

NOAA

OBSERVATOIRE ROYAL DE BELGIQUE
KONINKLIJKE STERRENWACHT VAN BELGIE



BULLETIN D'OBSERVATIONS : SEISMOLOGIE

WAARNEMINGSBERICHTEN : SEISMOLOGIE

BULLETIN SEISMIQUE

Station: Uccle

ANNEE 1959

Section - Géodynamique
Sectie - Géodynamica

Septembre 1968

Coordonnées géographiques de la Station.

Latitude : 50°47'55" N. Longitude : 4°21'30" E. Altitude : 100 m.
Sous-sol : sable (éocène moyen).

Appareils : Un séismographe vertical Wiechert (masse 1300 kg). Un séismographe horizontal Wiechert à deux composantes (N-S et E-W) (masse 1000 kg). Deux séismographes horizontaux Galitzine. Un séismographe à composante verticale type Wilip-Somville. Un séismographe vertical type Grenet.

En 1959 les séismographes ont fonctionné sans interruptions

Constantes approximatives des séismographes Galitzine :

E-W	$T_1 = 24^{\circ},5$	$l = 123,8 \text{ mm}$	$A_1 = 1040 \text{ mm}$
	$T = 21^{\circ},8$	$\mu = + 0,2$	$k = 38$
N-S	$T_1 = 24^{\circ},5$	$l = 124,7 \text{ mm}$	$A_1 = 1040 \text{ mm}$
	$T = 21^{\circ},8$	$\mu = + 0,2$	$k = 38$

Les constantes du séismographe à composante verticale et à enregistrement galvanométrique ont été approximativement les suivantes :

$$\mu = 0,0 ; \quad T = 10^{\circ},0 ; \quad T_1 = 10^{\circ},15 ; \quad k = 290$$

Les Constantes des séismographes Wiechert ont varié entre les valeurs extrêmes suivantes :

	Z*	E*	N*
T :	4°,22 et 4°,23	7°,35	7°,38 et 7°,36
$\frac{r}{T^2}$:	0,067 et 0,079	0,021 et 0,019	0,021 et 0,023
ϵ :	2,5 et 2,7	2,1	2,5
V :	157 et 159	140 et 142	162 et 161

Etat de la Cave. - Au cours de l'année 1959 la température a varié entre 14,7° et 16,3° C et le degré d'humidité a été maintenu à 60 %.

Analyse des séismogrammes et bulletins. - En 1959 les amplitudes n'ont pas été réduites en mouvement vrai du sol. C'est pour cette raison que les colonnes "Périodes" et "Amplitudes" ont été supprimées dans le Bulletin annuel.

Pour l'analyse des séismogrammes nous avons utilisé les tables de H. Jeffreys, B. Gutenberg et C.F. Richter, J.B. Macelwane et J.S. Joliat, ainsi que les hodographes publiés par Mme Y. Labrouste.

Les calculs des distances et des azimuts ont été exécutés à l'ordinateur IBM 1620.

L'impression du présent bulletin a été réalisée à partir des "listings" obtenus à la Tabulatrice IBM 447.

EXEMPLE EXPLICATIF DES TABLEAUX

STATION
ANNEE

MOIS

N°		HEURE ORIGINE	ϕ	λ	h	Δ_c	α_c	M	CENTRE INTERNATIONAL (1)
		HEURES	PHASES	COMPOSANTES	h_o	Δ_o	α_o	T	REMARQUES A_μ (2)
135	2	00 39 22,0	53,0 N	168,5 W		76,3	355,6	6,5	U.S.C.G.S.
		01 20	LM	E*					
136	2	2 17 35,0	52,5 N	168,0 W		76,8	355,2	6,9	U.S.C.G.S.
		2 29 34	P	Z*, N*	O	76,5			
		2 39 30	S	N*					
		3 12,5	M	E*				18,0	+ 750

(1) Chaque séisme enregistré est identifié, par un numéro suivi des déterminations obtenues dans les Centres Internationaux, ainsi que de la distance et de l'azimut de l'épicentre par rapport à la Station calculés à l'ordinateur IBM 1620.

(2) Les observations sont indiquées à la suite de chaque ligne d'identification.

LISTE DES ABREVIATIONS

- Δ_o : distance observée (exprimée au 0,1 de degré).
- Δ_c : distance calculée (exprimée au 0,1 de degré)
- α : azimuth (exprimé en degrés, et mesuré du N vers l'Est)
- h : profondeur de l'hypocentre (exprimée en km ou en fraction du rayon terrestre).
- H : heure origine
- Z* : séismographe vertical Wiechert.
- E* : séismographe horizontal Wiechert (composante E-W)
- N* : séismographe horizontal Wiechert (composante N-S).
- VG : séismographe vertical Wilip-Somville
- EG : séismographe horizontal Galitzine (composante E-W)
- NG : séismographe horizontal Galitzine (composante N-S)
- ZG : séismographe vertical Grenet.
- (...) : douteux
- AG.MI. agitation microsismique
- AG.ATM agitation atmosphérique
- MBT : mauvaise base de temps
- COM : compression
- DIL : dilatation
- $h=0$ ■ foyer superficiel
- $h=0,00$ ■ profondeur 33 km.

1	2	05 19	41.0	47.7 N	004.0 0	.000	6.29 243.69	BCIS
		5 21 10		E	VE		6.3	
		5 21 15		PN	EE			
		5 21 37		/P*/	EG			
		5 21 49		PG	VG,NG			
		5 22 17		E	VE,NE			
		5 22 24		/SN/	VE			
		5 22 51		S*	NG			
		5 23 02		E	NE			
		5 23 07		SG	VG,EG			
		5 23 18		E	VE,EE			
		5 23 23		E	NE			
2	3	07 59	12.0	35.5 S	029.5 0	.000	90.86 207.04	USCGS
		8 13 01		LQ	NG			
3	3	11 17	38.0	14.5 S	075.5 0	.000	94.73 253.10	USCGS
		11 58 09		LQ	NG			
		12 06 14		LR	NG			
		12 09 22		M	EG			
4	5	09 46	42.0	22.0 S	171.5 0	.000	151.09 352.04	USCGS
		10 06 34		PKP	EE,NE			
		10 10 04		PKS	EG			
		11 00 04		LR	NG			
5	7	22 21	58.0	37.0 N	029.3 E	.000	22.51 118.16	BCIS
		22 34 50		LM	NG			
6	8	01 33	48.0	15.5 N	061.0 0	.010	62.56 260.79	USCGS
		1 52 29		S	EE,NE			
		1 53 16		PPS	EG			
		1 55 47		E	VG			
		1 57 58		E	EG			
		2 00 01		LQ	NG			
		2 00 36		E	VG			
		2 01 45		E	NG			

		2 02	31	F	VG					
		2 03	35	LR	VG					
7	9	01 55	04.0	36.2 N	021.5 E	.000	19.10	133.24		BCIS
		2 06	28	M	EG					
		2 07	44	M	VG					
		2 08	28	M	EG					
8	11	04 27	24.0	36.7 N	029.5 E	.000	22.84	118.41		BCIS
		4 32	58	PP	NG					
		4 39	09	LR	NG					
		4 40	18	M	NG					
9	13	01 15	25.0	13.5 N	146.0 E	.000	107.77	39.33		USCGS
		1 49	30	SS	EG					
		2 04	36	LR	EG					
		2 19	45	M	EG					
10	15	21 20	26.0	25.5 S	180.0 W	.073	154.51	9.18		USCGS
		22 02	25	/SS/	EG					
11	16	01 31	25.0	52.0 N	171.0 O	.004	77.60	357.06		USCGS
		2 02	59	L	NG					
		2 04	15	LQ	EG					
		2 09	08	LR	EG					
		2 18	55	M	NG					
		2 21	35	M	EG					
12	22	05 10	28.0	37.9 N	142.6 E	.000	84.26	31.93		BCIS
		5 23	02	P	VG,NG		84.5			
		5 23	06	/PCP/	VG,NG					
		5 23	17	E	VE					
		5 23	50	E	EG					
		5 24	58	E	VG					
		5 26	18	PP	NG					

5	28	01	E	EG
5	32	40	E	NG
5	33	28	S	NG
5	33	46	/SCS/	EE,NE
5	34	28	PS	VG
5	34	53	PPS	VG
5	39	54	E	VG
5	46	08	LQ	VG
5	49	29	L	VG
5	49	56	LR	EE,NE
5	58	00	MR	VE,EE
6	01	46	M	NE,VG
6	03	22	M	EE
6	03	40	M	VE,EE

13 24 05 08 35.0 37.5 N 141.0 E .010 84.24 33.29 USCGS

5	49	34	LR	NG
5	52	56	E	EG
5	56	28	M	NG

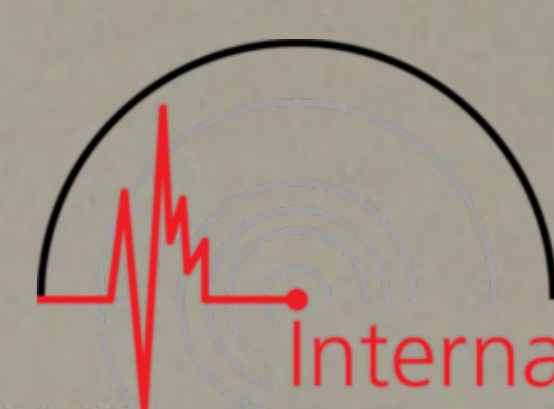
14 24 19 55 14.0 37.5 N 024.5 O .000 24.42 248.19 USCGS

20	00	35	P	VE,EE	24.4
20	00	41	E	EE	
20	00	48	F	VG	
20	00	48	E	NE,VG	
20	01	12	PP	NG	
20	01	32	E	NE	
20	01	47	E	VG	
20	02	07	E	NE,EG	
20	04	56	S	VE,EE	
20	05	06	E	EE,EG	
20	07	00	E	EE,VG	
20	07	56	PCS	VE	
20	08	48	L	EG	
20	08	59	E	VE	
20	09	26	E	NG	
20	09	44	E	VG	
20	10	38	M	VE	

15 26 11 38 36.0 36.8 N 029.1 E .000 22.55 118.83 BCIS

11	51	35	M	NG
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16 27 03 35 29.0 71.5 N 000.2 O .000 20.90 355.92 USCGS



3 40	14	P	VE,EE	20.9
3 40	21	E	NG	
3 40	29	E	NG	
3 40	46	PPP	NE	
3 41	18	E	NE	
3 41	58	E	VG	
3 44	08	S	EG	
3 45	53	LR	NG	
3 47	34	M	EG	

17	28	01 21	16.0	38.5 N	142.5 E	.000	83.85	31.78	USCGS
		2 14	57	M	EG				

18	29	06 45	36.0	37.5 N	024.5 O	.000	24.42	248.19	BCIS
		6 51	24	E	VE				
		6 51	33	E	VG				
		6 51	39	PP	VG				
		6 55	26	S	EE				
		6 55	44	E	EG				
		6 57	20	LR	NG				
		6 58	06	/M/	NG				

19	29	23 24	30.0	71.0 N	008.0 E	.000	20.36	3.43	USCGS
		23 29	08	P	VE		20.5		
		23 29	24	E	VE				
		23 29	33	PP	VE,EE				
		23 29	42	PPP	EE				
		23 29	51	E	EE				
		23 30	08	E	NE				
		23 30	19	E	VE				
		23 32	00	E	EE				
		23 32	59	S	NE				
		23 33	26	SS	EE				
		23 36	30	M	EE				

20	30	20 38	58.0	44.0 N	144.0 E	.000	79.35	28.40	USCGS
		21 20	08	M	EE				

21	30	22 16	47.0	44.0 N	144.0 E	.000	79.35	28.40	USCGS
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		22	56	22	M	NE				
22	5	01	04	50.0	57.0 N	157.0 0	.010	71.56	349.37	USCGS
		1	16	01	P	NE				
		1	16	08	E	VG				
23	6	07	19	27.0	43.5 N	144.5 E	.000	79.96	28.28	USCGS
		7	58	56	LR	EG				
		8	00	57	LR	NG				
24	6	14	33	02.0	51.0 N	175.5 0	.004	78.68	359.91	USCGS
		14	54	53	E	EG				
		14	58	06	E	NG				
		15	10	21	LR	NG				
		15	24	06	M	EG				
25	7	09	36	51.0	04.0 S	081.5 0	.000	90.38	264.28	USCGS
		9	49	56	P	VE,EE		90.4		
		9	50	12	E	NG				
		9	50	25	E	NG				
		9	53	35	PP	EE				
		9	54	48	E	VG				
		9	56	40	E	EG				
		9	59	56	E	EG				
		10	00	40	E	EG				
		10	00	50	S	EE				
		10	01	11	E	EG				
		10	01	42	E	EG				
		10	02	01	PS	EG				
		10	07	12	E	EG				
		10	21	18	LR	NG				
26	7	20	08	17.0	37.7 N	020.7 E	.000	17.51	132.12	BCIS
		20	17	56	M	NG				
27	8	01	02	26.0	49.0 N	028.5 0	.000	21.16	277.97	USCGS

1	07	14	P	EE	21.2
1	07	20	E	EE	
1	07	30	/PP/	VE,EE	
1	07	44	PPP	VE,VG	
1	08	12	E	EG	
1	09	29	E	NG	
1	11	10	S	NE,NG	
1	12	07	LR	VG	
1	12	17	E	EG	
1	13	10	E	VE	
1	13	30	E	NE,VG	
1	13	46	M	VE	

28 9 04 42 33.0 50.5 N 177.5 O .000 79.16 1.21 USCGS

5	04	46	S	EG,NG	80.0
5	13	59	LQ	EG	
5	20	29	LR	NG	
5	26	20	M	EG	

29 11 21 36 46.0 15.0 S 173.5 O .000 144.28 356.46 USCGS

21	56	17	PKP	NG	
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30 14 22 25 50.0 28.0 N 097.0 E .000 70.43 69.64 USCGS

23	02	41	LR	EG	71.0
23	03	08	E	NG	

31 15 03 59 25.0 59.5 S 025.0 E .000 111.30 168.89 USCGS

4	20	13	E	NG	112.0
4	26	49	E	EG,NG	
4	33	27	E	EG	
4	33	46	E	NG	
4	45	25	LQ	EG	
4	49	18	LR	NG	
4	57	01	E	NG	
4	58	11	E	EE	
4	58	35	E	VE	
5	00	10	M	VG	

32 16 00 39 32.0 01.0 S 081.5 O .000 88.08 266.17 USCGS

		1 02	58	E	EG					
		1 03	09	S	NG					
		1 08	26	E	EG					
		1 19	33	LR	NG					
33	17	12 03	05.0	51.5 N	171.0 0	.000	78.10	357.04		USCGS
		12 15	09	P	VE		78.0			
		12 15	17	PCP	VE,EE					
		12 15	29	F	NE,VG					
		12 15	36	E	NG					
		12 16	02	E	VG					
		12 16	15	E	VG					
		12 18	03	PP	EG					
		12 25	01	S	NE					
		12 33	52	LQ	EG					
		12 40	07	LR	NG					
		12 49	00	M	EG					
34	20	18 16	22.0	15.5 N	091.0 0	.018	81.46	283.93		USCGS
		19 01	45	LR	EG					
		19 02	22	LR	NG					
35	23	01 58	38.0	05.5 S	150.0 E	.000	126.50	44.35		USCGS
		2 58	37	LR	EG					
		3 03	52	E	NG					
		3 09	44	M	NG					
36	23	10 31	14.0	52.5 N	159.0 E	.010	74.96	15.74		USCGS
		10 42	48	P	VG,EG					
37	23	16 04	48.0	50.0 N	157.0 E	.000	76.99	17.73		USCGS
		16 16	43	P	VG,EG					
		16 47	33	M	EG					
38	24	12 45	41.0	11.0 N	122.5 E	.010	98.46	61.09		USCGS
		13 39	25	M	NG					

39	27	20 56	30.0	27.5 N	129.0 E	.000	88.06	46.99	USCGS
		21 20	33	E	EG				
		21 31	02	LQ	EG				
		21 40	48	LR	NG				
		21 42	53	E	EG				
		21 45	05	M	NG				
40	1	00 31	14.0	75.5 N	008.0 E	.000	24.86	2.18	BCIS
		36 38		IP	VG		24.6		
		36 49		E	VG,NG				
		36 57		E	NG				
		37 17		PP	EG				
		37 29		PPP	NG				
		37 45		E	VG				
		38 08		E	EG				
		39 34		E	EG				
		40 59		S	VG				
		42 55		LR	NG				
		44 34		M	EG				
41	2	15 51	41.0	36.5 N	070.5 E	.034	48.36	80.45	USCGS
		16 06	49	/S/	NG				
		16 10	33	LQ	EG				
		16 18	18	M	EG				
42	10	22 49	39.0	14.0 N	092.5 O	.000	83.53	284.10	USCGS
		23 33	58	LR	EG				
43	12	01 29	07.0	07.0 N	145.0 E	.000	113.18	43.22	USCGS
		2 03	05	E	EG				
		2 21	34	LR	EG				
		2 26	35	E	EG,NG				
		2 28	27	LM	EG				
44	13	19 08	05.0	34.2 N	026.2 E	.000	22.98	127.84	BCIS
		19 13	08	P	EE				

		19 13	18	E	NG					
		19 16	54	/S/	EG					
		19 20	17	LM	EG					
45	14	02 55	24.0	45.0 N	151.5 E	.000	80.50	22.98		USCGS
		3 37	29	LR	NG					
		3 40	14	M	EG					
46	16	08 02	10.0	45.5 N	151.0 E	.000	79.91	23.14		USCGS
		8 26	59	E	NG					
		8 35	47	LQ	NG					
		8 44	53	LM	NG					
47	17	08 25	22.0	27.5 N	130.0 E	.000	88.52	46.23		USCGS
		8 38	15	P	NG		88.5			
		8 49	03	S	EE,EG					
		8 50	03	/PS/	VG					
		8 55	03	/SS/	EG					
		8 59	33	E	NG					
		9 12	31	M	NE					
48	18	00 41	17.0	27.0 N	129.0 E	.000	88.48	47.25		USCGS
		1 05	03	S	NG					
		1 11	55	E	NG					
		1 15	39	E	EG					
		1 25	16	LR	NG					
		1 28	03	E	EG					
		1 32	33	M	NE					
49	19	08 25	35.0	35.2 N	036.0 O	.000	32.91	257.44		BCIS
		8 32	17	P	EE,NE		33.0			
		8 32	48	E	VG					
		8 33	18	/PP/	EG					
		8 35	56	E	VG					
		8 37	33	S	VE,NE					
		8 39	33	SS	NG					
		8 39	58	SSS	EG					
		8 40	53	LR	EE,VG					

8 41 33 E VG
8 42 46 /SCS/ VG
8 48 02 M VG

50 20 01 02 42.0 52.0 N 159.0 E .000 75.44 15.88 USCGS
1 48 03 M EG
1 51 17 M NG

51 20 10 51 49.0 26.0 S 013.5 O .000 77.99 196.38 BCIS
11 06 03 E EE,EG
11 23 28 LQ NG
11 28 18 LR EG

52 20 15 44 31.0 36.5 N 142.5 E .000 85.66 32.64 USCGS
16 32 25 M EG

53 22 22 36 41.0 46.7 N 003.2 O .000 6.47 233.54 BCIS
22 38 14 P* EG 6.0
22 38 59 E VG
22 39 44 S* EE
22 39 55 /SG/ NG

54 23 07 10 22.0 40.0 N 118.0 O .000 76.53 318.13 USCGS
7 22 18 P NG 77.0
7 32 09 S NG
7 42 58 LQ NG
7 47 32 LR EG
7 48 34 E NG
7 52 08 LM NG
7 54 34 M EG

55 24 17 18 24.0 34.0 N 142.0 E .000 87.74 34.07 USCGS
18 04 48 L EG
18 06 55 M EG

56	25	00 00	13.0	17.5 S	180.0 E	.097	146.58	7.56	USCGS
		34 15		M	EG				
57	26	02 24	12.0	07.0 S	155.5 E	.004	130.18	38.84	USCGS
		3 22	16	LQ	EG				
		3 27	13	LR	NG				
		3 38	18	M	EG				
58	26	05 24	42.0	00.0 N	125.0 E	.000	108.83	65.40	USCGS
		6 17	56	LR	EG				
59	27	07 02	07.0	17.5 N	063.0 O	.018	62.32	263.89	USCGS
		7 12	16	P	VE,EE				
60	27	22 57	36.0	01.0 N	085.0 O	.000	88.77	270.14	USCGS
		23 40	45	LR	EG				
		23 41	12	E	NG				
61	28	19 47	07.0	20.0 S	178.5 O	.089	149.20	5.25	USCGS
		20 05	55	PKP	VE,VG				
		20 05	58	E	VG				
62	30	21 04	00.0	41.0 N	030.0 O	.000	25.63	260.94	BCIS
		21 10	12	PP	EG				
		21 13	56	S	EG				
		21 15	59	L	EG				
63	31	07 20	45.0	15.0 S	173.0 O	.000	144.25	355.63	USCGS
		7 40	33	/PKP/	NG				
		8 20	56	LQ	EG				
		8 29	31	LR	NG				

		8	40	48	M	NG					
64	1	00	34	18.0	27.5 N	021.0 W	.000	30.18	229.12		USCGS
		40	32		P	VG,EG		30.0			
		41	28		PP	VG,NG					
		45	28		S	VG,EG					
		46	56		/SS/	EG,NG					
		47,1			L	NG					
		48,5			L	VG					
		50,1			M	EG					
65	1	14	48	34.0	18.5 S	169.0 E	.026	145.53	26.37		USCGS
		15	07	56	PKP2	VG,EG					
		15	08	43	*PPKP2	VG					
66	2	04	34	19.0	40.0 N	029.7 E	.000	20.71	111.61		BCIS
		4	44,8		LQ	NG					
		4	46,7		LR	EG					
67	2	19	21	34.0	20.5 N	121.0 E	.000	89.88	56.92		USCGS
		20	10,2		L	EG					
68	4	14	12	36.0	10.0 S	120.5 E	.000	114.05	75.67		USCGS
		15	06,5		LQ	EG					
		15	13,7		LR	EG					
		15	16,7		LM	NG					
		15	19,9		M	EG					
69	8	08	01	36.0	17.0 S	174.5 O	.010	146.29	358.03		USCGS
		8	21	09	PKP	VS	.010	146.3			
		8	21	40	*PPKP	VS					
		8	27	32	PPP	EG					
		8	27	56	SKS	EG,NG					
		8	28	45	*SSKS	NG					
		8	29	36	E	EG,NG					

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		8 30	24	E		NG					
		8 32	24	E		NG					
70	10	23 51	35.0	19.0 S		173.2 0	.000	148.23	355.61		BCIS
		24 19	07	E		VG,NG					
		24 19	14	E		NS					
		24 19	44	E		ES,VG					
		24 20	35	E		NG					
71	12	09 54	58.0	16.5 N		095.0 0	.018	83.14	287.57		USCGS
		10 07	06	P		EG	.018	83.0			
		10 07	40	*PP		VG,EG					
		10 17	16	S		EG					
		10 32,2		L		EG					
		10 42,7		LM		EG					
72	12	15 22	33.0	04.5 S		134.0 E	.010	117.59	60.06		USCGS
		16 21,6		L		EG					
		16 27,6		LM		NG					
73	12	20 54	00.0	15.5 S		173.0 0	.000	144.75	355.59		USCGS
		21 13	56	PKP		VG,EG					
		22 02,7		L		NG					
		22 07,5		L		EG					
		22 09,6		LM		NG					
74	14	02 53	04.0	24.0 N		109.5 0	.000	85.55	302.97		USCGS
		3 33,8		L		EG					
75	14	07 20	28.0	57.5 N		155.0 0	.000	70.82	348.37		USCGS
		7 31	40	P		VG,NG					
76	15	00 15	21.0	41.5 N		143.0 E	.000	81.31	30.15		USCGS

52,6	L	NG
54,6	L	EG
1 00,6	LM	EG
1 06,4	M	NG

77	19	21 28	03.0	44.6 N	006.8 E	.000	6.42	164.20	BC15
		21 31	30	E	VG				
		21 31	36	SG	VG,EG				
78	20	03 27	52.0	06.0 S	149.5 E	.010	126.72	45.18	USCGS
		4 30,9		L	EG				
		4 41,4		LM	EG				
79	20	04 21	10.0	08.5 N	083.0 O	.000	81.77	273.36	USCGS
		4 00,5		L	EG				
80	22	10 55	05.0	54.0 N	167.0 O	.000	75.42	354.74	USCGS
		11 06	50	P	VG,NG				
		11 07	08	E	NG				
81	22	19 01	41.0	11.5 N	086.5 O	.000	81.70	277.96	USCGS
		19 25	05	PS	EG				
		19 39,6		LR	NG				
		19 42,7		MR	EG				
82	27	20 26	46.0	36.5 S	097.5 O	.000	124.13	252.55	USCGS
		21 04	51	SSP	EG				
		21 09	16	SSS	EG				
		21 27,7		L	NG				
83	24	09 31	33.0	11.5 N	086.5 O	.000	81.70	277.96	USCGS
		10 09,7		L	NG				

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84	24	17 57	58.0	31.0 S	178.0 O	.000	160.15	5.97	USCGS
		18 18	02	PKP1	VG,EG		161.0		
		18 18	46	PKP2	VG,FG				
		18 22	32	PP	VG				
		18 25	46	E	VG				
		18 35	57	PPS	NG				
		18 42	55	/SS/	EG,NG				
		18 48,0		L	EG				
		18 14,9		L	NG				
		18 17,7		L	EG				
		18 28,2		M	NG				
85	25	00 26	41.0	37.0 N	028.5 E	.000	22.07	119.38	BCIS
		31 36		P	EG		22.1		
		32 16		/PP/	NG				
		35 46		S	EG,NG				
		36 16		SS	VG,NG				
		37 27		E	NG				
		39,1		LM	NG				
		41,0		M	EG				
86	25	01 05	42.0	37.0 N	028.5 E	.000	22.07	119.38	BCIS
		1 10	36	P	NG		22.1		
		1 11	06	PP	EG				
		1 14	40	S	EG				
87	26	14 45	16.0	46.5 N	013.0 E	.000	7.16	123.60	BCIS
		14 47	08	PN	VS,ES		7.2		
		14 47	11	PP	EG				
		14 47	36	PG	NS,EG				
		14 48	48	SSS	VG,EG				
		14 49	13	SG	ES,NG				
88	26	20 40	38.0	25.0 N	122.5 E	.018	86.97	53.25	USCGS
		20 53	10	P	VG,NG	.018	87.0		
		20 53	40	/*PP/	VS,ES				
		20 56	37	PP	VG				
		20 57	09	*PPP	VG				

		21	03	24	F	ES,NS				
		21	03	36	S	EG				
		21	04	20	*SS	FG				
		21	04	38	SP	NS,NG				
		21	04	56	PS	EG				
		21	05	18	PPS	EG				
		21	09	24	E	ES,NS				
		21	09	39	SS	EG				
		21	10	12	*SSS	NS,EG				
		21	12	50	SSS	EG,NG				
		21	16,6		LM	NG				
		21	26,5		M	EG				
89	27	13	09	20.0	33.5 N	093.0 E	.000	64.09	68.25	USCGS
			13	42,9	LR	EG				
90	28	11	09	30.0	15.0 N	093.0 O	.000	83.07	285.12	USCGS
		11	21	56	P	VG,EG		83.0		
		11	26	38	E	NG				
		11	32	10	E	EG,NG				
		11	32	15	S	VG				
		11	32	38	E	EG				
		11	37	52	/SS/	EG				
		11	41	08	SSS	EG,NG				
		11	41	35	SCS	EG				
		11	46,0		L	NG				
		11	53,5		LM	VG				
		11	57,1		M	EG				
91	3	04	41	24.0	12.5 N	087.5 O	.010	81.57	279.36	USCGS
			5	20,6	LQ	EG				
92	4	07	15	42.0	52.5 N	159.5 E	.004	75.04	15.43	USCGS
		7	27	18	P	VS,ES	.004	75.0		
		7	27	22	E	NS,VG				
		7	27	26	*PP	VS				
		7	27	32	PCP	VS,EG				
		7	30	07	E	VS,NG				
		7	30	16	PP	VS,VG				
		7	31	56	/PPP/	VS,VG				
		7	36	56	S	NS				

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		7 37 18	E	VS,ES					
		7 37 56	/PPS/	ES					
		7 46,5	LR	EG					
		7 51,9	LM	NS					
		8 06,1	M	VG					
93	5	19 04 16.0	52.5 N	159.5 E	.004	75.04	15.43		USCGS
		19 16 04	P	EG					
		19 42,1	LR	NG					
		19 46,6	LM	EG					
		19 50,6	M	NG					
94	7	00 03 24.0	03.5 S	148.5 E	.000	124.06	44.90		USCGS
		28 36	E	VG					
		1 05,0	LQ	EG,NG					
		1 16,0	LR	EG					
95	8	11 34 50.0	53.5 N	160.5 E	.004	74.24	14.55		USCGS
		11 46 22	P	VG					
		11 46 40	*PP	VG,EG					
		11 47 00	E	NG					
		12 13,9	LR	NG					
96	12	04 57 35.0	54.5 N	168.0 E	.000	74.27	9.83		USCGS
		5 09 08	P	VS		73.0			
		5 09 56	E	EG					
		5 18 34	S	EG,NG					
		5 23 36	/SS/	EG,NG					
		5 25 32	E	EG					
		5 33,9	LQ	EG					
		5 36,2	LR	VG					
		5 44,6	LM	EG					
		5 48,6	M	NS					
97	12	09 46 51.0	23.5 S	064.5 O	.000	95.43	239.34		USCGS
		10 00 21	P	VG		95.8			
		10 04 10	PP	VG,EG					
		10 10 56	E	EG,NG					

		10 11 36	S	EG,NG					
		10 17 48	/SS/	EG,NG					
		10 31 30	E	EG,NG					
		10 32 42	F	EG					
		10 37,2	LM	EG					
		10 40,8	M	VG					
		10 49,2	M	VG					
98	12	21 40 22.0	51.5 N	177.0 O	.000	78.17	.87		USCGS
		22 20,5	LQ	EG					
		22 31,5	LR	NG					
99	12	21 59 56.0	51.5 N	177.0 O	.000	78.17	.87		USCGS
		22 48,8	LR	EG					
100	14	00 55 55.0	40.0 N	023.0 E	.000	16.92	122.47		USCGS
		1 05,5	LR	VG,EG					
101	14	06 36 55.0	35.1 N	024.9 E	.000	21.62	128.66		BCIS
		4 41 44	P	VS,ES					
		4 42 16	PP	VG					
		4 42 28	PPP	ES,NS					
		4 45 44	S	EG					
		4 45 56	PCP	VG,EG					
		4 46 36	SSS	NS,EG					
		4 47,2	LR						
		4 48,5	LM						
102	14	09 33 22.0	19.0 S	170.0 E	.000	146.28	25.01		USCGS
		9 53 06	PKP1	VG,EG					
		9 53 50	E	NG					
103	14	10 41 56.0	19.0 S	170.0 E	.010	146.28	25.01		USCGS
		11 01 34	/PKP/	VG					

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104	14	11 49	20.0	19.0 S	170.0 E	.010	146.28	25.01	USCGS
		12 08	56	/PKP/	VG,NG				
		12 09	46	F	VG				
105	14	13 19	32.0	19.0 S	170.0 E	.018	146.28	25.01	USCGS
		13 39	03	PKP	VG				
		13 39	39	*PPKP	VG,NG				
106	14	19 22	18.0	40.0 N	023.3 E	.000	17.08	121.90	BCIS
		19 31,4		LR	EG				
107	15	06 16	23.0	04.5 S	153.5 E	.004	127.10	39.88	USCGS
		6 35	21	PKP	VG	.004	127.0		
		6 35	36	*PPKP	VG				
		6 37	26	PP	VG				
		6 38	03	E	VG				
		6 38	54	PKS	NG				
		6 47	34	/PS/	EG,NG				
		7 11,2		LR	EG				
		7 13,4		LM	NG				
108	19	15 17	44.0	33.0 N	068.5 E	.000	49.34	85.41	USCGS
		15 33	52	S	VG,NG				
		15 43,8		LR	EG				
		15 46,9		LM	NG				
109	19	16 36	51.0	37.0 N	026.5 E	.000	20.98	122.58	USCGS
		16 41	41	P	EG		21.3		
		16 45	35	S	FG				
		16 48,4		LR	NG				
110	19	19 35	03.0	44.5 N	149.0 E	.000	80.32	24.85	USCGS
		19 47	18	P	VG		80.0		
		19 56	56	E	NG				

		19 57 17	S	NG					
		19 57 42	/SCS/	EG					
		20 06,7	LR	EG					
		20 21,0	LM	NG					
111	19	19 49 12.0	41.5 N	042.0 E	.000	27.43	95.08		USCGS
		19 55 04	P	VG,EG		27.5			
		19 59 42	S	VG,EG					
		20 00 50	/SS/	VG					
		20 02,6	LQ	NG					
		20 04,1	LR	EG					
112	21	11 34 23.0	28.0 S	069.0 O	.004	101.44	239.85		USCGS
		11 52 32	P	VG,EG					
		11 17,4	LQ	EG					
		11 21,7	LR	NG					
		11 29,4	LM	EG,NG					
113	24	13 19 32.0	36.3 N	048.0 E	.000	34.26	97.94		USCGS
		13 27,6	LR	EG					
114	24	19 17 40.0	17.5 N	097.0 O	.010	83.57	289.70		USCGS
		19 30 00	P	NS	.010	84.0			
		19 30 27	*PP	VG					
		19 33 38	*PPP	EG					
		19 40 19	S	VS,EG					
		19 40 37	F	NG					
		19 41 10	/PS/	EG,NG					
		19 45 47	SS	EG,NG					
		19 57,9	M	ES,EG					
		20 03,3	M	NG					
115	26	04 13 01.0	27.5 N	126.5 E	.010	86.87	48.88		USCGS
		4 25 39	P	VS,EG	.010	86.9			
		4 25 59	/*PP/	VG,EG					
		4 29 06	PP	VG					
		4 35 58	S	EG					
		4 36 43	*SS	EG,NG					

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		4 58,4		LR	NG					
		5 00,6		MR	EG					
		5 03,1		LM	NG					
116	26	05 27 36.0		17.0 N	061.3 O	.000	61.62	262.14		USCGS
		5 37 59		P	VG					
117	26	06 36 00.0		37.5 N	070.0 E	.000	47.42	79.74		USCGS
		6 44 35		P	NG					
		6 55 13		E	EG					
		7 03,1		LQ	NG					
		7 08,5		LR	EG					
118	29	10 42 48.0		18.0 S	169.5 E	.010	145.19	25.31		USCGS
		11 02 21		PKP2	VS,NS					
		11 02 43		*PPKP	VS,ES					
119	30	05 36 25.0		20.0 N	080.0 O	.000	71.23	278.77		USCGS
		6 10,7		LQ	EG					
120	2	00 47 17.0		32.5 N	131.5 E	.000	84.91	42.56		USCGS
		1 28,8		LQ	EG					
		1 39,8		LR	NG					
121	2	02 37 46.0		21.0 N	121.0 E	.000	89.47	56.64		USCGS
		2 51 03		E	EG					
		3 01 11		E	EG					
		3 22,6		LQ	NG					
		3 26,0		LR	EG					
		3 28,6		LM	EG					
122	2	03 23 12.0		25.0 S	176.0 O	.000	154.25	.75		USCGS
		3 43 15		PKP1	EG,NG					



123	2	03 31	55.0	25.5 S	176.0 0	.000	154.75	.76	USCGS
		3 51	59	PKP1	EG				
124	2	03 52	06.0	25.5 S	176.0 0	.000	154.75	.76	USCGS
		4 48,6		LQ	NG				
		4 54,9		LR	EG				
125	2	04 57	18.0	21.0 N	121.5 E	.000	89.73	56.25	USCGS
		5 10 11		P	EG		88.0		
		5 20 55		S	FG				
		5 21 41		E	EG				
		5 41,6		LQ	EG				
		5 45,7		LR	ES,NS				
		5 47,9		M	ES				
126	2	05 42	26.0	42.0 S	072.0 0	.018	113.69	232.35	USCGS
		6 01 59		PP	EG				
		6 02 25		/PPP/	NG				
127	3	03 43	42.0	04.0 N	077.0 0	.000	81.40	265.83	USCGS
		4 24,6		LQ	EG				
128	5	20 37	15.0	12.0 N	086.5 0	.010	81.32	278.28	USCGS
		21 05 25		*SSS	EG				
		21 07 56		SSS	EG,NG				
		21 14,6		LQ	NG				
		21 22,1		LR	EG				
129	7	13 39	38.0	00.5 N	018.0 0	.000	53.54	208.21	USCGS
		13 56 41		S	EG,NG				
		14 02,3		LQ	NG				
		14 07,5		LR	EG				

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		14	09,9		LM		NG			
130	9	23	10 38.0	58.0 S		009.5 O	.000	108.94	187.75	USCGS
		23	54,9	LQ		EG				
131	10	04	16 03.0	35.7 N		024.2 E	.000	20.79	128.91	BCIS
		4	20 44	P		EG,NG		20.7		
		4	24 36	S		EG,NG				
		4	26,7	LQ		NG				
		4	27,8	LR		EG				
132	13	21	56 45.0	46.1 N		012.3 E	.000	7.07	128.63	BCIS
		21	58 25	/PN/		EG		7.0		
		21	58 53	E		VG				
		21	59 05	PG		EG				
		21	59 51	SN		VG				
		22	00 39	SG		EG,NG				
133	14	00	11 57.0	20.5 S		068.0 O	.010	94.99	243.75	USCGS
		29	07	PP		ES	.010	95.0		
		29	19	E		NG				
		29	31	E		EG				
		35	45	SKS		ES				
		36	15	S		NG				
		36	25	E		VG				
		38	33	PPS		VG				
		38	52	E		VG				
		43	25	/PSS/		VG				
		43	37	E		VG				
		55,2		LQ		EG				
		1	02,6	LR		NG				
		1	03,1	M		NG				
134	16	00	32 17.0	42.3 N		024.1 E	.000	15.98	114.49	BCIS
		41	11	E		NG				
		42	35	E		EG				

135	16	03 28	41.0	44.0 N	019.0 E	.000	12.02	118.81	BCIS
		3 31 33		P	VG,NG				
		3 35,5		LQ	NG				
136	17	12 32	02.0	42.7 N	020.0 E	.000	13.42	121.09	BCIS
		12 39 25		E	NG				
		12 39 53		E	EG				
137	18	06 50	45.0	55.0 S	129.0 O	.000	151.86	243.05	USCGS
		8 07,9		LQ	EG				
		8 09,7		LR	NG				
138	18	15 31	25.0	54.0 N	160.0 E	.000	73.68	14.71	USCGS
		15 43 01		P	VG		73.5		
		15 43 15		PCP	VG,NG				
		15 45 49		PP	VG				
		15 52 31		S	NG				
		15 53 05		SCS	EG				
		15 53 11		/PPS/	EG				
		15 57 15		SS	EG				
		15 57 34		E	NG				
		15 58 09		E	NG				
		16 10,5		L	EG				
		16 14,1		LM	NS				
		16 17,9		M	VG				
139	18	15 58	58.0	54.0 N	161.0 E	.000	73.84	14.11	USCGS
		16 09 15		P	EG				
		16 30,5		LQ	EG				
		16 37,1		LR	EG				
		16 40,3		LM	EG				
140	19	01 37	51.0	06.0 N	082.5 O	.000	83.36	271.37	USCGS
		2 15,2		LQ	NG				
		2 19,9		LR	NG				

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141	20	16 42	25.0	32.0 N	040.0 O	.000	37.52	257.21	USCGS
		16 56	09	S	EG,NG				
142	23	14 35	02.0	39.0 N	119.0 O	.000	77.79	318.24	USCGS
		15 12,5		LQ	EG				
		15 17,3		LR	EG				
143	24	07 15	44.0	36.1 N	142.1 E	.000	85.88	33.10	BCIS
		7 28	05	/P/	VG				
144	25	03 12	28.0	36.0 N	071.5 E	.026	49.30	80.29	BCIS
		3 20	31	P	VG,EG				
		3 20	35	E	EG				
		3 20	46	E	NG				
145	25	06 46	55.0	62.0 N	027.5 O	.000	20.67	315.07	USCGS
		6 51	43	P	EG,NG		20.6		
		6 51	59	PP	EG,NG				
		6 52	15	PPP	EG,NG				
		6 57,5		LR	VS,NG				
146	25	13 37	10.0	30.5 N	131.0 E	.000	86.41	43.94	USCGS
		14 27,5		LR	EG				
		14 33,5		LM	EG				
147	25	14 34	57.0	05.0 S	152.0 E	.018	126.87	41.81	USCGS
		15 57,5		LR	NG				
148	26								
		52 45		/PKP/	VG				
		1 52,9		L	EG				

		1	58,6	L		NG						
149	27	19	04	27,0	33,0	S	179,0	0	.010	162,04	9,19	USCGS
		19	24	21	PKP1		VG		.010	163,0		
		19	25	09	PKP2		NG					
		19	28	52	PP		VG					
		19	32	47	PPP		NG					
		19	42	11	E		NG					
		19	42	19	SPP		EG					
		19	49	01	/SS/		EG					
		19	50	11	E		EG					
		19	55	22	PSS		EG					
		20	02,6		LQ		EG					
		20	07,9		LR		NG					
		20	37,6		LM		NG					
150	27	19	11	23,0	42,0	N	080,0	E	.000	50,78	68,79	USCGS
		19	20	29	P		EG			51,0		
		19	27	45	S		EG					
		19	27	56	PPS		EG					
		19	30	11	E		NG					
		19	30	59	E		EG					
		19	35,8		LR		EG,NG					
		19	39,2		LM		NG					
151	28	04	23	28,0	63,5	N	020,0	0	.000	18,20	323,64	USCGS
		4	33,1		LR		EG					
152	28	19	43	22,0	09,5	S	122,5	E	.000	114,89	73,63	USCGS
		20	05	35	PPP				115,0			
		20	09	59	S		EG					
		20	10	35	E		EG					
		20	12	55	/PS/		EG					
		20	18	54	/SS/		NG					
		20	35,2		LQ		NG					
		20	46,2		LR		EG					
153	29	07	16	07,0	07,0	S	155,5	E	.000	130,18	38,84	USCGS
		7	38	45	/PKS/		VG,NG					

		7 39 35	E	NG					
		8 13,1	LQ	EG					
		8 21,5	LR	NG					
154	1	02 27 46.0	28.0 N	139.5 E	.081	92.16	38.62		USCGS
		2 49 41	SKS	EG		92.0			
		2 50 11	SCS	NG					
		2 51 27	SP	EG					
		2 56 35	SSP	NG					
		3 16,4	LQ	EG					
155	2	11 27 45.0	20.0 S	178.5 0	.097	149.20	5.25		USCGS
		11 46 29	PKP2	NG					
156	2	11 34 20.0	20.0 S	178.5 0	.097	149.20	5.25		USCGS
		11 53 05	PKP2	VG					
157	3	17 55 12.0	16.1 S	172.8 E	.000	144.17	19.21		USCGS
		18 14 47	PKP	ES,NS					
		18 15 45	E	EG					
		18 16 33	E	NS					
		18 29 03	PS	NG					
		18 30 53	PPS	NG					
		18 37,5	LQ	EG					
		18 54,9	LR	EG					
		19 06,7	LM	EG,NG					
		19 12,6	M	EG					
158	3	17 55 53.0	16.0 S	173.0 E	.000	144.11	18.85		USCGS
		18 15 27	PKP1	ES,NS					
		18 18 49	E	ES,VG					
		18 18 52	PP	NS					
		18 25 35	/SKKS/	EG,NG					
159	4	07 40 51.0	72.2 N	001.7 E	.000	21.53	357.77		BCIS
		7 51,5	LR	NG					

160	4	15 24	34.0	51.2 N	003.2 E	.000	.84	299.22	BCIS
		15 24	51	PN	EG				
		15 25	18	E	EG				
161	6	09 10	17.0	26.5 S	061.0 0	.089	95.97	235.00	USCGS
		9 22	50	P	VG,EG		96.0		
		9 23	14	E	VG				
		9 25	05	*PP	VG				
		9 31	35	E	NG				
		9 33	15	S	NS,VG				
		9 34	45	SP	EG				
		9 40	09	SS	NG				
162	6	09 23	27.0	26.5 S	061.5 0	.089	96.24	235.36	USCGS
		9 32	27	P	ES,NS				
		9 45	39	SKS	ES,NS		96.0		
		9 46	27	S	ES,NS				
		9 49	25	PS	EG				
		9 50	05	PPS	EG				
		9 53	35	SSP	EG				
		9 56	53	E	EG				
163	9	16 05	18.0	20.5 S	068.0 0	.010	94.99	243.75	USCGS
		16 19	05	*PP	VG,EG	.010	96.0		
		16 19	54	E	NG				
		16 29	05	SKS	VG,NG				
		16 29	41	S	VG				
		16 29	59	E	EG				
		16 31	03	E	EG				
		16 35	58	E	EG				
		16 44,2		LQ	NG				
		16 48,8		LR	EG				
		16 57,5		LM	EG				
164	10	04 11	40.0	19.0 S	069.0 0	.000	94.39	245.41	USCGS
		5 03,6		L	EG,NG				

165	11	03 07	10.0	17.0 S	173.5 E	.000	145.19	18.40	USCGS
		3 25	49	E	VG				
		3 25	59	E	VG				
166	11	12 01	42.0	37.5 S	078.0 E	.000	108.93	126.16	BCIS
		12 07,5		LQ	EG,NG				
		12 15,6		LR	VG,NG				
		12 25,6		LM	NG				
167	11	18 23	00.0	44.5 N	148.5 E	.000	80.19	25.18	USCGS
		19 09,5		LQ	NG				
168	12	00 24	22.0	19.5 S	177.5 O	.057	148.75	3.38	USCGS
		43 29		/PKP/	VG,EG				
169	13	12 28	45.0	52.0 N	172.5 O	.000	77.64	358.01	USCGS
		12 40	45	P	VG,NG				
		12 50	34	S	EG				
		12 54	45	E	EG				
		13 16,1		LQ	EG				
		13 20,2		LR	NG				
		13 24,5		LM	EG				
		13 26,9		M	EG				
170	14	11 33	51.0	57.0 N	158.0 O	.014	71.67	349.93	USCGS
		12 11,3		LQ	NG				
171	14	13 00	24.0	16.5 S	173.0 E	.010	144.60	19.03	USCGS
		13 19	59	/PKP/	VG				
		13 22	35	E	VG				
		13 22	50	E	VG				
		13 23	05	E	VG				

172	14	18 14	51.0	21.0 S	179.0 O	.004	150.16	6.31	USCGS
		18 34	02	E	VG				
173	14	20 25	09.0	39.3 N	020.3 E	.000	16.05	129.60	BCIS
		21 00	38	E	EG,NG				
		22 33,7		L	EG				
174	16	15 17	27.0	50.5 N	177.0 O	.000	79.17	.88	USCGS
		15 29	33	P	VG,EG				
175	16	19 13	59.0	20.7 S	168.2 E	.000	147.36	28.90	BCIS
		19 33	41	PKP	VG				
176	17	13 16	36.0	44.6 N	006.8 E	.000	6.42	164.20	BCIS
		13 20	04	P	VG,EG				
177	18	19 54	57.0	15.5 N	120.5 E	.018	93.68	60.14	USCGS
		20 08	00	P	ES,NS		93.8		
		20 11	49	PP	VG				
		20 12	36	E	VG				
		20 18	20	/SKS/	ES				
		20 18	51	S	ES,NS				
		20 25	22	SS	NG				
		20 31,2		LQ	NG				
		20 39,3		LR	ES				
		20 43,4		LM	EG				
		20 49,5		M	EG				
178	19	03 42	02.0	06.5 S	105.0 E	.000	101.66	85.87	USCGS
		4 35,7		LQ	EG				
		4 45,5		LR	NG				
		4 48,7		LM	EG				

179	19	15 06	10.0	15.0 S	070.5 O	.026	92.12	248.99	USCGS
		15 19	02	P	VG,EG		92.0		
		15 19	52	*PP	EG				
		15 22	46	PP	EG,NG				
		15 23	30	*PPP	VG				
		15 29	14	SKS	ES,NS				
		15 30	56	*SSKS	VG				
		15 30	10	SP	NG				
		15 30	32	PS	ES				
		15 36	11	SS	NG				
		15 37	28	*SSS	NG				
		15 39	32	SSS	NG				
180	20	02 41	04.0	06.0 S	111.0 E	.073	105.06	80.81	USCGS
		3 04	12	/SKS/	EG				
		3 05	28	S	NG				
		3 06	56	SP	EG				
		3 20,7		L	EG				
		3 41,9		L	NG				
181	21	07 43	13.0	14.5 S	167.5 E	.000	141.31	26.70	USCGS
		8 02	44	PKP	VG				
		8 05	49	S	VG				
182	21	09 17	51.0	19.0 N	068.5 O	.000	64.70	269.36	USCGS
		9 48,5		L	NG				
183	21	12 29	09.0	16.0 N	098.0 O	.000	85.33	289.51	USCGS
		12 41	48	P	VG				
		12 52	14	SKS	EG,NG				
		12 56	57	E	EG				
		13 11,5		L	EG				
		13 19,1		L	NG				
184	21	13 03	31.0	16.0 N	098.0 O	.000	85.33	289.51	USCGS
		13 16	11	P	VG				
		13 16	16	PCP	VG				

185	22	11 15	33.0	02.0 N	128.5 E	.000	109.19	61.16	USCGS
		12 17,5		LM	EG				
186	22	19 24	17.0	53.0 N	153.0 E	.097	73.34	19.18	USCGS
		19 34 46		P	VG,EG		73.0		
		19 35 04		PCP	EG				
		19 35 59		E	NG				
		19 43 24		S	NG				
		19 43 56		SCS	EG				
		19 47 20		*SS	EG				
		20 13,6		L	EG				
187	22	23 02	27.0	05.0 S	152.5 E	.000	127.08	41.24	USCGS
		23 21 31		PKP	VG		127.0		
		23 23 30		PP	VG				
		23 24 52		PKS	EG,VG				
		23 28 38		SKS	EG				
		24 00,8		LQ	EG				
		24 04,6		LR	NG				
		24 18,5		LM	VG,EG				
		24 22,1		LM	EG				
188	23	14 56	45.0	24.5 S	176.0 O	.004	153.76	.74	USCGS
		15 16 54		PKP2	VG,NG				
		15 20 30		PP	VG				
		16 12,4		LR	VG				
		16 29,4		MR	VG				
		16 44,5		LM	VG				
189	24	01 23	09.0	41.0 N	125.5 O	.000	78.69	323.65	USCGS
		1 35 26		/PCP/	VG				
		1 37 50		E	VG				
		1 45 10		S	NG				
		1 56,1		LR	EG,NG				
		1 04,7		LM	EG				
		1 07,4		M	EG				

190	24	23 03	08.0	56.5 S	028.5 O	.000	110.24	198.72	USCGS
		24 00,8		LQ	EG				
		24 03,8		LR	NG				
191	25	19 23	54.0	49.5 N	142.5 E	.000	73.94	26.93	USCGS
		20 04,1		L	EG				
192	26	17 07	03.0	40.8 N	027.5 E	.000	18.91	112.97	BCIS
		17 11 26		P	VG,EG				
		17 15 03		S	EG				
		17 18,1		LM	VG,NG				
193	27	1.500 KM à l'W des Iles Galapagos							
		6 15,1		L	EG				
194	31	19 53	02.0	38.5 N	070.0 E	.000	46.81	78.66	USCGS
		20 18,4		LQ	EG				
		20 20,1		LR	NG				
195	2	20 30	02.0	20.0 N	067.0 O	.000	63.01	268.94	BCIS
		21 16,6		LQ	EG				
		21 22,5		LR	NG				
196	4	08 02	17.0	20.5 S	178.0 O	.089	149.72	4.39	USCGS
		8 21 04		PKP	VG				
197	5	05 16	39.0	12.5 N	125.0 E	.000	98.60	58.19	USCGS
		6 11,2		L	NG				
198	6	16 21	17.0	39.8 N	023.2 E	.000	17.17	122.56	BCIS



		16	31.1		LQ	EG,NG				
199	7	10	43	32.0	56.0 N	023.2 E	.000	12.38	57.83	USCGS
		10	54	54	P	VG,EG				
		11	04	16	S	EG				
		11	04	44	E	NG				
		11	18.9		LQ	EG				
		11	25.1		LR	EG				
		11	29.1		LM	NG				
200	7	21	45	26.0	56.5 N	154.0 O	.000	71.66	347.55	USCGS
		21	56	50	P	VG,NG				
		22	06	10	/S/	EG				
		22	20.9		L	EG				
		22	29.0		L	NG				
201	8	00	47	38.0	55.0 N	162.5 E	.000	73.09	12.96	USCGS
			59	28	PCP	VG,NG				
		1	08	36	S	EG				
		1	23.4		LQ	EG				
		1	32.4		LR	EG				
202	9	04	48	30.0	00.0 N	066.0 E	.000	72.40	112.64	BCIS
		5	17.8		LQ	EG				
203	9	20	29	28.0	10.0 S	161.0 E	.010	135.00	33.53	USCGS
		21	25.5		LQ	EG				
		21	37.8		LR	NG				
204	10	00	36	42.0	35.2 N	027.2 E	.000	22.71	124.58	USCGS
			49.6		LR	NG				
205	10	00	36	35.0	55.5 S	146.0 E	.000	156.62	116.63	USCGS

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		2 08,6		LR	EG					
		2 11,2		MR	NG					
206	10	23 07 27.0	35.0 N		111.0 E	.000	73.05	55.33		USCGS
		23 46,3		LR	NG					
207	11	21 49 42.0	11.0 S		163.0 E	.000	136.62	31.38		USCGS
		22 55,5		LR	EG					
		23 09,5		MR	EG					
208	11	23 28 04.0	41.2 N		023.0 E	.000	16.08	119.45		BCIS
		23 37 08		E	NG					
		1 15,7		LQ	EG					
		1 20,5		LR	NG					
209	12	04 05 20.0	15.0 S		028.0 E	.000	68.64	155.43		USCGS
		4 40,8		LQ	EG					
		4 48,2		LR	NG					
210	12	09 58 22.0	16.5 S		177.5 0	.000	145.77	3.17		USCGS
		10 18 04		PKP	VG					
		10 45 12		/SSS/	NG					
		11 06,3		LQ	NG					
		11 08,8		LR	EG					
		11 15,5		LM	VG,NG					
		11 21,5		M	EG					
211	13	00 33 11.0	40.0 N		049.0 E	.000	32.69	91.71		BCIS
		45,6		LR	EG					
212	15	08 57 04.0	23.0 N		121.0 E	.000	87.83	55.51		USCGS
		9 09 56		P	VG,EG		88.0			

9 13 26	PP	EG
9 20 22	SKS	NS,ES
9 20 48	E	NS
9 21 46	PS	VS,NG
9 26 32	SS	NG
9 41,0	LM	ES
9 44,1	M	VG

213 15 13 14 26.0 21.0 S 174.0 O .000 150.25 356.91 USCGS

14 42,8	L	EG
14 46,1	L	NG

214 17 21 04 40.0 07.5 S 156.0 E .000 130.83 38.50 USCGS

21 23 58	PKP	VG,EG	131.0
21 26 14	PP	VG,EG	
21 27 26	PKS	NG	
21 38 02	PPS	EG	
21 43 34	SS	EG	
21 44 03	SSP	EG	
22 03,5	LM	EG,NG	
22 08,6	LM	NS,ES	
22 11,9	M	VG,NG	

215 18 00 34 03.0 22.5 N 122.0 E .026 88.77 55.03 USCGS

46 38	P	VG
1 21,1	L	NG

216 18 06 37 15.0 44.6 N 111.0 O .000 69.77 316.51 USCGS

6 48 26	P	VS,ES	70.0
6 48 44	E	VS,ES	
6 51 08	PP	EG	
6 52 56	E	VS,EG	
6 57 42	S	NS,VG	
6 58 08	PS	VG	
6 58 18	PPS	EG	
7 02 08	E	VS	
7 02 46	E	NS	
7 10,3	LR	VS,NS	
7 16,9	LM	VS	

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217	18	11 03	52.0	44.8 N	111.0 O	.000	69.61	316.64	USCGS
		11 33.6		LQ	EG				
		11 42.9		LR	EG				
218	18	15 26	06.5	44.5 N	110.4 O	.000	69.59	316.08	USCGS
		15 37 16		P	VG,NG				
		15 46 26		S	EG				
		15 47 10		PPS	NG				
		15 50 58		SS	NG				
		15 59.3		LQ	ES,NS				
		16 03.3		LM	NS				
219	18	22 04	00.0	41.0 N	019.5 E	.000	14.37	127.17	BCIS
		22 11.8		LR	VG				
220	19	04 04	03.0	44.5 N	111.4 O	.000	70.02	316.69	USCGS
		4 24 24		S	EG				
		4 28 46		E	EG				
		4 37.1		LQ	EG				
		4 42.8		LR	NG				
		4 45.6		LM	EG				
221	19	07 08	28.0	21.5 N	121.0 E	.000	89.06	56.36	USCGS
		8 56.6		L	NG				
222	21	08 03	15.0	50.5 S	139.5 E	.000	151.76	107.09	USCGS
		9 23 14		/PKP/	VG				
		9 25 53		E	VG				
		9 20.1		L	EG				
		9 23.7		L	NG				
		9 32.6		L	EG				
223	21	09 37	49.0	50.5 S	140.0 E	.000	152.06	106.88	USCGS
		9 57 54		PKP2	VG				

		11 00,8		L		EG				
224	22	21 28 02,0		17.5 S		069.5 O	.000	93.50	246.71	USCGS
		21 43 28		E		VG				
225	23	22 21 30,0		35.5 N		003.0 O	.000	16.19	202.01	USCGS
		22 25 17		P		EG		16.0		
		22 28 28		S		EG				
		22 28 36		SS		EG				
		22 30,0		LR		NS				
		22 32,0		LM		NS				
226	24	00 33 56,0		35.5 N		003.0 O	.000	16.19	202.01	BCIS
		1 42,8		L		EG				
227	24	15 41 40,0		10.5 S		161.5 E	.000	135.64	33.13	USCGS
		16 50,7		L		NG				
228	24	21 30 46,0		10.5 S		161.0 E	.000	135.47	33.78	USCGS
		21 50 18		/PKP/		VG,EG		135.0		
		21 52 52		PP		VG,EG				
		21 53 49		PKS		NG				
		22 11 09		SS		NG				
		22 16 06		SSS		EG				
		22 17 36		E		NG				
		22 26,4		L		EG				
		22 30,5		L		EG				
		22 39,9		LM		ES,NS				
		22 45,7		M		VS				
229	25	11 57 52,0		41.0 N		020.0 E	.000	14.62	126.05	BCIS
		12 06,3		LQ		EG,NG				
230	25	12 24 18,0		27.5 S		071.0 O	.000	102.16	241.58	USCGS

		13 26,6		LQ		NG				
		13 29,1		LR		EG				
231	25	13 40 06.0	60.5 S		155.0 E	.000	160.88	131.94		USCGS
		14 29,5		L		EG				
232	26	02 29 37.0	05.0 S		152.0 E	.000	126.93	41.85		USCGS
		2 49 06		E		VG				
233	26	08 25 30.0	18.0 N		094.5 O	.000	81.69	288.15		USCGS
		8 37 50		P		VG,EG	82.0			
		8 42 52		PP		EG				
		8 47 59		S		VG,EG				
		8 48 50		/PS/		VG				
		8 49 16		PPS		EG				
		8 53 02		E		NG				
		8 53 23		SS		EG				
		8 59,5		LQ		NG				
		9 06,9		LR		ES				
		9 11,6		LM		ES				
234	26	10 27 41.0	51.0 N		132.0 O	.000	72.09	332.71		USCGS
		10 39 07		P		VG	72.0			
		10 48 30		S		NG				
		10 50 03		PS		EG,NG				
		10 53 11		SS		NG				
		10 54 06		E		EG				
		10 56 32		/SSS/		NG				
		10 57,6		LQ		NG				
		11 02,1		LR		ES,EG				
		11 07,0		LM		EG				
235	27	13 36 50.0	45.0 S		080.5 O	.000	120.17	234.92		USCGS
		14 40,0		L		EG				
		14 43,2		L		EG				
236	28	23 53 10.0	25.0 N		096.0 E	.000	72.04	72.45		USCGS



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			31,8	L	NG				
237	28	02 37	00.0	09.0 S	158.0 E	.018	132.98	36.84	USCGS
			32,3	L	EG				
238	28	15 52	10.0	17.0 S	167.0 E	.000	143.52	28.70	USCGS
		16 11	49	PKP	VG				
239	30	14 39	24.0	53.0 N	106.8 E	.000	57.83	44.23	BCIS
		15 17,0		L	EG				
240	30	21 45	07.0	36.5 S	078.5 E	.000	108.43	125.16	USCGS
		22 44,7		L	NG				
241	30	22 57	00.0	37.0 N	068.5 E	.000	46.79	81.29	USCGS
		23 18,5		L	EG				
		23 21,6		L	NG				
242	30	23 36	42.0	53.0 N	106.0 E	.000	57.48	44.62	USCGS
		24 07,9		L	NG				
243	1	07 28	23.0	54.0 N	035.5 O	.000	24.32	293.17	BCIS
		7 33 42		P	VG,EG				
		7 38 05		S	VG,EG				
		7 39,9		L	EG				
244	1	10 49	43.0	20.0 N	064.5 O	.000	61.42	266.97	USCGS
		11 08 34		/S/	VG,EG				

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245	1	11 37	40.0	41.0 N	019.6 E	.000	14.42	126.95	BCIS
		11 41	11	P	VG,EG		14.5		
		11 41	20	PP	VG				
		11 41	23	PPP	EG				
		11 44	15	SSS	NG				
		11 45,6		M	NS,EG				
246	3	04 02	00.0	41.0 N	020.0 O	.000	19.50	249.27	USCGS
		4 10,5		LR	EG,NG				
247	3	06 27	33.0	04.5 S	122.5 E	.000	110.96	70.35	USCGS
		6 46	35	E	EG				
		6 56	09	/PS/	EG				
		7 24,9		LQ	NG				
		7 34,7		LR	EG				
248	4	08 36	53.0	48.2 N	007.4 E	.000	3.27	141.53	BCIS
		8 38	09	E	EG,NG				
249	4	18 26	41.0	01.0 S	024.0 O	.000	56.92	214.50	USCGS
		18 44	29	S	NG				
		18 48,6		L	NG				
		18 52,1		L	EG				
250	5	23 22	56.0	57.0 S	075.0 O	.000	125.54	221.44	USCGS
		56,7		LR	EG				
251	5	06 07	38.0	01.0 N	129.0 E	.000	110.29	61.31	USCGS
		7 02,8		LR	NG				
252	5	15 34	44.0	01.0 N	129.0 E	.000	110.29	61.31	USCGS
		16 30,6		LR	NG				

253	5	21 53	22.0	51.0 N	179.5 E	.000	78.59	3.13	USCGS
		22 16,5		LR	EG				
		22 21,8		MR	NG				
254	6	00 27	59.0	05.5 N	126.5 E	.000	105.19	60.87	USCGS
		1 22,5		LR	EG				
255	7	11 17	48.0	54.0 N	105.5 E	.000	56.58	43.97	BCIS
		11 32 48		E	VG				
256	7	13 12	08.0	54.5 S	022.0 E	.000	105.87	169.41	BCIS
		14 04,6		L	EG				
257	7	16 05	33.0	31.4 N	132.0 E	.000	86.07	42.75	USCGS
		16 58,9		L	EG,NG				
258	7	19 19	39.0	42.5 N	142.5 E	.010	80.25	30.06	USCGS
		19 59,6		L	EG				
259	7	20 18	37.0	58.5 S	024.5 O	.000	111.37	195.80	USCGS
		21 04 31		L	VG				
260	11	12 31	01.0	43.0 N	029.0 O	.000	23.93	264.01	BCIS
		12 36 22		P	EG				
		12 40 35		S	VG,NG				
		12 42,5		LQ	NG				
261	11	14 18	07.0	43.0 N	029.0 O	.000	23.93	264.01	USCGS

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		14 23 27	P	VG,EG					
		14 27 45	S	VG,EG					
		14 28,6	LQ	NG					
262	12	01 53 47.0	03.0 S	146.5 E	.000	122.70	46.76		USCGS
		2 14 45	E	EG					
		2 31,5	L	EG					
		2 49,5	L	EG					
		2 53,6	L	EG					
		3 04,6	L	EG					
263	12	07 01 45.0	03.0 S	146.5 E	.000	122.70	46.76		USCGS
		8 01,6	LQ	EG					
		8 12,7	LR	EG,NG					
264	12	11 24 27.0	09.5 S	156.0 E	.000	132.64	39.58		USCGS
		11 44 41	E	NG					
		11 47 14	PKS	VG					
		11 49 02	PPP	EG					
		12 21,6	L	EG					
		12 29,5	L	EG					
		12 42,5	L	EG					
265	12	21 20 00.0	36.5 N	070.5 E	.029	48.36	80.45		BCIS
		21 28 27	P	VG					
		21 39,5	L	EG					
266	13	19 15 52.0	39.5 N	014.5 E	.000	13.36	143.87		USCGS
		19 24 47	P	VG					
267	14	14 09 39.0	28.5 S	177.0 0	.000	157.71	3.16		USCGS
		14 29 41	/PKP1/	VS,VG		157.7			
		14 30 03	E	NG					
		14 30 13	PKP2	VS,VG					
		14 30 45	E	VG					



		14 33 55	E	NG					
		14 34 25	E	VG					
		14 36 47	SKS	EG					
		14 37 03	E	NG					
		14 40 35	SKKS	EG					
		14 47 13	PPS	EG					
		14 54 31	SSP	VG					
		15 00 11	/SSS/	NG					
		15 31,9	LR	ES					
		15 43,1	LM	ES					
268	14	17 06 15.0	29.0 S	176.5 0	.000	158.22	2.03		USCGS
		17 26 15	PKP	VG					
		17 26 45	E	VG					
		17 27 00	E	VG					
		17 30 27	PP	VG					
		18 30,5	LQ	EG					
		18 32,7	LR	EG					
		18 40,5	LM	VG,EG					
269	14	17 22 28.0	46.0 N	151.5 E	.000	79.56	22.62		USCGS
		17 34 51	/PCP/	VG					
270	14	22 23 53.0	29.0 S	177.0 0	.000	158.21	3.21		USCGS
		23 14,1	L	EG					
		23 41,1	L	NG					
		23 49,7	L	NG					
271	15	05 59 42.0	28.5 S	177.0 0	.000	157.71	3.16		USCGS
		6 19 41	PKP1	VG		157.7			
		6 20 14	PKP2	VG					
		6 23 53	PP	VG					
		6 26 49	SKS	EG,NG					
		6 33 59	E	NG					
		6 37 07	PPS	EG,NG					
		6 43 49	SS	EG					
		6 45 25	E	NG					
		6 49 44	SSS	NG					
		6 51 55	E	NG					
		7 22,9	L	VS					
		7 25,4	L	ES					

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272	16	10 07	45.0	29.0 S	176.5 0	.000	158.22	2.03	USCGS
		11 40,4		L	EG				
		11 47,9		L	EG				
273	16	15 57	03.0	28.5 S	176.0 0	.000	157.73	.83	USCGS
		16 17 35		PKP2	VG				
		17 13,9		L	EG				
		17 22,8		L	NG				
274	17	14 36	11.0	28.5 S	176.0 0	.000	157.73	.83	USCGS
		14 56 43		PKP2	VG				
		16 02,4		L	EG,NG				
		16 10,4		L	NG				
		16 13,3		L	EG				
275	17	21 49	02.0	35.5 N	003.0 0	.000	16.19	202.01	BCIS
		21 58,1		L	EG				
276	17	22 14	40.0	30.5 N	114.0 0	.000	82.56	310.00	USCGS
		23 03,7		L	NG				
277	18	02 05	00.0	35.5 N	003.0 0	.000	16.19	202.01	BCIS
		2 13,8		L	EG				
278	18	12 01	11.0	57.5 S	024.0 0	.000	110.34	195.88	USCGS
		12 46,7		L	EG				
		12 54,6		L	EG				
		12 59,5		L	NG				
279	19	15 43	54.0	00.0 N	029.8 E	.000	54.99	148.39	BCIS



		16	03,4		L	EG				
280	20	06	07	59.0	13.5 S	111.5 O	.000	116.56	281.66	USCGS
		7	00,8		L	EG,NG				
		7	06,5		L	EG				
		7	14,8		L	EG				
281	21	02	08	28.0	09.5 S	149.0 E	.000	129.56	47.80	USCGS
		3	14,5		L	EG,NG				
		3	20,3		L	EG				
		3	26,5		L	EG				
282	22	22	23	11.0	35.5 N	138.5 E	.000	85.12	36.00	USCGS
		23	03,0		L	EG				
		23	05,5		L	NG				
		23	08,8		L	EG				
		23	17,0		L	NG				
283	24	05	43	38.0	83.5 N	112.5 E	.000	41.87	9.35	USCGS
		6	19,4		L	EG				
284	25	02	36	48.0	22.0 N	122.0 E	.000	89.18	55.31	USCGS
		2	49	45	P	VG,EG		89.2		
		2	53	16	PP	EG,NG				
		3	00	26	S	NS				
		3	01	25	E	EG				
		3	01	31	PS	VG				
		3	01	59	/PPS/	EG				
		3	07	23	E	EG				
		3	12	34	E	NG				
		3	18,8		L	EG				
		3	23,9		LM	ES				
		3	33,9		M	ES				
285	28	04	20	27.0	26.5 N	128.0 E	.000	88.43	48.27	USCGS
		5	08,1		L	EG				

		5	17,6		L	EG					
286	29	15	31	57.0	29.0 S	176.5 O	.000	158.22	2.03		USCGS
		16	16	15	SS	EG					
		16	56,0		L	NG					
		16	59,0		L	EG					
		17	06,1		L	NG					
		17	12,5		L	EG					
287	30	16	57	37.0	36.0 N	003.3 O	.000	15.79	203.40		USCGS
		17	06,5		L	EG					
288	30	20	25	58.0	18.0 S	168.0 E	.000	144.76	27.69		USCGS
		21	38,7		L	EG					
		21	47,5		L	NG					
289	5	18	27	47.0	83.5 N	112.5 E	.000	41.87	9.35		USCGS
		18	35	41	P	NS		42.5			
		18	37	32	PP	NG					
		18	42	01	S	EG,NG					
		18	45	02	SS	NG					
		18	48,0		L	NG					
		18	52,0		M	NG					
		19	28,0		F	NG					
290	5	20	34	06.0	41.0 N	019.5 E	.000	14.37	127.17		BCIS
		20	37	35	P	NS		14.7			
		20	40	21	S	NG					
		20	40	38	SS	VG,EG					
		20	41,0		LQ	EG,NG					
		20	42,5		LR	VG,EG					
		20	43,6		M	EG,NG					
		21	03,0		F	EG,NG					
291	7	08	30	41.0	41.0 N	019.7 E	.000	14.47	126.72		BCIS
		8	34	16	P	ES,NS		14.7			



8 34 27	PP	NG
8 36 58	S	NS, VG
8 36 11	SS	NS, VG
8 38,1	L	VS, ES
8 39,3	M	VS, ES
9 09,3	F	NG

292	8	00 03	28.0	19.0 S	169.0 E	.000	146.00	26.63	USCGS
		23 13		PKP	VS, ES				
		23 30		E	VG, EG				

293	8	07 20	51.0	41.0 N	019.5 E	.000	14.37	127.17	BCIS
		7 29,0		L	EG, NG				

294	12	03 21	52.0	02.0 N	098.5 E	.000	91.03	85.54	USCGS
		3 35 01		P	NG				
		3 38 31		PP	NS				
		3 45 52		S	NG				
		4 04,0		LM	VG				

295	15	06 15	32.0	00.5 N	120.5 E	.000	105.79	68.92	USCGS
		6 29 49		IP	ES, NS		106.5		
		6 34 18		IPP	ES, NS				
		6 36 32		PPP	VG, EG				
		6 38 21		PPPP	VG				
		6 40 28		SKS	NG				
		6 41 15		SKKS	EG				
		6 41 53		S	NG				
		6 43 33		PS	VG				
		6 44 30		PPS	EG				
		6 49 13		SS	NG				
		6 53 08		SSS	EG				
		7 01,0		L	NG				

296	15	07 40	20.0	44.0 N	148.0 E	.000	80.51	25.71	USCGS
		27 52 40		PCP	VS, VG				

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297	19	02 46	49.0	44.5 N	148.0 E	.000	80.05	25.52	USCGS
		2 59	04	PCP	ES				
298	19	15 55	30.0	54.5 N	029.0 O	.000	20.47	293.42	USCGS
		16 14	23	PP	VG,NG				
		16 20	30	SKS	EG				
		16 23	43	PS	EG				
		16 24	42	PPS	EG				
		16 29	31	SS	NG				
		16 33	36	SSS	NG				
		16 36	06	E	EG				
		16 47,5		L	EG,NG				
		16 51,0		M	EG				
299	24	23 40	37.0	41.8 N	698.0 E	.000	74.33	41.92	USCGS
		23 48	53	P	VG		45.4		
		23 50	39	PP	EG				
		23 55	32	S	VG,EG				
		23 58	46	SS	EG				
		2,5		L	EG,NG				
		7,5		M	NG				
300	25	06 51	18.0	45.0 N	028.5 O	.000	22.66	268.01	BCIS
		6 56	28	P	ES		23.0		
		6 56	38	E	NG				
		7 00	34	S	EG				
		7 02,0		L	EG,NG				
		7 02,5		M	EG				
301	25	15 57	52.0	39.4 N	041.6 E	.000	28.36	99.15	BCIS
		16 03	48	P	ES,NS				
302	26	07 35	12.0	37.5 N	142.5 E	.004	84.75	32.21	USCGS
		7 47	46	IP	ES,NS	.000	85.1		
		7 47	54	PCP	NS,VG				
		7 48	10	I*PP	NS,VG				
		7 50	59	PP	EG				

7 52 56	PPP	EG
7 58 10	S	NS,NG
7 58 26	*SS	NG
7 59 04	PS	VG
8 09,7	LQ	EG
8 13,6	LR	NG
8 20,5	IM	NG

303 27 06 52 50.0 45.5 N 151.0 E .010 79.91 23.14 USCGS

7 04 51	IP	VS,ES	.010	79.7
7 05 02	PCP	NG		
7 05 16	*PP	NG		
7 05 30	*SP	NG		
7 07 54	PP	EG,NG		
7 14 36	S	EG,NG		
7 15 36	PS	EG,NG		
7 19 46	SS	VG		
7 28,0	L	EG		
7 37,5	M	VS,ES		

304 29 14 30 24.0 43.0 N 131.0 E .081 75.74 37.41 USCGS

14 41 17	P	VG,EG		75.5
14 43 13	*PP	NG		
14 50 11	S	VG,EG		
14 50 36	SCS	VG		
15 45,0	M	VG,NG		

305 30 04 00 26.0 66.0 N 136.5 E .000 57.99 20.97 USCGS

4 10 24	P	ES,NS		
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306 30 07 04 48.0 19.0 S 177.5 0 .065 148.26 3.34 USCGS

7 23 59	/PKP/	VG		
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307 30 21 37 35.0 19.0 S 177.5 0 .089 148.26 3.34 USCGS

21 56 01	/PKP/	ES		
21 56 13	PKP1	VG		

308	31	04 27	12.0	16.5 S	178.0 O	.065	145.75	4.02	USCGS
		4 46 06		IPKP1	VG				
		4 47 51		*PPKP	VG				
309	2	20 03	32.0	05.5 S	151.5 E	.004	127.16	42.68	USCGS
		21 09,0		L	NG				
310	3	09 40	05.0	10.5 S	111.0 E	.000	108.50	83.78	USCGS
		9 56 45		E	VG				
		10 00 07		PP	VG				
		10 40,0		M	EG,NG				
311	5	11 50	17.0	13.0 S	166.5 E	.010	139.60	27.46	USCGS
		13 03,0		M	EG,NG				
		13 11,0		M	EG				
312	5	17 38	08.0	09.0 S	157.5 E	.000	132.79	37.46	USCGS
		18 45,0		L	EG				
313	6	01 07	31.0	09.0 S	157.5 E	.000	132.79	37.46	USCGS
		2 14,0		L	EG				
314	6	07 37	08.0	41.7 N	021.2 E	.000	14.75	121.58	BCIS
		7 40 49		P	VS,ES		15.0		
		7 43 36		S	NS				
		7 44,8		L	EG,NG				
		7 45,3		M	NG				
		7 51,0		F	EG,NG				
315	6	11 43	06.0	24.0 S	174.5 O	.000	153.25	357.68	USCGS
		13 03 09		PKP1	VG				

		13 03 30	PKP2	VG					
		13 11,0	L	EG,NG					
316	7	02 32 08.0	36.1 N	002.5 E	.000	14.75	185.92		BCIS
		2 35 38	P	VS,ES		14.5			
		2 38 18	S	EG					
		2 39,0	L	EG					
		2 40,3	M	EG					
317	7	22 16 15.0	23.5 S	175.5 O	.000	152.76	359.72		USCGS
		22 36 13	PKP1	VG					
		22 36 35	E	VG					
		22 40 01	/PP/	VG					
		22 48,0	M	EG					
318	8	13 54 55.0	44.0 N	140.5 E	.000	78.25	30.72		USCGS
		14 07 00	P	VG		78.0			
		14 07 24	E	ES,VG					
		14 16 56	S	EG					
		14 32,0	L	EG,NG					
		14 41,0	M	EG,NG					
319	10	20 56 12.0	36.0 N	089.0 E	.000	59.99	68.82		BCIS
		21 22,5	L	NG					
		21 29,5	M	EG,NG					
320	15	10 25 03.0	38.0 N	074.5 E	.000	49.91	76.26		USCGS
		10 34 08	P	NG		50.2			
		10 41 20	S	NG					
		10 49,5	L	NG					
		10 54,0	M	NG					
321	15	17 08 41.0	37.8 N	020.5 E	.000	17.34	132.35		BCIS
		17 12 50	P	VG		17.2			
		17 12 57	IP	ES,NS					

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		17 13 05	IPPP	ES,NS					
		17 13 14	IPPP	ES,EG					
		17 13 20	IPPPP	NS					
		17 16 02	IS	NG					
		17 16 26	SS	ES					
		17 16 37	SSS	ES					
		17 16,1	IL	NG					
		17 18,0	IM	NS,EG					
322	16	10 21 17.0	01.0 N	026.5 O	.000	56.03	218.17		USCGS
		10 31 00	P	VS,VG		56.0			
		10 31 08	E	VG					
		10 31 16	E	VG					
		10 38 50	S	EG,NG					
		10 39 00	PS	EG					
		10 43,0	L	NG					
		10 46,0	M	NG					
		10 51,5	M	NG					
323	19	11 08 41.0	05.5 S	146.0 E	.010	124.65	48.69		USCGS
		11 27 31	PKP	NG		125.0			
		11 29 29	PP	VG					
		11 30 27	E	NS					
		11 32 09	PPP	NS					
		11 39 28	PS	NG					
		11 40 58	PPS	EG,NG					
		11 46 22	SS	EG,NG					
		11 51 04	SSS	EG					
		12 05,0	LQ	EG,NG					
		12 10,0	LM	EG,NG					
324	19	14 00 26.0	38.8 N	026.5 E	.000	19.68	119.01		BCIS
		14 05 01	P	ES,VG		20.0			
		14 05 21	E	VS,NG					
		14 08 40	S	VG,EG					
		14 11,7	LM	EG					
325	22	16 26 34.0	54.0 S	136.0 O	.000	155.71	246.87		USCGS
		16 46 21	PKP	VS					
		17 44,0	L	EG					

326	22	19 34	35.0	21.5 S	178.5 O	.081	150.69	5.44	USCGS
		19 53	31	IPKP1	VS		150.0		
		19 53	38	PKP	VS,ES				
		19 53	49	PKP2	ES,VS				
		19 55	31	E	NS				
327	23	16 14	47.0	20.0 S	174.5 E	.000	148.30	17.84	USCGS
		16 34	29	PKP	VS,ES				
328	24	20 06	33.0	07.0 N	036.5 O	.000	55.21	232.22	BCIS
		20 30,0		LM	EG,NG				
329	26	07 06	19.0	05.5 S	102.5 E	.000	99.31	87.18	USCGS
		7 33,0		L	EG				
		7 48,0		M	EG				
		8 01,0		M	NG				
330	26	23 09	23.0	05.5 S	103.0 E	.000	99.63	86.79	USCGS
		23 34	40	S	EG,NG				
		23 36	23	PS	EG				
		23 36	46	E	EG				
		23 57,0		L	EG,NG				
		24 05,0		M	EG,NG				
		24 11,0		M	EG,NG				
331	27	00 22	04.0	37.8 N	020.1 E	.000	17.15	133.22	BCIS
		26 34		P	VS,ES		18.0		
		26 48		PP	ES,NS				
		29 58		S	NS				
		31,3		L	NS				
		33,0		M	NS				
332	27	00 26	13.0	37.8 N	020.1 E	.000	17.15	133.22	BCIS
		30 14		P	ES,NS				



30	20	E	VG,EG
30	23	/*PP/	VS
31	14	E	NS,VG

333 28 02 45 45.0 19.5 S 174.5 E .000 147.81 17.65 USCGS

3 05	42	PKP1	VS
3 05	50	E	NS
3 06	02	E	VG
4 06,0		L	EG
4 17,0		M	EG

334 28 12 34 53.0 28.5 S 071.0 O .000 102.93 240.94 USCGS

13 25,0		L	EG,NG
13 30,0		M	EG

335 30 11 12 53.0 44.5 N 080.5 E .000 49.58 65.90 USCGS

11 39,0		L	EG,NG
11 40,0		M	NG

336 1 12 38 49.0 38.0 N 020.1 E .000 16.99 132.82 BCIS

12 42	53	P	VS,ES	17.5
12 43	05	E	ES,NS	
12 43	16	E	NS	
12 46	03	S	ES,NS	
12 46	27	L	NG	
12 49,0		LM	EG,NG	

337 1 14 59 40.0 63.0 S 154.0 E .000 159.58 138.45 USCGS

16 20,0		LM	EG
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338 2 09 34 00.0 01.0 S 123.0 E .000 108.47 67.73 USCGS

9 53	04	PP	EG	109.0
9 53	23	F	VG	
9 55	23	PPP	VG	
9 59	08	SKS	EG	

10 00 33	S	EG
10 02 24	PS	EG
10 03 29	PPS	NG
10 08 20	SS	EG
10 25,0	L	EG,NG

339	2	18 20	05.0	44.7 N	015.4 E	.000	9.61	125.13	BCIS
		18 22 33		PN	VG		9.8		
		18 22 43		PPP	VG				
		18 23 17		E	NS,EG				
		18 23 45		E	VE				
		18 24 16		SN	ES,VG				
		18 25 03		S*	NS				
		18 25 28		SG	ES				

340	11	01 38	33.0	23.0 S	175.0 O	.000	152.26	358.73	USCGS
		3 05,0		LM	EG				

341	12	20 00	05.0	35.8 N	000.6 O	.000	15.41	195.33	BCIS
		20 08,0		L	EG%NG				
		20 08,5		M	EG				

342	14	22 00	50.0	52.5 N	168.0 E	.000	76.24	10.22	USCGS
		22 12 39		P	NG		76.5		
		22 12 53		PCP	NG				
		22 15 42		PP	NS,EG				
		22 22 52		SKS	EG				
		22 22 59		SCS	EG,NG				
		22 23 05		PS	NG				
		22 23 13		E	NG				
		22 23 23		PPS	EG				
		22 30 46		SSS	EG				
		22 36,0		L	EG				
		22 52,0		M	EG,NG				

343	14	23 21	56.0	59.5 S	031.0 O	.000	113.53	198.80	USCGS
		23 36 40		/P/	NS		116.0		
		23 40 40		PKP	VS				

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23	41	27	/PP/	NS						
23	41	45	E	NG						
23	42	13	E	EG						
23	44	13	PPP	EG,NG						
23	47	32	SKS	EG						
23	48	40	SKKS	EG						
23	48	50	SKKKS	NG						
23	49	23	E	EG						
23	51	24	IPS	EG						
23	52	13	E	NG						
23	52	29	/PPS/	EG						
23	57	03	/SS/	NG						
24	10,0		L	EG						
24	19,0		M	EG						
24	22,0		M	EG						

344 15 12 15 48.0 59.0 S 024.0 0 .000 111.76 195.36 USCGS

13 15,0 M NG

345 15 23 01 55.0 44.5 N 011.1 E .000 7.77 141.59 BCIS

23 04 00 PN NS, VG 8.1
 23 04 18 P* VG
 23 04 32 E NS
 23 04 45 E NS
 23 05 34 SN ES%NS
 23 06 05 S* NS, VG
 23 06 25 E NS, VG

346 18 16 24 50.0 53.0 N 168.5 0 .000 76.49 355.57 USCGS

16 36 45 P VG, NG
 16 37 57 PCP VG, NG
 17 07,0 L EG

347 19 15 07 00.0 27.5 N 112.5 0 .000 84.27 307.21 USCGS

15 50,0 M NG

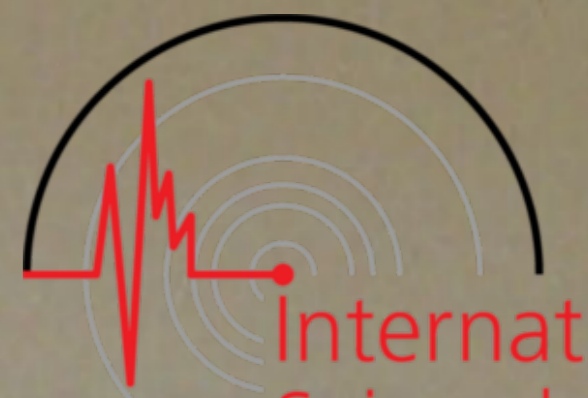
348 21 11 19 13.0 13.5 N 052.0 E .000 53.44 116.56 BCIS

11 28 35 IP ES 52.6

11 28 43	I	NG
11 28 58	I	ES
11 28 45	PCP	ES
11 28 33	PP	VG,NG
11 28 40	PPP	EG
11 36 03	IS	ES,NG
11 36 08	IPS	ES
11 36 17	E	ES
11 39 38	SS	EG
11 41 25	SSS	EG,NG
11 42,0	L	NS
11 52,5	M	NS

349	22	00 09	38.0	13.5 M	052.0 E	.000	53.44	116.56	BCIS
		19 02		P	NS				
		19 13		E	ES,NS				
350	22	17 20	19.0	37.5 N	141.5 E	.000	84.41	32.93	USCGS
		17 32 45		P	NS				
		17 32 53		/PCP/	ES,VG				
351	23	03 49	00.0	52.5 N	158.0 O	.000	76.09	348.99	USCGS
		4 00 30		P	VG				
352	23	09 29	02.0	37.8 N	014.7 E	.010	14.93	146.51	BCIS
		9 32 31		P	NS				
		9 32 36		E	VS				
		9 34 39		E	VS,ES				
353	26	22 02	35.0	53.0 N	160.0 E	.000	74.64	14.99	USCGS
		22 14 21		P	ES,NS				
		22 14 28		E	ES				
354	27	11 54	48.0	52.5 N	160.0 E	.000	75.13	15.13	USCGS
		12 06 33		P	NS				

355	27	15 52	55.0	56.0 N	162.5 E	.000	72.12	12.70	USCGS
		16 04	23	IP	VS,ES		72.0		
		16 04	41	IPCP	EG,NG				
		16 07	01	PP	NG				
		16 08	46	PPP	NG				
		16 13	42	IS	EG				
		16 14	17	IPS	NG				
		16 14	25	IPPS	EG				
		16 14	32	E	EG				
		16 18	25	ISS	NS				
		16 21	33	SSS	EG,NG				
		16 22,0		L	EG				
		16 27,5		M	EG				
		16 34,5		M	EG				
356	28	07 20	32.0	52.5 N	160.0 E	.000	75.13	15.13	USCGS
		7 32	21	P	ES,NS		76.0		
		7 32	27	E	NS				
		7 32	33	PCP	NG				
		7 32	45	E	NS,NG				
		7 42	04	S	EG				
		7 42	15	I	NG				
		7 42	30	SKS	EG				
		7 42	35	SCS	NG				
		7 42	44	PS	NG				
		7 46	57	SS	EG				
		7 50	14	SSS	EG				
		7 57,0		L	EG				
		8 02,0		M	EG				
		8 08,0		M	NG				
357	28	13 04	30.0	52.5 N	160.0 E	.000	75.13	15.13	USCGS
		13 16	17	P	NS,VG				
		13 48,0		L	EG,NG				
358	29	17 14	40.0	21.5 S	174.0 O	.000	150.75	356.87	USCGS
		17 34	56	E	NS,VG				
359	29	20 35	08.0	18.0 N	145.0 E	.050	103.31	38.32	USCGS



20 52 59 PP ES,NS

360 31 20 52 57.0 37.9 N 025.2 0 .000 24.57 249.80 BCIS

20 58 26 P ES
21 05.0 LM NG

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