



Eidgenössische Technische Hochschule Zürich

Institut für Geophysik

Jahresbericht 1972 des Schweizerischen Erdbebendienstes

von D. Mayer-Rosa, Ch. Sprecher, Z. Somogyi, R. Berger, M. Baer

ERRATUM!

Jahresbericht 1972 des Schweizerischen Erdbebendienstes

TABELLE I:

Datum/Herdzeit:	falsch:	richtig:
19.1./ 9:57:15	ML=.57 (BUB)	ML=2.6 (BUB)
27.1./ 0:01:27	.24	2.2
28.2./ 1:27:25	.00	3.0
4.3./20:10:55	.67	2.7
22.3./ 0:10:11	.00	3.0
28.6./17:17:29	.28	2.3
1.7./ 4:47:27	.86	1.9
10.7./13:15:54	.93	1.9
2.8./11:26:16	.81	1.8
3.8./ 3:53:27	.99	2.0
3.8./ 3:54:11	.77	1.8
5.8./ 1:14:02	.07	3.1
16.8./20:21:27	.41	2.4
18.8./ 0:28:19	.86	2.9
20.8./ 4:49:46	.51	2.5
22.8./ 9:40:11	.74	1.7
27.8./ 6:13:07	.27	3.3
31.8./19:10:56	.63	1.6
18.9./19:06:08	.60	2.6
21.9./ 8:57:24	.13	2.1
23.9./14:28:52	.93	1.9
6.10./ 4:34:36	.48	3.5
17.10./18:19:25	.48	2.5



EIDGENÖSSISCHE TECHNISCHE HOCHSCHULE ZÜRICH
ÉCOLE POLYTECHNIQUE FÉDÉRALE ZÜRICH
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SWISS FEDERAL INSTITUTE OF TECHNOLOGY ZURICH

Institut für Geophysik
Schweizerischer Erdbebendienst

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WICHTIG

IMPORTANT

IMPORTANT

Um die Nachfrage nach weiteren Jahresberichten des Schweiz. Erdbebendienstes feststellen zu können, benötigen wir Ihre Antwort auf die untenstehenden Fragen. Bitte senden Sie daher den unteren Teil dieses Blattes zurück an:

In order to determine the demand for further "Jahresberichte des Schweiz. Erdbebendienstes", we need your answers for the questions below. Please, therefore, send back the lower part of this sheet to:

Afin de déterminer la demande des prochains "Jahresberichte des Schweiz. Erdbebendienstes", nous aurions besoin de vos réponses aux questions ci-dessous. Ayez l'obligeance de remplir le questionnaire ci-dessous et de nous le renvoyer à:

SCHWEIZ. ERDBEBENDIENST
ETH Hönggerberg (HPP)
Postfach 266
CH-8049 Zürich (Schweiz)

Sollten wir keine Antwort erhalten, nehmen wir an, dass kein Jahresbericht benötigt wird und streichen diese Adresse.

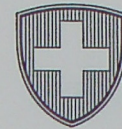
In the event we don't get a reply we will assume, that you are not interested in further Bulletins and we will remove your address from our mailing list.

Dans l'éventualité d'une non-réponse de votre part, nous supposerons que vous n'êtes pas intéressé aux prochains bulletins et nous vous ôterons de notre liste d'envoi.

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EINLEITUNG

Der vorliegende Jahresbericht 1972 des Schweiz. Erdbebendienstes Zürich (SED) setzt nach einer Unterbrechung von 1964-1971 die Reihe der Berichte über die Aufzeichnungen an den seismischen Stationen in der Schweiz fort. (Jahresberichte 1879-1963). Die Berichte für den Zeitraum 1964-1971 werden in gekürzter Form ebenfalls noch in dieser Reihe veröffentlicht werden.

Im Berichtszeitraum 1972 waren in der Schweiz 6 Stationen in Betrieb, wovon 4 Stationen durch den SED und 2 Stationen durch andere Organisationen versorgt wurden (siehe Zusammenstellung der Stationen und Fig. 1). Die Station Buchberg (BUB) wurde im November 1971 neu eingerichtet und hat ab 1. Januar 1972 kontinuierlich registriert.

Von den 1972 insgesamt 840 registrierten Ereignissen konnten eindeutig 380 als Erdbeben identifiziert werden, 25 davon lagen in der Schweiz. Die nicht identifizierbaren Ereignisse sind in Fig. 4 nach Registrierzeitpunkt und Entfernung aufgetragen. Die Häufung von Ereignissen für die Tageszeiten um 12:00 Uhr bzw. 16:00-17:00 Uhr MEZ lässt den Schluss zu, dass zumindest eine grosse Zahl dieser Ereignisse Sprengungen waren.

An folgende internationale Datenzentren wurden seismologische Daten für 1972 gemeldet:

- International Seismological Centre (ISC)
6 South Oswald Road, Edinburgh, EH9 2HX Scotland, U.K.
- National Oceanic and Atmospheric Administration
Earthquake Research Laboratory (ERL), Boulder, Co. 80302, USA
- Bureau Central International de Seismologie (BCIS)
5 Rue René Descartes, Strasbourg, France

Der Schweiz. Erdbebendienst (SED) ist seit 1956 dem Institut für Geophysik der ETH Zürich angeschlossen. Vorsteher des Instituts ist Prof. Dr. Stephan Müller.

Adresse: Schweiz. Erdbebendienst
ETH-Hönggerberg
Postfach 266
CH-8049 Zürich

Telefon: 01 - 57 78 00

Telex: 58181 ETHEB CH

Personal: Dr. Dieter Mayer-Rosa (Seismologie und Redaktion
des Jahresberichtes)
Manfred Baer, Dipl. Phys. (Rechenprogramme)
Robert Berger, Techn.Angest. (Makroseismik)
Zsombor Somogyi, Techn.Angest. (Seismogrammanalyse)
Christian Sprecher, Dipl. Natw. (Seismogrammanalyse)

Den technischen Aufbau der Stationen besorgten Max Dietiker und Heinrich Krämer. Herr Albert Egli war zeitweilig mit Arbeiten für diesen Jahresbericht betraut. Dank gebührt dem Personal und der Leitung der Kraftwerke Tierfeld-Limmernboden und Grande Dixence für die Betreuung der Stationen LIN bzw. DIX sowie dem Seismologischen Zentralobservatorium in Erlangen, BRD, für die Berechnung von Tabelle II.

STATIONEN DES SCHWEIZERISCHEN ERDBEBENDIENSTES

Station	Zürich-Degenried (ZUR)	Buchberg (BUB)	Grande Dixence (DIX)	Linth-Limmern (LIN)
Latitude	47° - 22.12' N	47° - 44.94' N	46° - 04.83' N	46° - 52.14' N
Longitude	8° - 34.83' E	8° - 36.18' E	7° - 24.65' E	8° - 59.82' E
Höhe	604 m	740 m	2400 m	1900 m
Untergrund	Sandsteine und Mergel der ob. Süswassermolasse	Malm	Casanna-Schiefer	Malm
Seismometer	MARK L4C	MARK L4-3D		
Komponente	Z	Z,N,E	Breitband	Breitband
Eigenperiode	1.0 s	1.0 s	Z,N,E	Z,N,E
Vergrößerung	5000	27000	5.0 s	5.0 s
Dämpfung	0.7	0.7	5000	5000
Registrierung	Tintenschreiber (12 cm/min) und 35 mm-Scratch-Film		0.7	0.7
Zeitsystem	Quarz-Uhr, HBG 75 kHz	Tintenschreiber (12 cm/min)	35 mm-Scratch-Film	35 mm-Scratch-Film
		HBG 75 kHz	Quarz-Uhr, HBG 75 kHz	HBG 75 kHz

STATIONEN, DIE NICHT VOM SED BETRIEBEN WERDEN

Station	Basel (BAS)	Neuchâtel (NEU)
Latitude	47° - 32.40' N	46° - 59.84' N
Longitude	7° - 34.97' E	6° - 57.44' E
Höhe	310 m	490 m
Betrieb durch	Observatorium der Abt. Meteorologie der Stadt Basel Venusstrasse 7 CH-4102 Binningen	Observatoire Neuchâtel Rue de l'Observatoire 58 CH-2000 Neuchâtel

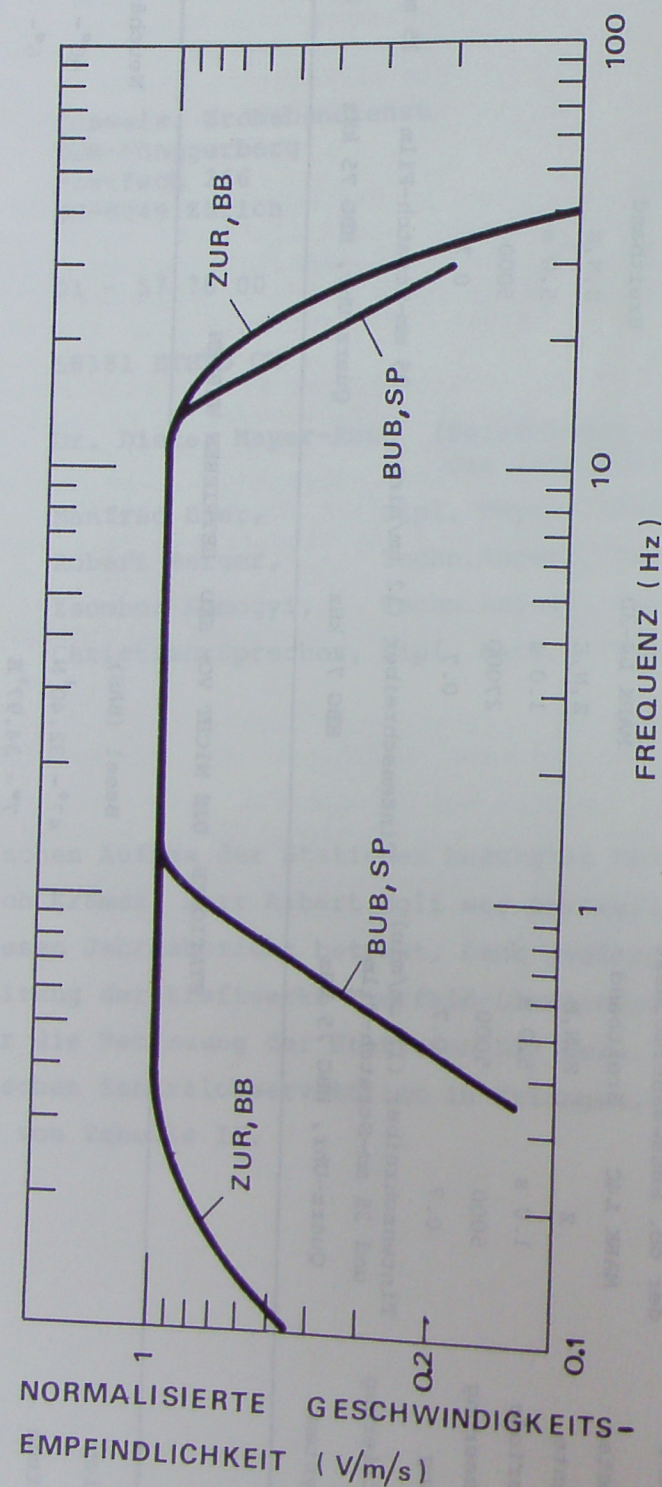


Fig.1: Charakteristik der Stationen des Schweiz. Erdbebendienstes
ZUR, BB: Zürich-Degenried, Breitband-System
BUB, SP: Buchberg, Kurzperiodisches (LHz) System

TABELLE I: ERDBEBEN IN DER SCHWEIZ

Tabelle I enthält Erdbeben, deren Epizentren entweder in der Schweiz liegen oder die in der Schweiz verspürt wurden. Für das Gebiet um Basel sind ausserdem auch Ereignisse im grenznahen Ausland aufgeführt.

Ereignisse, die in Tabelle I mit SED bezeichnet sind, wurden mit Registrierungen an mindestens 3 Stationen vom SED lokalisiert. In den meisten Fällen standen dazu auch die Registrierungen benachbarter Stationen in Deutschland und Frankreich zur Verfügung. Die Berechnung der Herdparameter wurde dabei mit einem Programm HYPO 71 des National Center for Earthquake Research, California, durchgeführt. Das Programm benützt Geigers Methode zur Hypozentrumsbestimmung, wobei die Residuen zwischen beobachteter und berechneter Laufzeit für P- und S-Ersteinsätze minimalisiert werden. Zur Berechnung der Laufzeiten zwischen Hypozentrum und Stationen diente folgendes Geschwindigkeits-Tiefen-Modell:

Tiefe (km)	Geschwindigkeit(km/s)	
	P	S
0.0	4.0	2.3
0.5	6.0	3.5
25.0	6.7	3.9
45.0	8.1	4.7

Dieses Modell ist stark vereinfacht und erklärt lediglich die gemittelten Laufzeiten der Ersteinsätze von verschiedenen seismischen Refraktionsprofilen in der Schweiz. Es repräsentiert zudem vorwiegend die Alpenstruktur. Dies kann bei der Berechnung solcher Hypozentren zu systematischen Fehlern führen, die im Alpenvorland bzw. im Jura liegen und/oder bei denen Stationsentfernungen von > 100 km auftreten. Um dies zu vermeiden, sind die Ablesungen von Stationen mit Epizentralentfernungen von > 100 km mit abnehmendem Gewicht versehen. Dadurch konnte der epizentrale Fehler relativ klein gehalten werden. Dagegen ist die Herdtiefe mit dem 1972 zur Verfügung stehenden Stationsnetz im allgemeinen nicht genau bestimmt.

Die Karte in Fig. 2 gibt die Epizentren (X) der in Tabelle I aufgeführten Ereignisse und die 1972 bestehenden Erdbebenstationen (Δ) wieder. Die Magnitude (nach Richter) wurde einheitlich aus den Registrierungen der Station BUB berechnet und ist durch die Grösse der X-Symbole in der Karte wiedergegeben. Neben den geographischen Koordinaten sind ebenfalls die Landeskoordinaten eingezeichnet. Der Abstand zwischen den Markierungen beträgt 50 km.

In Fig. 3a und 3b sind die Isoseisten der MSK-Intensitäten von in der Schweiz verspürten Beben eingezeichnet. Sie gründen auf der makroseismischen Auswertung von zahlreichen Meldungen aus der Bevölkerung.

Abkürzungen in Tabelle I:

BCIS bzw. SED	Ereignis vom BCIS bzw. SED lokalisiert
HO	Herdzeit (GMT)
LAT	Geographische Breite (Grad-Min)
LONG	Geographische Länge (Grad-Min)
Z	Herdtiefe (km)
ML	Richter-Magnitude (BUB: bestimmt aus der Registrierung der Station Buchberg)
RMS	Mittlerer quadratischer Fehler der Residuen zwischen berechneten und beobachteten Laufzeiten
ERH	Standard-Fehler des Epizentrums in horizontaler Richtung (km)
ERZ	Standard-Fehler der Herdtiefe (km)
DMIN	Epizentral-Entfernung der nächstliegenden Station zum Herd (km)
IO	Intensität am Epizentrum (MSK)
R	Schütterradius
INTENS	Intensitäten (MSK) aus makroseismischen Untersuchungen

TABELLE I

10. JAN 1972

BCIS: H0= 23:24:40
LAT= 46.3N LONG= 7.5 E

VALAIS, REGION SIERRE

19. JAN 1972

BCIS: H0= 09:57:15
LAT= 46.4N LONG= 7.3 E

SED : H0= 9:57:15.2
LAT=46-22.4N LONG= 7-19.3E Z= 10.0 KM ML=.57(BUB)
RMS= 1.06 S ERH= 8.0 KM ERZ= 8.9KM DMIN= 33.4KM
BERNER ALPEN, REGION GSTAAD-LENK

27. JAN 1972

SED : H0= 0: 1:27.3
LAT=46-31.0N LONG= 9-13.0E Z= 3.4 KM ML=.24(BUB)
RMS= .15 S ERH= .4 KM ERZ= 2.3KM DMIN= 42.6KM
GRAUBUENDEN, REGION RHEINWALD
IO= III (MSK) R= <5 KM
INTENS. (MSK): SPLUEGEN (3) III, MEDELS I.R. III

21. FEB 1972

BCIS: H0= 13:18:33
LAT= 47.3N LONG= 7.0 E ML=2.0(BUB)

JURA, REGION PORRENTROY

28. FEB 1972

BCIS: H0= 01:27:25
LAT= 46.8N LONG= 6.9 E

SED : H0= 1:27:25.9
LAT=46-48.6N LONG= 6-43.8E Z= 13.6 KM ML=.00(BUB)
RMS= 1.42 S ERH= 4.3 KM ERZ= 3.7KM DMIN= 27.0KM
JURA, REGION YVERDON
IO= IV (MSK) R= 10 KM
INTENS. (MSK): LA BREVINE II, CHAMBLON IV,
GRANDSON III, YVERDON III
VALEYRES S.M. IV

04. MAR 1972

BCIS: H0= 20:10:56
LAT= 46.2N LONG= 7.3 E

SED : H0= 20:10:55.1
LAT=46- 2.5N LONG= 7-15.3E Z= 10.0 KM ML=.67(BUB)
RMS= 1.63 S ERH= 4.3 KM ERZ= 4.4KM DMIN= 12.7KM
VALAIS, VAL DE BAGES
I0= II (MSK)
INTENS. (MSK): LE CHABLE II

22. MAR 1972

SED : H0= 0:10:11.1
LAT=46-59.8N LONG= 9-14.6E Z= 10.0 KM ML=.00(BUB)
RMS= 1.07 S ERH= 13.8 KM ERZ= 6.1KM DMIN= 65.0KM
KT. GLARUS, REGION GLARUS-FLUMS
I0= IV (MSK) R= 10 KM
INTENS. (MSK): NETSTAL(8) III, MOLLIS(7) IV,
NAEFELS(2) III, GLARUS(5) III
ENNENDA(2) III, DIESBACH II, FILZBACH II
MITLOEDI II, SCHWANDEN III, MUEHLEHORN II

17. MAI 1972

BCIS: H0= 08:13:49
LAT= 48.3N LONG= 9.0 E ML=3.6(BUB)

SCHWAEBISCHER JURA, ZOLLERNALB
I0= V (MSK)
INTENS. (MSK): WINTERTHUR(4) III, ZUERICH(2) II
USTER II, PFAEFFIKON II, ANDELFINGEN III

18. MAI 1972

BCIS: H0= 08:11:01
LAT= 48.3N LONG= 9.1 E ML=4.5(BUB)

SCHWAEBISCHER JURA, ZOLLERNALB
I0= V (MSK)
INTENS. (MSK): STEIN A.R.(2) III, WINTERTHUR(10) III
USTER II, ALTDORF II, SCHAFFHAUSEN(2) IV
PFAEFFIKON III, NEUHAUSEN IV, FRENKEN-
DORF II, SEUZACH III, ANDELFINGEN(3) III
ZUERICH(2) II, WAEDENSWIL II, WIESEN-
DANGEN III, WUELFINGEN III, BUCHS AG II
MAENNEDORF II

02. JUN 1972

SEDZ: H0= 08:51:46.0
LAT=47-30.0N LONG=8-30.0 E
GLATTAL, REGION ZUERICH
I0= II (MSK) R= 10 KM
INTENS. (MSK): ZUERICH(4) II, USTER II

28. JUN 1972

BCIS: H0= 17:17:29
LAT= 46.1N LONG= 7.1 E

SED : H0= 17:17:29.5
LAT=46- 3.6N LONG= 6-53.4E Z= .7 KM ML=.28(BUB)
RMS= .22 S ERH= 1.8 KM ERZ= 1.4KM DMIN= 46.3KM
VALAIS, REGION MARTIGNY-EMOSSON

01. JUL 1972

SED : H0= 4:47:27.9
LAT=46-43.3N LONG= 8-19.5E Z= 10.0 KM ML=.86(BUB)
RMS= 1.60 S ERH= 18.7 KM ERZ=11.1KM DMIN= 53.7KM
KT. URI, REGION SUSTEN

10. JUL 1972

SED : H0= 13:15:54.1
LAT=47-33.1N LONG= 7-35.9E Z= 10.0 KM ML=.93(BUB)
RMS= .77 S ERH= 3.4 KM ERZ= 6.1KM DMIN= 1.9KM
REGION BASEL

02. AUG 1972

SED : H0= 11:26:16.7
LAT=47-31.6N LONG= 7-37.3E Z= 10.0 KM ML=.81(BUB)
RMS= .80 S ERH= 4.3 KM ERZ= 4.2KM DMIN= 3.4KM
REGION BASEL

03. AUG 1972

SED : H0= 3:53:27.5
LAT=47-30.7N LONG= 7-23.7E Z= 13.9 KM ML=.99(BUB)
RMS= .65 S ERH= 3.3 KM ERZ= 4.9KM DMIN= 14.3KM
REGION BASEL

03. AUG 1972

SED : H0= 3:54:11.6
LAT=47-34.0N LONG= 7-25.7E Z= 16.8 KM ML=.77(BUB)
RMS= .84 S ERH= 2.3 KM ERZ= 2.8KM DMIN= 11.9KM
REGION BASEL

05. AUG 1972

BCIS: H0= 01:14:02
LAT= 46.1N LONG= 7.6 E

SED : H0= 1:14: 2.5
LAT=46- 3.6N LONG= 7-34.4E Z= 12.0 KM ML=.07(BUB)
RMS= 1.32 S ERH= 9.8 KM ERZ= 7.7KM DMIN= 84.5KM
VALAIS, REGION VAL D HERENS

16. AUG 1972

SED : H0= 20:21:27.8
LAT=46- 8.0N LONG= 7-13.5E Z= .4 KM ML=.41(BUB)
RMS= 1.04 S ERH= 5.5 KM ERZ= 4.8KM DMIN= 68.0KM
VALAIS, REGION ROSABLANCHE

18. AUG 1972

BCIS: H0= 00:28:18
LAT= 46.0N LONG= 7.5 E

SED : H0= 0:28:19.3
LAT=46- 5.3N LONG= 7-19.3E Z= 1.9 KM ML=.86(BUB)
RMS= 1.02 S ERH= 5.9 KM ERZ= 6.5KM DMIN= 70.1KM
VALAIS, REGION ROSABLANCHE

20. AUG 1972

SED : H0= 4:49:46.0
LAT=46- 5.4N LONG= 7-18.0E Z= 5.8 KM ML=.51(BUB)
RMS= .88 S ERH= 8.3 KM ERZ=13.4KM DMIN= 68.9KM
VALAIS, REGION ROSABLANCHE

22. AUG 1972

SED : H0= 9:40:11.1
LAT=46-49.3N LONG= 7-10.2E Z= 10.0 KM ML=.74(BUB)
RMS= .65 S ERH= 2.9 KM ERZ= 4.2KM DMIN=116.0KM
KT. FRIBOURG, REGION FRIBOURG

27. AUG 1972

SED : H0= 6:13: 7.6
LAT=47-21.6N LONG= 7-36.5E Z= 17.9 KM ML=.27(BUB)
RMS= .67 S ERH= 1.8 KM ERZ= 2.3KM DMIN= 20.1KM
JURA, REGION BALSTHAL
IO= IV (MSK) R= 25 KM
INTENS. (MSK): BALSTHAL(8) IV, SOLOTHURN(2) II, RIEHEN
II, BRETZWIL(2) III, REIGOLDSWIL(3) III,
LAUWIL II, LIESTAL II, WALDENBURG II,
MUMLISWIL(4) IV, LANGENBRUCK II, HOLDER-
BANK III, OBERBUCHSITEN II, EGERKINGEN
II, KAPPEL III, WANGEN B.O.(2) III,
GRETZENBACH II, OENSINGEN(5) IV, NIEDER-
BIPP(3) IV, WIEDLISBACH III, ATTISWIL
III, RIEDHOLZ II, LUTERBACH II, FELD-
BRUNNEN II, OEKINGEN(2) III

31. AUG 1972

SED : H0= 19:10:56.8
LAT=47-30.1N LONG= 7-35.7E Z= 22.0 KM ML=.63(BUB)
RMS= .70 S ERH= 4.8 KM ERZ= 3.8KM DMIN= 70.5KM
REGION BASEL

18. SEP 1972

SED : H0= 19: 6: 8.8
LAT=46- 7.8N LONG= 6-55.7E Z= 7.1 KM ML=.60(BUB)
RMS= 1.04 S ERH= 4.4 KM ERZ= 6.7KM DMIN= 37.6KM
VALAIS, REGION MARTIGNY

21. SEP 1972

SED : H0= 8:57:24.6
LAT=46-22.3N LONG= 7-36.0E Z= 10.0 KM ML=.13(BUB)
RMS= .34 S ERH= 16.5 KM ERZ=33.9KM DMIN=107.1KM
BERNER ALPEN, REGION LENK

23. SEP 1972

SED : H0= 14:28:52.7
LAT=47-29.3N LONG= 7-27.1E Z= 19.6 KM ML=.93(BUB)
RMS= 1.05 S ERH= 3.2 KM ERZ=13.2KM DMIN= 86.2KM
REGION BASEL

06. OKT 1972

BCIS: H0= 04:34:41
LAT= 46.2N LONG= 7.2 E

SED : H0= 4:34:36.5
LAT=46-11.0N LONG= 7-18.1E Z= 10.0 KM ML=.48(BUB)
RMS= 1.44 S ERH= 4.6 KM ERZ= 5.3KM DMIN= 14.3KM
VALAIS, REGION GRAND MUVERAN
IO= IV (MSK) R= 10 KM
INTENS. (MSK): GRYON (VAUD) IV

17. OKT 1972

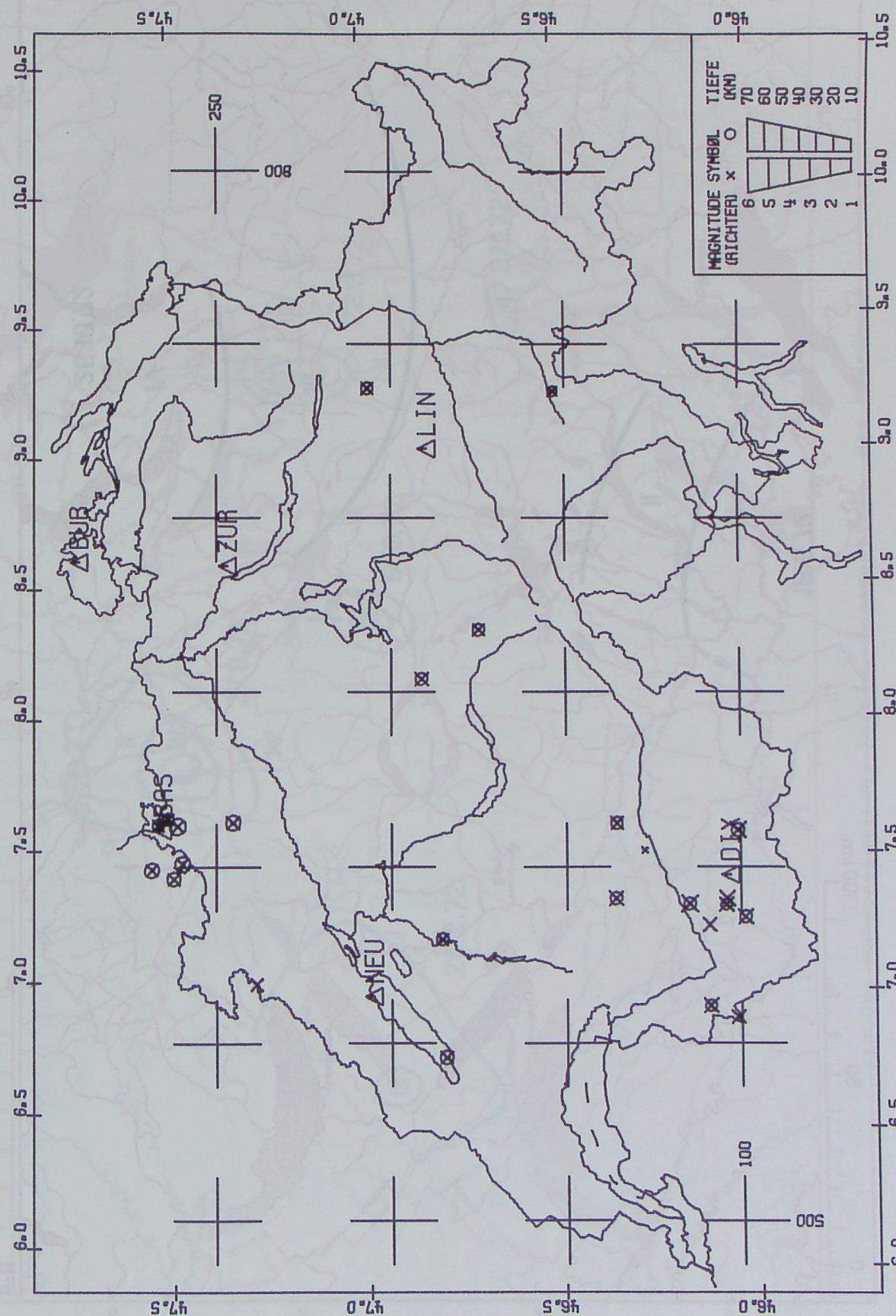
SED : H0= 18:19:25.8
LAT=46-52.3N LONG= 8- 8.6E Z= 10.0 KM ML=.48(BUB)
RMS= 1.59 S ERH= 7.5 KM ERZ= 6.7KM DMIN= 64.3KM
KT. OBWALDEN, REGION LUNGERN
IO= IV (MSK) R= 7 KM
INTENS. (MSK): LUNGERN II, GISWIL(3) III, SACHSELN III,
SARNEN(2) II, KAISERSTUHL II

25. OKT 1972

ECIS: H0= 21:56:13
LAT= 44.5N LONG= 9.9 E ML=5.1(BUB)

ITALIEN, APENNIN
IO= VII (MSK) R= CA 500 KM
INTENS. (MSK): 774 MELDUNGEN AUS 256 ORTSCHAFTEN, IN
DER GANZEN SCHWEIZ GESPUERT.
IMAX IN DER SCHWEIZ = IV (TICINO)

ERDBEBEN EPIZENTREN JAN 72 BIS DEZ 72



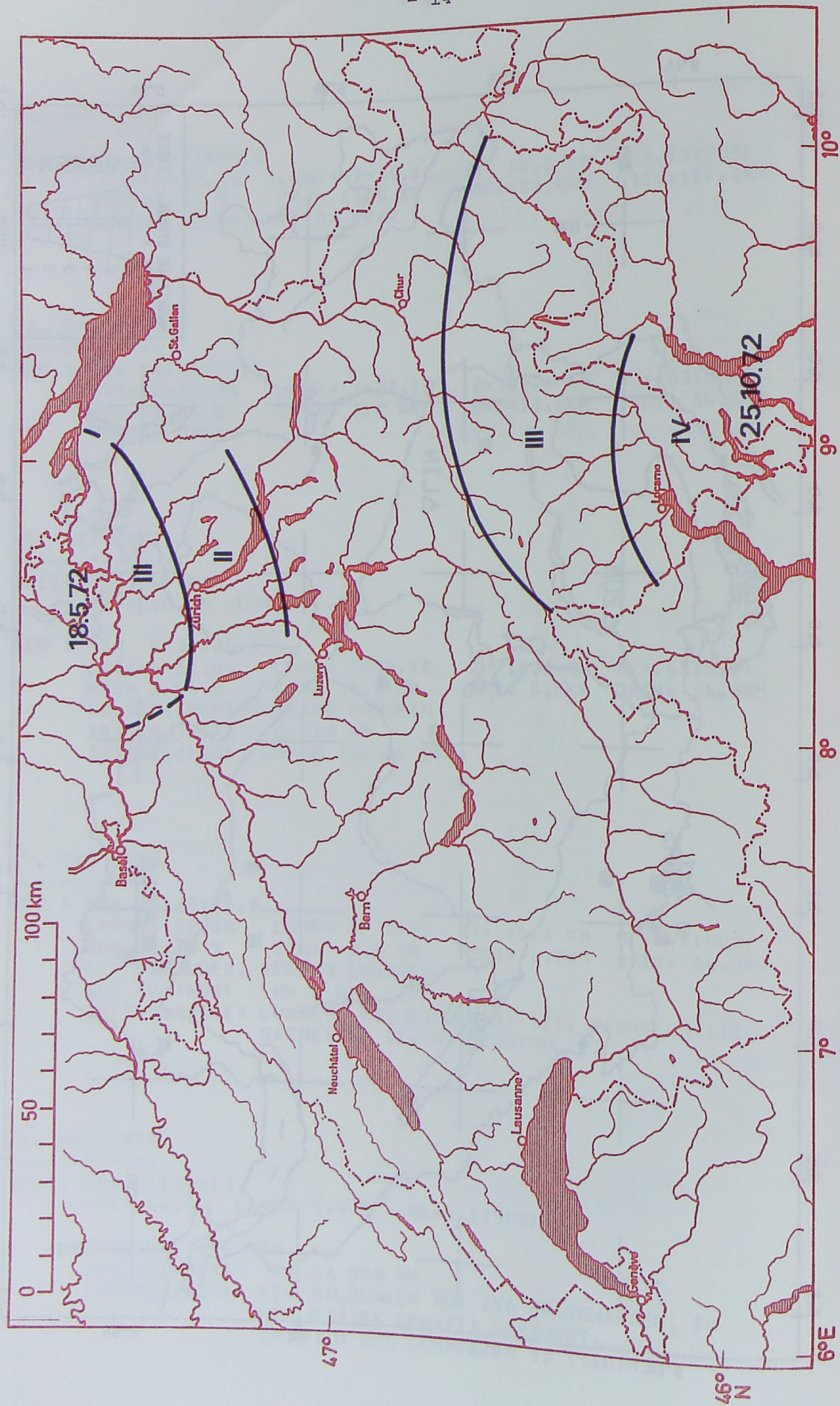


Fig.3a: Makroseismische Karten. Intensitäten der MSK-Skala

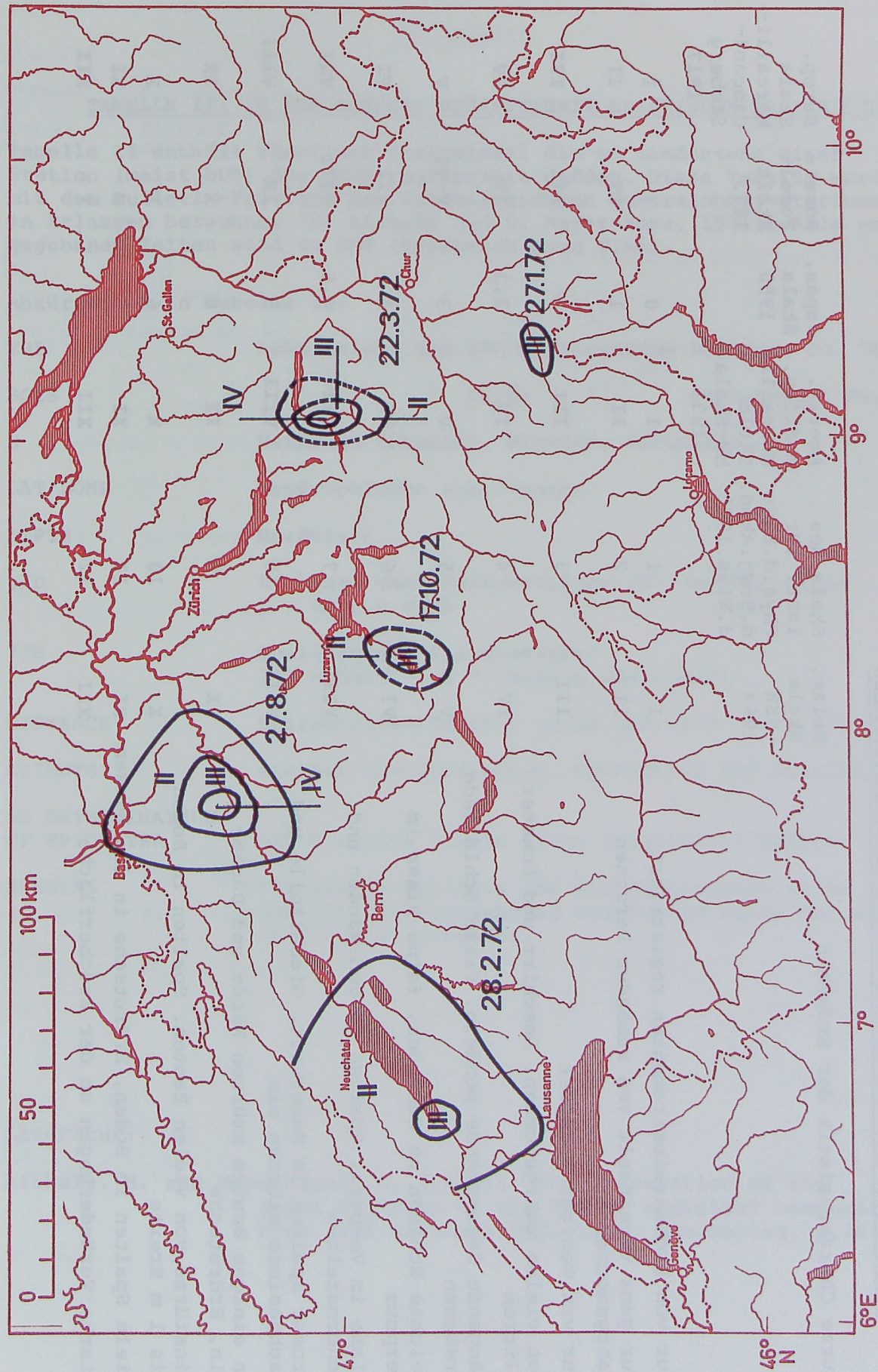


Fig.3b: Makroseismische Karten. Intensitäten der MSK-Skala

VERGLEICH VON MAKROSEISMISCHEN INTENSITÄTSSKALEN

Kurze Charakteristik der Erdbeben

Kurze Charakteristik der Erdbeben	Seism. Skala MSK 1964	Skala des Inst. für Phys.d.Erde d.Sowj.Akad. d.Wiss.1952	Amerik. modifiz. Mercalli-Skala MM-Skala 1931	Japan. Skala 1950	Rossi-Forrel-Skala 1873	Europ. Skala Mercalli-Cancani-Sieberg 1917
Nur von Erdbebeninstrumenten registriert	I	1	I	0	I	I
Nur ganz vereinzelt von ruhenden Personen wahrgenommen	II	2	II	1	II	II
Nur von wenigen verspürt	III	3	III	2	III	III
Von vielen wahrgenommen. Geschirr und Fenster klirren	IV	4	IV	2,3	IV	IV
Hängende Gegenstände pendeln. Viele Schlafende erwachen	V	5	V	3	V-VI	V
Leichte Schäden an Gebäuden, feine Risse im Verputz	VI	6	VI	4	VII	VI
Risse im Verputz, Spalten in den Wänden und Schornsteinen	VII	7	VII	4,5	VIII	VII
Grosse Spalten im Mauerwerk. Giebelteile und Dachgesimse stürzen ein	VIII	8	VIII	5	IX	VIII
An einigen Bauten stürzen Wände und Dächer ein, Erdrutsche	IX	9	IX	6	X	IX
Einstürze von vielen Bauten. Spalten im Boden bis 1 m Breite	X	10	X	6	X	X
Viele Spalten im Boden, Erdrutsche in den Bergen	XI	11	XI	7	X	XI
Starke Veränderungen an der Erdoberfläche	XII	12	XII	7	X	XII

- 16 -

- 17 -

TABELLE II: IN DER SCHWEIZ REGISTRIERTE SEISMISCHE EREIGNISSE

Tabelle II enthält sämtliche Ereignisse, die an mindestens einer Station (meist BUB) des SEDZ registriert wurden. Diese Tabelle wurde mit dem Bulletin-Programm des Seismologischen Zentralobservatoriums in Erlangen berechnet (H. Aichele und D. Mayer-Rosa, 1971). Alle angegebenen Zeiten sind in GMT (Greenwich Mean Time).

Abkürzungen in Tabelle II:

ERL	Lokalisiert vom ERL-Datenzentrum Boulder, Co. USA
BCIS	" " BCIS- " Strasbourg, France
H	Herdzeit (Stunden, Minuten, Sekunden)
LAT/LONG	Geographische Koordinaten
DEPTH	Herdtiefe
U/D	Richtung des Erstausschlags für den P-Einsatz U = auf, D = ab
I/E	Qualität des Ersteinsatzes I = scharf -, E = langsam ansteigend
DISTANCE	Epizentralentfernung in km und Grad
AZIMUTH	Station zum Epizentrum, Epizentrum zur Station
NO DETERMINATION OF EPICENTER	das Ereignis konnte nicht lokalisiert werden
SPEZIAL	für dieses Ereignis ist die Absolutzeit nicht bekannt, zur Berechnung des Herdes wurde nur die (S-P)-Zeit verwendet.

Literatur:

Aichele, H. and Mayer-Rosa, D. (1971): The preparation of the joint bulletin of the FRG by a digital computer, Proc. XII Ass.Gen. ESC, 1970, Luxembourg, p.298

TABELLE II

JAN 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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JAN 01
NO DETERMINATION OF EPICENTER

BUB	DI	P	13 54 41.-					
		S	13 54 45.-					

JAN 01 ERL
H= 22 05 59.0
LAT = 16.7 S
LONG= 174.8 E
DEPTH= 56 KM
MAGNITUDE= 5.8
FIJI ISLANDS REGION

ZUR	E	PKP	22 25 38.-				16390 147.4	25.1 342.5
-----	---	-----	------------	--	--	--	-------------	------------

JAN 02
NO DETERMINATION OF EPICENTER

BUB	OE	P	02 25 38.-					
-----	----	---	------------	--	--	--	--	--

JAN 04 ERL
H= 03 16 54.5
LAT = 22.6 N
LONG= 122.1 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 6.1
TAIWAN REGION

BUB	E	P	03 23 42.-				9800 88.1	58.0 321.7
ZUR	E	P	03 29 44.-				9820 88.3	58.0 321.4

JAN 05 ERL
H= 04 57 40.3
LAT = 47.8 N
LONG= 16.2 E
DEPTH= 11 KM
MAGNITUDE= 4.0
AUSTRIA

JAN 05 BCS
H= 04 57 43.0
LAT = 47.9 N
LONG= 16.2 E
AUSTRIA

BUB	UE	P	04 59 59.0					
ZUR	E	P	05 00 01.4				570 5.1	86.4 272.0
							580 5.2	82.2 267.8

JAN 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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JAN 08 ERL
H= 05 27 52.9
LAT = 20.9 N
LONG= 120.2 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 6.2
PHILIPPINE ISLANDS REGION

ZUR	E	P	05 40 43.-				9850 88.5	60.4 320.8
-----	---	---	------------	--	--	--	-----------	------------

JAN 10
DETERMINATION OF EPICENTER

=== SEE TABLE I ===

ZUR	DI	P	23 25 07.6					
	E	S	23 25 26.3					

JAN 11
NO DETERMINATION OF EPICENTER

ZUR	E	P	17 04 26.0					
	E	S	17 05 08.0					

JAN 12 ERL
H= 18 37 20.6
LAT = 37.7 N
LONG= 75.1 E
DEPTH= 84 KM
MAGNITUDE= 5.6
TADZHIK-SINKIANG BORDER REGION

BUB	E	P	18 45 56.2				5390 48.5	76.3 304.3
-----	---	---	------------	--	--	--	-----------	------------

JAN 14
NO DETERMINATION OF EPICENTER

ZUR	E	P	13 32 37.3					
	E	S	13 32 41.1					

JAN 17 BCS
H= 12 08 08.0
LAT = 44.2 N
LONG= 8.2 E
NORTHERN ITALY

BUB	E	P	12 09 02.9				400 3.6	184.7 4.4
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JAN 1972

JAN 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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JAN 17 BCS
H= 14 13 19.0
LAT = 44.2 N
LONG= 8.2 E
NORTHERN ITALY

BUB UE P 14 14 16.1

JAN 18 ERL
H= 12 43 27.8
LAT = 54.7 N
LONG= 161.4 E
DEPTH= 33 KM
MAGNITUDE= 5.6
NEAR EAST COAST OF KAMCHATKA

BUB E P 12 55 09.-

JAN 18 ERL
H= 14 02 01.1
LAT = 44.6 N
LONG= 149.1 E
DEPTH= 52 KM
MAGNITUDE= 4.8
KURIL ISLANDS

BUB UE P 14 12 26.-

JAN 18 ERL
H= 23 26 11.9
LAT = 44.2 N
LONG= 8.2 E
DEPTH= 25 KM
MAGNITUDE= 4.1
NORTHERN ITALY

JAN 18 BCS
H= 23 26 19.0
LAT = 44.2 N
LONG= 8.2 E
NORTHERN ITALY

ZUR E P 23 27 02.8

BUB UE P 23 27 06.8

400 3.6 184.7 4.4

8380 75.4 15.9 341.4

9090 81.7 27.3 334.3

350 3.1 184.4 4.2

390 3.5 184.2 3.9

JAN 1972

JAN 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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JAN 19 BCS
H= 00 37 04.0
LAT = 31.4 N
LONG= 13.8 W
MADEIRA ISLANDS REGION

JAN 19 ERL
H= 00 37 06.7
LAT = 31.2 N
LONG= 13.9 W
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 4.9
MADEIRA ISLANDS REGION

BUB UE P 00 42 19.-

JAN 19
DETERMINATION OF EPICENTER

=== SEE TABLE I ===

DIX P 09 57 00.-
SPECIAL 09 57 03.6

LIN P 09 57 00.-
SPECIAL 09 57 15.-

ZUR UE P 09 57 40.4
E S 09 57 58.3

BUB UE P 09 57 45.0
E S 09 58 07.1

JAN 20 ERL
H= 00 52 21.4
LAT = 36.7 N
LONG= 27.1 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 4.6
DODECANESE ISLANDS

JAN 20 BCS
H= 00 52 22.0
LAT = 36.5 N
LONG= 27.2 E
DODECANESE ISLANDS

BUB DE P 00 56 24.-

1950 17.6 122.4 314.9

JAN 1972

JAN 1972
STATION COMP. PHASE
ABBREV. SEIS.

JAN 20 ERL
H= 02 15 06.7
LAT = 36.6 N
LONG= 27.1 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 4.8
DODECANESE ISLANDS

JAN 20 BCS
H= 02 15 10.0
LAT = 36.5 N
LONG= 27.2 E
DODECANESE ISLANDS

BUB DE P 02 19 10.-

JAN 20 ERL
H= 11 36 28.6
LAT = 36.4 N
LONG= 70.7 E
DEPTH=213 KM
MAGNITUDE= 6.0
HINDU KUSH REGION

JAN 20 BCS
H= 11 36 41.0
LAT = 36.5 N
LONG= 70.5 E
DEPTH=315 KM
HINDU KUSH REGION

BUB DE P 11 44 34.1

ZUR E P 11 44 34.5

JAN 20
NO DETERMINATION OF EPICENTER

BUB DE P 11 43 38.1
E S 11 43 41.5

JAN 20 BCS
H= 18 49 15.0
LAT = 44.2 N
LONG= 8.2 E
NORTHERN ITALY

BUB E P 18 50 10.3

1970 17.7 122.5 315.0

5150 46.3 80.5 304.4

5160 46.4 80.1 303.9

400 3.6 184.7 4.4

JAN 1972

STATION COMP. PHASE
ABBREV. SEIS.

TIME
H M S

PER. LOG. S/N
AMP.

DISTANCE
KM DEG.

AZIMUTH
STAT. EPIC.

JAN 21 ERL
H= 19 18 57.2
LAT = 6.7 S
LONG= 71.9 W
DEPTH=562 KM
MAGNITUDE= 5.6
WESTERN BRAZIL

BUB DI P 19 30 51.6

9850 88.6 258.5 41.7

JAN 23 BCS
H= 11 46 22.0
LAT = 44.2 N
LONG= 8.2 E
NORTHERN ITALY

ZUR E P 11 47 12.-

350 3.2 184.9 4.7

BUB DE P 11 47 14.5

400 3.6 184.7 4.4

JAN 23 ERL
H= 21 17 52.1
LAT = 13.2 S
LONG= 166.4 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.9
NEW HEBRIDES ISLANDS

ZUR E PKP 21 37 22.-

15700 141.2 36.0 335.8

JAN 24
NO DETERMINATION OF EPICENTER

BUB E P 16 18 19.-
E S 16 18 41.7

JAN 25 ERL
H= 02 06 23.3
LAT = 22.5 N
LONG= 122.3 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 6.3
TAIWAN REGION

BUB E P 02 19 12.-

9320 88.3 58.0 321.8

ZUR E P 02 19 13.-

9840 88.5 57.9 321.5

JAN 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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JAN 25 ERL
H= 03 41 23.7
LAT = 23.0 N
LONG= 122.2 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.9
TAIWAN REGION

BUB	E	P	03 54 10.-				9760 87.8	57.7 321.7
ZUR	E	P	03 54 12.-				9790 88.0	57.7 321.4

JAN 25 ERL
H= 20 24 38.9
LAT = 43.8 N
LONG= 13.4 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 4.5
CENTRAL ITALY

JAN 25 BCS
H= 20 24 39.0
LAT = 43.7 N
LONG= 13.5 E
CENTRAL ITALY

ZUR	E	P	20 25 54.-				550 5.0	135.0 318.4
BUB	DE	P	20 25 57.2				580 5.2	138.1 321.5

JAN 25 BCS
H= 23 22 17.0
LAT = 43.7 N
LONG= 13.4 E
CENTRAL ITALY

JAN 25 ERL
H= 23 22 17.1
LAT = 43.8 N
LONG= 13.4 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 4.8
CENTRAL ITALY

ZUR	E	PKP	23 23 32.-				560 5.0	135.5 319.0
BUB	E	PKP	23 23 35.7				580 5.3	138.6 322.0

JAN 26
NO DETERMINATION OF EPICENTER

BUB	DE	P	10 44 06.0					
	E	S	10 44 11.6					

JAN 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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JAN 26 BCS
H= 10 50 09.0
LAT = 43.8 N
LONG= 13.4 E
CENTRAL ITALY

JAN 26 ERL
H= 10 50 09.2
LAT = 43.9 N
LONG= 13.3 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 4.3
CENTRAL ITALY

BUB	DE	P	10 51 26.2				580 5.2	137.9 321.3
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JAN 26 ERL
H= 23 00 24.4
LAT = 20.2 S
LONG= 179.0 W
DEPTH= 668 KM
MAGNITUDE= 5.7
FIJI ISLANDS REGION

BUB	DE	PKP	23 19 01.5				16880 151.8	15.2 349.2
ZUR	DE	PKP	23 19 01.-				16920 152.2	15.3 349.0

JAN 26 ERL
H= 23 32 36.5
LAT = 20.2 S
LONG= 179.0 W
DEPTH= 689 KM
MAGNITUDE= 5.1
FIJI ISLANDS REGION

BUB	UE	PKP	23 51 16.9				16880 151.8	15.2 349.1
-----	----	-----	------------	--	--	--	-------------	------------

JAN 27
DETERMINATION OF EPICENTER

=== SEE TABLE I ===

LIN		P	00 01 00.-
		SPECIAL	00 01 05.1
ZUR	E	P	00 01 45.0
	E	S	00 01 58.3
BUB	E	P	00 01 51.4
	N	S	00 02 09.4

JAN 1972

JAN 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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JAN 23 ERL
H= 01 16 21.7
LAT = 19.4 S
LONG= 169.1 E
DEPTH=124 KM
MAGNITUDE= 6.1
NEW HEBRIDES ISLANDS

BUB	E	PKP	01 35 46.-				16410 147.6	36.0 335.2
ZUR	UE	PKP	01 35 50.-				16440 147.9	36.3 334.8

JAN 28
NO DETERMINATION OF EPICENTER

ZUR	UE	P	11 15 14.5					
	E	S	11 15 22.-					

FEB 02
NO DETERMINATION OF EPICENTER

BUB	E	P	07 19 34.5					
	E	S	07 19 44.1					

FEB 04 ERL
H= 02 42 18.9
LAT = 43.8 N
LONG= 13.3 E
DEPTH= 25 KM
MAGNITUDE= 4.8
CENTRAL ITALY

FEB 04 BCS
H= 02 42 21.0
LAT = 43.7 N
LONG= 13.4 E
CENTRAL ITALY

ZUR		P	02 43 34.4				540 4.9	135.2 318.6
BUB	UE	P	02 43 37.9				570 5.1	138.3 321.7

FEB 04 ERL
H= 09 18 31.5
LAT = 43.9 N
LONG= 13.2 E
DEPTH= 23 KM
MAGNITUDE= 4.4
CENTRAL ITALY

FEB 1972

FEB 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
--------------------	----------------	-------	---------------	------	--------------	-----	---------------------	------------------------

FEB 04 BCS
H= 09 18 33.0
LAT = 43.7 N
LONG= 13.4 E
CENTRAL ITALY

ZUR	E	P	09 19 45.7				530 4.7	135.0 318.3
BUB	DI	P	09 19 48.7				560 5.0	138.2 321.5

FEB 04 ERL
H= 17 19 52.4
LAT = 43.8 N
LONG= 13.3 E
DEPTH= 23 KM
MAGNITUDE= 4.4
CENTRAL ITALY

FEB 04 BCS
H= 17 19 53.0
LAT = 43.7 N
LONG= 13.4 E
CENTRAL ITALY

ZUR	E	P	17 21 08.5				540 4.9	135.5 318.9
BUB	DE	P	17 21 11.6				570 5.2	138.6 322.0

FEB 04 ERL
H= 18 17 29.5
LAT = 43.8 N
LONG= 13.4 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 4.8
CENTRAL ITALY

FEB 04 BCS
H= 18 17 32.0
LAT = 43.7 N
LONG= 13.4 E
CENTRAL ITALY

ZUR	E	P	18 18 47.5				550 4.9	134.5 318.0
BUB	E	P	18 18 46.-				580 5.2	137.6 321.1

FEB 1972

FEB 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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FEB 04 BCS
H= 19 02 53.0
LAT = 43.7 N
LONG= 13.4 E
CENTRAL ITALY

FEB 04 ERL
H= 19 02 56.0
LAT = 43.8 N
LONG= 13.3 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 4.8
CENTRAL ITALY

ZUR	E	P	19 04 10.-				560 5.0	135.5 319.0
BUB	DE	P	19 04 13.5				580 5.3	138.6 322.0

FEB 05 BCS
H= 01 26 30.0
LAT = 43.7 N
LONG= 13.4 E
CENTRAL ITALY

FEB 05 ERL
H= 01 26 32.3
LAT = 43.8 N
LONG= 13.3 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 4.8
CENTRAL ITALY

ZUR	E	P	01 27 46.9				560 5.0	135.5 319.0
BUB	UE	P	01 27 49.8				580 5.3	138.6 322.0

FEB 05
NO DETERMINATION OF EPICENTER

ZUR	E	P	07 07 06.-					
BUB	E	P	07 07 09.6					

FEB 05 BCS
H= 07 08 11.0
LAT = 43.8 N
LONG= 13.4 E
CENTRAL ITALY

FEB 1972

FEB 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
--------------------	----------------	-------	---------------	------	--------------	-----	---------------------	------------------------

FEB 05 ERL
H= 07 08 12.9
LAT = 43.9 N
LONG= 13.3 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 4.7
CENTRAL ITALY

ZUR	E	P	07 09 26.-				550 4.9	134.8 318.2
BUB	DE	P	07 09 30.0				580 5.2	137.9 321.3

FEB 05
NO DETERMINATION OF EPICENTER

BUB	E	P	10 55 10.2					
	E	S	10 55 30.5					

FEB 05 BCS
H= 15 14 47.0
LAT = 43.7 N
LONG= 13.4 E
CENTRAL ITALY

FEB 05 ERL
H= 15 14 48.0
LAT = 43.7 N
LONG= 13.4 E
DEPTH= 35 KM
MAGNITUDE= 4.7
CENTRAL ITALY

BUB	DE	P	15 16 07.0				580 5.3	138.6 322.0
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FEB 06 BCS
H= 01 34 17.0
LAT = 43.7 N
LONG= 13.5 E
CENTRAL ITALY

FEB 06 ERL
H= 01 34 22.4
LAT = 44.0 N
LONG= 13.2 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 4.9
ADRIATIC SEA

BUB	DE	P	01 35 37.4				590 5.3	138.0 321.5
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FEB 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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FEB 06 ERL
H= 11 55 09.0
LAT = 17.8 S
LONG= 168.4 E
DEPTH=135 KM
MAGNITUDE= 5.2
NEW HEBRIDES ISLANDS

BUB	DE	PKP	12 14 33.5				16220 145.9	36.0 335.4
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FEB 06
NO DETERMINATION OF EPICENTER

BUB	DI	P	15 23 40.1					
		S	15 23 49.0					

FEB 06 ERL
H= 21 44 28.8
LAT = 43.8 N
LONG= 13.2 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 4.4
CENTRAL ITALY

FEB 06 BCS
H= 21 44 30.0
LAT = 43.7 N
LONG= 13.4 E
CENTRAL ITALY

BUB	E	P	21 45 46.2				570 5.1	138.8 322.2
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FEB 07
NO DETERMINATION OF EPICENTER

BUB	E	P	08 20 25.7					
	E	S	08 20 40.0					

FEB 07
NO DETERMINATION OF EPICENTER

BUB	UE	P	10 37 35.4					
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FEB 08 ERL
H= 03 37 52.4
LAT = 19.3 N
LONG= 122.0 E
DEPTH= 50 KM
MAGNITUDE= 5.7
PHILIPPINE ISLANDS REGION

BUB	E	P	03 50 49.-					
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10080	90.6	60.0	321.7
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FEB 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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FEB 08
NO DETERMINATION OF EPICENTER

BUB	UI	P	10 10 45.2					
	E	S	10 10 55.-					

FEB 08
NO DETERMINATION OF EPICENTER

BUB	E	P	10 32 10.9					
	N	S	10 32 13.8					

FEB 08
NO DETERMINATION OF EPICENTER

BUB	E	P	11 12 54.5					
-----	---	---	------------	--	--	--	--	--

FEB 08 ERL
H= 12 19 14.8
LAT = 43.8 N
LONG= 13.3 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 4.6
CENTRAL ITALY

FEB 08 BCS
H= 12 19 16.0
LAT = 43.7 N
LONG= 13.4 E
CENTRAL ITALY

ZUR	E	P	12 20 29.-					
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BUB	DI	P	12 20 35.1					
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FEB 09
NO DETERMINATION OF EPICENTER

BUB	E	P	13 56 41.2					
	N	S	13 56 59.7					

FEB 09
NO DETERMINATION OF EPICENTER

BUB	DE	P	15 02 05.-					
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FEB 09
NO DETERMINATION OF EPICENTER

BUB	DI	P	15 31 23.8					
	E	S	15 31 29.5					

FEB 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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540	4.8	135.2	318.6
570	5.1	138.4	321.7

FEB 1972

FEB 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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FEB 11
NO DETERMINATION OF EPICENTER

BUB	UI	P	10 20 27.7					
	E	S	10 20 39.-					

FEB 11
NO DETERMINATION OF EPICENTER

BUB	E	P	16 09 16.-					
	E	S	16 09 30.-					

FEB 12
NO DETERMINATION OF EPICENTER

BUB	E	P	05 15 18.-					
	E	S	05 15 36.-					

FEB 14 ERL
H= 23 29 51.7
LAT = 11.4 S
LONG= 166.3 E
DEPTH=102 KM
MAGNITUDE= 6.2
SANTA CRUZ ISLANDS

BUB	E	PKP	23 49 01.-				15480 139.2	34.7 337.0
ZUR	E	PKP	23 49 01.-				15510 139.5	34.9 336.7

FEB 15
NO DETERMINATION OF EPICENTER

BUB	UE	P	10 48 53.6					
	E	S	10 48 58.8					

FEB 15
NO DETERMINATION OF EPICENTER

BUB	I	P	15 35 05.4					
	E	S	15 35 10.8					

FEB 15
NO DETERMINATION OF EPICENTER

BUB	I	P	15 39 55.2					
	N	S	15 39 58.-					

FEB 17
NO DETERMINATION OF EPICENTER

FEB 1972

FEB 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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BUB	E	P	00 31 31.-					
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FEB 17
NO DETERMINATION OF EPICENTER

BUB	E	P	10 51 03.0					
	E	S	10 51 08.7					

FEB 18
NO DETERMINATION OF EPICENTER

BUB	I	P	08 48 02.8					
	E	S	08 48 06.0					

FEB 18
NO DETERMINATION OF EPICENTER

ZUR	I	P	08 55 48.9					
	N	S	08 55 51.3					

FEB 20
NO DETERMINATION OF EPICENTER

BUB	I	P	16 44 46.0					
	E	S	16 45 05.0					

FEB 21
DETERMINATION OF EPICENTER

=== SEE TABLE I ===

BUB	I	P	13 18 57.3					
	E	S	13 19 12.7					

FEB 21 ERL
H= 19 34 50.9
LAT = 55.9 N
LONG= 158.3 W
DEPTH= 60 KM
MAGNITUDE= 5.7
ALASKA PENINSULA

BUB	E	P	19 46 33.-					
ZUR	E	P	19 46 36.-					

8470	76.1	352.4	9.1
8510	76.5	352.4	9.2

FEB 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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FEB 23 ERL
H= 18 19 04.6
LAT = 15.1 S
LONG= 173.0 W
DEPTH= 51 KM
MAGNITUDE= 5.7
TONGA ISLANDS

BUB	E	PKP	18 38 42.-				16390 147.4	2.8 358.0
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FEB 24
NO DETERMINATION OF EPICENTER

BUB	E	P	10 41 10.-					
-----	---	---	------------	--	--	--	--	--

FEB 25 BCS
H= 02 36 46.0
LAT = 47.4 N
LONG= 10.0 E
AUSTRIA

ZUR	E	P	02 37 02.6				110 1.0	87.6 268.7
	E	S	02 37 17.3					
BUB	DE	P	02 37 03.5				110 1.0	109.7 290.8
	E	S	02 37 20.7					

FEB 25
NO DETERMINATION OF EPICENTER

BUB	UE	P	14 44 47.2					
	E	S	14 44 52.7					

FEB 26
NO DETERMINATION OF EPICENTER

ZUR	E	P	14 01 10.0					
	E	S	14 01 21.-					

FEB 26 ERL
H= 23 31 09.6
LAT = 50.6 N
LONG= 97.3 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.3
USSR-MONGOLIA BORDER REGION

BUB	E	P	23 40 35.-				6080 54.7	51.3 304.2
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FEB 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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FEB 28
DETERMINATION OF EPICENTER

=== SEE TABLE I ===

DIX		P	01 27 00.-					
		SPECIAL	01 27 10.-					
ZUR	UE	P	01 27 51.-					
	N	S	01 28 10.0					
BUB	UE	P	01 27 55.7					
	N	S	01 28 14.0					

FEB 28
NO DETERMINATION OF EPICENTER

BUB	UE	P	05 02 35.2					
	E	S	05 03 15.0					

FEB 28
NO DETERMINATION OF EPICENTER

BUB	E	P	09 06 50.0					
	E	S	09 06 51.2					

FEB 28 ERL
H= 10 52 43.7
LAT = 37.0 N
LONG= 24.2 E
DEPTH= 11 KM
MAGNITUDE= 4.8
SOUTHERN GREECE

FEB 28 BCS
H= 10 52 46.0
LAT = 36.9 N
LONG= 24.4 E
SOUTHERN GREECE

BUB	UE	P	10 56 21.-					
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1750 15.7 127.5 318.1

FEB 28
NO DETERMINATION OF EPICENTER

BUB	UE	P	11 46 51.-					
-----	----	---	------------	--	--	--	--	--

FEB 28
NO DETERMINATION OF EPICENTER

BUB	DI	P	13 53 02.3					
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FEB 1972

FEB 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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FEB 28 ERL
H= 15 41 05.3
LAT = 49.5 N
LONG= 8.2 E
DEPTH= 10 KM (GEOPHYSICIST)
GERMANY

FEB 28 BCS
H= 15 41 07.0
LAT = 49.4 N
LONG= 8.3 E
GERMANY

BUB	UE	P	15 41 35.2				200 1.8	351.7 171.4
	E	S	15 42 01.0					
ZUR	E	P	15 41 42.-				240 2.2	353.5 173.3
	E	S	15 42 13.2					

FEB 29 ERL
H= 09 22 59.8
LAT = 33.3 N
LONG= 140.8 E
DEPTH= 56 KM
MAGNITUDE= 6.3
SOUTH OF HONSHU, JAPAN

BUB	E	P	09 35 47.-				9850 88.6	38.4 330.0
ZUR	E	P	09 35 49.-				9890 88.9	38.3 329.8

FEB 29
NO DETERMINATION OF EPICENTER

BUB	E	P	10 31 14.-					
-----	---	---	------------	--	--	--	--	--

FEB 29 ERL
H= 20 54 21.2
LAT = 42.0 N
LONG= 15.4 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 4.7
ADRIATIC SEA

FEB 29 BCS
H= 20 54 28.0
LAT = 42.0 N
LONG= 15.0 E
ADRIATIC SEA

BUB	E	P	20 56 10.-				830 7.5	137.4 322.2
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FEB 1972

FEB 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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MAR 01 ERL
H= 09 04 41.7
LAT = 18.9 S
LONG= 173.8 W
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.8
TONGA ISLANDS

BUB	DE	PKP	09 24 27.7				16810 151.2	4.8 356.6
-----	----	-----	------------	--	--	--	-------------	-----------

MAR 01 ERL
H= 09 25 36.5
LAT = 33.5 N
LONG= 140.9 E
DEPTH= 62 KM
MAGNITUDE= 5.0
SOUTH OF HONSHU, JAPAN

BUB	E	P	09 41 22.6				9850 88.6	38.2 330.1
-----	---	---	------------	--	--	--	-----------	------------

MAR 02 ERL
H= 09 30 08.7
LAT = 18.2 S
LONG= 168.1 E
DEPTH= 37 KM
MAGNITUDE= 4.9
NEW HEBRIDES ISLANDS

BUB	E	PKP	09 49 45.0				16250 146.1	36.6 334.9
-----	---	-----	------------	--	--	--	-------------	------------

MAR 03 ERL
H= 21 26 51.3
LAT = 44.7 N
LONG= 18.4 E
DEPTH= 32 KM
MAGNITUDE= 4.9
YUGOSLAVIA

MAR 03 BCS
H= 21 26 52.0
LAT = 44.5 N
LONG= 18.4 E
YUGOSLAVIA

ZUR	DE	P	21 28 40.6				820 7.4	107.8 294.8
BUB	E	P	21 28 38.5				830 7.5	110.6 297.6

MAR 04
NO DETERMINATION OF EPICENTER

BUB	E	P	13 40 41.-					
	E	S	13 40 42.-					

MAR 1972

MAR 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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MAR 04 BCS
H= 19 12 22.0
LAT = 71.4 N
LONG= 5.0 W
JAN MAYEN ISLAND REGION

MAR 04 ERL
H= 19 12 24.6
LAT = 71.3 N
LONG= 5.3 W
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.0
JAN MAYEN ISLAND REGION

BUB E P 19 17 45.-

MAR 04 BCS
H= 20 10 54.0
LAT = 46.0 N
LONG= 7.5 E
SWITZERLAND

=== SEE TABLE I ===

DIX	P	20 11 00.-	10	0.1	142.2	322.3
	SPECIAL	20 11 02.-				
ZUR UE	P	20 11 24.0	170	1.6	208.9	28.1
E	S	20 11 45.2				
BUB UE	P	20 11 29.8	210	1.9	203.8	23.0
E	S	20 11 55.5				

MAR 06
NO DETERMINATION OF EPICENTER

ZUR DE P 14 58 53.0
S 14 59 07.-

MAR 06 ERL
H= 18 50 18.2
LAT = 50.2 N
LONG= 148.8 E
DEPTH=592 KM
MAGNITUDE= 5.4
SEA OF OKHOTSK

BUB E P 19 01 10.-

ZUR E P 19 01 11.-

8520 76.6 25.1 333.6
8560 76.9 25.0 333.5

MAR 1972

MAR 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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MAR 07 ERL
H= 07 45 21.9
LAT = 28.2 S
LONG= 178.3 W
DEPTH=192 KM
MAGNITUDE= 6.2
KERMADEC ISLANDS REGION

BUB E PKP 08 04 47.-

ZUR E PKP 08 04 58.-

17770 159.3 18.0 346.3

17810 160.1 18.3 346.0

MAR 10
NO DETERMINATION OF EPICENTER

BUB DE P 08 54 18.8
E S 08 54 42.7

MAR 10
NO DETERMINATION OF EPICENTER

BUB E P 11 20 56.-

MAR 11
NO DETERMINATION OF EPICENTER

BUB E P 23 03 36.-
E S 23 03 40.-

ZUR E P 23 03 43.0
E S 23 03 49.3

MAR 13
NO DETERMINATION OF EPICENTER

BUB E P 10 35 05.3
N S 10 35 10.2

MAR 13
NO DETERMINATION OF EPICENTER

BUB DE P 14 29 34.8
N S 14 29 41.0

MAR 13
NO DETERMINATION OF EPICENTER

BUB UE P 17 22 26.5
N S 17 22 35.0

MAR 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
MAR 17 ERL									
H= 00 21 25.8									
LAT = 24.7 S									
LONG= 179.6 W									
DEPTH=407 KM									
MAGNITUDE= 5.6									
SOUTH OF FIJI ISLANDS									
BUB	E	PKP	00 40 30.-				17360	156.1	18.7 346.2
MAR 17 ERL									
H= 04 58 37.6									
LAT = 44.7 N									
LONG= 6.8 E									
DEPTH= 33 KM (NORMAL)									
FRANCE									
BUB	DE	P	04 59 28.-				370	3.3	203.5 22.1
MAR 17 ERL									
H= 07 49 02.3									
LAT = 49.0 N									
LONG= 156.2 E									
DEPTH= 33 KM (NORMAL)									
MAGNITUDE= 5.2									
KURIL ISLANDS									
BUB	E	P	08 01 07.-				8850	79.6	21.0 338.4
MAR 17									
NO DETERMINATION OF EPICENTER									
BUB	UE	P	13 15 55.2						
	E	S	13 16 13.3						
MAR 17									
NO DETERMINATION OF EPICENTER									
BUB	DE	P	14 01 11.3						
	E	S	14 01 24.7						

MAR 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
MAR 19 ERL									
H= 15 57 50.4									
LAT = 40.8 N									
LONG= 141.9 E									
DEPTH= 76 KM									
MAGNITUDE= 6.0									
NEAR EAST COAST OF HONSHU, JAPAN									
ZUR	E	P	16 10 07.-				9220	32.9	33.3 330.1
MAR 20 ERL									
H= 07 33 49.6									
LAT = 6.8 S									
LONG= 76.8 W									
DEPTH= 64 KM									
MAGNITUDE= 6.1									
NORTHERN PERU									
ZUR	E	P	07 46 51.-				10210	91.8	262.0 42.7
BUB	E	P	07 46 52.-				10220	91.9	262.1 42.3
MAR 20 ERL									
H= 23 31 48.8									
LAT = 51.3 N									
LONG= 179.2 W									
DEPTH= 46 KM									
MAGNITUDE= 6.0									
ANDREANOF ISLANDS, ALEUTIAN IS.									
BUB	DE	P	23 44 00.5				9020	81.1	5.0 354.7
ZUR	E	P	23 44 02.-				9060	81.5	4.9 354.6
MAR 21									
NO DETERMINATION OF EPICENTER									
BUB	DE	P	13 06 35.1						
	E	S	13 06 43.-						
MAR 21									
NO DETERMINATION OF EPICENTER									
BUB	DE	P	14 24 28.0						
	E	S	14 24 40.5						
MAR 21 BCS									
H= 23 06 46.0									
LAT = 35.7 N									
LONG= 15.1 E									
MEDITERRANEAN SEA									

MAR 1972

MAR 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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MAR 21 ERL
H= 23 06 48.5
LAT = 35.8 N
LONG= 14.8 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 4.6
MEDITERRANEAN SEA

BUB	E	P	23 09 50.-				1440	13.0	155.8 340.1
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MAR 22
DETERMINATION OF EPICENTER

=== SEE TABLE I ===

ZUR	UI	P	00 10 22.8
	E	S	00 10 29.5
BUB	UI	P	00 10 28.1
	N	S	00 10 38.3

MAR 22 ERL
H= 00 51 51.6
LAT = 40.3 N
LONG= 42.1 E
DEPTH= 34 KM
MAGNITUDE= 4.8
TURKEY

MAR 22 BCS
H= 00 51 55.0
LAT = 40.4 N
LONG= 42.2 E
TURKEY

ZUR	E	P	00 57 13.-	2790	25.1	94.0 297.6
BUB	E	P	00 57 13.-	2790	25.1	94.9 298.5

MAR 22 ERL
H= 02 59 09.0
LAT = 53.0 N
LONG= 159.6 E
DEPTH= 41 KM
MAGNITUDE= 5.2
NEAR EAST COAST OF KAMCHATKA

BUB	E	P	03 10 57.-	8520	76.6	17.5 340.4
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MAR 22
NO DETERMINATION OF EPICENTER

BUB	DI	P	07 30 04.8
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MAR 1972

MAR 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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E	S		07 30 08.1						
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MAR 22 ERL
H= 10 27 41.9
LAT = 49.1 N
LONG= 153.6 E
DEPTH=134 KM
MAGNITUDE= 6.3
KURIL ISLANDS

BUB	UE	P	10 39 31.7	8770	78.9	22.6 336.8
ZUR	UE	P	10 39 33.-	8810	79.3	22.6 336.6

MAR 22
NO DETERMINATION OF EPICENTER

BUB	E	P	16 00 27.3
	E	S	16 00 44.-

MAR 22
NO DETERMINATION OF EPICENTER

BUB	E	P	16 49 30.8
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MAR 22
NO DETERMINATION OF EPICENTER

BUB	DE	P	16 58 48.9
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MAR 23
NO DETERMINATION OF EPICENTER

BUB	E	P	07 45 19.3
	N	S	07 45 30.1

MAR 23
NO DETERMINATION OF EPICENTER

BUB	DI	P	15 13 36.3
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MAR 24 ERL
H= 03 38 27.1
LAT = 56.1 N
LONG= 157.2 W
DEPTH= 69 KM
MAGNITUDE= 6.0
ALASKA PENINSULA

BUB	DE	P	03 50 06.-	8430	75.8	351.8 9.8
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MAR 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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ZUR E P 03 50 09.- 3470 76.2 351.8 9.9

MAR 24
NO DETERMINATION OF EPICENTER

BUB DE P 03 14 47.3

MAR 25 ERL
H= 00 56 05.1
LAT = 48.0 N
LONG= 153.2 E
DEPTH=134 KM
MAGNITUDE= 5.8
KURIL ISLANDS

BUB DE P 01 07 59.-
ZUR E P 01 08 01.-

MAR 25 ERL
H= 22 59 40.3
LAT = 43.4 N
LONG= 146.0 E
DEPTH= 43 KM
MAGNITUDE= 5.8
KURIL ISLANDS

BUB E P 23 11 57.1

MAR 27
NO DETERMINATION OF EPICENTER

BUB DI P 10 41 51.8
N S 10 41 53.3

MAR 28
NO DETERMINATION OF EPICENTER

BUB UE P 14 51 35.9
N S 14 51 40.9

MAR 28
NO DETERMINATION OF EPICENTER

BUB UE P 14 58 18.9

MAR 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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MAR 29 BCS
H= 11 31 54.0
LAT = 44.4 N
LONG= 9.4 E
NORTHERN ITALY

BUB UE P 11 32 43.9 380 3.4 170.3 350.9

MAR 30 ERL
H= 05 34 54.7
LAT = 25.7 S
LONG= 179.4 E
DEPTH=532 KM
MAGNITUDE= 6.2
SOUTH OF FIJI ISLANDS

BUB E PKP 05 53 49.- 17440 156.8 21.5 344.1
ZUR E PKP 05 53 50.- 17480 157.2 21.8 343.7

MAR 30
NO DETERMINATION OF EPICENTER

BUB UE P 23 57 19.5
N S 23 57 36.6

MAR 31
NO DETERMINATION OF EPICENTER

BUB UE P 00 44 55.6
N S 00 45 03.1

MAR 31 ERL
H= 02 58 02.4
LAT = 36.5 N
LONG= 21.2 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 4.7
SOUTHERN GREECE

MAR 31 BCS
H= 02 58 07.0
LAT = 36.5 N
LONG= 21.3 E
SOUTHERN GREECE

BUB E P 03 01 28.-

1630 14.6 135.8 324.3

MAR 1972

MAR 1972

MAR 1972

STATION COMP. PHASE
ABBREV. SEIS.

TIME
H M S

PER.

LOG.
AMP.

S/N

DISTANCE
KM DEG.

AZIMUTH
STAT. EPIC.

MAR 31 BCS
H= 03 54 31.0
LAT = 46.6 N
LONG= 5.8 E
FRANCE

BUB E P 03 55 13.-
E S 03 55 40.-

MAR 31
NO DETERMINATION OF EPICENTER

BUB DE P 04 59 11.0
N S 04 59 13.3

APR 01 ERL
H= 05 51 48.8
LAT = 43.6 N
LONG= 16.0 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 4.9
YUGOSLAVIA

APR 01 BCS
H= 05 51 52.0
LAT = 43.9 N
LONG= 16.1 E
YUGOSLAVIA

BUB UE P 05 53 27.3

APR 01 ERL
H= 23 51 23.0
LAT = 49.5 S
LONG= 163.7 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 6.0
AUCKLAND ISLANDS REGION

ZUR E PKP 00 11 20.-

APR 02 ERL
H= 09 01 23.8
LAT = 16.1 S
LONG= 173.1 W
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.9
TONGA ISLANDS

BUB UE PKP 09 21 05.-

250 2.2 240.0 58.0

730 6.6 125.8 311.1

18170 163.4 106.7 271.9

16510 148.4 3.1 357.8

APR 1972

STATION COMP. PHASE
ABBREV. SEIS.

TIME
H M S

PER.

LOG.
AMP.

S/N

DISTANCE
KM DEG.

APR 1972
AZIMUTH
STAT. EPIC.

ZUR DE PKP 09 21 10.-

16550 148.8 3.1 357.8

APR 02 ERL
H= 21 30 05.4
LAT = 13.3 S
LONG= 166.1 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.4
NEW HEBRIDES ISLANDS

BUB E PKP 21 49 27.-

15660 140.9 36.1 335.9

APR 03 ERL
H= 09 07 16.0
LAT = 28.1 N
LONG= 57.2 E
DEPTH= 52 KM
MAGNITUDE= 5.0
SOUTHERN IRAN

BUB UE P 09 15 05.3

4700 42.2 99.8 311.2

APR 03 BCS
H= 18 52 56.0
LAT = 54.1 N
LONG= 35.3 W
NORTH ATLANTIC OCEAN

APR 03 ERL
H= 18 52 59.3
LAT = 54.3 N
LONG= 35.1 W
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.4
NORTH ATLANTIC OCEAN

BUB UE P 18 58 47.-

3120 28.0 299.6 84.9

APR 03 ERL
H= 20 36 22.2
LAT = 54.3 N
LONG= 35.1 W
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.2
NORTH ATLANTIC OCEAN

APR 03 BCS
H= 20 36 23.0
LAT = 54.2 N
LONG= 35.4 W
NORTH ATLANTIC OCEAN

MAR 1972

MAR 1972

STATION COMP. PHASE
ABBREV. SEIS.

TIME
H M S

PER.

LOG.
AMP.

S/N

DISTANCE
KM DEG.

AZIMUTH
STAT. EPIC.

MAR 31 BCS
H= 03 54 31.0
LAT = 46.6 N
LONG= 5.8 E
FRANCE

BUB E P 03 55 13.-
E S 03 55 40.-

MAR 31
NO DETERMINATION OF EPICENTER

BUB DE P 04 59 11.0
N S 04 59 13.3

APR 01 ERL
H= 05 51 48.8
LAT = 43.6 N
LONG= 16.0 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 4.9
YUGOSLAVIA

APR 01 BCS
H= 05 51 52.0
LAT = 43.9 N
LONG= 16.1 E
YUGOSLAVIA

BUB UE P 05 53 27.3

APR 01 ERL
H= 23 51 23.0
LAT = 49.5 S
LONG= 163.7 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 6.0
AUCKLAND ISLANDS REGION

ZUR E PKP 00 11 20.-

APR 02 ERL
H= 09 01 23.8
LAT = 16.1 S
LONG= 173.1 W
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.9
TONGA ISLANDS

BUB UE PKP 09 21 05.-

250 2.2 240.0 58.0

730 6.6 125.8 311.1

18170 163.4 106.7 271.9

16510 148.4 3.1 357.8

APR 1972

STATION COMP. PHASE
ABBREV. SEIS.

TIME
H M S

PER.

LOG.
AMP.

S/N

DISTANCE
KM DEG.

AZIMUTH
STAT. EPIC.

ZUR DE PKP 09 21 10.-

16550 148.8 3.1 357.8

APR 02 ERL
H= 21 30 05.4
LAT = 13.3 S
LONG= 166.1 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.4
NEW HEBRIDES ISLANDS

BUB E PKP 21 49 27.-

15660 140.9 36.1 335.9

APR 03 ERL
H= 09 07 16.0
LAT = 28.1 N
LONG= 57.2 E
DEPTH= 52 KM
MAGNITUDE= 5.0
SOUTHERN IRAN

BUB UE P 09 15 05.3

4700 42.2 99.8 311.2

APR 03 BCS
H= 18 52 56.0
LAT = 54.1 N
LONG= 35.3 W
NORTH ATLANTIC OCEAN

APR 03 ERL
H= 18 52 59.3
LAT = 54.3 N
LONG= 35.1 W
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.4
NORTH ATLANTIC OCEAN

BUB UE P 18 58 47.-

3120 28.0 299.6 84.9

APR 03 ERL
H= 20 36 22.2
LAT = 54.3 N
LONG= 35.1 W
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.2
NORTH ATLANTIC OCEAN

APR 03 BCS
H= 20 36 23.0
LAT = 54.2 N
LONG= 35.4 W
NORTH ATLANTIC OCEAN

APR 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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BUB	E	P	20 42 10.2				3100	27.9	300.1 85.4
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APR 03 ERL
H= 22 08 50.9
LAT = 33.5 N
LONG= 138.1 E
DEPTH=309 KM
MAGNITUDE= 4.5
SOUTH OF HONSHU, JAPAN

BUB	UI	P	22 20 10.4				9710	87.3	40.2 328.6
		S	22 20 52.-						

APR 04
NO DETERMINATION OF EPICENTER

BUB	E	P	16 30 50.0						
		S	16 30 55.5						

APR 04 ERL
H= 22 43 06.7
LAT = 7.4 S
LONG= 125.6 E
DEPTH=377 KM
MAGNITUDE= 6.6
BANDA SEA

BUB	E	PKP	23 01 00.-				12620	113.5	74.5 319.0
ZUR	UE	PKP	23 01 01.5				12630	113.6	74.6 318.6

APR 07 ERL
H= 00 30 55.8
LAT = 5.2 N
LONG= 61.9 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.1
CARLSBERG RIDGE

BUB	E	P	00 41 15.-				6910	62.1	115.4 322.2
-----	---	---	------------	--	--	--	------	------	-------------

APR 08 ERL
H= 04 55 04.9
LAT = 8.1 N
LONG= 38.8 W
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.4
CENTRAL MID-ATLANTIC RIDGE

BUB	E	P	05 03 47.-				6260	56.3	241.2 36.7
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APR 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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APR 08 ERL
H= 09 33 42.1
LAT = 29.6 N
LONG= 101.8 E
DEPTH= 53 KM
MAGNITUDE= 5.3
SZECHWAN PROVINCE, CHINA

BUB	DE	P	09 44 54.-				7860	70.7	67.1 314.4
-----	----	---	------------	--	--	--	------	------	------------

APR 09
NO DETERMINATION OF EPICENTER

ZUR	UE	P	00 26 57.3						
	E	S	00 27 21.1						

BUB	E	P	00 26 57.5						
	N	S	00 27 20.0						

APR 09
NO DETERMINATION OF EPICENTER

BUB		P	00 27 47.2						
	N	S	00 28 09.8						

ZUR	UE	P	00 27 48.5						
	E	S	00 28 12.3						

APR 09 ERL
H= 04 10 50.7
LAT = 42.2 N
LONG= 84.7 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.9
NORTHERN SINKIANG PROV., CHINA

BUB	DE	P	04 19 58.8				5790	52.1	66.1 303.9
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APR 10 ERL
H= 02 06 53.2
LAT = 28.4 N
LONG= 52.8 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 6.1
SOUTHERN IRAN

APR 10 BCS
H= 02 06 56.0
LAT = 28.5 N
LONG= 52.7 E
SOUTHERN IRAN

ZUR	E	P	02 14 18.-				4350	39.1	102.9 311.2
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APR 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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BUB	DE	P	02 14 18.0				4350	39.2	103.4 311.8
-----	----	---	------------	--	--	--	------	------	-------------

APR 11 ERL
H= 02 21 15.7
LAT = 1.0 N
LONG= 28.3 W
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 6.0
CENTRAL MID-ATLANTIC RIDGE

BUB	DE	P	02 30 56.8				6280	56.5	226.0 29.1
-----	----	---	------------	--	--	--	------	------	------------

APR 11
NO DETERMINATION OF EPICENTER

BUB	E	P	08 40 17.3						
-----	---	---	------------	--	--	--	--	--	--

APR 11 ERL
H= 14 14 15.6
LAT = 42.3 N
LONG= 142.9 E
DEPTH= 60 KM
MAGNITUDE= 5.3
HOKKAIDO, JAPAN REGION

BUB	E	P	14 26 28.-				9080	81.6	32.5 330.8
-----	---	---	------------	--	--	--	------	------	------------

APR 13
NO DETERMINATION OF EPICENTER

ZUR	UI	P	07 57 20.1						
	E	S	07 57 20.3						

APR 13
NO DETERMINATION OF EPICENTER

BUB	DE	P	14 13 11.-						
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APR 13
NO DETERMINATION OF EPICENTER

BUB	E	P	16 05 54.-						
-----	---	---	------------	--	--	--	--	--	--

APR 16 ERL
H= 10 10 03.6
LAT = 47.7 N
LONG= 16.1 E
DEPTH= 18 KM
MAGNITUDE= 4.9
AUSTRIA

APR 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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APR 16 BCS
H= 10 10 05.0
LAT = 47.7 N
LONG= 16.2 E
AUSTRIA

ZUR	UI	P	10 11 20.8				570	5.1	83.2 268.7
-----	----	---	------------	--	--	--	-----	-----	------------

APR 16 ERL
H= 11 04 44.3
LAT = 47.7 N
LONG= 16.0 E
DEPTH= 19 KM
MAGNITUDE= 4.4
AUSTRIA

APR 16 BCS
H= 11 04 46.0
LAT = 47.8 N
LONG= 16.1 E
AUSTRIA

ZUR	UI	P	11 06 01.8				560	5.1	83.2 268.6
-----	----	---	------------	--	--	--	-----	-----	------------

APR 17
NO DETERMINATION OF EPICENTER

ZUR	E	P	15 57 29.7						
	E	S	15 57 31.3						

APR 18 ERL
H= 01 48 57.4
LAT = 21.3 S
LONG= 170.3 E
DEPTH= 118 KM
MAGNITUDE= 5.2
LOYALTY ISLANDS REGION

BUB	E	PKP	02 08 34.4				16650	149.8	35.5 335.2
-----	---	-----	------------	--	--	--	-------	-------	------------

APR 18 BCS
H= 05 51 51.0
LAT = 36.3 N
LONG= 11.2 W
NORTH ATLANTIC OCEAN

APR 1972

APR 1972

STATION COMP. PHASE
ABBREV. SEIS.

TIME
H M S

PER. LOG. S/N
AMP.

DISTANCE AZIMUTH
KM DEG. STAT. EPIC.

APR 18 ERL
H= 05 51 52.8
LAT = 36.4 N
LONG= 11.1 W
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 4.7
NORTH ATLANTIC OCEAN

BUB E P 05 56 08.-

APR 20
NO DETERMINATION OF EPICENTER

BUB DI P 10 23 40.4
S 10 29 42.2

APR 20
NO DETERMINATION OF EPICENTER

BUB DE P 14 41 07.2

APR 20
NO DETERMINATION OF EPICENTER

BUB E P 15 03 47.8
E S 15 03 50.8

APR 21 ERL
H= 01 28 09.5
LAT = 54.0 N
LONG= 166.9 W
DEPTH=103 KM
MAGNITUDE= 5.8
FOX ISLANDS, ALEUTIAN ISLANDS

BUB E P 01 40 01.-

APR 21 ERL
H= 13 25 21.3
LAT = 15.3 S
LONG= 173.7 W
DEPTH=125 KM
MAGNITUDE= 5.6
TONGA ISLANDS

BUB E PKP 13 44 51.-

2070 18.6 239.2 45.9

8730 78.5 357.3 3.1

16410 147.6 4.1 357.1

APR 1972

STATION COMP. PHASE
ABBREV. SEIS.

TIME
H M S

PER. LOG. S/N
AMP.

DISTANCE AZIMUTH
KM DEG. STAT. EPIC.

APR 22 ERL
H= 10 18 02.3
LAT = 46.5 N
LONG= 13.8 E
DEPTH= 38 KM
AUSTRIA

BUB DE P 10 18 59.9

APR 22
NO DETERMINATION OF EPICENTER

BUB E P 10 39 44.2

APR 23 ERL
H= 23 36 33.3
LAT = 17.5 S
LONG= 167.7 E
DEPTH= 17 KM
MAGNITUDE= 4.6
NEW HEBRIDES ISLANDS

BUB E PKP 23 56 10.9

APR 24 ERL
H= 09 57 21.7
LAT = 23.6 N
LONG= 121.6 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 6.0
TAIWAN

BUB E P 10 10 04.-

APR 24
NO DETERMINATION OF EPICENTER

BUB DI P 16 51 50.4
N S 16 51 53.6

APR 24
NO DETERMINATION OF EPICENTER

BUB E P 22 23 28.6
N S 22 23 35.-

APR 25
NO DETERMINATION OF EPICENTER

BUB UI P 14 58 15.6

APR 1972

420 3.8 107.5 231.4

16160 145.3 36.7 335.0

9670 87.0 57.7 321.5

APR 1972

STATION COMP. PHASE
ABBREV. SEIS.

TIME
H M S

PER. LOG. S/N
AMP.

DISTANCE
KM DEG.

AZIMUTH
STAT. EPIC.

S 14 58 18.4

APR 25 ERL
H= 19 30 09.3
LAT = 13.4 N
LONG= 120.3 E
DEPTH= 50 KM
MAGNITUDE= 6.2
MINDORO, PHILIPPINE ISLANDS

10430 94.2 65.0 321.0
10500 94.4 65.1 320.7

BUB E P 19 43 26.-
ZUR E P 19 43 25.-

APR 26
DETERMINATION OF EPICENTER

=== SEE TABLE I ===

BUB E N P 16 29 01.-
16 29 08.-
ZUR E P 16 29 01.-

APR 26
NO DETERMINATION OF EPICENTER

BUB E P 16 44 06.1

APR 27 ERL
H= 01 29 38.2
LAT = 13.5 N
LONG= 120.7 E
DEPTH= 72 KM
MAGNITUDE= 5.4
MINDORO, PHILIPPINE ISLANDS

BUB E P 01 42 51.-

APR 27
NO DETERMINATION OF EPICENTER

BUB E N P 10 57 33.4
10 57 39.5

APR 27
NO DETERMINATION OF EPICENTER

BUB E N P 15 43 18.8
15 43 24.0

APR 1972

STATION COMP. PHASE
ABBREV. SEIS.

TIME
H M S

PER. LOG. S/N
AMP.

DISTANCE
KM DEG.

AZIMUTH
STAT. EPIC.

APR 28
NO DETERMINATION OF EPICENTER

BUB N P 18 06 50.8
18 07 16.8

APR 28 ERL
H= 23 32 10.2
LAT = 5.1 S
LONG= 154.2 E
DEPTH= 409 KM
MAGNITUDE= 6.0
SOLOMON ISLANDS

BUB E PKP 23 50 30.5
ZUR E PKP 23 50 31.0

14270 128.3 45.8 331.0
14300 128.6 46.0 330.6

APR 29 ERL
H= 18 29 38.3
LAT = 34.8 N
LONG= 24.6 E
DEPTH= 47 KM
MAGNITUDE= 5.1
CRETE

APR 29 BCS
H= 18 29 39.0
LAT = 34.7 N
LONG= 24.7 E
CRETE

ZUR E P 18 33 39.9

1930 17.4 130.4 321.0

APR 29
NO DETERMINATION OF EPICENTER

BUB E P 18 46 41.8

APR 30
NO DETERMINATION OF EPICENTER

BUB E P 15 01 47.-

MAY 02
NO DETERMINATION OF EPICENTER

BUB I P 15 56 57.7

MAY 03
NO DETERMINATION OF EPICENTER

MAY 1972

MAY 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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BUB	UI	P	08 44 15.6					
	N	S	08 44 18.5					

MAY 03
NO DETERMINATION OF EPICENTER

BUB	DI	P	10 33 19.3					
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MAY 04
NO DETERMINATION OF EPICENTER

BUB	DE	P	01 16 03.2					
	E	S	01 16 11.8					

MAY 04 ERL
H= 07 48 17.2
LAT = 15.9 S
LONG= 167.5 E
DEPTH= 45 KM
MAGNITUDE= 6.1
NEW HEBRIDES ISLANDS

BUB		PKP	08 07 46.-				15990 143.8	35.9 335.7
ZUR	UE	PKP	08 07 47.2				16030 144.1	36.2 335.4

MAY 04 ERL
H= 21 40 00.9
LAT = 35.1 N
LONG= 23.6 E
DEPTH= 46 KM
MAGNITUDE= 5.9
CRETE

MAY 04 BCS
H= 21 40 03.0
LAT = 35.2 N
LONG= 23.6 E
DEPTH= 35 KM
CRETE

ZUR	UI	P	21 43 51.-				1850 16.6	132.0 321.9
BUB	DI	P	21 43 53.6				1880 16.9	133.0 323.0

MAY 05 ERL
H= 23 16 27.9
LAT = 4.2 S
LONG= 152.7 E
DEPTH= 32 KM
MAGNITUDE= 5.6
NEW BRITAIN REGION

MAY 1972

MAY 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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BUB	E	PKP	23 35 30.5				14090 126.7	46.9 330.4
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MAY 07 BCS
H= 14 43 44.0
LAT = 43.1 N
LONG= 17.8 E
YUGOSLAVIA

MAY 07 ERL
H= 14 43 49.9
LAT = 43.3 N
LONG= 17.6 E
DEPTH= 57 KM
MAGNITUDE= 4.4
YUGOSLAVIA

BUB	E	P	14 45 44.-				890 8.0	122.3 308.9
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MAY 08 ERL
H= 09 20 54.5
LAT = 41.6 N
LONG= 23.5 E
DEPTH= 10 KM
MAGNITUDE= 5.0
GREECE-BULGARIA BORDER REGION

MAY 08 BCS
H= 09 20 56.0
LAT = 41.6 N
LONG= 23.7 E
GREECE-BULGARIA BORDER REGION

BUB	UE	P	09 23 53.1				1360 12.2	114.4 305.0
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MAY 08
NO DETERMINATION OF EPICENTER

BUB	E	P	14 38 31.-					
-----	---	---	------------	--	--	--	--	--

MAY 08
NO DETERMINATION OF EPICENTER

BUB	E	P	15 24 57.-					
-----	---	---	------------	--	--	--	--	--

MAY 08 ERL
H= 16 15 16.7
LAT = 19.4 S
LONG= 176.3 W
DEPTH= 71 KM
MAGNITUDE= 5.4
FIJI ISLANDS REGION

MAY 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
BUB	E	PKP	16 35 06.-				16840 151.5	9.8 353.0
MAY 08 NO DETERMINATION OF EPICENTER								
BUB	E	P	16 25 34.-					
MAY 09 NO DETERMINATION OF EPICENTER								
BUB	E	P	11 06 02.6					
MAY 09 ERL H= 12 20 22.6 LAT = 17.8 S LONG= 173.9 W DEPTH=568 KM MAGNITUDE= 5.8 FIJI ISLANDS REGION								
BUB	E	PKP	12 39 03.-				16620 149.5	14.1 350.0
ZUR	E	PKP	12 39 04.-				16670 149.9	14.2 349.9
MAY 09 ERL H= 13 09 59.0 LAT = 15.6 S LONG= 175.0 W DEPTH=267 KM MAGNITUDE= 5.4 TONGA ISLANDS								
BUB	E	PKP	13 29 06.-				16430 147.8	6.6 355.4
MAY 09 NO DETERMINATION OF EPICENTER								
BUB	I	P	14 15 32.4					
MAY 09 NO DETERMINATION OF EPICENTER								
BUB	E	P	18 16 28.2					
	N	S	18 16 48.5					

MAY 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
MAY 11 ERL H= 00 44 58.1 LAT = 42.8 N LONG= 144.5 E DEPTH= 68 KM MAGNITUDE= 5.5 HOKKAIDO, JAPAN REGION								
BUB	DE	P	00 57 11.3				9100 81.8	31.2 331.7
MAY 11 ERL H= 21 18 29.6 LAT = 27.6 S LONG= 179.1 W DEPTH=387 KM MAGNITUDE= 5.8 KERMADEC ISLANDS REGION								
BUB	E	PKP	21 37 41.3				17680 159.0	19.5 345.3
MAY 12 ERL H= 01 21 28.7 LAT = 24.6 N LONG= 121.6 E DEPTH= 62 KM MAGNITUDE= 5.3 TAIWAN								
BUB	E	P	01 34 05.-				9590 86.2	57.1 321.5
MAY 12 NO DETERMINATION OF EPICENTER								
ZUR	DE	P	14 13 21.6					
		S	14 13 24.8					
MAY 12 NO DETERMINATION OF EPICENTER								
BUB	DI	P	16 09 42.3					
	N	S	16 09 49.0					
MAY 13 ERL H= 16 37 13.3 LAT = 45.1 N LONG= 28.1 W DEPTH= 33 KM (NORMAL) MAGNITUDE= 4.8 NORTH ATLANTIC RIDGE								
BUB	E	P	16 45 48.-				2820 25.3	277.7 70.7

MAY 1972

STATION COMP. PHASE TIME
ABBREV. SEIS. H M S

PER. LOG. S/N
AMP.

DISTANCE AZIMUTH
KM DEG. STAT. EPIC.

MAY 14 ERL
H= 12 01 16.1
LAT = 40.3 N
LONG= 143.4 E
DEPTH= 12 KM
MAGNITUDE= 5.3
OFF EAST COAST OF HONSHU, JAPAN

BUB DI P 12 13 45.9

9290 83.6 33.1 331.2

MAY 15 ERL
H= 09 32 54.6
LAT = 23.6 S
LONG= 179.9 E
DEPTH=553 KM
MAGNITUDE= 5.6
SOUTH OF FIJI ISLANDS

BUB E PKP 09 51 44.-

17230 154.9 19.1 346.0

MAY 15
NO DETERMINATION OF EPICENTER

ZUR I P 12 07 21.0

MAY 15
NO DETERMINATION OF EPICENTER

BUB I P 15 23 25.4

MAY 16
NO DETERMINATION OF EPICENTER

BUB E P 09 18 09.8
N S 09 18 16.6

MAY 16
NO DETERMINATION OF EPICENTER

BUB UI P 17 15 10.6
N S 17 15 21.2

MAY 17 BCS
H= 08 13 49.5
LAT = 48.3 N
LONG= 9.0 E
GERMANY

MAY 1972

MAY 1972

STATION COMP. PHASE TIME
ABBREV. SEIS. H M S

PER. LOG. S/N
AMP.

DISTANCE AZIMUTH
KM DEG. STAT. EPIC.

MAY 17 ERL
H= 08 13 50.6
LAT = 48.4 N
LONG= 9.9 E
DEPTH= 33 KM (NORMAL)
GERMANY

=== SEE TABLE I ===

BUB E P 08 14 01.5
E S 08 14 09.8

70 0.6 27.6 208.0

ZUR DI P 08 14 08.8
E S 08 14 21.6

110 1.0 18.1 198.5

MAY 17
NO DETERMINATION OF EPICENTER

BUB I P 09 21 47.2
E S 09 21 55.8

MAY 17
NO DETERMINATION OF EPICENTER

BUB E P 14 03 59.2

MAY 18
NO DETERMINATION OF EPICENTER

BUB E P 00 09 42.2
N S 00 09 50.3

MAY 18 BCS
H= 08 11 01.5
LAT = 48.3 N
LONG= 9.1 E
GERMANY

MAY 18 ERL
H= 08 11 02.0
LAT = 48.3 N
LONG= 9.0 E
DEPTH= 33 KM (NORMAL)
GERMANY

=== SEE TABLE I ===

BUB I P 08 11 12.8

70 0.6 29.7 210.1

MAY 1972

STATION COMP. PHASE
ABBREV. SEIS.

TIME
H M S

PER.

LOG.
AMP.

S/N

DISTANCE
KM DEG.

AZIMUTH
STAT. EPIC.

ZUR I P 08 11 20.3
S 08 11 33.2

MAY 18
NO DETERMINATION OF EPICENTER

ZUR UI P 08 26 35.7

MAY 18
NO DETERMINATION OF EPICENTER

BUB E P 09 28 17.-
E S 09 28 25.2

MAY 18
NO DETERMINATION OF EPICENTER

BUB E P 14 47 20.0
N S 14 47 32.6

MAY 18
NO DETERMINATION OF EPICENTER

BUB UE P 15 02 42.6
N S 15 02 48.2

MAY 18
NO DETERMINATION OF EPICENTER

BUB DE P 15 12 33.1
S 15 12 38.6

MAY 18
NO DETERMINATION OF EPICENTER

BUB E P 16 30 21.9
N S 16 30 22.6

MAY 19
NO DETERMINATION OF EPICENTER

BUB N P 06 27 12.-
S 06 27 20.3

MAY 1972

110 1.0 19.4 199.8

MAY 1972

STATION COMP. PHASE
ABBREV. SEIS.

TIME
H M S

PER.

LOG.
AMP.

S/N

DISTANCE
KM DEG.

AZIMUTH
STAT. EPIC.

MAY 19 BCS
H= 10 58 12.6
LAT = 43.2 N
LONG= 17.7 E
YUGOSLAVIA

BUB E P 11 00 06.-

MAY 19
NO DETERMINATION OF EPICENTER

BUB P 14 03 47.2
E S 14 03 50.5

MAY 19 BCS
H= 14 55 22.0
LAT = 44.3 N
LONG= 7.6 E
NORTHERN ITALY

BUB E P 14 56 16.-

MAY 19
NO DETERMINATION OF EPICENTER

BUB E P 16 02 08.-
N S 16 02 21.-

MAY 20
NO DETERMINATION OF EPICENTER

BUB E P 03 51 38.-
N S 03 51 46.4

MAY 20 ERL
H= 21 18 51.2
LAT = 49.4 N
LONG= 128.4 W
DEPTH= 28 KM
MAGNITUDE= 4.7
VANCOUVER ISLAND REGION

BUB DI P 21 30 23.2
N S 21 30 32.2

MAY 1972

870 7.9 122.3 308.8

390 3.5 191.8 11.1

8490 76.3 332.7 28.3

MAY 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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MAY 22 ERL
H= 06 04 00.1
LAT = 16.6 N
LONG= 122.3 E
DEPTH= 34 KM
MAGNITUDE= 5.7
LUZON, PHILIPPINE ISLANDS

BUB	E	P	06 17 10.5				10330 92.9	61.5 321.8
ZUR	E	P	06 17 11.-				10350 93.1	61.5 321.4

MAY 22 ERL
H= 20 45 57.3
LAT = 17.7 S
LONG= 175.2 W
DEPTH=227 KM
MAGNITUDE= 6.2
TONGA ISLANDS

BUB	UI	PKP	21 05 15.5				16660 149.9	7.2 354.9
ZUR	DI	PKP	21 05 17.0				16710 150.2	7.3 354.8

MAY 23
NO DETERMINATION OF EPICENTER

BUB	DI	P	08 13 13.1					
	E	S	08 13 16.2					

MAY 23
NO DETERMINATION OF EPICENTER

BUB	E	P	13 09 22.2					
	N	S	13 09 27.1					

MAY 24 ERL
H= 11 26 01.1
LAT = 22.3 S
LONG= 171.2 E
DEPTH= 38 KM
MAGNITUDE= 5.6
LOYALTY ISLANDS REGION

BUB	E	PKP	11 45 48.-				16800 151.0	34.9 335.4
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MAY 24
NO DETERMINATION OF EPICENTER

ZUR	I	P	13 57 34.8					
		S	13 57 36.2					

MAY 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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MAY 24
NO DETERMINATION OF EPICENTER

BUB	E	P	16 58 42.5					
	N	S	16 58 46.2					

MAY 25
NO DETERMINATION OF EPICENTER

BUB	E	P	11 07 49.-					
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MAY 25
NO DETERMINATION OF EPICENTER

BUB	UI	P	15 55 40.8					
-----	----	---	------------	--	--	--	--	--

MAY 25
NO DETERMINATION OF EPICENTER

BUB	DI	P	16 07 05.0					
	E	S	16 07 07.0					

MAY 25
NO DETERMINATION OF EPICENTER

BUB	E	P	16 11 17.8					
-----	---	---	------------	--	--	--	--	--

MAY 25
NO DETERMINATION OF EPICENTER

BUB	DI	P	17 00 33.2					
-----	----	---	------------	--	--	--	--	--

MAY 26
NO DETERMINATION OF EPICENTER

BUB	E	P	09 11 40.-					
-----	---	---	------------	--	--	--	--	--

MAY 26
NO DETERMINATION OF EPICENTER

BUB	I	P	13 18 49.4					
-----	---	---	------------	--	--	--	--	--

MAY 26
NO DETERMINATION OF EPICENTER

ZUR	UI	P	14 02 24.8					
		S	14 02 26.2					

MAY 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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MAY 26
NO DETERMINATION OF EPICENTER

BUB	E	P	16 17 18.6					
-----	---	---	------------	--	--	--	--	--

MAY 27 ERL
H= 04 06 50.4
LAT = 55.0 N
LONG= 156.3 E
DEPTH=409 KM
MAGNITUDE= 5.7
KAMCHATKA

BUB	E	P	04 17 43.-				8240 74.1	18.7 338.0
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MAY 28 ERL
H= 01 55 21.9
LAT = 11.0 S
LONG= 117.1 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 6.3
SOUTH OF SUMBAWA ISLAND

BUB	E	PKP	02 13 35.-				12290 110.5	83.8 316.9
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MAY 28 ERL
H= 03 14 36.3
LAT = 38.9 N
LONG= 30.0 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 4.7
TURKEY

MAY 28 BCS
H= 03 14 40.0
LAT = 38.9 N
LONG= 29.8 E
TURKEY

BUB	E	P	03 18 43.-				1980 17.8	111.7 306.5
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MAY 28 ERL
H= 18 12 36.2
LAT = 18.0 S
LONG= 179.4 W
DEPTH=621 KM
MAGNITUDE= 5.1
FIJI ISLANDS REGION

BUB	E	PKP	18 31 12.2				16640 149.6	15.2 349.3
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MAY 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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MAY 29
NO DETERMINATION OF EPICENTER

BUB	DI	P	14 41 26.2					
-----	----	---	------------	--	--	--	--	--

MAY 29
NO DETERMINATION OF EPICENTER

BUB	E	P	15 26 20.8					
-----	---	---	------------	--	--	--	--	--

MAY 29
NO DETERMINATION OF EPICENTER

BUB	E	P	17 35 38.2					
-----	---	---	------------	--	--	--	--	--

MAY 29
NO DETERMINATION OF EPICENTER

BUB		P	18 37 37.5					
-----	--	---	------------	--	--	--	--	--

MAY 29 BCS
H= 19 58 42.0
LAT = 43.6 N
LONG= 13.8 E
CENTRAL ITALY

MAY 29 ERL
H= 19 58 43.8
LAT = 43.7 N
LONG= 13.9 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 4.3
CENTRAL ITALY

BUB	UE	P	20 00 06.0				610 5.5	136.8 320.5
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MAY 30 ERL
H= 00 49 19.8
LAT = 7.2 S
LONG= 128.7 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.5
BANDA SEA

BUB	E	P	01 02 45.6				12820 115.3	71.7 319.3
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MAY 30
NO DETERMINATION OF EPICENTER

BUB	E	P	07 55 46.2					
	N	S	07 55 51.3					

MAY 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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MAY 30
NO DETERMINATION OF EPICENTER

BUB	DE	P	15 25 22.9						
	E	S	15 25 29.1						

MAY 30 ERL
H= 23 56 21.5
LAT = 43.8 N
LONG= 13.4 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 4.1
CENTRAL ITALY

MAY 30 BCS
H= 23 56 22.0
LAT = 43.7 N
LONG= 13.5 E
CENTRAL ITALY

BUB	E	P	00 05 38.-						
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MAY 31
NO DETERMINATION OF EPICENTER

ZUR	I	P	08 27 45.8						
	N	S	08 27 47.3						

MAY 31 BCS
H= 08 59 05.0
LAT = 49.1 N
LONG= 6.7 E
FRANCE

BUB	E	P	08 59 38.-						
-----	---	---	------------	--	--	--	--	--	--

MAY 31 BCS
H= 11 41 44.0
LAT = 47.7 N
LONG= 7.7 E
GERMANY

BUB	DI	P	11 41 55.4						
	E	S	11 42 03.4						
ZUR	I	P	11 41 58.0						
	N	S	11 42 07.0						

580 5.2 138.0 321.5

210 1.9 317.6 136.1

70 0.6 265.8 85.1

80 0.7 299.4 118.7

MAY 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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MAY 31
NO DETERMINATION OF EPICENTER

ZUR	DI	P	13 39 29.3						
	N	S	13 39 29.5						

MAY 31
NO DETERMINATION OF EPICENTER

BUB	DI	P	15 05 54.5						
	N	S	15 05 59.0						

MAY 31
NO DETERMINATION OF EPICENTER

BUB	E	P	17 05 04.-						
	N	S	17 05 19.-						

JUN 01
NO DETERMINATION OF EPICENTER

BUB	E	P	14 27 19.-						
	N	S	14 27 29.8						

JUN 01
NO DETERMINATION OF EPICENTER

BUB	DI	P	15 55 08.6						
	N	S	15 55 10.1						

JUN 02
DETERMINATION OF EPICENTER

=== SEE TABLE I ===

LIN		P	08 51 00.-						
		SPECIAL	08 51 11.-						

ZUR	I	P	08 51 48.3						
	N	S	08 51 49.7						

JUN 02
NO DETERMINATION OF EPICENTER

BUB	DI	P	15 58 34.7						
	N	S	15 58 47.4						

JUN 02
NO DETERMINATION OF EPICENTER

BUB	DI	P	16 08 47.9						
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JUN 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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N S 16 09 01.8

JUN 02 ERL
H= 22 50 47.4
LAT = 3.6 N
LONG= 96.7 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.5
NORTHERN SUMATRA

BUB E P 23 03 21.-

JUN 05 ERL
H= 10 44 59.2
LAT = 37.8 N
LONG= 21.4 E
DEPTH= 69 KM
MAGNITUDE= 4.2
SOUTHERN GREECE

JUN 05 BCS
H= 10 45 04.0
LAT = 37.9 N
LONG= 21.6 E
DEPTH= 90 KM
SOUTHERN GREECE

BUB E P 10 48 19.-

JUN 05
NO DETERMINATION OF EPICENTER

BUB E P 15 17 32.-
N S 15 17 43.-

JUN 05
NO DETERMINATION OF EPICENTER

BUB DI P 15 30 20.2

JUN 05
NO DETERMINATION OF EPICENTER

BUB E P 15 59 19.-
S 15 59 30.-

JUN 07
NO DETERMINATION OF EPICENTER

ZUR DI P 07 47 51.0
N S 07 47 52.5

JUN 1972

DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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9580 86.1 89.0 317.5

1510 13.6 132.1 320.8

JUN 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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JUN 07
NO DETERMINATION OF EPICENTER

ZUR E P 15 33 33.8
E S 15 33 55.8

JUN 07
NO DETERMINATION OF EPICENTER

BUB I P 17 37 03.0
N S 17 37 13.2

JUN 08 ERL
H= 09 14 08.3
LAT = 21.1 N
LONG= 120.2 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.4
TAIWAN REGION

BUB UE P 09 26 57.-

JUN 08
NO DETERMINATION OF EPICENTER

ZUR E P 09 15 01.-
E S 09 15 23.0

BUB E P 09 15 02.-
E S 09 15 24.1

JUN 08 BCS
H= 11 48 22.0
LAT = 47.5 N
LONG= 10.8 E
AUSTRIA

BUB UI P 11 48 49.1
E S 11 49 10.9

ZUR DI P 11 48 48.3
E S 11 49 08.2

JUN 08 ERL
H= 17 57 38.6
LAT = 22.6 S
LONG= 66.2 W
DEPTH= 259 KM
MAGNITUDE= 5.4
JUJUY PROVINCE, ARGENTINA

JUN 1972

DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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9310 88.2 60.3 321.1

170 1.5 98.7 280.3

170 1.5 84.2 265.8

JUN 1972

JUN 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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BUB	DI	P	18 10 40.8				10760	96.8	243.9 41.0
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JUN 08 ERL
H= 18 53 41.7
LAT = 30.5 S
LONG= 71.8 W
DEPTH= 39 KM
MAGNITUDE= 6.2
NEAR COAST OF CENTRAL CHILE

BUB	E	P	19 07 48.-				11780	106.0	242.3 43.8
-----	---	---	------------	--	--	--	-------	-------	------------

JUN 09 ERL
H= 07 42 19.9
LAT = 34.8 N
LONG= 26.5 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 4.9
CRETE

JUN 09 BCS
H= 07 42 28.0
LAT = 34.9 N
LONG= 26.5 E
DEPTH= 90 KM
CRETE

ZUR	E	P	07 46 33.-				2040	18.4	126.5 318.3
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JUN 09
NO DETERMINATION OF EPICENTER

ZUR	I	P	09 47 01.0						
	E	S	09 47 01.7						

JUN 11 ERL
H= 16 41 00.9
LAT = 3.9 N
LONG= 124.3 E
DEPTH= 325 KM (GEOPHYSICIST)
MAGNITUDE= 5.8
CELEBES SEA

BUB	E	P	16 54 29.-						
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ZUR	E	P	16 54 30.-						
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JUN 11
DETERMINATION OF EPICENTER

=== SEE TABLE I ===

11560	104.0	67.9	321.2
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11580	104.1	67.9	320.8
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JUN 1972

JUN 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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BUB	E	P	23 18 26.1						
	N	S	23 18 39.0						

JUN 12
NO DETERMINATION OF EPICENTER

BUB	I	P	00 30 26.3						
	N	S	00 30 33.6						

JUN 12
NO DETERMINATION OF EPICENTER

BUB	I	P	01 26 21.3						
	N	S	01 26 28.5						

JUN 12
NO DETERMINATION OF EPICENTER

BUB	UI	P	01 26 51.0						
	N	S	01 26 58.4						

JUN 12
NO DETERMINATION OF EPICENTER

BUB	DI	P	03 33 39.5						
	N	S	03 33 47.0						

JUN 12
NO DETERMINATION OF EPICENTER

BUB	DI	P	06 22 43.9						
	N	S	06 22 51.2						

JUN 12 ERL
H= 09 56 22.6
LAT = 5.2 N
LONG= 78.2 W
DEPTH= 27 KM
MAGNITUDE= 5.6
SOUTH OF PANAMA

ZUR	UE	P	10 08 52.-						
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BUB	E	P	10 08 52.-						
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9340	84.0	271.2	43.0
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9340	84.0	271.1	42.6
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JUN 1972

JUN 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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JUN 12 BCS
H= 13 33 54.0
LAT = 32.9 N
LONG= 46.8 E
IRAN-IRAQ BORDER REGION

JUN 12 ERL
H= 13 34 00.7
LAT = 33.1 N
LONG= 46.3 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.4
IRAN-IRAQ BORDER REGION

BUB	E	P	13 40 23.2				3590 32.3	103.3 308.7
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JUN 12 ERL
H= 19 47 37.2
LAT = 53.3 N
LONG= 166.8 W
DEPTH= 44 KM
MAGNITUDE= 5.8
FOX ISLANDS, ALEUTIAN ISLANDS

BUB	E	P	19 59 39.2				8810 79.2	357.2 3.2
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JUN 13 ERL
H= 00 55 37.3
LAT = 33.1 N
LONG= 46.3 E
DEPTH= 27 KM
MAGNITUDE= 5.1
IRAN-IRAQ BORDER REGION

JUN 13 BCS
H= 00 55 38.0
LAT = 33.0 N
LONG= 46.7 E
IRAN-IRAQ BORDER REGION

BUB	UE	P	01 02 01.3				3540 31.8	103.6 308.6
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JUN 13
NO DETERMINATION OF EPICENTER

ZUR	I	P	07 10 27.0					
	N	S	07 10 28.3					

JUN 13
NO DETERMINATION OF EPICENTER

BUB	E	P	15 23 37.4					
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JUN 1972

JUN 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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	E	S	15 23 43.0					
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JUN 14 BCS
H= 04 34 28.0
LAT = 33.0 N
LONG= 46.6 E
IRAN-IRAQ BORDER REGION

JUN 14 ERL
H= 04 34 28.1
LAT = 33.0 N
LONG= 46.1 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.3
IRAN-IRAQ BORDER REGION

BUB	DI	P	04 40 50.7				3570 32.1	103.4 308.6
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JUN 14
NO DETERMINATION OF EPICENTER

ZUR	I	P	07 51 39.5					
-----	---	---	------------	--	--	--	--	--

JUN 14
NO DETERMINATION OF EPICENTER

BUB	E	P	11 01 33.5					
	N	S	11 01 42.6					

JUN 14 ERL
H= 18 55 53.3
LAT = 43.7 N
LONG= 13.4 E
DEPTH= 14 KM
MAGNITUDE= 4.9
CENTRAL ITALY

JUN 14 BCS
H= 18 55 56.0
LAT = 43.7 N
LONG= 13.5 E
CENTRAL ITALY

ZUR	E	P	18 57 11.4				560 5.0	135.2 318.7
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BUB	E	P	18 57 13.8				590 5.3	138.3 321.7
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JUN 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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JUN 14 ERL
H= 21 00 59.6
LAT = 43.7 N
LONG= 13.5 E
DEPTH= 6 KM
MAGNITUDE= 4.7
CENTRAL ITALY

JUN 14 BCS
H= 21 01 05.0
LAT = 43.7 N
LONG= 13.5 E
CENTRAL ITALY

ZUR	E	P	21 02 19.-				560	5.1	135.3 318.8
-----	---	---	------------	--	--	--	-----	-----	-------------

BUB	E	P	21 02 22.-				590	5.3	138.3 321.8
-----	---	---	------------	--	--	--	-----	-----	-------------

JUN 15 ERL
H= 00 33 23.6
LAT = 38.3 N
LONG= 22.2 E
DEPTH= 26 KM
MAGNITUDE= 4.9
GREECE

JUN 15 BCS
H= 00 33 26.0
LAT = 38.3 N
LONG= 22.3 E
GREECE

ZUR	E	P	00 36 35.-				1490	13.4	127.2 316.5
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BUB	E	P	00 36 37.-				1520	13.7	128.5 317.8
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JUN 15
NO DETERMINATION OF EPICENTER

ZUR	I	P	06 24 43.1						
	E	S	06 24 46.6						

JUN 15
NO DETERMINATION OF EPICENTER

BUB	DI	P	15 32 45.8						
	N	S	15 32 49.5						

JUN 15
NO DETERMINATION OF EPICENTER

BUB	DI	P	16 36 22.8						
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JUN 1972

JUN 1972

60

JUN 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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	N	S	16 36 27.9						
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JUN 16
NO DETERMINATION OF EPICENTER

BUB	DI	P	14 00 59.4						
	E	S	14 01 04.6						

JUN 17 BCS
H= 09 00 48.0
LAT = 46.3 N
LONG= 12.6 E
NORTHERN ITALY

ZUR	E	P	09 01 44.0				330	3.0	109.7 292.6
	E	S	09 02 21.-						

BUB	I	P	09 01 38.5				340	3.1	116.5 299.4
	E	S	09 02 26.-						

JUN 17 ERL
H= 09 02 47.5
LAT = 48.3 N
LONG= 14.5 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 4.6
AUSTRIA

JUN 17 BCS
H= 09 02 48.0
LAT = 48.5 N
LONG= 14.6 E
AUSTRIA

BUB		P	09 02 48.4				440	4.0	79.5 263.8
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ZUR	DI	P	09 02 50.0				450	4.1	74.2 258.6
	E	S	09 03 35.6						

JUN 18 BCS
H= 23 32 49.0
LAT = 48.6 N
LONG= 14.6 E
AUSTRIA

BUB	E	P	23 33 48.8				460	4.1	75.8 260.3
	N	S	23 34 33.-						

JUN 1972

JUN 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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JUN 19 BCS
H= 04 09 50.0
LAT = 44.4 N
LONG= 6.4 E
FRANCE

JUN 19 ERL
H= 04 09 50.1
LAT = 44.3 N
LONG= 6.4 E
DEPTH= 85 KM
FRANCE

ZUR	E	P	04 10 56.-				370	3.3	207.9 26.4
	E	S	04 11 39.-						
BUB	E	P	04 10 52.3				410	3.7	205.4 23.8
	N	S	04 11 31.-						

JUN 20
NO DETERMINATION OF EPICENTER

ZUR	I	P	13 06 12.1						
	E	S	13 06 13.5						

JUN 21
NO DETERMINATION OF EPICENTER

BUB	I	P	01 24 44.7						
	E	S	01 24 52.1						

JUN 21
NO DETERMINATION OF EPICENTER

ZUR	I	P	10 52 43.9						
	N	S	10 52 45.4						

JUN 21 ERL
H= 15 06 53.3
LAT = 43.8 N
LONG= 13.3 E
DEPTH= 4 KM
MAGNITUDE= 4.4
CENTRAL ITALY

JUN 21 BCS
H= 15 06 55.0
LAT = 43.9 N
LONG= 13.2 E
CENTRAL ITALY

JUN 1972

JUN 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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BUB	UE	P	15 08 13.6				570	5.1	138.7 322.0
	N	S	15 09 12.-						

JUN 23
NO DETERMINATION OF EPICENTER

ZUR	I	P	09 59 38.5						
	E	S	09 59 40.0						

JUN 23
NO DETERMINATION OF EPICENTER

BUB	E	P	15 31 18.-						
	N	S	15 31 31.-						

JUN 24 BCS
H= 07 17 54.0
LAT = 43.7 N
LONG= 16.9 E
YUGOSLAVIA

JUN 24 ERL
H= 07 17 55.5
LAT = 43.7 N
LONG= 16.9 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.3
YUGOSLAVIA

ZUR	E	P	07 19 37.6				770	6.9	119.1 305.0
BUB	E	P	07 19 39.-				790	7.1	121.8 307.8

JUN 24 ERL
H= 15 29 22.2
LAT = 36.2 N
LONG= 69.7 E
DEPTH= 47 KM
MAGNITUDE= 6.0
HINDU KUSH REGION

BUB	E	P	15 37 37.-				5080	45.7	81.3 304.4
ZUR	DE	P	15 37 40.0				5090	45.8	80.9 303.9

JUN 25 BCS
H= 17 10 42.0
LAT = 44.5 N
LONG= 10.7 E
NORTHERN ITALY

JUN 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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JUN 25 ERL
H= 17 10 43.1
LAT = 44.5 N
LONG= 10.5 E
DEPTH= 17 KM
MAGNITUDE= 4.3
NORTHERN ITALY

ZUR	E	P	17 11 38.-				360 3.2	152.0 333.5
	E	S	17 12 11.-					
BUB	UI	P	17 11 38.3				400 3.6	155.1 336.6

JUN 26
NO DETERMINATION OF EPICENTER

BUB	DI	P	06 19 19.8					
	E	S	06 19 23.5					

JUN 27
NO DETERMINATION OF EPICENTER

BUB	I	P	12 22 39.7					
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JUN 28 ERL
H= 01 43 56.5
LAT = 43.0 N
LONG= 20.5 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 4.9
YUGOSLAVIA

JUN 28 BCS
H= 01 44 00.0
LAT = 43.0 N
LONG= 20.5 E
YUGOSLAVIA

BUB	E	P	01 46 15.-				1070 9.6	115.0 303.5
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JUN 28 ERL
H= 09 49 34.9
LAT = 27.6 N
LONG= 33.8 E
DEPTH= 15 KM
MAGNITUDE= 5.6
UNITED ARAB REPUBLIC

JUN 1972

JUN 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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JUN 28 BCS
H= 09 49 41.0
LAT = 27.6 N
LONG= 33.6 E
DEPTH= 60 KM
UNITED ARAB REPUBLIC

BUB	E	P	09 55 26.-				3120 28.1	126.7 322.4
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JUN 28 BCS
H= 17 17 29.0
LAT = 46.1 N
LONG= 7.1 E
SWITZERLAND

=== SEE TABLE I ===

BUB	E	P	17 18 07.-				220 1.9	212.5 31.4
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JUN 29
NO DETERMINATION OF EPICENTER

BUB	E	P	17 14 17.-					
-----	---	---	------------	--	--	--	--	--

JUL 01
DETERMINATION OF EPICENTER

=== SEE TABLE I ===

LIN		P	04 47 00.-					
		SPECIAL	04 47 05.5					
BUB	E	P	04 47 47.9					
	N	S	04 48 01.2					

JUL 01
DETERMINATION OF EPICENTER

=== SEE TABLE I ===

LIN		P	14 07 00.-					
		SPECIAL	14 07 05.5					
BUB	UE	P	14 07 58.4					
	N	S	14 08 11.6					

JUL 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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JUL 02 BCS
H= 12 56 03.0
LAT = 30.1 N
LONG= 50.8 E
IRAN

JUL 02 ERL
H= 12 56 06.7
LAT = 30.1 N
LONG= 50.8 E
DEPTH= 31 KM
MAGNITUDE= 5.4
IRAN

ZUR	DI	P	13 03 12.-				4080 36.7	102.7 310.1
BUB	E	P	13 03 11.-				4080 36.7	103.2 310.7

JUL 02
NO DETERMINATION OF EPICENTER

BUB	DI	P	13 22 58.1					
	N	S	13 23 25.3					

JUL 04
NO DETERMINATION OF EPICENTER

BUB	DI	P	08 56 48.0					
	N	S	08 56 56.5					
ZUR	DI	P	08 56 55.8					
	E	S	08 57 08.0					
BUB	UI	P	08 57 44.6					
	N	S	08 57 53.2					
ZUR	UI	P	08 57 52.5					
	E	S	08 58 04.6					

JUL 04
NO DETERMINATION OF EPICENTER

BUB	UE	P	10 57 06.0					
	E	S	10 57 18.6					
ZUR	E	P	10 57 16.-					
	E	S	10 57 24.-					

JUL 04
NO DETERMINATION OF EPICENTER

BUB	UI	P	15 09 21.2					
	N	S	15 09 26.5					

JUL 1972

JUL 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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JUL 04
NO DETERMINATION OF EPICENTER

BUB	DI	P	16 16 27.6					
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JUL 05
NO DETERMINATION OF EPICENTER

BUB	I	P	09 36 00.8					
	N	S	09 36 02.5					

JUL 05 ERL
H= 10 16 38.4
LAT = 49.5 N
LONG= 127.2 W
DEPTH= 27 KM
MAGNITUDE= 5.8
VANCOUVER ISLAND REGION

BUB	E	P	10 28 23.-				8430 75.8	332.1 29.0
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JUL 05
NO DETERMINATION OF EPICENTER

BUB	DI	P	15 44 12.6					
	N	S	15 44 22.9					

JUL 06
NO DETERMINATION OF EPICENTER

BUB	UI	P	15 13 08.6					
	E	S	15 13 13.7					

JUL 07
NO DETERMINATION OF EPICENTER

BUB	DI	P	11 07 33.8					
	E	S	11 07 41.9					

JUL 07
NO DETERMINATION OF EPICENTER

BUB	I	P	15 01 38.3					
	E	S	15 01 43.8					

JUL 07
NO DETERMINATION OF EPICENTER

BUB	DI	P	17 07 37.3					
	E	S	17 07 42.5					

JUL 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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JUL 03 BCS
H= 03 00 07.0
LAT = 44.3 N
LONG= 9.8 E
NORTHERN ITALY

BUB	DI	P	03 01 00.7						
	E	S	03 01 38.2						

JUL 08 ERL
H= 06 49 22.8
LAT = 36.3 N
LONG= 71.4 E
DEPTH=121 KM
MAGNITUDE= 5.6
AFGHANISTAN-USSR BORDER REGION

BUB	E	P	06 57 41.-						
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JUL 09
NO DETERMINATION OF EPICENTER

BUB	UI	P	18 28 23.2						
	E	S	18 28 42.6						

JUL 10
NO DETERMINATION OF EPICENTER

BUB	UI	P	07 36 50.2						
	E	S	07 37 11.6						

JUL 10
DETERMINATION OF EPICENTER

=== SEE TABLE I ===

BUB	DI	P	13 16 07.5						
	E	S	13 16 16.-						
ZUR	UI	P	13 16 07.8						
		S	13 16 16.5						

JUL 12
NO DETERMINATION OF EPICENTER

BUB	E	P	11 34 34.-						
	N	S	11 34 38.5						

JUL 12
NO DETERMINATION OF EPICENTER

JUL 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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BUB	DE	P	14 28 22.8						
	N	S	14 28 26.-						

JUL 13
NO DETERMINATION OF EPICENTER

BUB	DI	P	10 00 13.7						
		S	10 00 14.8						

JUL 13 BCS
H= 22 21 16.0
LAT = 43.7 N
LONG= 13.4 E
CENTRAL ITALY

JUL 13 ERL
H= 22 21 17.0
LAT = 43.8 N
LONG= 13.3 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 4.4
CENTRAL ITALY

BUB	E	P	22 22 33.9						
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JUL 14
NO DETERMINATION OF EPICENTER

BUB	DI	P	00 04 19.3						
	E	S	00 04 27.8						

JUL 16 ERL
H= 00 29 16.6
LAT = 20.9 S
LONG= 178.7 W
DEPTH=600 KM
MAGNITUDE= 5.4
FIJI ISLANDS REGION

ZUR	E	PKP	00 48 06.-						
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JUL 16 ERL
H= 02 46 50.7
LAT = 38.3 N
LONG= 43.3 E
DEPTH= 40 KM
MAGNITUDE= 4.9
TURKEY

JUL 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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							580	5.3	138.6 322.0
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							17000	152.9	15.2 349.0
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JUL 1972

JUL 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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JUL 16 BCS
H= 02 46 56.0
LAT = 38.1 N
LONG= 43.5 E
TURKEY

ZUR	E	P	02 52 29.-				2930 26.8	97.1 301.0
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JUL 17
NO DETERMINATION OF EPICENTER

BUB	DI	P	17 48 12.6					
	E	S	17 48 17.8					

JUL 18
NO DETERMINATION OF EPICENTER

BUB	I	P	10 08 35.3					
	E	S	10 08 47.-					

JUL 19
NO DETERMINATION OF EPICENTER

BUB	DI	P	13 25 03.8					
	E	S	13 25 10.8					

JUL 19
NO DETERMINATION OF EPICENTER

ZUR	E	P	16 27 02.6					
	E	S	16 27 12.6					

BUB	E	P	16 27 03.4					
		S	16 27 14.3					

JUL 21
NO DETERMINATION OF EPICENTER

ZUR	E	P	04 29 46.-					
	E	S	04 30 09.6					

BUB	E	P	04 29 47.8					
	E	S	04 30 10.-					

JUL 21
NO DETERMINATION OF EPICENTER

BUB	E	P	08 00 51.-					
	N	S	08 01 17.-					

JUL 1972

JUL 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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JUL 21
NO DETERMINATION OF EPICENTER

BUB	E	P	15 30 06.-					
	E	S	15 30 19.3					

JUL 23 ERL
H= 19 13 09.0
LAT = 50.1 N
LONG= 129.3 W
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.9
VANCOUVER ISLAND REGION

BUB	E	P	19 24 52.-				8440 75.9	333.6 27.8
ZUR	E	P	19 24 54.-				8480 76.3	333.6 28.0

JUL 26
NO DETERMINATION OF EPICENTER

BUB	E	P	01 33 33.-					
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JUL 26
NO DETERMINATION OF EPICENTER

BUB	E	P	13 38 18.-					
	E	S	13 38 25.2					

JUL 27 ERL
H= 00 08 46.0
LAT = 43.6 N
LONG= 13.4 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 4.4
CENTRAL ITALY

BUB	E	P	00 10 06.8				590 5.3	139.3 322.7
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JUL 27
NO DETERMINATION OF EPICENTER

BUB	E	P	11 05 35.-					
	N	S	11 05 43.4					

JUL 1972

JUL 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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JUL 27
NO DETERMINATION OF EPICENTER

BUB	I	P	15 23 28.8						
	N	S	15 23 34.2						

JUL 28
NO DETERMINATION OF EPICENTER

BUB	E	P	14 28 12.-						
	N	S	14 28 26.1						

JUL 28
NO DETERMINATION OF EPICENTER

BUB	E	P	17 41 12.-						
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JUL 29
NO DETERMINATION OF EPICENTER

ZUR	E	P	17 04 31.-						
BUB	DE	P	17 04 36.5						

JUL 30 ERL
H= 03 01 06.6
LAT = 49.2 N
LONG= 156.2 E
DEPTH= 45 KM
MAGNITUDE= 5.1
KURIL ISLANDS

BUB	E	P	03 13 09.-				8830	79.4	21.0 338.4
ZUR	E	P	03 13 12.-				8870	79.8	20.9 338.3

JUL 30 ERL
H= 21 45 14.1
LAT = 56.8 N
LONG= 135.7 W
DEPTH= 25 KM (GEOPHYSICIST)
MAGNITUDE= 6.5
SOUTHEASTERN ALASKA

BUB	E	P	21 56 39.-				7970	71.6	340.2 24.5
ZUR	E	P	21 56 38.-				8010	72.0	340.3 24.7

JUL 1972

JUL 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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JUL 31 ERL
H= 03 28 30.2
LAT = 30.7 N
LONG= 141.6 E
DEPTH= 36 KM
MAGNITUDE= 5.7
SOUTH OF HONSHU, JAPAN

BUB	E	P	03 41 29.-				10150	91.3	39.0 330.4
ZUR	E	P	03 41 34.-				10180	91.6	39.0 330.2

AUG 01
NO DETERMINATION OF EPICENTER

BUB	E	P	12 32 55.2						
	N	S	12 33 06.3						

AUG 02
NO DETERMINATION OF EPICENTER

BUB	DE	P	11 08 31.-						
	N	S	11 08 39.-						

AUG 02
NO DETERMINATION OF EPICENTER

BUB	DI	P	11 26 30.2						
	N	S	11 26 39.8						

AUG 02
NO DETERMINATION OF EPICENTER

ZUR	E	P	19 11 30.-						
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AUG 02 ERL
H= 21 38 50.4
LAT = 56.1 N
LONG= 163.2 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.6
NEAR EAST COAST OF KAMCHATKA

BUB	E	P	21 50 27.-				3270	74.4	14.5 342.5
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AUG 03
DETERMINATION OF EPICENTER

=== SEE TABLE I ===

BUB	E	P	03 53 43.8						
	N	S	03 53 55.8						

AUG 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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AUG 03
DETERMINATION OF EPICENTER

=== SEE TABLE I ===

BUB	E	P	03 54 27.4						
	N	S	03 54 39.-						

AUG 03 ERL
H= 04 40 54.9
LAT = 51.2 N
LONG= 178.1 W
DEPTH= 49 KM
MAGNITUDE= 5.8
ANDREANOF ISLANDS, ALEUTIAN IS.

BUB	E	P	04 53 07.-				9040	81.3	4.3 355.4
ZUR	E	P	04 53 10.-				9080	81.6	4.3 355.4

AUG 03
NO DETERMINATION OF EPICENTER

BUB	E	P	17 38 11.1						
	N	S	17 38 21.3						

AUG 03
NO DETERMINATION OF EPICENTER

BUB	E	P	19 51 47.2						
	N	S	19 52 05.-						

AUG 04 ERL
H= 11 38 08.3
LAT = 56.2 N
LONG= 135.3 W
DEPTH= 20 KM
MAGNITUDE= 5.6
SOUTHEASTERN ALASKA

BUB	E	P	11 50 32.-				3020	72.1	339.8 24.7
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AUG 04 ERL
H= 17 51 12.9
LAT = 49.2 N
LONG= 156.1 E
DEPTH= 54 KM
MAGNITUDE= 5.7
KURIL ISLANDS

BUB	E	P	18 03 15.-				3830	79.4	21.0 338.3
ZUR	UI	P	18 03 17.6				8870	79.8	21.0 338.2

AUG 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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AUG 05 BCS
H= 01 14 02.0
LAT = 46.1 N
LONG= 7.6 E
SWITZERLAND

=== SEE TABLE I ===

LIN		P	01 14 10.-				140	1.2	232.0 50.9
		SPECIAL	01 14 26.-						
ZUR	DI	P	01 14 31.0				160	1.4	208.3 27.6
	E	S	01 14 49.-						
BUB	E	P	01 14 33.8				200	1.8	203.0 22.3
	N	S	01 14 55.6						

AUG 06 ERL
H= 01 12 50.4
LAT = 25.1 N
LONG= 61.2 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.5
SOUTHERN IRAN

AUG 06 BCS
H= 01 12 55.0
LAT = 25.2 N
LONG= 61.2 E
SOUTHERN IRAN

ZUR		P	01 21 19.2				5220	46.9	99.2 312.3
BUB	UE	P	01 21 19.-				5220	47.0	99.6 312.8

AUG 06 ERL
H= 07 14 46.6
LAT = 11.1 S
LONG= 162.0 E
DEPTH= 56 KM
MAGNITUDE= 5.9
SOLOMON ISLANDS

ZUR	E	PKP	07 34 06.-				15290	137.5	40.5 333.3
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AUG 07 ERL
H= 09 24 14.7
LAT = 16.6 S
LONG= 172.1 W
DEPTH= 33 KM
MAGNITUDE= 5.8
SAMOA ISLANDS REGION

AUG 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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BUB	DI	PKP	09 43 56.5				16570 149.0	1.3 359.1
ZUR	E	PKP	09 43 56.-				16610 149.4	1.3 359.1

AUG 07 ERL
H= 23 16 39.0
LAT = 19.1 S
LONG= 169.1 E
DEPTH=184 KM
MAGNITUDE= 5.5
NEW HEBRIDES ISLANDS

BUB	E	PKP	23 36 01.-				16380 147.3	35.7 335.4
ZUR	UE	PKP	23 36 02.-				16410 147.6	36.0 335.0

AUG 08 BCS
H= 13 18 27.0
LAT = 44.1 N
LONG= 8.0 E
NORTHERN ITALY

ZUR	E	P	13 19 17.-				370 3.3	187.3 6.9
BUB	E	P	13 19 21.3				410 3.7	186.8 6.4

AUG 08
NO DETERMINATION OF EPICENTER

BUB	I	P	15 23 01.3					
	E	S	15 23 06.4					

AUG 08
NO DETERMINATION OF EPICENTER

BUB	DE	P	18 57 03.9					
	E	S	18 57 08.2					

AUG 08 BCS
H= 19 09 30.0
LAT = 25.0 N
LONG= 61.2 E
SOUTHERN IRAN

AUG 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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AUG 08 ERL
H= 19 09 33.5
LAT = 25.0 N
LONG= 61.1 E
DEPTH= 41 KM
MAGNITUDE= 5.5
SOUTHERN IRAN

ZUR	I	P	19 13 01.-				5220 46.9	99.3 312.3
BUB	DI	P	19 18 00.-				5230 47.0	99.7 312.9

AUG 09 ERL
H= 04 17 37.3
LAT = 7.9 N
LONG= 94.1 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.1
NICOBAR ISLANDS REGION

BUB	E	P	04 29 48.-				9030 81.2	88.0 317.1
ZUR	E	P	04 29 50.-				9030 81.2	87.9 316.7

AUG 11
NO DETERMINATION OF EPICENTER

BUB	UI	P	14 33 56.8					
	E	S	14 34 01.3					

AUG 11
NO DETERMINATION OF EPICENTER

BUB	UE	P	15 28 50.3					
	E	S	15 29 04.2					

AUG 12 ERL
H= 09 42 05.2
LAT = 51.4 N
LONG= 179.3 W
DEPTH= 29 KM
MAGNITUDE= 5.9
ANDREANOF ISLANDS, ALEUTIAN IS.

BUB	E	P	09 54 17.-				9010 81.0	5.0 354.6
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AUG 12 ERL
H= 23 47 57.3
LAT = 41.1 N
LONG= 22.7 E
DEPTH= 12 KM
MAGNITUDE= 4.9
YUGOSLAVIA

AUG 1972

STATION COMP. PHASE
ABBREV. SEIS.

TIME
H M S

PER. LOG. S/N
AMP.

DISTANCE
KM DEG.

AUG 1972
AZIMUTH
STAT. EPIC.

AUG 12 BCS
H= 23 47 58.0
LAT = 41.1 N
LONG= 22.8 E
YUGOSLAVIA

BUB E P 23 52 49.1

1340 12.1 118.1 308.0

AUG 13 BCS
H= 17 16 06.0
LAT = 44.8 N
LONG= 10.4 E
NORTHERN ITALY

BUB E P 17 17 56.6
E S 17 18 33.-

360 3.2 156.4 337.7

AUG 14
NO DETERMINATION OF EPICENTER

BUB DI P 15 59 22.2
E S 15 59 24.-

AUG 15 ERL
H= 10 56 12.8
LAT = 56.3 N
LONG= 135.5 W
DEPTH= 21 KM
MAGNITUDE= 5.6
SOUTHEASTERN ALASKA

BUB UE P 11 07 31.-

8020 72.1 339.9 24.6

AUG 15
NO DETERMINATION OF EPICENTER

BUB E P 16 26 20.-
E S 16 26 35.8

AUG 16
NO DETERMINATION OF EPICENTER

BUB UE P 12 41 47.-

AUG 16
NO DETERMINATION OF EPICENTER

ZUR I P 17 22 25.6

AUG 1972

STATION COMP. PHASE
ABBREV. SEIS.

TIME
H M S

PER. LOG. S/N
AMP.

DISTANCE
KM DEG.

AUG 1972
AZIMUTH
STAT. EPIC.

S 17 22 29.8

AUG 16
DETERMINATION OF EPICENTER

=== SEE TABLE I ===

ZUR DI P 20 21 57.1
E S 20 22 16.-

BUB I P 20 22 03.4
E S 20 22 28.4

AUG 16 ERL
H= 23 22 44.5
LAT = 44.3 N
LONG= 8.1 E
DEPTH= 4 KM
NORTHERN ITALY

AUG 16 BCS
H= 23 22 49.0
LAT = 44.3 N
LONG= 7.7 E
NORTHERN ITALY

ZUR E P 23 23 35.-

350 3.1 186.8 6.4

BUB UE P 23 23 40.-

390 3.5 186.3 6.0

AUG 16 ERL
H= 23 37 51.9
LAT = 44.2 N
LONG= 8.1 E
DEPTH= 33 KM (NORMAL)
NORTHERN ITALY

AUG 16 BCS
H= 23 37 54.0
LAT = 44.3 N
LONG= 7.7 E
NORTHERN ITALY

BUB E P 23 38 45.-

390 3.5 185.3 5.0

AUG 17
NO DETERMINATION OF EPICENTER

AUG 1972

AUG 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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BUB	E	P	07 29 56.3					
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AUG 17
NO DETERMINATION OF EPICENTER

BUB	DE	P	08 10 29.1					
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AUG 17
NO DETERMINATION OF EPICENTER

BUB	E	P	20 11 29.9					
	N	S	20 11 45.-					

AUG 17 ERL
H= 23 44 05.9
LAT = 6.0 S
LONG= 152.9 E
DEPTH= 10 KM
MAGNITUDE= 6.4
NEW BRITAIN REGION

BUB	E	PKP	00 03 11.-				14280 128.4	47.8 329.8
ZUR	E	PKP	00 03 10.-				14310 128.7	48.0 329.5

AUG 18 BCS
H= 00 28 18.0
LAT = 46.0 N
LONG= 7.5 E
SWITZERLAND

=== SEE TABLE I ===

LIN		P	00 28 20.-				150	1.4	230.5	49.4
		SPECIAL	00 28 40.-							
ZUR	E	P	00 28 48.8				170	1.6	208.9	28.1
	E	S	00 29 08.-							
BUB	UI	P	00 28 56.9				210	1.9	203.8	23.0
	E	S	00 29 19.-							

AUG 18
NO DETERMINATION OF EPICENTER

BUB	E	P	07 39 41.1							
	E	S	07 39 45.8							

AUG 18
NO DETERMINATION OF EPICENTER

AUG 1972

AUG 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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BUB	E	P	11 08 03.8					
	E	S	11 08 11.-					

AUG 18
NO DETERMINATION OF EPICENTER

BUB	DI	P	14 23 03.7					
	N	S	14 23 05.1					

AUG 18
NO DETERMINATION OF EPICENTER

BUB	E	P	15 57 28.-					
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AUG 20 ERL
H= 02 59 57.9
LAT = 49.5 N
LONG= 48.2 E
DEPTH= 0 KM (GEOPHYSICIST)
MAGNITUDE= 5.7
WESTERN KAZAKH SSR

AUG 20 BCS
H= 03 00 00.0
LAT = 49.4 N
LONG= 48.2 E
WESTERN KAZAKH SSR

BUB	DI	P	03 05 34.-				2890	26.0	71.4	281.5
ZUR	E	P	03 05 35.-				2910	26.2	70.6	280.7

AUG 20
DETERMINATION OF EPICENTER

=== SEE TABLE I ===

BUB	UE	P	04 50 21.5							
	N	S	04 50 45.-							

AUG 21 ERL
H= 06 23 48.9
LAT = 49.5 N
LONG= 147.0 E
DEPTH=578 KM
MAGNITUDE= 5.9
SEA OF OKHOTSK

BUB	E	P	06 34 41.-				8530	76.7	26.4	332.6
ZUR	E	P	06 34 43.-				8570	77.0	26.3	332.4

AUG 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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AUG 21
NO DETERMINATION OF EPICENTER

BUB	E	P	11 04 37.-					
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AUG 22
DETERMINATION OF EPICENTER

=== SEE TABLE I ===

BUB	UE	P	09 40 36.6					
	E	S	09 40 54.-					

AUG 22
NO DETERMINATION OF EPICENTER

BUB	DI	P	10 05 49.2					
	E	S	10 05 52.-					

AUG 23 ERL
H= 08 47 16.0
LAT = 58.2 N
LONG= 153.6 W
DEPTH= 61 KM
MAGNITUDE= 5.5
KODIAK ISLAND REGION

BUB	E	P	08 58 42.-				8160 73.3 350.3 12.4	
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AUG 24
NO DETERMINATION OF EPICENTER

BUB	DE	P	14 40 24.-					
	N	S	14 40 41.5					

AUG 24
NO DETERMINATION OF EPICENTER

BUB	E	P	16 21 41.2					
	E	S	16 22 00.3					

AUG 25
NO DETERMINATION OF EPICENTER

BUB	DE	P	12 00 07.8					
	E	S	12 00 20.6					

AUG 25
NO DETERMINATION OF EPICENTER

BUB	E	P	13 04 58.8					
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AUG 1972

AUG 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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	N	S	13 05 05.7					
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AUG 25
NO DETERMINATION OF EPICENTER

BUB	E	P	14 32 50.8					
	N	S	14 33 04.1					

AUG 27
DETERMINATION OF EPICENTER

=== SEE TABLE I ===

LIN		P	06 13 00.-					
		SPECIAL	06 13 13.-					

ZUR	I	P	06 13 20.3					
	E	S	06 13 29.4					

BUB	DI	P	06 13 22.6					
	E	S	06 13 33.7					

AUG 27
NO DETERMINATION OF EPICENTER

ZUR	I	P	17 37 33.0					
		S	17 37 33.5					

AUG 27
NO DETERMINATION OF EPICENTER

ZUR	DI	P	17 45 31.6					
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AUG 28 ERL
H= 05 59 56.5
LAT = 73.3 N
LONG= 55.1 E
DEPTH= 0 KM (GEOPHYSICIST)
MAGNITUDE= 6.3
NOVAYA ZEMLYA

AUG 28 BCS
H= 06 00 00.0
LAT = 73.3 N
LONG= 53.6 E
NOVAYA ZEMLYA

BUB	DI	P	06 06 32.8				3650 32.8	22.7 244.6
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ZUR	E	P	06 06 35.0				3690 33.1	22.5 244.4
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AUG 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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AUG 30 ERL
H= 00 08 23.1
LAT = 44.0 N
LONG= 16.2 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 4.5
YUGOSLAVIA

AUG 30 BCS
H= 00 08 25.0
LAT = 44.2 N
LONG= 16.3 E
YUGOSLAVIA

BUB UI P 00 10 00.2

AUG 30
NO DETERMINATION OF EPICENTER

BUB I P 01 35 22.9
N S 01 35 36.9

AUG 30 ERL
H= 15 14 09.9
LAT = 36.7 N
LONG= 96.5 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.5
TSINGHAI PROVINCE, CHINA

BUB E P 15 24 32.-

AUG 30
NO DETERMINATION OF EPICENTER

BUB UI P 15 52 31.5
N S 15 52 46.0

AUG 30 ERL
H= 18 47 42.6
LAT = 36.6 N
LONG= 96.4 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.5
TSINGHAI PROVINCE, CHINA

BUB E P 18 59 05.-

720 6.5 122.1 307.6

6970 62.6 64.7 310.6

6970 62.7 64.8 310.6

AUG 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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AUG 30 ERL
H= 18 51 34.8
LAT = 36.7 N
LONG= 96.3 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.5
TSINGHAI PROVINCE, CHINA

BUB E P 19 01 57.-

6960 62.6 64.8 310.6

AUG 31 ERL
H= 14 03 16.3
LAT = 52.3 N
LONG= 95.4 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.5
CENTRAL RUSSIA

BUB E P 14 12 28.-

5860 52.7 50.4 302.1

AUG 31
NO DETERMINATION OF EPICENTER

BUB DE P 17 52 47.4
N S 17 53 02.-

AUG 31
NO DETERMINATION OF EPICENTER

BUB DI P 19 11 10.9
N S 19 11 20.8

SEP 01
NO DETERMINATION OF EPICENTER

BUB E P 06 43 08.0
N S 06 43 16.9

SEP 01 ERL
H= 12 47 14.2
LAT = 15.0 S
LONG= 167.3 E
DEPTH=130 KM
MAGNITUDE= 5.6
NEW HEBRIDES ISLANDS

BUB UI PKP 13 06 31.0

15890 142.9 35.5 336.1

ZUR E PKP 13 06 32.-

15920 143.2 35.8 335.7

SEP 01
NO DETERMINATION OF EPICENTER

SEP 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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BUB	DI	P	14 44 50.1					
	N	S	14 44 51.6					

SEP 01
NO DETERMINATION OF EPICENTER

BUB		P	16 03 49.6					
	E	S	16 08 56.-					

SEP 02 ERL
H= 01 49 36.8
LAT = 29.4 N
LONG= 130.5 E
DEPTH= 41 KM
MAGNITUDE= 6.1
RYUKYU ISLANDS

BUB	UE	P	02 02 20.9				9700 87.2	47.9 325.0
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SEP 02 ERL
H= 02 07 43.8
LAT = 24.5 N
LONG= 122.4 E
DEPTH= 91 KM
MAGNITUDE= 5.5
TAIWAN REGION

ZUR	E	P	02 12 42.0				9670 87.0	56.6 321.5
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SEP 02
NO DETERMINATION OF EPICENTER

BUB	UI	P	10 27 18.6					
	E	S	10 27 20.3					

SEP 02 BCS
H= 14 53 49.0
LAT = 31.3 N
LONG= 16.2 E
NEAR COAST OF LIBYA

SEP 02 ERL
H= 14 53 51.4
LAT = 31.5 N
LONG= 16.3 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.0
NEAR COAST OF LIBYA

ZUR	E	P	14 57 48.3					
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BUB	UI	P	14 57 52.8					
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1900	17.1	157.3	342.1
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1940	17.4	157.8	342.7
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SEP 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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SEP 02
NO DETERMINATION OF EPICENTER

BUB	E	P	16 53 45.2					
	E	S	16 53 51.-					

SEP 03
NO DETERMINATION OF EPICENTER

BUB	UE	P	00 42 34.3					
	E	S	00 43 14.-					

SEP 03 ERL
H= 08 38 43.2
LAT = 39.2 N
LONG= 28.1 E
DEPTH= 16 KM
MAGNITUDE= 4.6
TURKEY

SEP 03 BCS
H= 08 38 45.0
LAT = 39.1 N
LONG= 28.1 E
TURKEY

BUB	E	P	08 42 36.6				1840 16.5	114.1 307.6
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SEP 03 ERL
H= 16 48 28.8
LAT = 36.0 N
LONG= 73.4 E
DEPTH= 36 KM
MAGNITUDE= 6.3
NORTHWESTERN KASHMIR

BUB	E	P	16 57 07.3				5380 48.4	79.2 305.2
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ZUR	E	P	16 57 08.1				5390 48.4	78.9 304.7
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SEP 03 ERL
H= 23 03 52.1
LAT = 35.9 N
LONG= 73.3 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.6
NORTHWESTERN KASHMIR

BUB	E	P	23 12 30.-				5370 48.3	79.4 305.2
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SEP 1972

SEP 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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SEP 04 ERL
H= 00 05 51.4
LAT = 41.6 N
LONG= 141.9 E
DEPTH= 76 KM
MAGNITUDE= 5.3
HOKKAIDO, JAPAN REGION

BUB E P 00 18 03.-

9110 81.9 33.5 330.2

SEP 04 ERL
H= 13 37 51.4
LAT = 35.8 N
LONG= 73.3 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.2
NORTHWESTERN KASHMIR

BUB E P 13 50 57.7

5380 48.4 79.5 305.3

SEP 04
NO DETERMINATION OF EPICENTER

BUB DI P 14 08 36.4
N S 14 08 39.-

SEP 04
NO DETERMINATION OF EPICENTER

BUB DI P 15 29 35.2
E S 15 29 40.8

SEP 04 ERL
H= 18 11 12.0
LAT = 11.7 S
LONG= 166.2 E
DEPTH= 62 KM
MAGNITUDE= 6.0
SANTA CRUZ ISLANDS

BUB E PKP 18 30 33.4

15510 139.4 35.0 336.7

ZUR PKP 18 30 34.8

15540 139.8 35.2 336.4

SEP 05 ERL
H= 02 39 46.1
LAT = 21.6 S
LONG= 169.7 E
DEPTH= 55 KM
MAGNITUDE= 4.9
LOYALTY ISLANDS REGION

BUB UI PKP 02 59 31.9

16660 149.9 36.8 334.3

SEP 1972

SEP 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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SEP 05
NO DETERMINATION OF EPICENTER

BUB DI P 15 09 52.8
E S 15 09 57.-

SEP 05
NO DETERMINATION OF EPICENTER

BUB I P 17 12 16.3
N S 17 12 29.5

SEP 05 ERL
H= 17 18 27.1
LAT = 1.9 N
LONG= 128.2 E
DEPTH= 132 KM
MAGNITUDE= 6.1
HALMAHERA

BUB E P 17 33 10.5

12010 108.0 66.1 321.9

SEP 05 ERL
H= 17 30 35.6
LAT = 19.9 S
LONG= 169.0 E
DEPTH= 52 KM
MAGNITUDE= 6.1
NEW HEBRIDES ISLANDS

BUB E PKP 17 50 12.7

16450 148.0 36.5 334.7

ZUR E PKP 17 50 13.6

16490 148.3 36.9 334.3

SEP 05 ERL
H= 18 03 35.0
LAT = 19.8 S
LONG= 169.0 E
DEPTH= 74 KM
MAGNITUDE= 5.2
NEW HEBRIDES ISLANDS

BUB I PKP 18 23 13.0

16450 147.9 36.6 334.7

ZUR E PKP 18 23 13.5

16480 148.2 36.9 334.3

SEP 06 BCS
H= 08 49 47.0
LAT = 41.2 N
LONG= 4.0 E
WESTERN MEDITERRANEAN SEA

SEP 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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SEP 06 ERL
H= 08 49 47.4
LAT = 41.3 N
LONG= 4.1 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 4.9
WESTERN MEDITERRANEAN SEA

ZUR	E	P	08 51 29.0				780 7.0	209.7 26.5
BUB	DI	P	08 51 32.6				810 7.3	208.3 25.1

SEP 06
NO DETERMINATION OF EPICENTER

BUB	UE	P	14 15 13.5					
	E	S	14 15 17.1					

SEP 07 ERL
H= 02 54 58.3
LAT = 2.0 S
LONG= 68.0 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.8
CARLSBERG RIDGE

ZUR	E	P	03 06 16.8				7940 71.4	114.8 321.9
BUB	E	P	03 06 17.3				7950 71.5	114.9 322.2

SEP 07
NO DETERMINATION OF EPICENTER

BUB	DE	P	10 47 15.8					
	N	S	10 47 28.2					

SEP 07
NO DETERMINATION OF EPICENTER

BUB	E	P	12 51 22.7					
	E	S	12 51 53.8					

SEP 07
NO DETERMINATION OF EPICENTER

BUB	UI	P	14 57 22.3					
	E	S	14 57 34.2					

SEP 07
NO DETERMINATION OF EPICENTER

BUB	E	P	16 28 35.6					
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SEP 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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E S 16 28 47.8

SEP 07 BCS
H= 22 26 54.0
LAT = 46.0 N
LONG= 1.5 W
FRANCE

SEP 07 ERL
H= 22 26 57.9
LAT = 46.0 N
LONG= 1.1 W
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.3
FRANCE

ZUR	E	P	22 28 39.2				790 7.1	262.5 75.2
BUB	E	P	22 28 38.8				790 7.1	259.5 72.2

SEP 08 BCS
H= 01 51 48.0
LAT = 45.0 N
LONG= 1.5 W
FRANCE

BUB		P	01 53 33.0				790 7.1	259.5 72.2
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SEP 08 BCS
H= 08 01 23.0
LAT = 46.0 N
LONG= 1.5 W
FRANCE

BUB	E	P	08 04 27.-				790 7.1	259.5 72.2
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SEP 08 BCS
H= 11 34 44.0
LAT = 71.4 N
LONG= 10.3 W
JAN MAYEN ISLAND REGION

SEP 1972

STATION COMP. PHASE
ABBREV. SEIS.

TIME
H M S

PER. LOG. S/N
AMP.

DISTANCE
KM DEG.

AZIMUTH
STAT. EPIC.

SEP 08 ERL
H= 11 34 46.2
LAT = 71.6 N
LONG= 10.0 W
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.7
JAN MAYEN ISLAND REGION

STATION	COMP.	PHASE	TIME	PER.	LOG.	S/N	DISTANCE	AZIMUTH
ABBREV.	SEIS.		H M S		AMP.		KM DEG.	STAT. EPIC.
BUB	E	P	11 40 11.8				2820 25.3	345.9 149.3
ZUR	E	P	11 40 16.0				2860 25.7	346.1 149.5

SEP 08
NO DETERMINATION OF EPICENTER

STATION	COMP.	PHASE	TIME	PER.	LOG.	S/N	DISTANCE	AZIMUTH
ABBREV.	SEIS.		H M S		AMP.		KM DEG.	STAT. EPIC.
BUB	E	P	14 30 54.6					
	E	S	14 31 06.-					

SEP 08
NO DETERMINATION OF EPICENTER

STATION	COMP.	PHASE	TIME	PER.	LOG.	S/N	DISTANCE	AZIMUTH
ABBREV.	SEIS.		H M S		AMP.		KM DEG.	STAT. EPIC.
BUB	E	P	16 07 53.1					
	E	S	16 08 06.6					

SEP 09 ERL
H= 02 44 03.1
LAT = 15.4 S
LONG= 175.7 W
DEPTH= 35 KM
MAGNITUDE= 5.9
TONGA ISLANDS

STATION	COMP.	PHASE	TIME	PER.	LOG.	S/N	DISTANCE	AZIMUTH
ABBREV.	SEIS.		H M S		AMP.		KM DEG.	STAT. EPIC.
BUB	E	PKP	03 03 42.5				16400 147.5	7.7 354.6
ZUR	E	PKP	03 03 47.-				16450 147.9	7.7 354.6

SEP 09 BCS
H= 02 48 01.0
LAT = 46.0 N
LONG= 1.5 W
FRANCE

STATION	COMP.	PHASE	TIME	PER.	LOG.	S/N	DISTANCE	AZIMUTH
ABBREV.	SEIS.		H M S		AMP.		KM DEG.	STAT. EPIC.
BUB	E	P	02 50 16.-				790 7.1	259.5 72.2

SEP 09
NO DETERMINATION OF EPICENTER

STATION	COMP.	PHASE	TIME	PER.	LOG.	S/N	DISTANCE	AZIMUTH
ABBREV.	SEIS.		H M S		AMP.		KM DEG.	STAT. EPIC.
BUB	E	P	04 06 15.5					
	E	S	04 06 37.4					

SEP 1972

STATION COMP. PHASE
ABBREV. SEIS.

TIME
H M S

PER. LOG. S/N
AMP.

DISTANCE
KM DEG.

AZIMUTH
STAT. EPIC.

SEP 09
NO DETERMINATION OF EPICENTER

STATION	COMP.	PHASE	TIME	PER.	LOG.	S/N	DISTANCE	AZIMUTH
ABBREV.	SEIS.		H M S		AMP.		KM DEG.	STAT. EPIC.
BUB	E	P	08 07 18.6					
	E	S	08 07 38.0					

SEP 09
NO DETERMINATION OF EPICENTER

STATION	COMP.	PHASE	TIME	PER.	LOG.	S/N	DISTANCE	AZIMUTH
ABBREV.	SEIS.		H M S		AMP.		KM DEG.	STAT. EPIC.
BUB	DI	P	08 09 13.6					
		S	08 09 15.1					

SEP 10 ERL
H= 06 03 25.7
LAT = 20.2 S
LONG= 168.8 E
DEPTH= 39 KM
MAGNITUDE= 5.4
LOYALTY ISLANDS

STATION	COMP.	PHASE	TIME	PER.	LOG.	S/N	DISTANCE	AZIMUTH
ABBREV.	SEIS.		H M S		AMP.		KM DEG.	STAT. EPIC.
BUB	UI	PKP	06 23 09.5				16480 148.2	37.1 334.3
ZUR	E	PKP	06 23 07.-				16510 148.5	37.5 333.9

SEP 10 ERL
H= 11 07 31.2
LAT = 20.1 S
LONG= 168.8 E
DEPTH= 53 KM
MAGNITUDE= 5.2
LOYALTY ISLANDS

STATION	COMP.	PHASE	TIME	PER.	LOG.	S/N	DISTANCE	AZIMUTH
ABBREV.	SEIS.		H M S		AMP.		KM DEG.	STAT. EPIC.
BUB	UE	PKP	11 27 11.8				16460 148.0	37.0 334.4

SEP 10
NO DETERMINATION OF EPICENTER

STATION	COMP.	PHASE	TIME	PER.	LOG.	S/N	DISTANCE	AZIMUTH
ABBREV.	SEIS.		H M S		AMP.		KM DEG.	STAT. EPIC.
BUB	DE	P	21 41 43.9					
	N	S	21 42 18.2					

SEP 11 BCS
H= 07 49 32.0
LAT = 46.0 N
LONG= 1.5 W
FRANCE

STATION	COMP.	PHASE	TIME	PER.	LOG.	S/N	DISTANCE	AZIMUTH
ABBREV.	SEIS.		H M S		AMP.		KM DEG.	STAT. EPIC.
BUB	E	P	07 50 17.3				790 7.1	259.5 72.2

SEP 11
NO DETERMINATION OF EPICENTER

SEP 1972

SEP 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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BUB	E	P	11 01 13.4						
	E	S	11 01 25.0						

SEP 11
NO DETERMINATION OF EPICENTER

BUB	UI	P	13 33 44.3						
	N	S	13 34 23.9						

SEP 12
NO DETERMINATION OF EPICENTER

BUB	E	P	10 11 02.4						
	E	S	10 11 13.7						

SEP 12 ERL
H= 14 40 43.9
LAT = 44.0 N
LONG= 17.1 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 4.4
YUGOSLAVIA

SEP 12 BCS
H= 14 40 47.0
LAT = 44.1 N
LONG= 17.2 E
YUGOSLAVIA

BUB	E	P	14 42 30.0				780	7.0	119.0 305.1
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SEP 12
NO DETERMINATION OF EPICENTER

BUB	UI	P	16 31 24.0						
	N	S	16 31 34.0						

SEP 12
NO DETERMINATION OF EPICENTER

BUB	E	P	20 21 58.5						
	E	S	20 22 26.9						

SEP 13 ERL
H= 04 13 20.5
LAT = 37.9 N
LONG= 22.4 E
DEPTH= 83 KM
MAGNITUDE= 6.0
SOUTHERN GREECE

SEP 1972

SEP 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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SEP 13 BCS
H= 04 13 22.0
LAT = 37.9 N
LONG= 22.4 E
DEPTH= 80 KM
SOUTHERN GREECE

ZUR	E	P	04 16 32.7				1540	13.8	128.0 317.3
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BUB	E	P	04 16 34.3				1560	14.1	129.2 313.6
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SEP 13 ERL
H= 06 22 22.5
LAT = 20.3 S
LONG= 168.7 E
DEPTH= 48 KM
MAGNITUDE= 5.1
LOYALTY ISLANDS

BUB	E	PKP	06 42 10.6				16490	148.3	37.4 334.1
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SEP 13
NO DETERMINATION OF EPICENTER

BUB	UI	P	10 16 57.3						
	N	S	10 17 08.3						

SEP 13 ERL
H= 12 52 17.6
LAT = 20.4 S
LONG= 168.7 E
DEPTH= 32 KM
MAGNITUDE= 5.0
LOYALTY ISLANDS

BUB	E	PKP	13 11 59.7				16490	148.3	37.4 334.1
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SEP 13 ERL
H= 13 06 55.9
LAT = 20.3 S
LONG= 168.8 E
DEPTH= 75 KM
MAGNITUDE= 4.9
LOYALTY ISLANDS

BUB	E	PKP	13 25 38.-				16480	148.2	37.2 334.2
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SEP 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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SEP 13 ERL
H= 13 51 59.0
LAT = 20.2 S
LONG= 168.8 E
DEPTH= 58 KM
MAGNITUDE= 4.9
LOYALTY ISLANDS

BUB	E	PKP	14 11 40.5				16480 148.2	37.1 334.3
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SEP 13 ERL
H= 14 33 38.0
LAT = 20.4 S
LONG= 168.8 E
DEPTH= 35 KM
MAGNITUDE= 5.9
LOYALTY ISLANDS

BUB	E	PKP	14 53 19.6				16500 148.3	37.2 334.2
ZUR	E	PKP	14 53 19.-				16530 148.7	37.5 333.8

SEP 13
NO DETERMINATION OF EPICENTER

BUB	E	P	14 53 05.8					
	N	S	14 53 20.9					
ZUR	E	P	14 53 06.5					
	N	S	14 53 22.8					

SEP 13 ERL
H= 14 55 46.1
LAT = 20.4 S
LONG= 168.9 E
DEPTH= 53 KM
MAGNITUDE= 5.6
LOYALTY ISLANDS

BUB	E	PKP	15 15 28.0				16500 148.4	37.2 334.2
ZUR	E	PKP	15 15 27.-				16540 148.7	37.6 333.8

SEP 14 ERL
H= 09 24 12.0
LAT = 20.5 S
LONG= 168.9 E
DEPTH= 33 KM
MAGNITUDE= 5.3
LOYALTY ISLANDS

BUB	OE	PKP	09 43 56.8				16520 148.5	37.2 334.2
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SEP 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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SEP 14
NO DETERMINATION OF EPICENTER

BUB	UI	P	18 20 44.1					
	E	S	18 20 54.2					
ZUR	DI	P	18 20 48.3					
	N	S	18 21 01.5					

SEP 14
NO DETERMINATION OF EPICENTER

BUB	E	P	21 20 36.-					
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SEP 14 BCS
H= 22 17 03.0
LAT = 42.7 N
LONG= 18.0 E
YUGOSLAVIA

ZUR	E	P	22 20 37.-				900 8.1	121.3 307.9
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SEP 15
NO DETERMINATION OF EPICENTER

BUB	E	P	06 39 54.0					
	N	S	06 40 09.8					

SEP 15
NO DETERMINATION OF EPICENTER

BUB	DE	P	09 02 09.5					
	E	S	09 02 24.0					

SEP 15 ERL
H= 13 18 45.4
LAT = 20.1 S
LONG= 168.8 E
DEPTH= 21 KM
MAGNITUDE= 5.2
LOYALTY ISLANDS

BUB	E	PKP	13 38 29.5				16460 148.0	37.1 334.4
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SEP 15
NO DETERMINATION OF EPICENTER

BUB	DI	P	14 32 35.1					
	N	S	14 32 36.4					

SEP 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
SEP 15 ERL								
H= 17 46 50.8								
LAT = 20.4 S								
LONG= 168.7 E								
DEPTH= 25 KM								
MAGNITUDE= 5.4								
LOYALTY ISLANDS								
BUB	E	PKP	18 06 35.0				16500 148.3	37.5 334.0
ZUR	E	PKP	18 06 30.0				16530 148.7	37.9 333.6

SEP 16 ERL
H= 03 53 26.5
LAT = 40.3 N
LONG= 19.7 E
DEPTH= 15 KM
MAGNITUDE= 5.1
ALBANIA

SEP 16 BCS
H= 03 53 39.0
LAT = 40.2 N
LONG= 19.9 E
ALBANIA

ZUR	E	P	03 56 01.-				1190 10.7	127.2 314.9
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SEP 16 ERL
H= 09 14 34.6
LAT = 15.2 N
LONG= 96.2 W
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 6.0
NEAR COAST OF OAXACA, MEXICO

BUB	UE	P	09 27 25.6				9840 88.5	291.0 40.7
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SEP 16
NO DETERMINATION OF EPICENTER

BUB	DE	P	11 18 47.8					
	N	S	11 19 15.5					

SEP 16 ERL
H= 14 06 26.1
LAT = 41.3 N
LONG= 20.7 E
DEPTH= 6 KM
MAGNITUDE= 5.2
ALBANIA

SEP 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
SEP 16 BCS								
H= 14 06 28.0								
LAT = 41.4 N								
LONG= 20.9 E								
ALBANIA								
ZUR	E	P	14 09 02.-				1180 10.6	120.3 308.8
BUB	E	P	14 09 01.5				1200 10.8	122.1 310.6

SEP 16
NO DETERMINATION OF EPICENTER

BUB	DI	P	21 57 04.4					
		S	21 57 11.7					
ZUR	UI	P	21 57 11.7					
	E	S	21 57 23.3					

SEP 17 BCS
H= 14 07 12.0
LAT = 38.2 N
LONG= 20.3 E
GREECE

SEP 17 ERL
H= 14 07 15.6
LAT = 38.3 N
LONG= 20.3 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.6
GREECE

ZUR	E	P	14 10 11.5				1400 12.6	132.6 320.6
BUB	E	P	14 10 13.8				1420 12.8	133.9 321.9

SEP 17 ERL
H= 14 44 10.3
LAT = 38.5 N
LONG= 20.3 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 4.8
GREECE

BUB	E	P	14 47 10.-				1400 12.6	133.0 321.1
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SEP 1972

STATION COMP. PHASE
ABBREV. SEIS.

TIME
H M S

PER. LOG. S/N
AMP.

DISTANCE
KM DEG.

SEP 1972
AZIMUTH
STAT. EPIC.

SEP 17 ERL
H= 17 37 48.5
LAT = 35.9 N
LONG= 73.3 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.4
NORTHWESTERN KASHMIR

BUB E P 17 46 27.2
ZUR E P 17 46 27.-

5370 48.3 79.3 305.2

5380 48.4 79.0 304.7

SEP 17 ERL
H= 20 56 52.3
LAT = 5.7 N
LONG= 77.6 W
DEPTH= 22 KM
MAGNITUDE= 4.9
NEAR WEST COAST OF COLOMBIA

ZUR E P 21 09 19.-
BUB E P 21 09 19.3

9260 83.3 271.1 43.1

9260 83.3 271.1 42.7

SEP 17 ERL
H= 21 17 39.2
LAT = 5.7 N
LONG= 77.6 W
DEPTH= 22 KM
MAGNITUDE= 5.4
NEAR WEST COAST OF COLOMBIA

ZUR E P 21 30 05.6
BUB E P 21 30 05.4

9250 83.2 271.1 43.1

9250 83.2 271.0 42.7

SEP 18
NO DETERMINATION OF EPICENTER

BUB DE P 16 01 42.8
E S 16 01 51.3

SEP 18
DETERMINATION OF EPICENTER

=== SEE TABLE I ===

DIX P 19 06 00.-
SPECIAL 19 06 03.5

LIN P 19 06 00.-
SPECIAL 19 06 20.-

ZUR E P 19 06 39.5

SEP 1972

STATION COMP. PHASE
ABBREV. SEIS.

TIME
H M S

PER. LOG. S/N
AMP.

DISTANCE
KM DEG.

SEP 1972
AZIMUTH
STAT. EPIC.

E S 19 07 03.2
BUB UI P 19 06 45.3
E S 19 07 11.5

SEP 19 ERL
H= 01 36 52.4
LAT = 19.5 N
LONG= 70.1 W
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.8
DOMINICAN REPUBLIC REGION

BUB UI P 01 47 52.5
ZUR E P 01 47 53.8

7600 68.3 275.5 45.4

7600 68.3 275.6 45.8

SEP 19
NO DETERMINATION OF EPICENTER

BUB E P 08 42 32.9
E S 08 42 51.7

SEP 19
NO DETERMINATION OF EPICENTER

BUB UE P 16 12 30.6
S 16 12 38.4

SEP 19
NO DETERMINATION OF EPICENTER

BUB E P 17 01 18.-

SEP 20 ERL
H= 07 45 17.0
LAT = 19.3 S
LONG= 173.8 W
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.4
TONGA ISLANDS

BUB E PKP 08 04 09.8

16860 151.6 4.8 356.5

SEP 20
NO DETERMINATION OF EPICENTER

BUB DI P 16 12 38.4
E S 16 12 43.6

SEP 1972

SEP 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME			PER.	LOG. AMP.	S/N	DISTANCE		EARTH STAT. EPIC.	
			H	M	S				KM	DEG.		

SEP 20
NO DETERMINATION OF EPICENTER

RUB	DE	P	18 01 18.-
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SEP 20 ERL
H= 20 44 53.2
LAT = 14.4 N
LONG= 56.6 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.3
ARABIAN SEA

BUB E P 20 53 58.4

SEP 21 ERL
H= 00 10 13.3
LAT = 3.0 N
LONG= 96.1 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.2
NORTHERN SUMATRA

BUB E P 00 22 52.4

SEP 21
DETERMINATION OF EPICENTER

=== SEE TABLE I ===

BUB	UE	P	08 57 53.4
	E	S	08 58 13.8

SEP 21
NO DETERMINATION OF EPICENTER

BUB	E	P	15	13	30.9
		S	15	13	46.0

SEP 21 ERL
H= 15 30 00.2
LAT = 37.1 N
LONG= 116.0 W
DEPTH= 0 KM
MAGNITUDE= 5.7
SOUTHERN NEVADA

BUB E P 15 42 23.3

SEP 21
NO DETERMINATION OF EPICENTER

SEP 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME			PER.	LOG. AMP.	S/N	DISTANCE		AZIMUTH	
			H	M	S				KM	DEG.	STAT.	EPIC.

DUB DE P 18 01 18.-

SEP 22 ERL
H= 11 45 14.8
LAT = 16.5 S
LONG= 174.6 W
DEPTH=219 KM
MAGNITUDE= 5.5
TONGA ISLANDS

BUB E PKP 12 04 32.-

SEP 22
NO DETERMINATION OF EPICENTER

BUB	I	P	14	35	12.4
	E	S	14	35	13.4

SEP 22 ERL
H= 19 57 27.4
LAT = 22.3 N
LONG= 121.2 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.7
TAIWAN REGION

BUB E P 20 10 14.8

SEP 23 ERL
H= 01 10 18.1
LAT = 21.0 S
LONG= 168.5 E
DEPTH= 33 KM
MAGNITUDE= 4.9
LOYALTY ISLANDS

BUB E PKP 01 30 03.6

SEP 23 ERL
H= 02 14 26.8
LAT = 22.3 N
LONG= 121.4 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.4
TAIWAN REGION

8UB E P 02 27 14.-

SEP 23
DETERMINATION OF EPICENTER

=== SEE TABLE I ===

SEP 1972

SEP 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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BUB	E	P	14 29 07.3					
	N	S	14 29 18.4					
ZUR	UE	P	14 29 08.0					
	E	S	14 29 20.0					

SEP 23

NO DETERMINATION OF EPICENTER

BUB	DI	P	17 01 23.7					
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SEP 24

STR
H= 08 01 01.2
LAT = 47.7 N
LONG= 7.3 E
DEPTH= 0 KM (GEOPHYSICIST)
FRANCE

BUB	DI	P	08 01 17.8				100 0.9 265.5 84.5	
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SEP 24

ERL
H= 20 09 35.6
LAT = 6.3 S
LONG= 131.2 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 6.1
TANIMBAR ISLANDS REGION

BUB	E	P	20 28 11.6				12920 116.2 69.0 320.7	
ZUR	E	P	20 28 19.7				12940 116.4 69.1 320.3	

SEP 25

NO DETERMINATION OF EPICENTER

BUB	UE	P	12 40 02.1					
		S	12 40 30.7					

SEP 25

NO DETERMINATION OF EPICENTER

BUB	DI	P	17 01 25.5					
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SEP 26

NO DETERMINATION OF EPICENTER

BUB	E	P	08 10 10.3					
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SEP 1972

SEP 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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SEP 26

NO DETERMINATION OF EPICENTER

BUB	DI	P	11 47 36.3					
		S	11 47 41.4					

SEP 26

ERL
H= 12 17 00.9
LAT = 34.4 N
LONG= 26.4 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.1
CRETE

SEP 26

BCS
H= 12 17 05.0
LAT = 34.3 N
LONG= 26.3 E
DEPTH= 55 KM
CRETE

ZUR	E	P	12 21 16.-					
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2070 18.6 127.7 319.5

BUB	E	P	12 21 18.-					
-----	---	---	------------	--	--	--	--	--

2100 18.9 128.7 320.4

SEP 26

STR
H= 18 01 01.3
LAT = 43.9 N
LONG= 8.0 E
DEPTH= 0 KM (GEOPHYSICIST)
FRANCE

BUB	DI	P	18 01 23.6					
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130 1.2 339.9 159.4

SEP 27

ERL
H= 09 01 43.8
LAT = 16.5 S
LONG= 172.2 W
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.9
SAMOA ISLANDS REGION

BUB	E	PKP	09 21 25.3					
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16550 143.3 1.4 359.0

ZUR	E	PKP	09 21 26.4					
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16590 149.2 1.4 359.0

SEP 27

NO DETERMINATION OF EPICENTER

BUB	DI	P	09 57 48.0					
	E	S	09 57 51.5					

SEP 1972

SEP 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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SEP 27
NO DETERMINATION OF EPICENTER

BUB	UI	P	14 30 40.2					
	E	S	14 30 50.4					

SEP 27
NO DETERMINATION OF EPICENTER

BUB	E	P	15 11 01.5					
	N	S	15 11 10.4					

SEP 27
NO DETERMINATION OF EPICENTER

BUB	UE	P	15 19 42.6					
	E	S	15 19 53.8					

SEP 27 STR
H= 18 01 01.5
LAT = 47.7 N
LONG= 7.3 E
DEPTH= 0 KM (GEOPHYSICIST)
FRANCE

BUB	E	P	18 01 18.1				100	0.9	265.4	84.4
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SEP 28
NO DETERMINATION OF EPICENTER

BUB	DE	P	15 03 46.3							
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SEP 28
NO DETERMINATION OF EPICENTER

BUB	DI	P	15 42 45.9							
		S	15 42 47.8							

SEP 28 STR
H= 18 01 01.1
LAT = 47.7 N
LONG= 7.3 E
DEPTH= 0 KM (GEOPHYSICIST)
FRANCE

BUB	E	P	18 01 17.6				100	0.9	265.5	84.6
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SEP 1972

SEP 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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SEP 29
NO DETERMINATION OF EPICENTER

BUB	E	P	14 10 54.0					
	E	S	14 11 26.0					

SEP 29
NO DETERMINATION OF EPICENTER

BUB	E	P	14 32 30.5					
	E	S	14 32 45.8					

SEP 30
NO DETERMINATION OF EPICENTER

BUB	E	P	10 40 54.5					
		S	10 41 07.5					

OCT 01 ERL
H= 04 32 00.2
LAT = 43.5 N
LONG= 21.5 E
DEPTH= 3 KM
MAGNITUDE= 4.9
YUGOSLAVIA

OCT 01 BCS
H= 04 32 05.0
LAT = 43.5 N
LONG= 21.6 E
YUGOSLAVIA

ZUR	E	P	04 34 26.0				1100	9.9	108.5	297.7
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BUB	UE	P	04 34 26.8				1110	10.0	110.6	299.8
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OCT 01
NO DETERMINATION OF EPICENTER

BUB	DE	P	16 59 42.6							
	N	S	16 59 50.4							

OCT 01 ERL
H= 23 49 36.2
LAT = 7.5 N
LONG= 123.7 E
DEPTH=613 KM
MAGNITUDE= 6.0
MINDANAO, PHILIPPINE ISLANDS

BUB	UE	P	00 02 16.~				11220	100.9	66.1	321.5
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OCT 1972

OCT 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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OCT 02

NO DETERMINATION OF EPICENTER

BUB	DE	P	12 06 55.-						
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OCT 03 ERL

H= 08 59 57.8

LAT = 46.8 N

LONG= 45.0 E

DEPTH= 0 KM (GEOPHYSICIST)

MAGNITUDE= 5.8

SOUTHWESTERN RUSSIA

OCT 03 BCS

H= 09 00 00.0

LAT = 46.9 N

LONG= 44.9 E

SOUTHWESTERN RUSSIA

BUB	DE	P	09 05 19.8				2730	24.6	78.5 285.6
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ZUR	E	P	09 05 19.5				2740	24.7	77.6 284.7
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OCT 03

NO DETERMINATION OF EPICENTER

BUB	E	P	10 45 47.1						
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OCT 03

NO DETERMINATION OF EPICENTER

BUB	DE	P	14 23 15.7						
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	E	S	14 23 21.3						
--	---	---	------------	--	--	--	--	--	--

OCT 03

NO DETERMINATION OF EPICENTER

BUB	UE	P	15 08 27.5						
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	E	S	15 08 51.2						
--	---	---	------------	--	--	--	--	--	--

OCT 03

NO DETERMINATION OF EPICENTER

ZUR	DE	P	17 03 12.-						
-----	----	---	------------	--	--	--	--	--	--

BUB	DE	P	17 03 13.2						
-----	----	---	------------	--	--	--	--	--	--

	E	S	17 03 19.9						
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OCT 03

NO DETERMINATION OF EPICENTER

OCT 1972

OCT 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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BUB	DE	P	17 05 31.7						
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	N	S	17 05 36.3						
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OCT 04

NO DETERMINATION OF EPICENTER

BUB	DE	P	14 49 27.0						
-----	----	---	------------	--	--	--	--	--	--

OCT 04

NO DETERMINATION OF EPICENTER

BUB	E	P	17 09 52.6						
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	E	S	17 10 07.8						
--	---	---	------------	--	--	--	--	--	--

OCT 05

NO DETERMINATION OF EPICENTER

BUB	E	P	08 35 37.1						
-----	---	---	------------	--	--	--	--	--	--

	E	S	08 35 46.0						
--	---	---	------------	--	--	--	--	--	--

OCT 05

NO DETERMINATION OF EPICENTER

BUB	DE	P	10 38 07.3						
-----	----	---	------------	--	--	--	--	--	--

	E	S	10 38 30.6						
--	---	---	------------	--	--	--	--	--	--

OCT 05 ERL

H= 10 48 19.1

LAT = 13.8 N

LONG= 91.1 W

DEPTH= 89 KM

MAGNITUDE= 5.4

NEAR COAST OF GUATEMALA

BUB	E	P	11 00 52.6				9590	86.3	286.3 41.8
-----	---	---	------------	--	--	--	------	------	------------

OCT 05

NO DETERMINATION OF EPICENTER

BUB	UE	P	15 20 34.9						
-----	----	---	------------	--	--	--	--	--	--

		S	15 20 39.9						
--	--	---	------------	--	--	--	--	--	--

OCT 05 ERL

H= 18 41 08.5

LAT = 44.5 N

LONG= 11.0 E

DEPTH= 19 KM

MAGNITUDE= 4.2

NORTHERN ITALY

OCT 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
OCT 05	BCS								
H=	18 41	10.0							
LAT =	44.5	N							
LONG=	11.0	E							
NORTHERN ITALY									
BUB	DE	P	18 42 06.5				410	3.7	151.9 333.6

OCT 06 ERL
H= 04 34 38.7
LAT = 46.2 N
LONG= 7.3 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 3.7
SWITZERLAND

OCT 06 BCS
H= 04 34 41.0
LAT = 46.2 N
LONG= 7.2 E
SWITZERLAND

=== SEE TABLE I ===

DIX	P	04 35 00.-				20	0.2	319.7 139.6
	SPECIAL	04 35 05.-						
LIN	P	04 35 00.-				150	1.4	241.5 60.2
	SPECIAL	04 35 19.-						
ZUR	P	04 35 00.-				160	1.5	218.3 37.3
	SPECIAL	04 35 19.5						
BUB	DI	P	04 35 08.3			200	1.8	211.1 30.2
	S	04 35 31.5						

OCT 06 BCS
H= 05 41 08.0
LAT = 44.5 N
LONG= 11.0 E
NORTHERN ITALY

BUB UE P 05 42 06.0

OCT 07
NO DETERMINATION OF EPICENTER

BUB DE P 01 44 46.5
E S 01 44 55.8

OCT 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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OCT 08
NO DETERMINATION OF EPICENTER

BUB UE P 16 14 49.2
N S 16 14 55.1

OCT 09 ERL
H= 07 18 23.6
LAT = 28.2 N
LONG= 56.0 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.2
SOUTHERN IRAN

OCT 09 BCS
H= 07 18 31.0
LAT = 28.2 N
LONG= 55.9 E
SOUTHERN IRAN

BUB DE P 07 26 08.5

4610 41.4 100.8 311.3

OCT 10
NO DETERMINATION OF EPICENTER

BUB E P 07 38 54.4
E S 07 39 17.9

OCT 10
NO DETERMINATION OF EPICENTER

BUB DE P 11 06 16.2
N S 11 06 31.0

OCT 10
NO DETERMINATION OF EPICENTER

BUB UE P 14 10 56.9

OCT 10
NO DETERMINATION OF EPICENTER

BUB E P 16 41 51.0
E S 16 42 05.9

OCT 10
NO DETERMINATION OF EPICENTER

BUB UE P 16 43 23.6
N S 16 43 33.9

OCT 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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OCT 11
NO DETERMINATION OF EPICENTER

BUB	DE	P	20 13 54.0						
	E	S	20 14 00.9						

OCT 12
NO DETERMINATION OF EPICENTER

BUB	DE	P	16 10 25.9						
	E	S	16 10 34.6						

OCT 13 ERL
H= 04 46 11.0
LAT = 52.8 N
LONG= 163.1 W
DEPTH= 38 KM
MAGNITUDE= 5.9
SOUTH OF ALASKA

BUB	UE	P	04 58 15.5				8850	79.5	354.9 5.7
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OCT 13
NO DETERMINATION OF EPICENTER

BUB	E	P	08 14 51.6						
	E	S	08 15 09.9						

OCT 13
NO DETERMINATION OF EPICENTER

BUB	DE	P	15 08 36.8						
	E	S	15 08 40.0						

OCT 14 ERL
H= 00 00 24.5
LAT = 48.4 N
LONG= 148.7 E
DEPTH=394 KM
MAGNITUDE= 5.6
NORTHWEST OF KURIL ISLANDS

BUB	DE	P	00 11 42.5				8690	78.2	25.9 333.7
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OCT 14
NO DETERMINATION OF EPICENTER

BUB	UE	P	07 21 47.0						
	E	S	07 22 01.9						

OCT 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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OCT 14
NO DETERMINATION OF EPICENTER

BUB	DE	P	10 44 24.6						
	N	S	10 44 31.5						

OCT 14
NO DETERMINATION OF EPICENTER

BUB	DE	P	12 05 18.9						
	N	S	12 05 32.3						

OCT 14
NO DETERMINATION OF EPICENTER

BUB	UE	P	21 20 57.8						
	N	S	21 21 06.3						

OCT 15 ERL
H= 10 28 08.3
LAT = 22.1 S
LONG= 171.3 E
DEPTH=101 KM
MAGNITUDE= 5.6
LOYALTY ISLANDS REGION

BUB	DE	PKP	10 47 48.8				16780	150.9	34.5 335.7
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OCT 16
NO DETERMINATION OF EPICENTER

BUB	E	P	12 40 52.5						
-----	---	---	------------	--	--	--	--	--	--

OCT 17
NO DETERMINATION OF EPICENTER

BUB	UE	P	08 06 56.5						
		S	08 07 02.0						

OCT 17
NO DETERMINATION OF EPICENTER

BUB	DI	P	11 01 40.3						
	E	S	11 01 49.9						

ZUR	UE	P	11 01 47.6						
	E	S	11 02 01.-						

OCT 17
NO DETERMINATION OF EPICENTER

OCT 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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ZUR	DE	P	11 34 31.7					
		S	11 34 39.8					

OCT 17
NO DETERMINATION OF EPICENTER

BUB	DE	P	15 06 05.0					
	N	S	15 06 15.4					

OCT 17
NO DETERMINATION OF EPICENTER

BUB	DI	P	15 44 24.3					
	N	S	15 44 25.9					

OCT 17
DETERMINATION OF EPICENTER

=== SEE TABLE I ===

LIN		P	18 19 00.-					
		SPECIAL	18 19 07.5					

ZUR	UE	P	18 19 36.6					
	E	S	18 19 45.7					

BUB	DI	P	18 19 43.2					
	E	S	18 19 56.6					

OCT 18
NO DETERMINATION OF EPICENTER

BUB	E	P	15 55 27.2					
	E	S	15 55 39.9					

OCT 18
NO DETERMINATION OF EPICENTER

BUB	DE	P	16 05 49.2					
	E	S	16 06 11.8					

OCT 18
NO DETERMINATION OF EPICENTER

BUB	DE	P	16 38 36.4					
	E	S	16 38 39.5					

OCT 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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OCT 19 ERL
H= 22 16 38.1
LAT = 50.7 S
LONG= 139.1 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.4
SOUTH OF AUSTRALIA

ZUR	DE	PKP	22 36 21.-				16450 147.9	114.7 283.6
BUB	E	PKP	22 36 19.3				16460 148.0	114.1 284.2

OCT 20
NO DETERMINATION OF EPICENTER

BUB	E	P	00 20 26.3					
	E	S	00 20 42.3					

OCT 20 BCS
H= 04 33 46.0
LAT = 20.5 N
LONG= 29.7 W
NORTH ATLANTIC OCEAN

OCT 20 ERL
H= 04 33 48.9
LAT = 20.6 N
LONG= 29.7 W
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.7
NORTH ATLANTIC OCEAN

ZUR	DE	P	04 41 30.2				4550 40.9	242.4 40.0
BUB	E	P	04 41 30.8				4570 41.1	242.1 39.5

OCT 20 ERL
H= 08 17 48.6
LAT = 18.8 N
LONG= 106.7 W
DEPTH= 38 KM
MAGNITUDE= 5.7
OFF COAST OF JALISCO, MEXICO

BUB	UE	P	08 30 55.1				10250 92.1	301.0 37.6
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OCT 20
NO DETERMINATION OF EPICENTER

BUB	UE	P	16 55 49.5					
	E	S	16 56 16.0					

OCT 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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OCT 21
NO DETERMINATION OF EPICENTER

BUB	DE	P	10 43 18.6					
	N	S	10 43 34.3					

OCT 23
NO DETERMINATION OF EPICENTER

BUB	UE	P	10 30 37.5					
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OCT 23
NO DETERMINATION OF EPICENTER

BUB	DE	P	11 02 34.1					
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OCT 23
NO DETERMINATION OF EPICENTER

BUB	DE	P	11 12 29.3					
	N	S	11 12 44.1					

OCT 23
NO DETERMINATION OF EPICENTER

BUB	DE	P	14 12 30.0					
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OCT 24
NO DETERMINATION OF EPICENTER

BUB	E	P	08 17 07.9					
	E	S	08 17 17.7					

OCT 24
NO DETERMINATION OF EPICENTER

BUB	UE	P	11 06 51.7					
	N	S	11 07 03.7					

OCT 24
NO DETERMINATION OF EPICENTER

BUB	UE	P	16 30 45.3					
	E	S	16 31 00.3					

OCT 25
NO DETERMINATION OF EPICENTER

BUB	DE	P	09 55 57.9					
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OCT 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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OCT 25
NO DETERMINATION OF EPICENTER

BUB	DE	P	13 41 12.6					
	E	S	13 41 33.0					

OCT 25 BCS
H= 10 25 54.0
LAT = 70.9 N
LONG= 6.4 W
JAN MAYEN ISLAND REGION

OCT 25 ERL
H= 18 25 55.3
LAT = 70.9 N
LONG= 7.0 W
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.3
JAN MAYEN ISLAND REGION

BUB	DE	P	13 31 12.0					
-----	----	---	------------	--	--	--	--	--

2700 24.3 348.0 154.9

OCT 25 ERL
H= 21 56 06.4
LAT = 44.2 N
LONG= 9.7 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.1
NORTHERN ITALY

OCT 25 BCS
H= 21 56 13.0
LAT = 44.5 N
LONG= 9.9 E
DEPTH= 53 KM
NORTHERN ITALY

=== SEE TABLE I ===

DIX	P	21 57 00.-	270	2.4	138.2	319.8
	SPECIAL	21 57 18.-				
LIN	P	21 57 00.-	300	2.7	169.5	350.0
	SPECIAL	21 57 16.-				
ZUR	DI	21 56 59.0	360	3.2	165.9	346.7
	E	21 57 34.-				
BUB	UI	21 57 03.3	400	3.6	167.6	348.4
	E	21 57 39.3				

OCT 26
NO DETERMINATION OF EPICENTER

OCT 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
BUB	UE	P	10 16 48.6						
	E	S	10 16 58.8						

OCT 26 ERL
H= 17 05 03.7
LAT = 27.4 N
LONG= 128.5 E
DEPTH= 47 KM
MAGNITUDE= 6.0
RYUKYU ISLANDS

BUB	DE	P	17 17 48.6				9760	87.8	50.4 324.2
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OCT 26 ERL
H= 22 48 34.4
LAT = 14.3 S
LONG= 167.2 E
DEPTH=157 KM
MAGNITUDE= 5.4
NEW HEBRIDES ISLANDS

BUB	E	PKP	23 07 44.-				15820	142.2	35.2 336.3
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OCT 27 ERL
H= 09 23 08.7
LAT = 20.0 S
LONG= 168.9 E
DEPTH= 39 KM
MAGNITUDE= 5.7
NEW HEBRIDES ISLANDS

BUB	E	PKP	09 42 48.3				16460	148.0	36.8 334.6
ZUR	E	PKP	09 42 48.-				16490	148.3	37.1 334.2

OCT 27
NO DETERMINATION OF EPICENTER

BUB	UE	P	17 35 07.0						
	E	S	17 35 43.7						

OCT 28 ERL
H= 03 16 52.0
LAT = 15.3 S
LONG= 167.5 E
DEPTH=128 KM
MAGNITUDE= 5.8
NEW HEBRIDES ISLANDS

BUB	E	PKP	03 36 09.8				15920	143.2	35.5 336.0
ZUR	E	PKP	03 36 10.-				15960	143.5	35.8 335.7

OCT 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
BUB	E	P	14 35 40.-						
	N	S	14 35 49.-						

OCT 28
NO DETERMINATION OF EPICENTER

OCT 30
NO DETERMINATION OF EPICENTER

BUB	E	P	08 25 25.3						
	E	S	08 25 36.-						

OCT 30 ERL
H= 10 29 51.2
LAT = 21.1 S
LONG= 170.2 E
DEPTH=154 KM
MAGNITUDE= 5.0
LOYALTY ISLANDS REGION

BUB	UE	PKP	10 49 22.-				16630	149.5	35.5 335.2
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OCT 30 BCS
H= 14 32 13.0
LAT = 38.3 N
LONG= 20.4 E
GREECE

OCT 30 ERL
H= 14 32 13.1
LAT = 38.3 N
LONG= 20.4 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.3
GREECE

BUB	E	P	14 35 14.-				1420	12.8	133.3 321.4
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OCT 30
NO DETERMINATION OF EPICENTER

BUB	E	P	16 01 32.7						
	E	S	16 01 45.-						

OCT 30
NO DETERMINATION OF EPICENTER

BUB	E	P	23 10 56.1						
	N	S	23 11 06.5						

OCT 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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OCT 31
NO DETERMINATION OF EPICENTER

BUB	E	P	03 37 44.7						
	N	S	03 38 00.-						

OCT 31
NO DETERMINATION OF EPICENTER

BUB	E	P	08 26 06.-						
	N	S	08 26 16.-						

OCT 31
NO DETERMINATION OF EPICENTER

BUB	DE	P	10 21 52.1						
	E	S	10 21 55.5						

OCT 31
NO DETERMINATION OF EPICENTER

BUB	E	P	12 53 21.-						
-----	---	---	------------	--	--	--	--	--	--

OCT 31
NO DETERMINATION OF EPICENTER

BUB	E	P	15 49 44.4						
	N	S	15 49 57.-						

OCT 31
NO DETERMINATION OF EPICENTER

BUB	E	P	20 42 45.5						
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NOV 02 ERL
H= 01 26 57.6
LAT = 49.9 N
LONG= 78.8 E
DEPTH= 0 KM (GEOPHYSICIST)
MAGNITUDE= 6.2
EASTERN KAZAKH SSR

NOV 02 BCS
H= 01 27 00.0
LAT = 50.0 N
LONG= 79.3 E
DEPTH= 0 KM (GEOPHYSICIST)
EASTERN KAZAKH SSR

BUB	DI	P	01 35 14.3						
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4970 44.7 59.8 295.5

NOV 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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ZUR	UI	P	01 35 16.0				5000	44.9	59.5 295.0
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NOV 02
NO DETERMINATION OF EPICENTER

BUB	E	P	14 15 55.5						
	N	S	14 16 04.-						

NOV 02
NO DETERMINATION OF EPICENTER

ZUR	UI	P	14 32 50.8						
	N	S	14 32 52.3						

NOV 02
NO DETERMINATION OF EPICENTER

ZUR	UI	P	15 05 35.4						
	N	S	15 05 36.9						

NOV 02 ERL
H= 19 55 22.1
LAT = 20.0 S
LONG= 168.8 E
DEPTH= 32 KM
MAGNITUDE= 6.3
LOYALTY ISLANDS

BUB	DE	PKP	20 15 01.8				16460	148.1	36.9 334.4
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ZUR	UE	PKP	20 15 02.-				16500	148.4	37.3 334.0
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NOV 02 ERL
H= 21 08 37.3
LAT = 20.3 S
LONG= 169.0 E
DEPTH= 21 KM
MAGNITUDE= 5.0
NEW HEBRIDES ISLANDS

BUB	E	PKP	21 28 21.-				16500	148.4	36.9 334.4
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NOV 03
NO DETERMINATION OF EPICENTER

BUB	E	P	11 09 52.1						
	E	S	11 10 00.-						

NOV 03
NO DETERMINATION OF EPICENTER

NOV 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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BUB	E	P	13 37 51.0					
		S	13 37 55.-					

NOV 03
NO DETERMINATION OF EPICENTER

BUB	DI	P	13 46 39.3					
	E	S	13 46 40.3					

NOV 03
NO DETERMINATION OF EPICENTER

BUB	DE	P	13 53 23.1					
	E	S	13 53 27.1					

NOV 03
NO DETERMINATION OF EPICENTER

BUB	E	P	16 03 05.1					
	N	S	16 03 19.1					

NOV 03 ERL
H= 16 15 03.1
LAT = 20.1 S
LONG= 168.8 E
DEPTH= 26 KM
MAGNITUDE= 5.4
LOYALTY ISLANDS

BUB	E	PKP	16 34 47.5					
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NOV 03
NO DETERMINATION OF EPICENTER

BUB	E	P	17 07 03.-					
	E	S	17 07 30.-					

NOV 03 ERL
H= 22 42 38.4
LAT = 19.6 S
LONG= 169.4 E
DEPTH= 22 KM
MAGNITUDE= 5.2
NEW HEBRIDES ISLANDS

BUB	E	PKP	23 02 21.-					
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16470 148.1 37.0 334.4

16440 147.9 35.7 335.3

NOV 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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NOV 03 ERL
H= 23 57 59.4
LAT = 34.2 N
LONG= 69.7 E
DEPTH= 20 KM
MAGNITUDE= 5.4
AFGHANISTAN

BUB	DE	P	00 06 30.-				5210 46.3	83.5 306.0
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NOV 04 ERL
H= 03 49 56.6
LAT = 20.1 S
LONG= 169.1 E
DEPTH= 53 KM
MAGNITUDE= 5.7
NEW HEBRIDES ISLANDS

BUB	E	PKP	04 09 33.9				16480 148.2	36.5 334.7
ZUR	E	PKP	04 09 34.0				16510 148.5	36.8 334.3

NOV 04
NO DETERMINATION OF EPICENTER

BUB	E	P	06 44 24.-					
	N	S	06 45 04.-					

NOV 04 ERL
H= 23 48 22.3
LAT = 20.2 S
LONG= 168.9 E
DEPTH= 21 KM
MAGNITUDE= 5.2
LOYALTY ISLANDS

BUB	UE	PKP	00 08 08.3				16480 148.2	37.0 334.4
ZUR	UE	PKP	00 08 07.-				16510 148.5	37.3 334.0

NOV 05 ERL
H= 00 05 50.2
LAT = 9.7 S
LONG= 122.2 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.8
SAHU SEA

BUB	E	P	00 19 18.1				12560 113.0	78.3 317.8
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NOV 1972

STATION COMP. PHASE
ABBREV. SEIS.

TIME
H M S

PER.

LOG. S/N
AMP.

DISTANCE
KM DEG.

NOV 1972
AZIMUTH
STAT. EPIC.

NOV 05 ERL
H= 19 25 42.4
LAT = 35.1 N
LONG= 24.9 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.2
CRETE

NOV 05 BCS
H= 19 25 45.0
LAT = 35.0 N
LONG= 25.2 E
CRETE

ZUR E P 19 29 44.0

1920 17.3 129.4 320.2

BUB E P 19 29 44.3

1950 17.5 130.4 321.2

NOV 05 ERL
H= 22 07 02.2
LAT = 20.1 S
LONG= 168.8 E
DEPTH= 25 KM
MAGNITUDE= 5.3
LOYALTY ISLANDS

BUB E PKP 22 26 46.8

16470 148.1 37.0 334.4

ZUR E PKP 22 26 47.7

16510 148.4 37.4 334.0

NOV 06
NO DETERMINATION OF EPICENTER

BUB DE P 11 04 28.7
N S 11 04 32.4

NOV 07
NO DETERMINATION OF EPICENTER

BUB E P 04 34 46.-
N S 04 34 57.-

NOV 07
NO DETERMINATION OF EPICENTER

BUB E P 13 13 18.9
N S 13 13 24.1

NOV 08
NO DETERMINATION OF EPICENTER

BUB E P 13 17 19.-

NOV 1972

STATION COMP. PHASE
ABBREV. SEIS.

TIME
H M S

PER.

LOG. S/N
AMP.

DISTANCE
KM DEG.

NOV 1972
AZIMUTH
STAT. EPIC.

N S 13 17 22.-

NOV 08
NO DETERMINATION OF EPICENTER

BUB DE P 14 07 33.8
S 14 07 37.8

NOV 09
NO DETERMINATION OF EPICENTER

BUB DE P 05 40 38.3
N S 05 40 49.6

NOV 09
NO DETERMINATION OF EPICENTER

ZUR DE P 07 37 20.-
BUB E P 07 37 24.9
E S 07 37 46.3

NOV 09 ERL
H= 08 09 05.4
LAT = 21.1 S
LONG= 179.0 W
DEPTH= 621 KM
MAGNITUDE= 4.5
FIJI ISLANDS REGION

BUB UE PKP 08 28 33.5

16980 152.7 15.6 348.8

NOV 09
NO DETERMINATION OF EPICENTER

ZUR DE P 08 37 20.1
E S 08 38 38.2

NOV 09 ERL
H= 16 36 55.2
LAT = 19.6 S
LONG= 169.3 E
DEPTH= 25 KM
MAGNITUDE= 5.6
NEW HEBRIDES ISLANDS

BUB E PKP 16 56 37.-

16440 147.8 35.8 335.3

NOV 1972

STATION COMP. PHASE
ABBREV. SEIS.

TIME
H M S

PER. LOG. S/N
AMP.

DISTANCE
KM DEG.

NOV 1972
AZIMUTH
STAT. EPIC.

NOV 09 ERL
H= 18 41 14.5
LAT = 23.9 N
LONG= 121.6 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.7
TAIWAN

BUB E P 18 53 56.-

9650 86.8 57.6 321.5

NOV 10 ERL
H= 07 40 55.8
LAT = 44.5 N
LONG= 147.4 E
DEPTH=113 KM
MAGNITUDE= 5.6
KURIL ISLANDS

BUB E P 07 53 00.-

9030 81.2 28.5 333.3

NOV 10
NO DETERMINATION OF EPICENTER

BUB E P 11 05 37.9
S 11 05 39.3

NOV 10
NO DETERMINATION OF EPICENTER

BUB DE P 13 31 54.2
E S 13 31 56.6

NOV 10
NO DETERMINATION OF EPICENTER

BUB DE P 13 43 38.5
E S 13 43 52.1

NOV 10
NO DETERMINATION OF EPICENTER

BUB DE P 14 07 29.3
E S 14 07 35.8
ZUR E P 14 07 30.3
E S 14 07 34.2

NOV 10
NO DETERMINATION OF EPICENTER

BUB E P 16 24 14.3
S 16 24 47.4

NOV 1972

STATION COMP. PHASE
ABBREV. SEIS.

TIME
H M S

PER. LOG. S/N
AMP.

DISTANCE
KM DEG.

NOV 1972
AZIMUTH
STAT. EPIC.

NOV 10
NO DETERMINATION OF EPICENTER

BUB E P 16 53 44.2
N S 16 53 48.9

NOV 11
NO DETERMINATION OF EPICENTER

BUB DE P 12 56 16.1
N S 12 56 21.7

NOV 12 ERL
H= 17 56 44.4
LAT = 38.4 N
LONG= 73.3 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 6.0
TADZHIK-SINKIANG BORDER REGION

BUB UE P 18 05 07.8

5210 46.9 76.6 303.3

ZUR E P 18 05 13.5

5230 47.0 76.2 302.8

NOV 13 ERL
H= 04 43 45.2
LAT = 15.6 N
LONG= 95.0 W
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.5
NEAR COAST OF OAXACA, MEXICO

BUB E P 04 56 35.0

9730 87.5 290.3 41.0

NOV 13 ERL
H= 08 11 48.8
LAT = 27.9 N
LONG= 140.0 E
DEPTH=372 KM
MAGNITUDE= 5.5
BONIN ISLANDS REGION

BUB UE P 08 24 20.9

10340 93.0 41.7 329.6

NOV 13
NO DETERMINATION OF EPICENTER

BUB DE P 17 07 41.0
N S 17 08 01.5

NOV 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	NOV 1972 AZIMUTH STAT. EPIC.
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NOV 14 BCS
H= 04 31 41.0
LAT = 71.0 N
LONG= 7.8 W
JAN HAYEN ISLAND REGION

NOV 14 ERL
H= 04 31 42.8
LAT = 71.0 N
LONG= 7.9 W
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.1
JAN HAYEN ISLAND REGION

BUB	E	P	04 37 01.-				2730	24.6	347.2 152.7
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NOV 14
NO DETERMINATION OF EPICENTER

BUB	E	P	12 53 59.5						
	E	S	13 00 14.5						

NOV 15
NO DETERMINATION OF EPICENTER

BUB	E	P	06 49 42.8						
	E	S	06 49 47.1						

NOV 15
NO DETERMINATION OF EPICENTER

BUB	E	P	16 37 13.3						
		S	16 37 19.3						

NOV 16
NO DETERMINATION OF EPICENTER

BUB	UI	P	03 35 47.1						
	E	S	03 35 48.6						

NOV 16 ERL
H= 12 43 05.5
LAT = 35.7 N
LONG= 69.9 E
DEPTH=124 KM
MAGNITUDE= 5.6
HINDU KUSH REGION

BUB	DE	P	12 51 18.9				5130	46.1	81.7 304.8
ZUR	UE	P	12 51 11.2				5140	46.2	81.3 304.3

NOV 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	NOV 1972 AZIMUTH STAT. EPIC.
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NOV 16
NO DETERMINATION OF EPICENTER

BUB	DE	P	16 04 11.-						
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NOV 16
NO DETERMINATION OF EPICENTER

BUB	UE	P	16 28 52.8						
	E	S	16 28 58.0						

NOV 16
NO DETERMINATION OF EPICENTER

BUB	DE	P	16 35 55.0						
	E	S	16 36 08.8						

NOV 17 ERL
H= 02 42 35.5
LAT = 37.4 N
LONG= 20.3 E
DEPTH= 41 KM
MAGNITUDE= 4.3
IONIAN SEA

NOV 17 BCS
H= 02 42 39.0
LAT = 37.4 N
LONG= 20.3 E
IONIAN SEA

BUB	E	P	02 45 57.8				1500	13.5	136.0 323.9
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NOV 17 ERL
H= 09 09 00.1
LAT = 27.3 N
LONG= 59.1 E
DEPTH= 65 KM
MAGNITUDE= 5.4
SOUTHERN IRAN

NOV 17 BCS
H= 09 09 05.0
LAT = 27.4 N
LONG= 59.2 E
SOUTHERN IRAN

BUB	DE	P	09 17 01.6				4390	44.0	99.0 311.5
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NOV 17
NO DETERMINATION OF EPICENTER

NOV 1972

STATION COMP. PHASE
ABBREV. SEIS.

TIME
H M S

PER. LOG. S/N
AMP.

DISTANCE
KM DEG.

NOV 1972
AZIMUTH
STAT. EPIC.

BUB UE P 10 06 54.6
E S 10 07 06.0

NOV 17
NO DETERMINATION OF EPICENTER

BUB DE P 15 46 23.5
N S 15 46 25.-

NOV 19 ERL
H= 20 10 52.3
LAT = 80.4 N
LONG= 2.5 W
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.4
NORTH OF SVALBARD

NOV 19 BCS
H= 20 10 53.0
LAT = 80.3 N
LONG= 2.0 W
NORTH OF SVALBARD

BUB DE P 20 17 31.- 3670 33.0 356.6 166.1

NOV 20
NO DETERMINATION OF EPICENTER

BUB E P 15 04 41.-
N S 15 04 45.-

NOV 21 ERL
H= 01 23 46.6
LAT = 17.6 S
LONG= 179.0 W
DEPTH=563 KM
MAGNITUDE= 5.1
FIJI ISLANDS REGION

BUB DE PKP 01 42 32.9

NOV 21
NO DETERMINATION OF EPICENTER

BUB E P 03 52 37.-
N S 03 52 46.-

NOV 21
NO DETERMINATION OF EPICENTER

BUB E P 14 04 54.0

NOV 1972

STATION COMP. PHASE
ABBREV. SEIS.

TIME
H M S

PER. LOG. S/N
AMP.

DISTANCE
KM DEG.

NOV 1972
AZIMUTH
STAT. EPIC.

N S 14 05 04.-

NOV 21 ERL
H= 17 01 55.3
LAT = 52.4 N
LONG= 173.6 E
DEPTH= 50 KM
MAGNITUDE= 5.5
NEAR ISLANDS, ALEUTIAN ISLANDS

BUB E P 17 13 57.0 8830 79.4 9.3 349.8

NOV 22
NO DETERMINATION OF EPICENTER

BUB E P 22 42 01.-
N S 22 42 22.-

NOV 23
NO DETERMINATION OF EPICENTER

BUB E P 05 19 00.8
N S 05 19 03.8

NOV 23
NO DETERMINATION OF EPICENTER

BUB E P 15 01 37.7
N S 15 01 52.8

NOV 24 ERL
H= 03 48 35.1
LAT = 39.5 N
LONG= 20.3 E
DEPTH= 11 KM
MAGNITUDE= 5.3
GREECE-ALBANIA BORDER REGION

NOV 24 BCS
H= 03 48 39.0
LAT = 39.4 N
LONG= 20.4 E
GREECE-ALBANIA BORDER REGION

ZUR DE P 03 51 26.9 1290 11.6 128.4 316.4

BUB UE P 03 51 28.- 1310 11.8 129.3 317.9

NOV 1972

STATION COMP. PHASE
ABBREV. SEIS.

TIME
H M S

PER. LOG. S/N
AMP.

DISTANCE AZIMUTH
KM DEG. STAT. EPIC.

NOV 24 BCS
H= 08 06 04.0
LAT = 43.0 N
LONG= 13.4 E
CENTRAL ITALY

BUB UE P 08 07 06.3

NOV 24
NO DETERMINATION OF EPICENTER

BUB UE P 13 46 41.3
E S 13 46 49.7

NOV 24
NO DETERMINATION OF EPICENTER

BUB UE P 16 14 32.3
N S 16 14 37.7

NOV 24
NO DETERMINATION OF EPICENTER

BUB DE P 22 56 12.7
N S 22 56 33.9

NOV 25
NO DETERMINATION OF EPICENTER

BUB E P 09 20 45.3
E S 09 21 02.3

NOV 26
NO DETERMINATION OF EPICENTER

BUB DE P 06 53 13.7
E S 06 53 18.9

ZUR E P 06 53 16.0
E S 06 53 23.4

NOV 26 ERL
H= 16 03 11.8
LAT = 43.0 N
LONG= 13.4 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 4.9
CENTRAL ITALY

650 5.8 142.8 326.2

NOV 1972

STATION COMP. PHASE
ABBREV. SEIS.

TIME
H M S

PER. LOG. S/N
AMP.

DISTANCE AZIMUTH
KM DEG. STAT. EPIC.

NOV 26 BCS
H= 16 03 13.0
LAT = 43.0 N
LONG= 13.4 E
CENTRAL ITALY

ZUR UE P 16 04 35.2
E S 16 05 37.0

BUB UE P 16 04 38.8
E S 16 05 45.6

NOV 28
NO DETERMINATION OF EPICENTER

BUB E P 08 34 03.8
N S 08 34 18.1

NOV 28
NO DETERMINATION OF EPICENTER

ZUR E P 13 00 45.8
S 13 00 55.6

BUB DE P 13 00 57.7
S 13 01 12.-

NOV 28
NO DETERMINATION OF EPICENTER

BUB DI P 13 49 37.8
S 13 49 39.9

NOV 28
NO DETERMINATION OF EPICENTER

BUB E P 20 38 59.-
S 20 40 04.-

NOV 30 ERL
H= 11 25 31.6
LAT = 44.1 N
LONG= 13.0 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 4.6
ADRIATIC SEA

620 5.6 140.6 324.0

650 5.9 143.0 326.5

NOV 1972

NOV 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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NOV 30 BCS
H= 11 25 33.0
LAT = 44.0 N
LONG= 13.1 E
ADRIATIC SEA

ZUR	E	P	11 26 40.6				500	4.5	134.6 317.8
	E	S	11 27 33.5						
BUB	DI	P	11 26 44.4				530	4.8	138.0 321.2
	E	S	11 27 37.7						

NOV 30
NO DETERMINATION OF EPICENTER

BUB	E	P	15 39 50.-						
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DEC 01 ERL
H= 07 24 52.9
LAT = 42.7 N
LONG= 13.3 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 3.9
CENTRAL ITALY

DEC 01 BCS
H= 07 24 53.0
LAT = 42.8 N
LONG= 13.3 E
CENTRAL ITALY

BUB	E	P	07 26 30.-				670	6.0	145.1 328.4
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DEC 01
NO DETERMINATION OF EPICENTER

BUB	DE	P	16 16 29.3						
	E	S	16 16 35.2						

DEC 02 ERL
H= 00 19 47.2
LAT = 6.5 N
LONG= 126.6 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 6.3
MINDANAO, PHILIPPINE ISLANDS

BUB	E	P	00 33 50.-				11500	103.4	64.4 322.2
ZUR	E	P	00 33 51.-				11520	103.6	64.5 321.9

DEC 1972

DEC 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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DEC 02 ERL
H= 13 28 24.4
LAT = 35.4 N
LONG= 27.1 E
DEPTH= 55 KM
MAGNITUDE= 5.1
DODECANESE ISLANDS

DEC 02 BCS
H= 13 28 25.0
LAT = 35.2 N
LONG= 27.1 E
EASTERN MEDITERRANEAN SEA

ZUR	E	P	13 32 34.-				2030	18.3	124.2 316.5
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BUB	E	P	13 32 33.-				2050	18.5	125.2 317.6
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DEC 03
NO DETERMINATION OF EPICENTER

BUB	DI	P	05 40 04.8						
	E	S	05 40 11.8						

ZUR	E	P	05 40 06.1						
	E	S	05 40 14.2						

DEC 04
NO DETERMINATION OF EPICENTER

BUB	DI	P	09 35 34.3						
	E	S	09 35 37.9						

DEC 04 ERL
H= 10 16 12.0
LAT = 33.3 N
LONG= 140.7 E
DEPTH= 66 KM
MAGNITUDE= 6.6
SOUTH OF HONSHU, JAPAN

BUB	E	P	10 28 58.-				9850	88.6	38.4 329.9
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ZUR	E	P	10 28 59.-				9880	88.9	38.4 329.7
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DEC 04
NO DETERMINATION OF EPICENTER

BUB	E	P	13 23 11.2						
	E	S	13 23 14.9						

DEC 1972

DEC 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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DEC 04

NO DETERMINATION OF EPICENTER

BUB	E	P	15 46 12.6						
		S	15 46 17.0						

DEC 05

DETERMINATION OF EPICENTER

=== SEE TABLE I ===

ZUR	DE	P	00 37 42.1						
	E	S	00 37 44.8						
BUB	DE	P	00 37 49.1						
	E	S	00 37 56.4						

DEC 05

NO DETERMINATION OF EPICENTER

ZUR	I	P	13 36 59.3						
	N	S	13 37 01.3						

DEC 05

NO DETERMINATION OF EPICENTER

BUB	E	P	14 04 19.7						
		S	14 04 24.8						

DEC 05

NO DETERMINATION OF EPICENTER

BUB	DE	P	14 53 54.7						
	E	S	14 54 05.8						

DEC 05

NO DETERMINATION OF EPICENTER

BUB	E	P	15 46 48.3						
	E	S	15 46 54.1						

DEC 07

NO DETERMINATION OF EPICENTER

BUB	DE	P	15 26 58.8						
	E	S	15 27 03.8						

DEC 07

NO DETERMINATION OF EPICENTER

BUB	E	P	16 01 27.5						
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DEC 1972

DEC 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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	E	S	16 01 33.7						
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DEC 03

NO DETERMINATION OF EPICENTER

BUB	DE	P	11 36 29.9						
	E	S	11 36 32.9						

DEC 03

NO DETERMINATION OF EPICENTER

BUB	E	P	16 15 22.8						
	E	S	16 15 37.9						

DEC 08

ERL
H= 13 02 23.5
LAT = 21.4 S
LONG= 179.2 W
DEPTH=605 KM
MAGNITUDE= 5.4
FIJI ISLANDS REGION

BUB	E	PKP	18 21 19.6						
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17010	153.0	16.1	343.4
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DEC 03

NO DETERMINATION OF EPICENTER

BUB	UE	P	01 00 38.3						
	N	S	01 01 00.9						

DEC 10

ERL
H= 04 26 57.7
LAT = 49.8 N
LONG= 78.1 E
DEPTH= 0 KM (GEOPHYSICIST)
MAGNITUDE= 5.7
EASTERN KAZAKH SSR

DEC 10

BCS
H= 04 27 00.0
LAT = 50.0 N
LONG= 79.0 E
DEPTH= 3 KM (GEOPHYSICIST)
EASTERN KAZAKH SSR

BUB	DE	P	04 35 11.3						
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4930	44.3	60.2	295.2
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ZUR	UE	P	04 35 13.1						
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4950	44.5	59.9	294.7
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DEC 1972

DEC 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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DEC 10 ERL
H= 04 27 08.4
LAT = 50.1 N
LONG= 79.8 E
DEPTH= 0 KM (GEOPHYSICIST)
EASTERN KAZAKH SSR

DEC 10 BCS
H= 04 27 13.0
LAT = 50.0 N
LONG= 79.0 E
DEPTH= 0 KM (GEOPHYSICIST)
EASTERN KAZAKH SSR

BUB	UE	P	04 35 24.9				4360 44.6	59.6 235.3
ZUR	UE	P	04 35 26.1				4980 44.8	59.3 294.8

DEC 10 ERL
H= 04 33 37.2
LAT = 17.5 N
LONG= 93.6 W
DEPTH=211 KM
MAGNITUDE= 5.2
CHIAPAS, MEXICO

BUB	E	P	04 45 48.3				9470 85.2	290.6 41.4
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DEC 10 ERL
H= 18 26 07.1
LAT = 44.8 N
LONG= 149.4 E
DEPTH= 13 KM
MAGNITUDE= 6.0
KURIL ISLANDS

BUB	DE	P	18 38 25.9				9030 31.6	27.1 334.5
ZUR	E	P	18 38 28.0				9120 82.0	27.0 334.3

DEC 11
NO DETERMINATION OF EPICENTER

BUB	DE	P	10 28 36.5					
		S	10 23 51.-					

DEC 12
NO DETERMINATION OF EPICENTER

BUB	UE	P	03 36 18.6					
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DEC 1972

DEC 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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DEC 12
NO DETERMINATION OF EPICENTER

BUB	E	P	11 35 07.6					
	E	S	11 35 10.7					

DEC 12
NO DETERMINATION OF EPICENTER

BUB	DE	P	15 30 45.8					
	E	S	15 30 58.3					

DEC 13
NO DETERMINATION OF EPICENTER

BUB	DE	P	12 23 53.9					
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DEC 13
NO DETERMINATION OF EPICENTER

BUB	DE	P	12 39 15.8					
	E	S	12 39 18.7					

DEC 13
NO DETERMINATION OF EPICENTER

BUB	E	P	13 04 22.9					
	E	S	13 04 37.3					

DEC 13
NO DETERMINATION OF EPICENTER

BUB	E	P	13 35 06.2					
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DEC 13
NO DETERMINATION OF EPICENTER

BUB	UE	P	14 14 40.1					
	E	S	14 14 55.0					

DEC 13
NO DETERMINATION OF EPICENTER

BUB	DE	P	15 53 59.0					
	E	S	15 54 02.8					

DEC 14
NO DETERMINATION OF EPICENTER

BUB	UE	P	00 09 29.4					
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DEC 1972

STATION COMP. PHASE
ABBREV. SEIS.

TIME
H M S

PER. LOG. S/N
AMP.

DISTANCE
KM DEG.

DEC 1972
AZIMUTH
STAT. EPIC.

N S 00 08 48.0

DEC 14

NO DETERMINATION OF EPICENTER

BUB DI P 13 59 45.6
E S 13 59 47.6

DEC 14

NO DETERMINATION OF EPICENTER

BUB DE P 14 23 41.2
S 14 28 53.2

DEC 14 ERL

H= 17 50 21.7

LAT = 38.2 N

LONG= 20.2 E

DEPTH= 10 KM (GEOPHYSICIST)

MAGNITUDE= 4.7

GREECE

DEC 14 BCS

H= 17 50 27.0

LAT = 38.0 N

LONG= 20.3 E

IONIAN SEA

BUB UE P 17 53 39.9

1420 12.8 134.3 322.2

DEC 14 ERL

H= 20 49 34.3

LAT = 1.3 S

LONG= 89.3 E

DEPTH= 33 KM (NORMAL)

MAGNITUDE= 5.4

SOUTH INDIAN OCEAN

BUB DE P 21 02 07.6

9420 84.7 97.7 318.0

DEC 15

NO DETERMINATION OF EPICENTER

BUB UE P 11 36 29.9

DEC 15

NO DETERMINATION OF EPICENTER

BUB E P 11 54 31.3
E S 11 54 43.6

DEC 1972

STATION COMP. PHASE
ABBREV. SEIS.

TIME
H M S

PER. LOG. S/N
AMP.

DISTANCE
KM DEG.

DEC 1972
AZIMUTH
STAT. EPIC.

DEC 15

NO DETERMINATION OF EPICENTER

BUB UE P 12 01 08.6
E S 12 01 20.0

DEC 15

NO DETERMINATION OF EPICENTER

BUB UE P 12 38 39.7
N S 12 38 51.0

DEC 17 ERL

H= 00 18 33.7

LAT = 44.7 N

LONG= 149.2 E

DEPTH= 50 KM

MAGNITUDE= 5.7

KURIL ISLANDS

BUB E P 00 30 45.3

9080 81.6 27.2 334.3

ZUR E P 00 30 50.-

9120 82.0 27.2 334.2

DEC 17 ERL

H= 12 44 30.3

LAT = 34.3 N

LONG= 26.2 E

DEPTH= 35 KM

MAGNITUDE= 4.7

CRETE

DEC 17 BCS

H= 12 44 33.0

LAT = 34.2 N

LONG= 26.3 E

DEPTH= 45 KM

EASTERN MEDITERRANEAN SEA

BUB E P 12 43 47.6

2100 18.9 129.3 320.9

DEC 18 ERL

H= 01 13 54.2

LAT = 16.6 S

LONG= 28.1 E

DEPTH= 2 KM

MAGNITUDE= 5.2

ZAMBIA

BUB UE P 01 29 45.9

7330 66.4 159.5 345.3

DEC 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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DEC 18
NO DETERMINATION OF EPICENTER

BUB		P	02 24 27.2						
	E	S	02 24 45.0						

DEC 18
NO DETERMINATION OF EPICENTER

BUB	UE	P	10 47 10.6						
	N	S	10 47 26.7						

DEC 18
NO DETERMINATION OF EPICENTER

BUB	E	P	10 49 57.3						
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DEC 18
NO DETERMINATION OF EPICENTER

BUB	DE	P	15 16 35.5						
	N	S	15 16 38.8						

DEC 19
NO DETERMINATION OF EPICENTER

BUB	E	P	06 53 31.-						
	N	S	06 59 54.-						

DEC 19
NO DETERMINATION OF EPICENTER

ZUR	E	P	07 54 03.0						
	E	S	07 54 17.1						

BUB	UE	P	07 54 03.1						
	N	S	07 54 20.0						

DEC 19
NO DETERMINATION OF EPICENTER

BUB	E	P	13 06 39.9						
	E	S	13 06 49.1						

DEC 19
NO DETERMINATION OF EPICENTER

BUB	UE	P	13 32 46.6						
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DEC 1972

DEC 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM	DEG.	AZIMUTH STAT. EPIC.
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DEC 19 ERL
H= 19 34 31.4
LAT = 35.5 N
LONG= 27.8 E
DEPTH= 54 KM
MAGNITUDE= 4.6
DODECANESE ISLANDS

DEC 19 BCS
H= 19 34 33.0
LAT = 35.2 N
LONG= 27.7 E
DEPTH= 45 KM
EASTERN MEDITERRANEAN SEA

BUB	E	P	19 38 46.-				2090	18.8	123.7 316.5
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DEC 22
NO DETERMINATION OF EPICENTER

BUB	E	P	00 35 58.6						
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DEC 22
NO DETERMINATION OF EPICENTER

BUB	UI	P	15 11 56.8						
		S	15 11 57.8						

DEC 22
NO DETERMINATION OF EPICENTER

BUB	DE	P	15 14 16.9						
	E	S	15 14 21.6						

DEC 22 ERL
H= 16 22 03.9
LAT = 16.0 S
LONG= 172.4 W
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.7
SAMOA ISLANDS REGION

BUB	E	PKP	16 41 50.-				16490	148.3	1.3 353.7
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DEC 23
NO DETERMINATION OF EPICENTER

BUB	E	P	08 42 15.-						
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DEC 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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DEC 24 BCS
H= 08 12 06.0
LAT = 44.6 N
LONG= 10.1 E
NORTHERN ITALY

ZUR	E	P	08 12 53.-				330 3.0	158.5 339.6
	E	S	08 13 26.-					
BUB	E	P	08 12 55.7				370 3.3	161.2 342.3
	E	S	08 13 48.0					

DEC 24 BCS
H= 17 34 54.0
LAT = 44.6 N
LONG= 10.1 E
NORTHERN ITALY

BUB	E	P	17 35 45.3				370 3.3	161.2 342.3
	E	S	17 36 25.-					

DEC 25 ERL
H= 18 55 58.1
LAT = 53.9 N
LONG= 159.4 E
DEPTH= 52 KM
MAGNITUDE= 5.7
NEAR EAST COAST OF KAMCHATKA

BUB	DE	P	19 07 44.9				8520 76.6	17.7 340.2
ZUR	UE	P	19 07 47.2				8560 76.9	17.6 340.1

DEC 27 ERL
H= 14 06 09.0
LAT = 46.3 N
LONG= 144.0 E
DEPTH=342 KM
MAGNITUDE= 5.4
SEA OF OKHOTSK

BUB	UE	P	14 17 34.5				8740 78.6	29.8 331.1
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DEC 28 ERL
H= 02 40 53.0
LAT = 21.5 S
LONG= 163.9 E
DEPTH= 28 KM
MAGNITUDE= 5.6
LOYALTY ISLANDS REGION

DEC 1972

STATION ABBREV.	COMP. SEIS.	PHASE	TIME H M S	PER.	LOG. AMP.	S/N	DISTANCE KM DEG.	AZIMUTH STAT. EPIC.
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BUB	UE	PKP	03 00 40.5				16660 143.8	36.4 334.5
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DEC 28 ERL
H= 04 04 23.3
LAT = 17.3 S
LONG= 167.5 E
DEPTH= 5 KM (GEOPHYSICIST)
MAGNITUDE= 5.1
NEW HEBRIDES ISLANDS

BUB	E	PKP	04 24 03.-				16180 145.5	37.4 334.5
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DEC 28 ERL
H= 03 59 55.4
LAT = 20.5 S
LONG= 169.4 E
DEPTH= 47 KM
MAGNITUDE= 5.5
NEW HEBRIDES ISLANDS

BUB	DE	PKP	09 19 38.3				16540 143.7	36.5 334.6
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DEC 28 ERL
H= 10 45 50.2
LAT = 21.7 S
LONG= 169.9 E
DEPTH= 42 KM
LOYALTY ISLANDS REGION

BUB	E	PKP	11 02 00.6				16680 150.0	36.6 334.3
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DEC 28
NO DETERMINATION OF EPICENTER

BUB	UI	P	15 12 05.8					
		S	15 12 06.8					

DEC 28 ERL
H= 16 57 45.0
LAT = 34.7 N
LONG= 73.4 E
DEPTH= 63 KM
MAGNITUDE= 5.6
AFGHANISTAN

BUB	E	P	17 06 10.-				5230 47.1	82.6 305.7
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DEC 29
NO DETERMINATION OF EPICENTER

DEC 1972

STATION COMP. PHASE
ABBREV. SEIS.

TIME
H M S

PER.

LOG. S/N
AMP.

DISTANCE
KM DEG.

DEC 1972
AZIMUTH
STAT. EPIC.

BUB UE P 00 15 14.4
E S 00 15 55.-

DEC 29 ERL
H= 13 13 53.0
LAT = 19.8 S
LONG= 168.9 E
DEPTH= 31 KM
MAGNITUDE= 4.7
NEW HEBRIDES ISLANDS

BUB E PKP 18 38 39.-

16440 147.8 36.6 334.7

DEC 29 ERL
H= 19 05 23.4
LAT = 21.6 S
LONG= 169.7 E
DEPTH= 33 KM (NORMAL)
MAGNITUDE= 5.4
LOYALTY ISLANDS REGION

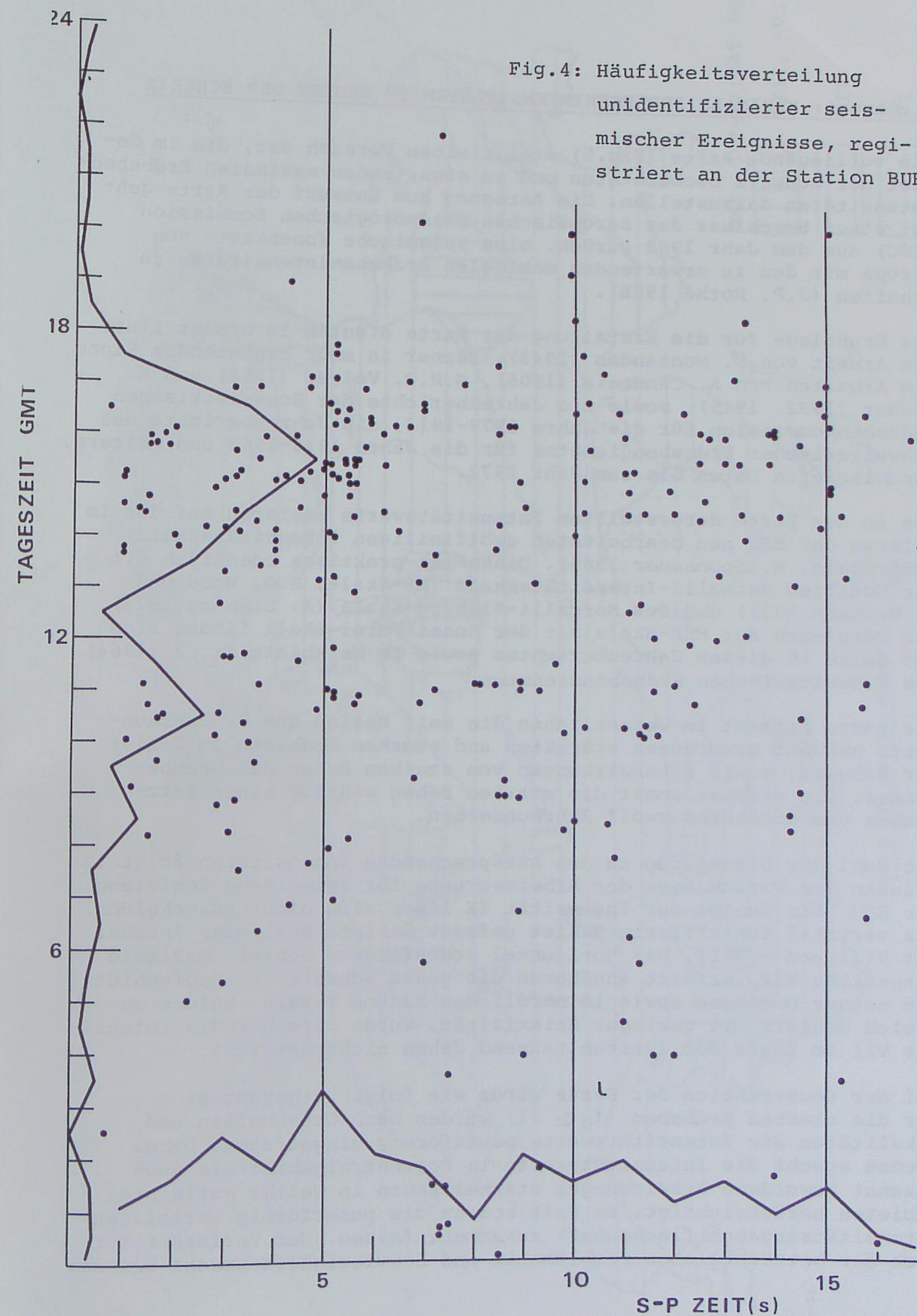
BUB UE PKP 19 25 10.1

16660 149.8 36.7 334.3

DEC 31 BCS
H= 07 40 07.0
LAT = 44.8 N
LONG= 12.3 E
NORTHERN ITALY

BUB UE P 07 41 11.8

470 4.2 133.1 316.2



N. Pavoni: MAXIMALE ERDBEBENINTENSITÄTEN IM GEBIET DER SCHWEIZ

Die vorliegende Karte (Fig.5) stellt einen Versuch dar, die im Gebiet der Schweiz beobachteten und zu erwartenden maximalen Erdbebenintensitäten darzustellen. Die Anregung zum Entwurf der Karte geht auf einen Beschluss der Europäischen Seismologischen Kommission (ESC) aus dem Jahr 1968 zurück, eine seismische Zonenkarte von Europa mit den zu erwartenden maximalen Erdbebenintensitäten zu schaffen (J.P. Rothé 1968).

Als Grundlage für die Erstellung der Karte dienten in erster Linie die Arbeit von F. Montandon (1943), ferner in mehr ergänzendem Sinne die Arbeiten von A. Candreia (1906), G.H.O. Volger (1858) und E. Wanner (1932, 1945) sowie die Jahresberichte der Schweizerischen Erdbebenkommission für die Jahre 1879-1912, die Jahresberichte des Schweizerischen Erdbebendienstes für die Jahre 1913-1963 und weitere, unpublizierte Daten bis zum Jahr 1972.

Die in der Karte dargestellten Intensitätswerte basieren auf der im Auftrag der ESC neu bearbeiteten zwölfteiligen Intensitätsskala (MSK-Skala, W. Sponheuer 1965). Diese ist praktisch identisch mit der Modified Mercalli-Intensitätsskala (MM-Skala, H.O. Wood und F. Neumann 1931) und der Mercalli-Sieberg-Skala (A. Sieberg 1923). Ein Vergleich der MSK-Skala mit der Rossi-Forel-Skala findet sich auf Seite 16 dieses Jahresberichtes sowie im Merkblatt Nr. 7 (1964) des Schweizerischen Erdbebendienstes.

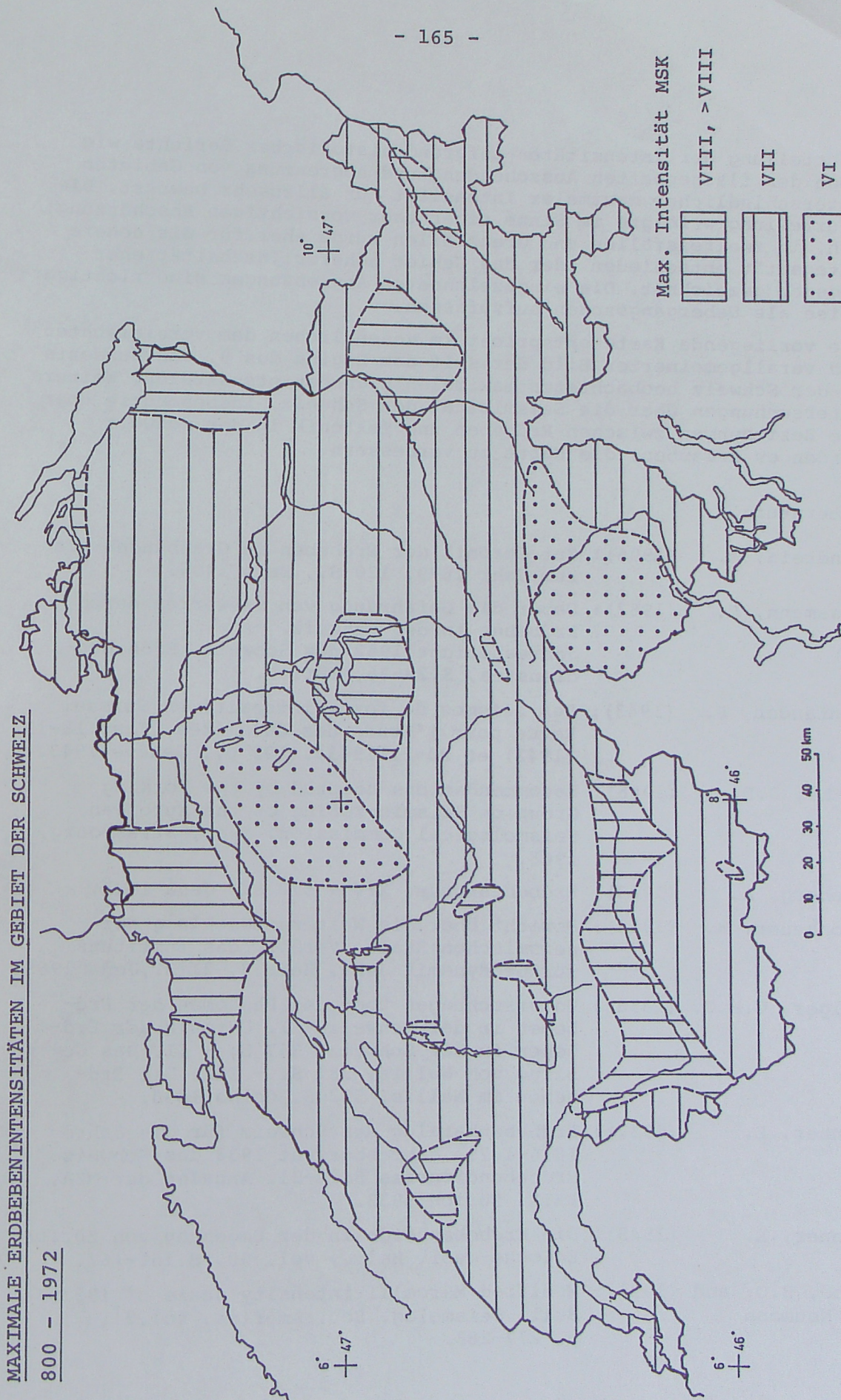
Die Karte erfasst im wesentlichen die seit Beginn des 9. Jahrhunderts bekannt gewordenen stärksten und starken Erdbeben im Gebiet der Schweiz, sowie Bebenwirkungen von starken Beben der Nachbarländer. Sie erfasst somit die starken Beben während eines Zeitraumes von annähernd zwölf Jahrhunderten.

Die Wahl der Signaturen zu den entsprechenden Intensitäten folgt im Prinzip den Vorschlägen der Arbeitsgruppe für seismische Zonierung der ESC. Ein Gebiet der Intensität IX liess sich nicht ausscheiden. Das vertikal schraffierte Gebiet umfasst Gebiete maximaler Intensität VIII und > VIII. Das horizontal schraffierte Gebiet, maximale Intensität VII, erfasst annähernd die ganze Schweiz. Im Napfgebiet und seiner Umgebung sowie im nördlichen Kanton Tessin, beides zugleich Gebiete mit geringer Seismizität, wurde offenbar die Intensität VII im Laufe der letzten tausend Jahre nicht erreicht.

Bei der Konstruktion der Karte wurde wie folgt vorgegangen: Für die starken Erdbeben ($I_0 \geq VI$) wurden nach Ortschaften und wurden sowohl die Intensitätswerte punktförmig eingetragen. Dabei bekannt gewordene Auswirkungen starker Beben in weiter entfernten Intensitätsangaben flächenhaft zusammenzufassen. Der Verfasser ist sich der beträchtlichen Problematik und Schwierigkeit sowohl bei der

Fig.5 :
MAXIMALE ERDBEBENINTENSITÄTEN IM GEBIET DER SCHWEIZ

800 - 1972



Karte entworfen von N. Pavoni

Beurteilung der Intensitäten aufgrund historischer Berichte wie auch der flächenhaften Ausscheidung und Abgrenzung von Gebieten unterschiedlicher maximaler Intensität nur allzusehr bewusst. Die Beurteilung erfolgte im Sinne einer eher vorsichtigen Abschätzung, d.h. in Zweifelsfällen und Grenzfällen wurde eher für die höhere Intensität entschieden oder das Gebiet höherer Intensität eher grösser gezeichnet. Die eingezeichneten Abgrenzungen sind richtigerweise als Uebergangszonen aufzufassen.

Die vorliegende Karte entspricht im wesentlichen dem vereinfachten und verallgemeinerten Bild der seit dem Beginn des 9. Jahrhunderts in der Schweiz beobachteten maximalen Erdbebenintensitäten. Weitere Untersuchungen über die Seismizität der Schweiz, insbesondere über die Beziehungen zwischen Erdbeben und Tektonik in der Schweiz werden es erlauben, die Karte zu verbessern.

Literatur:

- Candreia, A. (1906): Zur Chronik der Erdbeben in Graubünden bis zum Jahr 1879. 120 S., Bern 1906.
- Gassmann, F. (1962): Ueber die Gefährdung von Bauwerken durch Erdbeben in der Schweiz. Jahresbericht 1962 des Schweiz. Erdbebendienstes, S.29-36, Zürich.
- Montandon, F. (1943): Les séismes de forte intensité en Suisse. Revue pour l'Etude des Calamités. Fasc.18-19 (1942) et 20-21(1943). 109 p., Genève 1943.
- Rothé, J.P. (1968): Recommendations adopted by the Working Group on Seismic Zoning of the European Seismological Commission. 3 p., Strasbourg, 1968.
- Sieberg, A. (1923): Erdbebenkunde. XIV + 572 S., Jena 1923.
- Sponheuer, W. (1965): Bericht über die Weiterentwicklung der seismischen Skala. Veröff. des Instituts für Geodynamik Jena, Heft 8, 21 S., Jena 1965.
- Volger, G.H.O. (1858): Untersuchungen über das Phänomen der Erdbeben in der Schweiz - I. Chronik der Erdbeben in der Schweiz, 367 S. - II. Das Gebirge vom Wallis, 281 S. - III. Die Erdbeben im Wallis, 522 S. Gotha 1858.
- Wanner, E. (1932): Erdbebenkatalog der Schweiz für die Jahre 1856-1879. Jahresbericht 1932 des Schweiz. Erdbebendienstes S.16-21. Annalen der MZA, LXIX, Zürich 1933.
- Wanner, E. (1945): Die Erdbebenherde in der Umgebung von Zürich. Eclogae geol. Helv., vol. 38, S.151-161.
- Wood, H.O. and F. Neumann (1931): Modified Mercalli intensity scale of 1931, Bull. Seismolog. Soc. America, vol.21, p. 277-283.