INSTITUTO GEOFÍSICO DA UNIVERSIDADE DE COIMBRA

Observações Meteorológicas, Magnéticas e Sismológicas

ANO DE 1977

3.ª Parte — OBSERVAÇÕES SISMOLÓGICAS

VOLUME CXVI

I. G. U. C.

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B O L E T I M S I S M O L O G I C O

A N O 1 9 7 7

1. ENDEREÇO-ADDRESS

Instituto Geofisico da Universidade de Coimbra

Av. Dias da Silva

3000 Coimbra - PORTUGAL

2. ESTAÇÃO SISMOGRAFICA DE COIMBRA (COI)

Latitude: 40° 12' 25'' N Altitude: 140 metros

Longitude: 08° 25' 30'' W Sub-solo: Arenitos triássicos

3. SISMOGRAFOS

Geotech CP-Z,N,E	T_s=1s	Grenet CPG-Z	T_g=0.75s	T_s=1.4s
Geotech LP-Z	T_s=15s	Wiechert LPW-Z	T_g=1.5s	T_s=5.3s

O periodo T(s) lido entre os três primeiros ciclos iniciais,a contracção C e a dilatação D referem-se à componente vertical do periodo curto (Z-CP).

The period T(s),the compression C and the dilation D are measured from short period vertical (Z-CP).

4. ABREVIATURAS

GS United States Geological Survey - Washington

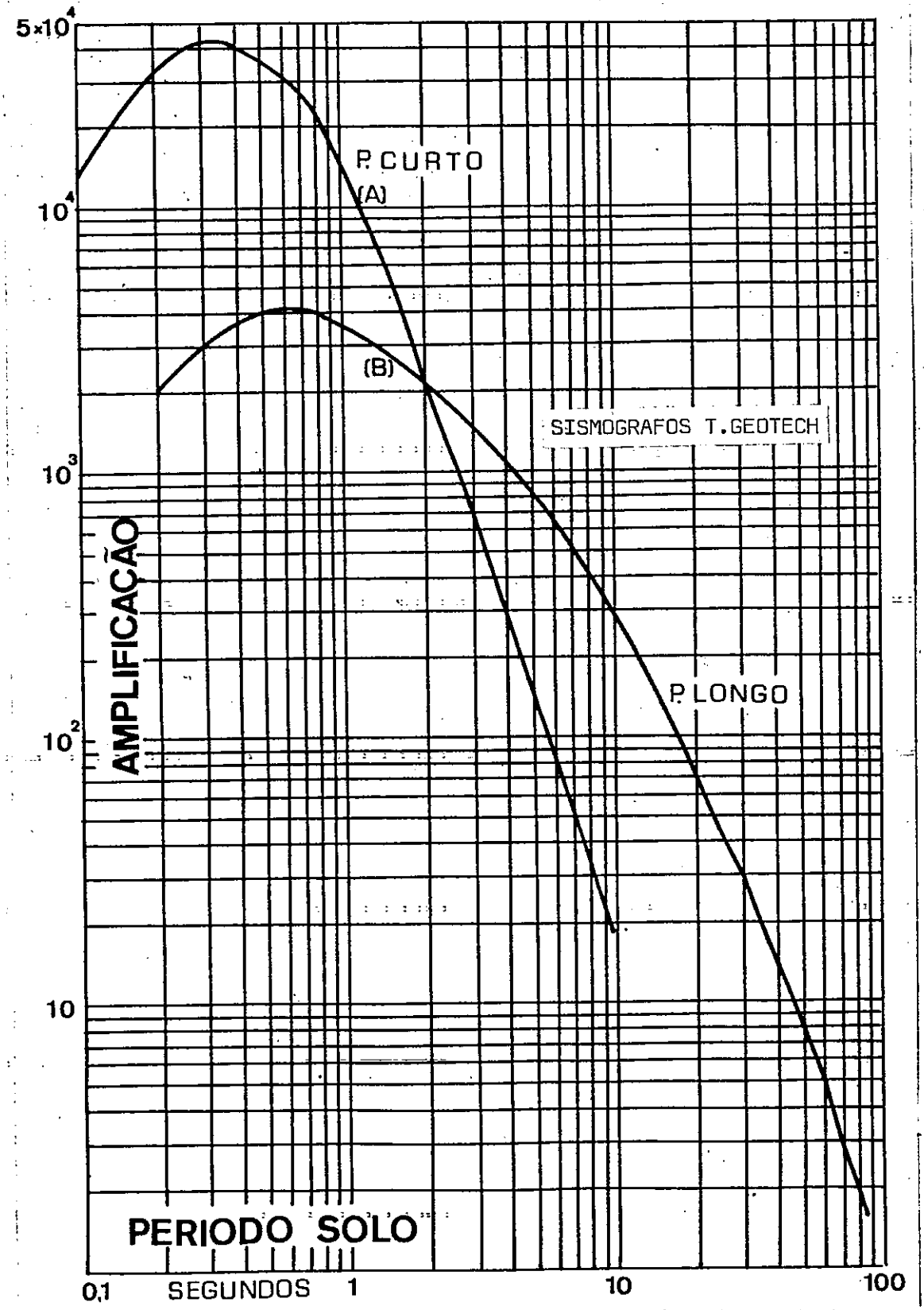
IS Seccion de Sismolgia e Ingenieria Sismica - Madrid

SP Service de Physique du Globe - Rabat

IN Instituto Nacional de Meteorologia e Geofisica - Lisboa

UC Instituto Geofisico da Universidade - Coimbra

ESTAÇÃO DE COIMBRA



ABREV.
A: CP-Z,N,E B: LP-Z

DIA	FASE	HORA-TMG	COMP-APAR	T(S)	DIST-KM	REFERENCIAS
01	IP	21 51 12.0	Z-CP	0.9	08048	GS HO 21 39 41.3 38.2N 90.0E TSINGHAI-CHINA
02	EPN	01 31 24.3	E-CP		00462	SP HO 01 30 28.5 36.5N 10.8W
	ISN	32 05.3	E-CP			
05	EP	05 54 04.0	Z-CP	0.7	05981	GS HO 05 44 39.9 27.5N 56.2E SUL DO IRAO
09	EPN	18 07 12.3	Z-CP		00463	IN HO 18 06 10 37.0N 11.8W
	ISN	08 01.2	E-CP			OCEANO ATLANTICO
16	EPN	00 00 24.0	Z-CP		00668	GS HO 23 58 46.8 35.6N 3.6W MARROCOS
16	IPN	21 07 03.5	Z-CP		00427	IN HO 21 06 55 36.8N 4.9W
	ISN	07 54.8	N-CP			MALAGA-ESPANHA
17	EP	21 39 50.1	Z-CP	0.7	09527	GS HO 21 27 12.6 24.8S 68.7W FRONT CHILE-ARGENTINA
19	EP	00 58 06.7	Z-CP		08449	GS HO 00 46 18.3 37.0N 95.7E SINKIANG-CHINA
19	IP	20 50 10.7C	Z-CP	1.2	01523	GS HO 20 46 53.3 36.6N 8.5E
	I	50 18.3	Z-CP			TUNISIA
23	EPN	12 49 30.6	E-CP		00189	UC HO 12 49 05
	ISN	49 53.6	E CP			
29	IPG	03 30 51.7	E-CP		LOCAL	
	ISG	30 55.8	E-CP			
30	EPN	04 59 22.3	Z-CP		00290	REG COI PTO
	ISN	59 56.9	E-CP			
	ISG	05 00 01.4	E-CP			
31	EIP	14 36 12.0	Z-CP	0.7	06481	GS HO 14 26 14.8 40.0N 70.8E
	EIPP	38 01.7	Z-CP			TACHESKENT-URSS

DIA	FASE	HORA-TMG	COMP-APAR	T(S)	DIST-KM	REFERENCIAS
04	IP	07 57 59.8	Z-CP	1.1	09166	GS HO 07 46 33.8 24.7S 63.4W
	EIPP	08 00 03.1	Z-CP			PROV SALTA-ARGENTINA
16	EP	00 54 08.8	Z-LP		02282	GS HO 00 49 31.2 26.0N 26.3W
						ATLANTICO/NORTE
18	EPN	12 10 31.3	Z-CP		00510	SP HO 12 09 23.5 36.6W 5.1W
	ISN	11 15.3	E-CP			PROX ESTR GILBRALTAR
	ISG	11 44.0	N-CP			
19	EP	22 46 45.0	Z-CP	LP 0.9	09569	GS HO 22 34 04.1 55.6N 170.0E
	IPCP	46 49.2	Z-LP			ILHAS ALEUTINAS
	EPP	49 14.0	Z-LP			
	EIS	57 24.4	Z-LP			
	L	23 19.8	Z-LP			
	M	23 24.7	Z-LP			
26	EP	22 47 28.3	Z-CP	0.8	01721	GS HO 22 43 48.9 28.5N 20.8W
				Mas Canarias		ILHAS CANARIAS
28	EP	01 43 43.6	Z-CP		08353	GS HO 01 32 02.0 4.0N 82.5W
	ES	50 05.6	E-CP			
						SUL PANAMA

DIA	FASE	HØRA-TMG	COMP-APAR T(S)	DIST-KM	REFERENCIAS
02	EPKP	10 12 03•0	Z-LP	12838	GS HØ 09 53 23•2 6•8N 123•7E ILHA MINDANAU
02	EP	23 23 35•4	Z-LP	09419	GS HØ 23 11 01•8 54•7N 163•7E ESTE DE KAMCHATCA
04	EIP	19 27 20•0C	Z-CP LP 0•7	02975	GS HØ 19 21 54•1 45•8N 29•8E
	I*P	27 28•8	Z-LP		RØMENIA
	IPP	27 52•0	Z-LP		DESTRUIDØR MAG 6•4 MB
	IPPP	27 68•4	Z-LP		
	IS	31 22•8	Z-LP		
	ISS	32 17•0	Z-LP		
	ISSS	32 44•8	Z-LP		
	L	19 34•4	Z-LP		
05	EPN	00 12 20•7	Z-CP	00557	SP HØ 00 10 38 35•7N 11•2W
	ESN	12 56•0	Z-CP		CØSTA DE MARRØCØS
07	EPN	09 42 34•0	Z-CP	00411	SP HØ 09 41 39•5 36•7N 9•7W
	ESN	43 22•0	N-CP		SW DE S•VICENTE
07	ESN	21 20 18•4	E-CP		PRØXIMØ SENTIDØ EM CASCAIS
08	IP	22 18 16•0D	Z-CP 1•1	08878	GS HØ 22 46 04•8 12•1S 74•0W PERU
09	IP	14 40 00•4D	Z-CP 0•9	10017	GS HØ 14 27 53•6 41•6N 130•9E CØREIA DØ NØRTE
10	EPN	13 52 32•7	Z-CP	00684	SP HØ 13 51 02•0 36•3N 14•5W ØCEANØ ATLANTICØ
11	ESN	18 35 13•0	Z-CP		PRØXIMØ
	ISG	35 23•6	Z-CP		
18	EPN	10 00 21•5	Z-CP	00400	SP HØ 09 59 24 36•8N 9•9W
	ISN	00 52•9	Z-CP		ØCEANØ ATLANTICØ
18	IPP	22 02 38•4D	Z-LP	11868	GS HØ 21 43 52•4 16•8N 122•3E
	EPPP	05 50•0	Z-LP		LUZØN-FILIPINAS
	ES	10 03•0	Z-LP		
	ESS	17 28•5	Z-LP		
	L	22 24•3	Z-LP		
	M	22 42•5	Z-LP		
21	IP	21 28 19•0D	Z-CP LP 0•8	05999	GS HØ 21 18 54•2 27•6N 56•4E
	IPCP	29 29•2	Z-LP		SUL DØ IRAØ
	IPP	30 09•2	Z-LP		ESTRAGØS E VITIMAS
	IS	36 04•8	Z-LP		
	ISS	40 35•0	Z-LP		
	L	21 43•4	Z-LP		

	M	21 53.8	Z-LP			
21	IP	22 51 31.20	Z-CP LP	05999	GS HO 22 42 06.5 27.6N	56.2E
	LM	23 17.5	Z-LP		SUL DO IRAO	
22	EPKP	02 42 45.0	Z-LP	18992	GS HO 02 23 17.8 33.6S	179.1E
					ILHAS KERMADEC	
22	EP	09 24 05.0	Z-LP	06005	GS HO 09 14 48.1 27.6N	56.4E
					SUL DO IRAO	
22	IP	12 06 55.00	Z-CP LP	06006	GS HO 11 57 30.9 27.6N	56.5E
	IS	14 38.0	Z-LP		SUL DO IRAO	
	M	12 34.0	Z-LP			
22	EP	21 40 27.5	Z-CP	05994	GS HO 21 31 02.6 27.7N	56.4E
	I	40 41.3			SUL DO IRAO	
23	EPKP	07 39 13.4	Z-LP	16947	GS HO 07 19 11.1 14.5S	177.9W
	LM	08 40.5	Z-LP		ILHAS FIJI	
23	ESN	11 21 13.6	Z-CP	00455	SP HO 11 19 20.5 36.6N	5.9W
	ESG	21 37.7	E-CP		MALAGA-ESPANHA	
23	EPKP	17 30 25.0	Z-LP	16939	GS HO 17 10 19.5 14.4S	178.0W
	LM	18 30.5			ILHAS FIJI	
24	IP	00 00 41.00	Z-CP LP 0.9	06015	GS HO 23 51 15.8 27.6N	56.6E
					SUL DO IRAO	
24	EP	00 23 15.3	Z-CP	06005	GS HO 00 13 52.3 27.5N	56.4E
					SUL DO IRAO	
24	EP	04 51 50.0	Z-CP LP	06015	GS HO 04 42 24.3 27.6N	56.6E
					SUL DO IRAO	
24	EP	14 20 02.3	Z-CP	06022	GS HO 14 10 46.4 27.4N	56.5E
					SUL DO IRAO	
25	EPG	23 11 53.6	Z-CP	00080	REGISTADO MTE	
	ISG	12 03.6	Z-CP			
26	IP	04 48 54.0	Z-CP LP 0,9	09529	GS HO 04 36 14.7 52.3N	168.3W
	EPP	51 26.0	Z-LP		ILHAS FOX-ALEUTAS	
	ES	05 04 37.2	Z-LP			
	LM	05 28.5	Z-LP			
26	EP	22 34 39.3	Z-CP	04600	GS HO 22 26 54.7 1.0S	14.0S
					NORTE ILHA ASCENSAO	
28	EP	23 38 42.4	Z-CP	06005	GS HO 22 29 16.8 27.6N	56.4E

DIA	FASE	HORA-TMG	COMP-APAR	T(S)	DIST-KM	REFERENCIAS
01	IP	13 45 48.7D	Z-CP	0.7	05998	GS HO 13 36 24.7 27.5N 56.3E
	IPP	47 25.4	Z-LP			SUL DO IRAO
	IS	53 04.4	Z-LP			
02	ISN	03 17 59.2	E-CP			REG MTE
02	IP	07 35 11.5D	Z-CP	1.6	16909	GS HO 07 15 22.7 16.7S 172.1W
	IPP	39 02.5	Z-LP			ILHAS SAMOA GRAU VI
	ISKS	42 30.0	Z-LP			TSUNAMI 4-15CM
	ISS	56 34.5	Z-LP			
	L	08 30.3	Z-LP			
	M	08 38.7	Z-LP			
02	IPN	16 06 00.2D	Z-CP		00483	GS HO 16 04 54.3 36.2N 10.5W
	IPG	06 15.0	Z-CP			ATLANTICO NORTE
	ISN	06 46.4	E-CP			
	ISG	07 11.7	E-CP			
04	EP	17 59 57.1	Z-CPLP	0.8	04495	GS HO 17 52 19.7 7.3N 34.9W
	ES	18 06 07.4	Z-LP			CRISTA CENTRAL DO
	LM	18 11 0	Z-LP			ATLANTICO
05	IPN	20 30 04.4C	Z-CP		00140	GS HO 20 29 37.8 39.6N 9.8W
	ISN	30 30.5	Z-CP			PORTUGAL
06	EP	13 45 14.4	Z-CPLP		05282	GS HO 13.36 37.1 32.0N 50.7E
	ES	52 00.0	Z-CP			IRAO
06	EPG	17 38 37.6	Z-CP		00120	REG MTE
	ISG	38 23.6	Z-CP			
08	ISN	01 06 51.1	Z-CP			REG MTE
	ISG	07 02.7	E-CP			
09	EP	04 15 06.6	Z-CPLP	1.2	08500	GS HO 04 04 12.5 10.0S 71.2W
	IPP	17 04.4	Z-LP			FRONT PERU/BRASIL
12	IPN	19 48 09.3	Z-CP		00240	REG MTE
	ISN	48 37.7	N-CP			
13	IPG	10 49 25.1D	Z-CP			SISMO LOCAL
	ISG	49 28.0	Z-CP			
13	EP	11 43 41.0	Z-CPLP	1.3	06680	GS HO 11 33 51.8 36.5N 70.9E
						INDUKUSH
14	EP	07 20 00.5	Z-CP		01309	GS HO 07 17 09.0 36.3N 5.7E
	ES	22 02.0	Z-LP			ARGELIA
		07 24.4	Z-LP			
18	EIP	00 22 51 2	Z-CPLP	0.9	06779	GS HO OC 13 04.6 34.5N 70.8E
						HINDUKUSH

20 EP 04 31 45.7 Z=CPLP 05961 GS H0 04 22 24.8 26.9N 55.5E
SUL D0 IRA0

20 EIPKP 23 32 50.8 Z=CPLP 1.3 16752 GS H0 23 13 10.4 9.8S 160.3E
EIPP 36 21.4 Z=LP TLHAS SAL0MA0 GRAU VI
EISKS 40 54.0 Z=LP TSUNAMI 7.6CM
EISKKS 43 18.8 Z=LP

20 EIPKP 00 02 35.5 Z=CP 16435 GS H0 23 42 50.5 9.9S 160.3E
IPP 06 14.4 Z=LP TLHAS SAL0MA0
IPPP 09 04.8 Z=LP
ISS 25 48.6 Z=LP

21 EPKP 00 22 31.8 Z=CP 15595 GS H0 00 02 49.0 9.7S 160.1E
TLHAS SAL0MA0

21 EPKP 01 04 13.0 Z=CP 16469 GS H0 00 44 33.5 10.9S 158.2E
TLHAS SAL0MA0

21 EPKP 01 40 20.0 Z=CP 16425 GS H0 01 20 32.8 9.9S 159.9E
TLHAS SAL0MA0

21 EPP 02 04 40.0 Z=CP 11954 GS H0 01 45 50.2 26.9N 142.4E
ILHAS DE B0NIN

21 EIPKP 04 43 50.0 Z=CPLP 1.0 16423 GS H0 04 24 09.6 9.6S 160.7E
EIPP 47 23.8 Z=LP ILHAS SAL0MA0 GRAU VII
EISKS 51 52.0 Z=LP ESTRAG0S F0RTES E VITIMAS
EISS 05 06 11.2 Z=LP
L 05 40.0 Z=LP
M 05 53.2 Z=LP

21 EPKP 05 26 12.0 Z=CP 1.7 16475 GS H0 05 06 28.5 10.1S 160.7E
TLHAS SAL0MA0

21 EPKP 07 38 36.0 Z CP 1.0 16485 GS H0 07 18 51.1 10.2S 160.7E
TLHAS SAL0MA0

21 EPKP 10 05 21.5 Z=CP 16495 GS H0 09 45 38.2 10.3S 160.7E
TLHAS SAL0MA0

21 EPKP 17 13 01.8 Z=CPLP 1.3 16478 GS H0 16 53 11.5 10.2S 160.6E
TLHAS SAL0MA0

22 EP 03 04 01.8 Z=CPLP 0.9 09575 GS H0 00 52 01.6 52.3N 153.8E
ILHA KURILHAS

22 EPKP 03 30 44.0 Z=CP 16476 GS H0 03 11 00.2 10.2S 160.7E
TLHAS SAL0MA0

22 EPKP 13 40 20.0 Z CP 16426 GS H0 13 20 36.3 09.9S 159.9E
TLHAS SAL0MA0

22 EPKP 18 44 57.1 Z CP 16461 GS H0 18 25 11.0 10.1S 160.7E
TLHAS SAL0MA0

24	EPKP	19 28 52.3	Z CP	1.3	16425	GS	HØ 06 28 52.3	9.9S 160.1E
							ILHAS SALØMAØ	
24	EPN	18 48 35.0	Z-CP		00495	IN	HØ 18 47 35	36.4N 5.5W
	ISN	49 38.3	E-CP				ØLVERA PRØV. DE CADIZ	
	ISG	50 54.7	E-CP				ESPANHA	
26	IP	16 33 50.3Ø	Z-CPLP	1.1	04914	GS	HØ 16 25 29.0	36.7N 48.9E
							IRAØ ØRIENTAL	

DIA	FASE	HORA-TMG	COMP-APAR	T(S)	DIST-KM	REFERENCIAS
02	EP	15 26 35.5	Z-CP	1.0	05417	GS HO 15 17 48.9 37.0N 55.2E FRONT IRAO/URSS
03	IPN	17 55 17.3D	Z-CP		00496	GS HO 17 54 09.7 37.1N 4.3W
	ISN	56 03.9	N-CP			ALAMEDA PROV SEVILHA
03	EPN	22 24 28.0	Z-CP		00508	HO 22 23 22 35.8N 10.0W
	ISN	25 10.0	E-CP			SW SAGRES OCEANO ATLANTICO
05	EPN	12 18 02.0	Z-CP		00240	REG MTE PTO
	ESN	18 28.5	E-CP			
	ESG	18 36.0	E-CP			
05	EPN	21 34 41.2	Z-CP		00270	REG MTE PTO
	ISN	35 12.0	N-CP			
12	EP	11 30 37.6	Z-CP-LP	1.4	09608	GS HO 11 17 53.1 39.3N 117.7E NORDESTE DA CHINA
12	EP	12 32 33.0	Z-CP		09361	GS HO 12 20 00.7 21.7N 93.0E BURMA NORDESTE DA CHINA
12	IP	21 50 14.0D	Z-CP-LP	0.9	09820	GS HO 21 37 33.4 50.2N 155.0E ILHAS KURILHAS
13	EP	18 23 06.4	Z-CP	1.0	02714	GS HO 18 17 46.1 39.1N 23.5E MAR EGEU
14	EP	06 16 43.3	Z-CP		08774	GS HO 06 04 39.7 1.5N 85.3W COSTA DO EQUADOR
19	EP	22 07 51.5	Z-CP	0.4	05937	GS HO 22 58 30.8 27.1N 55.3E SUL DO IRAO
24	EPKP	10 43 16.7	Z-CP		12890	GS HO 10 23 23.4 18.8N 145.3E ILHAS MARIANAS
25	EPN	13 34 24.3	Z-CP		00448	IN HO 13 33 22 36.8N 11.2W
	ISN	35 11.9	Z-CP			SUDOESTE DE SAGRES
25	IPG	18 07 51.7	Z-CP		00056	LOCAL REG PTO
	ISG	07 56.7	Z-CP			
26	IP	01 42 48.0C	Z-CP-LP		04452	GS HO 01 35 13.8 38.9N 44.4E
	LM	02 07.0	Z-LP			FRONT TURQUIA/IRAO
29	EP	16 41 12.0	Z-CP-LP	1.1	01782	GS HO 16 37 20.5 40.5N 29.5W ACORES
29	ESN	23 06 30.5	Z-CP		00675	GS HO 23 03 55.9 36.0N 2.7W
	ISG	07 01.0	E-CP			MAR DE ALBORAM
30	EP	15 29 41.4	Z-CP-LP	0.9	09540	GS HO 15 16 01.6 52.4N 169.7W
	LM	16 11.0	Z-LP			ILHAS FOX ALEUTINAS

DIA	FASE	HORA-TMG	COMP-APAR	T(S)	DIST-KM	REFERENCIAS
01	EIP	13 01 04.7	Z-CP-LP	0.9	03469	GS HO 12 54 49.2 36.2N 31.3E
	ES	06 36.0	Z-LP			TURQUIA
	LM	13 15.3	Z-LP			
03	EP	01 15 25.0	Z CP	1.3	06561	GS HO 01 05 23.7 39.9N 71.8E
						URSS GRAU VII
03	IP	02 40 52.4C	Z CP-LP	0.8	06670	GS HO 02 31 04.7 36.4N 70.8E
	IPCP	41 39.4	Z CP-LP			INDUSTAO
	EPP	42 16.0	Z LP			
03	EPKP	15 37 20.1	Z-CP	1.2	17046	GS HO 15 17 25.1 14.1S 166.6E
						NOVAS HEBRIDAS
05	IP	02 58 44.7C	Z-CP-LP	1.3	09546	GS HO 02 46 05.9 23.9S 70.2W
						COSTA NORTE DO CHILE
05	EIP	04 53 24.7	Z-CP-LP		05028	GS HO 04 45 07.6 32.6N 48.1E
	ES	05 00 13.0	Z-LP			IRAO OCIDENTAL
	L	05 05.0	Z-LP			
	M	05 15.8	Z-LP			
05	EP	08 33 49.6	Z-CP-LP		05042	GS HO 08 25 30.8 32.6N 48.2E
						IRAO OCIDENTAL
05	EP	08 53 27.5	Z-CP-LP		05016	GS HO 08 45 13.0 32.7N 47.9E
						FRONT IRAO/IRAQUE
05	EP	14 03 34.3	Z-CP-LP	1.0	01985	GS HO 13 59 21.7 37.9N 14.5E
						SICILIA
06	IPN	10 50 37.0	Z-CP	0.7	00676	GS HO 10 49 09.5 37.4N 1.5W
	ISN	51 42.7	E-CP			PROY MURCIA ESPANHA
	ISG	52 17.6	E-CP			GRAU III-IV
06	ESG	16 04 15.0	Z-CP		00676	GS HO 16 00 56.0 37.4N 1.7W
						LORCA-ESPANHA
08	EP	13 37 23.6	Z-CP	1.5	09199	GS HO 13 25 15.6 22.1S 67.3W
						FRONT CHILE/BOLIVIA
09	ESG	08 20 31.3	Z-CP		00676	TS HO 08 17 23.0 37.4N 1.5W
						LORCA ESPANHA
11	EP	20 38 54.0	Z-CP-LP	1.1	02778	GS HO 20 33 30.7 33.9N 39.0W
						CRISTA ATLANTICO NORTE
14	ISN	15 11 21.3	E-CP		00498	SP HO 15 09 32 35.9N 10.0W
14	IP	21 49 01.00	Z-CP-LP	1.7	06062	GS HO 21 39 35.2 14.1S 14.4W
						CRISTA DO ATLANTICO SUL
14	EP	00 01 29.8	Z-CP-LP		04501	GS HO 23 53 49.9 16.6N 46.6W
						CRISTA DO ATLANTICO NORTE

18	EPKP	02 09 46.4	Z=CP=LP		17165	GS	HO 01 48 48.0	15.3S 166.1E
							NOVAS HEBRIDAS	
18	EP	17 01 42.8	Z=CP=LP		09184	GS	HO 16 49 40.9	20.9S 68.4W
							FRONT CHILE/BOLIVIA	
18	EIPKP	22 30 38.0	Z=CP=LP	1.3	16403	GS	HO 22 10 49.6	9.8S 159.7E
							ILHAS SALOMAO GRAU V	
19	IP	12 00 11.7C	Z=CP	0.8	10074	GS	HO 11 47 23.4	47.1N 151.1E
							ILHAS KURILHAS	
20	IPN	15 00 56.3C	Z=CP		00384	TN	HO 14 59 57	0036.8N 9.2W
	ISN	01 40.3	Z=CP					
22	IPKP	12 28 26.2C	Z=LP		17726	GS	HO 12 08 33.4	22.9S 175.9W
	IPP	32 48.5	Z=LP				ILHAS DE TONGA	
	IPPP	36 37.0	Z=LP				GRAU VII ESTRAGOS	
	ISS	41 11.5	Z=LP				TSUNAMI 40 CM	
	LM	13 28.2	Z=LP					
25	EPN	22 07 01.3	Z=CP		00249	TN	HO 22 06 24	42.4N 7.8W
	ISN	07 25.3	N=CP				NORTE PORTUGAL	
	ISG	07 33.3	E=CP					
26	EPN	01 33 35.0	Z=CP		00771	SI	HO 01 31 32.0	37.3N 0.7W
	ESN	34 40.7	Z=CP				MAR MEDITERRANEO	
28	IP	07 16 42.0C	Z=CP=LP	0.7	01986	GS	HO 07 12 49.3	38.6N 14.7E
	ES	19 54.4	Z=LP				SICILIA	
28	EP	15 45 34.0	Z=CP=LP	1.3	03950	GS	HO 15 38 37.0	22.6N 41.1W
							CRISTA DO ATLANTICO NORTE	
28	EP	16 25 11.6	Z=CP=LP	1.3	03945	GS	HO 16 18 15.2	22.6N 45.1W
	LM	16 35.2	Z=LP				CRISTA DO ATLANTICO NORTE	
28	EIP	19 25 31.6	Z=CP=LP	1.3	03945	GS	HO 19 18 35.8	22.6N 45.1W
	LM	19 35.0	Z=LP				CRISTA DO ATLANTICO NORTE	
29	EPKP	07 43 30.0	Z LP		14321	GS	HO 07 24 24.8	7.5S 127.6E
	EPP	45 41.6	Z LP				MAR DE BANDA	

DIA	FASE	HORA-TMG	COMP-APAR	T(S)	DIST-KM	REFERENCIAS
02	EPN	00 29 07.0	Z=CP		00178	REG MTE
	ESN	29 27.1	N=CP			
02	EPKP	01 15 00.0	Z=CPLP	1.1	16456	GS HO 00 55 09.0 9.9S 160.5E ILHAS SALOMAO
02	EPG	23 18 59.0	Z=CP		00078	REG MTE
	ISG	19 08.7	N=CP			
03	EP	14 58 05.0	Z=CPLP	1.0	13485	GS HO 14 39 14.1 1.4N 126.4E ESTREITO DAS MOLUCAS
	ESP	15 09 12.0	Z=LP			
04	EP	02 12 49.0	Z=CPLP	1.0	02644	GS HO 02 07 41.9 57.4N 32.9W ATLANTICO NORTE
06	EP	04 54 01.0	Z=CPLP	1.0	08276	GS HO 04 42 23.6 5.3N 82.6W
	I*P	54 15.0	Z=LP			SUL PANAMA
06	EP	11 47 24.0	Z=CPLP	1.7	17755	GS HO 11 28 31.5 21.1S 178.6W
	I	48 03.0	Z=LP			ILHAS FIJI
10	EPKP2	02 57 50.0	Z=CPLP	0.8	17621	GS HO 02 37 14.6 19.1S 168.4E NOVAS HEBRIDAS
10	ESN	12 38 32	E=CP			REG MTE
11	ESN	20 46 46.0	E=CP			REG MTE E ESPANHA
14	EIP	05 58 28.7C	Z=CPLP	0.8	05902	GS HO 05 49 08.7 40.3N 63 .6E UZBESQUISTAO=URSS
15	LM	03 18.7	Z=LP		11213	GS HO 02 12 54.4 24.0N 122.E FORMOSA
15	IPN	05 43 23.6C	Z=CP	0.3	00735	GS HO 05 41 47.5 34.7N 3.7W
	ISN	44 33.3	N=CP			MARROCOS GRAU V
15	IPN	12 24 00.9D	E=CP	0.3	00249	IN HO 12 23 23 42.4N 7.8W
	ISN	24 28.7	E=CP			NORTE PORTUGAL
	ISG	24 34.0	E=CP			
18	EP	14 32 47.3	Z=CP		06685	GS HO 14'22 52.6 35.5N 70.3E INDUSTAO
19	EPN	16 29 34.0	Z=CP		00322	REG LIS ESPANHA MARROCOS
	IPG	29 47.2	Z=CP			
	ISN	30 13.6	NE=CP			
	ISG	30 23.6	NE=CP			
20	EP	13 36 46.3	Z=CPLP	1.3	09151	GS HO 13 24 25.9 54.6N 161.6W PENINSULA ALASKA
21	EPKP	12 13 22.0	Z=CPLP		18181	GS HO 11 53 22.5 53.8S 158.6E
	I	13 25.2C	Z=LP			ILHAS MACQUARTE
	IPKP2	18 04.0	Z=LP			

	ESKS		20 21.0	Z=LP			
	ESS		38 50.0	Z=LP			
	LM	13	24.5	Z=LP			
21	EPP	14	04 35.3	Z=CPLP	2.0	11860	GS HØ 13 45 54.0 16.8N 122.4E
	LM	14	44	Z=LP			LUZØN FILIPINAS
22	IPG	16	21 21.7	Z=CP	0.5	00056	REG MTE
	ISG		21 27.0	Z=CP			
22	EPKP	17	36 46.7	Z=CPLP	1.3	18930	GS HØ 17 16 40.3 33.8S 179.7W
	EPKP2		38 14.0	Z=LP			SULFL KERMADEC
	EPP		41 46.0	Z=LP			
23	EP	07	07 45.7	Z=CP	0.9	07264	GS HØ 06 57 03.7 42.0N 83.4E
							NØRTE SINHIANG CHINA
23	EP	13	57 20.2	Z=CP	1.3	09198	GS HØ 13 44 54.6 54.3N 162.4W
							ALASKA
24	EPKP2	06	42 45.3	Z=CPLP	2.0	16647	GS HØ 06 22 51.3 13.3S 173.2W
	LM	06	46.0	Z=LP			ILHAS TØNGA GRAU IV
26	ISN	21	28 55.6	E=CP		00527	SP HØ 21 27 09 35.7W 10.3W
28	EP	01	55 20.2	Z=LP		04624	GS HØ 01 47 32.7 1.2S 14.0W
	LM	02	13 1				NØRTE ILH ASCENSAØ
29	IPKP	11	35 19.0C	Z=CPLP	1.3	15912	GS HØ 11 15 45.3 8.1S 155.5E
	IPP		38 40.0	Z=LP			ILHAS SALØMAØ
	IPPP		41 53.0	Z=LP			
	L	12	18.0	Z=LP			
	M	12	35.5	Z=LP			

DIA	FASE	HORA-TMG	COMP-APAR	T(S)	DIST-KM	REFERENCIAS
04	EP	13 32 23.3	Z-CP	1.0	08169	GS HO 13 20 52.5 12.4N 87.3W PROX COSTA NICARAGUA
05	EPN	01 46 41.7	Z-CP	0.7	00543	IS HO 01 45 25.4 37.2N 3.5W
	IPG	47 00.7	Z-CP			ALCALA REAL GRANADA
	ESN	47 50.7	Z-E			
	ISG	48 06.7	Z-E			
06	EPKP2	11 45 37.5	Z-CPLP	11.3	15984	GS HO 11 26 12.2 7.1S 155.8E ILHAS SALOMAO
07	EPKP	02 04 54	Z-CPLP	1.3	16847	GS HO 01 45 09.3 12.4S 166.3E ILHAS SANTA CRUZ
07	EP	07 19 32.7	Z-CPLP		08052	GS HO 07 08 05.6 8.6N 82.8W
	LM	07 47.5	Z-LP			FRONT PANAMA-COSTA RICA
07	EPG	08 41 24.3	Z-CP	0.2	00101	REG MTE
	ISG	41 36.2	Z-CP			
08	IP	07 11 15.6C	Z-CPLP	0.9	07748	GS HO 07 00 06.3 6.9N 77.8W PROX COSTA COLOMBIA
08	IPKP	13 18 33.1D	Z-CPLP	1.0	16539	GS HO 12 58 45.0 10.6S 161.3E ILHAS SALOMAO
08	IPG	16 31 34.3D	Z-CP	0.2	00030	REG MTE
	ISG	31 37.6	N-CP			
10	EPKP	18 46 44.0	Z-LP		17620	GS HO 18 27 09.6 20.7S 178.4W ILHAS FIJI
11	EPKP	02 02 35.0	Z-CPLP	1.3	17686	GS HO 01 42 47.5 17.6S 174.4W
	EPP	07 01.0	Z-LP			ILHAS TONGA GRAU III
	LM	03 07.6	Z-LP			
12	EPKP	00 27 20.7	Z-CPLP	1.0	15894	GS HO 00 07 51.8 6.4S 155.0E ILHAS SALOMAO
14	EIP	04 32 18.0	Z-CPLP	1.0	06252	GS HO 04 22 49.7 10.9N 62.4W ILHAS WINDWARD GRAU V
14	EP	19 14 44	Z-CPLP	1.5	07000	GS HO 19 04 20.3 27.7S 12.7W CRISTA ATLANTICO SUL
15	EP	20 35 40.0	Z-CPLP	1.3	08590	GS HO 20 33 44.1 2.8N 84.3W PROX COSTA AMERICA CENTRAL
15	IP	21 15 57.7D	Z-CPLP	1.0	02173	GS HO 21 10 32.5 38.8N 16.9E SUL DE ITALIA
18	EP	09 33 09.0	Z-CPLP	1.1	03645	GS HO 09 27 40.0 33.2N 23.4E
	ES	38 22.0	Z-LP			GRECIA
18	EP	12 12 47.0	Z-CPLP	2.3	10180	GS HO 11 59 41.2 46.6N 153.7E ILHAS KURILHAS

19	IPN	01 23 44.0	Z=CP	0.3	00434	TN	H0 01 22 44 36.6N 6.5W
	IPG	23 54.4	Z=CP				OCEANO ATLANTICO
	ISN	24 31.0	E=CP				
	ISG	25 01.0	N=CP				
19	EP	06 24 44	Z=LP		13880	GS	H0 06 08 55.2 11.1S 118.5E
	EPKP	06 27 55	Z=CPLP	1.3			SUL DE SIMBAWA AUSTRALIA
	I	28 09	Z=CPLP				DESTRUIDOR 7.9MSZ 7.0MB
	IPP	29 46	Z=CPLP				VITIMAS ALDEIAS ARRAZADAS
	IPPP	32 30	Z=CPLP				TSUNAMINI 6=10 METROS
	ISKS	35 04	Z=CPLP				
	ISP	39 39	Z=LP				
	ISS	46 35	Z=LP				
	L	07 05	Z=LP				
19	EP	18 08 02.3	Z=CP	1.7	08677	GS	H0 17 55 00.1 37.1N 116.1W
							NEVADA DO SUL USA 5.6MB
							EXPLOSAO SUBTERRANEA TN
20	EP	02 57 31.6	Z=CPLP	1.9	07974	GS	H0 02 46 11.8 16.6N 86.8W
	LM	03 21.0	Z=LP				MAR DAS CARAIBAS
20	EP	04 03 05.0	Z=CPLP	1.3	07815	GS	H0 03 51 54.7 16.7N 86.6W
	LM	04 21.0	Z=LP				MAR DAS CARAIBAS
20	EPKP	12 41 38.7	Z=CPLP	0.7	16864	GS	H0 12 22 11.1 12.4S 167.1E
							ILHAS SANTA CRUZ
20	EPP	19 37 35	Z=LP		13930	GS	H0 19 16 32.7 11.0S 119.4E
	LM	20 44	Z=LP				ILHAS SUMBA INDONESIA
24	ESN	11 38 14	N=CP			REG	MTE
25	EPKP	18 24 11.3	Z=CPLP	1.5	13918	GS	H0 18 05 10.8 10.7S 119.3E
							ILHAS DE SIMBA
26	EP	20 03 54.0	Z=LP		11103	GS	H0 19 50 01.4 59.4S 20.5W
	EPPP	08 52.8	Z=LP				ATLANTICO SUL
	ES	15 04.0	Z=LP				
	LM	20 32.0	Z=LP				
27	EPKP	07 31 32	Z=CPLP	1.7	14188	GS	H0 07 12 22.5 8.1S 125.3E
	EPP	33 12	Z=LP				TIMOR 6.8MSZ
	LM	08 32	Z=LP				VITIMAS
28	EP	09 48 24.9	Z=CP	0.7	01446	GS	H0 09 45 14.5 38.2N 8.2E
							MEDITERNANEO OCIDENTAL
29	EPN	01 56 14.0	Z=CP		00254	TN	H0 01 55 34 42.5N 8.5W
	ISN	56 41.7	E=CP				OCEANO ATLANTICO
	ISG	56 45.6	E=CP				

29	EPP	14 42 10.2	Z=CPLP		11616	GS HO 14 23 40.5 17.4N 119.9E	
	L	15 22.0	Z=LP			ILHAS FILIPINAS	
29	EP	21 12 46.7	Z=CPLP	0.8	09690	GS HO 20 59 59.2 51.6N 173.9W	
						ILHAS ALEUTAS GRAU II	
30	EP	15 25 14.7	Z=CPLP	1.1	09715	GS HO 15 12 27.6 51.4N 173.8W	
						ILHAS ALEUTAS GRAU II	
31	IP	00 53 03.6D	Z=CPLP	1.2	07595	GS HO 00 42 05.4 7.3N 76.3W	
	I	53 16.0	Z=CPLP			NORTE DE COLOMBIA	
	ES	01 02 08.0	Z=LP			VITIMAS	
	LM	01 15.0	Z=LP				
31	EP	01 29 28.3	Z=CPLP		07586	GS HO 01 18 35.1 7.4N 76.2W	
						NORTE DE COLOMBIA	
31	EPN	20 46 58.6	Z=CP		00170	PROXIMO REG MTE PTO	
	ISN	47 19.6	NE=CP				

12.	EPN	22 22 02.4	Z=CP	0.4	00695	GS	HO 22 20 28.9 43.1N 1.0W	
	ESN	23 11.3	N=CP				PIRINEUS GRAU VI	
	ISG	23 51.7	E=CP					
13	EPKP2	00 41 40	Z=LP		16866	GS	HO 00 21 52.6 15.4S 173.3W	
	I	41 47	Z/LP				ILHA DE TONGA GRAU III	
	LM	01 43	Z=LP					
13	EP	18 47 32.0	Z=CPLP	1.3	05690	GS	HO 18 38 28.8 15.5N 60.4W	
							ILHAS LEENARD	
16	EP	23 52 05.6	Z=CPLP	1.2	01844	GS	HO 23 48 08.4 46.3N 12.9E	
	ES	55 04.0	Z=LP				AUSTRIA GRAU VI E VII	
	L	23 57.3	Z=LP				ESTRAGOS 5.1 MB	
17	EPKP	05 42 24	Z=LP		13511	GS	HO 05 23 30.2 11.7N 143.1E	
	LM	06 38.5	Z=LP				SUL ILHAS MAURICIAS	
20	EP	16 35 36	Z=CP		09172	GS	HO 16 23 13.3 23.4S 68.3W	
							NORTE DO CHILE GRAU III	
21	EP	17 52 14	Z=CPLP		09295	GS	HO 17 39 38.8 55.7N 162.3E	
							PROX COSTA DO KAMCHATCA	
21	IP	21 14 05.0D	Z=CPLP	0.7	09600	GS	HO 21 01 44.0 51.8N 155.2E	
	IPP	15 08.1					NORDESTE ILHAS KURILHAS	
23	EP	03 02 54	Z=CPLP	0.9	02386	GS	HO 02 58 01.2 41.5N 20.1E	
							ALBANIA GRAU VII	
23	EPP	05 18 45	Z=CP	1.8	13869	GS	HO 05 57 55.6 11.2S 118.2E	
							MAR TIMOR	
29	EPN	06 31 07.3	Z=CP		00436	IN	HO 06 30 04 36.8N 10.9W	
	ISN	35 53.6	E=CP				ATLANTICO SUL PORTUGAL	
30	EP	07 21 50	Z=CP		09186	GS	HO 07 10 25.3 11.2N 85.8W	
							NICARAGUA ESTRAGOS FRACOS	

DIA	FASE	HORA-TMG	COMP-APAR	T(S)	DIST-KM	REFERENCIAS
01	IP	03 08 11.3C	Z-CPLP		04898	GS HO 02 59 57.5 73.4N 54.6E NOVA ZEMBLA URSS 5.7MB EXPLOSAO SUBTERRANEA TN
01	IP	17 48 07.8C	Z-CPLP		07583	GS HO 17 37 06.8 7.4N 76.3W
	I	48 13.6	Z-CPLP			COLOMBIA DO NORTE
02	EPKP	10 55 29.2	Z-CPLP		13998	GS HO 10 36 28.3 11.4S 119.2E SUL ILHA DE SUMBA
04	EPKP	09 08 29	Z CPLP	1.5	16775	GS HO 08 48 39.2 13.7S 166.7E
	EPP	10 07	Z-LP			NOVAS HEBRIDAS
	LM	10 12	Z-LP			
04	EP	15 53 49.0	Z-CPLP	0.9	09811	GS HO 15 40 57.3 51.2N 178.4E
	LM	16 28.5	Z-LP			ILHAS ALEUTAS GRAU III.
04	EP	17 23 22	Z-CPLP	0.8	09824	GS HO 17 10 30.6 51.1N 178.3E ILHAS ALEUTAS GRAU II
04	EP	17 37 38.3	Z-CPLP	1.0	09821	GS HO 17 24 42.8 51.1N 178.0E
	LM	18 02	Z-LP			ILHAS ALEUTAS
04	EP	23 33 36.3	Z-CPLP	0.7	09788	GS HO 23 20 44.9 51.2N 178.2E ILHAS ALEUTAS.
05	EP	03 13 01	Z-CP	0.7	06531	GS HO 03 02 57.8 50.9N 78.9E KAZAQUISTAO URSS 5.9MB EXPLOSAO SUBTERRANEA TN
05	EPN	05 30 44	Z-CP		00187	PROX REG PTO MTE
	ESN	31 07.1	N-CP			
	ISG	31 12.3	N-CP			
06	EPKP2	04 53 12	Z-CPLP		16508	GS HO 04 33 27.9 10.5S 161.0E ILHAS SALOMAO
07	EPN	22 52 23.0	Z-CP		00753	GS HO 22 50 35.7 43.3N 0.3W
	ESN	53 42.7	Z-CP			PIRINEUS
	ISG	54 21.7	Z-CP			
10	EPP	06 37 41	Z-CPLP		02812	GS HO 06 31 41.8 34.9N 23.0E ILHA DE CRETA
11	EPKP2	14 32 44	Z-CPLP		16861	GS HO 14 12 29.9 15.4S 173.3W ILHAS DE TONGA
11	EP	23 24 47.0	Z-CPLP	0.7	02808	GS HO 23 19 23.7 35.0N 23.0E
	EPP	25 44.8	Z-LP			ILHA DE CRETA
	ES	29 25.0	Z-LP			
	LM	23 31.5	Z-LP			
12	EP	14 27 24 8	Z-CPLP		05916	GS HO 14 18 06.6 12.8S 14.7W CRISTA ATLANTICO SUL

DIA	FASE	HORA-TMG	COMP-APAR	T(S)	DIST-KM	REFERENCIAS
04	IP	13 54 23.0C	Z-CPLP	1.3	06214	GS HO 13 44 52.0 10.4N 62.3W PROX COSTA VENEZUELA
05	EP	05 41 07.3	Z-CPLP	0.9	03494	GS HO 05 34 46.8 40.9N 33.4E
	EPP	42 07.0	Z-LP			TURQUIA
	ES	46 22.0	Z-LP			
	LM	05 50.0	Z-LP			
08	EP	03 15 50	Z-CP		08730	GS HO 03 03 51.5 9.5S 74.7W
	I	16 14.0	Z-CP			PERU
10	EPN	06 07 46.5	Z-CP	0.5	00788	MTF E PTO REGISTARAM
	ESN	09 08.8	N-CP			
10	EPN	10 23 15.1	Z-CP	0.3	00368	IS HO 10 22 26.2 37.4N 6.2W
	IPG	23 34.7	Z-CP			AZNALCULLA-SEVILHA
	ISN	23 57.6	NE-CP			
10	EIPKIKP1	2 13 54.0	Z-CPLP	2.0	17984	GS HO 11 53 53.6 25.9S 175.4W
	EIPKP2	14 44	Z-LP			SUL DA ILHA DE TONGA
	EIPP	18 26	Z-LP			
	EISKKS	22 00	Z-LP			
	EISPP	31 20	Z-LP			
	EISS	37 10	Z-LP			
	L	13 13	Z-LP			
	M	13 26	Z-LP			
13	IP	23 28 52.1	Z-CPLP	0.9	09200	GS HO 23 16 27.2 12.2S 77.9W COST DO PERU
14	IPKP	05 15 29.3D	Z-CPLP	1.3	16883	GS HO 04 55 34.8 15.7S 173.0W ILHAS DE TONGA
14	EDKP	12 48 54	Z-CPLP		17194	GS HO 12 29 13.8 15.4S 167.4E
	EIPKP2	49 19	Z-CP			NOVAS HEBRIDAS
16	IPN	07 45 53.7D	Z CP		00440	IN HO 07 44 52 36.5N 10.2N
	IPB	46 00.0	Z-CP			OCEANO ATLANTICO
	ISN	46 41.9	N-CP			SW DE PORTUGAL
	ISG	46 58.4	E-CP			
17	EPKP	17 46 44.6	Z-CPLP	1.8	18608	GS HO 17 26 40.4 27.9S 173.1E
	EPP	51 46	Z-LP			NORTE DA NOVA ZELANDIA
	EPPP	18 00 52	Z-LP			
	ESS	12 00	Z-LP			
	LM	18 52	Z-LP			
18	IPN	09 38 36.5C	Z-CP	0.4	00533	GS HO 09 37 25 37.0N 13.0W
	ISN	39 32.7	NE-CP			ATLANTICO NORTE
	ISG	40 03.6	E-CP			

19	IP	06 44 26.1C	Z=CP	0.7	05861	GS HO 06 35 10.9 27.8N 54.9E SUL DO IRAO	
19	ESN	21 48 11.0	Z=CP		00477	SP HO 21 46 14 36.0N 9.5W OCEANO ATLANTICO	
22	EP	10 07 36.0	Z=CPLP	0.7	02824	GS HO 10 02 19.1 34.9N 23.2E ILHA DE CRETA	
22	EP	18 06 08.8	Z=CPLP	1.0	09334	GS HO 17 54 45.9 28.0S 62.9W SANTIAGO ARGENTINA	
22	IP	18 08 48.8D	Z=CPLP	1.7	09093	GS HO 17 57 17.4 27.9S 62.9W	
	IPP	11 01.3C	Z=CPLP	0.8		ARGENTINA	
24	EP	06 03 05	Z=CP	1.3	02203	GS HO 05 58 27.8 52.2N 31.6W CRISTA DO ATLANTICO	
24	EPN	13 06 50.0	Z=CP	0.2	00166	UC HO 13 06 22	
	ISN	07 09.0	Z=NE				
24	EPN	23 36 15	Z=CP		00211	REGISTADO EM MTE E PTO	
	ESN	36 40	NE=CP				
	ISG	36 45.6	E=CP				
25	EPB	18 39 13.6	Z=CP		00448	IN HO 18 37 58.5 36.3N 9.7W	
	EPN	39 51.3	Z=CP			ATLANTICO NORTE SW DE PORTUGAL	
27	EP	07 05 31	Z=CP	1.0	03181	GS HO 06 59 27.3 35.5N 27.6E ILHAS DO DODECANESCO	
29	EIP	03 16 59.6	Z=CP	0.7	06492	GS HO 03 06 57.7 49.8N 78.1E ESTE DE KAZIQUISTAO URSS EXPLOSAO SUBTERRANEA	
30	EPKP	13 13 12	Z=CP		17131	GS HO 12 53 22.8 14.9S 166.9E NOVAS HEBRIDAS	

DIA	FASE	HORA-TMG	COMP-APAR	T(S)	DIST-KM	REFERENCIAS
01	EPN	05 41 54.4	Z-CP		00278	REGISTADO EM MTE
	ISN	42 25.6	Z-CP			
03	EP	02 28 15.6	Z-CP	0.8	02700	GS HO 02 22 54.9 42.1N 23.9E BULGARIA
04	EP	10 05 43	Z-CPLP	1.3	09711	GS HO 09 52 55.7 51.7N 175.9W
	ES	16 40	Z-LP			ILHAS ANDREANOF
	M	10 37	Z-LP			
05	EPKP	06 22 53.9	Z-CPLP		16840	GS HO 06 02 57.6 10.1S 161.0E ILHAS SALOMAO
07	EPKP	23 16 44.4	Z-CPLP	1.3	16001	GS HO 22 57 15.8 7.2S 156.1E ILHAS SALOMAO
09	EP	22 12 01	Z-CPLP	1.1	08679	GS HO 22 00 0.1A 37.1N 116.0W SUL DA NEVADA USA EXPLOSAO SUBTERRANEA
13	EP	08 54 24.2	Z-CPLP	0.9	08800	GS HO 08 42 21.4 9.4S 75.7W PERU
13	IPN	20 07 39.3C	Z-CP	0.1	00130	UC HO 20 07 16 41.0N 9.5W
	ISN	07 55.3	Z-CP			OCEANO ATLANTICO
	ISG	07 59.6	Z-CP			
17	IPN	15 03 45.1C	Z-CP	0.3	00460	GS HO 15 02 41.8 43.0N 12.5W
	ISN	04 20.5	E-CP			ATLANTICO NORTE
18	EP	05 31 51.5	Z-CPLP	0.5	18336	GS HO 05 20 11.3 32.7N 88.4E
	LM	06 04.5	Z-LP			TIBET
22	EIPKP	16 16 22.9	Z-CPLP	1.0	14279	GS HO 15 56 44.1 10.2N 161.1E ILHAS SALOMAO
23	IP	09 39 24.0D	Z-CPLP	1.0	09983	GS HO 09 26 24.7 31.0S 67.8W
	I	39 54.0	Z-LP			PROV S.JOAO ARGENTINA
	EIPP	43 10	Z-LP			DESTRUIDOR DEZENAS DE MOR
	EIPPP	44 30	Z-LP			TOS E CENTENAS DE FERIDOS
	EISKS	50 26	Z-LP			
	EISPP	52 10	Z-LP			
	L	10 05	Z-LP			
	M	10 17	Z-LP			
23	EP	17 08 01	Z-CPLP	0.9	09595	GS HO 16 55 20.4 52.2N 171.6W ILHAS FOX
26	EP	09 34 02	Z-CPLP	0.3	15493	GS HO 09 14 51.2 15.3S 174.4E ILHA DE TONGA
28	IP	03 04 01.0C	Z-CPLP	0.8	03170	GS HO 02 59 10.8 36.0N 27.8E ILHAS DO DODECANESO

28 LM 07 21 Z=LP 09990 GS HO 06 31 29.3 31.4S 69.4W
PROV S.JOAO ARGENTINA

30 EP 04 17 01.6 Z=CPLP 1.0 06536 GS HO 04 06 57.5 49.9N 78.9E
KAZAQUISTAO URSS
EXPLOSAO SUBTERRANEA

DIA	FASE	HORA-TMG	COMP-APAR	T(S)	DIST-KM	REFERENCIAS
11	EP	16 32 29.8	Z-CPLP	1.3	06875	GS HO 16 22 08.6 9.5N 69.5W VENEZUELA
13	IP	01 22 40.5C	Z-CPLP	0.7	05102	GS HO 01 14 18.6 17.4N 54.8W
	EIPP	24 18.0	Z-CPLP			ATLANTICO NORTE
	ES	29 32.6	Z-LP			
	LM	01 34.5	Z-LP			
14	EPG	17 28 18	Z-CP		00044	UC SISMO LOCAL
	ISG	28 23	E-CP			
15	EP	23 31 03	Z-CPLP	1.0	06660	GS HO 23 20 53.6 4.8S 34.9E TANZANTA AFRICA
16	IPG	04 31 07.2C	Z-CP	0.3	00113	IN HO 04 30 46 39.6N 9.5W
	ISG	31 20.9	E-CP			PORTUGAL
18	EIP	16 57 43.6	Z-CPLP	0.7	06971	GS HO 16 47 17.1 39.8N 77.3E SINQUIANE CHINA
19	IP	23 43 46.0D	Z-CPLP	0.7	05819	GS HO 23 34 34.2 30.9N 56.5E
	EIPP	45 50.0	Z-CPLP			IRAO
	ES	51 22.0	Z-LP			DESTRUIDOR 584 MORTOS 1000
	M	00 10	Z-LP			FERIDOS ALDEIAS DESAPARICI DAS
20	EP	09 03 22	Z-CPLP	1.0	09957	GS HO 08 50 38.2 48.6N 153.0E ILHAS KURILHAS
20	EP	20 08 20	Z-CPLP	0.8	02066	GS HO 20 04 16.3 38.8N 15.6E SICILIA
21	EPP	01 19 33	Z-CPLP	0.7	12114	GS HO 01 00 32.8 25.5N 143.1E
	ESS	34 28	Z-LP			ILHAS VULCANO
	LM	01 59	Z-LP			
21	EP	16 52 20	Z-CPLP	0.9	09580	GS HO 16 39 33.0 52.9N 159.8E ESTE DE KAMCHATKA
28	IP	02 54 18.0D	Z-CPLP	1.0	05339	GS HO 02 15 36.7 16.6N 40.3E
	EIPP	56 06.0	Z-LP			MAR VERMELHO
	IS	03 01 16.2	Z-LP			
	ESS	04 28.8	Z-LP			
	L	03 09.8	Z-LP			
	M	03 14.0	Z-LP			
30	IP	17 39 03.0D	Z CPLP	0.5	02019	GS HO 17 35 08.9 49.0N 15.4E SUL DE ITALIA
30	EP	18 12 06.7	Z CPLP	0.7	02019	GS HO 18 08 51.3 39.9N 15.4E SUL DE ITALIA
31	EP	08 05 14.9	Z CPLP	1.1	08960	GS HO 07 53 18.0 15.3S 71.7W
	ES	15 26	Z LP			SUL DO PERU

ANALISADO E COMPILADO POR:

GEOF. F. VIDAL

OBS. GEOF. M. LEITÃO