APRIL 1 0.H 34.M 21.S EPICENTRE 27.58 -20.81 DEPTH= 0.KM

A= 0.82974 B=-0.31541 C= 0.46049 D=-0.3553 E=-0.9347
G= 0.4304 H=-0.1636 K=-0.8877 HT= 2.6

SE= 2.67

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
PONTA DELGDA	10.92	339.2	2 35K	-4	4 25	-17		2 40 PP
ANGRA DO HO.	12.28	335.7	2 51	-6	5 10	-5		3 4 PP
MBOUR	13.61	164.0	3 6	-9	5 31	-16		
LISBON	14.78	38.3	3 27K	-3	5 58	-17		
COIMBRA	16.23	36.0	3 48A	-1	6 42	-7		7 3 SS
MALAGA	16.60	52.6	3 52K	-2	6 55	-2		
SERRA PILAR	16.84	33.5	3 54A	-3	7 1	-2		4 8 PP
GRANADA	17.39	52.3	4 5A	1	7 32	17		4 20 PP
ALMERIA	18.04	54.6	4 12A	0	7 45	15		4 35 PP
TOLEDO	18.54	44.3	4 19	1	7 56	15		4 39 PP
RELIZANE	19.90	60.5	4 19A	-15	8 10	-2		4 36 PP
ALICANTE	20.12	52.6	4 38	2	8 28	12		5 1 PP
TORTOSA	21.96	47.5	5 3	8	9 3	11		
ALGIERS UNI.	22.14	59.6	4 57	0	9 0	5		5 30 PP
BARCELONA	23.32	47.8	5 9	1	9 29	13		
TAMANRASSET	24.28	95.5	5 17K	-1	9 43	10		
JERSEY	25.95	28.8	5 48	14	10 43	42		
CLERMONT-FD.	26.26	39.9	5 37	1	10 8	2		
FOLINIERE	26.36	31.2	5 37	0				
PARIS	27.82	34.1	5 53	2	10 36	4		
MONACO	27.86	47.2	5 56	5				6 19
KEW	28.43	27.4	5 58A	2	10 43	2		7 13
NEUCHATEL	29.15	40.9	6 3	0	10 21	-32		
PAVIA	29.62	45.7			11 22	22		7 16 PPP
DOURBES	29.70	33.9	6 14	6				6 59 PP
BASLE	29.79	40.4	6 6	-2				8 0
UCCLE	30.03	32.6	6 11	0	11 7	0		
PRATO	30.35	49.2	6 16	3	11 12	0		
STRASBOURG	30.47	38.8	6 14K	0	10 14	-60	6 31	7 5 PP
DURHAM	30.58	22.0	6 16K	1				
CHUR	30.61	42.9	6 15	-1				
ROME	30.65	53.5						7 6 PP
BOLOGNA	30.74	48.1	6 30	13				
EBINGEN	30.93	40.3	6 18	-1				
RAVENSBURG	31.11	41.4	6 20	0	11 27	3		
TUBINGEN	31.17	39.8	6 19	-2	11 29	4		
DE BILT	31.28	31.4	6 15	-7	11 29	2		
STUTTGART	31.37	39.5	6 21	-1	11 25	-3		7 5 PP
BENSBERG	31.52	34.6	6 23	-1				12 10
MUNSTER	32.36	33.4	6 31	0				6 49
ABERDEEN	32.42	19.0	6 36A	4	11 55	11		13 53 SS
WITTEVEEN	32.44	31.5	6 29	-3				
TOLMEZZO	32.57	45.7	6 29	-4				7 25
TRIESTE	32.76	47.3	6 36	1	11 52	2	7 51	
SONNEBERG	33.32	38.2	6 42	3	11 58	0		7 46 PP
JENA	33.81	37.5	6 43	-1	12 3	-3		7 42 PP
CHEB	33.82	39.3	6 38	-6	11 57	-9		
ZAGREB	34.28	48.0	6 49K	1	12 22	9		
HALLE	34.31	36.9	6 44	-4	12 12	-2		8 22 PPP
COLLMBERG	34.77	37.8	6 46	-6	12 24	3		8 8 PP
PRAGUE	34.99	40.4	6 54	0				8 38 PPP
PRUHONICE	35.01	40.6	6 53A	-1	12 6	-19		8 12 PP
POTSDAM	35.36	36.2	6 57	0	13 36	66		7 40 PP
BRATISLAVA	35.82	44.7	7 1A	0	12 10	-27		8 4 PP
SIDA	36.25	2.1	7 5	1				
HURBANOVO	36.40	45.6			12 9	-37		8 39
BUDAPEST	36.83	46.5	7 9	0	12 54	1		
COPENHAGEN	36.88	31.2	7 10	0	12 59	6		8 26 PP
BELGRADE	37.03	51.2	7 11A	0	12 57	1		8 46 PPP
SKOPJE	37.15	56.1	7 11K	-1				8 19 PP
RACIBORZ	37.20	42.1	7 11	-1				
GOTEBORG	37.90	28.3	7 13A	-5				
HALIFAX	38.04	308.1	7 18K	-2	13 9	-2		8 47
BERMUDA	38.10	288.1	7 19	-1	13 7	-5		8 47 PP
KRAKOW	38.23	42.8	7 23	2				8 55 PP
ATHENS	38.53	62.8	7 22	-2				
FORT FRANCE	39.55	259.6	7 33	1				15 42
WARSAW	39.66	40.0	7 42	9	13 41	5		9 10 PP
ST. VINCENT	40.35	257.5	7 41	2				
LWOW	40.66	44.5	7 42	1	13 55	4		

The scanned images of the bulletins of the International Seismological Summary (ISS) have been obtained thanks to funding provided by the US National Science Foundation through grant EAR-9725140 (Villaseñor et al., 1997) and collected by SGA Storia Geofisica Ambiente (Bologna) on behalf of the Istituto Nazionale di Geofisica e Vulcanologia (Rome), in the frame of the EUROSEISMOS project.

BUCHAREST	40.91	53.0	7	45	2					
GRENADA	41.26	256.3	7	48	2					
UPPSALA	41.54	28.2	7	47	-2	14	0	-4		
TRINIDAD	41.65	254.2	7	57	8					
SKALSTUGAN	41.88	21.5	7	51A	0					
IASI	42.37	49.2	7	57	2					
SAN JUAN	42.51	267.5	7	56	0				9	49 PCP
ISTANBUL UN.	42.73	58.4	7	56	-2				9	51 PP
SEVEN FALLS	43.46	310.5	8	3	-1				9	52 PP
KASTAMONU	44.08	58.0	8	26A	17	15	19	38		
SHAWINIGAN	44.70	309.4	8	14A	0					
NURMIJARVI	44.91	30.0	8	34	18					
BREBEUF	45.19	307.8	8	16	-2	15	58	1		
FORDHAM	45.20	301.3	8	24	6					
PALISADES	45.22	301.5	8	18K	0	14	57	0	10	5 PP
CARACAS	46.49	257.8	8	28A	0	15	13	-2		
SIMFEROPOL	46.66	53.1	8	29	-1	15	18	0		
OTTAWA	46.66	307.6	8	29	-1				10	4 PCP
LEOPOLDVILLE	47.11	126.8	8	32K	-1	15	25	1	10	28 PP
KIRUNA	47.21	19.9	8	33	-1	15	22	-4	10	24 PP
GEORGETOWN	47.72	298.7	8	38K	0				10	10 PCP
WASHINGTON	47.72	298.7	8	38	0				10	29 PP
PENNSYLVANIA	48.23	301.3	8	44	2	15	43	3	10	38 PP
JERUSALEM	48.42	70.8	8	44	0	15	49	6		
KSARA	48.63	68.0	8	47	2	15	52	6	10	33
SODANKYLA	48.93	22.2	8	46	-2					
CHAPEL HILL	49.59	295.0	8	54	1				10	17
MOSCOW	50.02	39.0	8	55	-1	16	6	1		
SOTCHI	50.68	54.9	9	3	2	16	16	2		
CLEVELAND	50.94	302.4	9	5A	2	16	32	14		
APATITY	51.36	23.5	9	4	-2	16	24	1		
COLUMBIA	51.49	292.9	9	7	0					
ISFJORD	52.93	8.5	9	21	3					
THULE	53.90	347.6	9	24	-1				11	35 PP
NORD	54.15	0.8	9	25	-2	16	50	-11		
TIFLIS	54.57	56.8	9	29	-1	17	7	0		
FUQUENE	54.80	256.4	9	32	0	17	14	4		
BOGOTA	55.52	255.7	9	35	-2	17	16	-4	21	3 SS
GORIS	56.05	59.3	9	38	-3					
LWIRO	56.17	113.6	9	40K	-1	17	28	-1		
MAKHACH-KALA	56.39	55.0	9	43	0					
CHINCHINA	56.68	257.0	9	41	-4	17	33	-2		
ST. LOUIS !	57.94	300.1	9	51	-3	18	0	8		
FLORISSANT	58.02	300.3	9	55	0	17	55	2		
RESOLUTE	59.43	342.7	10	3K	-1	18	7	-4	19	54 SCS
KHEYS	60.08	11.1	10	15	6	18	34	14		
ELISABTHVLLE	60.85	123.2	10	14K	0	18	33	3	22	21 SS
SVERDLOVSK	62.79	37.7	10	29	2	18	55	1		
LA PAZ	63.43	232.0	10	31K	0	19	8	6	12	59 PP
DALLAS	64.55	295.3	10	37	-2					
HUANCAYO	65.89	240.8	10	47	0					
RAPID CITY	66.17	308.7	10	47	-2				39	22 PKPPKP
BULAWAYO	67.36	129.4	10	54	-3					
BOZEMAN	70.99	312.1	11	19	0				11	54 PCP
KIMBERLEY	71.03	138.4	11	17A	-2					
TACUBAYA	71.29	282.5	11	25	4	20	13	-24	12	22
BANFF	71.84	318.7	11	19A	-5					
SALT LAKE C.	73.30	307.5	11	32	-1				11	44 PCP
NAMANGAN	74.23	51.8	11	37	-1	21	6	-4		
QUETTA	74.91	63.7	11	41K	-1	21	19	1	11	56 PCP
PIETERMZBURG	75.06	135.4							12	39 PCP
TUCSON TELE.	75.74	299.1	11	47	0				14	48 PP
TUCSON	75.86	299.1	11	48	1				22	1 SCS
EUREKA	76.71	307.6	11	52	0				14	45 PP
SANTA LUCIA	76.94	221.0							20	52 PP
WARSAK DAM	76.94	58.4	11	52K	-2					
VICTORIA	77.58	318.4	12	2	5					
COLLEGE	79.15	339.7	12	5	-1	22	10	7	15	7 PP
RENO	79.36	309.0	12	7	0					
MINERAL	80.21	310.4	12	11	0					
SHASTA	80.58	311.0	12	13	0					
FRESNO	80.61	306.5	12	14	0					
PASADENA	80.62	303.5	12	14	0	22	24	5	15	19 PP
LICK	81.65	307.7	12	20	1					
BERKELEY	81.83	308.4	12	21	1					
DEHRA DUN	83.51	59.3	12	33	4	22	52	4		
BOMBAY	84.55	71.6	12	41	7	23	1	2		
PORT STANLEY	85.39	202.1	12	38	0					

POONA	85.58	71.5	12	39	0	23	12	3				
IRKUTSK	87.17	30.2	12	49	2							
ULAN-BATOR	91.40	32.2	13	9	2	24	9	6				
MAGADAN	92.92	4.3	13	14	0							
SHILLONG	96.40	57.0	13	39K	9							
PEKING	101.73	32.3									17	57 PP
CHANGCHUN	102.45	24.4									17	58 PP
KUNMING	104.50	51.4									18	23 PP
WUHAN	108.20	39.6	18	53	777							
NANKING	109.33	35.7	19	0	777							
MATUSIRO	113.23	18.3	19	1	24						29	13 PS
SOUTH POLE	117.42	180.0	18	45	0						19	58 PP
BYRD STATION	118.48	191.3	18	56	9						29	13 PKKP
SCOTT BASE	129.53	182.1	19	8	-1							
PORT MORESBY	158.65	34.4	20	38	41						24	16 PP
TONGARIRO	162.13	225.4	20	50	50							
KARAPIRO	162.84	229.0	20	53	52						24	35
RIVERVIEW	170.69	134.0	20	13A	6						31	43 SKKS
BRISBANE	174.53	90.4	20	8	-1						24	53

APRIL 1 14.H 48.M 30.S EPICENTRE -18.50 168.85 DEPTH= 116.KM

DEPTH OF FOCUS= 0.013R

A=-0.93106 B= 0.18344 C=-0.31541 D= 0.1933 E= 0.9811
G= 0.3095 H=-0.0610 K=-0.9490 HT= 5.0

SE= 1.66

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
NOUMEA	4.40	210.4	1	4	-2	1	52	-5					
BRISBANE	17.08	235.6	3	58	5						4	55	
ONERAHI	17.88	165.3	4	4	1								
KARAPIRO	20.21	164.6	4	26A	-2								
CHARTERS TS.	21.38	262.3	4	40	0						5	52	
TUAI	21.47	162.1	4	40	-1								
RIVERVIEW	21.98	222.6	4	30	-16						8	36	PCP
COBB RIVER	22.75	172.4	4	55	2								
PORT MORESBY	22.90	290.3	4	56K	1	9	7	15					
WELLINGTON	23.26	168.7	4	57	-1								
KAIMATA	24.04	175.3	5	6	1								
CANBERRA	24.30	222.5	5	8K	0				5	49			
GEBBIES PASS	25.32	173.6	5	17	-1						5	41	
MELBOURNE	28.39	222.4	5	45	-1								
ADELAIDE	31.34	232.5	6	11	-1								
SCOTT BASE	59.39	180.5	9	51	-2				10	13			
MATUSIRO	61.93	332.3	10	9K	-1						13	38	
HONG KONG	67.11	304.9	10	43	0								
MIRNY	67.55	204.8	10	44	-2								
BYRD STATION	68.73	169.8	10	59	6						11	39	PCP
NANKING	69.46	316.0	10	58	0								
WUHAN	71.43	312.3	11	8K	-2								
SOUTH POLE	71.61	180.0	11	9	-2				11	39			
CHANGCHUN	73.73	328.7	11	22	-1								
PEKING	76.13	321.0	11	37K	0								
KUNMING	77.59	301.8	11	47K	2								
CHENGTU	79.19	307.4	11	54	0								
CHITTAGONG	85.54	295.2	12	26	0	22	45	-2	13	12	15	52	PP
BERKELEY	85.54	47.8	12	27K	1								
LICK	85.74	48.5	12	28K	1								
SHILLONG	86.70	298.2	12	31K	-1								
SHASTA	86.76	45.2	12	33K	1								
FRESNO	86.80	49.6	12	33	0								
PASADENA	86.89	52.6	12	33	0								
MINERAL	87.13	45.8	12	37K	3								
RENO	88.00	47.1	12	39K	1								
COLLEGE	89.45	17.0	12	43	-2								
HORSESHOE B.	90.29	37.3	12	48	-1								
EUREKA	90.68	48.4	12	51	0						16	26	PP
LILLOOET	91.68	36.5	12	56	0								
TUCSON TELE.	91.97	56.6	12	57	0				13	49	16	38	PP
RESOLUTE	109.36	16.3	18	12	-4								
SODANKYLA	125.53	343.1	18	48	0								
KIRUNA	126.77	345.6	18	49	-1								
NURMIJARVI	130.91	337.5	18	58	0								

ELISABTHVLLE	131.59	234.7	19	4	5						
SKALSTUGAN	132.19	346.1	19	0	-1						
KASTAMONU	137.66	311.7	19	7	-4						
PRUHONICE	142.46	332.7	19	17K	-2					20	43 *SPKP
JENA	142.95	336.1	19	16	-4						
DURHAM	143.06	350.8	19	15K	-6						
ATHENS	143.96	309.8	19	20A	-2						
BENSBERG	144.49	340.0	19	23K	0						
LEOPOLDVILLE	145.46	231.4	19	25	0						
STUTTGART	145.61	336.0	19	25	0						
TOLMEZZO	145.78	329.8	19	26	1	19	46				
TUBINGEN	145.85	335.8	19	26K	1						
KEW	146.01	347.9	19	26	0						
DOURBES	146.05	341.8	19	24	-2						
EBINGEN	146.17	335.6	19	28K	2						
STRASBOURG	146.30	337.2	19	28K	2	20	9				
CHUR	147.01	333.6	19	30K	3						
BASLE	147.24	336.3	19	30	2						
PARIS	147.81	343.0	19	34	5						
NEUCHATEL	147.92	336.4	19	33	4						
FOLINIERE	148.59	346.4	19	34	4						
CLERMONT-FD.	150.34	339.6	19	40	8						
TAMANRASSET	163.83	288.1	19	51	2					20	45 PKP2

APRIL 1 18.H 18.M 29.S EPICENTRE 39.75-120.21 DEPTH= 0.KM

A=-0.38791 B=-0.66627 C= 0.63687 D=-0.8642 E= 0.5031
G=-0.3204 H=-0.5504 K=-0.7710 HT= -1.6

SE= 2.64

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
RENO	1.37	124.0	0	9K	-4							
MINERAL	1.23	299.8	0	25A	0							
SHASTA	1.92	300.3	0	35A	0							
UKIAH	2.41	256.1	0	41	-1	1	9	-3				
BERKELEY	2.47	221.2	0	42K	0	1	13	-1				
SAN FRANCSCO	2.64	222.3	0	44	-1	0	31	-47				
LICK	2.65	205.5	0	45K	0	1	18	-1				
BRANNER	2.79	214.2	0	47K	0	1	21	-1				
FRESNO	2.99	173.7	0	50K	0							
TINEMAHA	3.10	149.3	0	52	0	1	43	13				
VINEYARD	3.13	197.5	0	55	3							
ARCATA	3.17	292.1	0	55	3							
EUREKA	3.28	93.3	0	53	-1							
HAIWEE	4.02	152.9	1	9	4	2	9	16				
WOODY	4.18	164.8	1	6	-1	2	11	14				
ISABELLA	4.31	160.8	1	9	0							
KING RANCH	4.43	175.0	1	10	0							
CHINA LAKE	4.43	151.4	1	10	0							
BOULDER CITY	5.68	129.8	1	27	-1	2	31	-4				
PASADENA	5.82	163.1	1	30	0	2	56	17				
SALT LAKE C.	6.47	78.3	1	38	-1	2	42	-13				
BUTTE	8.41	39.3	2	12	6	4	1	18				
BOZEMAN	8.97	45.7	2	16	2	3	55	-2			2	47
VICTORIA	9.07	346.3	2	27	11							
HUNGRY HORSE	9.68	25.3	2	27	3						5	8
HORSESHOE B.	9.87	348.2	2	28	1							
TUCSON TELE.	10.66	131.0	2	37	0							
TUCSON	10.66	131.7	2	46	9							
LILLOOET	11.02	354.3	2	44	2							
LARAMIE	11.25	77.3	2	44	-1							
BANFF	11.88	14.4	2	55	1							
RAPID CITY	13.38	65.6	3	12	-2	5	53	8				
DALLAS	20.07	102.7	4	42	4							
FAYETTEVILLE	20.82	91.8	4	44	-2							
TERRE HAUTE	25.19	80.0				11	31	99	7	31		
COLLEGE	29.82	336.5	6	7	-4						9	12 PCP
COLUMBIA	31.68	87.9	6	27	-1							
CHAPEL HILL	32.53	83.5	6	37	2							
OTTAWA	32.92	65.3	6	39	1							
WASHINGTON	33.15	77.4	6	37	-3							
BREBEUF	34.37	64.8	6	56	5							
SHAWINIGAN	34.84	62.9	6	56	1							
PALISADES	34.97	72.6				12	29	1				
SEVEN FALLS	36.10	61.6	7	4	-2							

RESOLUTE	36.94	10.9	7 11K	-2	
THULE	43.01	15.8	8 2	-1	9 41 PP
BERMUDA	44.87	81.4			18 16 SS
KHEYS	60.38	1.5	10 6	-8	
HUANCAYO	66.28	131.1	10 52A	-1	
KIRUNA	68.72	15.0	11 4	-4	
SODANKYLA	70.28	13.0	11 14	-3	
UPPSALA	74.85	20.6	11 45	0	
MATUSIRO	75.34	305.4	11 46K	-1	
NURMIJARVI	76.03	17.1	11 49	-2	
ABUYAMA	78.07	305.4	13 17K	74	
MOSCOW	83.03	12.4	12 52	23	
TAMANRASSET	99.81	49.5			17 54 PP
SOUTH POLE	129.56	180.0			21 10 PP
ELISABTHVLLE	139.95	54.6	19 34	3	
KIMBERLEY	149.23	80.0	19 56	9	

APRIL 1 23.H 33.M 50.S EPICENTRE -5.97 154.41 DEPTH= 94.KM
DEPTH OF FOCUS= 0.010R

A=-0.89705 B= 0.42966 C=-0.10337 D= 0.4320 E= 0.9019
G= 0.0932 H=-0.0447 K=-0.9946 HT= 7.0

SE= 2.21

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
RABAUL	2.84	308.2	0 45	1				
CHARTERS TS.	16.04	208.8	3 42A	1	6 46	10		
NOUMEA	19.97	145.5	4 23	-4				
BRISBANE	21.43	183.4	4 48	6	8 44	15		
GUAM	21.57	333.6	4 43	0	8 38	7	5 4	
RIVERVIEW	27.88	185.8	5 39K	-4	10 23	5		
CANBERRA	29.63	189.0	5 57A	-1				
ADELAIDE	32.25	204.6	6 20A	-1				9 7 PCP
MELBOURNE	32.85	193.8	6 25A	-2				
KARAPIRO	37.15	151.8	7 1A	-2			7 11	9 20
COBB RIVER	38.60	157.6	7 18	3				
TUAI	38.62	151.1	7 14	-1	13 3	-1		
MANILA	38.93	301.9	6 17	-61				
KAIMATA	39.40	160.1	7 25	3				
MATUSIRO	44.94	341.5	8 4A	-3	14 38	1		9 45 PP
LEMBANG	46.49	266.3	8 16	-3				
HONG KONG	48.38	306.8	8 34	0	15 54	28		10 6 PCP
CANTON	49.48	307.2	8 44	2	15 50	9	8 59	
NANKING	50.79	320.4	8 56A	4	16 5	5	9 10	9 24 *SP
WUHAN	52.65	315.9	9 6A	0	16 28	3	9 23	
CHANGCHUN	56.11	334.9	9 30	-2				
PEKING	57.75	325.8	9 42	-1	17 37	4		
KUNMING	58.98	303.8	9 53A	1	17 59	10	10 9	
CHENGTU	60.40	310.2	10 1A	-1	18 12	5	10 17	10 31 *SP
LANCHOW	63.19	315.5	10 21A	1	18 50	7	10 38	
CHITTAGONG	67.37	297.1	10 47	0	19 42	8		13 17 PP
SHILLONG	68.29	300.4	10 53A	0				
SCOTT BASE	72.13	177.3	11 14	-2				
MIRNY	73.43	201.5	11 23	-1				
COLLEGE	82.36	21.4	12 10	-3				
POONA	82.98	289.4	12 15	-1	22 28	2		
BYRD STATION	83.47	169.9	12 26	8				
SOUTH POLE	84.07	180.0	12 20	-1				13 1
LAHORE	84.69	302.4	12 25	1				
WARSAK DAM	87.41	304.4	12 37	-1				
BERKELEY	88.38	51.8	12 43	1				
SHASTA	88.72	49.0	12 45	1				
LICK	88.79	52.4	12 45	1				
MINERAL	89.26	49.5	12 46	0				
QUETTA	90.77	300.1	12 55	1				
PASADENA	91.18	56.0	12 56	1				
EUREKA	93.46	50.8	13 6	0				
BOULDER CITY	94.08	54.4	13 10	1				
RESOLUTE	101.13	14.7	13 40	-1				
OTTAWA	121.51	39.4	18 41	-1				
ELISABTHVLLE	124.44	251.6	18 52A	4				
HUANCAYO	127.40	110.0	18 57K	3				
TAMANRASSET	145.66	302.3	19 29	2				22 44

APRIL 2 4.H 34.M 24.S EPICENTRE 40.50 29.37 DEPTH= 0.KM

A= 0.66448 B= 0.37401 C= 0.64698 D= 0.4905 E=-0.8714
G= 0.5638 H= 0.3173 K=-0.7625 HT= -1.9

SE= 2.32

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
ISTANBUL UN.	0.61	331.5	0 12	-3				0 18 SG
KASTAMONU	1.37	50.3	0 57	31				
BUCHAREST	4.60	329.3	1 16	4	2 20	13		2 28 SG
SOFIA	5.03	297.8	1 17	-1				3 13
ATHENS	5.07	241.8	1 18A	-1	2 36	17		
SIMFEROPOL	5.65	36.6	1 29	2	2 30	-4		
SKOPJE	6.19	286.4	2 7K	32	3 20	33		2 59
IASI	6.82	349.6	1 43	0	3 1	-2		1 52 PG
BELGRADE	7.86	306.2	1 56K	-2				2 34 PG
KSARA	8.45	140.1	2 8	2	3 55	11		2 56 PG
LWOW	10.06	339.8	2 26	-2				3 35
ZAGREB	11.13	302.9						6 5 SG
KRAKOW	11.62	328.3	2 48	-2				
TIFLIS	11.70	79.0	3 16	25				
RACIBORZ	12.36	324.4	3 1	1				
WARSAW	13.06	336.7			5 41	3		
PRUHONICE	14.08	317.2	3 27	4				4 35
COLLMBERG	15.66	319.0	3 35	-8				
JENA	16.18	316.0	3 53	3				
MOSCOW	16.18	16.9	3 47	-3				
HALLE	16.31	318.2	3 51	-1				4 22
EBINGEN	16.46	304.6	3 57	4				
TUBINGEN	16.52	305.8	3 56	2				
STUTTGART	16.53	306.7	3 54	0				
STRASBOURG	17.35	304.9	4 7	2				
PULKOVO	19.30	1.4	4 25	-4				
CLERMONT-FD.	19.83	294.1	4 7	-28				4 35
NURMIJARVI	20.24	353.3	4 38	-1				
GOTEBORG	20.53	332.8	4 41	-1				
UPPSALA	0.71	343.1	4 43	-1				
PARIS	20.77	302.5	4 45	0				
FOLINIERE	22.68	301.3	4 59	-5				
KEW	23.20	308.2	5 8	-1				
TOLEDO	25.46	279.6	5 33	2				
SVERDLOVSK	26.00	40.6	5 39	3				
TAMANRASSET	26.79	235.9	5 44	1	10 30	12		6 31 PP
SODANKYLA	26.96	357.7	5 47	2				
APATITY	27.19	3.4	5 49	2				
KIRUNA	27.82	352.7	5 55	3				
QUETTA	32.12	96.8	6 31	0				
ADDIS ABABA	32.44	162.5	6 35	1				
SCORESBY SD.	39.69	335.7	7 35	0				
KHEYS	40.59	5.9	6 52	-51				
LWIRO	42.55	180.8	7 58A	-1				
LEOPOLDVILLE	46.50	199.6	8 28	-2				
THULE	52.80	342.9	9 19	0				
SHILLONG	53.43	85.9	9 22K	-2				
CHITTAGONG	55.16	89.2	9 36	0				
LANCHOW	56.98	68.6	9 50	1				
RESOLUTE	59.37	345.2	10 4	-2				
CHENGTU	59.84	73.9	10 9	0				
PEKING	63.44	59.0	10 33	0				
SEVEN FALLS	67.64	313.4	10 58	-2				
BREBEUF	70.16	313.2	11 14	-2				
COLLEGE	74.94	358.8	11 43	-1				
SAN SALVADOR	101.66	299.4						21 44
CHARTERS TS.	122.98	88.9						19 49
SOUTH POLE	130.31	180.0	19 9	-3				

APRIL 2 19.H 21.M 36.S EPICENTRE 20.38 120.74 DEPTH= 0.KM

A=-0.47953 B= 0.80637 C= 0.34614 D= 0.8595 E= 0.5111
G=-0.1769 H= 0.2975 K=-0.9382 . HT= 4.6

SE= 2.41

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
BAGUIO CITY	3.94	182.2	0	59	-2	2	30	42					
MANILA	5.77	177.7	1	32	5	3	2	28					
HONG KONG	6.42	288.5	1	32K	-4	2	26	-24					
CANTON	7.44	292.5	1	45	-6	3	4	-12					
ZO-SE	10.69	2.0	2	36	1	4	42	6					
WUHAN	11.54	332.3	2	47	0	4	57	0					
NANKING	11.75	351.9	2	50	0	5	5	3					
PHU-LIEN	13.22	274.3	3	7	-3	5	48	10			3	24	PP
KUNMING	17.29	289.0	4	0	-2	7	9	-4					
SIAN	17.33	325.3	4	5K	2								
CHENGTU	18.22	307.5	4	13K	-1	7	32	-2			4	28	PP
TIENSHUI	19.38	320.0	4	29	1								
ABUYAMA	19.49	39.1	4	29A	0								
PEKING	19.98	349.7	4	34	0								
LANCHOW	21.56	320.1	4	51K	0								
YINCHUAN	21.95	328.3	4	58	3								
PAOTOW	22.12	337.9	4	58K	2								
MATUSIRO	22.21	39.8	4	56K	-1	9	3	7			5	28	PP
SINING	23.16	318.3	5	10	3								
TUKUBASAN	23.16	43.0	5	3	-4						5	53	PP
WUWEI	23.50	322.0	5	13	3								
CHANGCHUN	23.70	8.3	5	12K	0	9	23	0			5	41	PP
GUAM	23.96	102.9	5	14	0	3	0	-27					
TOCKLAI	24.61	289.9	5	51	30								
MIZUSAWA	25.64	38.8	5	30	0								
CHITTAGONG	26.99	279.4	5	43	0	10	18	0			6	28	PP
SHILLONG	27.05	286.5	5	42A	-1	10	17	-2					
MEDAN	27.21	235.0	7	7	82						7	48	
ULAN-BATOR	29.67	341.0	6	7	0	11	4	3					
LEMBANG	29.96	206.8	6	9K	-1	11	16	11					
HOWRAH	30.22	280.0	6	14	2								
CHATRA	31.36	288.3	6	19	-3								
BOKARO	32.50	282.6	6	32K	0	11	48	3			7	50	
IRKUTSK	34.30	342.0	6	47	-1								
RABAUL	39.36	124.9	7	31	1								
PORT MORESBY	39.38	136.2	7	30K	0	13	32	1					
MADRAS	39.46	265.8	7	32	1	13	38	6					
DEHRA DUN	39.63	293.2	7	42	10	13	41	6					
PETROPAVLOVK	43.76	32.4	8	5	-1								
POONA	44.14	275.9	8	10	1						17	56	
MAGADAN	44.65	21.3	8	14	0								
BOMBAY	45.03	276.7	8	14	-3	14	56	2			10	56	PPP
NAMANGAN	46.25	307.6	8	31	5								
CHARTERS TS.	47.28	146.5	8	35A	1	15	32	6					
QUETTA	49.23	292.7	8	49	-1	16	5	11			10	45	PP
SVERDLOVSK	56.90	325.3	9	46	0								
BRISBANE	56.92	145.5	9	59	13	18	7	21					
ADELAIDE	57.59	162.5	9	50A	-1								
RIVERVIEW	61.20	151.3	10	16A	0	18	38	4					
CANBERRA	61.54	153.9	10	18A	-1				10	30			
MELBOURNE	62.22	158.[illegible]	10	23A	0								
MAKHACH-KALA	64.30	308.7	10	37	0	19	20	7					
KHEYS	66.40	349.8	10	44	-6	19	23	-15					
TIFLIS	66.41	307.6	10	51	1								
MOSCOW	69.57	323.2	11	9	-1	20	16	0					
SOTCHI	69.87	310.1	10	51	-21								
APATITY	70.34	336.0	11	10	-5	20	13	-12			20	31	PS
COLLEGE	72.37	26.6	11	26	-1								
PULKOVO	72.84	328.0	11	29	-1	20	49	-5					
SODANKYLA	72.95	336.2	11	29	-1								
KSARA	74.83	300.8	11	42	1	21	16	0			14	26	PP
KIRUNA	75.14	337.3	11	43	0								
NURMIJARVI	75.43	329.4	11	51	6								
JERUSALEM	75.89	298.9	11	49K	2	21	38	10					
KASTAMONU	76.80	309.4	11	39A	-14								
IASI	77.42	315.8	12	8	12								
KARAPIRO	77.53	138.6	11	56	-1								
LWOW	78.89	319.0	12	4	0								
UPPSALA	78.97	329.9	12	2K	-2								
ADDIS ABABA	79.43	275.8	12	9	2								
RACIBORZ	82.33	320.6	12	22	0						12	31	PCP
RESOLUTE	82.47	9.0	12	23A	0	22	34	-4					
GOTEBORG	82.53	329.2	12	25K	2								
THULE	83.26	2.1	12	26	-1								
PRUHONICE	84.52	321.5	12	36	3						14	1	

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COLLMBERG	84.84	323.1	12 30	-5	15 55	
HALLE	85.34	323.6	12 34	-3	12 57	PCP
SCORESBY SD.	85.69	348.2	12 40	1		
JENA	85.80	323.2	12 40	0	13 34	
SONNEBERG	86.27	322.8	12 42	0	13 6	
TRIESTE	86.88	317.8	12 46	1	13 9	
MUNSTER	87.47	325.3	12 50	2		
WITTEVEEN	87.54	326.3	12 54	6		
STUTTGART	88.18	322.0	12 52	1		
TAMANRASSET	103.63	300.8	14 14	12	18 22	PP
TUCSON TELE.	108.09	44.2	14 52	777	18 43	PP
SOUTH POLE	110.25	180.0	17 2	777	18 33	PP
CARACAS	148.40	14.5	19 47	5		
LA PAZ	170.74	66.8	20 12	5	20 27	

APRIL 3 5.H 48.M 36.S EPICENTRE 24.33 121.85 DEPTH= 69.KM

DEPTH OF FOCUS= 0.006R

A=-0.48139 B= 0.77486 C= 0.40970 D= 0.8494 E= 0.5277
G=-0.2162 H= 0.3480 K=-0.9122 HT= 3.5

SE= 3.33

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S	
HWALIEN	0.42	210.5	0 10K	-4	0 18	-6			
ILAN	0.45	348.1	0 10	-4	0 18	-6			
TAIPEI	0.76	336.7	0 15	-2	0 28	-1			
HSINCHU	0.93	300.4	0 10	-8	0 29	-3			
TAICHUNG	1.08	260.7	0 21A	1	0 39	4			
YUSHAN	1.18	224.4	0 17	-4	0 34	-4			
ALISHAN	1.26	230.2	0 22	0	0 40	1			
HSINKONG	1.30	199.9	0 19	-4	0 37	-3			
TAITUNG	1.70	202.4	0 27	-1	0 49	0			
TAINAN	2.00	228.8	0 37	5	1 1	5			
TAWU	2.16	204.1	0 35	1	1 1	1			
HENGCHUN	2.53	203.8	0 39	-1	1 7	-3			
ZO-SE	6.77	355.1	1 35	-4	2 55	0			
HONG KONG	7.34	255.6	1 46	-1	3 17	8		8 36	PCP
CANTON	7.95	262.7	1 53	-2	3 25	1			
BAGUIO CITY	7.96	188.8	1 54	-1					
NANKING	8.15	341.4	1 55	-3	3 28	-1			
WUHAN	8.95	315.2	2 5	-4	3 48	-1			
MANILA	9.73	185.0	2 12	-7	4 19	11			
PHU-LIEN	14.49	259.0						3 30	PP
SIAN	14.99	314.2	3 30	1					
PEKING	16.37	344.4	3 49	3	6 55	10		4 2	PP
CHENGTU	17.03	295.7	3 56	1	7 13	13			
KUNMING	17.44	276.3	4 3	3	7 21	12			
MATUSIRO	18.61	45.3	4 19	5	7 52	16			
PAOTOW	19.00	331.4	4 20	2					
LANCHOW	19.46	311.2	4 25	2	8 8	14			
CHANGCHUN	19.66	7.5	4 24	-1					
GUAM	24.17	112.4	5 16	6					
SHILLONG	27.19	278.9	5 40A	1					
CHITTAGONG	27.62	272.1	5 40	-3	10 6	-12		6 40	PP
WARSAK DAM	44.59	294.4	8 9	2					
QUETTA	48.77	289.6	8 41	1			9 25		
CHARTERS TS.	50.07	149.6	8 49	-1				10 20	
ADELAIDE	61.07	164.2	10 9	0					
CANBERRA	64.66	155.6	10 30	-2					
COLLEGE	68.39	27.3	10 53	-3					
SODANKYLA	69.78	335.8	11 4	-1					
KIRUNA	71.91	337.0	11 18	1					
N'IRMIJARVI	72.57	329.0	11 23	2					
KASTAMONU	75.12	308.9	11 24A	-12					
RESOLUTE	78.43	9.3	11 52	-3					
THULE	79.29	2.4	11 54	-5					
KARAPIRO	79.83	139.7	12 14	12					
MINERAL	92.72	43.2	13 5K	0					
MBOUR	124.35	309.4	18 7	-44				18 52	

APRIL 5 10.H 47.M 53.S EPICENTRE 44.62 6.85 DEPTH= 0.KM

A= 0.70904 B= 0.08520 C= 0.70000 D= 0.1193 E=-0.9929
G= 0.6950 H= 0.0835 K=-0.7141 HT= -3.4

SE= 2.64

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
MONACO	0.98	154.8						0 18 PG
MARSEILLES	1.69	219.0	0 30	0				0 51 SG
PAVIA	1.74	70.4	0 32	1	1 4	10		0 37 PG
NEUCHATEL	2.38	1.6	0 42	2	1 19	8		0 47 PG
SALO	2.78	68.1	0 45	-1	1 16	-5		
CLERMONT-FD.	2.88	294.8	0 47	-1	1 21	-2		
CHUR	2.91	39.1	0 49	1	1 33	9		
PRATO	3.14	102.2	0 51	0	1 25	-5		
BOLOGNA	3.20	90.6	0 52	0	1 46	14		1 2 PG
RAVENSBURG	3.70	30.3	1 0	1				2 20 SG
GARCHY	3.75	316.6	0 59	-1	1 39	-6		
EBINGEN	3.85	21.6	1 1	0				1 19 PG
STRASBOURG	4.01	8.7	1 4	0	1 47	-5		1 19 PG
TUBINGEN	4.20	20.6	1 6	0	1 56	-1		2 31 SG
STUTTGART	4.45	20.4	1 9	-1				1 26 PG
CUGLIERI	4.62	163.4	0 59	-13	1 47	-20		
TOLMEZZO	4.69	65.5	1 11	-2	2 5	-4		1 27 PG
BARCELONA	4.71	228.9	1 13	-1	2 16	6		
ROME	4.93	121.5	1 16	-1	2 15	0		2 35 S*
TRIESTE	4.99	75.7	1 17	0	2 11	-6		1 34 PG
PARIS	5.15	326.0	1 20	0	2 16	-5		
TORTOSA	6.03	233.1	1 34	2	3 20	37		
BENSBERG	6.35	1.8	1 37K	0	2 45	-6		
UCCLE	6.41	345.6	1 37	-1	2 51	-1		
SONNEBERG	6.47	25.5	1 38	0				3 24 SG
FOLINIERE	6.53	312.1	1 37	-2				
ZAGREB	6.56	76.3	1 46	6	3 2	6		2 23 PG
CHEB	6.63	32.5	1 33	-8	2 48	-10		2 7 PG
HOF A. SAALE	6.64	29.1	1 54	13				3 28
JENA	7.07	25.1	1 49	2	3 8	-1		2 19 PG
MUNSTER	7.37	3.7	1 51	0				
PRUHONICE	7.49	41.6	1 51A	-2	3 17	-2		2 28 PG
PRAGUE	7.49	40.7	1 55	2	3 19	-1		2 33 PG
VIENNA-H.	7.51	57.7	1 51	-2	3 14	-6		2 29 PG
JERSEY	7.64	309.8	1 52	-3				4 12 SG
HALLE	7.68	24.6	1 50	-5				2 22 PG
COLLMBERG	7.85	29.5	1 52	-6	3 38	10		2 28 PG
BRATISLAVA	7.92	59.8	1 56A	-3	3 25	-5		2 37 PG
ALICANTE	8.34	223.8	2 33	28	3 51	10		
ALGIERS UNI.	8.36	201.5	2 1	-4	3 27	-14		4 21 SG
KEW	8.37	327.5	2 3	-2	3 46	5		4 46 SG
HURBANOVO	8.51	63.5	2 7	0	3 37	-8		4 32 SG
TARANTO	8.72	114.8	1 47	-23	3 37	-13		
POTSDAM	8.79	25.8	2 35	24	4 7	15		3 20
BUDAPEST	8.97	67.1	2 31	18	4 13	17		
MESSINA	9.15	131.5	2 18	2	4 12	11		2 42 P*
KECSKEMET	9.27	71.1						4 23
REGGIO CALA.	9.28	131.6	2 8	-10				
TOLEDO	9.37	243.4	2 16A	-3	3 56	-10		5 3 SG
RACIBORZ	9.44	50.6	2 14	-6	4 8	0		2 35 PP
BELGRADE	9.69	84.0	2 27K	4				5 24 SG
RELIZANE	10.08	210.7	2 24	-5	4 5	-19		
KRAKOW	10.40	53.9	2 30	-3	4 47	15		2 54 PPP
ALMERIA	10.50	225.5	2 39	5				
GRANADA	10.85	230.3	2 37A	-2	5 22	39		3 37
SKOPJE	10.93	98.9	2 49K	9	5 14	30		5 56 PS
DURHAM	11.52	334.8	2 43	-5	5 5	6		2 55 PP
MALAGA	11.62	231.1	2 50A	0	5 7	6		6 6 PPP
COPENHAGEN	11.63	15.9	2 54	4				
SERRA PILAR	11.86	258.3	2 53K	0	5 8	1		3 1 PP
WARSAW	12.09	46.0	2 58	2	5 12	-1		3 13 PPP
SOFIA	12.09	93.4	2 53	-3	5 1	-12		5 14 SS
COIMBRA	12.13	254.0	3 3K	6				5 28 SS
RATHFARNHAM	12.23	319.9	3 8	10				4 43
LWOW	12.77	59.8	3 5	0	5 36	7		
EDINBURGH	12.99	334.1	3 21	13	5 58	23		8 43 PCP
BACAU	14.17	75.0	3 38	14				
ATHENS	14.30	111.8	3 27	2				3 47 PPP
IASI	14.65	72.5	3 33	3				7 13
UPPSALA	16.58	19.3	3 56	1	7 14	15		

The scanned images of the bulletins of the International Seismological Summary (ISS) have been obtained thanks to funding provided by the US National Science Foundation through grant EAR-9725140 (Villaseñor et al., 1997) and collected by SGA Storia Geofisica Ambiente (Bologna) on behalf of the Istituto Nazionale di Geofisica e Vulcanologia (Rome), in the frame of the EUROSEISMOS project.

ISTANBUL UN.	16.62	94.7	3	56	1	7	10	10		
KASTAMONU	17.78	92.1	4	36A	26					
NURMIJARVI	19.14	27.5	4	28	1					
SKALSTUGAN	19.25	7.4	4	30	2				5	15
SIMFEROPOL	19.33	79.4	4	29	0	8	11	9		
PULKOVO	20.73	34.7	4	42	-2	8	34	2		
TAMANRASSET	21.81	183.3	4	56K	1				5	20 PP
MOSCOW	22.43	49.3	5	0	-1					
SOTCHI	23.54	80.9	4	54	-18					
KIRUNA	24.34	12.5	5	23	3					
KSARA	24.82	105.8	5	28	3	9	51	6	11	6 SSS
SODANKYLA	25.11	18.0	5	28	1					
JERUSALEM	25.57	110.4	5	35K	3	10	14	16		
APATITY	26.92	22.3	5	43	-1	10	17	-3		
TIFLIS	27.66	82.5	5	52	1					
MAKHACH-KALA	29.18	78.7	6	7	2	10	58	1		
SCORESBY SD.	29.58	340.9	6	22	14					
SVERDLOVSK	35.24	50.2	6	56	-2					
NORD	37.94	354.5	7	19	-1					
KHEYS	39.04	11.3	7	42	12					
THULE	43.66	340.7	8	7	-1				9	44 PCP
ADDIS ABABA	44.94	132.3	8	20	2					
NAMANGAN	46.58	70.6	8	31	0	15	21	1		
QUETTA	48.82	85.8	8	47	-1	15	53	1		
LEOPOLDVILLE	49.35	168.9	8	51K	-2					
RUMANGABO	49.94	150.0	8	56	-1				10	21 PCP
WARSAK DAM	49.97	78.8	8	55	-2					
RESOLUTE	50.50	340.3	9	2	1	16	25	10		
LWIRO	50.61	151.1	9	1K	-1				11	3
ASTRIDA	51.26	150.1	9	6K	-1				10	26 PCP
KARACHI	51.44	90.3	9	13	4					
SEVEN FALLS	52.02	302.2	9	14	1					
PALISADES	57.02	297.1				17	44	1	21	40 SS
ELISABTHVLLE	59.01	156.3	10	5K	2				12	16 PP
YAKUTSK	64.25	26.1	10	36	-3					
SAN JUAN	65.29	271.8	10	42	-3					
COLUMBIA	65.70	294.4	10	47	-1					
COLLEGE	69.06	348.7	11	9	0					
SHILLONG	69.12	74.4	11	7A	-3					
LANCHOW	70.11	58.8	11	16	0					
RAPID CITY	72.01	314.6	11	26	-1					
PEKING	74.51	48.8	11	41	-1					
KIMBERLEY	74.83	163.7	11	43A	-1					
BUTTE	75.07	321.1	11	46	1					
VICTORIA	77.53	328.7	11	58	-1					
EUREKA	81.74	318.9	12	22	1					
RENO	83.45	321.4	12	33	3					
MINERAL	83.57	323.0	12	33A	2					
BOULDER CITY	83.96	316.0	12	35	2					
TUCSON TELE.	84.67	311.1	12	37	1					
TUCSON	84.80	311.1	12	38	1					
FRESNO	85.70	319.8	12	42	0					
LICK	86.07	321.3	12	47K	4					
PASADENA	87.06	317.2	12	48	0					
SOUTH POLE	134.43	180.0	19	21	1					
CHARTERS TS.	138.42	67.2	19	26	-1					
SCOTT BASE	145.71	172.6	19	42K	2					
BRISBANE	148.04	69.1	20	16	32					
MELBOURNE	148.05	92.5	19	48	4					
CANBERRA	149.77	85.3	19	55	8					

APRIL 5 19.H 59.M 59.S EPICENTRE 46.23 150.47 DEPTH= 0.KM

A=-0.60403 B= 0.34216 C= 0.71978 D= 0.4929 E= 0.8701
G=-0.6263 H= 0.3548 K=-0.6942 HT= -4.0

SE= 1.97

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
KURILSK	2.08	242.2	0	34	-2	1	0	-3				
Y.-SAKHLINSK	5.39	280.5	1	37	14							
TUKUBASAN	12.67	221.6	3	4A	0	5	14	-13				
MATUSIRO	13.33	227.8	3	14A	1	5	52	9				
YAKUTSK	19.80	330.4	4	36	1							
PEKING	25.65	268.4	5	35	2							

PAOTOW	29.68	273.8	6 10	1	
SIAN	33.53	264.0	6 45	2	
LANCHOW	36.09	270.7	7 4A	-1	
COLLEGE	37.69	38.0	7 22	3	
CHENGTU	38.99	263.2	7 30	0	
SHILLONG	50.53	267.0	9 1A	-1	
RESOLUTE	51.91	17.9	9 13A	1	
NORD	52.23	357.6	9 13	-2	
CHITTAGONG	52.66	263.9	9 8	-10	
NAMANGAN	55.09	295.1	9 37	1	
THULE	55.15	10.4	9 35	-1	
APATITY	57.09	336.0	9 48	-2	
LAHORE	58.89	284.5	10 3	0	
SODANKYLA	59.06	338.0	10 3	-1	
KIRUNA	60.24	340.4	10 11	-1	
MINERAL	61.09	60.7	10 18	0	
BERKELEY	62.21	63.3	10 26A	0	
RENO	62.68	60.5	10 29	0	
LICK	62.93	63.4	10 31	1	
SCORESBY SD.	63.48	357.2	10 35	1	
PULKOVO	63.62	330.8	10 34	-1	
FRESNO	64.43	62.9	10 40	0	
QUETTA	64.67	287.8	10 42	0	
NURMIJARVI	64.88	333.7	10 43	0	
EUREKA	65.01	58.5	10 43	-1	
SKALSTUGAN	65.65	340.9	10 47	-1	
PASADENA	67.14	64.1	10 57	-1	11 14
UPPSALA	67.48	336.4	10 58	-2	11 26 PCP
BOULDER CITY	67.98	60.7	11 4	1	
RAPID CITY	69.00	47.8	11 10	1	
TIFLIS	70.32	310.0	11 19	2	
TUCSON	72.95	61.2	11 33	0	
TUCSON TELE.	72.95	61.0	11 33	0	
ABERDEEN	74.46	344.9			14 29
COLLMBERG	76.17	334.1	11 45	-7	
DURHAM	76.63	343.8	11 21K	-33	
PRUHONICE	76.84	332.5	11 56	1	
JENA	76.92	334.7	11 56	0	
KASTAMONU	77.58	318.0	10 53K	-66	
RATHFARNHAM	78.88	346.0	12 21	14	
KEW	79.48	341.9	12 10	0	
FAYETTEVILLE	79.54	48.1	12 12	2	
STUTTGART	79.55	335.1	12 11	1	
STRASBOURG	80.13	335.9	12 14	1	12 23 PCP
BREBEUF	80.74	29.7	12 14	-2	
PARIS	81.32	339.2	12 22	2	
CINE	81.84	317.3	12 23	1	
FOLINIERE	82.05	341.1	12 24	1	
JERUSALEM	82.82	309.1	12 29A	2	
BYRD STATION	135.13	165.7	19 33	11	
SOUTH POLE	136.04	180.0	19 10	-13	

APRIL 5 21.H 6.M 6.S EPICENTRE -15.62 167.55 DEPTH= 202.KM

DEPTH OF FOCUS= 0.027R

A=-0.94087 B= 0.20769 C=-0.26766 D= 0.2155 E= 0.9765
G= 0.2614 H=-0.0577 K=-0.9635 HT= 5.6

SE= 1.61

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
SUVA	10.71	105.1	2	29	0							
BRISBANE	17.91	226.4	4	24A	27	7	46	39				
RABAUL	18.91	305.3	4	30	23						7	30
APIA	20.07	87.5	4	16	-3						9	13
CHARTERS TS.	20.73	254.7	4	25	0	8	12	12				
PORT MORESBY	20.85	284.8	4	27K	0	8	17	15				
ONERAHI	20.97	164.3	4	31	3							
KARAPIRO	23.30	163.9	4	49A	-1							
RIVERVIEW	23.40	216.3	4	53A	2						9	43
TONGARIRO	24.51	164.9	5	19	17							
TUAI	24.58	161.7	5	1	-1	9	9	3				
CANBERRA	25.71	216.9	5	12A	-1							
COBB RIVER	25.76	171.0	5	15	2							
KAIMATA	27.01	173.7	5	27	2							

GEBBIES PASS	28.32	172.2	5 33	-3						
MELBOURNE	29.78	217.7	5 49K	0						
ADELAIDE	32.21	228.0	6 12	1					8 56	PCP
TERRE ADELIE	53.97	192.5	9 3	-2						
CAPE HALLETT	56.69	179.0	9 23A	-1						
MATUSIRO	58.82	332.5	9 37A	-2						
LEMBANG	59.27	271.3	9 39	-3	17 42	10				
SCOTT BASE	62.25	180.2	10 2K	0			10 40			
MIRNY	69.64	204.3	10 48	-1						
CHANGCHUN	70.64	329.0	10 53	-2						
BYRD STATION	71.77	169.9	11 3	1			11 38			
PEKING	73.13	321.2	11 10	0	20 30	11				
SOUTH POLE	74.48	180.0	11 16	-1			11 34			
SIAN	74.60	312.8	11 18A	0						
KUNMING	75.03	301.8	11 22	2	20 52	12	11 55			
CHENGTU	76.46	307.5	11 29	1	21 5	9	12 6			
PAOTOW	77.25	318.8	11 35	2						
LANCHOW	79.14	312.3	11 42A	-1						
CHITTAGONG	83.19	295.4	12 6	2	22 19	13	12 54		15 23	PP
SHILLONG	84.24	298.4	12 10A	0						
BERKELEY	84.56	48.4	12 13K	2			12 46			
LICK	84.79	49.1	12 13	1			12 48			
FRESNO	85.92	50.2	12 18	0			12 53			
MINERAL	86.04	46.4	12 13	-5						
PASADENA	86.16	53.1	12 54	35					15 40	
RENO	86.98	47.7					12 59			
COLLEGE	87.09	17.5	12 22	-1						
HALLEY BAY	88.63	176.5	12 30	-1						
BOULDER CITY	89.37	52.4	12 36	2			13 11			
EUREKA	89.72	48.8	12 36	0			13 12		16 8	PP
TUCSON	91.32	57.0	13 20	37					16 21	PP
TUCSON TELE.	91.44	56.9	12 45	1			13 19		16 24	PP
SANTA LUCIA	106.11	132.3	12 49	777						
RESOLUTE	106.96	16.0	18 0	0					20 14	
SEVEN FALLS	122.72	43.7	18 23A	-8						
KIRUNA	123.69	345.7	18 33	0						
NURMIJARVI	127.79	337.8	18 44	3						
SAN JUAN	128.75	78.8	18 43	0						
SKALSTUGAN	129.12	346.0	18 44	0						
ADDIS ABABA	129.63	268.9	18 52	7						
UPPSALA	130.69	340.5	18 47	0						
ELISABTHVLLE	132.14	237.9	18 56K	7						
JERUSALEM	133.86	299.2	18 56A	3						
ASTRIDA	134.53	250.2	18 56	2						
KASTAMONU	134.81	313.4	18 55K	1						
RUMANGABO	135.41	251.6	18 59	4					22 22	PP
LWIRO	135.52	250.1	18 59	3					22 19	
ISTANBUL UN.	136.18	313.7	18 56	-1						
CINE	138.09	309.4	19 4	4						
COLLMBERG	138.99	335.7	18 59	-3						
PRUHONICE	139.35	333.3	19 5	2					22 29	PP
JENA	139.83	336.5	19 4	1						
ATHENS	141.15	312.0	19 7	1						
STUTTGART	142.49	336.4	19 7	-1					22 36	PP
TOLMEZZO	142.68	330.6	19 6	-3					19 28	
EBINGEN	143.05	336.0	19 10	1						
STRASBOURG	143.18	337.5	19 9	-1			19 48		22 25	PP
PARIS	144.71	342.8	19 14	2						
NEUCHATEL	144.80	336.8	19 13	1						
FOLINIERE	145.52	346.0	19 16	2						
LEOPOLDVILLE	146.14	236.3	19 17	2						
CLERMONT-FD.	147.23	339.7	19 20	4						
TAMANRASSET	161.61	295.5	19 38A	2			20 24		24 18	PP

APRIL 5 23.H 29.M 31.S EPICENTRE -5.47 146.42 DEPTH= 38.KM

DEPTH OF FOCUS= 0.001R

A=-0.82940 B= 0.55058 C=-0.09467 D= 0.5531 E= 0.8331
G= 0.0789 H=-0.0524 K=-0.9955 HT= 7.0

SE= 2.22

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
PORT MORESBY	3.97	169.6	1	1K	1	1	56	10			1	16

RABAUL	5.86	77.8	1	24	-3						
CHARTERS TS.	14.45	180.6	3	25A	1	6	12	8			
GUAM	18.89	355.0	4	20	0						
BRISBANE	22.78	164.7	5	27K	27	9	35	33			
NOUMEA	25.59	132.8	5	24	-3						
RIVERVIEW	28.56	171.7	5	53A	-1	10	42	4			
CANBERRA	29.80	175.8	6	5A	0				6	15	7 21 PPP
ADELAIDE	30.17	192.7	6	9K	0	11	9	5			8 59
MANILA	32.15	308.6	6	30	4	11	23	-12			
MELBOURNE	32.24	182.2	6	28	1						13 49 SS
BAGUIO CITY	33.56	310.8	6	37	-1	12	19	22			
LEMBANG	38.60	265.9				13	17	3			
PERTH	38.89	223.6	7	26	3	13	24	5			8 53 PP
DJAKARTA	39.39	266.9	7	26A	-2						8 11
KARAPIRO	41.77	144.7	7	48A	1						9 43
TUKUBASAN	41.89	352.3	7	50A	2	14	1	-2			8 34
HONG KONG	41.93	312.3	7	52	3	14	8	4			
APIA	41.97	104.5	7	37	-12						
MATUSIRO	42.50	350.2	7	53K	0	14	13	1			
COBB RIVER	42.56	150.3	7	55	1						8 21
TONGARIRO	42.66	146.1	7	55	1						8 32
KAIMATA	43.05	152.8	8	7	9						9 6
CANTON	43.05	312.5	8	0	2	14	24	4			8 12
ZO-SE	43.64	328.0	8	4A	2	14	32	3			8 15
WELLINGTON	43.73	148.8	8	2A	-1	14	44	14			8 26
ROXBURGH	44.62	157.1	8	9	-1	14	41	-2			18 51 SS
NANKING	45.65	326.6	8	20A	1	15	1	3			8 30
MEDAN	48.53	279.6	8	54	13						15 59
KUNMING	52.23	307.5	9	10	1	16	35	5			16 56
CHANGCHUN	52.64	340.9	9	10A	-2	16	36	0			9 22
SIAN	53.05	320.9	9	15	0	16	45	4			9 25
PEKING	53.16	331.1	9	15	-1	16	44	1			9 27
CHENGTU	54.17	314.2	9	23	-1	16	59	3			9 36
PAOTOW	56.70	327.3	9	42A	0	17	35	5			9 53
LANCHOW	57.45	319.4	9	47A	0	17	43	3			9 58
PETROPAVLOVK	59.29	8.5	9	59	-1	18	10	6			
CHITTAGONG	60.13	299.5	10	7	1	18	21	6			12 21 PP
KIPAPA	60.64	61.8	10	10	1						
SHILLONG	61.26	303.0	10	12A	-2	18	33	4			19 40 PPS
TERRE ADELIE	61.35	182.3	10	11	-3	18	47	17			
ULAN-BATOR	63.48	331.4	10	29	1	19	1	4			
MAGADAN	64.91	2.5	10	37	-1	19	18	3			
WILKES	65.57	195.1	10	41	-1	19	27	4			23 47 SS
BOKARO	65.85	299.0	10	43	-1	19	29	3			11 11
IRKUTSK	67.72	333.6	10	54	-1	19	54	5			
CAPE HALLETT	68.37	172.3	11	0A	0	20	19	22			13 42 PP
MIRNY	71.08	199.9	11	16	0	20	45	17			
SCOTT BASE	73.13	175.6	11	29	1						
DEHRA DUN	74.35	303.4	11	57	22	21	5	-1			
POONA	75.35	290.7	11	38	-3	21	10	-7			
BOMBAY	76.37	290.8	11	47	0	21	28	0			
LAHORE	77.76	303.8	11	53	-2						
WARSAK DAM	80.61	305.6	12	9	-1						
NAMANGAN	82.16	312.5	12	19	1						
QUETTA	83.68	301.1	12	25	-1	22	47	3			22 39
SOUTH POLE	84.57	180.0	12	29	-1	22	50	-3			15 44 PP
COLLEGE	84.90	23.0	12	31	-1						
BYRD STATION	85.36	169.9	12	24	-10	22	51	-10			13 35
BERKELEY	94.36	52.5	13	18	1						
LICK	94.82	53.1	13	20	1						17 9 PP
MINERAL	95.01	50.1	13	21A	1						17 32
KHEYS	96.10	350.0	13	18	-7						
FRESNO	96.26	53.7	13	30	5						
RENO	96.35	50.9	13	28A	2						
PASADENA	97.51	56.4	13	32	1						14 1
HALLEY BAY	99.03	181.8	13	28	-10						
EUREKA	99.32	51.0	13	40	1						17 10 PP
BUTTE	101.56	44.3									17 47 PP
TIFLIS	102.29	311.4									18 4 PP
RESOLUTE	102.61	13.8	13	52	-2	24	44	14			17 59 PP
TUCSON	103.67	58.3	18	36	277						
TUCSON TELE.	103.76	58.2	14	2	3						30 11 PKKP
MOSCOW	105.04	326.3									18 29 PP
THULE	106.58	8.1	14	22	777						17 32 PP
PULKOVO	107.66	331.5									18 46 PP
KIRUNA	108.04	341.2									18 53 PP
RAPID CITY	108.39	45.4	18	52	777						29 37 PKKP
KSARA	110.08	303.9	14	24	777						19 4 PP
KASTAMONU	112.75	312.6									19 3 PP

UPPSALA	113.36	334.6								19	24 PP
ISTANBUL UN.	114.13	312.6								19	31 PP
SCORESBY SD.	114.64	355.7								29	16 PKKP
ASTRIDA	116.26	264.4	18	9	-30					19	48
RUMANGABO	116.81	265.8								19	40 PP
ELISABTHVLLE	117.00	254.1	18	48	7					19	53 PP
LWIRO	117.23	264.7	19	6	25					19	55 PP
PRUHONICE	120.09	326.2								20	27 PP
COLLMBERG	120.22	328.2	18	56	9						
JENA	121.17	328.4								20	13
STUTTGART	123.67	327.3	18	57	3					20	55 PP
STRASBOURG	124.55	327.8								20	42 PP
OTTAWA	125.96	35.7	18	48	-10						
MORGANTOWN	126.20	43.8	19	5	6						
PARIS	127.08	330.8								21	1 PP
BREBEUF	127.11	34.6	19	0	0						
SEVEN FALLS	127.61	31.5	18	50	-11						
COLUMBIA	127.73	50.7	19	2	0						
PALISADES	129.51	39.4								21	14 PP
LEOPOLDVILLE	130.27	259.6	19	10	4					21	22 PP
TOLEDO	136.64	326.5	20	46	88						
GRANADA	138.22	323.2	20	13A	52					23	2 PP
TAMANRASSET	138.55	298.5	19	23	1					22	25 PP
LA PAZ	139.45	123.2	19	27	4					19	41
SAN JUAN	145.75	65.2	19	34	0					20	26
CARACAS	146.61	79.3	19	37K	1						

APRIL 6 14.H 12.M 39.S EPICENTRE -10.05 120.40 DEPTH= 0.KM

A=-0.49835 B= 0.84947 C=-0.17334 D= 0.8625 E= 0.5060
G= 0.0877 H=-0.1495 K=-0.9849 HT= 6.5

SE= 2.10

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
LEMBANG	13.04	283.2	3	5A	-3	5	13	-21					
DJAKARTA	13.97	284.9	3	17A	-3	6	27	31					
PERTH	22.20	190.3	4	55	-3	8	46	-11					
MANILA	24.48	1.4	5	23	3						13	48	
MEDAN	25.52	301.0	5	31K	1	9	46	-8					
BAGUIO CITY	26.30	0.4	5	39	2	10	43	36					
PORT MORESBY	26.37	90.9	5	39	1	10	5	-3			7	18	PP
CHARTERS TS.	26.83	114.7	5	41A	-1	10	15	-1					
ADELAIDE	29.89	148.8	6	9A	-1	11	3	-2			9	19	PCP
RABAUL	32.04	81.8	6	27	-2								
HONG KONG	32.72	349.3	6	35A	0	11	56	6			8	6	PPP
PHU-LIEN	33.51	336.2	6	41A	0	12	4	2			7	57	PP
GUAM	33.62	46.4	6	39	-3	11	57	-6					
CANTON	33.65	348.1	6	43	0	12	3	-1			8	15	PPP
HWALIEN	33.83	2.0	7	0	16								
TAIPEI	34.88	1.8	6	31	-22								
PORT BLAIR	34.96	307.4	6	53	-1	12	20	-4			17	14	SCS
BRISBANE	35.27	123.9	7	28A	31	12	59	30					
MELBOURNE	35.40	145.4	6	57	-1	12	30	-1			8	25	PP
CANBERRA	36.21	138.5	7	4A	-1				7	17	8	35	PP
RIVERVIEW	36.81	134.7	7	9K	-1	12	55	2					
KUNMING	38.93	333.9	7	30A	3	13	30	5			9	5	PP
ZO-SE	40.92	1.0	7	43	-1	13	52	-3			9	23	PP
NANKING	41.89	358.0	7	52A	0	14	11	2			9	38	PP
CHITTAGONG	42.69	319.2	7	59A	1	14	20	-1			9	39	PP
CHENGTU	43.43	339.3	8	4A	0	14	30	-2			9	49	PP
COLOMBO	43.74	291.1	8	9	2	14	36	0					
TOCKLAI	44.24	326.3	8	15	4								
SHILLONG	45.00	322.4	8	16A	-1	14	53	-1			10	1	PP
HOWRAH	45.14	316.2	8	20	2	14	55	-1					
SIAN	45.38	346.6	8	20A	0	14	56	-4			13	54	PCS
NOUMEA	45.70	111.3	8	22	-1								
VIZIANAGRAM	45.98	307.3	8	24A	-1								
MADRAS	46.03	299.0	8	24A	-1	15	3	-6			10	10	PP
TIENSHUI	46.51	343.3	8	30	1								
ABUYAMA	46.93	17.1	8	30A	-2								
KODAIKANAL	47.22	294.0	8	32K	-3	15	17	-9					
BOKARO	47.72	315.3	8	37K	-2	15	32	-1			10	28	PP
LANCHOW	48.47	342.0	8	46A	2	15	41	-3			9	12	PCP
CHATRA	48.83	319.4	8	49	2	15	52	3					

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MATUSIRO	49.29	19.0	8	48A	-3	16	18	23	10 0	PCP
SINING	49.61	340.3	8	55	2					
TUKUBASAN	49.62	21.0	8	50	-3	15	59	-1	10 45	PP
HYDERABAD	49.63	303.1	8	51A	-2	15	58	-2	10 56	PP
PEKING	49.98	355.8	8	56A	0	16	4	-1		
YINCHUAN	50.04	345.5	8	57	1	16	6	0		
WUWEI	50.54	341.8	9	3	3	16	13	0		
PAOTOW	51.28	349.9	9	5A	-1	16	15	-8		
SEHORE	53.73	308.5	9	26	2					
CHANGCHUN	53.81	4.4	9	22A	-3	16	55	-2	11 25	PP
MACQUARIE I.	53.84	153.2	9	27	2					
POONA	53.99	301.6	9	25A	-1	16	55	-5		
ROXBURGH	54.69	139.5	9	37	6	17	1	-8	20 57	SS
BOMBAY	55.03	301.5	9	33	-1	17	10	-4	17 15	PS
AGRA	55.27	313.0	9	33A	-2	17	9	-8	11 49	PP
COBB RIVER	55.36	133.3	9	37	1	17	19	1	19 18	SCS
WILKES	56.49	184.8	9	43	-1	17	27	-6	11 45	PP
KARAPIRO	56.54	128.9	9	46	1				10 39	
SUVA	56.67	105.1				17	36	0	23 57	SSS
TONGARIRO	56.87	130.4	9	49	2					
WELLINGTON	56.88	133.0	9	45	-2	17	33	-5	19 24	SCS
DEHRA DUN	57.16	316.1	9	48	-1	17	41	-1	11 49	PP
TERRE ADELIE	58.46	170.4	9	41	-17	17	50	-9		
ULAN-BATOR	58.94	349.4	10	1	0	18	6	1		
MIRNY	59.42	192.4	10	2	-3	18	8	-4		
LAHORE	60.45	315.0	10	9	-3	18	15	-10	12 21	PP
UGLEGORSK	61.89	16.0	10	21	-1					
KARACHI	62.96	305.7	10	24A	-5	18	49	-8		
IRKUTSK	63.59	349.0	10	32	-1	19	5	1		
WARSAK DAM	63.77	315.8	10	35	1	19	5	-2		
QUETTA	65.09	309.9	10	42A	-1	19	18	-5	13 5	PP
NAMANGAN	67.75	322.1	10	59	-1	19	52	-3		
CAPE HALLETT	68.96	165.5	11	6	-1	20	9	-1	24 34	SS
SEMIPALATNSK	69.60	333.9	11	10	-1	20	15	-2		
TANANARIVE	70.68	253.4	11	19	1					
PETROPAVLOVK	70.87	23.3	11	19	0					
SCOTT BASE	71.74	170.7	11	22	-2	20	43	1	14 15	PP
MAGADAN	73.53	15.6	11	34	0	21	3	0		
SOUTH POLE	80.02	180.0	12	10	-1	22	5	-8	15 11	PP
ADDIS ABABA	83.42	280.4	12	33	4					
LCO. MARQUES	83.71	244.8	12	33	3				23 31	SP
GORIS	84.30	311.6	12	34	1	23	3	6		
MAKHACH-KALA	84.56	315.2	12	33	-1	22	55	-4		
BYRD STATION	85.15	171.3	12	26	-11	22	56	-9	14 46	PP
HONOLULU	85.81	67.6	12	43	3					
KIPAPA	85.90	67.5	12	43	2					
TIFLIS	86.07	313.4	12	43	1	23	8	-6		
BULAWAYO	88.26	250.0	12	53	1					
KIMBERLEY	90.10	240.9	12	58	-3					
SOTCHI	90.18	314.2	13	2	1	23	31	-21		
ASTRIDA	90.21	267.3	13	3A	1				17 5	PP
RUMANGABO	90.82	268.5	13	6	2				16 41	PP
ELISABTHVLLE	90.88	258.1	13	8A	3	24	4	5	16 52	PP
KSARA	91.01	304.0	13	7	2	24	9	9	16 45	PP
JERUSALEM	91.17	301.9	13	8	2	24	8	7		
LWIRO	91.19	267.5	13	8K	2	24	5	4		
HERMANUS	93.45	234.3				24	26	5	23 56	SKS
MOSCOW	94.18	325.8	13	21	1	23	51	-3		
SIMFEROPOL	94.40	314.7	13	21	0	23	55	0		
KHEYS	96.16	350.6	13	24	-5	24	0	-4		
KASTAMONU	96.28	310.8	13	20K	-9	24	32	-13		
ISTANBUL UN.	97.57	310.3	13	33A	-2	24	10	-2		
CINE	97.86	306.8	13	37	0				17 32	PP
APATITY	98.05	337.2	13	36	-1	24	55	-5	24 16	SKS
IASI	99.20	316.4	13	50	7				17 51	
COLLEGE	99.78	25.7	13	44	-1				17 48	PP
SODANKYLA	100.65	336.9	13	48	-1					
NURMIJARVI	101.50	329.8	13	55	2					
LWOW	101.71	318.9	13	54	0				18 4	PP
SOFIA	101.92	311.6	13	57	2	24	35	2	17 59	
BANGUI	102.33	272.3	17	8	777					
KIRUNA	103.01	337.4	13	58A	-2				18 0	PP
BELGRADE	104.06	313.7							18 21	PP
LEOPOLDVILLE	104.09	262.9				24	45	2	18 24	PP
KRAKOW	104.35	319.1	14	7	1					
UPPSALA	105.04	329.4	14	9K	777				18 17	PP
RACIBORZ	105.46	319.2							18 27	PP
BRATISLAVA	106.29	317.3	14	16A	777				18 33	PP

SKALSTUGAN	106.98	333.6	14	18	777			18	47 PP
ZAGREB	107.18	314.9						18	45 PP
PRUHONICE	107.82	319.3						18	47 PP
POTSDAM	108.47	321.9						18	56 PP
COLLMBERG	108.65	320.8	17	26	777			18	48
TRIESTE	108.75	314.8	18	29	-1			18	54 PP
TOLMEZZO	109.19	315.6	18	37	7				
HALLE	109.28	321.1	18	43	13				
PLAUEN	109.29	320.0	18	38	8				
JENA	109.59	320.5	18	36	5			19	3 PP
SONNEBERG	109.91	320.0						19	0 PP
STUTTGART	111.44	318.5	18	36	2			19	8 PP
MUNSTER	111.84	322.1						19	13 PP
RESOLUTE	112.38	9.6	18	36	0	25 23	5	19	27 PP
STRASBOURG	112.41	318.5	18	39	3			21	52 PPP
NEUCHATEL	113.24	316.9	18	58	21				
MONACO	113.45	313.3	18	33	-5				
THULE	113.48	2.2	18	30	-8			19	23 PP
SCORESBY SD.	115.17	346.9	18	45	4			19	36 PP
PARIS	115.77	319.6	18	47A	5			19	47 PP
CLERMONT-FD.	116.09	316.2	18	48	5			19	49 PP
TAMANRASSET	116.69	290.4	18	48K	4	25 39	5	19	39 PP
MINERAL	117.72	49.7	18	57A	11				
ALGIERS UNI.	117.81	306.3	18	48	2	25 42	4	19	58 PP
RENO	119.23	50.3	18	53	4				
RELIZANE	119.97	305.5	18	53	2			20	8 PP
ALICANTE	120.30	308.6	18	52	1	25 50	3	27	18 SKKS
HUNGRY HORSE	120.75	39.2						20	23 PP
PASADENA	121.52	56.1						18	56 PP
EUREKA	122.14	49.6	18	57	2			20	22 PP
BUTTE	122.52	41.3	18	57	2			20	33 PP
TOLEDO	122.64	311.1	18	53	-3			20	30 PP
GRANADA	122.97	307.9						20	18 PP
BOZEMAN	123.64	41.2	19	1	3			20	43 PP
BOULDER CITY	123.85	53.3	19	2	4				
SALT LAKE C.	124.80	47.0	19	2	2				
SERRA PILAR	125.57	313.8	19	1K	0			20	56 PP
TUCSON	127.93	56.9	19	9	3			20	51 PP
TUCSON TELE.	128.00	56.7	19	10	4			21	13 PP
RAPID CITY	129.36	40.0	19	10	1			21	18 PP
BOULDER	129.73	45.6	19	10	1				
SANTA LUCIA	135.50	166.7						22	1 PP
LAWRENCE	137.09	41.9	19	17	-6				
MBOUR	138.16	280.3						23	11 PKS
DALLAS	138.95	50.8						23	2
FAYETTEVILLE	139.32	44.9	19	23	-4				
FLORISSANT	140.30	38.7	19	26	-3		22 26		
ST. LOUIS 1	140.49	38.8	19	23	-6				
TACUBAYA	140.67	71.7	19	34	4			19	59
OTTAWA	142.15	18.6	19	30	-2				
BREBEUF	142.68	16.3	19	30K	-3				
PENNSYLVANIA	145.37	24.8	19	39	1			23	2 PP
HALIFAX	145.38	5.0	19	40A	2			22	58 PP
MORGANTOWN	145.41	28.2	19	39	1			22	56 PP
PALISADES	146.67	19.9	19	43	3			23	8 PP
FORDHAM	146.82	20.0						20	52 PP
GEORGETOWN	147.29	25.7	19	44	3				
WASHINGTON	147.29	25.7	19	43	2			21	40 PP
COLUMBIA	149.11	36.2	19	46	2				
LA PAZ	152.31	162.2	19	59A	10			23	37 PKS
HUANCAYO	153.05	144.2	20	1	11				
BERMUDA	157.29	11.2	19	59	4	26 29 -29		24	5 PP
CHINCHINA	163.34	106.5	20	4	2			24	47 PP
BOGOTA	164.67	109.6	20	7	4			24	48 PP
FUQUENE	165.28	107.0	20	4	0			24	50 PP
SAN JUAN	169.58	36.6	20	8	1			21	24 PP
CARACAS	172.77	85.8	20	11	2			25	29 PPP

APRIL 8 1.H 23.M 29.S EPICENTRE -32.66 179.47 DEPTH= 389.KM

DEPTH OF FOCUS= 0.056R

A=-0.84351 B= 0.00774 C=-0.53706 D= 0.0092 E= 1.0000
G= 0.5370 H=-0.0049 K=-0.8435 HT= 0.9

SE= 1.80

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	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
RAOUL ISLAND	4.07	34.1	1	12	0								
ONERAHI	5.24	232.3	1	30K	6	2	42	11					
KARAPIRO	6.16	210.5	1	37K	3	2	54	5					
TUAI	6.41	196.5	1	37K	0	2	55	1					
TONGARIRO	7.27	205.0	1	47	0	3	18	7					
WELLINGTON	9.39	202.3	2	9A	-2	3	53	-3			14	13	SCS
COBB RIVER	9.99	210.8	2	17	-1	4	4	-4					
KAIMATA	11.73	210.6	2	36	-3	4	36	-9					
GEBBIES PASS	12.25	204.0	2	41A	-4	4	49	-7					
SUVA	14.48	356.0	3	5	-4						5	13	
ROXBURGH	15.07	208.4	3	11	-5	5	34	-19			5	55	
NOUMEA	15.48	308.6	3	21	1	6	6	5					
APIA	20.40	25.1	4	11	2	7	37	7					
BRISBANE	23.43	275.8	4	39A	2	7	26	-55					
RIVERVIEW	23.69	259.4	4	42	2	8	55	30					
CANBERRA	25.36	255.5	4	57	2				5	7			
MELBOURNE	28.54	249.8	5	24K	1	9	41	-1	6	41	12	13	SS
CHARTERS TS.	32.19	284.7	5	55	1	10	39	0					
ADELAIDE	33.78	254.7	6	11A	3						7	41	
PORT MORESBY	37.77	300.5	6	42A	1	12	1	-3			8	49	*SP
RABAUL	38.13	312.2	6	44	0	11	57	-12					
CAPE HALLETT	40.00	184.4	7	3A	3	12	39	2			8	56	PCP
SCOTT BASE	45.64	183.7	7	46K	1				9	15	12	17	SCP
GUAM	56.62	318.4	9	4	-2								
HAWAII V.OB.	57.15	28.6	9	8	-1								
SOUTH POLE	57.52	180.0	9	11	-1	16	38	0			9	59	PCP
HONOLULU	57.78	24.9	9	13	-1								
KIPAPA	57.92	24.9	9	14	0				10	44			
MIRNY	59.14	207.7	9	21	-2	16	56	-2					
ARGENTINE I.	70.73	156.4	11	21	45	19	15	-3					
LEMBANG	71.08	274.0	10	38A	0				12	9			
DJAKARTA	72.08	274.2				19	30	-3			14	57	
MANILA	72.99	300.3	10	46	-3						15	17	
BAGUIO CITY	74.49	301.5	10	57	-1								
TUKUBASAN	77.80	328.3	11	15K	-1	20	28	-7			21	0	SCS
ABUYAMA	78.81	324.5	11	21K	-1								
MATUSIRO	78.92	327.2	11	21A	-1						20	41	SCS
PORT STANLEY	82.12	148.1	11	40	1								
HONG KONG	82.89	302.0	11	43A	0	21	24	-3	13	21			
ZO-SE	84.02	312.8	11	48A	0	21	31	-7					
CANTON	84.02	302.1	11	49A	1	21	44	6			24	31	*SS
MEDAN	84.18	278.0	11	48	-1								
NANKING	86.15	312.1	11	59A	0	22	0	1			21	45	SKS
SANTA LUCIA	86.85	128.0				21	41	-24					
PETROPAVLOVK	87.33	347.6	12	3	-1	22	9	-1					
UGLEGORSK	87.94	336.4	12	8	1	21	54	-21					
PASADENA	88.60	47.3	12	11A	1	22	29	8	13	45	22	1	SKS
LICK	88.68	43.0	12	12K	1				13	44			
BERKELEY	88.69	42.3	12	11K	0				13	44			
UKIAH	89.03	40.9	12	13	1				13	47			
FRESNO	89.36	44.5	12	15	1				13	49			
CHANGCHUN	90.76	324.1	12	19A	-1	22	42	1	13	55	25	32	*SS
MINERAL	90.78	40.9	12	22K	1				13	55			
RENO	91.23	42.4	12	24A	1								
BOULDER CITY	91.86	47.7	12	27	1				14	1			
TUCSON	92.13	52.7	12	28	1	23	25	32	14	2	29	42	PKKP
TUCSON TELE.	92.26	52.7	12	30	3				14	3	29	41	PKKP
KUNMING	92.94	297.8	12	31	0	23	4	4	14	7	16	21	PP
PEKING	93.04	316.6	12	10A	-21	23	4	3	14	6	16	22	PP
EUREKA	93.42	44.4	12	32	-1				14	5	29	37	PKKP
PORT BLAIR	93.51	281.5	12	35	2								
SIAN	93.91	308.5	12	35A	0								
MAGADAN	94.89	345.8	12	37	-2	23	16	0					
CHENGTU	95.17	303.1	12	41A	0	23	21	2	14	16	16	40	PP
HUANCAYO	96.02	108.3	13	20	35								
LANCHOW	98.37	307.5	12	56A	1	23	51	5			23	24	SKKS
BUTTE	99.47	40.9	13	0	0								
COLLEGE	100.52	13.6	13	4	-1						16	8	PP
SHILLONG	101.46	293.0	13	9A	0								
RAPID CITY	103.82	46.4	13	19	0						17	35	PP
POONA	112.66	278.0	17	50	0								
KIMBERLEY	114.37	204.3	17	55	1								
CARACAS	115.42	93.7				24	7	-2					
MORGANTOWN	117.44	58.8	18	OK	0								
SAN JUAN	119.95	86.5	18	4	0								

RESOLUTE	120.04	17.8	18	3A	-2				21	1	19 40 PP
BULAWAYO	120.56	212.1	18	6	0						
WARSAK DAM	120.97	292.8	18	4	-2						
OTTAWA	122.21	53.6	18	8K	-1						21 4 SKP
PALISADES	122.25	59.0	18	9	0	24	24	-8			20 0 PP
NAMANGAN	123.10	300.6	17	41	-29						
QUETTA	123.26	286.9	18	12A	1				19	48	36 2 SS
BREBEUF	123.66	53.9	18	11A	-1						
SHAWINIGAN	124.48	52.9	18	13K	0						27 59 PKKP
SEVEN FALLS	125.91	52.5	18	16A	0						
THULE	126.67	15.8	18	8	-9						20 12 PP
KHEYS	128.16	349.9	18	13	-7						
ELISABTHVLLE	128.50	215.9	18	27K	6				20	6	20 31 PP
NORD	130.57	3.1	18	23	-2						21 6 PP
UVIRA	134.38	223.7	18	33	1						21 23 PP
ASTRIDA	134.72	225.1	18	34	1						
LWIRO	135.56	224.3	18	23	-11						19 17
RUMANGABO	135.97	225.7	18	27	-8						
ADDIS ABABA	136.77	246.0	18	40	4						
APATITY	139.87	340.6	18	35	-7						21 34 PP
LEOPOLDVILLE	140.25	205.1	18	38	-5						21 40 PP
SCORESBY SD.	140.33	11.1	18	42	-1				20	27	21 41 SKP
SODANKYLA	141.78	343.4	18	40	-6						
KIRUNA	142.74	347.0	18	43	-5						
TIFLIS	143.14	297.5	18	46	-2						
MOSCOW	144.89	322.6	18	49	-2						
REYKJAVIK	145.82	16.5	18	54A	1				20	34	
PULKOVO	146.07	332.3	18	52	-1						
BANGUI	146.65	216.5	18	57	3						20 39
SOTCHI	146.81	300.9	18	55	1						
SIDA	146.98	14.2	18	57	2				20	36	
NURMIJARVI	147.61	336.9	18	58	3						
SKALSTUGAN	148.03	349.2	18	55	-1						
KSARA	149.63	282.3	18	59	1				20	42	22 41 PP
JERUSALEM	149.83	278.1	18	58K	-1				20	43	
UPPSALA	150.25	341.5	19	4	5				20	54	
SIMFEROPOL	150.57	304.8	19	0	0						
GOTEBORG	153.54	344.9	19	8	4				21	9	
IASI	154.19	312.5	19	21	16						19 39
BACAU	154.87	311.6	19	29	23						
LWOW	154.98	320.5	19	16	10						
ISTANBUL UN.	155.03	298.0	19	4	-2						23 14 PP
COPENHAGEN	155.26	342.3	19	15	9						19 33 PKP2
CINE	156.13	289.9	19	9	2						19 39
MBOUR	156.43	136.7	19	11	3						19 52 PKP2
KRAKOW	156.94	324.9	19	8	-1						19 40
RACIBORZ	157.74	326.9	19	9	-1						19 46
COLLMBERG	158.90	335.9	19	10	-1						22 13
HALLE	159.07	337.8	19	6	-5				20	46	19 47 PKP2
PRUHONICE	159.39	331.5	19	12	0				20	57	23 37 PP
BRATISLAVA	159.58	324.5	19	11K	-1						
JENA	159.68	337.5	19	11	-1						23 26 PP
MUNSTER	159.81	345.3	19	7	-5						19 54
VIENNA-H.	159.88	325.6	19	13	1						19 56 PKP2
CHEB	160.13	334.9	19	51	39				21	21	
SONNEBERG	160.28	337.3	19	11	-1				19	55	
BENSBERG	160.86	345.0	19	13	0						19 58 PKP2
KEW	161.20	359.6	19	13	0						19 59 PKP2
STUTTGART	162.32	338.4	19	14	-1				20	5	20 23 *SPKP
TUBINGEN	162.58	338.3	19	14	-1				20	6	
STRASBOURG	162.91	341.0	19	15	0				20	57	20 8 PKP2
EBINGEN	162.92	337.9	19	15	0				20	8	
PARIS	163.71	352.9	19	17	1						23 57 PP
CHUR	163.88	334.4	20	12A	56						
FOLINIERE	163.91	359.9	19	17	1						
BASLE	163.92	339.8	20	12A	56						
CLERMONT-FD	166.61	348.9	19	20	1						20 23
TAMANRASSET	168.80	210.0	19	21A	1				21	1	24 21 PP
SERRA PILAR	169.36	35.1	19	7K	-13						
LISBON	170.74	46.8	19	24K	3						20 43 PKP2
TOLEDO	172.25	20.5	19	23A	1						24 40 PP
ALICANTE	174.32	359.6	19	27	4	25	44	-2			24 59 PPP
GRANADA	174.83	28.4	19	26K	3	26	44	58			24 57 PP
MALAGA	174.84	37.2	19	24K	1	26	26	40			24 56 PP
ALGIERS UNI.	174.95	325.3	19	23	0						
ALMERIA	175.52	20.4	19	25A	2						
RELIZANE	176.79	344.2	19	30A	7				21	10	24 59 PP

APRIL 8 R.H 1.M 40.S EPICENTRE -16.95-173.88 DEPTH= 95.KM

DEPTH OF FOCUS= 0.010R

A=-0.95166 B=-0.10207 C=-0.28970 D=-0.1066 E= 0.9943
G= 0.2880 H= 0.0309 K=-0.9571 HT= 5.4

SE= 2.16

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
APIA	3.73	33.2	0 54A	-2	1 31	-8		
SUVA	7.43	259.6	1 55	8	3 19	8		2 5
RAOUL ISLAND	12.80	196.1	2 56	-3				
NOUMEA	19.27	250.8	4 17	-2	6 50	-57		
ONERAHI	21.47	206.9	4 44	2			5 3	16 30
KARAPIRO	22.88	202.0	4 56A	0			5 11	
TUAI	23.14	198.1	5 0	2	9 2	3	5 18	
TONGARIRO	24.02	200.5	5 6	-1				
WELLINGTON	26.15	199.7	5 25	-2	9 54	5		8 49
COBB RIVER	26.68	203.0	5 34	2				
GEBBIES PASS	29.01	200.4	5 52A	-1	10 38	3		
BRISBANE	32.29	245.2	6 19A	-2				6 50
RIVERVIEW	35.57	235.1	6 47A	-3				10 16
RABAUL	35.62	287.0	6 48	-2				
CANBERRA	37.74	233.7	7 6	-2			7 16	
CHARTERS TS.	37.87	259.1	7 7A	-2				9 23
PORT MORESBY	38.62	276.2	7 16K	1				
MELBOURNE	41.62	231.7	7 38A	-2				
MACQUARIE I.	42.95	203.0	7 51	0				
ADELAIDE	45.78	237.6	8 14A	1				8 58
GUAM	50.82	304.0	8 51	-2				
CAPE HALLETT	56.12	185.8	9 35A	4				
SCOTT BASE	61.68	184.6	10 10	0			10 30	10 41 PCP
MATUSIRO	69.82	320.5	11 1A	-1			11 25	17 58
MANILA	71.51	292.1	11 3	-9				
BAGUIO CITY	72.61	293.7	11 16	-2				
BERKELEY	72.95	40.5	11 20A	0			11 53	
LICK	73.01	41.2	11 21A	0			11 52	
UKIAH	73.15	38.9	11 22	0			11 52	
SOUTH POLE	73.16	180.0	11 21	-1			11 53	
PASADENA	73.42	45.6	11 23	0				11 53
FRESNO	73.85	42.6	11 26	0				
MINERAL	74.89	38.8	11 33	1			12 4	
RENO	75.49	40.3	11 36	1				
MIRNY	75.84	204.3	11 36	-1				
BOULDER CITY	76.71	45.6	11 40	-2			12 15	
LEMBANG	77.07	266.7	11 44	0			12 17	
TUCSON	77.66	50.6	11 48	1			12 19	
TUCSON TELE.	77.78	50.6	11 49	1			12 19	40 53 PKPPKP
EUREKA	77.87	42.1	11 48	0			12 19	
VICTORIA	79.12	31.5	12 7A	12				
HORSESHOE B.	79.76	30.9	11 56	-3				
HONG KONG	80.48	296.8	12 4	1				19 54
NANKING	80.77	307.5	12 5A	1				
SALT LAKE C.	81.23	42.7	12 7	0			12 40	
CANTON	81.54	297.2	12 9A	1				
TACUBAYA	81.77	66.9	12 46	37				17 39
CHANGCHUN	82.07	320.4	12 11A	0				
BUTTE	83.55	38.0	12 18	0			12 49	
COLLEGE	83.96	10.9	12 19	-1			12 50	
BOZEMAN	84.26	38.8	12 22	0			12 52	
BANFF	84.77	32.6	12 16K	-9				
BOULDER	85.25	45.8	12 27	0				
PEKING	86.20	313.7	12 31A	-1	22 59	2		
RAPID CITY	88.43	42.9	11 41	-61			12 11	
MEDAN	88.59	274.1	12 44	1				
DALLAS	88.65	55.2	13 17	34				
SIAN	89.24	306.1	12 47A	1				
PAOTOW	90.72	312.3	12 54A	1				
KUNMING	91.31	295.7	12 58A	2				
CHENGTU	91.94	301.3	13 0A	1	23 56	7		
LANCHOW	93.78	306.4	13 8A	1				
RESOLUTE	103.33	15.6	13 49	-1				
OTTAWA	107.53	47.0						29 46 PKKP
NORD	114.60	3.6						16 57
QUETTA	123.29	295.2	18 48A	2				

SCORESBY SD.	123.83	11.0	18 48	1					
APATITY	126.45	347.3	18 52	0					
SODANKYLA	127.88	350.1	18 54	0					
KIRUNA	128.32	353.1	18 55	0					
NURMIJARVI	134.49	347.3	19 1	-6					
GOTEBORG	139.08	355.2	19 10	-5					
ELISABTHVLLE	144.65	218.0	19 28K	3					
IASI	145.02	334.2	19 34	8				20 58	
MUNSTER	145.04	358.4	19 27	1					
KRAKOW	145.15	344.4	19 26	0				20 0	
KEW	145.18	7.1	19 27	1					
HALLE	145.22	353.6	19 22	-4				19 55	
RACIBORZ	145.54	346.2	19 28	1				20 2	
BACAU	145.80	334.2	19 33	6				19 47	
JENA	145.82	353.8	19 27	0	20 2			22 52	PP
BENSBERG	146.06	358.8	19 29K	1	20 2				
PLAUEN	146.18	353.1	19 28	0	20 1				
PRAGUE	146.29	350.3	19 32	4	20 8				
PRUHONICE	146.35	350.2	19 31	3	20 7				
SONNEBERG	146.40	354.1	19 29	1	20 3				
ADDIS ABABA	147.27	260.2	19 34	4					
BRATISLAVA	147.59	346.2	19 31	1	19 58			20 10	PKP2
FOLINIERE	147.81	8.2	19 31	0					
STUTTGART	148.16	356.1	19 31	0	20 8				
TUBINGEN	148.41	356.3	19 37A	5	20 10				
STRASBOURG	148.42	357.9	19 38	6	19 59			20 10	*SPKP
KSARA	148.46	307.8	19 34	2					
EBINGEN	148.76	356.3	19 36A	4	20 11				
ISTANBUL UN.	148.93	325.3	19 36A	4					
BASLE	149.48	358.1	19 39	6					
UVIRA	149.54	230.3	19 34	1				19 41	*SPKP
ASTRIDA	149.66	232.4	19 35A	2				19 40	*SPKP
BELGRADE	149.71	339.6	19 40K	7					
JERUSALEM	149.78	304.6	19 36A	2				19 41	PKP2
CHUR	150.05	355.3	19 35A	1					
SOFIA	150.43	333.8	19 42	7					
LWIRO	150.59	231.7	19 36	1				23 11	
RUMANGABO	150.78	233.8	19 38	3				19 44	*SPKP
CINE	151.77	321.1	19 38	1					
TOLEDO	155.50	19.1	19 45	3				20 10	PKP2
LEOPOLDVILLE	156.98	203.9	19 46A	2	20 21				
GRANADA	158.09	21.2	20 54A	69				24 14	PP
TAMANRASSET	174.17	5.5	20 0A	2	20 32			25 58	PP

APRIL 8 11.H 44.M 26.S EPICENTRE -50.38 -72.61 DEPTH= 0.KM

A= 0.19141 B=-0.61102 C=-0.76813 D=-0.9543 E=-0.2989
G=-0.2296 H= 0.7330 K=-0.6403 HT= -5.6

SE= 1.94

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
PORT STANLEY	9.38	103.8	2	17	-2								
OHIGGINS	15.21	154.1	3	32	-5	6	32	4					
SANTA LUCIA	16.99	5.5	3	55	-5	7	19	10					
LA PLATA	18.81	40.2	4	23A	0	7	59	9			9	14	PCP
BUENOS AIRES	18.84	38.6	4	25	2								
TALA POZO	23.41	18.9	5	9	-2	9	29	8					
ANTOFAGASTA	26.75	4.5	5	43	0								
HALLEY BAY	31.20	159.5	6	22	-1								
LA PAZ	33.98	7.7	6	50A	3	12	19	7			8	8	PP
HUANCAYO	38.28	355.7	7	27	3	13	33	15					
SOUTH POLE	39.81	180.0	7	36	0	13	35	-6			9	3	PP
SCOTT BASE	47.03	194.4	8	35	0						17	46	
CAPE HALLETT	50.05	200.8	8	59A	1						10	59	PP
BOGOTA	54.79	358.2	9	34	0	17	22	8					
CHINCHINA	55.18	356.3	9	36K	0	17	27	8					
CARACAS	60.82	6.4	10	16A	0	18	38	5					
GALERAZAMBA	60.94	357.0				18	45	11					
MIRNY	62.89	173.6	10	28	-2						12	47	PP
ST. VINCENT	64.05	12.3	10	35	-3								
FORT FRANCE	65.60	12.2	10	44	-4								
SAN JUAN	68.69	6.6	11	6	-1						12	4	
ROXBURGH	70.44	221.2				20	40	10			29	4	SSS
GRAHAMSTOWN	70.46	118.7	11	18	0								
GEBBIES PASS	70.46	224.3	11	18	0								

WELLINGTON	71.39	227.2	11	26	2					
TONGARIRO	72.65	229.1	11	31	0				12	10
WINDHOEK	72.77	104.6	11	32	0					
KIMBERLEY	72.83	114.3	11	32K	0					
TACUBAYA	73.33	333.8	11	36A	1					
KARAPIRO	73.65	229.9	11	36A	-1				12	14
PRETORIA	77.07	114.6	11	57	1					
MBOUR	80.75	54.1	12	18	2	22	31	7		
BULAWAYO	81.61	111.3	12	21	0					
BERMUDA	82.69	6.8	12	22	-5	22	58	14	15	31 PP
COLUMBIA	84.34	353.0	12	35	0					
LEOPOLDVILLE	85.30	91.1	12	40A	0	23	16	6	32	4 SSS
DALLAS	85.58	339.8	12	42	1	22	58	-15		
CHAPEL HILL	86.11	354.8	12	46	2					
MELBOURNE	86.14	208.9	12	43	-1					
CANBERRA	87.10	212.9	12	49A	0					
ELISABTHVLLE	87.44	105.0	12	54K	4	23	22	-9	29	28 SS
RIVERVIEW	87.67	215.2	12	51A	0	23	28	-5		
FAYETTEVILLE	88.18	342.7	12	54	0					
TUCSON	88.95	328.4	12	59	1				16	30 PP
WASHINGTON	88.98	356.5	12	57	-1				17	25 PP
TUCSON TELE.	89.00	328.5	12	59	1				30	15 PKKP
MORGANTOWN	89.86	354.3	13	3K	1					
ADELAIDE	90.66	205.3	13	8A	2					
PENNSYLVANIA	90.91	356.0	13	8	1	24	12	10	16	46 PP
PALISADES	91.01	359.0	13	8	1	24	54	51	16	43 PP
LAWRENCE	91.17	342.5	13	7	-1					
BRISBANE	92.59	219.5	13	13K	-1				23	43
PASADENA	93.29	323.6	13	19	1	24	35	12	16	56 PP
BOULDER	94.49	335.4	13	24	1					
UVIRA	94.79	101.3	13	27K	2					
HALIFAX	94.94	6.4	13	23A	-2	23	58	-39	17	16 PP
OTTAWA	95.43	357.8	13	27	0					
BREBEUF	95.50	359.3							17	22 PP
LWIRO	95.54	100.2	13	29A	1	24	59	16		
ASTRIDA	95.86	101.2	13	30A	1				26	9 PS
SHAWINIGAN	96.54	359.9	13	28	-5					
RUMANGABO	96.59	100.1	13	35	2				16	43
EUREKA	97.25	327.6	13	37	1				17	33 PP
RAPID CITY	97.77	338.3	13	36	-2				16	53 PP
TAMANRASSET	100.03	66.5	13	49A	1	24	27	0	17	51 PP
GRANADA	106.20	50.9	18	35K	9					
ALICANTE	108.67	52.2	14	28	777	26	6	-29		
ALGIERS UNI.	109.30	55.5	18	42	9				19	34 PP
ADDIS ABABA	110.51	100.9	18	23	-11					
PORT MORESBY	111.17	222.6							28	49 PS
LEMBANG	123.03	180.3	19	0K	2				20	22
JERUSALEM	124.72	80.5	19	3A	1				20	49
RESOLUTE	125.66	352.9	19	3A	0				20	56 PP
SCORESBY SD.	125.94	18.7	19	7	3					
KSARA	126.48	79.1	19	6	1				21	2 PP
THULE	126.55	1.3	19	5	0				20	56 PP
KRAKOW	127.26	54.0	19	7	1					
GOTEBORG	127.99	42.7	19	8	0					
COLLEGE	128.67	328.1	19	9	0					
BACAU	128.98	61.1							22	32 PP
LWOW	129.28	56.2	19	11	1					
IASI	129.72	60.8	19	26	15				22	41 PP
UPPSALA	131.64	42.5	19	14	-1				22	38 PP
SIMFEROPOL	132.20	66.6	19	15	-1					
MEDAN	132.79	168.1	19	18	1				22	46
SOTCHI	134.78	71.3	19	21	0					
NORD	134.99	9.9	19	21A	0					
NURMIJARVI	135.04	44.0	19	24	3					
KIRUNA	136.35	33.3	19	23	-1					
TIFLIS	136.88	76.5	19	25	0					
PULKOVO	137.31	46.7	19	24	-1					
BOMBAY	138.28	126.2	19	29	2				22	17 PP
SODANKYLA	138.42	35.1	19	29	2					
POONA	138.50	127.7	19	26	-2					
MAKHACH-KALA	139.24	76.5	19	29	0					
MOSCOW	139.35	54.6	19	26	-3					
PORT BLAIR	139.57	157.5	19	31	2				23	8 PP
APATITY	141.00	35.9	19	26	-6					
MANILA	142.63	202.0	19	33	-2				22	36
QUETTA	143.72	108.3	19	35	-2				22	50 PP
BAGUIO CITY	144.50	202.1	19	38	0					
KHEYS	145.07	14.5	19	40	1					

AGRA	147.75	125.0	19	36A	-8						
HOWRAH	148.46	144.7	19	45	0						
BOKARO	148.63	139.7	20	46	61						
PETROPAVLOVK	148.70	295.2	19	48	3						
LAHORE	149.10	114.9	19	50	4						
WARSAK DAM	149.18	108.3	19	47	1						
CHITTAGONG	149.49	150.7	19	48	2						
DEHRA DUN	150.28	121.3	19	56	8					24	27
PHU-LIEN	150.48	178.5	19	50	2					23	26 PKS
HONG KONG	151.48	193.2	19	52	3					19	56 PKP2
CHATRA	151.85	139.1	19	52	2					23	57 PP
CANTON	152.37	191.7	19	52A	1					23	44 PP
TUKUBASAN	152.57	251.5	19	50K	-1					23	40 PP
NAMANGAN	153.56	96.9	19	53	1						
MAGADAN	153.89	307.3	19	41	-12						
MATUSIRO	153.92	249.8	20	1	8					43	38 SS
KUNMING	154.45	170.0	19	56	2					23	53 PP
UGLEGORSK	157.66	280.2	19	58	0						
ZO-SE	158.16	213.3	20	0A	2					24	14 PP
CHENGTU	160.14	171.4	20	2K	1					24	23 PP
SEMIPALATNSK	162.72	79.4	20	4	1						
YAKUTSK	163.07	322.0	19	59	-5						
SIAN	163.85	184.5	20	5A	1					24	41 PP
LANCHOW	165.48	168.4	20	8A	2					24	51 PP
CHANGCHUN	166.17	248.6	20	6A	-1					24	56 PP
PEKING	167.95	214.2	20	8A	0					25	5 PP
PAOTOW	170.03	191.7	20	11A	2					25	11 PP

APRIL 9 H.M 44.M 2.5 EPICENTRE -14.73 167.12 DEPTH= 78.KM

DEPTH OF FOCUS= 0.007R

A=-0.94319 B= 0.21567 C=-0.25273 D= 0.2229 E= 0.9748
G= 0.2464 H=-0.0563 K=-0.9675 HT= 5.8

SE= 1.53

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
NOUMEA	7.55	184.7	1	47	-2	3	19	5					
SUVA	11.37	108.9	2	56	15	4	58	11			3	30	
BRISBANE	18.24	223.7	4	9A	0	7	33	7					
PORT MORESBY	20.23	282.9	4	31A	0	8	13	5	5	0			
CHARTERS TS.	20.58	252.3	4	34K	0	8	20	5					
ONERAHI	21.93	164.1	4	53	5				5	17			
RIVERVIEW	23.88	214.4	5	6A	-1	9	27	13					
KARAPIRO	24.27	163.7	5	10	0				5	35	12	21	PCS
TONGARIRO	25.47	164.7	5	22	0								
CANBERRA	26.18	215.2	5	30A	2				6	2			
GEBBIES PASS	29.25	171.8	5	55	-1						6	57	
ROXBURGH	30.77	177.0				11	10	4			7	22	PP
ADELAIDE	32.50	226.7	6	25	0						12	49	SCP
CAPE HALLETT	57.58	178.8	9	43	-1								
MATUSIRO	57.84	332.6	9	44K	-1				10	3	17	52	
SCOTT BASE	63.13	180.1	10	20K	-1								
CHANGCHUN	69.66	329.0	11	1	-2								
MIRNY	70.27	204.1	11	6	0						11	15	
PEKING	72.17	321.2	11	17K	-1	20	34	1					
SIAN	73.69	312.8	11	28	1								
KUNMING	74.20	301.7	11	32	2	20	59	4	11	52	21	40	*SS
SOUTH POLE	75.36	180.0	11	34	-2				11	57	12	10	*SP
CHENGTU	75.59	307.5	11	37	-1	21	12	1	11	58	21	41	*SS
PAOTOW	76.31	318.8	11	43	1								
LANCHOW	78.23	312.3	11	53	1								
SHILLONG	83.45	298.5	12	20	0								
LICK	84.53	49.3	12	25A	0				12	52			
MINERAL	85.74	46.5	12	30	-1				12	58			
COLLEGE	86.37	17.6	12	33	-1				12	55			
EUREKA	89.45	48.9	12	49	0				13	14			
TUCSON	91.19	57.1	12	58	1								
TUCSON TELE.	91.31	57.0	12	58	0								
RESOLUTE	106.22	15.9				24	34	-2			18	14	PP
THULE	112.04	12.1	18	24	-2								
HUANCAYO	112.67	110.0	16	59	777								
PALISADES	121.32	50.8									30	13	PS
SCORESBY SD.	124.00	3.7	18	52	3								
NURMIJARVI	126.81	337.9									17	57	

FOLINIERE	144.56	345.8	19 27	0							
LEOPOLDVILLE	146.27	237.9	19 34	4			19 55	20	5	*SP	
TAMANRASSET	160.84	297.4	20 15	25				24	53		

APRIL 9 6.H 18.M 34.S EPICENTRE -36.34 76.79 DEPTH= 0.KM

A= 0.18456 B= 0.78606 C=-0.58996 D= 0.9735 E=-0.2286
G=-0.1348 H=-0.5743 K=-0.8074 HT= -0.4

SE= 2.27

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
TANANARIVE	31.01	296.2	6 20	-1				
MIRNY	31.69	167.7	6 26	-1	11 41	4		
PERTH	32.46	93.8	6 35	1	11 55	6		
WILKES	35.74	157.3	7 6	4	12 38	-2		
PIETERMZBURG	39.19	266.1	7 32	1				
LEMBANG	40.70	51.3	7 46	2	13 58	3		
DJAKARTA	40.71	49.7	7 44A	0	14 2	7		
GRAHAMSTOWN	40.96	259.0	7 53	7				
PRETORIA	42.58	270.2	8 0	1				
COLOMBO	43.11	4.5	8 10	7	14 37	7		
KIMBERLEY	44.05	264.4	8 11K	0				
MEDAN	44.67	32.0	8 17	1				
BULAWAYO	44.94	277.6	8 19	1				
KODAIKANAL	46.32	0.9	8 30	1	15 17	0	19 44	SSS
HERMANUS	46.37	254.6			15 21	4	10 57	PP
MADRAS	49.17	4.4	8 56	4	16 3	6	11 52	PPP
ADELAIDE	49.58	107.8	8 54A	-1	16 11	8		
PORT BLAIR	50.06	20.5	8 57	-1	16 8	-1	10 47	PP
ELISABTHVLLE	50.70	286.1	9 6A	3	16 23	5	11 7	PP
WINDHOEK	53.00	267.6	9 18	-3				
MELBOURNE	53.28	113.5	9 22	-1	16 54	1		
HYDERABAD	53.50	2.0	9 25	1	16 50	-6	20 33	SS
SOUTH POLE	53.85	180.0	9 25	-2	17 16	15	11 27	PP
POONA	54.64	356.6	9 32K	-1	17 8	-4		
UVIRA	54.67	295.2	9 33K	0	17 31	19		
SCOTT BASE	54.78	165.0	9 33K	-1	17 20	6	10 48	PCP
ASTRIDA	54.82	296.5	9 33	-1	17 32	18		
BOMBAY	55.06	355.4	9 36	0	17 17	-1	12 56	PPP
LWIRO	55.74	296.1	9 41K	0			12 28	
RUMANGABO	55.99	297.3	9 43	1	17 42	12		
CAPE HALLETT	56.87	158.6	9 49	0	17 47	5	21 39	SS
MACQUARIE I.	57.08	136.5	9 52	2				
HALLEY BAY	58.40	196.7	9 58	-2				
RIVERVIEW	59.46	111.5	10 10K	3	18 21	5		
CHITTAGONG	60.08	16.1	10 11	0	18 24	0	12 26	PP
BOKARO	60.44	9.5	10 17	3	18 29	1		
CHARTERS TS.	62.17	95.2	10 23	-2	18 52	2		
KARACHI	62.51	350.1	10 21	-7				
AGRA	63.14	1.2	10 29K	-3	18 58	-4	23 0	SS
SHILLONG	63.20	15.3	10 30A	-2	19 7	4		
PHU-LIEN	63.45	31.4	10 36	2			15 20	
CHATRA	63.59	10.4	10 33	-2	19 14	6		
BRISBANE	63.81	105.9	10 35K	-1	19 12	1		
LEOPOLDVILLE	64.64	284.0	10 39K	-3	19 24	3	23 26	SS
MANILA	65.61	47.8	10 59	11				
KUNMING	65.77	25.7	10 50	1	19 36	1	14 55	PPP
DEHRA DUN	66.32	1.2	10 53	1	19 39	-3	13 17	PP
ROXBURGH	66.76	130.2			19 46	-1	24 8	SS
QUETTA	66.81	350.7	10 54	-1	19 45	-2	13 24	PP
BAGUIO CITY	66.82	46.3	10 56	0	19 56	8		
LAHORE	67.57	357.7	10 59	-1				
BANGUI	67.67	293.7	11 2	1				
HONG KONG	68.19	37.3	11 4	0	20 10	6	24 9	SS
CANTON	68.42	36.1	11 7	1	20 9	2		
PORT MORESBY	68.69	86.0	11 8A	1	20 11	1		
WARSAK DAM	70.15	355.4	11 13	-3				
CHENGTU	71.38	24.6	11 22K	-2	20 37	-5		
TONGARIRO	73.98	127.0	11 38	-1				
ARGENTINE I.	74.29	196.0	11 40	-1				
KARAPIRO	74.69	125.9	11 44	1			11 50	
RABAUL	75.75	84.7	11 47	-2				
LANCHOW	76.31	22.3	11 51K	-1	21 35	-2		
SIAN	76.36	27.0	11 52K	-1	21 37	0		

NAMANGAN	77.09	356.0	11	59	2	21	45	0		
JERUSALEM	78.15	324.7	12	3K	0				12	27 PCP
NANKING	78.59	35.4	12	4	-1	21	57	-4		
ZO-SE	78.95	37.7	12	6K	-1	22	3	-2		
KSARA	79.56	326.3	12	11	1	22	16	4	15	12 PP
GORIS	80.52	336.6	12	15	0	22	21	-1		
PAOTOW	82.41	24.9	12	26K	1	22	42	1		
TIFLIS	83.02	336.5	12	28	0	22	49	2		
MAKHACH-KALA	83.33	338.8	12	28	-2	22	49	-2		
PEKING	84.19	29.3	12	33K	-1	22	56	-3		
CINE	86.28	323.3	12	46	1					
SOTCHI	86.39	334.0	12	44	-1	23	14	-7		
SEMIPALATNSK	86.42	2.2	12	44	-1	23	16	-5		
KASTAMONU	88.07	327.2	12	48	-5					
ULAN-BATOR	88.09	19.7	12	53	-1	23	41	4		
ISTANBUL UN.	88.60	325.9	12	50	-6					
TAMANRASSET	89.30	299.1	13	0	1	23	30	-18	16	43 PP
SIMFEROPOL	89.64	331.2	13	4	3					
CHANGCHUN	91.15	32.8	13	8	0	24	5	0	16	48 PP
IRKUTSK	91.46	16.5	13	8	-1	24	7	0		
MATUSIRO	92.23	45.1	13	12K	-1	24	18	4	30	26 SS
BUCHAREST	92.57	326.3				23	46	-2	25	39
TUKUBASAN	93.09	46.3				23	58	7	24	19
TARANTO	93.96	318.8							22	49
IASI	94.12	328.8	13	36	14	23	32	-59	17	32
ROME	97.54	317.3				24	14	0		
MOSCOW	97.60	338.9	13	42	5					
LWOW	97.65	328.7	13	40	2					
MBOUR	101.35	279.5				26	1	29	18	6 PP
PRUHONICE	101.99	324.3	13	57A	0				17	59 PP
UGLEGORSK	102.86	37.8							18	9 PP
PULKOVO	103.15	337.9				24	40	-1	18	18 PP
STUTTGART	103.81	321.0							18	28 PP
SANTA LUCIA	104.23	207.6				24	45	-2		
HALLE	104.23	324.3	18	19	-3				18	26 PP
STRASBOURG	104.42	320.2							18	32 PP
COPENHAGEN	106.75	327.8				25	1	4	18	45 PP
UPPSALA	107.48	333.0				25	6	4		
APATITY	108.62	343.8				25	9	6	18	30 PKS
KIRUNA	112.09	340.1							28	56
MAGADAN	113.23	32.2							19	34 PP
KHEYS	116.96	355.3				25	29	-10	19	34 PP
LA PAZ	117.86	218.6							19	50 PP
HUANCAYO	125.16	214.0	19	6	3					
NORD	126.21	349.5	19	4	-1					
SCORESBY SD.	126.64	335.5	19	10	5				21	6 PP
THULE	136.86	348.6	19	24	-1				21	58
CARACAS	138.33	241.1	19	46	19				23	40 PP
BOGOTA	138.60	227.2							34	41 PPS
COLLEGE	141.16	28.6	19	24	-8				22	31 PP
RESOLUTE	141.37	356.5	19	27	-6				22	33 PP
SAN JUAN	142.80	251.3	19	40	5					
BERMUDA	148.09	274.3	19	44	0				43	6 SS
HALIFAX	149.00	297.9	19	40A	-6				42	36 SS
SEVEN FALLS	153.72	304.3	20	1	8					
SHAWINIGAN	155.14	303.7	20	9	14					
BREBEUF	155.95	301.5	19	53	-3					
FORDHAM	156.69	290.1							21	38
PALISADES	156.71	290.5	19	55	-2				23	59 PP
OTTAWA	157.41	302.1	20	15	17					
PENNSYLVANIA	159.72	290.4							24	29 PP
VICTORIA	160.82	44.3	20	44	42					
COLUMBIA	161.72	269.2	20	4	2				20	52
UKIAH	163.93	74.0	20	9	4				20	59
BERKELEY	164.72	78.6	20	1	-4				24	58 PP
MINERAL	165.03	68.9	20	8	2				21	6 PKP2
LICK	165.21	80.6	20	10	4				21	7 PKP2
HUNGRY HORSE	165.60	30.2	21	7	61					
RENO	166.52	71.3	20	11	4					
FRESNO	166.65	83.2	20	11	4					
PASADENA	167.58	95.7	20	12	4				25	1 PP
BUTTE	168.04	33.1	21	17	69					
BOZEMAN	168.96	30.0	20	9	1					
EUREKA	169.44	68.9	20	11	2				25	11 PP
RAPID CITY	172.27	359.9	20	11	1				25	28 PP
TUCSON	172.49	120.7	20	14	3				25	31 PP
TUCSON TELE.	172.62	120.5	20	13	2				25	36 PP
FAYETTEVILLE	172.70	270.7	20	14	3				25	32

LARAMIE 174.70 19.7 21 45

APRIL 9 17.H 8.M 33.S EPICENTRE 25.70 94.76 DEPTH= 0.KM

A=-0.07487 B= 0.89909 C= 0.43132 D= 0.9966 E= 0.0830
G=-0.0358 H= 0.4298 K=-0.9022 HT= 3.1

SE= 3.63

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
TOCKLAI	1.04	0.5	0 27	5				
SHILLONG	2.61	267.7	0 43A	-1	1 11	-6		0 52 PP
CHITTAGONG	4.28	219.6	1 7	-1	1 57	-2		1 24 PG
HOWRAH	6.67	243.3	1 51	10	2 25	-34		
CHATRA	6.91	281.0	1 35	-10	3 1	-4		
KUNMING	7.19	93.5	1 52A	3	3 13	1		2 11 *SP
BOKARO	8.35	259.0						3 24
CHENGTU	9.54	56.7	2 22	1	4 5	-6		2 41 *SP
PHU-LIEN	11.95	111.7	2 55K	1	5 0	-10		3 3 PP
LANCHOW	12.93	34.7	3 7K	-1	5 29	-5		3 26 *SP
WUWEI	13.90	26.8	3 20	0				
PORT BLAIR	14.09	188.2	3 26	3	6 9	8		3 37 PP
SIAN	14.93	51.9	3 39	5	6 31	10		
AGRA	15.07	279.1			6 26	2		
DEHRA DUN	15.46	291.1	3 38	-3	6 34	1		6 12
SEHORE	16.30	264.8			6 47	-6		
CANTON	17.07	94.9	4 3	2	7 18	7		4 22 *SP
HONG KONG	18.05	96.7	4 14K	0	7 39	6		
MADRAS	18.66	230.1	4 16	-5	7 49	2		4 46 PPP
LAHORE	18.85	292.7	4 19	-4				
PAOTOW	19.54	36.8	4 31	-1	8 3	-4		
POONA	20.63	254.0	4 44	1				
BOMBAY	21.38	256.0	4 53	2	8 46	2		5 4 PP
WARSAK DAM	21.73	297.8	4 54	-1				
PEKING	22.89	46.1	5 6	0	9 10	-2		5 21 *SP
ZO-SE	23.83	70.9			9 33	4		
ULAN-BATOR	24.15	20.2	5 18	0	9 36	2		
NAMANGAN	24.48	314.2	5 21	-1				
QUETTA	24.94	286.7	5 24	-2	9 43	-5		6 9 PPP
BAGUIO CITY	25.76	105.9	5 32	-2				
SEMIPALATNSK	27.08	339.4	5 42	-4				
MATUSIRO	38.46	62.9	7 21K	-4	13 16	-5		7 45
YAKUTSK	43.19	23.3	7 52	-12				
TIFLIS	43.91	304.3	8 21	11				
MOSCOW	50.75	322.2	9 9	5				
MAGADAN	51.11	32.9	9 26	20				
SIMFEROPOL	51.84	308.1	9 23	11				
JERUSALEM	52.01	291.3	9 24	11				
KASTAMONU	54.43	303.7	9 14	-17				
ADDIS ABABA	55.55	263.2	9 46	7				10 26 PCP
APATITY	55.63	335.9	9 36	-4				
ISTANBUL UN.	55.79	303.5	9 45	4				
KHEYS	57.30	352.0	9 47	-5				
HELSINKI	58.04	326.4	10 0	3				
SODANKYLA	58.15	335.0	9 44	-14				
NURMIJARVI	58.21	326.8	10 5	7				
KIRUNA	60.56	335.2	10 11	-3				
UPPSALA	61.72	326.0	10 17	-5				10 34
RABAUL	63.05	109.5	10 54K	23				
ISFJORD	63.20	346.7	10 31	-1				
SKALSTUGAN	63.99	330.4	10 34	-3				10 46
GOTEBORG	64.87	324.0	10 48	5				10 56
COLLMBERG	65.36	316.9	10 53	7				
HALLE	65.97	317.2	10 50	0				11 13 PCP
JENA	66.31	316.7	11 7	15				
CHARTERS TS.	67.58	127.2	10 57	-3				11 20
NORD	67.78	351.5	10 57	-5				
STUTTGART	68.31	314.8	11 9	4				
RUMANGABO	68.59	257.6	11 5	-2				11 18 PCP
ASTRIDA	68.84	256.2	11 6	-2				11 20 PCP
LWIRO	69.49	257.0	11 11	-1				11 23
UVIRA	69.79	255.7	11 11	-3				11 26 PCP
ADELAIDE	73.28	143.4	11 33K	-2				
ELISABTHVLLE	75.28	249.2	11 47K	1				
RATHFARNHAM	76.04	322.6	12 17	26				

THULE	77.58	356.0	11	54	-5							
COLLEGE	77.73	22.8	11	58	-2							
CANBERRA	79.46	137.5	11	57	-13							
RESOLUTE	79.67	2.6	12	8	-3							
TAMANRASSET	79.80	290.3	12	12	1							
SOUTH POLE	115.55	180.0	18	41	-3							

APRIL 9 17.H 36.M 11.S EPICENTRE 6.98 -82.27 DEPTH= 0.KM

A= 0.13350 B=-0.98367 C= 0.12069 D=-0.9909 E=-0.1345
G= 0.0162 H=-0.1196 K=-0.9927 HT= 6.9

SE= 2.94

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
CHINCHINA	6.91	106.4	1	46K	1	2	58	-7					
GALERAZAMBA	7.88	60.9	2	1	2	3	28	-2					
BOGOTA	8.49	105.6	2	8K	1	3	43	-2					
FUQUENE	8.62	99.5	2	13	4	3	49	1					
SANTIAGO MA.	8.89	317.2	2	13	0								
SAN SALVADOR	9.58	315.0	2	19	-3						4	5	
COMITAN	13.34	314.5	3	13	0						7	17	
CARACAS	15.56	75.9	3	42A	0	6	33	-3					
MERIDA	15.60	333.6	3	43	0	6	43	6			6	10	
OAXACA	17.33	306.5	4	7	2	7	34	17			8	16	SS
VERA CRUZ	18.14	313.4	4	18	3								
SAN JUAN	19.39	52.7	4	29	-1								
HUANCAYO	20.12	159.9	4	35	-3	8	28	8					
TACUBAYA	20.57	308.5	4	45K	2	8	38	9					
ST. VINCENT	21.56	71.8	4	55	2								
FORT FRANCE	22.11	67.9	4	59	0	9	9	11					
GUADALAJARA	24.51	305.9	5	30	8								
COLUMBIA	26.91	2.3	5	44	-1								
CHAPEL HILL	28.96	5.4	6	4	1								
BERMUDA	30.12	30.6	6	5	-9	11	21	9			7	1	PP
FAYETTEVILLE	30.96	341.0	6	19	-2								
CHIHUAHUA	31.14	316.7									8	32	
GEORGETOWN	32.12	7.6	6	31	0								
WASHINGTON	32.12	7.6	6	30	-1								
ST. LOUIS 1	32.33	348.3	6	28	-5	11	43	-4			7	27	PP
FLORISSANT	32.51	348.2	6	31	-4	11	44	-6					
MORGANTOWN	32.58	3.3	6	35	0								
PENNSYLVANIA	33.91	6.0	6	48	1	12	12	1					
LAWRENCE	33.94	341.7	6	43	-4								
FORDHAM	34.55	11.3									8	3	PP
PALISADES	34.70	11.1	7	0	6	12	21	-3			9	1	PPP
TUCSON TELE.	36.57	317.4	7	7	-2						8	13	PP
TUCSON	36.59	317.2	7	8	-2	13	1	8			8	41	PCP
OTTAWA	38.70	7.4	7	24	-3	13	21	-4					
BOULDER	38.85	331.4	7	25	-4								
BREBEUF	39.10	9.7	7	28	-3	13	32	1					
LARAMIE	39.99	332.4	7	39	1								
SHAWINIGAN	40.27	10.2	7	42	2								
HALIFAX	40.88	20.4	7	49	4	13	57	-1			16	31	SS
SEVEN FALLS	41.18	11.9	7	43	-5	14	4	2			16	49	SS
RAPID CITY	41.24	337.0	7	48	0						9	30	PP
BOULDER CITY	41.48	318.8	7	55	5								
SANTA LUCIA	41.67	165.4	7	49	-3	13	59	-10					
PASADENA	42.75	314.2	8	1	0	14	27	2			9	47	PP
SALT LAKE C.	42.76	326.5	7	59	-2								
EUREKA	44.31	322.1	8	13	0								
FRESNO	45.25	316.5	8	24	3								
BOZEMAN	45.88	332.0	8	26	0						9	23	
RENO	46.75	319.7	8	37	4								
LICK	46.80	316.1	8	31A	-2								
BUTTE	46.86	331.2	8	35	1								
BERKELEY	47.49	316.4	8	42K	3	15	39	6					
LA PLATA	47.57	152.7									18	29	SCS
MINERAL	48.34	319.6	8	49K	4								
UKIAH	48.77	317.3	8	54	5								
HUNGRY HORSE	49.23	332.4	8	53	1								
VICTORIA	54.05	327.3	9	28	0	17	4	0					
HORSESHOE B.	54.48	328.2	9	28	-4								
MBOUR	64.42	77.4	10	59	19	19	23	5					
RESOLUTE	68.04	356.4	10	58	-5	19	56	-6			20	54	SCS

THULE	69.82	3.5	11 9	-5							
SERRA PILAR	73.15	49.2	11 33A	-1							
COLLEGE	73.47	336.1	11 36	0						14 3	PP
SCORESBY SD.	73.81	17.7	11 39	1	21 20	11					
RATHFARNHAM	76.07	36.9	12 2	11							
KEW	79.57	39.0	12 12	2	22 12	0					
NORD	79.65	7.8	12 9	-2	22 24	11				27 8	SS
ISFJORD	84.45	12.0	12 35	-1							
STRASBOURG	84.85	41.8			23 13	7				28 37	SS
TAMANRASSET	85.31	67.7	12 46K	6	23 11	1				15 55	PP
STUTTGART	85.78	41.5	12 44	2							
SKALSTUGAN	85.83	26.6	12 41	-2							
COPENHAGEN	86.95	34.4			23 32	6					
JENA	87.06	39.2	12 50	1						13 16	
HALLE	87.22	38.6	12 47	-2						13 18	
COLLMBERG	87.90	38.7	12 53	0							
KIRUNA	88.35	21.7	12 55	0	23 40	1				23 21	SKS
PRUHONICE	89.08	39.9								29 58	SS
SOUTH POLE	96.93	180.0	13 31	-4						22 32	
TUKUBASAN	121.47	320.3								22 22	PPP
MATUSIRO	122.44	321.7								32 20	PPS
CANBERRA	125.26	231.4	19 17	14							
QUETTA	132.70	37.1	19 15	-2						22 50	PKS
ADELAIDE	133.19	227.7	19 59	41							
CHATRA	144.87	16.5	19 41	2							
HONG KONG	146.74	331.4	19 56	14							

APRIL 10 5.H 47.M 38.S EPICENTRE -25.62 178.25 DEPTH= 584.KM

DEPTH OF FOCUS= 0.087R

A=-0.90237 B= 0.02754 C=-0.43007 D= 0.0305 E= 0.9995
G= 0.4299 H=-0.0131 K=-0.9028 HT= 3.2

SE= 1.44

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S	
RAOUL ISLAND	4.96	137.6	1 33	1					
SUVA	7.44	1.3	1 50	-4	3 22	-3		2 12	
ONERAHI	10.65	197.3	2 29	4	4 32	10		13 44	SCS
NOUMEA	11.29	284.6	2 35	3	4 42	9			
KARAPIRO	12.48	190.0	2 45A	1	5 3	8		10 8	SCP
TUAI	13.17	183.8	2 50	0	5 7	0		10 15	SCP
TONGARIRO	13.73	188.9	2 24	-32				9 36	SCP
WELLINGTON	15.88	189.6	3 16	-1	5 51	-4		10 14	SCP
COBB RIVER	16.08	195.2	3 19	0	6 20	21		13 49	SCS
KAIMATA	17.77	196.7	3 34	-1	6 32	4		13 56	SCS
GEBBIES PASS	18.60	192.8	3 41	-2	6 46	4		3 54	
ROXBURGH	21.14	197.6	4 2	-4	6 34	-50		14 8	SCS
BRISBANE	22.63	259.7	4 21	1					
RIVERVIEW	24.86	244.4	4 40A	1	8 24	1			
CANBERRA	26.92	242.0	4 58	1	8 56	1		6 17	PP
CHARTERS TS.	29.97	274.1	5 24K	0	9 40	-2			
FORT NELSON	30.59	227.8	5 31	2	9 52	0			
MELBOURNE	30.65	238.5	5 30A	1	9 50	-3	7 13	12 49	
MACQUARIE I.	32.19	201.2	5 41	-1				6 31	
RABAUL	32.86	306.1	5 47	-1					
PORT MORESBY	33.64	293.1	5 55K	0	10 36	-2	7 33	8 19	PCP
ADELAIDE	35.19	245.2	6 8A	1	11 0	-2		12 4	PCS
CAPE HALLETT	46.92	183.3	7 40A	-1	13 52	2	9 43	9 0	PCP
TERRE ADELIE	47.08	198.9	7 42	0					
GUAM	50.74	316.1	8 8	-1	14 41	-1		9 15	PCP
HAWAII V.OB.	51.65	32.4	8 15	0	14 58	4			
HONOLULU	51.99	28.3	8 17	-1				9 4	
KIPAPA	52.13	28.4	8 18	-1					
SCOTT BASE	52.58	183.0	8 21K	-1	15 9	3	10 18	9 21	PCP
BYRD STATION	60.21	169.8	10 13	59	17 49	65	12 15	12 43	PP
SOUTH POLE	64.53	180.0	9 41	-1	18 34	58		12 8	PP
MIRNY	64.91	206.1	9 42	-2	17 35	-6			
MANILA	68.59	299.0	10 5	-2	18 12	-12			
LEMBANG	69.63	272.1	10 13K	0				12 14	PP
BAGUIO CITY	69.97	300.3	10 14	-1	18 36	-4			
DJAKARTA	70.61	272.4	10 16K	-3	18 23	-24			
TUKUBASAN	71.27	328.2	10 22A	-1	18 52	-2		13 25	PP
MATUSIRO	72.44	327.1	10 28K	-1	19 5	-2	12 30	19 46	SCS
HALLEY BAY	77.87	173.8	10 57	-2					

HONG KONG	78.28	301.7	11	2K	1	20	8	-2	13	6	14	7	PP
ZO-SE	78.47	312.7	11	1K	-1	20	9	-3			14	8	*SP
Y.-SAKHLINSK	79.04	336.1	11	6	0	20	22	5					
CANTON	79.39	301.9	11	8K	1	20	20	-1	13	14	14	15	*SP
PETROPAVLOVK	80.25	348.2	11	11	-1				13	16			
NANKING	80.65	312.2	11	14K	0	20	33	-1	13	26	14	22	*SP
UGLEGORSK	81.08	336.9	11	17	1								
MEDAN	82.16	277.8	11	23	1	20	46	-3					
WUHAN	82.65	308.7	11	24K	0	20	53	0	13	30	14	32	*SP
BERKELEY	84.27	43.3	11	32K	0	20	56	-13	13	42	15	4	PP
LICK	84.33	44.0	11	33K	1				13	43	14	59	PP
CHANGCHUN	84.44	324.5	11	33K	0	21	12	1	13	38	14	58	PP
UKIAH	84.47	41.8	11	34	1				13	44	15	0	*SP
PASADENA	84.67	48.2	11	34K	0	21	20	7	13	44	21	3	SKS
FRESNO	85.15	45.3	11	37	1				13	48			
SHASTA	85.96	41.0	11	41K	1				13	52			
MINERAL	86.21	41.6	11	43K	2				13	52			
RENO	86.81	43.1	11	45A	1						12	27	
PEKING	87.19	317.2	11	46K	0	21	38	2	13	54	14	56	*SP
MAGADAN	87.83	346.4	11	48	-1								
BOULDER CITY	87.96	48.3	11	51	1				14	2	15	27	PP
PORT STANLEY	88.66	148.9	11	55	2								
KUNMING	88.69	298.5	11	54K	1	21	51	1	14	3	15	4	*SP
TUCSON	88.76	53.2	11	54	1	22	1	11	14	6	29	31	PKKP
TUCSON TELE.	88.88	53.2	11	55	1	21	58	7	14	5	29	30	PKPPKP
EUREKA	89.18	44.9	11	55	0				14	6	15	34	PP
VICTORIA	90.35	34.5	12	1A	0	22	11	7	14	15	21	36	SKKS
CHENGTU	90.40	304.0	12	2K	1	22	6	1	14	9	15	46	PP
HORSESHOE B.	90.97	33.9	12	1	-3	22	14	4					
PORT BLAIR	91.00	282.4	12	5	1						21	37	
SITKA	91.15	23.3	12	5	1				14	20			
PAOTOW	91.35	315.0	12	7K	2	22	20	7	14	15	21	39	SKS
TACUBAYA	91.80	69.5	12	10K	3	22	25	8			14	18	
SANTA LUCIA	92.04	128.7				21	34	-12	14	16			
SALT LAKE C.	92.53	45.6	12	11	0	21	49	0	14	23	15	59	PP
LANCHOW	93.20	308.6	12	14K	0	22	35	6	14	23	21	49	SKS
COLLEGE	93.96	13.8	12	15	-2	22	34	-1	14	26	16	9	PP
BUTTE	94.87	40.8	12	21	0				14	32			
HUNGRY HORSE	95.28	38.3							14	32			
BOZEMAN	95.59	41.7	12	27	3				14	34	16	22	PP
LARAMIE	96.91	47.5	12	30	0						14	42	
ULAN-BATOR	97.13	320.0	12	31	0								
SHILLONG	97.65	294.6	12	33	-1						14	32	
HUANCAYO	99.23	108.1				22	27	4					
RAPID CITY	99.73	45.8	12	42	-1	22	23	-3	14	59	16	55	PP
LA PAZ	103.04	115.5									22	42	
CHINCHINA	106.67	92.5	17	24	777	22	59	1			18	0	PP
BOGOTA	107.92	93.5				23	0	-3			18	6	PP
FUQUENE	108.59	92.8									28	2	PP
BOMBAY	111.46	281.3	18	12	44						20	32	
COLUMBIA	112.26	61.9									18	57	PP
RESOLUTE	113.67	16.8	17	31A	-2	23	22	-3			18	35	PP
SEMIPALATNSK	114.26	316.0	17	32	-2	23	25	-3					
MORGANTOWN	114.57	56.2	17	33	-1						18	41	PP
PENNSYLVANIA	116.38	55.4									18	59	PP
WASHINGTON	116.58	57.6									18	57	PP
NAMANGAN	118.43	304.4	17	44	2								
OTTAWA	118.74	50.6	17	41	-1								
PALISADES	119.37	55.8				25	10	84			19	14	PP
QUETTA	119.94	291.4	17	46	1				20	2	21	20	*PPP
THULE	120.18	14.5	17	42	-3				20	21	19	15	PP
BREBEUF	120.22	50.7	17	44	-1								
KIMBERLEY	120.23	207.0	17	45K	0								
SAN JUAN	120.37	82.9	17	45	-1								
SHAWINIGAN	120.92	49.5	17	47	0						19	22	PP
KHEYS	121.07	350.6	17	44	-3								
SEVEN FALLS	122.30	49.0	17	47	-2						27	47	PKKP
NORD	123.62	2.6	17	50	-2				20	12			
BERMUDA	125.23	67.3	17	47	-8						19	48	PP
BULAWAYO	125.79	215.8	17	56	0								
ISFJORD	127.01	356.0	18	2	4						20	5	PP
HALIFAX	127.24	52.3	17	58	-1				20	22	31	4	SPP
APATITY	132.88	342.4	18	9	-1	24	25	1	20	41	23	55	PPP
ELISABTHVLLE	133.33	221.0	18	15A	5				20	46	20	56	PP
SCORESBY SD.	133.62	9.2	18	13	2				20	26	20	47	SKP
SODANKYLA	134.75	345.0	18	12	-1								
KIRUNA	135.66	348.2	18	6	-9						20	50	SKP
MAKHACH-KALA	136.44	306.2	18	17	1								

ADDIS ABABA	138.16	254.2	18 16	-3				
MOSCOW	138.54	327.2	18 13	-7	20 42			
TIFLIS	138.59	304.8	18 13	-7				
PULKOVO	139.29	335.7	18 14	-7				
REYKJAVIK	139.31	13.4				21 3	SKP	
LWIRO	139.48	231.4	18 7	-15				
SIDA	140.37	11.3				21 5	SKP	
NURMIJARVI	140.70	339.7	18 19	-6				
HELSINKI	140.86	339.1	18 18	-7				
SKALSTUGAN	140.94	350.1	18 18A	-8		21 4	SKP	
SOTCHI	141.91	308.7	18 22	-5				
UPPSALA	143.24	343.7	18 25K	-4		21 11	SKP	
SIMFEROPOL	145.32	313.0	18 34	2		22 9	PKS	
LEOPOLDVILLE	145.93	211.4	18 35	2	21 1	22 12	PP	
KSARA	146.46	293.1	18 36	2	20 53	21 50	*SPKP	
GOTEBORG	146.48	346.7	18 33	-1	20 50			
JERUSALEM	147.11	289.4	18 36	1	20 53			
COPENHAGEN	148.23	344.7	18 38	1	20 56			
WARSAW	148.33	333.0	18 38	1	20 57	22 9	PP	
LWOW	148.67	327.2	18 38	1	21 2			
KASTAMONU	148.88	308.5	18 36	-2	20 54			
ISTANBUL UN.	150.26	308.8	18 45	5	21 3			
KRAKOW	150.41	331.2	18 40	0				
DURHAM	150.88	359.8	18 47K	7	19 53	21 11	SKP	
POTSDAM	151.02	341.1	18 40	-1	21 5	19 45		
RACIBORZ	151.12	332.9	18 43	2				
BANGUI	151.23	226.1	18 48	7		22 12		
COLLMBERG	151.99	340.1	18 42	0		21 8		
CINE	152.04	302.5	18 44	2	21 8			
WITTEVEEN	152.11	349.1	19 4	22	21 12			
HALLE	152.12	341.5	18 39	-3	20 58	22 36	PP	
RATHFARNHAM	152.15	5.8	19 2A	20	21 24	21 42	*SPKP	
PRAGUE	152.57	337.1	18 45	2	21 22	22 51	PP	
PRUHONICE	152.61	336.8	18 44	1	21 10	22 39	PP	
JENA	152.74	341.4	18 44	1	21 4	22 29	PP	
MUNSTER	152.74	347.3	18 45	2				
PLAUEN	152.95	340.3	18 40	-3	21 1	19 48		
BRATISLAVA	153.05	331.5	18 48	4	21 9	19 9	PKP2	
SONNEBERG	153.34	341.4	18 44	0	21 10	19 7		
BENSBERG	153.79	347.2	18 46	1		19 10	PKP2	
KEW	154.17	357.9	19 11A	26	21 28	21 51	*PPKP2	
ATHENS	155.19	305.9	18 56	9	21 14			
STUTTGART	155.35	342.5	18 48A	1	21 7	21 36	SKP	
STRASBOURG	155.90	344.4	18 48	1		19 20	PKP2	
EBINGEN	155.96	342.2	18 54	6		21 37	SKP	
PARIS	156.62	352.9	18 52	4		23 1	PP	
FOLINIERE	156.87	357.9	18 50	1				
BASLE	156.92	343.7	19 25K	36		28 15		
CHUR	156.99	339.9	19 48	59		20 25		
MBOUR	161.86	125.2	18 57	3		19 47	PKP2	
TAMANRASSET	172.79	248.4	19 3	1	21 28	24 26	PP	

APRIL 11 9.H 25.M 11.S EPICENTRE 9.62 -82.43 DEPTH= 0.KM

A= 0.12984 B=-0.97755 C= 0.16597 D=-0.9913 E=-0.1317
G= 0.0219 H=-0.1645 K=-0.9861 HT= 6.6

SE= 3.56

	DELTA DEG.	AZ. DEG.	P M	P S	P O-C S	S M	S S	S O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
BALBOA HTS.	2.91	102.7	0	52	3	1	26	1					
SANTIAGO MA.	7.06	303.6	1	52	5						4	19	
GALERAZAMBA	7.15	80.1									2	19	PG
SAN SALVADOR	7.81	302.2	2	0	2								
CHINCHINA	8.18	123.9	2	5	2	3	45	8					
FUQUENE	9.56	114.9	2	18	-4	4	7	-5					
BOGOTA	9.67	120.3	2	29	5	4	32	18					
MERIDA	13.22	329.3	3	13	2								
MERIDA	13.22	329.3									3	13	PP
CARACAS	15.29	85.4	3	35K	-4	6	40	10					
SAN JUAN	18.05	59.4	4	15	1	7	32	-2					
TACUBAYA	18.90	302.8	4	20	-4						4	31	
GRENADA	20.48	81.3	4	43	1								
ST. VINCENT	21.04	78.4	4	51	3								
HUANCAYO	22.65	161.7	5	3	-1	9	27	19					

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
COLUMBIA	24.30	2.8	5	22	2	9	43	6					
DALLAS	26.65	332.3	5	53	11								
BERMUDA	27.98	33.4	5	54	0	10	33	-5					
WASHINGTON	29.55	8.5	6	10	1								
MORGANTOWN	29.97	3.8	6	12	0								
PALISADES	32.16	12.2	6	33	1	11	45	1					
TUCSON TELE.	34.57	315.0	7	0	7								
TUCSON	34.59	314.8	7	0	7								
OTTAWA	36.12	8.0	7	5	-1								
BOULDER	36.48	329.9	7	5	-4								
BREBEUF	36.55	10.4	7	7	-2						7	45	
LARAMIE	37.60	331.0	7	20	2								
SHAWINIGAN	37.72	10.9	7	19	0								
SEVEN FALLS	38.65	12.7	7	27	0								
PASADENA	40.84	312.2	7	56	11	13	57	0			17	22	
EUREKA	42.16	320.4	7	52	-4								
BOZEMAN	43.50	330.8	8	2	-5								
BUTTE	44.49	330.1	8	12	-3								
MINERAL	46.26	318.1	8	27K	-2								
RESOLUTE	65.42	356.4	10	43K	-4	19	26	-5			24	3	SS
THULE	67.22	3.6	9	56	-62								
COLLEGE	71.01	335.8	11	18	-4								
TAMANRASSET	84.47	67.9	12	35	-1								
COLLMBERG	85.95	38.8	12	41	-2								
BYRD STATION	91.50	186.0	13	6	-4								
CAPE HALLETT	104.33	197.5									32	45	SS
SHILLONG	144.59	8.9	19	34K	-5								

APRIL 11 11.H 28.M 59.S EPICENTRE -0.90 128.40 DEPTH= 47.KM

DEPTH OF FOCUS= 0.002R

A=-0.62111 B= 0.78356 C=-0.01562 D= 0.7837 E= 0.6212
G= 0.0097 H=-0.0122 K=-0.9999 HT= 7.2

SE= 2.84

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
MANILA	17.05	334.7	3	57	1	6	57	-6					
BAGUIO CITY	18.86	336.2	4	18	-1	7	51	7					
PORT MORESBY	20.48	115.0	4	36	0	8	22	4			5	0	PP
LEMBANG	21.55	253.6	4	47	0	8	48	10					
GUAM	21.60	48.1	4	47	-1	9	14	35			5	5	PP
DJAKARTA	22.15	255.8	4	53K	0	8	54	5					
RABAUL	23.97	98.3	5	9	-2								
TAWU	24.24	342.9	5	18	5	9	29	3					
HWALIEN	25.59	345.5	5	11	-15								
CHARTERS TS.	25.81	138.5	5	27A	-1	9	53	1					
HONG KONG	26.92	329.8	5	38A	-1	10	14	4					
MEDAN	30.04	278.7	6	7	0	11	10	10					
PHU-LIEN	30.32	316.6	6	10	1	11	11	6			12	47	SS
WUHAN	33.92	338.3	6	39	-2								
NANKING	34.01	345.3	6	42	1	12	9	7			9	20	PCP
ADELAIDE	35.20	165.2	6	53K	2	12	23	2			16	31	SCS
BRISBANE	35.44	140.3	6	52	-2	12	22	-2					
KUNMING	35.86	317.8	6	58A	1	12	38	7			9	25	PCP
PORT BLAIR	37.59	290.5	7	12	0	12	58	1			8	44	PP
MATUSIRO	38.36	12.8	7	17K	-1	12	57	-12			9	35	PCP
TUKUBASAN	38.50	15.3	7	25K	6						8	21	
CHENGTU	39.03	325.6	7	23A	-1	13	20	1			8	52	PP
RIVERVIEW	39.08	149.3	7	17K	-7	13	30	10					
CANBERRA	39.25	153.0	7	24	-1				7	37	9	0	PP
MELBOURNE	39.79	159.3	7	29	-1	13	38	7					
PEKING	42.24	346.0	7	49	-1	14	10	3			9	29	PP
TOCKLAI	42.49	312.8	7	56	4								
CHITTAGONG	42.49	305.2	7	53	1	14	15	4			9	30	PP
NOUMEA	42.68	122.7	7	57	3								
LANCHOW	43.33	330.6	7	59A	0	14	27	4			9	40	PCP
SHILLONG	44.03	309.3	8	4A	-1	14	35	2					
PAOTOW	44.55	340.0	8	8	-1								
HOWRAH	45.47	303.4				15	0	5					
CHATRA	48.33	308.0	8	39	0						14	5	
ULAN-BATOR	52.11	341.8	9	7A	0	16	32	5					
AGRA	55.87	304.0	9	31	-4								
IRKUTSK	56.73	342.5	9	39	-2								
KARAPIRO	56.80	136.2	9	41	-1								

POONA	56.96	292.8	9	42	-1					
DEHRA DUN	57.06	307.5	9	46	2	17	35	2		
BOMBAY	57.99	292.9	9	55	5	17	43	-2		
TUAI	58.34	136.4	9	59	6					
YAKUTSK	62.76	0.7	10	26	3	18	49	3		
MAGADAN	62.78	12.6	10	22	-1					
WARSAK DAM	63.54	309.0	10	25	-3					
KARACHI	64.84	299.1	10	33	-3				12	54 PP
SEMIPALATNSK	65.49	328.4	10	39	-1					
QUETTA	66.05	303.7	10	42	-2	19	26	-1	13	7 PP
NAMANGAN	66.11	316.2	10	43	-1					
CAPE HALLETT	75.96	167.8	11	46	2				26	31 SS
SVERDLOVSK	78.76	328.7	11	58	-1					
SCOTT BASE	79.55	172.3	12	1	-2					
TANANARIVE	81.05	251.1	12	14K	3					
GORIS	84.45	309.7	12	29	0	22	52	2		
TIFLIS	85.81	311.8	12	35	-1					
COLLEGE	88.16	25.1	12	46	-1	23	30	4	16	13 PP
KHEYS	88.52	350.3	12	43	-6	23	19	-10		
SOUTH POLE	89.10	180.0	13	0	9				13	25
ADDIS ABABA	89.78	279.0	12	53	-2					
MOSCOW	91.18	325.5	13	5	4	23	55	2		
KSARA	92.60	303.6	12	56	-12					
APATITY	92.74	337.5	13	11	3	24	10	3	23	43 SKS
BYRD STATION	92.88	170.7	13	8	-1				13	33
SIMFEROPOL	93.67	314.8	13	16	3					
PULKOVO	94.85	329.8							26	13
SODANKYLA	95.36	337.6	13	18	-2					
KASTAMONU	96.33	311.4	13	17	-8					
KIRUNA	97.56	338.6	13	33	3	24	7	-41		
ISTANBUL UN.	97.70	311.1	13	1	-30					
ASTRIDA	98.62	267.3							17	46 PP
RUMANGABO	99.05	268.5							17	47 PP
LWIRO	99.56	267.6							17	51
RESOLUTE	102.04	10.7	13	50	0	25	32	7	18	4 PP
STUTTGART	109.54	322.2	18	31	6					
EUREKA	110.16	48.0	18	33	7				14	29 P
TUCSON	116.21	54.2	18	45	7				19	43 PP
TUCSON TELE.	116.28	54.1	18	45	7				19	44 PP
TAMANRASSET	120.47	295.9	18	49K	3	26	18	39	20	8 PP
OTTAWA	130.85	22.4	19	13	7					
SHAWINIGAN	130.90	19.3	19	12	6					
MORGANTOWN	133.59	30.4	19	17K	5					
HUANCAYO	153.15	119.3	19	55	10					

APRIL 12 9.H 54.M 56.S EPICENTRE 17.07 -95.04 DEPTH= 124.KM

DEPTH OF FOCUS= 0.014R

A=-0.08406 B=-0.95278 C= 0.29181 D=-0.9961 E= 0.0879
G=-0.0256 H=-0.2907 K=-0.9565 HT= 5.3

SE= 2.20

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
OAXACA	1.65	268.4	0	28A	-3	0	56	2			0	44
VERA CRUZ	2.35	334.1	0	44	5	1	19	10				
COMITAN	2.91	105.9	0	46	-1						1	13
PUEBLA	3.58	303.4	0	54	-2						1	24
TACUBAYA	4.58	301.0	1	10K	1	2	4	2			1	29
MERIDA	6.42	52.2	1	34A	0	2	46	0				
SAN SALVADOR	6.52	119.9	1	36	1	2	59	10				
SANTIAGO MA.	7.27	118.4	1	45	0	3	3	-4				
LEON	7.45	303.7	1	49	1	3	19	8			2	40
GUADALAJARA	8.62	295.9	2	0	-3	3	45	6			2	21
MANZANILLO	9.05	283.9	2	4	-5	3	46	-4			3	22
MAZATLAN	12.27	301.5	2	58	6						5	22
CHIHUAHUA	15.34	320.5	3	39	8	6	24	6			8	9
DALLAS	15.79	354.6	3	38	1							
BALBOA HTS.	17.09	116.2	4	8	15							
LITTLE ROCK	17.80	7.3	4	1A	0							
FAYETTEVILLE	18.96	2.1	4	14	0	7	44	6				
GALERAZAMBA	20.18	105.5	4	35	8	8	16	15			12	3 SCP
TUCSON TELE.	20.79	319.9	4	33	0	8	23	10				
TUCSON	20.80	319.5	4	33	0	8	21	8			5	9 PP

COLUMBIA	21.03	34.1	4	35	-1	8	26	9				
LAWRENCE	21.82	359.6	4	42	-1	8	38	6				
ST. LOUIS 1	21.89	10.1	4	43A	-1	8	35	2				
FLORISSANT	22.03	9.8	4	45A	0	8	42	7			9	3
CHINCHINA	22.51	120.1	4	49	-1	8	56	12			5	35 *SP
TERRE HAUTE	23.28	15.1	3	49	-69	7	4	-113				
CHAPEL HILL	23.54	34.0	5	0	0						5	26
FUQUENE	23.84	116.5	5	4	1						10	2 SS
BOGOTA	23.99	118.7	5	7	3	9	19	10			12	4 SCP
BOULDER	24.55	340.8	5	10	0							
BOULDER CITY	25.75	320.8	5	22	1				5	42	5	57 *SP
LARAMIE	25.80	341.5	5	22	1							
MORGANTOWN	26.03	27.3	5	23A	-1							
PASADENA	26.81	313.8	5	31K	0	9	50	-6	6	5	6	19 *SP
WASHINGTON	26.82	32.3	5	29	-2	10	5	9	5	56	8	41 PCP
CLEVELAND	26.96	22.8	5	19A	-13	9	50	-8				
SAN JUAN	27.57	82.9	5	36	-2						6	27 PP
SALT LAKE C.	27.72	331.8	5	39	0				6	9		
PENNSYLVANIA	27.91	28.6	5	37	-4	10	19	5	6	3	6	35 PP
CARACAS	28.05	99.8	5	38A	-4	11	6	50				
EUREKA	28.81	325.0	5	49	0				6	22	6	46 PP
FRESNO	29.38	316.7	5	52K	-2				6	28		
FORDHAM	29.91	33.3	7	6	67	12	1	76				
PALISADES	30.01	33.1	5	56	-4	10	48	1	6	21	6	51 PP
LICK	30.92	316.0	6	7K	0				6	41	9	1 PCP
RENO	31.06	321.1	6	9K	0				6	44		
BERMUDA	31.37	55.2	6	0	-11	10	58	-10			6	24 PP
BOZEMAN	31.49	338.3	6	14	2	11	15	5	6	45		
BERKELEY	31.62	316.3	6	13K	-1	11	19	7	6	48	9	3 PCP
BUTTE	32.34	336.9	6	20	0	11	26	2	6	46	7	31 PP
OTTAWA	32.54	25.7	6	19A	-3	11	28	1	6	44	7	20 PP
GRENADA	32.60	94.3	6	21	-1							
MINERAL	32.64	320.7	6	22K	0							
FORT FRANCE	32.66	89.2									7	34 PP
ST. VINCENT	32.81	92.1	6	23	-1							
UKIAH	32.95	317.5	6	25	0							
SHASTA	33.33	320.5	6	27K	-1							
BREBEUF	33.52	27.7	6	28	-2	11	44	2				
SHAWINIGAN	34.71	27.3	6	39A	-1	12	1	1	7	4		
HUNGRY HORSE	34.84	337.7	6	44	3				7	15		
HUANCAYO	34.88	144.8	6	43	1	12	14	11				
SEVEN FALLS	36.01	28.4	6	48A	-3	12	22	2			8	5
BANFF	37.74	338.9	7	5K	-1							
HALIFAX	38.10	37.1	7	9A	8	12	55	18				
VICTORIA	38.97	329.8	7	16	0							
HORSESHOE B.	39.50	330.9	7	18	-2							
LA PAZ	42.62	140.1	7	44	-2	13	54	-5			17	34 SS
SITKA	49.97	332.5	8	46	2				9	21		
SANTA LUCIA	55.34	155.2	9	16	-8	16	54	-2				
RESOLUTE	57.62	0.0	9	38A	-2	17	29	3			13	6 PPP
COLLEGE	59.27	336.7	9	50	-1	17	51	3	10	14	21	54 SS
KIPAPA	59.28	285.1	9	50	-1				10	18	10	27 *SP
HONOLULU	59.37	285.0	9	50	-2				10	16		
THULE	60.96	7.0	10	2	-1	18	15	6	10	27	10	46 PCP
SCORESBY SD.	68.39	20.2	10	50	-1	19	46	6	11	17	39	4 PKKP
NORD	71.52	8.7	11	9	-1	20	21	4	11	35		
MBOUR	74.72	79.4	11	30	2	22	1	68				
PORT STANLEY	75.76	157.2	11	37	3							
RATHFARNHAM	75.77	38.2	11	32	-2	21	16	12	11	55	13	8
DURHAM	78.21	36.2	11	47K	-1							
KEW	79.72	39.3	11	55	-1	21	51	4	12	22	27	2 SS
TOLEDO	80.00	51.4	11	59A	2	21	56	6	12	15		
MALAGA	80.50	54.6	12	0K	0	22	2	7	12	27	12	50
GRANADA	81.00	53.9	12	5A	2	22	8	8			15	17 PP
KHEYS	81.51	5.5	12	5	0	22	11	6				
ALMERIA	81.96	54.0	12	7A	-1	22	14	4				
PARIS	82.18	41.4	12	11	2	22	18	6				
SKALSTUGAN	82.32	25.5	12	10A	0				12	37	30	34 PKKP
ALICANTE	83.08	52.1	12	24	11	22	26	5			15	31 PP
DOURBES	83.10	39.8	11	50	-24							
TORTOSA	83.11	49.5	12	21	7	22	25	4				
KIRUNA	83.46	20.2	12	16A	1	22	26	1	12	41	30	32 PKKP
CLERMONT-FD.	83.49	44.2	12	16A	1	22	33	8				
MUNSTER	84.29	37.3	12	21	2							
BENSBERG	84.37	38.4	12	21A	1				12	48		
GOTEBORG	84.50	31.0	12	20A	0				12	47	15	34 PP
RELIZANE	84.61	54.4	12	21	0	22	39	3	12	48	15	52 PP
COPENHAGEN	85.55	32.8	12	26A	0	22	56	11	12	52	15	44 PP
STRASBOURG	85.57	40.5	12	27	1	22	53	8	12	52	15	49 PP

NEUCHATEL	85.60	42.2	12	27	1						
SODANKYLA	85.71	19.3	12	26	0						
BASLE	85.82	41.5	12	23	-4						
ALGIERS UNI.	86.23	52.8	12	28	-1	22	55	3	12	53	22 44 SKS
UPPSALA	86.23	27.8	12	29	0	22	58	6	12	55	15 49 PP
STUTTGART	86.38	40.0	12	30A	0	22	46	-7	12	58	23 1 *PS
TUBINGEN	86.39	40.2	12	30A	0				12	56	
EBINGEN	86.46	40.6	12	31	1				12	57	
HALLE	86.96	36.8	12	30	-3	23	3	4	12	56	15 52 PP
SONNEBERG	86.97	38.0	12	33	0				12	59	
JENA	86.97	37.4	12	33	0	22	51	-8	12	59	15 52 PP
RAVENSBURG	87.01	40.8	12	34	1						
MAGADAN	87.03	332.3	12	33	0	23	6	7			
MONACO	87.06	45.1	12	34	1				13	0	
POTSDAM	87.23	35.7	12	34	0	23	10	9	13	1	24 23
CHUR	87.30	41.7	12	36K	2	22	54	-8			
PLAUEN	87.48	37.6	12	34	-1				12	59	15 54 PP
COLLMBERG	87.64	36.7	12	35	-1						13 34 PCP
CHEB	87.78	38.0	12	39	2	23	15	9	13	1	22 58 SKS
NURMIJARVI	88.91	25.5	12	43	1						
PRAGUE	88.99	37.4	12	43	1	23	26	8			23 5 SKS
PRUHONICE	89.10	37.5	12	43	0	23	28	9	13	13	23 5 SKS
TOLMEZZO	89.69	41.1	12	36	-9						12 56 PCP
TRIESTE	90.47	41.6				23	41	10			23 14 SKS
RACIBORZ	91.15	36.3	12	54	2						16 31 PP
ROME	91.19	45.4	13	40	47	23	16	-21			17 28 PPS
WARSAW	91.63	33.6				23	23	-18			23 42 SCS
PULKOVO	91.63	24.4	12	54	-1						
ZAGREB	91.80	40.8	13	29	34	23	52	9			23 21 SKS
KRAKOW	92.13	35.8	12	57	0						
TAMANRASSET	92.84	65.3	13	1	1	23	16	-3	13	27	16 44 PP
YAKUTSK	93.61	340.6	13	36	32						
LWOW	94.50	34.6	13	9	1	24	13	7			
MOSCOW	97.24	24.8	13	20	0	24	35	6			
BYRD STATION	97.79	184.2	14	5	42						18 38 PKP
IASI	97.94	35.4				24	9	-26			
FOCSANI	98.60	36.8				23	34	-16			
BUCHAREST	98.68	38.3				23	53	2			22 5
KISHINEV	98.74	35.1									17 10 PP
KARAPIRO	99.85	233.4									17 36 PP
SIMFEROPOL	102.91	34.4				24	16	5			17 56
KASTAMONU	103.24	38.8									17 54
SVERDLOVSK	103.61	13.5	14	2	13	24	19	5			
TUKUBASAN	105.69	316.4				25	44	5			27 32 PS
MATUSIRO	106.72	317.6				25	55	8			18 54 PP
SOTCHI	106.80	32.6				24	35	7			18 25 PP
SOUTH POLE	106.97	180.0	14	4	777						18 34 PKP
CAPE HALLETT	107.55	198.6				24	34	3			18 35 PP
LEOPOLDVILLE	110.66	88.3									18 54 PP
TIFLIS	110.72	31.1									18 56 PP
MAKHACH-KALA	111.05	28.6									18 58 PP
JERUSALEM	111.93	44.5									18 56 PP
ULAN-BATOR	112.39	344.2									19 25 PP
SEMIPALATNSK	112.70	3.3									19 11 PP
RIVERVIEW	118.89	240.4	18	24A	-10						29 40 PS
CHARTERS TS.	122.08	256.8	18	39	-1				19	10	
LWIRO	122.93	81.4	18	45	3						
RUMANGABO	123.13	80.2	18	45	3						28 35
UVIRA	123.62	82.7	18	47	4				19	14	
KIMBERLEY	123.87	113.4	18	45K	1						
ELISABTHVLLE	124.15	92.6	18	46K	2				19	14	19 24 *SP
GRAHAMSTOWN	125.40	119.0	18	49	2						
BULAWAYO	126.72	102.6	18	49	0						
WARSAK DAM	127.63	14.1	18	52	1						
ADELAIDE	129.12	238.7	18	56	2				19	20	22 16 PKS
QUETTA	129.92	20.4	18	58	3	25	55	5	19	26	21 11 PP
MIRNY	130.27	184.2	18	56	0						22 21 PKS
LAHORE	130.59	12.0	18	59	2						
BAGUIO CITY	131.62	311.6	19	0	1						
DEHRA DUN	132.41	8.1									21 14 PP
MANILA	132.53	309.4	19	2	2						21 22 PP
CHATRA	136.31	357.1	19	9	2						22 23 PKS
SHILLONG	137.08	350.8	19	11A	2						22 40
BOMBAY	142.31	19.0	19	43	25						
POONA	142.97	17.7	19	20	1						
TANANARIVE	144.42	98.8	19	23A	1						
PORT BLAIR	150.43	344.4	19	38	6						19 57 PKP2
MEDAN	155.41	325.3	19	42	3						24 32

LEMBANG 155.63 292.0 19 40 1 20 6

APRIL 12 10.H 59.M 21.S EPICENTRE 24.12 122.47 DEPTH= 0.KM

A=-0.49062 B= 0.77086 C= 0.40629 D= 0.8436 E= 0.5369
G=-0.2181 H= 0.3428 K=-0.9137 HT= 3.6

SE= 2.83

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
HWALIEN	0.79	259.7	0 18A	0	0 29	-2		
ILAN	0.93	314.7	0 25A	5	0 38	4		
TAIPEI	1.26	316.5	0 28A	3	0 49	6		
HSINKONG	1.43	225.3	0 26	-1	0 42	-5		
HSINCHU	1.53	296.7	0 18	-11	0 37	-12		
YUSHAN	1.53	245.9	0 29	0	0 46	-4		
TAICHUNG	1.64	271.6	0 33	3	0 53	1		
ALISHAN	1.64	249.2	0 33	3	0 49	-3		
TAITUNG	1.82	222.1	0 31	-2	0 53	-4		
TAWU	2.28	219.8	0 38	-1	1 10	2		
TAINAN	2.35	242.2	0 42	2	1 9	-1		
KAOHSIUNG	2.51	234.1	0 1	-42	0 14	-60		
HENGCHUN	2.64	217.4	0 47	3	1 17	-1		
PENGHU	2.74	258.3	1 9	23				
ZO-SE	7.05	350.9	1 48	1	3 9	0		
HONG KONG	7.85	258.3	1 56A	-2	3 17	-12		
BAGUIO CITY	7.86	193.4	1 57	-1	4 27	58		
NANKING	8.54	338.5	2 7	-1	3 44	-2		
WUHAN	9.50	314.0	2 20	-1	4 9	-1		
MANILA	9.59	188.7	2 16	-6	4 36	24		
SIAN	15.54	313.6	3 46	4				
PEKING	16.73	343.0	4 1	4	7 8	5		4 17 PP
CHENGTU	17.64	295.7	4 9A	0	7 25	1		
TIENSHUI	17.90	309.4	4 14	2				
KUNMING	18.03	277.1	4 14	1	7 36	3		4 30 PP
MATUSIRO	18.36	43.9	4 20	2	7 49	9		4 31
PAOTOW	19.46	330.5	4 30A	-1				
YINCHUAN	19.87	319.9	4 44	9				
LANCHOW	20.03	310.8	4 38A	1				
ULAN-BATOR	26.79	336.4	5 42	-1				
SHILLONG	27.78	279.4	5 51	-1				
CHITTAGONG	28.20	272.7	5 39	-17	10 11	-30		
CHATRA	31.93	282.4	6 30	1				
YAKUTSK	38.21	5.5	7 15	-8				
DEHRA DUN	39.79	289.0	7 35	-1				
SEMIPALATNSK	41.82	319.8	7 52	-1				
LAHORE	42.94	291.0	8 2	0				
WARSAK DAM	45.20	294.6	8 21	1				
NAMANGAN	45.36	304.5	8 23	1				
QUETTA	49.38	289.9	8 53A	0				10 17 PCP
CHARTERS TS.	49.60	150.1	8 56	1				
SVERDLOVSK	54.80	323.6	9 30	-4				
ADELAIDE	60.71	164.7	10 16	1				10 27
KHEYS	63.03	349.4	10 23	-8				
CANBERRA	64.23	156.1	10 43	4				
TIFLIS	65.46	306.5	10 46	-1				
MOSCOW	67.57	322.4	10 59	-1				
APATITY	67.61	335.5	10 59	-1				
COLLEGE	68.32	27.4	11 5	0				
SOTCHI	68.73	309.3	11 6	-1				
SODANKYLA	70.21	335.8	11 35	18				
PULKOVO	70.55	327.6	11 17	-2				
SIMFEROPOL	72.26	311.8	11 28	-1				
KIRUNA	72.33	337.1	11 28	-1				
NORD	72.53	354.2	11 28	-2				
NURMIJARVI	73.05	329.	11 33	-1				
KSARA	74.32	300.3	11 48	7				
JERUSALEM	75.51	298.5	11 48K	0				
KASTAMONU	75.70	309.1	11 36K	-13				
UPPSALA	76.55	329.9	11 53	-1				
LWOW	77.14	318.9	11 55	-2				
SKALSTUGAN	77.16	334.5	11 54	-3				
RESOLUTE	78.54	9.5	12 2	-3				
CINE	78.97	306.2	12 5K	-2				
KARAPIRO	79.30	140.0	12 16	7				

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THULE	79.47	2.6	12	7	-3						
KRAKOW	79.48	320.2	12	10	0						
GOTEBORG	80.16	329.3	12	11	-2						
RACIBORZ	80.47	320.7	12	15	0						
PRUHONICE	82.60	321.7	12	25A	-1					12	50
SHASTA	91.79	43.5	13	12	1						
MINERAL	92.48	43.5	13	20	6						
BUTTE	94.21	34.9	13	23	1						
EUREKA	96.48	41.6	13	34	2						
TAMANRASSET	103.05	302.4								18	17 PP

APRIL 12 15.H 22.M 30.S EPICENTRE -4.36 134.17 DEPTH= 1.KM

A=-0.69484 B= 0.71520 C=-0.07544 D= 0.7172 E= 0.6968
G= 0.0526 H=-0.0541 K=-0.9972 HT= 7.1

SE= 3.96

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
PORT MORESBY	13.82	111.9	3	15	-2	5	51	-1			3	26	PP
CHARTERS TS.	19.51	143.9	4	26	-3	8	8	5					
MANILA	22.91	325.4	5	3	-1	8	15	-54					
BAGUIO CITY	24.63	327.2	5	20	-1	9	48	9					
LEMBANG	26.54	263.5	5	39A	0	10	29	19					
DJAKARTA	27.29	265.0	6	1K	16						10	33	
BRISBANE	29.19	143.9				10	50	-3			7	18	PPP
ADELAIDE	30.71	172.7	6	15	-1	11	4	-13			7	12	
HONG KONG	32.93	324.4				11	46	-6			7	46	PP
RIVERVIEW	33.31	153.7	6	44A	5	11	59	1					
CANBERRA	33.73	157.9	6	40A	-2	11	59	-5					
MELBOURNE	34.75	164.9	6	48A	-3	12	18	-2			16	38	SCS
NOUMEA	35.98	122.7	7	5	3								
MEDAN	36.33	282.0	7	13	8						12	24	
NANKING	39.05	339.1	7	29	2	13	24	-2	7	54	8	6	*SP
TUKUBASAN	40.74	7.4	7	37	-4	13	42	-9			16	18	SS
MATUSIRO	40.87	5.0	7	43	0	13	46	-7			9	26	PP
KUNMING	42.31	315.3	7	56	2	14	16	2			8	21	*SP
PORT BLAIR	44.20	291.5	8	17	7	14	52	10			10	2	PP
SIAN	45.19	330.1	8	19	1								
CHENGTU	45.20	322.4	8	17	-1	14	50	-6					
PEKING	47.17	341.1	8	31	-2	15	20	-4			9	4	*SP
CHANGCHUN	48.62	351.5	8	46	1	15	48	3	9	10	10	41	PP
CHITTAGONG	49.18	304.5	8	45	-4	15	52	-1	9	14	10	45	PP
LANCHOW	49.25	327.3	8	48	-1	15	48	-6					
PAOTOW	49.90	336.0	9	2	8	16	11	8					
KARAPIRO	50.35	137.3	8	55	-3								
SHILLONG	50.68	308.2	8	58A	-2	16	15	1					
TONGARIRO	51.02	138.7	9	10	7						10	19	
ROXBURGH	51.20	148.7				16	22	1					
TUAI	51.89	137.4	9	15	5								
APIA	54.08	103.8	9	45	19								
COLOMBO	55.34	281.4	9	52	17						17	23	
MADRAS	56.32	288.6	9	51	9						17	24	
ULAN-BATOR	57.29	338.5	9	48	-1								
IRKUTSK	61.84	339.7	10	12	-8								
TERRE ADELIE	62.56	176.8	10	44	19						12	46	
POONA	63.60	293.0	10	34	2						18	5	
DEHRA DUN	63.72	306.8	10	41	8						16	54	
WILKES	63.93	190.4	10	54	20	19	6	-2					
MAGADAN	65.06	9.2	10	44	2	19	25	3					
YAKUTSK	66.28	357.7	10	42	-7								
MIRNY	68.31	196.5	10	59	-3	20	12	11					
WARSAK DAM	70.19	308.4	11	11	-3								
HONOLULU	71.02	65.9	11	25	6								
KIPAPA	71.12	65.8	11	24	5				11	45			
CAPE HALLETT	71.45	169.0	11	23	2	20	16	-22			14	8	PP
SEMIPALATNSK	71.47	326.9	11	19	-2	20	35	-3					
NAMANGAN	72.59	315.3									11	42	PCP
QUETTA	72.75	303.3	11	26	-3	20	26	-27	11	50	14	11	PP
SVERDLOVSK	84.71	328.0	12	33	-1	22	58	-2					
TANANARIVE	85.42	251.4	12	36	-2								
SOUTH POLE	85.67	180.0	12	36	-3						12	44	
BYRD STATION	88.54	170.4	12	50	-3	23	13	-23	13	13			
COLLEGE	88.84	24.7	12	52	-2	23	31	-8			25	2	*SPS
TIFLIS	92.40	311.5	13	25	14								

KHEYS	92.88	350.1	13 3	-10				
MOSCOW	97.27	325.5	13 35	2				
APATITY	98.11	337.6			24 42	-18	24 16	SKS
KSARA	99.30	303.4	13 26	-16	24 35	-35	23 50	SKS
SODANKYLA	100.71	337.9	13 51	2				
PULKOVO	100.71	330.0					18 2	PP
KIRUNA	102.84	339.1	14 1	3	24 33	-2		
NURMIJARVI	103.32	331.4	14 5	5				
KISHINEV	103.62	317.2					18 38	PP
MINERAL	103.65	49.7					18 23	PP
LICK	103.91	52.8					18 25	PP
RESOLUTE	104.26	12.0	14 2	-2	24 43	1	18 21	PP
RENO	105.11	50.3					18 35	
LWIRO	105.14	266.5	17 47	777			27 35	
ELISABTHVLLE	105.46	256.7					18 34	PP
UPPSALA	106.86	331.8					22 31	
LWOW	106.26	320.7					18 41	PP
THULE	106.92	5.4	14 19	777				
PASADENA	107.04	55.7			26 12	-3	18 37	PP
HUNGRY HORSE	107.65	40.5					18 59	PP
EUREKA	108.05	50.0	14 27	777			18 35	PP
PRUHONICE	112.07	322.7					19 26	PP
SCORESBY SD.	112.18	351.6					19 11	PP
TUCSON	113.40	56.8	18 47	10			19 38	PP
TUCSON TELE.	113.47	56.7	18 46	9			19 36	PP
STUTTGART	115.77	323.0					18 48	PP
RAPID CITY	116.09	42.5					18 50	PP
DALLAS	124.71	52.7					18 7	PP
TAMANRASSET	127.15	295.3	19 11	7	19 36		21 12	PP
OTTAWA	131.50	28.0	19 19	7				
SHAWINIGAN	131.92	24.9	19 21	8				
PALISADES	135.65	30.6	19 12	-8			22 0	PP
HUANCAYO	146.44	119.4	19 43	4				
BERMUDA	147.00	30.1	19 44	4			23 0	PKS
LA PAZ	149.74	133.7	19 59	15				
MBOUR	149.88	291.3	19 55	11			20 13	PKP2
SAN JUAN	155.75	53.3	20 30	38				
CARACAS	158.21	72.5	20 36	40			24 46	PP

APRIL 12 20.H 54.M 5.S EPICENTRE -15.36-173.35 DEPTH= 0.KM
A=-0.95823 B=-0.11180 C=-0.26324 D=-0.1159 E= 0.9933
G= 0.2615 H= 0.0305 K=-0.9647 HT= 5.7

SE= 3.77

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
APIA	2.17	44.5	0 33	-3				
NOUMEA	20.32	247.1	4 40	2				5 51
ONERAHI	23.1'	206.2	5 8	2	9 43	31		5 21
KARAPIRO	24.53	201.6	5 20	0				5 35
TUAI	24.80	197.9	5 35	13				
TONGARIRO	25.68	200.2	5 28	-3				
COBB RIVER	28.33	202.5	5 54	-1				
BRISBANE	33.43	243.2	6 35	-5	11 58	-2		
RIVERVIEW	36.91	233.6	7 8A	-2				8 35 PP
CHARTERS TS.	38.70	257.1	7 21	-4	13 18	-3		
PORT MORESBY	38.99	274.0	7 25	-2	13 20	-5		7 40 *SP
CANBERRA	39.09	232.4	7 25	-3	13 19	-8	7 39	9 25 PPP
HONOLULU	39.38	22.7	7 28	-2	13 15	-16		
KIPAPA	39.52	22.8	7 30	-2				
MELBOURNE	43.01	230.5	7 57A	-3				
ADELAIDE	47.07	236.4	8 29	-4				8 47
CAPE HALLETT	57.74	185.8	9 55	3	18 9	20		12 3 PP
TERRE ADELIE	59.30	199.1	10 13	1C				
SCOTT BASE	63.29	184.6	10 31	1	19 24	24		
TUKUBASAN	67.57	320.6	10 55A	-3	19 49	-3		11 16 PCP
MATUSIRO	68.94	319.8	11 3	-3	20 5	-4		11 16
BYRD STATION	68.99	171.3	11 5	-2	21 4	55	11 20	12 5 PCP
WILKES	70.46	204.7	11 11	-5	20 27	0		25 26 SS
BERKELEY	71.42	40.5	11 18	-3				
LICK	71.49	41.3	11 21K	-1				
UKIAH	71.60	39.0	1' 24	2				
PASADENA	71.95	45.7	11 23	-1	20 45	1		14 13 PP
FRESNO	72.34	42.7	11 25K	-2				
PETROPAVLOVK	72.35	342.7	11 25	-2	20 44	-4		

BAGUIO CITY	72.45	293.1	11 35	8						
SHASTA	73.08	38.1	11 29K	-2						
MINERAL	73.34	38.8	11 32A	-1						
Y.-SAKHLINSK	73.49	330.3	11 34	0	20 59	-2				
RENO	73.95	40.3	11 35K	-1						
SOUTH POLE	74.74	180.0	11 40	-1			11 54		13 28	PP
BOULDER CITY	75.24	45.7	11 43	-1						
TUCSON	76.26	50.7	11 49	0						
EUREKA	76.36	42.1	11 49	-1						
TUCSON TELE.	76.39	50.7	11 50	0					13 56	
ALBERNI	77.31	30.2	11 53	-2						
MIRNY	77.49	204.1	11 54	-2	21 45	0				
VICTORIA	77.51	31.4	11 54K	-2	22 3	17				
LEMBANG	77.68	266.2	12 8K	11					13 17	
ZO-SE	77.98	307.1	11 58	-1	21 52	1	12 10		12 15	*SP
HORSESHOE B.	78.14	30.8	11 57	-3						
SITKA	78.76	20.1	12 3	0						
SALT LAKE C.	79.72	42.7	12 8	-1						
MAGADAN	80.11	342.4	12 20	9						
NANKING	80.22	307.0	12 10	-1	22 17	3	12 23		12 30	*SP
HONG KONG	80.24	296.3	12 26	15	22 11	-4				
TACUBAYA	80.68	66.9	12 24	10					15 11	PP
CHANGCHUN	81.19	320.0	12 14	-2	22 25	1	12 27		15 27	PP
BUTTE	81.99	37.9	12 20	0	22 29	-4			15 24	PP
COLLEGE	82.32	10.7	12 19	-3	22 31	-5			15 41	PP
HUNGRY HORSE	82.40	35.4	12 30	7						
BOZEMAN	82.71	38.7	12 23	-1						
WUHAN	82.94	304.2	12 26	1	22 49	7	12 39		12 44	*SP
BANFF	83.16	32.5	12 24	-3						
ARGENTINE I.	83.91	156.4	12 30	0						
LARAMIE	84.15	44.5	12 30	-2						
PEKING	85.48	313.4	12 36	-2	23 10	2	12 50		16 1	PP
RAPID CITY	86.92	42.8	12 45	0						
HALLEY BAY	87.03	172.1	12 45	-1						
DALLAS	87.33	55.0	12 56	9						
SIAN	88.72	305.9	12 55	1			13 8			
MEDAN	88.99	274.0	12 51	-4						
YAKUTSK	89.08	336.7	12 58	2	23 13	-29				
PAOTOW	90.03	312.2	12 59	-1	23 54	4	13 13		23 26	SKS
FAYETTEVILLE	90.42	52.7	13 21A	19						
LAWRENCE	90.56	49.7	13 9	6						
KUNMING	91.09	295.6	13 7	2	24 7	7	13 20		13 27	*SP
CHENGTU	91.56	301.2	13 6	-1	24 7	3	13 20		16 55	PP
LANCHOW	93.26	306.4	13 13	-2	24 27	8	13 28		17 5	PP
HUANCAYO	94.42	103.7	13 40	20						
ULAN-BATOR	94.55	318.4	13 30	9						
IRKUTSK	97.39	322.1	13 44	10						
LA PAZ	99.71	110.1							25 31	SS
SHILLONG	100.70	293.7	13 53	4						
RESOLUTE	101.68	15.4	13 49	-4	24 30	0			17 57	PP
PALISADES	106.96	51.3	14 23	777	24 59	5			18 39	PP
THULE	108.36	13.9	18 38	10					14 29	P
SEMIPALATNSK	112.13	318.5							19 12	PP
KHEYS	112.14	352.3	18 43	8						
BERMUDA	113.67	61.1							19 20	PP
GRENADA	113.72	83.4							20 20	
HALIFAX	114.65	47.7			25 25	-1			19 53	PP
NAMANGAN	118.72	308.5							19 1	PP
WARSAK DAM	119.12	300.6	18 47	-1						
SVERDLOVSK	122.13	328.3	18 57	3						
SCORESBY SD.	122.18	11.0	18 55	1					20 26	PP
QUETTA	123.07	296.2	18 56	0					30 47	PS
APATITY	125.02	347.8	18 57	-3					19 11	
SODANKYLA	126.41	350.5	18 59	-3						
KIRUNA	126.81	353.5	19 2	-1					21 12	
SKALSTUGAN	131.68	356.6	19 11	-1					19 25	
PULKOVO	132.39	344.0	19 25	11					22 38	PKS
KIMBERLEY	132.78	201.8	19 22	8						
NURMIJARVI	133.06	347.9							19 12	
MOSCOW	133.23	336.4	19 24	9					22 39	PKS
UPPSALA	134.86	352.2	19 15	-3					22 58	
MAKHACH-KALA	135.60	316.7							20 50	
GOTEBORG	137.55	355.8	19 25	2					19 40	
TIFLIS	137.95	316.3	19 25	1					22 58	PKS
BULAWAYO	138.64	212.1	19 23	-2					19 41	
RATHFARNHAM	140.80	12.3	19 49	2					20 47	
WINDHOEK	140.94	195.4	19 42	13						
SIMFEROPOL	142.48	327.5	19 36	4					22 56	PKS

POTSDAM	142.72	353.5	19 42	10			22 42	
LWOW	142.83	341.3	19 41	8			25 53	
KISHINEV	143.44	334.3	19 44	10				
MUNSTER	143.47	359.0	19 41	7				
KEW	143.55	7.3	19 46	12				
HALLE	143.70	354.4	19 29	-5			23 1	PKS
KRAKOW	143.76	345.5	19 31	-3			22 58	PKS
IASI	143.81	335.7	20 5	31				
RACIBORZ	144.12	347.3	19 33	-2				
JENA	144.30	354.7	19 34	-1			23 4	PP
BENSBERG	144.49	359.4	19 34	-2			19 46	
BACAU	144.59	335.7	19 51	15				
PLAUEN	144.67	353.9	19 32	-4			23 3	PP
PRAGUE	144.81	351.3	19 38	2			22 57	PP
SONNEBERG	144.88	354.9	19 37	1				
PRUHONICE	144.88	351.1	19 35	-1			21 26	
CHEB	145.06	353.6	19 38	1			23 8	PKS
FOCSANI	145.17	334.5	19 57	20				
DOURBES	145.31	2.3	19 17	-20				
BRATISLAVA	146.17	347.1	19 41	3			22 59	PP
FOLINIERE	146.17	8.5	19 39	1				
HURBANOVO	146.21	346.0	19 54	15				
ELISABTHVLLE	146.21	218.6	19 42K	3				
VIENNA-H.	146.24	348.3	19 40	1			19 53	PKP2
PARIS	146.47	5.0	19 41	2				
STUTTGART	146.62	356.9	19 39	0				
BUCHAREST	146.67	334.3	19 53	14			20 45	
STRASBOURG	146.86	358.6	19 42	2			23 11	PP
TUBINGEN	146.86	357.1	19 42	2				
EBINGEN	147.22	357.1	19 43	3				
RAVENSBURG	147.58	356.3	19 47	6				
KSARA	147.86	310.2	19 48	7			23 32	PP
ISTANBUL UN.	147.91	327.2	19 46	5			23 31	PP
BASLE	147.92	358.8	19 48	7			22 45	
ADDIS ABABA	148.01	262.4	19 47	6				
BELGRADE	148.40	341.1	19 46	4			23 30	PP
NEUCHATEL	148.45	359.6	19 46	4				
CHUR	148.51	356.2	19 46	4				
TOLMEZZO	148.60	351.5	19 39	-3				
ZAGREB	148.64	347.4	19 50	8	19 52		20 1	
TRIESTE	149.22	350.3	19 50	7			23 30	PP
SOFIA	149.22	335.6	20 2	19			22 2	PP
JERUSALEM	149.27	307.2	19 48K	5			20 3	PKP2
CLERMONT-FD.	149.54	4.9	19 49	5				
PAVIA	150.20	356.4	18 43	-62				
CINE	150.83	323.4	19 52	6				
SERRA PILAR	151.11	24.3	19 43A	-3			20 4	PKP2
MONACO	151.72	358.8	19 53	6			20 7	
LWIRO	151.96	233.3	19 49K	1			23 35	
RUMANGABO	152.11	235.5	19 56	8			20 8	
ATHENS	152.89	329.4	19 44	-5			20 5	
ROME	153.08	350.4	19 13	-36				
TARANTO	153.33	341.8					26 57	
TOLEDO	153.84	18.9	19 52	2			20 13	PKP2
TORTOSA	154.07	10.7	20 22	31				
MESSINA	155.93	342.6	20 4	11			20 28	
ALICANTE	156.25	14.0	19 51	-2	26 56	0	20 23	PKP2
MALAGA	156.56	22.8	20 19	25			20 35	
MBOUR	157.15	89.4	20 19	24			24 20	PP
ALGIERS UNI.	158.44	7.9	19 59	3			24 23	PP
LEOPOLDVILLE	158.63	204.1	20 2	6				
RELIZANE	158.97	14.0	19 57	0			24 20	PP
TAMANRASSET	172.54	8.1	20 8A	0			25 36	PP

APRIL 13 18.H 32.M 5.S EPICENTRE 22.00 93.33 DEPTH= 80.KM

DEPTH OF FOCUS= 0.007R

A=-0.05384 B= 0.92652 C= 0.37238 D= 0.9983 E= 0.0580
G=-0.0216 H= 0.3718 K=-0.9281 HT= 4.2

SE= 2.18

DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S

CHITTAGONG	1.44	284.8	0	25A	-1				0	28 PG
SHILLONG	3.80	339.7	0	56A	-2	1	44	2		
HOWRAH	4.67	277.7	1	8	-2	2	1	-2		
TOCKLAI	4.91	15.3	1	18	5					
CHATRA	7.39	311.8	1	45	-3				4	35
KUNMING	9.11	68.7	2	12	1	3	59	6		
VIZIANAGRAM	10.05	249.2	2	50	26				4	10
PORT BLAIR	10.29	183.3	2	24	-3	4	24	3	2	31 PP
PHU-LIEN	12.45	93.0	2	55	-1				3	9 PP
CHENGTU	12.89	45.8	3	2	0	5	31	7	3	19 PPP
AGRA	14.83	293.2	3	31	4					
MADRAS	15.39	236.6	3	31	-3	6	12	-10		
DEHRA DUN	15.01	304.3	3	47	5	6	28	-9		
LANCHOW	16.75	30.8	3	52	1	7	0	7		
SIAN	18.36	45.0	4	12	1					
POONA	18.59	262.8	4	13	0	7	26	-9		
MEDAN	19.03	163.4	4	19	1	8	0	16	7	59
LAHORE	19.42	303.3	4	23K	0					
BOMBAY	19.46	264.6	4	24	1	8	13	20	4	40
WUHAN	20.83	61.5	4	37	0	8	24	4	4	59 PP
WARSAK DAM	22.59	306.6	4	51	-4					
QUETTA	25.01	294.5	5	19K	1	9	41	7	5	56 PP
NAMANGAN	26.32	320.9	5	32	2					
PEKING	26.46	42.0	5	30	-2	10	1	4		
MATUSIRO	41.39	59.3	7	37K	-3					
SVERDLOVSK	42.23	333.8	7	47	0					
YAKUTSK	47.10	22.5	8	30	4					
KSARA	51.53	296.3	9	8	8					
MOSCOW	52.92	324.1	9	9	-1					
ADDIS ABABA	53.87	265.1	9	20	3					
KASTAMONU	55.45	305.8	9	8A	-21					
ISTANBUL UN.	56.80	305.4	10	35	56					
PULKOVO	57.70	327.8	9	14	-31					
APATITY	58.49	337.1	9	48	-2					
NURMIJARVI	60.62	328.1	10	4	-1					
KHEYS	60.78	352.5	10	3	-3					
SODANKYLA	60.96	336.0	10	6	-1					
KIRUNA	63.38	336.1	10	23K	0					
UPPSALA	64.07	327.1	10	26K	-2				10	55 PCP
PRUHONICE	66.36	316.3	10	43K	0				11	13 PCP
CHARTERS TS.	66.46	125.1	10	44	1				10	56
ISFJORD	66.50	347.1	10	43	-1				10	58
RUMANGABO	66.53	258.4	10	46	2				11	22 PCP
SKALSTUGAN	66.57	331.2	10	43	-1					
ASTRIDA	66.70	257.0	10	46K	1					
GOTEBORG	67.10	324.8	10	46K	-1					
COLLMBERG	67.18	317.8	10	48	0					
LWIRO	67.40	257.7	10	50K	1					
HALLE	67.81	318.1	10	48	-4				13	37
STUTTGART	70.00	315.5	11	5	0					
STRASBOURG	70.96	315.5	11	11	0					
ADELAIDE	71.14	141.8	11	12A	0	11	25			
NORD	71.24	351.6	11	11	-2				11	26 PCP
ELISABTHVLLE	72.75	249.5	11	25A	3					
BRISBANE	75.82	127.7	11	52	13					
BULAWAYO	75.82	241.2	11	40	1					
CANBERRA	77.66	136.3	11	49	-1				12	3
RELIZANE	79.63	304.3	12	4	4					
TAMANRASSET	79.85	290.5	12	3K	1				15	1 PP
LEOPOLDVILLE	80.62	261.4	12	7K	1					
THULE	81.16	355.7	12	7	-2					
COLLEGE	81.64	22.2	12	10	-1					
KIMBERLEY	83.11	235.4	12	19A	0					
RESOLUTE	83.41	2.2	12	20K	0				12	35
BERKELEY	111.70	29.7	18	59	33					
SOUTH POLE	111.86	180.0	18	26	0					
BYRD STATION	120.18	173.7	18	42	0				18	58

APRIL 14 7.H 20.M 28.S EPICENTRE 58.06-154.93 DEPTH= 38.KM

DEPTH OF FOCUS= 0.001R

A=-0.48158 B=-0.22527 C= 0.84696 D=-0.4237 E= 0.9058
G=-0.7672 H=-0.3589 K=-0.5317 HT= -8.3

SE= 1.51

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S	
COLLEGE	7.63	23.5	1 54	3	3 16	-2			
SITKA	10.58	87.1	2 30	-2					
ALBERNI	19.74	103.4	4 29	0					
HORSESHOE B.	20.47	101.3			8 36	17			
VICTORIA	20.93	103.4	4 42K	0	8 37	9			
BANFF	23.55	89.9	5 8A	0					
HUNGRY HORSE	25.97	94.1	5 31	0					
SHASTA	27.01	115.8	5 41	1			5 59	12 33	SCP
RESOLUTE	27.49	29.9	5 46A	1	10 38	17			
MAGADAN	27.50	296.4	5 46	1					
MINERAL	27.66	115.2	5 47	1			6 4	9 1	PCP
BUTTE	28.21	96.7	5 51	0			6 8		
BOZEMAN	29.24	95.8	6 0	0					
BERKELEY	29.32	119.2	6 1	0			6 18	9 5	PCP
LICK	30.03	119.1	6 12	4			6 24		
EUREKA	31.10	109.6	6 17	0			6 35	9 10	PCP
FRESNO	31.36	117.4	6 20	1			6 37		
SALT LAKE C.	32.23	103.4	6 27	0					
THULE	33.87	25.0	6 39	-2	11 59	-3	7 0		
PASADENA	34.26	118.2	6 44	0	12 10	2		12 57	SCP
BOULDER CITY	34.39	112.3	6 46	0			7 4		
RAPID CITY	34.47	91.0	6 45	-1	12 18	7	7 4		
LARAMIE	35.13	96.6	6 51	-1					
YAKUTSK	35.88	308.9	6 57	-1					
BOULDER	36.20	97.8	7 2	1					
KIPAPA	36.66	184.8	7 4	-1					
HONOLULU	36.79	184.9	7 5	-1					
HAWAII V.OB.	38.57	180.5	7 20	-1					
NORD	38.79	9.0	7 23	0				9 33	PCP
TUCSON TELE.	39.33	111.4	7 27	0	13 16	-9	7 43		
TUCSON	39.35	111.6	7 27	0	13 15	-11	7 46	9 35	PCP
KHEYS	41.26	353.1	7 35	-8					
ISFJORD	43.96	3.4						10 7	PP
FAYETTEVILLE	44.99	91.9	8 12	-1					
DALLAS	46.10	97.1	8 21	-1					
TUKUBASAN	47.14	271.8	8 30K	0				9 1	*PPSP
SCORESBY SD.	47.48	19.5	8 34	1					
OTTAWA	47.84	69.0	8 35K	-1					
MATUSIRO	47.89	273.6	8 37A	1	15 52	22		10 4	PCP
SHAWINIGAN	48.47	66.0	8 40	-1				10 2	PCP
BREBEUF	48.81	67.5	8 42K	-1				10 6	PCP
SEVEN FALLS	49.00	64.2	8 42	-3				10 4	PCP
CHANGCHUN	49.24	289.9	8 46A	-1					
MORGANTOWN	49.88	77.3	8 51	-1			9 11		
PALISADES	51.94	71.7	9 7	0	16 22	-4	9 25	20 2	SS
FORDHAM	52.08	71.8						10 19	PP
COLUMBIA	53.57	82.8	9 18	-1					
HALIFAX	54.26	61.6	9 28	4					
KIRUNA	54.38	2.2	9 24	-1	16 57	-2			
APATITY	54.55	356.1	9 27	0					
SODANKYLA	54.88	359.3	9 28	-1					
PEKING	56.60	293.1	9 40A	-1					
SKALSTUGAN	58.30	6.7	9 53	0					
PAOTOW	59.12	297.9	10 0A	1					
ZO-SE	61.06	282.9	10 12A	0					
NANKING	61.53	285.4	10 15A	-1					
NURMIJARVI	61.77	0.2	10 17	0					
SVERDLOVSK	61.98	338.8	10 18	-1					
HELSINKI	62.11	0.1	10 20	1					
UPPSALA	62.29	4.2	10 20	-1			10 37		
PULKOVO	62.44	357.0	10 20	-2					
GOTEBORG	64.12	7.8	10 29	-4				11 6	PCP
SIAN	64.70	294.4	10 37A	1					
WUHAN	64.91	287.7	10 38A	0					
DURHAM	65.49	16.6	10 39	-2					
LANCHOW	65.63	299.3	10 42A	0					
RATHFARNHAM	66.12	20.0	10 45A	0					
MOSCOW	66.12	352.3	10 45	0					
KEW	68.88	16.7	11 3A	0					
MUNSTER	69.41	11.4	11 7	1					
CHENGTU	70.01	295.9	11 11A	1					
BENSBERG	70.36	11.9	11 12A	0					
COLLMBERG	70.56	8.0	11 11	-2				11 42	
JENA	70.82	9.0	11 4	-11			11 14	11 57	
DOURBES	70.90	13.8	10 47	-28					
SONNEBERG	71.33	9.3	11 19	1					

FOLINIERE	71.47	17.5	11	19	0						
CANTON	71.65	284.1	11	20	0						
HONG KONG	71.83	282.9	11	21	0	20	1	-36			
PRAGUE	71.88	7.2	11	22	1					11	34 PCP
PRUHONICE	71.98	7.1	11	22A	0					11	46 PCP
RACIBORZ	72.08	4.6	11	23	1						
KRAKOW	72.18	3.5	11	24	1					11	40 PCP
LWOW	72.48	0.7	11	24	0						
STUTTGART	72.74	10.9	11	27A	1				11	42	
STRASBOURG	72.77	11.9	11	27	1					11	54 *SP
TUBINGEN	72.96	11.0	11	29A	2						
EBINGEN	73.30	11.2	11	31A	2						
BASLE	73.79	12.2	11	34A	2						
NAMANGAN	73.94	325.1	11	34	1						
SAN JUAN	73.98	81.0	11	34	1				11	52	
CHUR	74.67	11.0	11	39A	2						
CLERMONT-FD.	74.95	15.7	11	41	2						
KISHINEV	75.24	357.3	11	40	-1						
BELGRADE	77.42	3.4	11	54K	1						
MONACO	77.52	13.0	11	56	3						
SOTCHI	78.00	349.2	11	55	-1						
TIFLIS	79.23	345.1	12	4	1						
SHILLONG	79.96	302.5	12	7A	0					18	21
WARSAK DAM	80.37	322.3	12	8A	-1						
KASTAMONU	80.82	355.7	12	11K	0						
CHATRA	80.91	306.9	12	13	1						
ISTANBUL UN.	81.21	357.0	11	59A	-14						
DEHRA DUN	81.45	315.7	12	16	1						
LAHORE	81.68	319.2	12	16	0						
PORT MORESBY	81.88	237.6	12	16A	-1						
ATHENS	84.33	1.1	12	30A	1						
QUETTA	85.36	324.6	12	35A	1					15	48 PP
KSARA	88.03	351.0	12	49	2						
CHARTERS TS.	91.67	233.6	13	5A	0					13	25
HUANCAYO	94.69	105.1	13	18	0						
RUHANGABO	123.34	354.9	18	55	2						
LWIRO	124.27	355.5	18	57K	2						
ASTRIDA	124.58	354.3	18	57	1						
UVIRA	125.48	355.0	18	59K	2						
LEOPOLDVILLE	125.91	12.1	18	59A	1						
ELISABTHVLLE	133.64	356.8	19	16	3					21	45 PP
BYRD STATION	139.32	171.1	19	13	-10						
BULAWAYO	142.04	354.6	19	26	-2						
WINDHOEK	144.09	12.6	19	31K	-1						
SOUTH POLE	147.88	180.0	19	34	-4					20	50
MIRNY	148.88	225.9	19	42	2						
KIMBERLEY	150.70	0.5	19	43	1						

APPIL 15 0.H 15.M 21.S EPICENTRE 41.37 143.04 DEPTH= 0.KM

A=-0.60142 B= 0.45250 C= 0.65843 D= 0.6012 E= 0.7991
G=-0.5261 H= 0.3959 K=-0.7526 HT= -2.2

SE= 2.91

	DELTA DEG.	AZ. DEG.	P M	P S	P O-C S	S M	S S	S O-C S	*PP M	*PP S	SUPP. M	SUPP. S
URAKAWA	0.80	345.9	0	23K	5	0	38	7				
HIROO	0.93	12.8	0	24A	4	0	40	6				
HATINOHE	1.42	234.2	0	26K	-1	0	44	-2				
OBIHIRO	1.55	4.3	0	35K	6	0	55	5				
TOMAKOMAI	1.58	316.9	0	37	8	0	59	9				
HAKODATE	1.79	283.9	0	35K	3	0	58	2				
AOMORI	1.80	252.9	0	32K	0	0	57	1				
MURORAN	1.82	302.4	0	36A	4	0	59	3				
KUSIRO	1.90	31.7	0	36	3	1	0	2				
MIYAKO	1.90	205.8	0	32A	-2	0	54	-5				
MORI	1.99	292.3	0	39A	4	1	5	4				
SAPPORO	2.11	324.0	0	41A	4	1	9	5				
MORIOKA	2.20	221.1	0	37A	-1	1	3	-3				
ASAHIGAWA	2.46	348.6	0	47	6	1	13	0				
SUTTSU	2.53	305.2	0	46	3	1	20	5				
MIZUSAWA	2.68	213.8	0	45	0	1	12	-6				
NEMURO	2.71	43.0	0	46K	1	1	17	-2				
AKITA	2.78	234.6	0	50K	4	1	21	0				
ABASHIRI	2.80	18.6	0	51	5	1	24	3				
ISINOMAKI	3.22	204.8	0	50	-2	1	32	0			4	20

SAKATA	3.49	226.0	1	3	7	1	48	9			
SENDAI	3.51	208.7	0	51A	-5	1	37	-2			
YAMAGATA	3.74	214.5	1	0	0	1	45	0			
HUKUSIMA	4.13	209.6	1	4	-1	1	55	0			
WAKKANAI	4.17	346.7	1	33	27				2	13	
NIIGATA	4.62	223.1	1	10	-2	2	5	-3			
ONAHAMA	4.72	201.4	1	12	-2	2	10	0			
SHIRAKAWA	4.78	208.2	1	15	1	2	19	8			
AIKAWA	4.99	229.4	1	20	3	2	17	0			
KURILSK	5.22	40.8	1	23	2	2	19	-4			
MITO	5.37	202.8	1	21	-2	2	28	2			
UTUNOMIYA	5.41	208.2	1	22	-1	2	30	3			
Y.-SAKHLINSK	5.58	357.7	1	29	3	2	30	-2			
KAKIOKA	5.60	204.4	1	23	-3	2	38	6			
TUKUBASAN	5.63	205.0	1	22K	-5	2	23	-10			
TAKADA	5.66	222.6	1	28	1	2	38	4			
MAEBASI	5.85	213.2	1	29	-1	2	44	6	2	29	
TYOSI	5.90	197.6	1	27	-3	3	1	21			
KUMAGAYA	5.95	209.9	1	31	0	2	45	4			
NAGANO	6.02	220.3	1	34	2	2	51	8			
MATUSIRO	6.11	219.5	1	32A	-1	2	42	-3	3	1	
OIWAKE	6.13	216.3	1	37	3	2	54	9			
WAZIMA	6.21	232.0	1	34	-1						
HONGO	6.21	205.4	1	31	-4				2	58	
TITIBU	6.21	211.2	1	35	0	2	53	6			
TOKYO C.M.O.	6.24	205.5	1	32K	-3	2	47	-1	2	5	
YOKOHAMA	6.50	205.3	1	44	5	3	5	10			
TOYAMA	6.51	226.2	1	42	3				2	18	
KOHU	6.72	212.9	1	47	5	3	5	5			
HUNATU	6.75	211.1	1	42	0	2	59	-2			
TAKAYAMA	6.90	222.8	1	45	1						
MERA	6.92	202.5	1	42	-3						
MISIMA	7.02	208.6	1	46	0	3	8	0	2	21	
AJIRO	7.03	207.4	1	44	-2	3	12	4			
IIDA	7.13	216.7	1	56	8	3	17	7			
OSIMA	7.20	204.8				3	19	6			
SHIZUOKA	7.36	211.2	1	56	5	3	31	15			
HUKUI	7.50	227.1	1	54	1						
GIHU	7.73	221.6	1	56	0	3	30	5			
UGLEGORSK	7.74	355.2	2	0	4	3	27	1			
OMAESAKI	7.76	210.9	2	6	10	3	51	25			
NAGOYA	7.82	219.6	2	3	6	3	35	7			
HAMAMATU	7.86	214.0	2	25	27	4	1	32			
TSURUGA	7.90	226.0	1	58A	0	3	39	9			
IBUKISAN	7.95	223.3	2	0	1	3	42	11			
HIKONE	8.10	223.4	2	1	0	3	45	10			
KAMEYAMA	8.32	220.6	2	10	6	3	53	13			
MAIZURU	8.37	227.7	2	7	2	3	52	11			
TU	8.39	219.9	2	6	1						
VLADIVOSTOK	8.45	285.6	2	8	2						
KYOTO	8.56	224.6	2	12	4	3	54	8			
TOYOOKA	8.69	230.5	2	10A	1				3	11	
ABUYAMA	8.76	224.6	2	8A	-2	3	55	4			
NARA	8.77	222.7				3	56	4			
OSAKA	8.95	223.9	2	20	7	4	22	26	3	35	
OWASE	9.08	218.8	2	24	9	4	13	14			
KOBE	9.11	225.4	2	15	0	4	12	12			
WAKAYAMA	9.46	223.6	2	23	3	4	5	-3			
SUMOTO	9.52	225.2	2	25	4	4	16	6	3	6	
YONAGO	9.64	235.2	2	21	-2				4	41	
SIOMISAKI	9.79	218.5	2	28	3	4	20	3			
OKAYAMA	9.81	230.0	2	25	0						
TOKUSIMA	9.90	225.3	2	26	0						
TAKAMATU	10.00	228.2	2	25	-3	4	26	4			
HAMADA	10.78	236.7	2	37	-1	4	25	-16			
KOTI	10.86	227.1	2	39	0	4	41	-2			
HIROSIMA	10.91	233.6	2	40	0	4	47	3			
MATUYAMA	11.10	230.6	2	39	-4	4	47	-2			
SIMIDU	11.75	226.3	2	49	-2						
OOITA	12.19	231.8	3	0	3				6	14	
HUKUOKA	12.68	236.2	3	3	-1	5	28	1			
SAGA	12.91	235.4	3	11	3						
ITUHARA	13.02	241.1	3	3	-5						
KUMAMOTO	13.02	233.0	3	8	-1						
MIYAZAKI	13.26	228.3	3	22	10	6	2	21			
CHANGCHUN	13.29	286.6	3	11A	-1	5	38	-4			
NAGASAKI	13.59	234.8	3	14A	-2	6	23	34	7	15	
KAGOSIMA	14.01	229.7	3	26	4						

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TOMIE	14.35	237.1	3	25	-1					
YAKUSIMA	14.88	226.9	3	29	-4					
MAGADAN	18.83	12.3	4	18	-5					
ZO-SE	20.35	246.7	4	36A	-4	8	17	-7	4	50
PEKING	20.39	275.1	4	36A	-5	8	18	-7	4	58 PP
NANKING	21.49	252.1	4	48	-4	8	40	-6		
PAOTOW	24.86	279.2	5	25	0	9	45	-1		
WUHAN	25.36	253.9	5	27	-3	9	48	-6	5	42
SIAN	27.75	266.3	5	50A	-2					
IRKUTSK	28.32	305.9	5	56	-1	10	39	-4		
HONG KONG	30.82	240.8	6	17	-2	11	20	-3		
LANCHOW	30.86	273.1	6	18A	-2	11	22	-1	7	20 PP
CANTON	30.87	243.0	6	19A	-1	11	22	-1		
WUWEI	31.10	277.1	6	21	-1					
BAGUIO CITY	31.52	224.5	6	29	4					
MANILA	32.85	222.1	6	34	-3	11	0	-54		
CHENGTU	33.08	263.8	6	36A	-3	11	53	-5	7	48 PP
PHU-LIEN	36.95	247.5	7	11A	-1	12	53	-5	8	36 PP
KUNMING	37.12	256.8	7	11	-3	12	55	-5	8	38 PP
SEMIPALATNSK	43.43	304.1	8	4	-2	14	27	-8		
COLLEGE	44.78	34.5	8	18	1	14	52	-2	18	22 SS
SHILLONG	44.86	266.0	8	15	-2				14	15
CHITTAGONG	46.73	262.3	8	31	-1	15	22	0	10	22 PP
KHEYS	49.74	346.8	8	46	-9	15	42	-22		
PORT MORESBY	50.66	174.8	9	2	-1				17	49
NAMANGAN	52.26	294.9	9	14	-1					
SITKA	52.32	43.1	9	17	2					
DEHRA DUN	52.71	279.9	9	21	3	17	8	23		
SVERDLOVSK	52.80	316.8	9	17	-2					
PORT BLAIR	52.91	250.9	9	19	-1	16	43	-5		
AGRA	54.42	276.6	9	26	-5				17	28
MEDAN	54.70	238.8	9	35	2					
LAHORE	54.82	283.3	9	34A	0					
STALINABAD	55.35	293.4	9	35	-2					
WARSAK DAM	55.60	287.3	9	38	-1	17	22	-2		
NORD	56.81	356.5	9	46A	-2					
ISFJORD	57.01	348.9	9	43	-6				10	23
RESOLUTE	58.09	15.4	9	55A	-2	17	55	-2	19	42 SCS
APATITY	59.28	335.1	10	3	-2	18	5	-8	18	23 PS
THULE	60.80	8.1	10	13	-3	18	27	-5	10	41 PCP
QUETTA	60.92	285.9	10	15	-2	18	31	-3	12	28 PP
CHARTERS TS.	61.14	176.5	10	16	-2				10	31
SODANKYLA	61.47	336.8	10	18	-2					
POONA	62.51	271.0	10	25	-2				19	10
KIRUNA	62.92	339.0	10	28	-2	18	56	-3		
BOMBAY	63.06	272.0	10	30	-1	19	15	14	19	43 PS
KARACHI	63.30	281.8	10	35A	3					
MOSCOW	64.55	322.8	10	39	-2	19	14	-5		
PULKOVO	65.11	329.0	10	43	-1	19	21	-5		
COLOMBO	65.43	257.0							19	45
NURMIJARVI	66.72	331.7	10	53	-2					
MAKHACH-KALA	66.81	307.4	10	53	-2					
HELSINKI	66.85	331.3	10	54	-1					
SHASTA	67.53	55.1	11	6A	6					
SCORESBY SD.	67.93	354.6	11	0	-2	20	4	3		
SKALSTUGAN	68.34	338.6	11	3	-2				11	21
BRISBANE	69.12	170.5	11	21	11	20	14	-1		
TIFLIS	69.16	307.6	11	10	0	20	4	-11		
BERKELEY	69.29	57.5	11	11	0					
GORIS	69.57	304.9	11	12	0					
UPPSALA	69.62	334.0	11	10A	-3	20	15	-6		
LICK	70.00	57.6	11	18A	3					
BUTTE	70.01	45.9	11	3	-12					
SOTCHI	70.96	311.6	11	20	-1	20	35	-1		
BOZEMAN	71.05	45.5	11	24	3					
FRESNO	71.51	57.1	11	25	1					
EUREKA	72.19	52.9	11	28	0					
SIMFEROPOL	73.13	315.4	11	33	-1	20	59	-2		
GOTEBORG	73.14	335.0	11	32A	-2					
SALT LAKE C.	73.78	49.8	11	38	1					
WARSAW	74.12	327.2	11	38	-1				14	23 PP
PASADENA	74.18	58.4	11	41	1	21	13	0	11	55
KISHINEV	74.40	319.6	11	39	-2	21	11	-4		
LWOW	74.62	324.0	11	42	0	21	16	-2		
COPENHAGEN	74.62	333.5	11	42	0					
BOULDER CITY	75.12	55.1	11	47	2					
RIVERVIEW	75.20	173.0	11	44	-2					
ADELAIDE	76.03	183.7	11	50	0					

KRAKOW	76.21	326.2	11	49	-2				12	9	PCP
RAPID CITY	76.24	42.8	11	52	0						
CANBERRA	76.51	175.0	11	57	4						
RACIBORZ	76.91	327.1	11	55	0				12	8	PCP
LARAMIE	76.92	46.1	11	56	1						
POTSDAM	77.07	331.2	11	55	-1						
KASTAMONU	77.36	314.5	11	48K	-10	21	30	-18			
COLLMBERG	77.97	330.6	11	56	-5	22	18	24	14	53	PP
HALLE	78.19	331.2	11	57	-5				12	31	
PRUHONICE	78.44	329.0	11	54A	-10				22	27	PS
ISTANBUL UN.	78.54	315.2	12	5A	1	21	58	-3			
BUDAPEST	78.55	325.0	12	5	1						
JENA	78.79	331.1	12	4	-2				15	4	PP
BRATISLAVA	78.85	326.5	12	5A	-1				12	18	PCP
VIENNA-H.	79.09	326.9	12	7	0						
MUNSTER	79.30	333.8	12	4	-4						
SONNEBERG	79.38	331.0	12	8	-1						
KSARA	79.64	306.0	12	11	1	22	18	6	15	16	PP
TUCSON	80.07	55.7	12	13	0						
TUCSON TELE.	80.07	55.6	12	13	0						
SOFIA	80.22	319.5	12	15	2	22	18	0	17	3	
BENSBERG	80.31	333.5	12	13	-1						
JERUSALEM	81.44	304.9	12	20K	0				12	34	PCP
STUTTGART	81.44	331.1	12	20	0				15	28	PP
CINE	81.50	313.3	12	20K	0				15	19	PP
TUBINGEN	81.69	331.1	12	22A	1						
TOLMEZZO	81.93	327.6	12	21	-1				23	0	
EBINGEN	82.02	331.0	12	23	0						
RATHFARNHAM	82.06	342.0	12	37	14						
STRASBOURG	82.12	331.8	12	23	0						
TRIESTE	82.24	326.8	12	24	0				22	50	SKKS
CHUR	82.92	329.9	12	27A	-1						
BASLE	83.07	331.4	12	29	1						
ATHENS	83.56	316.1	12	30A	-1						
PARIS	83.69	335.0	12	32	1						
LAWRENCE	84.03	41.8	12	33	0						
KARAPIRO	84.31	154.7	12	37	2						
FOLINIERE	84.64	336.7	12	36	0						
FAYETTEVILLE	86.78	43.0	12	46K	-1				13	35	
SHAWINIGAN	86.83	23.9	12	46	-1						
SEVEN FALLS	86.89	22.4	12	48	1						
OTTAWA	86.92	26.2	12	46	-2						
MESSINA	87.45	321.3	12	41	-9						
BREBEUF	87.51	24.9	12	50A	0						
MORGANTOWN	90.39	31.8	13	6	2						
HALIFAX	91.12	18.7				24	2	-2			
PALISADES	91.42	27.1	14	13	64	23	59	-8	23	39	SKS
TAMANRASSET	105.00	319.8				25	12	0	18	18	PP
ELISABTHVLLE	116.79	278.3	18	48A	2				19	56	PP
LEOPOLDVILLE	120.65	293.7	18	54	0				20	24	PP
CARACAS	121.47	35.2							22	12	PKS
SOUTH POLE	131.18	180.0	19	12	-2				22	32	PP
BYRD STATION	131.71	166.6	19	14	-1				21	50	PP
LA PAZ	143.48	56.6	19	43	7						

APRIL 15 19.H 11.M 18.S EPICENTRE 54.02 160.45 DEPTH= 0.KM

A=-0.55608 B= 0.19744 C= 0.80734 D= 0.3346 E= 0.9424
G=-0.7608 H= 0.2701 K=-0.5901 HT= -6.9

SE= 2.48

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
PETROPAVLOVK	1.40	231.0	0	33	6	0	51	4					
MAGADAN	7.66	320.2	2	5	9	3	39	14					
UGLEGORSK	12.45	254.1	3	10	8	5	39	17					
Y.-SAKHLINSK	13.30	245.1	3	17	4								
YAKUTSK	17.99	308.7	4	16	3								
TUKUBASAN	22.73	226.7	6	5	60						10	6	
MATUSIRO	23.29	230.4	5	11A	0	9	21	1			8	58	PCP
CHANGCHUN	24.99	260.4	5	26A	-1								
ABUYAMA	25.89	232.4	5	37A	1								
COLLEGE	27.61	46.3	5	52	1								
PAOTOW	35.95	269.1	7	5A	0								
KHEYS	40.29	345.2	7	32	-9								

SIAN	40.86	262.5	7 45	-1			
RESOLUTE	42.39	22.4	8 0A	2	14 25	5	
LANCHOW	42.59	268.8	7 59A	-1			
HORSESHOE B.	45.36	63.2	8 23	1			
VICTORIA	45.80	64.2	8 26	0			
ISFJORD	46.62	351.0	8 33	1			
SHASTA	51.38	71.6	9 10A	1			
SVERDLOVSK	51.75	316.4	9 10	-2			
APATITY	52.49	337.3	9 17	0			
BOZEMAN	54.09	59.9	9 30	1			
SODANKYLA	54.10	339.8	9 29	0			
KIRUNA	54.88	342.7	9 34	-1			
FRESNO	55.56	73.3	10 8	28			
EUREKA	55.78	68.4	9 42	1			
SCORESBY SD.	55.79	1.0	9 42	0			
SHILLONG	57.24	269.1	9 50A	-2			
NAMANGAN	57.53	296.2	10 15	21			
PASADENA	58.37	74.4	10 0	0			10 18
RABAUL	58.42	189.7	9 59	-1			
RAPID CITY	59.16	56.5	10 6	1			
CHITTAGONG	59.71	266.7	10 8	-1	18 16	-3	
PULKOVO	59.74	333.4	10 10	1			
SKALSTUGAN	60.15	344.2	10 12	0			
NURMIJARVI	60.51	336.6	10 15	0			
HELSINKI	60.74	336.3	10 16	0			
MOSCOW	61.00	327.1	10 17	-1			
BOULDER	61.08	61.0	10 20	2			
UPPSALA	62.64	339.9	10 29A	0			
WARSAK DAM	62.69	290.8	10 27	-2			
TUCSON TELE.	63.89	70.5	10 37	0			13 11 PP
TUCSON	63.90	70.6	10 37	0			11 9
GOTEBORG	65.73	342.1	10 53	4			
QUETTA	68.12	291.4	11 2	-2			13 33 PP
TIFLIS	69.88	314.1	11 15	0			
OTTAWA	70.03	38.5	11 14A	-2			
SHAWINIGAN	70.10	36.0	11 15	-1			
LWOW	70.23	331.7	11 18	1			
SEVEN FALLS	70.26	34.5	11 14	-3			
POTSDAM	70.54	339.5	11 18	-1			
BREBEUF	70.71	37.1	11 19A	-1			
KARACHI	71.45	288.4	11 30	5			
RACIBORZ	71.53	335.4	11 26	1			
COLLMBERG	71.57	339.1	11 54	29			16 23
HALLE	71.60	339.9	11 22	-4			11 54 PCP
JENA	72.21	339.9	11 31	2			12 7
PRUHONICE	72.48	337.7	11 32K	1			12 18
PLAUEN	72.51	339.4	11 30	-1			
CHEB	72.85	339.1	11 42	9			
BENSBERG	73.02	342.7	11 34	0			
MORGANTOWN	73.27	44.5	11 35K	0			11 50
BRATISLAVA	73.57	335.4	11 37	0			
CHARTERS TS.	74.73	193.8	11 43A	-1			11 56
STUTTGART	74.75	340.7	11 45	1			
HALIFAX	74.80	31.0	11 45	1			
STRASBOURG	75.20	341.6	11 48K	1			
EBINGEN	75.35	340.7	11 48	1			
KASTAMONU	75.64	323.3	11 43	-6			
PARIS	75.87	345.2	11 53	3			
TOLMEZZO	76.20	337.4	11 44	-8			
FOLINIERE	76.33	347.1	11 54	1			
TRIESTE	76.74	336.7	11 55	0			
CLERMONT-FD.	78.73	344.0	12 0	-6			
MONACO	79.93	340.5	12 14	1			
CINE	79.94	323.4	12 14	1			
ATHENS	81.08	326.7	12 18A	-1			
BRISBANE	81.41	186.7	12 21K	0			
JERUSALEM	82.35	315.4	12 26	1			
RIVERVIEW	87.86	187.7	12 25K	-28			
CANBERRA	89.52	189.3	13 0	-1			
ADELAIDE	90.58	197.8	13 5	0			
KARAPIRO	92.49	168.1	13 14	-1			
TAMANRASSET	100.52	336.6	13 50	-1			17 53 PP
ELISABTHVLLE	123.80	300.5	19 3	2			
SCOTT BASE	131.66	178.2	19 14	-2			22 35 PKS
KIMBERLEY	139.20	290.1	19 28A	-1			
SOUTH POLE	143.84	180.0	19 24	-14			22 59 PP

APRIL 15 23.H 52.M 42.S EPICENTRE -23.48-179.99 DEPTH= 567.KM

DEPTH OF FOCUS= 0.084R

A=-0.91821 B=-0.00016 C=-0.39611 D=-0.0002 E= 1.0000
G= 0.3961 H= 0.0001 K=-0.9182 HT= 3.8

SE= 1.66

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
SUVA	5.50	344.1	1	36	0	2	49	-3				
APIA	12.37	40.4	2	40	-2	4	48	-5				
ONERAHI	13.19	200.5	2	56	5	5	20	12				
KARAPIRO	14.90	193.9	3	7	-1	5	48	9			3	54
TUAI	15.47	188.4				5	48	-1				
TONGARIRO	16.13	192.6	3	20	1	6	5	4				
WELLINGTON	18.29	192.7				6	38	1				
COBB RIVER	18.59	197.5	3	42	-1	6	42	-1				
KAIMATA	20.29	198.6	3	57	-2	7	7	-4			4	5
GEBBIES PASS	21.06	195.0	4	4	-2	7	19	-5				
BRISBANE	24.66	255.0	4	38	0							
CANBERRA	29.36	239.2	5	20K	1							
CHARTERS TS.	31.50	269.7	5	37K	0	10	6	-1				
PORT MORESBY	34.38	288.5	6	1K	0							
TERRE ADELIE	49.63	198.9	7	59	-3				9	32		
BYRD STATION	62.03	170.1	9	27	0				11	13		
SOUTH POLE	66.67	180.0	9	57	1				11	50		
MATUSIRO	71.55	325.5	10	25K	0	19	0	0			19	28
HONG KONG	78.54	300.4	11	5	1	20	30	15				
HALLEY BAY	79.82	173.4	11	10	-1							
PASADENA	82.05	47.6	11	24	2							
TUCSON	86.19	52.5	11	44	2							
TUCSON TELE.	86.32	52.5	11	45	2							
EUREKA	86.53	44.2	11	44	0				13	50		
COLLEGE	91.51	13.1	12	6	-1							
RESOLUTE	111.16	16.5	17	28	-1							
NORD	121.41	2.8									25	0
ELISABTHVLLE	135.99	220.5	18	24A	7							
NURMIJARVI	139.21	341.6	18	15	-8							
UPPSALA	141.60	345.8	18	22	-6							
GOTEBORG	144.73	348.9	18	37	4							
JERUSALEM	147.84	292.7	18	44	7							
LEOPOLDVILLE	148.58	210.2	18	57A	19							
KASTAMONU	148.72	312.1	18	40A	1				20	46		
COLLMBERG	150.46	343.4	18	49	8							
TAMANRASSET	174.88	263.3	19	7	3						20	47 PKP2

APRIL 16 7.H 27.M 31.S EPICENTRE -23.78 178.96 DEPTH= 537.KM

DEPTH OF FOCUS= 0.080R

A=-0.91597 B= 0.01662 C=-0.40091 D= 0.0181 E= 0.9998
G= 0.4008 H=-0.0073 K=-0.9161 HT= 3.7

SE= 1.43

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
SUVA	5.62	354.8	1	34	-1	2	54	3			1	59
ONERAHI	12.60	197.4	2	48A	3	5	8	11			3	35
APIA	13.24	43.1	2	49	-2	5	5	-4				
KARAPIRO	14.40	191.0	3	4A	1						5	2
TUAI	15.06	185.5	3	9	0	5	38	-5			6	19
TONGARIRO	15.65	189.9	3	15	0						6	2
WELLINGTON	17.80	190.4	3	36	0	6	32	1			3	43
COBB RIVER	18.03	195.4	3	38	0	6	35	0				
KAIMATA	19.71	196.7	3	54	0	7	2	-1			4	3
GEBBIES PASS	20.54	193.1	4	0	-2	7	13	-4				
BRISBANE	23.65	255.5	4	32	2	8	9	2				
CANBERRA	28.38	239.2	5	13A	1	9	22	0	6	43	6	46 PP
CHARTERS TS.	30.53	270.6	5	31K	1	9	54	-1				
MELBOURNE	32.19	236.2	4	45A	-60							
RABAUL	32.35	302.9	5	45	-1							
PORT MORESBY	33.57	289.8	5	56K	0	10	39	-3			8	11 PCP
ADELAIDE	36.57	243.0	6	21	0	11	24	-3	7	57	12	7 PCS

CAPE HALLETT	48.80	183.5	7	58K	1						20	53	*SSCS
TERRE ADELIE	49.03	198.6	7	58	-1								
HAWAII V.OB.	49.76	32.5	8	4	0								
HONOLULU	50.06	28.3	8	6	-1								
KIPAPA	50.20	28.3	8	9	1								
SCOTT BASE	54.44	183.2	8	37	-1				10	21	9	12	PCP
BYRD STATION	61.90	170.0	9	27	-1				11	34	11	45	PP
SOUTH POLE	66.36	180.0	9	56	-1	18	2	-2	11	52	12	23	PP
MIRNY	66.84	205.7	9	58	-2								
LEMBANG	70.22	271.2	10	20K	0						12	20	
MATUSIRO	71.26	326.3	10	25K	-1	19	0	0			19	50	
ZO-SE	77.71	312.0	11	1	-1	20	12	2					
HONG KONG	77.87	301.0	11	3	0	20	5	-7					
HALLEY BAY	79.63	173.7	11	10	-2								
NANKING	79.90	311.6	11	14	1								
WUHAN	82.02	308.2	11	25	1								
BERKELEY	82.49	43.1	11	27	0								
LICK	82.56	43.8	11	28K	1								
PASADENA	82.97	48.0	11	30	1	21	7	4			21	39	SCS
CHANGCHUN	83.32	324.1	11	30	-1	21	10	3					
FRESNO	83.40	45.1	11	33	2								
MINERAL	84.41	41.4	11	37K	1				13	38			
PEKING	86.28	316.8	11	45	0								
TUCSON	87.14	53.0	11	51	2				13	54			
TUCSON TELE.	87.26	52.9	11	51	1				13	54			
EUREKA	87.42	44.6	11	51	0				14	10			
SIAN	88.03	308.8	11	54	1								
KUNMING	88.38	298.2	11	56	1								
CHENGTU	89.91	303.7	12	3K	1	22	10	3			21	40	SKS
PAOTOW	90.51	314.7	12	5	0								
SALT LAKE C.	90.78	45.2	12	7	1								
COLLEGE	92.02	13.5	12	9	-3				14	10			
LANCHOW	92.56	308.4	12	6	-8								
RESOLUTE	111.72	16.6	17	31A	-2								
OTTAWA	117.07	49.7	17	44	1								
THULE	118.24	14.3	14	37	777						20	46	PP
KHEYS	119.36	350.8	17	44	-4								
QUETTA	119.86	292.2	17	50	1								
SEVEN FALLS	120.60	48.1	17	48	-2								
APATITY	131.32	343.2							20	45			
SODANKYLA	133.13	345.7	18	7	-7								
KIRUNA	133.99	348.9	18	4	-12						20	54	SKP
ELISABTHVLLE	135.14	221.4	18	23	5						21	1	SKP
MOSCOW	137.33	328.6	18	22	0								
PULKOVO	137.87	336.9	18	24	1								
NURMIJARVI	139.19	340.8	18	18	-7								
SKALSTUGAN	139.23	350.9	18	20	-5								
HELSINKI	139.36	340.3	18	20	-5								
UPPSALA	141.65	344.9	18	25	-6								
SIMFEROPOL	144.50	315.2	18	36	1								
GOTEBORG	144.83	347.9	18	36K	0						21	25	SKP
KSARA	146.29	295.7	18	40	2								
JERUSALEM	147.06	292.1	18	43	4								
LWOW	147.45	329.3	18	44	5								
LEOPOLDVILLE	147.83	211.7	18	46	6								
KASTAMONU	148.20	311.2	19	40	60						23	4	PP
RACIBORZ	149.75	335.1	18	49	6								
HALLE	150.57	343.4	18	39	-5						18	56	
MUNSTER	151.08	348.9	18	53	8								
PRAGUE	151.11	339.2	18	54	9				21	10	19	17	PKP2
PRUHONICE	151.15	338.9	18	53	8				21	2			
CINE	151.54	305.8	19	14	29				21	20			
SOFIA	152.38	319.0	18	56	9						22	45	
STUTTGART	153.78	344.6	18	49	0								

APRIL 16 16.H 14.M 1.S EPICENTRE 12.49 143.16 DEPTH= 93.KM

DEPTH OF FOCUS= 0.009R

A=-0.78158 B= 0.58567 C= 0.21492 D= 0.5996 E= 0.8003
G=-0.1720 H= 0.1289 K=-0.9766 HT= 6.2

SE= 2.61

DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S

GUAM	1.83	57.8	0	25	-6						
RABAUL	18.85	151.1	4	15	0					7	48
YAKUSIMA	21.37	328.7	4	41	0	8	34	6			
MANILA	21.66	278.0	4	43	-1	8	40	7			
PORT MORESBY	22.11	169.5	4	51A	3	8	48	7	5 12	6	44
MIYAZAKI	22.15	332.7	4	45	-4	8	50	8			
BAGUIO CITY	22.20	282.8	4	51	2	8	56	13			
OWASE	22.40	344.7	4	53	2	8	52	6			
KOTI	22.73	338.8	4	55	1	8	53	1			
MISIMA	22.85	351.1	4	59	3						
SUMOTO	23.03	342.3	4	57	0	9	0	3			
YOKOHAMA	23.06	352.7	4	57	-1						
NARA	23.07	344.4	4	56	-2					5	29
KAMEYAMA	23.07	345.9	5	20	22						
OSAKA	23.12	343.8	4	59	1	9	4	5		5	59
OOITA	23.18	334.8	5	10	11	9	9	9			
KUMAMOTO	23.23	332.6	5	1	2	9	5	4			
HSINKONG	23.24	300.0	4	59	0						
KOBE	23.25	343.2	4	54	-5					5	26
HUNATU	23.25	350.9	5	10	11						
TAKAMATU	23.26	340.6	4	54	-5	8	56	-5			
NAGOYA	23.26	347.1	5	23	23						
ABUYAMA	23.32	344.1	4	59K	-1	9	3	1			
TAWU	23.36	297.8	5	19	19						
HWALIEN	23.39	302.2	5	6	5						
KOHU	23.41	350.6	5	9	8						
KYOTO	23.42	344.5	5	1	0						
HIKONE	23.52	345.7	5	2	0						
GIHU	23.53	346.8	5	2	0						
NAGASAKI	23.53	331.0	5	1	-1	9	5	-1			
IBUKISAN	23.60	346.1	5	2	-1						
ILAN	23.63	304.1	5	4	1						
TITIBU	23.67	351.7	5	3	0						
SAGA	23.77	332.4	5	2	-2						
TUKUBASAN	23.79	353.9	5	2	-3	9	8	-2	5 20	5	36 PP
KAKIOKA	23.79	354.0	5	3	-2						
KUMAGAYA	23.80	352.4	5	7	2						
TAIPEI	23.94	304.5	5	7	1						
HUKUOKA	24.00	333.1	5	6	-1	9	6	-8			
MAEBASI	24.09	351.9	5	24	17	9	45	30		6	1
OIWAKE	24.10	350.9	5	9	1						
MATUMOTO	24.11	349.7	5	13	5						
UTUNOMIYA	24.14	353.5	5	9	1	9	18	2			
TOYOOKA	24.14	343.2	5	6	-2	9	11	-5			
TAICHUNG	24.24	301.7	5	5	-4						
MATUSIRO	24.36	350.3	5	7K	-3	9	18	-2	5 24	5	32 *SP
O AHAMA	24.44	355.6	5	32	21	9	30	9			
HAMADA	24.47	337.6	5	28	17	9	23	1			
NAGANO	24.48	350.4	5	12	1	9	22	0			
SHIRAKAWA	24.66	354.4	5	15	2	9	32	7			
TOYAMA	24.69	348.5	5	26	13						
HUKUSIMA	25.27	355.0	5	23	4	9	45	10			
NIIGATA	25.59	352.5	5	27	5						
SENDAI	25.75	355.9	5	41	18					6	19
YAMAGATA	25.77	354.9	5	31	7	9	53	9			
ISINOMAKI	25.88	356.	5	42	17						
SAKATA	26.47	354.2	5	51	21						
MIZUSAWA	26.59	356.5	5	48	17	10	4	7			
MORIOKA	27.16	356.6	5	54	18						
AKITA	27.25	354.8	5	56	19	10	23	15		8	18
ZO-SE	27.46	315.9	5	37K	-2	10	11	0	5 55	6	25 PP
HONG KONG	29.28	293.4	5	55	0	10	40	0		6	49 PP
NANKING	29.65	314.9	5	57K	-2	10	42	-4	6 13	6	51 PP
CANTON	30.27	294.5	6	3K	-1	10	57	1	6 22	7	1 PP
WUHAN	31.95	308.7	6	16	-3	11	23	1	6 37	7	21 PP
VLADIVOSTOK	32.03	344.4	6	18	-2				6 38		
CHARTERS TS.	32.44	174.6	6	24	1	11	35	5			
Y.-SAKHLINSK	34.35	359.5	6	54	14						
CHANGCHUN	34.80	337.1	6	42K	-1	12	4	-2		8	1 PP
PHU-LIEN	35.89	288.2	6	55	2	12	20	-3		8	16
PEKING	36.30	323.9	6	55	-1	12	29	0	7 14	8	22 PP
UGLEGORSK	36.49	358.8	6	56	-2						
SIAN	37.89	310.6	7	9K	0						
KUNMING	40.15	294.1	7	29K	1	13	31	3	7 48	7	54 *SP
LEMBANG	40.20	243.4	7	29K	0	13	29	1			
PAOTOW	40.34	320.0	7	29K	-1				7 49		
CHENGTU	40.38	302.9	7	30K	0	13	30	-1	7 49	9	5 PP
DJAKARTA	40.59	244.8	7	31	-1	13	35	1			
BRISBANE	40.87	166.5	7	34A	0	13	40	2			

LANCHOW	42.45	310.5	7	48K	1				8	7	9	27 PP
WUWEI	44.06	312.4	8	0	0				8	20		
ULAN-BATOR	46.47	326.7	8	18K	-1	15	0	1				
RIVERVIEW	46.69	170.8	8	21A	0	15	6	4				
MAGADAN	47.32	5.3	8	42	16	15	45	34				
ADELAIDE	7.35	185.0	8	27	1				8	45	18	14 SCS
TOCKLAI	47.45	294.8	7	29	-58							
CANBERRA	47.87	173.6	8	31A	1				8	59	10	26 PP
PORT BLAIR	49.27	274.7	8	40	-1	15	43	4			9	57 PCP
CHITTAGONG	49.75	288.7	8	45	0	15	48	3	9	14	10	43 PP
SHILLONG	49.91	292.9	8	43K	-3						9	17
MELBOURNE	50.08	178.1	8	48A	1						9	3
YAKUTSK	50.39	351.8	8	46	-4	15	48	-6				
IRKUTSK	50.43	330.0	8	48	-2	15	57	2				
APIA	51.74	118.9	9	1	1						19	15
HOWRAH	52.99	288.8	9	5	-4	16	27	-3				
CHATRA	54.22	294.1	9	16	-2	16	12	-34				
ONERAHI	56.34	149.6	9	36A	3						10	3
HONOLULU	56.62	72.7	9	34	-1				9	53		
KIPAPA	56.69	72.5	9	34	-2							
KARAPIRO	58.61	150.3	9	50A	1						9	55
HAWAII V.OB.	59.35	74.7	9	53	-1							
TONGARIRO	59.63	151.2	9	56A	0							
COBB RIVER	59.90	154.5	9	59	1							
TUAI	60.09	149.7	9	59	-1							
KAIMATA	60.58	156.3	10	7	4							
WELLINGTON	60.95	153.1	10	2A	-3							
MADRAS	61.28	278.1	10	8	0	18	24	5			18	51 PPS
GEBBIES PASS	62.06	156.2	10	11A	-2						10	37
AGRA	62.39	294.1	10	13	-2	18	32	-1				
DEHRA DUN	62.39	297.7	10	14	-1	18	30	-3				
SEMIPALATNSK	63.27	320.4	10	18	-3	18	44	0				
LAHORE	65.60	299.1	10	35	-1	19	6	-6	10	56		
POONA	66.71	284.9	10	43	0	19	28	2				
BOMBAY	67.65	285.4	10	49	0	19	39	2			11	18 PCP
WARSAK DAM	67.94	301.7	10	53	2							
NAMANGAN	67.96	309.2	10	51	0	19	38	-3				
MACQUARIE I.	68.06	170.1	11	53K	62							
COLLEGE	69.90	25.1	10	59	-4				11	25	38	57 PKPPKP
STALINABAD	70.15	306.6	11	3	-1	20	8	1				
QUETTA	71.99	297.8	11	15	0	20	19	-9	11	37	14	14 *PPP
KARACHI	72.28	293.3	11	17	0				11	39		
SVERDLOVSK	75.56	325.7	11	36	0	21	6	-2				
KHEYS	77.96	349.8	11	41	-8	21	15	-19				
TERRE ADELIE	79.10	180.7	11	55	-1							
HORSESHOE B.	82.94	41.1	12	14A	-2							
VICTORIA	83.01	42.0	12	15K	-1							
SHASTA	85.30	49.5	12	27	0							
ISFJORD	85.36	350.7	12	39	11						12	53
NORD	85.54	357.1	12	47	18							
MAKHACH-KALA	85.68	312.9	12	50	21							
APATITY	85.88	338.7	12	29A	-1	22	51	-3	12	50	22	35 SKS
RESOLUTE	86.00	13.1	12	29	-2	22	53	-2			23	17 *PS
BERKELEY	86.01	52.3	12	31A	0							
CAPE HALLETT	86.49	172.0	12	36	3	23	10	10			23	30 *SS
LICK	86.61	52.7	12	33	-1							
MIRNY	86.94	197.9	12	36	0							
BANFF	87.34	38.2	12	36	-1							
TIFLIS	87.92	312.2	12	39	-1	22	58	-16				
FRESNO	88.17	52.9	12	42	1				13	3		
SODANKYLA	88.32	339.7	12	40	-2							
MOSCOW	88.32	327.0	12	41	-1	23	16	-1				
HUNGRY HORSE	89.10	40.6	12	44	-2							
THULE	89.31	7.1	12	45	-2				13	6		
KIRUNA	90.09	341.4	12	48	-2	23	6	-28	13	9		
PASADENA	90.12	55.1	12	51K	0	23	5	-29	13	17	13	33 *SP
PULKOVO	90.37	332.2	12	50	-2	23	13	-23				
EUREKA	90.37	49.5	12	50	-2				13	12	16	25 PP
SCOTT BASE	91.17	175.1	12	56	0						13	4 PCP
BOZEMAN	91.90	42.5	12	59	0							
HELSINKI	92.55	333.8	13	0	-2							
SALT LAKE C.	92.99	47.3	13	4	0							
SIMFEROPOL	94.29	317.7				23	35	-35				
UPPSALA	95.79	335.6	13	15	-2	23	40	-43	13	35		
TUCSON	96.56	55.1	13	21	1							
TUCSON TELE.	96.61	55.0	13	21	1				13	40	17	8 PP
KSARA	97.03	306.8	13	9	-13	23	35	-59			16	10 PP
RAPID CITY	97.66	41.8	13	25	0							

KASTAMONU	97.96	315.4	13	16K	-10	24	32	-9				
LWOW	98.29	325.1	13	48	20	24	56	12				
GOTEBORG	99.44	335.8									17	11 PP
SOFIA	102.29	319.1	17	14	777						18	21
SOUTH POLE	102.41	180.0	13	47	1						17	52 PP
PRUHONICE	103.26	328.8	17	5	777						18	20 PP
BYRD STATION	103.49	169.8	13	53	2						18	28 PP
HALLE	103.56	331.1	16	3	777						18	23 PP
MUNSTER	105.21	333.3	18	13	777							
ELISABTHVLLE	117.29	263.3	18	40	6				19	0	19	56 PP
KIMBERLEY	120.69	244.0	18	41	0							
TAMANRASSET	125.68	310.0	18	52	1				19	17	20	47 PP
HUANCAYO	142.41	93.6	19	23	1						22	33 PP
ST. VINCENT	144.83	44.4	19	25	-1							
MBOUR	146.83	323.0	19	57	28						20	19
LA PAZ	149.47	101.3	19	35	2						23	29 PKS

APRIL 18 6.H 17.M 59.S EPICENTRE -4.64 153.38 DEPTH= 54.KM
DEPTH OF FOCUS= 0.003R

A=-0.89110 B= 0.44663 C=-0.08032 D= 0.4481 E= 0.8940
G= 0.0718 H=-0.0360 K=-0.9968 HT= 7.0

SE= 1.71

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S
RABAUL	1.28	289.8	0	24	1							
PORT MORESBY	7.78	232.2	1	49K	-4	3	15	-6			2	3 PPP
CHARTERS TS.	16.78	203.8	3	53	0	7	2	6				
GUAM	19.93	334.6	4	32	2							
BRISBANE	22.72	180.8	4	58K	0	3	56	-2				
RIVERVIEW	29.12	183.8	5	56A	-2	10	49	4				
CANBERRA	30.80	187.0	6	12A	-1				6	25	7	20 PP
ADELAIDE	33.06	202.4	6	32	-1	11	44	-2				
MELBOURNE	33.92	192.0	6	44A	4						7	4
MANILA	37.37	301.3	7	9	0	12	53	0				
BAGUIO CITY	38.60	303.6	7	20	0							
KARAPIRO	38.80	151.6	7	22	1	13	17	2			7	39 PP
COBB RIVER	40.22	157.2	7	36	3						7	53
TUAI	40.28	150.8	7	51	18	13	33	-4				
ROXBURGH	43.06	163.6				14	1	-17				
MATUSIRO	43.36	342.1	7	57A	-2	13	59	-23			9	46 PP
HONG KONG	46.77	306.5	8	27	1	15	34	23				
ZO-SE	46.98	321.3	8	27A	-1	15	12	-2				
CANTON	47.87	306.9	8	36A	1							
NANKING	49.12	320.4	8	45A	1	15	44	0	9	9	10	38
WUHAN	50.99	315.9	8	59A	1							
PHU-LIEN	52.37	300.6	9	10	1	16	53	0				
HONOLULU	54.08	59.6	9	23	1							
KIPAPA	54.20	59.5	9	19	-3							
CHANGCHUN	54.47	335.3	9	24A	0							
MEDAN	55.26	277.6	9	31	1							
PEKING	56.08	326.0	9	35A	-1	17	18	-1				
SIAN	57.02	316.2	9	41A	-2							
KUNMING	57.40	303.6	9	45A	0							
CHENGTU	58.76	310.1	9	54A	-1	17	56	2				
PAOTOW	60.00	322.9	10	5A	2							
LANCHOW	61.53	315.5	10	15A	1							
TERRE ADELIE	62.63	185.3	10	18	-3							
WUWEI	63.28	316.7	10	27	1							
MAGADAN	64.02	358.5	10	30	0							
CHITTAGONG	65.85	296.9	10	42	0	19	27	4			11	12 PCP
ULAN-BATOR	66.28	327.8	10	45	0							
SHILLONG	66.74	300.2	10	47A	-1							
WILKES	68.30	197.3									17	43
CAPE HALLETT	68.40	174.5	11	1	3	20	1	7			11	18 PCP
SCOTT BASE	73.51	177.1	11	29K	0				11	49	11	46 PCP
MIRNY	74.29	201.2	11	33	0				11	47		
COLLEGE	81.50	21.7	12	12	-1				12	35	30	18 PKKP
POONA	81.58	289.4	12	13	-1						22	42
SEMIPALATNSK	82.91	321.9	12	20	0							
BYRD STATION	84.96	169.9	12	31	0				12	57	12	49 PCP
SOUTH POLE	85.39	180.0	12	33	0	23	3	5	12	52		
WARSAK DAM	85.81	304.5	12	35A	0							
NAMANGAN	86.77	311.4	12	41	1	23	15	4				

STALINABAD	88.65	308.7	12 51	2							
KARACHI	88.71	295.9	12 48	-1							
QUETTA	89.22	300.2	12 52A	1	23 44	10			23 21	SKS	
PASADENA	91.29	56.0	13 2	1	24 37	44			13 44		
EUREKA	93.42	50.8	13 12	1			13 36				
SVERDLOVSK	95.36	326.5	13 19	-1							
KHEYS	96.48	350.1	13 19	-6							
TUCSON TELE.	97.44	58.1	13 54	25							
RESOLUTE	100.11	14.5	13 40	-1	25 25	17			31 49	SS	
THULE	104.71	9.3	14 1	-1					18 5	PP	
APATITY	105.38	339.8	14 2	-2							
MOSCOW	108.13	327.6	18 23	1							
NURMIJARVI	112.23	335.4	18 31	1							
SKALSTUGAN	114.76	342.0	18 38	3							
JERUSALEM	116.28	303.1	18 41	3							
KASTAMONU	117.21	314.5	18 38	-1							
LWOW	118.07	325.4	18 43	2							
KIMBERLEY	120.50	232.8	18 47	1							
BREBEUF	122.36	37.5	18 51	2							
PRUHONICE	123.08	329.5	18 52A	1							
SEVEN FALLS	123.13	34.7	18 51	0							
HALLE	123.36	332.2	18 51	0					19 6		
ELISABTHVLLE	123.87	252.8	18 57	5							
MUNSTER	124.95	334.9	18 56	2							
BENSBERG	125.88	334.3							20 58	PP	
DURHAM	126.07	342.3	18 58K	2							
STUTTGART	126.51	331.2	18 59	2					20 57	PP	
TUBINGEN	126.74	331.1	18 59	1							
EBINGEN	127.03	330.8	19 0	2							
STRASBOURG	127.32	331.9	19 1	2					21 0	PP	
CHUR	127.65	329.2	19 1K	1							
RATHFARNHAM	128.70	344.5	19 2A	0							
HUANCAYO	128.81	109.4	19 8	6							
PARIS	129.49	335.4	19 7	4							
FOLINIERE	130.71	337.4	19 7	2							
CLERMONT-FD.	131.54	332.4	19 2	-5					22 31	PKS	
TAMANRASSET	144.08	303.2	19 30A	0					22 49	PP	
TRINIDAD	145.04	78.1	19 36	5							

APRIL 19 7.H 26.M 14.S EPICENTRE -45.11 -80.52 DEPTH= 0.KM

A= 0.11667 B=-0.69849 C=-0.70604 D=-0.9863 E=-0.1648
G=-0.1163 H= 0.6964 K=-0.7082 HT= -3.6

SE= 4.67

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S	
LA PLATA	20.02	67.2	4	30	-1	8	16	-2					
ARGENTINE I.	22.08	161.7	5	3	5								
ANTOFAGASTA	22.93	24.4	5	0	-7								
HUANCAYO	33.24	9.3	6	39	-2						7	54	PP
BYRD STATION	37.70	190.3	6	55	-24								
HALLEY BAY	37.98	160.7	7	21	0								
SOUTH POLE	45.09	180.0	8	16	-4						9	52	PP
CHINCHINA	50.04	6.4	8	56	-3	16	10	1					
SCOTT BASE	50.80	194.6	9	2A	-2	16	34	14			11	10	PP
CAPE HALLETT	53.06	201.7	9	20	-1	16	57	6			17	22	SKS
BALBOA HTS.	53.82	1.2				16	59	-2					
CARACAS	56.69	16.0	9	34	-14	17	30	-10					
TACUBAYA	66.41	340.7									11	59	
WILKES	68.69	184.8									24	44	SS
ROXBURGH	70.68	224.4				20	43	9			21	7	
WELLINGTON	70.82	230.5				20	34	-1					
KARAPIRO	72.72	233.5	11	28	-4								
BERMUDA	78.45	13.6				21	46	-14			28	10	SS
COLUMBIA	78.74	359.6	12	13	7								
DALLAS	78.98	346.1	12	48	41	23	22	76					
TUCSON	81.77	334.4	12	21	-1								
MBOUR	82.45	61.1				22	50	8					
MORGANTOWN	84.36	0.4	12	42	7								
PALISADES	85.94	5.0	12	31	-12	23	3	-14			16	1	PP
PASADENA	85.96	329.5	12	48	5	23	22	5			29	4	SS
BOULDER CITY	86.48	332.7	12	46	0								
BOULDER	87.63	341.2	12	50	-2								
RIVERVIEW	88.53	220.8	13	4	8	23	36	-5					

LARAMIE	88.91	341.4	12 55	-3				
EUREKA	90.04	333.3	13 3	0			16 38	
LICK	90.07	328.4	13 16A	13				
OTTAWA	90.22	3.4	13 11	7				
BERKELEY	90.77	328.2			24 11	9		
LEOPOLDVILLE	91.00	97.1	13 13	6			13 53	
RAPID CITY	91.06	343.9	13 11	3				
MINERAL	92.72	329.8	13 23	8				
BRISBANE	92.85	225.7	13 14	-2	24 27	7		
ELISABTHVLLE	94.14	110.8	13 21	-1				
BUTTE	95.06	338.2	13 46	20				
PORT MORESBY	110.86	231.3					28 42	PS
RESOLUTE	119.88	355.6	18 52	-1			30 2	PS
POONA	145.98	132.8	19 43	2				
MAGADAN	146.41	314.1	19 41	0				
TUKUBASAN	148.22	268.2	19 39	-6			19 58	
MATUSIRO	149.71	267.3	19 48A	1			48 28	SSS
Y.-SAKHLINSK	150.20	289.2	19 58	11				
QUETTA	150.48	109.1	19 49	1				
YAKUTSK	155.66	324.8					20 20	
NAMANGAN	159.30	91.7	20 13	13				

APRIL 19 8.H 59.M 17.S EPICENTRE 39.58 42.34 DEPTH= 0.KM

A= 0.57126 B= 0.52048 C= 0.63464 D= 0.6735 E=-0.7392
G= 0.4691 H= 0.4274 K=-0.7728 HT= -1.5

SE= 3.07

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
TIFLIS	2.84	40.5	0 46	-1	1 16	-7		
SOTCHI	4.45	334.7	1 10	0	2 6	2		
MAKHACH-KALA	5.16	47.3	1 27	7	2 24	3		
KSARA	7.74	224.0	1 57	0	3 40	14		2 5 PP
SIMFEROPOL	8.11	314.0	2 15	13				
KASTAMONU	8.99	285.1	1 46	-28	2 54	-63		
JERUSALEM	9.70	218.8	2 26	2	4 34	19		
ISTANBUL UN.	10.30	282.4	2 51	19	4 3	-27		
MOSCOW	16.46	350.6	3 52	-2				
LWOW	16.52	314.3	3 57	2				
WARSAW	19.40	317.7	4 31	1			6 21	
RACIBORZ	19.99	309.6	4 38	1				
BRATISLAVA	20.05	303.6	4 37	0			4 52	PP
STALINABAD	20.53	84.4	4 41	-1				
SVERDLOVSK	21.01	28.8	4 49	1				
PULKOVO	21.58	343.4	4 52	-1				
PRUHONICE	22.17	307.1	4 59	0				
QUETTA	22.21	107.4	4 58	-2			5 24	PP
PRAGUE	22.27	307.3	4 58	-2			5 48	
NAMANGAN	22.38	77.0	4 59	-2				
TOLMEZZO	22.42	297.3	5 4	2				
HELSINKI	23.31	337.8	5 13	3				
COLLMBERG	23.52	309.6	5 10	-2				
NURMI JARVI	23.68	338.0	5 13	-1				
PLAUEN	23.80	307.3	5 11	-4			5 19	
WARSAK DAM	23.99	94.2	5 15	-2				
HALLE	24.21	309.5	5 15	-4				
JENA	24.26	308.0	5 16	-4			6 4	
SONNEBERG	24.35	306.6	5 23	2				
KARACHI	24.80	116.1	5 33	8				
STUTTGART	25.31	302.2	5 28	-2				
UPPSALA	25.55	330.7	5 33	1				
LAHORE	27.12	97.2	5 47	0				
APATITY	28.45	352.8	6 3	4				
SODANKYLA	29.18	347.6	6 3	-2				
ADDIS ABABA	30.59	186.9	6 0	-18				
KIRUNA	30.76	343.9	6 17	-2				
TAMANRASSET	35.38	252.8	6 59A	0			8 22	PP
KHEYS	40.76	2.6	7 47	3				
CHITTAGONG	45.19	97.2	8 12	-8				
LEOPOLDVILLE	50.35	216.1	8 58	-3			10 1	
ELISABTHVLLE	52.81	198.5	9 24	5				
RESOLUTE	62.55	348.3	10 25	-3				
MATUSIRO	71.79	57.5	11 37	11				
COLLEGE	75.58	4.5	11 49	1				

EUREKA	48.85	343.2	13	44	1						
KARAPIRO	143.78	102.6	19	34K	-3						

APRIL 19 15.H 3.M 28.S EPICENTRE 58.17-151.79 DEPTH= 0.KM

A=-0.46704 B=-0.25051 C= 0.84801 D=-0.4727 E= 0.8812
G=-0.7473 H=-0.4008 K=-0.5300 HT= -8.3

SE= 3.35

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S	
COLLEGE	6.99	14.1	1	41	-3	2	58	-6					
SITKA	8.91	90.2	2	15	4	3	44	-8					
ALBERNI	18.17	107.7	4	13	0								
HORSESHOE B.	18.88	105.4	4	22	0	8	14	25					
VICTORIA	19.36	107.6	4	27A	0	8	12	13					
BANFF	21.89	92.9	4	55K	1								
HUNGRY HORSE	24.32	97.3	5	18	0	9	42	9					
SHASTA	25.59	120.2	5	31A	1								
MINERAL	26.23	119.6	5	36K	0						6	36	
RESOLUTE	26.56	29.9	5	38	-1	10	13	2					
BUTTE	26.58	100.0	5	38	-1						6	18	PP
BOZEMAN	27.60	99.0	5	49	1								
RENO	27.71	118.3	5	51A	2								
BERKELEY	27.95	123.7	5	52A	0	10	39	6					
LICK	28.67	123.4	5	58K	0								
MAGADAN	28.93	297.5	6	7	7	10	45	-4					
EUREKA	29.59	113.5	6	5	-1						9	8	PCP
FRESNO	29.96	121.6	6	10A	0								
SALT LAKE C.	30.66	107.0	6	15	-1								
RAPID CITY	32.81	93.9	6	40	5								
PASADENA	32.88	122.2	6	36	1	11	50	-1	6	48	9	18	PCP
THULE	33.05	25.5	6	34	-3								
LARAMIE	33.49	99.8	6	40	-1								
KIPAPA	36.98	189.7	7	10	0						8	53	PCP
YAKUTSK	37.09	310.0	7	11	0								
HONOLULU	37.11	189.8	7	11	0								
TUCSON TELE.	37.84	115.0	7	18	0						8	48	PP
TUCSON	37.87	115.2	7	19	1						9	3	PCP
NORD	38.41	9.6	7	21	-1								
KHEYS	41.34	353.9	7	36	-11								
FAYETTEVILLE	43.34	94.8	8	1K	-2								
FLORISSANT	43.34	88.9	8	2	-1								
ST. LOUIS I	43.53	88.9	8	2	-2								
ISFJORD	43.73	4.3	8	5	-1								
DALLAS	44.47	100.1	8	12	0								
OTTAWA	46.24	71.2	8	24	-2						9	59	PCP
SHAWINIGAN	46.90	68.1	8	28	-3								
BREBEUF	47.22	69.7	8	31A	-3	15	24	-1					
MORGANTOWN	48.22	79.8	8	40A	-2								
PENNSYLVANIA	48.44	77.1	8	43	0	15	45	2					
MATUSIRO	49.54	276.1	8	48	-4	15	54	-4			10	10	PCP
WASHINGTON	50.26	78.2	8	56	-1								
PALISADES	50.32	74.0	8	56	-2	16	1	-8			10	13	PCP
CHANGCHUN	50.76	292.0	8	59	-2	16	13	-2					
CHAPEL HILL	51.47	82.3	9	6	-1								
COLUMBIA	51.90	85.4	9	3	-7								
KIRUNA	54.18	3.6	9	24	-3	16	58	-4			9	33	
TACUBAYA	54.28	12.5	9	48	21								
APATITY	54.53	357.5	9	26	-3	16	43	-23			9	37	*SP
SODANKYLA	54.77	0.7	9	26	-5								
ULAN-BATOR	56.11	307.4	9	48	7								
SKALSTUGAN	57.97	8.3	9	52	-2						10	0	
PEKING	58.08	295.3	9	52	-3	17	52	-1					
NURMIJARVI	61.63	2.0	10	18	-1								
BERMUDA	61.67	73.8	10	14	-5	18	49	9					
HELSINKI	61.97	1.8	10	20	-1								
UPPSALA	62.03	6.0	10	22	0								
SVERDLOVSK	62.45	340.6	10	32	7								
MOSCOW	66.20	354.2	10	45	-4								
LANCHOW	67.01	301.5	10	52	-2	19	41	-5					
POTSDAM	69.12	9.9	11	14	7								
WARSAW	69.81	4.7	11	18	7	20	18	-1					
BENSBERG	69.88	14.0	11	20	8								
HALLE	69.89	10.7	11	13	1						11	45	
COLLMBERG	70.19	10.1	11	11	-3						12	7	

DOURBES	70.37	15.9	10	46	-29					
JENA	70.41	11.1	11	13	-2				11	33
PLAUEN	70.90	10.8	11	14	-4				11	23
SONNEBERG	70.92	11.4	11	25	7					
PARIS	71.30	17.6	11	30	9				12	24
CHENGTU	71.44	298.2	11	18	-3	20	34	-4		
PRAGUE	71.53	9.3	11	41	19					
PRUHONICE	71.63	9.2	11	22A	-1				14	10 PP
RACIBORZ	71.80	6.8	11	28	4				11	39 PCP
STUTTGART	72.28	13.1	11	26	0					
STRASBOURG	72.29	14.1	11	34	8					
LWOW	72.31	2.8	11	25	-2				11	35
SAN JUAN	72.32	83.7	11	25	-2					
HONG KONG	73.42	285.4	10	38	-55	20	59	-2		
BRATISLAVA	73.63	7.7	11	41	7					
NAMANGAN	74.77	327.3	11	44	3					
TRIESTE	75.85	10.4	11	44	-3				11	57 PCP
KUNMING	76.80	296.1	11	50	-2	21	33	-5		
SIMFEROPOL	77.13	355.7				21	39	-3	12	2 PCP
STALINABAD	77.84	328.6	12	0	2					
MAKHACH-KALA	77.95	345.6	12	3	4	21	46	-4		
CARACAS	78.45	88.8	11	58A	-4	22	7	11		
TOLEDO	78.66	24.8	12	4	1				12	13 PCP
TIFLIS	79.52	347.4	12	6	-1					
KASTAMONU	80.80	358.0	12	15	1					
ALICANTE	80.89	22.5	12	11	-4	22	15	-6	15	14 PP
WARSAK DAM	81.27	324.8	12	15	-2					
SHILLONG	91.28	305.0	12	12	-5					
GRANADA	81.34	25.2	12	29K	12				16	56 PPP
MALAGA	81.60	26.0	12	18K	0				15	26 PP
CHATRA	82.15	309.4	12	19	-2					
LAHORE	82.65	321.6	12	27	3					
ALGIERS UNI	83.09	20.1	12	36	10					
RELIZANE	83.60	22.3	12	35	6				12	44 PCP
CHITTAGONG	84.11	303.5	12	11	-20	22	15	-39		
CINE	84.59	0.1	12	39	5					
QUETTA	86.20	327.1	12	41	-1	23	12	-2	23	4 SKS
KSARA	88.14	353.6	13	1	10	23	43	10		
JERUSALEM	90.20	354.0	13	1	0				13	10 PCP
CHARTERS TS.	93.10	236.2	13	14	0					
TAMANRASSET	97.17	21.0	13	42	9				17	38 PP
ADDIS ABABA	112.48	348.7							19	22 PP
RUMANGABO	123.32	358.7	19	8	12					
LWIRO	124.24	359.3	18	58K	0				20	52
ASTRIDA	124.57	358.2	18	57	-2					
LEOPOLDVILLE	125.39	15.9	18	59	-1					
ELISABTHVLLE	133.55	1.1	19	16	0					
BYRD STATION	139.19	171.8	19	20	-6				21	55 PP
WINDHOEK	143.54	17.4	19	32	-2					
SOUTH POLE	148.00	180.0	19	42	1				20	8
MIRNY	150.17	226.7	19	47	2					
KIMBERLEY	150.49	6.1	19	50	5					

APRIL 19 17.H 38.M 53.S EPICENTRE 37.35 · 20.93 DEPTH= 0.KM

A= 0.74429 B= 0.28467 C= 0.60414 D= 0.3572 E=-0.9340
G= 0.5643 H= 0.2158 K=-0.7969 HT= -0.7

SE= 3.74

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
ATHENS	2.30	73.6	0	45A	5	1	19	10	0	54			PG
REGGIO CALA.	4.25	281.7	0	51	-17	1	33	-26	0	55			
MESSINA	4.35	282.8	1	3A	-6	1	46	-15	1	16			PG
SKOPJE	4.63	4.3	1	13A	0	2	1	-8	2	43			SG
SOFIA	5.65	18.3	1	30	2				3	7			
CINE	5.70	85.4	1	32	4				3	21			SG
ISTANBUL UN.	7.26	57.1	2	7	17								
BELGRADE	7.47	357.4	1	50K	-3				3	6			PS
BUCHAREST	8.07	27.4	1	59	-3	2	33	-62	2	51			
KASTAMONU	8.61	59.2	2	42	33								
ZAGREB	9.23	337.9	2	20	2				5	48			SG
TRIESTE	9.88	329.3	2	39	12	4	32	12	3	29			
TOLMEZZO	10.79	329.4	2	34	-5	3	39	-63	2	55			
BRATISLAVA	11.17	346.7	2	39	-5								

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
SIMFEROPOL	12.50	48.5	3	9	7							
KSARA	12.67	101.7	3	5	0	5	19	-9				
LWOW	12.67	9.2	3	3	-2							
CHUR	12.70	321.9	3	11K	6						5	14
KRAKOW	12.71	357.1	3	23	18	6	2	33				
RACIBORZ	12.87	352.1	3	3	-4							
JERUSALEM	13.02	111.1	3	7	-2	5	28	-8				
RAVENSBURG	13.33	325.0	3	28	15						5	57
PRUHONICE	13.43	342.0	3	10K	-5	5	39	-7				
PRAGUE	13.55	341.9	3	12	-4	5	33	-16				
EBINGEN	13.92	324.8	3	29	8	6	44	46			5	58
TUBINGEN	14.13	326.0	3	28	4							
NEUCHATEL	14.14	317.4	3	26	2							
STUTTGART	14.25	326.9	3	23	-3	6	21	15				
PLAUEN	14.57	337.2	3	32	2						3	41
STRASBOURG	14.76	323.6	3	36	4						4	31 PP
SONNEBERG	14.77	334.9	3	37	5	6	29	11			3	44
COLLMBERG	15.04	340.5	3	32	-4						6	48
JENA	15.12	336.8	3	40	3	6	46	20			3	49 PP
HALLE	15.51	339.6	3	42	0	6	42	7			4	5
SOTCHI	15.58	60.6	3	43	0							
POTSDAM	16.01	342.3	3	51	2						4	7
RELIZANE	16.46	270.6	3	59	5						4	15 PP
BENSBERG	16.77	328.6	4	7	9							
DOURBES	17.32	322.5	3	31	-34							
MUNSTER	17.37	331.5									5	4
PARIS	17.63	316.3	4	15	6							
TIFLIS	18.90	69.3	4	25	0							
COPENHAGEN	19.21	345.3				8	2	2				
FOLINIERE	19.29	313.0	4	26	-3							
TOLEDO	19.67	285.1	4	36	2							
TAMANRASSET	19.68	226.7	4	30A	-4	8	2	-8			4	47 PP
MAKHACH-KALA	21.02	66.2	4	48	0							
MOSCOW	21.57	26.2	4	52	-2							
UPPSALA	22.61	355.7	5	1	-3	9	4	-4			5	13
HELSINKI	22.98	5.2	5	15	7							
PULKOVO	23.23	12.1	5	8	-2	9	17	-2				
NURMIJARVI	23.30	4.7	5	10	-1							
SKALSTUGAN	26.78	351.4	5	40A	-4						6	11 PP
KIRUNA	30.53	359.6	6	14	-4							
APATITY	31.06	9.3	6	20	-2	11	21	-6				
ADDIS ABABA	32.49	145.7	6	39	4							
SVERDLOVSK	32.68	40.6	6	35	-1							
NAMANGAN	39.06	68.5	7	31	0							
LWIRO	40.07	167.7	7	38	-1						8	4
ASTRIDA	40.58	166.4	7	43	0							
ISFJORD	40.93	357.7	7	44	-2						8	0
LEOPOLDVILLE	41.84	188.5	7	51	-3							
KHEYS	44.48	7.4	8	52	37							
NORD	46.34	352.9	8	27A	-3							
ELISABTHVLLE	49.10	171.6	8	51	-1							
THULE	53.87	343.0	9	23	-5							
SHILLONG	60.37	79.1	9	43A	-31							
RESOLUTE	60.65	344.1	10	12A	-4							
YAKUTSK	65.69	29.3	10	40	-9							
COLLEGE	77.73	355.1	11	58	-3							
RAPID CITY	84.46	323.2	12	39	3							
MATUSIRO	86.33	45.8	12	44A	-2							
EUREKA	93.88	328.0	13	29	8							

APRIL 19 19.H 43.M 5.S EPICENTRE -15.82-172.02 DEPTH= 0.KM

A=-0.95328 B=-0.13370 C=-0.27090 D=-0.1389 E= 0.9903
G= 0.2683 H= 0.0376 K=-0.9626 HT= 5.6

SE= 2.72

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
SUVA	9.43	254.4	2	40	20	4	53	45				
ONERAHI	23.30	208.9	5	10	0							
KARAPIRO	24.61	204.2	5	20A	-3	9	55	13			8	25
TUAI	24.79	200.5	5	23	-2	9	56	11			5	30
WELLINGTON	27.83	201.7				10	56	20				
COBB RIVER	28.43	204.7	6	4	6							
GEBBIES PASS	30.70	202.1	6	26	8	11	48	27				

BRISBANE	34.38	244.3	6	49A	-2	12	17	-1			
RIVERVIEW	37.66	234.7	7	18K	0				8	13	
CANBERRA	39.84	233.4	7	36	-1						
CHARTERS TS.	39.85	257.6	7	35	-2						
ADELAIDE	47.89	237.1	8	43	2						
SCOTT BASE	62.95	184.9	10	28K	-2						
BYRD STATION	68.35	171.4	11	2	-3				11	30	
MATUSIRO	70.12	319.2	11	15A	-1	20	14	-13			
BERKELEY	70.94	39.7	11	21	0						
LICK	70.99	40.5	11	21K	0						
PASADENA	71.36	45.0	11	32	9						
FRESNO	71.81	41.9	11	26K	0						
SHASTA	72.66	37.4	11	31K	0						
MINERAL	72.90	38.0	11	32K	-1						
SOUTH POLE	74.28	180.0	11	38	-3				12	3	
BOULDER CITY	74.65	45.0	11	43	0						
TUCSON	75.57	50.1	11	48	0						
TUCSON TELE.	75.69	50.0	11	48	-1						
EUREKA	75.84	41.5	11	49	-1						
MIRNY	77.60	204.1	11	56	-3						
SALT LAKE C.	79.19	42.1	12	8	0						
BUTTE	81.57	37.3	12	20	-1						
HONG KONG	81.59	296.0	12	36	15	22	39	6			
BOZEMAN	82.27	38.2	12	25	1						
COLLEGE	82.53	10.2	12	24	-2						
BANFF	82.86	31.9	12	36	9						
RAPID CITY	86.39	42.3	12	44	-1						
MEDAN	90.29	273.6	12	45	-19						
RESOLUTE	101.78	15.4	13	55	-1						
PALISADES	106.25	51.3				25	6	79		28 58	PPS
LWOW	143.66	342.4	19	34	-3						
COLLMBERG	144.38	354.6	19	27	-11						
RACIBORZ	144.84	348.6	19	38	-1						
JENA	144.86	356.0	19	36	-3					20 0	
BENSBERG	144.94	0.9	19	39	0						
PLAUEN	145.24	355.3	19	37	-2					20 31	
SONNEBERG	145.43	356.4	19	40	0					19 58	
PRUHONICE	145.51	352.5	19	40A	0						
DOURBES	145.70	3.9	19	14	-26						
FOLINIERE	146.41	10.1	19	43	2						
ELISABTHVLLE	146.63	216.3	19	45K	3						
PARIS	146.79	6.6	19	46	4						
STUTTGART	147.12	358.5	19	44	1						
STRASBOURG	147.33	0.3	19	45	2					20 38	
TUBINGEN	147.37	358.7	19	45	2						
EBINGEN	147.72	358.8	19	47	4						
KASTAMONU	147.82	326.8	19	41A	-3						
ADDIS ABABA	149.21	261.0	19	54A	8						
TOLMEZZO	149.22	353.2	19	50	4					20 1	
ZAGREB	149.35	349.0	20	3	17						
SOFIA	150.15	336.9	19	53	6						
JERUSALEM	150.56	307.5	19	55	7					20 5	
UVIRA	151.63	229.2	19	57	7					20 7	
ASTRIDA	151.76	231.5	19	57A	7					20 7	
CINE	151.95	324.5	20	7	17						
LWIRO	152.69	230.7	20	0K	9					20 10	
RUMANGABO	152.88	233.0	20	0	9					20 20	
LEOPOLDVILLE	158.69	200.3	19	59	0					20 34	
TAMANRASSET	172.70	18.2	20	11	1					25 23	

APRIL 20 3.H 27.M 55.S EPICENTRE -6.01 148.81 DEPTH= 70.KM

DEPTH OF FOCUS= 0.006R

A=-0.85078 B= 0.51512 C=-0.10404 D= 0.5179 E= 0.8554
G= 0.0890 H=-0.0539 K=-0.9946 HT= 7.0

SE= 1.96

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
PORT MORESBY	3.74	205.9	0	56K	-1	1	40	0				
CHARTERS TS.	14.13	189.9	3	18K	0	5	47	-7				
GUAM	19.77	348.3	4	29	2				4	42		
BRISBANE	21.72	169.8	4	47	0	8	39	1				
NOUMEA	23.51	135.3	5	3	-1	9	17	7				

RIVERVIEW	27.76	175.8	5	45A	1	10	23	3					
CANBERRA	29.17	179.7	5	57A	0	10	45	2	6	19	8	50	PCP
ADELAIDE	30.25	196.6	6	7	0	11	5	5			11	30	
MELBOURNE	31.86	185.8	6	20	-1	11	31	6			15	8	
BAGUIO CITY	35.73	309.0	6	53	-1	12	29	4					
FORT NELSON	36.79	181.8									13	23	
APIA	39.54	104.3	7	27	1								
KARAPIRO	39.98	146.4	7	30A	1	13	19	-11			9	33	PCP
PERTH	40.18	225.8	7	37	6	13	38	6			14	15	SS
WELLINGTON	42.07	150.5	7	46	-1	13	59	-2	8	2	17	23	
ABUYAMA	42.54	343.8	7	52A	2								
TUKUBASAN	42.80	349.6	7	53K	0	14	1	-10	8	11	9	18	PP
ROXBURGH	43.24	158.9				14	19	1			17	41	
MATUSIRO	43.48	347.6	7	59A	1	14	20	-1	8	12	9	35	PP
HONG KONG	44.06	310.8	8	5	2	14	30	0			10	45	PPP
CANTON	45.18	311.0	8	7	-5	14	42	-4			8	33	*SP
ZO-SE	45.38	326.0	8	14A	1	14	50	2	8	28	8	38	*SP
MIZUSAWA	45.47	351.6	8	14	0	15	21	31					
NANKING	47.43	324.8	8	30A	0	15	23	5	8	42	10	21	PP
WUHAN	48.94	319.9	8	41A	0						9	0	*SP
MACQUARIE I.	49.04	172.2	9	13	31								
PHU-LIEN	49.24	304.0				15	48	5			10	57	PP
MEDAN	50.95	279.5	9	7	10	16	27	20					
VLADIVOSTOK	51.25	344.2	9	0	1								
Y.-SAKHLINSK	53.01	354.8	9	13	1	16	39	4					
CHANGCHUN	53.96	339.1	9	19A	0						9	38	*SP
KUNMING	54.45	306.5	9	22A	-1	17	0	6			17	23	PS
PEKING	54.80	329.6	9	24A	-1	16	59	0	9	38	11	22	PP
SIAN	54.98	319.6	9	25A	-2								
UGLEGORSK	55.18	354.6									10	28	PCP
CHENGTU	56.26	313.1	9	35A	-1	17	20	2			9	58	*SP
PAOTOW	58.46	326.0	9	51A	0				10	4			
HONOLULU	58.71	60.8	9	55	2	18	17	26					
KIPAPA	58.82	60.7	9	54	0								
LANCHOW	59.41	318.3	9	58A	0	18	2	2	10	14	18	29	PS
CHITTAGONG	62.47	298.9	10	18	0								
SHILLONG	63.55	302.3									12	9	
ULAN-BATOR	65.11	330.3	10	36	0	19	17	6					
MAGADAN	65.37	1.1	10	36	-1								
WILKES	65.68	196.0	10	36	-3	19	15	-3			20	9	SCS
CAPE HALLETT	67.53	173.0	10	51A	0	19	46	5			11	5	PCP
IRKUTSK	69.27	332.6	11	2	0								
YAKUTSK	69.42	350.5	11	1	-2	20	4	1					
MIRNY	71.39	200.4	11	15	0	20	27	1					
SCOTT BASE	72.42	176.1	11	21K	0	20	47	9					
POONA	77.76	290.3	11	54	3								
LAHORE	80.03	303.4	12	1	-3								
WARSAK DAM	82.86	305.2	12	16A	-2								
SOUTH POLE	84.03	180.0	12	24	0	22	45	4	12	42	14	0	PP
NAMANGAN	84.28	312.1	12	25	-1								
BYRD STATION	84.41	169.9	12	26	0	22	49	4	12	42	17	38	
COLLEGE	84.48	22.6	12	23	-4	22	44	-2	12	40	23	25	PS
STALINABAD	85.97	309.3	12	53	19								
QUETTA	85.99	300.8	12	33A	-1	22	59	-2			15	58	PP
SHASTA	92.97	49.6	13	8A	1								
LICK	93.25	53.0	13	27A	19								
MINERAL	93.54	50.0	13	13A	3								
SVERDLOVSK	93.99	326.6	13	27	15								
PASADENA	95.83	56.4	13	21	1	24	18	-11			17	11	PP
KHEYS	97.04	350.0	13	14	-11								
EUREKA	97.81	51.1	13	30	1								
HUNGRY HORSE	99.22	42.1	13	31	-4						38	16	PKPPKP
TUCSON	101.94	58.4	17	58	777								
RESOLUTE	102.56	14.1	13	50A	0						18	3	PP
NORD	104.15	357.8									27	16	PS
TIFLIS	104.43	311.4				24	12	-20			19	19	
APATITY	105.06	338.9	14	2	777	24	25	-9			18	25	PP
MOSCOW	106.80	326.6									18	34	PP
RAPID CITY	107.07	45.8	17	27	777								
SODANKYLA	107.51	339.9	14	7	777								
KIRUNA	109.31	341.6	18	24	777						27	45	
SKALSTUGAN	114.58	340.2									19	33	PP
KASTAMONU	114.86	312.9	18	34	1								
UPPSALA	114.86	335.2									29	19	PS
BULAWAYO	115.75	244.4	18	37	2								
ASTRIDA	118.57	263.8	18	43	3						19	1	
UVIRA	119.04	262.7	18	44	3								
ELISABTHVLLE	119.12	253.2	18	46A	5				19	1	20	4	PP
LWIRO	119.53	264.0	18	56	14						21	0	

PRUHONICE	121.84	327.0	18 49	3		20 10	PP
COLLMBERG	121.92	329.0	18 48	1			
HALLE	122.33	329.6				20 32	
OTTAWA	124.99	37.1	18 54K	1			
STUTTGART	125.39	328.3	18 55	2			
SHAWINIGAN	126.07	34.5	18 55	0			
BREBEUF	126.18	36.0	18 56	1		21 10	*SPP
STRASBOURG	126.25	328.8	19 10	15	19 25		
SEVEN FALLS	126.80	33.0	18 57	1			
PALISADES	128.39	40.9	19 0	1		21 14	PP
FORDHAM	128.49	41.1	19 12	13		25 8	
LEOPOLDVILLE	132.49	258.5	19 1	-6	19 9	21 32	PP
HUANCAYO	132.58	112.3	19 11	4			
CHINCHINA	135.77	89.1	19 15	2		23 37	PPP
LA PAZ	137.16	122.0	19 19	4	19 32	22 52	PP
BOGOTA	137.29	89.7	19 13	-3		22 49	
FUQUENE	137.68	88.5	19 18	2		22 7	PP
BERMUDA	139.23	45.6				22 25	PP
TAMANRASSET	140.89	299.0	19 21	-1		22 58	PP
SAN JUAN	143.80	67.0	19 27	0		23 9	PP
CARACAS	144.37	80.4	19 26A	-2		22 43	
ST. KITTS	147.19	67.2	19 37	4			
TRINIDAD	149.77	79.2	19 45	8			

APRIL 20 4.H 21.M 12.S EPICENTRE 8.50 -82.88 DEPTH= 0.KM

A= 0.12268 B=-0.98153 C= 0.14677 D=-0.9923 E=-0.1240
G= 0.0182 H=-0.1456 K=-0.9892 HT= 6.7

SE= 2.74

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
BALBOA HTS.	3.31	81.7	0 52	-2				
SANTIAGO MA.	7.40	312.6	1 52	0				
GALERAZAMBA	7.84	72.6			3 36	8		
CHINCHINA	8.01	115.5	1 59	-1	3 40	7		
SAN SALVADOR	8.12	310.4	2 2	0				
BOGOTA	9.56	113.2	2 24	2	4 20	9		
FUQUENE	9.56	107.7	2 22	0	4 28	17		
COMITAN	11.87	311.3	2 56	3				6 32
CARACAS	15.85	81.5	3 45A	-1	6 52	9		
OAXACA	15.97	303.4						6 12
VERA CRUZ	16.68	311.0	4 9	12				10 20
SAN JUAN	19.01	57.2	4 28	2				
TACUBAYA	19.18	306.1	4 30	3	8 12	13		
GRENADA	21.10	78.6	4 50	2				
TRINIDAD	21.28	82.5	4 51	1				
ST. KITTS	21.49	63.9	4 57	5				
HUANCAYO	21.75	159.7	4 51	—	8 51	0		
FORT FRANCE	22.15	71.8	5 6	7				9 11
COLUMBIA	25.44	3.6	5 33	2	10 12	16		
DALLAS	27.44	334.0	5 56	7				
LA PAZ	28.80	149.5			10 58	7		12 20 SS
BERMUDA	29.15	32.8			10 48	-9		
MORGANTOWN	31.11	4.4	6 24K	2				
LAWRENCE	32.32	341.8	6 30	-3				
CLEVELAND	32.87	1.9						7 43 PP
FORuHAM	33.20	12.5						7 50 PP
PALISADES	33.34	12.4	6 43	1				
TUCSON TELE.	35.06	316.5	6 56	-1				10 25
TUCSON	35.08	316.3	6 57	0				
BOULDER	37.24	331.1	7 14	-1				
OTTAWA	37.28	8.3	7 15	0				
BREBEUF	37.72	10.7	7 19K	0				
LARAMIE	38.37	332.1	7 25	1				
SHAWINIGAN	38.89	11.1	7 28	-1				
RAPID CITY	39.62	336.9	7 25	-10				
SEVEN FALLS	39.84	12.9	7 36	-1				
BOULDER CITY	39.95	318.0	7 39	1				
SALT LAKE C.	41.17	326.0	7 48	0				9 50 PP
PASADENA	41.27	313.4	7 48	0	14 10	7		17 42 SCS
EUREKA	42.75	321.5	8 1	0				
FRESNO	43.74	315.8	8 10A	1				
BOZEMAN	44.27	331.7	8 13	0				
RENO	45.21	319.1	8 21A	1				

BUTTE	45.25	330.9	8	21	0				10	1	PP
LICK	45.30	315.4	8	20K	-1						
BERKELEY	45.99	315.7	8	26	-1	15	20	8			
MINERAL	46.81	319.0	8	32A	-1						
SHASTA	47.50	319.0	8	37	-2						
HUNGRY HORSE	47.62	332.1	8	38	-1						
RESOLUTE	66.50	356.5	10	50A	-3	19	45	1	24	6	SS
COLLEGE	71.84	336.0	11	24	-2						
MALAGA	75.75	54.3	11	48	-1						
TOLEDO	76.04	51.1	11	50	-1						
GRANADA	76.39	53.8	11	54K	1						
NORD	78.24	7.9	12	0	-3						
ALICANTE	78.84	52.6	12	6	0	22	5	1			
STUTTGART	85.05	41.6	12	36	-3						
TAMANRASSET	85.29	67.8	12	39A	-1	23	11	1	15	55	PP
PAVIA	85.48	45.2	12	56	15				19	58	
JENA	86.27	39.2	12	42	-3				13	26	
PLAUEN	86.70	39.6	12	44	-3						
COLLMBERG	87.10	38.7	12	47	-2						
KIRUNA	87.17	21.7	12	47	-2						
UPPSALA	87.96	29.8	12	50	-3						
PRUHONICE	88.31	39.8	12	53	-2						
ROME	88.35	48.0	11	59	-56						
BYRD STATION	90.35	186.0	13	16	12						
SOUTH POLE	98.44	180.0	13	38	-3						
QUETTA	131.84	35.7	19	15	0				21	36	PP
POONA	144.67	40.4							21	25	PP
MANILA	147.05	313.9	19	44	1						

APRIL 21 1.H 27.M 42.S EPICENTRE -22.37 179.93 DEPTH= 524.KM

DEPTH OF FOCUS= 0.077R

A=-0.92562 B= 0.00106 C=-0.37846 D= 0.0011 E= 1.0000
G= 0.3785 H=-0.0004 K=-0.9256 HT= 4.1

SE= 0.93

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
APIA	11.60	44.1	2	35	-1	4	36	-4					
ONERAHI	14.20	198.7				5	37	9					
KARAPIRO	15.95	192.8	3	19A	-1	6	10	10					
TUAI	16.55	187.7	3	27	2	6	10	-1					
WELLINGTON	19.35	191.8	3	52	0	7	0	1					
COBB RIVER	19.62	196.4	3	54	-1	7	3	-1					
GEBBIES PASS	22.11	194.1	4	18	0	7	47	2					
BRISBANE	24.90	252.7	4	43	0						5	5	PP
CANBERRA	29.88	237.6	5	27	0	9	47	0			6	59	
CHARTERS TS.	31.45	267.9	5	40K	0								
GUAM	49.58	312.6	8	6	1								
SCOTT BASE	55.89	183.3	8	50K	0				10	39	9	40	PCP
SOUTH POLE	67.76	180.0	10	6	-1						12	0	
MATUSIRO	70.61	325.4	10	23K	-1								
TUCSON	85.58	52.6	11	45	1				13	46			
TUCSON TELE.	85.70	52.6	11	46	2				13	47			
EUREKA	85.80	44.3	11	45	0				13	46			
COLLEGE	90.45	13.2	12	5	-2				14	10			
RESOLUTE	110.13	16.4	17	29	-3								
SODANKYLA	131.99	346.5	18	13	-1								
KIRUNA	132.78	349.6	18	14	-2								
ELISABTHVLLE	136.78	221.3	18	26	3								
NURMIJARVI	138.15	341.9	18	19	-7								
HELSINKI	138.34	341.4	18	17	-9								
LWIRO	142.68	232.7	18	33	-1								
RUMANGABO	142.89	234.4	18	33A	-2								
GOTFBORG	143.64	349.1	18	39K	3								
COPENHAGEN	145.46	347.5	18	39A	0								
JERUSALEM	147.33	294.3	18	46A	5								
KASTAMONU	147.93	313.4	18	40	-2						19	34	
RATHFARNHAM	148.76	7.2	18	48	5								
RACIBORZ	148.84	337.0	18	48	4								
COLLMBERG	149.39	343.8	18	43	-1						21	3	
HALLE	149.47	345.2	18	46	1						18	52	
LEOPOLDVILLE	149.49	211.2	18	50K	5								
MUNSTER	149.86	350.5	18	53	8								

JENA	150.08	345.2	18 44	-1			19 11
SONNEBERG	150.68	345.2	18 53	7			21 8
BENSBERG	150.91	350.6	18 53	6			
CINE	151.42	308.4	18 54A	7			
STUTTGART	152.65	346.6	18 49	0			
STRASBOURG	153.11	348.5	18 51	1			
TAMANRASSET	174.82	275.5	19 10	1			20 50

APRIL 21 10.H 2.M 29.S EPICENTRE 44.82 152.67 DEPTH= 0.KM

A=-0.63222 B= 0.32676 C= 0.70251 D= 0.4591 E= 0.8884
G=-0.6241 H= 0.3226 K=-0.7117 HT= -3.5

SE= 2.75

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
Y.-SAKHLINSK	7.26	290.6	1 53	3				
UGLEGORSK	8.41	304.2	2 9	3				
MIZUSAWA	10.30	240.5	2 33	1	4 17	-12		
TUKUBASAN	12.84	232.3	3 4K	-2	5 17	-14		3 25
MATUSIRO	13.71	237.9	3 19K	1	5 46	-6		
VLAIVOSTOK	15.05	270.8	3 36	1				
CHANGCHUN	19.57	276.8	4 32	0				
YAKUTSK	21.79	330.3	4 53	-2				
PEKING	27.21	272.8	5 51	4				
LANCHOW	37.70	274.0	7 20	1				
COLLEGE	37.87	36.8	7 21	1				
SHILLONG	52.04	269.7	9 9A	-4				
RESOLUTE	52.77	18.0	9 19A	0				20 49 55
THULE	56.25	10.7	9 35	-9				
SHASTA	59.73	61.3	10 9A	0				
MINERAL	60.43	61.2	10 14A	1				
LAHORE	60.75	286.6	10 15	-1				
SODANKYLA	60.94	339.0	10 15	-2				
BERKELEY	61.46	63.8	10 20A	0				
KIRUNA	62.07	341.5	10 24	0				10 40
LICK	62.17	64.0	10 25A	0				
BUTTE	62.44	51.6	10 37	10				
EUREKA	64.42	59.1	10 39	-1				
PULKOVO	65.59	332.0	10 41	-6				
MOSCOW	65.86	325.8	11 3	14				
SALT LAKE C.	66.09	55.8	10 52	1				
QUETTA	66.58	289.8	10 55	1				
NURMIJARVI	66.82	334.9	10 55	0				
HELSINKI	66.99	334.5	10 53	-3				
BOULDER CITY	67.31	61.4	11 0	2				
SKALSTUGAN	67.48	342.0	11 15	15				
RAPID CITY	68.79	48.6	11 9	1				
LARAMIE	69.34	52.0	11 6	-5				
UPPSALA	69.38	337.6	11 10	-1				11 20
BOULDER	70.36	52.9	11 18	1				
BRISBANE	71.95	179.7	11 27	0				
TUCSON	72.26	62.1	11 29	0				
TUCSON TELE.	72.26	62.0	11 29	0				
COLLMBERG	78.10	335.5	12 1	-1				
PRUHONICE	78.79	333.9	12 7	1				
KASTAMONU	79.66	319.5	12 4	-7				12 21
BREBEUF	81.17	31.0	12 18K	-1				
PARIS	83.17	340.7	12 40	11				
BYRD STATION	133.39	166.1	18 18	-60				
SOUTH POLE	134.63	180.0	19 21	1				

APRIL 22 3.H 36.M 49.S EPICENTRE 35.53 69.66 DEPTH= 116.KM

DEPTH OF FOCUS= 0.013R

A= 0.28349 B= 0.76486 C= 0.57846 D= 0.9377 E=-0.3475
G= 0.2010 H= 0.5424 K=-0.8157 HT= -0.1

SE= 2.72

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S

WARSAK DAM	2.17	133.9	0	30	-6							
STALINABAD	3.10	346.9	0	43	-5	1	19	-6				
NAMANGAN	5.67	15.6	1	20	-3	2	22	-5				
QUETTA	5.80	203.9	1	20K	-5	2	27	-4			1	55 *SP
SEMIPALATNSK	16.74	24.1	3	47	-1	6	41	-8				
CHATRA	17.29	115.2	3	55	0	7	39	37				
POONA	17.33	166.6	4	6	10							
MAKHACH-KALA	18.67	300.1	4	9	-2							
TIFLIS	20.35	295.2	4	30	1							
SHILLONG	21.50	111.4	4	40	0							
SVERDLOVSK	22.17	346.8	4	47	0	8	46	7				
MOSCOW	29.75	322.8	5	56	-1							
KASTAMONU	30.83	292.8	5	47K	-20					6	36	
PULKOVO	35.10	326.1	6	46	2							
HELSINKI	37.73	324.9	7	6	0							
NURMIJARVI	37.99	325.4	7	8	0							
APATITY	38.11	338.4	7	12	3							
SODANKYLA	40.17	335.8	7	22	-4							
UPPSALA	41.18	322.8	7	33	-1					9	13	
PRUHONICE	42.02	307.7	7	42	1					8	25	
KIRUNA	42.49	334.8	7	48	3							
COLLMBERG	42.97	309.7	7	48	-1					9	42	
HALLE	43.62	310.0	7	50	-4					8	30	
GOTEBORG	43.77	319.0	7	55	0					9	48	PP
JENA	43.88	309.2	7	55	-1					8	4	
SKALSTUGAN	44.43	327.4	7	59K	-2				9	40		
YAKUTSK	45.40	35.0	8	35	27							
STUTTGART	45.59	306.3	8	10	0							
PARIS	49.97	307.3	8	44	0							
MATUSIRO	54.33	67.3	9	4	-12							
TAMANRASSET	56.56	275.6	9	32K	-1						11	3
SIDA	57.87	328.4	9	46A	5							
ELISABTHVLLE	61.59	228.5	10	9A	2							
LEOPOLDVILLE	64.56	243.9	10	25A	-2							
THULE	65.23	350.0	10	33	2							
RESOLUTE	69.60	355.7	10	56	-2							
COLLEGE	75.72	15.6	11	33	-1							

APRIL 22 7.H 31.M 33.S EPICENTRE 2.50 99.80 DEPTH= 226.KM

DEPTH OF FOCUS= 0.030R

A=-0.17010 B= 0.98447 C= 0.04335 D= 0.9854 E= 0.1703
G=-0.0074 H= 0.0427 K=-0.9991 HT= 7.1

SE= 2.15

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S
MEDAN	1.55	313.7	0	32	-5							
PORT BLAIR	11.50	322.7	2	40	1	4	56	12			2	48 PP
CHITTAGONG	21.21	339.2	4	21	-8							
MADRAS	22.04	299.3	4	36	-1	8	30	10			4	55
SHILLONG	24.17	342.3	4	56K	-1	8	58	2				
CHATRA	27.05	334.6	5	24	0	9	46	3				
QUETTA	41.55	314.9	7	26	-1							
NAMANGAN	45.94	330.2	8	3	1							
CHARTERS TS.	50.77	118.4	8	39	0						9	24
ADELAIDE	52.12	139.2	8	48A	-1						9	58
CANBERRA	59.41	134.0	9	41K	0							
ADDIS ABABA	61.01	278.9	9	52K	0							
SVERDLOVSK	62.49	337.0	10	2	0							
TIFLIS	62.76	316.4	10	3	0							
YAKUTSK	63.47	15.2	9	51	-17	18	25	3				
KASTAMONU	72.69	312.6	10	51	-14							
ELISABTHVLLE	73.29	257.2	11	10	1						11	57
CINE	74.02	308.3	11	11	-2							
APATITY	78.82	339.0	11	40	0							
HELSINKI	80.32	330.7	11	51	4							
NURMIJARVI	80.54	331.0	11	49	0							
SODANKYLA	81.26	338.0	11	52	0							
KIRUNA	83.68	338.0	12	4	-1							
LEOPOLDVILLE	84.76	265.4	12	9	-1							
SKALSTUGAN	86.67	333.4	12	20	1							
HALLE	86.72	321.3	12	16	-4							
GOTEBORG	86.74	327.5	12	21A	1							
SCOTT BASE	87.68	168.8	12	23	-1				13	10		

STUTTGART	88.54	318.6	12 29	1			13 16
SOUTH POLE	92.48	180.0	12 46	-1			
TAMANRASSET	92.99	292.8	12 49	0			13 38
RESOLUTE	102.42	4.0	13 33	1			16 33
EUREKA	126.86	34.4	18 39	2		19 29	
TUCSON	134.86	37.5					22 7 PKS
TUCSON TELE.	134.87	37.3					22 7 PKS

APRIL 22 10.H 55.M 11.S EPICENTRE 53.80-166.87 DEPTH= 51.KM

DEPTH OF FOCUS= 0.003R

A=-0.57771 B=-0.13475 C= 0.80504 D=-0.2272 E= 0.9739
G=-0.7840 H=-0.1829 K=-0.5932 HT= -6.8

SE= 1.62

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
COLLEGE	14.67	33.4	3 27	1	6 23	16		
SITKA	18.11	66.9	4 12	3	7 43	17		
PETROPAVLOVK	20.42	282.2	4 35	0			4 55	
MAGADAN	23.63	301.2	5 9	2				
ALBERNI	26.26	82.6	5 32	0				
HORSESHOE B.	27.11	81.4	5 39	-1				
LILLOOET	27.34	78.0	5 35K	-7				
VICTORIA	27.42	83.2	5 43	0				
BANFF	30.81	73.6	6 13	0				
Y.-SAKHLINSK	32.28	278.7						7 58 PP
SHASTA	32.36	95.5	6 27K	1			6 45	
UKIAH	32.88	98.5	6 31	0			6 49	
HUNGRY HORSE	32.99	77.5	6 32	0				8 26 PCP
KIPAPA	33.02	164.7	7 37	65				
MINERAL	33.04	95.3	6 32K	0			6 51	
HONOLULU	33.13	164.9	7 39	66			8 8	
YAKUTSK	33.37	309.9	6 35	0				
BERKELEY	34.28	99.3	6 43	0				
RESOLUTE	34.42	26.6	6 44A	0	12 6	-2		9 18 PCP
RENO	34.62	94.8	6 47K	1				
LICK	35.00	99.4	6 49K	0				
FRESNO	36.46	98.4	7 2	0				
EUREKA	36.93	91.6	7 5	-1			7 23	
SALT LAKE C.	38.56	86.7	7 19	0				
PASADENA	39.24	99.9	7 24	-1	13 23	2	7 42	9 5 PP
THULE	40.42	21.1	7 35	0				
VLADIVOSTOK	40.77	280.6						17 34
MATUSIRO	41.24	268.2	7 41A	0	13 47	-4		339 39 PP
RAPID CITY	41.61	76.6	7 44	0				9 23 PCP
LARAMIE	41.92	81.5	7 47	0				13 16
NORD	43.90	6.1	8 4	1				9 47 PP
ABUYAMA	43.96	268.6	8 4A	0				
CHANGCHUN	44.14	285.8	8 5A	0				
KHEYS	44.55	351.0	8 1	-7	14 25	-15		
TUCSON	44.90	95.4	8 11	0				9 54 PP
TUCSON TELE.	44.90	95.2	8 11	0				13 34
ULAN-BATOR	51.54	301.0						7 57
PEKING	51.79	287.8	9 4	0				
FAYETTEVILLE	52.04	78.8	9 4K	-2				
DALLAS	52.80	83.5	9 12	0				
PAOTOW	54.84	292.3	9 28	1				
ZO-SE	55.15	276.4	9 29A	0				
OTTAWA	55.74	58.5	9 32K	-2	17 12	-3		
NANKING	55.86	278.9	9 33	-1				
SHAWINIGAN	56.41	55.7	9 37K	-1				
BREBEUF	56.73	57.1	9 39K	-2	17 24	-4		
SEVEN FALLS	56.95	54.1	9 40	-2				
MORGANTOWN	57.59	66.0	9 45A	-2				11 21 PP
APATITY	58.02	351.0	9 49	-1	17 46	1		
KIRUNA	58.57	356.8	9 52A	-2				10 46 PCP
SODANKYLA	58.73	353.9	9 53	-2				
PALISADES	59.80	61.0	10 1	-1	18 4	-4		12 22 PP
FORDHAM	59.93	61.1	10 11	8				
SIAN	59.96	287.8	10 3A	0				
SIDA	60.28	15.4	10 7K	2				
TACUBAYA	61.41	96.1	10 16	3				
LANCHOW	61.46	292.8	10 13A	0				

SKALSTUGAN	62.96	0.4	10	22A	-1					10	59 PCP
SVERDLOVSK	63.12	333.0	10	24	0						
CHENGTU	65.40	288.6	10	39	0						
NURMIJARVI	65.67	353.8	10	41	0						
CANTON	65.79	276.3	10	42A	0						
HONG KONG	65.86	275.1	10	42A	0					11	29 PCP
PULKOVO	65.95	350.6	10	42	-1	19	25	0			
HELSINKI	65.99	353.6	10	44	1						
UPPSALA	66.65	357.5	10	46A	-1	19	32	-1		11	13 PCP
GOTEBORG	68.86	0.7	11	0A	-1					11	24 PCP
MOSCOW	68.99	345.4	11	2	0				11 26		
KUNMING	70.44	285.7	11	11A	0						
COPENHAGEN	70.88	0.4	11	13A	0						
DURHAM	71.12	8.9	11	14A	-1						
BERMUDA	71.15	60.9				20	19	-8		14	1 PP
RATHFARNHAM	72.06	12.1	11	20A	0						
NAMANGAN	73.05	317.5	11	28	2						
KEW	74.50	8.7	11	35A	0						
HALLE	75.07	0.8	11	33	-5	21	7	-4		14	37 PP
COLLMBERG	75.27	0.1	11	40	1					11	53
BENSBERG	75.50	3.9	11	40	0						
JENA	75.64	1.0	11	41	0					12	7
SHILLONG	76.06	294.1	11	43A	0						
PLAUEN	76.07	0.6	11	42	-2						
SONNEBERG	76.18	1.3	11	43	-1						
DOURBES	76.23	5.6	11	15	-29	20	54	-30			
RACIBORZ	76.41	356.6	11	46	1						
PRAGUE	76.50	359.1	11	46	0						
PRUHONICE	76.59	359.1	11	47	1					14	40 PP
PARIS	77.37	7.2	11	52	1					12	4 PCP
CHATRA	77.55	298.4	11	52	0						
STUTTGART	77.75	2.7	11	54A	1						
STRASBOURG	77.90	3.6	11	55A	1					12	57
TUBINGEN	77.99	2.8	11	55	1						
EBINGEN	78.34	2.8	11	57A	1						
BRATISLAVA	78.35	357.3	11	57K	1					12	5 PCP
IASI	78.63	350.0	11	58	0						
CHITTAGONG	78.65	292.2	11	58A	0	21	52	2		14	57 PP
BASLE	78.94	3.8	12	0	1						
WARSAK DAM	79.05	313.9	11	59	-1						
MAKHACH-KALA	79.20	335.0	12	2	1						
DEHRA DUN	79.23	307.1	11	58	-3						
NEUCHATEL	79.44	4.3	12	3	1						
SIMFEROPOL	80.01	345.0	12	7	2						
TOLMEZZO	80.18	0.1	11	32	-34					11	52
SOTCHI	80.36	340.7	12	6	-1						
CLERMONT-FD.	80.44	7.1	12	8	0						
TIFLIS	81.04	336.6	12	13	2	22	18	3			
SAN JUAN	81.53	70.6	12	13	0						
BELGRADE	81.56	354.7	12	14K	1					15	9 PP
MONACO	82.73	4.2	12	21A	2						
SERRA PILAR	83.61	16.3	12	26K	2						
CHARTERS TS.	83.83	223.7	12	24	-1						
KASTAMONU	84.00	346.7	12	25K	-1					15	58 PP
QUETTA	84.29	315.4	12	28A	1					15	43 PP
TOLEDO	85.53	13.2	12	33A	0						
LISBON	85.87	17.3	12	36K	1						
KARACHI	88.06	313.2	12	51	5						
CINE	88.06	348.2	12	46A	0						
ATHENS	88.15	351.6	12	46A	0						
GRANADA	88.24	13.3	12	50K	3						
MEDAN	89.77	275.7	12	54	0						
RELIZANE	90.16	10.2	12	55	-1						
KSARA	90.54	341.2	13	0	2						
POONA	91.20	304.1	13	1	0						
TAMANRASSET	103.46	7.2	13	56	0					18	6 PP
RUMANGABO	126.02	339.8	18	59A	3						
LWIRO	127.02	340.2	19	0A	2						
ASTRIDA	127.17	339.0	19	2K	3						
UVIRA	128.15	339.5	19	2K	1						
LEOPOLDVILLE	130.70	357.2	19	6A	1					22	25 SKP
SCOTT BASE	132.39	187.3	19	7	-2					22	24 SKP
BYRD STATION	136.27	169.3	19	7	-9					22	38 PP
ELISABTHVLLE	136.42	339.5	19	11	-5					22	1 PP
SOUTH POLE	143.61	180.0	19	25	-4					22	58 PP
BULAWAYO	144.36	334.5	19	30	0						
WINDHOEK	148.67	352.9	19	29	-8						
PRETORIA	149.82	332.2	19	16	-23						

KIMBERLEY 153.56 336.5 19 41 -4

APRIL 22 19.H 1.M 43.S EPICENTRE 11.47 -86.51 DEPTH= 0.KM

A= 0.05961 B=-0.97847 C= 0.19760 D=-0.9981 E=-0.0608
G= 0.0120 H=-0.1972 K=-0.9803 HT= 6.3

SE= 2.82

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
SANTIAGO MA.	2.77	316.6	0 46	1	1 25	7		
SAN SALVADOR	3.47	310.5	0 54	-1	1 25	-11		
COMITAN	7.23	311.7			3 13	6		3 25
BALBOA HTS.	7.28	109.4	1 47	-2				4 40
MERIDA	9.88	342.8	2 27	2	4 44	27		
CHINCHINA	12.56	120.1	3 0	-1	5 23	1		
FUQUENE	13.98	114.2	3 19	-1	6 14	18		
BOGOTA	14.07	117.9	3 22A	1	6 9	11		
GUADALAJARA	18.55	301.7	4 17	-1				
CARACAS	19.25	91.0	4 21A	-5	7 57	0		
SAN JUAN	20.86	68.4	4 43	-1			4 52	
COLUMBIA	22.98	11.7	5 7	2				
ST. KITTS	23.75	73.0	5 13	1				
ST. VINCENT	24.72	83.4	5 22	0				
FORT FRANCE	24.91	79.8			9 58	14		
CHAPEL HILL	25.26	14.3	5 30	3				
FAYETTEVILLE	25.47	345.4	5 28A	-1				
HUANCAYO	25.87	154.2	5 34	1				6 12 PP
WASHINGTON	28.58	15.5	5 59	2				
BERMUDA	28.92	40.6	6 3	2	11 17	28		8 32
PENNSYLVANIA	30.19	13.1	6 12	0				
CLEVELAND	30.21	7.5	6 12	0				
TUCSON TELE.	30.45	316.8	6 13	-1				9 12 PCP
TUCSON	30.47	316.5	6 23	9				
FORDHAM	31.31	18.6						7 30 PP
PALISADES	31.44	18.5	6 21	-2	11 56	27		7 30 PP
LA PAZ	33.21	146.5	6 43	5	11 55	-2		
OTTAWA	35.05	13.3	6 52A	-2				
BOULDER CITY	35.36	318.3	6 58	1				
RAPID CITY	35.54	339.1	6 57	-1				
BREBEUF	35.66	15.6	6 57A	-2	12 44	10		
PASADENA	36.64	313.2	7 9	1				8 57
SALT LAKE C.	36.73	327.1	7 8	0			7 18	9 30 PCP
SHAWINIGAN	36.85	15.9	7 8	-1				
SEVEN FALLS	37.92	17.5	7 16	-2				
EUREKA	38.21	322.0	7 19	-2			7 29	9 31 PCP
FRESNO	39.12	315.7	7 29	1				
LICK	40.68	315.3	7 37K	-4				9 44
BUTTE	40.94	332.2	7 43	0				
BERKELEY	41.37	315.6	7 48K	1				
MINERAL	42.23	319.2	7 57A	3				9 47
SHASTA	42.92	319.1	7 59	-1				
HUNGRY HORSE	43.35	333.3	8 1	-2				9 48 PCP
VICTORIA	48.03	327.5	8 38	-2				
RESOLUTE	63.36	357.5	10 26A	-5	19 7	6		14 26 PPP
THULE	65.67	4.6	10 42	-4				12 56 PP
SERRA PILAR	73.47	50.4	11 34A	0				
TOLEDO	76.99	51.5	12 24	30				
GRANADA	77.56	54.3	12 19K	22				12 37 PCP
CLERMONT-FD.	81.63	45.0	12 52	33				
UCCLE	81.76	39.9	13 15	56	23 15	45		
DOURBES	82.02	40.6	12 7	-14				
BENSBERG	83.50	39.4	12 59	31				
SKALSTUGAN	83.70	26.4	12 28	-1				
STRASBOURG	84.31	41.7	12 35	2				13 29
STUTTGART	85.20	41.3	12 53	16				
KIRUNA	85.73	21.4	12 37	-3				
JENA	86.24	38.9	13 3	21				
HALLE	86.33	38.3	13 6	23				
PLAUEN	86.69	39.2	12 38	-6				16 10 PP
COLLMBERG	87.01	38.3	12 54	8				13 20
TAMANRASSET	87.48	67.4	12 38	-10				16 5 PP
SODANKYLA	88.10	20.9	12 42	-9				
PRUHONICE	88.31	39.3	13 25	33				13 53
BYRD STATION	92.93	185.5	13 10	-4				

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SOUTH POLE	101.40	180.0	12	52	-60							
ELISABTHVLLE	115.42	97.5	19	47A	6							
CHARTERS TS.	128.67	253.6	19	7	0							
QUETTA	131.34	31.0	19	11	-1							
ADELAIDE	132.83	232.7	19	17	2							
SHILLONG	143.15	2.4	19	30	-3							
LEMBANG	165.31	287.1	20	2	-1							

APRIL 22 20.H 26.M 47.S EPICENTRE -36.50 -98.25 DEPTH= 0.KM

A=-0.11556 B=-0.79745 C=-0.59221 D=-0.9897 E= 0.1434
G= 0.0849 H= 0.5861 K=-0.8058 HT= -0.4

SE= 2.65

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S	
SANTA LUCIA	22.77	90.4	5	10	5	9	18	8					
HUANCAYO	31.91	46.1	6	32A	3	11	43	3					
LA PLATA	32.62	99.4				11	53	2					
LA PAZ	33.30	61.3	6	44	3	12	10	9			7	51	PP
ARGENTINE I.	35.07	155.8	6	57	1								
BYRD STATION	44.43	185.2	8	14	0						18	4	SS
CHINCHINA	46.37	32.0	8	27	-2	15	16	-1					
BOGOTA	46.74	34.1	8	32	0	15	27	5			10	19	PP
FUQUENE	47.64	34.0	8	38	-1	15	38	3					
BALBOA HTS.	48.51	25.0	8	44	-2	14	52	-55					
HALLEY BAY	50.43	162.0	9	1	0								
SAN SALVADOR	50.68	11.4									21	32	SSS
GALERAZAMBA	51.76	29.2				16	39	6					
COMITAN	52.78	7.4									20	47	SS
SOUTH POLE	53.69	180.0	9	26	1						10	29	PCP
CARACAS	55.26	38.5	9	34A	-3	17	19	-1					
VERA CRUZ	55.43	2.4									22	15	
TACUBAYA	55.60	358.9									22	55	
SCOTT BASE	55.68	194.8	9	38	-2						11	33	PP
CAPE HALLETT	56.11	201.6	9	42	-1	17	38	7			19	24	SCS
ST. KITTS	63.19	38.4	10	30	-2								
ROXBURGH	66.58	229.9				19	49	5			23	58	SS
TUCSON	69.40	348.6	11	17	6								
TUCSON TELE.	69.47	348.7	11	10	-2								
COLUMBIA	71.95	15.0	11	25	-2								
FAYETTEVILLE	72.32	3.4	11	26A	-3								
PASADENA	72.70	342.8	11	37	6	20	59	3			24	55	SS
BOULDER CITY	73.74	346.0	11	40	3								
LAWRENCE	75.15	2.4	11	43	-2								
BERMUDA	75.37	28.9				21	13	-13			26	13	SS
FRESNO	75.59	342.3	11	53	5								
LICK	76.60	341.0	11	53A	-1								
MIRNY	76.91	184.6	11	59	4								
BERKELEY	77.26	340.7	11	57	0								
EUREKA	77.35	346.0	11	57	-1								
WASHINGTON	77.53	16.8	11	57	-2								
MORGANTOWN	77.61	14.4	12	1K	2								
LARAMIE	77.72	354.4	11	59	-1								
UKIAH	78.70	340.4	12	9	4								
CLEVELAND	79.10	12.7	12	7	0								
PENNSYLVANIA	79.16	15.6				22	5	-2					
MINERAL	79.43	342.0	12	7	-2								
SHASTA	79.96	341.6	12	10A	-2								
FORDHAM	80.16	18.5	13	18	65								
PALISADES	80.30	18.4	12	16	2						23	2	PPS
RAPID CITY	80.33	356.4	12	13	-1								
BOZEMAN	82.60	351.0	12	30	4								
CORVALLIS	83.83	342.3	12	32	0								
OTTAWA	84.02	15.7	12	30	-3								
BREBEUF	84.60	17.1	12	33K	-3								
RIVERVIEW	84.71	231.5	12	33K	-4	23	1	-3					
CANBERRA	85.07	229.2	12	36A	-2								
HUNGRY HORSE	85.64	349.5	12	45	4								
SHAWINIGAN	85.79	17.3	12	39A	-3								
SEVEN FALLS	86.80	18.4	12	44	-3								
BRISBANE	87.59	237.4	12	52	1	23	19	-13					
ADELAIDE	91.34	223.6	13	7	-1								
KIMBERLEY	95.87	132.3	13	28	-1								
ELISABTHVLLE	109.98	122.1									19	8	PP
RESOLUTE	110.92	1.0	18	27	-8	26	49	93			34	50	SS

TAMANRASSET	113.89	78.6	18	45	5				19	32 PP
TOLEDO	115.06	57.9	19	35	52				29	29
RATHFARNHAM	119.36	43.5							20	54
DOURBES	124.64	49.7	18	38	-23				27	12
STRASBOURG	126.19	52.3	19	18	14					
MUNSTER	126.98	48.2	19	16	10					
STUTTGART	127.15	52.4	19	10	4				38	21 SS
JENA	129.16	50.2	19	10	0				19	22
TRIESTE	129.33	57.2							21	29 PP
PLAUEN	129.42	50.8	19	6	-4					
HALLE	129.50	49.5	19	16	5				19	52
COLLMBERG	130.11	49.9	19	17	5					
GOTEBORG	130.48	41.5	19	18	6					
PRUHONICE	130.83	51.9	19	23	10				21	39 PP
SKALSTUGAN	131.00	33.7	19	20	7					
UPPSALA	133.53	38.8							22	49 PKS
BELGRADE	133.74	59.8							21	16 PP
KIRUNA	134.00	27.6	19	25	6					
KHEYS	134.83	7.0	19	23	2					
MATUSIRO	135.20	287.7	19	33	12				39	43
SODANKYLA	136.42	27.4	19	22	-2					
LWOW	136.87	53.2	19	37	13				22	14
NURMI JARVI	136.99	37.5	19	30	5					
APATITY	138.81	25.8	19	40	12					
PULKOVO	139.91	37.9	19	42	12					
KASTAMONU	140.51	66.9	19	41A	10					
YAKUTSK	140.96	326.2	19	38	6					
JERUSALEM	141.49	83.1	19	35	2				22	38 PP
KSARA	142.67	80.2	19	43	8	26	53	10	22	53 PP
SIMFEROPOL	143.37	61.6	19	35	-1					
MEDAN	143.72	209.4	19	34	-2					
MOSCOW	144.64	42.9	19	37	-1					
CHANGCHUN	146.23	296.2	19	39	-2					
SOTCHI	147.32	64.3	19	45	2					
NANKING	149.19	272.7	19	55	9					
TIFLIS	151.01	68.2	19	56	8					
PEKING	152.85	288.0	19	59	8					
MAKHACH-KALA	153.01	65.5	19	56	5					
SVERDLOVSK	155.22	28.2	20	5	11					
SEMIPALATNSK	166.06	4.0							21	6
SHILLONG	166.09	221.3	20	10	4					
QUETTA	166.12	112.7	20	9	3					
CHATRA	169.32	207.1	20	10	2					
NAMANGAN	170.94	57.4	20	14	5					
WARSAK DAM	171.29	103.6	20	19	9					
LAHORE	172.11	126.6	20	11	1					

APRIL 24 9.H 31.M 33.S EPICENTRE 11.48 -86.40 DEPTH= 0.KM

A= 0.06154 B=-0.97830 C= 0.19783 D=-0.9980 E=-0.0628
G= 0.0124 H=-0.1974 K=-0.9802 HT= 6.3

SE= 2.24

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
SANTIAGO MA.	2.84	314.8	0	50	3	1	25	2				
SAN SALVADOR	3.55	309.2	0	58	1	1	33	-8				
BALBOA HTS.	7.19	109.8	1	50	1							
MERIDA	9.91	342.2	2	30	3						5	36
GALERAZAMBA	10.95	92.6				5	10	25				
VERA CRUZ	12.12	310.4	2	57	0	5	25	11			6	42
CHINCHINA	12.48	120.4	3	3	1	5	35	12				
FUQUENE	13.88	114.5	3	19	-1							
BOGOTA	13.98	118.2	3	29	7	6	18	19				
TACUBAYA	14.63	304.1	3	33K	3						6	52 SS
GUADALAJARA	18.64	301.5	4	36	15							
CARACAS	19.14	91.0	4	24A	-3	8	2	4				
SAN JUAN	20.75	68.3	4	46	1							
COLUMBIA	22.94	11.5	5	10	3	9	23	10				
DALLAS	23.30	337.5	5	9	-1							
ST. KITTS	23.64	73.0	5	14	0							
LITTLE ROCK	23.81	347.8	5	15	0							
GRENADA	24.16	86.2	5	18	-1							
FORT FRANCE	24.80	79.8	5	26	1	10	10	25				
CHIHUAHUA	25.09	315.7	5	26	-2	10	3	13			13	51

			P	O-C	S	O-C	*PP	SUPP.
	DELTA DEG.	AZ. DEG.	M S	S	M S	S	M S	M S
CHAPEL HILL	25.22	14.1	5 32	3				
HUANCAYO	25.84	154.5	5 35	0				
ST. LOUIS 1	27.26	353.4	5 47A	-1				
FLORISSANT	27.43	353.3	5 49	0				
GEORGETOWN	28.54	15.4	6 1K	2	10 55	8		
WASHINGTON	28.54	15.4	5 59	0	11 1	14	7 14	PP
MORGANTOWN	28.61	10.4	6 1A	1				
BERMUDA	28.84	40.5	6 2	0	11 27	35		
PENNSYLVANIA	30.15	13.0	6 15	1				
TUCSON TELE.	30.52	316.6	6 16	-1			9 15	PCP
TUCSON	30.54	316.4	6 17	0			9 15	PCP
FORDHAM	31.26	18.5					7 32	PP
PALISADES	31.40	18.3	6 24	-1	11 50	18	13 48	SS
LARAMIE	34.15	333.8	6 48	-1				
OTTAWA	35.01	13.2	6 56	0				
BOULDER CITY	35.42	318.2	7 0	0				
RAPID CITY	35.56	339.0	7 0	-1				
BREBEUF	35.61	15.5	7 1A	0	12 45	7		
PASADENA	36.71	313.1	7 11	0			9 34	PP
SALT LAKE C.	36.78	327.0	7 11	0			9 33	PP
SHAWINIGAN	36.81	15.8	7 10A	-1				
SEVEN FALLS	37.87	17.4	7 19A	-1				
EUREKA	38.27	321.9	7 23	-1			9 37	PCP
FRESNO	39.19	315.6	7 32	1				
BOZEMAN	40.03	333.0	7 38	0				
LICK	40.75	315.2	7 45K	1			9 47	PCP
BUTTE	40.98	332.1	7 46	0				
BERKELEY	41.44	315.5	7 51K	1	14 8	2	9 47	PCP
MINERAL	42.29	319.1	7 56K	-1				
SHASTA	42.99	319.1	8 10	7			9 51	PCP
HUNGRY HORSE	43.39	333.2	8 4	-2			9 50	PP
CORVALLIS	45.69	323.2	8 24	0				
SANTA LUCIA	47.11	162.0			15 23	-5	18 15	SCS
VICTORIA	48.08	327.5	8 42K	-1				
HORSESHOE B.	48.53	328.4	8 45K	-2				
RESOLUTE	63.36	357.5	10 29A	-4	18 57	-8	12 51	PP
MBOUR	67.51	79.1					20 30	SCS
COLLEGE	67.72	336.1	10 58	-3			13 32	PP
STUTTGART	85.12	41.4	12 31	-8			24 15	PPS
KIRUNA	85.68	21.4	12 38	-4				
JENA	86.16	38.9	13 0	16			13 12	
TAMANRASSET	87.37	67.4	12 50	0	23 37	7		
TRIESTE	88.86	43.7	12 42	-15			32 45	SSS
BYRD STATION	92.96	185.5	13 14	-2				
CAPE HALLETT	104.91	197.9					32 31	SS
MATUSIRO	116.39	320.8	18 45	-1			29 42	PS
CANBERRA	124.68	234.9	19 3	1				
QUETTA	131.28	31.1	19 15	1			22 40	PKS
SHILLONG	143.13	2.6	19 30	-6				

APRIL 24 17.H 58.M 6.S EPICENTRE -31.57-178.39 DEPTH= 34.KM

DEPTH OF FOCUS= 0.000R

A=-0.85327 B=-0.02397 C=-0.52092 D=-0.0281 E= 0.9996
G= 0.5207 H= 0.0146 K=-0.8536 HT= 1.3

SE= 2.49

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
RAOUL ISLAND	2.34	10.1	0 36	-1				
ONERAHI	7.35	233.3	1 52	5				2 0
AUCKLAND	7.73	225.0	1 56	3	3 25	5		2 39
KARAPIRO	8.07	216.6	1 58K	1	3 44	16		
TUAI	8.10	205.6	1 55	-2	3 26	-2		2 22
WELLINGTON	11.15	207.7	2 34	-6	4 33	-10		15 36 SCS
COBB RIVER	11.88	214.5	2 45	-5	4 51	-11		3 4
KAIMATA	13.62	213.7	2 54	-19	5 8	-36		
GEBBIES PASS	14.03	207.8	3 10	-8	5 38	-15		3 26
NOUMEA	16.35	300.7	3 52	4	7 10	22		
ROXBURGH	16.92	210.9	3 58	3	6 32	-29		7 41
APIA	18.70	20.4	4 13	-4	7 27	-14		
BRISBANE	25.17	272.0	5 26A	3			5 40	
RIVERVIEW	25.69	256.8	5 30A	2	9 57	5		
CANBERRA	27.40	253.3	5 46	2	10 48	28		12 44 SS

FORT NELSON	29.34	237.5								9 3	PCP
MELBOURNE	30.63	248.1	6 13	A	0	11 11	0			7 14	PP
CHARTERS TS.	33.70	281.3	6 40		0	12 0	0				
ADELAIDE	35.83	252.8	6 58	A	0	12 30	-2			8 24	PP
RABAUL	38.80	308.5	7 24		1						
PORT MORESBY	38.83	297.1	7 23	A	0	13 1	-17			9 10	PPP
CAPE HALLETT	41.24	185.2	7 45	A	2	14 1	7			9 12	PP
TERRE ADELIE	42.57	202.2	7 56		2	14 24	10				
SCOTT BASE	46.85	184.3	8 31	K	3	15 24	8	8	53	10 31	PP
BYRD STATION	53.85	169.3	9 22		1	16 59	7			11 9	PP
WILKES	53.96	208.3	9 20		-2	16 58	4			14 30	PCP
PERTH	55.11	250.9	9 29		-2	17 26	17			9 49	
HAWAII V.OB.	55.34	26.8	9 34		2	17 25	12				
HONOLULU	56.05	22.9	9 37	K	0	17 26	4			10 29	
GUAM	57.05	315.9	9 43	A	-2	17 26	-9				
SOUTH POLE	58.61	180.0	9 56		0	17 58	2			11 55	PP
MIRNY	60.94	207.2	10 10		-2	18 20	-6				
ARGENTINE I.	71.00	156.0	11 16		0						
HALLEY BAY	71.65	172.8	11 21		1						
LEMBANG	72.82	272.5	11 26		-1	20 56	7				
DJAKARTA	73.83	272.7	11 30	A	-2	21 19	19				
BAGUIO CITY	75.49	299.9	11 41		-1	21 37	18				
TUKUBASAN	77.85	326.8	11 53	K	-2	21 38	-6			14 51	PP
ABUYAMA	79.00	322.9	12 1	A	-1						
MATUSIRO	79.01	325.7	11 59	A	-3	21 50	-7			15 10	PP
HONG KONG	83.87	300.7	12 27		0	23 2	15			15 7	PP
ZO-SE	84.63	311.5	12 30	A	-1	22 46	-8			23 29	PS
CANTON	85.00	300.8	12 33	A	0						
Y.-SAKHLINSK	85.66	334.4	12 4		-32					23 55	
MEDAN	85.84	276.7	14 8		91	23 0	-6				
SANTA LUCIA	86.07	127.0	12 30		-8	22 58	-10				
PASADENA	86.53	46.1	12 41	A	1	23 5	-8			16 11	PP
LICK	86.65	41.9	12 43	A	2						
BERKELEY	86.67	41.2	12 43	A	2	23 23	9			22 59	SKS
PETROPAVLOVK	86.68	346.4	12 39		-2	23 10	-4				
NANKING	86.78	310.8	12 42	A	1	23 12	-3			15 57	PP
UKIAH	87.03	39.7	12 44	A	1						
VLADIVOSTOK	87.17	326.0	12 43		0	22 51	-28				
FRESNO	87.32	43.3	12 46		2						
UGLEGORSK	87.69	335.2	12 46		0						
SHASTA	88.59	39.1	12 52	A	2						
WUHAN	88.63	307.4	12 51	A	1						
PHU-LIEN	88.68	295.3	12 50		-1					16 14	PP
MINERAL	88.78	39.8	12 52		1					16 34	PP
RENO	89.21	41.3	12 54	A	1						
TUCSON	90.03	51.6	13 0	A	3	23 27	-18			16 15	PP
CORVALLIS	90.88	35.9	13 2	A	1						
CHANGCHUN	90.96	323.0	13 1	A	0						
CHIHUAHUA	91.16	56.9				24 22	27				
TACUBAYA	91.20	68.0	12 57		-5	24 6	10			13 33	
EUREKA	91.38	43.3	12 58	A	-5					29 55	PKKP
PEKING	93.51	315.6	13 13	A	0	24 5	-11			24 43	PS
ALBERNI	93.53	31.9	13 14		1	24 26	10				
VERA CRUZ	93.53	69.8				23 58	-18				
VICTORIA	93.63	33.1	13 15		1	24 26	9			23 45	SKS
KUNMING	94.05	296.8	13 16	A	0	24 9	-12			23 46	SKS
MAGADAN	94.29	344.8	13 14		-3	23 46	-2				
HORSESHOE B.	94.31	32.5	13 19		2	24 30	7			23 14	SKS
HUANCAYO	94.63	107.0	13 23	A	5						
SALT LAKE C.	94.63	44.3	13 19	A	1						
PORT BLAIR	95.08	280.5	13 17		-3	24 5	13			17 9	PP
CHENGTU	96.11	302.2	13 24	A	-1						
BUTTE	97.47	39.9	13 34	A	3						
LA PAZ	97.85	114.7	13 30		-3	24 16	9			17 38	PP
BOZEMAN	98.09	40.8	13 35	A	1						
HUNGRY HORSE	98.15	37.4	13 33	A	-1					17 32	PP
COLLEGE	99.04	12.7	13 36	A	-2	24 9	-4			29 50	PKKP
YAKUTSK	102.17	337.7	13 50		-2						
SHILLONG	102.71	292.2	13 54		-1					24 51	
CHINCHINA	103.46	92.4	14 3		5	24 37	3			18 36	PP
ULAN-BATOR	103.53	318.1	13 59		1					17 37	PP
COLOMBO	103.57	269.8	18 17		777					27 26	
LITTLE ROCK	104.32	57.9								18 24	PP
MADRAS	106.34	275.4								18 31	PP
GALERAZAMBA	106.69	87.5				24 53	7			18 26	
CHATRA	107.03	291.3	17 47		777					25 13	
IRKUTSK	107.19	321.1	14 13		777						
KODAIKANAL	107.29	271.5	18 37		777					25 13	
FLORISSANT	107.58	55.0								25 44	SKKS

ST. LOUIS 1	107.61	55.2			24	49	-1				
HYDERABAD	109.91	278.6	18	54	777						
GRAHAMSTOWN	111.30	202.3	18	32	2						
COLUMBIA	112.38	63.0	19	28	56						
PIETERMZBURG	113.28	207.2	19	28	54						
CARACAS	113.67	92.1	19	36	62	26	24	67			
CHAPEL HILL	114.63	61.8	19	32	56				19	54	
BOMBAY	115.34	277.4	19	29	51				25	45	
DEHRA DUN	115.77	291.0	19	26	47				24	30	
KIMBERLEY	116.09	202.6	18	12K	-27						
RESOLUTE	118.45	17.5	18	43A	-1	27	56	141	19	56	PP
LAHORE	119.19	291.0	18	46	1						
OTTAWA	120.11	52.6	18	48	1				22	20	PKS
PALISADES	120.14	57.9	18	47	0	25	37	-4	20	13	PP
SEMIPALATNSK	120.52	313.3	18	46	-2						
BREBEUF	121.56	52.9	18	50K	0						
WARSAK DAM	122.22	292.7	18	51	0						
SHAWINIGAN	122.38	51.9	18	52	1				20	35	PP
BULAWAYO	122.43	210.4	18	53	2						
SEVEN FALLS	123.81	51.6	18	54	0						
NAMANGAN	124.10	300.7	18	55	0	26	1	8			
BERMUDA	124.62	70.3			25	54	-1		20	42	PP
QUETTA	124.68	286.9	18	57A	1				20	57	PP
STALINABAD	125.67	297.2	18	58	0						
KHEYS	127.40	350.3	18	58	-3						
NORD	129.38	3.4	19	4	-1				22	29	PKS
ELISABTHVLLE	130.43	214.1	19	13K	6				21	28	PP
SVERDLOVSK	132.58	320.2	19	11	0				22	53	PKS
ISFJORD	133.11	356.6	20	13	61						
UVIRA	136.41	222.0	19	14	-4				21	59	
ASTRIDA	136.77	223.4	19	11A	-8				21	59	
LWIRO	137.59	222.6	19	11	-9				22	6	
RUMANGABG	138.02	224.1	19	13	-8				22	54	
ADDIS ABABA	138.87	245.1	19	26	3						
APATITY	139.42	341.9	19	21A	-3				22	16	PP
SODANKYLA	141.23	344.8	19	21	-6						
KIRUNA	142.05	348.5	19	24	-4				22	28	PP
MAKHACH-KALA	142.17	300.8	19	22	-6						
GORIS	143.06	295.0	19	25	-5						
TIFLIS	144.22	298.8	19	31	-1				23	13	PKS
REYKJAVIK	144.24	17.4	19	32	0				20	4	
MOSCOW	145.10	324.5	19	33	-1						
SIDA	145.46	15.3	19	38A	4				20	12	
PULKOVO	145.91	334.3	19	35	0						
SKALSTUGAN	147.26	351.2	19	37A	0						
NURMIJARVI	147.28	339.0	19	36	-1						
SOTCHI	147.77	302.7	19	38	0						
UPPSALA	149.75	343.9	19	40A	-1				23	16	PP
BERGEN	151.06	356.2	19	48	5						
KSARA	151.15	283.7	19	44A	1				23	29	PP
SIMFEROPOL	151.39	307.1	19	43	-1				23	17	PKS
JERUSALEM	151.46	279.4	19	46	2				19	53	PKP2
GOTEBORG	152.91	347.7	19	46A	0						
ABERDEEN	154.27	4.7							27	2	PPP
KASTAMONU	154.69	300.9	19	45K	-3						
COPENHAGEN	154.71	345.6	19	48A	0				23	26	PKS
IASI	154.74	315.6	20	12	24				20	24	
WARSAW	154.95	331.1	19	53	5				20	11	PKP2
LWOW	155.23	323.9	19	50	1	26	54	4			
MBOUR	155.87	130.9	19	54	4				23	59	PP
ISTANBUL UN.	156.08	300.9	19	46	-4				23	52	PP
DURHAM	156.69	4.7	19	48	-3				24	5	PP
BUCHAREST	156.92	310.7	20	6	15				20	30	
CINE	157.42	292.7	19	52	0						
RATHFARNHAM	157.54	12.5	19	53K	1				23	59	PP
POTSDAM	157.58	341.4	19	54	2				24	3	PP
RACIBORZ	157.74	331.0	19	52	0						
WITTEVEEN	158.44	351.6	19	55K	2				24	7	PP
COLLMBERG	158.56	340.2	19	54	1				24	8	PP
HALLE	158.67	342.0	19	50	-3				20	16	PKP2
MUNSTER	159.14	349.5	19	55	1						
PRAGUE	159.18	336.3	19	57	3	26	39	-15	24	11	PP
PRUHONICE	159.21	336.0	19	54A	0				24	10	PP
JENA	159.29	342.0	19	54	0				24	10	PP
DE BILT	159.31	353.8	19	54	0				24	11	PP
SOFIA	159.48	308.9	19	55	1				24	8	PP
PLAUEN	159.52	340.5	19	54	0				21	1	
BRATISLAVA	159.66	329.0	19	55K	1	26	48	-7	24	3	PP

CHEB	159.83	339.6	19	56	1				23	57 PP
SONNEBERG	159.89	341.9	19	58	3				20	45 PKP2
KEW	160.06	3.5	19	55	0				23	54 PP
BENSBERG	160.19	349.6	19	55	0				24	18 PP
BELGRADE	160.20	317.3	19	55K	0				30	37 SKKS
UCCLE	160.68	354.7	19	57	1					
ATHENS	160.77	295.4	19	58	2				20	37 PKP2
DOURBES	161.35	354.0	19	25	-31					
STUTTGART	161.88	343.7	19	57A	0				24	25 PP
ZAGREB	161.92	326.0	19	54	-3					
TUBINGEN	162.14	343.7	19	57	0					
JERSEY	162.18	8.0							27	4
STRASBOURG	162.38	346.4	19	57	0	27	12	15	24	23 PP
EBINGEN	162.49	343.4	19	58	1					
PARIS	162.76	358.0	19	59	1				24	26 PP
TOLMEZZO	162.76	332.5	19	54	-4				25	30
TRIESTE	163.07	329.6	19	57	-1				20	50 PKP2
BASLE	163.41	345.7	19	58	0				29	15
CHUR	163.56	340.5	19	38K	-20				20	53
NEUCHATEL	164.05	346.6	20	0	1					
BOLOGNA	165.00	332.2	20	38	38				27	32
PAVIA	165.18	338.7	20	1A	1	27	3	4	24	41 PP
PRATO	165.61	331.3	20	10	10	27	36	37		
CLERMONT-FD.	165.77	355.7	20	2	1				24	46 PP
ROME	166.51	322.9	20	2A	1				24	46 PP
REGGIO CALA.	166.76	303.3							24	45
MESSINA	166.79	303.9	20	1	0				24	52 PP
MONACO	167.02	340.9	20	2	1					
SERRA PILAR	167.41	37.9	20	2A	0				21	5 PKP2
COIMBRA	168.15	40.6	20	4A	2					
LISBON	168.67	48.0	20	6A	4				25	8 PP
TOLEDO	170.52	27.4	20	6A	2				25	11 PP
TAMANRASSET	170.58	202.6	20	6A	2				25	12 PP
TORTOSA	170.72	5.2	20	9	5					
MALAGA	172.84	42.5	20	6K	1				25	22 PP
GRANADA	172.94	36.1	20	9A	4	26	54	-9	25	29 PP
ALICANTE	173.02	13.6	19	58	-7	27	5	2	25	23 PP
ALMERIA	173.74	31.6	20	7A	2				25	28 PP
ALGIERS UNI.	174.67	347.4	20	6A	1				25	35 PP
RELIZANE	175.73	11.7	20	7A	1				25	39 PP

APRIL 25 0.H 26.M 39.S EPICENTRE 36.97 28.50 DEPTH= 0.KM

A= 0.70383 B= 0.38211 C= 0.59884 D= 0.4771 E=-0.8788
G= 0.5263 H= 0.2857 K=-0.8009 HT= -0.6

SE= 2.32

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
CINE	0.71	332.7	0	15	-2								
ATHENS	3.93	286.1	1	5K	2	1	52	2					
ISTANBUL UN.	4.08	5.2	0	44	-21	2	13	19					
KASTAMONU	4.73	21.2	1	31K	17								
KSARA	6.80	115.4	1	42A	-1	2	56	-6			2	10	PG
SOFIA	6.97	326.8	1	47	2						3	21	
SKOPJE	7.42	314.5	1	54	2	3	31	13					
HELWAN	7.47	160.7	1	51A	-2	3	15	-4					
JERUSALEM	7.59	131.0	1	53A	-1	3	14	-8					
BUCHAREST	7.66	347.0	1	56	1	3	39	15			2	35	PG
FOCSANI	8.77	354.0				3	43	-9					
SIMFEROPOL	9.03	26.3	2	12	-2								
TARANTO	9.46	295.1	2	11	-9	4	11	3			4	11	
BACAU	9.66	353.4	2	21	-2	3	28	-46			2	44	PG
BELGRADE	9.92	324.7	2	27K	0	4	22	2			5	26	SS
KISHINEV	10.04	1.3	2	27	-1	4	16	-7					
IASI	10.24	356.4	2	30	-1						3	41	
REGGIO CALA.	10.27	280.2	2	24	-7	4	21	-7					
TIMISOARA	10.33	330.4	2	36	4	4	35	5			5	18	S*
MESSINA	10.35	280.7	2	33A	1	4	30	0			3	2	P*
SOTCHI	10.81	48.9	2	39	0								
KECSKEKET	11.89	329.4									5	41	SSS
BUDAPEST	12.60	329.4	3	3	0	5	27	2					
ZAGREB	12.89	317.2	3	7K	0								
LWOW	13.25	347.3	2	50	-22	5	35	-6					
HURBANOVO	13.27	328.4	3	16	4	5	41	0					

ROME	13.32	296.6	3 15K	2	5 51	8	6 17 S*
TIFLIS	13.47	64.4	3 17	2	5 43	-3	
BRATISLAVA	13.97	326.8	3 20A	-1	4 38	-80	5 38 SS
TRIESTE	14.05	312.7	3 21	-1	6 18	18	4 45 PG
GORIS	14.24	74.4	3 26	1			
VIENNA-H.	14.36	325.5	3 27	1	6 31	24	7 9 SSS
FLORENCE X.	14.79	302.7	3 33	1	6 7	-11	
TOLMEZZO	14.89	314.1	3 32	-1			4 5
PRATO	14.93	302.9	3 37	3	6 18	-3	
BOLOGNA	15.01	305.4	3 29	-6	6 45	22	4 7
RACIBORZ	15.06	333.7	3 38	3			3 55 PPP
MAKHACH-KALA	15.74	61.8	4 4	20			
WARSAW	16.14	343.3	3 51	2	6 45	-4	4 8 PPP
PRUHONICE	16.48	326.6	3 54K	0	7 13	15	
PRAGUE	16.56	326.7	3 55	0	7 13	14	
PAVIA	16.69	305.4	4 1A	5	7 27	25	
CHUR	17.19	311.0	4 5K	2			9 52
MONACO	17.40	299.4	4 7K	2			
CHEB	17.51	323.5	4 9	2	7 31	10	
RAVENSBURG	17.59	313.8	4 17	9	7 39	16	
PLAUEN	17.90	324.2	4 11	-1	7 45	15	5 48
COLLMBERG	18.08	327.3	4 15	1	7 52	18	
EBINGEN	18.17	314.2	4 17	2	7 52	16	5 3
SONNEBERG	18.27	322.6	4 17	1	7 47	9	
TUBINGEN	18.30	315.2	4 18	1	7 51	12	
STUTTGART	18.35	316.0	4 20	3	7 24	-16	4 42 PP
JENA	18.46	324.4	4 20	1	7 57	15	4 36 PP
BASLE	18.68	310.9	4 23K	2	7 57	10	
HALLE	18.68	326.2	4 19	-2	7 31	-16	4 45 PP
NEUCHATEL	18.84	308.9	4 24	1	8 8	17	
POTSDAM	18.85	329.7	4 24	1	8 0	9	5 51 PPP
STRASBOURG	19.07	314.0	4 27K	1	8 0	4	4 58
MOSCOW	19.76	15.4	4 33	-1	8 0	-11	
ALGIERS UNI.	20.35	277.1	4 38	-2			5 2 PP
BENSBERG	20.66	319.3	4 44K	0	7 58	-32	
CLERMONT-FD.	20.91	302.8	4 46K	0	8 47	12	
MUNSTER	21.03	322.1	4 48	1			
GARCHY	21.40	306.8	4 54	3	9 0	15	
COPENHAGEN	21.65	334.9	4 54K	0	8 55	6	
WITTEVEEN	22.01	323.0	4 59K	2	9 11	15	
TORTOSA	22.09	288.6	5 2	4	9 8	11	
PARIS	22.31	310.2	5 1	1	9 7	5	
DE BILT	22.33	320.0	5 1K	1	9 11	9	10 21 SS
RELIZANE	22.51	275.3	4 57	-5			5 17 PP
PULKOVO	22.85	2.4	5 6	0			
ALICANTE	22.95	282.3	5 5	-2	9 15	2	10 11 SSS
HELSINKI	23.33	355.5	5 14	4			
GOTEBORG	23.44	337.4	5 13K	2	9 39	17	
NURMIJARVI	23.68	355.3	5 14	0			
UPPSALA	23.94	346.4	5 15	-1	9 36	5	
TAMANRASSET	24.35	240.9	5 22K	2	9 45	7	5 57 PP
ALMERIA	24.71	279.1	5 24K	0	9 40	-4	
KEW	25.02	314.5	5 26K	-1	10 1	12	6 7 PP
JERSEY	25.28	308.5	5 22	-7	9 23	-30	
GRANADA	25.55	280.2	5 28A	-4	10 12	14	6 4 PP
TOLEDO	25.59	286.5	5 33K	1	10 11	13	6 8 PP
MALAGA	26.26	279.5	5 38A	0	10 1	-9	6 17 PP
DURHAM	27.17	320.5	5 45A	-2			7 53
BERGEN	27.71	335.1			10 31	-2	
SKALSTUGAN	28.41	344.8	5 57K	-1			
ABERDEEN	28.63	324.6	5 59A	-1	10 44	-4	12 34
COIMBRA	28.91	287.9	6 2K	0	10 50	-3	
SERRA PILAR	28.96	289.8	6 1K	-2			6 54 PP
RATHFARNHAM	29.10	315.2	6 4K	0	11 11	15	
SVERDLOVSK	29.18	36.8	6 4	-1			
ADDIS ABABA	29.34	158.9	6 11	5			10 36 PPP
LISBON	29.65	285.0	6 9K	0			7 5 PP
SODANKYLA	30.46	358.6	6 17	1			
APATITY	30.75	3.7	6 18	-1	11 12	-10	7 12 PP
KIRUNA	31.24	354.1	6 23K	0	11 30	1	7 6
STALINABAD	31.70	74.7	6 29	2	11 35	-2	
QUETTA	32.58	90.6	6 33	-2	11 34	-16	7 43 PP
NAMANGAN	33.55	69.6	6 42	-1			
BANGUI	33.68	198.0	6 45	1			8 45
KARACHI	34.51	97.6	7 0	8			
WARSAK DAM	34.96	81.8	6 53A	-2			
LAHORE	37.98	84.3	7 20	-1			
RUMANGABO	38.12	178.7	7 24	2			9 40 PPP
LWIRO	39.02	179.5	7 31A	1	13 28	-1	

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
ASTRIDA	39.39	178.1	7	34A	1	13	30	-5					
UVIRA	40.25	179.0	7	41A	1								
DEHRA DUN	41.40	84.2	7	56	7	14	3	-2			17	30	SS
ISFJORD	41.68	355.4	8	52	60								
BOMBAY	42.67	102.6	7	57	-3	14	24	0			10	19	PPP
AGRA	42.70	88.6	7	57K	-3	14	21	-3					
KHEYS	44.17	5.7	8	20	8								
MBOUR	46.21	253.1	8	29	1	15	18	3					
NORD	47.52	351.9	8	38K	0						12	45	
HYDERABAD	47.92	100.0				15	40	1					
ELISABTHVLLE	48.35	181.4	8	49A	4	15	52	7			19	26	SS
IRKUTSK	53.63	47.7	9	23	-2	16	52	-6					
SHILLONG	54.46	82.8	9	30K	-1	17	8	-1					
COLOMBO	55.40	109.6	9	35	-3	17	20	-2					
ULAN-BATOR	56.54	52.2	9	44K	-2	17	39	2					
BULAWAYO	56.80	179.9	9	49	1								
TANANARIVE	58.43	158.7	10	1A	2								
LANCHOW	58.97	66.1	10	2	-1								
CHENGTU	61.54	71.6	10	20K	-1								
PORT BLAIR	62.51	96.1	10	27	0	18	55	1					
RESOLUTE	62.61	345.5	10	27K	-1	18	47	-8			22	57	SS
YAKUTSK	62.96	31.3	10	28	-2								
KUNMING	63.25	77.8	10	30K	-2	19	3	0					
SIAN	63.52	65.9	10	33K	-1								
KIMBERLEY	65.47	183.6	10	48	1								
PEKING	65.88	57.2	10	49K	0	19	38	2					
CHANGCHUN	69.85	49.9	11	13K	-1	20	28	5					
SHAWINIGAN	71.01	314.3	11	20K	-1								
BREBEUF	72.09	313.7	11	27K	-1						11	57	
MAGADAN	72.70	26.8	11	31	0								
OTTAWA	73.36	314.5	11	34K	-1								
BERMUDA	73.64	298.3				21	6	-1			31	21	
ZO-SE	74.00	63.0	11	37	-2	21	10	-1					
PALISADES	74.86	310.0	11	40	-4	21	24	3			29	44	PKKP
UGLEGORSK	76.08	38.4	11	51	0								
Y.-SAKHLINSK	77.81	39.7	12	1	1								
WASHINGTON	78.07	309.8	12	1	-1								
COLLEGE	78.45	358.4	12	4	0	22	4	4			14	52	PP
MORGANTOWN	79.36	311.8	12	9A	0								
PETROPAVLOVK	80.40	27.8	12	13	2								
ABUYAMA	81.52	52.6	12	20K	0								
MATUSIRO	82.10	49.9	12	23K	0	22	41	3			16	31	
SAN JUAN	82.74	287.4	12	26	-1								
MANILA	83.33	76.9	12	31	1								
COLUMBIA	83.63	308.0	12	32	1								
SITKA	85.34	351.2	12	41	1								
HUNGRY HORSE	88.73	336.1	12	55	-1								
BUTTE	90.26	334.0	13	3	-1								
HORSESHOE B.	90.46	342.0	13	3	-1								
VICTORIA	91.29	341.8	13	6	-2								
EUREKA	97.19	333.0	13	35	0								
LICK	101.06	336.1	13	40A	-13								
TUCSON	101.34	325.7	13	54	0						18	5	
PORT MORESBY	118.43	80.0									17	6	
CHARTERS TS.	123.68	90.7	19	2	2								
SOUTH POLE	126.79	180.0	19	5	0						21	5	PP
BYRD STATION	135.09	187.5	19	21	0						21	54	PP
KARAPIRO	153.88	102.2	20	2	9								

APRIL 25 1.H 5.M 40.S EPICENTRE 36.95 28.58 DEPTH= 0.KM

A= 0.70346 B= 0.38328 C= 0.59853 D= 0.4784 E=-0.8781
G= 0.5256 H= 0.2864 K=-0.8011 HT= -0.6

SE= 2.02

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
CINE	0.76	328.9									0	15	PG
ATHENS	4.00	286.2	1	5K	1						2	11	SG
ISTANBUL UN.	4.10	4.3	1	4	-1						2	13	SG
KASTAMONU	4.73	20.4	1	31	17								
KSARA	6.73	115.5	1	44	2	2	59	-2					
SOFIA	7.02	326.5	1	48	1	3	10	2			3	52	
HELWAN	7.42	161.2	1	50A	-2	3	14	-4					
SKOPJE	7.49	314.3	1	54	1	3	30	10			3	12	

JERUSALEM	7.53	131.3	1	53K	-1	3	17	-4			
BUCHAREST	7.70	346.6	1	58	2	2	41	-44	3	11	SG
FOCSANI	8.80	353.7	2	36	25	3	52	-1	3	46	
SIMFEROPOL	9.02	25.9	2	13	-2	3	50	-8			
TARANTO	9.53	295.1							3	10	
BACAU	9.69	353.1	2	25	1						
BELGRADE	9.98	324.5	3	18K	50				5	14	
IASI	10.27	356.1	2	52	20				3	36	
REGGIO CALA.	10.34	280.3	2	24	-9				4	26	
MESSINA	10.42	280.8	2	33A	-1	4	32	-1	5	20	S*
ZAGREB	12.95	317.1	3	8	0				7	16	SG
LWOW	13.29	347.0	3	14	1	6	12	30			
ROME	13.39	296.6	3	18	4	5	46	1			
TIFLIS	13.42	64.2	3	16	2						
BRATISLAVA	14.03	326.6	3	20	-2	5	32	-28			
TOLMEZZO	14.96	314.0	3	33	-1				5	21	
PRATO	15.00	302.9	3	43	8	6	27	4			
BOLOGNA	15.08	305.3	3	55	19	7	2	37			
RACIBORZ	15.11	333.5	3	42	6				3	53	PP
WARSAW	16.18	343.1	3	54	4	7	8	17	4	9	PP
PRUHONICE	16.50	326.5	3	54K	0	7	12	14			
PRAGUE	16.62	326.6	3	57	1	7	21	20			
PAVIA	16.76	305.4	4	1	3	7	30	26			
CHUR	17.25	310.9	4	6	2						
MONACO	17.47	299.4	4	7	0						
CHEB	17.57	323.4	4	13	5	7	37	15			
RAVENSBURG	17.66	313.7	4	11	2	7	38	13			
PLAUEN	17.96	324.1	4	13	0				4	46	
COLLMBERG	18.14	327.2	4	16	1	7	52	17			
EBINGEN	18.24	314.1	4	17	1	7	52	14			
SONNEBERG	18.33	322.5	4	17	0	7	49	9	4	24	
TUBINGEN	18.36	315.2	4	17	-1						
STUTTGART	18.42	316.0	4	18	0	7	50	8	5	29	
JENA	18.52	324.4	4	20	0	7	56	12	5	8	
HALLE	18.74	326.2	4	19	-3	8	0	11	4	35	PP
BASLE	18.75	310.9	4	23	1				8	44	
POTSDAM	18.90	329.6	4	23	-1	8	1	8	5	49	PPP
NEUCHATEL	18.91	308.8	4	25	1	8	5	12			
STRASBOURG	19.13	313.9	4	28K	1	8	3	5	5	30	PP
MOSCOW	19.76	15.3	4	33	-1						
ALGIERS UNI.	20.42	277.2	4	39	-2	8	29	3			
BENSBERG	20.72	319.3	4	44	-1				4	59	
CLERMONT-FD.	20.98	302.8	4	46K	-1	8	51	14			
MUNSTER	21.09	322.0	4	48	0						
GARCHY	21.47	306.7	4	52	0	8	53	7			
COPENHAGEN	21.70	334.8	4	54	0	8	57	6			
PARIS	22.38	310.2	5	1	0	9	12	9			
RELIZANE	22.58	275.4	5	2	-1	8	42	-25	5	22	PP
PULKOVO	22.86	2.3	5	5	-1						
ALICANTE	23.02	282.4	5	8	0	9	14	-1	5	47	PPP
HELSINKI	23.35	355.4	5	13	2						
GOTEBORG	23.49	337.4	5	14	2						
NURMIJARVI	23.71	355.2	5	15	1						
UPPSALA	23.98	346.3	5	15	-2	9	30	-2	5	37	
TAMANRASSET	24.40	241.1	5	22K	1	9	45	6	6	1	PP
ALMERIA	24.78	279.2	5	25	0						
KEW	25.09	314.5	5	27A	-1	10	4	14			
GRANADA	25.62	280.3	6	12A	39	10	20	21			
TOLEDO	25.66	286.6	5	33	0	10	10	10			
MALAGA	26.33	279.5	5	38A	-1				6	17	PP
DURHAM	27.23	320.5	5	46	-2						
SKALSTUGAN	28.45	344.7	5	56	-3						
SERRA PILAR	29.04	289.8	6	1A	-3						
RATHFARNHAM	29.16	315.2	6	29	24						
SVERDLOVSK	29.16	36.8	6	5	0						
ADDIS ABABA	29.29	159.1	6	9	3						
LISBON	29.72	285.1	6	10A	0						
SODANKYLA	30.49	358.5	6	16	-1						
APATITY	30.77	3.6	6	18	-1	11	10	-12			
KIRUNA	31.27	354.0	6	22K	-2						
QUETTA	32.51	90.6	6	33	-2						
NAMANGAN	33.49	69.6	6	47	4						
WARSAK DAM	34.90	81.8	6	52	-3						
RUMANGABO	38.09	178.8	7	23	1				9	39	PCP
LWIRO	39.00	179.7	7	32A	2						
ASTRIDA	39.36	178.2	7	34	1				9	42	PCP
UVIRA	40.22	179.2	7	40	0						
ISFJORD	41.71	355.4	8	53	61						

KHEYS	44.18	5.7	8 38	26		
NORD	47.55	351.9	8 38K	-1		
ELISABTHVLLE	48.33	181.5	8 49	4		10 15
SHILLONG	54.40	82.9	9 30A	-1		
BULAWAYO	56.78	180.0	9 48	0		
WINDHOEK	60.18	192.2	10 13A	1		
RESOLUTE	62.65	345.5	10 26K	-3		
SHAWINIGAN	71.08	314.3	11 20	-2		
BREBEUF	72.16	313.8	11 26K	-2		
OTTAWA	73.42	314.6	11 35	-1		
COLLEGE	78.48	358.4	12 3	-1		
ABUYAMA	81.48	52.7	12 20K	-1		
MATUSIRO	82.06	50.0	12 23K	-1		
SAN JUAN	82.81	287.5	12 26	-1		
SITKA	85.38	351.3	12 41	1		
HUNGRY HORSE	88.78	336.1	12 55	-2		
EUREKA	97.24	333.1	13 35	-1		
SOUTH POLE	126.76	180.0	19 5	-1		26 28 PKKP
BYRD STATION	135.07	187.5	19 22	0		

APRIL 25 22.H 49.M 42.S EPICENTRE 40.29 142.58 DEPTH= 0.KM

A=-0.60753 B= 0.46476 C= 0.64413 D= 0.6076 E= 0.7942
G=-0.5116 H= 0.3914 K=-0.7649 HT= -1.8

SE= 3.52

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
MIYAKO	0.80	216.6	0 16K	-2	0 24	-7		
HATINOHE	0.84	286.8	0 19	0	0 29	-3		
MORIOKA	1.24	241.9	0 24K	-1	0 38	-4		
AOMORI	1.47	291.6	0 28K	0	0 45	-3		
MIZUSAWA	1.61	224.5	0 29	-1	0 46	-6		
URAKAWA	1.86	4.5	0 39	5	1 5	7		
AKITA	1.99	254.2	0 35K	0	0 58	-3		
HAKODATE	2.05	317.1	0 38A	2	1 3	0		
HIROO	2.06	15.4	0 41	4	1 11	8		
ISINOMAKI	2.10	208.2	0 37	0	0 59	-5		
TOMAKOMAI	2.35	341.6			1 16	5		
MORI	2.36	320.6	0 44	3	1 13	2		
MURORAN	2.37	329.7	0 43	2	1 10	-1		
SENDAI	2.40	213.5	0 42A	1	1 9	-3		
SAKATA	2.54	237.7	0 45	2	1 15	0		
OBIHIRO	2.67	9.8	0 50	5	1 29	10		
YAMAGATA	2.68	221.1	0 41	-4	1 15	-4		
SAPPORO	2.93	342.0	0 52K	3	1 27	2		
KUSIRO	3.01	26.3	0 53	3	1 27	0		
HUKUSIMA	3.02	213.7	0 50	0	1 23	-5		
SUTTSU	3.07	325.6	0 54	3	1 21	-8		
ASAHIGAWA	3.49	357.5	1 5	8				
ONAHAMA	3.59	202.1	1 14	16				
NIIGATA	3.63	230.4	1 10	11	1 52	9		
SHIRAKAWA	3.67	211.0	1 6	7	1 52	8		
NEMURO	3.77	35.4	1 2	1	1 44	-3		
ABASHIRI	3.93	18.1	1 18	15	2 7	16		
AIKAWA	4.06	237.4	1 4	-1				
MITO	4.24	203.7	1 9	1	2 17	18		
UTUNOMIYA	4.30	210.6	1 6	-2	1 54	-6		
KAKIOKA	4.47	205.8	1 8	-3	2 6	2		
TUKUBASAN	4.51	206.5	1 8	-3	1 58	-7		1 19
TAKADA	4.65	228.2	1 14	1	2 11	2		
MAEBASI	4.77	216.5	1 15	0	2 11	-1		2 31
KUMAGAYA	4.84	212.4	1 18	2	2 13	-1		
NAGANO	4.99	225.0	1 19	1				1 36
MATUSIRO	5.07	223.9	1 18A	-1	2 15	-4		
OIWAKE	5.07	220.0	1 20	1	2 23	4		
TOKYO C.M.O.	5.12	206.8	1 19	-1	2 24	3		
WAZIMA	5.30	238.6	1 23	0	2 33	8		
YOKOHAMA	5.38	206.5	1 35	11	2 42	15		
MATUMOTO	5.43	223.4	1 26	2				
TOYAMA	5.54	231.4	1 26	0				
KOHU	5.63	215.5	1 27	0	2 37	3		
HUNATU	5.65	213.4	1 30	2	2 31	-3		
MERA	5.79	203.0	1 25	-4				
MISIMA	5.91	210.3	1 29	-2	2 39	-2		

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
SHIZUOKA	6.26	213.3			2 46	-3		
HUKUI	6.53	231.6	1 42	2				
OMAESAKI	6.66	212.8						2 31
Y.-SAKHLINSK	6.66	0.8	1 42	0	2 58	-1		
GIHU	6.71	225.1	1 41	-1				3 2
NAGOYA	6.78	222.8	1 49	6				
IBUKISAN	6.94	227.0	1 49	3				
HIKONE	7.09	227.0	1 46	-2				
KAMEYAMA	7.28	223.7	2 12	22				
ABUYAMA	7.76	228.0	1 56K	-1				
OSAKA	7.95	227.1	2 16	16				
VLADIVOSTOK	8.48	293.0	2 8	1	3 52	7		
UGLEGORSK	8.80	357.8	2 28	16				4 24 S*
CHANGCHUN	13.31	291.0	3 14	1				
ZO-SE	19.62	248.8	4 30	-3				
PEKING	20.17	277.8	4 33	-6				
YAKUTSK	23.12	344.5	5 5	-4	9 9	-8		
LANCHOW	30.59	274.7	6 14	-4				
SHILLONG	44.44	266.7	8 11K	-4				
COLLEGE	45.87	33.9	8 26	0				
KHEYS	50.71	347.0	8 53	-11				
NAMANGAN	52.40	295.4	9 12	-4				
SVERDLOVSK	53.35	317.3	9 21	-2				
LAHORE	54.74	283.8	9 30	-4				
WARSAK DAM	55.59	287.8	9 41	1				
NORD	57.86	356.5	9 53	-3				
RESOLUTE	59.23	15.1	9 51	-15				
APATITY	60.11	335.3	10 7K	-5				
QUETTA	60.89	286.2	10 13	-4				
SODANKYLA	62.33	336.9	10 23	-4				
KIRUNA	63.81	339.0	10 33	-3				
MOSCOW	65.20	323.0	10 38	-7				
PULKOVO	65.86	329.1	10 45	-5				
NURMIJARVI	67.51	331.8	10 56	-4				
HELSINKI	67.63	331.4	11 3	2				
SKALSTUGAN	69.22	338.6	11 7	-4				
UPPSALA	70.44	334.0	11 7	-11				11 48
EUREKA	73.12	52.4	11 34	0				
KASTAMONU	77.87	314.4	11 50A	-11				14 40
RAOUL ISLAND	78.30	145.4	11 36	-28				
COLLMBERG	78.73	330.4	12 4	-2				
PRUHONICE	79.18	328.8	12 7	-2				
TUCSON TELE.	80.97	55.2	12 28	10				
ONERAHI	81.15	154.3	13 0	41				
KARAPIRO	83.48	154.3	13 7	36				
WELLINGTON	86.30	156.3						15 38
GEBBIES PASS	87.90	158.7						16 43 PP

APRIL 26 12.H 34.M 57.S EPICENTRE 26.16 100.61 DEPTH= 0.KM

A=-0.16543 B= 0.88335 C= 0.43856 D= 0.9829 E= 0.1841
G=-0.0807 H= 0.4311 K=-0.8987 HT= 3.0

SE= 2.84

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
KUNMING	2.18	120.2	0 39A	1				1 6 SG
TOCKLAI	5.26	277.6	1 34	12				
CHENGTU	5.39	33.0	1 21	-3	2 23	-4		1 43 PG
PHU-LIEN	7.68	132.8	1 53	-3	3 22	-3		2 11 P*
LANCHOW	10.26	14.8	2 34	2	4 31	2		
SIAN	10.79	39.7	2 37	-2	4 37	-5		
HOWRAH	11.76	254.8	2 41	-11				
CANTON	11.93	102.2	2 51	-3				
CHATRA	12.05	276.1	2 56	0				7 3
HONG KONG	12.96	104.4	3 2	-6	6 9	35		
WUHAN	13.03	67.3	3 7	-2	5 28	-8		
PORT BLAIR	16.22	208.8	3 56	5				
PAOTOW	16.37	26.3	3 54	1				
NANKING	16.94	65.5	4 3	3				
ZO-SE	18.71	70.0	4 24	2				
PEKING	18.96	39.3	4 27	2	7 51	-3		
AGRA	20.21	277.8	4 38K	-1				
DEHRA DUN	20.29	287.0	4 44	4				8 24
BAGUIO CITY	20.96	113.6	4 51	4	8 49	12		
MADRAS	23.23	239.6	5 1	1	9 23	4		

The scanned images of the bulletins of the International Seismological Summary (ISS) have been obtained thanks to funding provided by the US National Science Foundation through grant EAR-9725140 (Villaseñor et al., 1997) and collected by SGA Storia Geofisica Ambiente (Bologna) on behalf of the Istituto Nazionale di Geofisica e Vulcanologia (Rome), in the frame of the EUROSEISMOS project.

LAHORE	23.60	289.3	5	15	2						
POONA	25.85	258.4				10	13	10	6	13	PP
WARSAK DAM	26.27	294.2	5	19	-20						
BOMBAY	26.63	260.0				10	32	16	11	16	
CHANGCHUN	26.68	42.3	5	43	0	10	12	-5			
NAMANGAN	28.12	309.0							7	43	
SEMIPALATNSK	28.81	332.5	6	2	0						
STALINABAD	29.44	302.7	6	7	-1						
QUETTA	29.88	285.5	5	53	-18				12	1	SS
MATUSIRO	33.56	62.8	6	42	-2	12	2	-4	8	7	
YAKUTSK	40.80	20.6	7	47	2	13	57	1			
MOSCOW	53.66	321.3	9	33	7						
APATITY	57.40	335.2	9	53	0						
KHEYS	57.62	351.1	9	49	-5						
PULKOVO	57.88	325.8	9	44	-12						
SODANKYLA	59.97	334.6	10	11	0						
HELSINKI	60.58	326.2	10	21	6						
NURMIJARVI	60.72	326.6	10	15	-1						
KIRUNA	62.36	335.0	10	27A	0						
CHARTERS TS.	63.80	131.5	10	36	0						
UPPSALA	64.28	326.2	10	38	-1						
SKALSTUGAN	66.17	330.7	10	51	-1						
SKALSTUGAN	66.17	330.7	10	51	-1						
ADELAIDE	70.67	147.5	11	25	5						
STUTTGART	71.68	315.8	11	25	-1						
ASTRIDA	74.08	259.0	11	39	-1						
COLLEGE	75.20	24.3	11	42	-4						
RESOLUTE	78.90	4.2	12	6	-1						
TAMANRASSET	84.53	292.6	12	36	0						

APRIL 26 14.H 45.M 16.S EPICENTRE 46.48 13.00 DEPTH= 0.KM

A= 0.67338 B= 0.15548 C= 0.72276 D= 0.2250 E=-0.9744
G= 0.7042 H= 0.1626 K=-0.6911 HT= -4.1

SE= 2.39

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
TOLMEZZO	0.08	170.5									0	1	PG
TRIESTE	0.98	147.5									0	20	PG
ZAGREB	2.17	106.5									0	40	PG
BOLOGNA	2.30	211.4									0	39	PG
CHUR	2.42	280.2				1	7	-2					
RAVENSBURG	2.65	300.7	0	47	2	1	19	1			0	56	PG
VIENNA-H.	2.90	51.0	0	50	2	1	22	-2			1	41	SG
PRATO	2.92	208.1	0	48	0	1	23	-2					
PAVIA	2.98	245.6	0	51	2	1	20	-6			1	46	
EBINGEN	3.23	303.3	0	56	3	1	33	0			1	7	PG
BRATISLAVA	3.26	57.2	0	56K	3	1	50	17			1	6	PG
TUBINGEN	3.37	309.1	0	56	1	1	36	0			1	9	PG
STUTTGART	3.45	313.1	0	57	1	1	39	1			1	10	PG
CHEB	3.63	353.7	0	58	-1						1	10	PG
PRUHONICE	3.66	15.9	1	0A	1	1	46	3			1	14	PG
PRAGUE	3.72	14.3	1	1	1	1	43	-2			1	16	PG
HURBANOVO	3.81	66.6	0	54	-7	1	36	-11			1	8	PG
PLAUEN	4.07	352.3	1	2	-3	1	40	-14			1	15	PG
SONNEBERG	4.09	343.6	1	6	1						1	10	PG
STRASBOURG	4.12	302.6	1	7	1	1	56	1			1	24	PG
NEUCHATEL	4.19	279.4				1	56	-1			1	18	P*
BUDAPEST	4.27	74.0									1	28	PG
JENA	4.56	348.6	1	12	0						1	31	PG
ROME	4.59	184.9	1	10	-2	2	3	-4			1	28	PG
KECSKEMET	4.63	82.1									1	32	PG
MONACO	4.81	237.2	1	17	2	2	18	6					
COLLMBERG	4.83	360.0	1	16	0	2	37	24			1	36	PG
RACIBORZ	5.00	42.0	1	21	3	2	19	1			1	32	PG
HALLE	5.08	352.5	1	14	-5	2	12	-7			1	35	PG
TIMISOARA	5.76	94.3	1	46	17						3	12	SG
POTSDAM	5.91	0.4	1	30	-1						1	56	PG
BENSBERG	5.92	321.4	1	32K	1	2	30	-10					
MUNSTER	6.53	329.3	1	40	0						3	47	
DOURBES	6.68	306.0	2	15K	33	3	1	2					
CLERMONT-FD.	6.90	267.7	1	43	-2	3	33	28					
HAMBURG	7.36	345.8	1	49	-2								
PARIS	7.47	292.0	1	54	1						4	5	SG

SKOPJE	7.52	123.7	1	54A	1	3	28	7	3 40 PSG
WARSAW	7.78	39.3				3	56	29	4 13 SG
LWOW	8.10	61.5	2	5	3				5 16
SOFIA	8.28	113.4	2	4	0	4	18	39	2 49
COPENHAGEN	9.22	358.1	2	18	1	4	26	23	2 40 PG
FOLINIERE	9.39	289.0	2	18	-1				
BUCHAREST	9.44	97.9				4	18	11	4 32
KEW	10.08	304.6	2	29	0				5 32 SG
JERSEY	10.51	290.4				4	29	-6	4 1
GOTEBORG	11.26	357.2	2	49	4				
ATHENS	11.63	133.2	2	45	-5				
DURHAM	12.42	317.3	2	58	-3				
ISTANBUL UN.	12.77	109.4	3	6	1				3 14 PP
UPPSALA	13.68	9.9	3	16	-2	6	0	9	
TOLEDO	14.07	248.2	3	20	-3				7 53
RELIZANE	14.23	225.5	3	25	0				
HELSINKI	15.43	22.9	3	42	2				
NURMIJARVI	15.64	21.8	3	41	-2				
PULKOVO	16.81	31.4	3	46	-12				
SKALSTUGAN	17.15	358.9	4	1	-1				4 10
MOSCOW	17.94	49.9	4	13	1				
KSARA	21.49	117.9	4	53	1				5 21
KIRUNA	21.75	7.6	4	55	0				
SODANKYLA	22.12	14.0	4	59	0				
JERUSALEM	22.53	122.8	5	5	2				
APATITY	23.64	19.5	5	13	-1	9	23	-3	
TAMANRASSET	24.40	196.9	5	20	-1				5 43 PP
SVERDLOVSK	30.71	52.7	5	17	-62				
KHEYS	36.39	10.7	7	16	8				
NORD	36.56	353.0	7	7A	-2				
RESOLUTE	50.19	340.8	8	56	-3				
ELISABTHVLLE	59.27	163.5	10	11	5				
YAKUTSK	60.61	28.9	10	12	-3				
COLLEGE	67.99	351.3	11	2	-1				
EUREKA	83.03	322.7	12	28	0				
MATUSIRO	83.82	41.4	12	30	-2				
SOUTH POLE	136.28	180.0	19	26	2				
CANBERRA	145.34	87.2	19	40A	0				

APRIL 26 20.H 40.M 37.S EPICENTRE 24.85 122.75 DEPTH= 113.KM
DEPTH OF FOCUS= 0.013R

A=-0.49141 B= 0.76417 C= 0.41790 D= 0.8411 E= 0.5409
G=-0.2260 H= 0.3515 K=-0.9085 HT= 3.4

SE= 2.64

	DELTA DEG.	AZ. DEG.	P M	P S	P O-C S	S M	S S	S O-C S	*PP M	*PP S	SUPP. M	SUPP. S
ILAN	0.91	265.2	0	23	2	0	39	1				
TAIPEI	1.13	279.5	0	23	-1	0	44	3				
HWALIEN	1.35	229.8	0	26	0	0	42	-4				
HSINCHU	1.61	268.6	0	27	-2	0	45	-6				
TAICHUNG	2.01	250.1	0	33	-1	0	47	-12				
YUSHAN	2.13	230.6	0	43	7	1	14	12				
HSINKONG	2.15	216.1	0	31	-5	0	56	-7				
ALISHAN	2.22	233.7	0	45	8	1	17	13				
TAITUNG	2.55	215.3	0	39	-2	0	49	-23				
TAINAN	2.95	232.0	0	46	-1	1	10	-12				
TAWU	3.01	214.6	1	12	25	1	46	23				
KAOHSIUNG	3.17	226.1	0	46	-4	1	21	-6				
PENGHU	3.20	246.4	0	56	6	1	30	2				
HENGCHUN	3.38	213.3	0	52	0	1	29	-3				
ZO-SE	6.38	347.8	1	34K	1	2	48	3			3	27 *SS
NANKING	7.97	335.1	1	56K	1	3	25	1				
HONG KONG	8.27	253.9	1	57A	-2							
BAGUIO CITY	8.63	194.0	2	1	-3							
CANTON	8.83	260.4	2	4K	-2							
YAKUSIMA	8.85	49.2	2	5A	-2	4	6	21				
WUHAN	9.20	309.8	2	11A	0							
TOMIE	9.37	32.9	2	18A	4	4	31	33				
KAGOSIMA	9.60	44.0	2	19A	2	4	24	21				
NAGASAKI	10.04	36.9	2	26A	4	4	30	16				
UNZENDAKE	10.24	38.2	2	32A	7	4	35	17				
MANILA	10.35	189.6	2	24	-3							

MIYAZAKI	10.39	45.3	2	26	-1	4	45	23	
KUMAMOTO	10.57	39.5	2	32A	3	4	56	30	
SAGA	10.66	36.5	2	38A	7				
ITUHARA	10.91	29.9	2	40A	6	4	59	24	
HUKUOKA	10.98	35.8	2	40A	5	4	46	10	
OOITA	1 .40	40.9	2	43A	3	5	21	35	
SIMONOSEKI	11.53	36.3	2	47A	5	5	4	15	
SIMIDU	1 .94	46.3	2	47	-1	5	18	19	
UWAZIMA	11.96	43.5	2	52K	4	5	12	12	
MATUYAMA	12.49	42.0	2	57	2	5	34	22	3 16 PP
HIROSIMA	12.68	39.3	2	57	0	5	26	10	8 15 PCP
KOTI	12.79	44.9	2	53	-6	5	42	23	
HAMADA	12.87	36.7	3	3K	3	5	37	16	
MUROTO	13.03	47.4	3	2	0	6	4	39	
TAKAMATU	13.62	43.5	3	6	-4	5	54	16	
OKAYAMA	13.78	42.1	3	7	-5	6	10	28	
TOKUSIMA	13.80	45.5	3	10	-2	6	2	19	15 28 SCS
MATSUE	13.82	37.8	3	18	6	6	4	21	
YONAGO	13.97	38.5	3	12	-2	6	12	25	
SUMOTO	14.17	45.3	3	16	-1				4 27
SIOMISAKI	14.24	50.0	3	14	-3	6	1	8	
WAKAYAMA	14.28	46.3	3	16	-2	6	13	19	
SAIGO	14.52	36.3	3	26	5	6	23	24	
TOTTORI	14.52	40.4	3	21	0	6	24	24	
KOBE	14.57	44.9	3	19	-3	6	26	25	
OSAKA	14.77	45.7	3	19	-5	6	10	5	
OWASE	14.88	48.8	3	24A	-2	6	19	11	
TOYOOKA	14.90	41.6	3	22A	-4	6	32	24	
ABUYAMA	14.94	45.1	3	23A	-3				
KYOTO	15.13	44.9	3	28	-1				5 35
SIAN	15.23	311.1	3	31A	1				
MAIZURU	15.25	43.1	3	24	-6				
PHU-LIEN	15.39	258.1	3	32	0				
TU	15.47	47.3	3	34	1				
KAMEYAMA	15.51	46.9	3	32	-2	6	3	-19	
TAIYUAN	15.53	328.6	3	38	4	6	34	11	
HIKONE	15.62	45.2	3	33	-2	6	25	0	
TSURUGA	15.74	43.8	3	40	3	6	58	30	
IBUKISAN	15.77	45.1	3	37	0	6	38	10	
NAGOYA	16.03	46.8	3	37	-3	6	39	5	
GIHU	16.04	45.8	3	36A	-4	7	30	56	
PEKING	16.11	341.5	3	45A	4				
HUKUI	16.12	43.0	3	42	1				
HAMAMATU	16.28	49.4	3	46	3	6	49	9	
TORISIMA	16.53	66.3	3	48	2				
OMAESAKI	16.57	50.5	3	44	-3	6	46	0	
KANAZAWA	16.67	42.4	3	53	5				
TAKAYAMA	16.80	44.5	3	52	2				
IIDA	16.81	47.2	3	51	1				
SHIZUOKA	16.89	49.7	3	50A	-1	6	32	-21	
HATIDYOZIMA	17.05	57.3	3	52	-1				7 11
TOYAMA	17.12	43.0	3	54A	0	7	26	27	
TATUNG	17.16	334.7	3	59	5				
MATUMOTO	17.33	45.5	3	56	0	7	30	27	
MISIMA	17.35	50.1	3	56A	0	7	6	2	13 37 SCS
KOHU	17.37	48.1	3	58	1	7	18	14	
WAZIMA	17.38	40.7	3	57A	0				
AJIRO	17.42	50.5	3	58	1	6	50	-15	
HUNATU	17.43	48.8	3	58A	1	7	29	24	
OSIMA	17.47	51.7	3	58A	0	7	5	-1	8 28 PCP
CHENGTU	17.56	293.4	3	58A	-1				
TIENSHUI	17.64	307.3	4	3	3				
MATUSIRO	17.67	45.1	3	58A	-2	7	7	-4	4 3
NAGANO	17.73	44.7	4	4A	3	8	4	52	
OIWAKE	17.75	46.2	4	2	1	7	26	13	
MERA	17.87	51.9	4	3A	0	7	23	8	
TITIBU	17.90	47.9	4	3	0	8	6	50	
YOKOHAMA	18.00	50.2	4	3	-1				5 32
TAKADA	18.02	43.7	4	0A	-4	7	32	14	15 37 SCS
MAEBASI	18.13	46.8	4	5A	-1	8	0	39	
KUNMING	18.20	274.9	4	8K	2				
TOKYO C.M.O.	18.20	49.7	4	5A	-1				
HONGO	18.23	49.6	4	4A	-3				4 44
AIKAWA	18.60	41.4	4	8	-3				
TUKUBASAN	18.73	48.7	4	8A	-4	7	38	4	4 48
UTUNOMIYA	18.75	47.5	4	9	-4	7	49	15	
KAKIOKA	18.79	48.8	4	10	-3				8 11
PAOTOW	18.95	328.9	4	16A	1				
TYOSI	18.99	51.0	4	11	-4				

NIIGATA	19.03	42.9	4	14A	-2					
CHANGCHUN	19.05	5.7	4	16A	0					
MITO	19.07	48.8	4	13	-3					
SHIRAKAWA	19.30	46.6	4	15	-4	7	22	-24		
YINCHUAN	19.48	318.1	4	21	1					
ONAHAMA	19.66	47.9	4	18	-4	7	43	-10		
VLADIVOSTOK	19.72	20.2	4	24	1					
LANCHOW	19.75	309.0	4	25A	2	8	4	10		
HUKUSIMA	19.83	45.4	4	26	2	8	3	7		
YAMAGATA	20.04	44.0	4	29	3	8	48	48		
SAKATA	20.12	41.8	4	35	8	8	39	37		
SENDAI	20.40	44.7	4	25	-5	8	48	41	5	4 PP
ISINOMAKI	20.77	44.9	4	34	0	8	23	9	15	48 SCS
AKITA	20.80	40.4	4	32	-2					
MIZUSAWA	21.06	43.1	4	34	-3	9	2	43		
MORIOKA	21.43	41.9	4	36	-4	9	5	39		
SINING	21.45	308.1	4	43	3	8	35	9	5	10 *SP
WUWEI	21.50	312.1	4	43	2	8	32	5		
MIYAKO	21.89	43.0	4	41A	-4	8	37	3	5	57
AOMORI	21.92	39.0	4	46	1					
HATINOHE	22.16	40.6	4	46	-1	8	52	13	5	25 PP
HAKODATE	22.52	37.1	4	49A	-2					
MORI	22.66	36.2	4	50A	-2				5	39 PP
SUTTSU	22.98	34.5	4	53	-2	8	43	-10	5	41 PP
MURORAN	23.04	36.3	4	58	2					
TOMAKOMAI	23.50	36.8	5	4	4	9	26	24	5	46
GUAM	23.63	114.6	5	3A	1					
SAPPORO	23.75	35.5	5	1A	-2	9	24	17	5	42 PP
URAKAWA	23.92	38.9	5	4	0	9	18	8	16	1 SCS
HIROO	24.31	39.3	5	8	0	9	22	6		
OBIHIRO	24.65	38.0	5	12	1					
ASAHIGAWA	24.78	35.5	5	14	1					
TOCKLAI	25.24	280.4	5	23	6					
KUSIRO	25.37	39.2	5	17A	-1	9	52	18	5	59 PP
WAKKANAI	25.59	31.9	5	21	1	10	12	35	6	12 PP
ABASHIRI	25.97	37.2	5	24A	0	10	13	29		
ULAN-BATOR	26.22	335.4	5	25A	-1	9	53	5		
NEMURO	26.27	39.8	5	25	-2					
YUMEN	26.47	311.9	5	29	1	9	53	1	5	56 *SP
Y.-SAKHLINSK	27.20	30.8	5	50	15					
SHILLONG	27.92	278.1	5	42	0	10	19	4		
CHITTAGONG	28.42	271.4	5	46K	0	10	26	3	6	51 PP
UGLEGORSK	28.53	27.1	5	47	0					
KURILSK	28.72	38.6	5	45	-4					
IRKUTSK	30.76	337.7	6	7	0	11	3	3		
PORT BLAIR	31.29	250.7	6	11	-1	11	9	0	7	6 PP
MEDAN	31.37	231.4	6	12A	0				7	2
CALCUTTA	31.54	273.0	6	19	5	11	17	4	12	38
HOWRAH	31.56	273.0	6	19	5					
CHATRA	32.02	281.3	6	16	-2	11	23	3		
DJAKARTA	34.52	208.8	6	38K	-1	12	0	1		
LEMBANG	34.76	207.0	6	40A	-1	12	3	0		
VIZIANAGRAM	37.08	267.5	7	4A	3	12	41	3		
YAKUTSK	37.46	5.4	7	2	-2					
PETROPAVLOVK	39.02	34.1	7	16	-1					
DEHRA DUN	39.80	288.2	7	27	4	13	21	2		8 40 PP
MAGADAN	39.83	22.0	7	23	-1					
AGRA	40.11	283.2	7	22A	-4	13	16	-8	7 50	9 2 PP
SEMIPALATNSK	41.43	319.2	7	35	-2	13	39	-4		
PORT MORESBY	41.53	142.1	7	38K	0	13	47	2	8 4	9 28 PCP
SEHORE	41.60	277.5	8	8	30	13	47	1	9 21	9 57 PPP
MADRAS	41.79	261.6	7	41K	1	13	50	2	9 16	16 46 SS
HYDERABAD	41.83	268.7	7	41K	1	13	51	2		9 8 PP
LAHORE	42.91	290.3	7	47A	-2					
COLOMBO	44.69	253.8	8	5	2	14	32	1		
WARSAK DAM	45.12	294.0	8	6	-1	14	40	3		
NAMANGAN	45.16	303.8	8	7	0					
KODAIKANAL	45.33	259.5	8	12K	4	14	54	14		9 57 PP
POONA	45.68	272.1	8	11	0	14	46	1	8 39	10 1 PP
BOMBAY	46.51	273.0	8	19	1	14	55	-1		10 11 PP
STALINABAD	47.29	300.3	8	24	0					
QUETTA	49.36	289.3	8	39A	-1	15	38	1	9 5	10 37 PP
CHARTERS TS.	50.12	150.7	8	46	0	15	50	3		
SVERDLOVSK	54.36	323.3	9	16	-1	15	38	-67		
PERTH	56.86	187.0	9	30	-5	17	20	2		12 51
BRISBANE	59.66	148.7	9	55	0	17	58	4		
ADELAIDE	61.35	165.1	10	5A	-1	18	19	3	10 33	22 25 SS
KHEYS	62.36	349.3	10	5	-8	18	13	-16		

MAKHACH-KALA	63.02	307.2	10	16	-1				10	45		
NOUMEA	63.22	134.2	10	20	1	18	42	3				
RIVERVIEW	64.30	153.9	10	26K	0	18	57	4				
GORIS	64.54	303.6	10	25	-2	18	48	-8				
CANBERRA	64.80	156.4	10	28K	-1	19	3	4	11	8	13	3 PP
TIFLIS	65.22	306.3	10	31	-1	19	6	2				
MELBOURNE	65.75	160.8	10	34A	-1	19	10	-1	10	58	19	55 *SS
APATITY	67.04	335.3	10	41	-2	19	26	0	11	15	13	13 PP
MOSCOW	67.15	322.3	10	42	-2				11	30		
COLLEGE	67.56	27.5	10	44A	-2						30	17 PKKP
SOTCHI	68.46	309.1	10	51	-1				11	25		
SUVA	69.05	122.8				19	52	2			20	47 SCS
SODANKYLA	69.64	335.8	10	58	-1							
ISFJORD	69.71	347.9	10	58	-2	19	24	-34	11	31	13	23 PP
PULKOVO	70.06	327.5	11	0	-2	20	0	-2				
FORT NELSON	71.15	161.1	11	15	7	20	17	3				
KIRUNA	71.76	337.0	11	10A	-2	20	20	-1	11	41	13	47 PP
NORD	71.83	354.2	11	11A	-1							
HONOLULU	71.92	74.5	11	14	1	20	30	7	11	51	25	27 SS
KIPAPA	71.95	74.3	11	14	1				11	48		
SIMFEROPOL	71.96	311.7	11	12	-1	20	22	-2				
HELSINKI	72.51	328.7	11	16	0							
NURMIJARVI	72.55	329.1	11	15	-2							
KSARA	74.17	300.2	11	27A	1	20	56	8			14	5 PP
APIA	74.50	113.5	11	30	2	20	59	7			25	29 SS
HAWAII V.OB.	75.06	75.3	11	33	2	21	6	8				
JERUSALEM	75.38	298.4	11	34K	1				12	8		
KASTAMONU	75.43	309.0	11	19K	-14	20	41	-21				
IASI	75.54	315.5	11	31	-3	21	1	-3	12	6		
SITKA	75.68	33.5	11	35K	0	21	11	6	12	12	14	34 PP
UPPSALA	76.05	329.9	11	34A	-3	20	59	-10	12	7	14	29 PP
BACAU	76.19	315.0	11	51	14	21	26	15			21	58 PS
FOCSANI	76.32	314.1	11	41	3	21	13	1			21	44 PS
SKALSTUGAN	76.61	334.5	11	38A	-2						21	16 SCS
LWOW	76.75	318.9	11	40	-1	21	15	-2				
ISTANBUL UN.	76.80	309.2	11	30	-11	21	8	-9				
BUCHAREST	77.52	313.2	11	43A	-2	21	26	1	12	15	14	31 PP
WARSAW	77.53	321.9	11	44	-1	21	23	-2	12	11	14	46 PP
ONERAHI	77.56	139.2	11	50	5	21	28	3			22	15
RESOLUTE	77.78	9.6	11	45A	-1	21	28	0			13	55 PP
RAOUL ISLAND	78.36	129.9	11	52	3							
THULE	78.73	2.6	11	49A	-3				12	23	11	54 PCP
CINE	78.74	306.2	11	50	-2	21	35	-3				
SKALNATE PL.	79.26	319.3	11	55A	1	21	40	-4	12	25	14	59 PP
GOTEBORG	79.65	329.3	11	53	-4				12	30	14	59 PP
KARAPIRO	79.70	140.2	11	58K	1	21	55	7	12	29	15	41
SOFIA	80.05	312.4	12	3	4	21	52	0			14	53 PP
RACIBORZ	80.06	320.7	11	58	-1	21	50	-2			15	10 PP
TIMISOARA	80.14	315.9	11	58	-1	21	55	2			13	12 *SP
COBB RIVER	80.32	144.0	12	5	5	21	56	1			27	18 SS
COPENHAGEN	80.45	327.4	12	0A	-1	21	57	1	12	33	15	2 PP
KECSKEMET	80.58	317.4	11	59	-2	21	59	2				
BUDAPEST	80.71	318.1	12	3	1	22	0	1				
ADDIS ABABA	80.83	275.7	12	5	2	22	22	22				
BELGRADE	81.03	315.3	12	3	-1	22	2	0	12	36	15	12 PP
BERGEN	81.09	333.5	12	4A	0	22	1	-2	12	39	15	16 PP
WELLINGTON	81.57	143.1	12	7A	0	22	6	-2	12	31	22	53
BRATISLAVA	81.58	319.3	12	3K	-4	22	11	3	12	36	27	23 SS
SKOPJE	81.65	312.4	12	6K	-1	22	9	1			12	41 PCP
ATHENS	81.76	307.9	12	6K	-2				12	32		
POTSDAM	81.80	324.3	12	9	1	22	11	1	12	42	15	22 PP
ROXBURGH	81.87	149.0	12	11A	3	22	13	2			27	41 SS
VIENNA-H.	81.97	319.6	12	9	0	22	15	3	12	42	15	19 PP
GEBBIES PASS	82.14	145.9	12	11	1						12	42
PRUHONICE	82.18	321.8	12	10	0	22	17	3	12	44	15	22 PP
PRAGUE	82.21	321.9	12	10	0	22	16	2	12	49	15	13 PP
COLLMBERG	82.38	323.4	12	11	0	22	19	3	12	43	15	17 PP
HALLE	82.84	323.9	12	9	-4	22	14	-7	12	43	15	23 PP
PLAUEN	83.25	323.0	12	12	-3	22	21	-4			12	31
JENA	83.34	323.5	12	15	-1	22	26	1	12	50	15	26 PP
CHEB	83.34	322.5	12	13	-3	22	22	-4	13	16	15	55 PP
ZAGREB	83.37	317.6	12	16A	0	22	31	5	12	51	27	41 SS
SONNEBERG	83.83	323.2	12	17	-1	22	27	-3	12	49	15	34 PP
TRIESTE	84.81	318.2	12	23A	0	22	37	-3	12	57	15	41 PP
MUNSTER	84.85	325.8	12	22	-1							
TOLMEZZO	84.87	319.2	12	22	-1	22	33	-8			17	50 PPP
ALBERNI	84.91	37.4	12	25K	1	22	41	0				
AKUREYRI	84.92	344.8				22	47	6			29	13 SS

MACQUARIE I.	84.94	159.8	12	28	4	22	48	7	13	7	16	3	
TANANARIVE	85.12	246.7	12	26	1	22	37	-6			15	45	PP
TARANTO	85.12	312.5	12	30	5	22	53	10			19	6	
BENSBERG	85.66	325.1	12	26K	-1	22	40	-8					
HORSESHOE B.	85.70	36.8	12	28	1	22	44	-5			26	28	SS
STUTTGART	85.80	322.5	12	28	0	22	40	-10	13	6	15	52	PP
TUBINGEN	86.00	322.4	12	28	-1						22	52	SCS
DE BILT	86.01	326.8	12	29A	0	22	42	-10			15	54	PP
VICTORIA	86.10	37.6	12	30A	1	22	47	-5			15	47	PP
RAVENSBURG	86.11	321.6	12	30	1						23	56	SCS
ABERDEEN	86.12	333.4	12	28A	-1	22	51	-2			15	56	PP
EBINGEN	86.25	322.1	12	29	-1				13	4	15	55	PP
SIDA	86.47	343.7	12	33	2	22	47	-9			15	58	PP
CHUR	86.67	320.8	12	32A	0	22	45	-13					
STRASBOURG	86.69	322.9	12	32	0	22	58	0	13	8	15	54	PP
BOLOGNA	86.87	318.1	12	37	4	22	54	-6			35	28	
VIK	87.01	343.8				23	13	12					
REYKJAVIK	87.11	345.3	12	35A	1						16	3	PP
UCCLE	87.20	326.0	12	35	0						16	1	PP
PRATO	87.35	317.7	12	37	2	23	8	4					
REGGIO CALA.	87.36	311.0	12	28	-7	22	59	-5			15	57	PP
MESSINA	87.38	311.1	12	34A	-2	23	5	0	13	4	15	59	PP
EDINBURGH	87.40	332.8	12	29	-7	22	51	-14	13	9	15	57	PP
DURHAM	87.49	331.4	12	36A	0	23	8	2	13	10			
DOURBES	87.49	325.4	13	6	30								
ROME	87.53	315.5	12	38A	2	23	9	3	13	8	15	59	PP
PAVIA	87.80	319.6	12	37A	-1	22	55	-14			16	5	PP
NEUCHATEL	88.05	321.9	12	38	-1	22	56	-15			16	8	
CORVALLIS	88.35	40.8	12	43	3								
BANFF	88.62	32.4	13	43K	61								
KEW	89.08	328.4	12	42A	-2	23	21	1	13	15	16	13	PP
PARIS	89.37	325.2	12	45	0	23	24	1					
MONACO	89.64	319.1	12	45A	-1						16	22	PP
ARCATA	89.92	44.2				23	10	-18	13	50	23	36	
FERNDALE	89.97	44.5	12	55	7	22	53	-36					
RATHFARNHAM	90.52	332.2	12	51A	1	23	38	5	13	25	16	24	PP
CLERMONT-FD.	90.91	322.5	12	52A	0	23	43	6					
SHASTA	91.09	43.6	12	54A	1								
HUNGRY HORSE	91.19	33.9	12	55A	1						16	27	PP
WILKES	91.25	184.9	12	43	-11	23	17	-23	13	24	16	14	PP
UKIAH	91.44	45.3	12	56A	1						16	36	PP
JERSEY	91.45	327.4				23	37	-4			16	36	PP
MINERAL	91.78	43.6	12	57A	1								
SASKATOON	92.04	27.9	13	1	4	22	56	-51			16	26	PP
TERRE ADELIE	92.46	172.7	12	55	-4	23	16	-35					
BERKELEY	92.77	45.9	13	1A	0	23	25	-28	13	46	16	44	PP
RENO	93.37	43.4	13	5A	1								
BUTTE	93.47	35.0	13	4A	0	23	25	-34			17	47	*SPP
LICK	93.48	46.1	13	5A	1								
RUHANGABO	93.65	270.2	13	5	0						17	22	*PPP
ASTRIDA	93.82	268.9	13	4A	-2	23	33	-29					
MIRNY	93.86	191.5	13	5	-1	23	26	-37					
VINEYARD	93.98	46.4	13	8	2								
BARCELONA	94.16	319.5	13	1	-6	24	6	1					
BOZEMAN	94.49	34.6	13	10A	1				13	49	14	33	
LWIRO	94.52	269.6	13	9A	0	23	37	-31					
UVIRA	94.73	268.4	13	8A	-2	23	39	-31					
FRESNO	95.01	45.7	13	13A	2								
TAHITI	95.48	106.9	13	18	5	24	39	23					
TORTOSA	95.50	319.8	13	17	4	24	17	0					
EUREKA	95.77	41.7	13	15A	1						30	7	PKKP
ALGIERS UNI.	96.45	315.4	13	16	-2	23	39	-46			17	9	PP
SALT LAKE C.	97.35	38.6	13	23A	1	23	47	-45					
PASADENA	97.63	47.0	13	24A	1	24	26	-9			17	22	PP
ALICANTE	97.65	318.4	13	13	-10	24	17	-18			17	20	PP
BOULDER CITY	98.67	43.8	13	29A	1				13	59	17	30	PKP
RELIZANE	98.67	315.9	13	26	-2	24	0	-43			17	17	PP
TOLEDO	98.73	321.4	13	28A	0	24	48	4	14	4	17	28	
RAPID CITY	99.53	31.7	13	33K	1						16	35	PP
ELISABTHVLLE	99.57	261.6	13	35A	3	24	6	-45	14	2	17	50	PP
ALMERIA	99.83	318.3	13	34A	1	24	58	5			17	39	PP
GRANADA	100.29	319.2	13	39K	4	26	3	66			17	45	PP
SERRA PILAR	100.34	324.8	13	36K	1	24	25	-32			17	46	PP
LARAMIE	100.38	34.9	13	43	8								
LCO. MARQUES	100.61	246.3	13	56	20						17	43	PP
COIMBRA	100.92	324.0	13	39A	1						27	32	PPS
MALAGA	101.07	319.3	13	38A	0	25	18	15	14	6	17	42	PP
BOULDER	101.46	35.6	13	41	1								
CAPE HALLETT	102.14	166.7	13	48	5	24	51	-21	14	18	17	55	PP

LISBON	102.37	323.4	13	45K	1	24	15	-59			17	57 PP
TAMANRASSET	102.87	302.7	13	46	0	24	18	-60			18	0 PP
TUCSON	103.60	44.5	13	52A	2	25	11	-14	14	39	18	4 PP
TUCSON TELE.	103.61	44.4	13	52A	2				14	38	17	30 PKP
PRETORIA	104.23	248.0	13	23	-29							
SCOTT BASE	105.66	171.2	14	4	777	25	48	0			18	18 PP
LAWRENCE	107.24	30.2	14	8	777						18	35 PP
SEVEN FALLS	107.33	9.7	14	5	777	24	25	0			18	48 PP
SHAWINIGAN	107.56	11.2	14	8	777	24	40	0				
GRAHAMSTOWN	108.08	241.1	18	19	777							
KIMBERLEY	108.09	246.2	14	15	777							
OTTAWA	108.09	13.6	14	10	777	24	39	0			18	43 PP
BREBEUF	108.42	12.1	14	11A	777	25	28	0				
CHIHUAHUA	109.06	44.4	18	11	777	24	43	0			18	37 PP
FLORISSANT	109.50	26.9	14	16	777	24	45	0			18	50 PP
ST. LOUIS 1	109.69	26.9	14	14	777	24	46	0			18	52 PP
FAYETTEVILLE	110.07	31.2	14	20A	777							
TERRE HAUTE	110.09	24.5	17	28	-50	24	3	-43				
CLEVELAND	110.28	19.2	14	21	777	24	45	-1	14	58	18	13 PKP
ANGRA DO HO.	110.85	335.2									19	9 PP
PONTA DELGDA	111.04	333.6									19	6 PP
DALLAS	111.36	35.1	14	30	777							
PENNSYLVANIA	111.93	16.7	14	31	777	24	53	0			19	13 PP
LITTLE ROCK	112.00	30.7	14	27	777							
MORGANTOWN	112.45	18.8	14	32A	777						19	14 PKP
MAZATLAN	112.54	48.9									19	16 PP
PALISADES	112.68	13.6	14	35	777	25	2	6	15	4	19	12 PP
WINDHOEK	112.70	254.8	17	48	-35							
FORDHAM	112.84	13.6	15	35	777						17	42
GEORGETOWN	113.93	16.8	18	25	-1	25	39	38			19	12 PP
WASHINGTON	113.93	16.8	14	36K	777	25	39	38	15	17	19	16 PP
HERMANUS	114.25	241.8				25	6	4				
SOUTH POLE	114.70	180.0	14	33	777						19	33 PP
CHAPEL HILL	116.14	19.6	18	35	5						19	38
GUADALAJARA	116.33	48.8									19	39 PP
COLUMBIA	117.26	22.1	14	57	777						18	34 PKP
BYRD STATION	119.03	169.8	15	7	777	25	08	-11	15	22	19	46 PP
TACUBAYA	119.99	46.8	18	41	4						19	52 PP
VERA CRUZ	122.13	44.5									20	25 PP
BERMUDA	122.65	7.5	15	3	777	25	23	-9			19	43 PP
MBOUR	124.64	310.4	18	49	3						20	37 PP
MERIDA	124.66	37.5									20	35 PP
COMITAN	126.85	43.3									21	6 PP
HALLEY BAY	126.95	189.2	18	38	-13							
SAN JUAN	136.17	12.2	19	1K	-7						21	48 PP
ST. KITTS	137.73	7.8	19	7	-4						22	37
ANTIGUA	138.21	5.6	19	7	-5						22	37
ARGENTINE I.	139.35	175.5	20	11	57						23	38
BALBOA HTS.	139.97	35.7	19	7	-8						23	1 PP
GALERAZAMBA	140.47	28.5	19	24	8						22	27 PP
FORT FRANCE	140.48	5.9	19	9	-7							
ST. VINCENT	142.01	6.4	19	17	-2						19	58
GRENADA	143.07	7.3	19	18	-3							
CARACAS	143.62	16.2	19	18A	-4	26	24	6				
TRINIDAD	144.49	7.0	19	23	0							
CHINCHINA	145.39	33.6	19	25	0						23	8 PP
BOGOTA	146.45	31.5	19	30	3						23	19 PP
HUANCAYO	158.68	56.6	19	49	5						24	6 PP
LA PAZ	166.87	52.8	19	55A	3	26	33	-10	20	56	24	39 PP
ANTOFAGASTA	167.93	87.1	20	1	8						27	3
LA PLATA	169.97	176.8	20	3	9						25	3 PP

APRIL 27 9.H 48.M 27.S EPICENTRE -7.11 129.36 DEPTH= 144.KM

DEPTH OF FOCUS= 0.018R

A=-0.62939 B= 0.76729 C=-0.12302 D= 0.7732 E= 0.6342
G= 0.0780 H=-0.0951 K=-0.9924 HT= 6.9

SE= 2.12

	DELTA DEG.	AZ. DEG.	P M	P S	P O-C S	S M	S S	S O-C S	*PP M	*PP S	SUPP. M	SUPP. S
PORT MORESBY	17.75	98.6	3	47K	-12	7	5	-5			4	58
CHARTERS TS.	20.81	129.7	4	31K	-1	8	12	2				
LEMBANG	21.58	269.4	4	37K	-2	8	31	7				

RABAUL	22.88	84.0	4	53	1			5	20		
MANILA	23.10	338.9	4	59	5	8	58	7			
BAGUIO CITY	24.94	339.7	5	13	1	9	23	1			
GUAM	25.53	36.8	5	16	-1	9	23	-9		5	48 PP
PERTH	27.75	205.3	5	37	0	10	12	4		6	23 PP
ADELAIDE	28.99	164.0	5	48A	0				6	18	
MEDAN	32.41	288.2	6	19	1	11	30	9			
HONG KONG	32.80	333.4	6	18	-4	11	23	-4			
RIVERVIEW	33.36	145.8	6	27A	0	11	35	-1			
CANBERRA	33.37	150.0	6	27K	0	11	37	1		7	43 PP
MELBOURNE	33.70	157.4	6	30K	0	11	41	0		7	35 PP
PHU-LIEN	35.61	321.6	6	45	-1	12	8	-2			
NOUMEA	38.78	116.9	7	7	-5	12	56	-2			
ZO-SE	38.80	348.8	7	14	2	12	57	-2	7	47	12 59 SCP
WUHAN	40.03	340.0	7	25K	2	13	15	-2	7	55	9 31 PCP
NANKING	40.23	346.1	7	25	1	13	13	-7	7	59	9 29 PPP
PORT BLAIR	40.95	296.9	7	34	4	13	9	-22			14 22
KUNMING	41.19	321.8	7	34	2	13	34	0			9 12 PP
ABUYAMA	42.17	7.6	7	39K	-1						
MATUSIRO	44.22	10.2	7	55K	-2	14	14	-4	8	28	13 16 PCS
TUKUBASAN	44.27	12.5	7	56A	-1	14	14	-5			8 36
SIAN	45.46	336.1	8	6A	-1	14	33	-3	8	37	8 58 *SP
CHITTAGONG	47.01	309.5	8	10	-9						9 55 PP
PEKING	48.46	346.5	8	28A	-2	15	16	-3	9	4	9 18 *SP
SHILLONG	48.82	313.1	8	32A	-1						
LANCHOW	49.21	332.5	8	36A	0	15	27	-2	9	9	9 27 *SP
CALCUTTA	49.80	307.4	8	41	1	15	30	-7			18 18 SCS
ONERAHI	50.05	131.4	8	45	3				9	22	
VLADIVOSTOK	50.05	2.4	8	42	0	15	40	0			
PAOTOW	50.69	341.0	8	48	1	15	48	-1	9	22	9 39 *SP
CHANGCHUN	50.84	356.2	8	47	-1	15	49	-2	9	21	9 39 *SP
ROXBURGH	51.54	144.8				16	0	-1			17 23
KARAPIRO	51.77	133.4	8	55	0				9	29	13 48
GEBBIES PASS	52.51	141.2	9	13	12						
MACQUARIE I.	52.89	158.8	9	3	0						
CHATRA	53.00	311.3	9	4	0	16	18	-3			
Y.-SAKHLINSK	55.12	11.1	9	20	0	16	47	-2			
UGLEGORSK	57.05	9.9	9	35	2						10 29 *SP
APIA	58.15	101.8	9	42	1						
ULAN-BATOR	58.27	342.4	9	44	2	17	32	1			
WILKES	60.43	188.7	9	57	0	17	57	-2			19 33 SCS
BOMBAY	61.42	295.9	9	58	-5						
DEHRA DUN	61.67	309.9	10	6	1	18	9	-5			22 9 SS
IRKUTSK	62.90	343.0	10	14	1	18	34	4			
MIRNY	64.37	195.3	10	22	-1	18	48	0			
PETROPAVLOVK	64.95	19.0	10	26	-1				11	18	
LAHORE	65.07	309.5	10	27A	0	18	52	-4			
WARSAK DAM	68.24	310.8	10	48A	1	19	34	-1			
KARACHI	68.77	301.1	10	49	-2					11	18 PCP
YAKUTSK	68.93	0.2	10	51	-1	19	42	-1			
CAPE HALLETT	69.73	167.7	10	57	1	19	53	1		11	33 PCP
QUETTA	70.34	305.4	11	0A	0	19	57	-2		13	25 PP
NAMANGAN	71.26	317.5	11	7	1	20	6	-4			
SEMIPALATNSK	71.26	329.3	11	5	-1				11	40	
STALINABAD	72.20	314.2	11	11	0	20	21	1			
SCOTT BASE	73.31	172.3	11	16K	-2	20	4	-29			
MAWSON	74.60	201.4	11	25A	0					12	5 PCP
HONOLULU	76.51	66.2	11	37	1				12	12	
KIPAPA	76.61	66.1	11	40	4				12	14	
HAWAII V.OB.	78.70	68.6	11	50	2						
TANANARIVE	80.01	252.1	11	56	1					12	4 PCP
SOUTH POLE	82.93	180.0	12	9	-1	22	13	-2	12	33	15 13 PP
SVERDLOVSK	84.54	329.0	12	17	-1	22	24	-7			
BYRD STATION	86.63	170.6	12	26	-3	22	39	-12	13	5	15 55 PP
TIFLIS	90.64	311.8	12	48	1						
ADDIS ABABA	91.68	278.8	12	56	4						
COLLEGE	93.34	25.1	12	58	-2					30	5 SS
SOTCHI	94.59	313.2				23	26	-37			16 55 PP
KHEYS	94.76	350.2	13	2	-4				13	39	
GRAHAMSTOWN	96.70	235.3	13	17	2						
KSARA	96.80	303.2	13	11	-5					17	11 PP
MOSCOW	96.80	325.3	13	14	-2						
BULAWAYO	97.58	248.6	12	57	-22						
SIMFEROPOL	98.68	314.3				23	48	1		17	28 PP
APATITY	98.80	337.3	16	32	777	23	25	-19			
ASTRIDA	99.23	266.2	13	26	-1						
KIMBERLEY	99.24	239.4	13	28	1						
UVIRA	99.71	265.2	13	29	0						

ELISABTHVLLE	100.17	256.9	13	37	6				17	41 PP
LWIRO	100.19	266.4	13	34	3				17	41
KASTAMONU	101.10	310.7				24	1	2	17	29 PP
HELSINKI	103.29	330.2	13	46	1					
NURMI JARVI	103.39	330.5	13	44	-1					
KIRUNA	103.65	338.3	13	45	-1	24	8	1	32	39 SS
LWOW	105.29	319.7	18	8	5					
RESOLUTE	107.91	11.2	14	5	777				18	25 PP
SKALSTUGAN	108.19	335.2	14	6	777				18	11 PKP
SHASTA	108.43	49.6	18	13	2				29	24 PPS
BERKELEY	108.83	52.5	18	15	3					
MINERAL	109.07	49.9	17	57A	-15				29	23 PPS
LICK	109.38	53.0	18	16A	3				18	58 PP
THULE	110.06	4.4	18	19	5					
RENO	110.54	50.5	18	19	4					
FRESNO	110.90	53.4	18	22	6					
PRUHONICE	111.27	321.0	18	14	-3				19	0 PP
COLLMBERG	111.86	322.7	18	20	2					
PASADENA	112.54	56.1	18	21	2	24	53	4	28	18 PKKP
JENA	112.83	322.6	18	21	1				19	52
EUREKA	113.48	50.1	18	23	2				19	43 PP
BUTTE	114.43	42.5	18	25	2				29	12 PS
STUTTGART	114.97	320.9	18	26	2				19	32 PP
BOZEMAN	115.55	42.5	18	29	4					
TUCSON	118.90	57.1	18	35	3				20	41 PP
TUCSON TELE.	118.98	57.0	18	35	3				21	56 PPP
LARAMIE	120.69	45.8	18	36	1				28	42
FOLINIERE	120.86	323.7	18	37	2					
BOULDER	121.30	47.1	18	39	3					
ALGIERS UNI.	123.04	309.5	18	42	2					
TAMANRASSET	123.88	292.6	18	44A	3				20	33 PP
RELIZANE	125.28	309.1	18	46	2				20	31 PP
GRANADA	127.89	312.2	18	51A	2					
FAYETTEVILLE	130.90	47.6	18	58A	3				22	6 PKS
LISBON	131.16	316.5	18	59K	4				22	10 PKS
TACUBAYA	131.34	70.5	19	1	5				22	13 PKS
OTTAWA	136.10	25.5	18	56	-8				22	22 PKS
SHAWINIGAN	136.34	22.1	19	1	-4				22	23 PKS
SEVEN FALLS	136.55	20.0	19	5	0				22	24 PKS
MORGANTOWN	138.28	34.6	18	59	-9				22	30 PKS
PALISADES	140.39	28.0	19	5	-7				22	31 PP
WASHINGTON	140.39	33.0	19	13	1				22	31 PP
FORDHAM	140.53	28.1	20	13	60					
COLUMBIA	141.23	42.2	19	12	-2				22	39 PP
CHAPEL HILL	141.30	38.1	19	11	-3				22	40
ANTOFAGASTA	143.83	148.3	19	23	5					
MBOUR	146.18	285.2	19	26	4				22	51 PP
HUANCAYO	148.93	127.6	19	32A	5				23	0 PP
LA PAZ	150.85	143.7	19	35	5				42	15 SS
CHINCHINA	155.07	93.5	19	39	3				20	7 PKP2
BOGOTA	156.56	94.8	19	41	3				20	5 PKP2
SAN JUAN	161.22	51.9	19	44	1	20	29		21	9 PP
CARACAS	163.55	77.0	19	47K	2				24	58 PP
ANTIGUA	165.79	45.2	19	49	2				20	48 PKP2
ST. VINCENT	167.93	59.3	19	51	2					

APRIL 27 12.H 47.M 31.S EPICENTRE 0.13 123.51 DEPTH= 214.KM

DEPTH OF FOCUS= 0.029R

A=-0.55202 B= 0.83383 C= 0.00218 D= 0.8338 E= 0.5520
G=-0.0012 H= 0.0018 K=-1.0000 HT= 7.2

SE= 2.59

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
MANILA	14.58	350.2	3	21	3	6	9	15					
BAGUIO CITY	16.45	350.0	3	40	0	6	47	12					
LEMBANG	17.29	246.1	3	49	-1						4	37	
HONG KONG	23.84	338.2	4	46	-9	9	5	13					
PORT MORESBY	25.37	112.5	5	7A	-2								
CHARTERS TS.	29.95	133.2	5	48	-2						8	49	PCP
ABUYAMA	36.36	16.9	6	46K	1								
ADELAIDE	37.66	159.3	6	55K	-1								
MATUSIRO	38.73	19.1	6	52A	-13				9	14	9	40	PPP
BRISBANE	39.46	136.5	7	20A	9				8	0			

SHILLONG	39.65	312.1	7	13K	0						
CANBERRA	42.53	148.6	7	36A	0	8	12	9	26	PPP	
RIVERVIEW	42.59	145.2	7	37K	0	8	6				
KARAPIRO	60.97	134.5	9	52	-1						
QUETTA	61.42	304.6	9	56	0	10	36				
YAKUTSK	61.91	3.3	9	57	-2						
TERRE ADELIE	67.99	172.5	10	34	-4						
MIRNY	69.95	192.5	10	50	0						
SVERDLOVSK	75.38	329.6	11	21	-1						
HONOLULU	79.14	68.5	11	45	3						
SCOTT BASE	81.25	171.6	11	53K	0						
HAWAII V.OB.	81.68	70.5	11	58	2						
COLLEGE	89.32	25.3	12	33	0	13	17				
SOUTH POLE	90.12	180.0	12	38	1						
BYRD STATION	94.66	171.0	12	59	1						
KIRUNA	94.81	338.2	12	58K	0						
ELISABTHVLLE	95.99	258.4	13	9K	5						
NORD	96.36	354.6	13	4	-1						
SKOPJE	98.91	312.4	12	37	-40						
RESOLUTE	101.90	9.7	13	30	0					15	18
TRIESTE	103.62	317.2								27	7 PS
EUREKA	113.06	46.4	15	29	777						
TAMANRASSET	115.61	295.3	18	20	3						
OTTAWA	131.58	18.1	18	50	3						

APRIL 27 13.H 9.M 21.S EPICENTRE 33.23 92.68 DEPTH= 0.KM

A=-0.03916 B= 0.83723 C= 0.54545 D= 0.9989 E= 0.0467
G=-0.0255 H= 0.5449 K=-0.8381 HT= 0.7

SE= 2.88

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
TOCKLAI	6.71	163.8	0	53	-49							
SHILLONG	7.67	185.5	1	53	-3	3	10	-14				
CHATRA	7.97	218.2	1	48	-12						4	29
WUWEI	9.37	57.2	2	21	2							
LANCHOW	9.61	69.7	2	23	1	4	7	-5				
CHENGTU	9.96	101.9	2	29A	2	4	22	1				
CHITTAGONG	10.86	184.2	2	39A	-1	4	38	-5			2	47 PP
TIENSHUI	10.95	79.3	2	43	2							
CALCUTTA	11.33	200.9	2	34	-12	4	38	-17				
KUNMING	11.95	130.4	2	53	-1	5	1	-9				
DEHRA DUN	12.78	260.8	3	10	4	5	26	-4				
SIAN	13.57	81.3	3	16	0	5	43	-6				
AGRA	14.06	248.2	3	17	-6							
LAHORE	15.59	268.8	3	39A	-4	6	34	-3			6	43 SS
PAOTOW	15.68	57.2	3	42	-2							
VIZIANAGRAM	17.18	211.1	4	10	7							
PHU-LIEN	17.52	131.5	4	5	-2	7	30	9			4	31 PPP
WARSAK DAM	17.62	278.3	4	7	-1							
ULAN-BATOR	18.17	32.0	4	16	1	7	46	10				
NAMANGAN	18.43	300.8	4	19	1							
WUHAN	18.78	92.3	4	24A	1	7	54	4				
SEMIPALATNSK	19.45	335.6	4	30	-1	8	7	2				
PEKING	20.01	63.5	4	37	0	8	24	7				
STALINABAD	20.06	292.1	4	32	-6							
HYDERABAD	20.28	222.6	4	40	0	8	34	11			5	3 PP
IRKUTSK	20.81	20.4	4	47	2							
PORT BLAIR	21.46	179.9	4	53	1	8	53	7			5	16 PP
HONG KONG	21.87	114.4	4	54	-2	8	52	-2			5	23 PP
NANKING	22.01	85.9	4	59A	1	9	0	4				
QUETTA	22.08	269.0	4	57A	-1	9	1	3			9	34 SS
BOMBAY	22.79	236.1	5	30	25	9	20	10				
MADRAS	23.15	212.5	5	10	1	9	31	14			5	44 PP
KARACHI	23.46	258.4	5	19	7							
ZO-SE	24.19	87.3	5	23A	4	9	44	9				
CHANGCHUN	27.47	57.8	5	50	0							
MEDAN	30.03	168.0	7	19	66						12	30
BAGUIO CITY	30.22	116.8				10	53	-17				
VLADIVOSTOK	32.12	60.5									13	39 SS
SVERDLOVSK	32.20	326.8	6	34	2	11	48	3				
MAKHACH-KALA	36.48	298.9	7	10	2							
YAKUTSK	37.20	28.0	7	14	-1							
MATUSIRO	37.24	71.8	7	13	-2	13	6	3				

TIFLIS	38.51	296.9	7	28	2	13	21	-1								
TUKUBASAN	38.79	71.9										16	25	SS		
SOTCHI	42.13	300.2										9	37	PP		
MOSCOW	43.83	318.0	8	8	-1											
SIMFEROPOL	46.01	302.6	8	28	1											
KSARA	46.82	287.2	8	36	3	15	37	13				10	26	PP		
APATITY	48.07	333.7	8	45	2	15	36	-5								
PULKOVO	48.15	323.0				15	36	-7								
KASTAMONU	48.99	298.4	8	41	-9							17	27			
KHEYS	49.62	351.5	8	44	-11											
PETROPAVLOVK	50.14	45.8										20	14	SS		
LWOW	52.18	310.2	9	16	2							20	47			
KIRUNA	53.01	333.1	9	23	2	16	50	0								
UPPSALA	54.55	323.2	9	31	-1											
ADDIS ABABA	55.06	256.8	9	35	-1											
SKALSTUGAN	56.61	328.1	9	46	-1											
PRUHONICE	58.14	311.9	10	0	2							10	31			
COLLMBERG	58.75	313.7	10	3	1											
HALLE	59.32	314.2	10	3	-3							10	50			
NORD	60.09	350.8	10	9	-2											
KEW	66.54	317.1				20	3	19								
ASTRIDA	69.13	252.2	11	12	2											
THULE	69.95	355.3	11	13	-2											
COLLEGE	71.52	23.1	11	24	0											
RESOLUTE	72.25	2.1	11	27	-2	20	55	4								
CHARTERS TS.	73.60	127.9	11	27	-10											
TAMANRASSET	75.62	287.9	11	48	0											
ELISABTHVLLE	76.44	246.2	11	57	4											
ADELAIDE	80.38	143.1	12	15A	0											
BULAWAYO	80.93	238.8	12	16	-1											
EUREKA	102.94	22.4	18	16	-3											
SOUTH POLE	123.06	180.0	18	59	1											

APRIL 28 11.H 9.M 35.S EPICENTRE 14.54 -92.50 DEPTH= 52.KM

DEPTH OF FOCUS= 0.003R

A=-0.04230 B=-0.96745 C= 0.24951 D=-0.9990 E= 0.0437
G=-0.0109 H=-0.2493 K=-0.9684 HT= 5.8

SE= 2.28

	DELTA DEG.	AZ. DEG.	P M	P S	P O-C S	S M	S S	S O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
SAN SALVADOR	3.28	103.9	0	52	2	1	29	1					
OAXACA	4.79	301.5	1	9A	-2						1	42	
VERA CRUZ	5.79	323.6	1	22	-3	2	19	-12					
MERIDA	6.94	22.9	1	42	0	2	34	-26					
PUEBLA	7.05	310.1	1	44	1						1	54	
TACUBAYA	8.02	307.9	1	57A	1								
GUADALAJARA	11.98	302.2	2	51	1						3	13	
MANZANILLO	12.18	293.2	2	54	1	5	10	2			5	33	SS
BALBOA HTS.	13.83	112.2	3	13	-2								
MAZATLAN	15.70	305.2	3	40	1						7	1	SS
CHIHUAHUA	18.84	320.3	4	11	-7	7	31	-12			8	11	SS
CHINCHINA	19.15	118.1	4	21	-1	8	4	14			4	38	PP
LITTLE ROCK	20.15	0.4	4	34	2								
BOGOTA	20.66	116.7	4	41	3	8	32	11			5	1	PP
FAYETTEVILLE	21.51	356.3	4	50	4	8	59	22					
COLUMBIA	21.98	26.2	4	53	2	9	0	15					
ST. LOUIS 1	24.09	4.4	5	11A	-1	9	18	-5					
FLORISSANT	24.24	4.1	5	12A	-1	9	37	12					
TUCSON TELE.	24.29	320.0	5	15	2	9	42	16					
TUCSON	24.30	319.6	5	15	1	9	45	19					
LAWRENCE	24.45	354.8	5	25	10								
CHAPEL HILL	24.47	27.1	5	17	2						5	25	
TERRE HAUTE	25.23	9.3	4	55	-28								
CARACAS	25.28	96.2	5	9	-14	9	55	12					
SAN JUAN	25.58	77.8	5	28	2								
MORGANTOWN	27.32	21.5									6	16	PP
BOULDER	27.76	338.6	5	46	0								
GEORGETOWN	27.82	26.4	5	46	0	10	41	17					
CLEVELAND	28.48	17.5	5	52	0	10	47	12			6	49	PPP
ST. KITTS	28.75	80.4	5	53	-2								
PENNSYLVANIA	29.11	23.2	5	58	0	10	54	9					
BOULDER CITY	29.25	320.9	6	1	2	11	33	46			7	35	
GRENADA	30.04	91.0	6	6	0								

ANTIGUA	30.28	81.1	5 59	-9						
PASADENA	30.31	314.6	6 8A	-1	11 12	8			7 36	PP
FORT FRANCE	30.33	85.6	6 9	0	11 47	43				
ST. VINCENT	30.34	88.7	6 13	4						
FORDHAM	30.83	28.2	6 14A	1						
PALISADES	30.94	28.0	6 11A	-3	11 16	2	6 32		7 14	PP
BERMUDA	30.95	50.2	6 13	-1	11 10	-4			7 13	PP
SALT LAKE C.	31.10	330.8	6 16	0	11 26	10			6 53	
HUANCAYO	31.43	146.4	6 32	14	11 31	10				
EUREKA	32.28	324.7	6 27	1					37 54	PKPPKP
OTTAWA	33.87	21.4	6 39A	-1	11 56	-3				
LICK	34.43	316.7	6 45A	1						
RENO	34.55	321.3	6 47A	1						
BREBEUF	34.74	23.5	6 45A	-2						
BOZEMAN	34.75	337.0	6 49	2						
BERKELEY	35.13	317.0	6 51A	1	12 29	10			8 19	PP
BUTTE	35.63	335.8	6 56	1					8 25	PP
SHAWINIGAN	35.94	23.4	6 57	0						
MINERAL	36.14	320.9	6 50A	-9					9 24	PCP
UKIAH	36.45	318.0	7 1	-1	12 51	12				
SHASTA	36.83	320.8	7 5	0						
SEVEN FALLS	37.17	24.7	7 6	-2						
ARCATA	37.98	319.8	7 14	0						
HUNGRY HORSE	38.11	336.6	7 15	-1	13 7	3			9 32	PCP
LA PAZ	39.12	141.1	7 25A	1	13 25	5			9 1	PP
SASKATOON	39.16	346.2	7 34	10					18 50	
CORVALLIS	39.74	325.1	7 30A	1						
BANFF	40.98	337.9	7 39K	0						
VICTORIA	42.38	329.5	7 52K	1	14 15	7			17 55	SS
HORSESHOE B.	42.89	330.6	7 55A	0	14 23	7			17 34	SS
ALBERNI	43.57	329.5	8 1	1	14 34	9				
ANTOFAGASTA	43.67	150.0	8 1	0						
SANTA LUCIA	52.05	156.8	9 1	-6	16 28	3				
SITKA	53.33	332.4	9 17	1	17 0	18				
LA PLATA	59.12	147.1	9 57A	0	17 55	-4			12 0	PP
RESOLUTE	60.15	359.3	10 2A	-3	18 15	3			13 44	PPP
KIPAPA	62.32	286.8	10 17	-2						
HONOLULU	62.41	286.6	10 19	-1	18 48	7				
COLLEGE	62.55	336.7	10 19	-2	18 48	5			12 44	PP
THULE	63.18	6.2	10 22	-3					11 2	PCP
REYKJAVIK	68.57	26.4	11 25	26						
MBOUR	72.78	79.2	11 24	-1	20 50	5				
NORD	73.64	8.5	11 27A	-3	20 51	-4				
RATHFARNHAM	76.24	38.1	11 43A	-2					13 5	
COIMBRA	76.29	51.6	11 55A	10						
ABERDEEN	78.14	33.8	11 53K	-2	21 45	1			14 49	PP
DURHAM	78.80	36.2	11 58K	-1					14 5	
JERSEY	79.41	41.9	11 57	-5	20 52	-66				
TOLEDO	79.66	51.4	12 3	-1	22 1	1			16 55	PPP
MALAGA	79.96	54.6	12 6K	1					15 17	PP
KEW	80.12	39.4	12 5A	-1	22 5	0			27 39	SS
GRANADA	80.51	54.1	12 10K	2	22 12	3			15 25	PP
FOLINIERE	80.53	42.1	12 8	0						
BERGEN	81.30	29.8	12 15	3	22 22	5			22 34	SKS
ALMERIA	81.46	54.2	12 12	-1	22 23	4			15 27	PP
PARIS	82.44	41.6	12 19	1	22 27	-2				
ALICANTE	82.69	52.4	12 22	3	22 42	11			28 4	SS
TORTOSA	82.88	49.8	12 59	39	22 34	1				
UCCLE	83.14	39.4	12 21	-1	22 36	0				
DE BILT	83.31	38.0	12 23A	0	22 37	-1			31 55	SS
APIA	83.34	253.9	12 31	8						
CLERMONT-FD.	83.58	44.5	12 24K	0	22 54	14				
KHEYS	83.78	5.8	12 26	1						
WITTEVEEN	84.00	37.0	12 25	-1						
RELIZANE	84.08	54.7	12 22	-4					12 57	
MUNSTER	84.79	37.7	12 30	0						
BENSBERG	84.82	38.8	12 31	1	23 16	23				
KIRUNA	84.97	20.5	12 30A	-1	22 51	-3			12 56	
GOTEBORG	85.39	31.4	12 32	-1						
ALGIERS UNI.	85.79	53.3	12 33	-2	22 59	-3			23 19	SCS
NEUCHATEL	85.81	42.6	12 33	-2						
STRASBOURG	85.88	40.9	12 33A	-2	22 55	-8			15 49	
BASLE	86.07	42.0	12 32	-4						
COPENHAGEN	86.32	33.3	12 37A	-1	23 34	27			15 59	PP
TUBINGEN	86.72	40.7	12 38A	-1						
STUTTGART	86.72	40.5	12 39A	0	23 5	-6			14 29	
EBINGEN	86.76	41.1	12 39	-1						
MONACO	87.09	45.6	12 40	-1						

SODANKYLA	87.27	19.8	12	41	-1					
UPPSALA	87.30	28.3	12	43A	1	23	5	-12	16	26 PP
SONNEBERG	87.43	38.5	12	42	-1					
JENA	87.47	37.9	12	43	0	22	17	-61	16	3 PP
HALLE	87.50	37.3	12	40	-3	23	20	2	16	5 PP
PAVIA	87.83	43.9	12	45A	0				16	20 PP
POTSDAM	87.84	36.2	12	45	0	23	9	-13	16	8 PP
PLAUEN	87.96	38.2	12	45	0				16	11 PP
COLLMBERG	88.18	37.2	12	46	0	22	52	-33	23	15 SKS
APATITY	89.31	18.1	12	51A	-1	23	18	-17	16	16 PP
PETROPAVLOVK	89.39	325.2	12	53	1					
PRAGUE	89.48	38.1	12	54	1	23	48	11	16	25 PP
PRATO	89.56	44.7	12	53	0					
PRUHONICE	89.59	38.1	12	53A	0	23	44	6	16	26 PP
TOLMEZZO	89.96	41.8	13	1	6	23	47	6	13	51
NURMIJARVI	90.11	26.1	12	55	-1					
TRIESTE	90.70	42.3	12	58	0	23	52	4	24	49 SP
ROME	91.20	46.2	13	0	-1	23	44	-8	24	43 PS
TAMANRASSET	91.64	66.1	13	3	0	24	14	18	16	51 PP
RACIBORZ	91.70	37.1	13	3	0				14	40
BRATISLAVA	91.84	39.1	13	2	-2	23	57	-1		
ZAGREB	92.08	41.6	13	11	6	23	36	-24	25	35 PS
WARSAW	92.35	34.4	13	6A	0	23	37	-25	16	42 PP
PULKOVO	92.89	25.2	13	7	-1	23	55	-12		
MESSINA	94.75	48.7							17	13
LVOW	95.16	35.6	13	18	-1	24	13	-14		
BELGRADE	95.36	41.2				24	21	-7	17	11 PP
T.MISOARA	95.43	40.1	14	19	59	23	52	2		
BYRD STATION	95.46	184.6	13	20	0	23	54	3	30	13 PKKP
YAKUTSK	96.79	341.4	13	26	0					
SKOPJE	97.26	43.4	16	20	777	23	30	-37	24	13 SCS
SOFIA	98.19	42.1	13	35	2	24	36	-16	17	25
MOSCOW	98.47	25.9	13	35	1					
BUCHAREST	99.10	35.6	14	15	38				16	42 PP
KASTAMONU	103.63	40.4	18	16	4				18	46 PP
SOUTH POLE	104.45	180.0	14	2	1				18	36
CAPE HALLETT	105.94	198.4	14	7	777	24	52	11	18	36 PP
SCOTT BASE	106.39	192.5							18	37 PP
LEOPOLDVILLE	108.26	89.8	18	47A	777				28	14 SP
TUKUBASAN	109.20	317.1	14	13A	777	26	23	-4	18	53 PP
MATUSIRO	110.23	318.4	14	25	777				18	58 PP
KSARA	111.24	44.4	14	34	777	25	10	6	19	10 PP
TIFLIS	111.55	33.1	18	57	29	25	18	13		
IRKUTSK	111.89	348.9	14	38	777				28	39 PS
MAKHACH-KALA	112.03	30.6	19	5	36					
SEMIPALATNSK	115.03	5.1							19	37 PP
ULAN-BATOR	115.45	345.7	14	49	777				19	42 PP
HERMANUS	115.90	121.4							19	46 PP
PEKING	119.51	335.0	18	46	2				20	9 PP
RIVERVIEW	119.74	239.2	18	33A	-11	25	51	15		
KIMBERLEY	120.61	114.9	18	48A	2					
LWIRO	120.83	83.9	15	18A	777				20	18 PP
RUMANGABO	121.09	82.7	18	50	3					
PAOTOW	121.30	340.0	18	49	2				20	22 PP
UVIRA	121.46	85.1	18	51	3					
PORT MORESBY	121.55	267.8				25	53	11	20	21 PP
ELISABTHVLLE	121.55	94.8	18	53A	5				30	11 SP
ASTRIDA	121.82	84.0	18	52	4					
NAMANGAN	122.85	14.2	18	53	3					
BULAWAYO	123.75	104.7	18	54	2					
CHARTERS TS.	123.86	255.5	18	54	2				20	35 PP
WILKES	126.13	191.3							20	49 PP
ADDIS ABABA	126.30	67.1	19	23A	26					
LANCHOW	127.34	343.4	19	2A	3				20	58 PP
SIAN	127.37	337.6	19	1A	2				20	57 PP
MIRNY	127.91	182.8	19	1	1				21	13 PP
WUHAN	128.17	330.0	19	3	2				21	7 PP
WARSAK DAM	129.40	17.2	19	4A	1					
ADELAIDE	129.83	236.5	19	5	1				22	29 PKS
QUETTA	131.33	23.9	19	10A	3				21	29 PP
LAHORE	132.46	15.3	19	10A	1				22	36 PKS
DEHRA DUN	134.48	11.5	19	22	9				22	45
HONG KONG	135.01	324.0							21	55 PP
BAGUIO CITY	135.12	312.1							21	27 PP
KARACHI	135.20	26.6	19	19	5				22	55 PKS
MANILA	136.02	309.7	19	20	5				22	13
AGRA	137.57	12.6	19	7K	-11				21	51 PP
KUNMING	137.95	339.2	19	22A	3				22	6 PP
CHATRA	138.88	0.4	19	21	0				22	55 PKS

SHILLONG	139.90	353.9	19 13	-9			
PHU-LIEN	140.16	331.4			22 17	PP	
TANANARIVE	141.55	102.2	19 25	-1	22 30	PP	
CHITTAGONG	143.08	353.3	19 29	1	22 57	PKS	
CALCUTTA	143.15	358.7	19 28	0	41 36	SS	
BOMBAY	143.76	23.9	19 30	1	23 13	PP	
POONA	144.49	22.7	19 31	0			
HYDERABAD	147.00	16.0	19 40	5			
VIZIANAGRAM	147.30	7.1	19 39	4			
PERTH	148.87	231.3	19 41	3	33 42		
MADRAS	151.69	15.2	19 53	11			
PORT BLAIR	153.45	348.5	19 50	5			
COLOMBO	157.39	20.0	19 52	2	31 3		
MEDAN	158.86	327.5	19 55	3			
DJAKARTA	159.26	291.6	19 53A	1	26 6		

APRIL 28 22.H 1.M 3.S EPICENTRE 35.05 140.50 DEPTH= 79.KM
DEPTH OF FOCUS= 0.007R

A=-0.63307 B= 0.52194 C= 0.57167 D= 0.6361 E= 0.7716
G=-0.4411 H= 0.3637 K=-0.8205 HT= 0.1

SE= 2.46

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
MERA	0.56	257.0	0 13K	-3	0 22	-6		
TYOSI	0.73	23.?	0 17A	-1	0 28	-3		
YOKOHAMA	0.79	299.1	0 16K	-2	0 28	-3		
TOKYO C.M.O.	0.88	316.2	0 18K	-1	0 31	-2		
HONGO	0.89	318.3	0 19K	0	0 33	0		
OSIMA	0.96	253.5	0 18K	-1	0 30	-4		
AJIRO	1.15	270.5	0 21	-1	0 35	-3		
KAKIOKA	1.21	347.8	0 23A	1	0 40	1		
TUKUBASAN	1.21	344.7	0 22K	-1	0 37	-2		
MISIMA	1.27	273.7	0 22	-1	0 35	-6		
MITO	1.33	359.1	0 25	1	0 44	2		
KUMAGAYA	1.43	320.7	0 25	0	0 44	0		
HUNATU	1.48	288.2	0 25	-1	0 42	-3		
TITIBU	1.48	309.2	0 25	-1	0 43	-2		
UTUNOMIYA	1.58	341.4	0 28	1	0 47	-1		
KOHU	1.68	290.8	0 27K	-2	0 48	-2		
SHIZUOKA	1.72	268.0	0 29	0	0 51	0		
MAEBASI	1.78	319.7	0 29K	-1	0 51	-1		
OMAESAKI	1.93	257.2	0 32K	0	0 55	0		
ONAHAMA	1.93	9.7	0 30	-2	0 53	-2		
HATIDYOZIMA	2.02	196.1	0 35	2	0 57	-1		
OIWAKE	2.04	309.5	0 34	1	0 58	0		
SHIRAKAWA	2.08	353.9	0 34	0	0 59	0		
HAMAMATU	2.31	262.6	0 41	4				
MATUSIRO	2.38	309.7	0 37K	-1	1 6	0		0 51
NAGANO	2.47	311.6	0 39	0	1 10	1		
HUKUSIMA	2.70	359.6	0 42	0	1 17	3		
TAKADA	2.74	319.0	0 38	-5	1 17	2		
TAKAYAMA	2.86	293.5	0 45	0	1 22	4		
NAGOYA	2.89	273.4	0 45K	0	1 25	6		
GIHU	3.07	277.6	0 47K	-1	1 35	11		
NIIGATA	3.09	338.3	0 50	2	1 26	2		
TOYAMA	3.14	302.6	0 49	0	1 21	-4		
YAMAGATA	3.20	357.9	0 51	2	1 26	-1		
SENDAI	3.23	5.6	0 49	-1	1 26	-2		
TU	3.28	265.6	0 51	0				
KAMEYAMA	3.31	267.7	0 51	0	1 39	9		
IBUKISAN	3.39	276.8	0 48K	-4	1 37	6		
ISINOMAKI	3.44	10.9	0 52	-1	1 31	-2		
AIKAWA	3.47	329.3	0 53	0				
HIKONE	3.49	274.9	0 53	0	1 26	-8		
HUKUI	3.59	287.4	0 56	1				
TSURUGA	3.67	280.7	0 56	0	1 34	-4		
OWASE	3.68	255.8	0 54	-2	1 35	-4		
WAZIMA	3.72	309.7	0 55	-2				
NARA	3.85	265.9	1 7	8	1 42	-1		
SAKATA	3.88	352.3	1 5	6	1 52	8		
KYOTO	3.91	271.0	0 59	0	2 30	46		
ABUYAMA	4.05	268.9	1 1K	0				

OSAKA	4.10	265.9	1	OK	-2	1	58	9			
MIZUSAWA	4.11	6.9	1	2	0	1	49	0			
MAIZURU	4.13	277.3	1	5	3						
SIOMISAKI	4.23	249.2	1	1	-3	1	49	-3			
KOBE	4.39	266.7	1	6	0	1	55	-1			
WAKAYAMA	4.47	261.0	0	56	-11	1	51	-7			
TORISIMA	4.56	182.1	1	5	-3						
TOYOOKA	4.67	277.5	1	8	-2						
AKITA	4.67	356.2	1	26	16	2	4	1			
MORIOKA	4.67	6.4	1	11	1	1	58	-5			
SUMOTO	4.68	263.0	1	9	-1	1	59	-4			
MIYAKO	4.74	13.9	1	9A	-2	2	0	-5			
TOKUSIMA	4.98	260.4	1	12	-2						
TOTTORI	5.15	276.8	1	16	0						
TAKAMATU	5.36	264.0	1	17	-2	2	14	-6			
OKAYAMA	5.42	268.0	1	19	-1						
AOMORI	5.77	2.1	1	25	0						
YONAGO	5.86	275.8									2 57
KOTI	5.96	257.4	1	28	1	2	36	1			
MATSUE	6.09	275.9	1	32	3						
SIMIDU	6.65	252.2	1	36	-1						
HAKODATE	6.72	1.4	1	39	1						
HAMADA	6.92	271.2	1	43	2	3	2	3			
MORI	7.04	0.4	1	45	2						3 38
URAKAWA	7.31	13.5	1	44	-2	3	4	-5			
HIROO	7.55	16.2									3 9
OOITA	7.58	258.7	1	50	0						
SAPPORO	8.04	4.5									3 49
OBIHIRO	8.14	14.2	1	54	-4	3	26	-3			
HUKUOKA	8.46	262.9									3 38
KUSIRO	8.48	19.8	1	55	-7	3	27	-10			
SAGA	8.64	260.9	2	5	1						
NEMURO	9.16	24.0									3 42
YAKUSIMA	9.58	244.2	2	18	1						
VLADIVOSTOK	10.46	322.9	2	29	0	4	29	4			
PEKING	19.90	291.7	4	23	-5						
GUAM	21.83	168.8	4	45	-2	8	13	-25			
HONG KONG	26.27	248.1	5	44	14	9	55	1			
YAKUTSK	27.84	349.1	5	42	-2						
LANCHOW	29.74	282.8	5	58A	-3						
CHENGTU	30.84	272.3	6	7A	-4						
SHILLONG	42.68	270.9	7	48A	-3						
COLLEGE	51.17	31.4	9	0	3						
LAHORE	54.50	286.4	9	18	-4						
CHARTERS TS.	55.03	173.4	9	25	-1						
KHEYS	55.46	347.8	9	21	-8						
WARSAK DAM	55.73	290.3	9	31	0						
SVERDLOVSK	56.16	319.3	9	36	2	17	16	1			
QUETTA	60.84	288.0	10	6	0						
APATITY	64.19	335.9	10	29	0						
RESOLUTE	64.71	14.0	10	32	0						
SODANKYLA	66.51	337.3	10	43	0						
THULE	67.32	7.1	10	47	-2						
KIRUNA	68.11	339.3	10	53	0				11	13	
PULKOVO	69.52	329.5				20	14	11			
ADELAIDE	69.64	181.6	11	3K	0						
NURMIJARVI	71.35	332.0	11	13	0						
SHASTA	72.90	52.1	11	29	7						
SKALSTUGAN	73.49	338.5									11 48 PCP
EUREKA	77.68	50.4	11	55	5						
KASTAMONU	80.33	314.1	11	55	-9						12 15
RACIBORZ	81.10	326.5	12	8	0						
COLLMBERG	82.45	329.8	12	20	5						
PRUHONICE	82.78	328.2	12	20	3						
JENA	83.31	330.3	12	39	20						
TUCSON TELE.	85.37	53.5	12	36	6						
STUTTGART	85.96	330.1	12	35	2						
TAMANRASSET	108.37	316.5									18 29 PP
SOUTH POLE	124.87	180.0	18	52	1						
BYRD STATION	126.00	167.7	18	55	2						

APRIL 29 0.H 23.M 45.S EPICENTRE 26.99 54.76 DEPTH= 0.KM

A= 0.51493 B= 0.72880 C= 0.45133 D= 0.8167 E=-0.5770
G= 0.2604 H= 0.3686 K=-0.8924 HT= 2.8

The scanned images of the bulletins of the International Seismological Summary (ISS) have been obtained thanks to funding provided by the US National Science Foundation through grant EAR-9725140 (Villaseñor et al., 1997) and collected by SGA Storia Geofisica Ambiente (Bologna) on behalf of the Istituto Nazionale di Geofisica e Vulcanologia (Rome), in the frame of the EUROSEISMOS project.

SE= 2.01

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
QUETTA	11.18	70.6	2 44	0	4 48	-3		
STALINABAD	16.47	42.1	4 1	7				
TIFLIS	16.82	333.4	4 1	3				
KSARA	17.64	297.3	4 11	3	7 24	0		4 32 PP
NAMANGAN	19.74	40.7	4 34	0				
ADDIS ABABA	23.40	223.2	5 12	1				
KASTAMONU	24.38	312.2	5 3K	-18				5 29 PP
SVERDLOVSK	30.12	6.4	6 15	2				
MOSCOW	31.29	341.3	6 23	-1				
CHITTAGONG	33.91	89.6	6 21	-25				
RACIBORZ	36.20	319.5	7 5	-1				
RUMANGABO	37.32	225.1	7 17	2				
TOLMEZZO	38.13	311.7	7 22	0				8 12
PRUHONICE	38.31	317.8	7 24	0				
HELSINKI	38.92	336.7	7 33	4				
NURMIJARVI	39.27	336.9	7 30	-2				
COLLMBERG	39.72	319.1	7 34	-1				
CHUR	40.57	311.5	7 39K	-3				
UPPSALA	41.52	332.6	7 48	-2				
COPENHAGEN	41.78	325.1	7 54	2				
APATITY	42.61	348.1	7 59K	0				
SODANKYLA	43.89	344.7	8 8	-2				
TAMANRASSET	44.64	275.8	8 15A	-1				10 4 PP
SKALSTUGAN	45.73	335.0	8 22	-2				
KIRUNA	45.79	342.6	8 24A	-1				
ELISABTHVLLE	46.67	218.2	8 33	1				
FOLINIERE	47.54	312.5	8 38	-1				
KEW	47.80	316.2	8 38	-3				
MEDAN	47.97	111.2						12 15
KHEYS	53.17	359.4	9 25	3				
KIMBERLEY	62.43	209.7	10 25	-2				
MBOUR	67.51	275.2	10 59	-1				
RESOLUTE	76.68	352.1	11 51	-3				
COLLEGE	86.77	9.5	12 46	-1				

APRIL 29 1.H 35.M 29.S EPICENTRE 46.13 26.22 DEPTH= 0.KM
A= 0.62390 B= 0.30727 C= 0.71857 D= 0.4418 E=-0.8971
G= 0.6446 H= 0.3175 K=-0.6955 HT= -4.0

SE= 4.81

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
BACAU	0.64	46.7	0 27	11	0 45	18		
FOCSANI	0.81	121.8	0 23	4	0 39	8		
IASI	1.42	40.5	0 35	8	0 58	11		
BUCHAREST	1.71	182.9	0 29K	-3	0 47	-7		
KISHINEV	2.01	62.7	0 39	3	1 6	4		
TIMISOARA	3.51	265.6	0 50	-7				2 9
LWOW	3.99	339.0	1 13	9	2 5	13		
SOFIA	4.01	212.1	0 59	-5	1 40	-13		1 53
SIMFEROPOL	5.67	99.2	1 21	-7				
KASTAMONU	5.79	143.7	1 38A	9	2 51	13		
RACIBORZ	6.67	309.3	1 45	3				
VIENNA-H.	7.04	291.1	1 50	3				
PRUHONICE	8.71	300.5	2 13K	3				
TOLMEZZO	9.15	276.4	2 18	1				3 33
COLLMBERG	10.15	305.4	2 32	2				
STUTTGART	11.82	289.1	2 52	-1				
MOSCOW	11.99	32.6	2 52	-3				
HELSINKI	14.09	357.4	3 22	-1				
NURMIJARVI	14.44	356.9	3 25	-3				
GOTEBORG	14.50	328.2	3 34	5				
UPPSALA	14.66	342.7	3 29	-2				3 46
SKALSTUGAN	19.16	340.8	4 22	-6				8 40
SODANKYLA	21.30	0.4	4 43	-8				
APATITY	21.80	7.5	4 49	-7	8 40	-13		
KIRUNA	21.97	354.1	4 52	-5				9 48
SVERDLOVSK	23.70	50.6	5 14	0				

APRIL 30 13.H 25.M 58.S EPICENTRE -56.10 -27.56 DEPTH= 185.KM

DEPTH OF FOCUS= 0.024R

A= 0.49679 B=-0.25933 C=-0.82822 D=-0.4627 E=-0.8865
G=-0.7342 H= 0.3833 K=-0.5604 HT= -7.6

SE= 3.19

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
HALLEY BAY	19.51	179.3	4	10	-5								
ARGENTINE I.	19.88	227.7	4	28	9	8	2	15					
SOUTH POLE	34.08	180.0	6	27	-2	12	28	48	6	52	8	5	PP
BYRD STATION	35.69	197.4	6	42	0	12	39	35	7	10	8	8	PP
SANTA LUCIA	37.23	289.1	6	50	-5	13	2	34					
KIMBERLEY	45.82	75.8	8	10K	5								
SCOTT BASE	46.02	184.2	8	4	-3	14	42	5					
WINDHOEK	46.81	63.0	8	13K	0								
PIETERMZBURG	48.23	81.8	9	24	60								
MIRNY	49.84	153.2	8	34	-2						10	34	
LA PAZ	50.05	305.5	8	38K	0	15	40	7	8	58	16	20	*SS
CAPE HALLETT	51.29	186.9	8	47	0						13	43	PCS
WILKES	54.00	160.4				16	35	8			21	19	
BULAWAYO	54.79	72.8	9	42	29				10	8			
HUANCAYO	57.30	300.6	9	31K	1						12	4	PP
ELISABTHVLLE	61.25	66.2	9	57K	-1				10	22			
LEOPOLDVILLE	61.80	50.3	10	1	0				10	27			
TANANARIVE	66.22	88.7	10	31	1						11	11	
UVIRA	69.07	63.3	10	49K	1				11	12			
LWIRO	69.97	62.3	11	2	9				11	22			
ASTRIDA	70.13	63.4	10	55K	1				11	23			
MBOUR	70.77	10.9	10	49	-9	20	46	50					
RUMANGABO	71.03	62.3	11	1	2				11	21			
BOGOTA	71.44	310.3	11	1	-1	20	41	37			13	51	PP
FUQUENE	72.06	311.0	10	59	-7								
CHINCHINA	72.43	309.0	11	5	-3	21	39	84			13	57	PP
CARACAS	73.97	319.5	11	13K	-4	21	6	34					
ST. VINCENT	74.54	325.9	11	20	0								
BALBOA HTS.	77.72	307.2	11	36	-2						12	3	
ANTIGUA	78.12	327.3	11	41	1								
ST. KITTS	78.92	325.9	11	44K	0								
SAN JUAN	80.99	323.2	11	54	-1								
TAMANRASSET	83.42	30.5	12	10K	2	22	29	17	12	36			
ADDIS ABABA	84.66	65.3	12	19	5								
MELBOURNE	86.22	174.1	12	22A	0								
ADELAIDE	88.58	168.8	12	33K	0	23	7	6			16	2	PP
CANBERRA	88.90	177.2	12	35A	1								
BERMUDA	93.63	329.2	12	50	-6	24	2	16			16	42	PP
BRISBANE	96.76	180.5	13	11A	1						13	23	
PALISADES	104.40	325.6	14	24	777						18	30	PP
BREBEUF	108.38	327.8									18	34	PP
KASTAMONU	108.90	42.6									18	39	PP
OTTAWA	108.93	326.3									18	37	PP
SEVEN FALLS	109.05	330.3									18	36	PP
RATHFARNHAM	110.43	13.4									18	42	PP
TUCSON	112.59	294.3	18	15	1						19	10	
TUCSON TELE.	112.61	294.4	18	16	2						19	8	
TIFLIS	114.96	51.9									19	8	PP
QUETTA	116.90	75.5	18	25	3	25	8	12			44	46	SS
LARAMIE	117.19	304.1	18	23	0								
BOULDER CITY	117.56	293.9	18	25	1								
PASADENA	117.88	290.2	18	26	2						19	55	
RAPID CITY	118.29	307.5	18	26	1						19	44	PP
SALT LAKE C.	119.76	299.5	18	29	1						19	56	
RABAUL	119.91	179.7	18	29	1								
FRESNO	120.74	291.0	18	32	2								
EUREKA	120.82	295.7	18	31	1						20	7	PP
UPPSALA	121.04	24.7	18	30	-1								
LICK	122.14	290.1	18	35K	2								
WARSAK DAM	122.33	76.1	18	33	0								
RENO	122.83	293.1	18	36K	2								
BERKELEY	122.86	290.1	18	35K	1								
BOZEMAN	123.09	303.7	18	36	2						20	15	PP
HELSINKI	123.15	28.3	18	36	1								
SKALSTUGAN	123.25	20.0	18	34	-1								
NURMIJARVI	123.36	27.9	18	34	-1								
BUTTE	124.06	303.1	18	38	2								
MINERAL	124.35	292.6	18	38	1								
SHASTA	125.02	292.3	18	39A	1								
CHATRA	125.54	94.1	18	38	-1								

HUNGRY HORSE	126.44	304.1	18 41	0			
SHILLONG	127.17	99.2	19 43	61			
NAMANGAN	127.53	70.4	18 44	1			
KIRUNA	128.60	21.2	18 45K	0		19 12	
SODANKYLA	129.55	24.0	18 47	0			
VICTORIA	131.05	298.7	18 50A	0			
APATITY	131.32	26.6	18 49	-1		22 1	
HORSESHOE B.	131.55	299.7	18 50	-1		22 2	
BAGUIO CITY	133.59	135.6				22 12	PCP
NORD	137.59	2.4	18 53	-9		21 48	PP
RESOLUTE	137.82	338.6	18 51K	-11		21 51	PP
LANCHOW	141.79	100.7	19 9	-1			
KHEYS	142.95	16.5	19 14	2			
SIAN	143.19	107.8	19 10	-2			
NANKING	146.47	121.6	19 21	3			
ZO-SE	146.79	125.7	19 21	3			
COLLEGE	150.40	311.7	19 21	-3			
PEKING	151.35	108.7	19 33	8			
MATUSIRO	158.21	147.8	20 11	37		24 15	
CHANGCHUN	158.83	114.0	19 36	1			
YAKUTSK	166.94	53.7	19 42	-1			

MAY 1 7.H 19.M 19.S EPICENTRE -3.93 135.64 DEPTH= 0.KM

A=-0.71336 B= 0.69748 C=-0.06808 D= 0.6991 E= 0.7150
G= 0.0487 H=-0.0476 K=-0.9977 HT= 7.1

SE= 2.42

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
PORT MORESBY	12.65	116.0	3 9	5	5 29	2		3 29 PPP
RABAUL	16.49	91.5	3 54	0				
CHARTERS TS.	19.04	147.9	4 24	-2	8 0	4		
MANILA	23.44	322.0	5 18	6	9 28	6		
LEMBANG	28.05	262.9	5 56	1				
BRISBANE	28.70	146.4	6 17	16	10 48	-2		
ADELAIDE	30.98	175.1	6 22A	1				7 21 PP
RIVERVIEW	33.07	155.9			12 4	6		
HONG KONG	33.47	322.1	6 28	-15	12 9	4		
CANBERRA	33.59	160.0	6 43A	-1				8 4 PP
ZO-SE	37.47	339.4	7 16	-1	13 5	-1		
MEDAN	37.68	281.0	7 18	-1				
ABUYAMA	38.59	359.9	7 28A	2				
NANKING	39.20	337.1	7 32	0	13 36	4		
WUHAN	39.75	331.0	7 37	1				
MATUSIRO	40.34	3.2	7 39	-2	13 48	-2		9 45 PCP
KUNMING	43.07	313.7	8 3	0				
CHENGTU	45.78	320.9	8 25	0				
PEKING	47.26	339.6	8 36	-1	15 30	0		
SHILLONG	51.58	307.1	9 7	-3				
ULAN-BATOR	57.45	337.4	9 54	1				
YAKUTSK	65.92	356.9	10 47	-3				
MIRNY	69.14	196.9	11 10	0				
WARSAK DAM	71.08	307.8	11 21	-1				
QUETTA	73.75	302.8	11 38	0	21 13	4		21 46 SCP
SVERDLOVSK	85.13	327.8	12 48	9				
SOUTH POLE	86.10	180.0	12 42	-2				
TANANARIVE	86.94	251.3	12 51	3				
COLLEGE	87.84	24.6	12 51	-1				
BYRD STATION	88.71	170.3	12 55	-2				
TIFLIS	93.22	311.4						16 25
MOSCOW	97.75	325.6						19 29 PPP
APATITY	98.28	337.7						21 18
KSARA	100.29	303.5	16 14	777				18 48 PP
RESOLUTE	103.54	12.2	14 1	-3	25 53	3		32 53 SS
ATHENS	109.64	308.9						19 0 PP
TAMANRASSET	128.29	296.0	19 9	0				21 53
HUANCAYO	145.35	117.7	19 45	5				
LA PAZ	148.95	131.4	19 51	5				

MAY 1 8.H 24.M 3.S EPICENTRE 36.45 51.23 DEPTH= 44.KM

DEPTH OF FOCUS= 0.002R

A= 0.50487 B= 0.62860 C= 0.59159 D= 0.7797 E=-0.6262
G= 0.3705 H= 0.4612 K=-0.8062 HT= -0.4

SE= 2.78

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
MAKHACH-KALA	7.11	337.3	1	41	-4	2	59	-6					
TIFLIS	7.25	318.4	1	45	-1	3	6	-2					
SOTCHI	11.33	312.4	2	43	1								
KSARA	12.84	262.7	3	6	3	5	41	16			3	22	PP
JERUSALEM	14.06	255.3	3	21	2	6	18	24					
STALINABAD	14.08	76.2	3	22	3								
QUETTA	14.55	111.0	3	29A	4	6	14	8			3	39	PP
SIMFEROPOL	15.48	308.5	3	43	6								
NAMANGAN	16.57	68.0	3	44	-7								
WARSAK DAM	16.78	92.4	3	48	-6								
KARACHI	17.16	123.7	4	3	5								
FRUNSE	19.06	63.2	4	17	-5								
KISHINEV	19.70	309.3	4	26	-3	8	3	0					
FOCSANI	20.27	304.5									9	23	
IASI	20.56	308.8	4	37	-1	8	37	17			5	10	
BUCHAREST	20.66	300.4	4	38A	-1	8	31	9			5	12	
BACAU	20.76	306.7	4	41	1	8	42	18			4	53	
SVERDLOVSK	21.34	14.3	4	42	-4								
MOSCOW	21.39	338.6	4	45	-1	8	32	-4					
ATHENS	21.94	282.3	4	52A	0						5	32	PPP
SOFIA	22.33	294.8	4	57	1	9	8	15					
DEHRA DUN	23.17	97.5	5	9	5	9	11	3			10	26	SSS
LWOW	23.78	312.7	5	11	1	9	27	8					
AGRA	24.53	104.6	5	12K	-5	9	32	0					
BELGRADE	24.69	299.3	5	21K	2								
SEMIPALATNSK	25.07	47.1	5	22	0								
BOMBAY	25.81	126.9	5	35	6	10	1	8			10	24	
KRAKOW	26.32	310.9	5	34	0	10	8	7			6	23	PP
WARSAW	26.49	316.1	5	41	6	10	11	7			11	28	SS
POONA	26.75	125.8	5	34	-4								
PULKOVO	26.96	336.5	5	38	-2								
RACIBORZ	27.39	310.2	5	44	0						6	25	PP
BRATISLAVA	27.60	305.8	5	38A	-8								
VIENNA-K.	28.12	305.8	5	51	1						6	12	
HELSINKI	29.09	332.9	6	3	4								
NURMIJARVI	29.44	333.2	6	0	-2						6	56	PP
PRUHONICE	29.63	308.7	6	3A	-1						9	16	PCP
PRAGUE	29.73	308.9	6	13	8								
COLLMBERG	30.90	310.8	6	15	0	11	21	6			9	10	PCP
PLAUEN	31.25	309.1	6	14	-4						7	27	
HALLE	31.58	310.9	6	16	-5	11	28	2					
SONNEBERG	31.82	308.6	6	23	0								
UPPSALA	31.82	328.0	6	22	-1	11	26	-3			7	21	PP
CHATRA	31.91	97.2	6	18	-6	11	29	-2					
COPENHAGEN	32.48	318.7	6	29	0	11	45	5					
CHUR	32.50	301.8	6	28A	-1								
RAVENSBURG	32.50	303.5	6	31	2								
APATITY	32.75	347.5	6	29K	-2	11	40	-4			7	34	PP
STUTTGART	32.88	305.3	6	32	0								
TUBINGEN	32.94	304.9	6	31	-2								
EBINGEN	32.97	304.2	6	32	-1								
GOTEBORG	33.46	322.0	6	37	0						7	34	PP
STRASBOURG	33.80	304.8	6	39	-1						8	9	PP
BASLE	33.86	302.9	6	39	-2								
MONACO	33.97	296.1	6	41	-1								
SODANKYLA	33.98	343.2	6	41	-1	12	6	3			6	54	PP
NEUCHATEL	34.27	301.9	6	43	-1								
BENSBERG	34.45	309.0	6	47	1	12	18	8					
KIRUNA	35.89	340.6	6	57	-1	12	35	3			14	57	SS
SKALSTUGAN	35.94	331.4	7	3	4						8	14	PP
SHILLONG	36.24	95.8	6	58	-3								
PARIS	37.31	304.9	7	10	0								
CHITTAGONG	37.77	100.4	7	14	0	13	5	4			8	41	PP
KEW	39.18	309.2	7	26A	0	13	27	5					
RELIZANE	40.57	284.6	7	36	-1						9	20	PP
ALICANTE	40.68	288.8	7	27	-11	13	46	1			9	13	PP
TAMANRASSET	41.64	263.9	7	46A	0	14	22	23			9	29	PP
LANCHOW	41.96	74.2	7	49	0	14	9	5			9	53	PP
ULAN-BATOR	41.96	56.2	7	52	3	14	12	8					
ALMERIA	42.60	287.2	7	54K	0								
RUHANGABO	42.76	213.3	7	56K	1						9	44	PCP

RATHFARNHAM	42.85	311.9	7	55A	-1					9	15 PP
TOLEDO	43.02	292.0	7	57	0	14	25	6		17	47
GRANADA	43.37	288.1	8	3A	3	14	10	-15		9	29 PP
KHEYS	43.72	0.2	8	8	5	14	41	12			
ASTRIDA	43.72	212.0	8	OK	-3					9	54 PCP
BANGUI	43.77	231.0	8	0	-3						
LWIRO	43.81	213.4	8	4K	0	14	46	15			
CHENGTU	43.91	81.6	8	7	2	14	35	3			
MALAGA	44.12	287.7	8	4K	-2						
ISFJORD	44.63	349.6	8	5	-5					9	58
UVIRA	44.77	212.2	8	10	-1						
KUNMING	45.18	89.6	8	17	2	14	52	1			
SERRA PILAR	46.07	294.9	8	21K	-1				8 30		
SIAN	46.50	74.8	8	24	-1	15	10	1			
LISBON	47.14	291.9	8	30A	0						
SIDA	48.95	326.6	8	48	4					9	48
PEKING	50.12	65.0	8	56	3						
NORD	50.97	349.9	8	58	-2						
WUHAN	52.32	77.0	9	12	2	16	33	2			
LEOPOLDVILLE	52.71	227.4	9	10A	-3						
ELISABTHVLLE	52.83	209.8	9	12K	-2						
YAKUTSK	53.31	35.2	9	19	2						
CANTON	54.65	85.9	9	30	3	17	6	4			
NANKING	55.00	73.4	9	32K	2	17	10	3			
TANANARIVE	55.18	184.2	9	29	-2						
CHANGCHUN	55.37	57.8	9	34	2						
HONG KONG	55.75	86.2	9	38	3	17	13	-4			
ZO-SE	57.24	73.4	9	48K	2	17	38	2			
THULE	61.25	346.4	10	13	0						
RESOLUTE	66.90	350.7	10	49	-1	19	36	-2			
WINDHOEK	66.98	214.3	10	50K	-1						
MATUSIRO	67.36	60.6	10	55A	2	19	32	-12			
KIMBERLEY	69.47	204.7	11	4K	-2						
COLLEGE	77.91	8.2	11	55	0						
WASHINGTON	91.14	322.2	13	1	-1						
MORGANTOWN	91.96	324.4	13	6	0						
HUNGRY HORSE	94.55	350.2	13	17	0						
RAPID CITY	96.55	341.8	13	26	0						
EUREKA	103.52	349.8	14	2	4						
SOUTH POLE	126.27	180.0	18	57	-1						
BYRD STATION	136.16	182.3	19	17	0						

MAY 3 4.H 41.M 25.S EPICENTRE 12.33 -87.33 DEPTH= 73.KM

DEPTH OF FOCUS= 0.006R

A= 0.04554 B=-0.97616 C= 0.21220 D=-0.9989 E=-0.0466
G= 0.0099 H=-0.2120 K=-0.9772 HT= 6.2

SE= 2.15

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
SANTIAGO MA.	1.60	316.1	0	23	-4	0	43	-4				
SAN SALVADOR	2.32	307.1	0	30	-7	0	57	-7				
COMITAN	6.07	310.5	1	20	-9	2	29	-9			2	52
BALBOA HTS.	8.34	112.9	1	59	-1							
MERIDA	8.85	345.9	2	5	-2	3	50	4				
OAXACA	10.25	298.2	2	39	13	4	23	3			4	19
VERA CRUZ	10.88	310.0	2	39	4	4	51	16			2	53
TACUBAYA	13.40	303.1	3	19K	11	5	59	23			6	19
CHINCHINA	13.69	121.3	3	12	0	6	5	23				
FUQUENE	15.06	115.7	3	27	-3	6	38	23				
BOGOTA	15.18	119.2	3	31	0	6	19	1				
CARACAS	20.08	93.1	3	25A	-65	7	27	-39				
SAN JUAN	21.31	71.0	4	43	1				5	2	8	44 PCP
COLUMBIA	22.32	13.9	4	55	3	9	5	17				
CHIHUAHUA	23.85	315.7				9	28	13			18	15
ST. KITTS	24.28	75.2	5	12	1							
FAYETTEVILLE	24.45	346.5	5	11A	-2							
CHAPEL HILL	24.65	16.3	5	18	3							
GRENADA	25.02	87.9	5	21	3						5	38
DOMINICA	25.35	80.3	5	23	2							
ST. VINCENT	25.43	85.3	5	24	2							
TRINIDAD	25.46	91.1	5	25	3							
FORT FRANCE	25.56	81.6				9	43	6				
ANTIGUA	25.76	76.4	5	21	-4							

HUANCAYO	26.99	153.4	5 38	1	10	23	16				
HORGANTOWN	27.96	12.2	5 47	2							
WASHINGTON	27.99	17.2	5 46	0						7 1	PP
BERMUDA	28.81	42.5	5 43	-10	11	5	29				
TUCSON TELE.	29.28	316.6	5 57	0						9 3	PCP
TUCSON	29.30	316.3	5 59	2						9 3	PCP
PENNSYLVANIA	29.55	14.7	5 59	-1							
PALISADES	30.90	20.0	6 12	0	11	17	8			8 59	PCP
BOULDER	31.82	333.3	6 19	-1							
LARAMIE	33.00	334.3	6 29	-1							
BOULDER CITY	34.19	318.2	6 40	0						9 16	PCP
LA PAZ	34.37	146.0	6 45	3	12	9	6				
OTTAWA	34.41	14.5	6 42A	0							
RAPID CITY	34.46	339.6	6 42	0						8 6	PP
BREBEUF	35.06	16.9	6 48A	0	12	21	7				
PASADENA	35.47	312.9	6 51	0						8 23	PCP
SALT LAKE C.	35.58	327.2	6 52	0						9 20	PCP
SHAWINIGAN	36.26	17.1	6 58	0							
EUREKA	37.05	322.0	7 4	0				7	30	9 23	PCP
FRESNO	37.96	315.5	7 11	-1						9 27	PCP
HALIFAX	38.05	27.8	7 15K	2						8 53	PP
BOZEMAN	38.86	333.3	7 19	0	13	18	6				
RENO	39.47	319.2	7 26K	2							
LICK	39.51	315.1	7 26K	1						9 33	PCP
BUTTE	39.81	332.3	7 27	0						8 48	PP
BERKELEY	40.20	315.4	7 31	0	13	27	-5			9 35	PCP
MINERAL	41.06	319.1	7 37K	-1	13	29	-16			9 37	PCP
SHASTA	41.75	319.0	7 42	-1						8 37	
HUNGRY HORSE	42.23	333.5	7 47	0						9 40	PCP
CORVALLIS	44.47	323.2	8 5	0							
VICTORIA	46.88	327.5	8 22A	-2							
HORSESHOE B.	47.34	328.5	8 27A	-1							
SANTA LUCIA	48.19	161.3	8 31	-4	15	23	-4				
RESOLUTE	62.48	357.7	10 15A	-3	18	44	6			14 5	PPP
THULE	64.88	4.9	10 32	-1				10	58		
COLLEGE	66.58	336.1	10 41	-3				11	9	13 6	PP
NORD	75.08	8.3	11 34	-1							
TOLEDO	77.08	51.6	12 3	16							
MALAGA	77.12	54.9	12 5K	18				12	23	14 53	PP
CLERMONT-FD.	81.59	45.0	12 28	17							
SKALSTUGAN	83.29	26.4	12 19	-1							
STRASBOURG	84.20	41.7	12 23	-1				12	41	29 5	SS
STUTTGART	85.09	41.3	12 30	1				12	45		
KIRUNA	85.23	21.3	12 29	0							
KHEYS	85.42	6.5	12 30	0							
SODANKYLA	87.59	20.7	12 40	-1							
TAMANRASSET	87.89	67.3	12 41	-1				13	1		
PULKOVO	92.66	26.7								16 45	PP
BYRD STATION	93.71	185.3	13 9	0				13	35		
SOUTH POLE	102.25	180.0	13 49	1				14	9	18 22	PP
BULAWAYO	118.31	106.3	15 58	777							
RIVERVIEW	122.88	237.7	18 42	-6	25	54	13				
CHARTERS TS.	128.14	254.2	18 59	1							
ZO-SE	128.87	328.3	19 1A	2							
NANKING	129.27	331.1	19 2A	2							
LANCHOW	130.71	348.1	19 5	2							
QUETTA	131.01	29.9	19 5	2						22 27	PKS
SIAN	131.17	342.1	19 5	1							
WUHAN	132.47	334.1	19 19	13							
CHENGTU	135.89	345.9	19 17	5							
KUNMING	141.59	345.3	19 26	3							
SHILLONG	142.32	1.2	19 21	-3							
MEDAN	163.10	338.9	19 55	2							

MAY 4 7.H 15.M 48.S EPICENTRE 53.24 159.75 DEPTH= 74.KM

DEPTH OF FOCUS= 0.006R

A=-0.56382 B= 0.20805 C= 0.79926 D= 0.3462 E= 0.9382
G=-0.7498 H= 0.2767 K=-0.6010 HT= -6.6

SE= 2.38

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
PETROPAVLOVK	0.67	260.5	0	21	4	0	37	8				

KLYUCHI	3.14	10.5	0	54	5					
MAGADAN	8.03	325.5	2	1	4					
KURILSK	11.15	228.8	2	40	1					
UGLEGORSK	11.85	256.5	2	54	6					
Y.-SAKHLINSK	12.60	246.8	3	0	2					
NEMURO	13.66	229.1	3	8A	-4				5	18
ABASHIRI	13.75	234.0	3	14A	1	6	18	33	3	45
WAKKANAI	14.12	243.6	3	23	5	5	15	-38	3	56
KUSIRO	14.48	231.0	3	12	-11	5	56	-6		
ASAHIGAWA	14.87	237.4	3	30	2				3	50
OBIHIRO	15.09	233.5	3	29	-2				5	8
RUMOE	15.14	239.4	3	28	-3				3	55
HIROO	15.52	231.6	3	35	-1	6	22	-4	4	14
URAKAWA	15.88	232.5	3	36	-5	7	16	42	6	30
SAPPORO	15.90	237.6	3	41A	0	6	32	-3	6	49 SS
TOMAKOMAI	16.19	235.8	3	44	-1	7	10	29		
MURORAN	16.63	236.5	3	50	0	7	21	30	6	47
SUTTSU	16.67	239.0	3	51A	0	7	23	31	8	29
MORI	17.00	236.7	3	53A	-2	7	18	18		
HAKODATE	17.16	235.7	3	53	-4	7	26	22	4	22
HATINOHE	17.73	231.5	4	1A	-3	7	39	23		
AOMORI	17.86	233.5	4	2	-3	7	40	21	4	26
YAKUTSK	18.16	310.8	4	8	-1					
MIYAKO	18.23	228.9	4	5	-5	7	36	9		
MORIOKA	18.56	230.6	4	10A	-4	7	47	12		
MIZUSAWA	19.03	229.6	4	18	-1	7	50	5		
AKITA	19.04	232.6	4	16A	-3	8	5	20		
ISINOMAKI	19.52	228.0	4	22	-2	8	0	5		
SAKATA	19.82	231.6	4	31	3	8	23	21	7	15
SENDAI	19.84	228.5	4	26A	-2	8	18	16	8	4
YAMAGATA	20.10	229.5	4	31K	0	8	17	10		
HUKUSIMA	20.46	228.5	4	34K	0	8	13	-1		
ONAHAMA	20.93	226.4	4	39K	0	8	24	1	5	33
NIIGATA	20.97	231.3	4	41	2	8	40	16	13	54
VLADIVOSTOK	21.02	252.5	4	38	-2					
SHIRAKAWA	21.09	227.9	4	41K	0	8	31	5		
AIKAWA	21.27	232.9	4	45	3	8	36	7		
MITO	21.60	226.4	4	47	1	8	39	4	5	3
UTUNOMIYA	21.72	227.7	4	48	1	8	46	8	5 7	37 PP 36
KAKIOKA	21.85	226.7	4	48	0	8	42	2		
TUKUBASAN	21.89	226.8	4	48A	-1	8	44	3	5	11 PP
SUIHWA	21.96	265.7	4	50	1					
TYOSI	21.99	224.7	4	52A	2	8	55	12		
TAKADA	22.01	231.4	4	52K	2	8	50	7	16	2 SCS
MAEBASI	22.20	228.9	4	51K	-1	8	55	9	5	49 PP
KUMAGAYA	22.27	228.0	4	55	3	8	55	7		
NAGANO	22.38	230.9	4	55K	2	9	0	11	5	27 PP
WAZIMA	22.43	234.2	4	54K	0	8	56	6	16	3
HONGO	22.46	226.7	5	0A	6	8	52	1		
MATUSIRO	22.47	230.6	4	54K	0	8	52	1	6	41
OIWAKE	22.49	229.7	4	58	3	9	11	19		
TOKYO C.M.O.	22.50	226.7	4	55K	0	8	38	-14		
TITIBU	22.54	228.3	4	56K	1	8	58	6	16	8
TOYAMA	22.83	232.6	4	58K	0	9	2	5		
MATUMOTO	22.83	230.6	4	59K	1	9	6	9		
KOHU	23.06	228.7	5	1	1	9	6	4		
HUNATU	23.08	228.2	5	3K	3	9	15	13		
HERA	23.11	225.5	5	2K	2				5	46 PP
KANAZAWA	23.23	233.2	5	7	5					
TAKAYAMA	23.25	231.7	5	4	2					
AJIRO	23.31	227.0	5	4	2	9	27	21	5	40 PP
MISIMA	23.32	227.3	5	4K	1	9	11	5	15	49
OSIMA	23.43	226.1	5	3K	-1	9	14	6	5	48 PP
IIDA	23.49	229.8	5	7	3	9	6	-3		
SHIZUOKA	23.69	228.1	5	2K	-4	9	13	1		
HUKUI	23.79	233.1	5	9	2	9	22	8	6	14 PP
NAGATURO	23.80	226.8	5	11	4	9	21	7		
OMAESAKI	24.08	227.9	5	11	1	9	35	16	20	44 SCS
GIHU	24.08	231.4	5	11K	1	9	18	-1	16	32
NAGOYA	24.18	230.7	5	11	0	9	43	22	5	55
HAMAMATU	24.21	228.9	5	14	3	9	56	35	6	5
TSURUGA	24.21	232.9	5	13	2	9	29	8	16	18 SCS
IBUKISAN	24.28	232.0	5	14	2	9	33	10		
HIKONE	24.43	232.1	5	14	1	9	28	3	16	7 SCS
CHANGCHUN	24.45	261.3	5	13A	-1	9	26	0		
MAIZURU	24.65	233.6	5	17A	2	10	9	40		
HATIDYOZIMA	24.67	223.2	5	13	-3				7	49
KAMEYAMA	24.67	231.1	5	17K	1	9	43	14	16	53 SCS
TU	24.75	230.9	5	21	5					

KYOTO	24.88	232.5	5	20	2	9	39	6		
TOYOOKA	24.91	234.7	5	18K	0	9	32	-1		
ABUYAMA	25.08	232.6	5	30K	10					
NARA	25.11	231.9	5	20	0	9	38	1		
SAIGO	25.13	237.9	5	24	4	9	43	6	7	10
TOTTORI	25.23	235.5	5	22	1	9	45	6	6	57
OSAKA	25.28	232.4	5	24A	3	9	56	17	6	4
KOBE	25.42	232.9	5	24	1	9	44	2		
OWASE	25.44	230.5	5	24	1	9	39	-3	6	1
YONAGO	25.72	236.8	5	27	1	9	50	3	6	8
WAKAYAMA	25.79	232.4	5	28	2	9	49	1	17	1
SUMOTO	25.84	233.0	5	28A	1	9	54	5	6	18
MATSUE	25.85	237.2	5	29	2	9	55	6		
HIMEJI	25.95	233.9	5	34	6	9	46	-4		
OKAYAMA	26.04	234.9	5	28	0	9	57	5		
SIOMISAKI	26.16	230.4	5	30	0	9	53	-1	6	16 PP
TOKUSIMA	26.21	233.1	5	32	2	9	55	0	16	17 SCS
TAKAMATU	26.26	234.2	5	31	0	9	59	3	7	58
HAMADA	26.79	237.9	5	35A	0	10	7	3	6	42 PP
TORISIMA	26.80	219.6	5	37	2					
HIROSIMA	27.02	236.7	5	37	-1	10	8	0	6	50
MUROTO	27.07	232.6	5	40	2	10	13	4		
KOTI	27.14	234.0	5	39K	0	10	5	-5		
MATUYAMA	27.29	235.5	5	41	1	10	15	3	6	53 PP
UWAZIMA	27.88	235.0	5	46	1	10	23	1	11	18
SIMIDU	28.03	233.8	5	48A	1	10	26	2	9	3
SIMONOSEKI	28.11	238.2	5	48	1	10	25	-1	6	27
OOITA	28.34	236.3	5	54A	5	10	33	4		
COLLEGE	28.46	45.3	5	49A	-1	10	27	-4	6	33 PP
HUKUOKA	28.67	238.5	5	55A	3	10	30	-4		
ITUHARA	28.77	240.8	5	54	1	10	33	-3		
ASOSAN	28.88	236.7	5	57	3	11	0	22	8	32
SAGA	28.99	238.2							6	30
KUMAMOTO	29.13	237.1	6	3A	7	10	46	4		
UNZENDAKE	29.43	237.6	6	1K	2	10	48	2		
MIYAZAKI	29.49	235.0	6	2	2	10	53	5		
NAGASAKI	29.61	238.1	6	2K	1	10	51	2	14	19
KAGOSIMA	30.21	235.8	6	9A	3	11	3	4		
TOMIE	30.27	239.5	6	7A	0	11	1	1		
YAKUSIMA	31.15	234.7	6	14K	0	11	14	0	6	56
PEKING	32.18	263.6	6	22A	-1	11	26	-4	7	45
IRKUTSK	32.85	291.1	6	29	0	11	41	1		
ULAN-BATOR	33.32	282.6	6	33	0	11	50	2		
TATUNG	33.87	266.2	6	39	1					
70-SE	35.52	247.0	6	53A	1	12	19	-2		
PAOTOW	35.52	269.6	6	52A	0					
SITKA	36.05	57.3	6	57A	0	12	35	5	39	16 PKPPKP
NANKING	36.14	250.7	6	58A	1	12	31	0		
YINCHUAN	39.11	269.9	7	25	3					
WUHAN	39.69	253.4	7	27A	0				9	2
TAIPEI	40.13	240.6	7	32	1	13	33	2		
ILAN	40.22	240.1	7	32	1	13	26	-7		
SIAN	40.34	262.8	7	31A	-1					
HSINCHU	40.60	241.0	7	40	6					
HWALIEN	40.94	239.5	7	43	6					
TAICHUNG	41.29	240.8	7	45	5					
GUAM	41.43	202.4	7	36K	-5	13	37	-14	12	47 SCP
YUSHAN	41.69	239.9	7	45	2	13	57	2		
ALISHAN	41.74	240.1	7	45	1	13	53	-2		
HSINKONG	41.79	239.1	7	46	2	13	55	-1		
TIENSHUI	42.01	265.9	7	48	2	13	55	-4		
LANCHOW	42.15	269.1	7	48A	1	14	2	1		
TAITUNG	42.19	239.0	7	48	1	14	1	-1		
TAINAN	42.47	240.3	7	53	3	14	16	10		
TAWU	42.65	239.0	7	54	3	13	59	-10		
KAOHSIUNG	42.75	239.9	8	18	26					
SINING	43.02	271.3	7	57	3					
HENGCHUN	43.02	238.9	7	58	4					
RESOLUTE	43.27	22.0	7	56A	0					
YUMEN	43.48	279.0	8	0	2					
KIPAPA	45.19	118.0	8	10K	-2				12	48
HONOLULU	45.24	118.2	8	10K	-2	14	49	3	15	28 *SS
ALBERNI	45.34	63.0	8	11K	-2	14	46	-1		
NORD	45.38	359.3	8	13	0	14	47	-1	18	2 SS
CHENGTU	45.80	263.4	8	16A	-1					
HORSESHOE B.	46.10	62.1	8	18K	-1	14	55	-3		
CANTON	46.15	247.8	8	20A	1					
HONG KONG	46.28	246.2	8	20K	0	14	23	-38		

VICTORIA	46.53	63.1	8	22K	0	14	56	-8		39	6 PKPPKP
SEMIPALATNSK	46.82	300.4	8	23	-2						
ISFJORD	47.32	350.9	8	28	-1						
BAGUIO CITY	47.80	234.9				15	18	-4			
CORVALLIS	49.00	67.3	8	41K	-1						
BANFF	49.02	56.1	8	39	-3						
MANILA	49.18	233.2	8	42	-1	15	46	4			
KUNMING	50.73	259.5	8	55A	0	15	59	-4			
HUNGRY HORSE	51.55	58.2	8	59K	-2						
PHU-LIEN	51.71	252.4	9	3	1						
SVERDLOVSK	52.02	316.5	9	4	-1	16	20	-1			
SHASTA	52.03	70.5	9	4	-1						
UKIAH	52.61	72.6	9	9K	0	16	33	4		40	8 PKPPKP
SASKATOON	52.71	50.7	9	12	2	16	33	3		19	52 SS
MINERAL	52.71	70.4	9	9K	-1	16	25	-5			
APATITY	53.04	337.2	9	10	-2	16	33	-2		11	2 PP
BUTTE	53.83	59.6	9	17K	-1	16	15	-30	9 49	11	42 PP
BERKELEY	54.02	73.1	9	18K	-1	16	50	2			
TOCKLAI	54.19	267.6	9	24	3						
RENO	54.27	69.9	9	21K	0						
FRUNSE	54.61	296.0	9	23	-1	16	57	1			
SODANKYLA	54.69	339.7	9	22	-2	16	54	-3		19	5 SCS
LICK	54.74	73.1	9	24K	-1					16	2
BOZEMAN	54.85	59.0	9	24K	-1	17	6	7			
VINEYARD	55.30	73.5	9	55	26						
KIRUNA	55.49	342.5	9	28A	-2	16	58	-10		39	23 PKPPKP
FRESNO	56.19	72.4	9	34K	-1						
EUREKA	56.46	67.5	9	35K	-2						
SHILLONG	56.80	269.0	9	40A	1	17	21	-4		11	36 PP
NAMANGAN	57.49	296.2	9	44	0						
RABAUL	57.59	189.0	9	41	-4	17	33	-2			
SALT LAKE C.	57.82	63.8	9	46K	-1	17	42	4			
CHATRA	58.69	273.8	9	51	-2	17	46	-4			
PASADENA	58.99	73.4	9	52K	-3	17	54	0		14	41
CHITTAGONG	59.24	266.6	9	55A	-1	18	1	4	10 19	12	10 PP
RAPID CITY	59.94	55.7	9	59K	-2						
PULKOVO	60.25	333.2	10	2	-1	18	10	0			
SAN DIEGO	60.58	73.9	10	4	-2						
LARAMIE	60.74	59.4	10	5	-2	18	27	11			
SKALSTUGAN	60.78	344.0	10	5	-2					39	19 PKPPKP
STALINABAD	60.79	296.1	10	8	1	18	16	-1			
NURMIJARVI	61.05	336.5	10	8	-1	18	20	0		19	49 SCS
CALCUTTA	61.21	269.6	10	5A	-5	18	7	-15		20	5 SCS
HELSINKI	61.28	336.1	10	10	0	18	16	-7		14	46 PCS
AKUREYRI	61.40	359.0	10	12	1	18	34	9			
MOSCOW	61.42	326.9	10	10	-1	18	23	-2			
DEHRA DUN	61.54	283.3	10	13	1	18	20	-6		12	14 PP
WARSAK DAM	62.57	290.7	10	16	-3	18	43	4			
LAHORE	62.80	286.9	10	19	-1	18	38	-4			
REYKJAVIK	62.96	0.8	10	21A	-1	18	51	7		39	25 PKPPKP
UPPSALA	63.22	339.7	10	21A	-2	18	43	-4		39	2 PKPPKP
SIDA	63.30	358.9	10	15	-9	19	2	14		39	22 PKPPKP
PORT MORESBY	63.32	193.9	10	22K	-2	18	48	-1	10 45	10	57 *SP
VIK	63.67	359.4	10	32	6	19	4	11			
AGRA	63.92	280.9	10	25A	-3	18	48	-8		12	45 PP
TUCSON TELE.	64.56	69.6	10	30K	-2						
TUCSON	64.56	69.8	10	30K	-2	19	6	2		38	39 PKPPKP
BERGEN	64.87	346.3	10	33	-1	19	8	0	10 48	11	13 PCP
GOTEBORG	66.34	341.8	10	40	-3						
PORT BLAIR	67.02	258.4	10	45	-3	19	36	2			
SEHORE	67.46	278.8	10	42	-8	19	32	-7		20	29 SCS
VIZIANAGRAM	67.51	270.4	10	49A	-2						
MAKHACH-KALA	67.93	312.9	11	22	29						
QUETTA	68.01	291.1	10	53A	-1	19	48	2		13	37 PP
COPENHAGEN	68.15	340.7	10	54	-1	19	50	3			
WARSAW	69.37	334.3	11	2A	0	20	5	3		13	36 PP
CHIHUAHUA	69.97	68.9	9	15K	-111	18	21	-108		22	47 SS
TIFLIS	70.11	313.8	11	7	0	20	12	1			
MEDAN	70.14	248.2	11	12	5	20	19	8			
FLORISSANT	70.18	51.4	11	5K	-2	20	2	-9			
EDINBURGH	70.30	349.9	11	0	-8	20	1	-12	11 22	13	35 PP
ST. LOUIS 1	70.38	51.4	11	9K	1	20	16	2			
FAYETTEVILLE	70.49	55.7	11	7	-2	20	12	-3			
SOTCHI	70.70	318.2	11	10	0	20	18	1			
LWOW	70.71	331.4	11	10	0	20	20	2			
OTTAWA	70.90	37.9	11	9K	-3	20	12	-8		13	44 PP
SHAWINIGAN	70.98	35.4	11	9	-3	20	17	-4			
TERRE HAUTE	71.00	49.0	12	22	70	21	17	56			

HYDERABAD	71.05	273.8	11	14A	2	20	18	-3			13	43 PP
POTSDAM	71.12	339.1	11	13	0	20	24	2				
SEVEN FALLS	71.14	33.9	11	12K	-1							
GORIS	71.24	311.4	11	12	-2	20	22	-2				
DURHAM	71.25	348.7	11	13	-1	20	41	17			15	48 PPP
KARACHI	71.29	288.1	11	17A	3	20	35	11				
BREBEUF	71.58	36.5	11	13K	-3	20	24	-4				
KRAKOW	71.64	334.0	11	15A	-1	20	30	2			15	35 PPP
SIMFEROPOL	71.69	322.6	11	16	0	20	28	-1				
KISHINEV	71.72	327.0	11	15	-1							
CLEVELAND	71.92	43.9	11	16	-2				11	27		
IASI	71.97	327.9	11	18A	0	20	31	-1			13	56 PP
RACIBORZ	72.06	335.1	11	18	0	20	36	3			11	39 PCP
COLLMBERG	72.15	338.8	11	18	-1	20	34	0			19	25
HALLE	72.18	339.5	11	16	-3	20	34	-1			13	57 PP
LITTLE ROCK	72.44	55.2	11	20K	-1	20	35	-2	11	39	21	12 SKS
MUNSTER	72.59	342.4	11	23	1						44	34
BACAU	72.75	328.0	11	24A	2	20	43	2			21	16 PS
JENA	72.80	339.5	11	23	0	20	42	1			14	20 PP
DE BILT	72.89	343.9	11	26A	3	20	46	4				
SUVA	72.91	161.4	11	23	0	20	44	1			14	4 PP
POONA	72.95	278.2	11	23A	-1	20	37	-6			14	5 PP
PRAGUE	72.98	337.4	11	23A	-1	20	45	1			13	37 PP
PRUHONICE	73.03	337.3	11	24A	0	20	44	0				
PLAUEN	73.08	339.0	11	22	-2	20	42	-3				
RATHFARNHAM	73.19	351.3	11	23A	-2	20	48	2			14	18 PP
BOMBAY	73.27	279.2	11	25	-1	20	44	-3			14	3 PP
SONNEBERG	73.40	339.6	11	27	1	20	50	2				
FOCSANI	73.42	327.4	11	28	2	20	51	3			13	29
CHEB	73.43	338.7	11	25	-1	20	44	-5			14	27 PP
MADRAS	73.46	269.6	11	27A	0	20	45	-4			14	4 PP
BENSBERG	73.63	342.3	11	27A	-1						25	37
CHARTERS TS.	73.88	193.2	11	25	-4	20	50	-4				
PENNSYLVANIA	73.99	41.8	11	29	-1	20	55	0			14	20 PP
MAZATLAN	74.00	72.8	11	32K	2	21	0	5			35	8
DJAKARTA	74.05	235.6	11	28	-2	20	53	-2				
HURBANOVO	74.09	334.2	11	34A	4	21	2	6			14	12 PP
BRATISLAVA	74.10	335.0	11	30K	0	20	58	2			25	12 SS
MORGANTOWN	74.12	43.9	11	30K	-1	20	53	-3				
VIENNA-H.	74.21	335.5	11	32	1	21	2	5			14	16 PP
LEMBANG	74.22	234.5	11	29K	-2	20	58	1				
BUDAPEST	74.22	333.5	11	34	3	21	1	4				
KEW	74.32	347.2	11	31A	-1	21	0	1			14	23 PP
KECSKEMET	74.56	332.8	11	38	5	21	5	4				
BUCHAREST	74.92	327.5	11	35	0	21	4	-1			14	22 PP
TIMISOARA	75.21	331.3	11	38	1	22	10	62			14	9 PP
STUTTGART	75.34	340.3	11	36	-2	21	12	2			21	51 SCS
PALISADES	75.35	39.1	11	35K	-3	21	36	26			14	46 PP
NOUMEA	75.45	173.6	11	37	-1	21	15	4				
FORDHAM	75.50	39.1	12	26	48	21	55	43				
TUBINGEN	75.59	340.4	11	39	0	21	15	2				
HALIFAX	75.68	30.4	11	38K	-1	21	0	-14			16	27 PP
STRASBOURG	75.80	341.2	11	40A	0	21	12	-3	11	54	14	46 PP
GEORGETOWN	75.93	42.3	11	40	-1	21	13	-3				
WASHINGTON	75.93	42.3	11	39A	-2	21	1	-15				
EBINGEN	75.95	340.3	11	41A	0	21	19	3				
RAVENSBURG	76.19	339.8	11	44	2	21	23	4				
BELGRADE	76.28	331.5	11	42A	-1	21	19	-1			26	21 SS
PARIS	76.51	344.8	11	46	2	21	25	2				
ZAGREB	76.57	334.8	11	45A	1	21	25	2	11	58	22	8 SP
TOLMEZZO	76.75	337.0	11	44	-1	21	22	-3			14	41 PP
JERSEY	76.80	347.9	11	47	1	21	24	-2				
BASLE	76.84	341.0	11	47A	1	21	27	1			12	22
FOLINIERE	76.99	346.7	11	46	-1							
CHUR	77.10	339.5	11	48A	1	21	28	-1				
KODAIKANAL	77.26	270.0	11	50A	2	21	22	-9			14	40 PP
TRIESTE	77.28	336.3	11	49A	1	21	26	-5	11	54	16	38 PPP
SOFIA	77.34	328.6	11	49	0	21	34	2			14	57 PP
NEUCHATEL	77.48	341.3	11	50	0	21	35	2			14	57
CHAPEL HILL	77.64	45.3	11	48	-2							
GUADALAJARA	77.72	72.0	11	51K	0	21	39	3			12	4 PCP
COLUMBIA	78.40	47.7	11	53K	-2	21	38	-5			17	20 PPP
MANZANILLO	78.43	73.8	12	0K	5	21	48	5				
COLOMBO	78.45	266.0	11	54	-1	21	47	4				
SKOPJE	78.59	329.6	11	56K	0	21	47	2			15	0 PP
PAVIA	78.77	339.3	11	57A	0	21	50	3				
BOLOGNA	78.94	337.5	12	1	3	21	51	2				
CLERMONT-FD.	79.36	343.6	12	1A	1	21	54	1				
PRATO	79.58	337.5	12	1	0	21	54	-1				

MONACO	80.52	340.0	12	6A	0	22	10	5				
KSARA	80.56	315.5	12	8A	2	22	7	1				
BRISBANE	80.59	186.0	12	5	-1	22	2	-4				
TACUBAYA	81.08	69.7	12	11K	2	22	14	3	12	31	17 4	PPP
ROME	81.12	335.9	12	10A	1	22	14	3			23 26	PPS
TARANTO	81.20	332.0	12	14	4	22	14	2			27 14	
ATHENS	81.50	326.3	12	10A	-1	22	12	-3			17 10	PPP
PUEBLA	81.93	69.1	12	16	3	22	15	-5			13 17	
CUGLIERI	83.67	338.2	12	22	0	22	40	3				
JERUSALEM	82.60	315.0	12	18K	1	21	35	-52				
VERA CRUZ	82.95	67.4	12	21K	2	22	30	0			15 21	PP
TAHITI	83.17	131.8	12	19	-1	22	37	5				
BARCELONA	83.75	343.3	12	25	2	22	41	3				
MESSINA	83.79	332.4	12	21A	-2	22	36	-2	12	32	15 40	PP
REGGIO CALA.	83.85	332.3	12	26A	3	22	37	-2	12	34	23 58	PPS
OAXACA	84.35	69.2	12	24K	-2	22	42	-2				
TORTOSA	84.61	344.3	12	31	4	22	47	0				
MERIDA	85.06	61.4	12	27K	-2	22	41	-10			14 33	
SERRA PILAR	85.46	351.2	12	32K	1	23	13	18			17 53	PPP
TOLEDO	86.20	347.6	12	35A	0	22	51	-11	13	0	16 4	PP
COIMBRA	86.37	351.0	12	36A	0	23	3	-1			22 51	SKS
BERMUDA	86.40	36.4	12	24	-12	22	52	-12			15 42	PP
RIVERVIEW	87.03	187.2	12	38K	-1	23	11	1				
ALICANTE	87.18	344.6	12	43	3	22	56	-15				
COMITAN	87.55	66.0	12	48	7	23	23	8			24 8	PS
LISBON	87.90	351.3	12	43K	0	23	20	2			16 12	PP
ALGIERS UNI.	88.10	341.5	12	42	-2	23	1	-19	12	54	16 10	PP
ANGRA DO HO.	88.28	5.5				23	28	6			23 12	SKS
CANBERRA	88.69	188.8	12	46K	-1	23	26	1	12	55	16 18	PP
GRANADA	88.79	346.8	12	55A	8	23	28	2			16 40	PP
ALMERIA	88.96	345.8	12	47	-1	23	30	2			16 36	
PONTA DELGDA	89.28	4.3	12	53	3	23	42	11	13	15	16 32	PP
MALAGA	89.35	347.3	12	50A	0	23	36	4			16 6	PP
ONERAHI	89.55	168.2	12	53	2	23	36	3	13	30		
ADELAIDE	89.69	197.1	12	50	-2	23	36	1			16 32	PP
AUCKLAND	90.69	168.0	13	16	20	24	6	22			25 21	PS
SAN SALVADOR	91.21	65.1	13	4	5						16 42	PP
MELBOURNE	91.60	191.7	13	0K	0	23	56	4			24 29	*SS
SANTIAGO MA.	91.82	64.7	13	10	9						16 52	PP
TUAI	92.90	166.5	13	6	0							
PERTH	93.03	216.2	13	8	1						17 23	PP
COBB RIVER	94.62	170.2	13	17	3	24	20	2			25 6	*SS
WELLINGTON	95.04	168.7	13	13	-3	24	22	1	13	48	17 12	PP
FORT NELSON	96.39	189.1	13	35	13	24	37	4				
GEBBIES PASS	97.20	170.6	13	30	4						17 28	PP
SAN JUAN	98.45	43.6	13	30K	-2						30 21	PKKP
ROXBURGH	98.76	173.2	13	29	-4	24	48	-5			17 32	PP
BALBOA HTS.	100.34	59.7	13	38	-2	24	46	-20				
ST. KITTS	100.76	41.0	13	54	12						17 42	PP
TAMANRASSET	101.06	335.9	13	44	1				14	0	17 52	PP
ANTIGUA	101.67	39.7	13	51	5							
DOMINICA	103.13	40.7	14	3	10							
FORT FRANCE	103.75	40.7	14	0	5	25	44	9				
ST. VINCENT	105.11	41.5	14	9	777						18 23	PP
CARACAS	105.12	47.8	13	52K	777	24	43	0				
CHINCHINA	105.75	58.4	14	4	777	24	38	0			18 39	PP
GRENADA	105.94	42.4	14	16	777						18 36	PP
BOGOTA	106.84	57.2	14	11	777	24	46	0			18 44	PP
TRINIDAD	107.34	42.7	14	22	777						18 47	PP
MACQUARIE I.	107.38	180.5				25	21	0			18 41	PP
MBOUR	112.59	356.6	14	39	777						19 18	PP
BANGUI	113.95	316.8	14	47	777						18 30	
RUMANGABO	114.08	303.5	14	48	777						29 6	SKSP
ASTRIDA	114.96	302.4	14	46	777						19 48	PP
UVIRA	116.03	302.5	14	50	777						19 42	PP
TERRE ADELIE	120.54	188.3	15	19	777	25	34	0				
HUANCAYO	120.16	68.1	18	45	2						20 9	PP
TERRE ADELIE	120.54	188.3	15	19	-205	25	34	0				
LEOPOLDVILLE	123.25	316.2	15	30	777						37 2	SS
ELISABTHVLLE	123.82	299.3	15	29A	777	25	53	9			20 39	PP
WILKES	124.84	202.0	15	26	777						20 42	PP
BROKEN HILL	125.61	296.4	17	22	-91							
KERGUELEN I.	127.04	235.0	18	51	-5						28 7	SKKS
KERGUELEN I.	127.04	235.0	18	51	-5	28	7	133				
LA PAZ	127.76	64.2	18	59	1	26	25	29			20 59	PP
MIRNY	129.61	208.5	15	52	777						19 4	PP
BULAWAYO	130.17	292.2	19	4	2							
SCOTT BASE	130.90	178.0	19	1A	-3						21 22	PP

ANTOFAGASTA	132.21	71.9	19	12	6					22	31	
LCO. MARQUES	132.44	283.5	19	8	1	26	14	6		21	29	PP
PRETORIA	134.82	287.9	19	5	-6							
JOHANNESBURG	135.22	287.7								21	53	PP
PIETERMZBURG	136.45	282.2	18	6	-68					20	9	
WINDHOEK	138.29	302.5	17	25	777							
KIMBERLEY	139.06	288.5	18	08	-71					18	8	PKP
MAWSON	139.97	216.3	19	9	-11					22	23	PP
BYRD STATION	140.37	164.3	18	44	-37	25	56	-26	19 11	22	4	PP
GRAHAMSTOWN	141.38	282.0	19	18	-5							
SOUTH POLE	143.06	180.0	19	19	-7	26	22	-4		25	49	PPP
HERMANUS	146.42	288.1	19	36	4					28	12	PKKP
LA PLATA	147.80	70.5	19	37K	3					23	17	PP
ARGENTINE I.	155.08	136.0	19	49	4							
PORT STANLEY	157.20	101.4	19	43	-4							
HALLEY BAY	157.49	175.8	20	0	12							

MAY 4 17.H 18.M 32.S EPICENTRE 28.86 92.07 DEPTH= 0.KM
A=-0.03165 B= 0.87657 C= 0.48022 D= 0.9993 E= 0.0361
G=-0.0173 H= 0.4799 K=-0.8771 HT= 2.2

SE= 1.99

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
TOCKLAI	3.19	130.7	0	52	-1	1	31	-1					
SHILLONG	3.28	183.1	0	50A	-4								
CHATRA	4.79	246.1	1	18	3	2	41	28					
CHITTAGONG	6.48	182.0	1	42	3	2	52	-3			2	8	PG
HOWRAH	7.14	209.1	2	8	19	3	32	21					
CALCUTTA	7.15	208.9	1	42	-7	3	47	35					
KUNMING	10.20	109.4	2	33	2	4	29	1					
CHENGTU	10.53	77.3	2	36	0	4	35	-1					
LANCHOW	12.25	51.0	2	57	-2	5	15	-3					
DEHRA DUN	12.29	280.2	3	1	1	5	12	-6					
AGRA	12.53	265.4	2	2A	-61								
LAHORE	15.57	284.3	3	39	-4	6	24	-13					
PORT BLAIR	17.12	177.8	4	1	-2	7	10	-3					
WARSAK DAM	18.23	291.5	4	15	-2	7	32	-6					
PAOTOW	18.79	46.8	4	25	2	7	52	1					
MADRAS	19.27	217.5	4	31	2	8	14	13					
POONA	19.57	242.3	4	32	-1	8	12	4					
WUHAN	19.61	79.6	4	32	-1	8	9	0					
FRUNSE	19.86	319.4	4	37	1	8	19	5					
CANTON	19.91	101.9	4	38	2	8	24	8					
BOMBAY	20.18	244.8	4	41	2	8	29	8					
NAMANGAN	20.58	311.3	4	47	4	8	34	5					
HONG KONG	20.96	103.1	4	50	3	8	47	10					
STALINABAD	21.61	302.6	4	56	2	8	52	3					
QUETTA	21.89	279.6	4	57K	0	8	53	-2			5	20	PP
ULAN-BATOR	22.23	27.1	5	0	0	9	8	7					
KARACHI	22.42	268.2	5	0	-2								
PEKING	22.71	54.3	5	7	2	9	14	4					
NANKING	23.24	75.5	5	12	2	9	23	4					
SEMIPALATNSK	23.30	340.6	5	12	1	9	23	3					
CHANGCHUN	30.42	51.6	6	16	-1								
SVERDLOVSK	35.65	330.5	7	2	0								
MATUSIRO	39.28	66.5	7	31	-2								
TIFLIS	40.18	301.5	7	41	1								
YAKUTSK	41.32	25.9	7	46	-3								
MOSCOW	46.80	320.9	8	33	-1								
KSARA	47.75	290.9	8	46	5								
JERUSALEM	48.68	288.3	8	49	1								
PULKOVO	51.37	325.2				16	32	5					
APATITY	51.78	335.3	9	13	1								
ADDIS ABABA	53.65	259.5	9	28	2								
KHEYS	53.85	352.1	9	25	-2								
NURMIJARVI	54.26	325.8	9	30	0								
SODANKYLA	54.27	334.3	9	30	0								
KIRUNA	56.69	334.5	9	47	-1								
BELGRADE	57.71	307.0	9	58A	3								
UPPSALA	57.77	324.9	9	53A	-3								
PRUHONICE	60.72	313.7	10	16A	0								
JENA	62.38	315.2	10	25	-2								
TANANARIVE	64.07	227.6	10	38	0								

NORD	64.31	351.1	10 38	-2
STUTTGART	64.40	313.3	10 39	-2
STRASBOURG	65.36	313.4	10 46	-1
RUMANGABO	67.01	254.9	10 58K	1
ASTRIDA	67.35	253.5	10 59	0
UVIRA	68.33	253.1	11 5A	-1
CLERMONT-FD.	69.25	311.6	10 58	-13
ELISABTHVLLE	74.23	246.9	11 43A	2
THULE	74.25	355.3	1 39	-2
COLLEGE	75.74	22.4	11 50	0
TAMANRASSET	76.49	288.7	11 53	-1
RESOLUTE	76.62	1.9	11 54K	-1
ADELAIDE	77.23	142.2	11 59K	1
LEOPOLDVILLE	80.61	259.7	12 17A	1
PIETERMZBURG	82.74	230.6	13 29	62
KIMBERLEY	86.12	234.3	11 43A	-62
SOUTH POLE	118.70	180.0	18 49	-2
CHARTERS TS.	71.39	126.4	11 25	1
BYRD STATION	127.10	173.4	19 7	0

MAY 5 11.H 40.M 17.S EPICENTRE 35.78 71.81 DEPTH= 0.KM

A= 0.25390 B= 0.77251 C= 0.58203 D= 0.9500 E=-0.3122
G= 0.1817 H= 0.5529 K=-0.8132 HT= -0.2

SE= 4.85

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
WARSAK DAM	1.79	186.9	0 41A	9				
STALINABAD	3.68	319.7	1 6	7	1 49	5		
LAHORE	4.71	152.8	1 16	2	2 3	-7		
NAMANGAN	5.20	358.9	1 32	11				
QUETTA	6.91	217.5	1 51A	6	3 9	4		2 25 *SP
DEHRA DUN	7.55	134.3	1 54	0	3 8	-13		2 3 PP
KARACHI	10.73	203.7	2 48	10	4 48	8		
CHATRA	15.86	120.0	3 26	-20	6 23	-20		
BOMBAY	16.84	176.7						7 36
SHILLONG	20.00	115.0	4 26K	-11				
MAKHACH-KALA	20.08	298.3	5 2	24				
TIFLIS	21.83	293.9	5 0	4				
CHITTAGONG	21.96	122.1	5 47	50				
SVERDLOVSK	22.37	343.7	5 1	0				
ULAN-BATOR	28.57	54.0	6 14	15				
MOSCOW	30.63	321.4	6 15	-3				
APATITY	38.53	337.5	7 48	22				
NURMIJARVI	38.79	324.6	7 27	-1	13 16	-10		9 35 PCP
ADDIS ABABA	40.17	236.6	8 44	65				
SODANKYLA	40.67	335.1	7 41	-2				
UPPSALA	42.04	322.3	7 53	-2				8 15
KIRUNA	43.02	334.2	8 1	-2				
PRUHONICE	43.24	307.6	8 5	1				
SKALSTUGAN	45.17	327.1	8 18	-2				8 53
MATUSIRO	52.62	68.2	9 11K	-7				9 31
TAMANRASSET	58.27	276.5	9 57A	-2				12 10 PP
ELISABTHVLLE	63.08	230.2	10 34K	3				11 20
BROKEN HILL	64.62	227.4	10 41	0				
THULE	65.28	350.4	10 40	-6				
LEOPOLDVILLE	66.25	245.4	10 49	-3				
BULAWAYO	69.04	223.5	11 8	-1				
RESOLUTE	69.47	356.3	11 7A	-5				
COLLEGE	75.00	16.4	11 39	-6				
KIMBERLEY	77.98	221.1						12 0 PCP
CHARTERS TS.	89.60	115.0	12 57	-4				
BRISBANE	99.03	117.2	13 47	3				
SOUTH POLE	125.59	180.0	18 59	-4				
BYRD STATION	135.41	177.2	19 20	-2				19 53 PP

MAY 5 19.H 4.M 19.S EPICENTRE 53.64 158.82 DEPTH= 20.KM

A=-0.55524 B= 0.21512 C= 0.80339 D= 0.3613 E= 0.9325
G=-0.7491 H= 0.2902 K=-0.5955 HT= -6.7

SE= 2.80

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
PETROPAVLOVK	0.52	191.4	0 6	-7				
KLYUCHI	2.91	21.9	0 45	-1				
KURILSK	11.02	224.6	2 34	-5				
UGLEGORSK	11.42	253.2	2 46	1				
Y.-SAKHLINSK	12.27	243.4	2 56	0				
NEMURO	13.52	225.6	3 17	4				6 8
ABASHIRI	13.55	230.6	3 12A	-1	5 22	-22		
WAKKANAI	13.81	240.4						5 20
KUSIRO	14.32	227.7	3 24	1				6 28
ASAHIGAWA	14.64	234.3	3 33	5				
OBIHIRO	14.90	230.3	3 32	1				11 12
SAPPORO	15.66	234.6	3 43	2	6 23	-11		
URAKAWA	15.70	229.4	3 44	3				6 57
TOMAKOMAI	15.97	232.8	4 1	16				7 40
SUTTSU	16.41	236.2	3 54	4				7 25
MORI	16.77	233.9	4 12	17				7 30
HAKODATE	16.94	232.9	4 16	19				
YAKUTSK	17.48	310.2	4 5	1	7 25	9		
MIYAKO	18.09	226.1	4 10	-1				
MORIOKA	18.40	227.8	4 13	-2				
AKITA	18.86	230.0	4 48	27				
HIZUSAWA	18.88	226.9	4 50	29	8 19	32		
SENDAI	19.70	225.9	4 24	-6	8 1	-5		
YAMAGATA	19.95	227.0	4 25	-8				
HUKUSIMA	20.32	225.9	4 33	-4				
VLADIVOSTOK	20.62	250.3	4 25	-15				
NIIGATA	20.80	228.9	5 7	25	9 29	61		
ONAHAMA	20.82	223.9	4 50	8				
SHIRAKAWA	20.96	225.5	4 50	6				
AIKAWA	21.08	230.5	4 53	8	8 51	18		
UTUNOMIYA	21.59	225.3	4 47	-3				
KAKIOKA	21.73	224.3	4 50	-1				
TUKUBASAN	21.77	224.4	4 46A	-6	8 41	-5		5 17 PP
TAKADA	21.83	229.1	4 41	-12				
MAEBASI	22.06	226.6	4 53	-2				
KUMAGAYA	22.14	225.6	4 58	3				
NAGANO	22.21	228.5	4 58	2	9 4	10		
WAZIMA	22.23	231.8	5 0	4				
MATUSIRO	22.30	228.3	4 54K	-3	8 35	-21		6 26
OIWAKE	22.34	227.4	5 0	2				
TOKYO C.M.O.	22.38	224.3	4 58	0	9 40	43		
TOYAMA	22.64	230.3	5 4	4	9 14	12		
MATUMOTO	22.66	228.3	5 0	-1				
KOHU	22.92	226.4	5 10	7				
HUNATU	22.95	225.9	5 6	2				
MERA	23.00	223.2	5 5	1				
SHIZUOKA	23.56	225.8	5 8	-1	9 35	17		
HUKUI	23.60	230.9	5 10	0				
GIHU	23.91	229.2	5 11	-2	9 32	7		
OMAESAKI	23.95	225.6	5 14	1	9 27	2		
CHANGCHUN	23.98	259.5	5 11K	-3	9 25	-1		
NAGOYA	24.01	228.5	5 17	3				
IBUKISAN	24.10	229.8	5 15	0				
HIKONE	24.25	229.9	5 18	2				
KAMEYAMA	24.50	228.9	5 18	-1	9 54	19		5 2 PP
TOYOOKA	24.70	232.5	5 15	-6	9 53	15		
ABUYAMA	24.90	230.5	5 20K	-2	9 51	10		
NARA	24.93	229.8	5 21	-2				
OSAKA	25.10	230.2	5 27	3	9 45	0		
KOBE	25.23	230.8	5 24	-2	10 7	20		
SUMOTO	25.64	230.9	5 33	3	10 15	21		
SIOMISAKI	25.99	228.3	5 41	8	10 7	7		
TOKUSIMA	26.01	231.0	5 39	6				
TAKAMATU	26.06	232.1	5 31	-2	9 41	-20		
HAMADA	26.54	235.9	5 20	-18	9 59	-10		
KOTI	26.93	232.0	5 39	-2	10 33	18		
MATUYAMA	27.07	233.5	5 45	2	10 37	20		7 9
COLLEGE	28.57	45.8	5 56	0	10 44	3		
NAGASAKI	29.36	236.3	6 4K	1	11 2	8		
PEKING	31.68	262.1	6 21	-3	11 31	0		
IRKUTSK	32.19	290.1	6 28	0	11 43	4		
ULAN-BATOR	32.70	281.5	6 12	-21	11 52	6		
PAOTOW	34.98	268.3	6 51	-1	12 26	4		
ZO-SE	35.18	245.4	6 52	-2	12 26	1		8 14 PP
NANKING	35.76	249.1	6 58	-1	12 36	2		
SITKA	36.30	57.4	7 5	1				

WUHAN	39.28	252.0	7	26	-3	13	29	1		
SIAN	39.85	261.5	7	31	-2				9	7 PP
KHEYS	40.41	345.1	7	29	-9					
GUAM	41.60	200.9	7	40	-8					
LANCHOW	41.61	267.9	7	46	-2	14	6	4	9	26 PP
RESOLUTE	43.11	21.9	8	OK	0	14	29	5	9	46 PP
CHENGTU	45.31	262.2	8	15K	-3	14	55	-1	10	3 PP
ALBERNI	45.65	62.9	8	20	-1					
CANTON	45.80	246.5	8	23K	1					
KIPAPA	45.86	117.4	8	24	2					
HONG KONG	45.94	244.9	8	23	0	15	7	2		
SEMIPALATNSK	46.15	299.6	8	22	-2	15	9	1		
HORSESHOE B.	46.40	61.9	8	24	-2					
THULE	46.77	13.7	8	27	-2					
VICTORIA	46.84	63.0	8	29	-1	15	24	6		
BAGUIO CITY	47.58	233.6	8	33	-3	15	41	13		
MANILA	48.99	231.9	8	44	-3	15	27	-21		
BANFF	49.26	56.0	8	50	1					
CORVALLIS	49.36	67.0	8	51	2					
SVERDLOVSK	51.36	315.8	9	5	0	16	26	5		
HUNGRY HORSE	51.81	58.0	9	7	-1				10	23 PCP
SHASTA	52.42	70.2	9	13K	0					
APATITY	52.46	336.7	9	13	0	16	38	2		
UKIAH	53.02	72.2	9	19	2				11	31 PP
MINERAL	53.10	70.0	9	18A	0					
FRUNSE	53.94	295.2	9	23	-1	17	1	5		
BUTTE	54.11	59.3	9	25	0				11	41 PP
SODANKYLA	54.12	339.3	9	26	1				11	28 PP
BERKELEY	54.43	72.7	9	27A	-1	17	11	8		
RENO	54.65	69.6	9	30K	1					
KIRUNA	54.95	342.1	9	32	1	17	8	-2		
BOZEMAN	55.12	58.7	9	33	0					
LICK	55.15	72.7	9	34K	1					
SHILLONG	56.26	268.0	9	39	-2	17	23	-4		
FRESNO	56.60	72.0	9	44	1					
EUREKA	56.82	67.1	9	44	-1				39	28 PKPPKP
NAMANGAN	56.82	295.4	9	42	-3					
RABAUL	57.90	187.8	9	48	-4					
CHATRA	58.12	272.8	9	49	-5	17	54	2		
SALT LAKE C.	58.14	63.4	9	55	1					
PASADENA	59.40	73.0	10	1	-2	18	15	6	12	33 PP
PULKOVO	59.64	332.7	10	5	0					
BOULDER CITY	59.96	69.2	10	7	0					
STALINABAD	60.12	295.3	10	8	0				18	25
RAPID CITY	60.17	55.4	10	8	0				39	53 PKPPKP
SKALSTUGAN	60.25	343.5	10	8	-1					
NURMIJARVI	60.47	335.9	10	12	2				10	54 PCP
HELSINKI	60.69	335.6	10	14	2				10	54 PCP
MOSCOW	60.79	326.3	10	13	1	18	32	6		
DEHRA DUN	60.91	282.4	10	26	13	18	34	6		
LAHORE	62.15	286.0	10	19	-3					
UPPSALA	62.66	339.1	10	24A	-1	18	50	0	10	39
PORT MORESBY	63.57	192.9	10	29	-2	19	3	2	19	24 PS
TUCSON TELE.	64.93	69.1	10	43	3				39	26 PKPPKP
TUCSON	64.94	69.3	10	7	-33					
GOTEBORG	65.79	341.2	10	48	3					
PORT BLAIR	66.56	257.5				19	39	1		
MAKHACH-KALA	67.25	312.1	10	58	3	20	1	15		
QUETTA	67.36	290.3	10	52	-3	19	45	-3	13	22 PP
COPENHAGEN	67.59	340.2	10	59	2					
ABERDEEN	68.46	349.0							5	26
WARSAW	68.77	333.7				20	13	8		
TIFLIS	69.44	313.1	11	8	0	20	18	6		
SOTCHI	70.04	317.5	11	16	4	20	34	14		
LWOW	70.10	330.7	11	12	0	20	25	5		
POTSDAM	70.55	338.5	11	15	0	20	28	3	15	40
GORIS	70.57	310.7	11	15	0					
OTTAWA	70.93	37.4	11	18	1					
SIMFEROPOL	71.04	321.9	11	19	1	20	42	11		
KRAKOW	71.04	333.4	11	18	0	20	40	9	13	44
KISHINEV	71.09	326.4	11	22	4					
SEVEN FALLS	71.12	33.4	11	19	1	20	44	12		
IASI	71.34	327.2	11	16	-4					
RACIBORZ	71.46	334.5	11	16	-4				11	47 PCP
COLLMBERG	71.58	338.2	11	18	-3	20	45	8		
BREBEUF	71.59	36.0	11	20K	-1					
HALLE	71.62	338.9	11	17	-4	20	52	14	21	14
SKALNATE PL.	71.75	332.8	11	19	-3					
MUNSTER	72.04	341.7	11	26	2					

JENA	72.23	338.9	11	26	1	21	8	23			
POONA	72.34	277.3	11	28	2						
DE BILT	72.35	343.3	11	24	-2	20	41	-5			
PRAGUE	72.40	336.8	11	32	6				14	17	PP
PRUHONICE	72.46	336.7	11	27A	1	20	55	8	14	6	PP
PLAUEN	72.51	338.4	11	28	1						
BOMBAY	72.66	278.4							21	41	
RATHFARNHAM	72.71	350.7	11	28	0						
SONNEBERG	72.83	339.0	11	29	0						
CHEB	72.86	338.1	11	34	5						
BENSBERG	73.09	341.7	11	30	0				11	34	
HURBANOVO	73.50	333.5				21	12	13			
BRATISLAVA	73.51	334.4	11	29	-4	20	53	-6			
KEW	73.81	346.6	11	36	2	21	10	7			
PENNSYLVANIA	74.06	41.3	11	37	1	21	9	3			
CHARTERS TS.	74.14	192.3	11	36	0						
MORGANTOWN	74.22	43.3	11	36A	-1						
BUCHAREST	74.28	326.8	11	47	10	21	23	15	16	33	
STUTTGART	74.78	339.7	11	40	0	21	25	11			
TUBINGEN	75.03	339.7	11	43	2						
STRASBOURG	75.25	340.6	11	43	0	21	23	4	14	53	PP
EBINGEN	75.39	339.7	11	44	1						
PALISADES	75.39	38.5	10	43	-60	21	17	-3	26	9	SS
FORDHAM	75.54	38.6	12	30	46	22	13	51			
HALIFAX	75.61	29.8	11	47A	2	21	21	-2	29	35	SSS
BELGRADE	75.66	330.8	11	46K	1				22	4	PS
ZAGREB	75.97	334.2	11	41	-6						
PARIS	75.98	344.1	11	49	2	21	31	4			
WASHINGTON	76.00	41.7	11	47	0						
TOLMEZZO	76.17	336.4	11	53	5						
BASLE	76.29	340.4	11	48	-1						
FOLINIERE	76.47	346.1	11	51	1						
CHUR	76.53	338.9	11	51A	1						
TRIESTE	76.69	335.6	11	49	-2						
SOFIA	76.72	327.9	11	51	0						
NEUCHATEL	76.92	340.7	11	53	1	21	29	-8			
CHAPEL HILL	77.75	44.7	12	1	4						
PAVIA	78.20	338.6	12	0	1	22	1	10	33	21	
BOLOGNA	78.36	336.9	12	30	30				15	1	PP
COLUMBIA	78.54	47.1	12	3	2						
CLERMONT-FD.	78.82	342.9	12	5	2						
KSARA	79.89	314.8	12	9A	1	22	17	8	15	17	PP
MONACO	79.95	339.4	12	8	-1						
ROME	80.53	335.2	12	14	2	22	27	12	15	16	PP
TARANTO	80.59	331.3	11	36	-36						
BRISBANE	80.93	185.2	12	17	3	22	22	2			
JERUSALEM	81.93	314.2	12	20A	1	22	46	16			
TORTOSA	84.08	343.6	12	35	5	23	4	13			
SERRA PILAR	84.99	350.5	12	37A	2				12	49	
TOLEDO	85.69	346.9	12	39	1	22	56	-11	32	29	
COIMBRA	85.89	350.2	12	40	1						
BERMUDA	86.40	35.7	12	51	9	23	17	3	29	41	SS
ALICANTE	86.65	343.8	12	46	3	23	25	8			
RIVERVIEW	87.36	186.4	12	47A	1	23	4	-19			
ALGIERS UNI.	87.55	340.7	12	45	-2	23	23	-2	16	9	PP
GRANADA	88.28	346.0	12	58K	7	23	41	9	16	34	PP
MALAGA	88.84	346.6	12	56	3						
ADELAIDE	89.91	196.4	13	0	2						
MELBOURNE	91.88	190.9	13	8	0						
TAMANRASSET	100.47	335.1	13	46	-1				17	53	PP
CARACAS	105.26	46.9							24	41	
CHINCHINA	106.01	57.5							18	23	PP
BOGOTA	107.09	56.3				25	9	5			
RUMANGABO	113.40	302.8							17	8	
LWIRO	114.45	302.8							17	36	
ELISABTHVLLE	123.14	298.6	18	58	3						
CAPE HALLETT	125.90	175.7							18	58	PP
SCOTT BASE	131.32	177.8	19	10	-1				22	33	SKP
KIMBERLEY	138.41	288.0	19	22	-2						
BYRD STATION	140.90	164.1	19	22	-6				22	52	PP
SOUTH POLE	143.45	180.0	19	27	-6				22	56	PP

MAY 6 17.H 29.M 32.S EPICENTRE -17.88-179.73 DEPTH= 644.KM

DEPTH OF FOCUS= 0.096R

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A=-0.95231 B=-0.00442 C=-0.30511 D=-0.0046 E= 1.0000
G= 0.3051 H= 0.0014 K=-0.9523 HT= 5.2

SE= 1.14

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S	
SUVA	1.77	260.9	1 18	0	2 20	0			
APIA	8.66	63.2	1 28	-39	3 28	-21			
GEBBIES PASS	26.53	192.4	4 51	-1					
BRISBANE	26.83	244.3	4 55K	1	8 49	0			
RIVERVIEW	30.50	232.9						9 36	
CHARTERS TS.	32.20	260.7	5 39	-1				10 57	
CANBERRA	32.72	231.7	5 44A	0			7 22	7 25	PP
PORT MORESBY	33.22	280.3	5 48	0	10 31	4		13 34	*SS
MELBOURNE	36.70	230.0	6 16	-1				39 32	
ADELAIDE	40.58	236.9	6 48	0				7 16	
GUAM	46.88	309.3	7 37	0					
CAPE HALLETT	54.73	183.7	8 37	4					
TERRE ADELIE	54.99	197.7	8 34	-1			11 2		
SCOTT BASE	60.37	183.3	9 12	1				9 38	PCP
MATUSIRO	67.13	324.2	9 54	0	18 3	4		21 51	*SS
BYRD STATION	67.48	170.6	9 54	-2			12 0		
SOUTH POLE	72.24	180.0	10 23	-1			12 27		
MIRNY	72.68	204.8	10 26	0					
HONG KONG	75.98	299.2	10 46	1	19 44	7			
BERKELEY	77.37	43.1	10 51	-1					
LICK	77.47	43.9	10 53A	0					
PASADENA	78.14	48.2	10 55	-1					
FRESNO	78.39	45.2	10 58	1					
SHASTA	78.90	40.7	11 0A	0					
RENO	79.89	42.8	11 6	1					
CORVALLIS	80.63	37.1	11 9	0					
BOULDER CITY	81.42	48.0	11 13	0					
TUCSON TELE.	82.75	52.8	11 20	0			13 34		
COLLEGE	86.03	13.1	11 33	-3			13 45		
BOZEMAN	88.56	40.8	11 49	2					
RESOLUTE	105.74	16.0	13 6	4					
RESOLUTE	105.74	16.0	13 6	777					
PALISADES	113.33	52.5						27 12	PS
SODANKYLA	127.70	347.5						20 18	SKP
KIMBERLEY	127.94	207.5	17 58	3					
KIRUNA	128.43	350.4	17 57	1			20 22	21 1	
BULAWAYO	133.09	217.6						21 38	
NURMIJARVI	133.97	343.5	18 9	3				20 40	SKP
ELISABTHVLLE	140.27	224.4	18 17A	-1				21 4	SKP
RATHFARNHAM	144.28	6.7	18 28A	3					
UVIRA	144.51	236.1	18 29	3				21 15	SKP
ASTRIDA	144.54	237.9	18 28K	2				21 15	SKP
COLLMBERG	145.15	346.0	18 29	2				20 55	
HALLE	145.20	347.2	18 26	-1					
LWIRO	145.50	237.4	18 31K	4					
JERUSALEM	145.55	300.4	18 34K	7					
RUMANGABO	145.60	239.3	18 32	5				21 19	SKP
JENA	145.81	347.2	18 32	4					
PRUHONICE	145.98	343.5	18 31	3					
KEW	146.48	0.7	18 32	3					
BENSBERG	146.54	352.1	18 34	5					
STUTTGART	148.34	348.7	18 39	8					
STRASBOURG	148.77	350.4	18 40A	8					
FOLINIERE	149.18	1.0	18 38	6					
TAMANRASSET	173.07	315.6	18 59	2				23 57	PP

MAY 7 0.H 3.M 26.S EPICENTRE -3.08 148.43 DEPTH= 0.KM

A=-0.85081 B= 0.52275 C=-0.05333 D= 0.5235 E= 0.8520
G= 0.0454 H=-0.0279 K=-0.9986 HT= 7.1

SE= 2.63

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
PORT MORESBY	6.41	191.4	1 35	-2	2 46	-6		
GUAM	16.84	347.5	3 57	-1	7 23	18		
CHARTERS TS.	16.96	187.0	3 59	-1	7 12	4		
BRISBANE	24.66	170.2	5 20K	-3	9 35	-8		

NOUMEA	25.90	139.0	5	40	5	10	16	13	
RIVERVIEW	30.70	175.6	6	21	3	11	20	-1	
CANBERRA	32.09	179.1	6	28A	-2				7 42 PP
MANILA	32.37	303.5	6	43	10				14 11
ADELAIDE	32.95	194.8	6	36	-2	12	4	8	8 14
BAGUIO CITY	33.66	306.0	6	38	-6	12	10	3	
MELBOURNE	34.73	184.8	6	51	-2				9 18 PCP
TAWU	36.91	314.6	7	13	1				
ABUYAMA	39.63	343.3	7	32A	-3				
FORT NELSON	39.69	181.2							16 46 SSS
TUKUBASAN	39.86	349.5	7	32	-4	13	58	16	8 57 PP
MATUSIRO	40.56	347.3	7	40	-2	13	43	-9	9 22 PP
LEMBANG	40.82	263.2	7	43	-1				
DJAKARTA	41.57	264.2	7	55	5				
HONG KONG	41.91	308.7	7	54	1	14	16	4	9 58 PPP
PERTH	41.99	223.2				14	23	9	17 5
ZO-SE	42.77	324.7	7	59K	-1	14	26	1	9 42 PP
CANTON	43.02	309.0	8	5K	3	14	33	4	17 43 SS
NANKING	44.85	323.5	8	19	2	14	59	4	10 46 PPP
ROXBURGH	46.09	159.6				15	15	2	
PHU-LIEN	47.34	302.0	8	39	2	15	36	5	10 17
VLADIVOSTOK	48.35	343.8	8	47	2	15	49	4	
Y.-SAKHLINSK	50.07	354.9	8	56	-2	16	13	4	
MEDAN	50.16	277.2	9	4	5				11 15
CHANGCHUN	51.11	338.6	9	8K	2				
PEKING	52.11	328.7	9	14K	0	16	39	2	22 1 SSS
UGLEGORSK	52.24	354.7	9	17	2	16	43	4	
KUNMING	52.44	305.0	9	17	1	16	46	4	20 27 SS
SIAN	52.54	318.4	9	15	-2				
CHENGTU	54.02	311.8	9	27	-1	17	3	0	
PAOTOW	55.84	325.1	9	39	-2				
PORT BLAIR	57.29	285.9	9	53	2				
CHITTAGONG	60.76	297.6	10	18A	3	18	39	7	12 35 PP
SHILLONG	61.70	301.1	10	20	-2				
ULAN-BATOR	62.40	329.8	10	27	1	18	59	6	
MAGADAN	62.47	1.4	10	27	0	19	0	7	
CHATRA	66.10	301.0	10	48	-3				
YAKUTSK	66.48	350.5	10	49	-4				
IRKUTSK	66.51	332.2	10	50	-3				
COLOMBO	69.15	278.5				20	12	-3	9 42
MADRAS	69.59	285.0	11	14	2	20	38	18	
CAPE HALLETT	70.47	173.1	11	17	-1	20	31	0	21 6 SCS
KODAIKANAL	71.87	281.7							21 4
MIRNY	74.00	200.0	11	37	-2	21	6	-5	
AGRA	74.09	299.2	11	38K	-1	21	8	-4	
DEHRA DUN	74.75	302.4	11	45	2	21	23	4	14 35 PP
SCOTT BASE	75.35	176.1	11	49	3				
POONA	76.41	289.8	11	52	0	21	38	0	
LAHORE	78.13	303.0	12	2	0				
SEMIPALATNSK	78.67	322.7	12	6	1	22	0	-2	
WARSAK DAM	80.87	305.0	12	15	-2				
COLLEGE	81.93	22.8	12	20	-2	22	34	-2	27 59 SS
NAMANGAN	82.05	311.9	12	25	2	22	40	3	
STALINABAD	83.83	309.1	12	35	3	23	0	5	
QUETTA	84.18	300.6	12	33	-1	23	0	1	12 36 PCP
SOUTH POLE	86.94	180.0	12	45	-3				
BYRD STATION	87.35	169.9	13	32	42				
BERKELEY	91.32	52.3				24	11	5	23 44 SKS
SVERDLOVSK	91.35	326.7	13	12	4				
SHASTA	91.36	49.5	13	9	1				
LICK	91.79	52.9				23	30	-40	
RENO	93.30	50.7	13	22	5				
KHEYS	94.10	350.0	13	16	-5				
PASADENA	94.52	56.1	13	35	12	24	6	-28	25 52 PS
EUREKA	96.27	50.8	13	33	2				
HUNGRY HORSE	97.30	41.8	13	37	1				
RESOLUTE	99.82	14.0	13	45	-2	25	22	4	32 9 SS
MAKHACH-KALA	100.09	312.9							17 47 PP
TUCSON	100.72	57.9							18 23 PP
TUCSON TELE.	100.81	57.8							18 4 PP
APATITY	102.20	339.1	13	40	-18	25	11	-27	26 55 PS
TIFLIS	102.21	311.9	13	59	1				
MOSCOW	104.16	326.9							18 15 PP
SOTCHI	105.63	314.4							18 36 PP
PULKOVO	106.50	332.3	18	33	7				
SIMFEROPOL	109.24	316.7							19 8 PP
KSARA	110.39	304.9	18	27	-6				19 11 PP
JERUSALEM	111.29	302.9	19	20	45				

KISHINEV	112.11	320.1							19 14	PP
LWOW	113.96	324.2	19	33	52				34 22	
BUCHAREST	114.83	318.2							29 18	PS
COPENHAGEN	116.79	333.8							19 56	PP
ASTRIDA	118.47	265.4	18	55	6					
POTSDAM	118.54	330.6							20 10	
RUHANGABO	118.97	266.8	18	59	9				19 14	
PRUHONICE	119.18	327.8							20 12	PP
COLLMBERG	119.22	329.7	18	48	-3					
LWIRO	119.42	265.7	18	55	4				29 19	
ELISABTHVLLE	119.56	254.9	18	58	7					
JENA	120.16	330.0							20 23	PP
TRIESTE	122.04	324.0							22 57	PPP
DE BILT	122.38	334.1							20 29	PP
STRASBOURG	123.56	329.7	18	51	-8	26	4	3	30 28	PS
ROME	124.84	320.8							20 53	PP
PAVIA	124.95	325.7							20 58	PP
KEW	125.14	336.6							27 53	SKKS
PALISADES	126.40	39.3							20 52	PP
ALGIERS UNI.	133.76	320.8							21 49	PP
HUANCAYO	133.98	109.9	19	26	7				19 40	PKP2
TOLEDO	135.69	329.4							22 18	PP
CHINCHINA	136.02	86.1	19	23	0				23 3	
BERMUDA	137.40	43.1							24 19	PP
BOGOTA	137.57	86.5							22 51	SKP
LA PAZ	138.97	119.5	19	35	7					
TAMANRASSET	139.09	301.8	19	30K	2				22 19	PP
SAN JUAN	142.91	63.3	19	38	3					
CARACAS	144.15	76.4	19	34	-3				29 52	SKKS
PONTA DELGDA	145.09	351.8	19	47A	8				19 54	PKP2

MAY 7 11.H 17.M 18.S EPICENTRE -3.56 149.80 DEPTH= 0.KM

A=-0.86259 B= 0.50213 C=-0.06171 D= 0.5031 E= 0.8642
G= 0.0533 H=-0.0310 K=-0.9981 HT= 7.1

SE= 2.46

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
PORT MORESBY	6.37	204.2	1	36	-1						2	45
CHARTERS TS.	16.71	191.6	3	58	1	7	8	5				
GUAM	17.65	343.6	4	8	-1							
BRISBANE	23.98	172.9	5	16K	-1	9	35	3				
CANBERRA	31.61	181.2	6	26K	-1							
ADELAIDE	32.86	196.9	6	36K	-2							
MANILA	33.77	302.9	6	48	2						10	51
MELBOURNE	34.39	186.8	6	49	-2							
MATUSIRO	41.34	345.8	7	46K	-3						9	28 PP
HONG KONG	43.28	308.1	7	39	-26							
ZO-SE	43.96	323.7	8	11	1	14	46	3			18	8 SCS
CANTON	44.38	308.4				14	51	2				
NANKING	46.06	322.6	8	28	1	15	18	5				
VLADIVOSTOK	49.20	342.7	8	51	-1							
MEDAN	51.57	277.4	9	19	9							
CHANGCHUN	52.06	337.6	9	10	-4	16	36	-1				
PEKING	53.23	327.9	9	21	-1							
SIAN	53.80	317.8	9	26	-1	17	3	2				
KUNMING	53.84	304.6	9	28	1	17	6	5				
CHENGTU	55.36	311.3	9	38	0							
PAOTOW	57.02	324.5	9	50	0	17	47	3				
LANCHOW	58.28	316.8	9	59	0	18	2	2				
CHITTAGONG	62.19	297.5	10	18	-8	18	37	-13			12	35 PP
MAGADAN	62.92	0.6	10	31	1							
SHILLONG	63.11	300.9	10	30	-2							
TERRE ADELIE	63.41	183.7	10	34	0							
ULAN-BATOR	63.50	329.2	10	38	4							
YAKUTSK	67.19	349.9	10	57	-1							
CHATRA	67.52	300.8									10	58
CAPE HALLETT	69.83	173.4	11	15	1						25	14 SS
MIRNY	74.02	200.4	11	36	-3							
SCOTT BASE	74.78	176.3	11	48	4							
DEHRA DUN	76.15	302.2				21	38	2				
POONA	77.85	289.7	12	5	4							
LAHORE	79.53	302.8	12	12	2							
COLLEGE	81.85	22.5	12	21	-1							

WARSAK DAM	82.27	304.8	12 24	-1						
NAMANGAN	83.39	311.8	12 37	7						
QUETTA	85.60	300.5	12 44	2						
SOUTH POLE	86.46	180.0	12 44	-2						
BYRD STATION	86.64	169.9	12 50	3						
EUREKA	95.52	50.8	13 29	1						
HUNGRY HORSE	96.75	41.9	13 35	1						
RESOLUTE	99.96	14.1	13 48	0	25 24	4			26 54	PS
ELISABTHVLLE	120.75	254.3	19 2	8						
TRIESTE	123.23	324.4			26 7	6			31 54	SPP
TAMANRASSET	140.50	302.1	19 30K	-1					22 23	PP

MAY 7 20.H 23.M 1.S EPICENTRE -8.49 124.25 DEPTH= 150.KM

DEPTH OF FOCUS= 0.018R

A=-0.55675 B= 0.81764 C=-0.14662 D= 0.8266 E= 0.5628
G= 0.0825 H=-0.1212 K=-0.9892 HT= 6.7

SE= 1.61

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
PORT MORESBY	22.64	94.1	4	50K	2	8	56	15			5	20	PP
MANILA	23.15	351.9	4	54	1	8	4	-46					
CHARTERS TS.	24.18	120.6	5	3	0	9	30	23					
PERTH	24.62	197.4	5	11	4	9	30	15			5	31	
BAGUIO CITY	25.01	351.6	5	11	0	9	53	32					
MEDAN	28.18	294.2	5	38	-2	9	26	-47					
ADELAIDE	29.47	155.3	5	50A	-2						7	3	
GUAM	29.83	43.2	5	56	1								
HONG KONG	32.15	342.3	6	15	0	11	27	12					
BRISBANE	33.11	128.5	6	22A	-1	11	40	10					
CANTON	33.16	341.3	6	22	-2	11	38	7					
PHU-LIEN	33.87	329.5									7	57	
MELBOURNE	34.70	150.5	6	35	-2								
CANBERRA	35.01	143.4	6	39K	0				6	49			
RIVERVIEW	35.35	139.4				12	20	15			17	46	
PORT BLAIR	37.21	302.1									15	38	
KUNMING	39.41	328.3	7	17A	1	13	18	12			9	13	PPP
ZO-SE	39.47	355.9	7	17	0								
WUHAN	39.89	346.9	7	21	1	13	26	13					
NANKING	40.64	352.9	7	27A	1	13	37	12			9	8	PP
NOUMEA	42.78	113.7	7	45	1								
CHENGTU	43.50	334.3	7	48A	-2	14	15	9					
CHITTAGONG	44.16	314.5	7	36	-19	14	0	-16					
ABUYAMA	44.43	13.3	7	58A	1								
SIAN	44.92	341.9	8	0A	-1								
SHILLONG	46.25	318.0	8	13K	2								
MATUSIRO	46.68	15.5	8	14A	-1	15	2	10			10	2	PP
LANCHOW	48.32	337.8	8	28A	0	15	28	13			10	21	PP
PEKING	48.85	351.8	8	30A	-2	15	29	7			10	27	PP
CHATRA	50.26	315.5	8	41	-1	15	37	-5					
PAOTOW	50.56	346.0	8	45	0								
VLADIVOSTOK	51.83	7.1	8	54	0	16	10	7					
CHANGCHUN	52.08	1.0	8	54	-2								
Y.-SAKHLINSK	57.59	14.9	9	36	0								
ULAN-BATOR	58.22	346.4	9	39	-1								
DEHRA DUN	58.78	313.1	9	36	-9								
TERRE ADELIE	59.41	172.2	9	41	-8								
UGLEGORSK	59.42	13.5	9	50	1								
MIRNY	61.78	193.6	10	2	-3								
WARSAK DAM	65.39	313.4	10	28A	0								
QUETTA	67.08	307.7	10	37A	-2	19	27	8			20	32	SCS
NAMANGAN	68.94	319.9	10	50	0	19	52	11					
CAPE HALLETT	69.54	166.4	10	54	0								
STALINABAD	69.60	316.4	10	53	-1	19	57	8					
SEMIPALATNSK	69.96	331.8	10	55	-2								
YAKUTSK	70.42	2.7	10	59	0								
MAGADAN	71.06	13.9	11	4	1								
SCOTT BASE	72.68	171.4	11	12	-1						14	32	PP
TANANARIVE	74.77	252.7	11	25K	0						16	36	PPP
SOUTH POLE	81.57	180.0	12	1	-1						13	13	
SVERDLOVSK	83.16	330.3	12	10	0								
BYRD STATION	86.09	171.0	12	25	0	23	1	17					
ADDIS ABABA	86.90	279.5	12	32	4								
TIFLIS	87.80	312.6	12	34	1	23	14	14					

BULAWAYO	92.36	249.4	12 55	1			
BROKEN HILL	93.45	254.9	12 59	0			
ASTRIDA	94.09	266.8	13 2	0			
HALLEY BAY	94.33	187.1	13 3	0			
UVIRA	94.56	265.8	13 4	0			
RUHANGABO	94.67	268.0	13 6	1			
ELISABTHVLLE	94.93	257.5	13 9	3			
MOSCOW	95.04	325.5	13 7	1			
KHEYS	95.25	350.4	13 2	-5			
COLLEGE	96.74	25.4	13 14	0			17 45 PP
PRUHONICE	109.10	320.0					18 42 PP
RESOLUTE	110.20	10.3	18 14	1			28 17 PS
THULE	111.75	3.2	17 45	-31			
HUNGRY HORSE	117.14	39.6	18 30	3			
PASADENA	117.50	56.0	18 32	5			
EUREKA	118.23	49.7	18 34	5			
TAMANRASSET	119.69	291.3	18 35K	3			20 5 PP
TUCSON TELE.	123.96	56.7	18 44	4			
RAPID CITY	125.71	40.8	18 46	3			
SHAWINIGAN	139.37	18.1	19 11	2			
WASHINGTON	144.17	29.0	19 17	-1			
CHAPEL HILL	145.39	34.4	19 22	2			
COLUMBIA	145.56	38.9	19 23	3			
HUANCAYO	151.80	136.1	19 43	13			20 25
LA PAZ	152.32	153.7	19 50	20			

MAY 8 11.H 34.M 52.S EPICENTRE 53.70 160.43 DEPTH= 67.KM

DEPTH OF FOCUS= 0.005R

A=-0.56029 B= 0.19916 C= 0.80400 D= 0.3349 E= 0.9422
G=-0.7576 H= 0.2693 K=-0.5946 HT= -6.8

SE= 1.96

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
PETROPAVLOVK	1.21	242.6	0 22	0	1 0	21		
KLYUCHI	2.63	4.1	0 45	3	1 17	4		
MAGADAN	7.91	321.7	1 57	2	3 33	9		
UGLEGORSK	12.36	255.5	3 0	5	5 25	13		
Y.-SAKHLINSK	13.16	246.3	3 8	2	5 33	2		
NEMURO	14.27	229.4	3 16	-4	5 55	-2		
WAKKANAI	14.69	243.3			6 15	7		
KUSIRO	15.08	231.2	3 22	-9	6 8	-8		
OBIHIRO	15.69	233.6	3 36	-3	6 37	6		
HIROO	16.13	231.8			6 35	-6		
URAKAWA	16.48	232.6	3 45	-4	6 48	-1		
SAPPORO	16.49	237.6	3 44	-5	6 25	-24		
TOMAKOMAI	16.78	235.8	3 56	4	6 52	-3		
SUTTSU	17.25	239.0	3 59	1				
MORI	17.59	236.8	4 2	0	7 18	4		
HAKODATE	17.76	235.8			7 6	-11		
HATINOHE	18.33	231.7	4 27	16	7 50	20		
AOMORI	18.46	233.7	4 19	6	7 30	-3		
MORIOKA	19.16	230.8	4 16	-5	7 42	-6		
MIZUSAWA	19.64	229.9	4 26	0	7 56	-3		
AKITA	19.65	232.9	4 27	1	8 14	15		
ISINOMAKI	20.12	228.4	4 32	1	8 17	8		
SAKATA	20.42	231.9	4 37	3	8 32	18		
SENDAI	20.44	228.9	4 33A	-2	8 25	10		
VLADIVOSTOK	21.55	252.2	4 42	-4	8 29	-6		
YAMAGATA	20.71	229.9	4 37	0				
HUKUSIMA	21.06	228.8	4 40	-1	8 31	5		
ONAHAMA	21.54	226.8	4 35	-11	8 38	3		
NIIGATA	21.57	231.6	4 52	6				
SHIRAKAWA	21.70	228.3	4 48K	1	8 43	5		
MITO	22.21	226.8	4 53	1	8 53	6		
UTUNOMIYA	22.33	228.1	4 53	0	8 53	3		
SUIHWA	22.41	265.2	4 52	-2				
KAKIOKA	22.46	227.1	4 54	-1	8 57	5		
TUKUBASAN	22.50	227.2	4 55A	0	9 0	7		5 17 PP
TAKADA	22.61	231.7	4 58	2				
MAEBASI	22.81	229.3	5 0	2	9 6	8		
KUMAGAYA	22.88	228.4	5 1	2				
NAGANO	22.98	231.2	5 3	3	9 11	10		
WAZIMA	23.03	234.4	5 1	1	9 11	9		

MATUSIRO	23.07	231.0	5	1A	0	9	10	7				12	23	PCS
OIWAKE	23.10	230.1	5	4	3	9	11	8						
TOKYO C.M.O.	23.11	227.1	5	1	0	9	14	11						
TITIBU	23.15	228.7	5	4	2									
YOKOHAMA	23.36	226.9	5	5	1									
TOYAMA	23.43	232.9	5	5	1									
MATUMOTO	23.43	231.0	5	6	2	9	17	8						
KOHU	23.67	229.1	5	8	1	9	23	10						
HUNATU	23.69	228.6	5	8	1	9	18	4						
MERA	23.72	226.0	5	9	2									
MISIMA	23.93	227.7	5	10A	1	9	10	-8						
SHIZUOKA	24.30	228.5	5	16A	3	9	35	11						
HUKUI	24.39	233.4	5	15	1									
GIHU	24.69	231.7	5	17	1	9	35	4						
NAGOYA	24.78	231.1	5	19	2									
IBUKISAN	24.89	232.3	5	20	2									
CHANGCHUN	24.93	261.0	5	18A	-1	9	36	1				10	4	
HIKONE	25.04	232.4	5	22	2	9	45	9						
KAMEYAMA	25.28	231.5	5	36	14									
KYOTO	25.49	232.9	5	26	2									
TOYOOKA	25.51	235.0	5	24	0									
ABUYAMA	25.68	232.9	5	26A	0									
NARA	25.72	232.2	5	29	3									
OSAKA	25.88	232.7	5	30	2									
OWASE	26.05	230.9	5	30	1									
WAKAYAMA	26.40	232.7	5	36	4									
TOKUSIMA	26.81	233.4	5	35	-1									
TAKAMATU	26.86	234.5	5	36	-1									
COLLEGE	27.84	45.9	5	45	-1	10	25	3	6	0		11	12	
NAGASAKI	30.20	238.4	6	8A	1	11	4	4				15	37	
KAGOSIMA	30.80	236.1	6	11	-1									
PEKING	32.64	263.5	6	27A	-1	11	36	-2				7	46	PPP
IRKUTSK	33.07	290.8	6	31	-1									
ULAN-BATOR	33.63	282.4	6	37A	0									
SITKA	35.46	58.0	6	53	1									
PAOTOW	35.94	269.5	6	55A	-1	12	29	0						
ZO-SE	36.08	247.2	6	57A	0	12	33	2				17	11	SCS
NANKING	36.68	250.8	7	2A	0	12	39	-1				9	24	PCP
WUHAN	40.22	253.6	7	32	0	13	37	3				9	35	PCP
KHEYS	40.60	345.3	7	25	-10	13	27	-13						
SIAN	40.80	262.8	7	36A	-1	13	44	1				9	16	PP
WUWEI	42.03	272.1	7	48	1									
LANCHOW	42.57	269.2	7	51A	0	14	8	-1				9	33	PP
RESOLUTE	42.69	22.3	7	52A	0	14	13	3				9	33	PP
ALBERNI	44.77	63.8	8	9	0									
NORD	44.93	359.4	8	10	0	14	45	2						
KIPAPA	45.04	119.2	8	10	-1									
HORSESHOE B.	45.52	62.9	8	14	-1									
VICTORIA	45.96	63.9	8	18	0									
CHENGTU	46.26	263.5	8	21A	0	15	2	0						
CANTON	46.70	248.1	8	25A	1	15	10	2						
HONG KONG	46.84	246.5	8	26A	1	15	9	-1						
SEMIPALATNSK	46.95	300.3	8	25	-1									
BANFF	48.42	56.8	8	37	-1									
CORVALLIS	48.45	68.1	8	38	0									
MANILA	49.78	233.7	8	48	0	16	2	11						
HUNGRY HORSE	50.96	58.9	8	56	-1							10	13	PCP
KUNMING	51.22	259.7	8	58A	-1	16	9	-2				18	44	SCS
SHASTA	51.50	71.3	9	2	1									
SVERDLOVSK	51.98	316.6	9	6	1	16	24	2						
PHU-LIEN	52.24	252.8	9	8	1									
BUTTE	53.25	60.3	9	9	-5	16	22	-17				11	35	PP
BERKELEY	53.50	73.8	9	16K	0	16	44	2				20	14	SS
RENO	53.73	70.7	9	19K	1									
LICK	54.22	73.9	9	22	1							10	22	
BOZEMAN	54.27	59.7	9	22	0									
SODANKYLA	54.40	339.9	9	22	-1	16	48	-6				11	22	PP
KIRUNA	55.18	342.7	9	28	0							12	41	
FRESNO	55.67	73.1	9	27	-5									
EUREKA	55.91	68.2	9	33	-1	17	16	1	9	54		39	4	PKPPKP
SHILLONG	57.22	269.3	9	42	-1	17	32	0						
SALT LAKE C.	57.25	64.5	9	43	0									
NAMANGAN	57.66	296.4	9	45	-1	17	37	-1						
PASADENA	58.47	74.2	9	51	-1	17	52	4				21	50	SS
BOULDER CITY	59.04	70.4	9	56	0							39	36	PKPPKP
CHATRA	59.07	274.0	9	56	0	18	0	4						
RAPID CITY	59.35	56.4	9	57	-1							39	29	PKPPKP
CHITTAGONG	59.68	266.9	10	1	1	18	10	6	10	25		22	13	SS

PULKOVO	60.03	333.5	10	2	-1	18	10	2															
SKALSTUGAN	60.46	344.3	10	4A	-1				10	27													
NURMIJARVI	60.80	336.7	10	8	0	18	21	3															
STALINABAD	60.96	296.3	10	7	-2	18	11	-9															
HELSINKI	61.03	336.4	10	10	1																		
MOSCOW	61.26	327.2	10	9	-2																		
DEHRA DUN	61.84	283.5	10	14	-1													19	58				
REYKJAVIK	62.49	1.2	10	20	1																		
WARSAK DAM	62.80	290.9	10	17A	-4																		
UPPSALA	62.94	340.0	10	21A	-1	18	45	0															
LAHORE	63.05	287.2	10	20	-3																		
PORT MORESBY	63.86	194.6	10	28	0	19	0	3										23	1	SS			
TUCSON TELE.	64.01	70.3	10	29	0													39	23	PKPPKP			
TUCSON	64.02	70.5	10	29	0													39	24	PKPPKP			
AGRA	64.24	281.2	10	29K	-2																		
GOTEBORG	66.03	342.1	10	39	-3																		
PORT BLAIR	67.51	258.8	10	53	2	19	44	3															
COPENHAGEN	67.85	341.1	10	54A	0																		
MAKHACH-KALA	67.92	313.2	10	48	-6																		
QUETTA	68.23	291.5	10	55A	-1	19	52	2	11	10								13	27	PP			
WARSAW	69.13	334.6	11	1A	-1	20	7	7	11	21								11	31	PCP			
FAYETTEVILLE	69.89	56.3	11	7A	1	20	48	39															
TIFLIS	70.09	314.1	11	8	1	20	16	4															
OTTAWA	70.29	38.4	11	7	-2	20	12	-2															
SHAWINIGAN	70.37	35.9	11	8A	-1																		
LWOW	70.51	331.7	11	11	1													21	20				
SEVEN FALLS	70.54	34.4	11	9	-1	20	20	3															
SOTCHI	70.64	318.5	11	11	0	20	20	2															
MEDAN	70.69	248.7	12	2K	51	20	26	7															
POTSDAM	70.84	339.5	11	13	1	20	23	3															
DURHAM	70.88	349.1	11	17	5																		
BREBEUF	70.97	37.0	11	11A	-2	20	23	1															
GORIS	71.25	311.8	11	14	0	20	29	4															
KRAKOW	71.41	334.4	11	16	1	20	28	1										11	35	PCP			
KARACHI	71.54	288.5	11	16	0																		
KISHINEV	71.57	327.4	11	16	0	20	26	-3															
SIMFEROPOL	71.58	322.9	11	16	0	20	34	5															
IASI	71.80	328.3	11	17	-1	20	37	5															
RACIBORZ	71.82	335.5	11	19	1													11	38	PCP			
COLLMBERG	71.87	339.2	11	19	1	20	43	11															
HALLE	71.90	339.9	11	14	-4	20	33	0	11	25								11	41	PCP			
MUNSTER	72.27	342.7	11	21	1																		
JENA	72.51	339.9	11	23	1													12	10				
DE BILT	72.56	344.3	11	23A	1	20	38	-2															
BACAU	72.58	328.4	11	23	1	20	43	3															
PRAGUE	72.71	337.8	11	26	3													21	23	PS			
PRUHONICE	72.77	337.7	11	24A	1	20	49	6										11	47	PCP			
RATHFARNHAM	72.80	351.7	11	22A	-2													15	9				
PLAUEN	72.80	339.4	11	22	-2													11	28				
SONNEBERG	73.11	340.0	11	27	2													12	13				
CHEB	73.15	339.1	11	26	0	20	52	5															
FOCSANI	73.26	327.8				20	50	2															
POONA	73.29	278.5	11	3	-23																		
BENSBERG	73.32	342.7	11	27A	0													12	6				
MORGANTOWN	73.51	44.4	11	27A	-1																		
BOMBAY	73.60	279.6	11	28	0	20	54	2										21	37	PS			
BRATISLAVA	73.86	335.4	11	28K	-2	21	1	6															
VIENNA-H.	73.96	335.9	11	32A	2													12	35				
KEW	73.97	347.6	11	30A	0																		
BUDAPEST	74.00	333.9	11	31	0																		
CHARTERS TS.	74.41	193.8	11	33	0																		
PALISADES	74.74	39.6	11	34	-1	21	2	-2										21	26	PS			
BUCHAREST	74.75	327.9	11	35	0													11	47				
LEMBANG	74.82	235.1	11	33	-2																		
STUTTGART	75.05	340.8	11	38A	1	21	29	21															
HALIFAX	75.08	30.9	11	37A	0																		
TUBINGEN	75.30	340.8	11	39A	1																		
WASHINGTON	75.31	42.9	11	37	-1																		
STRASBOURG	75.50	341.6	11	40A	1	21	8	-5	11	57								12	9	*SP			
EBINGEN	75.66	340.7	11	41A	1																		
NOUMEA	75.86	174.3	11	42	1																		
RAVENSBURG	75.91	340.2	11	43	2																		
BELGRADE	76.07	331.9	11	44	2	22	12	53										15	30	PP			
PARIS	76.18	345.2	11	44	1																		
ZAGREB	76.33	335.3	11	45A	1				11	56													
TOLMEZZO	76.49	337.5	11	43	-2	21	26	2															
BASLE	76.55	341.5	11	46A	1													14	50				
FOLINIERE	76.64	347.2	11	46	0																		

CHUR	76.82	340.0	11	48	1							
TRIESTE	77.03	336.7	11	48A	0							
NEUCHATEL	77.17	341.7	11	50	1							
COLUMBIA	77.79	48.3	11	52	0							
SKOPJE	78.41	330.1	11	58A	3						14	20
CLERMONT-FD.	79.04	344.0	12	0A	1				12	17		
PRATO	79.31	338.0	11	31	-29	22	15	21				
MONACO	80.23	340.5	12	4K	-1							
KSARA	80.52	316.0	12	9A	2	22	5	-2	12	31	15	12 PP
ROME	80.87	336.3	12	11	2	22	17	7				
BRISBANE	81.09	186.7	12	9	-1	22	17	4				
ATHENS	81.34	326.8	12	15	4	22	30	15			22	17 SKS
JERUSALEM	82.57	315.4	12	18K	1				12	42		
MESSINA	83.57	332.9	12	22A	-1							
SERRA PILAR	85.08	351.7	12	32A	2				12	42		
BERMUDA	85.79	36.9	12	28	-6	22	58	-1			28	38 SS
TOLEDO	85.84	348.1	12	42K	8						15	56 PP
RIVERVIEW	87.54	187.7	12	43	1							
ADELAIDE	90.25	197.7	12	55A	0						13	24
MELBOURNE	92.13	192.2	13	5K	1							
ADDIS ABABA	100.54	301.2	13	45	3							
TAMANRASSET	100.81	336.5	13	43A	0						17	48 PP
RUMANGABO	114.16	304.3	18	39	7							
ASTRIDA	115.06	303.3	18	37	3							
LWIRO	115.22	304.4	18	37	3							
HUANCAYO	119.61	68.5	18	46	3						20	11 PP
TERRE ADELIE	121.05	188.7	18	44	-2							
ELISABTHVLLE	123.95	300.3	18	57K	6				19	11		
BROKEN HILL	125.77	297.4	18	57	2							
LA PAZ	127.19	64.5	18	48	-9							
MIRNY	130.20	208.9	19	3	0							
BULAWAYO	130.37	293.2	19	6	3							
SCOTT BASE	131.34	178.2	19	5	0						22	24 SKP
KIMBERLEY	139.30	289.7	19	15	-5							
BYRD STATION	140.69	164.3	19	14	-9				19	25	22	55 PP
SOUTH POLE	143.51	180.0	19	23	-4						23	3 PP
ARGENTINE I.	155.12	135.3	19	56	11							
HALLEY BAY	157.92	175.3	19	49	0							

MAY 9 23.H 57.M 8.S EPICENTRE 44.84 149.40 DEPTH= 52.KM

DEPTH OF FOCUS= 0.003R

A=-0.61244 B= 0.36213 C= 0.70270 D= 0.5090 E= 0.8608
G=-0.6049 H= 0.3577 K=-0.7115 HT= -3.5

SE= 2.41

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
KURILSK	1.16	290.4	0	22	1							
NEMURO	3.14	242.7	0	47	-2	1	22	-3			1	42
ABASHIRI	3.76	259.3	0	56	-1	1	51	10				
KUSIRO	4.06	244.6	1	1	-1	1	47	-2				
OBIHIRO	4.88	249.0	1	13	0	2	12	3				
HIROO	5.11	242.1	1	15A	-1	2	14	-1				
Y.-SAKHLINSK	5.12	296.7	0	52	-25							
ASAHIGAWA	5.16	260.6	1	21	4							
WAKKANAI	5.50	278.8				2	31	6				
URAKAWA	5.52	243.2	1	23	1	2	24	-1				
SAPPORO	6.08	255.9	1	29	-1	2	41	2				
TOMAKOMAI	6.13	250.5	1	42	11	2	39	-1				
UGLEGORSK	6.57	312.8	1	39	2	3	7	16				
MURORAN	6.62	250.7	1	35	-2	3	1	9				
SUTTSU	6.94	256.2	1	38	-4	3	9	9				
MORI	6.99	250.0	1	43	0	3	4	3				
HAKODATE	7.03	247.3	1	43	0	3	3	0				
HATINOHE	7.22	236.2	1	45	-1	2	59	-8				
AOMORI	7.50	240.7	1	54	4	3	9	-5				
MORIOKA	7.97	232.8	1	52	-4	3	16	-10				
MIZUSAWA	8.39	230.1	1	59	-3	3	24	-12				
AKITA	8.58	236.7	2	21	16	3	35	-7				
ISINOMAKI	8.81	226.2	2	25	17	4	32	45			3	33
SENDAI	9.14	227.1				3	42	-12				
SAKATA	9.28	233.6	2	13	-1	3	56	-2				
YAMAGATA	9.45	229.0				4	19	16				
HUKUSIMA	9.76	226.6	2	22	1	3	59	-11				

ONAHAMA	10.17	222.1			4	5	-14				
SHIRAKAWA	10.37	225.1			4	13	-11				
NIIGATA	10.40	231.9								4	42
MITO	10.83	221.8			4	20	-15				
UTUNOMIYA	10.99	224.4	3	0	22					4	29
KAKIOKA	11.09	222.4	2	46	7	4	30	-12			
TUKUBASAN	11.14	222.6	2	35A	-5	4	29	-14		3	15
MAEBASI	11.51	226.5	2	48	3					5	54
KUMAGAYA	11.55	224.7				4	35	-18			
TOKYO C.M.O.	11.74	222.1	2	47	-1	4	59	1		4	50
NAGANO	11.77	230.0	2	56	8						
TITIBU	11.83	225.2				4	47	-11			
OIWAKE	11.84	227.9	3	29	40						
MATUSIRO	11.85	229.5	2	45K	-4	5	3	2		4	16
TOYAMA	12.30	232.9	3	3	8						
KOHU	12.36	225.7	3	36	40						
HUNATU	12.36	224.7								5	3
GIHU	13.49	230.0	3	7	-4						
MAGADAN	14.76	2.8	3	30	3	6	22	12			
CHANGCHUN	17.26	275.2	4	2	3						
YAKUTSK	20.68	333.3	4	36	-2	8	21	0			
PEKING	24.89	270.6	5	20A	0						
ZO-SE	25.98	247.8	5	31A	1	10	1	6			
NANKING	26.99	252.3	5	39	0	10	15	4			
SIAN	32.66	265.3	6	30	0						
LANCHOW	35.38	271.9	6	54A	1						
CHENGTU	38.09	264.0	7	16A	0	13	5	1			
MANILA	38.59	227.6	5	16	-124						
COLLEGE	39.25	36.9	7	26	1						
KUNMING	42.42	258.3	7	51A	0	14	10	1			
SEMIPALATNSK	45.41	302.9	8	13	-3						
CHITTAGONG	51.77	264.2	9	3	-2	16	24	3		11	1 PP
RESOLUTE	53.46	17.3	9	16A	-1	16	40	-4		20	22 SS
SVERDLOVSK	53.46	316.8	9	17	0						
NAMANGAN	55.01	295.4	9	29	0						
STALINABAD	58.20	294.5	9	51	0	17	52	5			
LAHORE	58.51	284.7	9	53	-1						
WARSAK DAM	58.97	288.6	9	56	-1						
BANFF	59.57	46.7	9	56	-5						
SODANKYLA	60.07	337.9	10	3	-1						
MEDAN	60.45	242.6	10	8	1						
KIRUNA	61.30	340.3	10	12	-1						
HUNGRY HORSE	62.02	48.6	10	17	0					12	37 PP
RENO	64.02	59.3	10	32K	1						
LICK	64.23	62.2	10	32K	0						
QUETTA	64.38	287.8	9	54	-39	19	11	5		12	55 PP
PULKOVO	64.46	330.7	10	34	0						
MOSCOW	64.52	324.4	10	33	-1						
BOZEMAN	65.27	49.6	10	39	0						
FRESNO	65.74	61.7	10	42	0						
NURMIJARVI	65.79	333.5	10	42	0						
HELSINKI	65.96	333.2	10	44	1						
EUREKA	66.39	57.3	10	46	0						
SKALSTUGAN	66.72	340.6	10	50	2						
POONA	67.02	273.6	10	50	0						
MAKHACH-KALA	68.31	309.4	10	55	-3	19	57	3			
PASADENA	68.43	63.0	10	58	-1						
UPPSALA	68.45	336.1	10	59	0						
BOULDER CITY	69.33	59.6	11	4	0						
RAPID CITY	70.50	46.9	11	11	0						
TIFLIS	70.64	309.8	11	14	2				11	28	
LARAMIE	71.14	50.3	11	15	0						
SOTCHI	72.03	314.0	11	20	-1	20	43	6			
BRISBANE	72.04	176.6	11	21	0						
BOULDER	72.18	51.1	11	22	1						
SIMFEROPOL	73.80	318.0	11	32	1	21	4	7			
TUCSON	74.28	60.2	11	35	1						
TUCSON TELE.	74.29	60.0	11	34	0						
LWOW	74.42	326.8	11	36	1						
KISHINEV	74.64	322.3	11	31	-5	21	8	2			
IASI	75.04	323.2	11	39	1						
POTSDAM	76.13	334.2	11	44	0					12	0
COLLMBERG	77.09	333.6	11	50	0						
HALLE	77.24	334.3	11	48	-3					12	0
JENA	77.85	334.2	11	55	1						
BUCHAREST	77.87	322.2	11	30	-24						
SONNEBERG	78.45	334.2	11	56	-1						
BENSBERG	79.13	336.8	12	2	1						

BELGRADE	79.90	325.8	12	7K	2							
RATHFARNHAM	80.04	345.5	12	8	2							
SOFIA	80.45	322.8	12	3	-5	22	16	7			15	9
STUTTGART	80.49	334.6	12	9	1							
FAYETTEVILLE	81.04	47.3	12	9A	-2							
STRASBOURG	81.09	335.3	12	13	2							
KSARA	81.21	309.4	12	15	3							
TOLMEZZO	81.33	331.1	12	14	1						12	59
OTTAWA	81.66	30.3	12	14	0							
SHAWINIGAN	81.69	27.9	12	15	0							
SEVEN FALLS	81.81	26.5	12	17	2							
CHUR	82.09	333.5	12	18	1							
BREBEUF	82.32	29.0	12	17A	-1							
PARIS	82.35	338.6	12	20.	2							
MELBOURNE	82.38	183.5	12	19	1							
FOLINIERE	83.12	340.5	12	24	2							
ATHENS	84.12	319.8	12	27K	0							
PENNSYLVANIA	84.78	34.1	12	32	2							
CLERMONT-FD.	84.97	337.0	12	34	3							
PALISADES	86.13	31.4	12	3(	-1	24	4	58	12	53	16	8 PP
WASHINGTON	86.73	34.5	12	40	0							
CHAPEL HILL	88.43	37.4	12	40	-8						13	2
TAMANRASSET	105.07	325.7	14	5	777						18	14 PP
ELISABTHVLLE	120.66	285.0	18	52	6							
HUANCAYO	129.81	63.7	19	8	4							
BYRD STATION	133.97	166.0	19	11	-1							
HALLEY BAY	149.17	182.0	19	43	4							

MAY 10 9.H 44.M 2.S EPICENTRE 48.40 148.68 DEPTH= 401.KM

DEPTH OF FOCUS= 0.058R

A=-0.56930 B= 0.34636 C= 0.74561 D= 0.5198 E= 0.8543
G=-0.6370 H= 0.3875 K=-0.6664 HT= -4.8

SE= 1.77

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
UGLEGORSK	4.43	281.3	1	19	2	2	21	4				
ABASHIRI	5.34	216.5	1	31	5	2	34	0				
NEMURO	5.52	204.3				2	31	-6				
KUSIRO	6.20	210.5	1	35A	0	2	46	-5				
OBIHIRO	6.69	217.0	1	41	0							
HIROO	7.19	213.6	1	44A	-3	3	3	-8				
SAPPORO	7.40	226.6	1	49K	0	3	9	-6				
URAKAWA	7.51	215.8	1	48	-2	3	11	-6				
TOMAKOMAI	7.71	222.9				3	22	1				
MURORAN	8.14	224.6	2	26	28	3	27	-3				
SUTTSU	8.15	229.7	1	58	0							
MORI	8.51	225.2	2	2	0							
HAKODATE	8.69	223.3				3	35	-7				
HATINOHE	9.38	215.6				3	49	-7			3	14
AOMORI	9.44	219.5				3	51	-6				
MIYAKO	9.99	211.3				4	4	-4				
MORIOKA	10.24	214.6	2	20	-2	4	11	-3				
AKITA	10.65	218.5				4	23	0				
MIZUSAWA	10.75	213.2				4	27	2				
MAGADAN	11.24	5.5	2	35	2	4	38	3				
SENDAI	11.60	212.0	2	38	1	4	41	0				
VLADIVOSTOK	12.85	252.0	2	53	1	5	18	10				
UTUNOMIYA	13.50	211.9	2	48	-1	5	22	1				
HUKUSIMA	12.20	212.3	2	45	1	4	58	3				
KAKIOKA	13.68	210.4	3	0	-1	5	33	8				
TUKUBASAN	13.72	210.6	3	OK	-1	5	29	3				
NAGANO	14.03	217.1	3	5	1							
MATUSIRO	14.12	216.8				5	37	3				
OIWAKE	14.18	215.4	3	13	7							
GIHU	15.70	218.5	3	22	0						6	9
NAGOYA	15.82	217.6	3	24	1							
ABUYAMA	16.67	220.6	3	32K	0							
NARA	16.72	219.6	3	33	1							
CHANGCHUN	16.82	263.0	3	31K	-2							
YAKUTSK	17.31	329.0	3	38	0	6	38	4				
PEKING	24.61	262.3	4	48	0							
ZO-SE	27.10	240.4	5	10	0							
NANKING	27.82	245.0	5	17K	1							

WUHAN	31.48	248.0	5 52	4					
SIAN	32.65	259.2	6 OK	2					
LANCHOW	34.94	266.3	6 19K	2					
COLLEGE	36.76	39.7	6 32	0			7 49		
KUNMING	42.79	253.8	7 22K	0	13 15	-1		9 13	PP
SHILLONG	49.50	263.8	8 14K	1					
RESOLUTE	50.21	18.1	8 17	-2				9 30	PCP
CHITTAGONG	51.74	260.8	8 31	1	15 25	5	9 55	10 36	PP
CHATRA	51.78	268.6	8 29	-1					
WARSAK DAM	57.43	286.0	9 10	-1					
HUNGRY HORSE	60.06	49.8	9 28	0					
NURMIJARVI	62.39	332.4	9 43	-1					
HELSINKI	62.56	332.1	9 44	-1					
QUETTA	62.88	285.7	9 47K	0					
EUREKA	64.91	58.3	10 0	0			11 24		
UPPSALA	64.99	335.2	9 58	-2					
TUCSON TELE.	72.95	60.5	10 49	1					
TUCSON	72.95	60.6	10 49	1					
HUANCAYO	128.57	60.4	18 24	4					
SOUTH POLE	138.21	180.0	18 37	-1				21 33	PP

MAY 11 16.H 28.M 58.S EPICENTRE 53.44 159.68 DEPTH= 88.KM

DEPTH OF FOCUS= 0.009R

A=-0.56110 B= 0.20774 C= 0.80125 D= 0.3472 E= 0.9378
G=-0.7514 H= 0.2782 K=-0.5983 HT= -6.7

SE= 1.56

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
PETROPAVLOVK	0.69	244.2	0 15	-3	0 26	-5		
MAGADAN	7.85	324.8	1 54	1				
UGLEGORSK	11.86	255.5	2 52	5				
Y.-SAKHLINSK	12.64	246.0	2 58	0	5 25	8		
YAKUTSK	18.01	310.4	4 5	-1	7 23	3		
VLADIVOSTOK	21.04	251.9	4 57	19				
TUKUBASAN	21.99	226.4	4 48K	0	8 44	4		5 12
MATUSIRO	22.56	230.2	4 53A	0	8 57	7		5 7
TIKSI	22.65	335.1	4 54	0	9 0	9		
CHANGCHUN	24.45	260.9	5 10	-1	9 25	3		
ABUYAMA	25.17	232.2	5 19K	1				
COLLEGE	28.35	45.5	5 47	-1			6 9	
PEKING	32.17	263.2	6 20	-1				
ULAN-BATOR	33.25	282.3	6 49	18				
PAOTOW	35.49	269.3	6 49A	-1				
SITKA	35.98	57.5	6 55	1				
KHEYS	40.74	345.3	7 22	-11				
LANCHOW	42.12	268.9	7 45A	0				
RESOLUTE	43.10	22.0	7 53A	0	14 16	4		9 42 PCP
NORD	45.19	359.2	8 10	0				
HORSESHOE B.	46.04	62.2	8 17	1				
HONG KONG	46.32	246.0	8 19	0				
VICTORIA	46.47	63.3	8 20	0				
SEMIPALATNSK	46.69	300.2	8 20	-1				
THULE	46.85	13.9	8 20	-3				9 55 PCP
BANFF	48.94	56.2	8 13	-26				
CORVALLIS	48.96	67.4	8 40A	1				
HUNGRY HORSE	51.48	58.3	8 58	0				10 13 PCP
SVERDLOVSK	51.86	316.4	9 2	1				
SHASTA	52.00	70.6	9 3A	1				
BERKELEY	54.00	73.1	9 17A	0				
RENO	54.24	70.0	9 20A	1				
SODANKYLA	54.50	339.7	9 19	-2				10 22 PCP
LICK	54.72	73.2	9 23A	1			9 38	
BOZEMAN	54.79	59.1	9 24	1			9 39	
KIRUNA	55.30	342.5	9 25A	-1				
FRESNO	56.17	72.4	9 33A	0				
SCORESBY SD.	56.39	0.7	9 36	2				10 33 PCP
EUREKA	56.43	67.6	9 34	-1				
SHILLONG	56.77	268.9	9 35A	-2				
NAMANGAN	57.38	296.0	9 39	-2				
SALT LAKE C.	57.77	63.8	9 44	0				
RABAUL	57.77	188.9	9 43	-1				11 3
PASADENA	58.97	73.5	9 52	0				10 7
CHITTAGONG	59.22	266.5	9 49	-5	17 54	1		12 0 PP

BOULDER CITY	59.55	69.7	9	57	1				10	11		
RAPID CITY	59.87	55.8	9	59	0				10	14		
PULKOVO	60.06	333.2	9	58	-2							
SKALSTUGAN	60.59	343.9	10	2A	-1						10	46 PCP
LARAMIE	60.68	59.4	10	4	0							
NURMIJARVI	60.86	336.4	10	4	-1						10	47 PCP
HELSINKI	61.09	336.1	10	6	-1						10	49 PCP
MOSCOW	61.24	326.8	10	3	-5							
BOULDER	61.76	60.3	10	12	1							
WARSAK DAM	62.47	290.6	10	14	-2							
LAHORE	62.70	286.8	10	16	-2							
REYKJAVIK	62.77	0.8	10	19A	1				10	57		
UPPSALA	63.03	339.6	10	19A	-1						10	52 PCP
TUCSON TELE.	64.52	69.7	10	31	1				10	45	39	18 PKPPKP
TUCSON	64.53	69.8	10	31	1				10	46		
GOTEBORG	66.15	341.7	10	42A	2						10	55 PCP
QUETTA	67.91	291.0	10	51	0	19	48	7	11	7	11	18 PCP
TIFLIS	69.96	313.7	11	4	0							
FAYETTEVILLE	70.41	55.7	11	5A	-1							
LWOW	70.52	331.3	11	7	0						11	28
OTTAWA	70.78	37.9	11	7	-2							
SHAWINIGAN	70.84	35.4	11	9A	0							
DURHAM	71.05	348.7	11	35K	25							
BREBEUF	71.45	36.5	11	11A	-2							
SIMFEROPOL	71.52	322.5	11	16	3							
KISHINEV	71.54	326.9	11	8	-5							
COLLMBERG	71.95	338.7	11	14	-2							
HALLE	71.99	339.5				20	27	-2				
JENA	72.61	339.5	11	20	1						13	25
PRUHONICE	72.84	337.3	11	22A	1						11	40 PCP
RATHFARNHAM	72.99	351.2	11	23K	1				12	5		
BENSBERG	73.44	342.3	11	25	1							
PENNSYLVANIA	73.87	41.8	11	26	-1				11	43		
CHARTERS TS.	74.05	193.1	11	27	-1						11	42
STUTTGART	75.15	340.3	11	36	2							
PALISADES	75.23	39.0	11	33	-2							
STRASBOURG	75.61	341.2	11	38	1						11	59
WASHINGTON	75.81	42.3	11	37	-1							
BELGRADE	76.09	331.4	11	40K	1						12	23
PARIS	76.31	344.7	11	44	3							
TOLMEZZO	76.56	337.0	11	43	1						12	14
BASLE	76.65	341.0	11	43	0							
FOLINIERE	76.79	346.7	11	44	1							
TRIESTE	77.09	336.2	11	46	1							
NEUCHATEL	77.28	341.2	11	47	1							
CHAPEL HILL	77.53	45.3	11	48	0							
CLERMONT-FD.	79.16	343.5	11	59	3							
KSARA	80.40	315.4	12	5	2							
BRISBANE	80.78	186.0	12	5	0							
ATHENS	81.32	326.2	12	9K	1							
JERUSALEM	82.44	314.9	12	14K	0							
SETIF	87.99	339.4	12	42	1							
CANBERRA	88.87	188.7	12	46	1							
MALAGA	89.16	347.3	12	47A	0						16	15 PP
ADELAIDE	89.86	197.1	12	50A	0							
TAMANRASSET	100.87	335.8	13	41A	1						17	41 PP
LWIRO	115.00	303.5	18	33	3							
ELISABTHVLLE	123.69	299.4	18	54K	7							
BROKEN HILL	125.49	296.5	18	53	2							
BULAWAYO	130.06	292.3	19	2	2							
KIMBERLEY	138.96	288.7	19	11	-5							
BYRD STATION	140.56	164.3	19	15	-4				19	41	23	4 PP
SOUTH POLE	143.25	180.0	19	19	-5							

MAY 12 0.H 35.M 47.S EPICENTRE 32.40 78.66 DEPTH= 0.KM

A= 0.16631 B= 0.82944 C= 0.53327 D= 0.9805 E=-0.1966
G= 0.1048 H= 0.5229 K=-0.8459 HT= 1.0

SE= 2.63

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
DEHRA DUN	2.14	194.3	0	42	5	1	13	8			0	47 PP
LAHORE	3.78	258.2	1	1	0							
AGRA	5.28	186.2	1	23A	1						2	36
WARSAK DAM	6.17	286.9	1	39K	4							

CHATRA	9.25	124.7	2	19	1					5	5
NAMANGAN	10.23	328.8	2	31	0						
QUETTA	10.26	260.6	2	28K	-4	4	20	-9		4	1
FRUNSE	10.95	344.0	2	42	1						
KARACHI	12.08	240.2	3	1	5	5	19	6			
HOWRAH	13.02	136.5	3	9	0	5	51	15			
CALCUTTA	13.05	136.5				5	19	-17			
SHILLONG	13.41	117.1	3	9K	-5	5	28	-17			
BOMBAY	14.43	202.7	3	18	-9					5	58
POONA	14.48	198.6	3	24	-4	5	57	-13			
VIZIANAGRAM	14.86	162.0	3	40	7						
HYDERABAD	14.91	180.8	3	29	-5	6	5	-16			
CHITTAGONG	15.37	127.3	3	42	2	6	42	11			
SEMIPALATNSK	18.02	3.3	4	12	-1						
MADRAS	19.36	175.5				7	52	-11			
LANCHOW	21.10	73.0	4	48K	0						
KODAIKANAL	22.09	183.1				9	11	13			
KUNMING	22.27	103.1	5	1	1	9	3	2			
SIAN	25.31	77.5	5	30	0						
ULAN-BATOR	26.38	45.8	5	42	2						
PAOTOW	26.40	63.1	5	42	2						
SVERDLOVSK	27.42	338.3	5	45	-4						
TIFLIS	28.43	298.8	6	0	2						
PEKING	31.03	65.1	6	24	3	11	28	2			
KSARA	35.68	284.2	7	4	2						
SIMFEROPOL	36.52	303.2	7	11	2						
MOSCOW	36.80	321.7	7	11	0						
CHANGCHUN	37.97	58.8	7	22	1						
KISHINEV	40.34	306.1	7	41	0						
PULKOVO	41.89	325.5	7	55	2						
ADDIS ABABA	43.59	246.7	8	26	19						
LWOW	43.67	310.1	8	11	3						
YAKUTSK	43.86	32.0	8	0	-10	14	38	-3			
NURMIJARVI	44.81	325.4	8	18	1						
SODANKYLA	46.12	335.0	8	29	1						
UPPSALA	48.15	323.6	8	43	-1						
KIRUNA	48.52	334.5	8	46	0						
MATUSIRO	48.60	67.8	8	47	0					9	58
KHEYS	48.95	354.1	8	50	0						
PRUHONICE	49.78	310.5	8	57	1					10	53 PP
GOTEBORG	50.97	320.6	9	7	2						
SKALSTUGAN	51.06	328.2	9	6	0						
HALLE	51.30	312.6	9	3	-5					10	29
JENA	51.58	311.9	9	10	0					9	28
STUTTGART	53.40	309.5	9	23	-1						
MAGADAN	53.77	36.9	9	27	1						
STRASBOURG	54.37	309.5	9	31	0					10	43
PARIS	57.74	310.6	9	55	0						
ASTRIDA	57.92	242.7	9	56	0						
LWIRO	58.39	243.8	9	58	-1						
UVIRA	58.95	242.4	9	42	-21						
SETIF	59.29	295.7	10	3	-3						
FOLINIERE	59.65	311.2	10	7	-1						
TAMANRASSET	64.42	281.7	10	38	-2					13	2 PP
ELISABTHVLLE	65.67	237.0	10	50	2						
THULE	69.48	352.1	11	10	-2						
LEOPOLDVILLE	70.30	251.3	11	15	-2					11	39
RESOLUTE	73.11	358.2	11	32	-2						
COLLEGE	76.50	18.6	11	52	-1					14	45
CHARTERS TS.	83.01	118.8	12	27	-1						
SOUTH POLE	122.23	180.0	19	2	5						
BYRD STATION	131.70	175.8	19	21	6						
HUANCAYO	148.69	304.4	19	52	7					20	15 PKP2

MAY 12 4.H 57.M 39.S EPICENTRE 55.15 168.24 DEPTH= 17.KM

A=-0.56202 B= 0.11702 C= 0.81880 D= 0.2038 E= 0.9790
G=-0.8016 H= 0.1669 K=-0.5741 HT= -7.3

SE= 3.13

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
KLYUCHI	4.38	288.6	1	5	-2							
PETROPAVLOVK	5.99	254.2	1	25	-4	2	39	1				
MAGADAN	10.39	302.2	2	31	0	4	37	9				

UGLEGORSK	17.12	260.1	4 8	9	7 30	22	
Y.-SAKHLINS.	17.94	253.4	4 6	-4			
NEMURO	18.84	240.5	4 13	-8	7 45	-2	
WAKKANAI	19.45	251.0	4 28	0	7 55	-5	
KUSIRO	19.69	241.7	4 29	-1	8 10	5	
ASAHIGAWA	20.17	246.4	4 35	0			
OBIHIRO	20.34	243.4	4 49	12			
YAKUTSK	20.96	304.8	3 42	-62			
URAKAWA	21.11	242.6	4 43	-2	8 39	5	
SAPPORO	21.20	246.4	4 42	-4	8 31	-5	5 49 PP
TOMAKOMAI	21.46	245.0	4 59	10			
SUTTSU	21.98	247.5	4 54	0	8 51	1	
MORI	22.29	245.7	4 59	2	8 59	3	
HAKODATE	22.44	244.9	4 58	0			
HATINOHE	22.94	241.5	5 1	-2	9 15	7	
AOMORI	23.11	243.1	5 6	1			
MIYAKO	23.39	239.4	5 7	-1	9 20	4	
TIKSI	23.47	329.7	5 9	0			
COLLEGE	23.52	47.9	5 11	2	9 27	9	6 8 PP
MORIOKA	23.75	240.7	5 11	0	9 26	4	
MIZUSAWA	24.20	239.8	5 16	0	9 29	-1	
AKITA	24.27	242.2	5 18	2	9 41	10	5 47
ISINOMAKI	24.65	238.5	5 25	5			
SENDAI	24.98	238.9	5 23	0	9 46	3	
SAKATA	25.03	241.3	5 32	8			
YAMAGATA	25.27	239.6	5 28	2	9 58	10	
HUKUSIMA	25.60	238.7	5 31	2	9 57	4	
ONAHAMA	26.03	237.0	5 43	10	10 30	30	
NIIGATA	26.17	241.0	5 35	1	10 17	14	
SHIRAKAWA	26.22	238.2	5 48	13	10 7	4	
VLADIVOSTOK	26.33	258.0	5 33	-3			
AIKAWA	26.50	242.2	5 38	1	10 22	14	
MITO	26.69	236.8	5 52	13	10 29	18	6 28 SP
UTUNOMIYA	26.84	237.9	5 41	0	9 57	-17	
KAKIOKA	26.95	237.1	5 57	15			
TUKUBASAN	26.99	237.2	5 39	-3	10 2	-14	6 9 PP
MAEBASI	27.35	238.9	5 49	4			10 50
KUMAGAYA	27.40	238.1	5 56	10	11 13	50	
HONGO	27.56	237.0	5 49	2	10 28	3	10 48
NAGANO	27.57	240.4	5 47	0	10 29	4	
TOKYO C.M.O.	27.60	237.0	5 48	1	10 24	-2	
MATUSIRO	27.65	240.2	5 45K	-3	10 23	-4	
OIWAKE	27.66	239.5	5 59	11			
TITIBU	27.68	238.3	5 56	8			
YOKOHAMA	27.85	236.8	6 3	13	10 55	25	13 41
MATUMOTO	28.01	240.2	5 46	-5			
TOYAMA	28.05	241.8	5 51	-1	10 49	16	
MERA	28.17	235.9	6 1	8			
KOHU	28.21	238.5	6 11	18	10 31	-5	
HUNATU	28.22	238.1	6 14	21	11 14	38	
AJIRO	28.42	237.1	6 13	18			
MISIMA	28.43	237.4	5 51	-4	10 35	-4	
OSIMA	28.51	236.4	6 34	38			10 52
IIDA	28.66	239.4	6 16	19			
SHIZUOKA	28.82	238.0	6 0	2			
OMAESAKI	29.21	237.8	6 27	25			10 45
GIHU	29.28	240.7	6 9	6	11 22	29	
NAGOYA	29.37	240.1	6 25	22			
CHANGCHUN	29.63	265.6	6 2K	-4	10 55	-3	7 8 PPP
HIKONE	29.65	241.2	6 19	13	11 39	40	
KAMEYAMA	29.87	240.4	6 14	6	11 38	36	7 14 PP
ABUYAMA	30.30	241.6	6 0K	-12	11 9	0	
OSAKA	30.50	241.4	6 24	11	11 42	30	
OWASE	30.62	239.8					11 11
KOBE	30.65	241.9	6 8	-7	11 15	0	
SITKA	30.78	62.9	6 17	1	11 31	14	7 51
YONAGO	31.01	245.1					11 14
SIOMISAKI	31.33	239.7			11 43	18	13 3
TAKAMATU	31.51	242.9	6 15	-7	11 13	-15	
HAMADA	32.08	246.0	6 16	-11	11 24	-13	
HIROSIMA	32.30	244.9	6 19	-10	12 2	22	
KOTI	32.38	242.6	6 33	3	11 42	0	
MATUYAMA	32.56	243.9			11 47	3	8 13
OOITA	33.61	244.6	6 52	11	11 54	-7	
HUKUOKA	33.97	246.4	6 46	2	11 49	-17	
KUMAMOTO	34.41	245.2	6 57	9			
MIYAZAKI	34.75	243.4	6 41	-9	12 26	8	
NAGASAKI	34.91	246.1	6 54A	2	12 25	4	

TOMIE	35.58	247.2				12	35	4						
IRKUTSK	36.77	292.8	7	7	-1	12	50	0						
PEKING	37.30	268.2	7	9K	-3	12	56	-2				8	32	PP
ULAN-BATOR	37.71	285.2	7	15	0	13	5	1						
TATUNG	38.91	270.7	7	24	-1									
RESOLUTE	39.55	24.5	7	32K	1	13	38	6				9	6	PP
ALBERNI	40.01	69.6	7	37	2	13	49	10						
KHEYS	40.33	346.0	7	30	-7	13	32	-11						
PAOTOW	40.45	273.8	7	37K	-1	13	37	-8				9	10	PP
ZO-SE	40.86	253.7	7	39K	-3	13	49	-2				9	19	PP
VICTORIA	41.19	69.8	7	45A	1	14	0	4				9	20	PP
NANKING	41.46	257.0	7	44K	-3	13	59	-1				9	24	PP
KIPAPA	42.09	129.5	7	50	-2									
HONOLULU	42.16	129.6	7	50A	-2	14	17	6				9	28	PCP
NORD	43.47	1.0	8	5A	2	14	35	5				9	44	PP
BANFF	43.76	62.1	8	6	1									
THULE	43.88	16.5	8	6	0									
WUHAN	44.99	259.5	8	14	-1	14	52	0				10	0	PP
HAWAII V.OB.	45.06	127.5	8	9	-7	14	57	4						
TAIPEI	45.45	247.9	8	31	12									
SIAN	45.46	268.0	8	17K	-2	14	58	-1				10	2	PP
ISFJORD	46.14	352.9	8	27	3									
HUNGRY HORSE	46.26	64.5	8	26A	1	15	27	17				10	14	PP
WUWEI	46.47	276.6	8	27	0									
TIENSHUI	47.05	271.0	8	30	-1	15	20	-1						
LANCHOW	47.08	273.9	8	30K	-1	15	16	-5				10	18	PP
UKIAH	47.31	80.0	8	34	0							10	26	PP
TAINAN	47.78	247.6	8	40	3									
SINING	47.87	276.0	8	40	2									
TAWU	47.95	246.5	8	52	13									
BUTTE	48.52	66.0	8	45K	2	15	51	9				10	20	PP
BERKELEY	48.73	80.5	8	43A	-2	15	50	5				10	38	PP
RENO	48.95	77.1	8	47A	1									
LICK	49.45	80.5	8	50A	0									
BOZEMAN	49.55	65.4	8	52A	1	16	4	8						
CHENGTU	50.91	268.9	9	0K	-1	16	12	-3				10	58	PP
EUREKA	51.13	74.5	9	3A	0							14	16	
CANTON	51.49	254.5	9	4	-2									
HONG KONG	51.62	253.1	8	46	-21	16	19	-6				9	25	PCP
SALT LAKE C.	52.48	70.5	9	12A	-1	16	39	2				20	35	SS
BAGUIO CITY	53.05	242.6	9	16	-1	16	43	-1						
PASADENA	53.70	80.8	9	21A	-1	16	13	-40	*			9	46	
SVERDLOVSK	53.95	319.6	9	4	-20									
BOULDER CITY	54.25	76.8	9	27K	1	17	7	6				11	29	PP
MANILA	54.41	241.0	9	21	-6	16	56	-7						
SCORESBY SD.	54.46	4.2	9	29	1	17	10	6				19	14	SCS
SODANKYLA	54.49	342.8	9	28	0									
RAPID CITY	54.69	62.0	9	30	1									
KIRUNA	55.03	345.7	9	32K	0	17	13	2				12	25	PP
KUNMING	55.93	265.5	9	35K	-3	17	19	-4				11	42	PP
PHU-LIEN	57.01	258.9	9	45	-1	17	28	-9				11	54	PP
FRUNSE	58.11	300.2	9	53	-1	17	54	2						
TUCSON TELE.	59.23	76.7	10	2	0	18	16	9				12	30	PP
TUCSON	59.24	76.8	10	2	0	18	15	8				12	39	PP
SKALSTUGAN	60.15	347.9	10	7K	-1									
PULKOVO	60.62	337.1	10	11	0	18	27	3						
RABAUL	60.62	198.5	10	6	-5									
REYKJAVIK	60.80	5.1	10	16	4							10	24	
NAMANGAN	60.98	300.7	10	11	-3	18	29	0						
NURMIJARVI	61.12	340.4	10	14	-1	18	44	13						
HELSINKI	61.37	340.1	10	17	1									
SHILLONG	61.73	274.7	10	16	-3	18	38	0						
MOSCOW	62.37	331.0	10	21	-2	18	51	4						
UPPSALA	62.98	343.9	10	27K	0	18	56	2						
BERGEN	64.00	350.7	10	46	12	19	12	5						
CHITTAGONG	64.25	272.5	10	32	-3	19	6	-4				12	53	PP
CHIHUAHUA	64.64	75.9	10	57	19							13	6	PP
FLORISSANT	65.02	57.7	10	40	0	19	23	4						
ST. LOUIS 1	65.21	57.7	10	41A	-1	19	24	2				19	39	
FAYETTEVILLE	65.23	62.2	10	38A	-4	19	25	3						
DEHRA DUN	65.82	288.6	10	46	0	19	24	-5				23	52	SS
GOTEBORG	65.88	346.3	10	48K	2									
CALCUTTA	66.11	275.4	11	27	40	20	19	46				24	52	SS
OTTAWA	66.20	43.8	10	46A	-2	19	34	0				27	5	SSS
SHAWINIGAN	66.39	41.2	10	49A	0									
WARSAK DAM	66.41	295.8	10	47K	-2	19	31	-5						
SEVEN FALLS	66.63	39.7	10	53	2	19	39	0				27	9	SSS
PORT MORESBY	66.69	202.7	10	52A	1	19	38	-2	11	0		19	58	PS
BREP	66.94	42.4	10	51A	-2	19	42	-1						

CLEVELAND	66.98	50.0	10	54	1	19	46	3			
LITTLE ROCK	67.19	61.8	10	54A	0						
ABERDEEN	67.77	354.3	10	58K	0	20	0	7	24	25	SS
COPENHAGEN	67.78	345.5	10	59	1	19	56	3	24	15	SS
AGRA	68.32	286.5	10	57K	-4	19	53	-6	13	28	PP
PENNSYLVANIA	69.12	48.0	11	8	2	20	12	3	12	16	
MORGANTOWN	69.18	50.1	11	6K	-1	20	7	-3			
WARSAW	69.59	339.2	11	14	5	20	20	6	15	27	PPP
MAKHACH-KALA	70.08	317.9	11	11	-1	20	27	7			
DURHAM	70.13	353.7	11	33K	21	20	16	-5	13	56	PP
PALISADES	70.59	45.2	11	14	-1	20	25	-1	11	43	PCP
FORDHAM	70.74	45.3	11	48	32						
POTSDAM	70.88	344.2	11	18	1	20	35	5	25	5	SS
GEORGETOWN	71.04	48.6	11	17	-1	20	32	1			
WASHINGTON	71.04	48.6	11	16	-2				12	26	PP
LWOW	71.20	336.4	11	20	1	20	38	5			
HALIFAX	71.35	36.3	11	26	6	20	34	-1	28	43	SS
QUETTA	71.81	296.6	11	21K	-1	20	38	-2	13	59	PP
RATHFARNHAM	71.83	356.5	11	24K	1	20	41	1	14	8	PP
KRAKOW	71.88	339.1	11	24K	1	20	45	4	15	48	PP
HALLE	71.91	344.7	11	20	-3	20	40	-1	14	1	PP
COLLMBERG	71.94	343.9	11	23	0	20	49	7	14	4	PP
MUNSTER	72.04	347.5	11	26	2						
TIFLIS	72.18	319.0	11	25	0	20	50	5			
RACIBORZ	72.19	340.2	11	26	1				11	49	PCP
DE BILT	72.20	349.1	11	25	0	20	52	7	15	51	PPP
PORT BLAIR	72.23	264.9	11	19	-6	20	39	-6	11	39	PCP
SOTCHI	72.38	323.4	11	26	0	20	52	5			
GUADALAJARA	72.42	79.1				20	45	-2			
JENA	72.52	344.8	11	28	1	20	52	4	14	11	PP
KISHINEV	72.61	332.2	11	28	1	20	54	5			
IASI	72.78	333.1				21	7	16			
PRAGUE	72.89	342.7	11	29	0	20	59	6	14	2	PP
PRUHONICE	72.96	342.6	11	31K	2	20	58	5	14	12	PP
SIMFEROPOL	72.98	327.8	11	29	0	20	56	2			
BENSBERG	73.09	347.6	11	31	1				11	51	
SONNEBERG	73.11	344.9	11	30	0	20	57	2	14	13	PP
CHEB	73.22	344.0	11	33	2	20	57	1	14	21	PP
COLUMBIA	73.33	54.2	11	31	0	20	59	1			
KEW	73.33	352.6	11	32K	1	21	2	4	14	18	PP
GORIS	73.50	316.8	11	33	0	21	3	3			
SUVA	73.52	169.9				21	21	21			
BRATISLAVA	74.23	340.4	11	35A	-2	21	14	6			
VIENNA-H.	74.30	340.9	11	37	0	21	16	8			
HURBANOVO	74.30	339.6	12	2	25	21	18	10			
BUDAPEST	74.50	338.9	12	10	32	21	20	9			
STUTTGART	74.97	345.8	11	42	1	21	17	1	14	31	PP
TUBINGEN	75.22	345.8	11	43	1						
STRASBOURG	75.35	346.7	11	44K	1	21	29	9	14	45	PP
EBINGEN	75.58	345.8	11	45	0						
TIMISOARA	75.68	336.8				21	10	-14			
PARIS	75.73	350.3	11	47	2	21	31	7			
JERSEY	75.73	353.5							21	26	
BUCHAREST	75.74	333.0	11	46	1	21	29	5	14	37	PP
TACUBAYA	75.75	76.6	11	46	1	21	25	0	14	46	PP
HYDERABAD	75.77	280.0	11	47	1	21	22	-3	14	19	PP
FOLINIERE	76.02	352.3	11	48	1						
BASLE	76.41	346.6	11	57	8						
TOLMEZZO	76.68	342.7	11	53	2	21	50	15	15	57	
ZAGREB	76.71	340.5	11	51A	0	21	39	4	12	46	
BELGRADE	76.73	337.1	11	51K	0	21	45	10	14	54	PP
CHUR	76.80	345.2	11	52K	1	21	47	11			
NEUCHATEL	77.01	347.0	11	53	0	21	44	6			
NOUMEA	77.15	181.7	11	54	1	21	42	2			
CHARTERS TS.	77.17	201.2	11	50	-3	21	35	-5			
TRIESTE	77.28	342.0	11	54	0	21	45	4	26	41	SS
POONA	77.47	284.3	11	54	-1	21	43	0			
VERA CRUZ	77.62	74.3	11	57	1	21	45	0	16	53	PPP
BOMBAY	77.74	285.3	11	54	-3	21	41	-5	14	47	PP
SOFIA	78.05	334.3	11	43	-15	21	54	4	14	54	PP
MADRAS	78.35	275.9	12	3	3	22	3	10	23	11	PPS
PAVIA	78.49	345.1							17	35	
CLERMONT-FD.	78.67	349.4	12	3	1	22	4	8			
BOLOGNA	78.81	343.4	12	12	9				15	23	
SKOPJE	79.20	335.5	12	24K	19				14	42	
PRATO	79.45	343.4	12	6	0	22	28	24			
MERIDA	79.74	68.2				22	9	2	15	33	PP
MONACO	80.16	346.0	12	11	1						

ROME	81.14	341.0	12	13K	3	22	29	7	15	24 PP
BERMUDA	81.75	43.0	12	21	3	22	31	3	13	41 PP
KODAIKANAL	82.13	276.5	12	23A	3	22	43	11	15	38 PP
KSARA	82.44	321.6	12	23K	1	22	40	5	15	32 PP
BRISBANE	83.32	193.6	12	23	-3	22	45	1		
COLOMBO	83.46	272.6	13	2	35				22	48
TORTOSA	83.83	350.7	12	33	4	22	48	-1		
SERRA PILAR	84.06	357.6	12	33	3					
MESSINA	84.12	338.7	12	30	0	22	54	2	12	54
JERUSALEM	84.52	321.3	12	32A	0	22	24	-32		
COIMBRA	84.98	357.4	12	37K	2	23	4	3		
TOLEDO	85.12	354.1	12	37K	2	23	1	-1	23	59 PS
ALICANTE	86.37	351.1	12	43	2	23	20	6	23	8 SKS
ALGIERS UNI.	87.57	348.1	12	45	-2	23	31	5	15	54 PP
GRANADA	87.77	353.5	12	51A	3	23	35	8	16	19 PP
SETIF	87.83	346.2	12	49	0	23	22	-6	16	6 PP
MALAGA	88.28	354.1	12	53A	2	23	33	1	16	16 PP
RELIZANE	88.85	350.0	12	54	1				16	25 PP
RIVERVIEW	89.83	194.2	13	3	5	23	49	3		
CANBERRA	91.61	195.6	13	9	3					
ADELAIDE	93.22	203.9	13	11	-3	24	15	-1	25	34 PS
SAN JUAN	93.50	50.6	13	18	3					
MELBOURNE	94.73	198.3				24	33	4		
WELLINGTON	96.22	175.1				24	46	4		
PERTH	97.67	222.8							32	51
ROXBURGH	100.33	179.2				25	25	8	24	24 SKS
CHINCHINA	100.46	65.4				24	23	0	17	55 PP
TAMANRASSET	100.99	343.8	13	49	0	25	29	7	17	56 PP
BOGOTA	101.56	64.3				24	29	0	27	3 PS
MBOUR	110.61	5.4				25	18	10	19	13 PP
HUANCAYO	114.82	74.8	19	45	66				20	32 PP
ASTRIDA	117.81	311.6							19	58
LWIRO	117.89	312.7	18	41	-4				29	47
LA PAZ	122.42	71.1	18	57	4	26	3	12	20	35 PP
LEOPOLDVILLE	124.89	326.5	19	3	5				20	47 PP
ELISABTHVLLE	126.87	309.3	19	9	7				21	3 PP
CAPE HALLETT	127.16	179.2				26	11	6	21	4 PP
SANTA LUCIA	134.17	86.9				27	41	78	21	43 PP
BYRD STATION	140.87	164.7	19	30	2				22	59 PP
KIMBERLEY	142.83	300.1	19	31	-1					
SOUTH POLE	144.97	180.0	19	31	-4				23	10 PP
GRAHAMSTOWN	145.56	293.3	19	18	-18				19	35

MAY 12 9.H 46.M 55.S EPICENTRE -23.18 -65.01 DEPTH= 0.KM

A= 0.38880 D=-0.83403 C=-0.39144 D=-0.9064 E=-0.4225
G=-0.1654 H= 0.3548 K=-0.9202 HT= 3.9

SE= 2.88

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
ANTOFAGASTA	4.99	263.6	1	21	5								
LA PAZ	7.27	335.6	1	51A	3	3	30	18			2	3	PP
SANTA LUCIA	11.36	204.8	2	40A	-5	5	38	45					
BUENOS AIRES	12.73	154.8	2	59	-4								
LA PLATA	13.21	153.7	3	4K	-6	5	21	-16			6	0	SSS
HUANCAYO	14.80	316.7	3	32	2	6	31	16					
BOGOTA	29.02	341.1	6	0	-1	11	2	11			6	53	PP
CHINCHINA	29.84	338.4	6	7	-2	11	2	-2			12	32	SS
CARACAS	33.53	356.6	6	35	-6	12	31	30					
TRINIDAD	33.81	6.4	6	50	7								
GRENADA	35.16	5.6	6	55	0						8	21	PP
GALERAZAMBA	35.22	342.3	7	3	7	12	30	2					
ST. VINCENT	36.31	6.2	7	7	2								
FORT FRANCE	37.87	6.1	7	14	-4						19	0	
ANTIGUA	40.14	5.8	7	41	4								
OHIGGINS	40.40	175.1				13	20	-27					
SAN JUAN	41.32	358.4	7	43	-4						9	26	PCP
ARGENTINE I.	42.06	179.5	7	53	0	14	13	2					
SAN SALVADOR	43.68	324.7	8	16	10								
MERIDA	50.00	329.5	8	53	-3	16	20	16			9	8	
VERA CRUZ	51.94	321.7	9	8	-2	16	31	0			18	37	SCS
TACUBAYA	53.90	319.0	9	29A	4	17	0	2			11	25	PP
BERMUDA	55.25	0.3	9	30	-5	17	15	-1			11	37	PP
HALLEY BAY	55.92	169.1	9	38	-2								

COLUMBIA	58.87	344.5	9	58A	-2	18	1	-3			19 43 SCS
MBOUR	60.02	56.3	10	8	0						12 27 PP
BYRD STATION	61.40	189.3	10	22	4	18	47	11			12 40 PP
GEORGETOWN	62.78	349.4	10	25	-2						
WASHINGTON	62.78	349.4	10	24	-3						10 58 PCP
LITTLE ROCK	63.22	334.9	10	28A	-2	18	58	-1			
MORGANTOWN	64.03	347.2	10	32A	-3	19	9	0			
FORDHAM	64.24	352.5	11	12	36						
PALISADES	64.40	352.5	10	35A	-3	19	12	-2			12 49 PP
PENNSYLVANIA	64.77	349.2	10	40	0	19	19	1			20 30 SCS
FAYETTEVILLE	65.09	334.2	10	39A	-3	19	23	1			
ST. LOUIS 1	65.89	338.6	10	44A	-3	19	28	-4			
FLORISSANT	66.08	338.5	10	47	-1	19	32	-3			
CLEVELAND	66.13	346.5	10	47A	-2	19	32	-3			
SOUTH POLE	66.96	180.0	10	52	-2	19	43	-2			13 23 PP
HALIFAX	67.48	1.1	10	55K	-2	19	47	-4			20 53 SCS
BREBEUF	68.80	353.5	11	3A	-2	20	10	3			
OTTAWA	68.95	351.9	11	4A	-2	20	9	0			15 22 PP
SHAWINIGAN	69.76	354.3	11	9A	-2						
SEVEN FALLS	70.17	355.8	11	11	-3	20	22	-1			
TUCSON TELE.	70.40	320.0	11	15	0	20	31	5			13 54 PP
TUCSON	70.40	319.8	11	16	1	20	33	7			13 59 PP
HERMANUS	72.74	120.5	11	33	4	20	48	-5			21 34 SCS
WINDHOEK	74.56	108.2	11	40	0						
BOULDER CITY	75.37	320.2	11	46K	1	21	32	10			14 0
RAPID CITY	75.53	332.6	11	45	0						
PASADENA	76.18	316.9	11	49A	0	21	38	7			26 29 SS
SALT LAKE C.	77.09	325.4	11	54A	0	21	47	6			
CAPE HALLETT	77.73	194.9	11	58	0	21	55	7			14 54 PP
EUREKA	78.42	322.1	12	2A	0						
GRAHAMSTOWN	78.88	121.5	12	1	-3						
FRESNO	78.89	318.0	12	5A	1						
KIMBERLEY	79.03	116.6	12	2K	-3						
BOZEMAN	80.28	329.2	12	13A	1	22	14	-1			13 34
LICK	80.39	317.5	12	8A	-4						
RENO	80.68	320.2	12	15A	1						
LISBON	80.78	41.0	12	15K	1				12	22	
BERKELEY	81.10	317.6	12	17A	1	22	30	6	12	58	15 27 PP
BUTTE	81.26	328.6	12	17A	0	22	27	2			15 6 PP
COIMBRA	82.15	40.2	12	21K	0	22	35	1			
TAMANRASSET	82.39	61.4	12	22A	-1	22	31	-6			15 23 PP
UKIAH	82.47	318.2	12	28	5						
MALAGA	82.54	44.9	12	23K	0	22	42	4			15 29 PP
SERRA PILAR	82.64	39.4	12	17K	-7	22	31	-8	12	26	22 53 SCS
PRETORIA	82.93	114.9	12	27	2						
SHASTA	82.94	319.8	12	25A	-1						
PIETERMZBURG	83.28	119.2	12	29	2						
GRANADA	83.33	44.9	12	31K	4	22	48	2	12	34	15 51 PP
HUNGRY HORSE	83.63	329.6	12	29A	0	22	54	5			15 45 PP
ALMERIA	83.88	45.7	12	31K	1	22	50	-2			
TOLEDO	84.62	42.5	12	34	0	23	1	2			15 49 PP
RELIZANE	85.29	48.0	12	38	1	22	53	-13			15 48 PP
BULAWAYO	85.44	109.8	12	37	-1						
BANGUI	85.86	83.5	12	47	7						22 59
CORVALLIS	85.88	322.4	12	41A	1						
ALICANTE	86.03	45.4	12	39	-2	23	13	0			
BANFF	86.32	330.9	12	42	0						
LCO. MARQUES	86.51	116.6	12	43	0						32 33 SSS
BROKEN HILL	87.54	104.6	12	49	1						
ALGIERS UNI.	87.55	48.2	12	47	-1	23	26	-1			16 8 PP
ELISABTHVLLE	87.69	101.6	12	52A	3	23	38	9			16 15 PP
TORTOSA	88.01	43.7	12	49	-2	23	29	-3			
TERRE ADELIE	88.10	190.1	12	51	0	23	29	-4			
VICTORIA	88.39	325.5	12	51A	-1	23	31	-4			23 23 SKS
HORSESHOE B.	88.85	326.2	12	56K	1						
SETIF	88.89	49.7	12	55	0	23	35	-5			16 19 PP
MIRNY	89.01	171.4	12	57	2	23	23	-18			
ALBERNI	89.58	325.5	13	1	3						
JERSEY	91.17	35.8	13	5	0						28 8
RATHFARNHAM	91.51	30.9	13	5A	-2	23	30	-34			16 44 PP
FOLINIERE	91.82	36.7	13	8	0						
CLERMONT-FD.	92.27	40.5	13	11	0						16 50 PP
UVIRA	92.44	94.8	13	14	3						24 18 SCS
LWIRO	92.62	93.5	13	13A	1	24	26	13			
ASTRIDA	93.34	94.2	13	19	4						17 1 PP
KEW	93.40	34.5	13	17	1	24	19	-1			16 59 PP
RUMANGABO	93.47	92.9	13	20	4	23	45	-7			
PARIS	93.49	37.7	13	18	2	24	26	5			

NEUCHATEL	95.18	40.8							16 57	
WELLINGTON	95.27	220.8							26 29	
ROXBURGH	95.65	215.0				24	43	4	26 11	PS
ABERDEEN	95.74	29.2				23	58	-7	17 18	PP
BASLE	95.81	40.5							15 11	
PRATO	96.35	44.9	13	44	15	24	50	5		
ROME	96.41	47.2	13	33	4	24	49	3	17 25	PP
STRASBOURG	96.41	39.7	13	25	-4	24	41	-5	17 22	PP
DE BILT	96.64	35.8	13	30K	-1	24	5	-5	17 24	PP
CHUR	96.68	41.8	13	32	1	24	50	2		
BOLOGNA	96.77	44.4	13	59	28				25 29	
EBINGEN	96.94	40.4	13	32	0					
MESSINA	97.01	51.5							17 32	
REGGIO CALA.	97.05	51.7							17 21	
TUBINGEN	97.16	40.1	13	33	0					
STUTTGART	97.34	39.9	13	33	-1	24	9	-4	17 28	PP
HAWAII V.OB.	97.67	287.8	13	33	-2	24	17	2		
SCORESBY SD.	98.20	13.4				25	3	2	24 18	SKS
TOLMEZZO	98.65	43.2	13	39	-1	24	19	-1	17 43	PP
TRIESTE	98.81	44.1	13	43	3	25	12	6	17 44	PP
TARANTO	99.12	50.0							17 29	
SONNEBERG	99.22	39.0	13	42	0	24	23	0	17 37	PP
THULE	99.40	359.2	13	43	0				30 7	PKKP
RESOLUTE	99.51	352.3	13	42A	-2	25	13	1	17 40	PP
JENA	99.67	38.6	13	41	-3	25	20	7	17 41	PP
CHEB	99.78	39.6				24	26	0	17 47	PP
PLAUEN	99.82	39.2				25	11	-4	17 49	PP
HALLE	100.12	38.2				24	25	-2	17 49	PP
ZAGREB	100.31	44.6	13	58	11	24	29	1	25 23	SKKS
COLLMBERG	100.64	38.7	13	48	-1	25	35	14	18 3	PP
HONOLULU	100.82	288.6				27	35	132	18 3	PP
PRAGUE	100.99	40.2				25	30	6	17 58	PP
PRUHONICE	101.03	40.3	13	51	1	25	30	5	17 49	PP
POTSDAM	101.11	37.7	13	48	-3	25	25	0	17 57	PP
TANANARIVE	102.00	116.6	14	4	9				18 6	PP
COPENHAGEN	102.09	34.4				25	41	8	24 38	SKS
SKOPJE	102.58	49.7	18	11	254				27 23	PS
GOTEBORG	102.65	32.4							18 10	PP
BELGRADE	102.89	46.7	14	9K	10	24	41	0	17 25	PP
BUDAPEST	102.90	43.8							24 31	PPP
ATHENS	102.92	54.2							17 57	PP
RACIBORZ	103.25	41.1							18 18	PP
TIMISOARA	103.71	46.0				24	43	-1	17 41	
SOFIA	104.17	49.5							17 23	
KRAKOW	104.29	41.5				25	57	5	18 23	PP
SKALSTUGAN	105.04	26.9							18 31	PP
WARSAW	105.63	39.6				26	12	29	24 49	SKS
ADDIS ABABA	106.11	86.9	14	21	777	26	57	2		
UPPSALA	106.16	31.4	18	20	777	26	7	2	24 51	SKS
BUCHAREST	106.60	48.4				24	56	-1	20 10	PP
LWOW	106.75	42.5	17	53	777				26 20	
NORD	107.29	6.6	14	23	777				28 7	PS
COLLEGE	107.75	333.6	14	20A	777	26	20	9	18 45	PP
IASI	108.33	45.9				25	25	5		
KISHINEV	109.12	46.3	17	51	777					
KIRUNA	109.53	23.7				26	33	-9	18 59	PP
NURMIJARVI	109.73	31.7							18 47	PP
JERUSALEM	110.14	63.2	18	35	4				19 9	PP
KSARA	111.19	61.3	18	39	6	25	15	2	19 19	PP
SODANKYLA	111.78	24.6							29 39	PKKP
SIMFEROPOL	112.29	49.3	14	45	777					
PULKOVO	112.39	33.0	18	38	3					
MELBOURNE	113.09	205.5							19 15	PP
RIVERVIEW	113.68	212.4	18	30	-8	25	22	0		
MOSCOW	115.89	37.8							19 43	PP
SOTCHI	116.03	51.5	18	40	-2					
KHEYS	117.29	10.0	18	46	1					
BRISBANE	117.66	218.2							19 59	PP
ADELAIDE	117.97	202.0	18	44	-2				19 57	PP
TIFLIS	119.53	54.1	18	52	3					
GORIS	120.47	56.7							19 52	
PERTH	125.17	180.9	19	3	4					
CHARTERS TS.	127.34	217.9	19	7	3					
SVERDLOVSK	128.44	34.8	19	10	4					
TIKSI	130.88	354.2	19	10	-1					
RABAUL	134.65	237.9	19	16	-2				23 1	
PORT MORESBY	134.85	227.8	19	25A	7	26	32	6	21 53	PP
PETROPAVLOVK	135.53	323.6	19	25	5					

MAGADAN	135.80	334.7	19	24	4					
KARACHI	136.47	76.4	19	32	11				23	4 PKS
QUETTA	136.76	70.1	19	15	-7				22	53 PKS
NAMANGAN	139.69	53.4	19	30	3					
BOMBAY	140.51	88.1	19	39	10				41	1 SS
WARSAK DAM	140.62	64.2	19	22	-7				22	37
FRUNSE	141.30	49.7	19	25	-5					
POONA	141.36	89.0	19	27	-3				22	41 PP
SEMIPALATNSK	141.69	36.0	19	26	-5					
KODAIKANAL	141.95	103.4							22	26
COLOMBO	142.56	110.0	19	34	2				29	30
LAHORE	143.11	67.9	19	32	-1					
HYDERABAD	145.32	92.6	19	43	6				42	13 SS
MADRAS	145.47	100.9	19	42	5				22	55 PP
DEHRA DUN	146.36	69.8	19	45	6				41	57 SS
AGRA	146.38	75.5	19	38A	-1				23	6 PP
UGLEGORSK	146.48	327.2	19	42	3					
Y.-SAKHLINSK	147.48	323.6	19	47	6					
LEMBANG	149.31	165.5	19	44	0					
DJAKARTA	149.75	163.7	19	50K	6					
IRKUTSK	149.83	13.1	19	47	3					
GUAM	150.20	256.3	19	50	5				22	33
ULAN-BATOR	154.48	12.7	19	54	3					
CHATRA	154.55	76.0	19	55	4					
TUKUBASAN	154.70	306.6	19	47A	-4	27	7	12	43	46 SS
MEDAN	154.92	138.6	20	9	17					
CALCUTTA	155.44	86.3	19	49	-3				24	6 PP
VLADIVOSTOK	155.68	328.9	19	53	0					
PORT BLAIR	155.90	114.6	20	0	7	27	20	24	24	4 PP
MATUSIRO	155.93	308.9	19	56A	3				30	41 SKKS
CHANGCHUN	157.72	340.0	19	57A	2				24	6 PP
ABUYAMA	158.61	307.6	19	59A	2					
CHITTAGONG	158.62	87.7	19	58	1	27	5	6	20	36 PKP2
SHILLONG	158.81	78.9	19	58	1				20	42
PAOTOW	162.16	12.4	20	4A	4				24	30 PP
PEKING	163.17	356.9	20	5A	4				24	37 PP
LANCHOW	163.91	34.5	20	5A	3				24	42 PP
CHENGTU	167.70	50.4	20	9A	4				25	6 PP
SIAN	167.76	24.4	20	9A	4				25	3 PP
KUNMING	168.60	78.1	20	9A	3				25	10 PP
MANILA	169.74	214.5	20	9	3				31	27
ZO-SE	170.38	326.4	20	9A	2				25	14 PP
NANKING	170.55	339.9	20	10A	3				25	15 PP
BAGUIO CITY	171.46	219.0	20	13	6	26	3	-65		
PHU-LIEN	171.88	105.4	20	13	5				25	26 PP
WUHAN	172.67	2.9	20	12	4				25	26 PP
TAWU	174.49	262.5	20	19	10					
CANTON	178.42	93.4	20	15	6				26	0 PP
HONG KONG	178.84	139.0	19	42	-27				25	59 PP

MAY 12 10.H 13.M 49.S EPICENTRE -22.85 -64.60 DEPTH= 0.KM

A= 0.39570 B=-0.83326 C=-0.38613 D=-0.9033 E=-0.4290
G=-0.1656 H= 0.3488 K=-0.9224 HT= 4.0

SE= 2.43

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
ANTOFAGASTA	5.41	260.4	1	24	0	2	34	6				
LA PAZ	7.14	331.6	1	57	9							
SANTA LUCIA	11.82	205.6				4	49	-17				
HUANCAYO	14.83	314.6	3	35	3						4	11
SAN JUAN	41.01	357.8	7	33	-13							
COLUMBIA	58.66	344.0	10	0	-1							
MBOUR	59.53	56.2	10	14	7							
CHAPEL HILL	60.03	346.5	10	11	0							
BYRD STATION	61.79	189.3	10	24	1						12	53 PP
WASHINGTON	62.53	349.1	10	29	2							
DALLAS	63.34	329.9	10	32	-1							
MORGANTOWN	63.79	346.8	10	34K	-2						12	36 PP
PALISADES	64.12	352.2	10	36	-2							
PENNSYLVANIA	64.52	348.9	10	40	-1							
FAYETTEVILLE	64.96	333.8	10	41A	-2							
SOUTH POLE	67.29	180.0	10	53	-5						13	27 PP
BREBEUF	68.52	353.2	11	4A	-2						13	42 PP
OTTAWA	68.67	351.6	11	6	-1							

SHAWINIGAN	69.47	354.0	11 12	0		
SEVEN FALLS	69.87	355.5	11 12	-2		
TUCSON TELE.	70.39	319.6	11 17	0		
TUCSON	70.39	319.5	11 18	1		
BOULDER	73.17	328.5	11 34	0		
LARAMIE	74.30	329.1	11 40	-1		
WINDHOEK	74.31	108.2	11 39	-2		
BOULDER CITY	75.36	319.9	11 48	1		
RAPID CITY	75.41	332.3	11 47	0		
SALT LAKE C.	77.03	325.1	11 56	0		
EUREKA	78.40	321.9	13 4	60		
KIMBERLEY	78.84	116.5	12 4K	-2		
FRESNO	78.90	317.8	11 59	-7		
BOZEMAN	80.19	329.0	12 15	2		
LICK	80.40	317.3	12 15K	1		
RENO	80.67	319.9	12 16	0		
BERKELEY	81.11	317.4	12 18	0		
BUTTE	81.18	328.4	12 19	0		
TAMANRASSET	81.90	61.2	12 23A	1		
MALAGA	82.04	44.8	12 24A	1	15 36	PP
GRANADA	82.83	44.8	12 39A	12	15 30	PP
SHASTA	82.94	319.6	12 30	2		
HUNGRY HORSE	83.54	329.3	12 31	0		
TOLEDO	84.12	42.3	12 34	0		
BULAWAYO	85.20	109.7	12 38	-1		
CORVALLIS	85.85	322.2	12 42	0		
BANFF	86.22	330.7	12 42	-2		
ALGIERS UNI.	87.05	48.0	12 46	-2	16 11	PP
BROKEN HILL	87.25	104.4	12 49	0		
ELISABTHVLLE	87.39	101.4	12 53A	3		
VICTORIA	88.33	325.3	12 54	0		
SETIF	88.39	49.5	12 55	0		
LWIRO	92.27	93.4	13 14	1		
ASTRIDA	92.99	94.1	13 17	1		
RESOLUTE	99.24	352.2	13 46	1	17 41	PP
COLLEGE	107.62	333.6	18 23	-5		
LEMBANG	149.53	164.6	19 52A	6		
GUAM	150.64	256.6	19 53	5		
MATUSIRO	156.01	309.8	20 6	10		
SHILLONG	158.37	78.1	20 0	1		

MAY 12 21.H 40.M 23.S EPICENTRE 51.54-177.14 DEPTH= 0.KM

A=-0.62380 B=-0.03118 C= 0.78096 D=-0.0499 E= 0.9988
G=-0.7800 H=-0.0390 K=-0.6246 HT= -6.0

SE= 2.07

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
PETROPAVLOVK	14.87	285.7	3 36	3				
COLLEGE	20.16	37.3	4 39	1	8 21	1		5 41
SITKA	24.71	60.6	5 26	2				5 44
UGLEGORSK	25.93	280.8	5 37	2				
Y.-SAKHLINSK	26.36	275.9	5 38	-1	10 16	5		
YAKUTSK	30.08	311.2	6 11	-2	11 11	0		
TIKSI	31.01	330.1	6 20	-1				
ALBERNI	32.84	72.9	6 38	1				
KIPAPA	33.55	146.5	6 43	0				
VICTORIA	34.00	73.4	6 47	0	12 13	1		
MATUSIRO	34.82	262.2	6 53A	-1	12 23	-2		9 27 PCP
VLADIVOSTOK	34.92	276.5	6 55	0	12 30	3		
CORVALLIS	35.94	79.4	7 15	11				
ABUYAMA	37.55	262.4	7 17A	0				
CHANGCHUN	38.61	281.8	7 26A	0	13 36	13		8 57 PP
SHASTA	38.61	84.2	7 27	1				
UKIAH	39.02	86.8	7 39	9				
RESOLUTE	39.17	24.7	7 31	0	13 38	6		9 9 PP
MINERAL	39.31	84.1	7 40	8				
HUNGRY HORSE	39.62	68.9	7 34	-1	13 38	0		9 13 PP
BERKELEY	40.38	87.7	7 47	6	13 48	-2		
RENO	40.90	83.9	7 46	1				
LICK	41.09	87.9	7 49	2				
BUTTE	41.67	71.2	7 51	0				9 43 PP
FRESNO	42.60	87.1	8 0	1				
BOZEMAN	42.75	70.8	8 1	1				

EUREKA	43.31	81.3	8	3	-2				8	30	
THULE	44.67	18.5	8	15	-1				9	57	PP
SALT LAKE C.	45.06	77.1	8	18	-1				8	43	
PASADENA	45.30	88.8	8	19	-2	15	0	-2	18	55	SS
KHEYS	45.72	349.4	8	16	-8	14	52	-16			
BOULDER CITY	46.19	84.4	8	28	0						
PEKING	46.36	283.0	8	30A	1	15	19	2	10	23	PP
NORD	46.69	3.9	8	25	-7	15	47	25			
ULAN-BATOR	47.17	297.2	8	37	1						
RAPID CITY	48.25	68.2	8	44	0						
ZO-SE	49.04	270.2	8	49A	-1	15	54	-1	10	44	PP
PAOTOW	49.72	287.5	8	57A	2	16	9	5	16	24	PS
NANKING	49.88	273.0	8	55A	-2						
TUCSON	51.14	85.2	9	6	0				9	17	
TUCSON TELE.	51.15	85.0	9	6	0				9	17	
YINCHUAN	53.31	287.8	9	24	1						
WUHAN	53.56	274.7	9	24	0				17	11	PS
SIAN	54.51	282.1	9	31A	0	17	10	0	11	39	PP
WUWEI	55.81	289.6	9	42	1						
TIENSHUI	56.21	284.6	9	46	2						
LANCHOW	56.35	287.2	9	44A	-1	17	35	1	11	49	PP
FAYETTEVILLE	58.66	70.2	9	58	-3	17	58	-7			
SEMIPALATNSK	59.15	313.3	10	2	-2						
CANTON	59.66	269.5	10	7	-1						
HONG KONG	59.68	268.2	10	8	0	18	19	1			
SODANKYLA	60.07	349.6	10	12	1				10	57	PCP
KIRUNA	60.23	352.4	10	11	-1				10	56	PCP
CLEVELAND	62.00	57.9	10	24	0						
SVERDLOVSK	62.01	328.2	10	25	1	18	53	5			
OTTAWA	62.15	51.4	10	24K	-1						
SHAWINIGAN	62.73	48.8	10	27K	-2						
BREBEUF	63.10	50.1	10	29K	-2						
MORGANTOWN	64.17	58.4	10	39K	1						
PENNSYLVANIA	64.41	56.2	10	39	-1	19	21	3			
KUNMING	64.82	279.0	10	41A	-1	19	22	-1	19	39	PS
SKALSTUGAN	64.99	355.4	10	44	0				11	16	PCP
PHU-LIEN	65.50	272.9							19	45	PS
WASHINGTON	66.22	57.1	10	49	-2						
PALISADES	66.28	53.6	10	50	-2	19	40	-1	13	51	PP
FORDHAM	66.41	53.7	10	43	-10	20	23	41			
PULKOVO	66.85	345.3	10	55	0						
NURMIJARVI	66.94	348.5	10	55	-1				11	24	PCP
HELSINKI	67.23	348.2	10	59	1				11	27	PCP
PORT MORESBY	68.06	218.4	11	1	-2	19	56	-6	27	35	SSS
UPPSALA	68.33	352.0	11	4K	-1				39	16	PKPPKP
HALIFAX	68.37	44.8	11	5	0	20	3	-3	25	14	SS
TOCKLAI	68.39	286.0	11	35	30						
MOSCOW	69.28	339.8	11	11	0						
NAMANGAN	70.17	311.4	11	13	-3						
GOTEBORG	70.87	354.8	11	25	5						
SHILLONG	71.01	287.2	11	19A	-2	20	36	-1			
COPENHAGEN	72.86	354.3	11	31	-1				21	54	SCS
CHITTAGONG	73.45	285.1	11	35	-1	21	4	-1	14	20	PP
RATHFARNHAM	75.25	5.7	11	47A	1				12	43	
DEHRA DUN	75.27	300.2	11	47	1	21	41	16	26	32	SS
WARSAK DAM	75.75	307.0	11	47	-2						
LAHORE	76.28	303.6	11	53	1						
DE BILT	76.72	358.5	11	57	3						
HALLE	77.05	354.2	11	53	-3				12	10	PCP
COLLMBERG	77.18	353.5	11	56	-1						
KEW	77.33	2.0	11	58	0						
LWOW	77.42	346.1	11	59	1						
BERMUDA	77.62	53.2	11	57	-2	21	47	-4			
JENA	77.64	354.4	11	59	0				12	44	
AGRA	77.78	298.2	11	59	-1						
BENSBERG	77.82	357.2	12	1K	1						
RACIBORZ	77.92	350.0	12	2	1						
PLAUEN	78.04	354.0	11	59	-3				12	19	
CHARTERS TS.	78.12	215.0	11	59	-3						
SONNEBERG	78.21	354.6	12	4	1						
MAKHACH-KALA	78.22	328.2	12	3	0	22	1	4			
PRUHONICE	78.37	352.3	12	4	1						
CHEB	78.44	353.8	12	3	-1						
KISHINEV	79.32	342.2	12	8	-1	22	6	-3			
IASI	79.38	343.1	12	5	-4						
STUTTGART	79.93	355.7	12	13	1						
BRATISLAVA	79.93	350.4	12	.9A	-3						
SOTCHI	80.02	333.7	12	13	1						
FOLINIERE	80.03	2.2	12	12	0						

PARIS	80.03	0.2	12 13	1						
SIMFEROPOL	80.17	338.0	12 14	1						
TUBINGEN	80.17	355.8	12 14	1						
STRASBOURG	80.17	356.7	12 15K	2	22 19	1		28 7	SS	
TIFLIS	80.22	329.5	12 15	2	22 20	2				
EBINGEN	80.53	355.9	12 16	1						
PORT BLAIR	81.06	277.4	12 16	-2						
QUETTA	81.12	308.0	12 19A	1	22 31	3		12 25	PCP	
NEUCHATEL	81.78	357.2	12 19	-3						
TOLMEZZO	82.05	352.9	12 26	3				12 55		
BUCHAREST	82.33	343.4	12 27	2						
TRIESTE	82.74	352.3	12 28	1						
BELGRADE	82.83	347.5	12 29K	2	22 52	7		23 5	SCS	
CLERMONT-FD.	83.07	359.8	12 29	1						
MEDAN	83.59	267.7	12 31	0						
SOFIA	84.47	345.0	12 36	1				13 36		
KARACHI	84.65	305.4	12 42	6						
ROME	86.57	352.8	12 48	2				23 37		
POONA	86.92	296.1	12 49	1						
BOMBAY	87.20	297.1	12 48	-1	23 43	15				
SAN JUAN	88.16	62.5	12 54	0				13 15		
TOLEDO	88.76	5.3	12 57	1	24 2	19		32 32	SSS	
KSARA	90.19	333.0	13 6	3	23 58	2		18 32	PPP	
ALICANTE	90.44	2.6	13 1	-3	23 52	-6				
GRANADA	91.48	5.2	13 11K	2						
MALAGA	91.89	5.8	13 13K	2				16 59	PP	
ALGIERS UNI.	92.07	359.8	13 11	-1						
JERUSALEM	92.29	332.9	13 14A	1						
SETIF	92.61	357.9	13 14	0						
RELIZANE	93.06	1.9	13 15	-1				15 48		
CHINCHINA	93.27	77.9	13 18	1				24 20	SKKS	
BOGOTA	94.49	76.9	13 22	-1				24 25	SKKS	
HUANCAYO	106.68	88.4			26 11	-5		22 24	PPP	
CAPE HALLETT	123.85	184.6						30 51	PKKP	
RUMANGABO	125.24	326.9	19 17	15				20 56	PP	
LWIRO	126.28	327.2	19 6A	2				21 2		
ASTRIDA	126.28	325.9	19 6	2				21 4	PP	
LEOPOLDVILLE	131.87	343.3	19 29	14				22 40	SKP	
BYRD STATION	135.29	167.9	19 22	0						
ELISABTHVLLE	135.48	324.5	19 26	4				22 4	PP	
BROKEN HILL	137.67	321.6						31 40		
SOUTH POLE	141.35	180.0	19 32	-1				29 44	PKKP	
BULAWAYO	142.74	317.6	19 32	-3						
PRETORIA	147.84	313.6	19 49	5						
PIETERMZBURG	150.03	306.3						20 53	PKP2	
KIMBERLEY	151.94	315.8	19 58	8						

MAY 12 21.H 59.M 56.S EPICENTRE 51.21-176.95 DEPTH= 0.KM

A=-0.62819 B=-0.03347 C= 0.77734 D=-0.0532 E= 0.9986
G=-0.7762 H=-0.0414 K=-0.6291 HT= -5.9

SE= 2.34

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
PETROPAVLOVK	15.08	286.9	3 43	7				
MAGADAN	19.96	307.2	4 38	2				
COLLEGE	20.35	36.7	4 39	-2	8 26	2		6 8
SITKA	24.78	60.0	5 27	2				
Y.-SAKHLINSK	26.52	276.7	5 41	0	10 16	2		
YAKUTSK	30.39	311.6	6 34	18				
TIKSI	31.35	330.4	6 23	-1				
ALBERNI	32.83	72.5	6 39	2				
KIPAPA	33.21	146.5	6 19	-22				
HORSESHOE B.	33.70	71.6	6 42	-3				
TUKUBASAN	33.94	260.7	6 42	-5	12 10	-2	8 1	PP
VICTORIA	33.98	73.1	6 47	0	12 17	5		
MATUSIRO	34.90	262.9	6 55A	0			9 28	PCP
VLADIVOSTOK	35.08	277.1	6 58	1				
ABUYAMA	37.63	263.0	7 12A	-6				
SHASTA	38.53	83.9	7 28	2				
CHANGCHUN	38.79	282.3	7 29A	1	13 28	2	9 4	PP
UKIAH	38.92	86.6	7 31	2			9 29	PCP
MINERAL	39.22	83.8	7 54K	22				
RESOLUTE	39.42	24.5	7 32A	-1	13 28	-8	9 40	PCP

HUNGRY HORSE	39.63	68.6	7	35	0	13	37	-2	9 8	PP
BERKELEY	40.28	87.4	7	39	-1					
RENO	40.81	83.6	7	48K	3					
LICK	40.99	87.6	7	46	0					
BUTTE	41.66	70.9	7	53	1	14	8	-1	9 58	PPP
FRESNO	42.50	86.9	8	0	1					
BOZEMAN	42.75	70.6	8	2	1				9 37	PP
EUREKA	43.24	81.1	8	5	0				11 29	
THULE	44.94	18.5	8	16	-2				9 58	PP
SALT LAKE C.	45.02	76.9	8	20	1					
PASADENA	45.19	88.6	8	21	1	15	1	0	18 58	SS
KHEYS	46.07	349.5	8	18	-9					
BOULDER CITY	46.11	84.2	8	28	0					
PEKING	46.55	283.4	8	31A	0	15	21	1	15 36	PS
ULAN-BATOR	47.43	297.5	8	40	2					
RAPID CITY	48.26	68.0	8	46	1	15	48	4		
ZO-SE	49.16	270.7	8	50A	-1	15	58	1	10 47	PP
PAOTOW	49.94	287.9	8	58A	1	16	10	2	10 58	PP
NANKING	50.01	273.4	8	56	-2	16	22	13	10 55	PP
TUCSON	51.05	85.0	9	7	1					
TUCSON TELE.	51.06	84.9	9	7	1					
YINCHUAN	53.52	288.1	9	27	3					
WUHAN	53.71	275.1	9	26	0				19 13	SCS
SIAN	54.69	282.5	9	33	0	17	12	-1	17 32	PS
WUWEI	56.03	289.9	9	42	-1					
LANCHOW	56.56	287.5	9	47A	0	17	39	1	11 55	PP
SINING	57.42	289.3	9	55	2					
FAYETTEVILLE	58.66	70.2	9	58A	-3	17	59	-6		
CANTON	59.78	269.8	10	10	1					
HONG KONG	59.79	268.5	10	8	-1	18	37	17	23 11	SS
BAGUIO CITY	60.17	258.8	10	10	-2					
SODANKYLA	60.42	349.7	10	14	1				10 58	PCP
KIRUNA	60.57	352.5	10	12	-3				10 57	PCP
MANILA	61.33	257.1	10	3	-17					
CLEVELAND	62.08	57.8	10	25	0					
OTTAWA	62.27	51.3	10	25K	-1					
SVERDLOVSK	62.36	328.4	10	27	0					
SHAWINIGAN	62.86	48.8	10	29	-1					
SEVEN FALLS	63.35	47.2	10	29	-4					
MORGANTOWN	64.24	58.3	10	39K	0	19	16	0		
PENNSYLVANIA	64.49	56.2	10	44	3	19	20	1		
KUNMING	64.99	279.3	10	42	-2	19	23	-2	19 35	PS
SKALSTUGAN	65.33	355.5	10	45	-1				11 17	PCP
WASHINGTON	66.30	57.1	10	52	0				11 32	PCP
PALISADES	66.38	53.6	10	52	-1					
FORDHAM	66.51	53.7	10	33	-21	20	27	43		
PULKOVO	67.20	345.4	10	56	-2					
NURMIJARVI	67.29	348.6	10	57	-2				11 26	PCP
TACUBAYA	67.50	86.8	10	50	-10					
HELSINKI	67.58	348.4	11	1	1					
PORT MORESBY	67.87	218.7				19	59	-1	27 35	SSS
TOCKLAI	68.60	286.3	11	37	30					
UPPSALA	68.67	352.2	11	5A	-2					
MOSCOW	69.63	340.0	11	9	-4					
NAMANGAN	70.48	311.6	11	19	1					
GOTEBORG	71.21	354.9	11	27	4					
SHILLONG	71.22	287.5	11	22A	-1	20	38	-2		
ABERDEEN	71.91	2.9	11	22K	-5	20	24	-24	13 52	PP
CHATRA	73.06	291.7	11	33	-1					
COPENHAGEN	73.20	354.5	11	34	0	21	3	1		
CHITTAGONG	73.65	285.3	11	38	1	21	7	0	14 23	PP
RATHFARNHAM	75.57	5.8	11	49K	1				12 28	
WARSAK DAM	76.05	307.2	11	50A	-1					
POTSDAM	76.44	353.7	11	52	-1					
LAHORE	76.56	303.8	11	57	3	21	38	-2		
DE BILT	77.05	358.7	11	54	-3	22	4	19		
HALLE	77.39	354.3	11	54	-4				12 21	
COLLMBERG	77.52	353.6	12	4	5					
KEW	77.66	2.2	12	0	0	22	0	8		
BERMUDA	77.73	53.3	11	56	-4	21	52	0		
LWOW	77.77	346.3	12	0	0					
CHARTERS TS.	77.92	215.2	12	1	0					
JENA	77.98	354.5	12	1	-1				12 26	
RACIBORZ	78.27	350.1	12	2	-1					
PLAUEN	78.38	354.1	12	10	6					
SONNEBERG	78.55	354.7	12	6	1					
MAKHACH-KALA	78.56	328.4	12	4	-1	22	3	2		
PRUHONICE	78.72	352.5	12	6K	0				12 16	PCP

CHEB	78.78	353.9	12	6	0					
KISHINEV	79.67	342.4	12	9	-2					
IASI	79.73	343.3	12	14	3					
STUTTGART	80.26	355.9	12	13	-1				22 32	SCS
BRATISLAVA	80.27	350.5	12	13K	-1				21 34	
FOLINIERE	80.36	2.4	12	14	-1					
PARIS	80.36	0.4	12	15	0				12 54	
SOTCHI	80.37	333.9	12	14	-1					
TUBINGEN	80.51	355.9	12	15	0					
STRASBOURG	80.51	356.8	12	16K	1	22 22	0			
SIMFEROPOL	80.52	338.2	11	55	-20					
TIFLIS	80.56	329.6	12	17	1	22 27	5			
EBINGEN	80.86	356.0	12	17	0					
PORT BLAIR	81.22	277.6	12	23	4					
QUETTA	81.42	308.1	12	21A	1	22 33	2		12 26	PCP
BASLE	81.57	356.9	12	19	-2					
GORIS	82.06	327.6	12	26	3					
NEUCHATEL	82.12	357.3	12	23	-1					
TOLMEZZO	82.40	353.1	12	27	2				12 43	
BUCHAREST	82.68	343.6	12	28	1					
ZAGREB	82.71	350.9	12	33	6					
TRIESTE	83.08	352.5	12	27	-2	22 49	1			
BELGRADE	83.17	347.6	12	32A	3	23 10	21			
CLERMONT-FD.	83.41	360.0	12	32	2					
MEDAN	83.70	267.9	12	32	0				13 23	
PAVIA	83.85	355.7	12	38	5	23 10	14			
BOLOGNA	84.41	354.1	12	52	17				14 25	
SOFIA	84.82	345.1	12	38	0				14 34	
ROME	86.91	353.0	12	49	1	23 18	-8		29 29	SS
POONA	87.18	296.2	12	49	0					
BOMBAY	87.46	297.2	12	51	0	23 44	13		23 30	SKS
TARANTO	87.86	349.2				23 20	16		14 4	
SAN JUAN	88.21	62.6	12	55	1					
TOLEDO	89.08	5.5	12	57	-1					
KSARA	90.54	333.2	13	8	3	24 1	2		18 29	PPP
ALICANTE	90.77	2.8	13	2	-4	23 53	-8			
GRANADA	91.79	5.3	13	14A	3	24 20	10		17 1	PP
MALAGA	92.20	6.0	13	13K	0					
ALGIERS UNI.	92.40	360.0	13	12	-2				16 53	PP
JERUSALEM	92.64	333.0	13	15A	0	23 50	- 8			
SETIF	92. 4	358.	13	11	-5					
CHINCHINA	93.22	78.1	13	21	4					
RELIZANE	93.39	2.0	13	17	-1				16 18	
FORT FRANCE	93.93	60.8							20 19	
BOGOTA	94.45	77.1	12	49	-34					
MBOUR	112.39	21.0	17	42	-56				32 52	SS
CAPE HALLETT	123.53	184.6							18 56	PKKP
LEOPOLDVILLE	132.22	343.5	19	22	6				22 42	SKP
BYRD STATION	134.94	168.0	19	23	2				22 54	PP
ELISABTHVLLE	135.82	324.5	19	28	5				22 6	PF
SOUTH POLE	141.02	180.0	19	25	-7					
BULAWAYO	143.06	317.6	19	31	-5					
PRETORIA	148.16	313.5	19	31	-13					
KIMBERLEY	152.26	315.7	19	59A	8					

MAY 14 0.H 48.M 41.S EPICENTRE -0.30 98.95 DEPTH= 0.KM

A=-0.15549 B= 0.98782 C=-0.00518 D= 0.9878 E= 0.1555
G= 0.0008 H=-0.0051 K=-1.0000 HT= 7.2

SE= 3.17

	DELTA DEG.	AZ. DEG.	P M	P S	P O-C S	S M	S S	S O-C S	*PP M	*PP S	SUPP. M	SUPP. S
MEDAN	3.86	356.1	1	5	3							
DJAKARTA	9.80	126.7				4	52	35			3	10
LEMBANG	10.82	127.0	2	39	0							
PORT BLAIR	13.40	332.7	3	18	4	6	11	26			6	27 SS
PHU-LIEN	22.28	19.3	4	59	-1	9	11	10				
CHITTAGONG	23.57	343.3	5	17	4	9	28	3				
KODAIKANAL	23.79	296.7				9	36	8				
KUNMING	25.46	7.9	5	36A	5	10	8	11				
SHILLONG	26.61	345.6	5	43	1	10	18	2				
HONG KONG	26.92	32.5	6	39	54							
BAGUIO CITY	27.04	51.1	5	47	1							
TOCKLAI	27.19	351.8	5	14	-33							

POONA	30.95	308.5	6	20	-1							
CHENGTU	31.16	8.5	6	23A	0	11	31	2				
BOMBAY	31.97	308.1				11	39	-2				
WUHAN	34.07	24.5	6	49	1							
SIAN	35.62	14.3	7	2A	0							
DEHRA DUN	36.37	328.7				13	9	19				
LANCHOW	36.48	6.6	7	10A	1							
NANKING	37.25	28.5	7	15	0							
ZO-SE	37.69	32.1	7	19A	0							
PAOTOW	41.92	12.7	7	54A	0							
WARSAK DAM	42.72	325.7	7	55	-6							
QUETTA	42.96	317.7	8	1	-2	14	17	-12				
PEKING	43.11	19.4	8	5A	1	14	37	6				
NAMANGAN	47.97	332.2	8	42A	-1	15	38	-2				
FRUNSE	48.24	336.0	8	44	-1	15	44	0				
ULAN-BATOR	48.52	7.1	8	51A	4	15	56	8				
CHARTERS TS.	50.26	116.0	8	57	-3							
ADELAIDE	50.62	137.2	9	0	-3						9	32
MATUSIRO	51.66	40.5	9	11	0	16	37	5				
MELBOURNE	56.43	136.9	9	52	6							
CANBERRA	58.13	132.4	9	55	-3						10	3
TIFLIS	64.21	317.6	10	36	-3							
SVERDLOVSK	64.72	337.9	10	40	-2							
YAKUTSK	66.38	15.3	10	51	-2	19	41	-2				
SOTCHI	68.39	317.8	11	1	-5	20	0	-7				
ASTRIDA	69.22	267.4	11	8	-3							
RUMANGABO	69.61	268.7	11	19	6							
LWIRO	70.15	267.7	11	23	6							
BULAWAYO	71.46	248.9	11	19	-5							
ELISABTHVLLE	71.74	257.9	11	30	4							
TIKSI	74.34	9.5	11	39	-2	21	13	-2				
MOSCOW	74.50	329.0	11	36	-6							
KHEYS	83.46	352.7	12	28	-3	22	45	-7				
LEOPOLDVILLE	83.69	265.7	12	40A	8							
SCOTT BASE	85.12	168.6	12	40K	1							
BYRD STATION	97.56	173.7	13	43	5							
COLLEGE	99.98	23.5	17	22	777						17	52 PP
HUNGRY HORSE	124.30	26.1	19	1	0							
EUREKA	129.60	35.1	19	11	0						21	14 PP
TUCSON TELE.	137.61	38.4									22	58 PKS
HUANCAYO	166.48	204.7	20	19	12							

MAY 14 0.H 55.M 54.S EPICENTRE 39.84 23.27 DEPTH= 0.KM

A= 0.70732 B= 0.30425 C= 0.63807 D= 0.3951 E=-0.9186
G= 0.5861 H= 0.2521 K=-0.7700 HT= -1.6

SE= 3.98

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S	
ATHENS	1.90	169.3	0	37A	3	1	9	10					
SKOPJE	2.57	327.0	0	40A	-4	1	8	-8			0	51	PG
TARANTO	4.66	279.7	1	20	7						2	55	
BUCHAREST	5.04	23.7	1	22	3	2	23	4			1	34	P*
BELGRADE	5.40	338.1	1	26K	2	3	10	42			1	47	PG
TIMISOARA	6.10	346.3	1	29	-5	2	36	-9			2	56	S*
MESSINA	6.23	257.2	1	32	-4						2	38	
ZAGREB	8.03	320.5	1	57	-4	4	20	47			2	34	PG
BUDAPEST	8.22	339.7	2	46	42						4	18	
KISHINEV	8.24	27.5	2	19	15								
ROME	8.44	287.6	2	43	37								
TRIESTE	9.10	312.8	2	52	36	3	53	-7			4	55	SGSG
BRATISLAVA	9.44	334.0	2	12	-8	4	6	-2					
SIMFEROPOL	9.51	54.0	2	25	4								
SKALNATE PL.	9.59	348.0	2	34	12								
TOLMEZZO	9.96	314.5	2	38	10	4	58	37			5	39	
LWOW	10.01	2.8	2	30	2								
KRAKOW	10.48	348.1	2	30	-5	4	44	10			3	51	
RACIBORZ	10.85	342.4	2	44	4								
KSARA	11.75	116.8	2	52	0	5	7	2					
PRUHONICE	11.87	331.6	2	50	-4	5	12	4					
PRAGUE	11.99	331.5	3	5	10								
WARSAW	12.49	353.6									5	59	
JERUSALEM	12.59	126.0	3	3	0						3	40	
STUTTGART	13.45	316.2	3	17	2								

COLLMBERG	13.52	331.4	3	9	-7				5	36 PCP
JENA	13.78	327.4	3	13	-6	5	40	-14		
NEUCHATEL	13.84	306.5	3	46	26				7	44
HALLE	14.07	329.7	3	26	3	5	46	-15		
STRASBOURG	14.12	313.3	3	28	4				5	52
POTSDAM	14.38	334.1	3	31	4					
BENSBERG	15.82	320.0	3	47	1				8	54
PARIS	17.32	308.0	4	5	0				9	32
COPENHAGEN	17.41	339.2	4	4	-2					
RELIZANE	18.41	264.4	4	16	-2					
MOSCOW	18.53	26.2	4	19	-1					
GOTEBORG	19.32	341.5	4	28	-1					
KEW	20.08	313.2	4	36	-2	8	32	13		
UPPSALA	20.35	351.8	4	37	-4				5	38
HELSINKI	20.38	2.4	4	40	-1					
PULKOVO	20.44	10.2	4	38	-4					
NURMIJARVI	20.71	1.9	4	42	-3	8	37	5	5	11 PPP
GRANADA	21.17	271.4				9	6	25		
TAMANRASSET	22.72	226.8	5	4	-1				9	55
ABERDEEN	23.93	324.9							8	6
SKALSTUGAN	24.66	348.2	5	21A	-3					
SODANKYLA	27.65	2.8	5	17	-34				6	0 PP
KIRUNA	28.09	357.7	5	29	-26				15	17
RESOLUTE	58.77	344.1	9	58	-4	17	36	-31	21	0
RAPID CITY	83.54	324.3	12	30	-1				15	27

MAY 14 6.H 27.M 0.S EPICENTRE 35.16 24.57 DEPTH= 0.KM

A= 0.74514 B= 0.34067 C= 0.57333 D= 0.4158 E=-0.9095
G= 0.5214 H= 0.2384 K=-0.8193 HT= 0.1

SE= 2.77

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
ATHENS	2.88	346.5	0	52K	4	1	32	8				
SOFIA	7.59	353.1	1	59	4						5	7
MESSINA	7.85	295.3	2	0	1	3	28	-1			2	38
KSARA	9.43	95.0	2	16	-5	3	54	-15			4	5 SS
SIMFEROPOL	12.20	33.9	3	15	17							
ZAGREB	12.48	331.1				5	19	-4				
TRIESTE	13.31	325.1	3	15	2	5	48	5			7	29
TOLMEZZO	14.21	325.6	3	25	0						6	24
LWOW	14.66	358.6	3	37	6							
KRAKOW	15.26	348.6	3	36	-3						6	42
SETIF	15.62	279.4	3	48	5						4	9 PPP
MONACO	15.74	308.0	3	47	2							
CHUR	16.25	320.5	3	54A	2							
PRUHONICE	16.52	336.7	3	59A	4							
TIFLIS	17.13	61.5	4	5	2							
ALGIERS UNI.	17.49	281.5	4	6	-1						4	25 PP
BASLE	17.71	319.4	4	9	-1							
STUTTGART	17.71	324.8	4	9	-1							
SONNEBERG	18.05	331.5	4	15	1	7	42	8			4	49
COLLMBERG	18.16	336.2	4	15	-1							
STRASBOURG	18.28	322.3	4	18	1	7	42	3			5	27
HALLE	18.69	334.8	4	19	-3	7	50	2			11	47
CLERMONT-FD.	19.40	309.6	4	34	4							
RELIZANE	19.57	278.7	4	36	4							
TAMANRASSET	20.69	238.5	4	42K	-3	8	22	-10			4	59 PP
PARIS	21.24	316.7	5	50	60	8	55	13				
MOSCOW	22.44	19.6	5	7	5							
FOLINIERE	22.93	314.0	5	6	-1							
TOLEDO	23.13	290.2	5	8	-1							
MALAGA	23.47	282.3	5	10A	-2						5	40 PP
GOTEBORG	24.07	343.3	5	13	-5							
KEW	24.19	320.0	5	19	0	9	40	5			5	27
PULKOVO	24.90	6.9	5	24	-2	9	25	-23				
HELSINKI	25.02	0.5	5	28	1							
UPPSALA	25.11	351.7	5	27	-1						5	40
NURMIJARVI	25.36	0.1	5	29	-2						6	38
SERRA PILAR	26.65	292.9	5	42K	-1						6	26 PP
RATHFARNHAM	28.26	319.5	5	55	-2							
ADDIS ABABA	29.08	150.1	6	10	5							
SKALSTUGAN	29.44	348.8	6	5	-3							
SODANKYLA	32.27	1.5	6	31	-2							

SVERDLOVSK	32.54	37.0	6	36	1						
KIRUNA	32.80	357.1	6	35	-2						
NAMANGAN	37.17	66.6	7	14	-1						
FRUNSE	39.13	63.2								9	55
SCORESBY SD.	43.16	339.1	8	5	1						
ELISABTHVLLE	46.62	176.2	8	35A	3						
THULE	56.81	343.6	9	45	-4						
SHILLONG	57.88	79.7	9	52K	-4						
CHITTAGONG	59.33	83.0	10	11	5						
RESOLUTE	63.54	345.0	10	32	-3						
SHAWINIGAN	69.96	313.2	11	15	-1						
BREBEUF	71.00	312.6	11	21	-1						
COLLEGE	80.12	356.7	12	12	-2						
HUNGRY HORSE	89.02	333.8	12	57	-1						
SOUTH POLE	124.98	180.0	19	0	-3						

MAY 14 6.H 36.M 56.S EPICENTRE 35.14 24.58 DEPTH= 0.KM
A= 0.74531 B= 0.34097 C= 0.57293 D= 0.4160 E=-0.9094
G= 0.5210 H= 0.2383 K=-0.8196 HT= 0.1

SE= 2.29

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
ATHENS	2.91	346.4	0	50K	3	1	25	3					
SKOPJE	7.27	340.9	1	51A	2	3	17	5			1	56	PG
SOFIA	7.62	353.0	2	0	7	3	36	16			4	0	
REGGIO CALA.	7.77	295.0	1	56A	1	3	19	-5			2	8	
TARANTO	7.87	314.7	1	53	-4								
MESSINA	7.88	295.5	1	56A	-1	3	22	-5			2	6	PP
BUCHAREST	9.35	6.7	2	20A	3	4	34	31			3	19	
KSARA	9.42	94.8	2	14A	-4	4	4	-1			2	28	PPP
JERUSALEM	9.49	107.6	2	14K	-5	3	56	-11					
BELGRADE	10.18	343.1	2	28A	-1	4	32	8			3	35	
FOCSANI	10.74	9.9	2	50	13	5	10	32					
TIMISOARA	10.91	347.5	2	36	-3	4	33	-9			5	48	SG
BACAU	11.56	8.0	2	52	4	5	12	14					
ROME	11.63	309.1	2	47	-2	4	54	-6			5	43	
SIMFEROPOL	12.22	33.8	2	58	1								
IASI	12.26	9.6	3	0	3	5	6	-9					
KISHINEV	12.29	13.8	2	58	0	5	13	-3					
KECSKEMET	12.33	344.1	3	16	18	5	33	17					
ZAGREB	12.51	331.1	2	58A	-3						3	57	PG
BUDAPEST	13.00	343.2	3	8	1	5	35	2					
TRIESTE	13.34	325.2	3	9	-3	5	35	-6			7	22	
PRATO	13.57	314.1	3	18	3	6	0	14					
HURBANOVO	13.58	341.4	3	16	1	5	38	-9					
BOLOGNA	13.81	316.6	3	12	-6						5	28	
BRATISLAVA	14.16	339.1	3	19A	-3								
TOLMEZZO	14.24	325.7	3	21	-2	5	56	-6			3	34	PP
SKALNATE PL.	14.39	348.5	3	28	3	5	48	-18					
SOTCHI	14.41	49.7	3	25	-1								
VIENNA-H.	14.46	337.5	3	26	0	6	2	-5			6	26	SS
LWOW	14.69	358.6	3	30	1	6	20	7					
KRAKOW	15.29	348.6	3	35	-2	6	16	-11			3	43	PP
PAVIA	15.45	315.1	3	41A	2						7	29	
SETIF	15.63	279.5	3	41A	0	6	27	-8			15	55	SCS
RACIBORZ	15.65	344.6	3	41	-1	6	26	-9			3	57	PP
MONACO	15.77	308.1	3	43	0								
CHUR	16.28	320.5	3	51K	1								
PRUHONICE	16.55	336.7	3	55A	2	7	6	10					
PRAGUE	16.67	336.7	3	55	0	7	8	9					
RAVENSBURG	16.85	323.1	3	59	2	7	10	7					
TIFLIS	17.13	61.4	4	1	0								
WARSAW	17.28	352.6	4	2	0	7	13	0			4	19	PP
CHEB	17.39	332.9	4	2	-2	7	25	9					
EBINGEN	17.45	323.1	4	5	1	7	22	5					
ALGIERS UNI.	17.51	281.6	4	4A	-1	7	28	10			4	19	PP
TUBINGEN	17.64	324.1	4	7	0	7	30	9					
BASLE	17.74	319.4	4	6K	-2	7	32	9					
STUTTGART	17.74	324.8	4	8	0	7	31	7			4	28	PP
NEUCHATEL	17.76	317.2	4	8	0	7	30	6					
PLAUEN	17.82	333.3	4	7	-2	7	33	8			4	17	PP
GORIS	17.83	69.4	4	8	-1								
SONNEBERG	18.08	331.5	4	14	2	7	42	11			4	24	PP

COLLMBERG	18.19	336.2	4 14	0	8 4	30		7 42
STRASBOURG	18.31	322.3	4 15K	0	7 30	-6		
JENA	18.38	333.2	4 16	0	7 47	9		4 24 PP
BARCELONA	18.69	296.3	4 18	-2	7 56	11		
HALLE	18.72	334.8	4 17	-3	7 36	-10		9 2 PCP
POTSDAM	19.10	338.0	4 24	-1	7 59	5		
CLERMONT-FD.	19.42	309.6	4 28A	0	8 20	19		
RELIZANE	19.59	278.8	4 29K	-1	8 9	4		4 48 PP
TORTOSA	19.79	293.8	4 38	5	8 22	13		
BENSBERG	20.22	326.8	4 37K	0	8 32	14		
ALICANTE	20.32	286.5	4 40	2	8 22	1		
TAMANRASSET	20.69	238.6	4 41K	-1	8 32	4		5 3 PP
MUNSTER	20.75	329.4	4 43	0				5 49
HAMBURG	21.11	335.3	4 44K	-2	8 35	-1		
PARIS	21.27	316.7	4 49	1	8 46	7		
DE BILT	21.91	326.7	4 57K	3	8 59	8		
ALMERIA	21.93	282.4	4 54K	-1	8 53	2		
COPENHAGEN	22.18	341.6	4 56	-1	8 59	3		5 49
MOSCOW	22.46	19.5	4 58	-2	9 1	0		
GRANADA	22.82	283.4	5 5A	2	9 11	3		5 19 PP
TOLEDO	23.15	290.3	5 7K	0	9 13	-1		5 41 PP
MALAGA	23.49	282.3	5 7K	-3	9 19	0		5 38 PP
JERSEY	24.09	313.8	5 15	-1				7 5
GOTEBORG	24.10	343.3	5 12K	-4				
KEW	24.22	320.0	5 18K	1	9 34	2		6 2 PP
PULKOVO	24.93	6.9	5 22	-2	9 40	-4		
HELSINKI	25.05	0.5	5 24	-1	9 44	-2		
UPPSALA	25.14	351.7	5 23K	-3	9 44	-4		
NURMIJARVI	25.39	0.1	5 26	-2	9 53	1		6 7 PP
COIMBRA	26.52	290.9	5 38K	-1	10 7	-4		
SERRA PILAR	26.67	292.9	5 41A	1	10 15	2		6 24 PP
DURHAM	26.72	325.4	5 39K	-2				
LISBON	27.11	287.6	5 45K	1	10 24	4	5 54	
EDINBURGH	28.14	326.2	5 56	2	10 23	-14		9 11 PCP
BERGEN	28.19	339.7	5 56	2	10 36	-2		10 49
RATHFARNHAM	28.29	319.5	5 56K	1	11 0	21		6 43 PP
ABERDEEN	28.43	329.1	6 2K	6	10 51	10		12 22
ADDIS ABABA	29.05	150.1	6 3	1				
SKALSTUGAN	29.47	348.8	6 3	-3				
BANGUI	31.10	191.6	6 19	-1				
SODANKYLA	32.30	1.5	6 28	-3	11 36	-7		7 25 PP
SVERDLOVSK	32.55	37.0	6 33	0	11 43	-4		
KIRUNA	32.83	357.1	6 33	-2	11 45	-6		7 50 PPP
QUETTA	35.81	85.7	7 0A	-1	12 33	-4		8 16 PP
NAMANGAN	37.17	66.6	7 13	1	12 58	0		
LWIRO	37.40	173.1	7 13	-1	13 2	1		
KARACHI	37.51	92.4	7 18A	3	13 11	8		8 43 PP
ASTRIDA	37.85	171.6	7 17K	-1				
WARSAK DAM	38.41	77.8	7 21	-2	13 13	-4		
SIDA	38.64	331.2	7 24	-1				7 53
UVIRA	38.65	172.7	7 24	-1	13 6	-14		
LEOPOLDVILLE	40.26	194.5	7 36	-2	13 38	-7		16 55
REYKJAVIK	40.32	330.5	7 40K	1				
LAHORE	41.37	80.4	7 47A	0	14 3	2		9 27 PP
SEMIPALATNSK	42.60	51.3	7 57	0	14 16	-3		
MBOUR	42.63	251.6	7 58	1	14 18	-2		
SCORESBY SD.	43.19	339.1	8 3	1	14 28	0		9 52 PP
DEHRA DUN	44.79	80.5	8 17	2	14 47	-4		10 5 PP
BOMBAY	45.47	97.9	8 19	-1	15 2	1		10 11 PP
AGRA	45.97	84.6	8 21A	-3	15 3	-5		10 21 PP
KHEYS	46.32	6.4	8 34	7	15 23	10		
POONA	46.49	97.6	8 28	-1	15 16	1		
ELISABTHVLLE	46.59	176.2	8 31A	2	15 17	0		18 19 SCS
NORD	48.91	352.6	8 41	-6	15 39	-11		18 34 SCS
BROKEN HILL	49.45	175.0						9 50 PP
HYDERABAD	50.81	95.8	8 59	-3	16 14	-3		11 8 PP
CHATRA	53.53	80.5	9 21	-1	16 49	-4		
BOKARO	53.73	84.5	9 23	-1	16 51	-5		12 43 PPP
KODAIKANAL	53.99	104.0	9 21	-5	17 3	4		20 43 SS
MADRAS	54.59	99.3	9 31	1	17 16	9		11 40 PP
BULAWAYO	55.10	175.4						9 31 PCP
CALCUTTA	56.40	84.6	9 50	7	17 30	-2		13 15 PPP
THULE	56.84	343.6	9 43	-3	17 30	-7		10 45 PCP
IRKUTSK	57.20	46.0	9 49	0	17 41	-1		
WINDHOEK	57.83	188.2	9 53	0				
COLOMBO	57.87	105.5	9 58	4	17 48	-3		
SHILLONG	57.88	79.7	9 51	-3	17 47	-4		12 1 PP
TANANARIVE	58.01	154.2	9 54	-1				
CHITTAGONG	59.32	83.0	10 9	5	18 19	9		12 22 PP

TOCKLAI	59.67	77.1	10	11	5					
WUWEI	61.00	62.2	10	18	3					
TIKSI	61.36	20.5	10	16	-2	18	34	-2		
LANCHOW	62.62	63.7	10	26A	0	18	51	-1	12	50 PP
YINCHUAN	63.39	60.3	10	35	4					
KIMBERLEY	63.54	179.8	10	19	-13					
RESOLUTE	63.57	345.0	10	30K	-2	19	3	-1	20	21 SCS
PIETERMZBURG	64.64	174.4							11	43
TIENSHUI	64.69	64.4	10	40	0					
PAOTOW	65.11	56.8	10	43A	1	19	24	1	13	13 PP
CHENGTU	65.15	69.0	10	43A	0	19	22	-1	12	10 PP
HALIFAX	65.19	308.2	10	42K	-1	19	23	-1	13	13 PP
PORT BLAIR	65.54	92.8	10	47	2	19	25	-3	11	19 PCP
YAKUTSK	66.15	29.9	10	46	-3	19	30	-6		
KUNMING	66.76	75.0	10	52A	-1	19	38	-5	13	18 PP
SIAN	67.17	63.4	10	55A	-1	19	47	-1		
SEVEN FALLS	68.55	313.1	11	4	0	20	6	2		
PEKING	69.54	55.0	11	10	0	20	15	-1	13	49 PP
SHAWINIGAN	69.99	313.2	11	13	0					
BREBEUF	71.03	312.6	11	19K	0	20	37	3		
BERMUDA	71.68	297.0	11	16	-7	20	44	3	16	24 PPP
PHU-LIEN	72.04	76.9	11	26	1	20	42	-3	11	33
OTTAWA	72.34	313.3	11	27K	0	20	52	3		
WUHAN	73.15	64.4	11	32	0	20	56	-2	14	23 PP
CHANGCHUN	73.44	47.9	11	33	-1	20	59	-2		
PALISADES	73.57	308.7	11	32	-2	21	4	1	21	44 PS
MEDAN	74.95	96.3	12	34	52	22	16	58		
NANKING	75.44	61.0	11	44	-1	21	20	-3	14	40 PP
MAGADAN	75.74	25.1	11	47	0	21	27	0		
CANTON	76.08	71.5	11	51	2	21	31	0		
PENNSYLVANIA	76.19	310.2	11	50	1	21	34	2		
GEORGETOWN	75.75	308.3	11	53	0	21	38	0		
WASHINGTON	76.75	308.3	11	53	0				22	40 SCS
ANTIGUA	76.98	281.7	11	59	5					
HONG KONG	77.20	71.7	12	2	7	21	43	0	23	11 PPS
ZO-SE	77.66	60.7	11	56A	-2	21	43	-5	14	52 PP
VLADIVOSTOK	77.79	45.7	11	55	-3	21	44	-5		
CLEVELAND	78.05	312.4	12	4	4	21	57	5		
ST. KITTS	78.09	282.8	12	2	2					
FORT FRANCE	78.24	279.8	12	1	0					
UGLEGORSK	79.46	36.4	12	7	0	22	7	0		
CHAPEL HILL	79.76	306.7	12	10	1					
COLLEGE	80.15	356.7	12	10	-1	22	16	2	23	8 PPS
SAN JUAN	80.21	285.5	12	12	1					
TRINIDAD	80.70	276.5	12	17	3					
Y.-SAKHLINSK	81.22	37.7	12	16	-1	22	24	-1		
COLUMBIA	82.21	306.1	12	23	1	22	36	1		
PETROPAVLOVK	83.47	25.8	12	28	0	22	44	-4		
FLORISSANT	84.99	314.7	12	37K	1	23	8	5	22	57 SKS
ST. LOUIS 1	85.01	314.5	12	36K	0	23	8	5	24	8 PS
ABUYAMA	85.14	50.4	12	41A	4					
MATUSIRO	85.69	47.7	12	39K	-1	23	2	-8	33	28 SSS
SITKA	86.61	349.2	12	46	2					
MANILA	86.85	74.5				23	28	7	13	58
TUKUBASAN	87.05	46.9	12	45	-1	23	27	4	16	7 PP
BANFF	87.18	336.2	12	47	0					
DJAKARTA	87.21	99.5	12	46A	-1	23	7	-17		
LAWRENCE	87.65	317.4	13	50	61					
RAPID CITY	87.98	325.3	12	50	-1					
LEMBANG	88.22	99.5	12	52K	0	23	14	-20		
LITTLE ROCK	88.87	312.8	12	55K	0	23	43	3	23	21 SKS
HUNGRY HORSE	89.05	333.8	12	55	-1	23	41	-1	16	33 PP
FAYETTEVILLE	89.06	314.8	12	56	0	23	22	-20		
BOZEMAN	90.14	330.6	13	7	6					
BUTTE	90.45	331.7	13	3	1	23	8	-46	16	17 PP
HORSESHOE B.	91.14	339.7	13	3	-3					
VICTORIA	91.96	339.4	13	9	0					
BOULDER	92.09	323.9	13	10	0					
BOGOTA	94.42	278.7				23	53	-1	17	1 PP
CORVALLIS	95.47	337.6	13	25K	0					
CHINCHINA	95.47	279.9	13	26	1	23	56	-4		
EUREKA	97.30	330.3	13	34	0					
SHASTA	98.64	335.2	13	41	1					
MINERAL	98.68	334.5	13	41	1				17	7 PP
RENO	98.74	332.9	13	43	3					
UKIAH	100.33	335.1							17	57 PP
TUCSON TELE.	100.85	322.7	13	50	0				17	55 PP
TUCSON	100.97	322.7	13	51	1				17	54 PP

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BERKELEY	101.12	333.8	13 51	0	24 27	-1	17 57	PP
FRESNO	101.16	331.5	13 52	1				
LICK	101.36	333.1	13 53A	1			17 2	
LA PAZ	101.47	257.9			24 34	4	18 12	PP
PASADENA	102.76	329.0	13 58	0	24 37	1	18 12	PP
HUANCAYO	104.88	265.6	14 11	3			18 19	PP
SANTA LUCIA	112.15	244.0			25 12	-5	35 20	PS
PORT MORESBY	121.89	78.4	19 1	7	26 4	12		
SOUTH POLE	124.95	180.0	18 59	-2				
CHARTERS TS.	126.84	89.7	19 4	1			21 7	SKS
TERRE ADELIE	132.26	151.5	19 23	9				
MELBOURNE	132.70	111.6	19 16	1			22 52	PKS
BYRD STATION	132.84	188.0	19 15	0			22 39	PKP
SCOTT BASE	134.19	169.6	19 14	-3			22 28	SKP
CANBERRA	135.12	107.1	19 17	-2				
BRISBANE	135.70	94.9					22 53	
RIVERVIEW	136.38	104.3					22 14	PP
CAPE HALLETT	138.82	164.8	19 28	2			22 58	PKS
NOUMEA	144.41	79.3	19 36	0				

MAY 14 9.H 33.M 24.S EPICENTRE -18.83 169.73 DEPTH= 0.KM

A=-0.93194 B= 0.16889 C=-0.32087 D= 0.1783 E= 0.9840
G= 0.3157 H=-0.0572 K=-0.9471 HT= 5.0

SE= 2.62

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
NOUMEA	4.62	221.1	1 9	-4	2 13	5		
SUVA	8.28	86.7			3 21	-19		
ONERAHI	17.36	167.3	4 12	6				
BRISBANE	17.59	237.7	4 9	1	7 26	3		
APIA	18.44	77.0	4 18	-1				
CHARTERS TS.	22.16	263.1	4 59	0	9 5	5		
RIVERVIEW	22.31	224.3	5 2A	1	9 9	7		
PORT MORESBY	23.79	290.1	5 16K	1				9 45
CANBERRA	24.62	224.0	5 22	-1	9 44	1	5 32	6 2 PP
ROXBURGH	26.64	180.6			10 20	3		
MELBOURNE	28.72	223.6	6 6	5				
ADELAIDE	31.80	233.4	6 33	4				
GUAM	40.45	320.7	7 43	1				
CAPE HALLETT	53.47	179.8	9 21A	-3				
SCOTT BASE	59.07	180.7	9 57A	-8				
MATUSIRO	62.61	331.7	10 28K	-1	18 54	-2		
MIRNY	67.60	204.9	10 57	-4				
ZO-SE	68.10	316.1	11 2K	-2				
BYRD STATION	68.26	169.8	11 10	5	20 7	2		
CANTON	69.08	304.8	11 10K	0				
NANKING	70.28	315.5	11 17K	0				
SOUTH POLE	71.28	180.0	11 19	-5	20 39	-2		
WUHAN	72.27	312.0	11 28	-1				
CHANGCHUN	74.45	328.3	11 41K	-1				
PEKING	76.91	320.6	11 56K	0	21 47	3		22 32 PS
SIAN	78.29	312.4	12 4K	0				
KUNMING	78.47	301.5	12 6K	1	22 5	4		
CHENGTU	80.05	307.1	12 13K	0	22 21	4		
PAOTOW	81.02	318.3	12 19K	1				
LANCHOW	82.82	311.8	12 28K	0				
BERKELEY	85.15	47.4	12 38	-2				
LICK	85.34	48.1	12 41	0				
FRESNO	86.39	49.3	12 47	1				
SHASTA	86.40	44.9	12 47	1				
PASADENA	86.44	52.3	12 45	-1	23 18	-4		24 36 PPS
MINERAL	86.77	45.5	12 47	-1				
ULAN-BATOR	86.93	323.2	12 54K	6				
RENO	87.62	46.8	12 53	1				
COLLEGE	89.53	16.8	12 58	-3				
BOULDER CITY	89.69	51.7	13 2	0				
EUREKA	90.28	48.2	13 5	1				
TUCSON	91.34	56.4	13 10	1				
TUCSON TELE.	91.46	56.4	13 10	0				
HUNGRY HORSE	95.09	40.6						14 15
BOULDER	98.15	50.6						21 36
LARAMIE	98.34	49.3						17 32 PP
KSARA	136.39	299.5	19 25	1				22 13 PP

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COLLMBERG	142.75	335.8	19 31	-5		
SOFIA	142.97	317.4	19 34	-2		
PRUHONICE	143.13	333.1	19 34A	-2		
JENA	143.59	336.6	19 33	-4		
SONNEBERG	144.17	336.4	19 37	-1		
DE BILT	144.65	343.5	19 40	1		
ATHENS	144.81	309.9	19 30A	-9		
BENSBERG	145.08	340.7	19 39	-1		
ZAGREB	145.43	327.0	19 36	-4	19 55	PKP2
RATHFARNHAM	145.46	355.8	19 39K	-1	19 42	PKP2
LEOPOLDVILLE	145.89	230.0	19 41K	0	20 26	
STUTTGART	146.24	336.6	19 43K	1		
TUBINGEN	146.49	336.5	19 44	2		
KEW	146.50	348.7	19 45	3		
TRIESTE	146.67	328.7	19 45	3	19 57	PKP2
EBINGEN	146.81	336.2	19 44	1		
STRASBOURG	146.92	337.9	19 45	2		
BASLE	147.88	337.0	19 46	2		
BANGUI	148.34	246.6	19 51	6		
PARIS	148.36	343.8	19 49	4		
NEUCHATEL	148.55	337.1	19 49	4		
FOLINIERE	149.10	347.3	19 51	5		
PRATO	149.25	329.0	19 57	11		
CLERMONT-FD.	150.94	340.5	19 57	8	20 44	PKP
MONACO	151.06	332.9	19 54	5		
SERRA PILAR	157.73	356.7	20 4K	6	20 41	PKP2
SETIF	157.86	324.6	19 59	0	20 34	PKP2
RELIZANE	160.62	332.6	20 1	-1	24 31	PP
MALAGA	161.45	345.0			20 47	PKP2
TAMANRASSET	164.72	287.6	20 6K	0	24 59	PP

MAY 14 10.H 42.M 18.S EPICENTRE -19.42 169.36 DEPTH= 243.KM

DEPTH OF FOCUS= 0.033R

A=-0.92758 B= 0.17434 C=-0.33046 D= 0.1847 E= 0.9828
G= 0.3248 H=-0.0610 K=-0.9438 HT= 4.8

SE= 1.51

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
BRISBANE	16.98	238.8	3 42K	-3	6 50	6		
APIA	18.92	75.7	4 6	1				
RIVERVIEW	21.65	224.8	4 34A	2	8 41	30		
PORT MORESBY	23.67	291.7	4 49K	-2			5 7	9 24
CANBERRA	23.96	224.5	4 55A	1			5 26	
ADELAIDE	31.17	234.0	5 59	1				
CAPE HALLETT	52.89	179.6	8 54	1				
SCOTT BASE	58.49	180.6	9 29A	-4				
MATUSIRO	62.96	332.1	10 0K	-3				29 0
MIRNY	66.92	205.0	10 29	1				
BYRD STATION	67.75	169.7	10 32	-1				
ZO-SE	68.28	316.5	10 35	-2				
CANTON	69.13	305.1	10 41	-1				
NANKING	70.45	315.9	10 50	0				
SOUTH POLE	70.70	180.0	9 29	-82			10 52	
WUHAN	72.39	312.3	11 2	1				
CHANGCHUN	74.76	328.6	11 15K	0				
PEKING	77.14	320.9	11 28K	0				
SIAN	78.43	312.7	11 37	2				
KUNMING	78.47	301.8	11 38	2				
CHENGTU	80.12	307.3	11 46	2				
LANCHOW	82.94	312.0	12 1	2				
BERKELEY	85.81	47.5	12 12	-1				
LICK	85.99	48.2	12 14	0				
FRESNO	87.04	49.4	12 20	1				
SHASTA	87.07	45.0	12 19	0				
PASADENA	87.07	52.4	12 19	0				
ULAN-BATOR	87.19	323.3	12 21K	1				
MINERAL	87.43	45.6	12 21	0				
RENO	88.28	46.9	12 26	1				
COLLEGE	90.18	16.9	12 31	-3				16 2
BOULDER CITY	90.33	51.8	12 35	0				
EUREKA	90.93	48.3	12 37	0			13 11	
TUCSON	91.95	56.6	12 43	1				
TUCSON TELE.	92.07	56.5	12 43	0				

RESOLUTE	110.10	16.4						14 58 *SP
OTTAWA	120.98	48.2	18 25	1				
SHAWINIGAN	122.94	46.6	18 29	2				
ELISABTHVLLE	131.44	233.7	18 52	8				
NURMIJARVI	131.93	337.4	18 47	2				
SKALSTUGAN	133.19	346.2	18 49	2				
COLLMBERG	143.13	335.2	19 4	-1				
BELGRADE	143.84	321.5	19 7	0				
JENA	143.98	336.0	19 4	-3				
SONNEBERG	144.56	335.7	19 9	1				
ATHENS	144.91	309.1	19 9A	1				
LEOPOLDVILLE	145.25	229.8	19 16K	7				
BENSBERG	145.51	340.0	19 11	2				19 19 PKP
ZAGREB	145.72	326.2	19 12	2				
RATHFARNHAM	146.01	355.3	19 13K	3			19 36	
STUTTGART	146.63	335.9	19 15K	4				
TUBINGEN	146.88	335.8	19 17	5				
KEW	147.00	348.1	19 18	6				
EBINGEN	147.20	335.5	19 17	5				
STRASBOURG	147.33	337.1	19 17	5				
PARIS	148.82	343.1	19 24	10				
NEUCHATEL	148.95	336.4	19 22	7				
PRATO	149.56	328.1	19 24	8				
CLERMONT-FD.	151.36	339.7	19 30	12				20 17 PP
SETIF	158.12	323.1	20 6	38				
MALAGA	161.91	343.6	20 21K	50				
TAMANRASSET	164.55	285.3	19 39	5				20 36

MAY 14 11.H 49.M 16.S EPICENTRE -19.17 169.82 DEPTH= 11.KM

A=-0.93033 B= 0.16709 C=-0.32643 D= 0.1768 E= 0.9843
G= 0.3213 H=-0.0577 K=-0.9452 HT= 4.9

SE= 2.17

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
NOUMEA	4.43	224.8	1 6	-2	2 10	10		
SUVA	8.23	84.3			3 1	-34		
ONERAHI	17.02	167.3	4 20	22				
BRISBANE	17.48	238.7	4 8	4	7 24	7		
APIA	18.43	75.9	4 8	-8				
RIVERVIEW	22.13	225.0	4 59A	3	9 7	13		
CHARTERS TS.	22.21	263.9	4 56	-1	9 4	9		
PORT MORESBY	23.99	290.7	5 12	-2			5 35	9 44
CANBERRA	24.44	224.6	5 20	2			5 46	
MELBOURNE	28.53	224.2	5 59	3				
ADELAIDE	31.67	233.9	6 25	1				12 0
CAPE HALLETT	53.14	179.8	9 18	-1				
SCOTT BASE	58.74	180.8	9 54K	-5				
MATUSIRO	62.95	331.7	10 25	-2	18 52	-3		
MIRNY	67.33	205.0	10 55	-1				
BYRD STATION	67.91	169.8	10 58	-1				
HONG KONG	68.24	304.6	12 6	65				
ZO-SE	68.41	316.2	11 1	-1				
CANTON	69.35	304.8	11 9	1				
NANKING	70.58	315.6	11 17	1				
SOUTH POLE	70.95	180.0	11 17	-1				
VLADIVOSTOK	71.11	331.6	11 19	0				
PETROPAVLOVK	72.65	353.0	11 28	0				
CHANGCHUN	74.78	328.3	11 40	0				
PEKING	77.23	320.6	11 53	-1				
SIAN	78.58	312.4	12 4	2				
KUNMING	78.72	301.5	12 4	1				
CHENGTU	80.32	307.1	12 11	0				
PAOTOW	81.33	318.3	12 19	3				
LANCHOW	83.10	311.8	12 26	0				
BERKELEY	85.32	47.4	12 38	1	23 13	8		
LICK	85.50	48.1	12 40	2				
FRESNO	86.54	49.3	12 47	4				
PASADENA	86.58	52.2	12 44	1	23 6	-11		24 20 PPS
SHASTA	86.58	44.8	12 47	4				
MINERAL	86.95	45.4	12 46	1				
YAKUTSK	86.95	342.3	12 46	1	23 20	-1		
ULAN-BATOR	87.25	323.2	12 49A	3				
RENO	87.79	46.8	12 51	2				

The scanned images of the bulletins of the International Seismological Summary (ISS) have been obtained thanks to funding provided by the US National Science Foundation through grant EAR-9725140 (Villaseñor et al., 1997) and collected by SGA Storia Geofisica Ambiente (Bologna) on behalf of the Istituto Nazionale di Geofisica e Vulcanologia (Rome), in the frame of the EUROSEISMOS project.

SHILLONG	87.81	297.9	12 49	0			
COLLEGE	89.82	16.7	12 57	-2			
BOULDER CITY	89.83	51.7	13 0	1			
EUREKA	90.44	48.1	13 2	1	13 28		
TUCSON	91.45	56.4	13 8	2			
TUCSON TELE.	91.57	56.4	13 8	1			
RESOLUTE	109.74	16.3	18 26	-3		34 32	SS
OTTAWA	120.49	48.1	18 50	0			
SHAWINIGAN	122.45	46.6	18 54	0			
KIRUNA	127.64	345.9	19 4	0			
NURMIJARVI	131.88	337.7	19 14	2			
ELISABTHVLLE	131.94	233.5	19 19	7			
SKALSTUGAN	133.06	346.5	19 14	0			
SIMFEROPOL	135.25	315.2	19 59	41			
KSARA	136.62	299.2	19 24	3		22 9	PP
LWOW	139.03	326.3				22 25	
COLLMBERG	143.09	335.7	19 31	-1			
PRUHONICE	143.47	333.0	19 32	-1			
JENA	143.93	336.5	19 33	-1		19 49	
ATHENS	145.09	309.6	19 34	-2			
BENSBERG	145.43	340.6	19 39	2			
LEOPOLDVILLE	145.74	229.5	19 40K	3		20 6	
RATHFARNHAM	145.80	355.8	19 37K	0	20 1	20 20	
STUTTGART	146.58	336.5	19 40	1			
TUBINGEN	146.83	336.4	19 44	5			
KEW	146.84	348.7	19 43	4			
TRIESTE	147.00	328.5	19 44	5		33 18	PSKS
EBINGEN	147.16	336.1	19 42	3			
STRASBOURG	147.27	337.8	19 44	4			
NEUCHATEL	148.90	337.0	19 47	5			
FOLINIERE	149.45	347.3	19 47	4			
CLERMONT-FD.	151.28	340.4	19 59	13			
SERRA PILAR	158.07	356.8	19 50	-5		20 25	PKP2
SETIF	158.19	324.2				20 31	PKP2
ALGIERS UNI.	158.97	329.2	19 37	-19			
RELIZANE	160.96	332.3	20 23	25		24 21	PP
MALAGA	161.80	345.0				20 48	PKP2
TAMANRASSET	164.90	286.5	20 3	1	20 29	24 39	PP

MAY 14 13.H 19.M 27.S EPICENTRE -19.06 169.71 DEPTH= 50.KM

DEPTH OF FOCUS= 0.003R

A=-0.93062 B= 0.16896 C=-0.32464 D= 0.1786 E= 0.9839
G= 0.3194 H=-0.0580 K=-0.9458 HT= 4.9

SE= 2.29

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
NOUMEA	4.44	222.9	1	2	-5	2	6	8					
SUVA	8.32	85.1									2	49	
ONERAHI	17.14	167.0	4	7	9								
BRISBANE	17.45	238.2	4	3K	1	7	15	3					
APIA	18.51	76.4	4	13	-1								
TONGARIRO	20.69	167.1	4	41	3						4	50	
CHARTERS TS.	22.12	263.6	4	54	1	8	59	11					
RIVERVIEW	22.14	224.7	4	55A	2	8	59	10					
PORT MORESBY	23.86	290.6	5	10K	0						9	39	
CANBERRA	24.45	224.3	5	16	1				5	51	6	12	PP
ROXBURGH	26.41	180.6				10	23	21					
MELBOURNE	28.54	223.9	5	51	-2								
ADELAIDE	31.65	233.7	6	24	3						14	37	
CAPE HALLETT	53.25	179.8	9	14	-2								
SCOTT BASE	58.84	180.7	9	50A	-6								
WILKES	60.45	203.6									22	27	SS
MATUSIRO	62.81	331.8	10	21K	-2	18	47	0					
MIRNY	67.39	205.0	10	50	-2								
BYRD STATION	68.04	169.8	10	53	-3				11	30			
HONG KONG	68.09	304.6	10	57	0						18	33	
ZO-SE	68.26	316.2	10	56	-2								
NANKING	70.43	315.6	11	10K	-1								
VLADIVOSTOK	70.97	331.7	11	14	0								
SOUTH POLE	71.06	180.0	11	12	-3				11	16	39	4	PKPPKP
WUHAN	72.41	312.0	11	23	0								
PETROPAVLOVK	72.53	353.0	11	23	-1								

CHANGCHUN	74.63	328.3	11	35K	-1					
PEKING	77.08	320.7	11	49K	-1					
SIAN	78.43	312.4	11	58K	1					
KUNMING	78.57	301.6	12	OK	2					
MAGADAN	79.84	350.3	12	6	1					
CHENGTU	80.17	307.1	12	8K	1					
PAOTOW	81.18	318.3	12	12K	0					
LANCHOW	82.95	311.8	12	22K	1					
UKIAH	85.26	46.0	12	35	2					
BERKELEY	85.32	47.4	12	33	0	23	10	12		
LICK	85.50	48.1	12	35	1					
FRESNO	86.55	49.3	12	40	1					
SHASTA	86.58	44.9	12	40	1					
PASADENA	86.59	52.2	12	39	0	23	2	-9	24	15 PPS
YAKUTSK	86.82	342.3	12	41	1					
MINERAL	86.94	45.5	12	41	0					
SHILLONG	87.67	297.9	12	49	4					
RENO	87.79	46.8	12	46	1					
COLLEGE	89.75	16.8	12	52	-2				16	23 PP
BOULDER CITY	89.84	51.7	12	55	0					
EUREKA	90.44	48.2	12	57	-1					
TUCSON	91.48	56.4	13	3	0					
TUCSON TELE.	91.60	56.4	13	3	0				16	40
HUNGRY HORSE	95.28	40.6	13	33	13					
RESOLUTE	109.67	16.3	18	23	-2				28	23 SP
THULE	115.71	12.9	18	34	-3					
SHAWINIGAN	122.45	46.5	18	50	0					
KIRUNA	127.51	345.9	18	58	-2					
TIFLIS	128.35	308.5	19	2	0					
ELISABTHVLLE	131.92	233.6	19	13	5					
SKALSTUGAN	132.93	346.4	19	10	0					
SOFIA	143.13	317.1	19	28	-1					
PRUHONICE	143.33	333.0	19	27A	-2				22	40 PP
DURHAM	143.74	351.5	19	25K	-5					
BELGRADE	143.77	322.0	19	29A	-1				20	55
JENA	143.79	336.5	19	27	-3				22	39 PP
ATHENS	144.94	309.7	19	31K	-1					
ZAGREB	145.61	326.8	19	33	0					
RATHFARNHAM	145.69	355.7	19	33K	0	20	11			
LEOPOLDVILLE	145.73	229.8	19	35K	2				20	11
STUTTGART	146.44	336.5	19	35	1				23	0 PP
TUBINGEN	146.69	336.3	19	38	3					
KEW	146.72	348.6	19	38	3					
TRIESTE	146.86	328.5	19	38	3	20	6		20	46
EBINGEN	147.02	336.1	19	39	4					
STRASBOURG	147.13	337.7	19	38	2	20	16			
PARIS	148.58	343.7	19	45	7					
FOLINIERE	149.32	347.2	19	44	5					
PRATO	149.44	328.8	20	15	36					
REGGIO CALA.	150.52	315.5	19	38	-3					
MESSINA	150.53	315.7	19	52	11					
CLERMONT-FD.	151.15	340.3	19	51	9				23	25
SERRA PILAR	157.96	356.6	20	19K	28					
SETIF	158.04	324.2	20	26	35	21	2			
ALGIERS UNI.	158.82	329.1	19	51	-1				20	25
RELIZANE	160.82	332.3	20	4	10				24	21
MALAGA	161.66	344.8	19	49A	-6				24	21 PP
TAMANRASSET	164.77	286.8	20	0	2	21	32		24	44

MAY 14 19.H 22.M 21.S EPICENTRE 39.85 23.52 DEPTH= 0.KM

A= 0.70589 B= 0.30725 C= 0.63822 D= 0.3991 E=-0.9169
G= 0.5852 H= 0.2547 K=-0.7699 HT= -1.6

SE= 4.27

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
ATHENS	1.88	175.2	0	34A	0	1	6	7					
SKOPJE	2.67	323.6	0	37K	-8						1	23	SG
SOFIA	2.85	357.2	0	47	-1	1	25	2			0	53	PG
TARANTO	4.85	279.4	1	39	23						2	58	
BUCHAREST	4.95	21.9	1	19	1	2	34	18			4	6	SG
BELGRADE	5.46	336.4	1	29K	4	3	9	40			1	51	PG
TIMISOARA	6.14	344.7	1	54	20	3	9	23			3	50	SG
REGGIO CALA.	6.38	256.6	2	13	35						2	40	
MESSINA	6.42	257.7	1	31	-7	2	47	-6					

BACAU	7.16	19.0	2	15	26					4	29
KISHINEV	8.14	26.6	2	18	16	4	33	57			
ZAGREB	8.14	319.6	1	59K	-3					4	27
ROME	8.61	287.3	2	28	19	4	22	34			
TRIESTE	9.23	312.1								2	49 PGPG
SIMFEROPOL	9.35	53.5	2	21	2	4	37	31			
BRATISLAVA	9.51	333.1	2	43	22						
SKALNATE PL.	9.62	347.0	2	32	9						
VIENNA-H.	9.85	330.9	2	31	5					5	39
LWOW	9.99	1.9	3	32	64					5	2 S*
TOLMEZZO	10.08	313.9	2	39	10					5	54
PRATO	10.10	297.5	3	39	69	5	14	49			
BOLOGNA	10.17	301.1	3	33	62					8	39
KRAKOW	10.51	347.2	2	30	-5					3	26
RACIBORZ	10.90	341.6								3	17
KSARA	11.58	117.4	2	54	4	5	15	14			
PRUHONICE	11.95	330.9	2	46	-9	5	0	-10			
CHUR	12.35	309.1	3	3K	3	5	53	33			
WARSAW	12.50	352.9								6	25
SOTCHI	12.66	67.6	3	6	2	5	54	27			
PLAUEN	13.32	326.9	3	1	-12					3	13
STUTTGART	13.57	315.8	3	16	0	6	8	19			
COLLMBERG	13.60	330.8	3	14	-3						
SONNEBERG	13.64	324.6	3	22	5						
BASLE	13.84	308.9	3	59	39						
JENA	13.88	326.9	3	21	1						
NEUCHATEL	13.99	306.1								5	15
HALLE	14.16	329.2	3	26	2	6	2	-1		7	47
STRASBOURG	14.25	312.9	3	25	0					7	27
SETIF	14.74	261.4	3	34	2						
BENSBERG	15.94	319.6	3	54	7						
TIFLIS	16.22	76.5	3	57	6						
COPENHAGEN	17.46	338.7	4	3	-4	7	24	4			
MOSCOW	18.44	25.8	4	15	-4						
RELIZANE	18.60	264.6	4	19	-2					5	57
FOLINIERE	19.29	305.4	4	18	-11						
GOTEBORG	19.37	341.1	4	23	-7						
KEW	20.21	313.0	4	38	-1					9	27
UPPSALA	20.36	351.4	4	34	-7	8	20	-5			
PULKOVO	20.40	9.9	4	43	2						
NURMI JARVI	20.70	1.6	4	39	-5	8	33	2			
TAMANRASSET	22.86	227.2	5	2	-4					6	37
ABERDEEN	24.03	324.7								8	39
SKALSTUGAN	24.69	347.9	5	18A	-6						
SODANKYLA	27.63	2.6	5	45	-6					6	30 PP
KIRUNA	28.09	357.5	5	48	-7						
SVERDLOVSK	29.47	42.4	6	5	-3						
NAMANGAN	36.31	72.3	7	2	-5						
QUETTA	36.55	91.6	7	13	4						
THULE	52.09	342.6	9	14	0						
RESOLUTE	58.81	344.1	9	56	-7						
HUNGRY HORSE	84.46	333.1	12	31	-5						

MAY 15 14.H 42.M 48.S EPICENTRE 16.94 -98.65 DEPTH= 0.KM

A=-0.14392 B=-0.94628 C= 0.28955 D=-0.9886 E= 0.1504
G=-0.0435 H=-0.2863 K=-0.9572 HT= 5.4

SE= 2.80

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S
OAXACA	1.80	87.1	0	43	10	1	15	19				
TACUBAYA	2.50	348.0	0	41A	-2							
VERA CRUZ	3.29	46.4	0	59A	5						1	45
LEON	5.05	326.0	1	11	-8	2	9	-10				
GUADALAJARA	5.78	310.8	1	15A	-14	2	14	-23				
MANZANILLO	5.80	292.1	1	12	-17						2	0
MERIDA	9.43	63.6				4	15	7				
SAN SALVADOR	9.63	108.1									4	40
CHIHUAHUA	13.50	330.8				5	21	-26			3	44
TUCSON	18.82	326.3	4	26	3	8	16	25				
TUCSON TELE.	18.83	326.7	4	26	3							
FAYETTEVILLE	19.48	10.9	4	29	-2	8	21	15				
LAWRENCE	22.15	7.0	5	0	1							
COLUMBIA	23.21	39.6	5	8	-1							

BOULDER	23.72	347.2	5 22	8			
BOULDER CITY	23.80	325.9	5 19	4			
PASADENA	24.50	318.1	5 33	11			
LARAMIE	25.01	347.6	5 29	2			
CHAPEL HILL	25.70	38.9	5 33	0			
SALT LAKE C.	26.35	337.0	5 41	2			
EUREKA	27.06	329.6	5 48	2		6 56	
FRESNO	27.21	320.7	5 48	1			
RAPID CITY	27.33	352.8	5 49	1		6 29	
LICK	28.70	319.6	6 2	1			
RENO	29.09	325.0	6 7K	3			
BOZEMAN	30.46	342.7	6 18	1			
MINERAL	30.65	324.2	6 19K	1			
BUTTE	31.23	341.1	6 24	1			
HUNGRY HORSE	33.76	341.4	6 45	0			
OTTAWA	34.25	29.2	6 48	-2			
BREBEUF	35.33	31.0	6 57K	-2			
SHAWINIGAN	36.50	30.4	7 7	-2			
BANFF	36.72	342.2	7 11	0			
HUANCAYO	36.89	139.8	7 16	4			
RESOLUTE	57.79	1.2	9 53A	-2	17 42 -12		
COLLEGE	58.06	337.6	9 56	-1			
THULE	61.54	7.8	10 17	-4			
NORD	72.18	8.8	11 26A	-3		11 36 PCP	
FOLINIERE	82.69	41.3	12 25	-2			
MALAGA	83.37	53.8	12 28A	-2			
GRANADA	83.86	53.1	12 32K	-1			
SKALSTUGAN	83.91	24.8	12 32K	-1			
CLERMONT-FD.	85.98	43.4	12 42	-1			
BENSBERG	86.60	37.6	12 42	-4			
UPPSALA	87.93	26.9	12 49	-4			
PRUHONICE	91.28	36.4	13 6	-3			
TAMANRASSET	96.01	64.1	13 28	-2		17 30	

MAY 16 6.H 16.M 28.S EPICENTRE -4.92 153.33 DEPTH= 70.KM

DEPTH OF FOCUS= 0.006R

A=-0.89036 B= 0.44722 C=-0.08513 D= 0.4489 E= 0.8936
G= 0.0761 H=-0.0382 K=-0.9964 HT= 7.0

SE= 2.62

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
RABAUL	1.36	301.6	0 25	1				
PORT MORESBY	7.58	233.7	1 50K	0	3 16	1		2 4
CHARTERS TS.	16.51	204.0	3 49K	0	6 53	4		
GUAM	20.16	335.1	4 32	1	8 12	3		
NOUMEA	21.44	144.9	4 40	-4	8 33	0		
BRISBANE	22.44	180.7	4 54A	0	8 55	4		
SUVA	27.83	120.2						6 50 PP
RIVERVIEW	28.84	183.8	5 53	-1	10 32	-6		
CANBERRA	30.52	187.0	6 9	0	11 6	2	6 28	8 58 PCP
ADELAIDE	32.78	202.5	6 29A	0	11 36	-4	6 45	12 58 PCS
MELBOURNE	33.64	192.0	6 35	-1	11 56	3	6 55	12 20 *SS
ONERAHI	36.31	150.5	7 4	5				7 11
MANILA	37.47	301.6	7 9	0				14 37 SS
KARAPIRO	38.58	151.4	7 16K	-2	13 16	7	7 38	9 22 PCP
BAGUIO CITY	38.71	303.9	7 19	0	13 13	3		
TONGARIRO	39.61	152.6	7 24A	-2			7 45	
COBB RIVER	39.99	157.0	7 29	0	13 32	2		
TUAI	40.06	150.6	7 30	0	13 33	2		
KAIMATA	40.75	159.4	7 43	7				
WELLINGTON	40.98	155.2	7 36	-2	13 40	-4		11 34 PCS
HENGCHUN	41.63	311.2	7 46	3				
TAWU	41.72	311.8	7 43	-1				
HSINKONG	41.83	313.0	7 46	1				
HWALIEN	42.18	314.3	7 52	4				
GEBBIES PASS	42.22	159.1	7 46	-2	14 1	-2		
ILAN	42.59	315.3	7 50	-1				
TAINAN	42.61	312.0	7 49	-2				
TUKUBASAN	42.76	344.2	7 44	-8	13 40	-31	7 59	9 5 PP
ROXBURGH	42.81	163.4			14 10	-1		
TAIPEI	42.92	315.4	7 53	-1				
ABUYAMA	42.96	338.4	7 52A	-2				

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MATUSIRO	43.60	342.3	7	56A	-3	14	22	-1			9	7	
PERTH	44.21	227.9	8	6	2	14	36	4			18	13	SS
MIZUSAWA	45.25	346.6	8	11	-1								
LEMBANG	45.50	265.3	9	10	56	15	40	50					
DJAKARTA	46.29	266.2	8	19	-2	15	6	5					
HONG KONG	46.89	306.8	8	26A	1	15	16	6			10	38	PPP
ZO-SE	47.17	321.5	8	27	0	15	11	-3			10	20	PP
CANTON	47.99	307.1	8	34A	0	15	30	4			9	6	*SP
NANKING	49.30	320.6	8	45A	1	15	48	4			9	14	*SP
MACQUARIE I.	49.64	175.7	8	46	-1	15	50	1	9	1	9	14	*SP
WUHAN	51.15	316.1	8	58A	0								
VLADIVOSTOK	51.60	340.0	9	0	-2	16	17	1					
PHU-LIEN	52.46	300.8	9	9	1	16	34	7			10	26	PCP
Y.-SAKHLINSK	52.49	350.8	9	7	-1								
HONOLULU	54.26	59.5	9	21	0	16	58	6			20	32	SS
KIPAPA	54.38	59.4	9	24	2								
UGLEGORSK	54.66	350.9	9	22	-2								
CHANGCHUN	54.70	335.4	9	23A	-1	16	58	0			12	41	PP
PEKING	56.28	326.1	9	34	-2	17	20	1			10	6	*SP
SIAN	57.19	316.4	9	42A	0								
KUNMING	57.51	303.7	9	45A	0	17	40	5			10	17	*SP
TATUNG	57.97	324.4	9	49	1								
PETROPAVLOVK	58.00	3.8	9	45	-3								
CHENGTU	58.91	310.3	9	55A	1	17	55	2			10	26	*SP
PAOTOW	60.19	323.0	10	3A	0						10	35	*SP
YINCHUAN	61.31	319.1	10	12	1								
LANCHOW	61.69	315.6	10	14A	1						10	47	*SP
TERRE ADELIE	62.35	185.3	10	15	-3	18	37	0					
PORT BLAIR	62.49	285.8	10	17	-2	18	41	2			12	36	PP
SINING	63.39	315.2	10	24	-1								
WUWEI	63.45	316.8	10	27	2								
MAGADAN	64.30	358.6	10	28	-2								
TOCKLAI	64.75	302.5	10	37	4								
CHITTAGONG	65.94	297.0	10	41A	0	19	27	6	11	0	8	12	PP
ULAN-BATOR	66.49	327.9	10	44A	0	19	33	5					
SHILLONG	66.83	300.3	10	47	0	19	38	6					
WILKES	68.02	197.3	10	58	4	19	48	2			13	47	PP
CAPE HALLETT	68.13	174.5	10	53A	-2	19	55	7			13	19	PP
YAKUTSK	69.17	348.3	11	6	5	20	10	10					
IRKUTSK	70.46	330.5	11	7	-2	20	19	4					
CHATRA	71.24	300.3	11	15	1	20	32	8					
BOKARO	71.67	296.9	11	11A	-5	20	28	-1					
SCOTT BASE	73.23	177.1	11	24K	-2	20	57	10	11	50	14	21	PP
COLOMBO	74.25	278.5	11	33	2	21	6	8					
MADRAS	74.78	284.8	11	35	0	21	7	3			21	43	PS
KODAIKANAL	77.02	281.6	11	58	11	21	40	11			26	58	SS
HYDERABAD	77.13	289.0	11	46A	-2	21	32	2			14	50	PP
TIKSI	78.06	352.3	11	49	-4	20	30	-70					
AGRA	79.25	298.7	11	57A	-2	21	52	0			15	9	PP
DEHRA DUN	79.85	301.8	12	6	3	22	4	5			15	16	PP
POONA	81.62	289.5	12	13A	1	22	22	5					
COLLEGE	81.77	21.7	12	10	-3	22	19	0	12	33	23	18	PS
BOMBAY	82.64	289.7	12	18	1	22	32	5			15	39	PP
SEMIPALATNSK	83.10	321.9	12	18	-2	22	32	0					
LAHORE	83.22	302.4	12	21	1	22	35	2					
SITKA	84.10	31.4	12	47K	22				12	59			
BYRD STATION	84.69	169.9	12	27	-1	22	56	8	12	46	15	50	PP
FRUNSE	85.11	313.7	12	28	-2	22	52	0					
SOUTH POLE	85.12	180.0	12	28	-2	22	56	4			15	59	PP
MAWSON	85.65	202.6	12	29A	-3								
WARSAK DAM	85.93	304.5	12	34	0	23	3	3					
NAMANGAN	86.92	311.4	12	40	1	23	17	8					
UKIAH	88.00	50.6	13	5	21								
ALBERNI	88.38	40.4	12	42	-4								
BERKELEY	88.58	52.0	12	45A	-1	23	16	-9			16	2	PP
KARACHI	88.78	295.9	12	47	0	23	28	1					
SHASTA	88.84	49.2	12	51	3								
LICK	89.00	52.6	12	44A	-4				13	5	15	53	PP
VICTORIA	89.18	41.3	12	48	-1	22	56	-35					
QUETTA	89.32	300.2	12	51A	1	23	34	2	13	8	16	5	PP
MINERAL	89.40	49.6	12	51A	1								
HORSESHOE B.	89.40	40.5	12	52	2								
FRESNO	90.40	53.3	13	4	9								
RENO	90.67	50.5	13	18	22								
PASADENA	91.49	56.0	12	59A	-1	23	26	1			16	41	PP
EUREKA	93.63	50.8	13	8A	-2				13	29	17	19	PP
BOULDER CITY	94.34	54.4	13	21	8				13	35	17	1	PP
BANFF	94.50	39.2	13	11	-3								
HUNGRY HORSE	95.40	42.0	13	16A	-2				13	40	16	59	PP

SVERDLOVSK	95.56	326.5	13	16	-3	23	46	0				
BUTTE	96.36	44.4	13	44	22						17	18 PP
KHEYS	96.75	350.1	13	16	-8							
SALT LAKE C.	96.83	49.7	13	46	21				14	22		
BOZEMAN	97.42	44.7	13	50	23							
TUCSON	97.53	58.2	13	51K	23						17	24 PP
TUCSON TELE.	97.63	58.2	13	49K	21						17	23 PP
HALLEY BAY	99.69	180.0	13	39	2							
RESOLUTE	100.39	14.5	13	37	-4	24	6	-6			17	44 PP
LARAMIE	101.56	49.0	14	16	30							
CHIHUAHUA	101.63	61.9									18	2 PP
BOULDER	101.85	50.3	14	16	29							
RAPID CITY	103.08	46.0	13	58	5				14	13		
NORD	103.21	358.5	13	58	5	24	34	9			27	21 PS
MAKHACH-KALA	104.91	313.0									18	18 PP
APATITY	105.63	339.8	13	48	777							
TIFLIS	107.07	312.1	14	10	777	26	7	0				
SODANKYLA	108.00	341.0	18	35	777						19	20 PP
TACUBAYA	108.09	71.3	15	56	777						18	32 PP
MOSCOW	108.34	327.5	14	13	777							
DALLAS	109.35	57.0									18	50 PP
PULKOVO	110.37	333.1	14	44	777							
SOTCHI	110.39	314.7									19	1 PP
NURMIJARVI	112.46	335.3	18	29	1	24	56	-9			25	40 SKKS
LITTLE ROCK	112.71	54.4									19	14
FLORISSANT	113.46	49.8									19	20 PP
ST. LOUIS 1	113.60	49.9									19	34 PP
SIMFEROPOL	113.91	317.3									19	26 PP
ADDIS ABABA	114.98	277.6	18	35	2							
SKALSTUGAN	115.01	341.9	18	37	4						19	52
KSARA	115.44	305.1	19	6	32	25	12	-4			19	40 PP
UPPSALA	115.69	337.0	18	41	6						19	7
JERUSALEM	116.39	303.0	18	37	1						19	47
IASI	117.34	321.5	19	36	58							
LWOW	118.27	325.3	18	43	4						19	38
CLEVELAND	119.15	44.7									20	46 PP
GOTEBORG	119.32	337.4	18	47	5						20	3 PP
BUCHAREST	119.43	319.1	17	33	-69						19	52 PP
BULAWAYO	120.27	243.4	18	43	0							
KIMBERLEY	120.30	232.7	18	45A	2							
KRAKOW	120.43	327.1	19	0	16							
REYKJAVIK	120.80	357.6	18	45	1				19	5		
RACIBORZ	121.34	327.8	19	10	25						20	44
OTTAWA	121.37	38.6	18	49	3						28	53 PKKP
PENNSYLVANIA	121.96	44.2									20	22 PP
COLUMBIA	121.99	52.8	18	52	5							
BROKEN HILL	122.05	249.7	18	50	3							
POTSDAM	122.47	332.3	18	47	-1						20	14
SHAWINIGAN	122.58	36.2	18	48	0							
BREBEUF	122.61	37.6	18	47K	-1				19	15		
BELGRADE	122.84	321.6	18	49K	1						20	40 PP
BRATISLAVA	123.02	326.5	18	48A	-1							
ASTRIDA	123.16	263.7	18	50A	1						20	30 PP
COLLMBERG	123.21	331.4	18	50	1						20	31
GEORGETOWN	123.29	46.0									20	43 PP
WASHINGTON	123.29	46.0	18	46	-3						20	39 PP
PRUHONICE	123.29	329.4	18	51K	2						20	18 PP
PRAGUE	123.29	329.5	18	56	7						20	56 PP
SEVEN FALLS	123.39	34.7	18	52	3							
SANTA LUCIA	123.54	135.8				25	36	-8			20	36 PP
HALLE	123.58	332.1	18	48	-2	25	57	13	19	10	20	47 PP
UVIRA	123.64	262.6	18	51K	1						20	35 PP
ATHENS	123.66	313.0	18	55	5							
RUMANGABO	123.71	265.1	18	50	0						20	32 PP
ELISABTHVLLE	123.74	252.6	18	54K	4				19	8	20	37 PP
LWIRO	124.13	264.0	18	53	2						30	42
JENA	124.13	331.8	18	51	0				19	11	20	39 PP
ABERDEEN	124.40	344.1									38	32 SS
PALISADES	124.58	42.4	18	51	-1	25	54	7			20	36 PP
SONNEBERG	124.68	331.4	18	51	-1				19	12	20	43 PP
MUNSTER	125.18	334.8	18	55	2						19	36
DE BILT	126.09	336.2	18	53	-2						20	52 PP
BENSBERG	126.11	334.2	18	55	0						20	56 PP
TOLMEZZO	126.30	326.7	19	2	7						19	24
DURHAM	126.32	342.2	18	55K	0							
TRIESTE	126.35	325.6	18	55	0				19	14	20	40 PP
STUTTGART	126.73	331.1	18	57	1						20	56 PP
TUBINGEN	126.96	330.9	18	56	0							

TARANTO	127.05	318.5							21	16	PP
EBINGEN	127.24	330.7	18	57	0						
STRASBOURG	127.54	331.7	18	58	1			19 15	21	2	PP
CHUR	127.86	329.1	18	59	1						
KEW	128.67	339.2	18	59	-1			19 19	21	9	PP
HUANCAYO	128.77	109.6	19	2K	2				20	53	PP
PRATO	128.93	325.3	19	0	0				21	14	PP
HALIFAX	128.93	33.5							21	16	PP
RATHFARNHAM	128.95	344.4	19	1	1				21	7	PP
NEUCHATEL	129.05	330.8	19	1	1				21	41	PP
PAVIA	129.16	327.7	19	1	0				21	3	PP
WINDHOEK	129.24	235.6	19	28	27						
ROME	129.31	322.5	19	1A	0				21	13	PP
REGGIO CALA.	129.31	316.6	19	0	-1						
MESSINA	129.33	316.8	19	0	-1			19 10	21	11	PP
PARIS	129.72	335.2	19	3	1				21	17	PP
FOLINIERE	130.95	337.3	19	6	2						
MONACO	131.05	327.4	19	5	1						
CHINCHINA	131.24	87.7	19	4	-1				22	30	SKP
CLERMONT-FD.	131.76	332.2	19	7	2				21	25	PP
CUGLIERI	132.70	323.0							20	2	
BOGOTA	132.77	88.3	19	25	18				21	32	PP
FUQUENE	133.14	87.1	19	7	-1				21	33	PP
LA PAZ	133.81	118.3	19	17	8				22	41	PKS
BANGUI	134.86	271.3	19	16	5				21	40	
BERMUDA	135.20	47.7	18	57	-15				21	57	PP
TORTOSA	136.73	329.6	19	16	1				22	49	PP
LEOPOLDVILLE	137.12	258.2	19	7A	-8				22	2	PP
SETIF	137.14	320.9	19	13	-2				21	55	PP
ALGIERS UNI.	138.21	323.3	19	16	-1			19 33	22	6	PP
ALICANTE	139.08	328.0	19	15	-4	26 13	-7		22	58	PKS
SAN JUAN	139.23	67.5	19	20	1				22	34	PP
TOLEDO	139.65	332.8	19	22	2				22	3	PP
CARACAS	139.75	79.6	19	25	5				22	2	PP
RELIZANE	140.38	324.3	19	13	-8			19 32	22	14	PP
SERRA PILAR	140.47	338.4	19	21K	-1				22	12	PP
COIMBRA	141.22	337.5	19	24K	1				22	27	PP
GRANADA	141.57	329.8	19	18K	-6	26 24	0		22	33	PP
MALAGA	142.33	330.1	19	21K	-4	26 15	-11		22	25	PP
ST. KITTS	142.61	67.8	19	33	8						
LISBON	142.78	337.1	19	27K	1				23	5	PKS
ANTIGUA	144.17	67.6	19	27	-1						
TAMANRASSET	144.19	302.8	19	29A	1			19 45	22	41	PP
FORT FRANCE	144.71	71.4	19	23	-6						
ST. VINCENT	144.90	74.1	19	28	-1						
TRINIDAD	145.14	78.5	19	28	-2						
BARBADOS	146.51	73.7	19	36	4						
PONTA DELGDA	147.33	358.5	19	40A	7				19	56	PKP2
MBOUR	166.60	315.2	20	1	4	26 56	4				

MAY 18 7.H 24.M 8.S EPICENTRE 52.51 173.69 DEPTH= 0.KM

A=-0.60757 B= 0.06719 C= 0.79142 D= 0.1099 E= 0.9939
G=-0.7866 H= 0.0870 K=-0.6113 HT= -6.3

SE= 2.02

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
PETROPAVLOVK	9.13	279.9	2	16	0							
MAGADAN	14.56	308.0	3	36	7	6	35	23				
UGLEGORSK	20.19	272.9	4	41	2							
Y.-SAKHLINSK	20.68	266.8									7	51
COLLEGE	23.08	42.7	5	10	2							
YAKUTSK	25.13	309.5	5	29	1	9	57	6				
TIKSI	27.37	330.9									11	43
MATUSIRO	29.53	251.5	6	8A	0							
ALBERNI	37.90	69.6	7	22	1							
HORSESHOE B.	38.72	68.6	7	26	-2							
VICTORIA	39.07	69.9	7	30	0							
PEKING	40.62	275.8	7	44	1							
RESOLUTE	40.63	24.1	7	44	1	14	8	14			9	44 PCP
ULAN-BATOR	41.61	291.4	7	53	2							
KHEYS	43.64	347.6	8	0	-8							
PAOTOW	44.00	280.7	8	12	1							
SHASTA	44.08	79.0	8	12	1							

HUNGRY HORSE	44.46	65.1	8 14	-1	9 58 PCP	
MINERAL	44.77	78.9	8 15	-2		
THULE	45.48	17.0	8 20	-3		
NORD	46.02	2.1	8 27	0		
WUHAN	47.88	266.8	8 42	0		
EUREKA	48.67	76.1	8 47	-1		
SIAN	48.76	274.8	8 49	0		
ISFJORD	49.12	354.6	8 55	4		
LANCHOW	50.62	280.3	9 4A	1		
RAPID CITY	53.02	63.6	9 21	0		
APATITY	56.62	342.9	9 46	-1		
TUCSON	56.62	79.2	9 46	-1		
TUCSON TELE.	56.63	79.0	9 57	10	10 47	
SODANKYLA	57.91	345.6	9 56	0	10 48 PCP	
KIRUNA	58.33	348.4	9 58A	-1		
REYKJAVIK	63.07	7.6	10 32	1		
SKALSTUGAN	63.34	350.8	10 32A	-1		
SIDA	63.69	5.8	10 37	1		
PULKOVO	64.25	340.4	10 38	-1		
NURMIJARVI	64.63	343.6	10 42	0	11 15 PCP	
HELSINKI	64.90	343.3	10 42	-1	11 15 PCP	
SHAWINIGAN	66.16	43.8	10 50K	-1		
MOSCOW	66.19	334.6	10 52	0		
UPPSALA	66.35	347.1	10 52A	-1		
COPENHAGEN	71.07	348.9	11 23K	1		
COLUMBIA	72.14	57.3	11 28	0		
RATHFARNHAM	74.57	360.0	11 43	0		
COLLMBERG	75.29	347.6	11 43	-4		
JENA	75.84	348.4	11 50	0		
QUETTA	75.91	301.2	11 51A	1		
CHARTERS TS.	76.05	206.5	11 50	-1		
PRUHONICE	76.37	346.3	11 54K	1		
STUTTGART	78.24	349.6	12 3	0		
STRASBOURG	78.58	350.5	12 5	0		
FOLINIERE	78.98	356.1			12 37	
MONACO	83.41	350.0	12 18	-13		
SAN JUAN	92.51	55.2	13 14	0		
BYRD STATION	137.50	166.3	19 24	-2	22 57 PP	
SOUTH POLE	142.32	180.0	19 28	-7		
WINDHOEK	145.14	320.0	19 40A	1		
KIMBERLEY	146.97	303.7	19 46K	3		

MAY 19 15.H 17.M 46.S EPICENTRE 33.02 68.15 DEPTH= 35.KM

DEPTH OF FOCUS= 0.000R

A= 0.31271 B= 0.77984 C= 0.54228 D= 0.9282 E=-0.3722
G= 0.2018 H= 0.5033 K=-0.8402 HT= 0.8

SE= 2.39

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
WARSAK DAM	3.01	70.0	0 49K	3				
QUETTA	3.01	200.2	0 47A	1	1 21	0		0 55 PG
LAHORE	5.43	103.9	1 20	0	2 20	-3		
STALINABAD	5.55	5.0	1 22	0	2 41	16		
KARACHI	7.23	188.0	1 59	13	3 36	29		
ANDIJAN	8.43	22.4	2 2	0				
NAMANGAN	8.43	18.5	2 1	-1	3 40	3		
DEHRA DUN	8.85	105.0	2 9	1	3 43	-5		3 56 SS
AGRA	10.37	121.9	2 23	-6				
FRUNSE	11.07	25.4	2 36	-3	4 38	-4		
SEHORE	12.58	139.0			5 17	-3		
BOMBAY	14.67	162.3	3 48	22	6 52	43		
POONA	15.31	159.1	3 33	-2	6 27	3		
CHATRA	17.59	105.5	4 7	3	7 36	20		
BOKARO	18.00	116.0	4 6	-3	7 38	13		4 18 PP
HYDERABAD	18.08	146.6	4 7	-3	7 36	9		
GORIS	18.73	296.4	4 17	-1	7 45	3		
MAKHACH-KALA	19.03	307.4	4 21	0	7 57	9		
SEMIPALATNSK	19.53	23.7	4 23	-4				
VIZIANAGRAM	20.22	133.4	4 47	13				
TIFLIS	20.44	301.8	4 36	-1				
HOWRAH	20.63	115.2	4 38	-1	8 32	10		
CALCUTTA	20.66	115.2	5 25A	46	9 24	61		
SHILLONG	21.95	103.6	4 53	1	9 1	14		5 22 PP

MADRAS	22.76	148.3	5	4	4	9	16	14			
CHITTAGONG	23.44	110.9	5	7	0	9	17	3	5	37	PP
TOCKLAI	23.88	98.1	5	10	-1						
KODAIKANAL	24.25	157.2	4	23	-51				9	48	
SVERDLOVSK	24.37	350.0	5	22	6						
SOTCHI	24.57	303.7	5	18	1						
KSARA	26.89	280.7	5	43	4	10	23	11	6	29	PP
JERUSALEM	27.77	276.5	5	48A	1	10	56	30			
SIMFEROPOL	28.80	304.4	6	24	27						
LANCHOW	29.44	74.0	6	4K	2						
CHENGTU	30.47	84.6	6	13	2	11	13	4	7	11	PP
PORT BLAIR	30.96	127.7	6	18	2	12	10	53	8	0	
MOSCOW	31.06	326.2	6	15	-2	11	18	0			
KUNMING	31.11	95.7	6	17K	0	11	23	4	13	8	SS
IRKUTSK	32.37	42.6	6	29	1						
ULAN-BATOR	32.65	51.3	6	30	0						
SIAN	33.81	76.4	6	41K	0						
PAOTOW	34.12	65.0	6	45K	2						
ADDIS ABABA	36.12	235.3	7	4	4						
LWOW	36.51	310.7	7	5	1	12	46	3			
PULKOVO	36.53	328.6	7	3	-1						
WARSAW	38.82	314.0							16	10	SS
PEKING	38.84	65.5	7	25	2	13	24	6	9	0	PP
HELSINKI	39.11	327.2	7	24	-1						
KRAKOW	39.16	310.4	7	28	2	13	29	6	9	0	PP
WUHAN	39.29	80.7	7	27	0	13	28	3	9	1	PP
NURMIJARVI	39.39	327.5	7	28	0	13	34	7	8	59	PP
APATITY	40.01	340.1	7	37	4	13	44	8	16	19	SS
RACIBORZ	40.27	310.3							8	47	PP
BRATISLAVA	40.85	307.3	7	37	-3						
VIENNA-H.	41.34	307.3							9	8	
ZAGREB	41.58	303.7							9	33	PP
MUNSTER	20.30	324.5	4	38	-2						
COPENHAGEN	21.24	337.4				8	47	6			
SODANKYLA	41.97	337.4	7	48	-1				9	27	PP
NANKING	42.37	77.0	7	53	1	14	15	4			
UPPSALA	42.46	324.7	7	52	-1	14	16	4	9	32	PP
PRUHONICE	42.61	309.9	7	58A	4	14	21	7	9	42	PP
PRAGUE	42.69	310.0	7	58	3				9	42	PP
TRIESTE	43.15	303.5	7	59	0	14	33	11	9	43	PP
COLLMBERG	43.65	311.7	8	6	3				9	48	PP
POTSDAM	43.67	313.3	8	1	-2	14	33	3	9	49	PP
PLAUEN	44.16	310.5	8	6	-1						
KIRUNA	44.26	336.3	8	7	0	14	40	2	9	51	PP
HALLE	44.32	312.0	8	7	-1	14	24	-15	8	21	9 55 PP
COPENHAGEN	44.35	318.0	8	10	2	14	45	5			
ROME	44.39	298.2	8	4	-5				10	2	
JENA	44.54	311.1	8	9	-1	14	53	11	9	57	PP
ZO-SE	44.59	77.5	8	10K	0	14	45	2	9	59	PP
SONNEBERG	44.77	310.4	8	15	3						
CHANGCHUN	45.25	58.9	8	15K	0						
SKALSTUGAN	45.90	329.0	8	20	-1						
STUTTGART	46.10	308.1	8	24	2						
MUNSTER	47.02	312.6	8	27	-2						
STRASBOURG	47.06	307.9				15	26	8	9	41	
KHEYS	47.59	356.3	8	36	2	15	33	7			
YAKUTSK	48.18	33.8	8	37	-2						
TIKSI	49.87	21.2	8	50	-2						
RUHANGABO	50.06	234.8	8	55	2						
VLADIVOSTOK	50.10	58.9	8	52	-1	16	0	-1			
CLERMONT-FD.	50.54	304.7	9	25	28						
ASTRIDA	50.72	233.3	8	59	1						
SETIF	50.95	292.2	8	59	-1				11	4	PP
LWIRO	51.09	234.5	9	1A	0				20	39	
UVIRA	51.77	233.1	9	5	-1						
KEW	51.98	312.4	9	9	2	16	31	4			
ABERDEEN	52.45	319.7							15	4	
BANGUI	54.20	249.3	9	23	-1	16	59	2			
ALICANTE	54.84	296.4	9	29	0	17	6	0			
RATHFARNHAM	55.31	315.3	9	34	2						
TAMANRASSET	55.58	276.5	9	32	-2	17	18	2	11	40	PP
UGLEGORSK	55.83	49.8	9	33	-3						
MATUSIRO	56.48	65.2	9	39K	-2	17	22	-6	21	24	
NORD	56.80	349.9	9	41	-2						
TOLEDO	57.05	299.2	9	40	-5	17	36	1	19	18	
GRANADA	57.56	296.0	9	14K	-34						
ELISABTHVLLE	58.99	228.2	10	1K	3	17	56	-4			
SIDA	59.30	329.0	10	4	4						

SCORESBY SD.	59.32	337.0	10	0	0						
BROKEN HILL	60.53	225.3	10	1	-8						
LEOPOLDVILLE	62.33	243.9	10	19	-2	18	46	3			
BULAWAYO	64.96	221.3	10	34	-4						
THULE	67.48	349.8	10	48	-6						
PRETORIA	69.73	218.1	10	39	-29						
PIETERMZBURG	71.83	214.1	11	21	0						
RESOLUTE	72.00	355.3	11	20	-2	20	41	2		25	20 SS
COLLEGE	78.46	14.8	11	58	-1						
PORT MORESBY	85.97	103.8	12	37	0	23	11	4		12	44 PCP
CHARTERS TS.	91.24	113.0	14	2K	59						
ADELAIDE	94.56	129.0	13	19K	1						
PALISADES	98.45	331.9				24	4	-54		31	27 SS
HUNGRY HORSE	98.98	1.5								17	15 PP
EUREKA	107.77	3.3	18	29	7						
SOUTH POLE	122.84	180.0	18	52	0						
CAPE HALLETT	124.78	158.6	18	57	1						
BYRD STATION	132.78	178.2	19	14	3					22	41 PP

MAY 20 0.H 50.M 3.S EPICENTRE -22.89-113.84 DEPTH= 0.KM

A=-0.37271 B=-0.84355 C=-0.38667 D=-0.9147 E= 0.4041
G= 0.1563 H= 0.3537 K=-0.9222 HT= 3.9

SE= 2.32

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
HUANCAYO	38.17	80.2	7	26	3	13	33	16				
LA PAZ	43.37	90.1	8	9A	3	14	21	-13				
CHINCHINA	46.48	58.2	8	32	1	15	25	6				
BOGOTA	47.50	59.9	8	44	5	15	45	12				
FUQUENE	48.27	59.2	8	47	2							
TUCSON	54.90	3.1	9	35	0							
TUCSON TELE.	54.99	3.2	9	36	1							
CARACAS	56.66	59.3	9	39K	-8	17	28	-11				
PASADENA	56.87	355.7	9	50	1	17	50	8			21	34 SS
BYRD STATION	57.26	181.2	9	2	-50						9	53 PCP
HAWAII V.OB.	58.35	312.8	10	0	1							
BOULDER CITY	58.55	359.1	10	2	1							
FRESNO	59.60	354.5	10	9	1							
LICK	60.35	352.8	10	14A	1							
BERKELEY	60.95	352.4	10	20	3							
KARAPIRO	61.41	238.2	10	20	0							
FAYETTEVILLE	61.53	18.0									15	58
EUREKA	62.07	358.1	10	26	1							
RENO	62.35	354.8	10	29	2							
SALT LAKE C.	63.35	1.7	10	34	1							
SHASTA	63.76	352.8	10	36	0							
CAPE HALLETT	64.09	199.3	10	38	0	19	6	-8				
COLUMBIA	64.61	29.9	10	36	-5							
SCOTT BASE	65.56	193.2	10	46K	-2						20	33 SKP
SOUTH POLE	67.25	180.0	10	58	0							
RAPID CITY	67.35	8.3	10	58	-1							
CORVALLIS	67.69	352.7	10	58	-3							
BOZEMAN	68.27	2.1	11	6	1							
BUTTE	68.58	0.9	11	6	-1							
MORGANTOWN	69.78	27.3	11	14K	0							
WASHINGTON	70.45	29.7	11	13	-5							
HUNGRY HORSE	70.91	359.9	11	20	-1						15	23 PPP
BERMUDA	72.29	42.2	11	27	-2	20	57	5				
PALISADES	73.59	30.4	11	35	-2	21	3	-4			16	8 PPP
BANFF	73.74	358.9	11	1	-37							
TERRE ADELIE	74.81	203.4	11	46	2							
OTTAWA	76.30	26.6	11	52	0							
BREBEUF	77.27	27.7	11	58K	0						15	58
SHAWINIGAN	78.46	27.6	12	5	1							
SITKA	81.65	348.3	12	22	1							
COLLEGE	91.32	346.2	13	8	-1							
PORT MORESBY	94.58	257.9									16	57
RESOLUTE	98.10	5.0	13	38	-2							
TAMANRASSET	124.48	77.4	19	3	2						20	52 PP
COLLMBERG	130.40	41.3	19	16	3							
ADDIS ABABA	150.35	113.3	19	58	10							
JERUSALEM	151.20	65.4	19	54	5							
SHILLONG	156.42	281.7	19	58	2							

QUETTA 172.70 354.6 20 14 3

MAY 20 11.H 26.M 30.S EPICENTRE 32.65 136.67 DEPTH= 441.KM

DEPTH OF FOCUS= 0.064R

A=-0.61370 B= 0.57884 C= 0.53696 D= 0.6861 E= 0.7275
G=-0.3906 H= 0.3684 K=-0.8436 HT= 0.9

SE= 2.03

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
SIOMISAKI	1.10	316.6	0	55A	-1	1	39	-2				
OWASE	1.47	344.4	0	57	-1	1	43	0				
WAKAYAMA	2.01	321.8	1	1	1	1	51	3				
TU	2.08	356.5	1	2	1	1	50	1				
NARA	2.14	341.2	1	1	-1	1	50	0				
MUROTO	2.18	286.5	1	3	1	1	51	1				
KAMEYAMA	2.20	355.6	1	2	0	1	51	1				
OSAKA	2.21	334.7	1	3K	1	1	52	2				
TOKUSIMA	2.25	309.5	1	2A	0	1	51	0				
SUMOTO	2.26	319.0	1	2A	0	1	50	-1			4	30
OMAESAKI	2.33	33.2	1	2	-1	1	52	0				
KOBE	2.38	328.8	1	3	0	1	52	0				
ABUYAMA	2.40	337.7	1	3A	0							
KYOTO	2.49	341.8	1	5	1	1	54	0				
NAGOYA	2.52	5.5	1	4	0	1	55	1				
HIKONE	2.63	352.4	1	6	1	1	56	1				
HATIDYOZIMA	2.69	79.6	1	4	-1							
SHIZUOKA	2.72	31.4	1	5K	0	1	56	0				
IBUKISAN	2.73	354.9	1	6	1	1	57	0				
GIHU	2.74	1.6	1	6K	1	1	57	0				
TAKAMATU	2.75	307.9	1	5	0	1	57	0				
KOTI	2.79	289.6	1	6A	0	1	59	2				
IIDA	3.02	18.2	1	10	3	2	2	2				
OSIMA	3.09	46.1	1	7K	-1	1	58	-3				
MISIMA	3.10	36.9	1	7K	-1	1	57	-4				
SIMIDU	3.13	273.3	1	8K	0	2	3	1				
AJIRO	3.13	39.5	1	8	0	2	0	-2				
TOYOOKA	3.26	332.3	1	10	1	2	4	0				
HUNATU	3.33	30.9	1	9	-1	2	7	2				
KOHU	3.36	27.4	1	10	0	2	5	0				
HUKUI	3.41	354.5	1	11	1	2	7	1				
MATUYAMA	3.49	290.7	1	12	1	2	9	2				
UWAZIMA	3.52	280.5	1	12	1	2	9	2				
YOKOHAMA	3.71	40.9	1	12	-1	2	8	-2				
MATUMOTO	3.75	16.2	1	14	1	2	10	-1				
TORISIMA	3.78	124.0	1	20	6							
TITIBU	3.87	30.3	1	13	-1	2	10	-3				
YONAGO	3.91	316.0				2	15	2				
HIROSIMA	3.94	296.9	1	15	0	2	15	1				
TOKYO C.M.O.	3.95	39.3	1	14A	-1	2	11	-3				
TOYAMA	4.06	6.0	1	17	1	2	17	1				
MATSUE	4.09	314.0				2	19	3				
MATUSIRO	4.09	17.7	1	15K	-1	2	15	-1				
KUMAGAYA	4.14	31.9	1	15	-2	2	14	-3				
NAGANO	4.20	17.0	1	17	0	2	18	0				
MAEBASI	4.23	27.2	1	16	-2	2	15	-4				
HAMADA	4.44	301.6	1	21	1	2	25	3				
MIYAZAKI	4.51	262.1	1	22K	2	2	27	4				
TUKUBASAN	4.55	37.6	1	17A	-4	2	10	-14			2	40
KAKIOKA	4.60	38.1	1	19K	-2	2	22	-3				
TYOSI	4.62	47.4	1	19A	-2	2	20	-5				
TAKADA	4.62	15.8	1	22K	1	2	25	0				
UTUNOMIYA	4.70	33.2	1	20K	-2	2	21	-5				
WAZIMA	4.72	2.2	1	23K	1	2	28	1				
MITO	4.86	39.1	1	21	-3	2	24	-5				
KUMAMOTO	5.04	273.5	1	26	1	2	34	2				
KAGOSIMA	5.31	259.9	1	39	11	2	41	4				
SHIRAKAWA	5.32	32.2	1	26	-2	2	32	-6				
HUKUOKA	5.33	281.7	1	45	17	2	42	4				
SAGA	5.39	278.1	1	48	19	2	43	4				
ONAHAMA	5.52	37.9	1	27K	-3	2	35	-6				
NIIGATA	5.60	19.6	1	31	0	2	42	-1				
YAKUSIMA	5.71	249.0	1	32	0	2	46	1				
NAGASAKI	5.73	272.6	1	34K	2	2	48	3				

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HUKUSIMA	5.96	30.4	1	33K	-2	2	44	-5			
YAMAGATA	6.34	27.2	1	44	5	2	52	-4			
SENDAI	6.58	30.4	1	39	-2	2	56	-5			
SAKATA	6.74	21.5	1	50	7	3	5	1			
ISINOMAKI	6.90	32.0	1	42	-3	3	2	-5			
MIZUSAWA	7.41	28.0	1	50	0	3	13	-4			
AKITA	7.58	20.5	1	57	5	3	21	0			
MORIOKA	7.92	26.0	1	54	-2	3	22	-5			
MIYAKO	8.19	30.0	1	53	-6	3	28	-5			
HATINOHE	8.78	25.0	2	5	0	3	39	-6			
AOMORI	8.79	20.8	2	25	19	3	44	-1			
HAKODATE	9.66	18.3				3	55	-6			
SUTTSU	10.51	14.5				4	22	2			
TOMAKOMAI	10.59	20.1				4	19	-3			
URAKAWA	10.65	25.3	2	24	-2	4	22	-1			
SAPPORO	11.03	18.2	2	31	0	4	27	-4			
VLADIVOSTOK	11.11	341.6				4	35	3			
OBIHIRO	11.47	24.8	2	46	11	4	40	4			
KUSIRO	11.98	28.4				4	49	-1			
NEMURO	12.76	30.8				5	6	1			
ABASHIRI	12.82	25.5				5	7	1			4 39
ZO-SE	13.26	267.4	2	52	-3	5	14	-1			
CHANGCHUN	14.28	324.7	3	6	0	5	38	3			
Y.-SAKHLINSK	15.01	16.2	3	14	1						
NANKING	15.12	272.5	3	14K	0	5	52	1			
PEKING	18.06	299.8	3	43	-1	6	49	4			
WUHAN	18.96	269.5	3	52	0	7	5	5			
BAGUIO CITY	21.76	225.9	4	17	-2	7	48	0			
HONG KONG	22.43	248.3	4	25	0						5 46 PP
PAOTOW	22.74	297.9	4	30	2						
MANILA	22.98	222.1	4	34	4						
SIAN	23.19	281.6	4	33K	1						
ULAN-BATOR	27.14	312.9	5	8	0	9	17	3			
LANCHOW	27.26	286.4	5	8K	-1	9	14	-2			
MAGADAN	28.51	15.1	5	20	0						
YAKUTSK	29.72	353.4	5	29	-1						
KUNMING	30.63	264.5	5	37K	-1						
TIKSI	39.26	356.1	6	50	0						
RABAUL	39.49	155.2	6	50	-2						
SHILLONG	39.55	271.6	6	52K	-1						
CHITTAGONG	40.83	267.1	6	56	-7						
MEDAN	45.83	238.9	7	34A	-9						
NAMANGAN	51.64	298.9	8	27	1						
LAHORE	52.13	286.7	8	30	0						
CHARTERS TS.	53.16	168.7	7	37	-60						
WARSAK DAM	53.58	290.5	8	40K	0						
COLLEGE	54.85	30.4	8	49	0				10	18	
KHEYS	57.13	348.1	8	58	-7						
POONA	57.64	272.3	9	9	0						
KIPAPA	58.44	83.4	9	14	0						
QUETTA	58.55	287.8	9	15K	0	16	45	2			11 32 PP
KARACHI	60.18	283.1	9	28	2						
HAWAII V.OB.	61.64	84.2	9	36	1						
SITKA	62.24	38.1	9	40	1						
APATITY	65.07	335.7	9	58	1	18	6	2			
NORD	65.15	355.8	9	57A	-1						
SODANKYLA	67.47	336.8	10	11	-1				11	41	
RESOLUTE	67.78	13.0	10	14A	0	18	40	4			10 37 PCP
KIRUNA	69.19	338.6	10	23A	0						
THULE	70.06	6.1	10	26	-2						10 59 PCP
HORSESHOE B.	71.93	42.6	9	41	-58						
NURMIJARVI	71.93	331.2	10	56	17						
VICTORIA	72.27	43.4	10	42A	1						
CORVALLIS	74.30	47.0	10	54A	1						
SKALSTUGAN	74.51	337.5	10	54	0						
UPPSALA	75.12	332.8	10	57A	0						
BANFF	75.23	38.3	10	56	-2						
SCORESBY SD.	76.02	352.7	11	4	2						
SHASTA	76.87	50.0	11	8A	1						
MINERAL	77.57	50.0	11	11A	0						
HUNGRY HORSE	77.64	40.1	11	12	1				12	46	
BERKELEY	78.46	52.4	11	16A	1						
LICK	79.16	52.6	11	20A	1						
RENO	79.16	50.0	11	20A	1						
BUTTE	79.82	41.5	11	24	1						
FRESNO	80.70	52.3	11	28A	1						
EUREKA	81.65	48.3	11	33	1				13	9	14 43 PP
SIDA	81.83	349.0	11	36K	3						

COLLMBERG	82.86	328.2	11	40	2						
PRUHONICE	83.08	326.6	11	40A	1						
SALT LAKE C.	83.41	45.4	11	42	1						
RAPID CITY	86.15	38.7	11	55	1						
TUCSON	89.33	51.5	12	10	1						
TUCSON TELE.	89.35	51.4	12	10	1						
ASTRIDA	105.65	277.1								17	50 PP
CAPE HALLETT	107.24	169.8								17	57 PP
SOUTH POLE	122.48	180.0	18	4	0						
BYRD STATION	124.32	168.2	18	10	2				19 52	20	48 PP
HUANCAYO	144.21	62.5	18	48	3						
LA PAZ	152.40	60.3	19	9	12						

MAY 20 16.H 36.M 52.S EPICENTRE 36.77 26.65 DEPTH= 0.KM

A= 0.71770 B= 0.36018 C= 0.59597 D= 0.4485 E=-0.8938
G= 0.5327 H= 0.2673 K=-0.8030 HT= -0.5

SE= 2.48

	DELTA DEG.	AZ. DEG.	P M	P S	P O-C S	S M	S S	S O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
ATHENS	2.63	298.1	0	42K	-2						0	48	PG
SOFIA	6.45	337.7	1	36	-2	2	55	1			3	29	
SKOPJE	6.61	323.6	2	10K	30						2	23	PG
BUCHAREST	7.66	357.0	2	39	44						3	47	
KSARA	8.10	108.6	2	4	3	3	42	7					
TARANTO	8.23	299.5				3	38	-1					
JERUSALEM	8.66	122.6	2	8	-1	4	3	14					
REGGIO CALA.	8.85	282.0				3	42	-12					
BELGRADE	9.31	331.6									3	27	
IASI	10.45	3.5	2	40	6						5	44	
ZAGREB	12.08	321.8	3	1	5						6	36	PS
ROME	12.11	299.4				5	22	8					
TRIESTE	13.14	316.5	3	22	12						7	18	SGSGSG
BRATISLAVA	13.39	331.3	3	10	-3								
BOLOGNA	13.95	308.3				5	44	-14			5	0	
TOLMEZZO	14.01	317.6	3	22	0						6	42	
KRAKOW	14.14	342.0	3	22	-1						3	36	PP
RACIBORZ	14.64	338.0									3	43	PPP
PRUHONICE	15.84	330.3	3	51A	6						5	20	
PRAGUE	15.96	330.3	4	14	27								
WARSAW	15.97	347.3									6	50	Ss
SETIF	17.10	274.5	4	2	0								
PLAUEN	17.24	327.3	4	3	0								
COLLMBERG	17.49	330.5	4	7	1						5	28	
SONNEBERG	17.57	325.6	4	9	2								
BASLE	17.72	313.3	4	12	3								
JENA	17.80	327.4	4	9	-1	7	35	8					
NEUCHATEL	17.83	311.1	4	11	0								
STRASBOURG	18.17	316.4	4	17	2	7	38	2			4	55	
POTSDAM	18.31	332.7	4	15	-2	7	42	3					
CLERMONT-FD.	19.79	304.4	4	35	1								
BENSBERG	19.88	321.7	4	34	-1								
UCCLE	21.24	318.3	4	49	0	8	43	1					
TAMANRASSET	22.97	238.5	5	6K	-1	9	6	-7			5	34	PP
FOLINIERE	23.12	309.8	5	7	-1								
NURMIJARVI	23.80	357.6	5	15	0						5	42	PP
UPPSALA	23.82	348.7	5	14	-1	9	28	0					
KEW	24.13	316.1	5	18	0	9	41	7					
RATHFARNHAM	28.21	316.3	6	9	13								
SKALSTUGAN	28.24	346.4	5	55	-1								
SODANKYLA	30.65	360.0	6	17	-1								
KIRUNA	31.31	355.5	6	21	-3								
LWIRO	38.87	176.6	7	29	1								
ASTRIDA	39.27	175.1	7	32	0								
UVIRA	40.10	176.2	7	39K	0								
ISFJORD	41.77	356.0	7	50	-2								
LEOPOLDVILLE	42.29	197.0	7	55	-1								
ELISABTHVLLE	48.14	179.0	8	46	3								
SHILLONG	55.96	81.7	9	40	-2								
RESOLUTE	62.43	345.2	10	26	-1								
COLLEGE	78.60	357.6	12	2	-3								
RAPID CITY	87.58	326.4	12	48	-3								
SOUTH POLE	126.58	180.0	19	2	-3						21	17	PP

MAY 20 19.H 35.M 10.S EPICENTRE 44.66 149.28 DEPTH= 47.KM

DEPTH OF FOCUS= 0.002R

A=-0.61356 B= 0.36455 C= 0.70046 D= 0.5108 E= 0.8597
G=-0.6022 H= 0.3578 K=-0.7137 HT= -3.4

SE= 2.70

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
NEMURO	2.98	244.9	0 45	-1	1 17	-4		
ABASHIRI	3.65	261.7	0 57	1	1 36	-2		
KUSIRO	3.91	246.3	0 59	-1	1 42	-3		
OBIHIRO	4.73	250.6	1 11	0				
HIROO	4.95	243.4	1 13A	-1	2 11	0		
Y.-SAKHLINSK	5.13	298.9	1 17	0				
URAKAWA	5.36	244.4	1 20	0	2 21	0		
WAKKANAI	5.44	280.7	1 43	22				
SAPPORO	5.95	257.3	1 28	0	2 36	0		
TOMAKOMAI	5.99	251.8	1 41	12				
MURORAN	6.48	251.9	1 35	-1	2 49	0		
UGLEGORSK	6.63	314.4	1 39	1	3 4	11		
SUTTSU	6.82	257.4	1 44	4				
MORI	6.84	251.1	1 41	0	3 5	7		
HAKODATE	6.88	248.3	1 38	-3	3 4	5		
HATINOHE	7.05	236.9	1 44	0	2 56	-7		
AOMORI	7.34	241.5	1 49	1	3 6	-4		
MIYAKO	7.38	229.9	1 51	3	3 1	-11		
MORIOKA	7.80	233.4	1 49	-5	3 11	-11		
MIZUSAWA	8.21	230.6	1 58	-2	3 22	-10		
AKITA	8.41	237.3	2 19	17	3 49	12		
ISINOMAKI	8.62	226.6	2 1	-4	3 30	-12		
SENDAI	8.96	227.5	2 6	-4	3 37	-14		
SAKATA	9.10	234.1	2 17	5	4 8	14		
YAMAGATA	9.27	229.4	2 12	-2				
HUKUSIMA	9.57	226.9	2 19	1	3 54	-12		
ONAHAMA	9.98	222.4	2 43	19	4 9	-7		
SHIRAKAWA	10.18	225.4	2 21	-6	4 6	-15		
NIIGATA	10.22	232.4	2 30	3				
PETROPAVLOVK	10.48	32.6	2 33	2				
MITO	10.64	222.0	2 39	6				
UTUNOMIYA	10.80	224.7	2 29	-6	4 23	-13		
KAKIOKA	10.90	222.6	2 27	-9	4 22	-16		
TUKUBASAN	10.95	222.8	2 30	-7	4 25	-14		3 28
MAEBASI	11.32	226.8	2 44	2	4 51	3		
KUMAGAYA	11.36	225.0	2 44	1	4 39	-10		
TOKYO C.M.O.	11.55	222.3	2 47	2				
NAGANO	11.59	230.3	2 54	8	5 3	8		
OIWAKE	11.65	228.1	2 51	4				
MATUSIRO	11.66	229.8	2 41	-6	5 8	11		
YOKOHAMA	11.80	221.9	2 57	8	5 1	1		
WAZIMA	11.84	236.4	2 48	-1				
MATUMOTO	12.02	229.6	3 2	10				
KOHU	12.17	225.9	3 1	7	5 13	4		
VLADIVOSTOK	12.64	269.1	3 0	0	5 19	-1		
OMAESAKI	13.16	224.0	3 16	9				
GIHU	13.31	230.3	3 5	-4				
NAGOYA	13.37	229.1	3 33	24				
IBUKISAN	13.54	231.2	3 8	-4				
HIKONE	13.69	231.2	3 10	-4				
KAMEYAMA	13.88	229.5	3 23	7				
ABUYAMA	14.36	231.8	3 18A	-4				
OSAKA	14.54	231.3	3 37	12	6 26	21		
MAGADAN	14.95	3.0	3 30	0	6 19	4		
HAMADA	16.40	239.5	3 52	3	6 49	0		
CHANGCHUN	17.19	275.7	4 0	1	7 12	5		
OOITA	17.82	236.2	4 6	0				
HUKUOKA	18.30	239.3	4 10	-2				
KAGOSIMA	19.64	234.7	4 25	-3				
YAKUTSK	20.80	333.6	4 38	-2	8 15	-9		
PEKING	24.80	270.9	5 31	12	9 57	21		
ZO-SE	25.84	248.0	5 29A	0	9 55	2		
TATUNG	26.84	272.9	5 41	3				
NANKING	26.85	252.5	5 37	-1	10 9	-1		
TIKSI	28.79	346.7	5 53	-3				
PAOTOW	28.98	275.8	5 57A	-1	10 46	2		

ULAN-BATOR	29.20	291.7	6 0	0						
SIAN	32.56	265.5	6 28A	-1	11 41	1				
LANCHOW	35.30	272.0	6 53A	0	12 24	1				
HONG KONG	36.40	243.9	7 2	0	12 42	3				
BAGUIO CITY	37.10	229.8	7 7	-1						
MANILA	38.41	227.6	7 18	-1						
COLLEGE	39.45	36.7	7 28	1	13 29	3			8 48	PP
KUNMING	42.29	258.3	7 51A	0	14 9	1				
SITKA	46.77	46.5	8 28	1			8 44			
KHEYS	47.60	346.5	8 22	-11						
RABAUL	48.70	176.2	8 41	-1						
KIPAPA	48.90	100.4	8 43	0			8 58			
HONOLULU	48.93	100.6	8 58	14						
SHILLONG	49.62	267.4	7 58A	-51						
HAWAII V.OB.	52.15	100.1	9 22	14						
FRUNSE	52.17	296.1	9 8	0	16 31	3				
CHATRA	52.21	272.0	9 8	-1						
RESOLUTE	53.66	17.3	9 17A	-2	16 49	1				
PORT MORESBY	53.84	182.6	9 20	-1	16 57	7	9 35			
ANDIJAN	54.67	294.9	9 49	22						
NAMANGAN	55.01	295.5	9 29	0	17 7	1				
ALBERNI	55.76	52.2	9 34	-1						
HORSESHOE B.	56.56	51.5	9 40	0						
DEHRA DUN	56.61	281.3	9 42	1						
THULE	56.84	9.9	9 39	-3			9 51		11 36	PP
VICTORIA	56.93	52.4	9 42	-1						
APATITY	58.18	336.0	9 49	-3						
LAHORE	58.47	284.7	9 57	3	17 56	4				
WARSAK DAM	58.95	288.6	9 56	-1						
CORVALLIS	59.14	56.3	9 58A	0						
BANFF	59.76	46.5	10 1	-2						
SODANKYLA	60.21	337.9	10 3	-3					12 17	PP
MEDAN	60.29	242.6	10 7K	1						
KIRUNA	61.44	340.3	10 12	-2						
SHASTA	61.91	59.5	10 17A	0						
HUNGRY HORSE	62.20	48.5	10 19	0						
LEMBANG	63.47	227.5	10 26K	-2						
BERKELEY	63.68	62.0	10 28A	-1						
RENO	64.19	59.2	10 32A	0						
QUETTA	64.35	287.8	10 33A	0	19 10	3			11 7	PCP
LICK	64.39	62.1	10 33A	-1						
CHARTERS TS.	64.41	183.2	10 31	-3						
BUTTE	64.41	49.9	10 33	-1			10 50			
MOSCOW	64.62	324.4	10 35	0						
SCORESBY SD.	65.00	356.8	10 38	0						
BOZEMAN	65.46	49.5	10 41	0			10 56			
FRESNO	65.90	61.6	10 43A	0						
NURMIJARVI	65.92	333.5	10 40	-4						
HELSINKI	66.08	333.1	10 43	-2						
EUREKA	66.56	57.2	10 48	0			11 5		13 18	PP
SKALSTUGAN	66.86	340.6	10 47	-2						
POONA	66.95	273.6	10 57	7	19 42	4				
KARACHI	67.02	284.1	10 56	6						
SALT LAKE C.	68.16	53.9	10 58	0						
UPPSALA	68.58	336.1	10 58	-2						
PASADENA	68.59	62.9	11 0	0	20 19	21				
BOULDER CITY	69.49	59.5	11 6	0			11 21			
TIFLIS	70.68	309.8	11 14	1						
RAPID CITY	70.68	46.7	11 12	-1						
SIDA	71.44	354.1	11 19	1						
BRISBANE	71.87	176.5	11 21A	1	21 16	40				
COPENHAGEN	73.60	336.2	11 31K	1					11 46	PCP
SIMFEROPOL	73.88	318.0	11 32	0						
TUCSON	74.45	60.1	11 36	1					12 0	
TUCSON TELE.	74.45	59.9	11 35	0			11 50		14 33	PP
LWOW	74.52	326.7	11 36	0					20 31	
IASI	75.14	323.1	11 40	1						
KRAKOW	75.89	329.1	11 44	0	21 26	5			11 59	PCP
POTSDAM	76.26	334.1	11 46	0					12 1	
FOCSANI	76.47	322.4	11 57	10						
RACIBORZ	76.49	330.0	11 48	1					11 57	PCP
COLLMBERG	77.21	333.6	11 52	1						
HALLE	77.37	334.3	11 47	-5					16 21	PPP
PRAGUE	77.80	332.1	11 58	4					12 16	PCP
PRUHONICE	77.84	332.0	11 55A	1					12 4	PCP
BUCHAREST	77.96	322.2	11 57K	2						
JENA	77.98	334.2	11 55	0					13 21	
RIVERVIEW	78.13	178.4	11 52	-4						
PLAUEN	78.17	333.6	11 54	-2						

MUNSTER	78.23	336.9	11	57	0					12	32 PCP
BRATISLAVA	78.49	329.6	12	OK	2						
LAWRENCE	78.49	45.9	11	58	0						
SONNEBERG	78.58	334.1	11	59	0						
VIENNA-H.	78.68	330.1	12	0	1						
BENSBERG	79.26	336.7	12	2	0						
CANBERRA	79.60	180.2	12	6K	2						
ADELAIDE	79.79	188.8	12	6	1						
BELGRADE	80.01	325.7	12	8A	2						
UCCLE	80.17	338.3	12	8	1	22	9	2			
RATHFARNHAM	80.20	345.4	12	26	19						
SOFIA	80.54	322.8	12	9	0					12	50
STUTTGART	80.61	334.5	12	10	1						
KEW	80.71	341.3	12	10	0	22	15	2			
TUBINGEN	80.87	334.5	12	11	0						
ZAGREB	80.89	329.0	12	12	1				12	28	
EBINGEN	81.21	334.4	12	13	0						
STRASBOURG	81.22	335.3	12	14K	1	22	18	0		14	12
FAYETTEVILLE	81.22	47.2	12	14A	1	22	19	1			
KSARA	81.25	309.4	12	16	3						
TOLMEZZO	81.45	331.1	12	15	1					13	0
TRIESTE	81.84	330.2	12	16	0						
OTTAWA	81.86	30.2	12	15A	-1						
SHAWINIGAN	81.89	27.8	12	16A	0						
MELBOURNE	82.20	183.4	12	20	2					12	33 *SP
CHUR	82.21	333.4	12	19	1						
BASLE	82.21	334.9	12	8	-10						
NEUCHATEL	82.88	335.1	12	21	0						
ATHENS	84.20	319.7	12	25	-3						
TARANTO	84.93	325.3	12	20	-12						
PENNSYLVANIA	84.98	34.0	12	31	-1	23	25	29			
ROME	85.55	329.2	12	35	0	23	9	8			
KARAPIRO	85.55	159.5	12	34	-1					12	51
PALISADES	86.32	31.3	12	19	-19	23	13	4		24	11 PS
WASHINGTON	86.92	34.4	12	42	1						
COLUMBIA	89.36	39.7	12	54	1						
GRANADA	94.93	338.6	13	1A	-18						
BERMUDA	97.33	28.5				24	2	0		26	6 PS
SCOTT BASE	122.71	175.7	18	50	-1						
HUANCAYO	129.96	63.7	19	18	13						
BYRD STATION	133.81	166.0	19	14	2					23	1 PP
SOUTH POLE	134.46	180.0	19	2	-11					23	2 PP

MAY 20 19.H 49.M 13.S EPICENTRE 41.81 41.87 DEPTH= 0.KM

A= 0.55675 B= 0.49895 C= 0.66414 D= 0.6674 E=-0.7447
G= 0.4946 H= 0.4432 K=-0.7476 HT= -2.4

SE= 2.62

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
TIFLIS	2.20	91.3	0	40	2	1	8	1					
SOTCHI	2.37	318.9	0	43	2	1	20	9					
GORIS	4.10	122.7	1	8	2								
SIMFEROPOL	6.46	301.7	1	38	-1	2	51	-3					
KSARA	9.27	212.6	2	21	3	4	5	1			8	55	PCP
FOCSANI	11.30	295.1	3	18	32	4	50	-4			5	2	SS
IASI	11.54	302.7	2	48	-1	4	53	-7			3	3	PP
BACAU	11.75	298.9	3	9	17								
BUCHAREST	11.82	288.0	2	50	-3	5	11	4			2	56	PP
SOFIA	13.76	279.9	3	16	-3						6	15	
MOSCOW	14.21	350.2	3	20	-5								
ATHENS	14.45	260.6	3	29K	1								
LWOW	14.78	308.9	3	29	-3	6	13	-5					
BELGRADE	15.87	288.1	3	52K	5	6	57	13			4	59	
SKALNATE PL.	16.82	303.3	4	3	4								
BUDAPEST	17.16	297.0	4	9	6	7	23	10					
WARSAW	17.56	313.5	4	10	2	7	27	4			4	23	PP
RACIBORZ	18.36	304.8	4	20	2						4	31	PP
TARANTO	18.58	274.1	4	58	37	8	17	31					
BRATISLAVA	18.59	298.4	4	22K	1	7	53	7					
ZAGREB	19.07	290.9	4	27A	0	8	14	17			4	37	PP
VIENNA-H.	19.09	298.4	4	24	-3						5	9	
SVERDLOVSK	19.28	32.4	4	25	-4	8	1	0					
PULKOVO	19.36	342.2	4	26	-4	8	0	-3					

REGGIO CALA.	20.41	268.2	4	41	0				4	59
PRUHONICE	20.61	302.7	4	43A	-1	8	36	6		
TRIESTE	20.63	290.2	4	34A	-10	8	35	5	5	21 PP
PRAGUE	20.70	302.9	4	45	0				5	15 PP
HELSINKI	21.12	336.2	4	47	-2	8	40	0	9	0
TOLMEZZO	21.16	292.3	4	49	0	8	43	2		
NURMIJARVI	21.49	336.4	4	48	-5	8	48	1		
ROME	21.85	280.1	4	56A	0	8	58	4	5	34 PP
COLLMBERG	21.88	305.6	4	58	2	9	7	13	12	36
CHEB	22.00	302.1				8	59	3	6	0
POTSDAM	22.13	308.4	5	1	2	9	8	9	10	24 SS
PLAUEN	22.22	303.2	4	57	-3	9	7	7		
NAMANGAN	22.33	82.1	5	4	3					
HALLE	22.56	305.7	5	0	-3	9	9	2	10	3 SS
JENA	22.66	304.1	5	6	2	9	17	8	10	14 SS
SONNEBERG	22.80	302.6	5	7	1	9	17	6	5	32 PP
QUETTA	23.29	111.8	5	11A	1	9	21	1	10	8 SS
UPPSALA	23.45	328.6	5	11K	-1	9	22	0		
RAVENSBURG	23.54	295.7	5	16	3					
CHUR	23.57	293.4	5	14A	1	9	25	0		
COPENHAGEN	23.62	316.0	5	16	2	9	28	2	6	56
PAVIA	23.87	289.2	5	22	6	9	43	13		
STUTTGART	23.88	298.1	5	16A	0	9	36	6	6	0 PP
TUBINGEN	23.95	297.5	5	17	0				6	17 PP
EBINGEN	23.99	296.6	5	18	1					
FRUNSE	24.12	76.4	5	19	0					
WARSAK DAM	24.60	98.7	5	23	0					
STRASBOURG	24.81	297.5	5	25	0	9	54	8	6	11 PP
BASLE	24.91	295.0	5	26	0	9	57	9		
MONACO	25.25	286.0	5	29A	0					
MUNSTER	25.30	305.4	5	31	1				5	45
NEUCHATEL	25.34	293.7	5	29	-1	9	56	1		
BENSBERG	25.42	303.0	5	32	1				6	23
KARACHI	26.16	119.6	5	45A	7					
APATITY	26.20	352.7	5	37	-1	10	9	0	6	1 PP
DE BILT	26.80	305.2				10	17	-2		
SODANKYLA	26.93	347.0	5	43	-2				6	32 PP
UCCLE	27.18	302.2	5	48	1	10	29	4		
SEMIPALATNSK	27.70	58.7	5	50	-2					
SKALSTUGAN	27.77	331.7	5	51	-2					
CLERMONT-FD.	28.06	291.4	5	56	1	10	39	0		
PARIS	28.31	297.8	5	58	0					
KIRUNA	28.53	343.1	5	58K	-1	10	44	-3		
SETIF	28.74	270.9	6	0	-1				6	50 PP
KEW	30.15	303.3	6	13	-1	11	10	-3		
FOLINIERE	30.28	297.9	6	13	-2					
TORTOSA	30.88	282.2							9	53 PCP
ALICANTE	32.35	278.2	6	32	-1	11	46	-1		
RELIZANE	32.54	273.1	6	34A	-1				7	46 PP
ADDIS ABABA	32.76	185.7	6	37	0					
RATHFARNHAM	33.84	306.6	6	55	9				7	38
TOLEDO	34.47	282.4	6	51	-1	12	10	-10	8	8 PP
TAMANRASSET	35.76	249.4	7	3A	0	12	49	9	8	21 PP
ISFJORD	38.12	350.8	7	54	31					
KHEYS	38.56	2.8	7	43	17	13	43	20		
CHATRA	39.82	97.3	7	36	-1					
SIDA	40.41	323.6	6	52A	-50					
SCORESBY SD.	42.58	333.5	8	1	2					
BANGUI	42.67	215.5	7	58	-2				11	31
SHILLONG	44.02	95.3	8	10A	-1					
NORD	44.41	349.7	8	13K	-1					
RUMANGABO	44.42	198.1	8	14A	0					
ULAN-BATOR	45.28	59.1	8	27	6					
LWIRO	45.43	198.5	8	21A	-1				19	15
ASTRIDA	45.55	197.1	8	22A	-1					
UVIRA	46.54	197.7	8	29A	-2					
LANCHOW	47.61	75.5	8	40	0					
TIKSI	50.04	24.4	8	57	-2					
LEOPOLDVILLE	51.96	214.6	9	11A	-2	16	38	2		
SIAN	52.16	75.0	9	15	0					
KUNMING	52.39	88.5	9	22	6					
YAKUTSK	53.21	36.1	9	18	-4					
PEKING	54.49	65.2	9	50	18					
ELISABTHVLLE	54.81	197.4	9	35K	1				11	41 PP
BROKEN HILL	57.33	195.5	9	50	-2					
MBOUR	57.40	259.8	9	52	-1					
RESOLUTE	60.30	347.9	10	11K	-2					
NANKING	60.38	72.1	10	18	5					

TANANARIVE	60.65	173.8	10 13A	-2			10 56
ZO-SE	62.60	71.7	10 33	5			
BULAWAYO	62.84	194.0	10 27	-3			
MEDAN	63.28	110.7	10 30	-3			
WINDHOEK	68.04	204.7	11 2	-2			
PRETORIA	68.40	193.3	11 3A	-3			
MATUSIRO	70.90	57.9	11 18	-3			24 53
COLLEGE	73.39	4.3	11 34	-2			
SHAWINIGAN	74.60	319.4	11 42	-1			
BREBEUF	75.77	319.1	12 11	21			
OTTAWA	76.86	320.1	12 2	6			
WASHINGTON	82.35	316.4	12 23	-2			
MORGANTOWN	83.25	318.6	12 30K	0			
BANFF	85.33	346.0	12 4	-36			
HUNGRY HORSE	87.73	344.2	12 52	0			
RAPID CITY	88.93	335.6	12 57	-1			
ANTOFAGASTA	121.66	265.5					14 15
SOUTH POLE	131.62	180.0	19 12	-3			22 37 PP
SCOTT BASE	137.70	165.0	19 26	-1			22 57 SKP
BYRD STATION	141.04	185.1	19 27	-6			22 17 PP
KARAPIRO	144.55	99.4	19 37	-2			

MAY 21 6.H 51.M 37.S EPICENTRE 52.62-170.70 DEPTH= 0.KM

A=-0.60167 B=-0.09858 C= 0.79264 D=-0.1617 E= 0.9868
G=-0.7822 H=-0.1282 K=-0.6097 HT= -6.4

SE= 2.30

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
COLLEGE	16.94	34.7	4 3	3	7 24	16		4 46
SITKA	20.69	63.5	4 47	3				
HORSESHOE B.	29.59	77.0						9 13 PCP
VICTORIA	29.88	78.7						9 14 PCP
KIPAPA	32.65	157.7	6 35	-1				7 40 PP
SHASTA	34.59	90.5	6 55A	2				
MINERAL	35.28	90.3	6 59	0				
HUNGRY HORSE	35.51	73.6	7 1	0				9 29 PCP
RESOLUTE	36.50	25.7	7 10	1	13 15	23		9 32 PCP
RENO	36.87	90.0	7 19	7				
LICK	37.14	94.3	7 18	4				
TUKUBASAN	37.96	264.4	7 22K	1				9 36
FRESNO	38.63	93.5	7 46	19				
BOZEMAN	38.63	75.7	7 28	1				
MATUSIRO	38.89	266.4	7 31A	2	13 22	-6		9 40
EUREKA	39.25	87.1	7 33	1				9 40 PCP
BOULDER CITY	42.17	90.4	7 58	2				
CHANGCHUN	42.23	284.6	7 56	-1				
THULE	42.33	20.0	7 59	2				
RAPID CITY	44.14	73.0	8 12	0				
LARAMIE	44.40	77.6	8 15	1				9 59
NORD	45.30	5.2	8 23	1				10 1 PCP
BOULDER	45.36	78.9	8 23	1				20 24
TUCSON	47.13	91.0	8 37	1				
TUCSON TELE.	47.14	90.9	8 37	1				
ISFJORD	49.56	358.8	8 56	1				
PEKING	49.94	286.2	8 58	0				
ZO-SE	52.97	274.3	9 20	-1				
PAOTOW	53.13	290.7	9 23	1				
NANKING	53.75	276.9	9 26	0				
SCORESBY SD.	55.16	12.3	9 38	1				
DALLAS	55.24	79.9	9 34	-3				
SIAN	58.10	285.9	9 58	0				
OTTAWA	58.32	55.6	9 58A	-1				
APATITY	58.79	349.4	9 50	-13				10 51 PCP
SHAWINIGAN	58.96	52.9	10 3	-1				
BREBEUF	59.29	54.3	10 5K	-1	18 4	-10		
KIRUNA	59.58	355.1	10 8K	0				10 54 PCP
SODANKYLA	59.63	352.3	10 8	0				10 53 PCP
LANCHOW	59.76	290.8	10 9	0				
MORGANTOWN	60.17	62.9	10 13K	1				
PALISADES	62.38	58.0	10 22	-5	18 50	-3		23 56 SS
FORDHAM	62.51	58.1	10 50	22				
CHENGTU	63.56	286.4	10 36	1				
COLUMBIA	63.63	68.0	10 35	0				

			P	O-C	S	O-C	*PP	SUPP.
	DELTA DEG.	AZ. DEG.	M S	S	M S	S	M S	M S
HONG KONG	63.65	272.7	10 36	1	19 43	34		
SKALSTUGAN	64.12	358.5	10 38A	-1				11 13 PCP
NURMIJARVI	66.55	351.8	10 53	-1				
HELSINKI	66.86	351.6	10 57	1				11 25 PCP
KUNMING	68.51	283.3	11 7	0				
BERMUDA	73.73	57.9			20 59	-10		
SHILLONG	74.40	291.6	11 41K	-1				
JENA	76.81	358.5	11 55	0				
CHITTAGONG	76.92	289.6	11 43	-13	21 19	-25		14 32 PP
PRUHONICE	77.68	356.5	11 51A	-9				
FOLINIERE	78.65	6.6	11 7	-59				
STUTTGART	78.99	0.1	12 9	1				
STRASBOURG	79.17	1.0	12 9	1				
CHARTERS TS.	81.41	220.5	12 19	-1				
QUETTA	83.46	312.6	12 32A	1	22 54	2		12 37 PCP
SAN JUAN	84.10	67.5	12 34	0				
KARAPIRO	90.96	190.9	13 5	-2				
TAMANRASSET	104.85	3.6						23 53
RUMANGABO	126.22	334.9	19 8	3				
LWIRO	127.24	335.2	19 9	2				
ASTRIDA	127.34	334.0	19 8	1				
BYRD STATION	135.55	168.8	19 19	-4				
ELISABTHVLLE	136.59	333.7	19 20	-5				
SOUTH POLE	142.43	180.0	19 27	-8				
BULAWAYO	144.29	327.8	19 39	1				
PRETORIA	149.63	324.8	19 23K	-24				

MAY 21 11.H 34.M 28.S EPICENTRE -28.11 -70.58 DEPTH= 56.KM

DEPTH OF FOCUS= 0.004R

A= 0.29368 B=-0.83311 C=-0.46870 D=-0.9431 E=-0.3325
G=-0.1558 H= 0.4420 K=-0.8834 HT= 2.4

SE= 2.46

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
ANTOFAGASTA	4.44	1.9	1 6	0	2 9	11		
SANTA LUCIA	5.30	180.9	1 19	1				
LA PAZ	11.77	11.6	2 47	0	5 13	15		3 6 PP
LA PLATA	12.74	125.2	2 57	-3	5 22	1		3 13 PP
HUANCAYO	16.58	343.5	3 57	7	7 4	13		
PORT STANLEY	25.42	161.4	5 25	1	10 16	32		
BOGOTA	32.71	353.6	6 30	1	11 48	8	6 50	
CHINCHINA	33.24	350.8	6 32	-2	11 54	5	6 59	12 15 *SS
ARGENTINE I.	37.37	175.6	7 9	0				
CARACAS	38.54	5.8	7 8A	-11	12 58	-12		
GRENADA	40.83	13.3	7 40	2				
ST. VINCENT	42.01	13.6	7 42	-5				
FORT FRANCE	43.55	13.3	7 58	-2				17 47
SAN JUAN	46.42	5.9	8 18	-5			8 35	10 9 PP
HALLEY BAY	52.15	167.2	9 7	0				
TACUBAYA	54.75	326.4	9 28	2				9 46
BYRD STATION	55.75	189.2	9 33	0	16 56	-18	9 49	39 44 PKPPKP
BERMUDA	60.42	5.7	10 0	-6	18 12	-3		13 52 PPP
SOUTH POLE	62.05	180.0	10 14	-3			10 26	11 35 PP
COLUMBIA	62.56	350.2	10 18	-2				
DALLAS	65.53	335.9	10 39	-1				10 54
MBOUR	66.91	58.0	10 50	2	19 46	11		
WASHINGTON	66.94	354.5	10 48	0	19 43	7	11 0	13 38 PP
FAYETTEVILLE	67.62	339.5	10 52A	-1	20 43	59	11 6	
MORGANTOWN	67.95	352.2	10 55K	0			11 8	
FORDHAM	68.68	357.3	11 20	21	20 11	14		
PALISADES	68.84	357.3	10 58	-2	19 59	0		25 19 SS
PENNSYLVANIA	68.89	354.1	11 3	2	20 3	4	11 18	13 54 PP
SCOTT BASE	69.08	191.0	11 0A	-2				12 57 PP
CLEVELAND	69.98	351.3	11 6	-1				
TUCSON	71.19	324.7	11 15	0	20 38	12	12 34	
TUCSON TELE.	71.21	324.8	11 15	0			11 29	
CAPE HALLETT	71.65	196.4	11 17	0	20 34	3		11 33 PCP
HALIFAX	72.66	5.2	11 22K	-1	20 49	6		20 13
OTTAWA	73.31	356.2	11 26A	-1	20 52	2		11 40 PCP
BREBEUF	73.31	357.8	11 26K	-1	20 56	6		
SHAWINIGAN	74.33	358.4	11 33A	0				11 46 PCP
HERMANUS	74.57	121.0	11 45	11	21 34	30		21 58 SCS
SEVEN FALLS	74.88	359.8	11 36K	0	21 20	12		21 35 SCS

BOULDER	75.09	333.1	11	37	0						
BOULDER CITY	76.17	324.3	11	44	0				12	1	
LARAMIE	76.30	333.6	11	44	0						11 59
PASADENA	76.57	321.0	11	47	1	21	22	-4			15 5 PP
WINDHOEK	77.77	109.1	11	53K	0						
RAPID CITY	77.80	336.6	11	51	-2						
MAWSON	78.47	163.5	11	55A	-1				12	8	
SALT LAKE C.	78.50	329.3	12	7	10				12	12	
FRESNO	79.40	321.8	12	2K	1						
EUREKA	79.44	325.9	12	1	-1				12	18	38 48 PKPPKP
LICK	80.83	321.1	12	10K	1						
KIMBERLEY	81.27	117.8	12	10A	-1						
RENO	81.44	323.7	12	13K	1						
BERKELEY	81.55	321.1	12	11K	-2	22	26	7			15 44 PP
BOZEMAN	82.12	332.6	12	16	0				12	31	
TERRE ADELIE	82.31	192.2	12	18	1	22	11	-16			
MINERAL	82.97	323.2	12	19K	-1						
BUTTE	83.03	332.0	12	20	0	22	40	6	12	36	15 34 PP
SHASTA	83.64	323.0	12	23K	-1						
LEOPOLDVILLE	84.29	91.9	12	28A	1	23	16	30	12	47	16 0 PP
MIRNY	84.81	173.5	12	27	-2	22	48	-4			
PRETORIA	85.34	116.6	12	33	1						
HUNGRY HORSE	85.49	332.6	12	31	-2	23	2	4	12	46	15 51 PP
CORVALLIS	86.87	325.3	12	42K	2						
BULAWAYO	88.40	111.9	12	47	0						
TAMANRASSET	89.12	63.6	12	51A	1	23	43	10	13	10	16 30 PP
MALAGA	89.56	47.3	12	58A	6	23	58	21			16 34 PP
VICTORIA	89.73	328.0	12	53	0						
HORSESHOE B.	90.28	328.7	11	57	-59						
BROKEN HILL	91.06	106.9	13	0	1						
BANGUI	91.33	85.8									13 1
ELISABTHVLLE	91.52	103.9	13	8	6	24	4	10			16 45 PP
TOLEDO	91.64	44.9	13	2	0	24	0	5			24 31 PS
ALICANTE	93.05	47.8	13	4	-5	24	9	2			
SETIF	95.88	52.1	13	25	4						17 15 PP
LWIRO	97.22	96.4	13	32	4	24	33	-10			
ASTRIDA	97.87	97.2	13	32	2						17 28 PP
RUHANGABO	98.12	95.9									17 34 PP
FOLINIERE	98.77	39.0	13	29	-6						
CLERMONT-FD.	99.28	42.9	18	15	777	24	44	-16			
KEW	100.32	36.8	13	45	3						17 55 PP
PARIS	100.47	40.0	13	45	3						17 51 PP
UCCLE	102.50	38.9									18 4 PP
PRATO	103.38	47.3									18 12 PP
STRASBOURG	103.41	42.0									18 12 PP
ROME	103.43	49.6									20 25
DE BILT	103.58	38.0									18 15 PP
RESOLUTE	103.76	353.5	13	56	-1	25	40	2			18 2 PP
SCORESBY SD.	104.19	15.1				25	2	-39			18 17 PP
STUTTGART	104.35	42.2	14	2	3						18 16 PP
TRIESTE	105.83	46.5									18 29 PP
JENA	106.66	40.9	17	44	777						18 32 PP
PRUHONICE	108.03	42.6									18 42 PP
COPENHAGEN	109.00	36.5									18 53 PP
COLLEGE	109.91	333.7	14	22	777				14	38	18 59 PP
BELGRADE	109.91	49.2									19 1 PP
SOFIA	111.17	52.1	19	7	40						
SKALSTUGAN	111.72	28.5	19	13	45						
NORD	112.77	7.4									19 18 PP
LWOW	113.77	44.9	18	34	2						28 38
KIRUNA	116.08	25.0	18	53	16						19 45
KISHINEV	116.15	48.8									19 41 PP
NURMIJARVI	116.57	33.4	18	32	-6						
KSARA	117.91	64.6									19 56 PP
PULKOVO	119.26	34.7	18	41	-2						
SIMFEROPOL	119.29	52.0									20 6 PP
CHARTERS TS.	120.36	220.8	18	47	2						
APATITY	120.99	25.8									20 18
MOSCOW	122.87	39.8									20 28
SOTCHI	123.00	54.4									20 26
TIFLIS	126.46	57.2	19	2	5						
GORIS	127.32	60.2									20 49 PP
PORT MORESBY	127.83	229.9	19	4	5						21 20 PP
MAKHACH-KALA	128.57	55.9	19	0	-1						
TIKSI	135.12	351.4	19	11	-2						
SVERDLOVSK	135.35	36.0	19	16	2						
KARACHI	142.30	83.4	19	24	-2						
QUETTA	143.00	76.3	19	25	-2						22 59 PKS

YAKUTSK	143.52	344.0	19	22	-6						
GUAM	144.05	253.4	19	27	-2			19	44		
POONA	146.08	98.5	19	30	-3						
NAMANGAN	146.62	57.4	19	35	1						
WARSAK DAM	147.16	70.1	19	36	2						
LAHORE	149.45	74.9	19	41	3						
DEHRA DUN	152.58	77.8	18	57	-46						
TUKUBASAN	152.88	295.1	19	46A	3					23	29 PP
MATUSIRO	154.32	296.5	19	45	0			20	10	43	23 *SSS
IRKUTSK	155.57	7.6	19	51	4						
VLADIVOSTOK	156.47	315.5	19	50	2						
CHANGCHUN	159.77	325.0	19	55	3			20	8	24	19 PP
ULAN-BATOR	160.13	5.0	19	57	5					24	51 PP
SHILLONG	164.13	95.1	19	58K	2						
PEKING	166.87	336.6	20	2	3			20	17	24	51 PP
PAOTOW	167.55	357.8	20	4	5			20	19	24	57 PP
ZO-SE	169.34	289.1	20	2	2			20	18	25	4 PP
LANCHOW	170.75	29.4	20	3	2					25	11 PP
NANKING	170.97	298.1	20	4	3			20	20	25	14 PP
KUNMING	173.24	115.3	20	7	5			20	23	25	32 PP
SIAN	173.86	3.9	20	5	2					25	28 PP
CANTON	173.90	215.7	20	8	5			20	22	25	41 PP
CHENGTU	174.64	60.4	20	7	4			20	23	25	33 PP
WUHAN	174.90	299.5	20	7	4			20	23	25	34 PP

MAY 22 6.H 57.M 10.S EPICENTRE -41.10 174.38 DEPTH= 41.KM

DEPTH OF FOCUS= 0.001R

A=-0.75213 B= 0.07396 C=-0.65485 D= 0.0979 E= 0.9952
G= 0.6517 H=-0.0641 K=-0.7558 HT= -2.1

SE= 2.44

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
WELLINGTON	0.34	121.8				0	20	2			0	13 P*
COBB RIVER	1.25	270.4									0	24 P*
TONGARIRO	2.09	25.2	0	34A	0							
KAIMATA	2.63	236.4	0	42	1						0	48 P*
GEBBIES PASS	2.90	205.7	0	44	-1	1	15	-4				
TUAI	3.13	43.7	0	46	-2	1	22	-3			0	58 P*
KARAPIRO	3.30	16.0	0	51K	0							
ONERAHI	5.32	359.9	1	19	0	2	16	-4				
RIVERVIEW	19.79	284.0	4	37A	7	8	20	15				
CANBERRA	20.73	277.9	4	38A	-2				4	46	5	5 PP
BRISBANE	22.19	301.1	4	54	0	8	55	4				
MELBOURNE	22.89	268.5	4	59	-2							
ADELAIDE	28.63	270.8	5	52	-3				6	7	12	35
APIA	29.76	27.9	6	9	4	11	7	10				
CAPE HALLETT	31.34	182.4	6	19	0	11	52	30			9	32 PCP
TERRE ADELIE	31.54	204.3	6	22	1							
CHARTERS TS.	31.84	302.8	6	22	-1	11	28	-2				
SCOTT BASE	37.00	182.7	7	8	0						9	26 PCP
PORT MORESBY	39.71	315.0	7	29A	-1	13	30	-1	7	55	9	13 PP
RABAUL	41.80	325.5	7	45	-2							
BYRD STATION	45.71	167.1	8	20	1				8	36	9	56 PP
SOUTH POLE	49.09	180.0	8	45	-1				9	1	13	53 SCP
MIRNY	49.80	211.2	9	4	13							
MAWSON	60.08	204.3	10	3A	-3				10	17		
GUAM	60.82	326.6	9	10	-61						10	51 PP
HALLEY BAY	62.86	174.2	10	22	-2							
ARGENTINE I.	64.63	156.6	10	35	-1							
LEMBANG	68.07	280.4	10	55A	-3							
MEDAN	81.63	282.2	12	15	0							
MATUSIRO	84.09	331.5	12	25A	-3	22	41	-7				
HUANCAYO	96.92	112.4	13	31	3							
TUCSON	100.35	56.2	14	1	17							
TUCSON TELE.	100.48	56.2	13	45	0						17	57 PP
SHILLONG	101.08	294.1	13	45	-2							
EUREKA	102.20	47.9	13	58	6						17	53 PP
HUNGRY HORSE	109.18	42.1	18	28	2							
RAPID CITY	112.46	50.6	18	31	-1							
QUETTA	121.58	284.1	18	48	-2						20	22 PP
SAN JUAN	123.96	94.8	18	57	3							
WASHINGTON	126.66	67.3	18	57	-2							

RESOLUTE	129.33	20.1	19	2	-3			22	14 PKS
OTTAWA	130.24	60.2	19	4	-2			21	20 PP
BREBEUF	131.65	60.8	19	7K	-2			22	26
SHAWINIGAN	132.56	59.7	19	9	-2			22	29 PKS
SVERDLOVSK	135.59	314.0	20	10	54				
APATITY	146.11	334.3	19	32K	-3			19	36 PKP2
JERUSALEM	146.12	267.3	19	35	0			19	57
KSARA	146.52	271.1	19	35	-1				
SODANKYLA	148.34	336.8	19	38	-1			20	0 PKP2
MOSCOW	148.37	312.4	19	43	4				
KIRUNA	149.72	340.7	19	41	0			19	59
SIMFEROPOL	150.90	291.0	19	47	4				
PULKOVO	150.98	322.3	19	45	2				
NURMIJARVI	153.13	326.5	19	48	2				
SKALSTUGAN	155.15	340.9	19	59	10				
UPPSALA	156.32	330.3	20	5	15				
TAMANRASSET	159.47	210.5	19	53	-1			24	28 PP
PRUHONICE	163.36	309.0						20	46 PKP2

MAY 22 8.H 31.M 7.S EPICENTRE 25.38 96.23 DEPTH= 0.KM

A=-0.09821 B= 0.89923 C= 0.42630 D= 0.9941 E= 0.1086
G=-0.0463 H= 0.4238 K=-0.9046 HT= 3.2

SE= 2.32

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
TOCKLAI	1.89	316.3	0	44	10								
SHILLONG	3.95	273.6	1	7	4	1	59	8					
CHITTAGONG	5.04	234.2	1	15	-3	2	15	-3			1	34	PG
KUNMING	5.85	91.9	1	31	1						1	52	PG
CALCUTTA	7.76	250.2									3	0	
CHATRA	8.27	282.0	2	3	-1								
CHENGTU	8.65	50.8	2	11	2	3	59	10					
LANCHOW	12.49	29.6	3	3	1								
SIAN	14.11	48.3	3	32	9								
CANTON	15.72	94.8	3	44	0								
HONG KONG	16.69	96.9	3	57	0	7	16	14					
DEHRA DUN	16.81	291.1	4	3	5	7	13	8					
WUHAN	16.98	68.3	3	58	-2								
PAOTOW	19.03	33.9	4	24	-2								
LAHORE	20.20	292.7	4	38	-1								
TATUNG	20.47	40.0	4	41	-1								
NANKING	20.86	66.2	4	45	-1	8	40	6					
MEDAN	21.80	173.4	4	59	4						11	52	
PEKING	22.17	43.9	5	0	1	9	7	8			12	5	SCS
BOMBAY	22.61	258.1									9	56	
ZO-SE	22.68	69.8	5	7	3	9	18	10					
WARSAK DAM	23.06	297.6	5	9A	1								
ULAN-BATOR	24.02	17.8	5	20	3	9	40	8					
NAMANGAN	25.66	313.4	5	34	1						10	2	
QUETTA	26.31	287.1	5	38A	-1	10	9	-1			6	21	PP
MATUSIRO	37.42	62.4	7	14A	-2	13	3	-2					
SVERDLOVSK	40.50	330.5	7	41	-1								
YAKUTSK	42.97	22.4	7	27	-35								
TIKSI	49.77	12.9	8	54	-2								
MOSCOW	51.82	322.1	9	12	0								
KSARA	52.51	294.2	9	21	4								
JERUSALEM	53.36	291.8	9	22A	-1								
SODANKYLA	59.00	335.0	10	2	-2						10	46	PCP
NURMIJARVI	59.21	326.9	10	3	-2								
KIRUNA	61.41	335.2	10	18	-2								
UPPSALA	62.73	326.2	10	26	-3								
SKALSTUGAN	64.92	330.6	10	41	-2								
PRUHONICE	65.79	315.5	10	48A	-1								
CHARTERS TS.	66.33	128.1	10	49	-3								
JENA	67.45	317.0	10	57	-2						11	15	
STUTTGART	69.47	315.1	11	10	-2								
ASTRIDA	70.06	257.1	11	16	1								
LWIRO	70.72	257.8	11	21	2								
ADELAIDE	72.23	144.4	11	31A	2								
BROKEN HILL	76.94	247.0	11	57	1								
COLLEGE	77.50	23.2	11	57	-2								
THULE	77.98	356.3	11	59	-2								
RESOLUTE	79.92	3.0	12	9A	-3						15	11	PP
TAMANRASSET	81.16	290.9	12	18	-1						15	22	PP

SOUTH POLE	115.23	180.0	18 39	-4							

MAY 24 0.H 9.M 26.S EPICENTRE 18.87 -64.35 DSPTB= 0=KM

A= 0.40990 B=-0.85359 C= 0.32149 D=-0.9014 E=-0.4329
G= 0.1392 H=-0.2898 K=-0.9469 HT= 4.9

SE= 2.80

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
SAN JUAN	1.75	254.1	0 33	1				
ANTIGUA	3.57	120.5	0 49K	-9				
FORT FRANCE	5.13	142.9	1 18	-2	2 22	1		
ST. VINCENT	6.39	152.0	1 37	-1				7 2
GRENADA	7.24	159.2	1 48	-2				7 37
BARBADOS	7.32	140.7	1 53	2				
TRINIDAD	8.66	160.4	2 10	1				
CARACAS	8.69	197.0	2 13	3	3 34	-16		
BERMUDA	13.46	358.8	2 56	-19	5 10	-36		
FUQUENE	16.16	215.7	3 50	0	6 53	3		
BOGOTA	17.05	215.0	4 7	6	7 18	7		
COLUMBIA	21.17	318.7	4 48	-1	8 41	0		
CHAPEL HILL	21.37	325.6	4 52	1				
WASHINGTON	22.81	333.7	5 4	-1				
FORDHAM	23.38	341.5	5 43	32	9 24	3		
PALISADES	23.54	341.7	5 12	-1	9 23	-1		5 32 PP
MORGANTOWN	24.69	330.2	5 26A	2	9 53	9		
BREBEUF	27.65	345.9	5 52	1				11 19
OTTAWA	28.09	342.8	6 37	42	11 30	50		
HUANCAYO	32.58	200.2	6 34	-1	11 49	-2		
LA PAZ	35.34	186.3	6 57	-2				
BOULDER	40.97	309.9	7 46	0				
RAPID CITY	41.03	316.5	7 45	-2				
LARAMIE	41.59	311.6	7 52	1				
TUCSON TELE.	43.60	297.3	8 8	0				9 54 PCP
TUCSON	43.68	297.2	8 9	1				8 46
SALT LAKE C.	45.97	308.8	8 26	-1				
BOULDER CITY	47.41	301.8	8 38	0				
BUTTE	47.92	315.6	8 42	0				
EUREKA	48.81	306.3	8 53	4				10 17 PCP
HUNGRY HORSE	49.59	318.1	8 54	-1				
PASADENA	49.97	299.0	8 57	-1				9 16
FRESNO	51.48	302.3	9 8	-1				
RENO	51.76	305.8	9 12	1				
LICK	52.99	302.9	9 20A	-1				
MINERAL	53.21	306.6	9 21K	-1				
BERKELEY	53.51	303.5	9 23A	-1				
SHASTA	53.85	307.0	9 25A	-2				
SIDA	54.64	23.2	9 33	0				
CORVALLIS	54.98	311.6	9 33	-2				
VICTORIA	55.69	316.3	9 37A	-3				
GRANADA	55.74	57.5	9 28K	-13				
THULE	57.61	358.9	9 45	-9				
RESOLUTE	58.22	350.9	9 55	-3	17 55	-4		
FOLINIERE	58.87	43.9	10 2	-1				
PARIS	60.83	44.1	10 24	8				
SETIF	62.99	58.4	10 35	4				
STRASBOURG	64.31	44.5	10 41	1				
TAMANRASSET	64.88	73.2	10 43K	0				
STUTTGART	65.26	44.3	10 52	6				
HALLE	66.97	41.3	10 59	2				
SKALSTUGAN	67.33	28.1	10 57	-2				
COLLMBERG	67.64	41.5	11 6	5				
UPPSALA	69.87	32.2	11 13	-2				
COLLEGE	70.32	333.2	11 15	-2				
PORT STANLEY	70.49	175.7	11 16	-2				
KIRUNA	70.72	23.6	11 19	-1				
SODANKYLA	73.13	23.8	11 33	-1				
NURMIJARVI	73.29	31.1	11 35	0				
APATITY	75.66	23.1	11 47	-2				
MOSCOW	81.15	34.1	12 26	7				
TIKSI	89.28	355.8	12 58	-1				
SOUTH POLE	108.75	180.0	18 45	14				21 58 PP
SHILLONG	130.14	28.4						22 33
BRISBANE	144.69	248.9	19 38	-1				

PORT MORESBY	148.09	282.8	19 48	4							
CHARTERS TS.	151.13	262.6	19 55	6							
ADELAIDE	154.04	227.3	20 1	8							20 15 PKP2

MAY 24 4.H 39.M 28.S EPICENTRE -20.59-179.03 DEPTH= 645.KM

DEPTH OF FOCUS= 0.097R

A=-0.93677 B=-0.01579 C=-0.34959 D=-0.0169 E= 0.9999
G= 0.3495 H= 0.0059 K=-0.9369 HT= 4.5

SE= 1.36

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
SUVA	3.41	315.0	1	27	1	2	36	2				
APIA	9.67	46.9	2	16	-1	4	7	1				
ONERAHI	16.20	199.6	3	22	3							
KARAPIRO	17.90	194.1	3	34A	0							
TUAI	18.45	189.5				6	50	15				
TONGARIRO	19.13	193.0	3	42	-4							
WELLINGTON	21.29	192.9	4	21	16							
BRISBANE	26.38	249.5	4	50	0							
RIVERVIEW	29.50	237.2	5	18A	1							
CHARTERS TS.	32.52	264.8	6	41	59						10	53
PORT MORESBY	34.43	283.8	5	57K	-1				7	35		
ADELAIDE	39.72	239.8	6	40K	-1							
CAPE HALLETT	52.09	184.1	8	15	0							
SCOTT BASE	57.72	183.5	8	53A	0							
BYRD STATION	64.71	170.4	9	37	-2				11	55		
SOUTH POLE	69.54	180.0	10	7	-1	18	25	-2				
BERKELEY	78.90	42.4	11	0A	0							
LICK	78.97	43.2	11	1A	1				11	11		
PASADENA	79.46	47.5	11	2	-1							
FRESNO	79.84	44.5	11	5A	0							
SHASTA	80.53	40.1	11	9A	1							
MINERAL	80.80	40.7	11	10K	0				11	23		
RENO	81.43	42.2	11	14A	1							
CORVALLIS	82.39	36.6	11	18A	0							
BOULDER CITY	82.75	47.4	11	20	1							
TUCSON	83.74	52.3	11	25	1							
EUREKA	83.85	43.9	11	25	0							
TUCSON TELE.	83.86	52.3	11	25	0							
COLLEGE	88.51	12.8	11	44	-3				14	6		
HUNGRY HORSE	89.79	37.2	11	51	-2							
LARAMIE	91.66	46.3	12	2	1							
RESOLUTE	108.15	16.2	17	14	-3							
OTTAWA	113.58	48.4	17	25	-2							
SODANKYLA	130.48	347.3	17	57	-2						20	24 SKP
KIRUNA	131.20	350.3	17	59	-2							
SKALSTUGAN	136.36	352.7	17	57	-13							
NURMIJARVI	136.74	343.1	18	1	-10						20	45 SKP
ELISABTHVLLE	138.75	221.4	18	18A	3						20	53 SKP
UPPSALA	139.01	347.2	18	5	-10							
GOTEBORG	142.06	350.4	18	14	-8							
ASTRIDA	143.58	234.1	18	24A	0							
LWIRO	144.51	233.5	18	27A	2							
RUMANGABO	144.70	235.3	18	28A	2							
RATHFARNHAM	146.87	8.0	18	31	2							
JERUSALEM	147.43	297.1	18	34	4							
COLLMBERG	147.93	345.7	18	35	5							
HALLE	147.97	347.0	18	30	0							
JENA	148.59	347.1	18	30	-1							
STUTTGART	151.12	348.7	18	35	0							
LEOPOLDVILLE	151.51	211.0	18	44A	8				21	14		
STRASBOURG	151.54	350.5	18	27	-9						18	43 PKP2
EBINGEN	151.73	348.7	18	43	7							
FOLINIERE	151.86	2.0	18	38	2							
TAMANRASSET	175.24	298.1	18	58	1							

MAY 24 11.H 28.M 19.S EPICENTRE 25.99 90.34 DEPTH= 0.KM

A=-0.00526 B= 0.89999 C= 0.43589 D= 1.0000 E= 0.0058
G=-0.0025 H= 0.4359 K=-0.9000 HT= 3.1

SE= 3.36

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
SHILLONG	1.45	106.6	0	31	4	0	54	7					
CHATRA	2.96	287.1	0	48	-1	1	24	-1					
CHITTAGONG	3.86	159.1	1	7	5	1	54	6					
CALCUTTA	3.90	208.3	1	8A	6	2	5	16					
TOCKLAI	4.05	78.3	0	59	-5								
BOKARO	4.65	243.4	1	14K	1	2	7	-1			1	31	PG
VIZIANAGRAM	10.10	220.5	2	27K	-2	4	14	-10					
KUNMING	11.19	92.1	2	45A	1	4	52	1					
DEHRA DUN	11.66	294.5	2	48	-2	4	49	-14			2	57	PP
SEHORE	12.38	259.7				5	7	-13			5	23	SS
HYDERABAD	13.94	234.7	3	19	-2	5	43	-14			6	7	SS
SINING	14.41	39.9	3	26	-1								
PORT BLAIR	14.42	170.6	3	28	1	6	1	-8			6	15	SS
LAHORE	15.08	295.2	3	29	-7								
LANCHOW	15.30	45.7	3	36A	-3								
TIENSHUI	15.81	53.6	3	46	1								
PHU-LIEN	15.82	105.7	3	45	0	6	43	1			4	2	PP
MADRAS	16.07	218.4	3	45K	-4	6	32	-16			3	57	PP
POONA	16.96	247.4	3	56K	-4	6	52	-16					
BOMBAY	17.65	250.0	4	8	-1	7	30	6			4	17	PP
SIAN	18.04	58.5	4	10A	-3								
WARSAK DAM	18.10	300.6	4	10K	-4								
YINCHUAN	18.31	43.3	4	22	5								
KODAIKANAL	19.86	220.2				8	29	15					
KARACHI	20.95	274.7	4	48	1	8	35	-1					
QUETTA	21.04	286.8	4	46K	-1	8	36	-2			5	9	PP
CANTON	21.07	93.0	4	48A	0	8	42	4					
NAMANGAN	21.51	318.6	4	51	-1	8	48	1					
WUHAN	21.80	72.5	4	55	0	8	54	2					
PAOTOW	21.90	43.5	4	55	-1								
HONG KONG	22.05	94.5	4	57	-1	9	1	4					
TATUNG	23.74	48.0	5	17	3								
ULAN-BATOR	25.47	26.5	5	31A	0	9	56	0					
NANKING	25.57	69.7	5	30	-2	9	55	-3					
PEKING	25.68	50.5	5	33A	0	10	1	1					
ZO-SE	27.52	72.2	5	48A	-2	10	27	-3					
BAGUIO CITY	29.70	102.7	6	10	1								
CHANGCHUN	33.43	48.8	6	40A	-2								
SVERDLOVSK	37.45	333.4	7	16	0								
VLADIVOSTOK	37.82	52.4	7	18	-2								
TIFLIS	40.45	304.6	7	49	8								
MATUSIRO	41.89	63.5	7	51A	-2	13	46	-26			14	8	
SOTCHI	44.40	306.6	8	10	-4								
YAKUTSK	44.57	25.2	7	52	-23								
Y.-SAKHLINSK	46.06	48.9	8	25	-2								
KSARA	47.39	293.0	8	35	-2								
MOSCOW	48.09	322.8	8	48	5								
JERUSALEM	48.18	290.4	8	42	-2								
SIMFEROPOL	48.53	308.0	8	52	6						15	54	PS
TIKSI	50.46	14.8	8	58	-3								
ADDIS ABABA	51.64	260.7	9	11	1								
KISHINEV	52.29	310.5	9	19	4								
PULKOVO	52.87	326.7	9	23	4	16	54	6					
MAGADAN	53.05	33.7	9	30	9								
APATITY	53.76	336.5	9	22A	-4	16	52	-8			9	31	*SP
LWOW	55.51	314.0	9	48	9								
HELSINKI	55.59	326.6	9	37	-2						10	32	PCP
NURMIJARVI	55.79	327.0	9	38	-3						10	13	
SODANKYLA	56.21	335.3	9	40	-4								
BELGRADE	58.23	309.2	10	4K	6						10	58	PCP
KIRUNA	58.63	335.3	9	58	-3	18	12	8					
UPPSALA	59.25	325.9	10	2	-3								
RACIBORZ	59.25	314.5	10	11	6								
VIENNA-H.	60.63	312.5	10	16	1								
TANANARIVE	61.00	227.3	10	15	-2								
PRUHONICE	61.60	314.6	10	27K	6						11	5	PCP
SKALSTUGAN	61.76	330.2	10	17	-5								
COPENHAGEN	62.21	321.2	10	29	4	18	59	9					
GOTEBORG	62.27	323.6	10	21	-5								
COLLMBERG	62.41	316.3	10	33	6								
MESSINA	62.97	301.4	10	27	-3								
HALLE	63.03	316.6	10	33	2						11	31	

TOLMEZZO	63.17	310.8	10 36	4			11 47
JENA	63.35	316.0	10 38	5			12 11
RUMANGABO	64.78	255.1	10 41K	-1			
ASTRIDA	65.06	253.7	10 43K	-1			
STUTTGART	65.25	314.0	10 50	5			
PORT MORESBY	65.46	114.8	10 46A	-1			13 47 PPP
LWIRO	65.69	254.6	10 46A	-2			
UVIRA	66.03	253.2	10 48K	-2			
STRASBOURG	66.22	314.0	10 55	4			12 8
NORD	66.89	351.2	10 52	-4			
RABAUL	66.92	107.1	10 55	-1			
PARIS	69.55	315.2	11 18	6			
CHARTERS TS.	70.98	124.5	11 21	0			
SETIF	71.30	301.7	11 19	-4			13 25
BANGUI	71.66	265.9	11 22	-3			
ELISABTHVLLE	71.69	246.8	11 26A	1			
BROKEN HILL	72.36	243.7	11 27	-2			
RATHFARNHAM	73.36	321.5	11 47	12			
RELIZANE	75.15	302.7	11 51	5			
BULAWAYO	75.44	238.8	11 46	-1			
TAMANRASSET	75.94	288.6	11 48K	-2			14 50 PP
ADELAIDE	75.96	140.7	11 51A	1			
THULE	76.97	354.9	11 54	-2			
LEOPOLDVILLE	78.58	259.4	12 3K	-2			
COLLEGE	78.97	21.7	12 5	-2			
PRETORIA	79.00	234.3					12 36
RESOLUTE	79.52	1.4	12 7A	-3	21 59	-12	22 59 SCS
KIMBERLEY	83.20	233.6	12 27	-2			
WINDHOEK	85.78	242.6	12 42	0			
HUNGRY HORSE	102.84	16.4	14 3	2			18 1 PP
EUREKA	110.39	21.5	19 9	35			
SOUTH POLE	115.84	180.0	18 43	-1			
BYRD STATION	124.43	174.0	19 0	-1			
HUANCAYO	160.64	313.1	20 12	11			21 21 PKP2

MAY 24 13.H 19.M 32.S EPICENTRE 36.12 4.51 DEPTH= 0.KM

A= 0.80717 B= 0.06367 C= 0.58688 D= 0.0786 E=-0.9969
G= 0.5851 H= 0.0461 K=-0.8097 HT= -0.3

SE= 3.17

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
SETIF	0.72	83.4	0 10K	-8				
ALGIERS UNI.	1.34	299.3	0 26	0	0 45	0		0 30 PG
RELIZANE	3.23	264.6	0 55	2	1 37	4		
ALICANTE	4.56	300.7	1 14	2	2 5	-2		
TORTOSA	5.65	327.4	1 33	5	2 39	5		
GRANADA	6.61	281.6						1 46 PG
MALAGA	7.21	277.4	1 53	3	3 21	8		3 48 SG
TOLEDO	7.73	301.6	1 58	1	3 20	-6		3 55 SG
ROME	8.47	44.6	1 41	-26				2 11
MESSINA	9.05	73.5	2 32	17				
CLERMONT-FD.	9.70	354.2	2 21	-3				2 34
NEUCHATEL	11.02	8.8	2 59	17				
SERRA PILAR	11.41	300.0	2 43K	-5	4 42	-15		2 51 PP
TOLMEZZO	12.09	29.3	3 1	4				3 57
EBINGEN	12.49	13.9	3 3	1				
STRASBOURG	12.68	9.9	3 8	3				
PARIS	12.77	353.9	3 8	2				
TUBINGEN	12.85	13.7	3 8	1				
ZAGREB	12.99	38.2	3 15	6				
STUTTGART	13.10	13.8	3 9	-1				
FOLINIERE	13.16	345.4	3 8	-3				
TAMANRASSET	13.32	176.0	3 10	-3	5 41	-2		
JERSEY	13.92	341.7	3 27	6				
UCCLE	14.67	359.6	3 42	11				
BENSBERG	14.96	6.5	3 36	1				
SONNEBERG	15.05	16.7	3 38	2				3 59
JENA	15.65	16.8	3 41	-3	6 40	1		
PRUHONICE	15.65	24.7	3 45A	1				
KEW	15.73	348.8	3 44	-1	6 54	14		
MUNSTER	16.00	7.0	3 48	0				
HALLE	16.27	16.8	3 50	-2	7 2	9		8 41 PCP
COLLMBERG	16.35	19.2	3 52	-1				

POTSDAM	17.35	17.8	4 13	8					7 27	
KRAKOW	17.86	34.0	4 10	-2					4 24	PP
RATHFARNHAM	18.77	339.6	4 24A	1					4 46	PP
LWOW	19.71	39.9	4 31	-3					8 22	
WARSAW	19.91	30.9	4 34	-2					4 47	PP
COPENHAGEN	20.30	13.0	4 40	-1	8 34	10				
KISHINEV	21.12	51.4	4 46	-3						
ABERDEEN	21.52	350.2			9 3	15				
GOTEBORG	22.16	10.7	4 57	-2						
SIMFEROPOL	24.06	59.4	5 19	1						
UPPSALA	25.22	15.6	5 26	-3	9 56	3				
KSARA	25.75	85.9	5 37	3					11 14	SS
JERUSALEM	25.78	90.7	5 46	11						
SKALSTUGAN	27.90	7.4	5 54	0						
PULKOVO	28.95	27.1	6 3	0						
MOSCOW	29.82	38.4	6 10	-1						
KIRUNA	33.02	11.0	6 37	-2						
SODANKYLA	33.75	15.2	6 41	-5						
BANGUI	34.16	154.3							6 51	
APATITY	35.50	18.7	6 56	-5	12 29	-7				
ADDIS ABABA	41.19	122.4	8 12	24						
LEOPOLDVILLE	41.51	163.7	7 53A	2						
SVERDLOVSK	42.41	42.6	7 55	-3						
RUMANGABO	43.85	142.7	8 10	0						
ASTRIDA	45.15	143.1	8 19	-1						
UVIRA	45.62	144.4	8 25	1						
ELISABTHVLLE	52.18	151.1	9 17	2						
BREBEUF	57.70	305.5	9 54	-1						
RESOLUTE	57.96	342.0	9 54A	-3	17 58	2			21 34	SCS
OTTAWA	59.12	306.0	10 5	0						
SHILLONG	73.41	70.3	11 34	-2						
RAPID CITY	76.74	315.1	11 54	-1						
COLLEGE	77.03	348.3	11 55	-2						
HUNGRY HORSE	79.68	323.4	12 10	-1						
LARAMIE	79.84	314.0	12 14	2						
BOULDER	80.49	312.9	12 16	0						
EUREKA	86.92	318.1	12 50	2						
TUCSON TELE.	88.84	310.0	12 54	-4					13 15	
TUCSON	88.97	310.0	13 3	5						
SOUTH POLE	125.94	180.0	18 53	-12						

MAY 24 19.H 17.M 40.S EPICENTRE 17.61 -97.17 DEPTH= 63.KM

DEPTH OF FOCUS= 0.005R

A=-0.11908 B=-0.94627 C= 0.30066 D=-0.9922 E= 0.1249
G=-0.0375 H=-0.2983 K=-0.9537 HT= 5.2

SE= 1.95

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
OAXACA	0.70	146.6	0	14K	-2							
PUEBLA	1.72	325.5	0	28	-1	0	53	3				
VERA CRUZ	1.87	31.8	0	30A	-1	1	0	7			1	12
TACUBAYA	2.62	313.1	0	38K	-3	1	18	6			1	33
COMITAN	5.01	104.9	1	15	0							
LEON	5.50	310.2	1	22	1	2	35	11			2	55
GUADALAJARA	6.57	298.7	1	37	1	2	56	6			2	14
MANZANILLO	6.95	283.0	1	38	-3	3	7	7				
MERIDA	7.87	63.8	1	48K	-6	3	23	0				
SAN SALVADOR	8.57	115.6	2	6	2	3	48	8				
SANTIAGO MA.	9.33	114.8	2	16	2	4	13	14				
MAZATLAN	10.27	304.2	2	39	12	4	27	5			5	28
CHIHUAHUA	13.68	324.9	3	16K	4	5	54	11			3	44
DALLAS	15.18	1.3	3	32	0							
LITTLE ROCK	17.64	13.2	4	3A	0							
FAYETTEVILLE	18.60	7.6	4	14	0							
TUCSON	19.10	322.3	4	21	1	7	39	-8	4	41		
TUCSON TELE.	19.10	322.7	4	20K	0							
COLUMBIA	21.81	38.4	4	47A	-1	8	48	8			8	10
ST. LOUIS 1	21.82	14.8	4	48A	0	8	49	9				
FLORISSANT	21.93	14.3	4	49A	0							
GALERAZAMBA	22.28	104.8	4	58	5							
BOULDER	23.43	344.2	5	5	1							
BOULDER CITY	24.08	322.9	5	12A	2	9	36	16			5	38
LARAMIE	24.70	344.7	5	19	3						17	14

PASADENA	24.98	315.3	5 20K	1	9 45	9	5 37	8 54 PCP
BOGOTA	26.04	117.0	5 32	3	10 4	11		
SALT LAKE C.	26.32	334.3	5 32K	0	9 38	-20		6 21 PP
MORGANTOWN	26.55	30.8	5 34A	0				
RAPID CITY	26.88	350.4	5 36	-1	10 27	20	6 1	
EUREKA	27.23	327.0	5 41K	1	11 19	66		
CLEVELAND	27.32	26.2	5 40A	-1	10 16	2		
GEORGETOWN	27.51	35.5	5 43	0	10 22	5		
FRESNO	27.62	318.2	5 42	-1				
PENNSYLVANIA	28.47	31.8	5 50	-1	10 41	8	6 16	6 58 PP
LICK	29.14	317.3	5 57K	0			6 18	9 6 PCP
RENO	29.39	322.7	6 0K	1				
SAN JUAN	29.53	83.7	5 59	-2	10 50	1	6 23	
BERKELEY	29.85	317.6	6 3K	0	11 6	12		9 5 PCP
CARACAS	30.15	99.5	4 55K	-71	9 50	-69		
BOZEMAN	30.28	340.5	6 6K	-1	10 55	-6		
FORDHAM	30.63	36.1	6 15	5	10 11	-56		
PALISADES	30.73	35.8	6 9A	-2	11 4	-4	6 34	7 20 PP
MINERAL	30.96	322.1	6 13	0				
BUTTE	31.09	339.0	6 14K	0	10 34	-40		6 38 PP
UKIAH	31.19	318.7	6 15K	0			6 40	40 3 PKPPKP
SHASTA	31.65	321.9	6 18	-1				
BERMUDA	32.76	57.1	6 25	-4	11 30	-10		7 8 PP
ARCATA	32.77	320.6	6 29	0				
OTTAWA	32.99	28.2	6 30	-1	11 46	2		
HUNGRY HORSE	33.61	339.5	6 35K	-1	12 34	41		8 4 PCP
BREBEUF	34.04	30.1	6 39K	-1	12 3	3		
ANTIGUA	34.38	85.4	6 36	-7	11 53	-12		
GRENADA	34.67	94.2	6 43	-2				12 12
FORT FRANCE	34.68	89.4	6 45	-1	12 13	3		
CORVALLIS	34.69	326.4	6 46A	0				
ST. VINCENT	34.86	92.1	6 46	-1				
SHAWINIGAN	35.21	29.6	6 41	-9	12 22	4		
TRINIDAD	35.33	96.4	6 50	-1				12 18
BARBADOS	36.46	91.6	7 1	0				
HUANCAYO	36.52	142.3	7 3	2	12 47	9		
SEVEN FALLS	36.55	30.6	7 1	0	12 31	-8		
VICTORIA	37.51	331.1	7 9K	0	12 56	3		8 46
HORSESHOE B.	38.07	332.2	7 13K	-1	13 2	0		9 36
ALBERNI	38.69	330.9	7 21K	2	13 16	5		
HALIFAX	38.93	38.9	7 22A	1	13 12	-3	7 43	8 52 PP
LA PAZ	44.35	138.2	8 6K	0	14 30	-5	8 24	9 58 PP
SITKA	48.57	333.2	8 39A	0			9 9	10 38 PP
ANTOFAGASTA	48.62	146.6	8 39	0				20 38
IVIGTUT	55.52	26.3	9 54	23	17 12	2	10 17	11 2 PP
SANTA LUCIA	56.70	153.5	9 39	0			11 43	
RESOLUTE	57.10	0.7	9 40K	-2	17 29	-1		13 15 PPP
HONOLULU	57.27	284.3	9 43K	0	17 44	11		
COLLEGE	57.99	337.1	9 47K	-1	17 41	-1	10 19	11 35 PP
THULE	60.69	7.5	10 6	-1	17 52	-25	10 32	12 32 PP
TAHITI	62.16	238.3	10 6	-11	17 52	-44		
BUENOS AIRES	63.63	144.9	10 26	-1				
ANGRA DO HO.	63.70	55.1	10 54	27	19 5	10		12 34
LA PLATA	64.16	144.7	10 28K	-2	19 1	0		13 10 PP
PONTA DELGDA	64.96	56.1	10 38K	3			10 58	
REYKJAVIK	67.88	27.3	10 57A	3	19 55	9	11 20	13 40 PP
SCORESBY SD.	68.60	20.4	10 57K	-1	19 56	2	11 19	11 26 PCP
SIDA	69.55	27.7	11 7A	3			11 27	
AKUREYRI	69.60	25.7			20 10	4		
NORD	71.31	8.8	11 13K	-2	20 28	2	11 39	20 52 *SS
RATHFARNHAM	76.61	38.1	11 45K	0	21 28	3	12 7	38 54 PKPPKP
MBOUR	76.62	79.0	11 47	2	21 35	10		
PORT STANLEY	77.06	156.1	11 48	0				12 7
ISFJORD	77.09	11.5	11 52	4				
SERRA PILAR	77.59	50.6	11 46A	-5	21 36	0	12 12	14 45 PP
LISBON	77.70	53.1	11 52K	1	21 36	-1	12 18	14 53 PP
EDINBURGH	77.81	35.1	11 50	-2	21 42	4	12 20	14 48 PP
COIMBRA	77.92	51.5	11 54K	1	21 42	3	12 34	14 55 PP
ABERDEEN	78.10	33.7	11 56K	2	21 53	12		14 58 PP
APIA	79.94	252.0	12 13	9				
JERSEY	80.12	41.6	12 5A	0	22 5	2		
KEW	80.60	39.0	12 7K	0	22 12	4	12 34	15 10 PP
BERGEN	80.87	29.4	12 10K	1	22 16	5	12 35	27 35 SS
KHEYS	81.17	5.2	12 11	1	22 18	4		
TOLEDO	81.26	51.0	12 11K	0	22 20	5	12 38	15 22 PP
FOLINIERE	81.26	41.7	12 11	0				
MALAGA	81.84	54.2	12 14K	0	22 24	3	12 36	15 30 PP
GRANADA	82.33	53.5	12 21A	5	22 33	7		15 22 PP

SKALSTUGAN	82.71	25.2	12	19K	1				12	40	30	44 PKKP
PARIS	83.12	41.0	12	22	2						15	34 PP
ALMERIA	83.29	53.6	12	21K	0	22	39	4	12	50	15	48 PP
UCCLE	83.60	38.7	12	21	-2	22	35	-3				
DE BILT	83.64	37.3	12	23K	0	22	41	2	12	45	15	49 PP
KIRUNA	83.66	19.8	12	23K	0	22	39	0	12	45	15	58 PP
PETROPAVLOVK	84.31	324.0	12	27	1	22	48	3				
ALICANTE	84.35	51.7	12	28	2	22	45	-1			17	38 PPP
CLERMONT-FD.	84.52	43.8	12	28K	1	23	27	40				
GOTEBORG	85.09	30.6	12	30K	0				12	52	38	40 PKPPKP
MUNSTER	85.09	36.9	12	33	3	23	1	8				
BENSBERG	85.21	37.9	12	31A	0	23	1	7				
BARCELONA	85.28	48.1	12	31	0	22	57	2				
MAGADAN	85.61	331.7	12	33	0							
TIKSI	85.69	346.8	12	31	-2	22	49	-10				
SODANKYLA	85.88	18.8	12	33	-1	23	7	6			15	53 PP
RELIZANE	85.95	53.9	12	35	1	23	6	5			15	55 PP
COPENHAGEN	86.19	32.3	12	37	1	23	13	9	12	55	16	15 PP
OHIGGINS	86.27	163.4	12	34	-2	22	54	-10				
ARGENTINE I.	86.31	166.8	12	36	0							
STRASBOURG	86.48	40.0	12	37K	0	23	15	9	12	58	15	50 PP
NEUCHATEL	86.56	41.7	12	38	1	22	52	-15				
UPPSALA	86.70	27.3	12	37K	-1	22	57	-12	13	0	16	1 PP
BASLE	86.76	41.0	12	39	1	23	17	8				
STUTTGART	87.27	39.5	12	41	0	23	7	-7	13	0	16	14 PP
TUBINGEN	87.29	39.7	12	42K	1				13	2	23	20 SCS
EBINGEN	87.37	40.1	12	42K	1				13	12	16	5 PP
ALGIERS UNI.	87.52	52.3	12	43	1	23	21	5			16	13 PP
HALLE	87.74	36.2	12	40	-3	23	22	4	13	3	16	7 PP
APATITY	87.75	17.0	12	40	-3	23	14	-4	13	2	16	30 PP
JENA	87.78	36.8	12	43	0	23	2	-17	13	4	16	8 PP
SONNEBERG	87.79	37.4	12	43	0	23	8	-11	13	4	16	10 PP
RAVENSBURG	87.93	40.3	13	14	30						17	12
POTSDAM	87.98	35.1	12	46	2	23	6	-15	13	3	16	11 PP
MONACO	88.12	44.6	12	44	-1				13	14		
CHUR	88.25	41.1	12	47A	2	23	13	-10			16	13
PLAUEN	88.29	37.1	12	43	-3	23	2	-21	13	11	16	12 PP
COLLMBERG	88.42	36.1	12	47	1	23	34	9	13	16	16	41 PP
CHEB	88.61	37.4	12	46	-1	23	32	6	13	14	16	22 PP
PAVIA	88.70	42.8	12	49K	1	23	19	-8			18	0 PPP
NURMIJARVI	89.29	24.9	12	51	1	23	39	6			16	24 PP
SETIF	89.49	52.1	12	50A	-1	23	43	8			16	16 PP
HELSINKI	89.62	25.0	12	51	-1	23	39	3	13	20	16	27 PP
PRAGUE	89.79	36.8	12	51	-2	23	46	9	13	21	16	28 PP
PRUHONICE	89.90	36.9	12	54	1	23	47	9			16	29 PP
SUVA	90.26	251.1	12	50	-5						15	40 PP
BOLOGNA	90.38	42.7	12	51	-5	23	23	-20			16	54
PRATO	90.49	43.4	12	52	-4	23	50	6				
TOLMEZZO	90.62	40.5	13	0	3	23	23	-22			16	33 PP
TRIESTE	91.41	40.9	13	1K	1	24	0	8	13	31	16	39 PP
VIENNA-H.	91.78	37.8	13	3	1	23	22	-33	13	34	16	40 PP
RACIBORZ	91.91	35.6	13	2	-1				13	26	16	44 PP
PULKOVO	91.97	23.7	13	2	-1				13	23		
BRATISLAVA	92.24	37.6	13	4K	0	24	0	1			16	45 PP
ROME	92.26	44.7	13	6K	2	23	36	6	13	24	16	31 PP
WARSAW	92.30	32.9	13	3	-1	24	5	5	13	18	16	51 PP
YAKUTSK	92.42	339.8	13	4	-1							
ZAGREB	92.71	40.1	13	6K	0	24	14	11	13	35	16	50 PP
KRAKOW	92.88	35.1	13	8	1	23	21	-13	13	26	25	23 PS
HURBANOVO	93.03	37.5	13	10	2	24	2	-4	13	38	16	58 PP
SKALNATE PL.	93.52	35.7	13	10	0	24	5	-5			16	42 PP
BUDAPEST	93.72	37.6	13	37	26	24	16	5				
TAMANRASSET	94.45	64.6	13	16	2	24	24	6			17	3 PP
LWOW	95.21	33.8	13	18	0	24	26	1				
UGLEGORSK	95.40	325.4	13	18	-1							
TIMISOARA	95.91	38.3	13	21	0	24	32	2			17	27 PP
BELGRADE	95.94	39.3	13	22K	1	24	30	-1			17	22 PP
MESSINA	96.03	47.0	13	21	0	24	33	1	13	36	25	5 *SS
TARANTO	96.11	44.3	13	22	0	23	52	1				
REGGIO CALA.	96.15	47.0	13	21	-1						16	38 PP
Y.-SAKHLINSK	96.24	323.4	13	21	-1							
MOSCOW	97.60	23.9	13	28	-1	24	44	-1				
BYRD STATION	98.17	183.8	13	31	0	24	7	5	13	52	17	32 PP
CAMPULUNG	98.40	37.2									17	35 PP
IASI	98.67	34.5	13	34	1	24	4	0			17	30 PP
BACAU	98.68	35.3				24	5	1			17	15 PP
SOFIA	98.84	40.0	13	35	1	24	9	4			18	5 *SPP
FOCSANI	99.37	35.9	13	27	-10						26	30 PS

KISHINEV	99.46	34.1	13	36	-1							
BUCHAREST	99.51	37.4	13	35	-2						17	44 PP
WELLINGTON	99.98	229.9				24	16	5			26	44 PS
ATHENS	101.70	43.8	13	47	0	24	20	1				
SVERDLOVSK	103.55	12.3	13	55	0							
SIMFEROPOL	103.60	33.3	13	55	0				14	17		
TUKUBASAN	103.89	315.5	13	56K	-1	25	42	5			18	14 PP
VLADIVOSTOK	104.64	325.1	14	1	1							
MATUSIRO	104.95	316.7	14	3K	2	25	40	-6	14	23	18	21 PP
CAPE HALLETT	107.40	198.7	14	12	777	24	36	-8			18	44 PP
SOTCHI	107.43	31.4	14	12	777							
SOUTH POLE	107.50	180.0	14	14	777				14	35	17	48 PP
CHANGCHUN	107.55	329.2									18	41 PP
ABUYAMA	107.68	316.6	13	52K	777						27	52
IRKUTSK	107.95	346.3	14	19	777							
SCOTT BASE	108.37	192.8	18	41	777	24	46	-3			19	1 PP
RABAUL	110.94	272.2	18	28	2							
TIFLIS	111.29	29.7	14	33	777	25	19	17				
ULAN-BATOR	111.30	342.9	14	31	777	24	59	-3				
MAKHACH-KALA	111.53	27.1	18	22	-5	25	12	9				
GUAM	111.54	292.7	18	23	-4							
LUANDA	111.98	92.6									19	8 PP
KSARA	112.05	41.0	14	26	777	24	52	-13			19	14 PP
SEMIPALATNSK	112.25	1.8	14	33	777							
LEOPOLDVILLE	112.67	87.4	14	36	777	25	2	-5			19	14 PP
JERUSALEM	112.96	43.1	14	41	777				15	14		
BANGUI	113.02	77.3									18	17
GORIS	113.75	30.2	14	39	777							
PEKING	114.78	332.3	18	36	3						19	34 PP
BRISBANE	115.15	247.4	18	35	1	25	24	7				
PORT MORESBY	117.17	268.3	18	41	3	25	12	-12	19	2	19	48 PP
RIVERVIEW	117.38	240.6				25	28	3			19	53 PP
TERRE ADELIE	118.23	202.5									29	53
WINDHOEK	118.50	106.5	18	43	2							
ZO-SE	119.15	322.5	18	43	1						20	0 PP
NANKING	119.78	324.9	18	44	1				19	6	20	3 PP
CHARTERS TS.	120.22	256.8	18	45	1	25	39	4				
FORT NELSON	120.36	230.2				27	16	101			30	5 PS
NAMANGAN	120.80	9.8	18	47	2						30	12 SKSP
HERMANUS	121.32	119.9				27	32	114			20	13 PP
MELBOURNE	122.45	236.1									20	30 PP
STALINABAD	122.60	13.1	18	50	1							
SIAN	122.76	334.3	18	49K	0						20	24 PP
LANCHOW	123.03	339.7	18	51K	2						20	30 PP
WUHAN	123.23	327.1	18	48	-2				19	10	20	25 PP
LWIRO	124.86	80.2									20	41 PP
RUMANGABO	125.04	79.0	18	54	1						19	39 *SPKP
UVIRA	125.56	81.5	18	57K	3						19	44 PP
ASTRIDA	125.85	80.2	18	56K	1						19	52 PP
KIMBERLEY	125.95	113.0	18	57	2							
ELISABTHVLLE	126.21	91.7	18	59A	4				19	19	20	54 PP
GRAHAMSTOWN	127.44	118.7	19	0A	2							
WARSAK DAM	127.57	11.8	18	58	0							
ADELAIDE	127.65	239.2	19	0	2				19	22	21	2 PP
BROKEN HILL	127.80	94.8	18	42	-17				19	20		
CHENGTU	127.86	336.8	19	0	1				19	22	21	3 PP
MAWSON	128.41	170.4	18	59K	-1				19	19	21	5 PP
BULAWAYO	128.82	101.9	18	48	-13				19	23		
PRETORIA	128.87	109.1	19	6	5							
ADDIS ABABA	129.06	62.2	19	6	5						21	36 PP
CANTON	129.79	322.6	19	4	2				19	25	21	14 PP
HONG KONG	129.86	321.1	19	6	4						21	17 PP
QUETTA	130.09	18.0	19	4	1	26	0	-4	19	26	21	17 PP
LAHORE	130.45	9.5	19	7	3				19	30	21	19 PP
MANILA	130.61	308.0	19	7	3						30	24
MIRNY	130.63	185.3	19	3	-1						28	9 SKKS
PIETERMZBURG	130.86	114.1									22	36 PKS
DEHRA DUN	132.13	5.6	19	13	6						21	41 PP
LCO. MARQUES	132.86	109.3	19	9	1						21	32 PP
KUNMING	133.40	334.9	19	11	2				19	34	21	39 PP
TOCKLAI	134.41	345.0	19	19	8							
PHU-LIEN	135.26	327.6	19	17	4	26	3	-12			21	50 PP
SHILLONG	136.19	348.2	19	2	-12							
BOKARO	138.71	355.9	19	32	13						22	8
CHITTAGONG	139.32	347.2	19	24	4						22	50 PP
BOMBAY	142.41	15.6	19	23	-3						22	48 PP
POONA	143.02	14.2	19	25	-2						22	39
VIZIANAGRAM	144.49	359.0	19	30	1							
HYDERABAD	144.92	7.3	19	31	1							

TANANARIVE	146.51	97.8	19 37A	4			20 3		22 30	PP
PERTH	146.96	239.1	19 35	1						
PORT BLAIR	149.31	340.7	19 40	3					23 20	
MADRAS	149.48	5.1	19 46	9						
KODAIKANAL	151.84	11.2	19 49	8						
LEMBANG	153.55	290.8	19 45K	2						
MEDAN	153.77	321.9	19 47	3						
DJAKARTA	153.95	292.9	19 44A	0						
COLOMBO	155.47	7.1	19 48	2					28 12	PPP

MAY 26 4.H 13.M 5.S EPICENTRE 27.11 127.37 DEPTH= 108.KM

DEPTH OF FOCUS= 0.012R

A=-0.54096 B= 0.70844 C= 0.45329 D= 0.7948 E= 0.6069
G=-0.2751 H= 0.3603 K=-0.8914 HT= 2.7

SE= 2.60

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
YAKUSIMA	4.32	38.9	1 OK	-4	1 47	-7		
KAGOSIMA	5.24	31.3	1 15	-2	2 21	4		
ILAN	5.57	246.5	1 24	3	2 17	-8		
TOMIE	5.62	12.2	1 23K	1	2 28	2		
TAIPEI	5.65	249.8	1 25	2	2 30	3		
MIYAZAKI	5.95	35.4	1 24	-3	2 29	-5		
NAGASAKI	6.01	20.7	1 26K	-1	2 37	1		
HWALIEN	6.06	240.2	1 28	0				
UNZENDAKE	6.13	23.4	1 30	1	2 40	1		
HSINCHU	6.20	249.6	1 5	-25	3 5	25		
KUMAMOTO	6.38	26.1	1 32	-1	2 43	-2		
ASOSAN	6.60	28.2	1 35	-1				
SAGA	6.62	21.8	1 36	0				
ZO-SE	6.71	307.8	1 38	1	2 51	-2		
TAICHUNG	6.72	245.4	1 37	0				
HSINKONG	6.74	235.0	1 33	-5	2 45	-8		
ALISHAN	6.93	240.4	1 47	7				
HUKUOKA	6.97	21.5	1 40	-1	2 57	-2		
TAITUNG	7.12	233.8	1 42	-1	2 51	-12		
OOITA	7.12	30.1	1 40	-3				
SIMIDU	7.45	39.4	2 9	22				
TAWU	7.55	232.5	1 45	-4				
TAINAN	7.66	239.3	2 3	13	3 50	34		
HENGCHUN	7.88	231.2	1 54	1	3 17	-4		
MATUYAMA	8.15	33.4	1 55	-2	3 15	-13		
KOTI	8.34	38.2	1 55	-4	3 30	-2		
HIROSIMA	8.44	29.8	1 58	-3	3 37	2		
HAMADA	8.75	26.3	2 6	1	3 36	-6		
NANKING	8.93	305.5	2 8K	1	3 49	2		
TAKAMATU	9.20	37.0	2 4	-7	3 41	-12		
TOKUSIMA	9.31	40.1	2 7	-5				
OKAYAMA	9.41	35.1			3 48	-10		
MATSUE	9.64	29.0	2 24	7				
SUMOTO	9.68	40.0	2 13	-4				
YONAGO	9.74	30.2			3 57	-8		
OSAKA	10.27	41.0	2 42	17	4 24	5		15 24 SCS
ABUYAMA	10.45	40.3	2 21K	-7				
NARA	10.47	41.9	2 25	-3				
KYOTO	10.65	40.2	2 29	-1				
KAMEYAMA	10.97	43.1	2 35	0				
HIKONE	11.13	40.9	2 34	-3				
NAGOYA	11.49	43.3	2 36	-5	4 37	-11		
GIHU	11.53	41.9	2 37	-5	4 43	-6		
HUKUI	11.70	38.2	2 59	15				
WUHAN	11.73	289.9	2 46	1	5 0	6		
OMAESAKI	11.94	48.7	3 5	18				
SHIZUOKA	12.28	47.7	3 1	9				
BAGUIO CITY	12.36	212.0	2 52	-1	5 3	-6		
TOYAMA	12.69	38.7	2 53	-4	5 40	24		
DAIREN	12.70	339.2	3 0	3				
MISIMA	12.73	48.3	3 0	2	5 39	22		
KOHU	12.79	45.7	3 5	7	5 46	27		
MATUMOTO	12.82	42.1	2 53	-6				
OSIMA	12.82	50.5	3 10K	11	5 44	24		
HUNATU	12.84	46.6	2 55	-4	5 41	21		

HONG KONG	12.91	251.1	2	58	-2	5	18	-4		5	52
MATUSIRO	13.17	41.7	3	9K	6	5	45	17		15	27 SCS
MERA	13.21	50.9	3	10	6						
OIWAKE	13.22	43.2	3	11	7	5	48	19			
NAGANO	13.24	41.3	3	10	6	5	49	20		15	28 SCS
TITIBU	13.33	45.6	3	12	7	5	53	22			
YOKOHAMA	13.38	48.7	3	6	0	5	57	25			
CANTON	13.33	255.6	3	3	-3						
TAKADA	13.56	40.1	3	15	6						
TOKYO C.M.O.	13.59	48.0	3	11	2	5	48	11			
MAEBASI	13.59	44.2	3	13	4	5	52	15			
KUMAGAYA	13.63	45.7	2	59	-10	5	56	18			
TUKUBASAN	14.13	46.9	3	12A	-4	5	51	1		3	39 PP
UTUNOMIYA	14.18	45.4	3	12	-4	5	59	8			
KAKIOKA	14.19	47.0	3	6	-11						
MITO	14.47	47.1	3	22	2						
NIIGATA	14.59	39.5	3	22	0						
SHIRAKAWA	14.76	44.3	3	22	-2	6	11	6			
ONAHAMA	15.08	46.1								6	22
HUKUSIMA	15.31	42.9	3	28	-3						
YAMAGATA	15.57	41.2	3	33	-1						
SAKATA	15.71	38.5	3	57	21	7	5	38			
PEKING	15.89	327.0	3	40K	2						
SENDAI	15.91	42.2	3	36	-2	6	31	0			
VLADIVOSTOK	16.39	11.8	3	42	-2	6	42	0			
AKITA	16.44	36.9	3	42	-3						
MIZUSAWA	16.61	40.4	3	43	-4	6	47	0			
CHANGCHUN	16.76	354.8	3	51	2						
SIAN	17.38	298.6	3	58K	2	7	13	9		4	28 *SP
TATUNG	17.45	321.5	4	2	5						
MORI	18.45	32.5	4	35	26	7	44	16			
SUTTSU	18.84	30.5	4	35	22	7	50	14		15	44 SCS
SUIHWA	19.47	359.2	4	25	5						
SAPPORO	19.56	31.9	4	22	1	7	56	5		15	45 SCS
URAKAWA	19.60	36.1	4	26	4	8	2	10			
PAOTOW	19.64	317.5	4	23	1						
PHU-LIEN	19.95	256.1	4	24	-1				4 45	8	11 SS
TIENSHUI	19.97	297.1	4	27	2						
CHENGTU	20.75	285.3	4	32K	-1	8	12	-2		4	55 PP
YINCHUAN	20.99	307.9	4	36	0						
KUSIRO	21.03	36.8	4	38	2	8	25	6			
GUAM	21.18	126.4	4	37	-1	8	30	8	5 0	15	39 SCS
NEMURO	21.91	37.7				8	39	5			
LANCHOW	21.92	299.9	4	45K	0	8	41	6	5 7	5	17 *SP
KUNMING	22.26	270.3	4	49K	1	8	40	-1		5	22 PP
Y.-SAKHLINSK	23.21	27.4	4	54	-3						
WUWEI	23.41	303.6	5	1	2						
SINING	23.65	300.0	5	3	1						
UGLEGORSK	24.71	23.5	5	10	-2						
ULAN-BATOR	26.21	327.8	5	25K	-1						
YUMEN	28.31	305.4	5	45	0						
IRKUTSK	30.50	331.7	6	4	0						
SHILLONG	31.79	275.4	6	14K	-2	11	16	-1	6 36	7	25 PP
CHITTAGONG	32.56	269.5	6	23	1	11	32	3	6 50	7	40 PP
PETROPAVLOVK	34.84	33.2	6	39	-3				7 7		
YAKUTSK	34.94	1.9	6	38	-5	12	4	-2			
MEDAN	36.04	234.5	6	55A	3	12	31	8			
MAGADAN	36.23	20.0	7	9	15						
BOKARO	37.55	274.5	8	4	59					9	36 PCP
DJAKARTA	38.61	214.0								8	34 PP
LEMBANG	38.78	212.4	7	18	3	13	10	6			
RABAUL	39.28	138.6	7	20	1					7	52
TIKSI	44.57	0.7	7	58	-4						
MADRAS	46.23	262.0	8	16	0						
NAMANGAN	47.43	301.9	8	25	0						
POONA	49.75	271.9	8	44	1					19	26
STALINABAD	49.80	298.8	8	45	2						
CHARTERS TS.	50.29	156.7	8	47	0	15	53	3			
QUETTA	52.57	288.5	9	4K	0	16	23	2	9 30	11	10 PP
KARACHI	53.55	283.2	9	13K	2						
SVERDLOVSK	55.10	322.0	9	52	29						
BRISBANE	59.62	153.5	9	54	0	17	36	-18			
KHEYS	60.93	348.9	10	10	7						
ADELAIDE	62.63	169.5	10	14	-1	18	38	6		12	8
COLLEGE	63.62	28.3	10	20	-1	18	43	-2	10 49	38	58 PKPPKP
RIVERVIEW	64.67	158.2	10	29A	1	19	2	4			
MAKHACH-KALA	64.98	307.1	10	28	-2						
CANBERRA	65.37	160.6	10	33A	0				11 4	12	41 PP
MELBOURNE	66.68	164.9	10	40	-1	19	27	5	11 4		

APATITY	66.73	335.3	10	39	-2	19	21	-2			19	58 *SS
TIFLIS	67.24	306.4	10	45	1							
MOSCOW	67.91	322.4	10	47	-2				11	14		
ISFJORD	68.37	348.2	10	51	0							
SODANKYLA	69.29	336.0	10	54	-3						11	17 PCP
NORD	69.98	354.7	10	59	-2						13	59 PP
PULKOVO	70.39	327.8	11	2	-2							
KIRUNA	71.29	337.5	11	7	-2				11	27		
SITKA	71.48	34.9	11	10	0				11	38		
APIA	71.68	116.6	11	12	1							
NURMIJARVI	72.73	329.6	11	17	-1				11	42	11	53 *SP
HELSINKI	72.73	329.2	11	17	-1				11	42	11	34 PCP
SIMFEROPOL	73.54	312.3	11	22	0	20	43	1				
RESOLUTE	74.84	10.7	11	28K	-2	20	54	-2			14	19 PP
KISHINEV	76.11	315.8	11	36	-1							
UPPSALA	76.15	330.7	11	36A	-1							
THULE	76.25	3.8	11	35	-3				12	5	11	56 PCP
SKALSTUGAN	76.33	335.4	11	37	-1							
KSARA	76.59	301.2	11	41K	1	21	9	-7	12	11	14	34 PP
LWOW	77.75	319.9	11	44	-2						15	8
JERUSALEM	77.93	299.5	11	48A	1				12	20		
WARSAW	78.28	322.9	12	3	14						21	50 SCS
KARAPIRO	78.88	143.1	11	52	0							
GOTEBORG	79.79	330.5	11	56	-1							
TONGARIRO	79.83	144.0	11	56	-2							
KRAKOW	79.96	321.3	11	58	0				12	16	22	33 PS
SCORESBY SD.	80.26	350.0	11	59	-1	22	0	5			22	52 PS
COPENHAGEN	80.74	328.6	12	2K	0	22	1	1			15	41 PP
RACIBORZ	80.90	322.0	12	4A	1				12	14		
TIMISOARA	81.37	317.1	12	10	4							
HORSESHOE B.	81.37	38.6	12	4	-2							
SOFIA	81.55	313.7	12	6	-1	22	5	-3			15	14 PP
VICTORIA	81.75	39.4	12	8K	0							
BUDAPEST	81.76	319.4	12	10	2	22	17	7				
BELGRADE	82.31	316.6	12	12A	1	22	21	5				
POTSDAM	82.34	325.7	12	10	-1				12	40	15	18 PP
BRATISLAVA	82.53	320.7	12	10A	-2	22	25	7			15	29 PP
VIENNA-H.	82.89	321.0	12	14K	0						16	5
PRUHONICE	82.93	323.2	12	13K	-1	22	25	3	12	47	15	26 PP
PRAGUE	82.95	323.3	12	15	1							
COLLMBERG	82.99	324.8	12	14	0						15	26 PP
HALLE	83.41	325.4	12	12	-4	22	25	-2			15	27 PP
ATHENS	83.60	309.4	12	16K	-1							
PLAUEN	83.90	324.5	12	14	-5						14	39
CORVALLIS	83.91	42.7	12	20K	1							
JENA	83.94	325.0	12	19	0	22	33	1			15	32 PP
CHEB	84.02	324.0	12	18	-1							
ZAGREB	84.45	319.1	12	21K	0	22	35	-2	12	37		
SONNEBERG	84.46	324.7	12	22	1						15	31 PP
ADDIS ABABA	84.71	277.4	12	26	3							
MUNSTER	85.27	327.4	12	27	2						13	14
SIDA	85.41	345.4	12	27K	1							
TOLMEZZO	85.82	320.8	12	26	-2	22	40	-10			13	0
TRIESTE	85.84	319.9	12	28K	0	22	44	-6			24	29 SPP
REYKJAVIK	85.92	347.0	12	29K	0							
BENSBERG	86.12	326.8	12	29K	-1						13	11
STUTTGART	86.47	324.2	12	32K	1	22	48	-9			15	54 PP
SHASTA	86.56	45.6	12	32K	0							
TUBINGEN	86.69	324.1	12	33K	1							
RAVENSBURG	86.86	323.3	12	34	1							
UKIAH	86.88	47.3	12	33	0							
EBINGEN	86.96	323.9	12	34K	0							
HUNGRY HORSE	86.96	35.9	12	35	1	22	56	-5			16	3 PP
MINERAL	87.26	45.6	12	35	0				13	11		
STRASBOURG	87.33	324.7	12	35K	0	23	1	-4	12	56	16	1 PP
CHUR	87.48	322.6	12	36A	0						16	2
UCCLE	87.59	327.8	12	35	-2	22	46	-21				
BASLE	88.09	324.0	12	38A	-1							
BERKELEY	88.20	47.9	12	40K	0	23	18	5			13	5
PRATO	88.40	319.6	12	43	2	22	59	-16				
PAVIA	88.71	321.4	12	43K	1						16	12 PP
NEUCHATEL	88.76	323.8	12	41	-1							
ROME	88.76	317.4	12	42K	0	23	21	3			16	11 PP
RENO	88.85	45.5	12	44K	1							
LICK	88.90	48.1	12	43K	0				13	9	16	5 PP
BUTTE	89.20	37.1	12	44	0	23	27	5			15	55 PP
KEW	89.26	330.3	12	44K	-1	23	24	1	13	13	16	17 PP
PARIS	89.82	327.2	12	49	2	23	49	21				

BOZEMAN	90.24	36.7	12	50	1				13	34		
RATHFARNHAM	90.38	334.3	12	49A	-1				13	11	14	35
FRESNO	90.44	47.7	12	51	1							
MONACO	90.59	321.1	12	49	-2							
FOLINIERE	91.26	328.5	12	53	-1				13	29		
EUREKA	91.29	43.8	12	55	1				13	22	16	14 PP
CLERMONT-FD.	91.57	324.6	12	55K	0							
JERSEY	91.70	329.5	13	0	4	24	25	41				
SALT LAKE C.	92.96	40.8	13	3	1							
PASADENA	93.03	49.1	13	3	1	23	56	0			16	39 PP
WILKES	93.91	186.8									23	31 PP
BOULDER CITY	94.14	46.0	13	9	2						16	52 PP
TERRE ADELIE	94.24	174.5	13	4	-4						16	50 PP
RAPID CITY	95.38	34.0	13	13	0						17	9 PP
TORTOSA	96.36	322.3	13	17	0							
SETIF	96.61	316.3	13	18	0						17	12 PP
MIRNY	96.95	193.2				23	48	3			17	16 PP
ALGIERS UNI.	97.66	318.0	13	22	-1	24	34	-1			17	21 PP
ASTRIDA	97.97	271.2	13	31K	6						17	24 PP
ALICANTE	98.62	321.1	13	16	-11	24	28	-15				
LWIRO	98.65	271.9	13	17	-11						17	35
UVIRA	98.91	270.6	13	29K	0							
TUCSON	99.05	46.8	13	31	2						17	29 PP
TUCSON TELE.	99.07	46.7	13	30	0						17	35 PP
TOLEDO	99.45	324.2	13	32K	1	24	43	-7			17	39 PP
RELIZANE	99.84	318.6	13	31	-2						17	29 PP
SERRA PILAR	100.78	327.7	13	36A	-1							
GRANADA	101.19	322.1	13	41K	2						17	52 PP
MALAGA	101.96	322.2	13	41	-1	24	43	-28			17	23 PP
LISBON	102.92	326.5	13	47A	0							
CAPE HALLET	103.41	167.6				24	22	13			18	2 PP
ELISABTHVLLE	103.98	264.0	13	54	3				14	16		
BROKEN HILL	104.24	260.9	13	53	1						17	49
OTTAWA	104.84	16.6	17	32	777							
TAMANRASSET	105.04	305.7	13	57	777	24	33	17	14	29	18	17 PP
BREBEUF	105.25	15.1	17	4	777						18	21
FLORISSANT	105.54	29.8	18	22K	777	24	29	11			25	45 S
ST. LOUIS 1	105.74	29.8	18	11	777	24	29	10			18	19 PP
SCOTT BASE	107.28	171.9	18	28	777						18	35 PP
PENNSYLVANIA	108.49	20.0				26	8	-56			18	43 PP
MORGANTOWN	108.88	22.0	18	13	777				18	47		
PALISADES	109.41	16.9	14	15	777	24	43	8			18	43 PP
WASHINGTON	110.47	20.2	18	22	3							
LEOPOLDVILLE	111.65	276.3	18	24	3							
SOUTH POLE	116.95	180.0	19	31	59				20	39		
BERMUDA	119.74	11.7									30	15
BYRD STATION	120.49	169.3	18	40	2				19	5	20	3 PP
MBOUR	126.15	315.6	18	53	4						20	44 PP
SAN JUAN	132.93	17.6	19	3	1						21	19 PP
CARACAS	140.12	22.3	19	6K	-9						22	5 PP
CHINCHINA	141.13	38.3	19	20	3						22	48 SKP
FUQUENE	141.72	35.3	19	20	2						22	50 SKP
BOGOTA	142.26	36.5	19	24	5						23	2 SKP
HUANCAYO	153.96	59.3	19	44	6						23	51 PP

MAY 26 5.H 27.M 46.S EPICENTRE 17.03 -61.72 DEPTH= 55.KM

DEPTH OF FOCUS= 0.004R

A= 0.45322 B=-0.84253 C= 0.29110 D=-0.8807 E=-0.4737
G= 0.1379 H=-0.2564 K=-0.9567 HT= 5.3

SE= 1.59

	DELTA DEG.	AZ. DEG.	P M	P S	P O-C S	S M	S S	S O-C S	*PP M	*PP S	SUPP. M	SUPP. S
FORT FRANCE	2.35	166.4	0	36A	-1	0	52	-13				
ST. VINCENT	3.86	173.4	0	57A	-1	1	50	7				
BARBADOS	4.40	151.9	1	5K	-1	2	10	14				
SAN JUAN	4.40	288.4	1	6	0	1	54	-2				
GRENADA	4.95	180.1	1	12	-1	2	4	-6				
TRINIDAD	6.35	177.1	1	34	1	2	44	-1				
CARACAS	8.23	218.6	1	51	-8	3	18	-14				
BERMUDA	15.51	350.6	3	39	3	6	12	-15			4	14
FUQUENE	16.44	227.0				7	12	24				
BOGOTA	17.28	225.9	4	1	2	7	27	20			4	21 PP

CHINCHINA	18.14	230.2	4	11	2	7	35	9		
COLUMBIA	24.20	317.9	5	12	0	9	34	10		
CHAPEL HILL	24.31	324.0	5	15	2					
WASHINGTON	25.58	331.4	5	26	1	10	12	25		
FORDHAM	25.95	338.6	5	28	-1					
PALISADES	26.11	338.7	5	45	15	10	23	28		
BREBEUF	30.08	343.2	6	6K	0					
MORGANTOWN	27.54	328.5	5	44A	2	11	7	49		
OTTAWA	30.62	340.5	6	10	-1					
SHAWINIGAN	30.83	345.0	6	13	0					
HUANCAYO	31.87	205.8	6	20	-2	11	21	-6		
FAYETTEVILLE	34.46	309.8	6	43	-1					
MBOUR	43.10	87.0	7	57	1					
RAPID CITY	44.08	316.7	8	4	0					
TUCSON TELE.	46.66	298.6	8	25	1					
TUCSON	46.74	298.4	8	25	0					
SALT LAKE C.	49.07	309.5	8	43	0					
BOULDER CITY	50.50	302.8	8	55	1					
EUREKA	51.91	307.1	9	5	0				14	9 SCP
HUNGRY HORSE	52.62	318.4	9	9	-1					
MALAGA	53.96	56.8	9	48K	28				10	25 PCP
REYKJAVIK	54.27	20.2	9	23K	1					
FRESNO	54.57	303.2	9	24	-1					
TOLEDO	54.58	52.9	9	25K	0					
GRANADA	54.64	56.3	9	29K	4					
RENO	54.85	306.6	9	41	14					
SITKA	55.37	21.9	9	31K	1	10	1			
RATHFARNHAM	56.04	36.6	9	35A	0					
LICK	56.08	303.8	9	35K	0					
MINERAL	56.31	307.4	9	33A	-4				9	54
BRANNER	56.52	303.9	9	39	0					
SHASTA	56.95	307.7	9	39K	-3					
RELIZANE	57.90	58.2	9	45	-3					
FOLINIERE	58.48	42.9	9	52	0					
SCORESBY SD.	58.58	14.6	9	53	0					
KEW	59.10	39.8	9	55	-2					
THULE	59.51	358.2	10	0	1				10	46 PCP
RESOLUTE	60.43	350.4	10	5K	-1				10	56 PCP
CLERMONT-FD.	60.49	46.7	10	7	1					
UCCLE	61.89	41.1	10	14	-2					
TAMANRASSET	63.02	72.7	10	25K	2					
STRASBOURG	63.88	43.8	10	28K	-1					
EBINGEN	64.66	44.3	10	33	-1					
TUBINGEN	64.74	44.0	10	34	0					
STUTTGART	64.84	43.7	10	34	-1				11	8
JENA	66.46	41.4	10	44	-1				11	27
HALLE	66.71	40.8	10	43	-4				12	59 PP
NORD	67.21	6.5	10	49	-1					
COLLMBERG	67.37	41.0	10	51	0					
TOLMEZZO	67.40	46.3	10	49	-2				11	40
SKALSTUGAN	67.77	27.7	10	53K	-1					
PRUHONICE	68.35	42.4	10	57K	0					
UPPSALA	70.09	31.8	11	7A	-1					
ISFJORD	70.42	12.3	11	13	3					
KIRUNA	71.40	23.4	11	16	0					
BELGRADE	72.71	47.6	11	26K	2					
COLLEGE	73.08	333.6	11	25	-1					
NURMIJARVI	73.57	31.0	11	30	1				11	49 PCP
HELSINKI	73.76	31.3	11	30	0					
SODANKYLA	73.80	23.8	11	30	0					
ATHENS	76.21	54.2	11	45	1					
APATITY	76.36	23.2	11	44K	-1					
LEOPOLDVILLE	78.87	98.1	11	59K	0					
JERUSALEM	86.90	57.8	12	43	3					
LWIRO	91.15	92.0	13	1	1					
UVIRA	91.81	93.1	13	4K	1					
ASTRIDA	92.14	92.0	13	5K	1					
BYRD STATION	101.40	188.7	14	3	17					
SOUTH POLE	106.92	180.0	18	32	777					
MATUSIRO	123.48	340.8	18	51A	0				19	24
BRISBANE	146.30	245.9	19	52	19				20	10
CANBERRA	147.15	230.4	19	40A	6					
CHARTERS TS.	153.31	259.3	19	55	11					

MAY 26 6.H 35.M 59.S EPICENTRE 37.20 69.98 DEPTH= 0.KM

A= 0.27336 B= 0.75018 C= 0.60208 D= 0.9396 E=-0.3424
G= 0.2061 H= 0.5657 K=-0.7984 HT= -0.7

SE= 2.14

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
KULYAB	0.71	347.2						0 16 PG
STALINABAD	1.65	324.9						0 34 PG
WARSAK DAM	3.44	157.7	0 56	0				
NAMANGAN	3.99	18.7	1 7	3	2 0	8		
ANDIJAN	4.00	27.0			1 59	7		1 8 PG
TASHKENT	4.14	352.7	1 7	1	1 55	-1		
LAHORE	6.69	146.2	1 41	-1				
QUETTA	7.45	200.7	1 53A	1	3 15	-4		2 39
ASHKABAD	9.26	278.1	2 18	0				
DEHRA DUN	9.60	133.3	2 23	1	3 57	-15		4 5 SS
SEHORE	15.27	154.4	3 36	-2	6 18	-11		
CHATRA	17.85	120.5	4 6	-5	7 38	9		
MAKHACH-KALA	18.12	295.5	4 13	-1				
BOMBAY	18.41	171.5			7 52	11		
GORIS	18.68	284.3	4 20	-1				
POONA	18.91	168.6	4 25	1	8 3	10		
BOKARO	19.03	130.0	4 26	0	7 49	-6		
TIFLIS	19.93	290.9	4 36	0				
SVERDLOVSK	20.60	345.3	4 42	-1				
HYDERABAD	21.07	157.0	4 48A	0	8 38	-1		
CALCUTTA	21.56	127.6	4 53	0	8 55	7		
SHILLONG	21.94	115.7	4 56A	-1	9 4	9	5 18	5 37 PP
VIZIANAGRAM	22.40	144.4	5 31	30				
TOCKLAI	23.41	109.3	5 11	0				
SOTCHI	23.83	295.0	5 17	2				
CHITTAGONG	23.97	122.0	5 25	8	9 44	13		
MADRAS	25.78	156.6	5 47	13	10 16	14		6 35 PP
LANCHOW	27.10	82.0	5 45	-1	10 29	5		
KODAIKANAL	27.70	164.0			10 38	5		13 14
KSARA	27.87	273.3	5 56	3	10 43	7		6 45 PP
SIMFEROPOL	27.94	297.4	5 54	0	10 40	3		
IRKUTSK	28.34	46.9	5 56	-1				
MOSCOW	28.59	320.8	6 0	0				
CHENGTU	28.87	92.9	6 2	0	10 51	-1		
ULAN-BATOR	28.97	56.5	6 3	0				
JERUSALEM	29.05	269.7	6 5	1				
KUNMING	30.35	104.1	6 17	2	11 17	1		
COLOMBO	31.48	160.9						13 39
KISHINEV	31.74	301.1	6 26	-2				
IASI	32.61	301.4	6 44	9				7 46
LWOW	35.09	305.9	6 56	-1	12 32	3		
PEKING	35.89	70.9			13 16	34		
ATHENS	36.37	285.7	7 8A	0				
HELSINKI	36.52	323.5	7 10	1				8 31 PP
APATITY	36.65	337.5	7 9	-1	12 49	-5		
NURMIJARVI	36.77	324.0	7 12	1	12 51	-4		8 37 PP
WUHAN	37.34	86.8	7 18	2	13 5	1		
BELGRADE	37.65	297.6	7 18K	0				9 7 PPP
KRAKOW	37.74	306.2	7 20	1				8 44 PP
SODANKYLA	38.75	334.9	7 27	-1				
RACIBORZ	38.86	306.2						9 5 PP
CANTON	39.67	98.3	7 36	1	13 41	2		
ADDIS ABABA	39.79	233.1	7 38	2				9 8 PP
UPPSALA	40.01	321.6	7 37A	-1				
ZAGREB	40.66	299.7	7 44	1				9 29 PP
HONG KONG	40.77	98.7	7 43	-1	13 51	-5		
KIRUNA	41.09	333.9	7 46A	-1				
PRAGUE	41.28	306.4	7 46	-2				9 32 PP
CHANGCHUN	41.91	63.0	7 53	-1	14 10	-3		
POTSDAM	42.02	309.9	7 55	0				9 43 PP
COLLMBERG	42.11	308.3						9 38 PP
TRIESTE	42.23	299.8	7 57	1	14 34	17		9 41 PP
COPENHAGEN	42.35	314.8	7 58	1	14 31	12		9 41 PP
ZO-SE	42.39	82.6	7 59	1	14 19	-1		
MEDAN	42.58	134.9	8 14	15	14 18	-5		
TOLMEZZO	42.62	301.0	7 56	-3				10 12
GOTEBORG	42.68	317.8	7 59	-1				
PLAUEN	42.71	307.2	7 57	-3				9 46 PP
HALLE	42.76	308.6	7 57	-4				9 45 PP
JENA	43.03	307.8	8 3	0				9 47 PP
SKALSTUGAN	43.17	326.4	8 3A	-1				9 46 PP
SONNEBERG	43.32	307.1	8 6	1				9 51 PP

KHEYS	43.52	355.6	8	8	1					
ROME	43.87	294.7	8	13	3	15	17	36	9	55 PP
YAKUTSK	43.89	36.0	8	8	-2	14	38	-4		
STUTTGART	44.82	305.0	8	17	0					
CHUR	44.92	302.3	8	16	-2					
TUBINGEN	44.94	304.7	8	19	1					
EBINGEN	45.06	304.2	8	20	1					
MUNSTER	45.40	309.7	8	23	1					
TIKSI	45.43	22.4	8	20	-2	15	0	-4		
PAVIA	45.49	300.0	8	26	3	15	21	16	19	3
STRASBOURG	45.78	304.9	8	25	0	15	19	10	10	15 PP
BENSBERG	45.80	308.3	8	25	0					
BASLE	46.10	303.5	8	30	3					
NEUCHATEL	46.62	302.9	8	30	-2					
VLADIVOSTOK	46.75	62.5	8	31	-2					
MONACO	47.03	298.5	8	34	-1					
ISFJORD	47.08	346.3	8	36	1					
UCCLE	47.59	308.5	8	36	-3					
CLERMONT-FD.	49.49	302.2	8	54	0					
KEW	50.35	310.1	9	0	0					
SETIF	50.86	289.6	9	3	-1				10	52 PP
FOLINIERE	51.08	306.7	9	4	-2					
TORTOSA	52.81	296.8	9	27	8					
NORD	52.96	349.4	9	18	-2					
MATUSIRO	53.46	68.6	9	21	-3				10	30 PCP
MAGADAN	54.34	38.2	9	41	11					
RELIZANE	54.66	291.0	9	31	-2				11	38 PP
UVIRA	55.49	232.4	9	36	-3					
TOLEDO	56.39	297.3	9	45	0					
SIDA	56.53	327.8	9	47	1					
TAMANRASSET	56.67	274.7	9	47A	0				11	57 PP
BANGUI	57.12	248.0	9	48	-3					
GRANADA	57.14	294.2	9	56K	5				11	53 PP
MALAGA	57.91	294.0	9	55K	-1				12	7 PP
SERRA PILAR	59.07	300.3	10	4K	0					
TANANARIVE	59.69	204.7	10	8	0					
LISBON	60.47	298.0	10	14K	0					
ELISABTHVLLE	62.90	228.1	10	30K	0					
THULE	63.63	349.9	10	33	-2					
LEOPOLDVILLE	65.53	243.4	10	45A	-2					
RESOLUTE	67.95	355.7	11	1K	-2	20	7	6	11	31 PCP
COLLEGE	74.04	15.8	11	38	-1					
MBOUR	79.06	279.7	12	8	1					
SITKA	83.70	13.6	12	33	1					
CHARTERS TS.	91.53	114.0	13	9	-1					
HUNGRY HORSE	94.75	2.7	13	25	1					
EUREKA	103.49	4.7	14	7	3					
TERRE ADELIE	116.88	155.1	18	52	5					
SOUTH POLE	127.02	180.0	19	4	-2				21	0 PP
SCOTT BASE	127.47	164.6	19	3	-4					
BYRD STATION	136.90	177.6	19	15	-10					
HUANCAYO	140.09	299.8	19	34	3					

MAY 27 4.H 51.M 55.S EPICENTRE 33.45 141.93 DEPTH= 76.KM

DEPTH OF FOCUS= 0.007R

A=-0.65821 B= 0.51551 C= 0.54865 D= 0.6166 E= 0.7873
G=-0.4319 H= 0.3383 K=-0.8361 HT= 0.7

SE= 4.60

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
HATIDYOZIMA	1.80	259.3	0	22	-8	0	47	-5				
MERA	2.28	310.6	0	29	-8	1	3	-1				
TYOSI	2.43	338.8	0	36	-3							
OSIMA	2.49	302.5	0	59	19							
YOKOHAMA	2.73	316.9	0	54	11	1	12	-3				
TOKYO C.M.O.	2.86	321.6	0	54	9	1	16	-2				
MISIMA	2.98	304.8	0	40	-6	1	14	-7				
KAKIOKA	3.12	333.0	0	42	-7	1	20	-5				
TUKUBASAN	3.15	331.9	0	43K	-6	1	20	-6	2	6		
MITO	3.16	338.1	0	49	0							
TORISIMA	3.27	205.5	0	49	-2							
OMAESAKI	3.29	291.4	0	56	5	1	25	-4				
SHIZUOKA	3.30	298.3	0	46	-5							

HUNATU	3.32	308.9	0	54	3	1	26	-4			
KUMAGAYA	3.41	322.8	0	48	-5						
TITIBU	3.45	317.8	1	2	9						
UTUNOMIYA	3.52	331.9	0	52	-2						
KOHU	3.52	309.0	0	50	-4	1	38	3			
ONAHAMA	3.59	346.7	0	50	-5	1	38	1			
MAEBASI	3.77	322.2	0	52	-5	1	43	2			
SHIRAKAWA	3.92	339.5	0	54	-6	1	39	-6			
OIWAKE	4.00	316.9	0	59	-2	1	50	3			
MATUMOTO	4.29	311.7	1	4	-1						
MATUSIRO	4.34	316.5	0	57A	-8	1	50	-5	1	18	
NAGOYA	4.45	294.0	1	13	6						
NAGOYA	4.45	294.0	1	4	-3						
HUKUSIMA	4.45	344.9	1	2	-5	1	55	-3			
GIHU	4.69	295.9	1	6	-4						
TAKADA	4.72	321.4	1	38	27						
KAMEYAMA	4.74	288.6	1	17	6						
SENDAI	4.88	350.4	1	7	-6	2	0	-9			
IBUKISAN	4.98	294.3	1	12	-2						
ISINOMAKI	4.99	354.5	1	20	6	2	4	-7			
HIKONE	5.04	292.7	1	11	-4						
NIIGATA	5.04	333.1	1	49	34						
TOYAMA	5.06	311.2	1	14	-1						
HUKUI	5.33	300.7	1	16	-3						
KYOTO	5.37	288.7	1	24	4						
OSAKA	5.45	284.4	1	28	7						
ABUYAMA	5.46	286.8	1	15A	-6						
SAKATA	5.70	343.2	1	27	3						
MIZUSAWA	5.70	353.7	1	42	18	2	25	-4			
KOBE	5.74	284.2				2	23	-6			
SUMOTO	5.93	280.6				2	41	7			
AKITA	6.43	347.3	2	12	38						
URAKAWA	8.71	4.2	2	11	5						
OBIHIRO	9.51	5.6	2	57	41						
NEMURO	10.27	15.1				4	5	-14			
VLADIVOSTOK	12.45	323.7	2	12	-44						
Y.-SAKHLINSK	13.50	2.3	3	2	-8						
GUAM	20.06	172.0	4	22	-8	7	55	-11			
YAKUTSK	29.65	348.4	5	59	-1						
ULAN-BATOR	29.95	309.3	6	4	1						
SHILLONG	43.92	273.4	7	57	-4						
COLLEGE	51.92	30.7	9	3	0						
WARSAK DAM	57.41	291.8	9	41	-2						
QUETTA	62.48	289.4	10	15	-3						
RESOLUTE	65.97	14.1	10	40A	-1						
ADELAIDE	68.09	182.8	10	58	4						
THULE	68.75	7.3	10	56	-2						
SHASTA	72.93	52.3	11	24	1						
MINERAL	73.63	52.3	11	27A	0						
HUNGRY HORSE	74.13	42.3	11	31	1						
LICK	75.12	55.0	11	44K	8						
BUTTE	76.24	43.7	11	44	2						
EUREKA	77.77	50.7	11	52	1				12	9	
KASTAMONU	82.30	314.9	12	7	-8						
PRUHONICE	84.76	329.0	12	27A	0						
TUCSON	85.33	54.3	12	34	4						
TUCSON TELE.	85.35	54.2	12	31	1						
SCOTT BASE	112.05	174.5	17	38	-49						
SOUTH POLE	123.27	180.0	18	52	4						
BYRD STATION	124.19	168.0	18	51	1				19	3	

MAY 27 20.H 38.M 25.S EPICENTRE 45.72 20.96 DEPTH= 0.KM
A= 0.65420 B= 0.25066 C= 0.71358 D= 0.3578 E=-0.9338
G= 0.6663 H= 0.2553 K=-0.7006 HT= -3.8

SE= 2.99

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
TIMISOARA	0.18	80.3									0	5	PG
BELGRADE	0.97	202.2	0	20K	-1	0	33	-3					
KECSKEMET	1.49	324.3	0	31	3						0	52	SG
BUDAPEST	2.19	324.1	0	39	1						1	9	SG
HURBANOVO	2.87	319.5	0	53	5	1	25	1					
CAMPULUNG	2.89	97.5	0	52	4	1	23	-2					

SOFIA	3.46	149.8	0	58	1				1	49 SG
ZAGREB	3.49	273.4	0	57A	0				2	4 SG
SKALNATE PL.	3.50	352.3	0	51	-6					
BRATISLAVA	3.61	314.2	0	58A	-1	1	37	-6	1	14 PG
SKOPJE	3.75	175.0	1	3A	2	1	54	8	1	18 PG
VIENNA-H.	4.04	310.5	1	5	0	1	45	-8	1	13 P*
BACAU	4.21	76.2	1	8	1	2	9	11	2	18
FOCSANI	4.37	88.0	1	27	18	2	19	17		
KRAKOW	4.39	351.2	1	10	0	2	20	18	1	27 PG
LWOW	4.60	25.5	1	14	1	2	3	-5		
RACIBORZ	4.74	337.9	1	15	0	2	19	8	1	31 PG
IASI	4.80	69.7	1	19	3	2	10	-3	1	44
TRIESTE	5.06	271.8	1	20	1	2	19	0	2	55 SGSG
TOLMEZZO	5.57	279.9	1	22	-4				1	48
KISHINEV	5.60	73.8	1	23	-4					
TARANTO	5.91	208.7	2	12	41	2	57	16		
PRUHONICE	6.07	317.0	1	32	-1	2	45	0	2	7 PG
PRAGUE	6.18	317.1	1	35	0	2	43	-4	2	5 PG
WARSAW	6.52	0.3	1	59	19	2	50	-6	3	31 SG
BOLOGNA	6.93	263.3	2	31	45	4	31	85		
ROME	7.23	241.1	2	23	33	3	52	38	4	27 S*
CHEB	7.23	310.2	1	53	3				4	9 SG
PRATO	7.25	258.8	2	35	45	3	57	43		
ISTANBUL UN.	7.48	125.8	1	47	-6	3	13	-7		
PLAUEN	7.59	312.2	1	52	-3	3	13	-10	4	23 SG
CHUR	8.00	282.2	2	2A	1				4	24
ATHENS	8.01	164.2	2	15	14				2	37 PPP
RAVENSBURG	8.06	288.9	2	19	18	4	16	42	2	43 PG
JENA	8.14	313.2	2	0	-3	3	25	-11	2	37 PG
HALLE	8.31	317.3	2	5	0	3	34	-7	2	45 PG
PAVIA	8.31	270.5				3	29	-12		
KASTAMONU	8.34	117.9	2	29	24	4	20	39		
POTSDAM	8.44	325.0	2	23	16	3	53	9	4	37 SG
MESSINA	8.53	10.1	2	8	0	3	43	-3	2	29 P*
STUTTGART	8.57	295.1	2	9	1	3	47	0		
EBINGEN	8.57	291.0	2	8	0	3	41	-6		
REGGIO CALA.	8.58	209.3				3	29	-18		
TUBINGEN	8.58	293.4	2	8	-1	4	1	14		
SIMFEROPOL	9.30	90.0	2	15	-4					
BASLE	9.39	285.9	2	18	-2					
STRASBOURG	9.44	292.4	2	21	0	4	10	1	2	58
NEUCHATEL	9.78	282.5	2	20	-5				5	30
MONACO	9.84	263.2	2	25	-1					
COPENHAGEN	11.33	334.7	2	50	4					
UCCLE	12.18	300.6	2	28	-30					
CLERMONT-FD.	12.47	276.6	3	12	10				7	5 SG
PARIS	12.92	290.5	3	16	8					
GOTEBORG	13.21	338.5	3	11	-1					
UPPSALA	14.29	353.2	3	25	-1				6	31
MOSCOW	14.51	40.3	3	28	-1					
HELSINKI	14.67	7.9	3	37	6					
NURMIJARVI	14.98	7.1	3	35	0	6	20	-3	5	31
PULKOVO	15.15	18.3	3	32	-5					
JERSEY	15.97	290.8	2	49	-59				3	40
KSARA	16.48	130.9	3	53	-1					
TIFLIS	17.67	94.6	4	12	3	7	27	2		
JERUSALEM	17.77	136.6	4	12	1					
SKALSTUGAN	18.56	347.7	4	18	-2					
MAKHACH-KALA	19.15	88.7	4	16	-11					
TOLEDO	19.22	261.2	4	23	-5					
GRANADA	20.23	253.7	4	24A	-16	8	17	-5		
SODANKYLA	21.91	5.9	4	56	-1	8	59	4		
KIRUNA	22.17	359.5	5	5	6	9	13	13		
APATITY	22.84	12.3	5	9	3	9	18	6		
TAMANRASSET	26.11	213.9	5	37	-1	10	11	3	9	26
SVERDLOVSK	26.80	51.1	5	44	0					
KHEYS	36.20	8.8	7	21	14					
LWIRO	48.27	169.5	8	43	-2					
ASTRIDA	48.74	168.3	8	47	-2					
TIKSI	52.52	22.3	9	10	-7					
RESOLUTE	52.65	342.5	9	12	-6					
ELISABTHVLLE	57.38	172.5	9	54	1				10	29
COLLEGE	69.40	354.9	11	10	-2					
HUNGRY HORSE	78.39	331.2	12	3	-1				14	32 PP

MAY 28 15.H 14.M 31.S EPICENTRE 12.97 124.39 DEPTH= 0.KM

A=-0.55057 B= 0.80446 C= 0.22296 D= 0.8252 E= 0.5648
G=-0.1259 H= 0.1840 K=-0.9748 HT= 6.1

SE= 2.11

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
MANILA	3.68	296.2	1 0	1	1 46	2		
BAGUIO CITY	5.04	313.4	1 19	0	2 19	1		
ZO-SE	18.29	351.2	4 19	2	7 42	3		
PHU-LIEN	18.68	297.0	4 16	-6				4 41 PPP
NANKING	19.67	345.8	4 37	4	8 13	3		
WUHAN	19.70	334.1	4 34	0				
GUAM	19.83	86.2	4 36	1				
KUNMING	23.74	303.6	5 16	1	9 28	1		
SIAN	25.42	329.0	5 30	-1				
CHENGTU	25.77	316.3	5 35	1	10 3	1		
MATUSIRO	26.57	25.5	5 38	-3	10 18	3		10 39
PEKING	27.91	346.4	5 54	0	10 35	-2		
LANCHOW	29.53	324.7	6 8	0				
PAOTOW	30.26	338.0	6 16	1				
SHILLONG	33.06	297.1	6 39A	0				
ULAN-BATOR	37.78	340.7	7 20	0	13 15	4		
BRISBANE	48.87	145.6	9 5	16				
YAKUTSK	49.13	3.3	8 50	-1				
ADELAIDE	49.54	164.5	8 54K	0				
WARSAK DAM	52.17	303.0	9 14	0				
CANBERRA	53.39	154.9	9 23K	-1				
QUETTA	55.54	297.7	9 39	0				
TIKSI	58.69	1.7	10 0	-2				
KHEYS	74.26	350.1	11 35	-6				
COLLEGE	77.43	25.9	11 58	-1				
MOSCOW	77.58	324.7	12 0	0				
APATITY	78.49	336.9	12 5	1				
SODANKYLA	81.10	337.2	12 18	-1				
KSARA	81.68	302.7	12 24	2				
JERUSALEM	82.59	300.8	12 28	2				
KIRUNA	83.28	338.2	12 32	2				
HELSINKI	83.49	330.2	12 32	1				
NURMI JARVI	83.55	330.6	12 32	1				
LWOW	86.77	320.4	12 47	0				
UPPSALA	87.10	331.1	12 47	-2				
RESOLUTE	89.18	9.7	12 58	-1	23 47	0		29 47 SS
PRAGUE	92.52	322.7						20 20
SAN JUAN	147.17	18.6	19 55	12				

MAY 28 22.H 27.M 25.S EPICENTRE -4.00 142.13 DEPTH= 137.KM

DEPTH OF FOCUS= 0.016R

A=-0.78753 B= 0.61237 C=-0.06920 D= 0.6138 E= 0.7894
G= 0.0546 H=-0.0425 K=-0.9976 HT= 7.1

SE= 1.85

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
PORT MORESBY	7.33	137.4	1 44K	-2				
RABAUL	10.01	91.5	2 23	2				2 53
GUAM	17.54	8.5	3 56	-1	7 14	8		
BRISBANE	25.57	157.1	5 19	1				6 6
ADELAIDE	30.94	185.5	6 5	-1				7 36
CANBERRA	31.81	169.3	6 15A	1				
MELBOURNE	33.77	176.0	6 32A	1				
ZO-SE	40.22	331.6	7 26A	1				
MATUSIRO	40.50	355.1	7 26A	-1	13 32	7		
NANKING	42.15	329.9	7 41	0				
WUHAN	43.28	324.4	7 51	1				
KARAPIRO	45.49	142.4	8 9	2				
KUNMING	47.97	309.1	8 27	0				
SIAN	49.26	323.2	8 37A	0				
PEKING	49.88	333.9	8 41	0				
CHANGCHUN	49.96	344.1	8 42	0				
CHENGTU	50.12	316.1	8 44	1				
PAOTOW	53.21	329.6	9 7	1				
LANCHOW	53.59	321.4	9 9A	0				

SHILLONG	56.89	304.0	9	33A	0							
ULAN-BATOR	60.20	333.4	9	57	1							
TERRE ADELIE	62.71	180.3	10	3	-10							
YAKUTSK	66.52	353.7	10	37	0							
SCOTT BASE	74.94	174.8	11	28K	0							
TIKSI	75.98	355.7				20	43	-21				
WARSAK DAM	76.29	306.2	11	35A	0							
NAMANGAN	78.03	313.2									20	8
QUETTA	79.26	301.6	11	53A	1						12	21
COLLEGE	85.25	23.8	12	22	0						12	53
SOUTH POLE	86.03	180.0	12	26	0							
BYRD STATION	87.54	170.1	12	34	0				13	1		
KHEYS	93.91	350.0	12	57	-6							
TIFLIS	98.12	311.4									21	53
EUREKA	101.71	50.7	13	41	2							
RESOLUTE	102.18	13.2	13	39	-2							
ELISABTHVLLE	113.25	255.6	18	27	6							
LEOPOLDVILLE	126.28	261.7	18	50	3							
TAMANRASSET	134.09	298.0	19	6	5						21	33 PP
HUANCAYO	139.49	113.7	19	15	4							
SAN JUAN	148.89	60.5	19	33	5						20	0

MAY 29 10.H 42.M 54.S EPICENTRE -19.32 168.91 DEPTH= 106.KM

DEPTH OF FOCUS= 0.012R

A=-0.92672 B= 0.18167 C=-0.32891 D= 0.1924 E= 0.9813
G= 0.3228 H=-0.0633 K=-0.9444 HT= 4.8

SE= 1.62

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S	
NOUMEA	3.75	217.4	0	55	-2	1	41	1					
SUVA	9.10	84.2	2	10	1	4	0	9					
BRISBANE	16.67	237.9	3	50K	2	6	57	8					
ONERAHI	17.08	164.7	4	6	13								
KARAPIRO	19.41	164.1	4	19K	-1								
TONGARIRO	20.62	165.3	4	32A	0								
TUAI	20.68	161.5	4	33	0	8	23	10					
COBB RIVER	21.93	172.2	4	49	4								
RABAUL	22.20	310.5	4	44	-4	8	47	7					
WELLINGTON	22.45	168.4	4	51A	1	8	50	5			9	28	
KAIMATA	23.22	175.3	5	0	2								
PORT MORESBY	23.25	292.1	4	58K	0	9	4	5	5	20	5	30	*SP
CANBERRA	23.73	223.8	5	4K	1	9	21	14	5	28	9	50	
GEBBIES PASS	24.51	173.4	5	10	0								
ROXBURGH	26.16	179.3	5	26A	0	9	46	-1			5	58	
MELBOURNE	27.83	223.5	5	40	-1				6	5	12	2	SS
FORT NELSON	29.74	213.0	6	32	34	11	24	39					
ADELAIDE	30.89	233.6	6	7K	-1	11	5	2	6	36	7	8	PP
MACQUARIE I.	35.93	189.9	6	51	0				7	17			
GUAM	40.35	322.0	7	28	0	13	23	-5	7	48	8	57	PP
PERTH	49.05	244.1	8	37	-1	15	45	12			10	30	PP
TERRE ADELIE	50.68	193.7	8	51	1				9	13			
HONOLULU	51.69	40.3	8	55	-3	16	20	11			16	54	
KIPAPA	51.83	40.3	8	57	-2				9	33			
HAWAII V.OB.	52.13	44.4	9	1	0	16	42	27					
CAPE HALLETT	52.99	179.5	9	7	0	16	35	8	9	37	18	51	SCS
MANILA	57.97	302.0	9	42	-1	17	35	2					
SCOTT BASE	58.58	180.5	9	47K	0	17	50	9	10	11	11	57	PP
BAGUIO CITY	59.32	303.5	9	52	-1								
WILKES	59.91	203.5	9	54A	-3	18	0	2			21	35	SS
LEMBANG	60.70	273.0	10	0K	-2	18	14	5					
TUKUBASAN	61.60	333.7	10	6A	-2	18	21	1	10	28	12	31	PP
DJAKARTA	61.65	273.4	10	7K	-1	18	15	-6					
HENGCHUN	62.48	308.8	10	18	4								
ABUYAMA	62.51	329.4	10	12A	-2	18	35	4					
TAWU	62.58	309.2	10	17	2								
MATUSIRO	62.68	332.4	10	13A	-2	18	37	3	10	36	13	0	*PPP
HWALIEN	63.06	311.1	10	44	26								
MIZUSAWA	63.70	336.1	10	44	22								
TAIPEI	63.79	311.9	10	22	-1								
MIRNY	66.83	205.0	10	42	0	19	27	3					
HONG KONG	67.62	305.1	10	46	-1	19	38	4			11	11	PCP
BYRD STATION	67.92	169.7	10	47	-2	19	42	5	11	12	13	21	PP

ZO-SE	67.92	316.8	10	48	-1	19	40	2		11	11 *SP
CANTON	68.73	305.3	10	54	0	19	49	2		11	15 *SP
Y.-SAKHLINSK	70.06	341.2	11	2	0	20	8	5			
NANKING	70.09	316.1	11	2	0	20	4	1		20	35 PS
SOUTH POLE	70.80	180.0	11	5	-1	20	14	3	11 32	13	44 PP
VLADIVOSTOK	70.84	332.2	11	9	2						
WUHAN	72.02	312.5	11	12	-2	20	23	-2		11	35 *SP
UGLEGORSK	72.17	341.8	11	16	1	20	31	4			
MEDAN	72.64	280.2	11	19	2					11	41
PETROPAVLOVK	72.69	353.5	11	16	-2	20	29	-4			
PHU-LIEN	72.85	299.9	11	19	0	20	35	0	11 40	21	17 PS
CHANGCHUN	74.46	328.8	11	28	0	20	56	3		11	50 *SP
PEKING	76.80	321.1	11	42	1	21	23	5		12	4 *SP
SIAN	78.05	312.8	12	12K	24						
KUNMING	78.07	302.0	11	50K	2	21	37	5		13	13 *SP
CHENGTU	79.73	307.5	11	58	1	21	53	4		12	21 *SP
MAGADAN	79.97	350.7	11	58	-1	21	50	-2			
TIENSHUI	80.44	311.7	12	26	25						
PAOTOW	80.97	318.7	12	27K	24						
LANCHOW	82.57	312.2	12	36K	24						
SINING	84.26	311.8	12	48	27						
WUWEI	84.31	313.3	12	48	27						
HALLEY BAY	84.87	176.1	12	21	-3						
TOCKLAI	85.21	300.3	12	54	29						
CHITTAGONG	85.93	295.2	12	52	23	22	58	6			
UKIAH	85.99	46.2	12	30	1				12 57	14	46 PP
BERKELEY	86.05	47.7	12	30A	1	22	57	4	12 57	16	16 PP
LICK	86.24	48.4	12	31	1				12 59	16	18 PP
YAKUTSK	86.84	342.6	12	33	0	22	47	-13			
ULAN-BATOR	86.86	323.5	12	34	1						
SHILLONG	87.13	298.2	12	37	2						
FRESNO	87.29	49.6	12	37A	2						
SHASTA	87.30	45.2	12	35A	0						
PASADENA	87.35	52.5	12	36A	0	23	11	6	13 4	16	15 PP
MINERAL	87.66	45.8	12	37A	0				13 8	16	27 PP
RENO	88.52	47.1	12	43A	2						
CORVALLIS	88.57	41.4	12	42	0						
SITKA	89.15	26.9	12	45	1				13 11		
COLLEGE	90.22	17.0	12	46	-3	23	11	-21	13 16	16	23 PP
VICTORIA	90.41	38.0	12	51A	1						
IRKUTSK	90.60	326.3	13	13	22	23	14	-21			
BOULDER CITY	90.60	52.0	12	52	1					13	20
HORSESHOE B.	90.91	37.2	12	52	-1						
EUREKA	91.18	48.4	12	54	0				13 22	16	32 PP
COLOMBO	91.35	276.8								23	19
CHATRA	91.51	297.8	12	58	3						
BOKARO	91.63	294.6	13	32	36					23	29
TUCSON	92.25	56.7	12	59	0				13 26	38	25 PKPPKP
TUCSON TELE.	92.37	56.6	13	0	1				13 28	30	15 PKKP
SALT LAKE C.	94.59	48.5	13	11	2				13 37		
HUNGRY HORSE	95.97	40.8	13	15	-1					17	4 PP
BUTTE	96.02	43.4	13	15	-1					17	34 PPP
BOZEMAN	96.89	44.1	13	22	2						
TACUBAYA	97.93	72.3								17	29 PP
LARAMIE	99.24	49.5	13	31	0					18	57
AGRA	99.34	295.4	13	52K	21						
DEHRA DUN	100.22	298.5								17	59
BOMBAY	101.58	286.1				24	13	-1		14	55
RAPID CITY	101.71	47.4	13	42	0					18	19 PKP
SANTA LUCIA	102.67	132.3	13	40	-6	24	10	-8			
COMITAN	103.46	77.3								21	10
DALLAS	103.73	59.8								18	31 PP
WARSAK DAM	106.47	300.8	14	3	777						
NAMANGAN	107.76	307.9				24	39	-15		18	53 PP
HUANCAYO	109.47	110.9	17	28	777					18	52 *PPP
QUETTA	109.51	296.0	14	37	777	24	43	1		18	50 PP
ST. LOUIS 1	110.11	55.0	18	19	1					29	26 PPS
RESOLUTE	110.13	16.4	18	16	-2	24	45	-2		14	18 P
KHEYS	113.45	350.3	18	21	-4	24	53	-7			
LA PAZ	113.58	118.6								19	17 PP
CHINCHINA	115.65	93.8				25	10	2		19	34 PP
THULE	116.13	12.8	18	31	1					19	31 PP
BOGOTA	117.00	94.7								19	46 PP
CHAPEL HILL	118.67	59.0								19	36 PP
HERMANUS	119.26	208.6				27	45	144			
KIMBERLEY	120.97	216.9	16	42	777						
OTTAWA	121.23	48.1	18	39	-1						
BREBEUF	122.70	47.9	18	43K	0						

PALISADES	122.78	53.2	18	43	0	26	22	49		20	20 PP
APATITY	124.21	341.0	18	45K	-1	25	40	3		20	48 PP
SEVEN FALLS	124.42	45.6	18	44	-2						
BULAWAYO	124.76	226.9	18	48	1						
CARACAS	125.53	90.8	18	49	1	25	48	7			
MAKHACH-KALA	125.78	309.5	19	13	24	25	48	6			
SODANKYLA	126.32	342.9	18	50	0						
KIRUNA	127.58	345.5	18	51	-1					20	50 PP
TIFLIS	127.92	308.2	18	55	2					30	57 PS
SAN JUAN	128.10	81.5	18	53	0					21	9 PP
SCORESBY SD.	128.43	4.6	18	55	1					31	48 SS
MOSCOW	128.58	327.1	18	56	2					31	55 PS
BROKEN HILL	128.59	232.1	18	43	-11						
HALIFAX	129.84	47.6	18	57A	0					22	12 PKS
PULKOVO	129.95	334.1	18	58	1					31	23 PS
BERMUDA	130.51	63.6	18	53	-5					22	16 PKS
ADDIS ABABA	130.74	265.3	19	4	6					21	42 PP
ELISABTHVLLE	131.16	234.1	19	6A	7				19 36	21	22 PP
SOTCHI	131.27	311.5	19	0	1	26	2	5			
NURMIJARVI	131.69	337.2	19	0	0				19 31	22	20 SKP
HELSINKI	131.80	336.7	19	2	2					22	21 SKP
SKALSTUGAN	133.00	346.0	18	54	-9					22	19 SKP
ASTRIDA	134.36	246.0	18	49K	-16				19 40		
UPPSALA	134.59	340.1	19	2	-4				19 31	22	27 SKP
SIMFEROPOL	134.75	314.8	19	7	1					22	34 PKS
RUMANGABO	135.33	247.2	19	11K	4				19 38		
LWIRO	135.33	245.7	19	11K	4					22	35
KSARA	135.95	298.9	19	8	0	26	8	2	19 36	21	48 PP
KISHINEV	137.34	319.6	19	10	-1					22	32 PKS
IASI	138.02	320.4								22	39 PP
GOTEBORG	138.07	341.6	19	12	0				19 41	22	30 SKP
KASTAMONU	138.24	311.1	19	9	-3					22	12 PP
LWOW	138.67	325.7	19	14	1					34	33
COPENHAGEN	139.59	339.6	19	17	2					22	36 PP
ISTANBUL UN.	139.61	311.3	19	6	-9					22	30 PP
BUCHAREST	140.22	317.4	19	16	0					22	38 PP
KRAKOW	140.64	328.4	19	47	30					22	48 PKS
RACIBORZ	141.46	329.6	19	12	-6					23	3
POTSDAM	142.00	335.9	19	17	-2				19 45		
SOFIA	142.80	316.4	19	19	-2					22	53 PP
HALLE	143.12	335.9	19	15	-6				19 41	22	43 PP
LUANDA	143.18	222.8	19	23K	2				19 50	22	50 PKS
PRAGUE	143.19	332.4	19	26	5					20	9
PRUHONICE	143.21	332.2	19	19	-2				19 44	22	48 PP
BRATISLAVA	143.28	328.1	19	23	2				19 47	22	47 PP
BELGRADE	143.50	321.3	19	22A	0					22	54 PP
VIENNA-H.	143.58	328.7	19	23	1					23	7 PP
JENA	143.72	335.7	19	19	-3				19 45	22	47 PP
PLAUEN	143.83	334.7	19	20	-2				19 44	22	50 PP
MUNSTER	144.27	340.1	19	22	-1					19	54
SONNEBERG	144.30	335.4	19	23	0						
SKOPJE	144.40	316.5	19	23A	0						
ATHENS	144.52	309.0	19	22K	-2						
DE BILT	144.89	342.5	19	22	-2					23	9 PP
LEOPOLDVILLE	144.98	230.4	19	26	2				19 51	22	46 PP
BENSBERG	145.28	339.6	19	25A	0				19 50		
ZAGREB	145.40	325.9	19	29K	4				19 56		
RATHFARNHAM	145.88	354.9	19	27	1				19 50	20	13 *SPKP
UCCLE	146.29	342.3	19	29	2						
STUTTGART	146.37	335.5	19	28	1				19 55	29	36 SKKS
TOLMEZZO	146.51	329.2	19	28	1					22	29
TUBINGEN	146.62	335.4	19	28	1				19 55	23	16
TRIESTE	146.67	327.6	19	32K	5				20 0	23	21 PP
KEW	146.82	347.7	19	31	4				19 55	33	31 SP
EBINGEN	146.94	335.1	19	29	1				19 56		
RAVENSBURG	146.99	334.0	19	33	5					20	37
STRASBOURG	147.07	336.7	19	30	2				19 57	22	55 PP
CHUR	147.76	333.1	19	31A	2						
TARANTO	147.86	317.1	18	50	-39						
BASLE	148.01	335.8	19	33	4						
PARIS	148.61	342.7	19	31	1	26	19	-7			
NEUCHATEL	148.69	335.9	19	32	1						
BOLOGNA	148.70	328.3	19	31	0					20	15
PAVIA	149.22	331.4	19	33	2					23	43
PRATO	149.26	327.7	19	40	9					20	6
JERSEY	149.35	348.4								20	21
FOLINIERE	149.40	346.2								20	3
ROME	149.88	323.5	19	34	2				20 2	20	51
REGGIO CALA.	150.17	314.5	19	38	5					23	34

MESSINA	150.18	314.7	19	38	5					20	14	
TORTOSA	156.39	337.6	20	11	30					24	10	PP
SETIF	157.79	322.6	19	46	3				20 16	24	22	PP
SERRA PILAR	158.16	354.9	19	39A	-5					23	54	PP
TOLEDO	158.63	345.0	19	4C	2				20 14	24	23	PP
ALGIERS UNI.	158.65	327.4	19	46	2					23	54	PP
ALICANTE	158.92	336.3	19	36	-9	26	19	-19		23	58	PP
LISBON	160.60	355.4	19	49K	3					20	56	
GRANADA	161.04	341.3	20	15A	28	26	50	10		24	42	PP
MALAGA	161.70	342.7	19	51K	4	26	49	9		24	19	PP
TAMANRASSET	164.12	285.4	19	53	3	27	0	18	20 19	24	56	PP

MAY 31 5.H 36.M 23.S EPICENTRE 19.11 -80.97 DEPTH= 0.KM

A= 0.14837 B=-0.93384 C= 0.32546 D=-0.9876 E=-0.1569
G= 0.0511 H=-0.3214 K=-0.9456 HT= 4.9

SE= 3.44

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
SAN JUAN	14.09	90.6	3	25	2						3	49
COLUMBIA	14.83	359.8	3	34	1							
CHINCHINA	14.99	159.0	3	37	2							
BOGOTA	15.90	154.1	3	50	3	7	1	17				
CARACAS	16.04	120.3	3	49	1	6	19	-28				
CHAPEL HILL	16.83	5.4	4	4	6	6	53	-12				
ANTIGUA	18.98	93.1	4	15	-10							
DALLAS	19.69	317.1	4	29	-4							
BERMUDA	19.71	44.7	4	32	-2	8	23	12				
ST. VINCENT	19.82	104.4	4	29	-6							
WASHINGTON	20.01	8.9	4	39	2	8	29	12				
FAYETTEVILLE	20.54	328.1	4	38	-4							
TRINIDAD	20.69	111.2	4	44	0							
PENNSYLVANIA	21.78	6.4	4	55	0							
PALISADES	22.65	14.0	5	6	2	9	15	7			5	31 PP
OTTAWA	26.57	8.3	5	45	4							
BREBEUF	27.01	11.4	5	43	-2							
SEVEN FALLS	29.14	14.3	6	7	2							
TUCSON TELE.	29.75	302.2	6	22	12						6	49
TUCSON	29.81	301.9	6	31	20							
RAPID CITY	31.08	328.1	6	18	-4							
SALT LAKE C.	34.10	315.9	6	53	5							
BOZEMAN	36.31	323.6	7	5	-2							
EUREKA	36.33	311.5	7	4	-3							
BUTTE	37.38	323.0	7	14	-2							
RENO	39.11	309.8	7	28	-3							
HUNGRY HORSE	39.55	325.1	7	30	-4							
LICK	39.81	305.8	7	40K	4							
MINERAL	40.68	310.2	7	38	-6							
RESOLUTE	56.10	355.6	9	40	-3	17	25	-6			21	7 SS
COLLEGE	63.06	333.9	10	32	1							
KEW	69.51	41.2	11	15	3							
FOLINIERE	69.67	44.1	11	14	1							
STRASBOURG	75.10	43.4	11	43	-2							
STUTTGART	75.99	43.0	11	53	2							
COLLMBERG	77.75	39.9	12	0	0							
PRUHONICE	79.06	40.9	12	11	3							
TAMANRASSET	79.71	69.4	12	12	1							
RABAUL	126.11	279.0									20	9
PORT MORESBY	132.50	274.7	19	52	35							

MAY 31 9.H 28.M 19.S EPICENTRE -6.37 155.91 DEPTH= 63.KM

DEPTH OF FOCUS= 0.005R

A=-0.90736 B= 0.40564 C=-0.11027 D= 0.4081 E= 0.9129
G= 0.1007 H=-0.0450 K=-0.9939 HT= 6.9

SE= 2.21

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S

RABAUL	4.31	299.9	1	2	-2	1	55	1		
PORT MORESBY	9.19	250.3	2	15K	3	4	5	10	2	45
CHARTERS TS.	16.48	213.8	3	50	2	7	5	17		
NOUMEA	18.82	148.3	4	15	-2	7	57	16		
BRISBANE	21.17	187.1	4	41K	-1	8	40	12		
GUAM	22.62	330.7	4	55	-1	9	14	19	5	6 PP
SUVA	24.88	120.1	5	26	8	10	21	47		
RIVERVIEW	27.68	188.6	5	44A	0	10	32	13		
CANBERRA	29.50	191.5	5	59A	-1					
ADELAIDE	32.54	206.8	6	26	-1	11	43	7	8	37
MELBOURNE	32.86	196.1	6	28K	-1	11	58	17		
KARAPIRO	36.11	153.2	6	55	-2				8	23 PP
TONGARIRO	37.17	154.4	7	5	-1				8	40 PP
FORT NELSON	37.18	190.4							8	41 PP
KAIMATA	38.53	161.5	7	35	18					
WELLINGTON	38.61	157.0	7	21A	3	13	36	26	8	51 PP
GEBBIES PASS	39.98	161.0	7	29	-1					
MANILA	40.42	301.2	7	35	2	13	43	6		
ROXBURGH	40.73	165.5				14	23	42		
BAGUIO CITY	41.65	303.4	7	44	1	14	4	9		
TUKUBASAN	44.89	341.8	8	3A	-2				9	54 PP
PERTH	45.21	230.5	8	15	3				10	2 PP
ABUYAMA	45.29	336.3	8	11A	-2					
MATUSIRO	45.80	340.0	8	14A	-3	15	0	5	9	57 PP
LEMBANG	47.96	266.6	8	32K	-2	15	19	-7		
DJAKARTA	48.77	267.4	8	51A	11				12	52
HONG KONG	49.82	306.2	8	48A	0	16	1	9	10	13 PCP
ZO-SE	49.91	320.3	8	52	3	16	5	12		
CANTON	50.92	306.5	8	58	2					
NANKING	52.06	319.5	9	5A	0	16	31	8	11	0 PP
HONOLULU	52.83	57.3	9	10	-1	16	41	8	20	13 SS
KIPAPA	52.95	57.2	9	31	19					
VLADIVOSTOK	53.87	338.4	9	40	22					
WUHAN	53.98	315.2	9	19	0	16	58	9		
Y.-SAKHLINSK	54.36	348.9							10	43 PCP
HAWAII V.OB.	54.47	60.8	9	22	-1	16	59	4		
PHU-LIEN	55.41	300.5	9	29	-1				13	2 PPP
UGLEGORSK	56.53	349.1	9	38	0					
CHANGCHUN	57.11	334.0	9	41	-1					
PEKING	58.92	325.0	9	55	0	18	5	11		
PETROPAVLOVK	59.32	1.9	9	51	-6	18	5	6		
SIAN	60.01	315.6	10	1A	-1					
KUNMING	60.45	303.4	10	5	0	18	20	6		
TERRE ADELIE	61.17	186.5	10	7	-3	18	39	16		
CHENGTU	61.80	309.7	10	14	0	18	39	8		
PAOTOW	62.90	322.1	10	21	0					
LANCHOW	64.53	314.9	10	31	-1					
MAGADAN	65.84	357.1	10	40	-1					
CAPE HALLETT	66.45	175.2	10	44	0	19	31	3	20	18 SCS
WILKES	67.42	198.2	10	48	-3	19	45	5	13	29 PP
ULAN-BATOR	69.09	327.1	11	2	1					
SHILLONG	69.78	300.1	11	5A	0	20	32	24	14	2 PP
YAKUTSK	71.13	347.3	11	14	1					
SCOTT BASE	71.67	177.6	11	16	0	20	22	-8	11	28 PCP
LHASA	71.75	303.9	11	18	1					
IRKUTSK	72.99	329.8	11	24	0	21	4	19		
MIRNY	73.61	201.8	11	27	-1					
BOKARO	74.61	296.7	11	34	0					
TIKSI	79.86	351.6	12	2	-1					
COLLEGE	82.18	21.0	12	12	-3	22	25	1	27	58 SS
AGRA	82.20	298.4	12	14K	-1					
BYRD STATION	82.82	169.9	12	14	-4	22	53	23	15	30 PP
SOUTH POLE	83.67	180.0	12	20	-3	22	56	17	12	44
SITKA	84.01	30.8	12	28	4					
BOMBAY	85.55	289.5	12	24	-8	22	49	-8	24	10
BERKELEY	87.45	51.6	12	42A	1	23	17	2	16	2 PP
LICK	87.85	52.2	12	43A	0					
SHASTA	87.85	48.8	12	45	2					
MINERAL	88.38	49.3	12	47K	1					
VICTORIA	88.58	41.0	12	46	-1					
HORSESHOE B.	88.84	40.2	12	46	-2					
FRESNO	89.21	53.0	12	51K	1					
RENO	89.62	50.3	12	51	-1					
NAMANGAN	89.80	311.1	12	53	1					
PASADENA	90.17	55.8	12	55	1	23	51	11	23	28 SKS
STALINABAD	91.70	308.4	13	3	2					
EUREKA	92.55	50.7	13	4	-1					
HUNGRY HORSE	94.75	42.0	13	16	1				17	4 PP
SALT LAKE C.	95.81	49.7	13	21	1					

TUCSON	96.11	58.3	13	23	2			17	13 PP
TUCSON TELE.	96.21	58.2	13	23	1			17	14 PP
SVERDLOVSK	98.19	326.4	13	40	9				
KHEYS	98.61	350.2	13	18	-15			26	13 PS
RESOLUTE	101.14	14.8	13	45	1	24 20	4	17	5 PP
RAPID CITY	102.22	46.4	13	48	-1				
MAKHACH-KALA	107.78	313.0						18	50 PP
DALLAS	107.96	57.7						18	44 PP
TIFLIS	109.94	312.0				24 56	0	19	0 PP
MOSCOW	110.94	327.8						19	6 PP
KIRUNA	111.78	343.3						28	35
FLOPISSANT	112.41	50.7	19	13	45				
PULKOVO	112.82	333.5	18	46	17				
SOTCHI	113.24	314.8						19	22 PP
SCORESBY SD.	115.96	359.2						19	46 PP
SIMFEROPOL	116.71	317.5						19	45 PP
KSARA	118.37	305.0	18	41	1			20	2 PP
JERUSALEM	119.33	302.9	18	50	8			20	10
KISHINEV	119.37	321.2						20	5 PP
SANTA LUCIA	120.71	135.0						30	8
OTTAWA	120.86	40.1	18	44	-1				
LWOW	120.92	325.8						20	19
PENNSYLVANIA	121.17	45.7	18	47	2			20	9 PP
ISTANBUL UN.	121.59	314.8						20	7 PP
WASHINGTON	122.40	47.6	18	51	3			20	24 PP
COPENHAGEN	122.90	336.3						20	26 PP
SEVEN FALLS	123.07	36.4	18	50	1				
PALISADES	123.87	44.1	18	50	-1			20	29 PP
FORDHAM	123.96	44.3	18	45	-6				
POTSDAM	124.94	333.1						20	50 PP
BELGRADE	125.57	322.1						20	47 PP
COLLMBERG	125.70	332.2	18	55	1			20	51
ELISABTHVLLE	125.73	250.8	19	3	9			20	54
PRUHONICE	125.83	330.2	18	56A	2			20	50 PP
HUANCAYO	125.86	109.7	18	57	3				
VIENNA-H.	125.98	327.6	18	56	1				
HALLE	126.05	332.9	18	52	-3			21	3
ABERDEEN	126.48	345.3						21	31
JENA	126.61	332.6	18	57	1			20	54 PP
PLAUEN	126.64	331.9	18	59	3			20	55 PP
CHEB	126.82	331.4						20	55 PP
SONNEBERG	127.17	332.3	19	4	7			21	0
ZAGREB	127.64	325.4	19	13	15			21	2
DE BILT	128.43	337.4	19	1	2			21	6 PP
HALIFAX	128.67	35.6	19	2K	2			22	22 PKS
CHINCHINA	128.72	88.7	19	4	4			22	24 SKP
TRIESTE	128.99	326.4	19	3	3				
STUTTGART	129.22	332.0	19	1	0			21	13 PP
STRASBOURG	130.02	332.8	19	3	1			21	13 PP
BOGOTA	130.23	89.3						21	24 PP
LA PAZ	130.86	118.1	19	5	1			22	34 PKS
KEW	130.92	340.5	19	9	5			21	26 PP
PAVIA	131.74	328.7						21	18
ROME	132.01	323.2	19	9	3			22	20
PARIS	132.09	336.5	19	11	5			21	36 PP
JERSEY	133.47	340.2						22	44
BERMUDA	134.22	50.2	19	1	-9			21	39 PP
CLERMONT-FD.	134.22	333.5						21	46 PP
SAN JUAN	137.36	69.8	19	18	2				
CARACAS	137.45	81.5	19	23	7			22	4 PP
SETIF	139.87	321.8	19	25	4			22	20
ALGIERS UNI.	140.89	324.5	19	16	-7	26 47	23	22	25 PP
ALICANTE	141.65	329.5	19	22	-2			23	34
TOLEDO	142.09	334.6	19	26	1	27 51	85	23	7 PP
RELIZANE	143.04	325.7	19	24	-2				
GRANADA	144.09	331.5	19	31A	3	26 6	-23	22	56 PP
MALAGA	144.84	332.0	19	30A	1			22	43 PP
LISBON	145.08	339.4	19	31	1				
TAMANRASSET	147.14	302.8	19	36	3			20	19
MBOUR	169.40	319.2	20	5	6			25	7 PP

MAY 31 12.H 15.M 43.S EPICENTRE 45.89 27.39 DEPTH= 0.KM

A= 0.62019 B= 0.32131 C= 0.71562 D= 0.4600 E=-0.8879
G= 0.6354 H= 0.3292 K=-0.6985 HT= -3.9

SE= 3.18

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
FOCSANI	0.23	215.1	0	10A	0								
BACAU	0.76	333.8	0	21	3	0	34	4					
IASI	1.32	5.4	0	31	5	0	50	5					
KISHINEV	1.51	40.8	0	33	4	0	56	7					
BUCHAREST	1.73	212.3	0	33K	1	0	57	2					
CAMPULUNG	1.77	250.4	0	35	3	1	3	7					
TIMISOARA	4.31	270.4	1	11	2	2	0	-1			1	17	P*
SOFIA	4.32	223.9	1	7	-2	2	1	0			1	25	PG
LWOW	4.55	331.3	1	13	1						2	1	
SIMFEROPOL	4.83	98.8	1	17	1	2	13	-1					
ISTANBUL UN.	4.98	165.9	1	16K	-2	2	9	-8					
BELGRADE	5.01	260.2	1	26K	7	2	28	10					
SKOPJE	5.83	230.0	1	37A	7						2	5	PG
SKALNATE PL.	5.85	306.8	1	35	5								
BUDAPEST	5.94	288.5	1	31	-1						3	7	SG
KRAKOW	6.51	312.4	1	40	0	3	32	36			2	5	PG
HURBANOVO	6.60	290.8	2	6	25						3	50	SG
RACIBORZ	7.46	307.5	1	55	2	3	20	1			3	50	SG
WARSAW	7.60	328.9	2	11	16	3	13	-10			3	58	SG
VIENNA-H.	7.89	291.4	1	58	-1	3	26	-4					
ZAGREB	7.97	273.6	2	1K	1						5	26	
ATHENS	8.37	200.3	2	1A	-5						2	16	PP
SOTCHI	9.08	100.3	2	12	-4	3	49	-11					
TRIESTE	9.54	273.5	2	23	1						5	12	SGSG
PRUHONICE	9.54	300.0	2	22K	0								
PRAGUE	9.64	300.4	2	23	0								
TOLMEZZO	9.99	278.1	2	29	1						3	28	
COLLMBERG	10.95	304.8	2	40	-1						7	1	SS
PLAUEN	11.17	299.9	2	41	-3	5	7	16			6	40	
POTSDAM	11.40	309.9	2	45	-2								
ROME	11.47	255.0	2	56	8								
HALLE	11.64	304.4	2	56	5	5	8	5					
JENA	11.65	301.4	2	49	-2	4	44	-19					
MESSINA	11.67	233.0	2	34	-17								
REGGIO CALA.	11.69	232.4	3	6	15						3	15	
SONNEBERG	11.71	298.4	2	51	-1								
MOSCOW	11.78	29.5	2	50	-3	4	55	-11					
RAVENSBURG	12.32	285.2	3	12	12								
STUTTGART	12.67	289.7	3	4	-1	6	31	63			4	7	
TUBINGEN	12.73	288.6	3	6	1								
EBINGEN	12.77	287.0	3	6	0								
TIFLIS	13.25	102.1	3	11	-1								
COPENHAGEN	13.59	321.6	3	14	-3	5	57	7					
STRASBOURG	13.60	288.5	3	29	12								
KSARA	13.69	148.7	3	24	6	6	2	10					
PULKOVO	14.02	6.1	3	18	-4	7	18	78					
NEUCHATEL	14.14	281.9	3	29	5						7	30	
MUNSTER	14.33	302.3	3	32	5								
BENSBERG	14.34	298.0	3	43	16								
HELSINKI	14.38	355.1	3	25	-2	5	58	-11					
MAKHACH-KALA	14.66	94.3	3	34	3								
NURMIJARVI	14.74	354.7	3	27	-5	6	1	-16			3	54	*SP
GOTEBORG	15.14	326.9	3	40	3	6	34	7					
UPPSALA	15.15	340.9	3	34	-3	6	14	-13					
JERUSALEM	15.34	154.0	3	40A	0								
DE BILT	15.81	301.2				6	59	17					
UCCLE	16.06	296.1	3	48	-1	7	0	12					
CLERMONT-FD.	16.90	278.3	4	0	0								
PARIS	17.10	288.8	4	2	0								
KEW	19.06	297.1	4	26	-1	8	4	7			8	24	
FOLINIERE	19.07	288.8	4	24	-3								
SETIF	19.15	247.4	4	24	-4	8	6	7			4	43	PP
SKALSTUGAN	19.66	339.7	4	32	-1						8	39	
TORTOSA	20.15	265.1	4	44	5								
ALGIERS UNI.	20.36	252.0	4	36	-5	8	5	-20			4	57	PP
ABERDEEN	21.36	312.6									9	7	
SODANKYLA	21.54	359.2	4	53	0	8	47	-1	5	9	5	27	PP
ALICANTE	21.92	259.8	5	1	4	8	56	1					
APATITY	21.95	6.2	4	52	-5	8	44	-12			4	58	*SP
KIRUNA	22.30	353.0	5	0	-1	9	1	-1			5	27	PP
RELIZANE	22.60	252.9	4	59	-5						5	31	PP
RATHFARNHAM	22.88	301.2	5	7	0								
SVERDLOVSK	23.23	49.8	5	13	3								
TOLEDO	23.71	266.6	5	12	-3	9	51	24			5	44	PP
GRANADA	24.65	260.4	5	36K	12	10	16	33			6	14	PP

MALAGA	25.44	260.2	5	28K	-3	9	50	-7		
TAMANRASSET	29.10	225.0	6	2A	-3	10	51	-5	6	54 PP
NAMANGAN	32.21	82.6	6	33	1					
KHEYS	35.41	7.2	7	9	9					
ADDIS ABABA	38.00	161.5	7	24	2					
NORD	38.59	350.6	7	25	-2					
THULE	47.23	341.3	8	36	-1					
LWIRO	47.95	178.1	8	40A	-3					
ASTRIDA	48.32	176.9	8	44A	-1					
UVIRA	49.18	177.7	8	49	-3					
CHATRA	50.55	90.6	9	5	2					
TIKSI	50.61	23.7	9	4	1					
LEOPOLDVILLE	51.19	195.6	9	4A	-3					
ULAN-BATOR	52.04	57.0	9	15	1					
RESOLUTE	53.80	343.8	9	25	-2	16	47	-14		
SHILLONG	54.62	88.5	9	32K	-1					
YAKUTSK	55.90	33.8	9	43	1					
ELISABTHVLLE	57.25	180.0	9	54A	2					
BROKEN HILL	60.06	178.8	10	10	-1					
MAGADAN	65.17	27.9	10	40	-5					
COLLEGE	69.52	357.8	11	13	0					
HONG KONG	72.16	76.2	11	28	-1					
MATUSIRO	77.04	50.6	11	56K	-1					
HUNGRY HORSE	80.28	335.0	12	13	-2					
RAPID CITY	80.30	326.3	12	23	8					
BOZEMAN	81.74	332.0	12	20	-2					
LARAMIE	83.57	326.3	12	32	0					
EUREKA	88.89	332.5	13	0	2					
TUCSON TELE.	93.39	325.5	13	19	0					
CHARTERS TS.	124.10	83.9	19	2	1					
SOUTH POLE	135.69	180.0	19	23	0				22	38 PP
BYRD STATION	143.78	189.3	19	32	-5					
SCOTT BASE	144.26	166.3	19	35	-3					
CAPE HALLETT	148.40	159.4							32	23
KARAPIRO	155.11	82.7	20	2	7				20	30 PKP2

MAY 31 13.H 1.M 44.S EPICENTRE 37.70 48.99 DEPTH= 0.KM

A= 0.52054 B= 0.59850 C= 0.60896 D= 0.7545 E=-0.6563
G= 0.3996 H= 0.4595 K=-0.7932 HT= -0.8
SE= 2.49

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
GORIS	2.75	311.6	0	47	1						1	28	SG
TIFLIS	5.15	322.5	1	21	1						2	42	SG
MAKHACH-KALA	5.38	348.3	1	25	2	2	28	1					
SOTCHI	9.17	312.7	2	18	2								
KSARA	11.33	253.9	2	47	1	4	52	-3			5	21	SSS
JERUSALEM	12.76	246.5	3	5	0						3	56	
SIMFEROPOL	13.30	307.6	3	12	-1								
ISTANBUL UN.	15.82	288.4	3	58	12								
QUETTA	16.67	111.4	3	56	0	7	6	4					
KISHINEV	17.53	308.5	4	5	-2								
NAMANGAN	17.84	72.4	4	8	-3								
WARSAK DAM	18.65	94.6	4	22	1								
MOSCOW	19.60	340.6	4	30	-2								
ATHENS	19.94	278.6	4	36	0								
SVERDLOVSK	20.65	18.3	4	44	0	8	22	-8					
LWOW	21.61	312.1	4	51	-2	8	54	5					
BELGRADE	22.52	297.4	5	6K	3	9	12	6					
RACIBORZ	25.21	309.3	5	26	-3								
VIENNA-H.	25.91	304.5	5	35	0								
PRUHONICE	27.45	307.6	5	51	2								
COLLMBERG	28.72	309.9	6	0	-1								
UPPSALA	29.82	328.1	6	11	0						6	52	
ADDIS ABABA	30.00	200.5	6	17	5								
STUTTGART	30.69	304.0	6	16	-3	11	55	34					
APATITY	31.16	348.5	6	27	4								
GOTEBORG	31.37	321.6	6	25K	1								
SODANKYLA	32.28	344.0	6	35	3						7	17	
SKALSTUGAN	33.99	331.4	6	49	2								
KIRUNA	34.12	341.1	6	50	2								
SETIF	34.63	281.1	6	56	3								

FOLINIERE	37.09	303.5	7	10	-4					
SHILLONG	38.16	95.8	7	23	0					
TAMANRASSET	40.03	260.8	7	35	-3				9	7 PP
KHEYS	42.49	0.8	7	48	-10					
ULAN-BATOR	42.78	57.1	8	4	3					
ASTRIDA	43.89	208.4	8	7	-3					
TIKSI	51.56	23.5	9	11	1					
THULE	59.62	345.9	10	8	0					
RESOLUTE	65.38	350.1	10	44	-2					
COLLEGE	76.92	7.3	11	54	-2					
HUNGRY HORSE	93.00	348.7	13	18	2					

JUNE 1 5.H 31.M 36.S EPICENTRE -4.02 154.01 DEPTH= 414.KM

DEPTH OF FOCUS= 0.060R

A=-0.89667 B= 0.43720 C=-0.06962 D= 0.4383 E= 0.8988
G= 0.0626 H=-0.0305 K=-0.9976 HT= 7.1

SE= 1.32

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
RABAUL	1.84	264.3	0	54	-3						1	37	
PORT MORESBY	8.66	231.5	2	5A	1	3	44	3			2	16	PP
CHARTERS TS.	17.60	204.8	3	41K	1	6	44	6					
GUAM	19.66	332.3	3	59	-1								
BRISBANE	23.35	182.2	4	34	-1	8	16	-1					
RIVERVIEW	29.78	184.8	5	31A	-1								
CANBERRA	31.49	187.9	5	46K	-1								
MELBOURNE	34.65	192.6	6	15K	1								
BAGUIO CITY	38.79	302.4	6	48	0								
KARAPIRO	39.05	152.6	6	50K	0						8	50	PCP
TUAI	40.52	151.8	7	2	0								
COBB RIVER	40.55	158.1	7	4	1								
KAIMATA	41.36	160.4	7	11	2								
WELLINGTON	41.51	156.2	7	8	-2								
GEBBIES PASS	42.82	160.1	7	20	-1								
MATUSIRO	42.97	341.3	7	21K	-1						7	48	
LEMBANG	46.25	264.4	7	47A	-1	14	2	-1					
TERRE ADELIE	63.30	185.6	9	47	-1				11	34			
SHILLONG	66.97	299.8	10	14A	3								
CAPE HALLETT	68.95	174.7	10	24	0								
SCOTT BASE	74.09	177.2	10	54A	0								
COLLEGE	80.69	21.6	11	28	-1				12	57			
BYRD STATION	85.45	169.9	11	53	0						12	39	
SOUTH POLE	86.01	180.0	11	56	0								
SHASTA	87.75	49.1	12	6	2								
LICK	87.93	52.5	12	2A	-3								
MINERAL	88.30	49.5	12	8A	1								
FRESNO	89.33	53.3	12	13	1								
PASADENA	90.43	56.0	12	18	1								
EUREKA	92.54	50.8	12	27	0				13	58			
HUNGRY HORSE	94.28	42.0	12	35	1				14	7			
TUCSON TELE.	96.58	58.1	12	47	2								
RESOLUTE	99.36	14.6	12	56	-2								
RAPID CITY	101.97	45.9	13	9	0								
SEVEN FALLS	122.27	34.7	18	7	0								
ELISABTHVLLE	124.65	253.0	18	18	7								
HUANCAYO	128.42	108.7	18	23	5						21	8	SKP
ST. VINCENT	144.00	73.1	18	45	-2								
TAMANRASSET	144.26	304.3	18	50K	2				20	28	21	52	PP
TRINIDAD	144.30	77.4	18	48	0								
BARBADOS	145.60	72.6	18	55	5								

JUNE 1 12.H 32.M 32.S EPICENTRE -6.51 154.78 DEPTH= 420.KM

DEPTH OF FOCUS= 0.061R

A=-0.89889 B= 0.42345 C=-0.11266 D= 0.4262 E= 0.9046
G= 0.1019 H=-0.0480 K=-0.9936 HT= 6.9

SE= 1.41

	DELTA	AZ.	P	O-C	S	O-C	*PP	SUPP.

	DEG.	DEG.	M S	S	M S	S	M S	M S	
RABAUL	3.47	311.4	1 8	-1				1 51	
PORT MORESBY	8.08	248.7	1 58	1	3 34	4		2 15	PPP
CHARTERS TS.	15.76	210.8	3 23	2	6 10	6			
NOUMEA	19.32	145.5	3 58K	1	7 13	5			
BRISBANE	20.92	184.3	4 11	-1	6 5	-91			
GUAM	22.21	333.4	4 23	-1	7 57	0		6 22	*SP
RIVERVIEW	27.39	186.6	5 11K	0	9 21	1			
CANBERRA	29.16	189.7	5 26A	0			6 42	8 12	PCP
ADELAIDE	31.92	205.5	5 50A	0	10 33	2		7 8	
MELBOURNE	32.42	194.6	5 54A	0	10 40	1	7 19		
KARAPIRO	36.51	151.9	6 29K	0				8 41	PCP
COBB RIVER	37.97	157.7	6 42	1					
TUAI	37.98	151.1	6 41	0	12 1	-2			
KAIMATA	38.77	160.2	6 49	2					
WELLINGTON	38.94	155.8	6 49	0					
GEBBIES PASS	40.23	159.8	6 59	0					
BAGUIO CITY	40.79	304.3	7 5	1					
ABUYAMA	44.97	337.5	7 37A	0					
MATUSIRO	45.56	341.3	7 41	-1	13 48	-4	9 12	16 28	*SS
HONG KONG	49.00	307.0	8 8	0					
ZO-SE	49.30	321.2	8 16	6	14 54	10			
NANKING	51.44	320.4	8 26	0	15 16	3			
KIPAPA	53.98	57.7	8 44	-1					
CHANGCHUN	56.75	334.8	9 3	-1	16 25	2			
PEKING	58.40	325.8	9 15	0	16 45	1			
SIAN	59.33	316.3	9 20	-2	16 55	-1			
KUNMING	59.59	303.9	9 24K	1	17 2	3			
TERRE ADELIE	60.91	186.0	9 30	-2	17 17	1			
LANCHOW	63.83	315.5	9 51K	0	17 53	1			
CAPE HALLETT	66.41	174.9	10 7	0	18 28	5		21 6	*SS
ULAN-BATOR	68.60	327.6	10 21	0	18 51	2			
SHILLONG	68.88	300.5	10 24K	2	18 54	2			
LHASA	70.89	304.3	10 36	2	19 19	4			
YAKUTSK	71.02	347.8	10 35	0	19 17	0			
SCOTT BASE	71.58	177.3	10 38	-1					
IRKUTSK	72.55	330.2	10 44	0	19 38	4			
CHATRA	73.28	300.4	10 47	-1					
TIKSI	79.83	351.9	11 22	-2	20 52	1			
COLLEGE	82.72	21.3	11 38	-1			13 9	13 56	*SP
BYRD STATION	82.88	169.9	11 39	-1	21 22	0	13 10		
POONA	83.51	289.4	11 43	0					
SOUTH POLE	83.53	180.0	11 42	-1					
LAHORE	85.29	302.4	11 51	-1					
FRUNSE	87.25	313.5	12 1	0	22 10	6			
WARSAK DAM	88.01	304.4	12 4	-1					
BERKELEY	88.43	51.8	12 4	-3	22 21	6		13 41	
SHASTA	88.79	49.0	12 8	-1					
LICK	88.83	52.4	12 11K	2				13 46	
MINERAL	89.33	49.4	12 12	1					
FRESNO	90.20	53.2	12 16	1					
RENO	90.57	50.4	12 18	1					
PASADENA	91.18	55.9	12 20	0	22 53	14		14 6	
QUETTA	91.36	300.1	12 20	0					
EUREKA	93.52	50.8	12 30	0			14 6		
HUNGRY HORSE	95.61	42.1	12 39	-1			14 9		
RESOLUTE	101.56	14.7	13 11	4	23 8	4		17 32	PP
KIRUNA	111.58	343.0	17 45	0					
NURMIJARVI	114.50	335.4	17 51	0				19 33	
HELSINKI	114.56	335.0	17 52	1					
SKALSTUGAN	116.96	342.2	17 56	0					
UPPSALA	117.71	337.2	17 56	-1					
GOTEBORG	121.33	337.7	18 5	1					
BREBEUF	122.96	38.8	18 7K	0					
COLLMBERG	125.29	331.6	18 12	0					
PRUHONICE	125.38	329.6	18 13	1					
HALLE	125.65	332.3	18 11	-1					
JENA	126.21	332.0	18 13	0					
SONNEBERG	126.76	331.7	18 14	0				21 57	
HUANCAYO	126.87	110.2	18 18	3					
STUTTGART	128.81	331.3	18 21	3					
STRASBOURG	129.62	332.0	18 22	2					
LEOPOLDVILLE	138.17	256.1	18 33	-3					
SETIF	139.28	320.8	18 31	-7					
ALGIERS UNI.	140.34	323.4	18 42	2				21 41	
SERRA PILAR	142.47	339.2	18 40A	-4					
RELIZANE	142.50	324.5	18 41	-3				19 18	
GRANADA	143.66	330.2	18 53K	7					

ST. VINCENT	143.91	76.6	18 44	-3							
LISBON	144.79	337.9	18 50K	2							
TAMANRASSET	146.26	301.9	18 53	3					20 31	22 22	PP

JUNE 1 17.H 7.M 22.S EPICENTRE -6.37 156.11 DEPTH= 50.KM

DEPTH OF FOCUS= 0.003R

A=-0.90876 B= 0.40252 C=-0.11017 D= 0.4050 E= 0.9143
G= 0.1007 H=-0.0446 K=-0.9939 HT= 6.9

SE= 2.20

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S	
RABAUL	4.47	298.6	1 6	-1	1 56	-2			
PORT MORESBY	9.37	250.7	2 18	3	4 6	6		4 24	SS
CHARTERS TS.	16.60	214.3	3 53	3				4 4	PP
NOUMEA	18.72	148.8	4 12	-5				4 18	PP
GUAM	22.71	330.2	4 53	-5	8 57	-1			
SUVA	24.72	120.3	5 38	20					
RIVERVIEW	27.71	188.9	5 45	0	10 19	-3			
CANBERRA	29.55	191.8	6 2K	0			6 29	6 59	PP
ADELAIDE	32.63	207.1	6 29A	0				7 34	PP
MELBOURNE	32.92	196.4	6 31A	0	12 4	19		15 16	
KARAPIRO	36.03	153.4	6 58K	0				8 27	PP
GEBBIES PASS	39.92	161.2	7 6	-25					
BAGUIO CITY	41.81	303.2	7 47	1	14 8	8			
TUKUBASAN	44.95	341.6	8 10A	-2	14 30	-15	8 30	9 52	PP
PERTH	45.36	230.6						10 11	PP
ABUYAMA	45.36	336.1	8 12K	-3					
MATUSIRO	45.87	339.8	8 18	-1	14 55	-4		18 21	SS
HONG KONG	49.97	306.1	8 48	-3	15 49	-7			
ZO-SE	50.03	320.1	8 57A	6			9 24		
NANKING	52.18	319.3	9 8A	1			9 32		
HONOLULU	52.66	57.2	9 12	1	16 42	9		19 53	
VLADIVOSTOK	53.93	338.2	9 21	1	16 53	2			
Y.-SAKHLINSK	54.40	348.7	9 26	2	17 4	7			
PHU-LIEN	55.58	300.4	9 35	3	17 28	15			
UGLEGORSK	56.56	349.0	9 39	-1					
CHANGCHUN	57.19	333.8	9 44A	0			10 13		
PEKING	59.03	324.9	9 56A	-1			10 25		
PETROPAVLOVK	59.31	1.8	9 59	0	18 7	5			
SIAN	60.15	315.5	10 4A	-1					
KUNMING	60.61	303.3	10 6A	-2					
TATUNG	60.76	323.3	10 8	-1					
TERRE ADELIE	61.20	186.6	9 47	-25	18 42	16			
CHENGTU	61.95	309.6	10 15A	-2					
LANCHOW	64.67	314.8	10 35A	0					
CAPE HALLETT	66.44	175.3	10 46	0	19 43	12		11 9	PCP
WILKES	67.49	198.3	10 52	0					
CHITTAGONG	69.05	296.7	11 20	18	20 35	33	11 52	14 8	PP
ULAN-BATOR	69.19	327.0	11 4	1	20 12	8			
SHILLONG	69.95	300.0	10 51K	-17					
YAKUTSK	71.17	347.2	11 15	0	20 36	9			
SCOTT BASE	71.66	177.6	11 18K	0	21 32	59		14 6	PP
LHASA	71.91	303.8	11 21	2					
IRKUTSK	73.09	329.7	11 27	1					
TIKSI	79.88	351.5	12 3	-2					
COLLEGE	82.11	21.0	12 15	-1	22 27	1	12 40	30 22	PKKP
BYRD STATION	82.79	169.9	12 19	-1	23 1	28			
SOUTH POLE	83.67	180.0	12 20	-4					
LAHORE	86.33	302.1	12 38	0					
BERKELEY	87.30	51.6	12 40	-2					
LICK	87.69	52.2	12 46	2					
SHASTA	87.70	48.8	12 47K	3					
FRUNSE	88.11	313.3	12 46	0					
MINERAL	88.23	49.3	12 50	3					
FRESNO	89.05	53.0	12 54	3					
RENO	89.46	50.3	12 55	2					
PASADENA	90.00	55.8	12 56	1	24 3	21			
EUREKA	92.40	50.7	13 7	1			13 37		
QUETTA	92.43	299.9	13 6	0				25 23	PS
HUNGRY HORSE	94.62	42.0	13 18	2				17 6	PP
SVERDLOVSK	98.29	326.4						17 34	PP
KHEYS	98.64	350.2	13 27	-8				24 2	SKKS

MAKHACH-KALA	107.92	313.0								18	48 PP
APATITY	107.93	340.1	13	22	777	24	37	-13		18	50 PPP
TIFLIS	110.09	312.0								19	0 PP
SODANKYLA	110.25	341.4	18	22	-4						
MOSCOW	111.04	327.8								19	9 PP
KIRUNA	111.83	343.4								19	17 PP
PULKOVO	112.90	333.5				25	30	19			
SIMFEROPOL	116.84	317.5								19	49 PP
UPPSALA	118.08	337.7								19	57
KSARA	118.53	305.0	18	47	5					20	5 PP
KISHINEV	119.49	321.3								20	9 PP
OTTAWA	120.73	40.1	18	48K	2						
LWOW	121.02	325.9	18	49	2					20	22 PS
WARSAW	121.32	329.4								20	19
BREBEUF	122.02	39.3	18	51	2						
COPENHAGEN	122.97	336.4								20	24
PALISADES	123.73	44.2								20	32 PP
POTSDAM	125.02	333.3								20	51 PP
COLLMBERG	125.79	332.3	19	0	4					20	38
ELISABTHVLLE	125.92	250.8	19	6	10						
PRUHONICE	125.92	330.3	18	59K	3					20	54 PP
JENA	126.69	332.7	18	57	-1					20	57 PP
PLAUEN	126.73	332.0								20	57 PP
DE BILT	128.50	337.5								11	10 PP
CHINCHINA	128.52	88.7	19	5	4					22	25 SKP
HALIFAX	128.55	35.7								22	25
TRIESTE	129.09	326.5	19	4	2					21	14 PP
STUTTGART	129.31	332.2	19	5	2					21	14 PP
BOGOTA	130.04	89.3								22	31 SKP
STRASBOURG	130.10	332.9	19	2	-2	25	50	-17		21	18 PP
RATHFARNHAM	131.05	346.1								20	30
ROME	132.13	323.4	19	6	-2					31	8 PS
CARACAS	137.25	81.5	18	52	-26					29	36 SKKS
SETIF	139.99	322.0	19	17	-6				19 43	22	21 PP
ALGIERS UNI.	141.00	324.7	19	21	-4				19 48	22	27 PP
TOLEDO	142.17	334.8	19	32	5					25	18
SERRA PILAR	142.79	340.8	19	23K	-5						
GRANADA	144.18	331.8	19	32A	2	26	4	-28		22	47 PP
LISBON	145.14	339.6	19	35K	3						
TAMANRASSET	147.30	303.0	19	39	4				20 11	23	22 PP
PONTA DELGDA	148.74	2.7	19	45K	7						
MBOUR	169.53	320.0							25 51	25	7 PP

JUNE 2 0.H 47.M 17.S EPICENTRE 31.46 131.59 DEPTH= 0.KM

A=-0.56722 B= 0.63918 C= 0.51935 D= 0.7480 E= 0.6637
G=-0.3447 H= 0.3884 K=-0.8546 HT= 1.3

SE= 3.40

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
MIYAZAKI	0.48	342.8	0	14K	0	0	20	-3				
KAGOSIMA	0.89	277.3	0	23A	4	0	39	6				
YAKUSIMA	1.37	223.1	0	29	3							
ASOSAN	1.50	343.2	0	30	2	0	51	2				
KUMAMOTO	1.55	331.2	0	30A	1	0	53	3				
UNZENDAKE	1.70	318.5	0	35	4	1	0	6				
SIMIDU	1.76	41.4	0	28	-4	0	46	-9				
OOITA	1.76	0.9	0	35A	3	0	55	0				
NAGASAKI	1.92	311.6	0	35A	1	1	10	11				
UWAZIMA	1.94	24.6	0	32	-3							
SAGA	2.09	329.0	0	39A	2	1	7	3				
HUKUOKA	2.33	335.3	0	42A	2	1	15	5				
SIMONOSEKI	2.54	347.6	0	40	-3	1	13	-2				
MATUYAMA	2.56	22.2	0	40	-3	1	13	-3				
KOTI	2.65	37.7	0	53	8							
TOMIE	2.66	296.5	0	47	2	1	27	9				
MUROTO	2.83	50.2	0	57	10	1	14	-8				
HIROSIMA	2.99	13.5	0	49	0	1	33	7				
ITUHARA	3.35	325.2	0	56	1	1	47	11				
HAMADA	3.45	6.6	0	55K	-1	1	31	-7				
TAKAMATU	3.53	35.4	0	56	-1	1	40	0				
OKAYAMA	3.76	30.8	0	56	-4	1	41	-5				
SUMOTO	4.00	43.0	1	2A	-2	1	52	0				
SIOMISAKI	4.05	59.6	1	4	-1	1	58	5				
WAKAYAMA	4.09	46.6	1	31	26							

MATSUE	4.17	16.9	1	13	7	2	2	6		
YONAGO	4.22	19.9							2	15 S*
KOBE	4.41	42.3	1	25	15				1	53
OSAKA	4.59	45.1	1	20	8	2	20	13		
OWASE	4.68	55.0	1	12	-1	1	57	-12		
ABUYAMA	4.77	43.4	1	13	-2					
NARA	4.80	46.8	1	16	1	2	16	4		
TOYOOKA	4.88	32.8	1	29	13	2	28	14		
KYOTO	4.97	43.3	1	19	1	2	5	-12		
MAIZURU	5.15	38.0	1	20	0	2	34	13		
KAMEYAMA	5.31	49.2	1	23	1	2	27	2		
HIKONE	5.45	44.5	1	25	1	2	22	-7		
IBUKISAN	5.60	44.4	1	25	-1	2	23	-9		
NAGOYA	5.83	49.2	1	28	-2	2	30	-8		
GIHU	5.85	46.4	1	29	-1	2	28	-11	3	55
HUKUI	6.01	39.2	1	32	0	2	37	-6		
OMAESAKI	6.39	58.9	1	36	-2				3	41
SHIZUOKA	6.70	56.7				2	53	-7		
TOYAMA	7.00	40.2	1	53	7	3	22	15		
MATUMOTO	7.14	46.3	2	3	15	3	46	35		
KOHU	7.16	52.6	2	7	19	3	33	21		
MISIMA	7.16	57.4	1	49	1				4	2
HUNATU	7.23	54.2				3	6	-7	2	30 PG
WAZIMA	7.36	35.2	1	52	1					
MATUSIRO	7.49	45.5	1	50A	-3	3	21	1		
OIWAKE	7.56	48.1	2	2	8					
NAGANO	7.56	44.8	2	0	6	4	12	51		
TITIBU	7.70	52.2	2	8	12					
YOKOHAMA	7.81	57.4	2	21	23	3	37	9		
TAKADA	7.88	42.6	2	3	5	3	35	6		
MAEBASI	7.93	49.6	1	58	-1				4	18
KUMAGAYA	7.99	52.1	1	56	-4				4	54
TOKYO C.M.O.	8.01	56.1				3	31	-2		
TUKUBASAN	8.52	53.9	2	5	-2				2	31
UTUNOMIYA	8.55	51.3	2	17	9	3	48	2		
KAKIOKA	8.58	54.0	1	57	-11					
MITO	8.86	54.0	2	11	-1					
NIIGATA	8.90	41.6	2	4	-9					
ZO-SE	8.91	270.4	2	22	9					
ONAHAMA	9.46	52.1	2	26	6					
HUKUSIMA	9.64	47.0	2	25	2					
SENDAI	10.23	45.8	2	34	3					
AKITA	10.76	37.7	3	0	22					
NANKING	10.90	276.4	2	40	0					
DAIREN	11.02	315.1	2	43	1					
VLADIVOSTOK	11.64	1.1	2	48	-2					
CHANGCHUN	13.31	339.9	3	14A	1					
PEKING	15.14	308.6	3	37A	0				3	50 PP
SUIHWA	15.55	348.1	3	41	-1					
TATUNG	17.15	305.2	4	9	6					
Y.-SAKHLINSK	17.68	25.8	4	7	-2					
HONG KONG	18.00	243.8	4	12	-1	7	55	23		
BAGUIO CITY	18.02	216.3	4	15	2					
CANTON	18.27	247.3	4	20	4					
SIAN	19.24	284.4	4	28A	0					
UGLEGORSK	19.30	21.2	4	25	-4	7	58	-3		
MANILA	19.41	212.4	4	32	2	8	21	17		
GUAM	21.61	143.0	4	53	0	8	53	4		
LANCHOW	23.50	288.8	5	12A	0					
WUWEI	24.60	293.2	5	23	0					
ULAN-BATOR	24.96	318.3	5	25	-1	9	43	-5		
KUNMING	26.20	263.2	5	38	0					
PETROPAVLOVK	29.19	34.2	6	2	-3	10	52	-5		
YAKUTSK	30.60	358.3	6	34	16	11	14	-6		
MAGADAN	30.91	19.0	6	17	-3	11	21	-4		
SHILLONG	35.25	270.6	6	56	-2					
CHITTAGONG	36.44	265.5	7	18	10	12	51	1		
TIKSI	40.25	358.7	7	36	-4	13	44	-4		
RABAUL	40.53	147.3	7	43	1					
PORT MORESBY	43.28	157.3							12	59
DEHRA DUN	45.57	283.1							19	12
FRUNSE	46.04	301.1	7	25	-62					
LAHORE	48.32	285.9	8	43	-2					
CHARTERS TS.	53.08	162.7	9	22	1					
SVERDLOVSK	54.05	320.1	9	24	-4					
QUETTA	54.78	286.7	9	32	-2					
KHEYS	57.41	348.3	9	42	-11	17	34	-15		
COLLEGE	58.04	29.8	9	54	-3	17	54	-3	20	23

BRISBANE	62.08	158.4	10	25	0	18	49	0			
APATITY	64.35	335.1	10	35	-5	19	9	-8		19	26 PS
ADELAIDE	66.38	173.6	10	53	0						
MOSCOW	66.74	322.1	10	52	-3						
SODANKYLA	66.83	336.0	10	51	-5						
TIFLIS	67.65	306.1	10	58	-3						
PULKOVO	68.69	327.8								11	11 PCP
KIRUNA	68.69	337.7	11	4	-3						
RESOLUTE	69.87	11.9	11	12A	-2	20	17	-7			
NURMIJARVI	70.84	329.9	11	17	-3						
HELSINKI	70.88	329.5	11	18	-3						
THULE	71.65	4.9	11	22	-3						
SKALSTUGAN	73.90	336.0	11	35	-4						
UPPSALA	74.15	331.3	11	37	-3						
VICTORIA	76.06	41.4	11	52	1						
LWOW	76.78	320.6								11	57
KSARA	77.47	301.9	11	56	-3						
CORVALLIS	78.23	44.8	12	4	1						
KARAPIRO	80.28	146.2	12	14	0						
SHASTA	80.91	47.7	12	14	-3						
HUNGRY HORSE	81.28	37.9	12	19	0						
COLLMBERG	81.52	326.1	12	15	-6						
PRUHONICE	81.61	324.5	12	19	-2						
JENA	82.43	326.4	12	21	-4						
SONNEBERG	82.98	326.2	12	24	-4					12	49
RENO	83.20	47.6	12	33	4					12	53
BUTTE	83.52	39.1	12	31	0						
DE BILT	84.50	330.1	12	55	19						
TOLMEZZO	84.72	322.4	12	49	12						
FRESNO	84.81	49.8	12	37	0						
TRIESTE	84.82	321.5	12	51	13						
STUTTGART	85.03	325.9	12	36	-3					13	3
EUREKA	85.62	45.8	12	41	-1					16	3 PP
STRASBOURG	85.84	326.4	12	41	-2	23	13	-2		29	13 SS
ROME	87.98	319.3				23	24	-12		25	0
RAPID CITY	89.72	36.1	13	1	0						
TUCSON	93.41	48.8	13	19	1						
TUCSON TELE.	93.42	48.7	13	18	0						
PALISADES	104.14	19.6								25	49
SOUTH POLE	121.29	180.0	18	54	-1						
BYRD STATION	124.03	168.5	19	1	1						
HUANCAYO	148.55	58.1	19	50	5						

JUNE 2 1.H 56.M 36.S EPICENTRE 0.05 123.44 DEPTH= 215.KM

DEPTH OF FOCUS= 0.029R

A=-0.55109 B= 0.83445 C= 0.00086 D= 0.8344 E= 0.5511
G=-0.0005 H= 0.0007 K=-1.0000 HT= 7.2

SE= 2.46

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S	
MANILA	14.64	350.5	3	20	2	6	8	13					
BAGUIO CITY	16.51	350.3	3	39	-2	6	48	12					
LEMBANG	17.20	246.3	3	45K	-3	6	55	4					
GUAM	24.97	56.9	4	59	-6								
PORT MORESBY	25.40	112.3				9	38	20			11	26	SS
RABAUL	29.01	98.7	5	43	1						6	23	
CHARTERS TS.	29.95	133.1									12	18	SS
ZO-SE	30.95	356.2	6	5	6				6	47	6	56	*SP
KUNMING	31.95	322.6	6	9	1								
NANKING	32.13	352.6	6	10A	1				6	51	7	9	*SP
CHENGTU	35.60	330.5	6	39	0						7	29	*SP
SIAN	36.64	339.6	6	48A	1								
ADELAIDE	37.62	159.2	6	57A	2						8	24	
MATUSIRO	38.82	19.1	7	5A	0				7	49	9	14	PCP
TUKUBASAN	39.18	21.5	7	6	-2						9	15	PCP
BRISBANE	39.45	136.3	7	12	1						15	56	
LANCHOW	40.22	335.1	7	18A	1						8	11	*SP
PEKING	40.34	351.4	7	16	-2						8	9	*SP
CANBERRA	42.50	148.5	7	38A	2				8	18	9	12	PP
LHASA	42.65	316.5	7	40A	3								
ULAN-BATOR	49.80	345.5	8	23	-10								
UGLEGORSK	51.41	15.6	8	45	0								

DEHRA DUN	52.58	309.2	8 58	5						
LAHORE	55.99	308.9	9 18	0						
WARSAK DAM	59.12	310.4	9 37	-3						
PETROPAVLOVK	60.46	23.5	9 49	0						
QUETTA	61.41	304.7	9 55K	0						
YAKUTSK	61.99	3.3	9 58	-1	18 2	-3				
MAGADAN	63.06	15.2	10 7	1	18 26	8				
TERRE ADELIE	67.93	172.4	10 34	-3						
TIKSI	71.55	1.8	10 57	-2	20 0	1				
SVERDLOVSK	75.41	329.7	11 21	-1						
TANANARIVE	76.68	250.6	11 21	-8						
SCOTT BASE	81.18	171.5	11 54	1					15 58	
KHEYS	86.76	350.5	12 17	-4						
MOSCOW	87.59	325.6	12 25	0						
JERUSALEM	88.46	301.6	12 31	2						
COLLEGE	89.42	25.3	12 33	0			13 27		15 55	PP
APATITY	89.96	337.4	12 35	-1						
SOUTH POLE	90.05	180.0	12 37	1	22 43	-1	13 19			
SODANKYLA	92.59	337.4	12 46	-2						
BULAWAYO	94.56	249.9	12 57	0						
BYRD STATION	94.60	171.0	12 59	2			13 37		13 41	*SP
BROKEN HILL	94.83	255.6	12 59	1						
KIRUNA	94.86	338.2	12 57	-1						
ELISABTHVLLE	95.91	258.4	13 7A	4						
RESOLUTE	101.99	9.7	13 31	0					17 36	PP
PRUHONICE	102.03	321.4							17 47	PP
HUNGRY HORSE	110.98	37.0	18 11	4						
SETIF	112.32	309.5							18 22	PP
EUREKA	113.16	46.4	18 15	4						
TAMANRASSET	115.58	295.3	18 20	4					19 8	PP
RAPID CITY	119.62	37.1	18 28	4					19 52	PP
TUCSON	119.63	52.3	18 29	5						
TUCSON TELE.	119.68	52.2	18 29	5						
SEVEN FALLS	131.39	13.0	18 50	3						
OTTAWA	131.67	18.0	18 50	3						
BREBEUF	132.20	16.2	18 46K	-2						
COLUMBIA	139.08	31.7	19 5	4						
BERMUDA	146.85	12.6	19 24	9						
HUANCAYO	157.88	123.3	19 38	8					20 12	PKP2
SAN JUAN	159.42	26.7							20 14	PKP2

JUNE 2 2.H 37.M 46.S EPICENTRE 20.88 120.81 DEPTH= 0.KM

A=-0.47889 B= 0.80317 C= 0.35438 D= 0.8589 E= 0.5121
G=-0.1815 H= 0.3044 K=-0.9351 HT= 4.5

SE= 3.69

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
HENGCHUN	1.11	357.3	0 20	-3	0 38	-1		
TAWU	1.46	3.4	0 23	-5	0 40	-8		
KAOHSIUNG	1.80	344.0	0 31	-2	0 52	-5		
TAITUNG	1.88	9.7	0 29	-5	0 54	-5		
TAINAN	2.17	345.6	0 41	3	1 12	6		
HSINKONG	2.27	13.3	0 35	-4	1 1	-8		
YUSHAN	2.59	2.9	0 49	5	1 25	8		
ALISHAN	2.62	359.9	0 48	3	1 24	6		
PENGHU	2.88	336.4	1 12	24	1 43	19		
HWALIEN	3.16	13.6	0 54	2	1 35	4		
TAICHUNG	3.25	358.0	0 55	1	1 28	-6		
HSINCHU	3.90	2.2	0 49	-14	1 47	-3		
ILAN	3.96	12.5	1 4	0	1 48	-4		
TAIPEI	4.18	8.9	1 5	-2	1 57	0		
BAGUIO CITY	4.44	182.8	1 12	2	2 0	-4		
MANILA	6.27	178.5	1 35	-1	2 42	-8		
HONG KONG	6.33	284.1	1 35	-2	2 39	-12		
CANTON	7.32	288.8	1 47	-4	3 12	-4		
ZO-SE	10.18	1.8	2 34	3	4 36	9		
NANKING	11.26	351.2	2 42	-4	4 49	-4		
YAKUSIMA	12.92	40.6	3 10	2				
PHU-LIEN	13.26	272.2	3 16	4	6 10	28		3 36 PPP
TOMIE	13.68	29.6	3 16	-2				
KAGOSIMA	13.76	37.4	4 4	45				
MIYAZAKI	14.52	38.7	3 55	26				
KUMAMOTO	14.80	34.5	3 32	-1				

SAGA	14.93	32.4	4	46	72					
HUKUOKA	15.25	32.0	3	41	2					
SIMONOSEKI	15.80	32.5	3	57	11					
SIMIDU	16.05	39.9	3	49	0					
MATUYAMA	16.68	36.9	3	57	0				8	52
HIROSIMA	16.91	35.0	4	7	7	7	50	42		
KOTI	16.93	39.2				7	12	4		
SIAN	16.96	324.2	3	58K	-2	7	9	0		
HAMADA	17.13	33.0	4	13	10	7	37	24		
KUNMING	17.20	287.4	4	2K	-1	7	19	5		
TAKAMATU	17.78	38.4	4	15	4	7	49	22		
TOKUSIMA	17.92	40.0	4	16	4					
CHENGTU	17.97	306.2	4	9K	-4					
SIOMISAKI	18.25	43.6	4	17	0	7	56	18		
SUMOTO	18.29	39.9	4	14	-3	7	58	19		
KOBE	18.69	39.7	4	26	4					
OSAKA	18.88	40.3	4	23	-1	8	14	21		
TIENSHUI	19.04	318.9	4	23	-3					
ABUYAMA	19.06	39.9	4	25K	-1	8	9	13		
TOYOOKA	19.08	37.2	4	25	-2	8	6	9		
NARA	19.09	40.8	4	24	-3					
KYOTO	19.26	39.9	4	28	-1	8	18	17		
PEKING	19.49	349.3	4	28K	-3	8	4	-2	11	48 PCP
KAMEYAMA	19.59	41.5	4	33	0	8	25	17		
HIKONE	19.74	40.2	4	36	2	8	23	11		
IBUKISAN	19.89	40.2	4	36	0					
NAGOYA	20.11	41.6	4	37	-1	8	38	18		
GIHU	20.14	40.7	4	38	-1	8	32	12	7	7
TATUNG	20.21	343.1	4	42	3					
HUKUI	20.28	38.6	4	31	-9					
OMAESAKI	20.55	44.7	4	43	0	8	38	9		
IIDA	20.87	42.1	4	46	0					
LANCHOW	21.21	319.2	4	48K	-2	8	42	0		
TOYAMA	21.27	38.7	5	0	10	8	47	4		
MISIMA	21.35	44.5	4	49	-2	8	51	7		
KOHU	21.41	42.9	4	53	1	8	53	8		
OSIMA	21.43	45.9	4	52	0					
MATUMOTO	21.43	40.8	4	54	2					
HUNATU	21.46	43.5	4	56	4	8	43	-3		
YINCHUAN	21.55	327.6	4	53	0					
WAZIMA	21.58	36.9	4	52	-1					
PAOTOW	21.67	337.3	4	53	-1					
MATUSIRO	21.78	40.5	4	57	1	8	52	0		
MERA	21.81	46.1	4	49	-7					
OIWAKE	21.84	41.4	5	6	10					
NAGANO	21.85	40.2	4	57	1	9	0	6		
TITIBU	21.95	42.9	4	57	0					
YOKOHAMA	21.99	44.8	5	7	9	9	14	18		
TOKYO C.M.O.	22.20	44.4	5	14	14	9	14	14		
MAEBASI	22.21	42.0	5	6	6					
KUMAGAYA	22.25	42.9	5	7	7	9	14	13		
TUKUBASAN	22.75	43.7	4	57	-8	9	6	-4	5	24 PP
UTUNOMIYA	22.81	42.7	4	57	-9				9	31
KAKIOKA	22.81	43.8	4	58	-8					
SINING	22.83	317.5	5	5	-1					
WUWEI	23.14	321.2	5	12	3					
NIIGATA	23.18	39.0	4	58	-11					
CHANGCHUN	23.19	8.3	5	5	-4	9	14	-4		
GUAM	24.01	104.0	4	54	-24					
VLADIVOSTOK	24.04	20.2	5	14	-4					
SENDAI	24.52	40.7	5	23	1					
AKITA	25.00	37.1	6	0	33				10	4
MIZUSAWA	25.21	39.4	5	26	-3	10	14	21		
HATINOHE	26.36	37.4	5	26	-14					
SHILLONG	26.97	285.5	5	45A	0	10	31	9	6	31 PP
CHITTAGONG	26.97	278.5	5	53	8	10	36	14		
SAPPORO	28.02	33.2							6	27 PP
LHASA	28.23	294.0	5	59	2	10	45	3		
ULAN-BATOR	29.22	340.7	6	2	-4	10	54	-4		
DJAKARTA	30.19	208.5	6	2A	-12					
LEMBANG	30.43	206.6	6	16A	-1	11	21	4		
CHATRA	31.27	287.5	6	34	10					
Y.-SAKHLINSK	31.52	29.3	6	30	4					
UGLEGORSK	32.86	26.1	6	38	0					
IRKUTSK	33.84	341.8	6	42	-4					
DEHRA DUN	39.49	292.6	7	47	13	13	35	-2	9	7 PP
RABAUL	39.60	125.5	7	31	-4					
PORT MORESBY	39.70	136.7	7	34	-2	13	32	-8	17	52 SCS
YAKUTSK	41.57	6.3	7	47	-4					

The scanned images of the bulletins of the International Seismological Summary (ISS) have been obtained thanks to funding provided by the US National Science Foundation through grant EAR-9725140 (Villaseñor et al., 1997) and collected by SGA Storia Geofisica Ambiente (Bologna) on behalf of the Istituto Nazionale di Geofisica e Vulcanologia (Rome), in the frame of the EUROSEISMOS project.

PETROPAVLOVK	43.30	32.6	8	0	-5						
MAGADAN	44.16	21.4	8	13	1						
FRUNSE	44.29	310.5	8	13	0						
BOMBAY	45.04	276.2				15	0	2			
WARSAK DAM	45.23	297.5	8	23	2						
NAMANGAN	45.99	307.2	8	28	1						
CHARTERS TS.	47.67	146.9	8	38	-2						
STALINABAD	47.86	303.5	8	41	-1						
QUETTA	49.09	292.3	8	50	-1	15	57	1	10	41	PP
TIKSI	50.98	3.3	8	59	-7						
SVERDLOVSK	56.52	325.1	9	45	-2						
BRISBANE	57.31	145.7							17	44	
ADELAIDE	58.06	162.7	9	55	-2	17	56	-2	18	18	PS
RIVERVIEW	61.62	151.4	10	25	3	18	47	4			
CANBERRA	61.97	154.0	10	22	-2				12	50	PP
MAKHACH-KALA	64.03	308.6	10	39	1						
KHEYS	65.91	349.8	10	40	-10						
TIFLIS	66.16	307.4	10	51	-1						
MOSCOW	69.20	323.1	11	9	-2						
SOTCHI	69.59	310.0	11	13	0						
APATITY	69.90	335.9	11	16	1	20	17	-8	20	31	PS
COLLEGE	71.89	26.7	11	22	-5	20	47	-1			
PULKOVO	72.44	327.9	10	33	-57						
SODANKYLA	72.52	336.1	11	26	-5				14	12	PP
SIMFEROPOL	73.27	312.2	11	37	2	21	0	-3			
KSARA	74.62	300.7	11	45	2	21	22	3	14	31	PP
KIRUNA	74.70	337.2	11	41	-3	21	17	-2	14	29	PP
HELSINKI	74.97	329.0	11	44	-1						
NURMIJARVI	75.02	329.4	11	44	-1	21	19	-4	21	57	PS
JERUSALEM	75.70	298.8	11	57	8						
KISHINEV	76.33	315.3	11	57	4	21	32	-5			
IASI	77.10	315.7	12	35	38						
LWOW	78.55	319.0	12	5	0				21	56	
UPPSALA	78.56	329.9	12	1	-4	21	57	-5			
BUCHAREST	78.92	313.3	12	37	30						
SKALSTUGAN	79.40	334.4	12	14	4						
WARSAW	79.53	321.9				22	6	-6	22	31	SCS
SITKA	79.97	32.6	12	17	4						
KRAKOW	80.96	320.1				22	25	-2	12	28	PCP
TANANARIVE	81.90	246.3	12	15	-8						
RESOLUTE	81.97	9.0	12	18	-5	22	44	7	15	22	PP
RACIBORZ	81.98	320.6	12	25	2						
THULE	82.75	2.2	12	31	4						
BRATISLAVA	83.40	319.1	12	33	2	22	59	7			
POTSDAM	83.95	324.0	12	32	-2				13	17	
PRUHONICE	84.17	321.5	12	35	0	22	56	-3	23	50	PS
HALLE	84.97	323.6	12	40	1	23	5	-2	15	49	PP
ZAGREB	85.07	317.3	12	47	8						
SCORESBY SD.	85.21	348.2	12	36	-4	23	4	-6	15	57	PP
PLAUEN	85.32	322.6	12	45	5				16	1	PP
JENA	85.44	323.2	12	40	-1	23	23	11	16	4	PP
SONNEBERG	85.91	322.8	12	48	5				13	5	
TRIESTE	86.55	317.8	12	43	-3	23	30	7	16	4	PP
TOLMEZZO	86.67	318.7	12	52	5				13	22	
STUTTGART	87.83	322.0	12	50	-3	23	26	-9			
DE BILT	88.31	326.2				23	26	-13			
STRASBOURG	88.74	322.3	12	54	-3	23	44	1	16	25	PP
TERRE ADELIE	88.79	172.0				23	8	-17			
PRATO	89.04	317.1	12	29	-29	23	44	-2			
ROME	89.07	314.9	12	53A	-6	23	24	-3	16	26	PP
UCCLE	89.45	325.4	13	10	10	23	25	-4			
PAVIA	89.62	318.9							24	33	
KEW	91.48	327.6				23	41	-1	24	3	
PARIS	91.57	324.4	13	16	6						
CORVALLIS	92.52	40.1	13	16	1						
CLERMONT-FD.	92.92	321.6							16	50	
RATHFARNHAM	93.15	331.3							26	55	
SHASTA	95.19	43.0	13	22	-5						
HUNGRY HORSE	95.47	33.2	13	26	-2						
MINERAL	95.88	42.9	13	28	-2						
SETIF	96.67	312.6	13	33	-1				17	29	PP
ELISABTHVLLE	97.19	260.3	13	43	7						
LICK	97.51	45.5	13	40A	3						
EUREKA	99.91	41.1	13	48	0						
SCOTT BASE	102.04	171.0							17	59	PP
GRANADA	102.05	317.6				24	36	-1	18	15	PP
TAMANRASSET	103.43	300.9							18	27	PP
TUCSON	107.67	44.2							18	53	PP

TUCSON TELE.	107.69	44.1						
SOUTH POLE	110.76	180.0	18 36	1			18 54	PP
BYRD STATION	115.45	170.3	18 41	-3				
CARACAS	147.90	14.4	19 36	-8				
HUANCAYO	162.22	62.9	20 2	-1			20 56	PKP2
LA PAZ	170.48	64.2	20 20	10				

JUNE 2 3.H 23.M 15.S EPICENTRE -25.64-176.00 DEPTH= 0.KM

A=-0.90045 B=-0.06294 C=-0.43039 D=-0.0697 E= 0.9976
G= 0.4293 H= 0.0300 K=-0.9026 HT= 3.2

SE= 3.14

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
RAOUL ISLAND	3.98	204.9	1 3	-1	1 52	0		
SUVA	9.07	324.2	2 23	8				3 2
APIA	12.43	19.4	3 3	2	5 0	-22		
ONERAHI	13.05	217.0	3 14	5				3 57
WELLINGTON	17.37	203.9	4 9	4	7 1	-17		
COBB RIVER	18.02	208.5						6 30
KAIMATA	19.76	208.4			8 7	-5		
GEBBIES PASS	20.25	204.3	4 44	4	8 4	-18		
BRISBANE	27.73	259.3	5 31	-21				14 52
RIVERVIEW	29.57	246.2	6 2A	-7	10 52	-11		
CHARTERS TS.	35.15	271.3	6 54	-3				
PORT MORESBY	38.50	288.1	7 23	-3	13 25	3		12 5
CAPE HALLETT	47.31	185.7	8 41	4	15 46	15		9 59 PCP
TERRE ADELIE	48.83	200.9	8 48	-1				
KIPAPA	49.93	22.1	8 57	-1				
SCOTT BASE	52.90	184.5	9 20	0	17 9	21		10 19 PCP
GUAM	54.52	310.9	9 28	-4				
BYRD STATION	59.29	170.3	10 4	-2				16 53
WILKES	60.16	206.6			17 53	-32		
SOUTH POLE	64.51	180.0	10 43	2				13 16 PP
MIRNY	67.16	205.7	10 53	-5	19 59	7		
HALLEY BAY	77.23	172.5	11 46	-12				
BERKELEY	80.83	40.3	12 16	-1				
LICK	80.84	41.0	12 18A	1				
PASADENA	80.91	45.3	12 16	-2				
Y.-SAKHLINSK	81.30	332.8	12 20	0				
PETROPAVLOVK	81.48	344.9	12 16	-5				
FRESNO	81.57	42.4	12 21K	0				
ZO-SE	82.39	309.7	12 31	6				
SHASTA	82.67	38.1	12 25	-2				
MINERAL	82.88	38.8	12 27A	-1				
RENO	83.37	40.3	12 31	1				
NANKING	84.59	309.3	12 35	-2				
TUCSON	84.69	50.6	12 38	1				
TUCSON TELE.	84.81	50.5	12 37	-1				
CORVALLIS	84.85	34.8	12 45	7				
EUREKA	85.62	42.3	12 40	-2				
CHANGCHUN	87.56	321.8	12 50	-1				
SANTA LUCIA	87.91	126.2			23 18	-2		29 36 SS
SALT LAKE C.	88.91	43.1	12 58	0				
MAGADAN	89.18	343.8	12 57	-2				
PEKING	90.81	314.7	13 7	0				
BUTTE	91.57	38.6	13 10	0				
HUNGRY HORSE	92.16	36.1	13 11	-2				16 51 PP
BOZEMAN	92.23	39.5	13 13	0				
COLLEGE	92.83	11.6	13 12	-4				
KUNMING	93.30	296.1	13 19	1				
HUANCAYO	94.26	105.4	13 25	3				
CHENGTU	94.77	301.6	13 24	-1				
RAPID CITY	96.09	43.8	13 31	0				
RESOLUTE	112.20	16.5	18 37	-1				
KHEYS	121.91	351.2	18 53	-4				
KIMBERLEY	122.35	201.6	18 59	2				
BROKEN HILL	133.57	213.6	19 18	-1				
SODANKYLA	135.99	347.6	19 22	-1				
ELISABTHVLLE	136.49	214.4	19 27	3				
KIRUNA	136.62	351.0	19 23	-1				
NURMIJARVI	142.36	343.4	19 29	-6				
ASTRIDA	142.46	225.4	19 33	-2				22 43 PP
LWIRO	143.32	224.6	19 36K	0				

RUMANGABO	143.68	226.2	19	44	7						
UPPSALA	144.52	348.2	19	34	4						
SOTCHI	145.92	310.8	19	41	0						
LEOPOLOVILLE	148.23	201.7	19	48	3						
SIMFEROPOL	149.03	316.2	19	50	4						
KISHINEV	150.97	323.7	19	55	6						
KSARA	151.23	294.0	19	53	4					23	35 PP
LWOW	151.30	332.5	19	56	7						
RATHFARNHAM	151.32	12.9	19	56	7					20	40
IASI	151.52	325.1	20	6	16					28	46
JERUSALEM	152.00	289.9	19	58	8					20	26
KRAKOW	152.69	337.3	19	59	8						
RACIBORZ	153.24	339.4	20	11	19					21	8
COLLMBERG	153.47	347.3	19	59	6					20	32 PKP2
HALLE	153.48	348.8	19	56	3					20	27 PKP2
KEW	154.00	6.2	20	14	21					20	33 PKP2
KEW	154.00	6.2	20	14	21					20	33 PKP2
JENA	154.09	349.0	19	52	-1					23	48 PP
BUCHAREST	154.09	321.9								22	16
PRUHONICE	154.36	344.1	20	3	9						
BENSBERG	154.60	355.3	20	17	23					22	28
BRATISLAVA	155.26	338.7								20	22 PKP2
STUTTGART	156.56	351.3	19	57	0					24	1 PP
FOLINIERE	156.65	7.5	20	25	28						
STRASBOURG	156.91	353.6	20	28	31					20	48 PKP2
TOLHEZZO	158.07	343.1	20	33	34						
TRIESTE	158.55	341.0	19	56	-3					20	37
CLERMONT-FD.	159.90	1.8	20	41	40						
ALICANTE	166.78	15.6	20	4	-3	27	6	-4		28	53
GRANADA	166.80	27.6	20	42K	35					24	59 PP
ALGIERS UNI.	168.88	4.0	20	7	-2					25	9 PP
SETIF	169.41	353.8	20	6	-3					25	15 PP
RELIZANE	169.50	15.6	20	8	-1					21	13 PKP2
TAMANRASSET	176.83	206.3	20	11	-1					25	48 PP

JUNE 2 3.H 31.M 57.S EPICENTRE -25.30-175.98 DEPTH= 0.KM

A=-0.90298 B=-0.06345 C=-0.42497 D=-0.0701 E= 0.9975
G= 0.4239 H= 0.0298 K=-0.9052 HT= 3.3

SE= 2.54

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
RAOUL ISLAND	4.30	203.2	1	4	-4						1	49
SUVA	8.81	322.8	2	15	3						2	45
APIA	12.10	19.8	2	54	-3	4	58	-16				
ONERAHI	13.34	216.2	3	20	7							
TUAI	14.66	201.7	3	41	10						5	57
NOUMEA	16.35	276.9	3	54A	1	7	16	21				
WELLINGTON	17.70	203.5	4	15	5	6	58	-28				
KAIMATA	20.07	208.0	4	44	6	8	8	-11			6	18
GEBBIES PASS	20.57	204.0	4	40	-3	8	9	-20				
CANBERRA	31.70	243.3	6	29	1						7	21
CHARTERS TS.	35.16	270.8	6	56	-2						7	17
MELBOURNE	35.29	239.7	6	54A	-5							
RABAUL	37.08	299.2	7	8	-6							
PORT MORESBY	38.42	287.7	7	23K	-2							
ADELAIDE	40.06	245.2	7	35	-4						13	13
CAPE HALLETT	47.65	185.6	8	39	-1							
TERRE ADELIE	49.16	200.8	8	51	-1							
KIPAPA	49.61	22.2	8	56	1							
SCOTT BASE	53.24	184.5	9	21K	-2	17	7	14			11	22 PP
GUAM	54.31	310.7	9	27	-3							
BYRD STATION	59.62	170.3	10	4	-4	18	14	-4				
SOUTH POLE	64.85	180.0	10	40	-3							
MIRNY	67.48	205.7	10	56	-4	19	55	-1				
ABUYAMA	75.41	320.5	11	47A	0							
HALLEY BAY	77.57	172.5	11	58	-2							
BERKELEY	80.55	40.3	12	16	0							
LICK	80.57	41.0	12	17A	1							
UKIAH	80.85	38.8	12	19	2							
Y.-SAKHLINSK	81.01	332.8	12	19	1							
PETROPAVLOVK	81.16	344.9	12	17	-2							
FRESNO	81.30	42.4	12	21K	1							
ZO-SE	82.18	309.6	12	29A	5							
SHASTA	82.39	38.1	12	26A	1							

MINERAL	82.60	38.8	12	26A	0					
HONG KONG	82.62	298.8	12	13	-14					
UGLEGORSK	82.96	333.7	12	29	1					
RENO	83.09	40.3	12	30	1					
NANKING	84.39	309.2	12	36A	0					
TUCSON	84.45	50.6	12	37	1					
CORVALLIS	84.55	34.8	12	37A	1					
TUCSON TELE.	84.58	50.6	12	37	0				15	51 PP
EUREKA	85.35	42.3	12	40	0					
VICTORIA	87.22	31.9	12	50	0					
CHANGCHUN	87.31	321.7	12	51A	1					
HORSESHOE B.	87.89	31.3	12	52	-1					
SALT LAKE C.	88.65	43.1	12	58	2					
MAGADAN	88.86	343.8	12	57	0	23	35	-9		
SITKA	88.89	20.9	12	58	0					
PEKING	90.58	314.7	13	5A	-1					
BUTTE	91.29	38.6	13	9	0					
HUNGRY HORSE	91.87	36.1	13	11	0				16	49 PP
BOZEMAN	91.95	39.5	13	13	1					
COLLEGE	92.49	11.6	13	13	-1	23	47	0	17	14 PP
SIAN	92.59	306.7	13	15A	0					
KUNMING	93.17	296.1	13	18A	1					
HUANCAYO	94.33	105.4	13	24	1					
CHENGTU	94.61	301.6	13	24A	0					
RAPID CITY	95.82	43.8	13	30	0					
LANCHOW	97.14	306.4	13	36A	0					
RESOLUTE	111.86	16.4	18	35	-2				19	12 PP
KHEYS	121.58	351.3	18	52	-4					
QUETTA	124.70	290.3	19	2	0					
SODANKYLA	135.66	347.7	19	21	-2				22	1 PP
KIRUNA	136.28	351.1	19	22	-2				22	1 PP
ELISABTHVLLE	136.79	214.6	19	28	3					
MOSCOW	140.98	330.2	19	26	-6					
PULKOVO	141.00	339.1	19	36	4					
SKALSTUGAN	141.34	354.1	19	34	1					
NURMIJARVI	142.04	343.5	19	29	-5				22	27 PP
HELSINKI	142.25	343.0	19	31	-4					
TIFLIS	142.65	306.3	19	33	-2					
ASTRIDA	142.71	225.7	19	31	-4					
LWIRO	143.58	224.9	19	40	3					
UPPSALA	144.19	348.3	19	34A	-4					
SOTCHI	145.70	311.2	19	49	8					
LEOPOLDVILLE	148.56	201.9	19	50A	5					
SIMFEROPOL	148.80	316.6	19	49	3					
KISHINEV	150.70	324.1	19	53	4					
RATHFARNHAM	150.98	12.8	19	54	5					
LWOW	151.01	332.8	19	54	5					
KSARA	151.10	294.6	19	55	6				20	15 PKP2
JERUSALEM	151.90	290.5	19	58	8					
POTSDAM	152.10	348.1	19	49	-2				20	6
KRAKOW	152.38	337.6	19	48	-3					
RACIBORZ	152.93	339.7	19	59	7					
COLLMBERG	153.14	347.5	19	50	-2				23	42 PP
HALLE	153.14	349.0	19	55	3				24	7 PP
KEW	153.66	6.1	20	13	20				20	34 PKP2
JENA	153.76	349.1	19	51	-2				23	44 PP
PRAGUE	153.99	344.6							20	17 PKP2
PRUHONICE	154.04	344.4	19	54K	1				23	49 PP
PLAUEN	154.07	348.1	20	12	19					
BENSBERG	154.26	355.4	20	3	9				20	17 PKP2
SONNEBERG	154.35	349.3	20	4	10					
BRATISLAVA	154.95	339.0							20	19 PKP2
STUTTGART	156.22	351.5	19	56	0				24	4 PP
FOLINIERE	156.31	7.4	19	58	2				20	25
BELGRADE	156.41	329.8	20	25K	28				27	35
PARIS	156.50	2.5	19	59	2				20	27
STRASBOURG	156.57	353.7	19	56	-1				24	6 PP
TOLMEZZO	157.74	343.4	20	31	33				20	31 PKP2
TRIESTE	158.23	341.4	20	34	35				20	34 PKP2
CLERMONT-FD.	159.56	1.8							20	35 PKP2
TOLEDO	163.96	23.0	20	5	0				24	45 PP
ALICANTE	166.44	15.3	20	5	-2	27	7	-3		
GRANADA	166.49	27.0	19	55K	-12				25	1 PP
SETIF	169.07	354.1	20	8	-1				24	59 PP
RELIZANE	169.16	15.2	20	9	0				20	59 PKP2
TAMANRASSET	177.14	209.0	20	13A	1				25	58 PP

JUNE 2 3.H 52.M 10.S EPICENTRE -25.50-175.95 DEPTH= 0.KM

A=-0.90148 B=-0.06379 C=-0.42809 D=-0.0706 E= 0.9975
G= 0.4270 H= 0.0302 K=-0.9037 HT= 3.2

SE= 2.08

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
RAOUL ISLAND	4.13	204.6	1 2	-2	1 50	-3		
SUVA	8.98	323.4	2 10	-3				4 24
APIA	12.28	19.4	2 52	-6	5 2	-13		
ONERAHI	13.19	216.8	3 21	11				3 38
TUAI	14.49	202.0			5 51	-17		
NOUMEA	16.40	277.5	3 52A	0	7 19	26		
WELLINGTON	17.53	203.8	4 5	-1	7 1	-18		7 18
COBB RIVER	18.17	208.4			7 23	-10		
KAIMATA	19.91	208.3			7 57	-15		
GEBBIES PASS	20.40	204.3			8 1	-21		
BRISBANE	27.80	259.0	5 49	-2				
RIVERVIEW	29.67	246.0	6 15	7				7 13 PPP
CANBERRA	31.63	243.6	6 26	1				
CHARTERS TS.	35.19	271.1	6 54	-2				
MELBOURNE	35.22	239.9	6 53	-3				
PORT MORESBY	38.50	287.9	7 21K	-3			7 30	16 8 SS
ADELAIDE	40.00	245.4	7 35	-1				
CAPE HALLETT	47.46	185.7	8 37	1	15 57	28		18 53 SS
TERRE ADELIE	48.98	200.8	8 48	0				
KIPAPA	49.78	22.1	8 57	3				
SCOTT BASE	53.05	184.5	9 19K	0	17 1	14		10 26 PCP
GUAM	54.46	310.8	9 16	-13				
BYRD STATION	59.42	170.3	10 3	-2	18 5	-6		
SOUTH POLE	64.65	180.0	10 38	-2	19 12	-6		
MIRNY	67.31	205.7	10 54	-3	20 4	14		
BERKELEY	80.69	40.3	12 15	1				
LICK	80.70	41.0	12 15A	1				
PASADENA	80.77	45.3	12 13	-2				
Y.-SAKHLINSK	81.19	332.8	12 17	0				
PETROPAVLOVK	81.35	344.8	12 16	-2				
FRESNO	81.43	42.4	12 19K	1				
ZO-SE	82.33	309.6	12 28A	5				
SHASTA	82.53	38.1	12 24A	0				
MINERAL	82.74	38.8	12 25A	0				
HONG KONG	82.74	298.8	12 29	4	22 55	14		
UGLEGORSK	83.15	333.7	12 27	0				
RENO	83.23	40.3	12 28	1				
NANKING	84.53	309.2	12 35A	1				
TUCSON	84.56	50.6	12 35	1				
TUCSON TELE.	84.69	50.5	12 36	1				
CORVALLIS	84.70	34.8	12 36A	1				
EUREKA	85.48	42.2	12 39	0				
CHANGCHUN	87.48	321.7	12 48A	-1				
SALT LAKE C.	88.78	43.1	12 55	0				
MAGADAN	89.05	343.8	12 56	0	23 29	-13		
SITKA	89.07	20.9	12 56	0				
PEKING	90.74	314.7	13 4A	0				
BUTTE	91.43	38.5	13 8	1				
HUNGRY HORSE	92.02	36.1	13 9	-1				16 43 PP
BOZEMAN	92.09	39.5	13 11	1				
COLLEGE	92.68	11.6	13 12	-1				
SIAN	92.73	306.7	13 14	1				
KUNMING	93.28	296.1	13 17A	1				
CHENGTU	94.73	301.6	13 23A	1				
RAPID CITY	95.95	43.8	13 28	0				
LANCHOW	97.28	306.4	13 34	0				
YAKUTSK	97.41	337.3	13 32	-2				
RESOLUTE	112.04	16.5	18 35	0				
KIMBERLEY	122.50	201.6	18 53K	-2				
SODANKYLA	135.86	347.7	19 18	-3				
KIRUNA	136.48	351.1	19 20	-2				
ELISABTHVLLE	136.64	214.5	19 26	4				
MOSCOW	141.16	330.1	19 30	0				
SKALSTUGAN	141.54	354.1	19 31	0				
NURMIJARVI	142.24	343.5	19 27	-5				22 35 PP
HELSINKI	142.45	343.0	19 30	-3				
ASTRIDA	142.59	225.5	19 29	-4				
TIFLIS	142.78	306.1	19 30	-3				
IWIRO	143.46	224.6	19 33K	-1				

UPPSALA	144.39	348.3	19	33A	-3				20	47
SOTCHI	145.85	311.0	19	39	1					
LEOPOLDVILLE	148.38	201.7	19	48A	5					
SIMFEROPOL	148.96	316.4	19	48	4					
WARSAW	150.36	338.7	19	47	1				22	33
KISHINEV	150.88	323.9	19	47	1					
LWOW	151.19	332.7	20	3	16					
KSARA	151.21	294.3	19	50	3				23	35 PP
JERUSALEM	151.99	290.1	19	56	8					
POTSDAM	152.30	348.1	19	51	2				23	35
KRAKOW	152.58	337.5	19	50	1					
COLLMBERG	153.34	347.4	19	59	9				23	44 PP
HALLE	153.34	349.0	19	53	3				22	56
KEW	153.85	6.2	20	11	20				20	31 PKP2
JENA	153.95	349.1	19	50	-1				23	43 PP
PRUHONICE	154.24	344.3	20	0	9				23	46 PP
PLAUEN	154.27	348.0	20	14	23					
BENSBERG	154.46	355.4	20	2	10					
SONNEBERG	154.55	349.3	19	53	1				20	15
STUTTGART	156.42	351.5	19	55	1				24	5 PP
FOLINIERE	156.50	7.5	19	58	4				20	24
STRASBOURG	156.77	353.7	19	55	0				20	26 PKP2
TRIESTE	158.43	341.2	19	58	1				20	32 PKP2
ROME	162.21	339.0							20	54
ALICANTE	166.62	15.6	20	3	-2	27	5	-1		
GRANADA	166.65	27.4	20	10A	5				24	59 PP
ALGIERS UNI.	168.73	4.1	20	7	1				25	4 PP
SETIF	169.27	354.1	20	7	0				24	52 PP
RELIZANE	169.35	15.6	19	57	-10				25	4 PP
TAMANRASSET	176.98	206.8	20	10	0				25	49 PP

JUNE 2 4.H 57.M 19.S EPICENTRE 20.89 120.86 DEPTH= 0.KM

A=-0.47959 B= 0.80271 C= 0.35447 D= 0.8585 E= 0.5129
G=-0.1818 H= 0.3043 K=-0.9351 HT= 4.5

SE= 3.94

	DELTA DEG.	AZ. DEG.	P M	P S	P O-C S	S M	S S	S O-C S	*PP M	*PP S	SUPP. M	SUPP. S
HENGCHUN	1.11	354.9	0	19	-4	0	37	-2				
TAWU	1.45	1.6	0	23	-5	0	45	-3				
KAOHSIUNG	1.81	342.5	0	34	1	0	49	-8				
TAITUNG	1.87	8.3	0	28	-6	0	56	-2				
TAINAN	2.18	344.4	0	40	2	1	20	14				
HSINKONG	2.25	12.1	0	36	-3	1	2	-6				
YUSHAN	2.58	1.9	0	45	1	1	19	3				
ALISHAN	2.62	358.9	0	44	0	1	17	0				
PENGHU	2.90	335.9				1	16	-8				
HWALIEN	3.15	12.8	0	53	1	1	33	2				
TAICHUNG	3.25	357.2	0	49	-4	1	40	7				
HSINCHU	3.89	1.5	0	58	-4	1	56	6				
ILAN	3.95	11.9	1	4	1	1	45	-6				
TAIPEI	4.17	8.3	1	4	-2	1	53	-3				
BAGUIO CITY	4.45	183.4	1	10	0	2	7	3				
MANILA	6.28	178.9	1	36	0	2	46	-4				
HONG KONG	6.38	283.9	1	35K	-3	2	49	-3				
CANTON	7.36	288.6	1	44	-7	3	6	-11				
ZO-SE	10.17	1.6	2	34	4	4	37	10				
NANKING	11.27	351.0	2	43	-2	4	51	-2				
YAKUSIMA	12.89	40.4	2	57	-10	5	19	-14				
PHU-LIEN	13.30	272.1									3	29 PP
TOMIE	13.65	29.5	3	16	-1	6	23	32				
KAGOSIMA	13.73	37.3	3	22	4						7	44
NAGASAKI	14.27	32.4	3	20	-6	6	18	12			4	52
MIYAZAKI	14.49	38.5	3	23	-5	7	28	77				
KUMAMOTO	14.77	34.4	3	44	12							
SAGA	14.90	32.3	3	42	8							
HUKUOKA	15.22	31.9	3	42	4	7	53	85				
OOITA	15.57	35.7	4	25	42	7	57	81			6	51
SIMONOSEKI	15.77	32.3	3	49	4							
SIMIDU	16.02	39.8	3	49	1							
MATUYAMA	16.65	36.8	3	47	-9							
HIROSIMA	16.88	34.9	4	9	10							
KOTI	16.89	39.1									7	23
SIAN	16.98	324.1	3	58	-3	7	11	2				

HAMADA	17.10	32.9	4	5	3	7	43	31		
KUNMING	17.24	287.3	4	2K	-2					
TAKAMATU	17.74	38.3	4	34	24	7	51	24		
CHENGTU	18.00	306.1	4	9K	-4	7	26	-6		
YONAGO	18.17	34.5							5	19
SIOMISAKI	18.21	43.5	4	16	0	7	46	9		
SUMOTO	18.25	39.8	4	15K	-1	7	57	19	5	7
KOBE	18.66	39.6	4	29	8	7	59	12		
OSAKA	18.85	40.3	4	19	-5	8	5	13		
OWASE	18.88	42.7	4	19	-5	8	3	11		
ABUYAMA	19.02	39.8	4	23K	-3	8	5	10		
TOYOOKA	19.05	37.1	4	24	-2	8	7	11		
NARA	19.05	40.7	4	27	1					
TIENSHUI	19.07	318.8	4	26	0					
KYOTO	19.22	39.8	4	28	0	8	11	11		
PEKING	19.50	349.2	4	28K	-3	8	4	-2		
KAMEYAMA	19.56	41.4	4	36	4	8	18	11		
HIKONE	19.70	40.1	4	33	-1	8	23	12		
IBUKISAN	19.86	40.1	4	34	-1					
NAGOYA	20.08	41.5	4	39	1	8	30	11		
GIHU	20.11	40.7	4	36	-2	8	29	10		
TATUNG	20.21	343.0	4	43	4					
HUKUI	20.25	38.5	4	49	9					
OMAESAKI	20.52	44.6	4	36	-6	8	37	9		
IIDA	20.84	42.0	4	46	0	8	18	-16		
LANCHOW	21.24	319.1	4	48K	-2	8	40	-2		
TOYAMA	21.24	38.6	5	1	11	8	45	3		
MISIMA	21.31	44.5	4	49	-2	8	49	6		
AJIRO	21.37	44.8	4	52	1					
KOHU	21.38	42.8	4	53	2	8	57	12		
OSIMA	21.39	45.8	5	12	21	8	59	14		
MATUMOTO	21.40	40.7	4	51	0					
HUNATU	21.42	43.4	4	54	2	8	54	9		
WAZIMA	21.54	36.8	5	0	7					
YINCHUAN	21.57	327.5	4	53	0					
PAOTOW	21.69	337.2	4	54	0					
MATUSIRO	21.75	40.4	4	51	-4	8	53	1	5	32 PP
MERA	21.78	46.1	4	59	4	8	56	4		
OIWAKE	21.81	41.4	5	9	13					
NAGANO	21.81	40.2	4	58	2	9	3	10		
TITIBU	21.92	42.8	5	2	5					
YOKOHAMA	21.95	44.7	5	2	5	9	15	20		
TOKYO C.M.O.	22.17	44.3	5	5	6	9	19	20		
MAEBASI	22.17	41.9	5	1	2	9	14	15	6	39
TUKUBASAN	22.72	43.6	4	57	-8	9	4	-5	5	36 PP
UTUNOMIYA	22.77	42.7	4	52	-13	9	4	-6		
KAKIOKA	22.77	43.7	4	55	-10					
SINING	22.85	317.4	5	5	-1					
MITO	23.05	43.8	5	9	1					
NIIGATA	23.15	38.9	5	9	0				7	14
CHANGCHUN	23.18	8.2	5	5K	-4	9	14	-4		
HUKUSIMA	23.89	41.1	5	23	7					
GUAM	23.97	104.1	5	13	-4				7	49
VLADIVOSTOK	24.02	20.2	5	15	-2					
SENDAI	24.48	40.6	5	28	6	9	38	-2		
AKITA	24.97	37.0	5	20	-7				9	52
MIZUSAWA	25.17	39.3	5	24	-5	10	8	16		
MORIOKA	25.57	38.4	5	37	5					
MIYAKO	26.01	39.4	5	29	-7	11	14	68		
HATINOHE	26.33	37.4	5	40	1					
MORI	26.89	33.7	5	46	2					
SHILLONG	27.01	285.5	5	45A	-1					
CHITTAGONG	27.02	278.5	5	50	4	10	31	9	6	50 PPP
SUTTSU	27.23	32.3	5	59	11					
SAPPORO	27.99	33.1	6	5	11	10	51	13		
LHASA	28.27	294.0	5	58	1	10	45	2		
PORT BLAIR	28.48	255.6							11	6
ULAN-BATOR	29.23	340.6	6	3	-3	10	59	1		
KUSIRO	29.55	36.5	6	20	11	11	11	8		
DJAKARTA	30.22	208.6	5	56	-19				16	44
LEMBANG	30.46	206.6	6	15A	-2	11	21	3		
CHATRA	31.31	287.5	6	25	1					
Y.-SAKHLINSK	31.49	29.2	6	33	7					
BOKARO	32.50	281.8	6	41	6	12	12	22	8	3 PP
UGLEGORSK	32.83	26.0	6	34	-3	12	6	11		
IRKUTSK	33.85	341.7	6	44	-2					
DEHRA DUN	39.53	292.6	7	39	5	13	29	-5	16	29 SS
RABAUL	39.56	125.5	7	31	-4				8	5
PORT MORESBY	39.67	136.8	7	32	-3	13	45	5	13	31

YAKUTSK	41.56	6.3	7	47	-4	14	0	-8			
COLOMBO	42.00	256.7							22	0	
LAHORE	42.79	294.2	7	54	-7	14	16	-10	9	34	PP
PETROPAVLOVK	43.27	32.6	8	0	-5						
MAGADAN	44.13	21.4	8	5	-7						
FRUNSE	44.32	310.5	8	11	-3						
BOMBAY	45.08	276.2							15	1	PS
WARSAK DAM	45.27	297.5	8	28	7						
NAMANGAN	46.03	307.2	8	26	-1						
CHARTERS TS.	47.65	146.9	8	37	-3	15	33	-3			
STALINABAD	47.89	303.5	8	50	8	15	45	6			
QUETTA	49.13	292.3	8	51	0	15	58	1	10	44	PP
TIKSI	50.97	3.3	8	59	-6	16	10	-12			
PERTH	52.76	185.4							20	26	
SVERDLOVSK	56.54	325.1	9	44	-3	17	33	-4			
BRISBANE	57.28	145.8	9	54	2	17	42	-5			
ADELAIDE	58.05	162.7	9	55K	-2						
RIVERVIEW	61.60	151.5	10	24A	2	18	44	1			
CANBERRA	61.95	154.1	10	23	-1						
MELBOURNE	62.66	158.6	10	29	0						
MAKHACH-KALA	64.07	308.6	10	37	-1						
KHEYS	65.92	349.8	10	40	-10						
TIFLIS	66.19	307.4	10	55	3	19	43	3			
MOSCOW	69.23	323.1	11	12	1	20	13	-4			
SOTCHI	69.62	310.0	11	12	-1	20	20	-1			
APATITY	69.92	335.9	11	14A	-1	20	20	-5	13	47	PP
COLLEGE	71.86	26.7	11	21	-6	20	46	-1			
PULKOVO	72.46	328.0	11	33	3	20	58	4			
SODANKYLA	72.53	336.1	11	26	-5						
SIMFEROPOL	73.30	312.3	11	38	3	21	1	-3			
KSARA	74.66	300.7	11	48	5	21	25	6	14	31	PP
KIRUNA	74.71	327.2	11	40	-3	21	14	-5	16	19	
HELSINKI	74.99	329.0	11	46	1						
NURMIJARVI	75.04	329.4	11	46	1	21	21	-2			
JERUSALEM	75.74	298.8	11	54	5						
KISHINEV	76.36	315.3	11	55	2	21	38	0			
KARAPIRO	77.84	138.7	12	12	11						
LWOW	78.58	319.0	12	9	4				12	44	
UPPSALA	78.58	329.9	12	4	-1	21	59	-3			
SKALSTUGAN	79.41	334.4	12	10	0						
WARSAW	79.56	322.0	12	14	4	22	16	4	22	58	PS
SITKA	79.94	32.6	12	11	-1						
KRAKOW	80.98	320.1	12	22	4	22	26	-1	15	22	PP
SKALNATE PL.	81.11	319.2	11	51	-28						
TANANARIVE	81.95	246.3	12	15	-8						
RESOLUTE	81.95	9.0	12	19	-4	22	33	-4	27	59	SS
BELGRADE	82.60	315.1	12	45K	19	22	39	-4	15	40	PP
THULE	82.74	2.2	12	32	5						
COPENHAGEN	82.83	327.2				22	54	8			
HURBANOVO	82.87	318.5				22	59	13			
BRATISLAVA	83.43	319.1	12	27	-4						
POTSDAM	83.97	324.1	12	36	3	22	59	2			
PRUHONICE	84.19	321.5	12	39A	4	23	5	6			
PRAGUE	84.22	321.6				23	6	6			
COLLMBERG	84.50	323.1	12	32	-4	23	5	3			
HALLE	84.99	323.6	12	32	-7	23	1	-6	15	53	PP
ZAGREB	85.10	317.3	12	47	8	23	11	3			
SCORESBY SD.	85.21	348.2	12	41	1	23	8	-1			
PLAUEN	85.34	322.6	12	41	1						
CHEB	85.40	322.2				23	12	1	19	13	
JENA	85.46	323.2	12	38	-3	23	9	-3	16	1	PP
SONNEBERG	85.93	322.8	12	48	5						
TARANTO	86.48	312.0				23	1	-21	29	42	SS
TRIESTE	86.58	317.8	12	51	5	23	29	6	16	14	PP
TOLMEZZO	86.69	318.7	12	58	11						
WILKES	87.18	184.2				23	19	-9	28	51	SS
STUTTGART	87.85	322.0	12	55	2	23	27	-8			
BENSBERG	87.88	324.6	12	59	6						
STRASBOURG	88.77	322.3	13	0	3	23	41	-2	24	53	PS
TERRE ADELIE	88.79	172.0	12	51	-6						
ABERDEEN	88.84	332.8				23	32	-12	22	39	
PRATO	89.07	317.1	13	17	19				16	47	PP
ROME	89.10	314.9	13	1	2	23	38	-8	16	29	PP
PAVIA	89.64	318.9				23	46	-5			
KEW	91.50	327.6				23	47	-21	25	20	PPS
PARIS	91.59	324.4				24	13	4	16	55	PP
CORVALLIS	92.48	40.1	13	25	11						
JERSEY	93.80	326.5							20	50	

SHASTA	95.15	43.0	13 22	-4							
HUNGRY HORSE	95.43	33.2	13 26	-2						17 6	PP
SETIF	96.70	312.7	13 34	0						17 32	PP
ALGIERS UNI.	97.99	314.2			24 22	5				17 41	
CAPE HALLETT	98.71	166.4								17 44	PP
ALICANTE	99.40	317.1	13 45	-1	25 15	0					
EUREKA	99.88	41.1	13 31	-17							
SCOTT BASE	102.04	171.1								18 11	PP
TAMANRASSET	103.46	300.9								18 23	PP
SOUTH POLE	110.76	180.0	18 34	-1							
BYRD STATION	115.45	170.3	18 42	-2							
HALLEY BAY	122.78	189.3	19 7	9							
CARACAS	147.88	14.5	19 48	4							
HUANCAYO	162.17	63.0	20 9	6							
LA PAZ	170.43	64.4	20 13	3							

JUNE 2 5.H 42.M 25.S EPICENTRE -42.79 -73.89 DEPTH= 87.KM

DEPTH OF FOCUS= 0.009R

A= 0.20430 B=-0.70721 C=-0.67684 D=-0.9607 E=-0.2775
G=-0.1878 H= 0.6502 K=-0.7361 HT= -2.7

SE= 1.68

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
SANTA LUCIA	9.68	16.2	2	21	3	2	39	-87					
PORT STANLEY	14.04	134.9	3	18	2								
LA PLATA	14.70	62.9				5	40	-26			3	22	PP
ANTOFAGASTA	19.30	9.7	4	19	-2						9	15	
ARGENTINE I.	23.15	169.7	4	42	-17								
LA PAZ	26.66	12.4	5	35A	2	10	28	28			6	29	PP
HUANCAYO	30.65	357.2	6	9	0	11	44	41					
HALLEY BAY	38.67	162.8	7	16	-1								
BYRD STATION	40.86	191.0	7	34	-1	13	45	5	8	9			
BOGOTA	47.19	359.8	8	27	1	15	33	22			10	21	PP
SOUTH POLE	47.40	180.0	8	27	-1				9	12	9	45	*SP
CHINCHINA	47.56	357.7	8	28	-1	15	27	11			10	27	PP
BALBOA HTS.	51.76	352.9	9	0	-1								
SCOTT BASE	54.20	193.2	8	18K	-61						9	19	PCP
TRINIDAD	54.39	15.2	9	20	0								
GRENADA	55.70	14.4	9	35	5								
ST. VINCENT	56.87	14.7	9	36	-2								
FORT FRANCE	58.42	14.5	10	1	12								
ST. KITTS	60.70	12.2	9	53A	-12								
SAN JUAN	61.28	8.4	10	4	-5				10	37			
TACUBAYA	66.13	333.8	10	41	1								
TERRE ADELIE	67.45	194.3	10	48	-1								
BERMUDA	75.28	8.0	11	35	0								
WINDHOEK	75.73	107.5	11	38	0								
COLUMBIA	76.70	353.9	11	42	-1								
KIMBERLEY	76.91	117.0	11	44A	-1								
MBOUR	77.15	56.4	11	47	1				12	20			
CHAPEL HILL	78.48	355.7	11	53	0								
PIETERMZBURG	79.94	121.0	12	2A	1								
WASHINGTON	81.36	357.5	12	9	0						12	58	*SP
TUCSON	82.00	329.1	12	13	1								
TUCSON TELE.	82.04	329.2	12	12	0						30	43	PKKP
FORDHAM	83.26	0.0	12	17	-1								
PENNSYLVANIA	83.28	357.0	12	19	0								
PALISADES	83.42	360.0	12	17	-2								
LEOPOLDVILLE	86.43	92.6	12	37A	3	23	13	12					
PASADENA	86.63	324.5	12	36	1								
HALIFAX	87.51	7.3	12	40A	1								
OTTAWA	87.82	358.7	12	40A	-1								
BREBEUF	87.90	0.2	12	41A	0						13	5	
LARAMIE	88.47	336.7	12	44	0								
BROKEN HILL	89.13	108.8	12	49	2								
FRESNO	89.55	324.8	12	49A	0								
SEVEN FALLS	89.57	2.1	12	48	-1								
SALT LAKE C.	89.97	332.1	12	51	0								
EUREKA	90.33	328.8	12	53	0						13	14	
RAPID CITY	90.38	339.3	12	52	-1								
LICK	90.82	323.8	12	58K	3								
BERKELEY	91.53	323.7	12	59	1								
RENO	91.90	326.2	13	1	1								

MINERAL	93.32	325.5	13 6	-1			
SHASTA	93.95	325.2	13 8	-1			
BOZEMAN	94.08	334.9	13 10	0			
BUTTE	94.88	334.1	13 14	0			
HUNGRY HORSE	97.40	334.3	13 24	-1		17 26	PP
LWIRO	97.77	100.3	13 30	3			
TAMANRASSET	97.80	66.3	13 28A	1		17 32	PP
ASTRIDA	98.20	101.2	13 26	-3			
SETIF	106.70	56.1	13 57	777		18 3	PP
CLERMONT-FD.	111.56	47.2				19 11	PP
STRASBOURG	115.79	46.9				19 33	PP
STUTTGART	116.67	47.3	18 36	2		19 49	PP
TRIESTE	117.46	52.2				19 51	PP
RESOLUTE	118.02	353.8	18 36A	-1			
JENA	119.16	46.3	18 40	1		19 53	PP
PLAUEN	119.23	46.9				19 59	PP
COLLEGE	121.67	331.2	18 44	0		19 54	PP
JERUSALEM	124.05	76.2	18 50	1			
SKALSTUGAN	125.68	33.3	18 51	-1			
UPPSALA	126.45	38.9	18 53	0			
SIMFEROPOL	129.65	61.3	19 0	1			
NURMIJARVI	129.96	39.7	19 0	0		22 8	SKP
HELSINKI	130.00	40.2	19 1	1			
KIRUNA	130.33	29.8	19 1	0			
PULKOVO	132.47	41.7	19 5	0			
SODANKYLA	132.54	31.1	19 5	0			
APATITY	135.16	31.3	19 7	-3			
MOSCOW	135.31	48.4	19 12	2			
TIFLIS	135.50	69.6	19 13	3			
KHEYS	137.89	12.1	19 4	-11			
BOMBAY	143.17	119.9			26 39	16	
PETROPAVLOVK	144.09	305.4	19 23	-3			
QUETTA	146.38	99.0	19 33A	3			
MAGADAN	148.11	317.3	19 37	4			
SVERDLOVSK	148.12	47.9	19 39	6			
TIKSI	149.00	346.2	19 37	3			
BAGUIO CITY	150.95	209.6	19 39	2			
STALINABAD	151.52	85.8	19 46	8			
WARSAK DAM	151.68	96.5	19 45	7			
LAHORE	152.46	103.5	19 43A	4			
NAMANGAN	154.39	82.2	19 44	2			
MATUSIRO	154.61	266.6	19 42	0		20 13	PKP2
SHILLONG	159.22	141.2	19 50	2			

JUNE 2 5.H 42.M 34.S EPICENTRE 21.13 121.36 DEPTH= 0.KM

A=-0.48590 B= 0.79717 C= 0.35835 D= 0.8539 E= 0.5205
G=-0.1965 H= 0.3060 K=-0.9336 HT= 4.4

SE= 3.42

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
HENGCHUN	1.04	326.7	0 20	-2	0 38	1		
TAWU	1.29	340.6	0 25	0	0 45	2		
TAITUNG	1.63	353.0	0 28	-2	0 51	-1		
KAOHSIUNG	1.80	325.8	0 34	2	0 51	-5		
HSINKONG	1.96	0.2	0 35	0	1 0	0		
TAINAN	2.14	330.5	0 46	9	1 15	10		
ALISHAN	2.44	347.7	0 49	7	1 22	9		
HWALIEN	2.84	4.7	0 52	5	1 32	9		
TAICHUNG	3.07	348.3	0 54	3	1 44	15		
ILAN	3.64	5.5	1 0	1	1 58	15		
HSINCHU	3.67	354.4	1 0	1	2 0	16		
TAIPEI	3.89	2.1	0 54	-8	1 54	5		
BAGUIO CITY	4.74	189.1	1 14	0	2 40	29		
MANILA	6.52	183.3	1 42	2	2 48	-8		
HONG KONG	6.79	281.2	1 37	-6	2 47	-15		
ZO-SE	9.93	359.1	3 35	68				
NANKING	11.12	348.6	3 47	64				
SIAN	17.07	322.6	3 59	-3				
KUNMING	17.63	286.3	4 9	1				
CHENGTU	18.25	304.8	4 7	-9				
PEKING	19.36	347.9	4 28A	-2	8 1	-2		
TATUNG	20.13	341.7	4 42	4				
MATUSIRO	21.26	40.1	4 52	2	8 50	8	5 16	

LANCHOW	21.38	317.9	4	51	0	8	45	1			
CHANGCHUN	22.88	7.4	5	5	-1						
GUAM	23.57	105.1	5	14	1						
VLADIVOSTOK	23.63	19.5	5	6	-7						
SHILLONG	27.41	285.0	5	51A	2						
LHASA	28.61	293.4	6	4	4						
ULAN-BATOR	29.16	339.8	7	4	59						
PETROPAVLOVK	42.81	32.5	8	1	0						
NAMANGAN	46.26	307.0	8	28	-1						
CHARTERS TS.	47.59	147.6	8	39	0						
TIKSI	50.70	3.1	8	59	-4						
SVERDLOVSK	56.62	324.9	9	46	-1						
ADELAIDE	58.14	163.2	9	57	-1						
RIVERVIEW	61.58	152.0								12	54 PP
CANBERRA	61.96	154.5	10	24A	0						
KHEYS	65.77	349.7	10	41	-8						
MOSCOW	69.32	323.1	11	12	1						
APATITY	69.89	335.9	11	11	-4						
COLLEGE	71.44	26.8	11	22	-2						
SODANKYLA	72.51	336.1	11	28	-2					11	51 PCP
KIRUNA	74.67	337.3	11	41	-2						
HELSINKI	75.03	329.0	11	50	5						
NURMIJARVI	75.08	329.4	11	48	3						
KARAPIRO	77.70	139.0	11	40	-20						
KAIMATA	78.36	144.6	11	43	-21						
UPPSALA	78.61	330.0	12	5	0						
SKALSTUGAN	79.40	334.5	12	11	2						
RESOLUTE	81.64	9.1	12	19A	-2						
THULE	82.49	2.3	12	29	3						
PRUHONICE	84.30	321.6	12	37	2						
COLLMBERG	84.59	323.2	12	41	5					18	33

JUNE 3 3.H 43.M 42.S EPICENTRE 3.69 -77.11 DEPTH= 0.KM

A= 0.22260 B=-0.97281 C= 0.06399 D=-0.9748 E=-0.2231
G= 0.0143 H=-0.0624 K=-0.9980 HT= 7.1

SE= 1.79

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
CHINCHINA	1.95	49.5	0	37	2	0	56	-5				
BOGOTA	3.17	73.0	0	56	3	1	39	7				
FUQUENE	3.80	62.2	1	3	1							
BALBOA HTS.	5.77	335.2	1	33	4	2	38	1				
GALERAZAMBA	7.27	14.4	1	55	4						2	51
CARACAS	12.15	55.7	1	59K	-59	4	21	-54				
HUANCAYO	15.74	173.6	3	48	3	6	46	5				
TRINIDAD	17.04	65.3	4	3	1	7	15	4				
GRENADA	17.34	60.5	4	5	0							
SAN JUAN	18.13	35.6	4	13	-2	7	43	7			4	45
ST. VINCENT	18.27	58.0	4	15	-2							
FORT FRANCE	19.18	54.1	4	26	-2	7	42	-17				
COMITAN	19.33	311.2									8	16
ST. KITTS	19.57	45.1	4	30	-2							
BARBADOS	19.68	60.5	4	31	-3							
LA PAZ	21.94	156.4	4	59A	2	8	58	2				
VERA CRUZ	24.14	311.1	5	42	23							
TACUBAYA	26.62	307.6	5	44K	2	10	21	5			6	33 PP
COLUMBIA	30.37	353.6	6	30	14							
BERMUDA	30.83	20.8				10	38	-46			7	3 PPP
WASHINGTON	35.04	0.1	6	58	1							
FAYETTEVILLE	35.88	336.1	7	2	-2							
PENNSYLVANIA	36.95	359.0	7	17	4	12	58	-1			8	41 PP
PALISADES	37.26	4.0	7	16	0	12	54	-9			8	36 PP
CLEVELAND	37.83	354.6	7	22	2	13	4	-8				
OTTAWA	41.56	1.5	7	51	0							
BREBEUF	41.75	3.7	7	53A	0	14	11	0				
HALIFAX	42.46	14.3	8	0	1	14	17	-4				
TUCSON TELE.	42.47	316.1	8	0	1							
TUCSON	42.50	315.9	8	1	2						9	40 PP
SEVEN FALLS	43.60	6.2	8	8	0							
LARAMIE	45.33	329.7	8	23	1							
RAPID CITY	46.35	334.0	8	29	-1							
SALT LAKE C.	48.36	324.6	8	46	0							
PASADENA	48.71	313.5	8	49	0	16	0	9			10	13 PCP

EUREKA	50.06	320.7	8 59	0			11 15 PP
FRESNO	51.16	315.7	9 7A	C			
BOZEMAN	51.23	329.9	9 7	-1			
BUTTE	52.24	329.2	9 16	1			
RENO	52.58	318.7	9 18	0			
LICK	52.72	315.4	9 20K	1			
BERKELEY	53.41	315.7	9 24K	0			
MINERAL	54.17	318.7	9 29K	-1			
HUNGRY HORSE	54.56	330.5	9 30	-3			
SHASTA	54.87	318.7	9 32	-3			
CORVALLIS	57.42	322.3	9 53	0			
VICTORIA	59.59	326.1	10 7K	-1			
HORSESHOE B.	59.99	327.0	10 9	-2			
RESOLUTE	71.68	355.1	11 23K	-3	20 32	-14	25 23 SS
FOLINIERE	78.43	41.1	12 3	-2			
COLLEGE	78.54	335.7	12 3	-2	21 55	-7	
KEW	78.90	38.4	12 6	-1			
SETIF	81.79	54.1	12 22	-1			
TAMANRASSET	81.79	67.6	12 23	0	22 34	-1	15 25 PP
HALLEY BAY	84.39	168.7	12 34	-2			
BYRD STATION	86.24	186.8	12 44	-1			13 14
SKALSTUGAN	86.45	26.6	12 45	-1			
TRIESTE	87.99	44.6	12 53	-1			
UPPSALA	89.22	30.2	13 18	19	23 32	-16	
KIRUNA	89.46	22.1	13 1	0			
NURMIJARVI	92.59	29.0	13 13	-2			
SOUTH POLE	93.67	180.0	13 20	0			17 27 PP
MATUSIRO	128.15	323.7	19 1	-8			21 10
QUETTA	131.89	43.1	19 17	1			22 39 PKS
CHARTERS TS.	134.74	245.4	19 28	7			20 12 PKS
HONG KONG	151.91	337.4	19 49	-2			22 38 PP

JUNE 3 5.H 43.M 28.S EPICENTRE 52.99-169.83 DEPTH= 0.KM

A=-0.59506 B=-0.10673 C= 0.79657 D=-0.1765 E= 0.9843
G=-0.7841 H=-0.1406 K=-0.6046 HT= -6.5

SE= 2.97

	DELTA DEG.	AZ. DEG.	P M	P S	P O-C S	S M	S S	S O-C S	*PP M	*PP S	SUPP. M	SUPP. S
COLLEGE	16.34	34.7	3	55	2	7	18	24				
PETROPAVLOVK	18.87	283.1	4	26	2							
SITKA	20.06	64.5	4	39	1							
SHASTA	34.08	91.7	6	45	-3							
UKIAH	34.55	94.6	6	56	3							
MINERAL	34.77	91.6	6	54K	0							
HUNGRY HORSE	34.91	74.6	6	53	-3						9	25 PCP
BERKELEY	35.93	95.5	7	7	3							
RESOLUTE	35.94	25.9	7	5	1	12	50	7			9	28 PCP
RENO	36.35	91.2	7	16	8							
LICK	36.65	95.6	7	14K	4							
BOZEMAN	38.03	76.7	7	29	7							
FRESNO	38.13	94.7	7	27K	4							
EUREKA	38.71	88.2	7	26	-2							
MATUSIRO	39.43	266.7	7	32A	-2	13	29	-7			9	38 PCP
SALT LAKE C.	40.39	83.6	7	52	10							
PASADENA	40.88	96.3	7	42	-4	13	44	-14				
CHANGCHUN	42.64	284.7	7	59	-1							
RAPID CITY	43.53	73.9	8	4	-3							
NORD	44.88	5.4	8	19	1						9	58 PP
KHEYS	45.07	350.5	8	13	-7							
TUCSON	46.62	92.1	8	28	-4							
TUCSON TELE.	46.62	91.9	8	29	-3							
PEKING	50.34	286.5	9	0	-1							
ULAN-BATOR	50.42	299.9	9	4	2							
ZO-SE	53.46	274.7	9	32A	8							
FAYETTEVILLE	53.94	76.1	9	22	-6							
NANKING	54.22	277.3	9	28A	-2							
SCORESBY SD.	54.68	12.7	9	30	-3							
OTTAWA	57.67	56.3	9	53K	-2							
SIAN	58.50	286.2	10	2	1							
APATITY	58.52	349.8	10	2	1							
BREBEUF	58.65	55.0	9	58K	-4	17	57	-8				
SEVEN FALLS	58.85	52.0	10	1	-2							
KIRUNA	59.26	355.5	10	6	0							

SODANKYLA	59.33	352.7	10 6	0			
PENNSYLVANIA	59.82	61.4	10 7	-3			
LANCHOW	60.12	291.2	10 11A	-1			
PALISADES	61.74	58.7	10 26	3	18 42	-3	20 8 SCS
CHAPEL HILL	62.71	66.0	10 38	9			
COLUMBIA	63.01	68.8	10 27	-4			
SVERDLOVSK	63.01	331.6					12 32 PP
TACUBAYA	63.11	93.2	10 45	13			
SKALSTUGAN	63.76	358.9	10 37K	1			
CHENGTU	63.95	286.9	10 37A	-1			
HALIFAX	64.09	49.7	10 36K	-2			
HELSINKI	66.57	352.0	10 56	2			
UPPSALA	67.35	355.9	11 0	1			
KUNMING	68.93	283.8	11 9A	0			
MOSCOW	69.30	343.8	11 13	2			
GOTEBORG	69.66	359.0	11 11	-3			
LHASA	72.03	295.4	11 30A	2			
NAMANGAN	72.42	315.7	11 32	2			
BERMUDA	73.09	58.6			20 42	-20	25 42 SS
RATHFARNHAM	73.20	10.2	11 34	-1			
SHILLONG	74.74	292.1	11 40	-4			
COLLMBERG	76.06	358.2	11 32	-19			
JENA	76.45	359.1	11 54	0			12 6
SONNEBERG	77.00	359.3	11 57	0			
KRAKOW	77.01	353.6	11 58	1			
CHITTAGONG	77.29	290.1	11 46	-12			
PRUHONICE	77.34	357.1	12 0K	1			
FOLINIERE	78.22	7.2	12 4	1			
STUTTGART	78.61	0.7	12 6	0			
STRASBOURG	78.79	1.6	12 8	2			12 30
BRATISLAVA	79.05	355.3	11 35	-33			
LAHORE	79.06	308.5	12 9A	1			
SIMFEROPOL	80.30	343.0	12 15	0			
NEUCHATEL	80.35	2.2	12 16	1			
TIFLIS	81.04	334.5	12 21	2			
SAN JUAN	83.48	68.2	12 27	-4			
QUETTA	83.59	313.2	12 33A	1	22 58	4	
MONACO	83.63	2.0	12 33	1			
LWIRO	127.12	336.4	19 8K	1			
ASTRIDA	127.23	335.2	19 7	0			
BYRD STATION	135.81	168.9	19 19	-4			
ELISABTHVLLE	136.49	335.0	19 27	3			
SOUTH POLE	142.80	180.0	19 26	-10			19 42

JUNE 4 1.H 57.M 52.S EPICENTRE 9.54 -84.25 DEPTH= 0.KM

A= 0.09887 B=-0.98137 C= 0.16474 D=-0.9950 E=-0.1002
G= 0.0165 H=-0.1639 K=-0.9863 HT= 6.6

SE= 3.36

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
BALBOA HTS.	4.66	96.8	1 14	1	2 6	-3		
SANTIAGO MA.	5.70	313.8	1 31	3	2 37	2		
SAN SALVADOR	6.41	310.9	1 40	2	2 49	-4		
CHINCHINA	9.69	117.4	2 24	1	4 18	4		
FUQUENE	11.18	110.5	2 52	8				
BOGOTA	11.22	115.2	2 47	3	4 58	6		5 16 SS
TACUBAYA	17.47	305.8	4 13	7				4 26 PPP
SAN JUAN	19.65	61.5	4 31	-2				
HUANCAYO	23.21	157.4	5 10	1				5 47 PP
COLUMBIA	24.52	6.5	5 23	1				
PALISADES	32.65	14.6			12 5	13		
TUCSON TELE.	33.37	316.7	6 41	-1				
TUCSON	33.39	316.5	6 41	-1				
OTTAWA	36.47	10.1	7 10	2				
BREBEUF	36.97	12.5	7 13	1				
RAPID CITY	38.14	337.7	7 23	1				
PASADENA	39.57	313.4	7 32	-2				
EUREKA	41.09	321.7	7 47	0				
LICK	43.61	315.4	8 9A	2				
MINERAL	45.13	319.1	8 17	-3				
HUNGRY HORSE	46.07	332.6	8 28	1				
RESOLUTE	65.38	356.9	10 41	-5				
COLLEGE	70.34	336.0	11 19	2				
FOLINIERE	78.79	42.1	12 4	-2				

KEW	78.83	39.3	12	10	4
SETIF	84.16	54.4	12	38	4
STRASBOURG	84.25	41.8	12	39	5
SKALSTUGAN	84.42	26.5	12	33	-2
STUTTGART	85.16	41.5	12	35	-4
TAMANRASSET	86.15	67.7	12	43	-1
JENA	86.32	39.1	12	41	-4
KIRUNA	86.70	21.6	12	44	-3
UPPSALA	87.72	29.6	12	46	-6
PRUHONICE	88.37	39.7	12	44	-11
BYRD STATION	91.25	185.8	13	6	-2
SOUTH POLE	99.48	180.0	13	39	-7

JUNE 4 12.H 31.M 56.S EPICENTRE 60.03-152.78 DEPTH= 79.KM

DEPTH OF FOCUS= 0.007R

A=-0.44652 B=-0.22963 C= 0.86481 D=-0.4573 E= 0.8893
G=-0.7691 H=-0.3955 K=-0.5021 HT= -8.9

SE= 1.89

	DELTA DEG.	AZ. DEG.	P M	P S	P O-C S	S M	S S	S O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
COLLEGE	5.38	23.2	1	22	3	2	26	6					
SITKA	9.60	100.5	2	13	-4	3	50	-14					
HORSESHOE B.	19.92	109.2	4	26K	-2								
VICTORIA	20.46	111.1	4	31	-2						5	52	
CORVALLIS	23.47	118.0	5	4A	1								
HUNGRY HORSE	25.11	100.3	5	18	-1				5	38	12	21	SCP
RESOLUTE	25.22	31.9	5	21K	1	10	8	31	5	44	10	34	SS
ARCATA	26.14	124.2	5	31	3								
SHASTA	27.00	122.1	5	36A	0								
PETROPAVLOVK	27.08	277.0	6	1	24								
BUTTE	27.45	102.5	5	39	-1								
MINERAL	27.62	121.4	5	40A	-2				6	4			
MAGADAN	27.66	293.9	5	32	-10								
BOZEMAN	28.44	101.4	5	50	1				6	9			
RENO	29.07	120.0	5	55	0								
BERKELEY	29.43	125.1	6	15	17	10	46	1					
LICK	30.14	124.8	6	3A	-1								
EUREKA	30.82	115.2	6	9	-1				6	31	7	16	PP
FRESNO	31.39	122.9	6	16	1								
TIKSI	31.53	323.6	6	19	3								
RAPID CITY	33.48	95.8	6	33	0				6	56			
BOULDER CITY	34.21	117.5	6	39	-1								
PASADENA	34.32	123.3	6	39K	-2	12	1	0	6	59	8	1	PP
LARAMIE	34.34	101.5	6	49	8								
YAKUTSK	35.53	307.6	6	50	-1	12	18	-2					
TUCSON TELE.	39.11	116.0	7	21	0						8	58	PP
TUCSON	39.14	116.2	7	22	1				7	40			
KHEYS	39.43	353.4	7	18	-5								
SCORESBY SD.	45.24	21.0	8	8	-3								
OTTAWA	46.14	72.2	8	17	-1								
BREBEUF	47.07	70.6	8	24A	-1								
MATUSIRO	48.88	273.7	8	40K	1	15	37	1			18	23	
PALISADES	50.31	74.8	8	49	-1	15	50	-6	9	11	18	33	SCS
KIRUNA	52.35	3.2	9	5	-1						9	50	*SP
HALIFAX	52.38	64.4	9	5A	-1	16	30	6					
APATITY	52.64	357.0	9	8	0								
SODANKYLA	52.91	0.3	9	9	-1				11	1			
SKALSTUGAN	56.19	8.0	9	33K	-1						10	30	
MURMIJARVI	59.78	1.5	9	59	0				10	22			
HELSINKI	60.12	1.3	10	1	0				10	25	10	45	PCP
UPPSALA	60.22	5.6	10	1	-1						10	40	*SP
PULKOVO	60.51	358.2	10	5	1								
GOTEBORG	62.00	9.2	10	14K	0								
RATHFARNHAM	63.87	21.7	10	26A	0								
MOSCOW	64.29	353.5	10	30	1								
KEW	66.66	18.4	10	44	0								
MUNSTER	67.24	13.0	11	14	26								
HALLE	68.15	10.2	10	51	-2						11	40	
COLLMBERG	68.43	9.5	10	55	0						11	35	
JENA	68.68	10.5	10	56	-1				11	34			
PRUHONICE	69.87	8.7	11	5	1								
LWOW	70.47	2.2	11	8	0								

STUTTGART	70.57	12.5	11 9	1		11 30	
STRASBOURG	70.60	13.6	11 10	2			11 43
MONACO	75.33	14.7	11 36	0			
GRANADA	79.86	24.6	12 5K	4			
SETIF	82.45	17.7	12 14	-1			
CHARTERS TS.	93.72	235.5	13 9	0			
TAMANRASSET	95.60	20.0	13 18	1			17 14 PP
BULAWAYO	140.14	358.0	19 13	-6			
BYRD STATION	141.11	171.2	19 11	-10			
KIMBERLEY	148.68	4.1	19 38A	4			
PIETERMZBURG	149.52	354.5					20 40
SOUTH POLE	149.86	180.0	19 39	3		20 3	20 19 *SPKP

JUNE 5 20.H 37.M 14.S EPICENTRE 12.06 -86.52 DEPTH= 27.KM

A= 0.05945 B=-0.97639 C= 0.20766 D=-0.9982 E=-0.0608
G= 0.0126 H=-0.2073 K=-0.9782 HT= 6.3

SE= 2.37

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
SANTIAGO MA.	2.38	306.8	0 38	0	1 13	7		
SAN SALVADOR	3.12	302.3	0 45	-4	1 26	1		
COMITAN	6.85	308.0			3 10	11		3 18
BALBOA HTS.	7.50	113.6	1 48	-2				
VERA CRUZ	11.66	308.7			5 19	21		6 22
CHINCHINA	12.87	122.3	2 59	-5	5 50	23		
TACUBAYA	14.22	302.4	3 26	4	6 12	13		
BOGOTA	14.36	120.0	3 28	5	6 21	18		3 38 PP
GUADALAJARA	18.24	300.2	4 16	4				
MANZANILLO	18.51	294.2			7 50	12		
SAN JUAN	20.65	69.8	4 42	2			5 3	
COLUMBIA	22.40	12.0	5 2	4	9 20	23		
DALLAS	22.73	337.2	5 2	1	9 0	-3		
CHIHUAHUA	24.60	315.0						10 56 SS
CHAPEL HILL	24.69	14.6						8 23
FAYETTEVILLE	24.90	345.1	5 22	0	9 19	-22		
HUANCAYO	26.40	154.7	5 38	2	10 8	3		
WASHINGTON	28.02	15.8	5 53	2				
BERMUDA	28.48	41.3	5 56	1	11 36	57		
PENNSYLVANIA	29.62	13.4	6 7	2				
CLEVELAND	29.63	7.6	6 6	1	11 5	8		
TUCSON TELE.	30.02	316.1	6 8	-1				
TUCSON	30.05	315.8	6 10	1				
PALISADES	30.89	18.8	6 17	1	11 57	40	6 39	
LA PAZ	33.70	147.0						15 14
OTTAWA	34.48	13.5	6 48A	0				
RAPID CITY	34.99	338.8	6 51	-1				
BREBEUF	35.09	15.8	6 53A	0			7 8	
PASADENA	36.24	312.6	7 2	-1	12 46	6		9 40
EUREKA	37.75	321.6	7 15	0				9 30
HALIFAX	37.93	26.9	7 16	-1	13 14	8		13 35 *SS
FRESNO	38.70	315.2	7 29	6				
BOZEMAN	39.46	332.7	7 29	0				
RENO	40.19	318.9	7 36	0				
LICK	40.26	314.8	7 37K	1				9 38
BUTTE	40.42	331.8	7 38	1				
BERKELEY	40.95	315.1						9 40 PCP
HUNGRY HORSE	42.82	333.0	7 56	-1				9 47 PCP
CORVALLIS	45.16	322.9	8 15	-1				
VICTORIA	47.53	327.2	8 31	-4				
RESOLUTE	62.78	357.5	10 22A	-3	18 52	2		14 8 PPP
COLLEGE	67.15	336.0	10 49	-4				
CLERMONT-FD.	81.22	45.1	12 44	29				
SKALSTUGAN	83.18	26.4	12 23	-2				
STRASBOURG	83.87	41.8						28 46 SS
STUTTGART	84.76	41.4	13 0	27				
JENA	85.78	38.9	13 7	29				13 20
TAMANRASSET	87.26	67.4	12 44	-1				
SODANKYLA	87.55	20.9	12 44	-3				
NURMIJARVI	89.68	27.5	12 55	-2				
BYRD STATION	93.52	185.5	13 16	2				
SOUTH POLE	101.99	180.0	13 55	2				
MATUSIRO	115.88	321.0	18 38	-2				29 38 PS
QUETTA	130.84	30.8	19 8	-1				22 31 PKS
SHILLONG	142.56	2.4	19 28	-2				

JUNE 7 8.H 34.M 31.S EPICENTRE 10.24 125.80 DEPTH= 0.KM

A=-0.57577 B= 0.79830 C= 0.17666 D= 0.8111 E= 0.5850
G=-0.1033 H= 0.1433 K=-0.9843 HT= 6.5

SE- 6.05

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
MANILA	6.38	313.0	1 27	-10	3 0	8		
BAGUIO CITY	7.97	321.0	1 48	-12				
HONG KONG	16.37	318.5	3 55	2	7 15	20		
CANTON	17.50	318.4	4 11	4	7 27	6		
GUAM	18.82	78.3	4 22	-1				
ZO-SE	21.19	349.0	4 48A	-1	8 40	-1		
PHU-LIEN	21.22	301.9	4 52	3				5 9
NANKING	22.65	344.4	5 3A	-1	9 7	-1		
KUNMING	26.43	306.9	5 43	3				
MATUSIRO	28.50	21.3	5 56	-3	11 43	57		6 52
CHENGTU	28.69	318.2			10 44	-5		
PORT MORESBY	28.85	131.9	6 3	1				
PEKING	30.88	345.5	6 19A	-1	11 21	-3		16 55 SCS
LANCHOW	32.55	325.7	6 36	1				
PAOTOW	33.29	337.8	6 41	0				
CHARTERS TS.	36.19	146.2	7 10K	4				
LHASA	37.73	305.8	7 22	3				
ULAN-BATOR	40.79	340.5	7 46	2				
BRISBANE	45.86	145.5	8 28	2	15 9	-1		
ADELAIDE	46.56	165.3	8 36A	5				
RIVERVIEW	50.02	152.3	9 20	22				
CANBERRA	50.35	155.3	9 5A	4				
MELBOURNE	51.08	160.5	9 9	3				
YAKUTSK	51.76	2.4	9 9	-2	16 25	-8		
NAMANGAN	56.49	312.6	9 47	1				
QUETTA	58.05	299.1	9 57	0				
TIKSI	61.37	1.1	10 18	-2	18 28	-12		
KARAPIRO	66.73	138.9	11 1	6				12 40
SVERDLOVSK	67.99	327.4	11 4	1				
KHEYS	77.17	350.1	11 53	-4				
COLLEGE	79.26	25.7	12 7	-2				
MIRNY	80.26	192.7	11 40	-34				
APATITY	81.52	337.2	12 21	0				
SODANKYLA	84.13	337.4	12 34	0				
KIRUNA	86.31	338.5	12 46	1				
HELSINKI	86.53	330.5	12 46	0				12 57 PCP
NORD	86.56	354.9	12 46	0				
NURMIJARVI	86.59	330.9	12 47	1				
CAPE HALLETT	87.33	167.6	12 54	4				16 38 PP
UPPSALA	90.14	331.3	13 3K	0				
SKALSTUGAN	91.02	335.8	13 21	14				
RESOLUTE	91.61	10.0	13 10	0	24 5	-4		18 52 PP
SCORESBY SD.	96.51	349.6	13 34	2				
HALLEY BAY	112.98	187.3	18 42	3				
SAN JUAN	149.22	22.5	19 52	6				

JUNE 7 13.H 39.M 38.S EPICENTRE 0.08 -17.63 DEPTH= 0.KM

A= 0.95301 B=-0.30295 C= 0.00144 D=-0.3029 E=-0.9530
G= 0.0014 H=-0.0004 K=-1.0000 HT= 7.2

SE= 2.53

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
TAMANRASSET	31.88	43.4	6 30	1	11 42	2		7 34 PP
LEOPOLOVILLE	33.15	98.1	6 40A	0	11 59	-1		
GRANADA	39.13	17.9	7 50A	19	14 44	72		9 26 PP
ALICANTE	41.22	20.6	7 49	1	14 9	6		9 48 PCP
ALGIERS UNI.	41.23	25.5	7 46	-2	14 6	3		9 24 PP
TOLEDO	41.50	15.8	7 53	2	14 10	3		9 31 PP
SETIF	41.82	28.3	7 55	2				9 34 PP
ELISABTHVLLE	46.23	106.2	8 33	4	15 22	6		10 37 PP

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LWIRO	46.48	93.2	8	31A	0				20	30
UVIRA	46.86	94.8	8	40K	6				10	24 PP
ASTRIDA	47.42	93.6	8	35A	-3					
BROKEN HILL	47.83	109.6	8	41	0					
HERMANUS	48.66	138.7				15	53	3		
CLERMONT-FD.	49.04	19.2	8	48	-3	16	1	6		
KIMBERLEY	49.64	129.0	8	55	0					
ROME	49.70	29.4	8	58	2	16	12	7	10	57 PP
FOLINIERE	50.71	14.6	8	55	-9					
PAVIA	50.78	24.3							16	41 PS
SAN JUAN	50.96	293.7	9	4	-1					
PRETORIA	51.10	123.8	8	40	-27					
NEUCHATEL	51.43	21.4	9	9	0					
BASLE	52.11	21.5	9	16	2					
LA PAZ	52.42	249.1	9	15	-2					
STRASBOURG	53.06	20.9	9	22	1	16	56	5	10	56 PP
RAVENSBURG	53.08	22.7	9	32	11					
TRIESTE	53.14	27.2	9	22	0	16	56	4		
EBINGEN	53.17	22.0	9	22	0					
GRAHAMSTOWN	53.17	133.2	9	20	-2					
KEW	53.25	13.4	9	24	1				19	57 SS
TOLMEZZO	53.39	26.1	9	23	-1				10	47
ATHENS	53.55	40.5	9	26K	1					
STUTTGART	53.74	21.7	9	26	0	17	2	2	10	33 PCP
RATHFARNHAM	53.87	8.4	9	22	-5					
UCCLE	53.87	17.1	9	29	2	17	3	1		
ZAGREB	54.31	28.5	9	33	3				31	34
BERMUDA	54.74	310.7				17	22	9	19	22 SCS
DE BILT	55.27	16.9				17	22	1		
SONNEBERG	55.81	21.9	9	40	-1				9	54
BELGRADE	55.86	32.0	9	42A	0	17	38	9	10	51 PCP
SOFIA	56.11	35.6	9	43	-1	17	46	14	13	33 PPP
JENA	56.40	21.8	9	43	-3	17	39	3	11	36 PP
BOGOTA	56.55	275.4	9	48	1	17	44	6		
BRATISLAVA	56.55	27.2	9	42	-5					
PRUHONICE	56.81	24.3	9	48A	-1	17	45	4	11	52 PP
PRAGUE	56.83	24.1	9	49	0	17	47	6		
HALLE	56.99	21.6	9	46	-4	17	41	-3	10	53 PCP
COLLMBERG	57.23	22.4	9	51	-1	17	45	-2	10	49 PCP
CHINCHINA	58.11	275.8	9	56	-2	17	55	-3		
POTSDAM	58.12	21.6	10	5	7	18	0	2		
RACIBORZ	58.44	26.3	10	0	0				10	51 PCP
HUANCAYO	58.50	255.9	9	59	-1					
JERUSALEM	59.00	52.4	10	5	1	18	22	12		
KRAKOW	59.20	27.2	10	4	-1	18	8	-4	10	53 PCP
SANTA LUCIA	59.87	230.6				18	20	-1		
HALIFAX	60.17	323.7	10	18	6	18	24	-1	24	52 SSS
KSARA	60.28	50.4	10	16	3	18	31	5	12	28 PP
COPENHAGEN	60.57	19.0	10	15	0	18	33	3		
LWOW	60.99	29.5	10	17	-1	18	37	2		
KISHINEV	61.81	34.2	10	20	-3					
GOTEBORG	62.10	17.5	10	27	2					
SIMFEROPOL	63.86	38.4	10	36	-1	19	14	2		
FORDHAM	65.01	315.9	10	43	-1	19	25	-1		
PALISADES	65.10	316.1	10	44	-1	19	37	10	23	39 SS
UPPSALA	65.58	18.7	10	47	-1	19	30	-3		
SEVEN FALLS	65.78	323.2	10	50	1					
WASHINGTON	66.57	312.9	10	53	-1					
TANANARIVE	66.62	110.6	10	43	-12					
BREBEUF	66.77	320.6	11	5	10					
SOTCHI	66.86	41.7	10	55	-1	19	49	1		
SKALSTUGAN	67.11	14.0	10	58	0				11	11
PENNSYLVANIA	67.80	314.6	11	3	1	20	2	2		
OTTAWA	68.07	319.9	11	3	-1					
COLUMBIA	68.11	306.8	11	4	0					
HELSINKI	68.33	21.4	11	3	-2					
NURMIJARVI	68.45	21.0	11	6	0					
TIFLIS	69.67	45.1	11	14	0	20	27	5		
GORIS	70.09	47.7	11	16	0	20	29	2		
PULKOVO	70.12	23.6	10	45	-31					
MOSCOW	71.12	29.4	11	22	0	20	36	-3		
MAKHACH-KALA	71.96	44.5	11	26	-1	20	49	0		
KIRUNA	72.53	14.2	11	30	-1	20	58	3		
SODANKYLA	73.83	16.3	11	37	-1				11	51 PCP
HALLEY BAY	75.69	182.3	11	48	-1					
APATITY	75.95	17.9	11	55	4	21	38	5	21	10
FAYETTEVILLE	79.10	306.7	12	7K	-1					
TACUBAYA	82.01	289.5							12	58

SVERDLOVSK	83.51	32.8	12 36	5					
QUETTA	85.27	59.9	12 42	2	23 17	7		28 51	SS
KHEYS	86.47	9.4						22 48	
RESOLUTE	86.56	344.9	12 48K	2	23 30	7		29 10	SS
RAPID CITY	86.75	314.0	12 47	0					
WARSAK DAM	89.28	56.2	12 53	-6					
NAMANGAN	89.42	49.2	13 1	1	23 50	1			
SOUTH POLE	90.08	180.0	13 4	1					
LAHORE	91.63	58.6	13 12	2					
BYRD STATION	92.14	189.8	13 16	3					
TUCSON TELE.	92.57	302.2	13 15	0				14 45	
TUCSON	92.66	302.1	13 15	0				13 54	
HUNGRY HORSE	94.20	318.3	13 22	0					
EUREKA	96.39	309.6	13 33	1					
MATUSIRO	137.22	29.0						22 9	PP
BRISBANE	151.32	162.5	20 3	13				20 28	PKP2

JUNE 9 23.H 10.M 38.S EPICENTRE -58.21 -8.90 DEPTH= 0.KM
A= 0.52302 B=-0.08189 C=-0.84838 D=-0.1547 E=-0.9880
G=-0.8382 H= 0.1312 K=-0.5294 HT= -8.3

SE= 2.11

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S	
HALLEY BAY	18.56	193.9	4 23	3					
ARGENTINE I.	26.34	231.3	5 38	-2				6 8	
PORT STANLEY	28.32	261.8	5 54	-4					
HERMANUS	30.31	50.6			11 22	7			
SOUTH POLE	31.96	180.0	6 30	0	11 43	2			
GRAHAMSTOWN	34.43	59.2	6 31K	-21					
BYRD STATION	36.60	195.9	7 11	1	12 37	-16			
KIMBERLEY	37.55	53.0	6 44	-34					
MIRNY	42.79	144.8	8 2	1	14 24	-2			
SCOTT BASE	44.17	178.7	8 12	0	14 51	5		9 56	PP
WILKES	47.94	151.6			15 41	1		19 36	SCS
CAPE HALLETT	49.78	179.7	8 57	0	16 8	2		11 1	PCP
TERRE ADELIE	53.34	165.8	9 21	-3	17 4	9			
ELISABTHVLLE	54.00	45.8	9 29	1	17 10	6		20 46	
LEOPOLDVILLE	56.91	29.1	9 52K	2	17 46	3		19 52	SCS
UVIRA	62.13	44.1	10 25	-1					
LWIRO	63.15	43.2	10 32K	0				31 39	
ASTRIDA	63.17	44.3	10 31	-1					
RUMANGABO	64.19	43.4	10 33	-6					
HUANCAYO	67.48	283.9	11 2	2					
MBOUR	72.63	351.8			21 12	16		25 39	SS
BOGOTA	81.16	293.7	12 20	1	22 27	-2		23 11	PS
TAMANRASSET	81.57	13.4	12 23	2	22 40	7		27 58	SS
CHINCHINA	82.22	292.5	12 27	2	22 34	-6		15 33	PP
ADELAIDE	83.33	153.7	12 31	1					
KARAPIRO	84.16	183.5	12 34	-1					
RIVERVIEW	86.80	163.5			23 27	2		26 10	
SAN JUAN	89.64	307.0	13 1	0					
BRISBANE	93.31	164.0						24 5	
KSARA	99.04	36.4	13 48	4	25 17	4		17 43	PP
BERMUDA	101.55	314.4			25 34	0		32 37	SS
PALISADES	112.66	312.0			25 18	-5		19 20	PP
SHILLONG	116.97	84.6	18 52A	5					
TOCKLAI	119.45	86.2	18 48	-4					
KIRUNA	127.57	13.6	19 13	5					
EUREKA	131.11	280.9	19 14	0				21 53	PP
HUNGRY HORSE	136.40	291.0	19 23	-1					
RESOLUTE	143.90	333.2	19 33	-5				41 40	SS
MATUSIRO	149.43	120.7	19 51A	4				29 56	SKKS
COLLEGE	159.64	306.2	20 23	22					

JUNE 10 4.H 16.M 2.S EPICENTRE 35.56 23.57 DEPTH= 0.KM
A= 0.74732 B= 0.32602 C= 0.57899 D= 0.3999 E=-0.9166
G= 0.5307 H= 0.2315 K=-0.8153 HT= -0.1

SE= 2.06

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	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
ATHENS	2.41	2.8	0	41A	0						1	18	SG
SKOPJE	6.63	345.8	1	42A	1						2	12	PG
REGGIO CALA.	6.84	294.1	1	43	-1	2	56	-7					
MESSINA	6.95	294.6	1	44	-1	3	0	-6			2	0	P*
TARANTO	6.99	316.4	0	52	-54						2	2	P*
SOFIA	7.13	358.6	1	51	3						3	56	
BUCHAREST	9.06	11.6	2	22	7								
BELGRADE	9.55	346.5	2	26	4	4	14	3			5	10	SS
KSARA	10.28	96.2	2	31	-1	4	23	-6			2	38	PP
TIMISOARA	10.33	350.8	2	34	2	4	23	-7			5	32	SG
JERUSALEM	10.41	107.9	2	31	-3	4	21	-11					
ROME	10.72	309.5	2	37	-1						5	54	
ZAGREB	11.75	333.0	2	50	-2						3	46	PG
IASI	12.01	13.2	2	48	-7								
SIMFEROPOL	12.35	37.4	3	1	1						5	24	
BUDAPEST	12.37	345.6	3	14	14	5	16	-4					
TRIESTE	12.53	326.5	3	4	2	5	26	2			7	7	SGSGSG
PRATO	12.68	314.7	3	16	12	5	43	16					
TOLMEZZO	13.43	326.9	3	12	-2	5	44	-1			4	14	
BRATISLAVA	13.48	341.1	3	12	-3	5	58	11					
LWOW	14.26	1.2	3	30	5	6	10	5					
PAVIA	14.57	315.6	3	50	21	6	45	33					
KRAKOW	14.72	350.7	3	30	-1	6	9	-7			6	36	SSS
SOTCHI	14.79	52.4	3	32	0	6	20	2					
MONACO	14.85	308.2	3	33A	0								
RACIBORZ	15.03	346.6	3	38	3								
PRUHONICE	15.84	338.2	3	44	-2	6	49	7					
PRAGUE	15.96	338.1	3	51	4	6	56	11					
RAVENSBURG	16.02	323.9	3	51	3	6	57	10					
EBINGEN	16.61	323.8	3	55	-1	7	25	25					
ALGIERS UNI.	16.62	280.2	3	56	0	7	12	12			4	12	PP
WARSAW	16.76	354.6	3	57	-1	6	54	-10			4	5	PP
TUBINGEN	16.81	324.9	3	57	-1	7	10	5			4	15	
BASLE	16.88	320.0	3	56	-3	7	16	9					
NEUCHATEL	16.89	317.6	4	0	1	7	2	-5					
STUTTGART	16.92	325.7	3	59A	-1	7	13	5			4	59	
PLAUEN	17.07	334.5	4	1	0	7	15	4			5	28	
SONNEBERG	17.32	332.6	4	6	1	7	32	15					
STRASBOURG	17.47	323.0	4	9	3	7	28	8					
COLLMBERG	17.47	337.4	4	5	-1	7	27	7			5	27	PP
JENA	17.63	334.3	4	9	1	7	31	7			5	11	
TIFLIS	17.67	63.3	4	11	2	7	36	11					
POTSDAM	18.40	339.3	4	17	-1	7	50	9			5	43	
GORIS	18.46	70.9	4	20	1	7	50	7					
CLERMONT-FD.	18.52	309.6	4	17	-2								
RELIZANE	18.70	277.3	4	21	-1						4	35	PP
ALICANTE	19.41	285.4	4	25	-5	7	53	-11			4	41	PP
BENSBERG	19.41	327.5	4	32	2	7	58	-6					
MUNSTER	19.97	330.1	4	37	1								
TAMANRASSET	20.22	235.8	4	39	0	8	25	4			8	47	PCP
PARIS	20.39	317.0	4	40	-1	8	27	2					
UCCLE	20.60	323.6	4	42	-1	8	35	6					
DE BILT	21.10	327.3				9	13	34					
COPENHAGEN	21.52	342.7	4	51K	-1	8	50	3					
GRANADA	21.91	282.3	4	58	2	8	58	4			5	46	PP
FOLINIERE	22.07	314.1	4	58	0								
TOLEDO	22.23	289.4	5	2	2	9	3	3			5	33	PP
MOSCOW	22.35	21.2	5	1	0	9	3	1					
JERSEY	23.20	313.8	5	8	-1	9	25	7					
KEW	23.36	320.3	5	10	-1	9	24	3			5	54	PP
GOTEBORG	23.47	344.3	5	12K	0								
UPPSALA	24.61	352.8	5	21K	-2	9	43	1					
PULKOVO	24.62	8.2	5	22	-1	9	39	-3					
HELSINKI	24.64	1.7	5	24	1	9	41	-2			6	3	PP
NURMIJARVI	24.97	1.3	5	24	-2	9	44	-4			10	46	SS
SERRA PILAR	25.74	292.2	5	30A	-4	9	54	-7			6	8	PP
LISBON	26.20	286.7	5	40K	2								
RATHFARNHAM	27.43	319.6	5	40	-9						6	27	PP
SKALSTUGAN	28.89	349.6	6	OK	-2								
BANGUI	31.36	189.5	6	27	3								
SODANKYLA	31.90	2.2	6	27	-2	11	36	-4			7	26	PP
KIRUNA	32.36	357.8	6	31	-2								
APATITY	32.53	7.0	6	31	-4	11	45	-5					
SVERDLOVSK	32.72	37.8	6	35	-1	11	49	-4					
STALINABAD	35.92	71.5	7	4	0	12	45	3					
RUMANGABO	37.09	170.4	7	14	0								

NAMANGAN	37.77	66.9	7 20	1	13 10	-1	
SIDA	37.87	331.3	7 18	-2			
LWIRO	37.93	171.5	7 21	0			
ASTRIDA	38.40	170.1	7 25K	0			9 39 PPP
WARSAK DAM	39.13	77.9	7 29	-2			
UVIRA	39.18	171.2	7 28K	-3			9 41 PPP
REYKJAVIK	39.54	330.6	7 36	2			
LEOPOLDVILLE	40.48	192.8	7 43K	1	13 48	-4	
MBOUR	41.98	250.3	7 56	2	14 3	-11	
LAHORE	42.12	80.4	7 57	2			
SCORESBY SD.	42.50	339.2	7 59K	1	14 21	0	
ISFJORD	42.82	357.0	8 1	0			
SEMIPALATNSK	42.99	51.7	8 2	0	14 26	-3	
DEHRA DUN	45.54	80.4	8 23	0			
KHEYS	46.00	6.6	8 34	7			
AGRA	46.76	84.5	8 33	0			
ELISABTHVLLE	47.07	174.8	8 38A	3			
NORD	48.38	352.7	8 44K	-1			
BROKEN HILL	49.95	173.8	8 58	1			
CHATRA	54.28	80.4	9 30	0			11 46
BULAWAYO	55.60	174.3	9 40	0			
THULE	56.20	343.5	9 42	-2			
IRKUTSK	57.50	46.0					14 39
WINDHOEK	58.14	187.0	9 26K	-32			
SHILLONG	58.61	79.4	10 1K	0			
TOCKLAI	60.39	76.8	10 0	-13			
ULAN-BATOR	60.52	50.1	9 13	-61			
PRETORIA	61.13	175.3	10 19	1			
TIKSI	61.26	20.4	10 16	-3	18 35	-3	
RESOLUTE	62.95	344.8	10 29K	-1	19 2	2	
LANCHOW	63.17	63.5	10 32K	0			
HALIFAX	64.28	307.7	10 38K	-1			
PAOTOW	65.57	56.6	10 48	0			
YAKUTSK	66.20	29.7	10 56	4			
KUNMING	67.45	74.7	10 59K	0			
SEVEN FALLS	67.65	312.6	11 0	-1			
SIAN	67.72	63.2	11 1	0			
PEKING	69.97	54.7	11 14K	-1			
BREBEUF	70.13	312.1	11 16K	0			
OTTAWA	71.45	312.8	11 24K	0			
PALISADES	72.65	308.2	11 30	-1	20 56	0	20 50 SKS
PHU-LIEN	72.75	76.5					12 58
PENNSYLVANIA	75.28	309.7	11 48	2			
MAGADAN	75.70	24.7	11 47	-2			
MEDAN	75.82	95.8					14 45 PP
WASHINGTON	75.84	307.7	11 49	-1			
MORGANTOWN	77.26	309.7	11 58K	0			
HONG KONG	77.85	71.3	11 17	-44	21 12	-41	13 58 PP
VLADIVOSTOK	78.08	45.3					16 3 PPP
CHAPEL HILL	78.84	306.2	12 8	2			
SAN JUAN	79.30	284.9	12 11	2			
COLLEGE	79.67	356.3	12 10	-1			15 10 PP
COLUMBIA	81.28	305.6	12 20	1			
Y.-SAKHLINSK	81.39	37.2					17 12 PPP
MATUSIRO	86.02	47.2	12 42K	-1	22 46	-3.	28 44 SS
SITKA	86.03	348.6	12 45	2			
BAGUIO CITY	86.15	72.7	12 45	1			15 12
RAPID CITY	87.16	324.7	12 49	0			
HUNGRY HORSE	88.30	333.3	12 54	0			
BOZEMAN	89.36	330.1	13 0	0			
BUTTE	89.68	331.1	13 1	0			
EUREKA	96.52	329.6	13 32	0			
MINERAL	97.94	333.8	13 39A	0			
TUCSON TELE.	100.00	322.0	13 48	0			
TUCSON	100.13	322.0	13 49	0			
HUANCAYO	104.09	265.2					18 10 PP
SOUTH POLE	125.38	180.0	19 3	0			
ADELAIDE	127.93	109.4	19 7	-1			21 6
BYRD STATION	133.14	188.3	19 12	-6			22 40 PP
SCOTT BASE	134.76	169.7	19 20	-1			
CAPE HALLETT	139.44	165.0	19 33	4			
KARAPIRO	157.44	104.3	20 32	34			

JUNE 10 10.H 50.M 36.S EPICENTRE -20.91-178.81 DEPTH= 579.KM

DEPTH OF FOCUS= 0.086R

A=-0.93476 B=-0.01942 C=-0.35476 D=-0.0208 E= 0.9998
G= 0.3547 H= 0.0074 K=-0.9350 HT= 4.5

SE= 1.43

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
SUVA	3.78	316.0	1 57	34				
APIA	9.74	44.6	2 15	-1	4 2	-3		
ONERAHI	15.97	200.5	3 22	4				
KARAPIRO	17.65	194.9	3 35	1				
TONGARIRO	18.87	193.7	3 44	-1				
WELLINGTON	21.03	193.6	4 3	-2				
COBB RIVER	21.35	197.8	4 6	-2				
GEBBIES PASS	23.82	195.5	4 28	-2				
BRISBANE	26.47	250.2	4 54	1	8 46	-2		
CANBERRA	31.65	236.1	5 38	0				
CHARTERS TS.	32.70	265.3	5 47	0				
ADELAIDE	39.75	240.2	6 44K	-1				
CAPE HALLETT	51.79	184.2	8 18	2				
TERRE ADELIE	52.40	198.6	8 21	0				
SCOTT BASE	57.42	183.6	8 55A	-1				9 39 PCP
SOUTH POLE	69.22	180.0	10 10	-1			12 15	
PASADENA	79.52	47.3	11 9	1				
FRESNO	79.92	44.4	11 11A	1				
SHASTA	80.63	39.9	11 14K	0				
MINERAL	80.90	40.6	11 16	1				
RENO	81.52	42.1	11 19	1				
TUCSON	83.76	52.2	11 31	1				
TUCSON TELE.	83.89	52.2	11 31	1				
EUREKA	83.94	43.8	11 30	0			13 43	
COLLEGE	88.77	12.7	11 51	-2			14 0	
HUNGRY HORSE	89.92	37.1	11 58	-1				
BULAWAYO	131.18	215.1						23 31
UVIRA	143.43	231.7	18 31	1				
ASTRIDA	143.56	233.5						18 30
LWIRO	144.49	232.9	18 33K	2				
JERUSALEM	147.76	296.7	18 41	5				
PRUHONICE	149.11	343.1	18 44K	6				

JUNE 10 23.H 54.M 48.S EPICENTRE -24.24-179.15 DEPTH= 0.KM

A=-0.91273 B=-0.01361 C=-0.40833 D=-0.0149 E= 0.9999
G= 0.4083 H= 0.0061 K=-0.9128 HT= 3.6

SE= 3.54

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
RAOUL ISLAND	5.10	167.9	2 18	59				3 32
SUVA	6.47	339.1			2 38	-17		
APIA	12.50	35.1	3 43	41	5 57	34		
ONERAHI	12.78	204.5	3 35	29	5 47	17		
NOUMEA	13.38	275.4	3 41	27	5 59	15		
KARAPIRO	14.37	197.2	3 48	21	6 23	15		
TUAI	14.85	191.4			6 49	30		
TONGARIRO	15.58	195.6	4 1	19	6 35	-1		
WELLINGTON	17.73	195.2	4 1	-9	7 12	-14		4 22
COBB RIVER	18.11	200.1	4 25	11	7 20	-15		
KAIMATA	19.83	200.9	4 41	6	7 44	-29		
GEBBIES PASS	20.54	197.2	4 47	4	7 55	-33		
BRISBANE	25.22	256.7	5 31K	2				7 2
RIVERVIEW	27.59	243.0	5 51A	0				
CANBERRA	29.65	240.7	6 8K	-1				
CHARTERS TS.	32.27	270.6	6 33	1				14 1 SS
ADELAIDE	37.91	243.8	7 18K	-3				8 22
TERRE ADELIE	49.16	199.4	8 48	-3				
GUAM	51.47	312.9	8 9	-60				
SCOTT BASE	54.08	183.7	9 26	-2				13 32 SCP
BYRD STATION	61.15	170.1	10 14	-4				12 3 PP
SOUTH POLE	65.90	180.0	10 45	-5				
MIRNY	67.18	205.7	10 49	-9				
MATUSIRO	72.62	325.1	11 28K	-3				
LICK	81.71	42.8	12 24A	2				
PASADENA	82.00	47.1	12 25	2				
TUCSON	86.05	52.1	12 45	1				14 40

TUCSON TELE.	86.17	52.1	12 46	2	14 40
EUREKA	86.55	43.8	12 46	0	
VICTORIA	87.89	33.4	12 53	0	
SODANKYLA	134.00	346.5			21 54 PP
KIRUNA	134.77	349.7	19 11	-10	21 56 PP
ELISABTHVLLE	135.90	219.0	19 14	-9	22 0 PP
NURMIJARVI	140.18	341.8	19 16	-15	22 13 PP
HELSINKI	140.37	341.3	19 18	-13	22 13 PP
ASTRIDA	141.27	230.5	19 21	-12	
LWIRO	142.17	229.8	19 22	-12	21 56
UPPSALA	142.53	346.1	19 24K	-11	
GOTEBORG	145.63	349.4	19 36K	-4	
COPENHAGEN	147.46	347.8	19 39	-4	
KSARA	148.05	295.4	19 41K	-3	19 50 PKP2
LEOPOLDVILLE	148.29	208.1	19 40K	-5	
JERUSALEM	148.94	291.7	19 42A	-3	21 41
RACIBORZ	150.89	336.7	19 48	-1	
COLLMBERG	151.41	344.0	19 49	0	21 48
PRUHONICE	152.18	340.9	19 51	0	20 4 PKP2
TAMANRASSET	175.48	252.1	20 4	-8	25 34 PP

JUNE 11 1.H 9.M 35.S EPICENTRE -23.71-174.93 DEPTH= 0.KM

A=-0.91300 B=-0.08100 C=-0.39983 D=-0.0884 E= 0.9961
G= 0.3983 H= 0.0353 K=-0.9166 HT= 3.7

SE= 2.33

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
RAOUL ISLAND	6.13	205.3	1 45	11				2 33
SUVA	8.31	310.5	2 5	1				
APIA	10.30	17.4	2 29	-3	4 18	-11		
KARAPIRO	16.35	207.8	3 54	2				
TUAI	16.48	202.3			6 37	-20		
WELLINGTON	19.53	203.8			7 39	-27		
GEBBIES PASS	22.41	204.2			8 40	-23		
TERRE ADELIE	50.98	200.6	9 2	-3				
SCOTT BASE	54.89	184.7	9 33K	-1	17 28	13		
BYRD STATION	61.02	170.6	10 15	-2				10 47 PCP
SOUTH POLE	66.43	180.0	10 51	-2				
LICK	78.74	40.7	12 7A	1				
TUCSON	82.71	50.2	12 29	2				
TUCSON TELE.	82.84	50.2	12 29	2				
EUREKA	83.54	41.9	12 32	1				
HUNGRY HORSE	90.03	35.7	13 5	2				
COLLEGE	90.75	11.2	13 3	-3				
KIRUNA	134.86	351.8	19 19	-2				
ELISABTHVLLE	138.63	214.3	19 30	2				
NURMIJARVI	140.78	344.8	19 20	-12				
HELSINKI	141.00	344.3	19 23	-9				
UPPSALA	142.82	349.5	19 28	-7				
UVIRA	144.23	224.1	19 35	-3				
ASTRIDA	144.50	225.9	19 35K	-3				
LWIRO	145.37	225.0	19 39A	-1				
GOTEBORG	145.68	353.4	19 40	0				
RUMANGABO	145.71	226.8	19 41A	1				
RATHFARNHAM	149.23	13.3	19 47K	1				
LEOPOLDVILLE	150.38	200.9	19 52A	4				
KSARA	151.27	297.5						20 3 PKP2
RACIBORZ	151.75	342.0	19 55	5				
COLLMBERG	151.78	349.4	19 54	4				
JERUSALEM	152.20	293.5	19 56A	6				
JENA	152.36	351.1	19 55	4				
PRUHONICE	152.75	346.6	19 58K	7				
STRASBOURG	155.09	355.7	19 47	-7				
TAMANRASSET	178.99	204.2	20 3	-9				25 54 PP

JUNE 13 12.H 1.M 50.S EPICENTRE 34.90 32.39 DEPTH= 0.KM

A= 0.69410 B= 0.44026 C= 0.56956 D= 0.5356 E=-0.8445
G= 0.4810 H= 0.3051 K=-0.8220 HT= 0.2

SE= 2.77

	DELTA DEG.	AZ. DEG.	P M	P S	O−C S	S M	S S	O−C S	*PP M	*PP S	SUPP. M	SUPP. S	
KSARA	3.08	109.5	0	51	0	1	25	−4			1	1	PG
JERUSALEM	3.91	141.9	1	0A	−3	1	44	−6					
ATHENS	7.63	296.2	1	56	0						2	9	PP
SIMFEROPOL	10.12	7.0	2	33	3	4	40	14					
SOTCHI	10.36	31.0	2	35	2								
SOFIA	10.51	320.5	2	37	2						3	32	
BUCHAREST	10.67	334.9	3	3	25						5	16	
TIFLIS	11.89	51.4	2	56	2	5	26	17					
KISHINEV	12.40	348.6	3	1	0								
IASI	12.81	345.0	3	7	0								
BELGRADE	13.48	320.9	3	25K	9	6	17	30			7	24	SS
MESSINA	13.93	288.6	3	27	6	5	57	−1			3	53	
MAKHACH-KALA	14.24	51.1	3	34	8								
LWOW	16.13	340.2	3	21	−29						4	30	
ZAGREB	16.56	316.1	3	59A	3	7	12	12					
HURBANOVO	16.73	325.0	4	21	23								
SKALNATE PL.	16.84	331.6	4	5	6								
ROME	17.08	300.1	4	2	0	7	27	15					
BRATISLAVA	17.47	324.0	4	10	3								
KRAKOW	17.67	332.7	4	10	0						6	49	
TRIESTE	17.78	312.8	4	12	1	7	44	16					
TOLMEZZO	18.60	314.0	4	20	−1						4	40	
PRUHONICE	19.93	324.5	4	36A	−1								
PRAGUE	20.05	324.6	4	39	1						5	31	PP
MOSCOW	21.14	8.2	4	48	−1								
MONACO	21.16	302.1	4	49	−1								
RAVENSBURG	21.30	314.1	4	43	−8								
PLAUEN	21.44	322.0	4	50	−2						5	27	
SONNEBERG	21.84	321.5	4	57	1								
EBINGEN	21.88	314.4	4	56	−1								
TUBINGEN	21.99	315.4	4	58	0								
JENA	21.99	323.1	4	56	−2	8	26	−30			5	15	PP
STUTTGART	22.03	316.0	4	58	0						5	21	PP
HALLE	22.18	324.7	4	56	−4	8	42	−18			5	24	PP
BASLE	22.41	311.8	5	0	−2								
NEUCHATEL	22.59	310.1	5	4	0								
STRASBOURG	22.77	314.4	5	7	1	9	25	14					
BENSBERG	24.29	319.1	5	20	0								
CLERMONT-FD.	24.68	305.0	5	26	2								
PULKOVO	24.92	357.5	5	26	0	9	56	8					
HELSINKI	25.74	351.5	5	33	−1								
PARIS	26.05	311.4	5	40	3								
NURMIJARVI	26.11	351.3	5	38	0						6	8	PP
TAMANRASSET	26.36	249.9	5	42	2	10	28	16			6	27	PP
GOTEBORG	26.60	335.3	5	41	−1								
UPPSALA	26.76	343.4	5	43	−1								
FOLINIERE	27.89	309.9	5	52	−2								
KEW	28.72	315.3	6	0	−1								
JERSEY	29.03	310.0	6	1	−3	10	43	−12					
SKALSTUGAN	31.28	342.8	6	21	−3								
SODANKYLA	32.68	355.9	6	35	−1						7	33	PP
APATITY	32.70	0.7	6	29	−8								
RATHFARNHAM	32.78	316.2	6	37K	0						7	30	PP
KIRUNA	33.68	351.8	6	44	−1								
SCORESBY SD.	45.77	337.6	8	23	−2								
KHEYS	45.94	4.7	8	38	11								
ELISABTHVLLE	46.51	186.7	8	38	7								
CHATRA	47.22	84.1	8	33	−4								
TIKSI	59.29	21.5	10	7	1								
YAKUTSK	63.08	31.6	10	31	−1								
RESOLUTE	65.38	346.5	10	45A	−2								
SEVEN FALLS	73.28	316.0	11	35	0								
SHAWINIGAN	74.70	316.3	11	46	2								
BREBEUF	75.79	315.8	11	40A	−10								
OTTAWA	77.04	316.6	11	57	0								
COLLEGE	80.56	0.1	12	16	0								
MATUSIRO	80.96	51.7	12	17A	−1	22	13	−14			13	24	
COLUMBIA	87.38	310.3	12	52	1								
RAPID CITY	91.62	329.7	13	11	0								
EUREKA	100.42	335.6	13	51	0								
SOUTH POLE	124.72	180.0	19	7	5								
KARAPIRO	150.31	106.7	19	54	6								

JUNE 13 16.H 4.M 10.S EPICENTRE 38.52 103.92 DEPTH= 0.KM

A=-0.18872 B= 0.76141 C= 0.62019 D= 0.9706 E= 0.2406
G=-0.1492 H= 0.6020 K=-0.7845 HT= -1.1

SE= 2.56

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
WUWEI	1.17	240.2						0 24 PG
YINCHUAN	1.84	90.8						0 37 PG
LANCHOW	2.44	181.9	0 43K	2				0 46 PG
SINING	2.55	222.6						0 47 PG
TIENSHUI	4.20	158.9						1 21 PG
PAOTOW	5.15	64.5	1 23	3				1 37 PG
YUMEN	5.63	290.6						1 43 PG
SIAN	5.86	135.1	1 28	-2				1 48 PG
CHENGTU	7.84	179.4	1 56	-2				2 30 PG
ULAN-BATOR	9.64	12.0	2 22	-1				
LHASA	13.86	234.1	3 19	-1				
PHU-LIEN	17.81	171.7						9 32
CHATRA	18.26	235.3	4 18	2	7 54	16		
HONG KONG	18.40	148.5						8 15
SEMIPALATNSK	20.55	313.0	4 43	0				
NAMANGAN	24.84	285.9	5 29	4				
MATUSIRO	27.18	83.4	5 43	-4				6 53
QUETTA	31.47	266.0	6 25	0				
KHEYS	45.96	349.0	8 19	-7				
SODANKYLA	50.31	330.6	9 4	4				
NURMIJARVI	52.32	322.1	9 15	0				
JERUSALEM	55.41	285.4	9 41	3				
UPPSALA	55.88	322.5	9 39	-2				
COLLMBERG	61.65	314.5	10 23	1				
COLLEGE	62.88	27.1	10 28	-2				
RESOLUTE	66.39	5.4	10 51	-2				
ADELAIDE	79.88	151.6						21 7
TAMANRASSET	82.36	292.9	12 27	2				
EUREKA	94.19	29.8	13 23	1				

JUNE 13 21.H 56.M 42.S EPICENTRE 46.46 12.66 DEPTH= 0.KM

A= 0.67455 B= 0.15149 C= 0.72252 D= 0.2191 E=-0.9757
G= 0.7050 H= 0.1583 K=-0.6914 HT= -4.1

SE= 2.81

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
TOLMEZZO	0.26	102.4						0 4 PG
TRIESTE	1.11	136.3						0 21 PG
BOLOGNA	2.17	206.0	0 41	3	1 6	0		2 0 SG
CHUR	2.19	281.5	0 40K	2	1 11	4		
ZAGREB	2.40	104.2	0 43	2				0 49 PG
RAVENSBURG	2.46	303.7	0 48	6	1 23	10		
PAVIA	2.75	243.6	0 45	-1	1 20	-1		0 53 PG
PRATO	2.80	203.7	0 46	-1	1 22	0		
EBINGEN	3.04	305.9	0 51	0	1 40	12		
VIENNA-H.	3.10	53.2	0 52	1	1 28	-2		1 2 PG
TUBINGEN	3.20	311.8	0 53K	0	1 31	-1		1 6 PG
STUTTGART	3.29	316.0	0 54K	0	1 34	0		1 7 PG
BRATISLAVA	3.47	58.8	0 57K	0	1 34	-5		1 8 PG
CHEB	3.63	357.2	0 57	-2	1 41	-2		
BASLE	3.64	289.0	0 59	0	1 46	3		
PRUHONICE	3.75	19.0	1 1A	0	1 42	-4		
PRAGUE	3.81	17.5	1 2	1	1 43	-4		1 15 PG
STRASBOURG	3.90	304.6	1 4A	2	1 53	3		1 22 PG
NEUCHATEL	3.96	280.0	1 3	-1	2 5	14		
HURBANOVO	4.04	67.5	1 3	-2	1 50	-3		1 18 PG
SONNEBERG	4.05	346.7	1 5	0	1 50	-4		1 21 PG
PLAUEN	4.06	355.4	1 4	-1				
BUDAPEST	4.51	74.4	1 21	10	2 14	9		
JENA	4.53	351.3	1 11	-1	1 54	-12		1 28 PG
ROME	4.56	181.7	1 26	14	2 42	36		
MONACO	4.60	235.5	1 9	-4				2 30 SG
COLLMBERG	4.85	2.5	1 15	-1	2 6	-8		2 44 SG
KECSKEMET	4.87	82.0			2 15	1		2 48 SG
HALLE	5.07	355.0	1 17	-2	2 17	-2		1 45 PG

			P	O-C	S	O-C	*PP		SUPP.	
	DELTA DEG.	AZ. DEG.	M	S	S	M	S	S	M	S
RACIBORZ	5.18	43.6	1	14	-7	2 28	6		1 39	PG
BELGRADE	5.70	103.9	1	37	9				1 57	PG
BENSBERG	5.79	323.1	1	29	0				3 14	SG
SKALNATE PL.	5.79	59.2	1	31	1					
POTSDAM	5.94	2.4	1	31	-1	2 40	-1		3 7	SG
TIMISOARA	6.00	93.7	2	6	34	3 14	31		3 32	S*
KRAKOW	6.04	50.8	1	27	-6	2 53	9		3 17	SG
MUNSTER	6.43	331.0	1	39	1				3 30	SG
DOURBES	6.50	307.1	1	42	3	3 6	11			
GARCHY	6.63	280.6	1	39	-2				3 30	SG
CLERMONT-FD.	6.67	267.5	1	39	-3				3 32	SG
TARANTO	6.85	149.2							2 51	
UCCLE	7.01	311.3	1	47	0				3 50	SG
PARIS	7.26	292.6	1	51	1				4 10	SG
SKOPJE	7.71	122.3				3 11	-14		3 24	SG
WARSAW	7.95	40.3							3 51	SS
LWOW	8.31	61.9							2 40	PG
FOLINIERE	9.17	289.4	2	15	-2					
COPENHAGEN	9.24	359.3	2	17	-1	3 49	-15			
KEW	9.90	305.2	2	26	-1	4 30	10			
KISHINEV	11.12	81.2	2	40	-4					
GOTEBORG	11.27	358.1	2	51	5					
ATHENS	11.79	132.1	2	50A	-3					
DURHAM	12.27	317.9	2	57	-2					
ALICANTE	12.63	234.8	2	54	-10	5 7	-20			
UPPSALA	13.74	10.6	3	17	-2	5 50	-3			
RATHFARNHAM	13.98	306.2	3	23A	1				3 32	PP
SIMFEROPOL	15.07	88.0	3	43	7					
HELSINKI	15.54	23.4	3	41	-1				3 53	PP
NURMIJARVI	15.75	22.3	3	44	-1	6 35	-6		3 53	PP
PULKOVO	16.96	31.8	4	1	1					
SKALSTUGAN	17.16	359.4	4	5	2					
MOSCOW	18.13	50.1	4	15	0					
KSARA	21.69	117.3	4	56	1					
KIRUNA	21.81	7.9	4	55	-1					
SODANKYLA	22.20	14.3	5	0	0					
APATITY	23.74	19.8							10 30	
TAMANRASSET	24.32	196.2	5	18	-2	9 24	-14		6 0	PPP
KHEYS	36.45	10.7	7	17	8					
QUETTA	44.70	91.6	8	10	-7					
RESOLUTE	50.13	340.7	9	0	1					
ELISABTHVLLE	59.32	163.1	10	6	0					
COLLEGE	67.97	351.1	11	0	-3					
EUREKA	82.91	322.5	12	26	-2					
SOUTH POLE	136.26	180.0	19	27	3					
SCOTT BASE	146.91	170.2	19	43	0					

JUNE 14 0.H 12.M 2.S EPICENTRE -20.42 -69.00 DEPTH= 83.KM

DEPTH OF FOCUS= 0.008R

A= 0.33608 B=-0.87564 C=-0.34686 D=-0.9336 E=-0.3583
G=-0.1243 H= 0.3238 K=-0.9379 HT= 4.6

SE= 2.70

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S
ANTOFAGASTA	3.47	202.0	0	52	-1	1 20		-13				
LA PAZ	3.99	12.1	1	7A	7	1 48		2				
HUANCAYO	10.30	322.9	2	29	2	4 49		28				
SANTA LUCIA	13.04	186.2	3	2K	-1	5 36		9				
BUENOS AIRES	16.91	148.8	3	48	-5							
LA PLATA	17.42	148.2	3	57A	-2	7	8	0			4 33	PPP
BOGOTA	25.38	348.1	5	21	0	9	40	1				
CHINCHINA	26.06	344.8	5	27	0	9	47	-3				
CARACAS	30.79	4.0	6	10K	0	11	18	12				
BALBOA HTS.	30.99	339.4									10 45	
GALERAZAMBA	31.61	348.2	6	24	7	11	21	2				
PORT STANLEY	32.41	167.0	6	22	-2	11	28	-3				
GRENADA	33.05	13.1	6	27	-2						6 33	
ST. VINCENT	34.24	13.5	6	37	-3	11	57	-2	7	13		
BARBADOS	34.59	16.3	6	47A	4						10 58	
FORT FRANCE	35.77	13.1	6	51	-2	12	19	-4				
ANTIGUA	38.00	12.3	7	9	-2							
ST. KITTS	38.03	9.8	7	9	-3	12	51	-6				

SAN JUAN	38.66	4.4	7	14A	-3	13	4	-3			9	16	PP
SANTIAGO MA.	38.76	328.8	7	18	0	13	14	6					
SAN SALVADOR	39.34	328.0	7	23	1	13	23	6					
COMITAN	42.94	326.4	7	48	-4	14	1	-10			17	34	SCS
ARGENTINE I.	44.92	177.2	8	7	-1	14	43	4					
MERIDA	45.80	332.7	8	13K	-2				8	46	10	19	*PPP
OAXACA	46.12	321.8	8	19	1	15	1	5			15	46	*SS
VERA CRUZ	47.51	324.2	9	15K	47	16	38	82			18	42	SCS
PUEBLA	48.54	322.0	8	42	6	15	33	3	9	0			
TACUBAYA	49.41	321.3	8	42K	-1	15	45	2	9	13	10	48	PP
BERMUDA	52.66	4.6	9	3	-5	16	26	-1	9	28	11	23	PP
GUADALAJARA	52.87	318.5	9	13K	4	16	34	4			17	19	*SS
COLUMBIA	55.32	347.8	9	25K	-2	16	56	-7			21	12	SS
MAZATLAN	56.64	318.0	9	34	-3	17	11	-10	9	55	18	49	SCS
CHAPEL HILL	56.84	350.3	9	37	-1								
DALLAS	59.25	332.8	9	43	-12								
HALLEY BAY	59.34	168.6	9	53	-3								
WASHINGTON	59.49	352.7	9	54A	-3	17	58	0	10	20	13	35	PPP
CHIHUAHUA	60.50	322.5	10	0K	-3	18	5	-6			13	5	*SPP
MORGANTOWN	60.61	350.3	10	4K	0	18	5	-7					
FAYETTEVILLE	61.05	336.8	10	4K	-3	18	20	2					
FORDHAM	61.12	355.8	10	1	-7	18	10	-9	10	35			
PALISADES	61.28	355.8	10	8K	-1	18	17	-4	10	40	20	25	SCS
PENNSYLVANIA	61.46	352.3	10	8	-2	18	19	-4	10	36	39	32	PKPPKP
MBOUR	61.73	60.2	10	10	-2	18	28	2					
TERRE HAUTE	62.02	343.9	10	18	4	17	58	-32					
ST. LOUIS 1	62.03	341.3	10	11K	-3	18	27	-3			19	12	PS
FLORISSANT	62.22	341.2	10	13K	-2								
CLEVELAND	62.67	349.4	10	16	-2	18	35	-3			22	47	SS
HALIFAX	64.91	4.3	10	32K	-1	19	4	-2			11	2	PCP
BREBEUF	65.74	356.4	10	37K	-1	19	14	-2					
OTTAWA	65.79	354.8	10	36K	-2	19	16	-1			23	20	SS
TUCSON	65.92	321.8	10	38K	-1	19	7	-11	11	8	13	37	PP
TUCSON TELE.	65.92	321.9	10	38K	-1						15	0	PPP
SHAWINIGAN	66.74	357.2	10	43K	-1	19	30	2					
SEVEN FALLS	67.24	358.6	10	46K	-2	19	32	-2			11	21	PCP
SOUTH POLE	69.70	180.0	11	0	-3	20	3	-1	11	35	13	35	PP
ANGRA DO HO.	70.61	33.6	11	9	1	20	16	2	11	35	20	32	SP
PONTA DELGDA	70.75	35.2	11	8K	-1	20	17	1	11	36	13	35	PP
BOULDER CITY	70.90	322.0	11	10K	0								
RAPID CITY	71.42	334.7	11	12K	-1	20	26	3	11	46	13	48	PP
PASADENA	71.65	318.6	11	14K	0	20	28	2			13	56	PP
SALT LAKE C.	72.74	327.3	11	20K	-1	20	38	0	11	48	21	26	*SS
EUREKA	74.00	323.9	11	29K	1	20	53	1	12	4	38	52	PKPPKP
FRESNO	74.38	319.8	11	29K	-1	21	0	3					
LICK	75.87	319.2	11	39K	0	21	21	8					
BOZEMAN	76.05	331.1	11	39K	-1	21	11	-4	12	0	38	5	PKPPKP
RENO	76.21	321.9	11	42K	1	21	23	6					
BERKELEY	76.58	319.3	11	43K	0	21	26	5	12	13			
SCOTT BASE	76.87	190.4	11	43	-2	21	27	3			14	37	PP
BUTTE	77.01	330.5	11	45K	0	21	25	-1	12	29	27	13	*SSS
HERMANUS	77.35	122.1	11	49	2	21	32	3	12	20			
MINERAL	77.78	321.6	11	48K	-2				12	18			
UKIAH	77.96	319.8	11	52K	1	21	43	7	12	19			
SHASTA	78.46	321.5	11	51K	-2	21	40	-1					
WINDHOEK	78.97	110.0	11	54K	-2						12	27	
SASKATOON	79.35	337.5	11	57	-1	21	55	4					
HUNGRY HORSE	79.41	331.3	11	58A	-1	21	54	3			30	50	PKKP
CAPE HALLETT	79.41	195.5	11	58K	-1	21	58	7			14	54	PP
ARCATA	79.57	320.8	11	59	0								
LUANDA	79.73	95.6	12	2	2	21	41	-14			14	59	PP
LISBON	81.23	43.2	12	11A	3	22	14	4	12	41	15	18	PP
CORVALLIS	81.46	324.1	12	10K	1								
COIMBRA	82.53	42.3	12	15A	0	22	22	-1	12	46	15	23	PP
SERRA PILAR	82.95	41.4	12	8A	-9	22	12	-16			15	20	PP
IVIGTUT	83.05	10.0	12	15	-3	22	35	6	12	45	22	26	SKS
GRAHAMSTOWN	83.49	123.0	12	19K	-1								
KIMBERLEY	83.59	118.2	12	19A	-1								
VICTORIA	84.04	327.1	12	21K	-2	22	38	-1	12	54	23	18	*SS
GRANADA	84.08	46.9	12	23K	0	22	30	-9			16	0	PP
TAMANRASSET	84.41	63.3	12	24A	0	22	42	0			17	38	PPP
HORSESHOE B.	84.53	327.8	12	21K	-4	22	41	-2					
ALMERIA	84.69	47.6	12	28	2	22	40	-5	13	0	23	38	SP
LILLOOET	84.72	329.4	12	23K	-3				12	57	13	18	*SP
TOLEDO	85.18	44.4	12	27K	-1	22	44	-6	12	57	16	55	PP
RELIZANE	86.29	49.8	12	32	-2	22	49	-11			15	43	PP
ALICANTE	86.81	47.1	12	37	1	22	54	-11			15	49	PP
PRETORIA	87.47	116.4	12	38	-1								

ALGIERS UNI.	88.55	49.8	12	44	-1					16	13 PP
TORTOSA	88.66	45.3	12	46	1	23	7	2			
BANGUI	89.29	85.1	12	51	3	23	8	-1			
BULAWAYO	89.89	111.4	12	49	-2						
SETIF	90.00	51.2	12	52	1					16	22 PP
BARCELONA	90.03	45.4	12	54	3	23	13	0			
LCO. MARQUES	91.07	118.1	12	53	-3	23	25	6		16	30 PP
RATHFARNHAM	91.11	32.2	12	58K	1	23	48	3	13 27	16	28 PP
REYKJAVIK	91.81	18.8	13	1K	1	23	58	7			
BROKEN HILL	91.84	106.0	13	0	0	23	28	5			
FOLINIERE	91.89	38.0	12	58	-2						
ELISABTHVLLE	91.91	103.1	13	2	2	24	2	10	13 31	16	42 PP
VIK	92.20	20.2				23	33	9			
CLERMONT-FD.	92.65	41.8	13	4	0	23	34	7			
SIDA	92.76	20.2	13	18	14						
KEW	93.29	35.7	13	5A	-2	24	25	21		16	47 PP
WILKES	93.64	179.8	13	8	0	24	6	-1		16	58 PP
PARIS	93.64	38.9	13	9	1	23	37	4			
EDINBURGH	94.04	31.0	13	10	0	23	28	-8		17	1 PP
AKUREYRI	94.05	18.8				23	48	-22			
DURHAM	94.25	32.4	13	17K	6	23	39	2	13 42	16	54 PP
MONACO	94.56	45.0	13	14	2					17	9 PP
TUAI	94.58	225.8	13	51	39						
GEBBIES PASS	94.83	219.8	13	17	3						
WELLINGTON	94.84	222.7	13	18K	4	25	7	50		17	8 PP
SITKA	94.85	329.8	13	14	0				13 44	17	6 PP
ABERDEEN	95.19	30.2	13	18K	3	24	37	17		17	6 PP
DOURBES	95.44	38.4	13	18	2	23	37	-6			
TONGARIRO	95.45	224.8	13	19K	3				13 48		
NEUCHATEL	95.57	41.8	13	16	-1					23	45 PPS
UCCLE	95.60	37.7	13	17	0				13 49		
ROXBURGH	95.69	216.9	13	22	5	23	47	5		31	58 SS
KARAPIRO	96.12	225.9	13	21	2	23	47	0		31	58
BASLE	96.18	41.5	13	30	10					23	53 PPS
COBB RIVER	96.24	222.1	13	28	8					13	57
PAVIA	96.27	44.1	13	21	1	23	53	4		17	12 PP
RESOLUTE	96.32	353.3	13	18	-2	24	26	-4		17	16 PP
UVIRA	96.39	96.1	13	19	-2				13 56		
HONOLULU	96.40	290.2	13	22	1					22	52
SCORESBY SD.	96.42	14.3	13	16	-5	23	46	-3	13 30	17	38 PP
LWIRO	96.53	94.8	13	23	2	24	47	16			
DE BILT	96.62	36.7	13	20	-2	24	50	18		17	16 PP
STRASBOURG	96.71	40.6	13	24	2	24	30	-3	13 52	17	17 PP
PRATO	97.07	45.9	13	35	11	24	47	11			
CHUR	97.14	42.7	13	26	2					23	51 PPS
ASTRIDA	97.27	95.5	14	24	59	24	3	10			
EBINGEN	97.29	41.3	13	26	1	23	56	3		17	21 PP
BENSBERG	97.29	38.3	13	27	2	24	42	4			
ROME	97.30	48.1	13	24A	-1	23	55	2	13 55	17	22 PP
RUMANGABO	97.35	94.2	13	14	-11					17	33 PP
BOLOGNA	97.45	45.4	13	40	15	23	54	0			
TUBINGEN	97.49	41.0	13	27	1	23	54	0	13 56		
RAVENSBURG	97.54	41.8	13	38	12	23	53	-1			
STUTTGART	97.66	40.8	13	25	-1	24	40	-1	13 57	17	24 PP
WITTEVEEN	97.75	36.4							13 58	17	24 PP
MUNSTER	97.95	37.4	13	26	-2					17	27 PP
MESSINA	98.25	52.4	13	14	-15	23	56	-3	13 43	17	26 PP
REGGIO CALA.	98.29	52.5				23	57	-2		17	26 PP
TOLMEZZO	99.22	44.0	12	59	-35	24	2	-1		17	32 PP
TRIESTE	99.45	44.9	13	29	-6	25	4	8		17	38 PP
SONNEBERG	99.45	39.8	13	37	2	25	2	6	14 7	17	37 PP
JENA	99.87	39.3	13	37	1	24	58	-2	14 6	17	37 PP
CHEB	100.06	40.3	13	38	1	25	10	9	14 6	17	38 PP
PLAUEN	100.07	39.9	13	37	0	25	4	3	14 7	17	37 PP
BERGEN	100.09	29.0	13	38A	1	25	0	-1		17	42 PP
TARANTO	100.22	50.7	13	31	-7	24	11	3		17	31 PP
HALLE	100.29	38.9	13	47	9	24	58	-5	14 10	17	41 PP
COLLMBERG	100.84	39.3	13	40	-1	24	11	0		17	16 PP
ZAGREB	100.99	45.2	13	46A	5	25	10	1		17	50 PKP
POTSDAM	101.23	38.2	13	42	-1	25	10	-1	14 14	17	51 PP
PRAGUE	101.31	40.8	13	42	-1	25	15	3		17	47 PP
PRUHONICE	101.36	40.9	13	42	-1	25	10	-2		17	52 PP
COPENHAGEN	101.94	34.9	13	51	5	25	15	-2	14 18	24	18 SKS
VIENNA-H.	101.97	42.9	13	46	0	25	13	-4		17	51 PP
GOTEBORG	102.34	32.9	13	50	3				14 6	17	56 PP
BRATISLAVA	102.42	43.1	13	47	-1	24	21	3		18	4 PP
HURBANOVO	103.04	43.7	16	15	144	24	21	0		18	7 PP
BUDAPEST	103.50	44.2				25	33	3		18	1 PP
SUVA	103.58	244.6	13	56	3					18	14

RACIBORZ	103.64	41.5	13	55	2					19	18	
COLLEGE	103.65	334.5	13	50A	-3	24	21	-3	14 23	18	15	PP
SKOPJE	103.65	50.1				24	36	12		18	20	PP
BELGRADE	103.73	47.1	13	56K	2	24	26	2		18	11	PP
SKALSTUGAN	104.28	27.1	14	10	14					29	45	PKKP
ATHENS	104.34	54.6	13	58	2	24	28	1				
TIMISOARA	104.49	46.3				24	30	2		18	18	PP
SKALNATE PL.	104.70	42.7	13	51	-7	25	29	-11		24	32	SKS
KRAKOW	104.71	41.8								18	9	
NORD	105.00	6.9	14	2K	3	25	45	3		24	30	SKS
SOFIA	105.22	49.8	14	3	777	24	35	3		18	34	PP
UPPSALA	105.76	31.6	14	21	777	24	26	0		18	25	PP
WARSAW	105.89	39.8				25	38	0		18	32	PP
TANANARIVE	106.57	117.9				26	12	4	14 30	18	33	PP
LWOW	107.24	42.6	15	16	777	25	15	0				
BUCHAREST	107.56	48.5				25	41	0		17	46	PP
KIRUNA	108.50	23.6	14	31	777	26	13	0		18	43	PP
IASI	109.08	45.8				23	58			18	46	PP
NURMIJARVI	109.33	31.6	14	33	777	24	50	0		18	50	PP
HELSINKI	109.44	31.9	18	5	777	26	22	0		18	53	PP
KISHINEV	109.90	46.1	14	18	777	24	50	0				
SODANKYLA	110.82	24.3	14	44	777	24	57	2		18	9	PKP
NOUMEA	111.21	234.9	18	51	27	24	46	-11				
PULKOVO	112.09	32.6	14	27	777							
JERUSALEM	112.21	63.1	14	35	777					19	11	PP
KSARA	113.12	61.0	14	39	777				15 15	19	17	PP
SIMFEROPOL	113.29	48.8	14	40	777				15 10			
APATITY	113.44	24.1	14	34	777	25	7	1		19	50	PP
MELBOURNE	113.83	208.9				25	8	1		19	23	PP
RIVERVIEW	113.86	215.9	19	22	53					19	22	
KHEYS	115.21	9.5	18	39	7	25	17	5				
MOSCOW	115.97	37.1	18	38	5	25	9	-6				
SOTCHI	117.20	50.7								19	46	PP
BRISBANE	117.37	222.1	15	0	777	25	19	-1				
ADELAIDE	118.98	205.9	18	41	2	25	18	-8		19	56	PP
TIFLIS	120.89	53.0	18	48	5	25	24	-8				
GORIS	122.02	55.6	15	28	777							
MAKHACH-KALA	122.87	51.5	15	21	777							
CHARTERS TS.	127.03	222.8	18	44	-10	25	33	-18				
PERTH	127.72	185.2								21	5	PP
TIKSI	127.73	352.9	18	58	2							
PETROPAVLOVK	131.11	323.8	19	4	2							
MAGADAN	131.72	334.1	19	3	0							
RABAUL	132.76	243.4	18	52	-13					22	27	PP
PORT MORESBY	133.71	233.6	18	59	-8	25	58	-10		21	33	PP
YAKUTSK	136.45	347.3	19	4	-8							
QUETTA	139.22	67.2	19	10	-7							
STALINABAD	139.45	54.2	19	10	-8	26	18	0				
NAMANGAN	140.89	49.5	19	14	-6				19 45			
SEMIPALATNSK	141.48	31.7	19	20	-2				19 54			
UGLEGORSK	142.14	326.4	19	22	-1							
FRUNSE	142.18	45.4	19	23	0				19 53			
WARSAK DAM	142.63	60.4	19	25	2							
NEMURO	143.19	316.3	19	27	3							
ABASHIRI	143.69	318.0	19	23	-2							
BOMBAY	144.07	85.7	19	26	0					22	41	PP
KUSIRO	144.12	316.4	19	25	-1					22	43	
WAKKANAI	144.52	321.7	19	31	4							
OBIHIRO	144.92	317.1	19	34	7							
POONA	144.97	86.6	19	27	-1					22	52	PP
ASAHIGAWA	145.00	318.9	19	31	3							
LAHORE	145.38	63.8	19	29	1							
URAKAWA	145.57	316.2	19	33	4							
SAPPORO	146.01	318.5	19	29K	0					23	9	
TOMAKOMAI	146.15	317.5	19	31	1							
KODAIKANAL	146.18	102.4	19	40K	10					22	55	PP
MURORAN	146.64	317.7	19	32	2							
SUTTSU	146.85	318.9	19	34	3							
MORI	147.01	317.6	19	39	8							
GUAM	147.03	263.3	19	23K	-8	26	34	5	20 6	23	5	PP
HAKODATE	147.08	317.0	19	34	3					24	31	
HATINOHE	147.17	314.4	19	38	7					23	52	
MIYAKO	147.28	312.7	19	34	3							
AOMORI	147.53	315.4	19	38	6							
IRKUTSK	147.79	7.7	19	36	4	26	36	6				
MORIOKA	147.81	313.3	19	35	3							
MIZUSAWA	148.10	312.4	19	40	7	26	0	-31				
ISINOMAKI	148.27	311.1	19	37	4							

AKITA	148.52	314.1	19 36	3		24 5	
SENDAI	148.64	311.1	19 37	3		23 19	
DEHRA DUN	148.74	65.0	19 43	9		29 53	
YAMAGATA	149.04	311.4	19 43	9			
HYDERABAD	149.10	90.0	19 40	6		20 16	PKP2
SAKATA	149.10	312.9	19 46	12			
AGRA	149.15	71.1	19 38A	4		23 10	PP
HUKUSIMA	149.17	310.4	19 43	9			
ONAHAMA	149.20	308.7	19 40	6		23 7	
MADRAS	149.61	99.2	19 49	14		29 57	SKKS
SHIRAKAWA	149.62	309.5	19 40	5			
MITO	149.74	308.0	19 44	9			
KAKIOKA	150.02	307.9	19 43	7			
TUKUBASAN	150.08	307.9	19 36K	0		23 19	
NIIGATA	150.10	311.7	19 46	10			
UTUNOMIYA	150.12	308.7	19 44	8		27 20	
HONGO	150.53	307.2	19 48	12			
TOKYO C.M.O.	150.56	307.2	19 41	5		23 32	
AIKAWA	150.61	312.5	19 46	9			
KUMAGAYA	150.64	308.3	19 39	2		23 47	
YOKOHAMA	150.73	306.8	19 42	5		23 39	
MAEBASI	150.76	309.0	19 41	4		22 3	
MERA	150.79	305.7	19 40	3			
TITIBU	150.93	308.2	19 42	5			
TAKADA	151.04	310.9	19 41	4			
OIWAKE	151.17	309.2	19 39	2		23 26	
NAGANO	151.28	310.1	19 45	7		23 20	
MATUSIRO	151.31	309.9	19 38	0		23 25	PP
HUNATU	151.36	307.5	19 50	12			
VLADIVOSTOK	151.38	327.0	19 39	1			
MISIMA	151.38	306.7	19 41	3		23 22	
KOHU	151.46	307.9	19 50	12			
MATUMOTO	151.63	309.5	19 51	13			
SHIZUOKA	151.85	306.7	19 45	7			
WAZIMA	151.86	312.5	19 48	10			
TOYAMA	151.97	311.0	19 46	7			
IIDA	152.05	308.2	19 52	13			
OMAESAKI	152.14	306.2	19 37	-2		23 57	
TAKAYAMA	152.19	309.9	19 45	6			
ULAN-BATOR	152.37	5.9	19 43	4			
LEMBANG	152.72	172.7	19 41A	1		20 29	PKP2
NAGOYA	152.83	308.2	19 46	6		24 49	
GIHU	152.88	308.8	19 45	5		23 34	
HUKUI	152.94	310.5	19 59	19			
IBUKISAN	153.17	309.1	19 55	15			
DJAKARTA	153.25	170.8	19 41A	1		31 13	
TSURUGA	153.27	309.9	19 47	7		21 6	
HIKONE	153.32	309.0	19 56	16		23 39	
KAMEYAMA	153.34	308.0	19 46	6		24 13	
CHANGCHUN	153.78	336.1	19 40K	-1		23 38	PP
OWASE	153.88	306.6	19 56	15			
NARA	153.89	308.1	19 44	3			
ABUYAMA	154.00	308.7	20 8	27			
OSAKA	154.13	308.3	19 45	3		23 39	
TOYOOKA	154.23	310.7	19 46	4		23 42	
KOBE	154.37	308.7	20 8	26			
SIOMISAKI	154.46	305.6	19 47	5		23 50	
TOKUSIMA	155.09	308.0	19 59	16			
YONAGO	155.31	312.0	20 1	18			
MATSUE	155.50	312.3	19 49	6			
KOTI	156.10	307.8	19 52	8	20 18	23 54	
BOKARO	156.42	77.1	19 53	8		23 53	PP
HAMADA	156.48	312.2	19 49	4		23 55	
HIROSIMA	156.50	310.7	19 47	2		23 50	
MATUYAMA	156.54	309.2	19 47	2		23 56	
SIMIDU	156.87	306.6	20 19	34		24 26	
CHATRA	157.28	69.1	19 54	8		24 0	PP
OOITA	157.66	309.0	19 50	4		24 5	
SIMONOSEKI	157.78	311.5	20 0	14			
MIYAZAKI	158.43	306.2	19 50	3	20 24	24 6	PP
KUMAMOTO	158.53	309.1	19 59	12		24 7	
SAGA	158.60	310.6	19 49	2			
ITUHARA	158.78	314.1	19 55	7			
CALCUTTA	158.81	80.2	20 11	23		24 16	PP
NAGASAKI	159.17	309.9	19 48	0			
KAGOSIMA	159.25	306.3	19 55	7		24 17	
MEDAN	159.40	142.8	19 51K	3		20 27	PP
DAIREN	159.43	335.8	19 54	6			

LHASA	159.75	59.1	19	52K	3	20	26	24	12	PP
YAKUSIMA	159.78	303.5	19	48	-1			24	12	
PAOTOW	159.89	2.1	19	50K	1	20	25	24	42	PP
PEKING	159.96	348.3	19	49K	0	20	24	24	11	PP
TOMIE	160.02	311.1	19	50	1			24	18	
PORT BLAIR	160.41	113.6	19	55	6			24	22	PP
SHILLONG	161.67	70.2	19	59	8			24	25	PP
CHITTAGONG	162.04	80.4	19	58K	7					
LANCHOW	163.18	20.5	19	55	3	20	31			
TOCKLAI	163.85	64.0	20	4	11					
ZO-SE	165.97	321.3	19	55K	0	20	31	24	45	PP
NANKING	166.48	330.5	19	56K	1			24	47	PP
CHENGTU	168.02	30.3	19	58K	2	20	32	24	48	PP
MANILA	168.85	240.2	20	1	4			24	59	PP
TAIPEI	169.26	297.2	19	28	-29					
HWALIEN	169.54	291.7	20	13	16					
HSINKONG	170.00	287.3	20	10	13					
BAGUIO CITY	170.07	247.9	19	59	2			25	8	PP
TAICHUNG	170.30	294.3	20	6	8			25	0	PP
TAWU	170.58	283.5	20	3	5			25	24	PP
HENGCHUN	170.77	281.5	19	50	-8					
KUNMING	171.05	57.5	19	59K	1			25	16	PP
TAINAN	171.05	288.3	20	11	13					
PHU-LIEN	175.89	84.0	20	4	4			26	7	PP
HONG KONG	176.50	302.9	19	53	-7			25	38	PP
CANTON	176.61	321.7	20	4K	4	20	38	25	35	PP

JUNE 14 16.H 15.M 53.S EPICENTRE 37.41 141.77 DEPTH= 0.KM

A=-0.62556 B= 0.49277 C= 0.60486 D= 0.6188 E= 0.7855
G=-0.4751 H= 0.3743 K=-0.7963 HT= -0.7

SE= 3.88

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
ONAHAMA	0.83	237.1	0	17K	-2	0	27	-5				
ISINOMAKI	1.08	340.9	0	21K	-1	0	34	-4				
HUKUSIMA	1.09	288.8	0	21	-1	0	34	-4				
SENDAI	1.11	321.6	0	22K	-1	0	34	-5				
SHIRAKAWA	1.27	257.5	0	24	-1	0	37	-6				
YAMAGATA	1.41	307.3	0	25	-2	0	43	-3				
MITO	1.46	225.9	0	27	-1	0	43	-5				
KAKIOKA	1.73	227.9	0	30	-2	0	49	-6				
UTUNOMIYA	1.75	241.3	0	30K	-2	0	44	-11				
TUKUBASAN	1.79	229.1	0	30A	-2							
MIZUSAWA	1.79	343.9	0	32	0	0	53	-3				
TYOSI	1.84	204.1	0	34	1	0	56	-1				
SAKATA	2.14	314.9	0	38	1						0	57
NIIGATA	2.22	284.2	0	43	4	1	7	0				
MIYAKO	2.25	3.9	0	38	-1	1	6	-2				
KUMAGAYA	2.29	237.6	0	38	-2	1	3	-6				
HONGO	2.34	224.2	0	43	3						1	7
MORIOKA	2.34	348.6	0	40	0	1	7	-3				
TOKYO C.M.O.	2.37	224.0	0	40	-1	1	7	-4				
MAEBASI	2.39	246.0	0	40K	-1	1	7	-4				
TITIBU	2.59	237.5	0	42	-2	1	13	-3				
YOKOHAMA	2.61	221.6	0	45	1	1	15	-2				
AKITA	2.66	331.0	0	47	2	1	17	-1				
OIWAKE	2.80	248.4									1	45
TAKADA	2.83	264.9	0	46	-1						1	30
AIKAWA	2.86	283.5	0	45	-3						1	7
MERA	2.94	212.9	0	47	-2	1	24	-1				
NAGANO	2.95	256.7	0	48	-1	1	36	10				
MATUSIRO	2.97	254.4	0	48K	-1	1	18	-8			1	35
HUNATU	3.08	232.7	0	53	2	1	27	-2				
HATINOHE	3.13	356.6	0	53	2	1	29	-1				
KOHU	3.13	236.5	0	51	0	1	33	3				
AJIRO	3.19	223.4	0	57	5	1	35	3				
MISIMA	3.22	225.8	0	54	1	1	29	-4				
MATUMOTO	3.26	250.4	0	55	2	1	32	-1				
AOMORI	3.50	347.6	0	58	1	1	40	1				
SHIZUOKA	3.65	229.3	1	3	4	1	45	2				
IIDA	3.69	240.5	1	4	5	1	47	3				
TOYAMA	3.72	260.5	1	0	0	1	47	2				
TAKAYAMA	3.84	252.3	1	3	1							

WAZIMA	3.88	271.1	1	10	8					
OMAESAKI	4.02	226.9	1	9	5	1	59	6		
KANAZAWA	4.19	259.5	1	32	25					
HAMAMATU	4.24	232.0	1	21	14	1	56	-2		
HAKODATE	4.44	349.8	1	14	4	2	5	2		
NAGOYA	4.47	241.5	1	13	2	2	2	-2		
GIHU	4.50	245.1	1	11	0	2	3	-2		
HUKUI	4.62	254.6	1	15	2					
MORI	4.78	349.2	1	19	4	2	15	3		
IBUKISAN	4.80	246.7	1	16	1	2	14	2		
URAKAWA	4.80	9.0	1	18	3	2	13	1		
TSURUGA	4.91	250.8	1	18	1	2	18	3		
HIKONE	4.94	246.1	1	17	0	2	13	-3		
MURORAN	4.96	353.1	1	21	4	2	21	5		
KAMEYAMA	4.99	240.9	1	35	17	2	34	17		
HIROO	5.01	13.3				2	9	8		
TOMAKOMAI	5.11	358.4	1	43	23	2	26	6		
KYOTO	5.43	245.8	2	0	36	3	0	32		
SUTTSU	5.52	348.1	1	27	2	2	31	1		
NARA	5.53	242.3	1	28	2	2	50	19		
OBIHIRO	5.62	10.8	1	37	10	2	28	-5		
ABUYAMA	5.62	245.1	1	27K	0	1	59	-34		
OWASE	5.62	235.4	1	26	-1					
SAPPORO	5.67	356.9	1	31	4	2	35	1		
TOYOOKA	5.91	253.6	1	30	-1					
KUSIRO	5.92	19.0	1	40	9	2	31	-10	3	12
SIOMISAKI	6.29	232.9				2	40	-10		
SUMOTO	6.37	243.5	1	53	16	2	59	7		
NEMURO	6.59	25.0				2	45	-12		
TOKUSIMA	6.73	242.5	1	41	-1					
TAKAMATU	6.98	246.1	1	44	-2					
MATSUE	7.28	257.1	1	53	3					
HIROSIMA	8.16	251.0	2	9	6	4	0	23		
MATUYAMA	8.17	246.8	1	54	-9	4	8	31		
HAMADA	8.24	255.2	2	12	8	3	38	0	4	16
OOITA	9.28	246.3	2	13	-5	4	25	21		
VLADIVOSTOK	9.46	310.2	2	51	31					
KUMAMOTO	10.15	246.5	2	15	-15					
ZO-SE	18.13	255.8	4	12	-3					
PEKING	20.13	285.4	4	31	-7					
MAGADAN	22.91	11.8	5	27	20					
PAOTOW	24.80	287.2	5	21	-4					
YAKUTSK	25.75	346.9	5	29	-5	9	55	-6		
SIAN	26.75	273.2	5	39	-4					
LANCHOW	30.31	279.2	6	10	-5					
KUNMING	35.38	261.0	6	53	-6					
SHILLONG	43.71	269.2	8	2A	-6					
CHATRA	46.86	273.5	8	30	-4					
COLLEGE	48.63	32.4	8	44	-3					
KHEYS	53.38	347.5	9	10	-13					
QUETTA	61.11	287.4	10	13	-5					
RESOLUTE	62.18	14.5	10	20A	-5					
APATITY	62.47	335.7	10	21	-6					
SODANKYLA	64.74	337.2	10	36	-6					
MOSCOW	67.13	323.5	10	51	-7					
NURMIJARVI	69.75	332.0	11	9	-5					
HELSINKI	69.86	331.6	11	10	-5					
HUNGRY HORSE	71.32	43.1	11	21	-2					
EUREKA	75.39	51.4	11	44	-3					
RAPID CITY	79.83	41.6	12	10	-2					
COLLMBERG	80.92	330.3	12	13	-5					
PRUHONICE	81.32	328.7	12	15A	-5					
JENA	81.77	330.8	12	17	-5					
PLAUEN	81.89	330.2	12	31	8					
TUCSON	83.14	54.5	12	39	10					
TUCSON TELE.	83.15	54.4	12	38	9					
STUTTGART	84.43	330.7	12	31	-5					
PARIS	86.86	334.4	12	45	-3					
REGGIO CALA.	89.93	320.4							17	4
SOUTH POLE	127.22	180.0	19	2	-5					

JUNE 14 21.H 2.M 51.S EPICENTRE -23.85-179.47 DEPTH= 458.KM

DEPTH OF FOCUS= 0.067R

A=-0.91554 B=-0.00844 C=-0.40214 D=-0.0092 E= 1.0000

G= 0.4021 H= 0.0037 K=-0.9156 HT= 3.7

SE= 2.24

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
RAOUL ISLAND	5.55	165.8	1	31	0	2	53	10				
SUVA	6.00	340.6	1	35	-1	2	53	2			3	6
APIA	12.37	37.4	2	57	13	5	0	4				
ONERAHI	13.02	202.8	2	53	2	5	20	11				
NOUMEA	13.05	274.0	2	54	2							
KARAPIRO	14.66	195.8	3	8A	0							
TUAI	15.17	190.1	3	15	1	5	53	3				
TONGARIRO	15.88	194.3	3	21	0	6	12	9			11	57
WELLINGTON	18.03	194.1	3	41	-1	6	45	3			3	47
COBB RIVER	18.38	199.0	3	45	-1							
KAIHATA	20.09	199.9	4	1	-1							
GEBBIES PASS	20.83	196.2	4	6	-3	7	36	6				
BRISBANE	25.03	255.9	4	49A	1				5	50		
CANBERRA	29.58	240.0	5	28A	0							
CHARTERS TS.	31.97	270.1	5	48K	0	10	26	-1				
MELBOURNE	33.34	236.9	6	0K	0							
PORT MORESBY	34.95	288.6	6	13K	0							
ADELAIDE	37.82	243.3	6	37A	0						11	56
HAWAII V.OB.	49.07	30.8	8	6	0							
KIPAPA	49.61	26.6	8	10	0							
GUAM	50.98	312.9	8	15	-5						10	32
SCOTT BASE	54.45	183.6	8	45K	0						10	49 PP
SOUTH POLE	66.29	180.0	10	3	0				10	22	12	44 PP
MIRNY	67.40	205.7	10	8	-2							
MATUSIRO	72.13	325.3	10	37K	-1						12	21
ARGENTINE I.	78.43	157.1	11	12	-1							
HONG KONG	79.15	300.3	11	16	-1							
HALLEY BAY	79.39	173.3	11	16	-2							
TUCSON	86.04	52.3	11	52	0						13	39
TUCSON TELE.	86.17	52.3	11	53	1						13	39
EUREKA	86.47	43.9	11	55	1						13	41
COLLEGE	91.77	13.0	12	18	-1						14	2
QUETTA	121.22	291.9	18	0	0							
SODANKYLA	133.55	346.4									21	7 PP
ELISABTHVLLE	136.01	219.6	18	30	2						21	20 PP
NURMIJARVI	139.72	341.8	18	33	-2						21	26 SKP
ASTRIDA	141.29	231.2	18	30	-9							
UPPSALA	142.08	346.0	18	34	-6							
LWIRO	142.19	230.5	18	38	-2							
RUHANGABO	142.45	232.2	18	41	1							
KSARA	147.62	295.9	18	53	5							
JERUSALEM	148.42	292.2	18	55	6							
LEOPOLDVILLE	148.49	209.0	18	56A	6							
RATHFARNHAM	150.15	8.2	19	5K	14						20	55
COLLMBERG	150.96	343.8	18	59	6							
HALLE	151.03	345.2	18	57	4						20	37
JENA	151.65	345.2	19	1	7						19	12
PRUHONICE	151.71	340.7	19	1	7						20	53 *SPKP
STUTTGART	154.21	346.7	18	55	-3							
TAMANRASSET	175.29	257.9	19	15	-1						24	55 PP

JUNE 15 2.H 39.M 2.S EPICENTRE 24.78 122.54 DEPTH= 118.KM

DEPTH OF FOCUS= 0.013R

A=-0.48894 B= 0.76629 C= 0.41682 D= 0.8430 E= 0.5379
G=-0.2242 H= 0.3514 K=-0.9090 HT= 3.4

SE= 2.35

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
ILAN	0.72	269.3	0	21	0	0	34	-2				
TAIPEI	0.96	285.2	0	22	0	0	36	-3				
HWALIEN	1.16	226.3	0	24	0	0	39	-4				
HSINCHU	1.43	271.1	0	22	-5	0	41	-7				
TAICHUNG	1.81	250.1	0	32	0	0	56	0				
YUSHAN	1.95	228.6	0	37	3	1	0	1				
HSINKONG	1.99	212.9	0	33	-1	0	56	-3				
ALTSHAN	2.03	232.1	0	36	2	1	9	9				
TAITUNG	2.39	212.5	0	36	-3	1	8	-1				

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TAINAN	2.77	230.6	0 22	-22	1 15	-3		
TAWU	2.85	212.2	0 43	-2	1 17	-3		
KAOHSIUNG	2.99	224.5	0 51	4	1 27	4		
PENGHU	3.00	246.1	1 7	20	1 40	17		
HENGCHUN	3.22	211.1	0 51	1	1 31	2		
ZO-SE	6.41	349.5	1 31K	-2	2 50	4		
NANKING	7.95	336.4	1 53A	-1				
HONG KONG	8.07	253.9	1 55	-1	3 17	-9		
BAGUIO CITY	8.52	192.8	2 0	-2	3 33	-4		
CANTON	8.64	260.6	2 2K	-2				
MANILA	10.25	188.5	2 25	0	4 41	22		
DAIREN	14.10	357.1	3 23	7				
ABUYAMA	15.12	45.3	3 38A	9				
SIAN	15.14	311.7	3 40	11				
PHU-LIEN	15.20	258.1	3 33	3	6 24	9		6 32
PEKING	16.12	342.1	3 42A	1	6 50	14		
TATUNG	17.14	335.2	4 3	9				
CHENGTU	17.41	293.8	3 57	0	7 8	3		
MATUSIRO	17.85	45.2	3 58	-4	7 17	3		8 31 PCP
KUNMING	18.02	275.0	4 6K	2	7 30	12		4 27 PP
TUKUBASAN	18.91	48.8	4 10	-4	7 38	1		
PAOTOW	18.92	329.4	4 14K	0	7 51	14		
CHANGCHUN	19.14	6.1	4 16K	0	7 51	9		4 31 PP
YINCHUAN	19.41	318.6	4 25	6				
VLADIVOSTOK	19.85	20.5	4 23	-1	8 5	9		
WUWEI	21.41	312.5	4 43	3				
SUIHWA	22.08	8.2	4 49	3				
GUAM	23.77	114.2	5 3	0	9 16	10		8 10
ULAN-BATOR	26.20	335.8	5 25	-1				
Y.-SAKHLINSK	27.36	30.9	5 38	2				
SHILLONG	27.74	278.2	5 39K	-1	10 14	2		6 6 PP
LHASA	28.38	286.9	5 46K	1				
UGLEGORSK	28.68	27.3	5 54	6	10 53	26		
IRKUTSK	30.75	337.9	6 5	-1				
MEDAN	31.18	231.2	6 27	17				
CHATRA	31.85	281.4	6 17	1				
YAKUTSK	37.54	5.6	7 2	-2				
PETROPAVLOVK	39.18	34.2	7 16	-2				
MAGADAN	39.96	22.1	7 24	0				
SEMIPALATNSK	41.36	319.[illegible]	7 36	0				
PORT MORESBY	41.60	141.8	7 39	1	13 47	2		9 13 PP
NAMANGAN	45.04	303.9	8 6	0				
POONA	45.49	272.1	8 10	1				8 36
TIKSI	47.02	2.7	8 20	-1				
STALINABAD	47.16	300.4	8 21	-1				
QUETTA	49.21	289.3	8 39K	1	16 12	38		19 50 SS
CHARTERS TS.	50.15	150.5	8 47	2				10 4
BRISBANE	59.70	148.5	9 55A	1	17 56	2		
ADELAIDE	61.33	164.9	10 6K	0				10 33
KHEYS	62.39	349.3	10 5	-8				
M LBOURNE	65.75	160.6	10 34	-1				
APATITY	67.03	335.3	10 40	-3				11 8 PCP
MOSCOW	67.09	322.3	10 31	-12				
COLLEGE	67.71	27.5	10 45	-2				
SODANKYLA	69.63	335.8	10 57	-2			11 25	11 12 PCP
PULKOVO	70.02	327.5	11 2	1				
KIRUNA	71.74	337.0	11 9	-2			11 39	
NORD	71.88	354.2	11 10	-2				
KIPAPA	72.15	74.2	11 15	1				
HELSINKI	72.48	328.7	11 14	-2				
NURMIJARVI	72.51	329.1	11 14	-2			11 43	
KSARA	74.04	300.2	11 27	2				
HAWAII V.OB.	75.26	75.2	11 33	1				
SITKA	75.84	33.4	11 35	0				
UPPSALA	76.01	329.8	11 34	-2			12 3	
SKALSTUGAN	76.59	334.4	11 38	-1			12 8	
RESOLUTE	77.88	9.5	11 44K	-2	21 22	-6	12 14	
KARAPIRO	79.77	140.1	11 57	0			12 26	
TONGARIRO	80.63	141.0	11 52	-9				
PRUHONICE	82.12	321.7	12 9A	0			12 40	
COLLMBERG	82.32	323.3	12 8	-2				
HALLE	82.79	323.9	12 11	-1			12 41	
PLAUEN	83.19	322.9	12 13	-1			12 33	
JENA	83.28	323.5	12 15	0			12 46	
TANANARIVE	84.92	246.6	12 24	1				
STUTTGART	85.74	322.5	12 27	0				15 47 PP
STRASBOURG	86.63	322.8	12 30	-2				
DURHAM	87.46	331.3						19 12
CORVALLIS	88.53	40.7	12 42K	1				

SHASTA	91.27	43.5	12	54	1						
HUNGRY HORSE	91.35	33.8	12	54	0					13	54
MINERAL	91.96	43.5	12	57K	0						
BERKELEY	92.95	45.8	13	2	1						
RENO	93.55	43.3	13	5K	1						
ASTRIDA	93.63	268.8	13	5	1						
BUTTE	93.63	34.9	13	5	1						
LICK	93.66	46.0	13	5K	1						
LWIRO	94.33	269.5	13	8A	1						
UVIRA	94.55	268.3	13	9	1						
FRESNO	95.19	45.6	13	11K	0						
EUREKA	95.94	41.6	13	15	0						
PASADENA	97.81	46.9	13	23	0						
ELISABTHVLLE	99.38	261.5	13	33	3						
TAMANRASSET	102.75	302.5								18	2 PP
SCOTT BASE	105.63	171.2								18	16 PP
SOUTH POLE	114.63	180.0	18	26	0						
BYRD STATION	118.99	169.9	18	36	1						
PORT STANLEY	153.12	179.4	19	58	22						
HUANCAYO	158.87	56.4	19	48	4					20	24 PKP2
LA PAZ	167.06	52.5	20	1	9					20	59

JUNE 16 0.H 32.M 18.S EPICENTRE 42.15 23.98 DEPTH= 0.KM

A= 0.67946 B= 0.30227 C= 0.66855 D= 0.4065 E=-0.9137
G= 0.6108 H= 0.2717 K=-0.7437 HT= -2.5

SE= 3.25

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
SOFIA	0.73	319.0									0	13	PG
SKOPJE	1.93	265.9									0	33	PG
BUCHAREST	2.75	33.5	0	48	2	1	34	14					
CAMPULUNG	3.21	13.3	0	58	6	1	43	11					
BELGRADE	3.71	317.3	0	56K	-3						1	12	PP
TIMISOARA	4.12	332.0	1	6	1	2	7	12			1	21	PG
ATHENS	4.18	182.8	1	7A	1	2	11	15			2	22	SG
BACAU	4.89	24.3				1	49	-25					
TARANTO	5.34	253.9				2	13	-12					
IASI	5.66	25.6	1	27	0						1	55	
KISHINEV	5.97	33.7	1	31	0								
ZAGREB	6.84	305.2	1	52	8	3	35	32					
HURBANOVO	7.04	326.4	1	54	8	3	12	4			4	0	SG
MESSINA	7.56	241.4	1	56	2								
LWOW	7.68	0.2									3	45	S*
BRATISLAVA	7.74	323.4	1	55	-1	3	17	-9			2	27	PG
SIMFEROPOL	7.88	65.8	1	57	-1								
TRIESTE	8.18	298.8	2	1	-1	3	31	-5			4	32	SGSG
KRAKOW	8.39	341.8	2	12	7	3	58	16			4	42	
RACIBORZ	8.89	335.2	3	14	62								
TOLMEZZO	8.94	302.1	2	9	-4						3	44	
PRUHONICE	10.21	323.3	2	29	-1	4	21	-6					
WARSAW	10.29	349.7				4	38	9					
PRAGUE	10.33	323.4	3	10	38	4	14	-16					
RAVENSBURG	11.62	303.9	3	4	14								
COLLMBERG	11.84	324.4	2	58	5						6	58	
EBINGEN	12.18	304.8	2	53	-4						6	1	
JENA	12.24	320.1	4	6	68						5	45	
TUBINGEN	12.27	306.4	2	56	-2								
STUTTGART	12.30	307.6	2	53	-6								
HALLE	12.45	322.8	3	6	5						4	55	
BASLE	12.82	300.4	3	3	-3								
STRASBOURG	13.08	305.0	2	55	-14						4	14	
CLERMONT-FD.	15.45	290.5	3	41	1								
MOSCOW	16.24	28.5	3	50	-1	7	27	36					-
PARIS	16.45	301.2	3	54	1						10	28	
HELSINKI	18.06	1.6	4	13	0								
PULKOVO	18.08	10.4	4	14	0								
UPPSALA	18.16	349.7	4	12	-3								
NURMIJARVI	18.39	1.1	4	17	-1								
SKALSTUGAN	22.53	346.3	5	0	-2						5	15	
TAMANRASSET	24.71	224.4	5	26A	2						6	57	
SODANKYLA	25.32	2.4	5	25	-4						5	53	PP
KIRUNA	25.81	356.9	5	32	-2								
APATITY	25.97	8.3	5	35	0						14	4	

ELISABTHVLLE	53.60	175.8	9 26	1
RESOLUTE	56.70	343.8	9 42	-5
RAPID CITY	81.98	324.6	12 21	-2
HUNGRY HORSE	82.57	333.3	12 24	-2
EUREKA	90.99	330.1	13 6	-1
TUCSON TELE.	94.99	322.8	13 25	0
SOUTH POLE	131.96	180.0	19 14	-1

JUNE 16 3.H 28.M 41.S EPICENTRE 43.88 18.84 DEPTH= 0.KM

A= 0.68438 B= 0.23347 C= 0.69073 D= 0.3229 E=-0.9464
G= 0.6537 H= 0.2230 K=-0.7231 HT= -3.1

SE= 2.30

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S	
BELGRADE	1.49	50.4	0 29K	0			0 36		PG
TIMISOARA	2.52	41.4	0 42	-1	1 14	-1	0 49		PG
SKOPJE	2.67	134.4	0 48A	3			1 1		PG
ZAGREB	2.81	314.7	0 48A	1			0 57		PG
SOFIA	3.49	108.2	1 0	3	1 45	5	1 51		
TARANTO	3.61	199.6	0 51	-8	2 9	26			
BUDAPEST	3.63	2.4	0 57	-2			2 8		SG
HURBANOVO	4.01	353.9	1 9	4	1 45	-8	2 13		SG
TRIESTE	4.03	297.8	1 7	2	1 54	1	2 16		SG
BRATISLAVA	4.46	344.9	1 9K	-2	1 56	-8	1 27		PG
CAMPULUNG	4.64	70.4	1 36	23			2 35		
TOLMEZZO	4.82	303.5	1 17	1			2 31		
ROME	5.07	249.2	1 22	2	2 24	4	2 34		S*
BUCHAREST	5.25	81.6	1 51	29	2 49	25			
BOLOGNA	5.43	279.1	1 56	31					
PRATO	5.59	272.7	1 40	13					
MESSINA	6.20	204.7	1 36	1	2 49	1	1 53		P*
KRAKOW	6.22	6.5	1 33	-3			2 30		
RACIBORZ	6.22	356.2	1 39	3			2 26		
REGGIO CALA.	6.26	203.7			2 45	-4			
PRUHONICE	6.77	335.8	1 42	-1	3 2	0	2 27		PG
PRAGUE	6.88	335.6	1 47	2			3 48		SG
LWOW	6.93	29.0	1 35	-11					
ATHENS	6.97	146.3	1 44	-2			1 52		PP
IASI	6.97	58.5	2 17	31			2 37		
CHUR	7.20	297.6	1 50	1			3 6		PS
RAVENSBURG	7.52	304.4	1 53	-1	3 52	31	4 14		SG
KISHINEV	7.70	62.5	1 56	0					
PLAUEN	8.03	327.9	1 58	-3			4 11		SG
EBINGEN	8.10	305.5	2 1K	-1	3 38	3	4 27		SG
TUBINGEN	8.21	307.9	2 2	-2			4 38		SG
STUTTGART	8.27	309.6	2 3	-1	3 45	5	2 48		PG
SONNEBERG	8.33	324.0	2 4	-1			4 34		SG
COLLMBERG	8.40	334.1	2 5	-1	3 56	13	3 37		PG
JENA	8.60	327.7	2 7	-2	3 59	11	3 4		PG
BASLE	8.68	298.8	2 10	0	4 8	18			
NEUCHATEL	8.92	294.6	2 13	-1					
HALLE	8.92	331.1	2 12	-2	3 44	-12	2 55		PG
STRASBOURG	8.99	305.4	2 13	-2	2 54	-64			
POTSDAM	9.33	337.7					5 10		SG
BENSBERG	10.60	316.0	2 36	-1			5 53		SG
SIMFEROPOL	10.99	79.1	3 7	25					
MUNSTER	11.04	321.1					6 12		
CLERMONT-FD.	11.32	285.1	3 21	34					
PARIS	12.32	299.3	2 59	-1					
FOLINIERE	14.20	296.9	3 28	3					
JERSEY	15.34	297.5					7 4		
HELSINKI	16.73	10.7	4 0	2					
MOSCOW	16.90	38.8	3 57	-3					
NURMIJARVI	17.02	9.9	4 3	2					
PULKOVO	17.38	19.7	4 6	0					
SKALSTUGAN	20.09	351.4	4 56	18					
TAMANRASSET	23.74	211.9	5 16	1			5 45		PP
SODANKYLA	23.91	7.4	5 18	1					
KIRUNA	24.02	1.5	5 17	-1					
APATITY	24.97	13.3	5 27	0					
MBOUR	42.37	237.3	8 0	2					
COLLEGE	71.09	354.0	11 21	-1					
HUNGRY HORSE	79.26	330.2	12 8	-1					

EUREKA	87.53	326.7	12	48	-3							

JUNE 16 8.H 2.M 8.S EPICENTRE 14.65 -93.52 DEPTH= 64.KM

DEPTH OF FOCUS= 0.005R

A=-0.05950 B=-0.96609 C= 0.25124 D=-0.998 E= 0.0615
G=-0.0154 H=-0.2508 K=-0.9679 HT= 5.8

SE= 3.32

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
COMITAN	2.09	39.9	0	31	-2	0	52	-6			0	46	
OAXACA	3.92	307.5	1	0	1	1	46	2			1	54	
SANTIAGO MA.	5.04	102.6	1	11	-4	2	5	-7					
VERA CRUZ	5.17	331.5	1	22	6	2	14	-2					
PUEBLA	6.25	314.9	1	32	1	2	42	0			2	12	
TACUBAYA	7.20	311.8	1	46K	1	3	4	-2			2	49	
MERIDA	7.29	30.1	1	43	-3	3	1	-7			2	25	
CHIHUAHUA	18.14	322.1									4	54	
DALLAS	18.36	351.3	4	6	-5								
CHINCHINA	20.07	116.8	4	29	-1	8	21	14			4	42	PP
FAYETTEVILLE	21.36	358.5	4	38	-5								
BOGOTA	21.59	115.5	4	50	4	8	44	8					
COLUMBIA	22.34	28.2	4	54	1	9	1	11					
TUCSON TELE.	23.58	321.3	5	7	2	9	29	18	5	20			
TUCSON	23.59	321.0	5	7	2	9	32	20	5	21			
CHAPEL HILL	24.84	28.9	5	25	8								
SAN JUAN	26.52	78.2	5	33	0						9	11	PCP
MORGANTOWN	27.60	23.0	6	2	19						11	20	
WASHINGTON	28.18	27.9	6	19	31								
BOULDER CITY	28.55	321.9	5	53	1								
PASADENA	29.54	315.5	6	1K	1	10	58	9	6	11			
RAPID CITY	30.48	346.2	6	6	-3								
SALT LAKE C.	30.54	332.0	6	8	-1								
PALISADES	31.33	29.3	6	16	0	11	10	-7			12	54	PCS
EUREKA	31.63	325.7	6	18	-1				6	35	9	8	PCP
HUANCAYO	32.07	144.9	6	23	0						7	42	PP
FRESNO	32.15	318.1	6	22K	-1								
LICK	33.68	317.4	6	37K	0								
RENO	33.86	322.1	6	39K	1								
OTTAWA	34.15	22.6	6	49	8								
BOZEMAN	34.28	338.0	6	40	-2								
BREBEUF	35.05	24.6	6	56	8								
BUTTE	35.14	336.7	6	47	-2				7	2			
MINERAL	35.44	321.7	6	51K	-1								
SHASTA	36.13	321.5	6	56A	-1								
SHAWINIGAN	36.25	24.4	7	17	19								
HUNGRY HORSE	37.63	337.5	7	8	-2				7	27	9	25	PCP
CORVALLIS	39.09	325.7	7	22A	0								
SITKA	52.79	332.8	9	10	-1								
RESOLUTE	60.04	359.6	9	57K	-5	18	5	-3			22	22	SS
COLLEGE	62.07	336.9	10	13	-3				10	29	10	53	PCP
NORD	73.69	8.6	11	23	-5								
KIRUNA	85.22	20.4	12	27	-3								
STUTTGART	87.29	40.2	13	0	20								
TAMANRASSET	92.50	65.8	13	0	-5								
SOUTH POLE	104.55	180.0									18	58	PP
BRISBANE	117.22	246.4	17	46	-52								
ELISABTHVLLE	122.54	94.6	18	51	3				19	9			
CHARTERS TS.	122.92	255.5	16	11	777								
ADELAIDE	129.06	236.8	18	24K	-37						18	48	
QUETTA	131.63	22.8	19	6	1				19	24	22	29	PKS
POONA	144.77	21.1	19	28	-1								

JUNE 17 12.H 32.M 5.S EPICENTRE 42.59 19.90 DEPTH= 0.KM

A= 0.69438 B= 0.25141 C= 0.67426 D= 0.3404 E=-0.9403
G= 0.6340 H= 0.2295 K=-0.7385 HT= -2.6

SE= 3.59

	DELTA	AZ.	P	O-C	S	O-C	*PP	SUPP.

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
SKOPJE	1.27	118.2			0 39	-4		0 20 PG
BELGRADE	2.27	9.9	0 37	-2				1 13 PG
SOFIA	2.53	86.3	0 44	1				1 25 SG
TARANTO	2.91	224.1	1 2	14				1 27
TIMISOARA	3.30	16.2	0 55	1	1 28	-6		1 4 PG
ZAGREB	4.29	320.2						1 18 PG
CAMPULUNG	4.57	52.4						2 22
BUCHAREST	4.86	65.8	1 43	27				2 38
TRIESTE	5.38	306.7	1 21	-2	2 22	-5		1 40 PG
HURBANOVO	5.42	347.8	1 31	7	2 52	24		
ATHENS	5.46	146.4	1 24K	0	2 29	0		
MESSINA	5.50	218.6	1 7	-18	2 27	-3		1 23 P*
REGGIO CALA.	5.54	217.3			2 30	-1		4 14
ROME	5.55	265.4	1 28	2				2 19
BRATISLAVA	5.92	341.5	1 32	1	2 56	15		
TOLMEZZO	6.22	310.1	1 35	0				2 55
SKALNATE PL.	6.60	2.0	1 35	-6	2 55	-2		
KRAKOW	7.46	0.1			3 25	6		
RACIBORZ	7.59	351.7	0 36	-78				4 35
LWOW	7.78	20.1			3 18	-10		5 8
PAVIA	8.17	292.1	2 6	3				4 17
PRUHONICE	8.27	335.2	1 46	-18				2 31 PG
CHUR	8.53	303.5	2 7	-1	3 40	-6		
RAVENSBURG	8.92	309.1	2 16	3				
EBINGEN	9.51	309.8	2 19	-2				
PLAUEN	9.54	328.7	2 32	10				
TUBINGEN	9.64	311.7	2 21	-2				
WARSAW	9.68	4.1						5 40
STUTTGART	9.71	313.2	2 21	-3				
COLLMBERG	9.91	334.0	2 27	0				4 13 PG
BASLE	10.02	303.8	3 9	41	4 48	25		
JENA	10.10	328.5	2 44	15	4 45	20		3 17
NEUCHATEL	10.21	300.0	2 28	-3				
STRASBOURG	10.40	309.3	2 26	-7	4 19	-13		5 15 SG
HALLE	10.43	331.5	2 34	0	4 24	-9		3 57
BENSBERG	12.08	318.2	3 10	14				
CLERMONT-FD.	12.46	290.5	3 12	11				5 10
FOLINIERE	15.51	300.5	3 36	-6				
JERSEY	16.65	300.9	4 37	41				4 58
SKALSTUGAN	21.49	350.7	4 48	-4				
TAMANRASSET	23.11	215.7	5 8	0				5 36 PP

JUNE 17 20.H 46.M 17.S EPICENTRE -12.66 167.03 DEPTH= 290.KM

DEPTH OF FOCUS= 0.041R

A=-0.95110 B= 0.21911 C=-0.21771 D= 0.2245 E= 0.9745
G= 0.2122 H=-0.0489 K=-0.9760 HT= 6.2

SE= 1.72

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
BRISBANE	19.73	219.5	4 10K	1	7 42	12		
PORT MORESBY	19.78	277.4	4 8	-1	7 40	9		4 41 PP
APIA	20.66	95.6	4 18	0				
CHARTERS TS.	21.21	247.1	4 24	0	8 9	12		
ONERAHI	23.95	165.2	4 52	3				
KARAPIRO	26.28	164.7	5 10A	-1				11 49
TONGARIRO	27.49	165.6	5 22K	0				
TUAI	27.55	162.7	5 21	-1	9 47	6		
CANBERRA	27.84	212.8	5 25A	0				
COBB RIVER	28.75	171.0	5 34	1				
WELLINGTON	29.31	168.0	5 36	-2				
KAIMATA	30.00	173.5	5 44	0				
GEBBIES PASS	31.31	172.1	5 54	-1				
ADELAIDE	33.89	224.3	6 18A	1	11 26	6		7 7
MATUSIRO	55.97	332.1	9 8A	-2				10 5 PCP
CAPE HALLETT	59.65	178.8	10 37A	61				
SCOTT BASE	65.20	180.1	10 13K	1				10 43 PCP
MIRNY	72.12	203.8	10 55	1				
BYRD STATION	74.76	170.0	11 1	-9				
SOUTH POLE	77.43	180.0	11 25	1				14 23 PP
SHILLONG	82.39	298.3	11 50A	-1				
UKIAH	82.77	47.4	12 51	58				

BERKELEY	82.99	48.8	11 54	0			
LICK	83.25	49.5	11 55K	0			12 49
SHASTA	83.96	46.1	11 59	0			
MINERAL	84.38	46.7	12 1	0			
FRESNO	84.43	50.6	12 1K	0			
COLLEGE	84.43	17.7	12 0	-1		12 53	
PASADENA	84.81	53.5	12 1	-2			12 56
RENO	85.38	47.9	12 6	0			
CHATRA	86.80	298.2	12 15	3			
EUREKA	88.17	49.0	12 20	1		13 15	
TUCSON	90.15	57.1	12 30	2			
TUCSON TELE.	90.26	57.0	12 30	1		13 24	
HUNGRY HORSE	92.14	40.9	12 37	0		13 30	
RESOLUTE	104.26	15.8					17 46 PP
QUETTA	104.88	298.1	12 2	-93			
APATITY	117.36	341.7					18 11
SODANKYLA	119.46	343.5	18 15	0			
KIRUNA	120.71	345.9	18 17	0			
SCORESBY SD.	121.95	3.5	18 10	-10			
NURMIJARVI	124.86	338.4	18 28	3		19 25	
HELSINKI	124.99	338.0	18 31	6			
KIMBERLEY	124.99	221.0	18 28A	3			
SKALSTUGAN	126.13	346.3	18 28A	0			
UPPSALA	127.73	341.0	18 31	0			
ELISABTHVLLE	133.21	240.6	18 48	7			
COLLMBERG	136.08	336.6	18 50	4			
PRUHONICE	136.47	334.3	18 48A	1			
STUTTGART	139.57	337.4	18 54	1			
FOLINIERE	142.53	346.4	18 56	-3			
CLERMONT-FD.	144.28	340.6	19 1	-1			
MONACO	144.40	334.3					20 2
LEOPOLDVILLE	147.25	240.7	19 12A	6			
TAMANRASSET	159.73	302.3	19 26	3		20 7	23 13 PP
MBOUR	175.75	65.8					24 49 PP

JUNE 18 6.H 50.M 44.S EPICENTRE -55.34-128.86 DEPTH= 0.KM

A=-0.35844 B=-0.44479 C=-0.82078 D=-0.7786 E= 0.6275
G= 0.5150 H= 0.6391 K=-0.5712 HT= -7.3

SE= 3.63

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
BYRD STATION	24.97	176.2	5	20	-7	9	49	0			8	48	PCP
CAPE HALLETT	29.94	212.4	6	21	9	11	19	10			10	35	PCP
SCOTT BASE	31.30	201.6	6	32	8	10	54	-37			7	25	PP
ARGENTINE I.	32.04	134.2	7	32	61								
SOUTH POLE	34.84	180.0	6	52	-3						8	35	PP
ROXBURGH	39.32	257.8									14	8	
KARAPIRO	40.76	271.5	7	44	0								
LA PLATA	51.62	97.7									16	36	
TALA POZO	53.28	86.7				16	56	2			20	36	SS
MIRNY	54.41	199.2	9	30	-1	17	17	8					
RIVERVIEW	57.49	256.4	9	50A	-3	18	10	20					
CANBERRA	57.57	253.7	9	53	-1								
MELBOURNE	57.89	248.9	9	55	-1								
HUANCAYO	59.84	65.5	10	10	0						12	22	PP
LA PAZ	60.03	75.0	10	10K	-1	18	32	9			12	24	PP
BRISBANE	61.23	262.7				18	37	-1			19	1	
CHARTERS TS.	70.90	262.4	11	19	-2								
CHINCHINA	74.34	56.0	11	40	-1	21	25	10					
BOGOTA	74.78	57.6	11	46	2	21	24	4			26	28	SS
FUQUENE	75.68	57.5	11	50	1								
TUCSON	88.60	15.2	12	59	3								
PASADENA	89.61	8.9									13	6	
EUREKA	95.09	10.0	13	25	-1								
PALISADES	106.75	40.3									18	49	PP
MBOUR	114.14	99.8									15	25	
COLLEGE	120.76	350.7	18	53	-1								
RESOLUTE	131.70	11.5	19	16	1								
TAMANRASSET	133.22	115.2	19	17	-1						21	47	PP
SCORESBY SD.	145.98	35.1	19	36	-5								
FOLINIERE	148.23	80.0									21	48	
CLERMONT-FD.	148.61	87.4	19	51	6								
QUETTA	152.43	210.7	20	5	14								

TARANTO	153.18	109.5	19 16	-36				
STUTTGART	153.72	86.8	19 52	-1				
JERUSALEM	153.90	147.9	19 55	2				
TRIESTE	154.60	96.7	20 4	10				
KSARA	156.00	147.4	19 58	2			24 2	PP
JENA	156.10	84.1	20 4	8			20 46	
COLLMBERG	157.07	84.2	20 5	8				
PRUHONICE	157.36	88.4	20 6	8				

JUNE 18 15.H 31.M 28.S EPICENTRE 54.11 160.22 DEPTH= 0.KM

A=-0.55412 B= 0.19931 C= 0.80822 D= 0.3385 E= 0.9410
G=-0.7605 H= 0.2735 K=-0.5889 HT= -6.9

SE= 3.33

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S	
PETROPAVLOVK	1.35	224.3	0 23	-2	0 41	-2			
MAGADAN	7.51	320.4	1 50	-2					
UGLEGORSK	12.34	253.3	2 57	-1					
Y.-SAKHLINSK	13.21	244.3	3 8	-2					
NEMURO	14.44	227.7	3 25	-1	6 7	0		7 15	
ABASHIRI	14.49	232.3	3 30	3	6 44	36			
WAKKANAI	14.76	241.5	3 32K	2				4 27	PP
KUSIRO	15.24	229.5	3 35	-2	6 30	4			
ASAHIGAWA	15.58	235.7	3 44	3					
OBIHIRO	15.84	232.0	3 38	-6				7 30	
HIROO	16.29	230.3	3 43	-7				7 14	
SAPPORO	16.61	236.0	3 54K	0	7 7	9		4 20	PP
URAKAWA	16.63	231.1	3 52	-2	7 19	21			
TOMAKOMAI	16.91	234.3	4 19	21	7 33	28			
MURORAN	17.35	235.1	4 13	10				7 8	
SUTTSU	17.36	237.5	4 3	0	7 14	-1		4 31	PP
MORI	17.72	235.3	4 15	7	7 33	10			
YAKUTSK	17.82	308.6	4 6	-3					
HAKODATE	17.89	234.4	4 6	-4	8 11	44		4 24	PP
HATINOHE	18.49	230.4	4 13	-5	7 58	17			
AOMORI	18.61	232.3	4 22	3	8 7	24			
MIYAKO	19.01	227.9	4 19	-5	8 23	31			
MORIOKA	19.33	229.5	4 27	0	8 18	19			
AKITA	19.80	231.6	4 41	8	8 21	11			
MIZUSAWA	19.81	228.6	4 39	6	8 23	13			
ISINOMAKI	20.31	227.1	4 34	-4	8 32	12			
SAKATA	20.58	230.7	4 40	-1	8 41	15			
SENDAI	20.62	227.7	4 37	-4	8 34	8			
YAMAGATA	20.88	228.7	4 47K	3	8 45	13			
HUKUSIMA	21.24	227.7	4 44	-4	8 47	8			
VLADIVOSTOK	21.56	251.0	4 45	-6					
ONAHAMA	21.73	225.7	4 55	2	8 53	5		13 11	PCS
NIIGATA	21.73	230.5	5 10	17	9 34	46			
SHIRAKAWA	21.88	227.2	4 53	-1	8 57	7			
AIKAWA	22.02	232.0	4 57	1					
TIKSI	22.18	334.1	5 7	10					
SUIHWA	22.32	264.0	4 58	-1					
MITO	22.40	225.7	5 1	2	9 11	11			
UTUNOMIYA	22.51	227.0	4 58	-2	9 8	6			
TUKUBASAN	22.69	226.1	4 58	-4	9 7	2		5 17	PP
TAKADA	22.77	230.6	5 4	1					
MAEBASI	22.98	228.2	5 3	-2	8 55	-16			
KUMAGAYA	23.06	227.3	5 6	0	9 25	13			
NAGANO	23.14	230.1	5 10	3	9 21	8			
WAZIMA	23.17	233.3	5 4	-3	9 20	6			
MATUSIRO	23.23	229.9	5 4K	-4	9 18	3		8 39	PCP
HONGO	23.26	226.0	4 56	-12	9 20	4		10 32	
OIWAKE	23.27	229.0	5 11	3	9 13	-3		14 57	
TOKYO C.M.O.	23.30	226.0	5 5	-3	9 7	-9			
TITIBU	23.33	227.6	5 11	2					
YOKOHAMA	23.55	225.9	5 11	0	9 38	17			
TOYAMA	23.58	231.8	5 11	0	9 30	9			
MATUMOTO	23.60	229.9	5 11	0	9 29	8			
KOHU	23.85	228.0	5 16	2	9 39	13			
HUNATU	23.87	227.5	5 18	4	9 31	5			
MERA	23.91	224.9	5 17	3	9 33	6			
KANAZAWA	23.97	232.4	5 20	5					
TAKAYAMA	24.01	230.9	5 15	0					

AJIRO	24.11	226.4	5	15	-1							
MISIMA	24.11	226.7	5	14	-2	9	31	1				
OSIMA	24.23	225.5	5	20	3	9	52	20				
IIDA	24.27	229.1	5	33	15	9	52	19				
SHIZUOKA	24.48	227.4	5	26	6	9	45	8				
HUKUI	24.54	232.4	5	22	2							
GIHU	24.84	230.7	5	19	-4	9	50	7				
OMAESAKI	24.87	227.3	5	24	0	9	51	8			5	34 PP
CHANGCHUN	24.87	260.0	5	20	-4	9	38	-5				
NAGOYA	24.94	230.1	5	25	1	9	46	2			6	5 PP
IBUKISAN	25.04	231.3	5	30	5						10	13
HIKONE	25.19	231.4	5	28	1	10	8	19			6	12 PP
KAMEYAMA	25.44	230.5	5	29	0						8	57
KYOTO	25.64	231.8	5	29	-2	10	7	11				
TOYOOKA	25.65	233.9	5	28	-3						10	13
SAIGO	25.83	237.1	5	46	13							
ABUYAMA	25.83	231.9	5	28K	-5	9	58	-1				
NARA	25.87	231.2	5	29	-4							
TOTTORI	25.95	234.8	5	28	-6							
OSAKA	26.03	231.7	5	36	2	10	14	11				
KOBE	26.17	232.3	5	34	-2	10	8	3				
OWASE	26.21	229.9	5	37	1	10	20	15				
YONAGO	26.44	236.0	6	2	24	10	36	27				
WAKAYAMA	26.55	231.7	5	41	2						11	25
MATSUE	26.56	236.4	5	36	-3						9	48
SUMOTO	26.58	232.3	5	39	-1	10	22	10				
OKAYAMA	26.76	234.2	5	40	-1							
SIOMISAKI	26.92	229.8	5	44	1	10	21	4				
TOKUSIMA	26.95	232.4	5	40	-3	10	24	6				
TAKAMATU	27.00	233.5	5	42	-1	10	15	-3				
HAMADA	27.49	237.2	5	50	2	10	35	9			6	57 PPP
COLLEGE	27.65	46.4	5	48	-1	10	31	2			6	50
HIROSIMA	27.73	236.0	5	47	-3	10	14	-16				
MUROTO	27.82	232.0	5	54	3	10	45	13				
KOTI	27.87	233.3	5	50	-1	10	17	-16			7	18 PP
MATUYAMA	28.02	234.8	5	49	-4	10	51	16			12	38 SS
UWAZIMA	28.60	234.4	6	2	4							
SIMIDU	28.77	233.3	6	1	2						11	16
SIMONOSEKI	28.81	237.5	6	0	0						14	40
OOITA	29.05	235.7	6	3K	1	10	45	-6				
HUKUOKA	29.36	237.8	6	4	-1	11	12	16				
ITUHARA	29.44	240.1									7	10 PP
SAGA	29.68	237.6	6	26	18							
KUMAMOTO	29.83	236.5	6	19	10							
UNZENDAKE	30.13	237.0									7	18 PP
DAIREN	30.16	255.6	6	8	-4							
MIYAZAKI	30.22	234.5	6	24	12	11	22	12				
NAGASAKI	30.31	237.5	6	10	-3						11	29
KAGOSIMA	30.93	235.3	6	19	0						11	45
TOMIE	30.96	238.9	6	22	3	11	21	-1				
YAKUSIMA	31.88	234.2	6	26	-1	11	39	3				
IRKUTSK	32.81	290.1	6	24	-11							
ULAN-BATOR	33.42	281.6	6	41	1							
SITKA	35.35	58.5	6	59	2							
PAOTOW	35.82	268.8	6	58	-3							
ZO-SE	36.12	246.4	7	1	-2	12	40	-2			8	39 PPP
NANKING	36.70	250.1	7	8	0	12	47	-4				
KHEYS	40.17	345.2	7	30	-7	13	29	-14				
SIAN	40.73	262.2	7	41A	-1	13	53	1			9	42 PCP
HWALIEN	41.62	239.2	8	41	52							
GUAM	42.34	202.7	8	2	7						10	22 PPP
RESOLUTE	42.36	22.4	7	53	-2	14	18	2			9	38 PP
LANCHOW	42.45	268.6	7	52	-4	14	11	-6			9	48 PCP
HSINKONG	42.47	238.8	7	55	-1	17	32	195				
TAITUNG	42.88	238.8	8	3	3							
TAINAN	43.14	240.0	8	35	33							
HENGCHUN	43.70	238.6	8	13	7							
NORD	44.52	359.3	8	13	0	14	53	6			18	8 SS
ALBERNI	44.70	64.1	8	15	1	14	56	6			10	10 PP
KIPAPA	45.35	119.3	8	19	-1						10	10 PCP
LILLOOET	45.37	60.9	8	20A	0	18	16	197				
HONOLULU	45.41	119.5	8	19	-1	15	12	12			9	44 PCP
VICTORIA	45.89	64.1	8	23	-1	15	4	-3	8	52	16	23 *SS
CHENGTU	46.19	262.9	8	24	-2	15	7	-4			10	14 PP
ISFJORD	46.52	350.9	7	27	-62							
SEMIPALATNSK	46.63	299.9	8	25	-5							
CANTON	46.74	247.5	8	31	1	15	21	2			10	19 PP
HONG KONG	46.89	246.0	8	29	-3	15	37	16			10	20 PP

CORVALLIS	48.42	68.3	8	44A	0				
HAWAII V.OB.	48.43	117.8	8	43	-1	15	50	7	
BAGUIO CITY	48.53	234.8	8	41	-3	15	47	3	
MANILA	49.93	233.2	8	56	1	16	0	-4	
ARCATA	50.42	72.4	9	1A	2				
HUNGRY HORSE	50.86	59.1	9	1	-1	16	29	12	10 23 PCP
KUNMING	51.17	259.2	9	2	-3	16	14	-7	
SHASTA	51.49	71.5	9	8A	1				
SVERDLOVSK	51.59	316.2	9	12	4				
SASKATOON	51.94	51.4				16	28	4	
UKIAH	52.09	73.5	9	12	0				
MINERAL	52.16	71.3	9	11A	-1				
PHU-LIEN	52.24	252.3	9	20	7				11 14 PP
APATITY	52.35	337.1	9	15	1	16	37	0	11 12 PP
BUTTE	53.16	60.4	9	18	-2				
BERKELEY	53.51	74.0	9	22K	0	17	0	7	
RENO	53.72	70.8	9	24A	0				
SODANKYLA	53.98	339.7	9	27	1				19 10 SCS
BOZEMAN	54.17	59.8	9	26	-1				10 27 PCP
LICK	54.23	74.0	9	27	0				
FRUNSE	54.49	295.8	9	24	-5				
TOCKLAI	54.50	267.4	9	59	29				
LHASA	54.56	272.8	9	31	1	17	13	6	
KIRUNA	54.76	342.5	9	31	0	17	15	5	9 44
FRESNO	55.67	73.2	9	37A	-1				
SCORESBY SD.	55.71	0.9	9	33	-5	17	21	-2	11 27 PP
EUREKA	55.88	68.3	9	39	-1				18 49
SHILLONG	57.10	268.9	9	45	-3	17	43	2	11 47 PP
SALT LAKE C.	57.19	64.6	9	49	0	17	47	5	10 34 PCP
NAMANGAN	57.36	296.0	9	46	-4				
PASADENA	58.48	74.3	9	56A	-2	18	8	9	12 25 PP
RABAUL	58.48	189.4	9	56	-2				
CHATRA	58.92	273.6	9	59	-2				18 29
BOULDER CITY	59.02	70.5	10	3	1	18	16	10	
RAPID CITY	59.23	56.4	10	2	-1	18	26	17	
CHITTAGONG	59.58	266.5	10	3	-3	18	11	-2	12 12 PP
PULKOVO	59.60	333.3	10	6	0	18	12	-2	
SKALSTUGAN	60.03	344.1	10	10	1				10 23 12 21 PP
NURMIJARVI	60.37	336.5	10	14	3	18	32	8	20 2 SCS
HELSINKI	60.60	336.2	10	14	1	18	34	8	40 44 PKPPKP
STALINABAD	60.66	296.0	10	7	-6				
MOSCOW	60.85	326.9	10	14	0				
DEHRA DUN	61.62	283.2	10	19	0	18	45	6	13 44 PP
BOKARO	61.99	272.5	10	22	0	18	41	-3	19 51 SCS
REYKJAVIK	62.09	1.1	10	27	4				10 51 11 7 *SP
SIDA	62.44	359.1	10	57	32				
UPPSALA	62.51	339.8	10	25	0	18	47	-4	10 38
WARSAK DAM	62.53	290.6	10	19	-7				
LAHORE	62.81	286.8	10	30	3	19	0	6	12 48 PP
TUCSON	64.00	70.5	10	35	0	19	14	5	12 56 PP
AGRA	64.03	280.9	10	36A	1	19	4	-6	11 4 PCP
BERGEN	64.10	346.5				19	11	0	
PORT MORESBY	64.22	194.3	10	34K	-3	19	6	-6	19 48 PPS
GOTEBORG	65.61	341.9	10	49	3				
COPENHAGEN	67.42	340.9	10	57	0	19	58	7	20 15 PS
PORT BLAIR	67.47	258.5	10	59	2	19	48	-4	14 59 PPP
VIZIANAGRAM	67.79	270.4	10	4	-55				
LUBBOCK	67.85	63.2	10	58	-2				
QUETTA	67.96	291.1	10	56	-5	19	58	0	13 30 PP
ABERDEEN	68.15	349.7				19	58	-2	24 25 SS
WARSAW	68.71	334.4	11	8A	3	20	6	0	11 29 PCP
CHIHUAHUA	69.40	69.6	11	15	6	20	22	7	
FLORISSANT	69.43	51.9	11	10A	0	20	15	0	
ST. LOUIS 1	69.62	51.9	11	9A	-2	20	18	1	
TIFLIS	69.72	313.9	11	8	-3				
OTTAWA	70.05	38.4	11	10	-3	20	16	-6	
LWOW	70.09	331.5	11	15	1	20	22	-1	
SHAWINIGAN	70.11	35.9	11	11	-3	20	19	-4	13 54 PP
TERRE HAUTE	70.23	49.5				20	32	8	15 32 PP
SOTCHI	70.24	318.3	11	13	-2				
SEVEN FALLS	70.27	34.3	11	14	-1	20	25	0	26 1 SS
POTSDAM	70.41	339.3	11	14	-2	20	31	5	15 42 PPP
DURHAM	70.45	348.9	11	27K	11				13 5
BREBEUF	70.72	37.0	11	14K	-3				14 1 PP
GORIS	70.88	311.5	11	20	2				
KRAKOW	70.98	334.2	11	21	2	20	31	-2	
DALLAS	71.05	60.1	11	18	-1				
CLEVELAND	71.10	44.4	11	19	-1	20	34	-1	15 47 PPP
KISHINEV	71.15	327.2	11	17	-3				

SIMFEROPOL	71.17	322.7	11	20	0	20	35	0			
WITTEVEEN	71.19	343.4	11	32	12						
HYDERABAD	71.27	273.9	11	24	3	20	36	0	13	58	PP
KARACHI	71.29	288.2	11	26	5						
IASI	71.39	328.0	11	20	-2	20	47	9	21	39	PS
RACIBORZ	71.39	335.3	11	19	-3				11	34	PCP
COLLMBERG	71.44	339.0	11	18	-4	20	59	21	13	42	PP
HALLE	71.47	339.7	11	24	2	20	52	13	13	56	PP
SKALNATE PL.	71.70	333.6	11	30	7	20	48	7	11	52	PCP
MUNSTER	71.85	342.6	11	23	-1						
JENA	72.09	339.7	11	22	-4	20	40	-6	14	5	PP
DE BILT	72.13	344.1	11	14	-12	20	50	4			
PRAGUE	72.29	337.6	11	35	8	20	59	11	14	20	PP
PRUHONICE	72.35	337.5	11	25	-2	20	53	4	21	32	PS
PLAUEN	72.38	339.2	11	24	-3	20	45	-4	13	56	
RATHFARNHAM	72.38	351.5	11	32	5	20	52	3	15	13	PP
SONNEBERG	72.69	339.8	11	26	-3				14	7	PP
CHEB	72.72	339.0	11	37	8	20	32	-21	21	39	PS
BENSBERG	72.90	342.5	11	30	0				14	13	PP
POONA	73.10	278.3	11	33	1	20	55	-2			
PENNSYLVANIA	73.16	42.3	11	30	-2	20	54	-4	14	13	PP
MORGANTOWN	73.31	44.4	11	30	-3						
BOMBAY	73.41	279.3	11	37	4	20	55	-6	12	0	PCP
BRATISLAVA	73.43	335.2	11	32	-2	21	5	4			
HURBANOVO	73.44	334.4	11	43	9	21	6	5	14	43	PP
UCCLE	73.52	344.3	11	34	0	21	2	0			
VIENNA-H.	73.54	335.7	11	38	4	21	13	11	14	27	PP
KEW	73.54	347.4	11	37	3	21	2	0	25	36	SS
MADRAS	73.74	269.7	11	38	3	21	11	6	14	25	PP
CAMPULUNG	73.90	328.8	11	49	13						
BUCHAREST	74.34	327.7	11	52	13	21	22	11	24	52	SS
PALISADES	74.50	39.5	11	37	-3	21	12	-1	11 42	22	18 PS
TIMISOARA	74.58	331.5	11	47	7	21	18	4			
STUTTGART	74.62	340.6	11	37	-3	21	16	2	16	36	PPP
FORDHAM	74.65	39.6	11	34	-7	21	0	-15	16	0	
DJAKARTA	74.77	235.8	11	35K	-6	21	13	-3			
CHARTERS TS.	74.78	193.6	11	39	-2	21	11	-5			
HALIFAX	74.79	30.8	11	43A	2	21	27	11	27	7	SS
TUBINGEN	74.87	340.6	11	44	2						
LEMBANG	74.95	234.8	11	41	-1	21	20	2			
STRASBOURG	75.07	341.5	11	42	-1	21	20	1	16	38	PPP
WASHINGTON	75.10	42.8	11	42	-1				14	16	PP
EBINGEN	75.23	340.6	11	42	-2						
BELGRADE	75.65	331.7	11	50K	4	21	51	25	14	29	PP
ZAGREB	75.90	335.1	11	52	4	21	28	-1	21	51	PS
JERSEY	76.01	348.1							18	36	
TOLMEZZO	76.06	337.3	11	56	7	21	52	22			
BASLE	76.12	341.3	11	43	-6	21	43	12			
FOLINIERE	76.21	347.0	11	46	-4						
NOUMEA	76.28	174.1	11	55	5	21	39	6			
CHUR	76.39	339.8	11	51	0	21	36	2			
TRIESTE	76.60	336.5	11	54	2	21	44	8	14	58	PP
NEUCHATEL	76.75	341.6	11	50	-3	21	52	14			
SOFIA	76.75	328.8	11	52	-1	21	43	5	22	2	SKS
CHAPEL HILL	76.83	45.8	11	43	-10						
KODAIKANAL	77.54	270.2	12	8	11				20	26	
COLUMBIA	77.61	48.2	11	57	0	21	56	9			
SKOPJE	77.99	329.9				22	30	39	12	22	PCP
PAVIA	78.06	339.5	12	35	35	23	1	69	15	49	PP
BOLOGNA	78.24	337.8	13	16	75				22	13	
CLERMONT-FD.	78.61	343.9	12	4	1	22	4	6			
COLOMBO	78.79	266.2	12	30	26	21	22	-38			
PRATO	78.88	337.8	12	7	3	22	23	22			
MONACO	79.80	340.3	12	13K	4						
KSARA	80.14	315.8	12	14	3	22	13	-1	15	23	PP
ROME	80.45	336.2	12	5	-8	22	27	10	28	49	SS
TACUBAYA	80.52	70.2	12	14K	1	22	28	10	15	20	PP
TARANTO	80.57	332.2				22	15	-3	16	55	
ATHENS	80.93	326.6	12	9	-6	22	26	4	23	5	PPS
BRISBANE	81.48	186.5	12	17	-1	22	23	-5			
JERUSALEM	82.19	315.2	12	19	-3	22	22	-13	15	21	PP
VERA CRUZ	82.37	67.9	12	20	-3	22	42	5	13	17	
MESSINA	83.15	332.7	12	26	-1	22	45	0	15	30	PP
REGGIO CALA.	83.22	332.6	12	35	8						
TORTOSA	83.85	344.7	12	39	9	22	55	3			
SERRA PILAR	84.65	351.5	12	34A	0	23	2	2	15	52	PP
TOLEDO	85.41	347.9	12	37A	-1	23	10	3	12	42	PCP
BERMUDA	85.54	36.8	12	42	3	23	8	0	15	32	PP

COIMBRA	85.56	351.3	12	37K	-2	23	8	-1				
ALICANTE	86.42	344.9	12	42	-1	23	16	-1			32	29 SSS
COMITAN	86.95	66.4				23	29	7				
LISBON	87.09	351.7	12	46K	0	23	22	-1				
ALGIERS UNI.	87.37	341.8	12	46	-2	23	34	8			16	20 PP
SETIF	87.47	339.8	12	46	-2						14	3
RIVERVIEW	87.93	187.5	12	52A	2	23	38	7				
GRANADA	88.02	347.1	12	54K	3	23	35	3			16	9 PP
RELIZANE	88.80	343.6	12	58	3	23	48	9			16	34 PP
CANBERRA	89.59	189.2	12	58	0				13	5		
ONERAHI	90.34	168.5	13	6	4							
ADELAIDE	90.60	197.5	13	3	0	23	58	2			16	48 PP
MELBOURNE	92.51	192.0	13	12	0	24	10	-3			24	23 *SS
KARAPIRO	92.60	167.9	13	10	-2						16	51
PERTH	93.89	216.6									17	14
WELLINGTON	95.83	169.0				25	2	21			26	43
KAIMATA	96.73	171.7	13	22	-9							
SAN JUAN	97.63	43.9	13	40	5						17	37 PP
GEBBIES PASS	98.01	170.9	13	45	8							
ROXBURGH	99.58	173.5				24	20	-6			32	32 SS
TAMANRASSET	100.38	336.4	13	46A	-2	24	26	-4			17	57 PP
CARACAS	104.33	48.1				24	52	3			18	30 PP
CHINCHINA	105.06	58.6	14	10	777	24	34	-18			18	34 PP
BOGOTA	106.14	57.4				24	56	0			18	39 PP
MBOUR	111.75	357.1	14	39	777						21	38
RUMANGABO	113.83	304.3									19	35 PP
ASTRIDA	114.73	303.2	18	29	-11						19	18 PP
LWIRO	114.88	304.3									19	43
UVIRA	115.79	303.3									19	24 PP
HUANCAYO	119.57	68.0	18	49	0							
LEOPOLDVILLE	122.82	317.1	19	2	6	26	5	10			20	53 PP
ELISABTHVLLE	123.63	300.3	19	1	4						20	44 PP
BROKEN HILL	125.47	297.4	19	2	1							
WILKES	125.75	202.4									20	43 PP
CAPE HALLETT	126.31	176.2	19	4	2						21	5 PP
LA PAZ	127.13	64.0	19	5	1						21	14 PP
BULAWAYO	130.09	293.3	19	9	-1							
SCOTT BASE	131.75	178.1	19	11	-2	26	27	7			22	36 SKP
LCO. MARQUES	132.50	284.7									22	40 PKS
PRETORIA	134.82	289.2	19	36	17						22	47
TALA POZO	138.37	69.1				27	12	40			22	22 PP
SANTA LUCIA	138.92	80.9	19	40K	14						23	2 PP
KIMBERLEY	139.04	290.0	19	23	-3						19	29
BYRD STATION	141.12	164.1	19	16	-14						20	1
GRAHAMSTOWN	141.46	283.5	19	27	-4							
SOUTH POLE	143.92	180.0	19	29	-6						22	7 PP
HERMANUS	146.41	289.8	20	2	23							
ARGENTINE I.	155.50	134.6	20	2	9							
PORT STANLEY	157.08	99.6	20	27	32							

JUNE 18 15.H 58.M 37.S EPICENTRE 54.10 160.28 DEPTH= 0.KM

A=-0.55438 B= 0.19871 C= 0.80819 D= 0.3374 E= 0.9414
G=-0.7608 H= 0.2727 K=-0.5889 HT= -6.9

SE= 2.96

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
PETROPAVLOVK	1.38	225.5	0	25	-1	0	47	1				
MAGADAN	7.54	320.2	1	58	4	3	32	11				
NEMURO	14.47	227.8	3	27	-1							
ABASHIRI	14.52	232.5	3	32	3							
KUSIRO	15.27	229.7	3	35	-3	6	23	-6				
ASAHIGAWA	15.61	235.9	3	44	1							
OBIHIRO	15.87	232.1	3	54	8							
HIROO	16.31	230.4	4	17	25							
SAPPORO	16.64	236.1	3	55	-1	7	17	16				
URAKAWA	16.66	231.3	3	59	3							
TOMAKOMAI	16.94	234.4	4	27	27	7	45	37				
MURORAN	17.38	235.2	4	2	-3						6	11
SUTTSU	17.39	237.6	4	5	-1	7	8	-10				
MORI	17.74	235.4	4	9	-1							
HATINOHE	18.52	230.5	4	19	-1	8	2	18				
AOMORI	18.63	232.5	4	25	4							
MIYAKO	19.04	228.0	4	24	-2	8	8	12				

HORIOKA	19.35	229.7	4	29	0	8	12	9		
AKITA	19.82	231.7	5	1	26					
MIZUSAWA	19.84	228.8	4	35	0	8	12	-1		
ISINOMAKI	20.33	227.3	4	36	-4					
SAKATA	20.61	230.8	4	40	-3					
SENDAI	20.65	227.8	4	39	-5				6	47
YAMAGATA	20.91	228.8	4	45	-1	8	45	10		
HUKUSIMA	21.27	227.8	4	47	-3	8	48	6		
ONAHAMA	21.76	225.8	4	53	-2	8	53	1	5	34
SHIRAKAWA	21.90	227.3	4	56	0	8	58	4		
TIKSI	22.20	334.1	4	58	-1					
MITO	22.42	225.8	5	2	0	9	19	15		
UTUNOMIYA	22.53	227.1	4	59	-4	9	8	2		
TUKUBASAN	22.71	226.3	5	0A	-5	9	11	2	5	24
TAKADA	22.80	230.7	5	6	1					
MAEBASI	23.01	228.3	5	5	-2				6	27
NAGANO	23.17	230.2	5	10	1	9	21	4		
WAZIMA	23.20	233.4	5	9	0	9	19	1		
MATUSIRO	23.26	230.0	5	6	-4	9	20	1	5	34 PP
TOKYO C.M.O.	23.32	226.2	5	6	-4					
TITIBU	23.36	227.7	5	11	0					
TOYAMA	23.61	231.9	5	12	-1	9	15	-10		
MATUMOTO	23.62	230.0	5	11	-2	9	30	5		
KOHU	23.87	228.1	5	18	2	9	36	6		
HUNATU	23.90	227.6	5	17K	1	9	32	2		
MERA	23.94	225.0	5	18	2					
AJIRO	24.14	226.5	5	19	1				6	52
MISIMA	24.14	226.8	5	16	-2	9	33	-1		
OSIMA	24.26	225.6	5	24	4					
IIDA	24.29	229.2	5	34	14					
SHIZUOKA	24.50	227.6	5	24	2					
HUKUI	24.57	232.5	5	18	-5					
GIHU	24.87	230.8	5	24A	-1	9	47	0	8	2
OMAESAKI	24.90	227.4	5	26	0	9	48	1		
NAGOYA	24.97	230.2	5	29	3	9	29	-19		
IBUKISAN	25.07	231.4	5	28	1					
HIKONE	25.22	231.5	5	30	1	9	58	6	6	22 PP
KAMEYAMA	25.46	230.6	5	34	3				9	1
KYOTO	25.66	231.9	5	32	-1	10	19	19		
TOYOOKA	25.67	234.0	5	32	-1	10	16	16		
ABUYAMA	25.86	232.0	5	31K	-4					
NARA	25.90	231.4	5	31	-4					
TOTTORI	25.98	234.9	5	36	0					
OSAKA	26.06	231.8	5	36	-1	10	10	3		
SUMOTO	26.61	232.4	5	41	-1	10	39	23		
TOKUSIMA	26.98	232.5	5	38	-7					
TAKAMATU	27.03	233.6	5	45	-1				10	13
COLLEGE	27.63	46.4	5	48	-3					
OOITA	29.08	235.8	6	6	2					
SAGA	29.72	237.6	6	14	4					
SITKA	35.32	58.5	6	59	0					
GUAM	42.35	202.7	7	56	-1					
RESOLUTE	42.35	22.4	7	53	-4					
KIPAPA	45.32	119.3	8	21	0				10	9 PP
LILLOOET	45.34	60.9	8	19K	-3					
HONOLULU	45.38	119.5	8	27	5					
VICTORIA	45.86	64.2	8	25	-1					
HONG KONG	46.92	246.0	8	36	2	15	31	6		
CORVALLIS	48.38	68.3	8	48	3					
MANILA	49.95	233.2	8	58	0	16	11	3		
HUNGRY HORSE	50.83	59.1	9	6	2				10	25 PP
SHASTA	51.45	71.5	9	8K	-1					
UKIAH	52.06	73.5	9	18	4					
MINERAL	52.13	71.3	9	17	3					
APATITY	52.37	337.2	9	16	0					
BUTTE	53.12	60.5	9	23	1					
BERKELEY	53.47	74.0	9	27	3					
RENO	53.68	70.9	9	25K	-1					
SODANKYLA	53.99	339.7	9	28	0				10	32 PCP
BOZEMAN	54.14	59.9	9	32	3					
LICK	54.19	74.1	9	34	5					
KIRUNA	54.77	342.6	9	33	-1					
FRESNO	55.63	73.3	9	44K	4					
SCORESBY SD.	55.71	0.9	9	38	-2				10	41 PCP
EUREKA	55.85	68.4	9	43	2					
SHILLONG	57.14	268.9	9	42	-9					
SALT LAKE C.	57.16	64.6	9	49	-2					
PASADENA	58.44	74.3	9	56	-4	18	4	2	10	41

RABAUL	58.49	189.5	9 58	-2			12 12
CHATRA	58.96	273.7	9 58	-5			
RAPID CITY	59.20	56.5	10 3	-2			39 42 PKPPKP
CHITTAGONG	59.61	266.5	10 8	0			
SKALSTUGAN	60.04	344.1	10 11	0			10 55 PCP
NURMIJARVI	60.39	336.5	10 15	2			
UPPSALA	62.53	339.8	10 29	1			
WARSAK DAM	62.57	290.6	10 24	-4			
TUCSON	63.97	70.5	10 40	3			39 36 PKPPKP
PORT MORESBY	64.23	194.4	10 31	-8			
QUETTA	68.00	291.2	10 57	-6			
ST. LOUIS 1	69.59	52.0	12 10K	57			
OTTAWA	70.03	38.4	11 11	-5			
SHAWINIGAN	70.09	35.9	11 13	-3			
SEVEN FALLS	70.25	34.4	11 16	-1			
POTSDAM	70.42	339.4	11 16	-2			
BREBEUF	70.70	37.0	11 15K	-5			
DALLAS	71.02	60.2	11 25	3			
HALLE	71.49	339.8	11 28	4	20 40	-3	13 56 PP
MUNSTER	71.86	342.6	11 21	-6			
PRUHONICE	72.36	337.6	11 31	1			
SONNEBERG	72.70	339.8	11 33	1			
PENNSYLVANIA	73.13	42.4	11 34	0			11 56
POONA	73.14	278.3	11 28	-6			
MORGANTOWN	73.29	44.4	11 32	-3			
BRATISLAVA	73.45	335.3	11 38	2	20 53	-12	
UCCLE	73.54	344.3	11 46	10			
PALISADES	74.48	39.6	11 40	-2			
STUTTGART	74.63	340.6	11 42	-1			
CHARTERS TS.	74.79	193.7	11 41	-3			12 22
TUBINGEN	74.89	340.6	11 43	-1			
WASHINGTON	75.08	42.8	11 47	2			
STRASBOURG	75.09	341.5	11 48	3			
EBINGEN	75.24	340.6	11 48	2			
BELGRADE	75.67	331.7	11 51K	2			12 57
TOLMEZZO	76.08	337.3	11 48	-3			12 27
BASLE	76.13	341.3	11 59	8			
FOLINIERE	76.22	347.0	11 53	1			
TRIESTE	76.62	336.6	11 53	-1			
NEUCHATEL	76.76	341.6	11 57	2			
CHAPEL HILL	76.81	45.8	11 59	4			13 0
COLUMBIA	77.59	48.3	12 1	2			
MONACO	79.82	340.4	12 25	13			
TACUBAYA	80.48	70.2	12 24	9	22 12	-9	15 13 PP
ATHENS	80.96	326.6	12 16	-2			
BRISBANE	81.48	186.5	12 20	0			
TORTOSA	83.87	344.7	12 47	14			
MERIDA	84.37	61.9					18 27
SERRA PILAR	84.66	351.6	12 33K	-4			15 51 PP
TOLEDO	85.42	348.0	12 37	-4			
COIMBRA	85.57	351.4	12 46K	5			
ALICANTE	86.43	345.0	12 46	0	23 21	0	
COMITAN	86.92	66.5			23 28	2	
LISBON	87.10	351.7	12 45K	-4			
ALGIERS UNI.	87.38	341.9	12 53	3	23 43	13	
RIVERVIEW	87.93	187.6	12 55K	2			16 28 PP
GRANADA	88.03	347.2	12 56K	3			13 26
CANBERRA	89.59	189.2	13 2K	1			
ADELAIDE	90.61	197.6	13 7	2			
MELBOURNE	92.51	192.1	13 16K	2			
KARAPIRO	92.59	168.0	13 15	0			
TAMANRASSET	100.40	336.4	13 48	-2			18 0 PP
MBOUR	111.75	357.1	14 11	777			18 42 PKP
HUANCAYO	119.54	68.1	18 57	5			
ELISABTHVLLE	123.67	300.4	19 2	2			
BROKEN HILL	125.50	297.5	19 2	-1			
LA PAZ	127.09	64.1	19 11	5			
SCOTT BASE	131.75	178.2	19 15	0	26 35	11	21 38 PP
KIMBERLEY	139.07	290.0	19 26	-3			
BYRD STATION	141.11	164.1	19 21	-11			23 2 PP
SOUTH POLE	143.92	180.0	19 30	-7			22 54 PP

JUNE 19 1.H 37.M 53.S EPICENTRE 5.89 -82.65 DEPTH= 0.KM

A= 0.12726 B=-0.98661 C= 0.10202 D=-0.9918 E=-0.1279
G= 0.0131 H=-0.1012 K=-0.9948 HT= 7.0

SE= 2.75

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
CHINCHINA	7.07	97.2	1 46	-1	3 23	14		
BOGOTA	8.64	98.0	2 9	0	3 47	-1		
GALERAZAMBA	8.77	55.9			3 45	-7		
FUQUENE	8.89	92.3	2 13	0	3 59	4		
SANTIAGO MA.	9.48	323.2	2 25	4				
SAN SALVADOR	10.13	320.7	2 26	-4				
COMITAN	13.86	318.7	3 28	8	6 17	21		
VERA CRUZ	18.63	316.4	4 26	5	8 14	27		
HUANCAYO	19.26	157.8	4 27	-1	8 10	9		
SAN JUAN	20.35	51.0	4 38	-3				
TACUBAYA	20.97	311.3	4 46K	-1	8 21	-16		5 5
ST. VINCENT	22.28	69.5	5 7	7				
ST. KITTS	22.56	58.0	5 4	1				
FORT FRANCE	22.88	65.8	6 7	61				
MANZANILLO	24.84	303.7	5 31	6	10 4	18		11 0 SS
LA PAZ	26.48	147.4	5 41A	0	9 50	-24		6 31 PP
BERMUDA	31.24	30.2	6 19	-4	11 27	-3		7 7 PP
CHIHUAHUA	31.68	318.3	6 31	4	11 26	-10		
MORGANTOWN	33.67	3.8	6 43	-2				
LAWRENCE	34.84	342.7	6 35	-20				
FORDHAM	35.68	11.4			12 36	-3		
PALISADES	35.83	11.3	6 59	-4	12 41	0		8 17 PP
TUCSON TELE.	37.12	318.7	7 14	0				
TUCSON	37.14	318.5	7 14	0	13 11	10		8 48 PPP
TALA POZO	37.94	153.0	7 17	-4	13 2	-11		8 37 PP
OTTAWA	39.81	7.6	7 34	-2				
BREBEUF	40.23	9.8	7 37	-3				
SANTA LUCIA	40.72	164.6			13 55	0		
SHAWINIGAN	41.39	10.3	7 47	-2				
HALIFAX	42.02	20.4						14 17 PPS
SEVEN FALLS	42.31	12.0	7 57	0				
PASADENA	43.24	315.3	8 4	-1	14 41	9		
SALT LAKE C.	43.46	327.4	8 7	1				
EUREKA	44.93	323.0	8 17	-1				
FRESNO	45.77	317.4	8 24	-1				
BOZEMAN	46.66	332.7	8 32	0				
LICK	47.32	317.0	8 36A	-1				
RENO	47.33	320.6	8 38	1				
BUTTE	47.62	331.9	8 38	-2				
BERKELEY	48.02	317.3	8 41	-2	15 45	4		10 40 PP
MINERAL	48.92	320.4	8 47A	-3				
HUNGRY HORSE	50.02	333.0	8 57	-1				
VICTORIA	54.75	327.9	9 32	-1				
HORSESHOE B.	55.20	328.8	9 35	-2				
MBOUR	65.03	76.9	10 28	-16	19 46	20		
RESOLUTE	69.10	356.5	11 6K	-4	20 11	-4		21 13 SCS
COLLEGE	74.30	336.3	11 38	-3	21 22	7		24 32
SCORESBY SD.	74.95	17.7	11 44	-1				
TOLEDO	77.50	50.6	12 6	7	21 52	2		
GRANADA	77.74	53.4			22 9	17		
FOLINIERE	80.44	41.7	12 18	3				
KEW	80.64	38.9			22 24	1		23 16 PS
PARIS	82.40	41.6	12 27	2				
BENSBERG	85.35	39.4	12 42	2				
STRASBOURG	85.90	41.7	12 45	2	23 17	1		24 19 PS
TAMANRASSET	86.07	67.6	12 46	2	23 17	-1		16 6 PP
STUTTGART	86.83	41.5	12 50	2				24 27 PS
BYRD STATION	87.80	186.0	12 51	-1				
JENA	88.13	39.2	12 55	1				13 18
HALLE	88.29	38.6	12 40	-15				13 11
COLLMBERG	88.97	38.7	12 59	1				
SOUTH POLE	95.86	180.0	13 30	0				
MATUSIRO	123.04	321.1						30 41 PS
QUETTA	133.78	37.4	19 24	5				
POONA	146.44	43.2	19 46	4				

JUNE 20 14.H 16.M 52.S EPICENTRE 38.70 70.78 DEPTH= 62.KM

DEPTH OF FOCUS= 0.005R

A= 0.25763 B= 0.73891 C= 0.62261 D= 0.9443 E=-0.3292

G= 0.2050 H= 0.5879 K=-0.7825 HT= -1.2

SE= 2.87

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
STALINABAD	1.58	265.4	0	20	-6	0	45	-1				
NAMANGAN	2.38	16.5	0	37	0	1	7	1				
LAHORE	7.70	156.7	1	45	-6							
QUETTA	9.06	201.5	2	6	-4	3	46	-6				
DEHRA DUN	10.28	142.2	2	27	0	4	28	7				
SEMIPALATNSK	13.50	26.8	3	6	-4							
CHATRA	18.13	125.9	4	8	0	7	30	5				
SVERDLOVSK	19.35	343.0	4	8	-14							
TIFLIS	20.05	286.9	4	36	6							
POONA	20.27	171.6	4	34	2						12	28
SHILLONG	22.08	120.1	4	49A	-2							
MOSCOW	27.87	318.6	5	44	-1							
APATITY	35.53	336.4	6	50	-2	12	23	0				
HELSINKI	35.72	322.1	6	52	-2							
NURMIJARVI	35.96	322.6	6	55	-1				7	27		
SODANKYLA	37.68	333.8	7	12	2				8	36		
UPPSALA	39.25	320.3	7	28	5						8	47 PP
KIRUNA	40.04	333.0	7	33	3						9	0 PP
PRUHONICE	40.86	304.9	7	36	-1							
LJUBLJANA	41.45	299.0	7	40A	-2							
COLLMBERG	41.71	307.0	7	42	-2							
SKALSTUGAN	42.29	325.5	7	54	5						9	15
JENA	42.64	306.6	7	48	-3						8	30
TIKSI	43.81	22.9	8	1	0							
MATUSIRO	52.35	69.9	9	6A	-1						14	19
TAMANRASSET	57.18	274.1	9	41	-1							
RESOLUTE	66.51	355.9	10	43	-2							
BULAWAYO	70.62	222.0	10	40	-30							
COLLEGE	72.43	16.2	11	20	-1							
CHARTERS TS.	91.56	114.4	13	3	2							
SOUTH POLE	128.51	180.0	19	1	1							

JUNE 20 16.H 42.M 26.S EPICENTRE 32.34 -40.32 DEPTH= 0.KM

A= 0.64537 B=-0.54777 C= 0.53240 D=-0.6471 E=-0.7624
G= 0.4059 H=-0.3445 K=-0.8465 HT= 1.0

SE= 1.91

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
BERMUDA	20.57	276.7	4	44	1	8	24	-4			8	54 SS
LISBON	26.08	67.1	5	40A	3							
SERRA PILAR	26.78	61.8	5	40K	-3							
SAN JUAN	27.05	245.3	5	44	-2							
SEVEN FALLS	27.50	311.3	5	51	1							
MBOUR	27.81	124.6	5	56	4	10	46	11				
PALISADES	28.15	297.5	5	54	-2	10	54	14			9	50
BREBEUF	28.83	306.8	5	58K	-4							
TOLEDO	30.10	65.2	6	12	-1	11	10	-1			6	55
OTTAWA	30.23	305.9	6	14	0							
GRANADA	30.43	70.6	6	22K	6						6	46 PP
WASHINGTON	30.43	292.8	6	14	-2							
MORGANTOWN	32.68	294.2	6	35	-1							
ALICANTE	32.86	68.2	6	33	-4	11	47	-8			7	41 PP
RELIZANE	33.87	72.8	6	45	-1							
ALGIERS UNI.	35.77	70.6	7	1	-1						8	21 PP
CLERMONT-FD.	35.86	55.2	7	4	1							
MONACO	38.80	58.9	7	28	0							
STRASBOURG	39.33	51.2	7	33	1	13	42	8			16	34 SS
EBINGEN	40.09	52.0	7	40	2							
TUBINGEN	40.18	51.5	7	39	0							
STUTTGART	40.29	51.1	7	39	-1							
TAMANRASSET	41.48	91.4	7	50K	0	14	8	2			8	30 PP
JENA	42.03	48.1	7	54	0						8	47
HALLE	42.33	47.2	7	57	0						8	28
CHEB	42.47	49.4	7	57	-1							
COLLMBERG	42.96	47.6	8	1	-1							
POTSDAM	43.11	46.1	8	3	0							
TRIESTE	43.29	55.9	8	4	-1						9	1.5 PP
PRAGUE	43.79	49.5	8	9	0	14	45	5				

LJUBLJANA	43.82	55.3	8	9K	0						
PRUHONICE	43.86	49.6	8	9	0	14	48	7	10	0	PP
LAWRENCE	44.55	294.6	7	58	-17						
ZAGREB	44.85	55.6	8	5	-12						
SKALSTUGAN	45.08	30.1	8	24	5						
BRATISLAVA	45.52	52.2	8	19K	-4						
RACIBORZ	46.22	49.6	8	28	0						
UPPSALA	46.66	36.0	8	31	-1						
BELGRADE	48.08	56.6	8	59K	16						
KIRUNA	49.49	25.8	8	54	0						
RAPID CITY	49.67	302.7	8	55	0						
RESOLUTE	49.93	343.6	8	57A	0	16	10	3	19	34	SS
NURMIJARVI	50.23	35.7	9	0	1						
SODANKYLA	51.75	27.0	9	9	-2						
APATITY	54.37	27.0	9	31	1						
BOZEMAN	54.86	306.0	9	39	5						
LA PAZ	55.39	212.9	9	37A	-1						
HUANCAYO	55.40	223.0	9	37A	-1						
BUTTE	55.83	306.7	9	41	0						
SALT LAKE C.	56.63	300.4	9	47	0						
MOSCOW	57.39	41.1	9	50	-2						
TUCSON TELE.	58.41	290.6	9	59	0						
TUCSON	58.53	290.5	10	1	1						
KHEYS	58.80	11.7	10	6	4						
EUREKA	60.03	300.1	10	11	0						
BANGUI	61.59	103.8	10	18	-3						
KSARA	62.42	65.8	10	27	0						
RENO	62.81	301.3	10	30	1						
CORVALLIS	63.49	307.6	10	34	0						
PASADENA	63.56	295.1	10	34	0						
MINERAL	63.80	302.7	10	36	0						
FRESNO	63.80	298.4	10	36	0						
LEOPOLDVILLE	64.09	113.9	10	37	-1						
SHASTA	64.24	303.3	10	38	-1						
TIFLIS	65.99	54.7	10	50	0						
COLLEGE	68.12	334.0	11	3	0						
RUHANGABO	73.62	102.3	11	42	5						
LWIRO	73.70	103.4	11	37	0						
UVIRA	74.66	104.3	11	42	-1						
ASTRIDA	74.66	103.2	11	42	-1						
TIKSI	76.04	3.5	11	52	1						
ELISABTHVLLE	78.03	112.0	12	4	2						
BROKEN HILL	80.52	113.7	12	14	-1						
YAKUTSK	85.63	4.7	12	42	1						
QUETTA	87.21	55.9	12	50	1						
SOUTH POLE	122.17	180.0	18	55	-2						

JUNE 23 10.H 44.M 56.S EPICENTRE 41.79 82.24 DEPTH= 0.KM

A= 0.10093 B= 0.74101 C= 0.66387 D= 0.9909 E=-0.1350
G= 0.0896 H= 0.6578 K=-0.7478 HT= -2.3

SE= 2.10

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
STALINABAD	10.81	257.0	2	40	1							
WARSAK DAM	11.47	230.8	2	48	0							
DEHRA DUN	11.93	197.8	2	55	1	5	5	-4			6	57
LAHORE	12.02	214.4	2	53	-3							
LHASA	14.06	146.8	3	27	4							
CHATRA	15.46	163.3	3	40	-1							
QUETTA	16.92	231.7	3	57	-3	7	7	-1			7	26 SS
LANCHOW	17.71	101.7	4	8	-2	7	26	0				
SHILLONG	18.03	150.8	4	12A	-2							
ULAN-BATOR	18.48	62.3	4	20	1							
PAOTOW	20.92	84.0	4	46	-1							
SIAN	22.26	101.0	5	2	2	9	6	5				
KUNMING	23.77	128.2	5	52	37							
MOSCOW	31.94	311.3	6	33	3							
YAKUTSK	34.53	37.8	5	53	-59							
APATITY	36.67	331.1	6	53	-17						13	40
TIKSI	37.58	22.2	7	17	-1							
KHEYS	39.98	352.2	7	37	-1							
KIRUNA	41.56	329.7	7	50	-1							
UPPSALA	42.70	317.7	8	4	4							

MATUSIRO	43.06	77.8	8	1	-2					23	18
SKALSTUGAN	44.90	323.5	8	17	-1						
PRUHONICE	46.35	304.4	8	28	-2						
COLLMBERG	46.91	306.5	8	33	-1						
JENA	47.88	306.4	8	41	-1						
STUTTGART	50.05	304.4	9	3	5						
RESOLUTE	63.81	359.2	10	34A	-2						
COLLEGE	66.72	20.9	10	53	-2						
ELISABTHVLLE	73.19	236.8	11	37	3						
CHARTERS TS.	85.28	122.0	12	40	0						
SOUTH POLE	131.60	180.0	19	14	-1						
HUANCAYO	144.48	320.0	19	40	2						

JUNE 23 14.H 35.M 1.5 EPICENTRE 39.10-118.90 DEPTH= 0.KM

A=-0.37605 B=-0.68123 C= 0.62811 D=-0.8755 E= 0.4833
G=-0.3035 H=-0.5499 K=-0.7781 HT= -1.4

SE= 2.31

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
RENO	0.83	302.2	0	18	-1							
TINEMAHA	2.10	165.2	0	37	0							
EUREKA	2.30	79.6	0	38	-2							
MINERAL	2.43	301.8	0	42A	1	1	21	9				
FRESNO	2.43	197.3	0	42K	0							
LICK	2.78	231.7	0	46	-1	1	21	0				
BERKELEY	2.91	246.1	0	48A	0	1	24	-1				
HAIWEE	3.05	165.4	0	50	0	1	38	10				
VINEYARD	3.06	220.7	0	55	5							
BRANNER	3.08	238.0	0	49A	-2	1	27	-2				
SAN FRANCSCO	3.09	245.6	0	51	0							
SHASTA	3.12	301.9	0	52A	1							
UKIAH	3.36	271.9	0	54	-1							
WOODY	3.39	179.5	0	57	2	1	46	9				
CHINA LAKE	3.43	162.1	0	56	0							
ISABELLA	3.45	174.2	0	45	-11							
KING RANCH	3.82	190.4	1	2	1							
FORT TEJON	4.22	179.9	1	6	-1							
ARCATA	4.36	295.7	1	9A	0							
STA. BARBARA	4.70	188.2	1	20	6							
PASADENA	4.97	173.0	1	18	0	2	36	19				
SALT LAKE C.	5.67	70.7	1	37	10							
CORVALLIS	6.39	330.5	1	41	3							
BUTTE	8.34	32.0	2	7	2							
BOZEMAN	8.76	38.9	2	14	3							
TUCSON TELE.	9.47	132.9	2	19	-2							
TUCSON	9.47	133.7	2	19	-2							
HUNGRY HORSE	9.89	19.2	2	29	3							
VICTORIA	9.97	342.4	2	29K	2							
ALBERNI	11.02	339.3	2	44K	2	5	44	57				
RAPID CITY	12.76	62.0	3	7	2							
CHIHUAHUA	14.90	130.7				6	26	6			6	5
FAYETTEVILLE	19.79	91.0	4	34A	-1	8	19	7				
SITKA	20.95	334.4	4	47	0							
TACUBAYA	25.99	133.4	5	33	-3						13	50
CLEVELAND	28.46	73.1	5	59	0							
MORGANTOWN	29.96	76.4	6	10A	-2						15	46 SS
COLUMBIA	30.69	87.6	6	21	2							
COLLEGE	30.82	336.2	6	20	0	11	29	6				
PENNSYLVANIA	31.30	73.6	6	27	3							
CHAPEL HILL	31.60	83.1	6	29	2						16	35
OTTAWA	32.27	64.5	6	30	-2							
WASHINGTON	32.30	76.9	6	38	5	12	0	14				
COMITAN	32.65	126.7									7	15
BREBEUF	33.74	64.1	6	43A	-2						14	26 SS
PALISADES	34.20	72.1	7	10	21	12	24	8				
SHAWINIGAN	34.24	62.2	6	47A	-2							
FORDHAM	34.26	72.4	6	43	-7							
SEVEN FALLS	35.52	61.0	6	59A	-1							
RESOLUTE	37.39	10.3	7	15A	-1	13	3	-2			8	37 PP
HALIFAX	40.89	63.8	7	45A	0	13	57	-1			16	57 SS
BERMUDA	43.97	81.4				14	35	-8			18	9 SS
SAN JUAN	49.92	98.8	9	9	12							
NORD	53.34	10.3	9	21	-2						10	24 PCP

PETROPAVLOVK	55.75	313.7	9	41	0						
SCORESBY SD.	55.95	23.7	9	42	0	17	29	0			
HUANCAYO	65.09	132.0	10	44	-1						
KIRUNA	69.08	15.4	11	8K	-2	20	13	-2			
SKALSTUGAN	70.58	20.9	11	18K	-1						
SODANKYLA	70.68	13.4	11	18	-1					11	48 PCP
APATITY	71.62	10.8	11	23	-2	19	33	-71			
LA PAZ	72.85	129.0	11	31	-1						
UPPSALA	75.10	21.1	11	44	-2						
GOTEBORG	75.14	24.8	11	44	-2						
NURMIJARVI	76.34	17.6	11	52	-1						
MATUSIRO	76.54	306.2	11	53K	-1	21	40	1			
HELSINKI	76.72	17.6	11	53	-2						
COPENHAGEN	76.91	25.9				21	48	5			
BENSBERG	78.65	31.4	12	9	4						
JENA	80.41	29.2	12	13	-2					14	18
COLLMBERG	80.64	28.3	12	16	0						
STRASBOURG	80.73	32.7	12	32	15						
STUTTGART	81.18	31.8	12	19	0					13	11
TOLEDO	81.40	44.9	12	19	-1						
PRUHONICE	82.29	28.2	12	25	0						
MOSCOW	83.44	13.1	12	21	-10						
LJUBLJANA	85.51	30.5	12	42A	1						
LWOW	85.61	23.1	12	42	1						
QUETTA	110.86	354.6	18	9	-26						
SOUTH POLE	128.91	180.0	19	10	0						
ELISABTHVLLE	139.48	56.7	19	33	3						
BULAWAYO	146.27	65.4	19	41	0						
KIMBERLEY	148.33	82.1	19	50	5						

JUNE 23 15.H 4.M 35.S EPICENTRE 39.06-118.96 DEPTH= 0.KM

A=-0.37696 B=-0.68127 C= 0.62751 D=-0.8750 E= 0.4842
G=-0.3038 H=-0.5491 K=-0.7786 HT= -1.3

SE= 2.58

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
RENO	0.82	306.4	0	16	-2							
TINEMAHA	2.07	163.7	0	37	1							
FRESNO	2.38	196.6	0	39	-1							
MINERAL	2.41	303.2	0	45	4							
LICK	2.72	231.8	0	47	2							
BERKELEY	2.85	246.5	0	51A	4	1	26	3				
VINEYARD	3.00	220.5	0	48	-1							
BRANNER	3.02	238.2	0	48	-2	1	28	1				
HAIWEE	3.02	164.3	0	49	-1	1	37	10				
SAN FRANCSCO	3.03	246.0	0	46	-4							
SHASTA	3.11	303.0	0	50	-1							
UKIAH	3.32	272.6	0	54	0							
WOODY	3.35	178.7	0	53	-1	1	42	7				
CHINA LAKE	3.41	161.1	1	1	6							
ISABELLA	3.41	173.3	1	12	17							
KING RANCH	3.77	189.8	1	3	3							
FORT TEJON	4.18	179.2	1	9	3							
ARCATA	4.34	296.5	1	5	-3							
PASADENA	4.94	172.4	1	18	1							
SALT LAKE C.	5.73	70.4	1	26	-2							
CORVALLIS	6.40	331.0	1	19	-18							
BUTTE	8.40	32.0	2	8	3							
BOZEMAN	8.82	39.0	2	14	3							
TUCSON TELE.	9.47	132.5	2	17	-3							
TUCSON	9.47	133.3	2	18	-2							
HUNGRY HORSE	9.95	19.4	2	32	5							
VICTORIA	9.99	342.7	2	32	5							
ALBERNI	11.04	339.6	2	44	2							
RAPID CITY	12.82	61.9	3	8	2							
CHIHUAHUA	14.90	130.4				6	25	5			6	3
DALLAS	18.97	102.2	4	23	-2							
FAYETTEVILLE	19.84	90.8	4	32A	-3							
SITKA	20.97	334.5	4	45	-2							
MORGANTOWN	30.01	76.3	5	36	-36						15	47 SCS
COLLEGE	30.84	336.3	6	18	-1							
OTTAWA	32.33	64.5	6	32	-1							
BREBEUF	33.80	64.1	6	45K	0							

SHAWINIGAN		34.30	62.1	6	51	1								
RESOLUTE		37.44	10.3	7	12	-4								
SKALSTUGAN		70.63	20.9	11	17	-2								
SODANKYLA		70.73	13.4	11	17	-2								
MATUSIRO		76.53	306.2	11	52	-1							19	4
JERUSALEM		105.55	22.6	18	22	-2								

JUNE 24 7.H 15.M 43.S EPICENTRE 35.79 142.10 DEPTH= 0.KM

A=-0.64150 B= 0.49944 C= 0.58228 D= 0.6143 E= 0.7891
G=-0.4594 H= 0.3577 K=-0.8130 HT= -0.2

SE= 3.15

	DELTA DEG.	AZ. DEG.	P M	S	O-C S	S M	S	O-C S	*PP M	S	SUPP. M	S
TYOSI	1.02	266.2	0	20K	-1	0	33	-3				
MITO	1.44	294.4	0	25	-2	0	41	-6				
ONAHAMA	1.50	320.4	0	27	-1	0	41	-8				
KAKIOKA	1.61	286.2	0	27	-2	0	45	-6				
TUKUBASAN	1.67	285.3	0	28A	-2							
HONGO	1.90	268.1	0	34	1							
TOKYO C.M.O.	1.91	267.3	0	34K	0	1	0	1				
UTUNOMIYA	1.95	293.4	0	33	-1	0	52	-8				
SHIRAKAWA	2.01	311.7	0	34	-1	0	55	-6				
YOKOHAMA	2.03	260.4	0	37	2	1	1	-1				
MERA	2.05	245.5	0	34	-2	1	0	-2				
KUMAGAYA	2.23	279.9	0	37	-1	1	13	6				
HUKUSIMA	2.35	326.7	0	39	-1	1	4	-6				
TITIBU	2.46	275.2	0	41	-1							
MAEBASI	2.53	284.7	0	42A	-1	1	8	-6				
AJIRO	2.56	254.0	0	44	1	1	14	-1				
SENDAI	2.65	339.2	0	43	-1	1	16	-2				
MISIMA	2.66	256.2	0	43	-1	1	19	1				
ISINOMAKI	2.70	346.9	0	41	-4	1	13	-6				
HUNATU	2.73	264.8	0	44	-1	1	15	-5				
YAMAGATA	2.82	330.8	0	44	-3	1	12	-10				
KOHU	2.88	267.8	0	40	-8	1	18	-5				
OIWAKE	2.92	281.6	0	51	3	1	15	-10				
SHIZUOKA	3.13	255.8	0	51	0	1	29	-1				
MATUSIRO	3.23	284.7	0	51A	-2	1	25	-7				
NIIGATA	3.24	311.9	0	53	0	1	27	-5				
NAGANO	3.27	286.6	0	53A	0	1	46	13				
HATIDYOZIMA	3.28	215.5				1	37	4				
TAKADA	3.36	293.9	0	55	1	1	31	-5				
MATUMOTO	3.38	278.9	0	56	1	1	36	0				
OMAESAKI	3.39	250.6	1	7	12	1	46	10				
MIZUSAWA	3.42	347.3	1	11	16	1	38	1				
IIDA	3.49	266.7	1	2	6	1	55	16				
SAKATA	3.59	330.4	1	5	7	1	46	5				
AIKAWA	3.80	306.9	0	58	-3	1	24	-23				
MIYAKO	3.85	358.5	0	59	-2	1	46	-2				
TAKAYAMA	3.95	276.6	1	1	-2							
MORIOKA	3.97	349.6	1	4	1	1	54	3				
TOYAMA	4.06	284.3	1	7	3	2	0	7				
AKITA	4.23	338.6	1	15	8	1	54	-4				
NAGOYA	4.23	263.0	1	11	4						2	22
GIHU	4.36	266.4	1	9	0	2	2	1				
WAZIMA	4.47	292.3	1	13	3							
IBUKISAN	4.68	266.6	1	15	2	2	20	11				
KAMEYAMA	4.70	260.1	1	27	14	2	26	17				
HUKUI	4.74	274.8	1	49	35							
HATINOHE	4.75	354.8	1	23	9	2	22	11				
HIKONE	4.80	265.4	1	17	2							
TSURUGA	4.91	270.1	1	16	0	2	13	-2				
AOMORI	5.12	348.7	1	35	16	2	35	15				
NARA	5.25	259.6	1	27	6							
KYOTO	5.26	263.4	1	33	12	2	44	20				
ABUYAMA	5.42	262.1	1	24A	0							
SIOMISAKI	5.72	247.7				3	16	41			4	10
KOBE	5.77	260.9									2	54 S*
TOYOOKA	5.93	269.6									3	11 SG
HAKODATE	6.07	350.2	1	39	6							
SUMOTO	6.09	258.4	1	30	-3						3	7 S*
URAKAWA	6.37	4.6	1	35	-2	2	49	-2				
MORI	6.41	349.8	1	51	13	3	2	10				

MURORAN	6 59	352.7							3 18	S*
TOMAKOMAI	6.73	356.7							3 36	SG
SUTTSU	7.14	348.9			3	13	2			
OBIHIRO	7.17	6.5	1	52	4					
SAPPORO	7.29	355.7	2	4	14				3	34
KUSIRO	7.39	13.2	1	45	-6	3	6	-11		
KOTI	7.40	254.9							3	58 SG
NEMURO	7.99	18.6				3	19	-13		
OOITA	9.02	256.5							4	42
VLADIVOSTOK	10.75	316.0	2	35	-3					
ZO-SE	18.07	261.0	4	11	-3					
PEKING	20.86	289.5	4	39	-7					
SIAN	27.15	276.5	5	44	-2					
YAKUTSK	27.38	347.3	5	46	-2					
LANCHOW	30.86	282.0	6	17	-3					
KUNMING	35.43	263.5	6	58	-1					
TIKSI	36.57	353.0	7	8	-1					
COLLEGE	49.85	31.7	8	58	2					
RESOLUTE	63.67	14.4	10	34A	-1					
SODANKYLA	66.32	337.6	10	50	-2					
KIRUNA	67.87	339.6	11	0	-2					
NURMIJARVI	71.30	332.4	11	22	-1					
SKALSTUGAN	73.27	339.0	11	33	-2					
UPPSALA	74.31	334.4	11	39	-2					
EUREKA	76.19	51.2	11	55	4					
COLLMBERG	82.45	330.6	12	24	-1					
TUCSON TELE.	83.88	54.4	12	35	3					
STUTTGART	85.96	330.9	12	42	-1					
TAMANRASSET	108.71	317.9							20	52 PPP
SOUTH POLE	125.61	180.0	20	12	69					
BYRD STATION	126.44	167.6	18	54	-11					

JUNE 25 3.H 12.M 43.S EPICENTRE 36.53 71.44 DEPTH= 84.KM

DEPTH OF FOCUS= 0.008R

A= 0.25640 B= 0.76355 C= 0.59267 D= 0.9480 E=-0.3183
G= 0.1887 H= 0.5618 K=-0.8054 HT= -0.4

SE= 0.92

	DELTA DEG.	AZ. DEG.	P M	P S	P O-C S	S M	S S	S O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
WARSAK DAM	2.53	177.9	0	41	1	1	10	0					
STALINABAD	2.93	314.3	0	48	3	1	20	1					
LAHORE	5.52	153.4	1	20K	-1	2	19	-4			2	1	*SP
QUETTA	7.36	211.9	1	46	0	3	5	-4			2	27	*SP
DEHRA DUN	8.30	136.4	2	1	2	3	29	-3			2	14	PPP
KARACHI	11.31	200.6	2	49	9								
CHATRA	16.50	121.4	3	47	0	6	43	-4					
SHILLONG	20.59	116.3									5	36	
TIFLIS	21.27	292.3	4	43	2								
SVERDLOVSK	21.57	343.7	4	44	0								
MOSCOW	29.85	320.8	5	59	-2								
LWOW	36.43	306.6	6	0	-58						8	8	PP
APATITY	37.72	337.3	7	10	1						12	11	
HELSINKI	37.76	323.7	7	13	4								
NURMIJARVI	38.00	324.2	7	12	1				7	49			
SODANKYLA	39.86	334.8	7	28	0								
UPPSALA	41.26	321.8	7	38	0						10	26	
KIRUNA	42.21	334.0	7	46K	0								
PRUHONICE	42.55	306.9	7	49	1						9	28	PP
LJUBLJANA	42.99	301.1	7	55	3						9	2	
COLLMBERG	43.45	308.9	7	58	2						9	41	PP
COPENHAGEN	43.66	315.3	8	OK	3								
GOTEBORG	43.97	318.2	7	59	-1								
TOLMEZZO	43.97	301.9	8	3	3						9	31	PP
KHEYS	44.29	355.3	8	8	5								
JENA	44.37	308.5	8	5	2						10	4	PP
SKALSTUGAN	44.37	326.7	8	4	1						9	51	PP
SONNEBERG	44.66	307.8	8	8	2								
TIKSI	45.61	22.0	8	13	0								
STUTTGART	46.16	305.7	8	19	2								
NORD	53.83	349.5	9	15	-1								
TAMANRASSET	57.89	275.9	9	44K	-1						11	53	PP
ELISABTHVLLE	63.33	229.6	10	24	2								
BROKEN HILL	64.91	226.8	10	32	0								

RESOLUTE	68.70	356.1	10	55	-1						
BULAWAYO	69.38	223.0	10	59	-1						
COLLEGE	74.36	16.3	11	29	-1						
CHARTERS TS.	90.19	114.8	12	52	0						
SHAWINIGAN	91.26	336.2	12	58	1						
SOUTH POLE	126.35	180.0	18	51	-2						

JUNE 25 6.H 46.M 55.S EPICENTRE 61.71 -27.14 DEPTH= 11.KM

A= 0.42402 B=-0.21736 C= 0.87918 D=-0.4562 E=-0.8899
G= 0.7824 H=-0.4011 K=-0.4765 HT= -9.5

SE= 2.04

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
REYKJAVIK	3.42	42.3	0	51	-2	1	40	6					
VIK	4.13	61.8	1	27	24						1	55	
SIDA	4.67	59.5	1	6	-5								
AKUREYRI	5.65	41.4	1	27	2	2	32	2					
SCORESBY SD.	9.06	11.1	2	15	3	3	45	-10					
IVIGTUT	10.08	276.4	3	8	41	4	53	33					
ABERDEEN	13.48	98.5	3	15A	3	5	48	5			6	13	SS
EDINBURGH	13.65	104.3	3	12	-3	6	5	18			8	15	PCP
RATHFARNHAM	13.96	117.7	3	19K	0						4	41	
DURHAM	15.07	105.9	3	34A	1						5	47	
KEW	17.84	112.9	4	6A	-2	7	47	23			7	5	
SKALSTUGAN	18.02	66.7	4	11	0								
DE BILT	19.89	104.2	4	31A	-2	8	31	21					
GOTEBORG	19.92	84.0	4	34	1								
THULE	20.11	333.1	4	36	1								
WITTEVEEN	20.11	100.8	4	36A	1								
NORD	20.19	4.4	4	37A	1	8	30	13					
UCCLE	20.39	108.0	4	37	-1						8	28	SS
KIRUNA	20.71	52.4	4	41A	0	8	45	18					
PARIS	21.02	114.3	4	44	-1	8	38	5					
MUNSTER	21.11	101.6	4	46	1						5	7	
COPENHAGEN	21.17	88.6	4	46K	0	8	34	-2			5	11	PP
BENSBERG	21.57	104.2	4	49	-1						6	59	PCP
UPPSALA	21.61	74.9	4	48A	-2	8	50	6					
SODANKYLA	23.12	52.6	5	6	1	9	23	12					
POTSDAM	23.41	95.1	5	8	0	9	20	4			5	53	PPP
HALLE	23.45	97.9	5	11	2	9	27	10			5	46	PP
SERRA PILAR	23.46	142.9	5	10K	1	9	21	4			5	43	PP
STRASBOURG	23.54	107.9	5	9A	0	9	33	14					
JENA	23.65	99.3	5	11	0	9	31	10			10	20	
CLERMONT-FD.	23.66	118.5	5	12K	1	9	35	14					
SONNEBERG	23.85	100.8	5	14	2	9	36	12					
STUTTGART	24.05	105.8	5	16A	2	9	40	12			6	5	PPP
COLLMBERG	24.08	97.2	5	15	0	9	38	10					
TUBINGEN	24.16	106.4	5	18A	2								
BASLE	24.23	109.8	5	20	4						10	52	
NEUCHATEL	24.35	111.5	5	18	1	9	49	16					
COIMBRA	24.37	143.5	5	18A	0	9	43	10					
EBINGEN	24.37	107.1	5	21	3								
NURMIJARVI	24.52	69.5	5	19	0	9	46	10			6	58	
CHEB	24.60	100.0	5	21	1	9	50	13					
HELSINKI	24.81	70.1	5	24	2	9	50	9					
LISBON	25.55	145.9	5	32K	3	9	55	2					
PRAGUE	25.58	97.9	5	29	0	10	13	20			6	10	PP
APATITY	25.62	50.7	5	30A	0	10	4	10			6	3	PP
PRUHONICE	25.69	98.0	5	29A	-1	10	8	13					
TOLEDO	26.00	136.5	5	34	1	10	13	13			11	13	SS
RESOLUTE	26.43	326.4	5	36	-1	10	9	2			6	6	PP
PAVIA	26.74	111.4	5	43	3	10	35	23					
TORTOSA	26.77	128.6	5	44	4	10	20	7					
MONACO	27.12	115.5	5	33	-10								
HALIFAX	27.24	248.0	5	46	2	10	30	9			6	17	PP
WARSAW	27.29	88.1	5	46	1	10	23	2			9	8	PCP
RACIBORZ	27.35	94.2	5	45	0								
PULKOVO	27.38	68.1	5	48	2	10	32	9					
BRATISLAVA	28.16	98.2	5	58K	5								
KHEYS	28.21	21.2	6	0	7	10	56	20					
BOLOGNA	28.23	109.7									9	29	
TRIESTE	28.44	105.4	5	58	3	10	48	8			6	48	PP
LJUBLJANA	28.50	104.0	5	56A	0						9	7	PCP

ALICANTE	28.59	132.5	5	58	1	10	53	11		6	55 PP
GRANADA	28.61	138.2	5	53A	-4	10	36	-7	6 18	6	56 PP
SEVEN FALLS	28.65	259.7	5	57	0						
SHAWINIGAN	29.98	260.8	6	8K	-1						
LWOW	30.30	89.3	6	12	0	11	22	13			
BREBEUF	31.16	260.3	6	19	0						
ALGIERS UNI.	31.27	128.9	6	21	1	11	34	9		7	42 PPP
RELIZANE	31.29	133.3	6	10	-11					7	12 PP
BELGRADE	32.19	99.4	6	29K	0	11	50	11		7	33 PP
OTTAWA	32.22	262.3	6	28K	-1						
MOSCOW	32.87	70.5	6	33	-1	11	51	1			
PALISADES	34.75	255.3	6	52	1	12	14	-5		8	0 PP
FORDHAM	34.86	255.1	6	47	-5					7	54 PP
MESSINA	35.18	112.0	6	54A	0	12	36	10		8	22 PP
PENNSYLVANIA	36.75	259.2	7	8	0					8	39 PP
WASHINGTON	37.89	256.5	7	16	-1	13	12	5		8	43 PP
CLEVELAND	37.95	263.4	7	20	2	13	6	-2			
BERMUDA	37.98	236.9	7	20	2	13	15	6		8	38 PP
SIMFEROPOL	38.58	86.8	7	24	1	13	26	8			
MORGANTOWN	38.65	260.1	7	25A	1					8	56 PP
ATHENS	39.07	103.5	7	30A	3						
CHAPEL HILL	41.23	255.8	7	48	3						
SOTCHI	42.27	83.5	7	53	0						
COLUMBIA	43.73	256.2	8	7	2						
TAMANRASSET	44.87	135.1	8	16A	1	14	57	6		10	2 PP
TIKSI	45.91	10.3	8	24	1	15	12	7			
TIFLIS	46.09	81.1	8	26	2	15	20	12			
RAPID CITY	46.19	284.3	8	25	0						
COLLEGE	46.28	329.5	8	25	-1						
MAKHACH-KALA	46.39	77.8	8	23	-4						
HUNGRY HORSE	47.76	295.9	8	39	2	15	40	8		10	14 PP
MBOUR	47.82	166.6	8	41	3	15	45	12			
KSARA	48.16	95.2	8	42	1	15	47	10		10	35 PP
FAYETTEVILLE	48.23	270.1	8	40A	-1						
BOZEMAN	48.53	291.5	8	44	1						
BUTTE	48.93	292.9	8	48	2	15	59	11		10	41 PP
JERUSALEM	49.53	97.4	8	54	3					10	49 PP
YAKUTSK	55.35	13.0	9	34	0						
EUREKA	55.65	290.4	9	37	0					11	40 PP
RENO	57.30	293.4	9	48	0						
MINERAL	57.41	295.3	9	50A	1						
SHASTA	57.46	296.1	9	49	-1						
CARACAS	58.72	227.4	10	6	8						
TUCSON TELE.	59.13	281.5	10	1	0					39	37 PKPPKP
TUCSON	59.25	281.5	10	1	-1					39	38 PKPPKP
FRESNO	59.59	291.5	10	7	3						
BERKELEY	59.75	294.1	10	8	2	18	27	13		13	39
PASADENA	61.04	288.6	10	11	-3	18	38	8		22	28 SS
TACUBAYA	64.61	263.8	10	36	-2						
ULAN-BATOR	64.68	32.3	10	40	2					13	7
QUETTA	65.77	71.3	10	46	1					11	18 PCP
FUQUENE	65.84	232.4	10	46	0	19	47	17			
BOGOTA	66.75	232.4	10	48	-4	19	56	15			
CHINCHINA	67.02	234.1	10	54	1	19	58	14			
Y.-SAKHLINSK	71.39	7.3	11	21	1						
PAOTOW	72.33	32.9	11	26	0						
CHANGCHUN	72.48	20.5	11	28	1						
VLADIVOSTOK	74.16	15.8	11	35	-2						
PEKING	74.34	28.5	11	38	0						
LANCHOW	74.78	39.3	11	41	1						
LHASA	76.31	52.2	12	2	13						
LWIRO	76.56	121.7	11	51A	1						
ASTRIDA	77.26	120.9	11	53A	-1						
UVIRA	77.81	121.9	11	58A	1						
SIAN	77.98	36.0	11	58	0						
CHENGTU	79.87	41.2	12	10	1						
SHILLONG	80.29	53.3	12	10K	-1						
MATUSIRO	81.37	11.9	12	16K	0	22	35	10		31	56 SSS
NANKING	82.58	28.7	12	25	2						
HUANCAYO	82.62	227.3	12	24	1					15	36 PP
ZO-SE	84.03	26.9	12	32	2						
LA PAZ	84.44	219.2	12	33K	1					13	13
KUNMING	84.64	44.4	12	35	2						
BRISBANE	145.78	359.7	19	38	1						
BYRD STATION	150.36	200.6	19	45	1					23	28 PP
SOUTH POLE	151.54	180.0	19	44	-2						
ADELAIDE	151.73	25.1	19	54	8						
SCOTT BASE	163.18	190.1	20	2	2						

JUNE 25 13.H 37.M 10.S EPICENTRE 29.96 130.98 DEPTH= 0.KM

A=-0.56910 B= 0.65511 C= 0.49694 D= 0.7549 E= 0.6558
G=-0.3259 H= 0.3752 K=-0.8678 HT= 1.8

SE= 3.66

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
YAKUSIMA	0.64	319.4	0 18A	2	0 30	3		
KAGOSIMA	1.64	347.1	0 31A	1	1 6	13		
MIYAZAKI	1.99	10.8	0 32	-3	0 52	-9		
UNZENDAKE	2.83	347.4	0 48	1	1 30	7		
KUMAMOTO	2.86	355.2	0 48	0	1 6	-17		
NAGASAKI	2.91	341.4	0 48A	-1	1 39	14		
ASOSAN	2.93	1.5	0 50	1	1 20	-5		
TOMIE	3.25	325.0	1 3	10	1 49	16		
SIMIDU	3.28	30.7	1 0	6				
OOITA	3.30	9.3	0 53	-1				
SAGA	3.33	350.1	0 54	0	1 48	13		
UWAZIMA	3.52	22.0	1 19	22				
HUKUOKA	3.64	352.6	1 0	1	1 50	7		
SIMONOSEKI	3.97	359.4					1 20	P*
MATUYAMA	4.14	20.9	1 5	-1	2 23	27	1 48	
KOTI	4.18	30.6	1 21	14	2 30	33		
HIROSIMA	4.56	15.3	1 29	17	2 14	8		
HAMADA	5.01	10.3	1 25	7	2 9	-9		
TAKAMATU	5.06	30.1	1 20	1	2 52	33	2 7	
TOKUSIMA	5.11	35.8	1 24	4				
SUMOTO	5.48	36.1	1 22A	-3			3 3	
MATSUE	5.75	17.3	2 9	40				
YONAGO	5.80	19.5			2 33	-5		
OSAKA	6.05	38.3					2 24	
NARA	6.24	39.9	1 41	5				
ABUYAMA	6.24	37.2	1 32A	-4	2 32	-17		
KAMEYAMA	6.73	42.2	1 53	10				
HIKONE	6.91	38.7	1 42	-3				
IBUKISAN	7.06	38.7					2 47	
NAGOYA	7.24	42.7	1 59	9				
GIHU	7.29	40.5	1 50	0			4 25	
HUKUI	7.52	34.8	1 50	-4				
MISIMA	8.46	50.5	2 3	-4				
TOYAMA	8.49	36.1	1 56	-11				
KOHU	8.53	46.5	2 13	5				
MATUSIRO	8.93	40.8	2 8	-5	3 48	-8	4 7	
OIWAKE	8.97	43.0	2 11	-3				
NAGANO	9.01	40.2	2 28	14				
NANKING	10.66	284.3	2 39	2				
VLADIVOSTOK	13.15	3.0	3 10	-1				
CHANGCHUN	14.56	343.5	3 31	2				
PEKING	15.73	313.6	3 49	4				
HONG KONG	16.90	247.1	4 2	2	7 28	21		
MANILA	17.87	213.2	4 19	7	7 48	18		
SIAN	19.16	288.6	4 23	-4				
Y.-SAKHLINSK	19.25	25.0	4 22	-6				
PAOTOW	20.07	307.5	4 36	-2				
GUAM	20.78	139.2	4 45	0				
UGLEGORSK	20.88	20.8	4 44	-2	8 30	-5		
CHENGTU	23.28	278.5	5 10	0				
LANCHOW	23.53	292.2	5 13	0	9 28	4		
KUNMING	25.54	265.8	5 35	3				
ULAN-BATOR	25.76	320.8	5 34	0				
YAKUTSK	32.07	358.9	6 37	6	11 37	-6		
SHILLONG	34.77	272.4	6 52A	-2				
TIKSI	41.73	359.0	7 50	-2				
SVERDLOVSK	54.86	320.7	9 32	-2				
KHEYS	58.77	348.5	9 52	-10				
COLLEGE	59.60	29.3	10 6	-2				
APATITY	65.48	335.3	10 43A	-4			19 39	
MOSCOW	67.60	322.4	10 58	-3				
SODANKYLA	67.98	336.1	11 0	-3				
KIRUNA	69.87	337.8	11 12K	-3				
RESOLUTE	71.43	11.6	11 21A	-3	20 32	-10	25 8	SS
NURMIJARVI	71.87	330.0	11 24	-3				
SKALSTUGAN	75.05	336.0	11 43	-2				

UPPSALA	75.21	331.4	11	43	-3						
PRUHONICE	82.52	324.3	12	26	0						
EUREKA	87.03	45.5	12	48	-1						
MESSINA	89.29	314.6								24	55
HUANCAYO	149.77	59.5	19	54	7						

JUNE 26 5.H 3.M 58.S EPICENTRE 44.98 141.35 DEPTH= 271.KM

DEPTH OF FOCUS= 0.038R

A=-0.55429 B= 0.44328 C= 0.70446 D= 0.6246 E= 0.7810
G=-0.5502 H= 0.4400 K=-0.7097 HT= -3.5

SE= 2.50

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
WAKKANAI	0.50	27.8	0	37	1	1	4	0				
ASAHIGAWA	1.40	148.2	0	40	0							
SAPPORO	1.91	180.0	0	44A	0	1	17	-1				
Y.-SAKHLINSK	2.19	25.4	0	46	0							
ABASHIRI	2.31	113.5	0	48	1	1	22	-2				
SUTTSU	2.32	200.8	0	49	1	1	26	1				
OBIHIRO	2.45	146.4	0	49	0	1	20	-7				
MORI	2.93	191.4	0	54	0							
KUSIRO	2.97	131.2	0	52	-2	1	31	-5				
URAKAWA	3.01	159.3	0	53	-1	1	35	-2				
HIROO	3.05	151.4	1	14	19							
HAKODATE	3.23	188.4	0	55A	-2	1	36	-5				
NEMURO	3.46	116.9	1	9	10	1	39	-7				
UGLEGORSK	4.13	6.6	1	7	1							
AOMORI	4.18	185.9	1	5	-2	1	55	-5				
HATINOHE	4.45	178.2	1	8	-2	1	55	-11				
MORIOKA	5.28	181.5	1	19	-1	2	17	-6				
AKITA	5.34	190.4	1	18	-3	2	22	-3				
MIYAKO	5.35	174.9	1	18	-3	2	14	-11				
MIZUSAWA	5.85	181.7	1	28	1	2	30	-6				
SAKATA	6.18	191.1				2	43	-3				
ISINOMAKI	6.54	180.2	1	33	-3	2	43	-8				
SENDAI	6.71	183.0	1	35	-3	2	48	-7				
YAMAGATA	6.76	186.7				2	52	-2				
VLADIVOSTOK	7.06	258.1	1	44	2							
HUKUSIMA	7.25	185.5	1	44	-1	3	1	-6				
NIIGATA	7.26	194.5				3	11	4				
SHIRAKAWA	7.90	186.6				3	17	-6				
ONAHAMA	8.03	182.6				3	13	-10				
UTUNOMIYA	8.49	188.1	2	31	31	3	29	-6				
MITO	8.62	184.7				3	27	-11				
NAGANO	8.64	197.1	2	12	10							
MAEBASI	8.74	192.2	2	11	8	3	37	-3				
MATUSIRO	8.75	196.8	2	2A	-1	3	41	1				
KAKIOKA	8.78	186.2	1	59	-5	3	32	-9				
TUKUBASAN	8.80	186.6	2	0	-4	3	32	-10				
TOYAMA	8.85	202.2	3	38	93							
OIWAKE	8.90	194.8	2	21	16							
KOHU	9.58	193.7	2	34	20							
MAGADAN	15.67	18.0	3	28	0							
YAKUTSK	18.37	342.4	3	53	-4	7	3	-5				
PEKING	19.18	263.9	4	5	0							
PAOTOW	23.32	270.2	4	49	4							
TIKSI	27.41	351.4	5	20	-1							
LANCHOW	29.66	265.8	5	45	2							
KUNMING	36.94	250.6	6	46	1							
COLLEGE	42.56	36.6	7	30	-1						8	27
SITKA	50.58	44.6	8	34	1							
RESOLUTE	54.95	15.7	9	3A	-2	16	8	-16			13	35
APATITY	55.49	333.7	9	7A	-2							
THULE	57.40	8.0	9	18	-4							
SODANKYLA	57.68	335.4	9	23	-1						10	14 PCP
KIRUNA	59.11	337.7	9	33	-1							
NURMIJARVI	62.97	330.2	9	58	-2						10	34 PCP
HELSINKI	63.10	329.9	10	2	1							
CORVALLIS	63.55	52.6	10	4A	1							
SKALSTUGAN	64.53	337.4	10	8	-2							
UPPSALA	65.84	332.6	10	17A	-1						10	46
SHASTA	66.50	55.5	10	23A	1							
MINERAL	67.19	55.4	10	27A	0							

RENO	68.76	55.1	10 37	1	
GOTEBORG	69.36	333.7	10 37	-3	
COPENHAGEN	70.85	332.2	10 49K	0	
EUREKA	71.00	53.0	10 51	1	
COLLMBERG	74.23	329.2	11 10	1	
RAPID CITY	74.42	42.5	11 10	0	
HALLE	74.44	329.9	11 11	1	
PRUHONICE	74.72	327.6	11 13A	1	
JENA	75.04	329.8	11 14	1	12 19
STUTTGART	77.69	329.9	11 29	1	
LJUBLJANA	77.92	325.2	11 30A	1	
TUBINGEN	77.94	329.8	11 31A	1	
EBINGEN	78.27	329.7	11 32	1	
STRASBOURG	78.36	330.6	11 32	0	
TUCSON TELE.	79.04	55.1	11 36	1	
TUCSON	79.04	55.3	11 36	1	
MONACO	82.63	328.2	11 54	0	
SEVEN FALLS	84.01	21.5	12 1	0	
SHAWINIGAN	84.02	22.9	12 2	1	
OTTAWA	84.21	25.3	12 1A	-1	

JUNE 26 5.H 24.M 12.S EPICENTRE -30.44-177.43 DEPTH= 0.KM

A=-0.86282 B=-0.03865 C=-0.50403 D=-0.0448 E= 0.9990
G= 0.5035 H= 0.0226 K=-0.8637 HT= 1.7

SE= 2.68

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
RAOUL ISLAND	1.25	340.2	0 24	-1				
ONERAHI	8.69	230.1	2 15	5				
TUAI	9.46	206.7	2 24	3	3 56	-13		
KARAPIRO	9.47	216.1	2 14	-7				3 30
WELLINGTON	12.53	208.1			5 5	-19		3 49
COBB RIVER	13.28	214.2			5 26	-16		
KAIMATA	15.01	213.5	3 36	1	6 3	-20		
GEBBIES PASS	15.41	208.0	3 42	2	6 11	-22		
APIA	17.36	18.7	4 18	13	7 1	-17		
BRISBANE	25.98	269.1	5 35	-1				9 3 PCP
CANBERRA	28.52	251.2	5 58K	-1				
CHARTERS TS.	34.31	279.0	6 48	-2				
ADELAIDE	36.96	251.2	7 11	-2				9 32 PCP
SCOTT BASE	48.04	184.5	8 43	0				
BYRD STATION	54.81	169.6	9 32	-2				
SOUTH POLE	59.73	180.0	10 7	-2				
MATUSIRO	78.55	325.0	12 1K	-4				
FRESNO	85.94	42.8	12 44	1				
SHASTA	87.20	38.6	12 49	-1				
MINERAL	87.38	39.3	12 50	0				
TUCSON	88.69	51.1	12 59	2				
TUCSON TELE.	88.81	51.1	12 58	1				
EUREKA	89.99	42.8	13 2	-1				
KIRUNA	141.11	349.3	19 29	-4				
SKALSTUGAN	146.27	352.2						
UPPSALA	148.88	345.3	19 47A	1				
KSARA	151.65	285.6	19 57	7				
GOTEBORG	151.97	349.2	19 53	2				
JERUSALEM	152.06	281.2	19 56	5				
COPENHAGEN	153.81	347.3	20 8	15				
COLLMBERG	157.76	342.5	20 19	21				
JENA	158.45	344.3	20 31	32				
PRUHONICE	158.49	338.6	20 33K	34				
STUTTGART	161.00	346.4	20 44	42				
LJUBLJANA	161.84	332.4	20 2	-1				
TAMANRASSET	171.93	199.8	20 11	0				21 32

JUNE 26 8.H 35.M 52.S EPICENTRE 30.67 138.93 DEPTH= 413.KM

DEPTH OF FOCUS= 0.060R

A=-0.64958 B= 0.56610 C= 0.50751 D= 0.6570 E= 0.7539
G=-0.3826 H= 0.3334 K=-0.8616 HT= 1.6

SE= 1.71

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
TORISIMA	1.20	98.6	0 52	-1	1 33	-3		
HATIDYOZIMA	2.54	17.3	1 40	39	1 46	-3		
SIOMISAKI	3.86	316.8	1 11	-1	2 6	-3		
OMAESAKI	3.97	351.5			2 11	0		
OWASE	4.10	326.5	1 14	0	2 12	-1		
OSIMA	4.11	5.2			2 10	-3		
MERA	4.31	9.9	1 16	0	2 12	-4		
AJIRO	4.37	1.8	1 17	0	2 13	-4		
MISIMA	4.44	0.2	1 17	0	2 15	-4		
KAMEYAMA	4.66	334.2	1 21	1	2 23	1		
NARA	4.78	327.7	1 20	-1				
NAGOYA	4.78	340.4	1 22	1	2 25	0		
YOKOHAMA	4.79	7.1			2 21	-4		
HUNATU	4.82	358.5	1 51	30	2 21	-4		
OSAKA	4.90	325.1	1 23A	1	2 27	0		
IIDA	4.93	349.5						2 8
KOHU	4.96	356.6	1 23	0	2 24	-4		
TOKUSIMA	5.00	313.8	1 24	1				
TOKYO C.M.O.	5.05	7.6	1 22	-2	2 25	-4		
GIHU	5.06	339.6	1 42	18	2 29	0		
ABUYAMA	5.06	326.9	1 24A	0	2 30	1		
KOBE	5.10	322.7	1 24	0	2 32	2		
KYOTO	5.11	329.0	1 25	1	2 30	0		
HIKONE	5.11	334.6	1 26	2	2 32	2		
IBUKISAN	5.16	336.2	1 26	1	2 31	0		
TYOSI	5.29	17.2			2 33	-3		
TITIBU	5.30	1.3	1 30	4	2 31	-3		
KOTI	5.41	303.5	1 27A	0	2 31	-5		
TUKUBASAN	5.62	9.7	1 27K	-3	2 35	-5		
MATUMOTO	5.62	352.1	1 30	0	2 39	-1		
KAKIOKA	5.65	10.3	1 26	-4	2 33	-7		
OIWAKE	5.66	356.9	1 31	1	2 37	-4		
MAEBASI	5.72	1.1	1 28	-2	2 39	-3		
HUKUI	5.81	338.2	1 32	1	2 45	1		
OKAYAMA	5.82	314.8	1 31	-1				
MITO	5.84	12.3						2 29
MATUSIRO	5.90	354.4	1 30A	-2	2 41	-4		
UTUNOMIYA	5.92	7.4	1 32	-1	2 38	-8		
TOYOOKA	5.95	325.7	1 33A	0	2 45	-1		
NAGANO	6.02	354.4	1 33A	-1	2 45	-2		
MATUYAMA	6.11	302.7	1 36A	1	2 49	0		
TOYAMA	6.19	347.0	1 36	1	2 50	-1		
TAKADA	6.44	355.2			2 40	-16		
ONAHAMA	6.48	14.1			2 53	-4		
SHIRAKAWA	6.52	9.1	1 38	-1	2 48	-10		
MIYAZAKI	6.55	282.9	1 41	2				
OOITA	6.72	294.3	1 43	2				
MATSUE	6.85	315.7	1 42	-1				
HUKUSIMA	7.18	9.8	1 46	-1	3 7	-4		
NIIGATA	7.24	0.8						3 13
YAMAGATA	7.65	8.4	2 3	11	3 16	-4		
SENDAI	7.76	11.6	1 51	-2	3 16	-7		
SAGA	7.77	291.6	1 53	0				
ISINOMAKI	7.99	13.6	1 55	-1	3 24	-3		
SAKATA	8.25	4.9						3 33
MIZUSAWA	8.63	11.5	2 3	0	3 38	-2		
AKITA	9.08	5.7						3 49
MORI	11.49	6.1						4 39
SUTTSU	12.15	4.6						4 54
SAPPORO	12.53	8.2						5 0
OBIHIRO	12.70	14.4	2 50	1				
VLADIVOSTOK	13.63	337.7	2 57	-2				
NEMURO	13.70	20.9						5 30
ZO-SE	15.25	276.2			5 51	-4		
Y.-SAKHLINSK	16.52	9.2	3 30	1				
CHANGCHUN	17.00	324.4	3 34	0	6 29	2		
NANKING	17.25	279.8	3 34	-2	6 31	-1		5 24 *SP
GUAM	17.94	161.3	3 44	1	6 49	5		
PEKING	20.73	303.0	4 9	-2	7 30	-3		5 11 PPP
HONG KONG	23.64	255.3	4 8	-30				6 31 *SP
PAOTOW	25.39	300.9	4 53	0	8 48	-1		
SIAN	25.53	286.0	4 42	-13				
LANCHOW	29.71	289.9	5 30K	-1	9 51	-6		
ULAN-BATOR	29.90	314.3	6 44	71				

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YAKUTSK	31.93	351.8	5 50	-1			
KUNMING	32.44	269.1	5 53	-2			
NAMANGAN	54.29	300.7	8 46	-1			
COLLEGE	55.60	29.7	8 58	1			
APATITY	67.66	336.4	10 14K	-1			
RESOLUTE	69.27	13.3	10 26K	1			10 46 PCP
KIRUNA	71.73	339.4	10 40K	0			
NURMI JARVI	74.59	332.1	10 56	0			
HELSINKI	74.66	331.7	10 59	2			
SKALSTUGAN	77.07	338.4	11 10	0			
UPPSALA	77.75	333.8	11 13	-1			
GOTEBORG	81.37	334.3	11 30	-3			
EUREKA	81.51	49.1	11 36	3		13 7	
KSARA	83.15	305.2	11 44	2			
PRUHONICE	85.79	327.7	11 55	0			
SOUTH POLE	120.50	180.0	18 3	0			
BYRD STATION	121.99	168.4	18 7	1			

JUNE 26 13.H 44.M 40.S EPICENTRE 45.86 26.53 DEPTH= 0.KM

A= 0.62522 B= 0.31214 C= 0.71531 D= 0.4467 E=-0.8947
G= 0.6400 H= 0.3195 K=-0.6988 HT= -3.9

SE= 4.74

	DELTA DEG.	AZ. DEG.	P M S	O-C S	S M S	O-C S	*PP M S	SUPP. M S
FOCSANI	0.50	108.8	0 25	11	0 39	16		
BACAU	0.75	19.8	0 30	13	0 46	17		
CAMPULUNG	1.21	241.2	0 28	4	0 45	4		
BUCHAREST	1.47	192.1	0 32	4	0 51	3		0 42
IASI	1.52	27.3	0 36	8	0 58	9		
TIMISOARA	3.72	270.2	1 26	27	2 21	36		2 2
SOFIA	3.91	217.1	1 1	-1	1 50	0		1 38
LWOW	4.32	337.9	1 12	4	2 5	5		
BELGRADE	4.41	258.5	1 21K	12	2 25	23		1 48
SKALNATE PL.	5.40	310.2	1 30	7				
SIMFEROPOL	5.42	97.0	1 23	-1				
KRAKOW	6.10	315.8	1 34	1				
BRATISLAVA	6.85	293.1	1 42A	-2	3 1	-2		
RACIBORZ	7.00	310.1	1 47	1	2 49	-18		
ZAGREB	7.37	273.5						3 57 SG
LJUBLJANA	8.37	275.6	2 4K	-1				4 41 SG
PRUHONICE	9.04	301.4	2 14K	0	4 10	11		
PRAGUE	9.14	301.8	2 15	-1				
TOLMEZZO	9.40	278.1	2 17	-2				
COLLMBERG	10.48	306.2	2 33	-1				
JENA	11.15	302.4	2 44	1				
SONNEBERG	11.20	299.3	2 42	-2				
MOSCOW	12.10	31.3	2 51	-5	5 2	-11		
STUTTGART	12.12	290.1	2 54	-2				
KSARA	13.99	146.0	3 20	-1				
PULKOVO	14.12	7.9	3 19	-4	5 51	-11		
HELSINKI	14.36	356.9	3 24	-2	6 1	-6		
NURMI JARVI	14.72	356.4	3 28	-3	6 7	-9		3 41 PP
GOTEBORG	14.84	328.2	3 27	-6				
UPPSALA	14.99	342.4	3 30	-4				
JERUSALEM	15.59	151.4	3 36	-6				
SKALSTUGAN	19.48	340.7	4 24	-7				
SODANKYLA	21.56	0.1	4 47	-6	9 9	21		
APATITY	22.04	7.1	5 11K	13	8 46	-11		
KIRUNA	22.25	353.9	4 54	-6				5 19
TAMANRASSET	28.66	223.6	5 48A	-12				8 56
NORD	38.52	350.7	7 17	-8				
BULAWAYO	65.71	177.9						20 7
COLLEGE	69.52	357.4	11 2	-10				
CHARTERS TS.	124.69	83.3	18 50	-11				
ADELAIDE	128.65	103.0	19 54	45				
SCOTT BASE	144.37	166.5	18 42	-56				
KARAPIRO	155.71	82.0	20 12A	17				20 42

JUNE 27 19.H 4.M 39.S EPICENTRE -33.42 179.84 DEPTH= 151.KM

DEPTH OF FOCUS= 0.019R

A=-0.83633 B= 0.00228 C=-0.54823 D= 0.0027 E= 1.0000
G= 0.5482 H=-0.0015 K=-0.8363 HT= 0.7

SE= 2.42

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
ONERAHI	5.09	241.1	1	20	5	2	24	11			1	33	
KARAPIRO	5.70	216.8	1	25K	2								
TUAI	5.79	201.3	1	22	-2	2	28	-2			14	59	SCS
TONGARIRO	6.73	209.9	1	35K	-2	3	4	11			2	27	
WELLINGTON	8.82	205.8	2	0	-5	3	37	-6			15	4	SCS
COBB RIVER	9.51	214.5	2	10	-4	3	53	-6			2	43	
KAIMATA	11.25	213.7	2	38	1	4	32	-8			3	38	
GEBBIES PASS	11.70	206.6	2	37	-6	4	42	-9			15	9	SCS
NOUMEA	16.20	309.7	3	42A	2						6	54	
APIA	20.97	23.3	4	34	2	8	6	-6			15	41	SCS
BRISBANE	23.83	277.2	5	3A	3	9	14	13					
RIVERVIEW	23.87	261.0	5	3A	3	9	12	10					
CANBERRA	25.48	257.0	5	18A	3	9	35	6			6	12	
FORT NELSON	27.11	240.0	5	35	5	9	55	0					
MELBOURNE	28.58	251.1	5	45A	2	10	17	-2			6	33	
TAHITI	31.77	68.2	6	16	4								
CHARTERS TS.	32.68	285.6	6	19	-1	11	24	1					
ADELAIDE	33.89	255.7	6	30A	0	11	43	1	7	9	7	47	PP
PORT MORESBY	38.42	300.9	7	8A	0	12	51	0	7	27	8	43	PP
RABAUL	38.87	312.4	7	11	-1	12	55	-3					
CAPE HALLETT	39.26	184.6	7	19	4	13	1	-3			8	1	PP
TERRE ADELIE	40.29	202.4	7	26	3	13	21	2					
SCOTT BASE	44.90	183.9	8	3A	2	14	35	9			9	49	PP
WILKES	51.62	209.0	8	49A	-4	15	54	-6			11	41	PPP
BYRD STATION	52.31	168.9	8	59	1	16	18	8	9	35	10	59	PP
SOUTH POLE	56.75	180.0	9	30	0	17	11	2			11	57	PP
GUAM	57.40	318.4	9	32A	-2	17	12	-5	10	11	10	28	*SP
HONOLULU	58.34	24.3	9	35	-6	17	47	17	10	14	12	59	PPP
KIPAPA	58.48	24.3	9	40	-2						39	18	PKPPKP
MIRNY	58.61	207.9	9	40	-3	17	29	-4					
ARGENTINE I.	69.91	156.2	10	56	0	19	55	3					
HALLEY BAY	69.99	173.2	10	56	-1								
LEMBANG	71.44	274.1	11	5A	0	20	10	0					
DJAKARTA	72.45	274.2	11	7	-4	20	17	-4					
MANILA	73.65	300.3	11	18	0	20	33	-2					
BAGUIO CITY	75.15	301.4	11	25	-2	20	51	0					
TUKUBASAN	78.61	328.2	11	43K	-3	21	21	-8			14	38	PP
TAWU	78.92	306.1	11	46	-2								
HWALIEN	79.55	307.7	11	53	2								
ABUYAMA	79.61	324.3	11	50A	-1								
MATUSIRO	79.73	327.1	11	49A	-3	21	36	-4			15	45	PP
TAIPEI	80.34	308.5	11	54	-1	21	40	-7					
PORT STANLEY	81.31	147.8	12	1	1	21	58	1					
HONG KONG	83.56	301.9	12	11	-1	22	16	-3			15	27	PP
MEDAN	84.59	277.8	12	16K	-1	22	26	-4					
CANTON	84.69	301.9	12	16A	-2	22	31	1	12	59	15	35	PP
ZO-SE	84.76	312.6	12	16A	-2	22	23	-8	12	57	13	14	*SP
NANKING	86.89	311.9	12	28A	0	22	36	-16	13	12	16	26	PP
VLADIVOSTOK	87.89	327.0	12	32	-1								
PHU-LIEN	88.15	296.3	12	36	2	23	8	5	13	5	24	23	PS
PETROPAVLOVK	88.15	347.4	12	33	-1								
VINEYARD	88.76	43.4	12	38	1								
UGLEGORSK	88.76	336.2	12	35	-2								
PASADENA	88.89	47.1	12	38K	0	23	18	8	12	59	22	57	SKS
LICK	89.02	42.8	12	40K	2						13	20	*SP
BERKELEY	89.05	42.1	12	40A	1	23	21	9			22	51	SKS
UKIAH	89.41	40.7	12	41A	1								
FRESNO	89.69	44.3	12	42K	0	23	27	9					
ARCATA	90.20	39.0	12	46	2								
GUADALAJARA	90.81	65.8									23	8	SKKS
SHASTA	90.97	40.0	12	49K	1				13	14			
MINERAL	91.15	40.7	12	49A	1						13	57	
CHANGCHUN	91.55	323.9	12	49A	-1	23	36	2	13	29	23	0	SKS
RENO	91.58	42.2	12	51K	1				13	33			
TUCSON	92.35	52.5	12	56K	2	23	54	13	13	35	30	8	PKKP
TUCSON TELE.	92.48	52.5	12	56K	1	23	55	13	13	36	30	8	PKKP
LA PLATA	93.11	135.9				23	46	-2			16	46	PP
CORVALLIS	93.25	36.8	12	58K	0								
TACUBAYA	93.26	69.0	13	28	30	23	40	-9			16	36	PP
CHIHUAHUA	93.42	57.9				23	55	5			24	39	*SS

The scanned images of the bulletins of the International Seismological Summary (ISS) have been obtained thanks to funding provided by the US National Science Foundation through grant EAR-9725140 (Villaseñor et al., 1997) and collected by SGA Storia Geofisica Ambiente (Bologna) on behalf of the Istituto Nazionale di Geofisica e Vulcanologia (Rome), in the frame of the EUROSEISMOS project.

KUNMING	93.57	297.6	12	59	0					13	59 *SP
EUREKA	93.74	44.3	13	1K	1					30	7 PKKP
PEKING	93.81	316.4	13	0A	-1				13 43	16	45 PP
TALA POZO	93.96	127.0				23	51	-4		16	46 PP
HUANCAYO	95.49	108.2	13	13	5						
VERA CRUZ	95.56	70.8								23	39 SKKS
MAGADAN	95.70	345.6	13	10	1						
CHENGTU	95.84	302.9	13	10	0				13 55	14	7 *SP
VICTORIA	96.00	34.0	13	10	-1					17	54 PP
HORSESHOE B.	96.68	33.4	13	8	-6						
SALT LAKE C.	97.00	45.3	13	16A	1						
COMITAN	97.17	75.4								23	48 SKKS
LA PAZ	98.40	116.0	13	24	3	24	51	18	14 3	17	25 PP
LUBBOCK	99.22	55.9	13	25	0					17	30
BUTTE	99.85	40.8	14	7	39					17	23 PP
BOZEMAN	100.47	41.8	13	32A	1					19	59 PPP
HUNGRY HORSE	100.52	38.3	13	31	0	23	58	5	14 4	17	37 PP
COLLEGE	101.19	13.5	13	32A	-2	23	51	-5		29	14 PKKP
MERIDA	101.66	72.6				24	6	7		25	30 S
DALLAS	102.40	58.9								17	53 PP
BALBOA HTS.	103.70	88.2				24	11	4			
RAPID CITY	104.12	46.4	13	49A	2					18	5 PP
CHINCHINA	104.85	93.9	13	43	-7	24	16	3		17	53 PP
BOGOTA	105.95	95.0				24	20	2		18	10 PP
LAWRENCE	106.59	54.1	14	59	777						
FUQUENE	106.70	94.5				24	27	5		18	26 PP
GRAHAMSTOWN	109.01	203.5	14	8	777					18	11
FLORISSANT	109.86	56.2				24	33	-2		18	45 PP
ST. LOUIS 1	109.88	56.4	18	15	777	24	34	0		29	27 PKKP
HERMANUS	110.10	197.0				26	14	97		34	1 SS
TANANARIVE	110.86	228.5	17	45	-29					24	13
KIMBERLEY	113.80	203.9	18	22	3						
CARACAS	115.06	93.9								19	32 PP
CHAPEL HILL	116.81	63.2								19	38 PP
CLEVELAND	117.13	56.6				25	3	-1			
MORGANTOWN	117.56	59.0	18	27	0	25	5	-1			
WASHINGTON	119.38	60.7	18	32K	1					19	56 PP
PENNSYLVANIA	119.47	58.4	18	33	2	25	13	1		19	55 PP
SAN JUAN	119.69	86.7	18	33K	1						
BULAWAYO	120.08	211.5	18	33	1					28	42
RESOLUTE	120.67	17.9	18	33A	-1					29	34 SP
FORDHAM	122.34	59.5	18	26	-11					20	7 PP
PALISADES	122.37	59.3	18	38	1	25	22	0	19 18	20	18 PP
OTTAWA	122.41	53.9	18	37	0	25	21	-1		27	57 SKKS
QUETTA	123.78	286.3	18	42	2						
BREBEUF	123.86	54.3	18	39K	-1	25	28	2			
SHAWINIGAN	124.69	53.2	18	43	2					28	24 PKKP
BROKEN HILL	125.12	214.6	18	21	-21						
SEVEN FALLS	126.12	52.9	18	34	-10	25	34	1		27	19 SKKS
BERMUDA	126.62	72.1	18	37	-8	25	31	-4	19 16	20	39 PP
ELISABTHVLLE	128.06	215.2	18	50A	2					22	10 SKP
HALIFAX	130.60	57.3	18	53A	0					22	1 SKP
NORD	131.31	3.2	18	53	-1					22	0 SKP
UVIRA	134.04	222.8	19	1	2						
ASTRIDA	134.40	224.2	19	0	0						
RUHANGABO	135.66	224.8	19	5	3						
IVIGTUT	138.64	33.0								22	40
LEOPOLDVILLE	139.68	204.2	19	1	-8					22	5 PP
APATITY	140.69	340.4	19	12	1						
SODANKYLA	142.60	343.3	19	11	-4						
KIRUNA	143.55	347.0	19	12	-4					22	28 PP
AKUREYRI	145.96	13.2	19	21	0						
REYKJAVIK	146.46	17.1	19	22	1					22	46
SIDA	147.64	14.8	19	31	8						
VIK	147.74	15.8	19	31	7						
NURMIJARVI	148.43	336.6	19	25	0						
HELSINKI	148.58	336.0	19	30	5						
SKALSTUGAN	148.83	349.3	19	24	-1						
KSARA	150.08	280.9	19	26	-1						
UPPSALA	151.07	341.4	19	26	-2					19	48 PKP2
MBOUR	155.66	137.1	19	38	3	26	47	23			
ABERDEEN	156.21	2.6	19	45A	10					22	30 PP
SKALNATE PL.	158.13	322.1	19	36	-2				20 12		
DURHAM	158.63	2.3	19	39	0	25	41	-46	19 50	23	55 PP
POTSDAM	158.78	337.2	19	38	-1				19 51	20	16 *SPKP
RATHFARNHAM	159.65	10.6	19	39K	-1					24	0 PP
HALLE	159.90	337.6	19	41	1					23	14 PP
WITTEVEEN	160.00	347.8	19	40	0					24	1 PP
HURBANOVO	160.02	321.7	19	36	-4	26	11	-18	20 11	22	55 PKS

ATHENS	160.10	290.0	19 41	1						
PRUHONICE	160.21	331.1	19 35	-5					24 8	PP
BRATISLAVA	160.38	323.7	19 37K	-4	26 11	-18	20 9		24 5	PP
JENA	160.51	337.3	19 38	-3			19 57		27 32	
DE BILT	160.94	349.9	19 42	1					24 7	PP
SONNEBERG	161.10	337.1							20 27	*SPKP
KEW	161.96	0.3	19 42	0					24 11	PP
UCCLE	162.32	350.6	19 43	0					20 32	PKP2
ZAGREB	162.50	319.7	19 43A	0						
DOURBES	162.97	349.5	19 44	1					24 16	PP
LJUBLJANA	163.11	322.6	19 42A	-1					22 30	
STUTTGART	163.15	338.2	19 43A	0			20 2		24 13	PP
TUBINGEN	163.40	338.1	19 43A	-1					20 38	
TOLMEZZO	163.59	326.0	19 47	3					31 39	
STRASBOURG	163.73	340.9	19 43A	-1			20 11		24 17	PP
EBINGEN	163.74	337.7	19 43	-1					20 39	
TRIESTE	163.78	322.9	19 43A	-1						
PARIS	164.50	353.4	19 46	1					20 28	
PAVIA	166.23	331.2	19 46A	0					24 36	PP
MONACO	168.13	332.3	19 48	1						
TAMANRASSET	168.28	206.7	19 49A	1			20 12		24 46	PP
SERRA PILAR	169.79	38.7	19 44K	-4					24 46	PP
COIMBRA	170.53	42.1	19 52A	3						
TORTOSA	172.60	356.1	19 58	8						
TOLEDO	172.84	24.8	19 51	1			20 10		25 9	PP
ALICANTE	175.08	3.0	19 40	-11	26 24	-13			29 24	PPP
GRANADA	175.31	35.9	19 54A	3	27 21	44			21 33	PKP2
ALGIERS UNI.	175.75	322.7	19 51A	0			20 21		25 23	PP
ALMERIA	176.09	28.4	19 50A	-1	26 40	3			25 25	PP
RELIZANE	177.61	346.1	19 53A	2	26 36	-1	20 17		25 33	PP

JUNE 27 19.H 11.M 29.S EPICENTRE 41.87 80.01 DEPTH= 27.KM

A= 0.12951 B= 0.73560 C= 0.66492 D= 0.9849 E=-0.1734
G= 0.1153 H= 0.6549 K=-0.7469 HT= -2.4

SE= 2.29

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
FRUNSE	4.15	285.9	1	4	1	1	50	-1					
ANDIJAN	5.86	261.6	1	27	0								
NAMANGAN	6.34	264.7	1	33	0								
SEMIPALATNSK	8.54	1.0	2	3	-1	3	40	-1					
STALINABAD	9.22	252.6	2	11	-3								
WARSAK DAM	10.31	223.1	2	28A	-1	4	21	-3					
LAHORE	11.26	205.7	2	39	-3	4	37	-11					
DEHRA DUN	11.63	188.5	2	45	-2	4	49	-8			2	54	PP
AGRA	14.79	187.0	3	28A	-1	6	0	-12			3	50	PPP
LHASA	15.11	140.3	3	36A	3	6	26	6					
QUETTA	15.72	226.3	3	38A	-3	6	17	-17			3	48	PP
CHATRA	16.11	156.4	3	46	0	7	1	18					
WUWEI	17.79	95.3	4	9	2								
SEHORE	18.81	188.4				7	48	4			4	32	PP
SHILLONG	18.98	145.2	4	19A	-2	7	49	1			4	39	PP
KARACHI	19.25	217.9	4	29	5								
TOCKLAI	19.35	136.6	4	26	1								
LANCHOW	19.36	99.5	4	25	-1	8	4	7					
IRKUTSK	19.46	49.4	4	26	-1	8	5	6					
SVERDLOVSK	19.48	326.8	4	25	-2	8	5	6					
ULAN-BATOR	19.93	63.2	4	33	1	8	17	8					
YINCHUAN	20.32	90.9	4	41	5								
CALCUTTA	20.51	157.5	4	50K	12	8	33	12					
TIENSHUI	21.44	101.4	4	49	2								
CHITTAGONG	21.83	149.4	4	54A	3	8	51	5			5	20	PP
CHENGTU	22.27	112.4	4	56A	0	8	59	5					
PAOTOW	22.56	83.2	4	50A	-9								
BOMBAY	23.70	197.2	5	21	11	9	31	12			6	16	PPP
POONA	23.85	194.6	5	13	2	9	28	6					
MAKHACH-KALA	23.95	283.6	5	13	1								
KUNMING	25.16	124.7	5	25	1	9	53	9					
GORIS	25.56	276.0	5	27	-1	9	54	3					
TIFLIS	26.15	281.6	5	33	0	10	5	4					
PEKING	27.25	81.7	5	44	1								
SOTCHI	29.45	287.1	6	2	-1								
MOSCOW	30.64	311.6	6	3	-11								

CHANGCHUN	32.95	71.0	6	34	0					
SIMFEROPOL	33.14	291.2	6	35	0	11	54	2		
CANTON	33.46	113.6	6	51	13					
ZO-SE	34.50	94.6	6	48A	1					
HONG KONG	34.59	113.7	6	50	2					
PULKOVO	35.12	317.9	6	52	0	12	24	2		
KSARA	35.45	271.6	6	54	-1	12	12	-16	7	55 PP
YAKUTSK	35.50	38.3	6	53	-3					
APATITY	35.80	331.5	6	57	-1	12	34	1	8	24 PP
HELSINKI	37.83	318.1	7	20	5	13	8	4	8	49 PP
NURMIJARVI	38.01	318.6	7	17	0				8	45 PP
TIKSI	38.15	22.7	6	16	-62					
SODANKYLA	38.23	329.9	7	19	0				8	40 PP
BUCHAREST	38.83	292.5	8	35	71	14	29	70	10	19
LWOW	39.00	301.4	7	25	0				18	59
KHEYS	39.68	352.7	7	32	1	13	35	3		
WARSAW	40.45	305.7	7	37	0	13	48	4	9	12 PP
KIRUNA	40.65	329.8	7	38A	-1				9	21 PP
SOFIA	41.26	290.9	7	46	2	13	43	-13	8	49
UPPSALA	41.52	317.6	7	46A	0				9	26 PP
SKALNATE PL.	41.54	301.2	7	46	0					
KRAKOW	41.54	302.6	7	45	-1	14	0	0	9	20 PP
BELGRADE	42.58	294.9	7	57K	2				12	50
RACIBORZ	42.62	303.0	7	55	0				12	49 PKP
ATHENS	42.70	284.2	7	55A	-1	14	19	2	9	42 PP
BUDAPEST	42.73	299.1	8	3	7				13	34 PKP2
HURBANOVO	43.18	299.9	8	5	5	14	29	5		
BRATISLAVA	43.81	300.6	8	3A	-2					
SKALSTUGAN	43.84	323.3	8	5A	0					
MATUSIRO	44.67	76.8	8	6	-6					
COPENHAGEN	44.81	312.0	8	14K	1	14	57	10	9	59 PP
PRUHONICE	44.93	303.7	8	14A	0	14	39	-10	10	7
PRAGUE	44.98	303.9	8	15	1	15	18	28	9	55 PP
POTSDAM	45.20	307.4	8	16	0				10	0 PP
ZAGREB	45.25	297.7	8	13	-3	15	0	6	10	26 PCP
HALLE	46.10	306.4	8	24	1	15	43	37	10	7 PCP
LJUBLJANA	46.14	298.5	8	23A	0				10	39
TARANTO	46.32	290.3	8	9	-16				18	14
JENA	46.48	305.7	8	25	-1				9	58 PP
TRIESTE	46.78	298.2	8	31	3	15	20	4	10	21 PP
SONNEBERG	46.88	305.1	8	30	1				10	24
TOLMEZZO	47.00	299.4	8	33	3					
MESSINA	48.46	288.2	8	45A	4				9	9 PCP
MUNSTER	48.53	308.1	8	43	1				12	53
STUTTGART	48.62	303.6	8	43A	0	15	46	4	10	38 PP
RAVENSBURG	48.70	302.3	8	45	2					
TUBINGEN	48.79	303.4	8	44	0					
BOLOGNA	48.80	297.6							13	12
WITTEVEEN	48.82	309.4	8	45	1					
EBINGEN	48.97	303.0	8	45	0					
ROME	49.04	294.0	8	51	5				10	31 PP
CHUR	49.09	301.1	8	46K	0				12	54
BENSBERG	49.13	307.0	8	46	-1				13	34
PRATO	49.19	296.9	8	50	3				20	59
STRASBOURG	49.58	303.8	8	49A	-1				10	51 PP
NORD	49.84	349.0	8	52	0	16	5	6	10	53 PP
DE BILT	49.92	308.9	8	53	0	16	7	7		
PAVIA	49.95	299.2	9	56	63				10	53
BASLE	50.08	302.6	8	59	5				13	52
UCCLE	50.86	307.6	8	59	-1					
DOURBES	50.96	306.6	9	1	0					
MONACO	51.68	298.2	9	5K	-1					
PARIS	52.73	305.8	9	14	0					
DURHAM	52.76	313.9	9	13A	-1				10	53 PP
KEW	53.33	309.8	9	17	-1	16	49	3	11	21 PP
CLERMONT-FD.	53.60	302.1	9	20	0				19	50
RATHFARNHAM	55.89	313.7	9	41A	4				12	1 PP
ALGIERS UNI.	57.89	292.5	9	49	-2					
REYKJAVIK	58.00	329.6	9	59	7					
RELIZANE	60.14	292.8	10	6	-1					
THULE	60.27	351.8	10	5	-3				10	53 PCP
TOLEDO	61.05	299.0	10	13	0					
ALMERIA	61.61	295.3	10	15	-2					
GRANADA	62.20	296.2	10	22K	1					
RUMANGABO	62.76	240.5	10	24	0					
SERRA PILAR	63.30	302.3	10	27K	-1					
ASTRIDA	63.46	239.2	10	27A	-2					
RESOLUTE	63.69	358.5	10	30A	-1	19	7	6		
COIMBRA	63.70	301.3	10	30K	-1					

LWIRO	63.80	240.2	10	30K	-1				15	26	
TAMANRASSET	63.88	277.9	10	30	-2				11	16	
UVIRA	64.52	239.1	10	32	-4						
LISBON	64.99	300.3	10	39A	0	19	11	-6	13	1	PP
BANGUI	65.98	253.4	10	43	-2				12	32	
COLLEGE	67.22	20.1	10	52	-1				39	14	PKPPKP
TANANARIVE	67.53	213.4	10	55	0				17	23	
ELISABTHVLLE	71.86	235.0	11	22K	0				13	58	PP
LEOPOLDVILLE	74.50	249.4	11	35	-2	21	8	-1	26	11	SS
SITKA	77.06	18.9	11	53	1						
PORT MORESBY	79.72	112.5	12	7	1						
ALBERNI	86.65	16.0							17	31	*SS
CHARTERS TS.	86.75	120.4	12	42	0						
HORSESHOE B.	86.85	15.0	12	37	-6						
VICTORIA	87.65	15.3	12	47	1				16	41	PKS
HUNGRY HORSE	89.31	9.3	12	53	-1						
ADELAIDE	93.45	135.3	13	14	0				13	32	
BRISBANE	96.39	121.2	13	28	1						
FORT FRANCE	113.26	318.7	18	35	1				23	13	
CARACAS	119.69	321.9	18	14	-33	25	25	-15			
CAPE HALLETT	129.36	156.7	19	7	1						
SCOTT BASE	129.85	164.0	19	6	-1				21	23	PP
SOUTH POLE	131.68	180.0	19	9	-1						
HALLEY BAY	134.21	199.7	19	16	1						
BYRD STATION	141.03	174.7	19	15	-12						
LA PAZ	142.78	303.2	19	35	5				22	43	PP
HUANCAYO	143.32	316.9	19	33	2				23	12	PP
PORT STANLEY	149.91	236.4	19	48	6						

JUNE 28 4.H 23.M 29.S EPICENTRE 63.91 -19.59 DEPTH= 0.KM

A= 0.41661 B=-0.14827 C= 0.89691 D=-0.3353 E=-0.9421
G= 0.8450 H=-0.3007 K=-0.4422 HT=-10.1

SE= 2.94

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
VIK	0.55	152.3	0	9	-6	0	16	-9				
SIDA	0.69	100.1	0	10	-7							
REYKJAVIK	1.04	283.4	0	21	-1							
AKUREYRI	1.88	19.2	0	29	-5	0	50	-8				
SCORESBY SD.	6.67	353.2	1	43	2							
RATHFARNHAM	12.66	140.9	3	6K	2							
DURHAM	12.92	126.8	3	9	1							
SKALSTUGAN	14.03	77.0	3	30	8							
KIRUNA	16.60	58.7	3	57	1	7	14	14				
UPPSALA	17.82	86.0	4	12	1	7	32	4				
SODANKYLA	19.02	59.0	4	24	-2							
NURMIJARVI	20.58	79.1	4	40	-3							
HALLE	20.66	112.1	4	48	4							
JENA	20.95	113.6	4	45	-2							
STRASBOURG	21.35	123.0	4	48	-3	8	43	-1				
APATITY	21.52	56.8	4	49	-4	8	51	4				
STUTTGART	21.73	120.6	4	53	-2							
TUBINGEN	21.87	121.2	4	56	0							
EBINGEN	22.13	121.8	4	59	0							
CLERMONT-FD.	22.17	134.3	4	45	-14						5	38
PRUHONICE	22.89	111.3	5	4A	-2							
TOLEDO	25.76	151.7	5	31	-3							
TORTOSA	25.94	143.4	5	47	11							
LJUBLJANA	26.02	117.1	5	38	2							
RESOLUTE	26.56	324.9	5	42	1	10	22	7				
RELIZANE	30.75	146.8	6	43	24							
BREBEUF	34.89	264.4	6	56	1							
TAMANRASSET	44.37	145.9	8	13	-1							
KSARA	45.13	104.6	8	17	-3							
COLLEGE	46.04	332.2	8	26	-1							
RAPID CITY	48.91	288.1	8	53	3							
EUREKA	58.00	294.9	9	57	0							
TUCSON TELE.	61.96	286.5	10	27	3							

JUNE 28 19.H 43.M 30.S EPICENTRE -9.54 122.47 DEPTH= 50.KM

DEPTH OF FOCUS= 0.003R

A=-0.52958 B= 0.83211 C=-0.16472 D= 0.8436 E= 0.5369
G= 0.0884 H=-0.1390 K=-0.9863 HT= 6.6

SE= 3.15

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
LEMBANG	14.95	279.3	3	29	-1	6	29	14					
DJAKARTA	15.85	281.0	3	40	-1	6	40	4					
PORT MORESBY	24.34	91.7	5	14	0	9	23	-4			6	6	PPP
CHARTERS TS.	25.21	117.1	5	21K	-2	9	47	5					
BAGUIO CITY	25.86	355.8	5	28	-1	10	9	16					
MEDAN	27.06	297.7	5	40A	0	10	5	-7					
ADELAIDE	29.31	152.0	6	0	0	11	14	25			7	59	
RABAUL	29.94	81.8	6	4	-2						16	41	
HENGCHUN	31.39	356.9	6	21	2								
TAWU	31.73	357.2	6	29	7	11	19	-8					
GUAM	31.81	44.4	6	17	-5	11	16	-12			9	13	PCP
HSINKONG	32.46	358.1	6	18	-10								
HONG KONG	32.68	345.7	6	23	-7	11	37	-4			7	36	PPP
ALISHAN	32.90	357.2				11	36	-8					
HWALIEN	33.32	358.6	6	46	11								
CANTON	33.65	344.6	6	38	0	11	52	-5			7	54	PP
BRISBANE	33.88	125.9	6	39K	-1	11	58	-2					
PHU-LIEN	33.94	332.8	6	43	2	11	44	-17			7	53	PP
ILAN	34.11	358.8	6	50	8								
TAIPEI	34.38	358.5	6	49	4						14	41	SSS
MELBOURNE	34.70	147.8	6	45	-2								
CANBERRA	35.26	140.8	6	52K	0	12	22	0			8	17	PP
RIVERVIEW	35.74	136.9	6	56K	0	12	30	1					
KUNMING	39.43	331.1	7	31	4	13	26	1			9	4	PP
FORT NELSON	39.73	151.1	7	30	0	13	40	10					
ZO-SE	40.43	358.3	7	34	-1	13	34	-6			9	10	PP
YAKUSIMA	40.50	10.7	7	40	4						9	32	
NANKING	41.51	355.3	7	44	0	13	51	-5					
MIYAZAKI	42.11	11.4	8	0	11	13	57	-8					
TOMIE	42.35	7.9	7	59	8	15	3	55			18	45	
KUMAMOTO	42.85	10.2	8	3	8								
SAGA	43.20	9.6	8	14	16								
TORISIMA	43.32	22.7	7	49	-10								
OOITA	43.42	11.2	8	8	8								
HUKUOKA	43.54	9.6	7	53	-8						17	47	
CHITTAGONG	43.68	316.9	8	4	2	14	42	14			9	50	PP
ITUHARA	43.98	8.1	8	13	9								
NOUMEA	43.99	112.2	8	4	0								
SIMONOSEKI	43.99	10.1									9	11	
KOTI	44.13	13.3	8	15	9	14	28	-6			9	59	PP
MATUYAMA	44.23	12.3	8	9	3	13	41	-55			10	0	
SIOMISAKI	44.59	15.9	8	11	2	14	34	-7			11	7	
HIROSIMA	44.68	11.7	8	9	-1	14	30	-12			10	1	
TOKUSIMA	44.87	14.3	8	12	1								
TAKAMATU	44.98	13.6	8	13	1						10	3	
TOCKLAI	45.00	324.0	8	14	2								
HAMADA	45.12	11.1	8	12	-1	14	47	-2			17	58	SS
SUMOTO	45.21	14.5	8	13	-1	14	39	-11			10	8	
COLOMBO	45.48	289.5	8	15	-1	14	47	-7					
KOBE	45.60	14.7	8	18	1	14	48	-7					
OSAKA	45.66	15.1	8	19	1	14	45	-11					
NARA	45.77	15.4	8	17	-2								
MATSUE	45.86	12.1	8	20	1								
ABUYAMA	45.88	15.0	8	17A	-3	14	52	-7					
SHILLONG	45.89	320.2	8	8	-12								
YONAGO	45.89	12.4	8	23	3	14	47	-13			19	4	SS
KYOTO	46.06	15.2	8	25	4	14	57	-5					
KAMEYAMA	46.10	16.0	8	21	0	14	55	-8			10	13	PP
TOTTORI	46.16	13.3	8	28	6								
OMAESAKI	46.37	18.0	8	30	7	14	55	-11			10	44	
HAIZURU	46.42	14.7	8	21	-3								
HIKONE	46.43	15.6	8	48	24								
NAGOYA	46.54	16.4	8	27	2	15	2	-7					
IBUKISAN	46.57	15.7	8	30	5								
TIENSHUI	46.66	340.9	8	32	6								
GIHU	46.70	16.1	8	20	-6	15	3	-8					
SHIZUOKA	46.77	18.0	8	24	-2	14	59	-13					
MISIMA	47.08	18.5	8	27	-2								
IIDA	47.11	17.1									13	52	
MERA	47.17	19.5	8	31	1								

HUKUI	47.18	15.3	8	38	8					
KOHU	47.43	17.9	8	32	0	15	17	-4		
TAKAYAMA	47.53	16.3	8	30	-2					
YOKOHAMA	47.58	19.1	8	31	-2				17	42
MATUMOTO	47.83	16.9	8	31	-4	15	20	-7		
TOKYO C.M.O.	47.84	19.0	8	35	0	15	26	-1	11	18
TOYAMA	48.04	15.9	8	31	-5	15	22	-8		
OIWAKE	48.07	17.5	8	40	3	15	26	-4	11	24
KUMAGAYA	48.16	18.4	8	39	2					
MATUSIRO	48.18	17.1	8	34A	-4	15	23	-9	13	50 PCS
NAGANO	48.29	17.0	8	38	0	15	27	-6		
MAEBASI	48.29	18.0	8	39	1	15	37	3	11	14
TUKUBASAN	48.45	19.1	8	35A	-5	15	21	-15	11	26 PPP
KAKIOKA	48.49	19.2	8	40	0				14	25
WAZIMA	48.60	15.3	8	42	1	15	33	-5		
LANCHOW	48.66	339.8	8	40K	-1	15	34	-5		
UTUNOMIYA	48.68	18.7	8	53	12	15	28	-11	13	55
TAKADA	48.70	16.8	8	38	-4					
MITO	48.72	19.4	8	44	2	15	35	-5		
BOKARO	48.83	313.4							15	33
SHIRAKAWA	49.31	18.7	8	45	-1	15	43	-5		
LHASA	49.34	323.2	8	46	0	15	45	-3	10	46 PP
ONAHAMA	49.38	19.5	8	45	-2	15	43	-6		
AIKAWA	49.56	16.4	8	49	1					
PEKING	49.67	353.7	8	47	-2	15	44	-9	18	29 SCS
NIIGATA	49.70	17.2	8	50	1	15	52	-1		
CHATRA	49.81	317.5	8	50	0	15	54	-1		
HUKUSIMA	49.97	18.7	8	51	0	15	53	-4		
YINCHUAN	50.10	343.4	8	55	3					
YAMAGATA	50.39	18.3	8	58	3	15	54	-9		
SENDAI	50.58	18.8	8	55	-1	16	1	-4		
SAKATA	50.83	17.5	9	2	4	16	9	0		
ISINOMAKI	50.86	19.1	8	58	0					
PADTOW	51.18	347.8	8	59K	-2	16	8	-6		
AKITA	51.67	17.3	9	6	2	16	18	-2		
MORIOKA	51.97	18.3	9	5	-1	16	19	-6		
MIYAKO	52.18	19.0	9	4	-4	16	22	-5		
HATINOHE	52.84	18.2	9	17	4	16	31	-5		
AOMORI	52.88	17.4	9	12	-1	16	31	-6		
VLADIVOSTOK	53.11	8.6	9	14	-1	16	45	5		
CHANGCHUN	53.18	2.6	9	13	-3	16	30	-11	18	55 SCS
MACQUARIE I.	53.39	154.4	9	19	2					
HAKODATE	53.75	16.9	9	19A	-1				14	15
ROXBURGH	53.76	140.5				17	17	28	21	30 SS
ONERAHI	53.78	127.5	9	46	26					
KAIMATA	53.85	136.3	9	24	4				10	20
MORI	54.00	16.6	9	22	0	16	46	-6		
COBB RIVER	54.23	134.2	9	23	0					
MURORAN	54.33	16.8	9	23	-1					
SUTTSU	54.56	16.0	9	24	-2	16	55	-5		
TOMAKOMAI	54.68	17.3	9	44	17	16	59	-2		
URAKAWA	54.71	18.4	9	28	1	17	0	-2	14	21
SUVA	54.83	105.4	10	8	40				12	47
SAPPORO	55.12	16.8	9	30K	0	16	58	-9	11	16 PP
GEBBIES PASS	55.14	137.2	9	29	-1					
KARAPIRO	55.27	129.7	9	30	-1				14	22
POONA	55.49	300.2	9	30	-2	17	2	-10		
OBIHIRO	55.54	18.4	9	32	-1	17	9	-4		
TONGARIRO	55.64	131.2	9	33K	0				11	41
WELLINGTON	55.74	133.8	9	32K	-2					
KUSIRO	55.97	19.3	9	37	1	17	13	-6		
ASAHIGAWA	56.07	17.3	9	36	-1					
AGRA	56.44	311.5	9	35A	-4	17	14	-11	19	14 SCS
BOMBAY	56.53	300.1				17	21	-5	19	56
NEMURO	56.68	20.0	9	33	-8	17	21	-7		
TUAI	56.74	130.3	9	43	2				9	59
ABASHIRI	56.87	18.7	9	41	-1	17	23	-7		
WAKKANAI	57.38	16.0				17	32	-5		
DEHRA DUN	58.24	314.6	9	48	-4	17	40	-8	18	14 PPS
TERRE ADELIE	58.63	171.4	9	50	-5	17	55	2		
ULAN-BATOR	58.85	347.8	9	54	-2	17	50	-6		
Y.-SAKHLINSK	59.07	16.0	9	55	-3	17	53	-6		
MIRNY	60.36	193.1	10	6	-1	18	5	-11		
UGLEGORSK	60.86	14.6	10	8	-2	18	16	-6		
LAHORE	61.57	313.7	10	10	-5					
IRKUTSK	63.51	347.6	10	25	-3	18	51	-5		
APIA	64.36	100.7	10	43	10					
WARSAK DAM	64.86	314.6	10	35K	-1	19	4	-8		

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QUETTA	66.35	308.8	10	44K	-2	19	19	-11			13	16 PP
FRUNSE	68.01	324.0	10	55	-1	19	47	-3				
NAMANGAN	68.63	320.9	10	58	-2				11	21		
CAPE HALLETT	68.94	165.9	11	3K	1	20	4	3			11	46 PCP
STALINABAD	69.17	317.5	11	1	-3	19	56	-8				
PETROPAVLOVK	69.62	22.3	11	4	-2	20	6	-3				
SEMIPALATNSK	70.07	332.8	11	9	0	20	10	-5				
YAKUTSK	71.57	3.6	12	17	59							
SCOTT BASE	71.91	171.0	11	19A	-1	20	30	-6			14	1 PP
MAGADAN	72.51	14.7	11	23	-1	20	39	-4				
TANANARIVE	72.79	253.1	11	28K	3						14	17 PP
SOUTH POLE	80.52	180.0	12	8	-1	22	9	-1	12	33	15	23 PP
TIKSI	81.11	2.0	12	8	-4	22	6	-10				
HONOLULU	83.73	67.3	12	25	0							
KIPAPA	83.82	67.2	12	26	0							
BYRD STATION	85.33	171.1	12	33	0	23	0	2	12	52	15	26 PP
ADDIS ABABA	85.34	279.9	12	37	4	22	25	-34				
GORIS	85.50	311.1	12	40	6							
MAKHACH-KALA	85.65	314.7	12	34	-1							
LCO. MARQUES	85.77	244.5	12	38K	3							
HAWAII V.OB.	85.93	69.6	12	38	2	22	57	-7				
TIFLIS	87.22	312.9	12	43	1	23	4	-13				
GRAHAMSTOWN	89.71	236.4	12	57K	3							
BULAWAYO	90.35	249.6	12	58	1							
SOTCHI	91.30	313.9	13	0	-2	23	52	-2				
BROKEN HILL	91.48	255.2	13	5	2	23	33	-23				
KIMBERLEY	92.13	240.5	13	8A	2							
ASTRIDA	92.28	267.0	13	7K	1						16	48 PP
KSARA	92.43	303.7	13	6	-1	24	7	3			16	52 PP
JERUSALEM	92.64	301.6	13	8K	0	24	35	29			16	58 PP
UVIRA	92.73	266.0	13	11	3						16	44 PP
RUMANGABO	92.88	268.2	13	12K	3						16	50 PP
ELISABTHVLLE	92.99	257.8	13	17A	8	24	23	14	13	41	17	0 PP
LWIRO	93.25	267.2	13	13K	2						43	52
MOSCOW	94.92	325.6	13	16	-2	24	20	-5				
HERMANUS	95.40	233.9				23	56	6			24	30 SKKS
SIMFEROPOL	95.50	314.5	13	18	-3							
KHEYS	96.00	350.5	13	16	-7				13	38		
APATITY	98.38	337.2	13	30	-4	24	43	-12	13	55	17	33 PP
COLLEGE	98.44	25.6	13	31	-3	24	48	-7			17	37 PP
PULKOVO	99.26	329.2	13	35	-3	24	54	-8				
WINDHOEK	100.30	244.9	13	44	1							
SODANKYLA	101.00	336.9	13	44	-2	24	16	-4	14	9	17	47 PP
BUCHAREST	101.15	313.5									20	50 PP
NURMIJARVI	102.09	329.9	13	51	0	24	21	-4			17	48 PP
LWOW	102.67	319.0	13	50	-3						25	46
SOFIA	103.11	311.6	13	54	-1	24	30	1			15	40
KIRUNA	103.33	337.6	13	54	-2	25	27	-9			18	0 PP
BANGUI	104.36	272.1	14	1	0						18	16
WARSAW	104.50	321.5	18	12	-3	24	39	3			18	19 PP
SITKA	104.59	33.5									18	54
UPPSALA	105.65	329.6	14	5	777	25	48	-7			18	23 PP
NORD	105.82	354.3	14	5	777	24	38	-3			17	52 PKP
LEOPOLDVILLE	106.19	262.6	14	11K	777	26	2	3	14	34	18	35 PP
RACIBORZ	106.42	319.4	17	43	777						18	42 PP
SKALSTUGAN	107.44	333.9	14	13	777						17	43
PRUHONICE	108.77	319.6	18	16	-7	26	22	4			18	46 PP
PRAGUE	108.83	319.7	18	26	3						18	47 PP
GOTEBORG	108.93	327.9	14	19	777						18	53 PP
COPENHAGEN	109.09	325.7				26	27	4			18	54 PP
MESSINA	109.13	307.1				26	23	0			18	54 PP
LJUBLJANA	109.27	315.4	14	22	777							
POTSDAM	109.33	322.2									18	57 PP
COLLMBERG	109.55	321.1	14	22	777						17	46
TRIESTE	109.85	315.1				25	1	2			19	22 PP
HALLE	110.17	321.4	18	26	0	26	14	74			18	51 PP
TOLMEZZO	110.26	315.9	18	28	2						19	0 PKP
JENA	110.50	320.9	14	51	777						18	57 PP
SONNEBERG	110.83	320.3	19	59	91							
RESOLUTE	111.54	10.0	14	32K	777	26	34	88			18	55 PP
STUTTGART	112.42	318.9	14	37	777	26	52	103			19	12 PP
MUNSTER	112.70	322.5	18	35	4							
THULE	112.89	2.7	18	52	20							
VICTORIA	113.01	41.2	18	34K	2						28	47
PAVIA	113.11	315.1									19	43 PP
BENSBERG	113.22	321.5	18	36	4							
STRASBOURG	113.38	318.9	18	57	24	28	30	197			20	25 PP
CORVALLIS	113.86	45.4	18	41	7							

DE BILT	114.12	323.1							19 30	PP
NEUCHATEL	114.27	317.3	18 36	2						
MONACO	114.59	313.8	18 30	-5						
UCCLE	114.98	321.9	17 57	-39					27 10	
DOURBES	115.02	321.1	18 38	2					27 13	SKKS
SCORESBY SD.	115.14	347.5	18 32	-4	25 21	1			29 13	PS
SHASTA	115.19	49.5	18 39	3						
BERKELEY	115.71	52.6	18 40	3			19	2		
MINERAL	115.84	49.8	18 39A	2					29 6	
LICK	116.28	53.1	18 40A	2			19	4		
ABERDEEN	116.30	330.0			25 32	8			21 53	PPP
PARIS	116.71	320.1							19 48	PP
DURHAM	117.02	327.4	18 42	2						
CLERMONT-FD.	117.13	316.7	18 42	2					36 24	
RENO	117.33	50.4	18 42A	2						
KEW	117.56	323.6	18 41	0	27 35	126			19 59	PP
FRESNO	117.82	53.5	18 43	2						
TAMANRASSET	118.43	290.7	18 45K	3	27 46	134			19 59	PP
PORT STANLEY	119.01	179.8							20 4	
HUNGRY HORSE	119.07	39.5	18 45	1					20 2	PP
ALGIERS UNI.	119.16	306.8	18 42	-2	25 33	-1			20 21	PP
PASADENA	119.54	56.2	18 46A	1	25 37	1	19	9	20 17	PP
RATHFARNHAM	120.15	327.2	18 47	1					20 47	
EUREKA	120.25	49.8	18 47	0					20 16	PP
BUTTE	120.79	41.7	18 48	1					20 41	PP
RELIZANE	121.34	306.1	18 49	1	25 43	1			20 33	PP
ALICANTE	121.58	309.2	18 47	-2	25 45	3			20 22	PP
BOZEMAN	121.91	41.6	18 51	2						
SALT LAKE C.	122.96	47.3	18 53	2					20 32	PP
TOLEDO	123.84	311.9	18 56	3					30 37	PS
GRANADA	124.26	308.6							21 10	PP
TUCSON	125.94	57.0	18 59	2					27 46	PKKP
TUCSON TELE.	126.01	56.9	18 47	-10					22 11	PKS
RAPID CITY	127.65	40.6	19 2	2						
LISBON	127.96	312.1	19 4A	3					19 39	
LUBBOCK	132.83	52.7	19 1	-9					22 33	
LAWRENCE	135.34	42.7	19 5	-10						
DALLAS	137.04	51.4	19 18	0						
FAYETTEVILLE	137.52	45.7	19 9A	-10						
TACUBAYA	138.57	71.5	19 24	3					22 46	
MBOUR	140.07	281.0	19 20	-3	25 54	-32				
SEVEN FALLS	140.88	14.4	19 19	-6					22 56	PKS
SHAWINIGAN	140.89	16.7	19 17	-8					22 32	PKS
OTTAWA	140.99	20.5	19 18	-7						
VERA CRUZ	141.47	71.2	18 50	-36						
BREBEUF	141.59	18.3	19 20A	-6					22 40	PP
TALA POZO	142.29	170.2	19 40	13					22 35	PP
PENNSYLVANIA	144.03	26.7	19 29	-1					23 2	PP
HALIFAX	144.66	7.5	19 28A	-3					23 4	PKS
ANTOFAGASTA	144.68	159.3	19 32	1						
PALISADES	145.47	22.1	19 35	2					23 9	PKS
FORDHAM	145.62	22.2	19 26	-7					29 28	
COMITAN	145.65	75.2	19 50	17						
WASHINGTON	145.93	27.8	19 34	0					23 13	PP
MERIDA	147.10	66.1	19 42	6						
SAN SALVADOR	148.69	79.3	19 44	6						
SANTIAGO MA.	149.44	79.7	19 48	9						
LA PAZ	152.08	157.9	19 47	4					23 38	PP
HUANCAYO	152.19	140.1	19 48A	5					23 6	
BERMUDA	156.33	15.2	19 52	3					24 30	PP
BALBOA HTS.	158.25	89.7	19 52	0						
CHINCHINA	161.49	102.9	19 57	2					20 41	PKP2
BOGOTA	162.87	105.5	19 59	3					20 36	PKP2
FUQUENE	163.44	103.0	19 58	1						
SAN JUAN	167.89	42.6	20 2	1					25 6	PP
CARACAS	170.69	83.3	20 9K	7					21 30	PKP2
FORT FRANCE	173.75	34.1	20 6	2						
ST. VINCENT	174.86	45.2	19 58	-6						
TRINIDAD	176.03	73.6	20 8	3						

JUNE 29 7.H 16.M 7.S EPICENTRE -7.26 155.15 DEPTH= 0.KM

A=-0.90025 B= 0.41685 C=-0.12560 D= 0.4202 E= 0.9074
G= 0.1140 H=-0.0528 K=-0.9921 HT= 6.8

SE= 2.70

The scanned images of the bulletins of the International Seismological Summary (ISS) have been obtained thanks to funding provided by the US National Science Foundation through grant EAR-9725140 (Villaseñor et al., 1997) and collected by SGA Storia Geofisica Ambiente (Bologna) on behalf of the Istituto Nazionale di Geofisica e Vulcanologia (Rome), in the frame of the EUROSEISMOS project.

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
RABAUL	4.25	315.5	1	7	-1						15	47	SCS
PORT MORESBY	8.20	254.4	2	0	-3	3	36	-2			5	6	
CHARTERS TS.	15.33	213.4	3	39	-1	6	49	18					
BRISBANE	20.21	185.5	4	39	0	8	29	7					
GUAM	23.04	333.3	5	2	-6	9	0	-15					
SUVA	25.12	117.7	5	19	-9								
RIVERVIEW	26.69	187.4	5	40	-3	10	24	7					
ADELAIDE	31.41	206.5	6	24	-1	11	29	-4			12	33	
MELBOURNE	31.80	195.4	6	26	-3								
APIA	33.12	104.1	6	7	-33	11	26	-33					
KARAPIRO	35.67	151.8	7	3	1	13	18	39			9	32	PCP
FORT NELSON	36.18	189.7									15	42	SS
TONGARIRO	36.71	153.1	7	13	2						7	39	
WELLINGTON	38.11	155.8				12	56	-20					
GEBBIES PASS	39.40	159.9	7	36	3								
ROXBURGH	40.07	164.5				13	52	6					
MANILA	40.25	302.7	7	42	2	13	49	1					
BAGUIO CITY	41.52	304.8	7	52	1	14	6	-1					
TAWU	44.63	312.1	8	48	32								
HWALIEN	45.11	314.5	8	29	9								
TUKUBASAN	45.51	342.9	8	13	-10	14	55	-10			18	23	SS
MATUSIRO	46.39	341.1	8	28	-2	15	9	-9			10	3	PCP
HONG KONG	49.75	307.3	8	59	3	16	10	5			11	2	PP
ZO-SE	50.12	321.3	9	OK	1	16	12	1			9	54	PP
CANTON	50.85	307.6	9	6	1	16	23	2			18	58	SCS
NANKING	52.25	320.5	9	16K	1	16	42	2					
HONOLULU	53.94	57.2	9	25	-3	17	9	6			21	33	SS
VLADIVOSTOK	54.42	339.2	9	31	0								
PHU-LIEN	55.22	301.4	9	40	3	17	19	-1					
HAWAII V.OB.	55.56	60.6	9	37	-3	17	38	13					
UGLEGORSK	57.26	349.8	9	51	-1	17	51	4					
CHANGCHUN	57.58	334.7	9	53	-1	17	50	-1			19	42	SCS
PEKING	59.22	325.8	10	5	-1	18	10	-3			19	55	SCS
TERRE ADELIE	60.21	186.2	10	12	0	18	9	-17					
PETROPAVLOVK	60.23	2.4	10	2	-11								
KUNMING	60.31	304.1	10	15	2	18	30	3			20	5	SCS
CHENGTU	61.80	310.4	10	22	-1	18	45	-1			20	12	SCS
PAOTOW	63.14	322.8	10	32	0	19	3	0					
LANCHOW	64.63	315.6	10	42	0	19	21	0					
CAPE HALLETT	65.64	175.0	10	53	5	19	38	4			23	59	SS
ULAN-BATOR	69.43	327.6	11	13	1	20	29	10					
SHILLONG	69.58	300.6	11	11	-2								
SCOTT BASE	70.82	177.4	11	21	0	20	37	2			11	38	PCP
LHASA	71.62	304.4	11	26	0	20	45	0			14	6	PP
YAKUTSK	71.83	347.7	11	32	5								
MIRNY	72.51	201.8	11	32	1								
AGRA	81.96	298.7				22	22	-15					
BYRD STATION	82.08	169.9	12	24	0	22	39	1					
SOUTH POLE	82.78	180.0	12	26	-2								
COLLEGE	83.28	21.1	12	27	-3	22	46	-4			23	56	PPS
SEMIPALATNSK	86.05	321.7	12	37	-7								
BERKELEY	88.59	51.7	12	58A	2	23	30	-12					
LICK	88.99	52.3	13	14	16								
SHASTA	89.00	48.9	12	50	-8								
MINERAL	89.53	49.4	13	OK	-1								
FRESNO	90.35	53.1	13	8	3								
RENO	90.76	50.4	13	9	3								
PASADENA	91.29	55.9	13	12	3	24	18	12			16	47	PP
STALINABAD	91.66	308.5	13	48	37								
QUETTA	92.06	300.0	13	11	-1	24	11	-2			16	51	PP
EUREKA	93.70	50.8	13	20	0								
KHEYS	99.36	350.1									27	16	PS
RESOLUTE	102.18	14.8	13	57	-1	24	37	-62			27	13	PS
RAPID CITY	103.38	46.5	13	8	-56								
NORD	105.58	358.8				24	56	-2					
MAKHACH-KALA	107.83	312.7				24	32	-4					
TIFLIS	109.97	311.7									19	0	PP
MOSCOW	111.28	327.4									19	23	PP
KIRUNA	112.41	343.0				25	59	37			28	47	PS
SCORESBY SD.	116.83	358.9				25	42	3			29	36	PS
SIMFEROPOL	116.85	317.0									19	56	PP
KSARA	118.26	304.5	18	50	0						20	9	PP
JERUSALEM	119.17	302.3									20	30	PP
BREBEUF	123.31	39.3	19	2	3								
ASTRIDA	124.67	261.8	19	6	4								

ELISABTHVLLE	124.73	250.5	19	10	8	26	19	14				
PALISADES	125.03	44.3	19	4	1	26	12	6	20	50	PP	
UVIRA	125.10	260.6	19	7	4							
LWIRO	125.64	262.0	19	8	4							
JENA	127.04	331.9	19	8	1	26	30	18	21	26	PP	
LJUBLJANA	128.63	325.6	19	12	2							
CHINCHINA	129.48	89.5	19	15	4				22	36	SKP	
STUTTGART	129.64	331.2	19	12	0				21	21	PP	
HALIFAX	129.82	35.6							22	38	PKS	
STRASBOURG	130.45	331.9							21	29	PP	
BOGOTA	130.99	90.2							22	42	PKS	
LA PAZ	131.10	119.2	19	19	5				22	45	PKS	
FUQUENE	131.40	89.1							22	45	SKP	
KEW	131.49	339.7							22	44	SKP	
MESSINA	132.27	316.4	19	17	0	26	49	23	21	41	PP	
BERMUDA	135.36	50.5				27	9	37	21	56	PP	
LEOPOLDVILLE	138.35	255.1	19	34	6				23	7	PKS	
ALGIERS UNI.	141.16	323.2	19	32	-1				22	51	PP	
RELIZANE	143.33	324.3	19	36	-1				21	1		
GRANADA	144.50	330.1	19	44K	5	26	47	1	29	0	SKKS	
LISBON	145.63	338.0	19	43	2							
TAMANRASSET	146.97	301.1	19	45	2				23	31	PKS	
MBOUR	169.52	313.1	21	27	78				25	39	PKS	

JUNE 29 13.H 19.M 46.S EPICENTRE 5.82 126.25 DEPTH= 111.KM

DEPTH OF FOCUS= 0.012R

A=-0.58831 B= 0.80234 C= 0.10074 D= 0.8064 E= 0.5913
G=-0.0596 H= 0.0812 K=-0.9949 HT= 7.0

SE= 1.93

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S	
BAGUIO CITY	11.91	332.6	2	49	2	5	9	11					
GUAM	19.75	66.0	4	20	-3	7	58	3					
HONG KONG	20.12	325.7	4	28	1	8	18	16					
ZO-SE	25.59	349.9	5	21	1	9	39	1					
PORT MORESBY	25.74	125.8	5	20	-2	9	49	9			6	0	PP
NANKING	27.01	346.0	5	35	2								
MEDAN	27.57	266.6	5	31	-8								
KUNMING	29.59	312.7	5	58	1								
CHARTERS TS.	32.34	143.0	6	22	1	11	30	5					
CHENGTU	32.36	322.5	6	21	0								
MATUSIRO	32.49	18.1	6	18A	-4	11	33	5			9	7	PCP
PEKING	35.25	346.5	6	46	0	12	11	1			16	59	SCS
LANCHOW	36.48	328.7	6	57	1								
CHITTAGONG	37.08	299.8	7	1	0								
VLADIVOSTOK	37.48	6.8	7	5	1	12	48	4					
CHANGCHUN	37.86	358.9	7	8	0	12	54	4					
SHILLONG	38.29	304.6	6	43	-28								
LHASA	40.78	309.8	7	33	1	13	37	3					
BRISBANE	42.02	143.3	7	42A	0						9	38	PPP
ADELAIDE	42.20	164.7	7	46A	3	13	52	-3			9	20	PP
CHATRA	42.66	303.8	7	50	3								
ULAN-BATOR	45.09	341.7	8	8	1								
RIVERVIEW	45.94	150.8	8	10K	-3								
CANBERRA	46.18	154.0	8	17K	2						9	50	PP
MELBOURNE	46.80	159.6	8	19	-1						8	41	
PETROPAVLOVK	54.08	23.5	9	13	-2								
YAKUTSK	56.11	2.0	9	29	0	17	13	5					
MAGADAN	56.80	14.6	9	35	0								
WARSAK DAM	57.74	306.7	9	41	-1								
QUETTA	60.64	301.3	10	1K	-1								
KARAPIRO	63.15	137.8	10	19K	1				11	1	11	30	
TONGARIRO	63.84	139.0	10	26	3								
TIKSI	65.75	0.9	10	35	0	19	13	2					
SVERDLOVSK	71.95	328.2	11	11	-2								
TERRE ADELIE	73.28	173.8	11	19	-2								
HONOLULU	74.55	69.6	11	30	2								
HAWAII V.OB.	77.24	71.5	11	46	2								
TIFLIS	79.77	311.2	11	57	0								
KHEYS	81.57	350.3	12	4	-3	22	2	-6					
CAPE HALLETT	82.94	167.6	12	15A	1								
COLLEGE	83.04	25.4	12	14	0								
MOSCOW	84.46	325.4	12	21	0								

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APATITY	85.74	337.4	12	25	-3	22	50	1		22	35 SKS
SCOTT BASE	86.46	172.1	12	31K	0						
SODANKYLA	88.36	337.6	12	40	0						
KIRUNA	90.56	338.6	12	50	-1						
HELSINKI	90.58	330.6	12	51	0					12	59 PCP
NURMIJARVI	90.65	331.0	12	53	2			13	31	13	3 PCP
NORD	90.98	354.9	12	53	0						
UPPSALA	94.21	331.3	13	8	1						
SKALSTUGAN	95.21	335.8	13	12	0						
SOUTH POLE	95.79	180.0	13	16	1			14	4	14	17 *SP
RESOLUTE	95.86	10.1	13	16A	1					17	4 PP
PRUHONICE	99.24	322.6	13	32	2						
BYRD STATION	99.81	170.7	13	35	2			14	21		
EUREKA	107.16	45.8	14	7	777					29	47 PKKP
TUCSON	113.87	51.1	18	31	5					19	22 PP
TUCSON TELE.	113.92	50.9	18	30	4					19	21 PP
TAMANRASSET	115.50	298.5	18	32K	3			19	22	19	41 PP
SHAWINIGAN	125.19	16.0	18	50A	2						
MORGANTOWN	128.71	25.9	18	57K	3						
PALISADES	129.86	19.9	19	2	5					22	17
WASHINGTON	130.54	24.0	19	1	3						
SAN JUAN	153.03	26.7	19	40	3						
HUANCAYO	157.81	107.7	19	50	7			20	24		
LA PAZ	162.36	128.2	19	54	6					20	42 PKP

JUNE 30 7.H 26.M 20.S EPICENTRE 45.41 27.29 DEPTH= 0.KM

A= 0.62600 B= 0.32297 C= 0.70980 D= 0.4585 E=-0.8887
G= 0.6308 H= 0.3254 K=-0.7044 HT= -3.7

SE= 2.90

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
SOFIA	3.94	227.9	1	12	9	1	50	-1			2	3 SG
TIMISOARA	4.28	276.7	1	10	2	2	8	9				
SIMFEROPOL	4.85	93.0	1	33	17							
LWOW	4.94	334.6	1	23	6	2	15	-1				
BUDAPEST	6.05	292.9	1	35	2	2	59	15				
KRAKOW	6.79	315.7	1	44	1	3	50	48				
RACIBORZ	7.70	310.6	1	56	0							
LJUBLJANA	8.96	278.6	2	15	1							
PRUHONICE	9.73	302.6	2	24K	0							
MOSCOW	12.23	28.6	2	56	-2							
STUTTGART	12.78	291.7	3	4	-2							
PULKOVO	14.50	6.1	3	35	7							
GOTEBORG	15.51	328.0	3	40	-2							
UPPSALA	15.58	341.6	3	40	-3							
SKALSTUGAN	20.09	340.3	4	37A	-1							
SODANKYLA	22.02	359.3	4	57	-1							
APATITY	22.43	6.2	4	51	-11	8	57	-7				
KIRUNA	22.76	353.3	5	4	-1							
TAMANRASSET	28.72	225.4	5	59	-2						9	7 PCP
CHATRA	50.62	90.2	9	8	6							
COLLEGE	69.99	357.8	11	12	-3							
SOUTH POLE	135.22	180.0	19	14	-8							
BYRD STATION	143.30	189.2	19	31	-5							
SCOTT BASE	143.81	166.5	19	30	-7							
KARAPIRO	155.24	83.7	20	22	27							

JUNE 30 10.H 23.M 23.S EPICENTRE -34.31-178.38 DEPTH= 34.KM

DEPTH OF FOCUS= 0.000R

A=-0.82742 B=-0.02337 C=-0.56109 D=-0.0282 E= 0.9996
G= 0.5609 H= 0.0158 K=-0.8278 HT= 0.4

SE= 2.27

	DELTA DEG.	AZ. DEG.	P M	P S	O-C S	S M	S S	O-C S	*PP M	*PP S	SUPP. M	SUPP. S
TUAI	5.74	217.5	1	22	-3	2	26	-5				
KARAPIRO	6.10	232.1	1	26K	-4	2	41	0				
ONERAHI	6.12	254.2	1	32	2						1	51

TONGARIRO	6.90	223.3	1	36	-5	2	56	-4		1	54
WELLINGTON	8.82	215.9	2	5	-3	3	36	-11			
COBB RIVER	9.76	223.6	2	32	11	3	58	-12			
KAIMATA	11.44	221.3	2	41	-3	4	42	-10			
GEBBIES PASS	11.68	214.0	2	43	-4	4	43	-14			
APIA	21.28	17.9	4	45	-1	8	24	-11			
BRISBANE	25.41	277.7	5	29K	3	9	50	2			
CANBERRA	26.74	258.5	5	41A	3						
MELBOURNE	29.71	252.5	6	2	-3						
CHARTERS TS.	34.34	285.3	6	45	-1	12	11	1			
ADELAIDE	35.11	256.5	6	51K	-1					7	37
CAPE HALLETT	38.51	185.5	7	23	2					15	53 SS
TERRE ADELIE	40.05	203.4	7	36	3						
PORT MORESBY	40.14	300.0	7	37	3					17	54
RABAUL	40.56	311.1	7	36	-2						
SCOTT BASE	44.12	184.5	8	6	-1					9	49 PCP
BYRD STATION	51.16	168.9	9	1	-1				10	28	
SOUTH POLE	55.87	180.0	9	35	-2				9	53	
MIRNY	58.52	208.0	9	54	-1						
GUAM	59.04	317.1	9	57	-2						
HALLEY BAY	68.93	172.7	11	2	-2						
MATUSIRO	81.28	326.0	12	12	-2	22	17	-4			
PASADENA	88.42	46.1	12	49	-1	23	49	18			
LICK	88.69	41.8	12	51	0						
BERKELEY	88.73	41.1	12	50A	-1						
FRESNO	89.31	43.3	12	53	-1						
SHASTA	90.71	39.1	13	0	-1						
MINERAL	90.88	39.8	13	1A	0						
RENO	91.26	41.3	13	3	0						
TUCSON	91.73	51.6	13	5	0						
TUCSON TELE.	91.86	51.6	13	6	0						
EUREKA	93.36	43.4	13	12	-1					16	56 PP
HUANCAYO	93.81	107.2	13	17	2						
LA PAZ	96.69	115.0	13	31	3					17	25 PP
COLLEGE	101.71	12.8	13	50	-1						
RESOLUTE	121.06	18.0	18	47A	-2					29	55 PS
PALISADES	121.55	59.3								37	25 SS
QUETTA	125.44	285.0	18	59	1						
ELISABTHVLLE	128.15	212.8	19	11	8						
APATITY	142.02	340.8	19	26	-3						
SODANKYLA	143.87	343.9	19	29	-3						
KIRUNA	144.74	347.8	19	31K	-2						
TIFLIS	145.47	295.3	19	37	2						
BANGUI	146.29	211.7	19	37	1						
REYKJAVIK	146.85	18.7	19	38	1						
MOSCOW	147.29	322.0	19	39	1						
SIDA	148.09	16.4	19	42	3						
PULKOVO	148.36	332.4	19	40	1						
NURMIJARVI	149.82	337.3	19	47	5						
SKALSTUGAN	149.97	350.5	19	45	3						
HELSINKI	149.98	336.7	19	46	4						
KSARA	151.69	278.8	19	44	0						
JERUSALEM	151.79	274.3	19	54	9					20	3 PKP2
UPPSALA	152.37	342.5	19	55	10						
SIMFEROPOL	152.97	302.9	19	57	11						
GOTEBORG	155.58	346.5	20	6	16						
LWOW	157.39	320.1	19	53	1						
PRUHONICE	161.68	332.6	19	32	-25					20	55
JENA	161.87	339.4	20	4	7					24	40 PP
STUTTGART	164.49	340.9	19	59	-1					20	55 PKP2
LJUBLJANA	164.70	323.9	20	1	1						
TAMANRASSET	168.01	197.6	20	5A	3					24	58 PP

The scanned images of the bulletins of the International Seismological Summary (ISS) have been obtained thanks to funding provided by the US National Science Foundation through grant EAR-9725140 (Villaseñor et al., 1997) and collected by SGA Storia Geofisica Ambiente (Bologna) on behalf of the Istituto Nazionale di Geofisica e Vulcanologia (Rome), in the frame of the EUROSEISMOS project.

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A digital hypocenter file of the ISS (Villaseñor and Engdahl, 2005) can be obtained from the USGS web site: http://earthquake.usgs.gov/scitech/iss/

Villaseñor, A., and E.R. Engdahl, *A digital hypocenter catalog for the International Seismological Summary,* Seism. Res. Lett., vol. 76, no. 5, pp. 554-559, 2005.

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