EARTHQUAKE PHASES RECORDED AT HERMANUS

1968 DECEMBER 1-31

PRELIMINARY REPORT

Date 1968	Phase	U.T. h m s	Remarks
Dec. 1	e	13 38 25	Weak
	F	14 39 ..	
Dec. 2	e	02 38 21	Central Africa?
	i	38 29	
	e	39 13	
	$i_N(e_E)$	42 10	
	i_E	42 20	
	F	04 07 ..	
Dec. 9	e	18 47 44	Isolated phase
Dec. 11	e	21 04 02	
	i	04 07	
	F	21 45 ..	
Dec. 17	e	12 32 37	
	F	14 18 ..	

Traces: 1968 Dec. 5, 0825 - 0900; Dec. 5, 1027 - 1144; Dec. 7, 0520 - 0756; Dec. 15, 0430 - 0542; Dec. 16, 0703 - 0708; Dec. 19, 1635 - 1658; Dec. 19, 1743 - 1800; Dec. 22, 1625 - 1649; Dec. 22, 1834 - 1856.

HERMANUS.
27th January, 1969.

A.M. van Wijk.
Chief : Magnetic Observatory.

Geological Survey Office,
Department of Mines,
~~P.O.Box 401~~,
Bag 112,
Pretoria

Seismological Bulletin. Republic of South Africa.

The data herewith give the results from a network of seismographs intended particularly for the study of earthquakes occurring in or near South Africa. This bulletin, however, is prepared regularly and will be sent to interested organizations on request.

Stations	Lat.	Long.	
Pretoria (PRE)	25°45.2'S	28°11.4'E	Height 1350m. Lithologic Foundation Weathered shale. Instrument Vertical S.P.(1.0 sec.) seismometer:Geotech Model 1051 Two horizontal S.P.(1.0sec) seismometers Geotech Model 1101 Vertical L.P. (15sec) Seismometer:Sprengnether Two horizontal L.P.(15sec) Seismometers Sprengnether Galvanometers forS.P. System 0.75 secs. Galvanometers for LP System 100.0 secs. Seismological Officer: Director, Geological Survey, P.O. Box 401 Pretoria.
Windhoek (WIN)	22°34'S	17°06 E	Height 1728m. Lithologic Foundation Micha Schist. Instrument: Same as Pretoria. Seismological Officer :Officer in charge
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All times are given in G.M.T.

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Address
Bernard Price Institute of Geophysical Research,
University of the Witwatersrand,
Jan Smuts Avenue,
Johannesburg , South Africa.

H.O. Oliver.
Seismological Officer.

Date	Station	Phase	G. M. T.	Arc Dist.	R/C	Remarks
2	WIN	iPKP	00 40(04.5)	128		USCGS H=00 21 10.8 5.1 S 153.4 E New Ireland reg. h=55 mag. 5.5
2	WIN	iP	22 56 29.3	75		USCGS H=22 45 08.5 22.6 S 66.6 W Juy Juy Prov. Argentina h= 237 mag. 5.3
3	WIN	iPKP2	02 44 42.0	151		USCGS H= 02 24 54.1 51.8 N 173.3 W Andreanof I's Aleutian I's h=39 mag.4.6
~~4~~	~~PIE~~	~~i~~	~~01 17 08~~	~~155~~		
5	PRE	iPKP	09 37 58.0	150	C	USCGS H=09 18 09.9 55.9 N 154.6 W S.of Alaska h=33 mag. 4.8
~~5~~	~~PRE~~	~~i~~	~~15 25 10.0~~			
~~5~~	~~GRM~~	~~t~~	~~18 46 00~~			
6	KIM	iP	23 39 06	84		USCGS H=23 27 21.2 27.8 S 71.1 W near coast N Chile h= 33 mag. 5.8
	PIE	iP	58	87		
~~6~~	~~GRM~~	~~i~~	~~23 54 30.5~~		~~C~~	
8	KIM	iP	18 56 50	85		USCGS H= 18 44 24.5 18.6 S 69.9 W N. Chile h= 116 mag. 5.4
	~~GRM~~	~~t~~	~~57 00~~			
~~11~~	~~WIN~~	~~t~~	~~15 51 00~~			
11	PIE	iP	19 50 59	216km		BPI H= 19 50 26 28.30 S 28.30 E Witzieshoek reg. S.A. Lesotho na border
		iS	51 23			
	GRM	iP	23.7	450km		
		iS	52 07.7			
	~~WIN~~	~~t~~	~~57 00~~			
11	PIE	iP	23 17 43	225km		Same region as above
		iS	18 08			
12	GRM	iPn	01 00 48.3			Uitenhage area . Felt over a wide area.
	PIE	iPn	01 51	730km		BPI H= 01 00 16
			02 14			
		iSi	03(40)			
	WIN	iPn	02 58.5			
		iSn	04 54.0			
	KIM	iPn	01 20	480		
12	PIE	iP	05 22 42	214km		from station
		IS	23 06			
12	PIE	iP	04 48 30	216km		from station
		iS	54			
~~13~~	~~GRM~~	~~i~~	~~16 18 50.0~~			Probably Argentine
	~~PIE~~	~~t~~	~~00~~			
~~14~~	~~WIN~~	~~iPP~~	~~08 22 04.0~~	~~192~~		USCGS H=08 01 27.8 22.5 S 179.6 W South of Fiji Islands h= 610 mag. 5.2
14	PIE	iPn	10 38 09	760km		25 S 32 E BPI H=10 36 30 Mocambique
		iSn	39 20			
	KIM	iPn	38 44	1050km		
		iSn	40 19			
	GRM	iPn	39 17.5			
		iSn	42 55.5			
		iS	42 30.5			
	WIN	iPn	40 03.5	1800km		
		iSn	42 50.5			
		iSi	44 12.9			
~~14~~	~~PIE~~	~~t~~	~~12 01 00~~			
14	kim	iP	12 38 35	68		USCGS H= 12 28 24 37.8 N 13.1 E Sicily h= 33 mag. 5.1
	GRM	iP	20.0	72	D	
	~~WIN~~	~~t~~	~~45 00~~			
14	WIN	iPKP2	13 00(32.0)	151		USCGS H=12 40 48.5 52.8 N 171.4 W Fox I'S Aleutian I's h= 44 mag.5.6
14	WIN	iPKP2	18 02(55.0)	151	C	USCGS H= 17 43 10.0 52.7 N 171.2 W Fox I's Aleutian I's h= 34 mag 5.5
15	WIN	iP	02 11 13.5	61	C	USCGS H=02 01 08.5 37.9 N 13.1 E Sicily h= 33 mag. 5.4
~~15~~	~~PRE~~	~~t~~	~~18 37 00~~			
	~~WIN~~	~~t~~	~~39 00~~			
~~16~~	~~WIN~~	~~i~~	~~14 51 30.1~~		~~C~~	
16	WIN	iP	16 52 54.0	61	C	USCHS H= 16 42 44.3 37.9 N 13.1 E Sicily h= 14 mag. 5.1
~~16~~	~~WIN~~	~~i~~	~~18 34 21.0~~			
19	WIN	iPKP	06 23(48.6)	132		USCGS H=06 04 38.2 9.4 S 158.4 E Solomon I's h= 33 mag. 6.0
	~~PRE~~	~~t~~	~~24 00~~			
19	KIM	iP	14 51 42	72		USCGS H=14 39 37.8 42.6 S 75.2 W off coast S. Chile .h=22 mag.5.5
	PRE	iP	58.0	81		
~~19~~	~~PRE~~	~~i~~	~~15 30 00~~			
~~19~~	~~PIE~~	~~i~~	~~18 33 51~~			
	~~KIM~~	~~i~~	~~24 42~~		~~C~~	
	~~PRE~~	~~i~~	~~44.0~~		~~C~~	
	~~GRM~~	~~i~~	~~47.9~~			

Date	Station	Phase	G. M. S. T.	Arc. Dist.	R/C	Remarks
~~19~~	~~KIM~~	~~i~~	~~21 39 36~~		~~R~~	
	~~PRE~~	~~i~~	~~39.5~~		~~C~~	
	~~WIN~~	~~i~~	~~52.2~~		~~C~~	
21	WIN	iP	16 49(40.0)	38		USCGS H= 16 42 29.2 1.2 S 14.0 W North of Ascension I's. h= 33 mag.-
	PRE	iP	51 04.0	48		
	GRM	iP	17.7	50		
	~~PIE~~	~~t~~	~~52 00~~			
21	WIN	iPKP	23 14 21.0	130	C	USCGS H= 22 55 35.8 5.0 S 150.8 E New Britian region h= 185 mag. 5.0
22	PIE	iP	20 11 24	207km		from station
		iS	47			
22	PIE	iP	21 16 56	225km		from station
		iS	17 21			
23	PIE	iP	00 56 37	225km		from station
		iS	57 02			
23	PRE	iPKP2	16 26 36.0	153		USCGS H=16 06 50.1 52.1 N 171.3 W Fox I's
	WIN	iPKP2	36.5	152		Aleutian I's h= 53 mag. 5.2
	PIE	ePKP2	(41)	156		
23	PIE	iP	21 14(10)	8		USCGS H=21 12 37 23.5 S 33.0 E Mozambique h= 33 mag.-
		iS	15 21			
	~~KIM~~	~~i~~	~~(55)~~	~~14~~		
	WIN	iP	16 03.5	19		
		iS	20(20.0)			
25	~~WIN~~	~~i~~	~~10 06 55.1~~		~~R~~	
25	PRE	iS	18 14 23.9			
	~~WIN~~	~~t~~	~~16 00~~			
26	PIE	iP	04 58 21	90		USCGS H= 04 45 41.4 8.8 S 120.4 E Flores
	PRE	iP	33.5	92	C	I's region h= 29 mag. 5.9
	GRM	iP	(33.5)	92	C	
	WIN	iP	59 23.1	102	P	
~~29~~	~~KIM~~	~~i~~	~~05 11 35~~			
	~~PIE~~	~~t~~	~~12 00~~			
29	WIN	iP	10 32 21.0	131	C	USCGS H= 10 18 16.5 5.6 S 153.9 E New Ireland re
29	PRE	iPKP	10 38 08.0	128	P	region h=70 mag. 5.3
	KIM	iPKP	10	132		USCGS H=10 19 05.6 43.6 N 146.7 E Kurile I's
	WIN	iPKP	13.9	134		h= 40 mag.-
~~29~~	~~PRE~~	~~i~~	~~12 08 56.0~~		~~R~~	
29	PRE	iPKP	17 01 54.0	128	C	USCGS H=16 42 50.4 43.5 N 147.2 E Kurile I's h= 36 mag. 5.7
29	WIN	iPKP2	21 12 01.5	142	P	USCGS H=20 52 21.3 56.4 N 153.6 W Kodiak I's
	PRE	iPKP2	11.5	151	P	reg. h=61 mag. 5.4.3
29	PRE	iPKP2	21 31 23.5	151	C	USCGS H=21 11 36.1 56.5 N 153.3 W Kodiak I's reg. h= 19 mag. 5.6
30	PRE	iP	01 49 20.0		C	
30	PIE	iP	03 55(43)	83		USCGS H=03 44 24.2 6.1 S 113.3 E Java h=
	PRE	iP	49.5	86	C	594 mag. 6.2
	KIM	iP	56 04	88		
	WIN	iP	39.5	95	C	
~~30~~	~~WIN~~	~~i~~	~~20 24 29.1~~		~~R~~	
~~30~~	~~PRE~~	~~i~~	~~22 38 00.0~~			
31	WIN	iP	02 13 54.5	71	C	USCGS H= 02 03 29.4 27.7 S 63.2 W Santiago De
~~31~~	~~PRE~~	~~i~~	~~20 25 13.0~~			Del Estero Province Argentine h= 580 mag.
~~31~~	~~WIN~~	~~t~~	~~22 39 00~~			4.9

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1	WIN	t	10 22 00			
2	PRE	iPKP2	03 34 36.6	152	C	USCGS H=03 14 44.5 49.2 N 129.1 W Vancouver I's region h= 33 mag. 5.1
2	WIN	t	05 46 00			
2	PRE	iP	11 22 55.5	52		USCGS H= 11 14 01.1 60.7 S 25.5 W S. Sandwich I's reg. h= 33 mag. 5.3
2	PRE	iPcP	16 30(20.1)	89		USCGS H= 16 17 29.0 29.9 N 100.2 ESzechwan Prov. China h= 24 mag. 5.1
2	PRE	t	16 40 00			
2	PIE	iP	22 10 40	45	C	USCGS H= 22 02 24.8 6.1 S 71.4 E Chagos Archipelago reg. h= 33 mag. 5.6
	PRE	iP	(42.6)	46		
	GRM	iP	11(11.0)	50	R	
	KIM	iP	12	50	R	
	WIN	iP	53.9	55		
3	PRE	iP	23 08 10.8	95		USCGS H= 22 55 36.8 1.6 N 122.6 E, Northern Celebes h= 435 mag. 5.5
	WIN	t	12 00			
4	PRE	t	00 00 00			
4	PRE	iPn	05 12 07.3	17		USCGS H= 05 08 19.0 9.7 S 32.7 E Zambia h=33 mag. 4.8
		iSi	16(51.8)			
	WIN	iPn	12 49.0	21		
		iSi	18 44.0			
	PIE	iP	12 51	20		
	GRM	iP	13 31.9	25		
4	PRE	iP	07 29(14.3)			Probably Mozambique
		iS	33(53.3)			
	WIN	iP	29 50.1			
		iS	35(35.5)			
4	WIN	i	11 34 44.4			
4	PRE	t	23 57 00			
5	PRE	iPKP2	00 42 01.9	153		USCGS H= 00 22 06.9 53.8 N 163.3 W Unimak I's region h=33 mag. 48
	WIN	iPKP2	02.0	150		
5	WIN	iPKP2	00 50 43.5	150		USCGS H= 00 30 57.4 53.8 N 163.3 W Unimak I's region h= 33 mag. 4.9
	PRE	iPKP2	47.5	153	R	
5	WIN	t	11 34 00			
5	WIN	t	15 40 00			
5	WIN	t	23 04 00			
7	GRM	t	01 30 00			
	WIN	t	32 00			
7	WIN	ePKP	13 41(21.1)	126		USCGS H=13 22 16.6 5.9 S 151.1 E New Britian region h= 39 mag. 6½
9	PRE	iP	00 57(27.5)	73		USCGS H=00 46 00.9 8.7 N 94.0 E Nicobar I's region h= 33 mag. 5.0
	WIN	iP	58 18.5	81		
10	PRE	iPKP2	04 09(07.0)	149		USCGS H=03 49 25.0 52.1 N 177.3 W Andreanof I's Aleutian I's h= 7 mag. 5.4
	WIN	iPKP2	(15.5)	150		
	PIE	iPKP2	(17)	150		
	KIM	iPKP2	(19)	152		
11	GRM	iPKP	08 45 21.6	127		USCGS H=08 26 32.8 16.2 S 173.9 W Tonga I's h= 112 mag. 6.0
11	WIN	i	18 44 44.6			
13	PRE	iP	09 40 25.1	47		USCGS H= 09 31 47.5 57.1 S 23.7 W S. Sandwich I's region h= 33 mag. 5.2
13	PRE	iPKP2	14 44 04.9	149	R	USCGS H=14 24 23.4 51.7 N 175.4 W Andreanof I's Aleutian I's h= 54 mag. 4.4
15	PRE	t	02 34 00			
16	PRE	t	07 14 00			
	WIN	t	15 00			
16	WIN	t	12 29 00			
16	PRE	i	13 12 35.6			
17	PRE	t	20 33 00			
18	PRE	i	13 13 18.5			
19	WIN	t	15 04 00			
20	WIN	iPcP	06 32 38.0	77	R	USCGS H= 06 20 30.8 20.3 S 70.0 W near coast N Chile h= 47 mag. 5.1
20	PRE	i	07 30 05.0		C	
20	PRE	iPPP	08 06 42.2	51		USCGS H=07 54 40.4 40.9 N 75.1 E Kirgiz-Sinkiang border region h= 60 mag. 4.6
20	PRE	iPKPi	12 32 42.9	150	C	USCGS H=12 13 08.4 51.4 N 177.7 E Rat I's Aleutian I's h= 45 mag. 5.1
	WIN	iPKPi	50.0	154		
	KIM	iPKPi	55	154		
20	WIN	t	13 05 00			
20	PRE	t	19 16 00			
	WIN	t	18 00			
21	WIN	e	02 07(40.0)			
21	PRE	t	03 13 00			
	WIN	t	15 00			
21	WIN	t	04 11 00			
21	PRE	iS	13 02 48.4			

March 1968 continued.

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21	PRE	t	23 36 00			
22	KIM	iPcP	02 08 04	84		USCGS H= 01 55 43.5 20.4 S 69.0 W N. Chile h=96 mag. 5.5
23	PRE	t	03 50 00			
23	PRE	t	03 57 00			
23	PRE	i	15 19 47.0		R	
24	WIN	iPP	07 21 06.9	46	R	USCGS H= 07 12 47.4 1.3 S 24.2 W Central Mid Atlantic Ridge h= 33 mag. 5.4
	PRE	iPcP	22 25.5	56	R	
26	PRE	iP	00 53 40.5	85		USCGS H=00 41 56.9 6.6 S 116.1 E Bali Sea h=520 mag. 5.9
26	PRE	iP	13 17 30.4			Probably Mozambique
		iS	19 00.0			
	WIN	iP	44.7		C	
26	WIN	t	20 00 00			
27	WIN	t	04 35 00			
27	WIN	iSi	08 31 46.5			
27	PRE	i	13 56 00			
27	PRE	t	22 55 00			Probably New Guinea region.
28	PRE	i	07 49(32.0)			
	WIN	i	50 08.0		C	
	KIM	i	48			
28	KIM	iPcP	13 49 27	77		USCGS H=13 37 50.2 34.9 S 69.4 W Chile-Argentine border reg. h=138 mag. 5.0
	PRE	iP	50.0	81		
28	PRE	i	14 17 55.5			
29	PRE	i	13 22 09.1		C	
30	PRE	iPKP2	12 46 26.9	152		USCGS H= 12 26 37.7 52.4 N 169.3 W Fox I's Aleutian I's h= 36 mag. 4.5
31	PRE	t	11 00 00			
	WIN	t	00			
31	PRE	iPKPi	17 53 59.0	147		USCGS H= 17 34 25.8 59.6 N 153.3 W S. Alaska h= 79 mag. 4.5
31	PRE	iP	23 40 50.9			
		iS	47 22.5			
	WIN	iP	41 20.4			
		iS	48(57.0)			Probably Far North.
	GRH	t	50 00			

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1	PRE	i	02 14 37.9		C	
2	WIN	t	15 24 00			
3	PRE	iP	11 49 48.5	96	C	USCGS H= 11 43 04.4 12.2 S 76.3 W near coast of Peru h= 46 mag. 5.0
4	PRE	iPKP	11 19 55.5	129		USCGS H=11 00 50.1 43.0 N 147.1 E Kurile I's h= 33 mag. 5.4
4	WIN	iP	11 39 16.5	79		USCGS H= 11 27 24.8 19.6 S 68.2 W Chile Bolivia border reg. h=114 mag. 5.3
	GRM	iP	36.1	84		
	PRE	t	40 00			
6	WIN	iP	11 31 22.5	79	C	USCGS H=11 19 23.1 28.5 S 71.0 W near coast Central Chile h= 23 mag. 5.7
	GRM	iP	31.5	82		
	KIM	iP	40	83		
	PRE	iP	32 01	86	C	
6	PRE	t	13 45 00			
7	PRE	t	02 32 00			
7	WIN	iP	22 32 10.0	61	C	USCGS H=22 22 2P.? 36.7 N 26.8 E Dodecanese Islands h= 161 mag. 5.0
	PRE	iP	27.0	63		
8	PRE	iP	12 36 54.0	48	R	USCGS H= 12 28 21.0 14.6 N 54.0 E Arabian Sea h= 33 mag. 5.4
	WIN	iP	37 28.9	53		
8	WIN	iP	14 52 16.4	22		USCGS H= 14 47 30 2.4 S 23.5 E Republic of the Congo h= 33 mag. 4.7
		iS	56(18.0)			
	PrE	i	52 38.4	24		
12	GRM	iPKP	06 03 25.5	116	R	USCGS H=05 44 47.6 5.5 S 153.2 E New Ireland reg. h= 74 mag. -
	PRE	iPKP	29.5	118		
	KIM	iPKP	32	119		
	WIN	iPKP	(51.0)	128		
14	PRE	i	03 51 56.4			
14	PRE	i	11 55 05.6			
15	PRE	iPKP2	03 02 32.1	152		USCGS H= 02 42 47.3 52.2 N 171.4 W Fox I's Aleutian I's h= 61 mag. 5.3
15	WIN	ePPP	22 59 50.5	26		USCGS H= 22 52 54 1.9 S 12.7 W North of Ascension I's h= 33 mag. 5.1
16	WIN	ePP	14 44 26.7	132		USCGS H= 14 23 42.6 49.7 N 147.1 E Sea of Okhotdk h= 582 mag.4.7
17	WIN	iS	06 38(44.5)			
	KIM	t	39 00			
17	PRE	iP	07 30 30.0			
		iS	36 50.5			
17	PRE	i	08 14(21.0)			
18	PRE	iP	12 45(56.0)			
		iS	47(13.0)			
	WIN	t	46 00			
19	WIN	iPcP	22 56 04.4	64	R	USCGS H= 22 45 41.2 39.4 N 25.0 E Aegean Sea h= 7 mag. 7¼
	PRE	iPcP	23.6	67	R	
	KIM	iP	42	70		
	PIE	iP	49	70		
	GRM	iP	57 06.4	74		
20	WIN	iPcP	02 31 13.3	72	C	USCGS H=02 19 49.6 12.4 N 46.9 W N. Atlantic Ridge h= 13 mag. 5.6
	KIM	iP	32 02	81		
	PRE	iP	13.0	82		
20	PRE	iPKPi	05 25 52.9	158		USCGS H= 05 06 11.9 58.4 N 151.7 W Kodiak I's reg. h= 34 mag. 4.9
20	PRE	i	17 01(03.5)			
20	PRE	iP	21 50 53.7	82	R	USCGS H= 21 38 29.2 27.9 S 66.4 W Catamarca Prov. Argentina h= 157 mag. 4.9
21	PRE	iPKPi	06 40 37.1	151	C	USCGS H= 06 21 03.6 52.3 N 175.3 W Andreanof I's Aleutian I's h= 107 mag. 5.3
21	KIM	i	15 49 41			
	PRE	i	47.0			
	PIE	i	(55)			
21	WIN	t	18 33 00			
21	PRE	i	19 28 21.9			
	WIN	i	(26.6)			
21	PRE	iPKP2	19 52 12.5	151	C	USCGS H= 19 32 32.2 51.7 N 175.9 W Andreanof I's Aleutian I's h= 54 mag. 4.8
21	PRE	iPKP2	21 27 39.4	151	R	USCGS H= 21 07 56.9 51.4 N 176.0 W Andreanof I's Aleutian I's h= 47 mag. 5.2
	WIN	iPKP2	42.7	151	C	
	PIE	iPKP2	(44)	152		
	KIM	iPKP2	(48)	156		
21	PRE	iPKPi	21 34 49.0	151		USCGS H= 21 15 08.0 51.4 N 175.8 W Andreanof I's Aleutian I's h= 52 mag. 4.4
	WIN	iPKPi	53.5	151	R	
21	PRE	i	21 38 22.5			
	WIN	t	39 00			

February continued

Date	Station	Phase	G. M. T. h. m. s.	Arc. Dist	R/C	Remarks
21	GRM	iP	23 23 58.2		R	
		iS	26 21.9			
	PIE	iP	24 42			
		iS	27(31)			
	KIM	i	25 19			
	PRE	i	30.5			
	WIN	i	26 34.9			
21	PRE	t	23 57 00			
22	WIN	iPKP1	17 08 43.2	151	C	USCGS H=16 49 58.6 51.4 N 176.1 W Andreanof
	PRE	iPKP1	09 40.1	151	R	I's Aleutian I's h= 54 mag. 4.5
22	PRE	iPKP2	18 06 39.5	151	R	USCGS H=17 46 57.4 51.4 N 176.3 W Andreanof
	WIN	iPKP2	43.0	151	C	I's Aleutian I's h= 49 mag. 5.1
	PIE	iPKP2	45	153		
	KIM	iPKP2	(49)	156		
22	PRE	iPKP2	18 33 39.9	151	C	USCGS H=18 13 59.3 51.4 N 176.2 W Andreanof
22	WIN	t	19 30 00			I's Aleutian I's h=66 mag. 4.4
22	PRE	i	20 49 11.2			
23	PRE	iPKP2	00 30 20.1	151	R	USCGS H= 00 10 39.5 51.5 N 176.3 W Andreanof
	WIN	iPKP2	23.5	151	R	I's Aleutian I's h= 65 mag. 4.6
23	PRE	iPKP1	01 59 52.0	151	R	USCGS H= 01 40 12 51.6 N 177.2 W Andreanof
23	PRE	t	06 19 00			I's Aleutian I's h=54 mag. 4.5
23	WIN	t	20 00			
23	PRE	iPKP2	08 32 35.6	151	R	USCGS H=08 12 55.7 51.6 N 175.9 W Andreanof
						I's Aleutian I's h=55 mag. 4.5
23	PRE	iPKP2	09 52 08.5	151		USCGS H= 09 32 26.1 51.5 N 176.3 W Andreanof
						I's Aleutian I's h= 49 mag. 4.6
23	WIN	t	17 30 00			
24	WIN	t	02 28 00			
	PRE	t	00			
24	PRE	i	04 06 45.0		C	
24	PRE	i	19 00 02.2			
25	WIN	iPKP2	18 28 06.7	151		USCGS H=18 08 19.9 51.4 N 176.0 W Andreanof
	KIM	ePKP2	(08)			I's Aleutian I's h= 50 Mag. 5.3
26	WIN	t	10 55 00			
26	PRE	iP	11 04(11.5)	104		USCGS H= 10 50 16.7 22.7 N 121.5 E Taiwan region
						h= 24 mag.-
26	PRE	i	23 09 36.0			
26	WIN	t	12 30 00			Probably Japan
28	PRE	i	13 20(08.6)			
28	PRE	i	16 44 32.4			

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