

GRA1 22:40:36.0 e Sg Z M14.4

 1997-12-02 D 23.0 AZ348
 GRA1 00:07:09.3 i P d Z mb5.1
 ALIGN 00:07:09.3 T1.3 A81
 GRA1 00:07:16.2 e (pP) Z
 GRA1 00:15:30.8 e L Z T21.8 A835 MS4.1

 1997-12-02 AZ150
 GRA1 03:45:52.5 e P Z
 GRA1 03:45:59.6 e P1 Z
 NEIC: OT 03:42:23.6 37.3N 20.8E dep 33km mb4.3
 IONIAN SEA

 1997-12-02 D 58.6 AZ251
 GRA1 04:57:54.9 i P c Z mb4.7
 ALIGN 04:57:54.9 T0.9 A6
 NEIC: OT 04:47:55.6 12.0N 43.8W dep 10km mb5.0
 NORTHERN MID-ATLANTIC RIDGE

 1997-12-02 D 7.2
 GRA1 09:23:03.8 e (PnI) Z
 GRA1 09:23:45.2 e SnI Z
 GRA1 09:24:10.5 e Sg Z M14.4
 NEIC: OT 09:20:46.0 42.9N 12.9E dep 10km
 CENTRAL ITALY

 1997-12-02 D 99.1 AZ 67
 GRA1 12:00:25.8 e Pdiff Z
 GRA1 12:04:41.2 e PP Z
 GRA1 13:14:16.4 e L Z T21.0 A132 MS4.4
 NEIC: OT 11:47:47.4 6.8N 123.6E dep588km mb5.3
 MINDANAO, PHILIPPINE ISLANDS

 1997-12-02 D 3.9 429km
 GRA1 17:19:08.1 e Pn Z M13.4
 GRA1 17:19:51.8 e Sn N
 SZGRF: OT 17:18:08.4 46.1N 13.5E dep 10km
 AUSTRIA

 1997-12-02 D 15.0
 GRA1 19:26:13.9 e P Z
 GRA1 19:26:23.4 e P1 Z
 GRA1 19:33:06.6 e L Z T20.9 A418 MS3.6

 1997-12-03 D 24.8 AZ264

GRA1 05:58:01.2 e P Z
 BEAM 05:58:01.2 T1.1 A11
 NEIC: OT 05:50:58.6 35.7N 34.9W dep 10km mb4.6
 AZORES ISLANDS REGION

 1997-12-03 D 4.8 535km

GRA1 06:55:38.4 e Pn Z
 GRA1 06:56:39.8 e Sg Z

 1997-12-03 D 55.9

GRA1 12:35:30.2 e P Z mb4.5
 BEAM 12:35:30.2 T1.1 A6
 GRA1 13:00:24.5 e L Z T20.9 A752 MS4.8
 NEIC: OT 12:25:54.0 35.1N 87.0E dep 33km mb4.4
 XIZANG

 1997-12-03

GRA1 18:49:26.9 e PKPab Z
 NEIC: OT 18:29:52.2 15.2S 173.6W dep 33km mb4.9
 TONGA ISLANDS

 1997-12-03 D 3.0 331km

GRA1 19:23:59.0 e Pn Z M13.0
 GRA1 19:24:49.5 e Sg N
 SZGRF: OT 19:23:12.1 51.7N 7.7E dep 1km
 Hamm/Westfalen

 1997-12-04 D 79.8 AZ 30

GRA1 01:16:06.2 e P Z mb4.3
 BEAM 01:16:06.2 T1.1 A4
 SZGRF: OT 01:04:02.9 43.7N 148.4E dep 33km
 KURIL ISLANDS REGION

 1997-12-04 D 72.7 AZ121

GRA1 02:28:29.1 e P Z mb4.9
 ALIGN 02:28:29.1 T1.1 A12
 GRA1 02:28:39.5 e (pP) Z
 GRA1 02:56:35.1 e L Z T19.0 A67 MS3.9
 SZGRF: OT 02:17:03.9 5.1S 66.8E dep 36km
 SOUTH INDIAN OCEAN

 1997-12-04 D150.0

GRA1 05:52:54.7 e PKPdf Z
 GRA1 05:52:58.4 e PKPbc Z
 GRA1 05:53:04.5 e PKPab Z
 GRA1 07:06:16.0 e L Z T20.0 A806 MS5.5

1997-12-04 D 26.0 AZ 90
GRA1 06:12:09.6 e P Z mb4.5
BEAM 06:12:09.6 T1.8 A21
NEIC: OT 06:06:18.1 42.1N 48.1E dep 33km mb4.5
CASPIAN SEA

1997-12-04 D148.7
GRA1 07:02:23.6 e PKPdf Z
GRA1 07:02:26.4 i PKPbc d Z
GRA1 07:02:29.9 e PKPab Z
GRA1 07:04:36.1 e (pPKPbc)Z
NEIC: OT 06:43:38.7 17.8S 178.7W dep500km mb4.6
FIJI ISLANDS REGION

1997-12-04 D 44.9 AZ 98
GRA1 10:25:14.3 e P Z mb4.9
ALIGN 10:25:14.3 T1.0 A16
GRA1 10:25:20.4 e (pP) Z
GRA1 10:36:04.8 e L Z T21.1 A208 MS4.0
NEIC: OT 10:17:01.7 29.1N 64.4E dep 33km mb4.9
SOUTHWESTERN PAKISTAN

1997-12-04 D 87.5 AZ287
GRA1 15:09:22.0 e P Z mb5.4
BEAM 15:09:22.0 T1.0 A19
GRA1 15:10:00.1 e Z
GRA1 15:45:25.5 e L Z T20.5 A2142 MS5.5

1997-12-04 D 87.6 AZ288
GRA1 22:27:04.4 e P Z mb5.1
ALIGN 22:27:04.4 T1.1 A12
GRA1 22:27:59.6 e pP Z
GRA1 22:28:11.6 e sP Z
GRA1 23:03:19.4 e L Z T20.4 A525 MS4.9
SZGRF: OT 22:14:40.6 13.5N 91.0W dep208km
NEAR COAST OF GUATEMALA

1997-12-04 D 77.8 AZ 10
GRA1 22:44:44.6 e P Z mb4.4
BEAM 22:44:44.6 T1.0 A3
GRA1 22:44:57.8 e pP Z
NEIC: OT 22:33:16.8 55.1N 162.3E dep 33km mb4.6
NEAR EAST COAST OF KAMCHATKA

1997-12-04 D 71.9 AZ 16
GRA1 22:53:17.1 i P c Z mb5.6
ALIGN 22:53:17.1 T2.2 A104
GRA1 23:28:20.4 e L Z T21.3 A1067 MS5.1

SZGRF: OT 22:41:58.9 56.1N 162.4E dep 33km
NEAR EAST COAST OF KAMCHATKA

1997-12-05 D 75.9 AZ 10
GRA1 00:17:43.2 e P Z mb5.1
ALIGN 00:17:43.2 T1.9 A32
GRA1 00:17:55.9 e pP Z
GRA1 00:18:04.8 e sP Z
GRA1 00:53:18.0 e L Z T20.5 A399 MS4.7
NEIC: OT 00:06:16.6 55.3N 162.5E dep 33km mb4.9
NEAR EAST COAST OF KAMCHATKA

1997-12-05 D 78.8 AZ 8
GRA1 01:21:46.5 e P Z mb4.4
BEAM 01:21:46.5 T1.3 A6
NEIC: OT 01:10:19.5 55.3N 162.6E dep 33km mb4.6
NEAR EAST COAST OF KAMCHATKA

1997-12-05 D 56.2 AZ216
GRA1 01:38:39.7 e P Z mb4.7
BEAM 01:38:39.7 T1.5 A11
SZGRF: OT 01:29:01.4
CENTRAL MID-ATLANTIC RIDGE

1997-12-05 D 80.9 AZ 4
GRA1 02:19:32.2 e P Z mb4.4
BEAM 02:19:32.2 T1.1 A4
GRA1 02:19:43.8 e pP Z
NEIC: OT 02:08:05.8 55.2N 162.3E dep 33km mb4.7
NEAR EAST COAST OF KAMCHATKA

1997-12-05 D 78.5 AZ 11
GRA1 05:45:23.3 e P Z mb4.7
BEAM 05:45:23.3 T1.4 A9
SZGRF: OT 05:33:27.2 51.2N 174.5E dep 33km
NEAR ISLANDS, ALEUTIAN ISLANDS

1997-12-05 D 70.9 AZ 16
GRA1 08:20:16.8 i P c Z mb5.5
ALIGN 08:20:16.8 T1.9 A76
GRA1 08:20:29.9 e pP Z
GRA1 08:20:38.8 e (sP) Z
GRA1 08:55:19.6 e L Z T21.6 A1374 MS5.2
SZGRF: OT 08:09:07.4 57.3N 163.3E dep 51km
NEAR EAST COAST OF KAMCHATKA

1997-12-05 D 73.3 AZ 17
GRA1 11:38:23.1 i P c Z mb6.5
ALIGN 11:38:23.1 T1.2 A436

GRA1 11:38:36.1 i pP d Z
GRA1 12:15:07.8 e L Z T21.1 A178256 MS7.3

1997-12-05 D 72.7 AZ 17
GRA1 11:46:53.0 i P c Z mb6.4
BEAM 11:46:53.0 T1.6 A466
GRA1 11:47:06.4 e pP Z
SZGRF: OT 11:35:29.9 55.1N 161.9E dep 47km
NEAR EAST COAST OF KAMCHATKA

1997-12-05 D 72.1 AZ 16
GRA1 11:48:40.0 e P Z mb6.0
BEAM 11:48:40.0 T1.2 A166
GRA1 11:48:48.6 e pP Z
SZGRF: OT 11:37:20.0 56.0N 163.3E dep 30km
NEAR EAST COAST OF KAMCHATKA

1997-12-05 AZ143
GRA1 12:57:15.5 e P Z

1997-12-05 D 74.2 AZ 17
GRA1 18:59:57.7 i P c Z mb6.6
BEAM 18:59:57.7 T1.5 A844
GRA1 19:00:09.4 i pP d Z
GRA1 19:35:31.0 e L Z T21.3 A26621 MS6.5

1997-12-05
GRA1 19:28:25.0 e (PKPab) Z
GRA1 19:28:32.1 e pPKPab Z

1997-12-06 D 73.3 AZ 15
GRA1 00:36:39.8 e P c Z mb5.7
ALIGN 00:36:39.8 T1.7 A112
GRA1 00:36:53.0 i pP Z
GRA1 00:36:59.4 e sP Z
GRA1 01:16:18.0 e L Z T18.7 A1443 MS5.3
SZGRF: OT 00:25:15.6 55.3N 165.8E dep 47km
KOMANDORSKY ISLANDS REGION

1997-12-06 D 73.0 AZ 16
GRA1 03:14:52.2 i P c Z mb5.6
ALIGN 03:14:52.2 T1.6 A79
GRA1 03:15:02.7 e pP Z
GRA1 03:49:22.9 e L Z T18.9 A761 MS5.0
SZGRF: OT 03:03:28.2 55.1N 163.0E dep 37km

NEAR EAST COAST OF KAMCHATKA

1997-12-06 D 73.9 AZ 16
GRA1 05:21:17.2 i P c Z mb5.7
ALIGN 05:21:17.2 T1.1 A80
GRA1 05:53:16.9 e L Z T21.9 A398 MS4.7
NEIC: OT 05:09:49.6 55.0N 162.1E dep 33km mb5.2
NEAR EAST COAST OF KAMCHATKA

1997-12-06 D 50.1 AZ327
GRA1 08:15:45.6 i P c Z mb5.6
ALIGN 08:15:45.6 T1.0 A88
GRA1 08:15:49.0 e pP Z
GRA1 08:37:52.0 e L Z T18.3 A444 MS4.5

1997-12-06 D 74.1 AZ 16
GRA1 10:16:37.1 e P Z mb5.6
ALIGN 10:16:37.1 T1.3 A86
GRA1 10:16:43.1 e pP Z
NEIC: OT 10:05:04.7 54.0N 162.0E dep 33km mb5.4
OFF EAST COAST OF KAMCHATKA

1997-12-06 D 80.5 AZ 4
GRA1 10:54:44.6 e P Z mb4.1
BEAM 10:54:44.6 T0.9 A2
GRA1 10:54:50.5 e pP Z
NEIC: OT 10:43:12.0 54.1N 161.8E dep 33km mb4.7
NEAR EAST COAST OF KAMCHATKA

1997-12-06 D 73.9 AZ 16
GRA1 11:10:43.0 i P c Z mb5.9
ALIGN 11:10:43.0 T1.1 A124
GRA1 11:10:52.5 e pP Z
GRA1 11:10:57.9 e sP Z
NEIC: OT 10:59:10.3 54.0N 161.9E dep 33km mb5.7
NEAR EAST COAST OF KAMCHATKA

1997-12-06 D 77.7 AZ 5
GRA1 11:33:10.1 e P Z mb4.8
BEAM 11:33:10.1 T1.1 A10
GRA1 11:33:16.4 e pP Z
NEIC: OT 11:21:37.5 54.1N 161.9E dep 33km mb4.9
NEAR EAST COAST OF KAMCHATKA

1997-12-06 D 73.2 AZ 16
GRA1 12:48:49.2 i P c Z mb6.2
ALIGN 12:48:49.2 T1.5 A278
NEIC: OT 12:37:21.6 54.9N 162.1E dep 33km mb5.4

NEAR EAST COAST OF KAMCHATKA

1997-12-06 D 74.3 AZ 16
GRA1 12:55:05.1 i P c Z mb5.0
BEAM 12:55:05.1 T0.8 A14
GRA1 12:55:17.5 e pP Z

1997-12-06 D 74.0 AZ 11
GRA1 13:31:33.2 e P Z
NEIC: OT 13:19:59.8 54.1N 161.9E dep 33km mb4.9
NEAR EAST COAST OF KAMCHATKA

1997-12-06 D 74.5 AZ 10
GRA1 14:08:21.6 i P c Z mb4.7
BEAM 14:08:21.6 T1.1 A8
GRA1 14:08:33.8 e pP Z
NEIC: OT 13:56:46.2 53.6N 161.5E dep 33km mb4.8
OFF EAST COAST OF KAMCHATKA

1997-12-06 D 72.1 AZ 18
GRA1 17:17:10.6 e P Z

1997-12-06 D 74.4 AZ 16
GRA1 17:39:23.6 e P Z mb4.8
BEAM 17:39:23.6 T1.3 A13
NEIC: OT 17:27:52.7 54.3N 162.6E dep 33km mb4.7
NEAR EAST COAST OF KAMCHATKA

1997-12-06 D 74.0 AZ 11
GRA1 17:48:57.7 i P c Z mb5.5
BEAM 17:48:57.7 T1.3 A59
GRA1 17:49:03.4 e pP Z

GRA1 18:24:14.1 e L Z T21.1 A336 MS4.6
NEIC: OT 17:37:24.1 54.0N 161.9E dep 33km mb5.3
OFF EAST COAST OF KAMCHATKA

1997-12-06 D 79.2 AZ 4
GRA1 17:54:11.7 e P Z mb4.7
BEAM 17:54:11.7 T2.0 A15
NEIC: OT 17:42:39.4 54.1N 161.9E dep 33km mb4.7
NEAR EAST COAST OF KAMCHATKA

1997-12-06 D 78.5 AZ 11
GRA1 19:04:47.6 e P Z mb4.8
BEAM 19:04:47.6 T0.9 A8
NEIC: OT 18:53:13.3 53.8N 161.4E dep 33km mb4.8

OFF EAST COAST OF KAMCHATKA

1997-12-06 D 73.6 AZ 10
GRA1 19:59:08.9 i P c Z mb5.3
BEAM 19:59:08.9 T1.0 A32
GRA1 19:59:24.4 e pP Z
GRA1 20:34:29.6 e L Z T20.3 A297 MS4.6
NEIC: OT 19:47:38.9 54.2N 160.9E dep 33km mb5.3
NEAR EAST COAST OF KAMCHATKA

1997-12-06 D 80.8 AZ 24
GRA1 21:11:50.7 e P Z mb4.4
BEAM 21:11:50.7 T1.2 A5
SZGRF: OT 20:59:41.8
KURIL ISLANDS REGION

1997-12-07 D 78.3 AZ 10
GRA1 00:49:05.1 e P Z mb5.0
BEAM 00:49:05.1 T1.4 A18
GRA1 00:49:09.5 e (pP) Z
NEIC: OT 00:37:35.3 54.7N 161.7E dep 33km mb4.6
NEAR EAST COAST OF KAMCHATKA

1997-12-07 D 80.4 AZ359
GRA1 01:59:50.8 e P Z
GRA1 01:59:59.9 e pP Z
NEIC: OT 01:48:14.2 54.0N 161.4E dep 33km mb4.6
OFF EAST COAST OF KAMCHATKA

1997-12-07 D 82.7 AZ 35
GRA1 04:02:55.6 i P d Z mb5.7
ALIGN 04:02:55.6 T1.0 A47
GRA1 04:03:06.7 e (pP) Z
GRA1 04:05:50.3 e PP Z
GRA1 04:43:35.1 e L Z T20.2 A201 MS4.5

1997-12-07 D 79.8 AZ 11
GRA1 04:07:56.2 e P Z mb4.7
BEAM 04:07:56.2 T1.0 A9
GRA1 04:08:09.8 e pP Z
SZGRF: OT 03:55:55.1
ALEUTIAN ISLANDS REGION

1997-12-07 D 73.6 AZ 10
GRA1 05:14:41.2 e P Z mb5.0
BEAM 05:14:41.2 T1.0 A16
GRA1 05:51:29.3 e L Z T18.9 A249 MS4.5
NEIC: OT 05:03:07.6 53.8N 161.9E dep 33km mb5.0

OFF EAST COAST OF KAMCHATKA

1997-12-07 D 79.3 AZ 10
GRA1 05:52:26.0 e P Z mb4.6
BEAM 05:52:26.0 T1.6 A9
GRA1 05:52:34.3 e (pP) Z
NEIC: OT 05:40:54.8 54.6N 162.2E dep 33km mb4.5
NEAR EAST COAST OF KAMCHATKA

1997-12-07 D 71.3 AZ 29
GRA1 06:06:01.5 e P Z
NEIC: OT 05:54:30.4 53.8N 161.5E dep 33km mb4.7
OFF EAST COAST OF KAMCHATKA

1997-12-07 D 7.1
GRA1 06:36:06.4 e Pn Z M14.4
GRA1 06:39:25.8 e L Z T15.2 A339 MS3.1
SZGRF: OT 06:34:23.8 42.8N 13.9E dep 10km
CENTRAL ITALY

1997-12-07
GRA1 07:18:22.0 e (P) Z

1997-12-07 D 73.7 AZ 6
GRA1 08:09:10.7 e P Z mb4.3
BEAM 08:09:10.7 T1.1 A3
NEIC: OT 07:57:38.3 54.0N 161.9E dep 33km mb4.6
NEAR EAST COAST OF KAMCHATKA

1997-12-07 D 73.7 AZ 10
GRA1 08:22:30.3 e P Z mb5.4
ALIGN 08:22:30.3 T0.9 A35
GRA1 08:22:38.6 e pP Z
GRA1 08:58:41.1 e L Z T19.3 A1162 MS5.2
NEIC: OT 08:10:57.3 54.2N 162.9E dep 33km mb5.3
NEAR EAST COAST OF KAMCHATKA

1997-12-07 D 73.8
GRA1 08:43:21.9 e P Z
NEIC: OT 08:32:36.2 54.6N 162.3E dep 33km mb4.5
NEAR EAST COAST OF KAMCHATKA

1997-12-07 D 80.2 AZ 6
GRA1 10:29:49.0 e P Z mb4.4
BEAM 10:29:49.0 T1.2 A5
GRA1 10:30:04.1 e pP Z
NEIC: OT 10:17:42.3 43.0N 146.8E dep 33km mb4.8
OFF COAST OF HOKKAIDO, JAPAN

1997-12-07

GRA1 11:34:18.6 e (PKPab) Z

1997-12-07

D 74.3 AZ 11

GRA1 13:26:19.4 i P c Z mb5.4

ALIGN 13:26:19.4 T1.0 A38

GRA1 13:26:35.2 e pP Z

NEIC: OT 13:14:46.5 54.0N 161.6E dep 33km mb5.1

OFF EAST COAST OF KAMCHATKA

1997-12-07

D 84.3 AZ 50

GRA1 13:51:59.7 i P d Z mb5.0

BEAM 13:51:59.7 T1.0 A10

GRA1 13:52:08.5 e pP Z

1997-12-07

D 74.0

GRA1 14:08:04.1 e P Z mb5.1

BEAM 14:08:04.1 T1.5 A33

GRA1 14:08:16.5 e pP Z

GRA1 14:32:58.1 e L Z T21.3 A175 MS4.3

1997-12-07

GRA1 14:12:56.4 e PKPdf Z

GRA1 14:13:05.5 i (PKPbcd) Z

1997-12-07

D 73.9

GRA1 14:56:57.6 i P d Z

ALIGN 14:56:57.6 T1.2 A36

GRA1 14:57:11.3 e pP Z

GRA1 15:28:06.1 e L Z T21.7 A144 MS4.2

1997-12-07

D 77.8 AZ 10

GRA1 15:33:41.9 e P Z mb4.8

BEAM 15:33:41.9 T1.9 A13

GRA1 15:33:55.7 e pP Z

NEIC: OT 15:22:08.7 54.0N 161.3E dep 33km mb4.5

NEAR EAST COAST OF KAMCHATKA

1997-12-07

D 73.3

GRA1 16:38:43.2 i P c Z mb5.3

ALIGN 16:38:43.2 T1.2 A30

GRA1 16:38:57.4 e pP Z

GRA1 17:10:47.2 e L Z T21.7 A162 MS4.3

1997-12-07 D 73.5
GRA1 18:07:48.6 i P c Z mb6.3
ALIGN 18:07:48.6 T1.6 A368
GRA1 18:07:59.6 e pP Z
GRA1 18:08:05.2 e sP Z
GRA1 18:42:09.5 e L Z T20.1 A9442 MS6.1

1997-12-07 D 78.1 AZ 10
GRA1 18:25:56.0 e P Z mb5.1
ALIGN 18:25:56.0 T1.2 A19
GRA1 18:26:06.5 e pP Z
NEIC: OT 18:14:26.7 54.9N 162.9E dep 33km mb4.9
NEAR EAST COAST OF KAMCHATKA

1997-12-07
GRA1 20:03:43.4 e P Z
GRA1 20:03:52.2 e P1 Z

1997-12-07 D 79.5 AZ 11
GRA1 20:09:28.3 e P Z mb4.3
BEAM 20:09:28.3 T1.0 A4
NEIC: OT 19:57:55.1 53.9N 161.2E dep 33km mb4.5
OFF EAST COAST OF KAMCHATKA

1997-12-07 D 74.2
GRA1 23:17:24.3 i P c Z mb5.7
ALIGN 23:17:24.3 T1.6 A138
GRA1 23:17:36.8 e pP Z
GRA1 23:17:41.0 e sP Z
GRA1 23:55:30.7 e L Z T18.7 A2984 MS5.6

1997-12-07 D 73.8
GRA1 23:25:17.2 e P Z mb4.4
BEAM 23:25:17.2 T1.2 A5

1997-12-07 D 59.6 AZ 72
GRA1 23:36:28.4 e P Z mb4.5
BEAM 23:36:28.4 T1.2 A6
GRA1 23:36:33.7 e (pP) Z
SZGRF: OT 23:26:26.6
TSINGHAI PROVINCE, CHINA

1997-12-08 D139.8

GRA1 02:07:12.8 e PKPdf Z
GRA1 03:05:22.5 e L Z T21.6 A490 MS5.2

1997-12-08 D 60.8
GRA1 02:14:07.4 i P d Z mb4.7
BEAM 02:14:07.4 T1.0 A13
GRA1 02:43:00.8 e L Z T20.0 A402 MS4.6

1997-12-08 D 74.5
GRA1 03:18:36.9 e P Z mb4.6
BEAM 03:18:36.9 T1.0 A7
GRA1 03:18:48.9 e pP Z

1997-12-08 D 49.4 AZ232
GRA1 06:36:18.0 e P Z
GRA1 06:57:37.0 e L Z T21.8 A224 MS4.1
NEIC: OT 06:26:19.2 3.4N 31.5W dep 10km mb4.5
CENTRAL MID-ATLANTIC RIDGE

1997-12-08
GRA1 06:45:19.7 e PKPab Z

1997-12-08 D 3.7 408km
GRA1 08:49:58.9 e Pn Z M13.7
GRA1 08:50:58.7 e Sg N
SZGRF: OT 08:49:01.4 51.5N 16.2E dep 1km
POLAND

1997-12-08 D 73.3
GRA1 10:59:58.0 i P c Z mb5.2
ALIGN 10:59:58.0 T0.8 A16

1997-12-08 D 74.0
GRA1 14:49:32.4 i P c Z mb5.4
ALIGN 14:49:32.4 T1.1 A46
GRA1 14:49:39.1 e pP Z
GRA1 15:20:04.1 e L Z T21.2 A198 MS4.4

1997-12-08 D152.0
GRA1 16:06:50.9 e PKPdf Z
GRA1 16:06:56.2 e PKPbc Z
GRA1 16:07:05.6 e PKPab Z

1997-12-08 D 70.3 AZ 12
GRA1 18:16:56.8 e P Z mb4.7
BEAM 18:16:56.8 T0.9 A5
GRA1 18:17:04.0 e pP Z
SZGRF: OT 18:05:47.4
BERING SEA

1997-12-08 D 73.9
GRA1 18:29:12.2 i P c Z mb5.2
BEAM 18:29:12.2 T1.4 A39
GRA1 18:29:23.9 e pP Z
GRA1 19:04:23.6 e L Z T18.8 A306 MS4.6

1997-12-08
GRA1 19:06:01.6 e PKPdf Z

1997-12-08 D 74.3 AZ 15
GRA1 19:45:23.6 e P Z mb4.8
BEAM 19:45:23.6 T1.5 A14
GRA1 19:45:32.9 e pP Z
SZGRF: OT 19:33:51.1
KOMANDORSKY ISLANDS REGION

1997-12-08 D 74.0
GRA1 21:17:47.4 i P c Z mb5.8
ALIGN 21:17:47.4 T1.1 A114
GRA1 21:17:55.6 e pP Z
GRA1 21:17:60.0 e sP Z
GRA1 21:53:07.4 e L Z T21.3 A1530 MS5.3

1997-12-08 D 74.1
GRA1 22:31:29.4 i P c Z mb5.9
ALIGN 22:31:29.4 T1.6 A211
GRA1 22:31:40.5 e pP Z
GRA1 23:09:14.8 e L Z T19.3 A995 MS5.1

1997-12-08 D 73.9
GRA1 23:52:58.9 i P c Z mb4.9
BEAM 23:52:58.9 T1.3 A15
GRA1 23:53:10.3 e pP Z
GRA1 00:32:40.7 e L Z T20.9 A83 MS4.0

1997-12-09 D 74.2

GRA1 00:18:39.5 i P c Z mb5.3
BEAM 00:18:39.5 T1.6 A53
GRA1 00:18:59.1 e pP Z
GRA1 00:19:04.2 e sP Z
GRA1 00:49:50.6 e L Z T19.7 A147 MS4.3

1997-12-09 D 3.5 393km
GRA1 01:37:34.2 e Pn Z M13.5
GRA1 01:37:44.1 e Pg Z
GRA1 01:38:33.4 e Sg E
SZGRF: OT 01:36:39.7 46.5N 13.3E dep 10km
AUSTRIA

1997-12-09 D 73.9
GRA1 02:31:22.8 e P Z mb5.0
BEAM 02:31:22.8 T1.1 A18
GRA1 03:08:17.6 e L Z T20.9 A336 MS4.6

1997-12-09 D 23.5 AZ107
GRA1 03:21:44.8 i P c Z mb4.6
ALIGN 03:21:44.8 T1.0 A21
GRA1 03:21:54.1 e (pP) Z
GRA1 03:35:53.3 e L Z T18.4 A547 MS4.0
SZGRF: OT 03:16:39.0 38.8N 40.5E dep 38km
TURKEY

1997-12-09 D 47.6 AZ141
GRA1 09:15:27.6 e P Z mb5.0
ALIGN 09:15:27.6 T0.9 A10
SZGRF: OT 09:06:54.0
ETHIOPIA

1997-12-09 D 73.6
GRA1 11:14:47.4 e P Z mb4.5
BEAM 11:14:47.4 T1.0 A5

1997-12-09 D149.9
GRA1 12:30:09.4 i PKPbc c Z
GRA1 12:30:15.5 e PKP Z
GRA1 12:30:20.5 e pPKPbc Z
GRA1 12:30:24.3 e pPKPab Z

1997-12-09 D 74.0
GRA1 13:14:20.4 i P c Z mb5.9
ALIGN 13:14:20.4 T1.4 A160

GRA1 13:14:29.3 e pP Z
GRA1 13:49:49.5 e L Z T20.1 A625 MS4.9
NEIC: OT 13:02:47.6 54.0N 161.9E dep 33km mb5.3
OFF EAST COAST OF KAMCHATKA

1997-12-09 D147.5
GRA1 14:39:31.1 e PKPbc Z

1997-12-09 D 80.1 AZ 11
GRA1 19:38:27.0 e P Z mb4.7
ALIGN 19:38:27.0 T1.4 A14
GRA1 19:38:40.4 e pP Z
GRA1 19:38:45.2 e sP Z
NEIC: OT 19:26:53.1 53.8N 161.6E dep 33km mb4.7
OFF EAST COAST OF KAMCHATKA

1997-12-10 D 73.9
GRA1 01:57:40.7 e P Z mb4.9
BEAM 01:57:40.7 T1.5 A17
GRA1 01:57:52.8 e pP Z

1997-12-10 D 77.6 AZ 6
GRA1 03:31:31.3 e P Z mb4.6
BEAM 03:31:31.3 T1.3 A6
GRA1 04:07:09.6 e L Z T20.4 A134 MS4.3
NEIC: OT 03:19:55.6 53.6N 161.8E dep 33km mb4.7
OFF EAST COAST OF KAMCHATKA

1997-12-10 D 73.8
GRA1 08:19:47.0 e P Z mb5.3
ALIGN 08:19:47.0 T1.2 A39
GRA1 08:19:55.8 e (pP) Z
GRA1 08:56:48.2 e L Z T19.3 A602 MS4.9
NEIC: OT 08:08:17.7 54.9N 162.9E dep 33km mb5.2
NEAR EAST COAST OF KAMCHATKA

1997-12-10 D 77.5 AZ 28
GRA1 11:16:34.0 i P c Z mb4.8
ALIGN 11:16:34.0 T0.7 A6
NEIC: OT 11:04:54.6 48.8N 147.9E dep 33km mb3.6
SEA OF OKHOTSK

1997-12-10 D 74.5
GRA1 11:24:52.2 e P Z mb5.0
ALIGN 11:24:52.2 T1.4 A20
GRA1 11:25:02.3 e pP Z
GRA1 12:01:41.6 e L Z T18.4 A424 MS4.8

 1997-12-10 D 80.5 AZ 27
 GRA1 21:24:35.1 i P c Z mb4.9
 ALIGN 21:24:35.1 T0.9 A12
 SZGRF: OT 21:12:27.7 44.4N 152.9E dep 33km
 KURIL ISLANDS REGION

1997-12-11 D 3.7 407km
 GRA1 00:08:15.2 e Pn Z M14.1
 GRA1 00:09:15.4 e Sg N
 SZGRF: OT 00:07:17.5 51.6N 16.1E dep 1km
 POLAND

1997-12-11 D 73.3 AZ 16
 GRA1 03:20:20.3 e P Z mb5.0
 ALIGN 03:20:20.3 T1.1 A14
 GRA1 03:20:26.5 e (pP) Z
 GRA1 03:20:29.9 e sP Z
 GRA1 03:54:56.4 e L Z T20.3 A127 MS4.2
 SZGRF: OT 03:08:52.4 55.0N 164.3E dep 23km
 KOMANDORSKY ISLANDS REGION

1997-12-11 D 74.6 AZ 17
 GRA1 04:12:00.7 i P c Z mb4.6
 ALIGN 04:12:00.7 T0.9 A6
 GRA1 04:12:09.1 e pP Z
 GRA1 04:12:14.2 e sP Z
 GRA1 04:47:48.3 e L Z T20.2 A394 MS4.7
 SZGRF: OT 04:00:26.0 53.4N 163.3E dep 31km
 OFF EAST COAST OF KAMCHATKA

1997-12-11 D 2.4 271km
 GRA1 06:41:46.8 e Pn Z M12.8
 GRA1 06:42:21.3 e Sg E
 SZGRF: OT 06:41:04.7 47.9N 13.6E dep 10km
 Attersee/A

1997-12-11 D 85.1
 GRA1 08:08:46.5 e P Z mb6.8
 ALIGN 08:08:46.5 T1.7 A1008
 GRA1 08:09:32.0 e pP Z
 GRA1 08:09:50.9 e sP Z
 GRA1 08:12:03.4 e PP Z
 GRA1 08:13:06.4 e pPP Z
 GRA1 08:18:57.2 e S Z
 GRA1 08:19:54.9 e pS Z
 GRA1 08:26:51.3 e PKKP Z
 GRA1 08:34:57.6 e P'P' Z

GRA1 08:41:48.5 e L Z T20.7 A2825 MS5.6
NEIC: OT 07:56:28.9 4.0N 75.8W dep176km mb5.9
COLOMBIA

1997-12-11 D 58.6 AZ219
GRA1 14:11:07.1 i P d Z mb5.1
ALIGN 14:11:07.1 T1.5 A30
GRA1 14:11:14.0 e pP Z
GRA1 14:11:16.6 e (sP) Z
GRA1 14:19:11.6 e S Z
GRA1 14:34:17.2 e L Z T21.7 A421 MS4.5
SZGRF: OT 14:01:07.9 2.1S 21.2W dep 24km
SOUTH ATLANTIC OCEAN

1997-12-11 D 73.7
GRA1 15:06:44.4 i P c Z mb5.2
ALIGN 15:06:44.4 T1.3 A32
GRA1 15:47:12.9 e L Z T18.3 A194 MS4.4

1997-12-11 D 94.4
GRA1 19:00:18.9 e Pdiff Z
NEIC: OT 18:47:09.5 6.2S 100.9E dep 33km mb5.0
SOUTHWEST OF SUMATERA, INDONESIA

1997-12-11 D 4.2 465km
GRA1 19:27:48.8 e PnI Z
GRA1 19:28:45.7 e SnI Z

1997-12-12
GRA1 01:05:00.9 e PKPdf Z
GRA1 02:18:41.5 e L Z T19.3 A448

1997-12-12 D 98.5
GRA1 07:28:57.5 e Pdiff Z
GRA1 07:32:53.7 e PP Z
GRA1 08:13:30.7 e L Z T20.8 A170 MS4.5
NEIC: OT 07:15:06.1 13.7S 76.4W dep 33km mb5.4
NEAR COAST OF PERU

1997-12-12 D 24.0 AZ106
GRA1 08:06:33.4 e P Z mb4.7
BEAM 08:06:33.4 T1.6 A42
GRA1 08:19:09.6 e L Z T18.6 A235 MS3.7
SZGRF: OT 08:01:21.4
TURKEY

1997-12-13

GRA1 01:47:41.9 e PKPdf Z

 1997-12-13 D 48.6 AZ 95
 GRA1 03:50:07.3 e P Z mb5.2
 ALIGN 03:50:07.3 T2.0 A52
 GRA1 04:12:05.0 e L Z T20.5 A238 MS4.2
 NEIC: OT 03:41:34.8 29.4N 68.5E dep 33km mb5.1
 PAKISTAN

 1997-12-13 D 11.8
 GRA1 04:32:36.9 e P Z
 GRA1 04:32:47.1 e (pP) Z
 NEIC: OT 04:30:07.4 38.8N 13.8E dep405km mb4.4
 SICILY

 1997-12-13 D149.4
 GRA1 04:57:43.7 e PKPdf Z
 GRA1 04:57:47.5 i PKPbc d Z
 GRA1 04:57:51.5 e PKPab Z
 GRA1 04:59:58.3 e pPKPbc Z
 NEIC: OT 04:39:04.8 18.0S 178.2W dep559km mb4.9
 FIJI ISLANDS REGION

 1997-12-13 D 78.3 AZ 8
 GRA1 06:00:13.5 i P c Z mb5.1
 ALIGN 06:00:13.5 T1.1 A18
 GRA1 06:00:27.2 e (pP) Z
 GRA1 06:29:48.5 e L Z T19.0 A126 MS4.3
 NEIC: OT 05:48:47.2 55.2N 161.9E dep 33km mb4.9
 NEAR EAST COAST OF KAMCHATKA

 1997-12-13 D 81.8 AZ 31
 GRA1 06:57:39.2 e P Z mb4.9
 ALIGN 06:57:39.2 T1.1 A11
 GRA1 06:57:49.3 e Z
 GRA1 06:57:58.6 e pP Z
 GRA1 06:58:03.6 e sP Z
 NEIC: OT 06:45:23.7 39.6N 142.2E dep 24km mb4.7
 NEAR EAST COAST OF HONSHU, JAPAN

 1997-12-13 D 22.9 AZ344
 GRA1 07:07:14.2 i P c Z mb5.5
 ALIGN 07:07:14.2 T1.5 A226
 GRA1 07:11:37.2 e S Z
 GRA1 07:16:41.2 e L Z T18.6 A1903 MS4.6
 SZGRF: OT 07:02:13.2 70.7N 8.2W dep 33km
 JAN MAYEN ISLAND REGION

1997-12-13 D149.8
GRA1 14:54:12.3 e PKPdf Z
GRA1 14:54:16.5 e PKPbc Z
GRA1 14:54:21.1 e PKPab Z

1997-12-13 D 79.5 AZ 11
GRA1 16:01:58.1 e P Z mb4.7
BEAM 16:01:58.1 T1.2 A12
GRA1 16:02:11.8 e pP Z
NEIC: OT 15:50:23.3 53.6N 161.5E dep 33km mb4.9
OFF EAST COAST OF KAMCHATKA

1997-12-13 D 86.8 AZ128
GRA1 17:54:00.0 e P Z T1.9 A47 mb5.3
GRA1 18:25:57.4 e L Z T19.3 A92 MS4.2
SZGRF: OT 17:41:17.7 21.1S 68.5E dep 33km
MID-INDIAN RISE

1997-12-13 D124.6
GRA1 19:41:59.4 e PKPdf Z
GRA1 20:34:44.9 e L Z T20.9 A1271 MS5.6

1997-12-13 AZ146
GRA1 20:45:14.6 e P Z
GRA1 20:45:25.0 e P1 Z
NEIC: OT 20:41:58.3 37.5N 20.7E dep 33km mb4.7
IONIAN SEA

1997-12-13 D 80.0 AZ 11
GRA1 22:52:32.0 i P c Z mb4.7
ALIGN 22:52:32.0 T1.0 A10
GRA1 22:52:37.3 e Z
GRA1 22:52:45.0 e pP Z
GRA1 23:48:15.3 e L Z T19.1 A108 MS4.2
NEIC: OT 22:40:57.0 53.6N 161.2E dep 33km mb4.7
OFF EAST COAST OF KAMCHATKA

1997-12-14 D112.7
GRA1 02:54:06.4 e Pdiff Z
GRA1 02:58:38.2 e PP Z
GRA1 03:39:32.2 e L Z T22.0 A606 MS5.1

1997-12-14 D 74.1
GRA1 04:22:31.2 i P c Z mb5.3
ALIGN 04:22:31.2 T1.4 A41
GRA1 04:22:43.2 e pP Z

GRA1 04:57:51.2 e L Z T20.9 A311 MS4.6

1997-12-14 D 73.8

GRA1 04:23:57.4 e P Z mb4.6

BEAM 04:23:57.4 T1.0 A7

1997-12-14

GRA1 07:17:20.1 e (PKPdf) Z

NEIC: OT 06:57:42.1 16.8S 173.8W dep 33km mb4.6

TONGA ISLANDS

1997-12-14 D 72.7

GRA1 07:18:13.1 e P Z mb4.7

BEAM 07:18:13.1 T1.7 A11

1997-12-14

GRA1 09:08:05.3 e (P) Z

GRA1 09:59:57.5 e L Z T20.1 A887

1997-12-14 D 14.2

GRA1 09:30:18.1 e P Z

1997-12-14

GRA1 17:21:35.8 e PKP Z

GRA1 18:21:37.6 e L Z T21.7 A136

NEIC: OT 17:02:23.4 10.1S 161.0E dep 66km mb5.0

SOLOMON ISLANDS

1997-12-14 D 23.5 AZ358

GRA1 19:31:18.2 e P Z mb4.1

BEAM 19:31:18.2 T1.2 A9

SZGRF: OT 19:26:12.0 73.0N 9.1E dep 33km

GREENLAND SEA

1997-12-14

GRA1 20:17:32.5 e PKP Z

GRA1 20:17:36.4 e Z

1997-12-14 D145.9

GRA1 23:29:39.8 e PKPdf Z

GRA1 23:29:41.4 e PKPbc Z

GRA1 23:29:54.4 e PKPab Z

GRA1 23:30:07.0 e pPKPab Z

GRA1 00:35:22.3 e L Z T20.6 A390 MS5.2

1997-12-14 D 1.8 201km

GRA1 09:57:44.0 e Sg N

SZGRF: OT 09:56:46.5 50.5N 13.7E

S of Teplice/CR

1997-12-15 D 56.0 AZ119

GRA1 00:52:56.3 i P Z mb4.9

ALIGN 00:52:56.3 T1.6 A22

GRA1 00:53:04.6 e pP Z

GRA1 01:14:41.2 e L Z T20.2 A197 MS4.2

SZGRF: OT 00:43:19.9 9.6N 58.7E dep 30km

CARLSBERG RIDGE

1997-12-15 D124.4

GRA1 10:47:02.7 e PKPdf Z

GRA1 11:41:47.0 e L Z T21.5 A2613 MS5.9

NEIC: OT 10:28:06.0 6.0S 149.8E dep 33km mb5.3

NEW BRITAIN REGION, P.N.G.

1997-12-15

GRA1 10:58:44.9 e PnI Z

GRA1 11:00:51.5 e SnI Z

NEIC: OT 10:56:13.8 42.1N 19.9E dep 10km

NORTHWESTERN BALKAN REGION

1997-12-15 D 44.9 AZ 84

GRA1 19:00:44.5 e P Z mb5.0

BEAM 19:00:44.5 T1.5 A29

GRA1 19:01:11.5 e pP Z

NEIC: OT 18:52:11.2 36.4N 70.5E dep217km mb4.4

HINDU KUSH REGION, AFGHANISTAN

1997-12-15 D 73.5

GRA1 23:10:10.5 i P c Z mb5.2

BEAM 23:10:10.5 T1.4 A30

GRA1 23:44:06.7 e L Z T19.4 A298 MS4.6

1997-12-16 D150.4

GRA1 03:31:17.7 e (PKPdf) Z

GRA1 03:31:20.3 i PKPbc d Z

GRA1 03:31:28.9 e PKPab Z

NEIC: OT 03:11:42.5 21.5S 176.5W dep150km mb4.7

FIJI ISLANDS REGION

1997-12-16 D 3.7 409km

GRA1 04:25:44.8 e Pn Z M13.6
GRA1 04:26:43.4 e Sg N
SZGRF: OT 04:24:46.3 51.5N 16.3E dep 1km
POLAND

1997-12-16

GRA1 07:31:42.9 e (P) Z
GRA1 08:40:22.8 e L Z T21.9 A766

1997-12-16 D 45.7 AZ263

GRA1 11:25:36.7 e P Z mb5.2
BEAM 11:25:36.7 T1.2 A33
GRA1 11:32:18.0 e S Z
GRA1 11:41:49.1 e L Z T18.1 A1362 MS4.9
NEIC: OT 11:17:22.4 30.1N 42.7W dep 10km mb5.0
NORTHERN MID-ATLANTIC RIDGE

1997-12-16 D 90.3

GRA1 12:01:32.7 e P c Z mb5.5
BEAM 12:01:32.7 T2.0 A61
GRA1 12:01:47.0 e pP Z
GRA1 12:05:04.8 e PP Z
GRA1 12:43:23.4 e L Z T18.1 A3229 MS5.8
NEIC: OT 11:48:34.1 16.3N 98.8W dep 33km mb5.5
NEAR COAST OF GUERRERO, MEXICO

1997-12-16 D 67.7 AZ 9

GRA1 15:04:26.1 e (P) Z

1997-12-16 D 88.6 AZ 90

GRA1 20:33:03.9 e P c Z mb4.9
BEAM 20:33:03.9 T1.1 A9
NEIC: OT 20:20:52.6 7.5N 94.3E dep 33km mb4.6
NICOBAR ISLANDS, INDIA

1997-12-16

GRA1 20:59:28.8 e PKPdf Z
GRA1 21:51:31.0 e L Z T20.9 A369
NEIC: OT 20:40:09.4 35.5S 105.9W dep 10km mb5.2
SOUTHERN EAST PACIFIC RISE

1997-12-17 D154.2

GRA1 00:09:18.2 e PKPdf Z
GRA1 00:09:30.3 e PKPbc Z
GRA1 00:09:38.9 e PKPab Z
GRA1 00:10:01.0 e pPKPbc Z
GRA1 00:10:15.8 e pPKPab Z

GRA1 00:12:55.7 e PP Z
GRA1 01:03:60.0 e L Z T21.4 A279 MS5.0
NEIC: OT 23:50:45.5 5.9S 147.2E dep103km mb5.7
EASTERN NEW GUINEA REG., P.N.G.

1997-12-17

GRA1 00:19:24.1 e PKPdf Z

1997-12-17 AZ255

GRA1 00:22:48.9 e (P) Z

1997-12-17 D 79.2

GRA1 04:50:54.7 i P c Z mb5.4
ALIGN 04:50:54.7 T1.2 A51
GRA1 05:28:49.1 e L Z T20.7 A17965 MS6.4

1997-12-17 D 44.5

GRA1 05:59:21.4 i P c Z mb5.8
ALIGN 05:59:21.4 T1.5 A288
GRA1 05:59:43.1 e Z
GRA1 06:00:04.9 e pP Z
GRA1 06:00:26.1 e sP Z
GRA1 06:01:05.7 e PP Z
GRA1 06:04:32.7 e ScP Z
GRA1 06:05:40.7 e PcS Z
NEIC: OT 05:51:29.3 36.4N 70.8E dep208km mb5.5
HINDU KUSH REGION, AFGHANISTAN

1997-12-17 D 17.3

GRA1 09:44:11.9 e P Z mb4.5
ALIGN 09:44:11.9 T0.9 A33
GRA1 09:52:02.7 e L Z T18.3 A953 MS4.1

1997-12-17 D 79.2

GRA1 11:57:14.4 e P Z T1.4 A37 mb5.2
GRA1 12:39:58.5 e L Z T19.8 A586 MS4.9

1997-12-18 D 59.4 AZ 72

GRA1 02:01:42.4 e P Z mb4.7
BEAM 02:01:42.4 T1.1 A8
GRA1 02:26:42.0 e L Z T21.3 A328 MS4.4
SZGRF: OT 01:51:43.8
TSINGHAI PROVINCE, CHINA

1997-12-18 D148.2

GRA1 05:48:09.6 e (PKPdf) Z
GRA1 05:48:10.1 e PKPbc Z
GRA1 05:48:14.7 e PKPab Z

1997-12-18 D 90.4
GRA1 05:59:57.6 e Pdiff Z
GRA1 06:00:06.4 e pPdiff Z
GRA1 06:48:43.7 e L Z T19.1 A863 MS5.2
NEIC: OT 05:46:57.3 1.9S 99.6E dep 33km mb5.3
SOUTHERN SUMATERA, INDONESIA

1997-12-18 D 86.8 AZ285
GRA1 15:14:21.2 i P c Z mb5.9
ALIGN 15:14:21.2 T1.9 A184
GRA1 15:15:06.7 e pP Z
GRA1 15:15:25.4 e sP Z
GRA1 15:17:47.0 e PP Z
GRA1 15:18:30.9 e pPP Z
GRA1 15:18:49.1 e sPP Z
GRA1 15:49:57.1 e L Z T19.1 A1118 MS5.3
SZGRF: OT 15:01:58.0 12.1N 88.1W dep183km
OFF COAST OF CENTRAL AMERICA

1997-12-18 D 74.4
GRA1 18:12:10.6 i P d Z mb4.8
ALIGN 18:12:10.6 T1.5 A15

1997-12-18 D 81.1 AZ 26
GRA1 18:46:29.4 e P Z mb4.7
BEAM 18:46:29.4 T1.1 A8
SZGRF: OT 18:34:19.1
KURIL ISLANDS REGION

1997-12-18 D104.1
GRA1 20:37:03.8 e Pdiff Z
GRA1 20:37:32.1 e (pPdiff)Z
GRA1 20:37:48.1 e (sPdiff)Z
GRA1 20:41:22.4 e PP Z
GRA1 21:26:07.5 e L Z T21.1 A1351 MS5.5
NEIC: OT 20:23:02.8 14.7N 144.7E dep 33km mb5.5
MARIANA ISLANDS

1997-12-19 D 80.2 AZ334
GRA1 00:53:35.6 e P Z
NEIC: OT 00:41:57.2 52.2N 158.6E dep 33km mb4.9
NEAR EAST COAST OF KAMCHATKA

1997-12-19

GRA1 01:26:13.2 e PKPdf Z

GRA1 02:19:01.3 e L Z T19.6 A564

NEIC: OT 01:07:23.4 6.1S 147.2E dep 67km mb5.2

EASTERN NEW GUINEA REG., P.N.G.

1997-12-19 D 95.0 AZ 90

GRA1 04:56:58.7 e Pdiff Z

NEIC: OT 04:44:46.3 7.5N 94.2E dep 33km mb4.9

NICOBAR ISLANDS, INDIA

1997-12-19 D 84.5 AZ 91

GRA1 06:02:47.3 e P Z mb4.7

BEAM 06:02:47.3 T0.9 A4

GRA1 06:02:54.9 e pP Z

GRA1 06:03:00.3 e sP Z

SZGRF: OT 05:50:17.0

NORTHERN SUMATERA

1997-12-19 D 82.3 AZ 90

GRA1 07:28:54.3 i P c Z mb5.1

BEAM 07:28:54.3 T1.2 A18

NEIC: OT 07:16:41.5 7.4N 94.2E dep 33km mb4.9

NICOBAR ISLANDS, INDIA

1997-12-19 D 74.2

GRA1 09:49:16.4 e P Z mb5.0

BEAM 09:49:16.4 T1.1 A19

GRA1 09:49:28.6 e pP Z

GRA1 10:24:47.3 e L Z T20.8 A307 MS4.6

1997-12-19

GRA1 10:13:20.5 e PnI Z

GRA1 10:14:48.0 e (SnI) Z

NEIC: OT 10:11:47.2 43.0N 12.8E dep 10km mb3.5

CENTRAL ITALY

1997-12-20 D 73.1 AZ 14

GRA1 00:51:23.0 i P c Z mb5.0

ALIGN 00:51:23.0 T1.2 A17

GRA1 00:51:31.0 e pP Z

NEIC: OT 00:39:59.4 56.2N 164.1E dep 33km mb4.9

KOMANDORSKY ISLANDS REGION

1997-12-20 D 3.6 405km

GRA1 04:23:35.5 e Pn Z M13.7

GRA1 04:24:33.2 e Sg N

SZGRF: OT 04:22:38.0 51.6N 16.1E dep 1km

POLAND

1997-12-20 AZ150
GRA1 10:39:50.8 e P Z
NEIC: OT 10:36:03.6 33.7N 26.4E dep 10km mb3.5
EASTERN MEDITERRANEAN SEA

1997-12-20 D 53.0 AZ 68
GRA1 11:17:16.0 i P c Z T0.6 A24 mb5.3
GRA1 11:17:22.1 i pP d Z
SZGRF: OT 11:08:02.0 41.0N 89.0E dep 22km
SOUTHERN SINKIANG PROV., CHINA

1997-12-20 D 67.2 AZ268
GRA1 13:05:33.4 e P Z

1997-12-20 D 72.5
GRA1 13:36:57.6 i P d Z mb5.9
ALIGN 13:36:57.6 T1.6 A147
GRA1 13:39:04.9 e pP Z
GRA1 13:40:04.3 e sP Z
NEIC: OT 13:26:31.5 53.4N 152.7E dep614km mb5.1
SEA OF OKHOTSK

1997-12-20 AZ210
GRA1 14:50:28.8 e P Z
GRA1 14:50:35.8 e pP Z

1997-12-20 D 90.7 AZ 60
GRA1 15:59:17.9 e P Z T1.0 A6 mb4.9
SZGRF: OT 15:46:18.9 18.5N 125.4E dep 33km
PHILIPPINE ISLANDS REGION

1997-12-20 D 54.3 AZ 44
GRA1 19:41:10.1 e P Z
GRA1 20:31:41.9 e L Z T19.4 A232 MS4.3

1997-12-20 D 70.6 AZ278
GRA1 21:45:53.6 e P Z

1997-12-20 D 1.0 114km
GRA1 19:41:10.4 e Pg Z
GRA1 19:41:24.0 e Sg E
SZGRF: OT 19:40:51.9 50.1N 12.7E dep 10km
Horni Slavkov/CR, S of Karlovy Vary

 1997-12-21 D 88.9 AZ 46
 GRA1 00:23:16.9 e P Z mb4.8
 BEAM 00:23:16.9 T1.3 A8
 SZGRF: OT 00:10:26.6
 EAST OF RYUKYU ISLANDS

1997-12-21 D 86.4 AZ 53
 GRA1 05:28:52.9 e P Z mb4.4
 BEAM 05:28:52.9 T0.8 A3
 GRA1 05:29:03.6 e (pP) Z
 NEIC: OT 05:16:19.1 24.2N 123.1E dep 33km mb4.9
 SOUTHWESTERN RYUKYU ISLANDS

1997-12-21 D 64.0 AZ 31
 GRA1 07:11:17.0 e P Z mb4.6
 BEAM 07:11:17.0 T0.9 A4
 NEIC: OT 07:01:27.1 56.6N 117.3E dep 33km mb4.7
 EAST OF LAKE BAYKAL, RUSSIA

1997-12-21 D 78.8 AZ 8
 GRA1 11:41:24.5 e P Z mb4.6
 BEAM 11:41:24.5 T1.4 A9
 NEIC: OT 11:29:59.4 55.7N 163.2E dep 33km mb4.1
 OFF EAST COAST OF KAMCHATKA

1997-12-21 D153.6
 GRA1 17:52:08.6 e PKPbc Z
 GRA1 17:52:20.9 e PKPab Z
 GRA1 17:54:21.8 e pPKPbc Z
 GRA1 17:54:29.7 e pPKPab Z
 NEIC: OT 17:33:15.2 24.2S 178.8E dep600km mb4.6
 SOUTH OF FIJI ISLANDS

1997-12-21 D 79.7
 GRA1 21:15:39.8 i P d Z mb5.5
 ALIGN 21:15:39.8 T1.1 A55
 GRA1 21:56:39.7 e L Z T19.8 A160 MS4.4

1997-12-22 D123.0
 GRA1 02:20:59.4 e Pdiff Z
 GRA1 02:21:44.4 e pPdiff Z
 GRA1 02:24:25.1 e PKP Z
 GRA1 02:34:17.4 e PKKP Z
 GRA1 02:35:08.2 e pPKKP Z
 GRA1 03:17:30.9 e L Z T22.0 A25924 MS6.8
 NEIC: OT 02:05:50.1 5.5S 147.9E dep179km mb6.3
 EASTERN NEW GUINEA REG., P.N.G.

1997-12-22 D 90.6
GRA1 05:35:10.2 e P c Z mb5.3
ALIGN 05:35:10.2 T1.8 A26
GRA1 05:35:17.7 e pP Z
GRA1 06:16:13.6 e L Z T20.6 A974 MS5.2
NEIC: OT 05:22:10.4 17.6N 100.8W dep 33km mb5.1
GUERRERO, MEXICO

1997-12-22 D 68.2 AZ162
GRA1 07:07:55.0 e P Z mb4.4
BEAM 07:07:55.0 T0.8 A2
GRA1 07:08:06.3 e pP Z
GRA1 07:08:10.4 e sP Z
SZGRF: OT 06:56:56.6
ZAMBIA

1997-12-22 D 50.2 AZ 32
GRA1 09:28:59.4 e P Z

1997-12-22 D 87.2
GRA1 10:16:24.2 e P Z mb5.6
BEAM 10:16:24.2 T2.4 A115
GRA1 10:16:42.0 e pP Z
GRA1 10:16:50.5 e sP Z
GRA1 10:52:22.3 e L Z T21.8 A2988 MS5.7

1997-12-22 D 80.8
GRA1 16:44:10.6 i P c Z mb5.5
BEAM 16:44:10.6 T1.7 A83
GRA1 16:44:22.9 e pP Z
GRA1 16:47:02.9 e PP Z
GRA1 17:21:05.5 e L Z T22.0 A641 MS4.9
NEIC: OT 16:32:00.3 40.2N 142.3E dep 45km mb5.3
NEAR EAST COAST OF HONSHU, JAPAN

1997-12-22 D 90.6
GRA1 17:02:53.1 i P c Z mb5.6
BEAM 17:02:53.1 T1.3 A44
GRA1 17:03:03.6 e pP Z
GRA1 17:45:50.0 e L Z T18.3 A2131 MS5.6

1997-12-22 D 24.0 AZ303
GRA1 17:37:09.9 e P Z
NEIC: OT 17:33:58.0 38.9N 25.8E dep 33km mb4.1
AEGEAN SEA

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1997-12-22      D 75.7
  GRA1 19:16:48.0 i P      c Z      mb5.5
  BEAM 19:16:48.0                T1.0  A39
  GRA1 19:16:57.7 e pP      Z
  GRA1 19:49:04.0 e L      Z T21.4  A231  MS4.5
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1997-12-22      D 78.9
  GRA1 19:19:53.9 i P      c Z      mb5.5
  BEAM 19:19:53.9                T1.3  A73
  GRA1 19:20:22.8 e pP      Z
  GRA1 19:20:36.0 e sP      Z
  GRA1 19:59:28.1 e L      Z T18.8  A310  MS4.7
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1997-12-23      D 86.9  AZ 56
  GRA1 02:48:18.7 e P      Z      mb4.6
  BEAM 02:48:18.7                T1.3  A6
  GRA1 03:31:10.0 e L      Z T18.9  A95  MS4.2
SZGRF: OT 02:35:37.9
RYUKYU ISLANDS
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1997-12-23
  GRA1 03:24:23.1 e PKPdf  Z
  GRA1 04:19:40.1 e L      Z T20.7  A95
NEIC: OT 03:05:27.1 6.0S 147.1E dep 33km mb4.9
EASTERN NEW GUINEA REG., P.N.G.
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1997-12-23      D 20.2  AZ138
  GRA1 09:09:05.6 e P      Z      mb3.8
  BEAM 09:09:05.6                T1.3  A8
  GRA1 09:14:55.5 e L      Z T19.5  A141  MS3.3
SZGRF: OT 09:04:32.8
EASTERN MEDITERRANEAN SEA
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1997-12-23      D 94.4  AZ 64
  GRA1 10:05:21.1 e P      Z      mb5.1
  BEAM 10:05:21.1                T2.3  A23
NEIC: OT 09:52:00.6 13.2N 125.3E dep 33km mb5.1
PHILIPPINE ISLANDS REGION
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1997-12-23      D 57.7  AZ212
  GRA1 10:35:12.7 e P      Z
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1997-12-23      D 23.0  AZ284
  GRA1 22:55:27.6 e P      Z      mb4.0
  BEAM 22:55:27.6                T1.3  A6
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GRA1 23:04:34.6 e L Z T20.4 A195
NEIC: OT 22:49:55.7 50.1N 29.1W dep 10km mb4.3
NORTHERN MID-ATLANTIC RIDGE

1997-12-24 D 95.1
GRA1 00:05:41.1 e P Z mb4.9
BEAM 00:05:41.1 T1.4 A7
GRA1 00:50:05.1 e L Z T20.9 A150 MS4.4

1997-12-24 D 15.0 AZ165
GRA1 09:43:03.3 e P Z
GRA1 09:47:51.2 e L Z T19.4 A282
NEIC: OT 09:40:07.4 37.7N 15.1E dep 10km mb4.2
SICILY

1997-12-24
GRA1 12:49:13.9 e PKP Z
NEIC: OT 12:30:07.5 6.3S 154.9E dep 33km mb4.9
SOLOMON ISLANDS

1997-12-24 D 6.0
GRA1 17:54:31.5 e Pn Z M15.0
GRA1 17:55:19.5 e (Sn) Z
GRA1 17:57:12.9 e L Z T16.7 A406 MS3.0
NEIC: OT 17:53:09.9 44.2N 10.6E dep 10km mb4.5
NORTHERN ITALY

1997-12-24 D 80.1 AZ 10
GRA1 18:41:29.6 i P c Z mb4.3
BEAM 18:41:29.6 T0.9 A4
NEIC: OT 18:30:00.2 54.6N 161.5E dep 33km mb4.5
NEAR EAST COAST OF KAMCHATKA

1997-12-24 D 3.0 328km
GRA1 18:43:06.4 e Pg Z
SZGRF: OT 18:42:11.0 49.2N 6.8E dep 1km
Lauterbach, SW of Saarbruecken, French-German border re

1997-12-25 D 21.3 AZ150
GRA1 00:48:09.6 e P Z T1.4 A25 mb4.4
SZGRF: OT 00:43:25.1
NEAR COAST OF LIBYA

1997-12-25 D 70.8
GRA1 13:01:12.6 i P d Z mb4.9
BEAM 13:01:12.6 T1.3 A13
GRA1 13:01:26.1 e pP Z
GRA1 13:01:31.0 e sP Z

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1997-12-25      D150.5
  GRA1 16:08:28.8 e PKPdf Z
  GRA1 16:08:39.4 e PKPab Z
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1997-12-25      D 23.1  AZ347
  GRA1 16:09:40.8 e P      Z      mb4.1
  BEAM 16:09:40.8          T1.2  A7
  GRA1 16:16:29.1 e L      Z  T21.3 A157  MS3.4
SZGRF: OT 16:04:38.0
  JAN MAYEN ISLAND REGION
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1997-12-25      D 87.9
  GRA1 22:29:09.9 i P      d Z      mb5.5
  BEAM 22:29:09.9          T1.6  A42
  GRA1 22:29:23.5 e pP     Z
  GRA1 22:29:29.4 e sP     Z
  GRA1 23:04:32.1 e L      Z  T21.8 A1757  MS5.4
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1997-12-25      D 91.0  AZ 46
  GRA1 23:39:15.8 e P      Z      mb4.8
  BEAM 23:39:15.8          T1.0  A5
SZGRF: OT 23:26:15.7
  VOLCANO ISLANDS REGION
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1997-12-26      D 79.9  AZ 9
  GRA1 00:04:28.4 e P      Z      mb4.6
  BEAM 00:04:28.4          T1.4  A11
NEIC:  OT 23:52:51.9 53.9N 162.0E dep 33km mb4.6
  OFF EAST COAST OF KAMCHATKA
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1997-12-26      D 79.0  AZ 10
  GRA1 00:30:33.6 e P      Z      mb5.0
  BEAM 00:30:33.6          T2.8  A41
SZGRF: OT 00:18:34.5
  RAT ISLANDS, ALEUTIAN ISLANDS
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1997-12-26      D 41.3  AZ106
  GRA1 01:12:58.6 e P      Z      mb4.3
  BEAM 01:12:58.6          T1.3  A8
  GRA1 01:13:06.0 e (pP)   Z
  GRA1 01:34:28.6 e L      Z  T18.8 A164  MS3.9
NEIC:  OT 01:05:39.4 28.5N 53.4E dep 33km mb4.5
  SOUTHERN IRAN
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1997-12-26      D 74.2

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GRA1 05:02:17.8 e P Z mb5.1
ALIGN 05:02:17.8 T0.8 A15
GRA1 05:02:23.6 e pP Z
NEIC: OT 04:50:44.3 53.8N 162.0E dep 33km mb5.2
OFF EAST COAST OF KAMCHATKA

1997-12-26 D 74.2
GRA1 05:14:05.9 e P Z mb4.9
BEAM 05:14:05.9 T1.2 A16
GRA1 05:14:19.8 e (pP) Z

1997-12-26 D 41.5 AZ130
GRA1 05:36:59.8 e P Z mb4.1
BEAM 05:36:59.8 T1.0 A4
SZGRF: OT 05:29:15.3 17.0N 43.1E dep 33km
WESTERN ARABIAN PENINSULA

1997-12-26 D153.6
GRA1 05:53:06.5 i PKPdf d Z
GRA1 05:53:13.8 i PKPbc d Z
GRA1 05:53:25.2 e PKPab Z
GRA1 05:55:32.1 e pPKPbc Z
GRA1 05:55:38.0 e pPKPab Z
NEIC: OT 05:34:25.2 22.2S 179.8W dep588km mb5.2
SOUTH OF FIJI ISLANDS

1997-12-26 D 78.6 AZ 6
GRA1 06:00:52.0 e P Z mb4.9
BEAM 06:00:52.0 T2.2 A29
GRA1 06:01:05.4 e pP Z
GRA1 06:01:13.1 e sP Z
NEIC: OT 05:49:18.9 54.0N 161.8E dep 33km mb5.1
NEAR EAST COAST OF KAMCHATKA

1997-12-26 D 37.8 AZ131
GRA1 06:18:40.7 e P Z mb4.1
BEAM 06:18:40.7 T1.8 A7
GRA1 06:18:58.4 e pP Z
SZGRF: OT 06:11:31.8
WESTERN ARABIAN PENINSULA

1997-12-26 D 74.5 AZ128
GRA1 06:19:42.9 e P Z mb4.3
BEAM 06:19:42.9 T1.2 A4
GRA1 06:19:59.5 e pP Z
SZGRF: OT 06:08:10.1
SOUTH INDIAN OCEAN

1997-12-26 D 73.8
GRA1 06:35:39.1 i P c Z mb5.5
ALIGN 06:35:39.1 T1.2 A60
GRA1 06:35:49.8 e pP Z
GRA1 06:35:55.0 e sP Z
GRA1 07:04:52.8 e L Z T20.6 A216 MS4.4

1997-12-26 D 79.3 AZ 10
GRA1 07:16:07.4 e P Z mb4.5
BEAM 07:16:07.4 T0.7 A4
NEIC: OT 07:04:34.1 53.9N 161.8E dep 33km mb4.7
OFF EAST COAST OF KAMCHATKA

1997-12-26
GRA1 13:25:40.5 e (PnI) Z
GRA1 13:26:47.4 e (SnI) Z
NEIC: OT 13:24:13.1 43.7N 10.4E dep 10km mb3.5
CENTRAL ITALY

1997-12-26 D 79.0 AZ 5
GRA1 21:30:18.8 i P c Z mb5.2
ALIGN 21:30:18.8 T1.4 A38
GRA1 21:30:34.7 e pP Z
GRA1 22:06:45.7 e L Z T21.3 A677 MS5.0
NEIC: OT 21:18:17.6 51.3N 178.8E dep 33km mb5.3
RAT ISLANDS, ALEUTIAN ISLANDS

1997-12-27 D 56.7 AZ 70
GRA1 04:29:22.1 e P Z mb4.6
BEAM 04:29:22.1 T1.3 A9
GRA1 04:29:29.6 e pP Z
GRA1 04:49:40.1 e L Z T21.3 A179 MS4.1
SZGRF: OT 04:19:41.8
SOUTHERN SINKIANG PROV., CHINA

1997-12-27 D 67.2
GRA1 04:48:23.6 e P Z mb4.7
BEAM 04:48:23.6 T1.5 A7

1997-12-27 D 15.0 AZ143
GRA1 19:14:43.3 e P Z
BEAM 19:14:43.3 T0.7 A1
GRA1 19:23:20.3 e L Z T15.2 A128

1997-12-27 AZ143
GRA1 19:21:59.5 e P Z

GRA1 19:30:52.4 e L Z T15.6 A888

1997-12-27 AZ143

GRA1 19:49:29.6 e P Z

1997-12-27 D 52.0 AZ182

GRA1 20:29:50.4 e P Z mb4.8

BEAM 20:29:50.4 T2.0 A24

GRA1 21:16:36.6 e L Z T19.3 A1319 MS5.0

SZGRF: OT 20:20:42.2 2.5S 9.4E dep 33km

GABON

1997-12-27 D147.7

GRA1 20:47:33.7 e PKPdf Z

GRA1 20:47:38.9 i PKPbc d Z

GRA1 20:47:41.8 e PKPab Z

GRA1 21:52:08.4 e L Z T21.9 A684 MS5.4

1997-12-28 D124.4

GRA1 03:44:11.3 e PKPdf c Z

GRA1 03:44:19.8 e pPKPdf Z

GRA1 04:43:38.1 e L Z T20.2 A371 MS5.0

NEIC: OT 03:25:13.0 4.4S 153.0E dep 33km mb5.5

NEW BRITAIN REGION, P.N.G.

1997-12-28 D 82.5 AZ 33

GRA1 05:25:38.0 i P c Z mb4.8

BEAM 05:25:38.0 T1.2 A11

GRA1 05:25:47.9 e pP Z

GRA1 05:25:51.7 e sP Z

GRA1 06:01:45.9 e L Z T21.8 A106 MS4.2

NEIC: OT 05:13:25.2 40.7N 143.7E dep 33km mb4.7

OFF EAST COAST OF HONSHU, JAPAN

1997-12-28 D 79.0 AZ 3

GRA1 09:18:50.3 e P Z mb4.6

BEAM 09:18:50.3 T1.3 A8

GRA1 09:52:41.6 e L Z T20.4 A82 MS4.1

SZGRF: OT 09:06:51.5 51.6N 174.3W dep 33km

ANDREANOF ISLANDS, ALEUTIAN IS.

1997-12-28 D 69.5 AZ 76

GRA1 12:33:44.7 e P Z mb4.8

BEAM 12:33:44.7 T1.8 A11

SZGRF: OT 12:22:41.1

BURMA-CHINA BORDER REGION

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1997-12-28      D 19.1  AZ132
  GRA1 20:50:15.3 e P      Z      mb3.8
  BEAM 20:50:15.3          T1.1  A6
  GRA1 20:56:41.4 e L      Z  T14.2  A309  MS3.8
SZGRF: OT 20:45:56.5
EASTERN MEDITERRANEAN SEA
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1997-12-28      D 2.8  311km
  GRA1 22:53:09.5 e Pn     Z      M13.1
  GRA1 22:53:55.0 e Sg     E
SZGRF: OT 22:52:24.7 47.0N 10.0E dep 10km
Arlberg/A
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1997-12-29      D 23.2  AZ157
  GRA1 01:01:45.1 e P      Z      mb4.0
  BEAM 01:01:45.1          T2.0  A10
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1997-12-29
  GRA1 02:59:08.3 e PKPdf  Z
  GRA1 04:07:36.3 e L      Z  T21.5  A120
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1997-12-29      D102.0
  GRA1 05:30:35.2 e PP     Z
  GRA1 06:12:49.7 e L      Z  T21.3  A666  MS5.1
NEIC: OT 05:12:21.3 52.1S 28.1E dep 10km mb5.3
SOUTH OF AFRICA
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1997-12-29      D 87.0  AZ280
  GRA1 08:09:25.2 e (P)    Z
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1997-12-29
  GRA1 08:47:55.0 e (P)    Z
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1997-12-29      D 64.6  AZ 79
  GRA1 09:19:11.0 e P      Z      mb4.6
  BEAM 09:19:11.0          T0.9  A3
SZGRF: OT 09:08:37.1 25.9N 91.6E dep 33km
INDIA-BANGLADESH BORDER REGION
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1997-12-29
  GRA1 12:56:44.7 e PKP    Z
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1997-12-30 D 11.2
GRA1 04:42:04.7 i PnI d Z
GRA1 04:44:29.1 e L Z T18.7 A119 MS2.8
NEIC: OT 04:39:28.8 45.6N 26.4E dep135km mb4.8
ROMANIA

1997-12-30 D152.5
GRA1 12:03:37.8 e PKPdf Z
GRA1 12:03:44.4 i PKPbc c Z
GRA1 12:03:53.3 e PKPab Z
NEIC: OT 11:44:33.8 21.6S 176.9W dep400km mb4.6
FIJI ISLANDS REGION

1997-12-30 D 72.9 AZ 76
GRA1 12:05:09.9 e P Z T1.9 A41 mb5.2
GRA1 12:36:15.6 e L Z T19.5 A369 MS4.7
NEIC: OT 11:54:07.8 25.3N 96.5E dep 50km mb5.1
MYANMAR

1997-12-30 D 68.3
GRA1 13:54:17.9 e P Z
GRA1 13:54:22.3 e Z
GRA1 14:25:28.5 e L Z T20.8 A4399 MS5.7
NEIC: OT 13:43:18.4 25.4N 96.6E dep 33km mb5.4
MYANMAR

1997-12-30 D148.6
GRA1 16:13:14.8 e PKPdf Z
GRA1 16:13:16.8 e PKPbc c Z
GRA1 16:13:20.8 e PKPab Z
NEIC: OT 15:54:31.2 18.6S 177.8W dep550km
FIJI ISLANDS REGION

1997-12-30 D 24.6 AZ130
GRA1 18:25:17.3 e P Z T1.7 A34 mb4.8
NEIC: OT 18:18:34.8 28.9N 47.4E dep 33km mb4.4
EASTERN ARABIAN PENINSULA

1997-12-30 D 78.9
GRA1 22:45:11.2 i P c Z mb4.9
ALIGN 22:45:11.2 T1.2 A17
GRA1 22:45:18.3 e pP Z
GRA1 22:45:22.9 e sP Z
NEIC: OT 22:33:09.6 51.9N 170.0W dep 33km mb4.8
FOX ISLANDS, ALEUTIAN ISLANDS

1997-12-31 D 79.5
GRA1 01:28:46.1 e P Z mb4.4
BEAM 01:28:46.1 T1.4 A5

GRA1 01:29:00.6 e pP Z
NEIC: OT 01:16:43.0 43.3N 146.7E dep 55km mb4.7
KURIL ISLANDS

1997-12-31 D 79.7 AZ 22
GRA1 10:45:06.2 i P d Z mb4.6
ALIGN 10:45:06.2 T0.8 A6
SZGRF: OT 10:33:03.4 47.1N 159.3E dep 33km
KURIL ISLANDS REGION

1997-12-31
GRA1 13:00:14.2 e PKP Z

1997-12-31 D 7.0
GRA1 16:03:58.7 e PnI Z
GRA1 16:05:18.9 e SnI Z
GRA1 16:07:22.3 e L Z T16.3 A1165 MS3.6

1997-12-31 AZ 81
GRA1 19:30:53.2 e P Z

1997-12-31 D 46.4 AZ286
GRA1 19:51:40.6 e (P) Z

1997-12-31 D 82.8
GRA1 20:49:13.9 e P Z mb5.0
BEAM 20:49:13.9 T1.5 A15

1997-12-31 D 58.2 AZ 73
GRA1 21:41:09.0 i P d Z mb4.7
BEAM 21:41:09.0 T1.8 A15
SZGRF: OT 21:31:18.7
TSINGHAI PROVINCE, CHINA
