

GRA1 11:16:03.5 e P Z T1.0 A39 mb5.3
SZGRF: OT 11:04:00.2 50.7N 176.2W dep 33km
ANDREANOF ISLANDS, ALEUTIAN IS.

1997-07-04 D 86.1 AZ 58
GRA1 18:50:05.4 e P Z T1.6 A41 mb5.3
GRA1 19:32:01.9 e L Z T19.6 A312 MS4.7
SZGRF: OT 18:37:28.4 23.5N 124.4E dep 33km
SOUTHWESTERN RYUKYU ISLANDS

1997-07-05 D 78.3 AZ 27
GRA1 00:31:32.9 i P c Z T0.9 A11 mb5.0
SZGRF: OT 00:19:37.5 46.3N 151.3E dep 33km
KURIL ISLANDS

1997-07-05
GRA1 03:33:45.3 e PKP Z
NEIC: OT 03:14:17.3 15.2S 174.1W dep100km mb4.9
TONGA ISLANDS

1997-07-05 D 87.3 AZ128
GRA1 03:51:13.4 e P Z T1.7 A24 mb5.1
SZGRF: OT 03:38:28.4 21.5S 68.8E dep 33km
MID-INDIAN RISE

1997-07-05 D 84.1 AZ127
GRA1 09:53:22.9 e P Z mb4.8
SZGRF: OT 09:40:53.9 18.1S 68.2E dep 33km
MID-INDIAN RISE

1997-07-05 D 86.8 AZ129
GRA1 11:56:03.1 e P Z T1.4 A12 mb4.8
SZGRF: OT 11:43:20.7 21.6S 67.6E dep 33km
MID-INDIAN RISE

1997-07-05
GRA1 13:48:09.8 e PKP Z
NEIC: OT 13:29:59.5 6.4S 154.3E dep500km mb4.6
SOLOMON ISLANDS

1997-07-05
GRA1 23:06:00.1 e PKP Z
NEIC: OT 22:46:41.0 11.5S 164.7E dep 33km mb5.4
SANTA CRUZ ISLANDS REGION

1997-07-05 D153.1
GRA1 23:40:12.2 e PKPdf Z
GRA1 23:40:18.8 e PKPbc Z
GRA1 23:40:29.9 e PKPab Z

1997-07-06 D 78.4 AZ 38
GRA1 02:02:29.7 e P Z T0.8 A37 mb5.6
SZGRF: OT 01:50:33.5 40.8N 137.8E dep 33km
EASTERN SEA OF JAPAN

1997-07-06
GRA1 03:57:29.9 e PKP Z
NEIC: OT 03:30:00.3 27.7S 65.8E dep 10km mb4.5
SOUTH INDIAN OCEAN

1997-07-06 D 26.4 AZ282
GRA1 05:35:34.6 e P Z T1.3 A51 mb5.0
SZGRF: OT 05:30:02.1 47.8N 29.0W dep 33km
NORTH ATLANTIC RIDGE

1997-07-06 D108.0
GRA1 10:08:22.0 e Pdiff Z
GRA1 10:12:49.2 e PP Z
GRA1 10:19:11.3 e SKS E
GRA1 10:20:38.2 e Sdiff N
GRA1 10:22:15.2 e PS E
GRA1 10:55:50.5 e L Z T21.7 A27791 MS6.8
NEIC: OT 09:54:02.5 30.1S 71.8W dep 33km mb5.7
NEAR COAST OF CENTRAL CHILE

1997-07-06
GRA1 11:55:37.7 e PKP Z

1997-07-06 D 85.9 AZ291
GRA1 20:26:02.0 e P Z T1.5 A181 mb6.0
GRA1 20:36:24.5 e S N
GRA1 20:59:21.1 e L Z T21.0 A3350 MS5.7
SZGRF: OT 20:13:25.7 16.8N 92.4W dep 33km
CHIAPAS, MEXICO

1997-07-06 D 3.5 389km
GRC2 22:29:50.5 e Pn Z

1997-07-06
GRA1 23:29:27.3 e (P) Z

1997-07-07 D 15.0
GRA1 06:14:58.0 e P Z

 1997-07-07 D 88.7 AZ 91
 GRA1 11:31:48.9 e P Z T1.0 A24 mb5.4
 GRA1 11:31:56.5 e pP Z
 GRA1 11:31:59.5 e sP Z
 GRA1 12:23:13.1 e L Z T21.4 A2207 MS5.5
 SZGRF: OT 11:18:58.6 .1N 99.3E dep 26km
 NORTHERN SUMATERA

 1997-07-07 D 87.3 AZ 90
 GRA1 11:37:21.3 e P Z T1.0 A37 mb5.5
 GRA1 11:37:29.1 e pP Z
 GRA1 11:37:31.9 e sP Z
 GRA1 12:23:13.2 e L Z T21.4 A2207 MS5.5
 SZGRF: OT 11:24:37.4 2.4N 99.9E dep 26km
 NORTHERN SUMATERA

 1997-07-07 D 87.4 AZ 95
 GRA1 12:23:14.9 e P Z T1.4 A15 mb4.9
 SZGRF: OT 12:10:30.4 1.1S 96.0E dep 33km
 SOUTHWEST OF SUMATERA

 1997-07-07 D 79.0 AZ 22
 GRA1 19:44:32.5 e P Z T0.9 A8 mb4.8
 SZGRF: OT 19:32:33.4 47.4N 157.7E dep 33km
 KURIL ISLANDS REGION

 1997-07-07 D 25.3
 GRA1 21:48:22.4 e P Z T1.0 A13 mb4.6
 SZGRF: OT 21:42:59.2 74.1N 3.4W dep 33km
 GREENLAND SEA

 1997-07-08 D 94.9 AZ 44
 GRA1 02:37:28.8 i P Z T1.4 A96 mb6.0
 GRA1 02:41:14.6 e PP Z
 GRA1 02:48:08.8 e S N
 GRA1 02:49:57.6 e SP Z
 GRA1 02:55:03.0 e SS E
 GRA1 03:23:20.5 e L Z T21.3 A1980 MS5.6
 SZGRF: OT 02:24:10.9 23.9N 142.4E dep 33km
 VOLCANO ISLANDS REGION

 1997-07-08 D 88.6 AZ 44
 GRA1 11:15:39.0 i P c Z T1.2 A23 mb5.3
 SZGRF: OT 11:02:50.3 29.3N 138.7E dep 33km
 SOUTH OF HONSHU, JAPAN

 1997-07-08 D 78.8 AZ 6

GRA1 12:23:16.6 e P Z T1.5 A89 mb5.6
GRA1 12:26:19.5 e PP Z
GRA1 12:33:09.1 e S N
GRA1 12:38:24.2 e SS N
GRA1 13:02:19.3 e L Z T21.5 A2252 MS5.5
SZGRF: OT 12:11:18.6 51.5N 178.6W dep 33km
ANDREANOF ISLANDS, ALEUTIAN IS.

1997-07-08

GRA1 13:38:11.5 e PKP Z
NEIC: OT 13:18:13.4 54.2S 133.3W dep 10km mb4.9
PACIFIC-ANTARCTIC RIDGE

1997-07-08

D 85.9 AZ 57
GRA1 16:39:01.9 e P Z T1.5 A12 mb4.8
SZGRF: OT 16:26:26.2 23.9N 124.4E dep 33km
SOUTHWESTERN RYUKYU ISLANDS

1997-07-08

GRA1 20:17:07.6 e (P) Z

1997-07-09

GRA1 00:47:04.0 e (PKP) Z

1997-07-09

D 39.0 AZ106
GRA1 01:25:13.6 e P Z T0.9 A9 mb4.4
SZGRF: OT 01:17:50.4 28.7N 54.7E dep 33km
SOUTHERN IRAN

1997-07-09

D 85.7 AZ 39
GRA1 09:48:31.6 i P c Z T0.9 A47 mb5.6
SZGRF: OT 09:35:57.2 34.1N 141.6E dep 33km
OFF EAST COAST OF HONSHU, JAPAN

1997-07-09

D 37.9
GRA1 14:52:58.6 i P c Z T1.1 A130 mb5.6
NEIC: OT 14:47:17.0 52.3N 31.6W dep 10km mb5.1
NORTHERN MID-ATLANTIC RIDGE

1997-07-09

D 44.3 AZ104
GRA1 17:46:55.9 e P Z T0.9 A18 mb4.8
SZGRF: OT 17:38:49.1 25.7N 59.8E dep 33km
SOUTHERN IRAN

1997-07-09

D 72.0 AZ266
GRA1 19:35:37.6 i P d Z T1.5 A382 mb6.3
GRA1 19:44:59.6 e S E

GRA1 20:05:41.7 e L Z T20.9 A50476 MS6.8
SZGRF: OT 19:24:17.3 11.5N 64.3W dep 33km
CARIBBEAN SEA

1997-07-09 D 77.7 AZ265
GRA1 20:17:40.9 e P Z T1.4 A16 mb5.0
SZGRF: OT 20:05:47.0 5.9N 66.7W dep 33km
VENEZUELA

1997-07-09 D 5.4
GRA1 20:37:34.0 e Sn E
SZGRF: OT 20:35:14.1 44.3N 10.7E dep 10km
NORTHERN ITALY

1997-07-10
GRA1 01:25:50.6 e P Z

1997-07-10
GRA1 03:54:10.0 e PKP Z
NEIC: OT 03:40:33.1 7.9N 126.5E dep 85km mb5.3
MINDANAO, PHILIPPINE ISLANDS

1997-07-10
GRA1 10:21:12.2 e (P) Z

1997-07-10 D 68.9 AZ 73
GRA1 14:10:27.8 e P Z T0.8 A11 mb5.2
SZGRF: OT 13:59:26.7 27.0N 99.7E dep 33km
YUNNAN PROVINCE, CHINA

1997-07-10 D 83.4
GRA1 23:36:23.3 i P c Z
SZGRF: OT 23:24:00.7 46.1N 173.9E dep 33km
ALEUTIAN ISLANDS REGION

1997-07-10 D 86.3
GRA1 23:54:53.6 e P Z T2.0 A51 mb5.3
SZGRF: OT 23:42:13.4 29.0S 52.0E dep 33km
SOUTH INDIAN OCEAN

1997-07-10 D 85.2 AZ 60
GRA1 08:32:37.2 e P Z mb5.2
SZGRF: OT 08:20:04.8
TAIWAN REGION

1997-07-11
GRA1 00:47:18.5 e P Z T0.6 A2

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1997-07-11      D 3.2  353km
  GRA1  01:22:07.9 e Pn      Z          M12.7
  GRA1  01:22:49.1 e Sn      Z
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1997-07-11      D 80.6
  GRA1  02:16:05.5 e P      Z          mb4.6
  GRA1  02:50:45.5 e L      Z  T21.3  A406  MS4.7
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1997-07-11      D 98.1
  GRA1  02:46:09.8 e PP     Z
  GRA1  02:46:38.2 e pPP    Z
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1997-07-11
  GRA1  03:03:19.4 e (P)    Z
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1997-07-11      D100.5
  GRA1  10:08:00.1 e Pdiff  Z
  GRA1  10:11:13.3 e (pPdiff)Z
  GRA1  10:12:13.1 e PP     Z
NEIC:  OT 09:55:12.0  5.7S 110.8E dep569km  mb5.5
  JAVA SEA
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1997-07-11      D 70.2  AZ 82
  GRA1  15:05:46.0 i P      c Z          mb5.7
  GRA1  15:06:19.7 e pP     Z
  GRA1  15:08:20.5 e PP     Z
  GRA1  15:09:08.6 e pPP    Z
SZGRF: OT 14:54:49.0  20.3N  94.0E dep138km
  BURMA
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1997-07-11      D 78.5  AZ 30
  GRA1  15:44:32.1 i P      c Z          mb5.3
SZGRF: OT 15:32:35.9  44.9N 147.6E dep 33km
  KURIL ISLANDS
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1997-07-11      D 79.5  AZ127
  GRA1  20:46:20.4 e P      Z          mb4.3
SZGRF: OT 20:34:15.7
  MID-INDIAN RISE
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1997-07-11
  GRA1  23:43:16.4 e PKP    Z
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1997-07-12      D148.5
  GRA1 01:30:07.8 e PKPbc  Z
  GRA1 01:30:11.1 e PKPab  Z
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1997-07-12
  GRA1 15:19:33.2 e Sn      Z
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1997-07-12      D 99.0
  GRA1 16:37:40.1 i P      d Z      mb5.2
  GRA1 17:16:33.0 e L      Z T21.9 A42 MS3.9
NEIC: OT 16:24:10.6 21.1S 68.0W dep123km mb5.2
  CHILE-BOLIVIA BORDER REGION
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1997-07-12      AZ240
  GRA1 16:54:03.7 e (P)    Z
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1997-07-12
  GRA1 17:41:25.2 e PKPab  Z
NEIC: OT 17:21:48.3 18.5S 169.3E dep 33km mb4.0
  VANUATU ISLANDS
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1997-07-13      D149.9
  GRA1 00:31:49.7 e (PKPdf) Z
  GRA1 00:31:52.6 e PKPbc  Z
  GRA1 00:31:59.4 e PKPab  Z
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1997-07-13      D 45.1 AZ 95
  GRA1 01:51:30.7 e P      Z      mb4.3
SZGRF: OT 01:43:18.5 29.9N 65.5E dep 33km
  PAKISTAN
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1997-07-13      D 40.3 AZ 89
  GRA1 02:03:11.3 i P      d Z      mb4.1
NEIC: OT 01:54:38.3 29.5N 68.4E dep 33km mb4.5
  PAKISTAN
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1997-07-13
  GRA1 15:53:59.4 e PKPab  Z
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1997-07-13      D 51.3 AZ136
  GRA1 16:21:05.4 e P      Z      mb4.3
SZGRF: OT 16:12:03.3
  ETHIOPIA
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 1997-07-13 D 41.6 AZ131
 GRA1 16:41:56.3 e P Z mb4.0
 SZGRF: OT 16:34:10.6
 WESTERN ARABIAN PENINSULA

1997-07-13 D 48.5 AZ136
 GRA1 18:58:35.3 e P Z mb4.5
 SZGRF: OT 18:49:54.4
 ETHIOPIA

1997-07-13 D 60.5 AZ 67
 GRA1 19:49:21.8 i P c Z mb4.2
 GRA1 19:49:26.5 e (pP) Z
 SZGRF: OT 19:39:13.9 36.6N 96.7E dep 17km
 TSINGHAI PROVINCE, CHINA

1997-07-13 D 52.3
 GRA1 23:33:18.2 e P Z
 GRA1 23:35:20.7 e PP Z
 GRA1 23:40:27.3 e (S) Z
 GRA1 23:58:40.8 e L Z T21.7 A378 MS4.4

1997-07-13 D 55.5
 GRA1 18:28:01.0 e P Z mb4.6
 SZGRF: OT 18:18:28.6
 NORTH ATLANTIC OCEAN

1997-07-14 D 57.5 AZ 68
 GRA1 09:53:48.1 i P c Z mb4.7
 GRA1 09:53:52.5 e pP Z
 GRA1 10:20:28.2 e L Z T18.8 A78 MS3.8
 SZGRF: OT 09:44:00.0 38.0N 93.2E dep 16km
 TSINGHAI PROVINCE, CHINA

1997-07-14 D 22.1 AZ220
 GRA1 11:29:30.2 e P Z mb3.9
 NEIC: OT 11:24:56.9 33.6N 4.3W dep 10km
 MOROCCO

1997-07-14 D 73.8 AZ128
 GRA1 13:37:14.1 e P Z mb4.5
 SZGRF: OT 13:25:41.8
 SOUTH INDIAN OCEAN

1997-07-14 D 15.5
 GRA1 15:53:37.0 e PnI Z
 GRA1 15:53:40.6 e P Z mb4.2

GRA1 15:53:47.6 e pP Z
GRA1 15:58:56.4 e L Z T18.5 A334 MS3.5

1997-07-14 D 80.4 AZ 28
GRA1 16:21:40.7 i P c Z mb5.9
GRA1 16:21:58.9 e (pP) Z
GRA1 17:02:42.4 e L Z T18.7 A5860
SZGRF: OT 16:09:38.5 43.9N 150.9E dep 66km

KURIL ISLANDS REGION

1997-07-15
GRA1 00:11:53.4 e PKPdf Z

1997-07-15
GRA1 03:14:53.0 e PKP Z

1997-07-15 D 56.5 AZ 68
GRA1 04:49:28.0 e P Z mb4.7
GRA1 04:49:32.6 e pP Z
GRA1 05:16:07.6 e L Z T19.4 A92 MS3.9

NEIC: OT 04:39:25.2 36.9N 95.3E dep 33km mb4.7
QINGHAI, CHINA

1997-07-15 D 84.3 AZ 59
GRA1 11:17:52.8 e P Z mb5.4
GRA1 11:18:10.7 e pP Z
GRA1 12:02:27.0 e L Z T18.6 A283 MS4.7
SZGRF: OT 11:05:29.3 24.2N 121.9E dep 64km
TAIWAN

1997-07-15 D 86.2
GRA1 17:56:40.7 e P Z
GRA1 18:29:08.6 e L Z T21.4 A256 MS4.6
NEIC: OT 17:43:59.5 8.8N 82.9W dep 33km mb4.7
PANAMA-COSTA RICA BORDER REGION

1997-07-15 D 33.6 AZ261
GRA1 21:06:45.9 e P Z mb4.7
GRA1 21:06:50.8 e pP Z
SZGRF: OT 21:00:07.2 35.4N 30.7W dep 19km
AZORES ISLANDS REGION

1997-07-16 D151.9
GRA1 02:29:27.8 e PKPdf Z

GRA1 02:29:33.7 i PKPbc d Z
GRA1 02:29:42.9 e PKPab Z
GRA1 02:30:23.1 e pPKPbc Z
NEIC: OT 02:09:59.8 21.8S 177.2W dep183km mb4.5
FIJI ISLANDS REGION

1997-07-16 D 46.5
GRA1 10:55:55.4 e P Z mb4.7
NEIC: OT 10:43:27.2 28.5N 43.7W dep 10km mb4.6
NORTHERN MID-ATLANTIC RIDGE

1997-07-16 D 46.3
GRA1 11:01:38.5 e P Z mb5.1
GRA1 11:17:47.2 e L Z T20.0 A1557 MS5.0
NEIC: OT 10:47:27.6 28.6N 43.8W dep 10km mb4.7
NORTHERN MID-ATLANTIC RIDGE

1997-07-16 D 24.4 AZ287
GRA1 21:14:21.0 e P Z mb4.5
GRA1 21:23:52.0 e L Z T18.7 A557 MS4.1
SZGRF: OT 21:09:06.2 50.6N 27.1W dep 33km
NORTH ATLANTIC RIDGE

1997-07-16
GRC1 21:32:58.7 e Pn Z M12.8
GRA1 21:33:48.5 e Sn Z
SZGRF: OT 21:32:10.3 46.1N 10.6E dep 10km
NORTHERN ITALY

1997-07-17 D 3.6 401km
GRA1 03:56:09.2 e Pn Z
SZGRF: OT 03:55:12.2 51.4N 16.2E dep 1km
POLAND

1997-07-17
GRA1 07:21:41.9 e (PKPab) Z
GRA1 07:21:54.2 e pPKPab Z
GRA1 08:38:03.5 e L Z T19.6 A191
NEIC: OT 07:01:33.1 22.9S 175.6W dep 33km mb4.9
TONGA ISLANDS REGION

1997-07-17 D 1.9 211km
GRA1 14:31:59.1 e Pn Z M12.6
SZGRF: OT 14:31:24.2 51.5N 10.4E dep 1km
Bleicherode

1997-07-18 D 59.6 AZ161
GRA1 03:26:22.8 e P Z mb4.9
GRA1 03:50:09.6 e L Z T18.2 A64 MS3.8

SZGRF: OT 03:16:20.4

ZAIRE REPUBLIC

1997-07-18 D 23.7 AZ 96

GRA1 07:39:23.0 e P Z mb4.3

GRA1 07:51:13.5 e L Z T21.2 A52 MS3.0

NEIC: OT 07:33:57.3 41.1N 45.1E dep 33km mb4.2

EASTERN CAUCASUS

1997-07-18 D 16.4 AZ151

GRA1 15:35:12.6 e P Z mb3.9

GRA1 15:41:40.8 e L Z T18.7 A89 MS3.0

NEIC: OT 15:31:44.2 37.4N 21.0E dep 33km mb4.1

IONIAN SEA

1997-07-18 D 47.8 AZ 94

GRA1 19:08:13.9 i P c Z mb5.0

GRA1 19:30:28.0 e L Z T19.6 A62 MS3.6

SZGRF: OT 18:59:40.2 28.8N 68.6E dep 33km

PAKISTAN

1997-07-18 D 70.6 AZ 80

GRA1 19:49:55.9 i P c Z mb5.2

GRA1 19:50:09.9 e pP Z

GRA1 20:21:09.6 e L Z T19.9 A42 MS3.7

SZGRF: OT 19:38:46.8 21.4N 95.8E dep 50km

BURMA

1997-07-18

GRA1 23:11:38.1 e PKPdf Z

GRA1 00:28:57.0 e L Z T18.0 A48

1997-07-19 AZ 26

GRA1 00:02:40.3 i P c Z mb5.4

GRA1 00:02:45.4 e pP Z

GRA1 00:05:38.8 e PP Z

GRA1 00:45:13.8 e L Z T22.0 A41 MS3.7

SZGRF: OT 23:50:35.2 45.2N 152.7E dep 18km

KURIL ISLANDS REGION

1997-07-19

GRA1 04:37:34.0 e PKPdf Z

GRA1 05:39:54.1 e L Z T21.7 A87

NEIC: OT 04:17:50.1 17.9S 176.7W dep 33km mb4.5

FIJI ISLANDS REGION

1997-07-19 D 89.9 AZ292

GRA1 07:47:50.8 e P Z mb4.5

GRA1 08:29:36.0 e L Z T19.5 A53 MS4.0

1997-07-19

GRA1 10:41:50.6 e PKPdf Z

1997-07-19 D106.9

GRA1 12:41:23.9 i PKPdf c Z

GRA1 12:41:39.4 e pPKPdf Z

GRA1 12:41:47.3 e PP Z

GRA1 13:23:57.1 e L Z T21.4 A2645 MS5.8

NEIC: OT 12:22:57.8 29.0S 71.4W dep 26km mb5.8

NEAR COAST OF CENTRAL CHILE

1997-07-19

GRA1 12:52:38.2 e PKPdf Z

1997-07-19 D 55.2 AZ159

GRA1 13:54:13.5 e P d Z mb4.7

SZGRF: OT 13:44:42.1 3.7S 28.3E dep 33km

LAKE TANGANYIKA REGION

1997-07-19 D 61.7 AZ159

GRA1 14:30:34.2 e P Z mb4.7

SZGRF: OT 14:20:17.3 10.0S 30.0E dep 33km

ZAMBIA

1997-07-19 D 90.5 AZ296

GRA1 14:35:04.7 e P Z T1.8 A89 mb5.8

GRA1 14:38:42.0 e PP Z

GRA1 15:16:33.2 e L Z T21.9 A12498 MS6.3

SZGRF: OT 14:22:06.5 16.2N 99.5W dep 33km

NEAR COAST OF GUERRERO, MEXICO

1997-07-19 D151.8

GRA1 16:29:58.0 i PKPdf d Z

GRA1 16:30:05.5 i PKPbc d Z

GRA1 16:30:10.8 i PKPab c Z

NEIC: OT 16:10:16.4 23.0S 169.9E dep 33km mb5.6

LOYALTY ISLANDS REGION

1997-07-19 D 86.5 AZ 39

GRA1 17:14:04.0 e P Z mb4.6

GRA1 17:14:19.3 e pP Z

SZGRF: OT 17:01:28.4 33.4N 142.0E dep 53km

OFF EAST COAST OF HONSHU, JAPAN

1997-07-19 D149.7
GRA1 19:16:20.5 e PKPbc Z
GRA1 19:16:25.9 e PKPab Z
GRA1 20:25:40.5 e L Z T19.6 A114 MS4.7
NEIC: OT 18:56:35.0 22.7S 171.6E dep 33km mb4.9
LOYALTY ISLANDS REGION

1997-07-20 D 78.4 AZ359
GRA1 00:42:21.4 i P c Z mb6.1
GRA1 01:20:34.1 e L Z T19.4 A4669 MS5.8

1997-07-20 D 78.4 AZ358
GRA1 00:50:37.7 i P c Z mb4.8

1997-07-20 D 78.4 AZ360
GRA1 01:07:26.5 i P c Z mb5.3

1997-07-20
GRA1 01:49:21.6 e (PKPab) Z

1997-07-20 D 11.6
GRA1 03:41:39.7 e P Z
GRA1 03:46:18.4 e L Z T19.8 A869 MS3.7

1997-07-20
GRA1 05:28:07.0 e Pn Z
NEIC: OT 05:25:21.7 41.2N 20.0E dep 10km mb3.8
ALBANIA

1997-07-20
GRA1 05:49:20.9 e Pn Z
NEIC: OT 05:46:44.4 41.2N 19.9E dep 10km mb3.6
ALBANIA

1997-07-20 D152.6
GRA1 08:27:53.9 e PKPdf Z
GRA1 08:28:04.7 e PKPbc Z
GRA1 08:28:10.3 e PKPab Z
NEIC: OT 08:08:14.6 15.1S 173.8W dep 33km mb4.4
TONGA ISLANDS

1997-07-20
GRA1 08:31:25.0 e Pn Z
NEIC: OT 08:28:46.2 41.2N 19.9E dep 10km mb4.0

ALBANIA

1997-07-20GRA1 09:27:03.2 e Pn Z
NEIC: OT 09:24:30.6 41.3N 20.0E dep 10km

ALBANIA

1997-07-20

GRA1 09:34:35.2 e Pn Z

1997-07-20 D 77.4 AZ 24GRA1 10:06:54.7 i P d Z mb4.8
SZGRF: OT 09:55:04.5 48.2N 154.2E dep 33km
KURIL ISLANDS-----
1997-07-20 D 98.9GRA1 10:27:38.2 i P d Z mb5.9
GRA1 10:28:41.0 e pP Z
GRA1 11:10:54.2 e L Z T21.6 A474 MS5.0
NEIC: OT 10:14:22.8 23.0S 66.3W dep256km mb5.9
JUJUY PROVINCE, ARGENTINA-----
1997-07-20 D120.1GRA1 11:08:25.6 e PKPdf Z
GRA1 11:08:58.7 e pPKPdf Z
GRA1 11:09:59.4 e PP Z
NEIC: OT 10:49:43.7 6.1S 145.4E dep122km mb5.1
NEW GUINEA, PAPUA NEW GUINEA-----
1997-07-20 D 60.1 AZ258GRA1 17:53:19.5 e P d Z mb5.0
GRA1 17:53:30.0 e pP Z
GRA1 17:53:38.5 e sP Z
GRA1 18:25:52.8 e L Z T22.0 A68 MS3.7
SZGRF: OT 17:43:17.0 15.2N 50.1W dep 43km
NORTH ATLANTIC OCEAN-----
1997-07-20 D146.2GRA1 19:51:55.2 e PKPdf Z
GRA1 19:51:57.9 i PKPbc d Z
GRA1 19:51:59.7 e PKPab Z-----
1997-07-20

GRA1 21:40:08.5 i PKPdf c Z

1997-07-21

GRA1 02:24:53.6 e PKPdf Z
GRA1 03:32:23.9 e L Z T20.2 A193
NEIC: OT 02:04:56.5 54.8S 129.6W dep 10km mb4.9
PACIFIC-ANTARCTIC RIDGE

1997-07-21 D 42.2 AZ103
GRA1 05:06:25.0 e P Z mb4.4
NEIC: OT 04:58:43.9 28.3N 57.4E dep 33km mb4.7
SOUTHERN IRAN

1997-07-21 D 77.8 AZ163
GRA1 08:57:47.3 e P Z mb5.0
NEIC: OT 08:45:48.6 26.9S 26.8E dep 5km mb5.0
REPUBLIC OF SOUTH AFRICA

1997-07-21 D 86.4 AZ 67
GRA1 10:58:10.8 e P Z
GRA1 11:49:31.4 e L Z T18.7 A324 MS4.8
NEIC: OT 10:44:38.2 10.2N 126.2E dep 58km mb5.0
PHILIPPINE ISLANDS REGION

1997-07-21
GRA1 12:49:57.7 e PKPdf Z
NEIC: OT 12:30:30.0 17.3S 167.6E dep 33km mb4.5
VANUATU ISLANDS

1997-07-21 D107.8
GRA1 18:08:40.7 e P Z
GRA1 18:13:05.0 e PP Z
GRA1 18:55:45.8 e L Z T21.8 A462 MS5.0
NEIC: OT 17:54:17.0 30.0S 71.7W dep 33km mb4.8
NEAR COAST OF CENTRAL CHILE

1997-07-21 D 8.2
GRA1 21:01:22.1 e Pn Z
GRA1 21:04:56.8 e L Z T13.7 A157 MS2.9

1997-07-21 D107.9
GRA1 23:34:04.5 e Pdiff Z
GRA1 23:38:32.0 e PP Z
GRA1 00:20:28.2 e L Z T21.7 A2350 MS5.7

1997-07-21 D 92.4 AZ 65
GRA1 23:49:57.3 e P Z mb4.5
GRA1 23:50:01.6 e (pP) Z
SZGRF: OT 23:36:47.7
MINDORO, PHILIPPINE ISLANDS

1997-07-22
GRA1 04:55:15.9 e Pn Z M14.0
SZGRF: OT 04:54:20.1 51.5N 16.1E dep 1km
POLAND

1997-07-22 D151.5
GRA1 08:52:07.0 e PKPdf Z
GRA1 08:52:12.5 i PKPbc d Z
GRA1 08:52:20.3 e PKPab Z
NEIC: OT 08:33:21.0 20.5S 178.3W dep530km mb4.9
FIJI ISLANDS REGION

1997-07-22 D127.1
GRA1 10:35:54.3 i PKPdf c Z
GRA1 10:36:08.9 e pPKPdf Z
GRA1 11:37:42.6 e L Z T20.2 A337 MS5.0
NEIC: OT 10:16:54.8 6.2S 154.7E dep 51km mb5.6
SOLOMON ISLANDS

1997-07-22 D152.8
GRA1 14:48:22.4 e PKPab Z
GRA1 16:04:43.9 e L Z T19.5 A303 MS5.1

1997-07-22 D 3.5 391km
GRA1 15:45:42.3 e Pn Z M13.0

1997-07-22 D 23.6 AZ328
GRA1 16:26:43.4 i P c Z mb4.6
GRA1 16:37:08.9 e L Z T18.1 A891 MS4.3
SZGRF: OT 16:21:36.3 66.6N 21.0W dep 33km
ICELAND REGION

1997-07-22
GRA1 19:08:55.0 e PKPdf Z
GRA1 19:09:02.9 e pPKPdf Z
NEIC: OT 18:49:56.3 60.3S 82.2E dep 10km mb4.6
SOUTHERN KERGUELEN PLATEAU

1997-07-22 D 61.7 AZ233
GRA1 19:20:31.5 i P d Z mb5.6
GRA1 19:20:36.7 e pP Z
GRA1 19:43:58.5 e L Z T19.4 A1027 MS5.0
SZGRF: OT 19:10:13.2 1.1N 33.8W dep 19km
NORTH ATLANTIC OCEAN

1997-07-22 D 83.3 AZ196

GRA1 20:36:48.8 e (P) Z
 NEIC: OT 20:25:15.9 22.6S 10.5W dep 10km
 SOUTHERN MID-ATLANTIC RIDGE

 1997-07-22

GRA1 21:42:16.5 e PKPab Z
 GRA1 21:42:22.8 e pPKPab Z

 1997-07-22 D 80.9 AZ 30

GRA1 22:16:41.1 i P c Z mb4.5
 GRA1 22:16:58.8 i pP Z
 GRA1 22:58:02.7 e L Z T22.0 A57 MS3.9
 SZGRF: OT 22:04:36.0 42.6N 148.7E dep 64km
 OFF COAST OF HOKKAIDO, JAPAN

 1997-07-23

GRA1 00:45:41.6 i PKPdf c Z
 GRA1 01:47:41.1 e L Z T20.9 A46
 NEIC: OT 00:26:03.6 20.6S 169.3E dep 33km mb4.7
 VANUATU ISLANDS

 1997-07-23 D103.9

GRA1 03:37:33.8 e Pdiff Z
 GRA1 03:42:01.1 e PP Z
 GRA1 04:34:39.5 e L Z T20.4 A82 MS4.3
 NEIC: OT 03:23:45.2 .0S 123.0E dep139km mb5.3
 MINAHASSA PENINSULA, SULAWESI

 1997-07-23 D 95.3 AZ267

GRA1 14:16:41.3 e P Z mb5.1
 GRA1 14:16:51.0 e pP Z
 GRA1 15:01:45.7 e L Z T18.2 A114 MS4.4
 SZGRF: OT 14:03:20.3 5.8S 80.1W dep 33km
 NEAR COAST OF NORTHERN PERU

 1997-07-23 D 4.4 493km

GRA1 18:17:21.8 e Pn Z
 GRA1 18:18:13.1 e Sn Z

 1997-07-23 D 84.7 AZ 58

GRA1 19:18:47.0 i P c Z mb5.0
 SZGRF: OT 19:06:17.3 24.6N 123.3E dep 33km
 SOUTHWESTERN RYUKYU ISLANDS

 1997-07-23 D 3.6 402km

GRA1 21:50:56.0 e Pn Z M13.7
 SZGRF: OT 21:49:59.3 51.5N 16.2E dep 1km

POLAND

1997-07-23 D 56.9 AZ246
GRA1 22:33:15.4 e P Z mb4.6
GRA1 23:16:26.7 e L Z T21.3 A191 MS4.2
SZGRF: OT 22:23:33.1 11.5N 40.4W dep 33km
NORTH ATLANTIC OCEAN

1997-07-24
GRA1 20:09:01.5 e Pdiff Z
GRA1 20:13:25.3 e PP Z
GRA1 20:57:03.6 e L Z T20.9 A946 MS5.3
SZGRF: OT 19:47:38.4 27.1S 71.7W dep 33km
NEAR COAST OF NORTHERN CHILE

1997-07-24 D 70.6 AZ 77
GRA1 23:30:43.7 i P d Z mb4.5
GRA1 23:30:52.7 e pP Z
SZGRF: OT 23:19:32.1 23.4N 98.1E dep 31km
BURMA-CHINA BORDER REGION

1997-07-25
GRA1 02:47:14.7 e (PKP) Z

1997-07-25
GRA1 03:03:14.3 e PKPab Z

1997-07-25 D108.0
GRA1 07:05:52.4 e PP Z
GRA1 07:47:52.6 e L Z T22.0 A3112 MS5.8
NEIC: OT 06:47:03.4 30.2S 71.8W dep 33km mb5.6
NEAR COAST OF CENTRAL CHILE

1997-07-25 D108.2
GRA1 07:52:24.8 e PP Z

1997-07-25 D108.4
GRA1 07:53:31.0 e PP Z
GRA1 08:35:45.3 e L Z T20.6 A3038 MS5.8

1997-07-25
GRA1 12:14:42.6 e PKPab Z
NEIC: OT 11:55:09.9 18.5S 168.2E dep 33km mb4.7
VANUATU ISLANDS

1997-07-25 D 79.0 AZ 5
GRA1 15:17:14.4 i P c Z mb4.8
SZGRF: OT 15:05:15.3 51.4N 177.0W dep 33km
ANDREANOF ISLANDS, ALEUTIAN IS.

1997-07-25
GRA1 19:18:47.5 e Pn Z M13.3
SZGRF: OT 19:17:49.9 51.5N 16.2E dep 1km
POLAND

1997-07-26 AZ 46
GRA1 03:27:38.6 e (P) Z

1997-07-26 D 5.6
GRA1 04:29:45.4 e Pn Z M13.7
GRA1 04:30:55.6 e (Sn) Z

1997-07-26 D 3.7 407km
GRA1 12:20:17.0 e Pn Z M14.2
SZGRF: OT 12:19:19.3 51.5N 16.2E dep 1km
POLAND

1997-07-26 D 15.0 AZ149
GRA1 15:04:06.9 e P Z
GRA1 15:10:10.2 e L Z T20.8 A131

1997-07-26 D 3.6 404km
GRA1 19:02:28.1 e Pn Z M14.2
SZGRF: OT 19:01:31.2 51.5N 16.1E dep 1km
POLAND

1997-07-26
GRA1 21:12:24.4 e PKPdf Z
NEIC: OT 20:53:41.3 19.8S 178.1W dep600km mb4.4
FIJI ISLANDS REGION

1997-07-26
GRA1 22:56:10.1 e PKPdf Z

1997-07-27 D 37.9 AZ106
GRA1 02:06:30.7 e P Z
GRA1 02:26:15.7 e L Z T20.2 A109 MS3.7
NEIC: OT 01:59:31.0 29.1N 52.3E dep 33km mb4.5
SOUTHERN IRAN

1997-07-27 D 3.6 402km
 GRA1 04:01:24.6 e Pn Z M13.3
 SZGRF: OT 04:00:27.3 51.3N 16.3E dep 1km
 POLAND

 1997-07-27 D108.0
 GRA1 05:35:53.6 e Pdiff Z
 GRA1 05:40:20.5 e PP Z
 GRA1 06:23:56.2 e L Z T19.9 A4462 MS6.0

 1997-07-27 D 91.1 AZ 42
 GRA1 07:06:51.7 i P d Z mb5.1
 SZGRF: OT 06:53:51.6 28.2N 142.2E dep 33km
 BONIN ISLANDS REGION

 1997-07-27 D 3.6 403km
 GRA1 07:47:55.2 e Pn Z M13.4
 SZGRF: OT 07:46:58.0 51.5N 16.1E dep 1km
 POLAND

 1997-07-27
 GRA1 10:11:32.8 e P Z
 GRA1 10:14:17.1 e (S) Z
 GRA1 10:19:03.0 e L Z T19.4 A2540 MS4.4
 SZGRF: OT 10:11:18.4 35.5N 21.1E dep 10km
 MEDITERRANEAN SEA

 1997-07-27 D 6.5
 GRA1 12:03:11.3 e PnI Z
 GRA1 12:04:22.3 e SnI Z

 1997-07-27 D 59.7 AZ258
 GRA1 15:49:41.8 e P Z mb4.9
 GRA1 15:49:48.8 e pP Z
 GRA1 16:09:50.7 e L Z T18.7 A150 MS4.2
 SZGRF: OT 15:39:39.1 15.4N 49.8W dep 25km
 NORTH ATLANTIC OCEAN

 1997-07-27 D 86.8 AZ 40
 GRA1 16:54:50.3 e P Z
 SZGRF: OT 16:42:10.5 32.8N 141.5E dep 33km
 SOUTH OF HONSHU, JAPAN

 1997-07-27
 GRA1 17:09:48.9 e PKP Z

1997-07-27 D 97.1
GRA1 17:23:38.5 i P d Z mb5.2
GRA1 17:24:03.5 e pP Z

1997-07-27 D 76.4
GRA1 18:43:57.0 e P Z
GRA1 18:44:19.8 e (pP) Z
GRA1 19:20:53.7 e L Z T20.1 A859 MS5.1
NEIC: OT 18:32:00.4 33.6N 122.2E dep 10km mb4.8
YELLOW SEA

1997-07-27 D149.7
GRA1 19:08:51.3 e PKPdf Z
GRA1 19:08:54.1 i PKPbc d Z
GRA1 19:09:00.6 e PKPab Z
NEIC: OT 18:50:01.8 19.7S 177.9W dep500km mb4.0
FIJI ISLANDS REGION

1997-07-27 D152.4
GRA1 19:24:59.3 e PKPdf Z
GRA1 19:25:05.8 i PKPbc d Z
GRA1 19:25:14.6 e PKPab Z
GRA1 19:27:28.0 e pPKPbc Z
NEIC: OT 19:06:21.0 20.7S 178.8W dep600km mb4.7
FIJI ISLANDS REGION

1997-07-27
GRA1 22:49:24.0 e PKPab Z

1997-07-27 D 39.5 AZ106
GRA1 23:41:08.6 e P Z mb4.2
GRA1 23:41:12.0 e (pP) Z
GRA1 00:02:49.9 e L Z T19.8 A290 MS4.1
SZGRF: OT 23:33:39.1 28.7N 55.4E dep 13km
SOUTHERN IRAN

1997-07-28 D 96.4 AZ 44
GRA1 07:00:23.3 e P d Z mb6.1
GRA1 07:00:31.1 e (pP) Z
GRA1 07:00:35.8 e (sP) Z
GRA1 07:04:18.2 e PP Z
GRA1 07:47:12.5 e L Z T19.9 A1964 MS5.6
NEIC: OT 06:46:55.5 22.3N 142.7E dep 33km mb5.8
VOLCANO ISLANDS REGION

1997-07-28 D 96.5 AZ 46
GRA1 10:04:39.3 e P Z mb5.7

GRA1 10:04:57.5 e (pP) Z
 GRA1 10:08:33.0 e PP Z
 GRA1 10:51:27.8 e L Z T20.3 A228 MS4.6
 NEIC: OT 09:51:11.1 22.2N 142.8E dep 25km mb5.2
 VOLCANO ISLANDS REGION

1997-07-28 D 88.8 AZ308
 GRA1 10:21:47.6 e P Z mb5.3
 GRA1 10:22:01.2 e (pP) Z
 GRA1 11:01:54.1 e L Z T20.2 A735 MS5.1

1997-07-28
 GRA1 16:05:08.9 e PKPab Z
 NEIC: OT 15:45:23.9 25.5S 178.2W dep300km mb4.1
 SOUTH OF FIJI ISLANDS

1997-07-28
 GRA1 20:17:07.7 i PKPab d Z
 GRA1 20:17:12.6 e pPKPab Z

1997-07-28 D 39.0 AZ264
 GRA1 23:36:38.3 e P Z mb4.8
 GRA1 23:42:35.0 e S Z
 GRA1 23:49:02.6 e L Z T21.8 A428 MS4.2
 SZGRF: OT 23:28:28.3 33.4N 37.2W dep 33km
 NORTH ATLANTIC RIDGE

1997-07-29 D 4.4 487km
 GRA1 00:07:51.3 e Pn Z M13.6
 SZGRF: OT 00:06:44.0 45.3N 11.8E dep 10km
 NORTHERN ITALY

1997-07-29 D 85.7 AZ 41
 GRA1 02:09:10.4 i P d Z mb4.5
 GRA1 02:09:27.0 e pP Z
 SZGRF: OT 01:56:39.3 33.0N 139.5E dep 59km
 SOUTH OF HONSHU, JAPAN

1997-07-29 D 77.6 AZ167
 GRA1 11:37:09.8 e P Z mb4.8
 GRA1 12:04:43.2 e L Z T20.8 A260 MS4.5

1997-07-29 D 15.0
 GRA1 21:17:49.2 e (P) Z
 GRA1 21:17:57.8 e (pP) Z
 GRA1 21:23:37.9 e L Z T16.3 A271 MS3.5

1997-07-29 D 15.0 AZ134
GRA1 22:09:22.2 e P Z
GRA1 22:15:14.7 e L Z T18.3 A66 MS2.8

1997-07-30 D 2.1 238km
GRA1 21:24:54.3 e Pn Z M13.1

1997-07-30 D 3.6 399km
GRA1 03:44:00.9 e Pn Z M14.2
SZGRF: OT 03:43:04.9 51.5N 16.1E dep 1km
POLAND

1997-07-30 D 85.4 AZ280
GRA1 12:07:28.0 i P Z mb4.9
GRA1 12:07:42.3 e (pP) Z
GRA1 12:40:51.3 e L Z T19.5 A282 MS4.7
SZGRF: OT 11:54:56.2 10.3N 83.7W dep 49km
COSTA RICA

1997-07-30 D 60.3 AZ235
GRA1 13:16:27.7 e P Z
GRA1 13:16:32.7 e (pP) Z
GRA1 13:35:42.8 e L Z T21.3 A139 MS4.1

1997-07-30 D 57.1 AZ235
GRA1 13:47:34.5 e P Z mb4.8
GRA1 13:47:38.8 e (pP) Z
GRA1 14:10:34.1 e L Z T19.1 A285 MS4.4
NEIC: OT 13:37:42.1 5.6N 32.8W dep 10km mb4.7
CENTRAL MID-ATLANTIC RIDGE

1997-07-30 D 15.0 AZ160
GRA1 16:09:46.5 e P Z
GRA1 16:09:51.8 e pP Z
NEIC: OT 16:06:38.0 37.3N 14.9E dep 10km mb4.6
SICILY

1997-07-30 D 86.8 AZ277
GRA1 16:24:06.2 e P Z mb4.7
SZGRF: OT 16:11:24.9 6.8N 81.8W dep 33km
SOUTH OF PANAMA

1997-07-30 D 15.1 AZ311
GRA1 16:32:33.1 e P Z

1997-07-30 D 75.5 AZ 62
GRA1 17:44:43.2 e P Z mb4.5
GRA1 17:44:54.5 e pP Z
NEIC: OT 17:32:09.0 23.9N 122.4E dep 33km mb4.6
TAIWAN REGION

1997-07-30
GRA1 21:30:38.4 e PKPdf Z

1997-07-30 D 74.9 AZ267
GRA1 22:53:08.6 e P Z mb4.6
SZGRF: OT 22:41:30.8 9.6N 66.6W dep 33km
VENEZUELA

1997-07-31
GRA1 02:30:11.4 e PKPdf Z
GRA1 02:30:21.8 e (pPKPdf) Z
GRA1 02:30:29.8 e (sPKPdf) Z

1997-07-31 D 66.6 AZ 80
GRA1 16:10:30.1 i P c Z mb5.7
GRA1 16:10:39.9 e (pP) Z
GRA1 16:12:56.7 e PP Z
GRA1 16:43:11.4 e L Z T20.9 A306 MS4.5
SZGRF: OT 15:59:19.7 24.0N 92.6E dep 34km
INDIA-BANGLADESH BORDER REGION

1997-07-31 D 69.2 AZ 81
GRA1 20:19:51.2 e P Z mb4.5
SZGRF: OT 20:08:48.3
BURMA

1997-07-31
GRA1 21:28:26.0 e PKPdf Z
GRA1 21:28:36.6 e pPKPdf Z
NEIC: OT 21:09:30.9 5.4S 154.1E dep100km mb4.7
SOLOMON ISLANDS

1997-07-31
GRA1 22:09:04.2 e Pdiff Z
GRA1 22:09:29.4 e pPdiff Z
GRA1 22:09:47.8 e sPdiff Z
GRA1 22:12:55.7 i PKPdf c Z
GRA1 22:13:17.6 e pPKPdf Z
GRA1 22:13:30.0 e sPKPdf Z
GRA1 22:13:43.0 e PP Z
GRA1 22:23:44.5 e PKKP Z

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Thu Apr 23 08:38:25 2020

26

GRA1 23:07:46.3 e L Z T20.9 A554 MS5.1
NEIC: OT 21:54:25.6 6.6S 130.9E dep 95km mb5.9
BANDA SEA
