Energy, Mines and Resources Canada

Earth Physics Branch

OCIS

SCALA

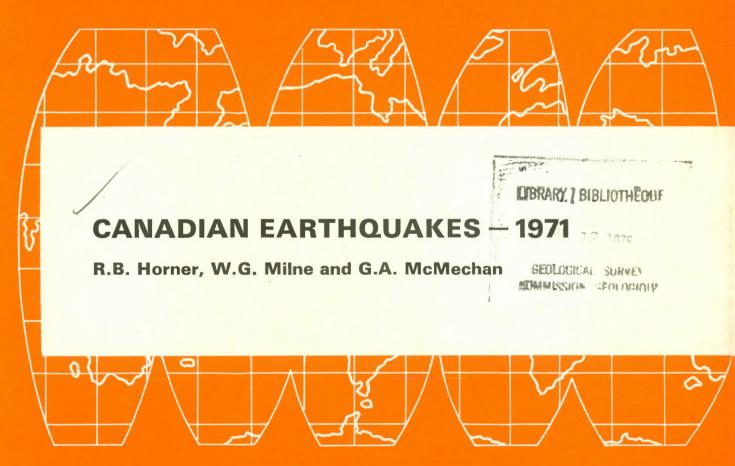
Energy, Mines and Energie, Mines et Resources Canada Ressources Canada

Direction de la physique du globe

This document was produced by scanning the original publication.

Ce document est le produit d'une numérisation par balayage de la publication originale.

# Seismological Service of Canada



Seismological Series Number 74 Ottawa, Canada 1976



Énergie, Mines et Ressources Canada

Earth Physics Branch

Direction de la physique du globe

1 Observatory Crescent Ottawa Canada K1A 0Y3 1 Place de l'Observatoire Ottawa Canada K1A 0Y3

# **Seismological Service of Canada**

## **CANADIAN EARTHQUAKES — 1971**

R.B. Horner, W.G. Milne and G.A. McMechan

Seismological Series Number 74 Ottawa, Canada 1976

### © Minister of Supply and Services Canada 1976

Available by mail from:

Printing and Publishing Supply and Services Canada, Ottawa, Canada K1A 0S9

Earth Physics Branch, Energy, Mines and Resources Canada, 1 Observatory Crescent, Ottawa, Canada K1A 0Y3

and at Canadian Government Bookstores:

HALIFAX 1683 Barrington Street

MONTREAL 640 St. Catherine Street West

> OTTAWA 171 Slater Street

TORONTO
221 Yonge Street

WINNIPEG

393 Portage Avenue

VANCOUVER 800 Granville Street

or through your bookseller

Catalogue No. M74-3/74

Price: Canada: \$2.00 Other countries: \$2.40

Price subject to change without notice

### CONTENTS

|   | Page |
|---|------|
| List of Figures                         | iv   |
| List of Tables                          | v    |
| I. Introduction                         | 1    |
| 1. Epicentre Determination              | 2    |
| 2. Magnitude Determination              | 3    |
| II Canadian Seismograph Network         | 3    |
| III Explosions                          | 5    |
| IV Summary of Seismic Activity for 1971 | 5    |
| 1. Eastern Region                       | 5    |
| 2. Northern Region                      | 11   |
| 3. Western Region                       | 13   |
| 4. Central Region                       | 14   |
| V Revisions                             | 14   |
| Acknowledgments                         | 14   |
| References                              | 14   |

### LIST OF FIGURES

| Figure |  |   |   |    | Page |
|--------|--|---|---|----|------|
| 1.     | Earthquakes of Eastern Canada and adjacent areas - 1971 .  |   |   | •  | vii  |
| 2.     | Earthquakes of Northern Canada and adjacent areas - 1971 (Sheet 1 of 2) $$                             |   | ٠ | •  | viii |
|        | Earthquakes of Northern Canada and adjacent areas - 1971 (Sheet 2 of 2)                                | • |   |    | ix   |
| 3.     | Earthquakes of Western Canada and adjacent areas - 1971 .  | • |   |    | х    |
| 4.     | Earthquakes of Central Canada and adjacent areas - 1971 .  | • |   |    | xi   |
| 5.     | The four regions of Canada   |   | • | ŀ  | 1    |
| 6.     | The Canadian Seismograph Network - 1971  | • |   |    | 4    |
| 7.     | Earthquakes in Canada and adjacent areas during 1971 with magnitude 4 or greater                       |   |   | •  | 7    |
| 8.     | Isoseismal map of the Mont-Tremblant, Quebec, earthquake of December 18, 1971 (compiled by G. Leblanc) |   |   |    | 8    |
| 9.     | The Ottawa Valley earthquake of September 27, 1971 $$  |   | • |    | 9    |
| 10.    | The Ottawa Valley earthquake of November 23, 1971 (compiled by A.E. Stevens)                           | ٠ | • |    | 10   |
| 11.    | The Lacolle, Quebec, earthquake of May 14, 1971  |   |   |    | 11   |
| 12.    | Histogram of unlocated events recorded at INK during 1971  |   |   | ų. | 12   |

## LIST OF TABLES

| Table |  |    |   |   |     | Page |
|-------|--|----|---|---|-----|------|
| 1.    | Earthquakes of Eastern Canada and adjacent areas - 1971  | •  |   |   |     | 15   |
| 2.    | Earthquakes of Northern Canada and adjacent areas - 1971 |    |   |   |     | 18   |
| 3.    | Earthquakes of Western Canada and adjacent areas - 1971  |    |   |   |     | 29   |
| 4.    | Earthquakes of Central Canada and adjacent areas - 1971  |    |   | • |     | 35   |
| 5.    | Unlocated events recorded at INK                         |    |   |   |     | 36   |
| 6.    | Unlocated events recorded at WHC                         |    |   | • |     | 38   |
| 7.    | Unlocated events recorded at YKC                         |    |   |   |     | 38   |
| 8.    | Unlocated events recorded at BLC                         |    |   | • |     | 38   |
| 9.    | Unlocated events recorded at RES                         |    |   |   |     | 39   |
| 10.   | Unlocated events recorded at MBC                         |    |   |   | . = | 40   |
| 11.   | Unlocated events recorded at ALE                         |    | ٠ |   |     | 41   |
| 12.   | Unlocated events recorded at FBC                         |    |   |   |     | 41   |
| 13.   | Unlocated events recorded at SFA                         |    |   |   |     | 42   |
| 14.   | Unlocated events recorded at HAL                         | ٠  |   |   |     | 42   |
| 15.   | Unlocated events recorded at ALB                         |    |   |   |     | 42   |
| 16.   | Unlocated events recorded at MCC                         |    | • | ٠ |     | 42   |
| 17.   | Unlocated events recorded at PNT                         |    | ٠ |   |     | 42   |
| 18.   | Unlocated events recorded at PHC                         |    |   |   |     | 43   |
| 19.   | Unlocated events recorded at SANDSPIT                    |    |   |   |     | 45   |
| 20.   | Unlocated events recorded at QCC                         |    |   |   |     | 45   |
| 21.   | Unlocated events recorded at VIC                         |    |   |   |     | 45   |
| 22.   | Summary of earthquakes reported felt in Canada during 19 | 71 |   |   |     | 6    |

| * |  |  |
|---|--|--|
|   |  |  |
|   |  |  |
|   |  |  |
|   |  |  |
|   |  |  |
|   |  |  |
|   |  |  |
|   |  |  |

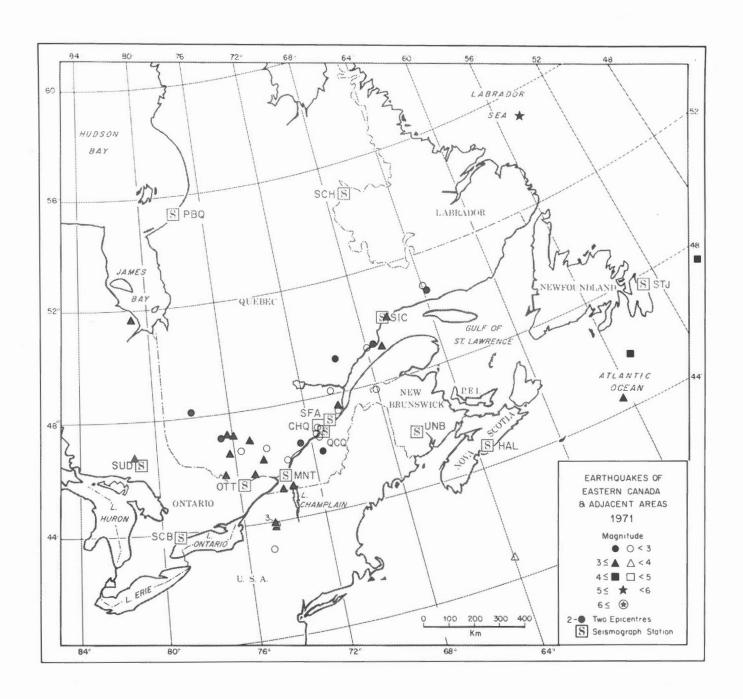


Figure 1. Earthquakes of Eastern Canada and adjacent areas - 1971

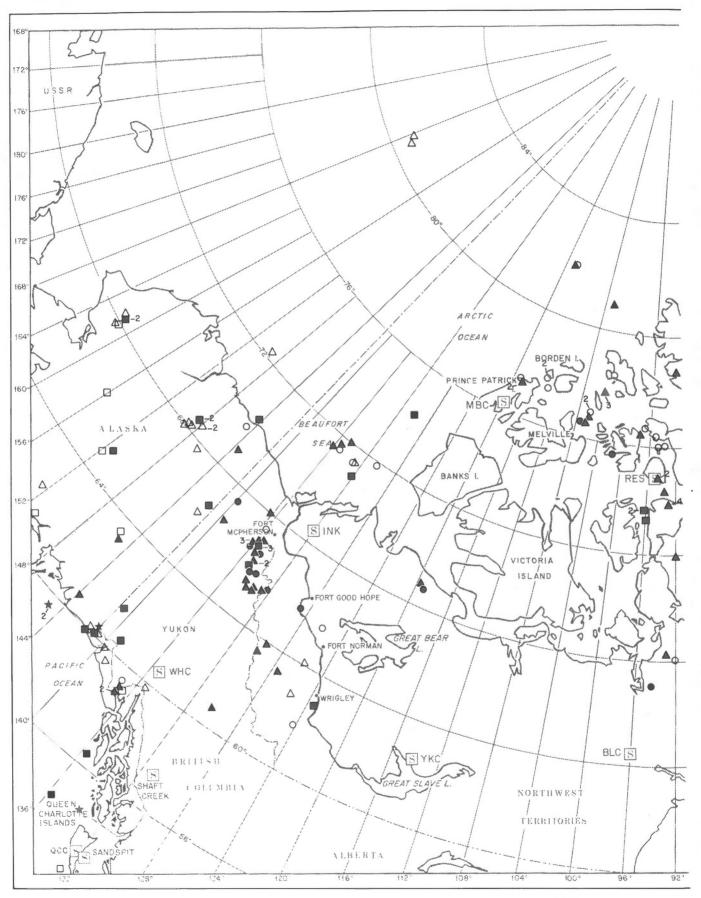
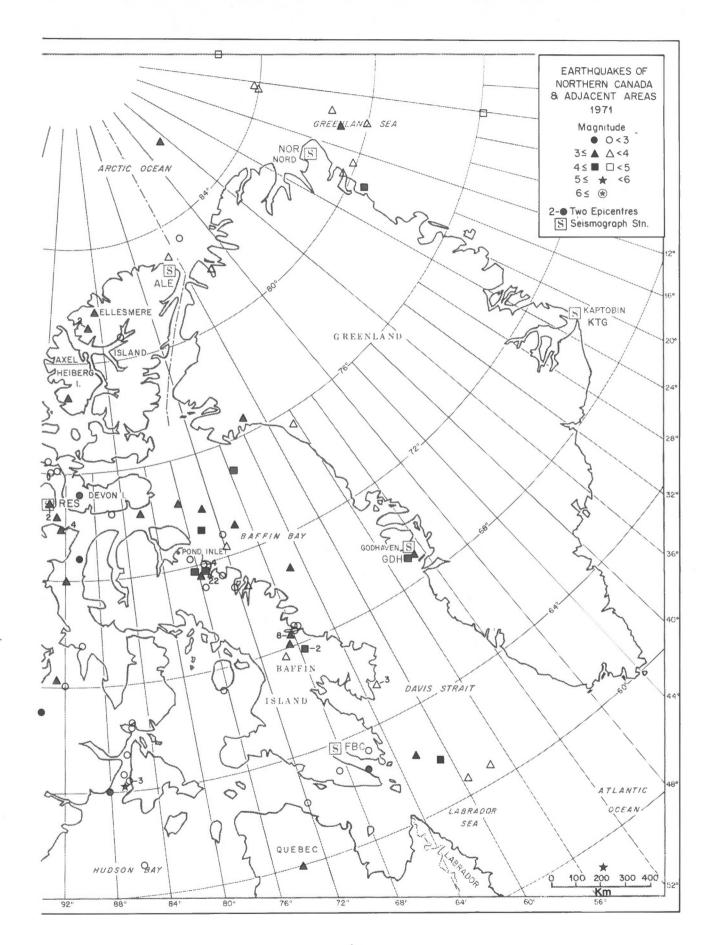


Figure 2. Earthquakes of Northern Canada and adjacent areas - 1971



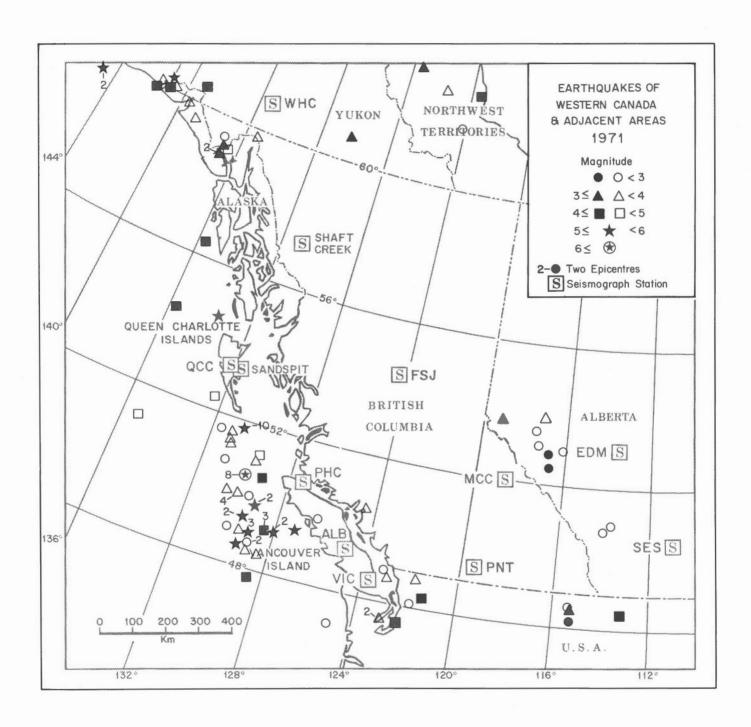


Figure 3. Earthquakes of Western Canada and adjacent areas - 1971

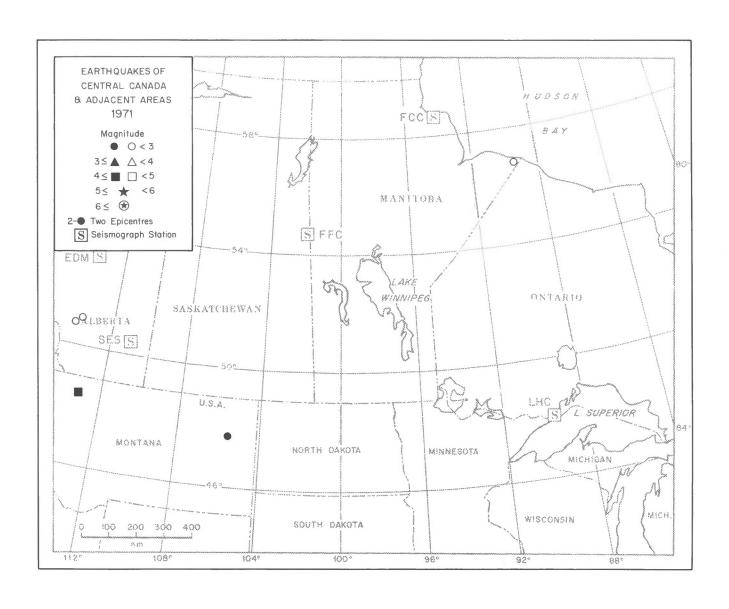


Figure 4. Earthquakes of Central Canada and adjacent areas - 1971

## **CANADIAN EARTHQUAKES — 1971**

R.B. Horner, W.G. Milne and G.A. McMechan

#### I. INTRODUCTION

This catalogue continues the annual lists of earthquakes in Canada as prepared by the Division of Seismology and Geothermal Studies, Earth Physics Branch (EPB), Department of Energy, Mines and Resources. An enumeration of the previous papers in this series can be found in Appendix 1 of Canadian Earthquakes – 1974 (Wetmiller, 1976b). Eastern, Northern and Central Region events have been analyzed by the Ottawa section of the EPB and Western Region events by the Victoria section of the EPB.

Earthquakes are listed in chronological order for each of the four regions of Canada

as shown in Fig. 5. The Eastern, Northern, Western and Central Regions are covered in Tables 1, 2, 3 and 4, respectively. Subsections of these tables contain the earthquakes located outside Canada. This catalogue, however, is not intended to be a complete listing of seismic activity in the United States close to the Canadian border. Only those events previously located by other agencies or large enough to be recorded in Canada are included.

The extension of the Canadian catalogue to include earthquakes offshore and into neighbouring countries is made for two reasons. Earthquakes near the international boundaries

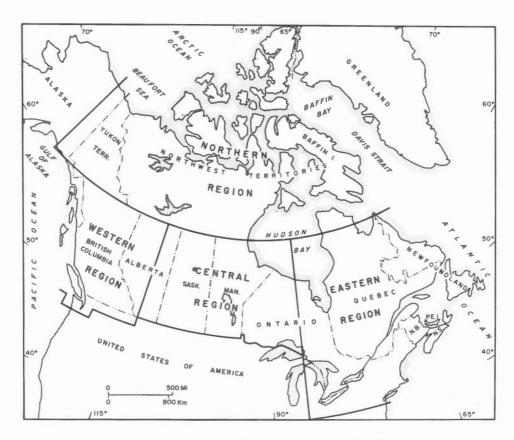


Figure 5. The four regions of Canada

may be felt and/or do damage in Canada; thus they must be included in any practical study of Canadian seismicity. Secondly, an understanding of the patterns of Canadian seismicity requires a consideration of the tectonics of neighbouring areas. In addition, the Northern Region map and table contain events beyond its boundaries in Northern Alaska and Greenland, which have been located with the Canadian Network but for which epicentres have not been published by the International Seismological Centre (ISC) or the United States National Earthquake Information Service (NEIS) through May 1971 or the National Earthquake Information Centre (NEIC) from June 1971 to December 1971. The Canadian records are not systematically read for all such events. In addition, information on magnitude and felt area for some American events is obtained from United States Earthquakes 1971 (Coffman and von Hake, 1973).

Tables 1, 2, 3 and 4 list only located earthquakes, while Tables 5 to 21 list unlocated events or those recorded at only one station. Whenever possible an epicentral region for these events is suggested. These lists of unlocated events should not be considered complete. Regional detection of such events is very dependent on instrumental magnification, record quality, noise levels, etc. They are useful in indicating relative levels of low magnitude seismic activity near each station. In these Tables, distances are given to the nearest kilometer but should not be considered accurate to better than ±10% of the calculated value.

Epicentres for earthquakes in the Eastern, Northern, Western and Central Regions are plotted in Figures 1, 2, 3 and 4, respectively. Epicentres for all earthquakes in Canada and adjacent areas during 1971 with magnitude 4 or greater are shown on one map of Canada (Fig. 7).

#### 1. Epicentral Determination

Epicentral solutions are given in this catalogue for Eastern, Northern and Central Region earthquakes, calculated by standard regression techniques applied to earthquakes recorded at regional and near-teleseismic distances. The solutions are based on the arrival times of  $P_n$ ,  $P_1$ ,  $S_n$  and  $L_g$  phases. The travel-time equations used are based on a single-layered crust 36 km thick and assume a focal depth of 18 km, as follows:

$$P_1 - H = \Delta/6.20$$
  $P_n - H = 5.60 + \Delta/8.2$   $P_n - H = 9.84 + \Delta/4.7$ 

H is the origin time in seconds and  $\Delta$  is the epicentral distance in kilometers. For a surface focus  $P_n$  and  $S_n$  intercepts become 7.50 and 13.12 s, respectively. Unless otherwise stated in the tables, the focal depth has been held fixed at 18 km or half the assumed crustal thickness. Because of a general paucity of data for most earthquakes, especially at epicentral distances less than 50 km, and uncertainties in the assumed crustal model, better estimates of focal depth cannot be made at present.

In the tables latitude and longitude are given in decimal degrees and origin time to the nearest second. Standard errors are given for these quantities, as well as the Root-Mean-Square (RMS) residual of the epicentral solution. The RMS residual is a measure of the consistency or the goodness-of-fit of the observed arrival times to the computed epicentre for the selected model. The number of stations and number of phases used in each solution are given as an indication of potential accuracy and to supplement standard error information. It is important to note that standard errors are meant to indicate only precision and not accuracy.

For the Western Region only, epicentres in most cases are located by drawing arcs as described in Canadian Earthquakes - 1966 (Stevens et al., 1972). They are not numerical solutions and no standard errors are given for origin time, latitude or longitude. In a few cases, numerical solutions have been calculated for Western Region earthquakes and standard errors are given.

The quality factors "F" and "0" are presented at the right of each epicentre and represent filled or open symbols, respectively, on the epicentre maps. For events in Eastern, Northern and Central Canada (numerical solutions) a filled symbol generally represents an earthquake well recorded at a minimum of three stations with a minimum of six phases. The station geometry, in particular, and the RMS value are also considered. For Western Region events (graphical solutions), a filled symbol is meant to indicate an estimated uncertainty of less than 20' of arc (about 40 km).

When available, solutions determined by the ISC and NEIS/NEIC are also given in the tables. This information is obtained from the 1971 ISC Bulletin, Vol. 1-12. Unless otherwise stated, these epicentres are calculated at a fixed model depth of 33 km. Unrestrained focal depths that result from these calculations should not, in general, be considered accurate; they are not likely more accurate than the general assumption of mid-crustal depths (18 km)

assumed in the Canadian epicentre determinations. The ISC and NEIS/NEIC do not calculate and RMS value but instead calculate the standard deviation (SD) of one P observation. This value is given in the tables in the RMS column. The relationship between these two quantities is SD =  $\sqrt{N/(N-3)}$  RMS, where N is the number of readings used.

Epicentres occurring within Canada and located by the ISC or NEIS/NEIC have been recomputed, in most cases, using Canadian data augmented by P arrival times of foreign stations at distances less than 20° obtained from the ISC Bulletin. For earthquakes occurring outside Canada but within the areas shown in Fig. 5, only the ISC and/or NEIS/NEIC epicentres, in most cases, are presented.

#### 2. Magnitude Determination

The magnitude values,  $M_{\rm L}$  or  $m_{\rm N}$ , given in this catalogue are based on the regional magnitude scales developed by Richter (Gutenberg and Richter, 1956) for California and by Nuttli (1973) for North America east of the Rocky Mountains, respectively. These scales have been applied to Canadian earthquakes as follows:

- A) For earthquakes east of the Cordillera (Eastern, Northern and Central Regions),  $m_{\rm N}$  is calculated from the maximum shortperiod vertical amplitude of the  $L_{\rm g}$  phase only if the following two conditions hold:
  - 1) the epicentral distance is greater than  $500 \ \mathrm{km}$ ,
  - 2) the period of the maximum amplitude is less than 1.3 seconds (Nuttli derived his magnitude scale only for periods between 0.7 and 1.3 seconds).

For events in the Yukon large enough to be recorded beyond 500 km,  $\rm m_{\rm N}$  is calculated only at stations to the east on the Shield.

- B) For earthquakes in the Cordillera (Western Region) or in any other region of Canada where  $\mathbf{m}_{N}$  cannot be applied,  $\mathbf{M}_{L}$  is calculated using the maximum shortperiod vertical amplitude of the  $\mathbf{S}_{1}$  or  $\mathbf{L}_{g}$  if the following two conditions hold:
  - 1) the epicentral distance is less than 600 km,
  - 2) the period of the maximum amplitude is less than 2.0 seconds.

C) For earthquakes in oceanic areas such as the Beaufort Sea or Baffin Bay or where the propagation path includes a substantial section of oceanic crust or wherever Lg is not recorded, ML is calculated from the maximum short-period amplitude of the Sn phase over the entire distance range. Because Sn amplitude attenuation is not adequately known, these magnitudes should be considered tentative. In such cases where Lg is absent and reliable mb magnitudes have been calculated by NETS/NEIC or ISC only their mb values are usually given.

The standard deviation of one magnitude value is given in the tables of Eastern,
Northern and Central Region earthquakes along with the number of stations used in computing the average magnitude. It is important to note that the standard deviation is simply a measure of the precision of the calculation (the scatter among individual values) and not a measure of the accuracy of the magnitude value. Similarily, magnitudes given in the tables of unlocated events are quoted to 0.1 unit but do not imply such accuracy.

#### II. CANADIAN SEISMOGRAPH NETWORK

Fig. 6 shows the 35 stations of the Canadian Seismograph Network whose records were used in the preparation of this catalogue. Detailed notes regarding instrumentation and changes in instrument constants, calibrations, etc. can be found in the 1971 Seismological Bulletin (Shannon et al., 1972).

The following international code letters are used as station abbreviations:

\*ALB Port Alberni, B.C.

ALE Alert, N.W.T.

BLC Baker Lake, N.W.T.

\*CHQ Charlesbourg, P.Q.

EDM Edmonton, Alta.

FBC Frobisher, N.W.T.

FCC Fort Churchill, N.W.T.

FFC Flin Flon, Man.

FSJ Fort St. James, B.C.

GWC Great Whale River, P.Q.

\*HAL2 Halifax, N.S.

INK Inuvik, N.W.T.

LHC Thunder Bay, Ont.

MBC Mould Bay, N.W.T.

\*MCC Mica Creek, B.C.

MNT Montreal, P.Q.

OTT Ottawa, Ont.

PHC Port Hardy, B.C.

PNT Penticton, B.C.

\*QCC Queen Charlotte City, B.C.

\*QCQ 4 Quebec, P.Q.

RES Resolute, N.W.T.

SCB Scarborough, Ont.

SCH Schefferville, P.Q.

SES Suffield, Alta.

SFA Seven Falls, P.Q.

\*SIC<sup>6</sup> Sept-Iles, P.Q.

STJ Saint John's, Nfld.

\*SUD Sudbury, Ont.

\*UNB Fredericton, N.B.

VIC Victoria, B.C.

\*WHC<sup>8</sup> Whitehorse, Y.T.

YKC Yellowknife, N.W.T.

<sup>&</sup>lt;sup>4</sup>Commenced operation on September 24, 1971.

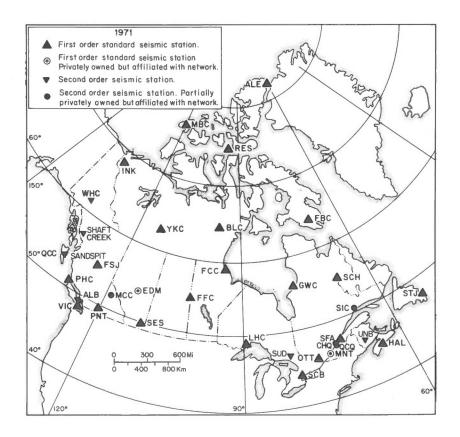


Figure 6. The Canadian Seismograph Network - 1971

<sup>\*</sup>Regional stations, short period vertical trace only.

 $<sup>^{1}</sup>$ Commenced operation on November 11, 1971.

<sup>&</sup>lt;sup>2</sup>Standard station closed March 16, 1971. Regional station commenced operation on April 1, 1971.

 $<sup>^{3}</sup>$ Commenced operation on July 24, 1971.

<sup>5</sup>Intermittent operation during 1971.

<sup>6</sup>Poor quality records throughout the year.

<sup>7</sup>Commenced operation on April 1, 1971.

<sup>8</sup>Commenced operation on September 1, 1971.

In addition to those stations listed above, temporary Regional stations operated at SANDSPIT (53.25°N, 131.82°W) on the Queen Charlotte Islands from April 25, 1970 to July 23, 1971 and at SHAFT CREEK (57.35°N, 131.0°W) in northwestern British Columbia from June 1971 to December 1972.

The magnification levels of the short-period seismographs of the Canadian Seismograph Network during 1971 permitted detection of most events of magnitude  $3\frac{1}{2}$  or greater in Canada. In southwestern British Columbia and the upper St. Lawrence Valley the relatively closer seismograph spacing permitted location of events as small as magnitude 2.

#### III. EXPLOSIONS

Seismographs of the network record many construction and mining blasts each year. Ideally, all blasts must be separated from earthquakes so that an accurate knowledge of the natural seismic activity in Canada may be obtained. Some of these blasts may have an equivalent seismic magnitude as large as 4; these are generally easy to locate and reject. Most blasts, however, are generally much smaller and the distinction on seismograms between blasts and earthquakes can be very difficult, especially when the event is recorded at only one station and not locatable. Consequently, a few of the small unlocated events may be blasts and, on the other hand, some small earthquakes may have been inadvertently rejected as blasts.

#### IV. SUMMARY OF SEISMIC ACTIVITY FOR 1971

The seismic activity within each of the four Regions during 1971 is discussed below. A total of 856 earthquakes were detected and 367 of these located, 288 in Canada and 79 in adjacent areas of the United States and Greenland.

In Canada, 10 earthquakes were reported felt. These are summarized in Table 22. The modified Mercalli Intensity Scale of 1931 is used to classify reports of felt earthquakes.

Figure 7 shows 59 earthquakes of magnitude 4 or greater in Canada and adjacent areas in 1971, three off the east coast of Canada, 22 in the Northern Region and 34 in the Western Region. Most of these earthquakes occur in sparsely settled areas or offshore and this explains to a large extent the very few reports of felt earthquakes. The actual "felt area" depends very markedly on local soil conditions, on the radiation pattern from the focus and, most importantly, on the population density within about 200 km of the epicentre. All of these may vary considerably from one earthquake to another.

#### 1. Eastern Region

The Eastern Region lies east of 85°W and includes Canada south of 60°N and the United States north of 40°N. Table 1 lists 46 earthquakes, 38 in Canada including three off the east coast (Table 1A) and 8 in the United States including one off the United States east coast (Table 1B). Epicentres for 44 events are plotted in Fig. 1, which also shows the Canadian seismograph stations in the area. The event of 26 Sept. 07h GMT in northern Quebec is plotted in Fig. 2. The event of 21 Oct. 00h GMT, reported felt in Massachusetts, was not instrumentally located and is not plotted. As well, three unlocated events occurring in the Eastern Region are listed in Tables 13 and 14.

Only minor seismic activity was recorded in the Eastern Region in 1971. In Canada the seismicity was confined mainly to the St. Lawrence Valley and to a zone in southwestern Quebec which runs northwest from the Montreal-Ottawa region. The widely-felt event of 18 Dec.  $15^{\rm h}$  GMT near Mont-Tremblant, Quebec, is described below. In the United States the earthquakes located near Blue Mountain Lake in New York State (Table 1B) represent the largest events in a swarm which began in May 1971. The largest event, magnitude  $m_{\rm N}$  3.7, on 23 May  $06^{\rm h}$  GMT was felt to distances of 80 km. For more information on this swarm see Sbar et al. (1972).

Six earthquakes were reported felt in eastern Canada in 1971 (see Table 22). The four most widely felt are discussed below.

TABLE 22

A Summary of Earthquakes Reported Felt in Canada during 1971

| Date and Time (GMT) | Magnitude | Location*   |
|---------------------|-----------|---|
| 25 Jan. 21:37       | 3.8       | San Juan Islands, U.S. Felt in northwestern Washington State and in Victoria with intensity III - IV.                 |
| 05 Feb. 07:33       | 5.5       | South of Queen Charlotte Islands. Felt at Sandspit and Cape St. James.  |
| 14 May 06:20        | 3.2       | South of Montreal, Quebec. Felt over small area around Lacolle. Maximum intensity IV.                                 |
| 15 Jul. 00:24       | 5.3       | Northwest of Queen Charlotte Islands. Felt on the Queen Charlotte Islands and in southwestern Alaska.                 |
| 27 Sep. 08:47       | 3.2       | Ottawa Valley near Thurso, Quebec. Felt to distances of about 50 km. Maximum intensity IV.                            |
| 02 Oct. 03:19       | 5.1       | Southampton Island in northern Hudson Bay. Felt at Coral Harbour (III) and Chesterfield Inlet.                        |
| 03 Nov. 05:33       | 3.2       | North shore St. Lawrence. Felt in Sept-Iles and vicinity. Maximum intensity IV.                                       |
| 21 Nov. 13:17       | 2.2       | St. Lawrence Valley north of Trois-Rivières, Quebec. Felt slightly with intensity III.                                |
| 23 Nov. 16:32       | 3.0       | Ottawa Valley near Campbells Bay, Quebec. Felt to distances of about 65 km. Maximum intensity IV.                     |
| 18 Dec. 15:36       | 3.9       | Southwestern Quebec near Mont-Tremblant. Felt to distances of $160~\mathrm{km}$ . Maximum intensity V. Slight damage. |

<sup>\*</sup>See Text and Figures 8 to 11 for more information.

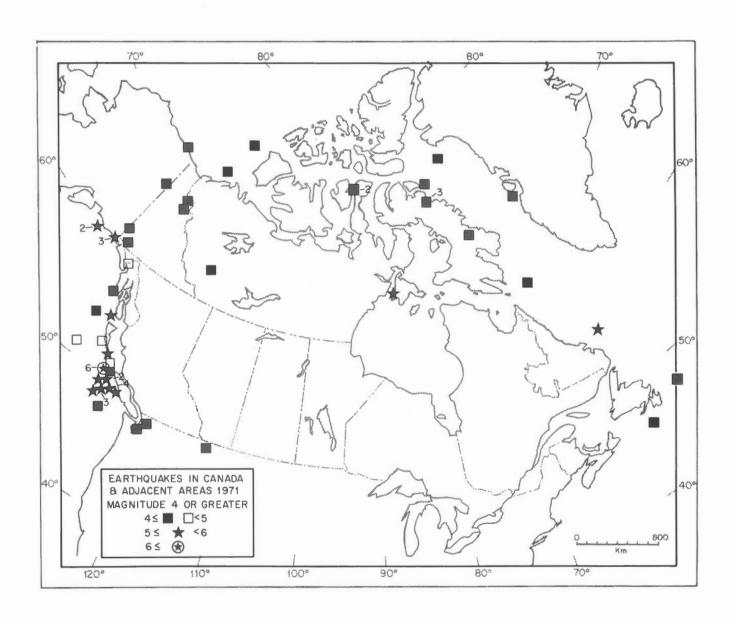


Figure 7. Earthquakes in Canada and adjacent areas during 1971 with magnitude 4 or greater

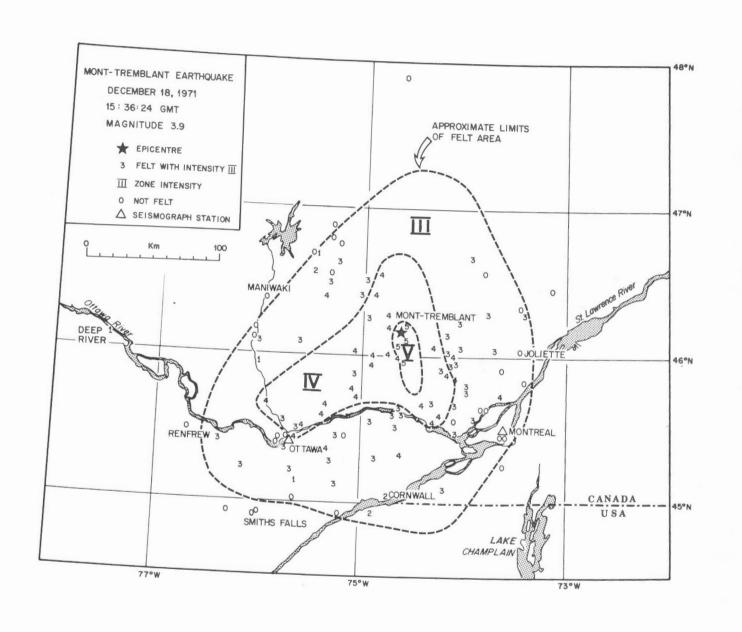


Figure 8. Isoseismal map of the Mont-Tremblant, Quebec, earthquake of December 18, 1971 (compiled by G. Leblanc)

1) The Mont-Tremblant, Quebec, earthquake of 18 Dec. 15  $^{\rm h}$  GMT (10  $^{\rm h}$  EST), magnitude  $\rm m_N$  3.9, was located approximately 100 km northwest of Montreal. The isoseismal map shown in Fig. 8 was compiled by G. Leblanc of the EPB. Little information was available from north of the epicentre due to the small population. The earthquake was felt over an area of approximately 50,000 km2 covering parts of southwestern Quebec, southeastern Ontario and the northeastern United States. The maximum radius of perceptibility was about 160 km. Intensity V effects were observed at Brébeuf, Ste-Agathe, St-Michel, St-Rémi and St-Jovite. These localities reported slight damage in the form of broken windows and displaced furniture (Leblanc and Stevens, 1972). This zone of intensity V appears to be elongated

in a north-south direction.

2) The Ottawa Valley earthquake of 27 Sept.  $08^{\rm h}$  GMT ( $04^{\rm h}$  EDT), magnitude  $m_{\rm N}$  3.2, was located northeast of Ottawa, approximately 15 km northeast of Thurso, Quebec. Reported intensities are shown in Fig. 9. No information was received from north of the epicentre. To the south the event was felt with intensities of III to IV to distances of about 50 km. The shock was strong enough to awaken people and rattle objects but no damage was reported.

3) The Ottawa Valley earthquake of 23 Nov.  $16^{\rm h}$  GMT (11 $^{\rm h}$  EST), magnitude M $_{\rm L}$  3.0, was located near Campbells Bay, Quebec, approximately 90 km west of Ottawa. The intensities

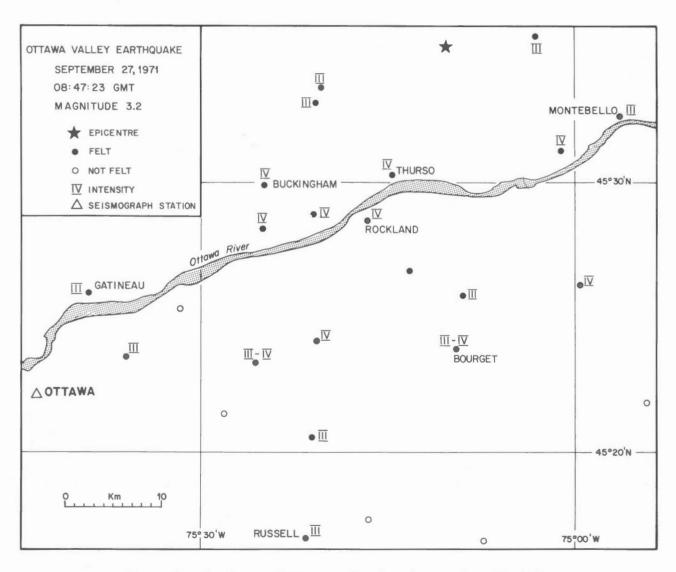


Figure 9. The Ottawa Valley earthquake of September 27, 1971

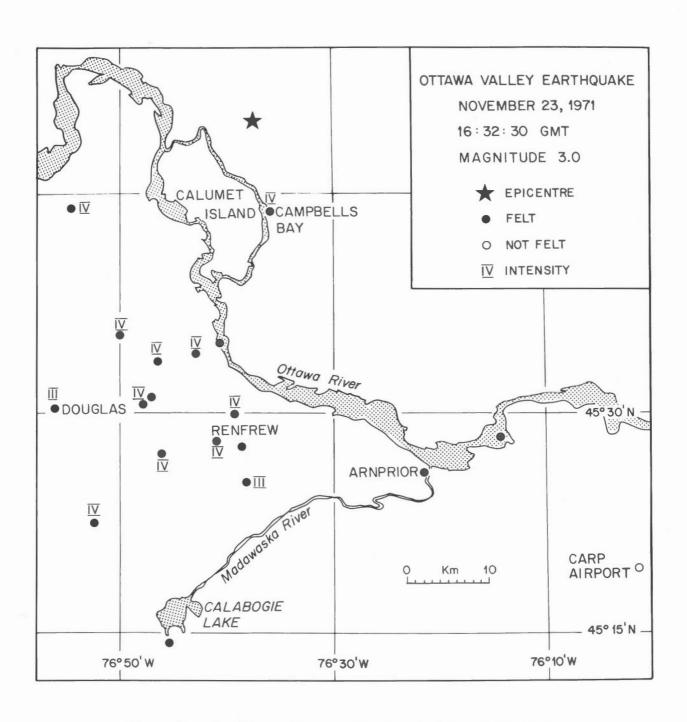


Figure 10. The Ottawa Valley earthquake of November 23, 1971 (compiled by A.E. Stevens)

reported for this event and shown in Fig. 10 were compiled by A.E. Stevens of the EPB. No information was received from north of the epicentre. To the south the event was reported felt to distances of about 65 km with intensities of III to IV. No damage was reported (with the exception of one woman who reported that the earthquake had caused her cake to fall in the oven!).

4) The southern Quebec earthquake of 14 May  $06^{\rm h}$  GMT ( $02^{\rm h}$  EDT), magnitude m $_{\rm N}$  3.2, was located near Lacolle, Quebec, approximately 50 km southeast of Montreal (Fig. 11). Intensities of III to IV were reported to distances of about 15 km from the epicentre. The shock awakened people but caused no damage.

#### 2. Northern Region

The Northern Region lies north of 60°N and

extends west into Alaska to  $145^{\circ}\text{W}$  and east into Greenland. Twenty-two events west of  $145^{\circ}\text{W}$  are included since they were located by the Canadian Network and epicentres had not been published by the NEIS/NEIC or the ISC.

Table 2 lists 226 earthquakes, 177 in Canada, 32 in Alaska (Table 2B) and 17 in Greenland (Table 2C). Epicentres for these events are plotted in Fig. 2, which also shows the seismograph stations in the Region. In addition, 319 unlocated events are listed by station in chronological order in Tables 5 to 12. Several of these earthquakes are associated with larger located events and, whenever possible, an epicentral region is suggested.

The areas of highest seismic activity in the Northern Region in 1971 were the northern Yukon Territory and the east coast of Baffin Island near Home Bay and Buchan Gulf. In

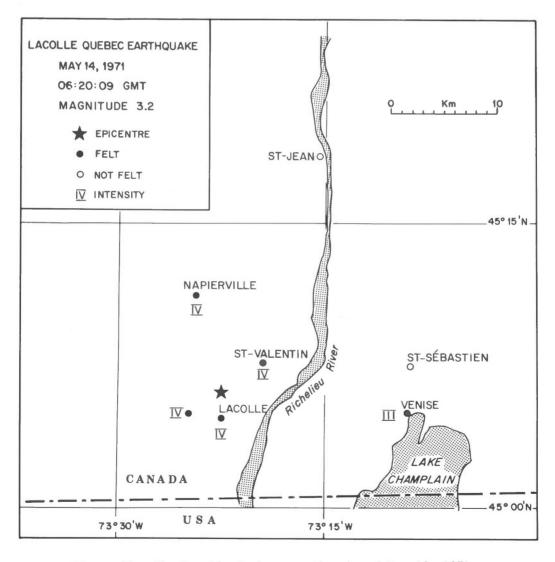


Figure 11. The Lacolle, Quebec, earthquake of May 14, 1971

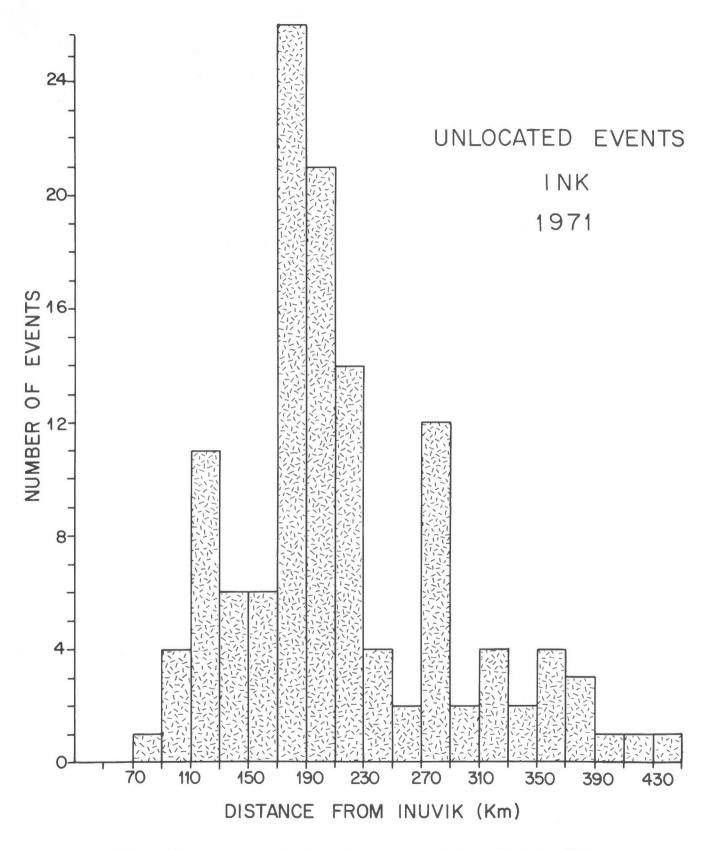


Figure 12. Histogram of unlocated events recorded at INK during 1971

Buchan Gulf a series of 25 events occurred between 16 Jan. and 23 Jan., the largest on 16 Jan. 23h GMT having magnitude m<sub>N</sub> 4.2. In the northern Yukon Territory only two events were larger than magnitude 4; mN 4.1 on 4 Mar. 13h GMT and ML 4.2 on 21 Nov. 13h GMT. Elsewhere in the Northern Region seismicity was scattered through the Arctic Islands. Baffin Bay, southern Davis Strait, the Beaufort Sea, the area just west of the Mackenzie River south of 650N, and from Southampton Island in northern Hudson Bay along the Boothia Peninsula to Resolute. A magnitude m<sub>N</sub> 3.9 event on Cornwallis Island on 17 Mar. 16:47 GMT was followed by 51 aftershocks, 50 of which were recorded only at RES (see Table 9). All of the aftershocks had magnitudes less than  $\rm M_L$  2. Two magnitude  $\rm m_N$  4.0 earthquakes, 27 June 03  $^h$  GMT and 24 July 22:25 GMT, occurred on the northwest coast of Somerset Island about 120 km south of Resolute. Both events were followed by two small aftershocks (see Table 9).

The two largest shocks in the Northern Region, magnitude  $\rm m_b$  5.8 on 26 Mar. 17  $^h$  GMT and magnitude  $\rm m_N$  5.1 on 2 Oct. 03  $^h$  GMT, were located on the border of southwestern Yukon Territory and Alaska and on the west coast of Southampton Island in northern Hudson Bay, respectively. The event of 25 March was reported felt at Yakutat, Alaska, with intensity IV at an epicentral distance of about 110 km. The Southampton Island earthquake was reported felt at Coral Harbour with intensity III and also at Chesterfield Inlet at distances of approximately 160 km and 230 km, respectively. Hashizume (1974) using the Rayleigh wave amplitude spectra produced by the Southampton Island earthquake estimated its focal depth to be 21 km. Hashizume also suggested the focal mechanism to be a thrust fault type with the maximum compressional direction nearly NE-SW. See Hashizume (1972) for more details.

Again this year as in 1969 and 1970 (Horner et al., 1974 and 1975) a large number of unlocated events were recorded at INK (see also Wetmiller, 1976a and b). Table 5 lists 138 unlocated events at INK in 1971. The distance range is from 82 to 885 km and most with magnitude less than 3. One hundred and twenty-five of these events lie between 70 and 450 km from INK. The frequency histogram as a function of distance is shown in Fig. 12. The events are grouped by 20 km intervals to show as much detail as possible within the accuracy of the calculated distances. In Fig. 12, 61 of the 125 events, about  $\frac{1}{2}$ , originate at distances of 170 to 230 km from INK. This distance range corresponds to that of the cluster of located events in the northern

Yukon Territory southwest of Ft. McPherson (Fig. 2).

The seismograph station at Whitehorse, Yukon Territory, commenced operation on September 1, 1971. This greatly improved the detection and location capability of events in the Yukon, particularly in the southwestern Yukon near the Alaskan border. Table 6 lists 25 unlocated events at WHC during the last four months of 1971. All of these events are magnitude 3 or less and their distance range varies from 142 to 358 km. Fourteen of these events were also recorded at Shaft Creek in northwestern British Columbia. In Fig. 2 most of the events within about 350 km of WHC are located to the west or southwest. This is a probable source region for most of the unlocated events at WHC as well.

#### 3. Western Region

The Western Region lies west of 113°W and includes Canada and Alaska east of 1430W and south of 60°N; Montana, Idaho and Washington States north of 48°N; and the Puget Sound area of Washington State north of 47°N between 121°W and 125°W. The regional boundary extends westward into the Pacific Ocean between 480N and 600N to include earthquakes that are located along tectonic features west of the mainland. In the area which includes the Gulf Islands and the San Juan Islands at the southern end of the Strait of Georgia the true epicentres of some of the earthquakes that are in the Canadian section of Table 3 may be in the United States and vice versa. Some of the unlocated events recorded at VIC may also originate in the United States.

Table 3 lists 93 earthquakes, 72 in Canada (Table 3A) and 21 in the United States (Table 3B). Epicentres for these events are plotted in Fig. 3, which also shows the Canadian seismograph stations in the area. In addition, 167 unlocated events are listed by station in chronological order in Tables 15 to 21.

The most seismic region in western Canada continued to be west of Vancouver Island. Two shocks, magnitude  $\rm M_S$  6 or greater, were detected during 1971. The first, on 13 March 23h GMT, had magnitudes  $\rm M_S$  6.1,  $\rm m_b$  5.7; and the second on 5 Dec. 5h GMT, had magnitudes  $\rm M_S$  6.0,  $\rm m_b$  5.5 and  $\rm M_L$  5.2 (Table 3A). This latter shock was the largest in a series of events which began in mid-November. Several events in this series were recorded only at PHC (Table 18).

Three events were reported felt in western Canada in 1971 (Table 22). The event of Jan. 25  $21^{\rm h}$  GMT (13 $^{\rm h}$  PST), M<sub>L</sub> 3.8, located in the San

Juan Islands was felt in northwestern Washington State and in a few districts on Vancouver Island; intensities of III-IV were reported in Victoria. The event of 5 Feb. 7h GMT (4 Feb.  $23^{\rm h}$  PST),  $\rm m_b$  5.1,  $\rm M_s$  5.7, located off the southern tip of the Queen Charlotte Islands was reported felt at Cape St. James and Sandspit on the Queen Charlotte Islands. The event of 15 July 00h GMT (14 July,  $18^{\rm h}$  PDT), magnitude  $\rm M_L$  5.3, located northwest of the Queen Charlotte Islands was reported felt at Port Clements, Queen Charlotte City and Masset, and at Sitka and Ketchikan in Alaska.

Over 200 earthquakes were reported felt in the Flathead Lake region of northwestern Montana during 1971 (Coffman and von Hake, 1973). In this catalogue only the four events located north of 47°N in Montana are listed (Table 3B).

#### 4. Central Region

The Central Region lies north of 49°N and south of 60°N between 85°W and 113°W and includes Saskatchewan, Manitoba and parts of Alberta and Ontario. Table 4 lists two events, one in Canada (Table 4A) and one in northeastern Montana with a previously unpublished epicentre. Epicentres for these two events are plotted in Fig. 4 which also shows the Canadian seismograph stations in the area.

#### V. REVISIONS

The events of 24 Nov. 21<sup>h</sup> GMT and 30 Nov. 14<sup>h</sup> GMT in Canadian Earthquakes 1969 (Horner et al., 1974) are misplotted in Fig. 2. They should be 5 degrees further south. The epicentres listed in Table 2 of the 1969 catalogue are correct.

#### ACKNOWLEDGMENTS

We gratefully acknowledge the cooperation of Rev. M. Buist, S.J., Collège Jean-de-Brébeuf and the Physics Department, University of Alberta, for loaning the records of the Montreal and Edmonton Observatories, respectively.

The interpretation of many events in the Greenland area was greatly facilitated by the addition of phase readings generously supplied by Dr. E. Hjortenberg, Danish Geodetic Institute.

We would also like to thank P.W. Basham, A.E. Stevens, G. Leblanc and R.J. Wetmiller for critically reviewing the manuscript.

#### REFERENCES

- Coffman, J.L. and C.A. von Hake, 1973. United States earthquakes 1971. U.S. Dept. of Commerce, N.O.A.A., E.D.S., Boulder, 176 p.
- Gutenberg, B. and C.F. Richter, 1956. Earthquake magnitude, intensity, energy and acceleration (second paper). Bull. Seis. Soc. Amer., 46, pp. 105-145.
- Hashizume, M., 1974. Surface wave study of earthquakes near northwestern Hudson Bay, Canada. J. Geophys. Res., 79, pp. 5458-5468.
- Horner, R.B., W.G. Milne and G.A. McMechan, 1974. Canadian earthquakes - 1969. Seism. Ser. Earth Physics Br., No. 67, 44 p.
- Horner, R.B., W.G. Milne and G.A. McMechan, 1975. Canadian earthquakes - 1970. Seism. Ser. Earth Physics Br., No. 69, 43 p.
- ISC, 1971. Bulletin of the International Seismological Centre, 8, Nos. 1 to 12.
- Leblanc, G. and A.E. Stevens, 1972. Mont-Tremblant: la région qui porte son nom. GEOS, Autumn issue, pp. 12-13.
- Nuttli, O.W., 1973. Seismic wave attenuation and magnitude relations for eastern North America. J. Geophys. Res., 78, pp. 876-885.
- Sbar, M.L., J. Armbruster and Y.P. Aggarwal, 1972. The Adirondack, New York, earthquake swarm of 1971 and tectonic implications. Bull. Seis. Soc. Amer., 62, pp. 1303-1318.
- Shannon, W.E., F. Lombardo and R.J. Halliday, 1972. Seismological Bulletin, January-December 1971. Seism. Ser. Earth Physics Br., No. 64, 434 p.
- Stevens, A.E., W.G. Milne, R.J. Wetmiller and R.B. Horner, 1972. Canadian earthquakes - 1966. Seism. Ser. Earth Physics Br., No. 62, 55 p.
- Wetmiller, R.J., 1976a. Canadian earthquakes 1973. Seism. Ser. Earth Physics Br., No. 72, 51 p.
- Wetmiller, R.J., 1976b. Canadian earthquakes 1974. Seism. Ser. Earth Physics Br., No. 73, 62 p.

### TABLE 1

### EARTHQUAKES OF EASTERN CANADA AND ADJACENT AREAS

#### 1971

#### (F=FILLED, 0=OPEN SYMBOL ON EPICENTRE MAPS)

#### A. CANADIAN EPICENTRES

|        | H-TIME (GMT) LATIT<br>HR MN SEC DEG        | UDE LONGITUDE<br>DEG                                 | RMS MAGNITUDE<br>SEC |   | OF DA |   |   |
|--------|--|--|----------------------|---|-------|---|---|
| JAN 6  | 06 22 08.(1) 47.17 BASKATONG RESERVOIR     | N(0.02) 75.96 W(0.04)<br>IN SOUTHWESTERN QUEBEC      | 1.2 MN=3.8(8.2)      | 6 | 9     | 2 | F |
| JAN 19 |  | N(0.03) 75.18 W(0.06)<br>NORTHEAST OF MONT-LAUR      |                      | 7 | 14    | 3 | F |
| JAN 19 |  | N(0.08) 69.80 W(0.19)<br>NCE WEST OF BAIE-COMEAU     |                      | 3 | 6     | 1 | F |
| JAN 26 | 13 25 31. (0) 49.30 NEAR BAIE-COMEAU QUE   | N(0.00) 67.97 W(0.01)<br>BEC                         | 0.1 MN=2.9( )        | 3 | 4     | 1 | 0 |
| FEB 5  | 23 40 54.(1) 48.20<br>SOUTHWESTERN QUEBEC  | N(0.03) 78.03 W(0.04)<br>NEAR VAL+D*OR               | 1.3 MN=2.7(0.1)      | 7 | 9     | 4 | F |
| FEB 7  |  | N(0.05) 67.58 W(0.12)<br>NCE EAST OF BAIE-GOMEAU     |                      | 5 | 7     | 4 | F |
| FEB 8  |  | N(0.21) 68.07 W(0.35)<br>NSWICK, NORTH OF EDMUNS     |                      | 4 | 7     | 1 | 0 |
| MAR 17 |  | N(0.03) 76.63 W(0.09)<br>SOUTHWESTERN QUEBEC         | 1.2 MN=2.7(0.0)      | 5 | 6     | 2 | F |
| MAR 26 | 03 04 51.(1) 46.76<br>SOUTHWEST OF QUEBEC  | N(0.08) 71.68 W(0.10)<br>CITY                        | 1.7 ML=1.9(0.0)      | 4 | 5     | 2 | 0 |
| MAR 26 | 09 11 10.(2) 46.63<br>SOUTHWEST OF QUEBEC  | N(0.13) 71.57 W(0.17)<br>CITY                        | 2.5 ML=1.9(0.0)      | 4 | 5     | 2 | 0 |
| MAR 27 | 16 34 03.(1) 46.89<br>NORTHWEST OF QUEBEC  | N(0.05) 71.41 W(0.06)<br>CITY                        | 1.0 ML=1.7( )        | 4 | 5     | 1 | 0 |
| MAR 31 | 22 01 33.(1) 46.97<br>NORTHWEST OF QUEBEC  | N(0.09) 71.55 W(0.10)                                | 1.9 ML=1.7( )        | 4 | 5     | 1 | 0 |
| APR 14 |  | N(0.17) 63.96 W(8.26)<br>NCE EAST OF SEPT-ILES       | 1.8 MN=2.7(0.3)      | 3 | 5     | 2 | 0 |
| MAY 14 | SOUTH OF MONTREAL QU                       | N(0.04) 73.37 W(0.07)<br>EBEC. REPORTED FELT TO      | DISTANCES            | 9 | 12    | 5 | F |
|        |  | ICENTRE LOCATED NEAR LAG<br>• NO DAMAGE • SEE FIGURE |                      |   |       |   |   |
|        |  | N(0.07) 63.81 W(0.18)<br>NCE EAST OF SEPT-ILES       |                      | 3 | 7     | 2 | F |
| JUN 11 | 10 33 10.(1) 45.70<br>GRAND BANKS, SOUTH O | N (0.06) 55.05 W (0.08)<br>F NEWFOUNDLAND            | 1.9 ML=4.2( )        | 7 | 13    | 1 | F |
| JUN 21 | 01 35 21.(1) 44.40<br>ATLANTIC OCEAN SOUTH | N(0.09) 56.33 W(0.07)<br>OF NEWFOUNDLAND             | 1.1 ML=3.6(0.2)      | 4 | 6     | 4 | F |
| JUN 27 | 12 22 30.(0) 46.05<br>NORTH OF MONTREAL NE | N(0.02) 73.41 W(0.03)<br>AR JOLIETTE QUEBEC          | 0.4 ML=2.2(0.3)      | 3 | 5     | 3 | 0 |
| JUL 6  |  | N(0.02) 76.28 W(0.03)<br>NORTHWEST OF MANIWAKI       | 0.6 MN=3.0( )        | 5 | 7     | 1 | F |

|                              | H-TIME (GMT)<br>HR MN SEC  | LATITUDE<br>DEG   | LONGITUDE<br>DEG   | RMS<br>SEC          | MAGNITUDE        |     | OF D<br>PHA     |                    |   |
|------------------------------|--|---|--|---------------------|------------------|-----|-----------------|--------------------|---|
| JUL 9                        |  | 46.74 N(0.02)<br>Sudbury Ontario  | 81.20 W(0.05)  | 0.7                 | MN=3.1(0.1)      | 5   | 9               | 3                  | F |
| AUG 12                       | 22 02 20.(2)<br>NORTH OF LA MA   | 48.14 N(0.13)<br>ALBAIE QUEBEC  | 70.46 W(0.21)  | 1.4                 | ML=2.4(0.3)      | 4   | 4               | 2                  | 0 |
| AUG 15<br>ISC<br>NEIC        | 06 17 16.  | 47.46 N(8.07)<br>47.4 N<br>N APPROX. 278 KM   | 49.4 W   |                     | MB=4.6           | 81  | 81              | 9                  | F |
| AUG 20                       |  | 46.62 N(0.09)<br>QUEBEC NEAR MONT   |  | 0.8                 | ML=2.2(0.4)      | 3   | 4               | 3                  | 0 |
| SEP 12                       | 08 31 43.(1)<br>NEAR LA MALBA  | 47.56 N(0.05)<br>IE QUEBEC  | 70.24 W(8.09)  | 2.2                 | MN=3.2( )        | 6   | 8               | 1                  | F |
| SEP 15                       |  | 46.57 N(0.06)<br>MONTREAL QUEBEC  |  | 0.7                 | ML=2.4(0.4)      | 3   | 4               | 3                  | 0 |
| SEP 26<br>ISC<br>NEIC        | 07 01 06.(1)<br>07 01 06.  | 59.95 N(0.03)<br>59.87 N(0.08)<br>59.9 N<br>EC (PLOTTED IN F  | 73.8 H(0.17)<br>73.7 H   | 2.4                 |                  |     | 33<br>10        | 13<br>0<br>2       | F |
| SEP 27                       | NORTHEAST OF OTTAWA. REPORT  | 45.71 N(0.02)<br>THURSO QUEBEC, A<br>TED FELT TO DIST<br>NO DAMAGE. SEE                                       | PPROX. 55 KM NO<br>ANCES OF 50 KM.   | RTHEAS              | ST OF            | 11  | 17              | 2                  | F |
| OCT 13                       |  | 51.65 N(0.03)<br>F JAMES BAY NEAR   |  | 1.8                 | MN=3.4(0.1)      | 10  | 12              | 9                  | F |
| OCT 27                       |  | 49.23 N(0.04)<br>IVER EAST OF BAI   |  | 2.3                 | MN=3.0(0.2)      | 8   | 10              | 4                  | F |
| NOV 3                        | NORTH SHORE ST   | 50.17 N(0.05)<br>T Lawrence. Felt<br>Maximum intensi  | IN SEPT-ILES   |                     |                  | 7   | 9               | 5                  | F |
| NOV 15                       | 07 17 49.(0)<br>NEAR LA MALBA  | 47.40 N(0.00)<br>IE QUEBEC  | 70.29 W(0.00)  | 0.0                 | ML=1.2(0.1)      | 3   | 3               | 3                  | 0 |
| NOV 15                       |  | 45.06 N(0.07)<br>MONTREAL ON THE  |  |                     |                  | 8   | 15              | 3                  | F |
| NOV 21                       | NORTH OF TROIS   | 46.55 N(0.03)<br>S-RIVIERES QUEBE<br>Intensity III.   |  |                     | ML=2.2(0.4)      | 4   | 8               | 4                  | F |
| NOV 22                       |  | 47.24 N(0.03)<br>Voir in southwes   |  | 1.0                 | ML=3.0(0.2)      | 7   | 8               | 6                  | F |
| NOA 53                       | NEAR CAMPBELLS REPORTED FELT   | 45.83 N(0.06)<br>S-BAY QUEBEC APP<br>TO DISTANCES OF<br>SITY IV. NO DAMA                                      | ROX. 85 KM WEST  | OF OF               | TTAWA.<br>Entre. | 8   | 9               | 6                  | F |
| DEC 7<br>ISC<br>NEIC<br>NEIG |  | 55.09 N(0.03)<br>55.05 N(0.02)<br>55.1 N  |  | 1.2                 |                  | 191 | 9<br>191<br>108 | 2<br>40<br>29<br>2 | F |
|                              | ISC DEPTH = LABRADOR SEA   | 25 +/- 2 KM   |  |                     |                  |     |                 |                    |   |
| DEC 18<br>ISC<br>NEIC        | 15 36 23.(0)<br>15 36 24.<br>ISC AND NEIC<br>NEAR MONT-TRE<br>50,000 SQ KM | 46.18 N(0.03) 46.08 N(0.03) 46.0 N DEPTH RESTRICT MBLANT QUEBEC. F WITH A MAXIMUM R XIMUM INTENSITY FIGURE 8. | 74.58 W(0.05)<br>74.7 W<br>ED TO 19 KM<br>ELT OVER AN ARE<br>ADIUS OF PERCEF | 1.1<br>0.8<br>EA OF | MB=3.7           | 17  | 36<br>17<br>14  | 9 0 2              | F |
|                              |  |   |  |                     |                  |     |                 |                    |   |

| DATE<br>1971                 | H-TIME (GMT)<br>HR HN SEC  | LATITUDE<br>DEG   | LONGITUDE<br>Deg   | RMS<br>SEC    | MAGNITUDE   |    | OF DA          |             |    |
|------------------------------|--|---|--|---------------|-------------|----|----------------|-------------|----|
| DEC 27                       | 17 29 54.(1)<br>SOUTH OF QUEBI   | 46.12 N(0.04)<br>EC CITY  | 71.54 W(0.04)  | 1.6           | MN=2.8(0.1) | 7  | 12             | 2           | F  |
|                              |  | 8. UNITE  | D STATES EPICEN  | TRES          |             |    |                |             |    |
| HAY 21                       |  | 40.72 N(0.21)<br>N South of Halif   |  | 1.7           | ML=3.5(0.1) | 3  | 6              | 2           | 0  |
|                              | 06 24 26.  |   | 74.54 W(0.03)<br>74.49 W<br>74.4 W(0.11)                       |               |             | 18 | 25<br>18<br>18 | 5<br>0<br>0 | F  |
| PAL                          | ISC DEPTH = NEW YORK STATI INTENSITY V A GRAY, RAQUETT                           | DEPTH RESTRICT<br>43 +/- 26 KM<br>E NEAR BLUE MOUN<br>T BLUE MOUNTAIN<br>E LAKE, SPECULAT<br>ITED STATES EART   | ITAIN LAKE. FELT<br>LAKE. INTENSITY<br>OR AND TUPPER L         | IV A          | r           |    |                |             |    |
|                              | 09 29 58.  |   | 74.55 W(0.04)<br>74.47 W<br>74.38 W(0.09)                      |               |             | 17 | 26<br>17<br>18 |             | F  |
| FAC                          | ISC DEPTH = NEW YORK STATI INTENSITY V A INTENSITY IV AT RAQUETTE L              | DEPTH RESTRICT 49 +/- 20 KM E NEAR BLUE MOUNT T BLUE MOUNTAIN AT NEWCOMB AND T AKE. NO DAMAGE. ITED STATES EART | ITAIN LAKE. FELT<br>LAKE, CONIFER A<br>UPPER LAKE. ALS         | ND SA         | BAEL.<br>T  |    |                |             |    |
| JUN 21<br>NEIC<br>ISC<br>PAL | 02 48 30.  | 43.99 N(0.04)<br>43.87 N<br>43.91 N(0.04)   | 74.48 W  |               |             | 10 | 11<br>10<br>5  | 0           | F  |
|                              | NEW YORK STATINTENSITY IV<br>LAKE AND TUPP                                       | ISC DEPTH RES E NEAR BLUE MOUN AT BLUE MOUNTAIN ER LAKE. INTENSI ITED STATES EART                               | TAIN LAKE. FELT<br>LAKE, NEWCOMB,<br>TY II AT INLET.           | WITH<br>RAQU  | ETTE        |    |                |             |    |
|                              | 08 14 59.  | 43.93 N(0.05)<br>43.87 N<br>43.8 N(0.11)  | 74.48 W  | 3.5           |             | 12 | 7<br>12<br>11  | 0           | F  |
| PAL                          | EPB, NEIC AND<br>NEW YORK STAT<br>INTENSITY V A<br>SABAEL. SLIGH<br>INTENSITY IV | ISC DEPTH RESE NEAR BLUE MOUNT INDIAN LAKE, BY DAMAGE REPORTE AT RAQUETTE LAKE                                  | NTAIN LAKE. FELT<br>BLUE MOUNTAIN LA<br>ED AT INDIAN LAK<br>E. | WITH<br>KE AN | D           |    |                |             |    |
| AUG 15                       |  | 43.87 N(0.90)<br>E, BLUE MOUNTAIN   |  | 0.0           | ML=2.0(0.1) | 2  | 3              | 2           | 0, |
| SEP 20                       |  | 43.05 N(0.02)<br>UTICA NEW YORK.  |  | 0.1           | ML=2.7(8.2) | 2  | 4              | 2           | 0  |
| OCT 21<br>NESA               | REPORTED FELT<br>OF NORTHEASTE   | NORTHEASTERN MA<br>OVER AN AREA OF<br>RN MASSACHUSETTS<br>ITED STATES EARI                                      | APPROX. 1200 S   | ES FR         | _           |    |                |             |    |

TABLE 2

### EARTHQUAKES OF NORTHERN CANADA AND ADJACENT AREAS

#### 1971

## (F=FILLED, 0=OPEN SYMBOL ON EPICENTRE MAPS)

### A. CANADIAN EPICENTRES

| 77 C C C C C C C C C C C C C C C C C C | H-TIME (GMT)<br>HR MN SEC                               | LATITUDE<br>DEG  | L ONGITUDE<br>DEG                       | RMS<br>SEC | MAGNITUDE                       |          | OF D          |       |   |
|--|---|--|---|------------|---------------------------------|----------|---------------|-------|---|
| JAN 5                                  |   | 76.53 N(0.04)<br>MELVILLE ISLAND                                   |   | 2.2        | MN=3.5(0.2)                     | 10       | 20            | 7     | F |
|  | 13 25 51.(1)<br>13 25 52.(1)<br>13 25 55.<br>BAFFIN BAY | 73.19 N(0.05)<br>73.6 N(0.13)<br>73.4 N                            | 74.30 W(0.17)<br>73.4 W(0.42)<br>73.7 W |            | MN=4.1(0.1)<br>MB=4.1<br>MB=4.5 |          | 27<br>13<br>6 | 8 3 5 | F |
| JAN 9                                  |   | 76.73 N(0.07)<br>MELVILLE ISLAND                                   |   | 1.6        | MN=3.0(0.3)                     | 4        | 9             | 2     | F |
| JAN 10                                 |   | 76.94 N(0.34)<br>MELVILLE ISLAND                                   |   | 1.3        | ML=1.9(0.3)                     | 2        | 5             | 2     | 0 |
| JAN 10                                 |   | 77.02 N(0.26)<br>MELVILLE ISLAND                                   |   | 1.1        | ML=2.3(0.5)                     | 2        | 5             | 2     | 0 |
| JAN 12<br>ISC                          | 17 35 57. (2)   | 62.31 N(0.04)<br>62.1 N(0.17)<br>RESTRICTED TO 0<br>IS STRAIT      | 61.9 W(0.40)                            | 2.7        | MN=3.9(0.2)                     |          | 27            | 12    | F |
| JAN 16                                 | BUCHAN GULF.  | 71.59 N(0.07)<br>NORTHERN BAFFIN<br>OF 25 EVENTS CON               | ISLAND. THIS IS                         | THE        | FIRST                           | 8        | 11            | 8     | F |
| JAN 16<br>ISC                          | 23 11 12.(1)<br>BUCHAN GULF,                            | 71.68 N(0.03)<br>71.9 N(0.13)<br>NORTHERN BAFFIN<br>IN THE SERIES. | 74.9 W(0.40)<br>ISLAND. THIS IS         | 3.7        | MN=4.2(0.2)                     | 18<br>10 | 33<br>10      | 14 0  | F |
| JAN 16                                 |   | 71.61 N(0.07)<br>NORTHERN BAFFIN                                   |   | 2.3        | MN=3.2(0.2)                     | 8        | 10            | 8     | F |
| JAN 17                                 |   | 71.62 N(0.07)<br>NORTHERN BAFFIN                                   |   | 2.2        | MN=3.1(0.2)                     | 7        | 9             | 7     | F |
| JAN 17                                 |   | 71.61 N(0.06)<br>NORTHERN BAFFIN                                   |   | 1.8        | MN=2.9(0.2)                     | 7        | 9             | 7     | F |
| JAN 17                                 |   | 71.65 N(0.07)<br>NORTHERN BAFFIN                                   |   | 1.9        | MN=2.9(0.2)                     | 6        | 7             | 6     | 0 |
| JAN 17                                 |   | 71.62 N(0.08)<br>NORTHERN BAFFIN                                   |   | 2.4        | MN=2.9(0.2)                     | 7        | 9             | 7     | F |
| JAN 17                                 |   | 71.07 N(0.00)<br>NORTHERN BAFFIN                                   |   |            |                                 | 3        | 3             | 2     | 0 |
| JAN 17                                 |   | 71.73 N(0.09)<br>NORTHERN BAFFIN                                   |   | 2.2        | MN=2.7(0.2)                     | 6        | 7             | 5     | 0 |
| JAN 17                                 |   | 71.63 N(0.08)<br>NORTHERN BAFFIN                                   |   | 2.4        | MN=3.2(0.2)                     | 7        | 9             | 7     | F |
| JAN 17                                 |   | 71.80 N(0.15)<br>NORTHERN BAFFIN                                   |   | 2.0        | MN=2.7(0.0)                     | 3        | 4             | 2     | 0 |

|        | H-TIME (GMT)<br>HR MN SEC    | LATITUDE<br>DEG  |                         | RMS<br>SEC |             |    | OF D |    |   |
|--------|------------------------------|--|-------------------------|------------|-------------|----|------|----|---|
| JAN 17 |                              | 71.62 N(0.05)<br>NORTHERN BAFFIN                                       |                         | 2.0        | MN=3.2(0.3) | 7  | 18   | 7  | F |
| JAN 17 | 12 09 36.(1)<br>BUCHAN GULF, | 71.63 N(0.05)<br>NORTHERN BAFFIN                                       | 75.31 W(0.20)<br>ISLAND | 3.5        | MN=4.1(0.2) | 13 | 24   | 12 | F |
| JAN 17 | 12 28 18.(0)<br>BUCHAN GULF, | 71.82 N(0.80)<br>NORTHERN BAFFIN                                       | 74.84 W(0.00)<br>ISLAND | 0.0        | MN=2.5(0.1) | 3  | 3    | 2  | 0 |
| JAN 17 |                              | 71.62 N(0.11)<br>NORTHERN BAFFIN                                       |                         | 3.0        | MN=3.0(0.3) | 7  | 8    | 7  | 0 |
| JAN 17 |                              | 71.62 N(0.05)<br>NORTHERN BAFFIN                                       |                         | 3.6        | MN=3.9(0.1) | 12 | 24   | 12 | F |
| JAN 17 | 16 06 47.(2)<br>BUCHAN GULF, | 71.58 N(0.06)<br>NORTHERN BAFFIN                                       | 75.77 W(0.20)<br>ISLAND | 2.4        | MN=3.5(0.2) | 8  | 11   | 8  | F |
| JAN 17 |                              | 71.80 N(0.00)<br>NORTHERN BAFFIN                                       |                         | 0.0        | MN=2.6(0.2) | 3  | 3    | 2  | 0 |
| JAN 18 |                              | 71.71 N(0.00)<br>NORTHERN BAFFIN                                       |                         | 0.D        | MN=2.5(0.1) | 3  | 3    | 2  | 0 |
| JAN 18 |                              | 71.58 N(0.08)<br>NORTHERN BAFFIN                                       |                         | 3.2        | MN=3.1(0.2) | 7  | 11   | 7  | F |
| JAN 19 |                              | 71.66 N(0.00)<br>NORTHERN BAFFIN                                       |                         | 0.0        | MN=2.5(0.1) | 3  | 3    | 2  | 0 |
| JAN 19 |                              | 71.53 N(0.05)<br>NORTHERN BAFFIN                                       |                         | 3.0        | MN=3.8(0.2) | 12 | 22   | 12 | F |
| JAN 19 |                              | 71.60 N(0.06)<br>NORTHERN BAFFIN                                       |                         | 1.6        | MN=2.9(8.4) | 6  | 7    | 4  | 0 |
| JAN 23 | 17 57 37.(2)<br>BUCHAN GULF, | 71.60 N(0.06)<br>NORTHERN BAFFIN                                       | 75.81 W(0.19)<br>ISLAND | 2.2        | MN=3.3(0.2) | 7  | 10   | 7  | F |
| JAN 23 | 18 20 26.(2)<br>BUCHAN GULF, | 71.62 N(0.10)<br>NORTHERN BAFFIN                                       | 75.67 W(0.28) ISLAND    | 2.7        | MN=3.0(0.3) | 6  | 8    | 6  | F |
| JAN 24 | 11 09 13.(1)<br>BEAUFORT SEA | 71.94 N(0.03)  | 134.35 W(0.26)          | 0.8        | ML=3.2(0.1) | 3  | 6    | 2  | F |
| JAN 27 | 13 00 54.(1)<br>WEST OF PELL | 68.23 N(0.06)<br>Y BAY NWT   | 92.89 W(0.18)           | 3.3        | MN=3.3(0.1) | 6  | 13   | 5  | F |
| JAN 28 |                              | 75.57 N(0.06)<br>AST OF BATHURST                                       |                         | 1.3        | MN=2.9(0.0) | 4  | 6    | 2  | F |
| JAN 31 |                              | 77.69 N(0.14)<br>NG ISLAND NHT   | 114.33 W(0.20)          | 0.4        | ML=2.4(0.3) | 2  | 4    | 2  | 0 |
| FEB 2  |                              | 68.64 N(0.00)<br>ST COAST OF BAFF                                      |                         | 0.0        | MN=2.4(0.1) | 3  | 3    | 2  | 0 |
| FEB 3  |                              | 77.25 N(0.04)<br>NCE PATRICK ISLA                                      |                         |            |             | 2  | 4    | 1  | 0 |
| FEB 3  |                              | 68.47 N(0.07)<br>ST COAST OF BAFF                                      |                         | 1.9        | MN=2.7(0.2) | 5  | 6    | 4  | 0 |
| FEB 3  | NORTHERN PRI<br>EVENT ASSOCI | 77.17 N(0.04)<br>NCE PATRICK ISLA<br>ATED WITH 3 FORE<br>SEE TABLE 10. | ND. MAIN SHOCK.         | 1.4        | MN=3.8(0.0) | 9  | 15   | 4  | F |

| DATE<br>1971 | H-TIME (GMT)<br>HR MN SEC      | LATITUDE<br>DEG   | LONGITUDE<br>DEG   | RMS<br>SEC   | MAGNITUDE              |          | OF D |    |   |
|--------------|--------------------------------|---|--|--------------|------------------------|----------|------|----|---|
| FEB 7        |                                |   | 118.59 W(0.19)<br>ND. AFTERSHOCK O   |              |                        | 2        | 4    | 1  | 0 |
| FE8 7        | 09 35 04.(1)<br>BAFFIN BAY     | 74.34 N(0.03)   | 76.50 W(0.15)  | 1.6          | MN=3.1(0.1)            | 8        | 15   | 4  | F |
| FEB 6        | 11 30 17.(2)<br>ROES WELCOME   |   | 86.77 W(0.24)  | 3.0          | MN=2.4(0.1)            | 5        | 5    | 4  | 0 |
| FEB 10       |                                | 65.81 N(0.11)<br>NORTHEASTERN YU                          | 133.85 W(0.35)<br>KON TERRITORY  | 1.7          | ML=2.6( )              | 3        | 7    | 1  | F |
| FEB 11       |                                |   | 135.94 W(0.19)<br>THWEST OF FT MCP   |              |                        | 3        | 7    | 1  | F |
| FEB 11       | 14 47 38.(2)<br>NORTHERN BAFF  | 72.23 N(0.07)<br>FIN ISLAND NEAR                          | 76.69 W(0.30)<br>POND INLET  | 1.5          | MN=2.8(0.2)            | 3        | 5    | 3  | 0 |
| FEB 19       | 03 58 15.(0)<br>SOUTHERN BAFF  |   | 68.60 W(0.04)  | 0.3          | MN=2.2( )              | 3        | 4    | 1  | 0 |
| FEB 22       | 11 45 04.(4)<br>LABRADOR SEA   | 60.63 N(0.08)   | 59.46 W(0.62)  | 1.1          | ML=3.3(0.4)            | 2        | 4    | 2  | 0 |
| FEB 23       |                                | 63.46 N(0.86)<br>EDER WEST OF WRI                         | 129.79 W(0.12)<br>GLEY   | 1.4          | ML=3.7( )              | 7        | 14   | 1  | F |
| FE8 24       | 07 38 26.(0)<br>LANCASTER SOU  |   | 85.75 W(0.06)  | 0.1          | MN=2.3( )              | 3        | 4    | 1  | 0 |
| FEB 24       | 16 20 04.(1)<br>ROES WELCOME   |   | 88.08 W(0.11)  | 2.0          | MN=2.8(0.1)            | 4        | 9    | 3  | F |
| MAR 3        |                                | 76.03 N(0.12)<br>HMALLIS ISLAND N                         | 93.46 W(0.49)<br>WT  | 2,3          | MN=2.4( )              | 4        | 6    | 1  | 0 |
| MAR 4        |                                | 75.98 N(0.11)<br>WALLIS ISLAND N                          | 94.41 W(0.47)  | 2.1          | ML=2.4( )              | 4        | 6    | 1  | 0 |
| MAR 4        |                                |   | 135.37 W(0.15)<br>135.82 W(0.07)   |              |                        | 13<br>18 |      | 8  | F |
| NEIS         | 13 43 08.<br>NORTHERN YUKO     |   | 135.8 W<br>THWEST OF FT MCP  | 0.9<br>HERSO |                        | 15       | 15   | 0  |   |
| MAR 15       |                                | 66.28 N(0.05)<br>IORTHEASTERN YUK                         | 134.81 W(0.23)<br>ON TERRITORY   | 0.9          | ML=2.8( )              | 3        | 8    | 1  | F |
| MAR 17       | BY 51 AFTERSH<br>WAS LARGE ENG | LAND NWT. MAIN S<br>OCKS - ONLY 1 OF<br>OUGH TO BE LOCATE | 94.37 W(0.13)<br>SHOCK. EVENT FOL<br>F THESE ON 20 MA<br>ED. OTHER AFTERS<br>LISTED IN TABLE | R 15H        |                        | 14       | 28   | 9  | F |
| MAR 17       |                                | 68.34 N(0.18)<br>T COAST OF BAFF                          | 68.27 W(0.33)<br>In Island   | 1.3          | MN=2.7(0.2)            | 3        | 4    | 3  | 0 |
| MAR 20       | 15 01 28.(1)<br>CORNWALLIS IS  | 74.86 N(0.02)<br>SLAND NWT. AFTER:                        | 94.37 W(0.10)<br>SHOCK OF EVENT O  | 1.3<br>F 17  | MN=3.2(0.2)<br>MAR 16H | 9        | 17   | 5  | F |
| MAR 22       |                                | 68.40 N(0.05)<br>T COAST OF BAFF                          | 68.32 W(0.19)<br>IN ISLAND   | 3.3          | MN=3.9(0.1)            | 14       | 28   | 12 | F |
| MAR 22       |                                | 68.68 N(0.00)<br>T COAST OF BAFF                          | 67.64 W(0.00)<br>IN ISLAND   | 0.0          | MN=2.5(0.3)            | 3        | 3    | 2  | 0 |
| MAR 22       |                                | 68.36 N(0.05)<br>T COAST OF BAFF                          | 68.37 W(0.18)<br>IN ISLAND   | 1.8          | MN=3.1(0.2)            | 7        | 9    | 7  | F |

| DA1 | TE<br>71 | H-TIME (GMT)<br>HR HN SEC                      | LATITUDE<br>DEG                       | LONGITUDE                          | RMS<br>SEC | MAGNITUDE        |    | OF D   |    |   |
|-----|----------|--|---------------------------------------|------------------------------------|------------|------------------|----|--------|----|---|
| MAR | 22       | 22 37 25. (3) 6<br>HOME BAY, EAST              |                                       | 68.16 W(0.33)<br>N ISLAND          | 1.8        | MN=2.8(0.3)      | 4  | 5      | 4  | 0 |
| MAR | 23       | 17 18 44. (2) 6<br>HOME BAY, EAST              |                                       | 68.59 W(0.20)<br>N ISLAND          | 1.5        | MN=2.7(0.3)      | 4  | 6      | 4  | 0 |
| MAR | 24       | 22 59 47. (3) 6<br>NEAR FT MCPHERS             |                                       | 135.78 W(0.40)                     | 1.7        | MN=2.5( )        | 2  | 6      | 1  | 0 |
|     | SC       | 17 35 18. 6<br>NEIS DEPTH RES<br>ISC DEPTH = 0 | TRICTED TO 7 K +/- 6 KM WESTERN YUKON | TERRITORY AND AL                   | 1.1        | M8=5.5<br>MS=5.7 |    | 221 92 |    | F |
| MAR | 29       | 16 39 08.(1) 6<br>NEAR WRIGLEY NW              |                                       | 123.39 W(0.09)                     | 2.6        | MN=4.0(0.2)      | 13 | 32     | 10 | F |
| APR | 1        |  |                                       | 104.22 W(0.00)<br>NWT. FORESHOCK ( |            |                  | 2  | 3      | 1  | 0 |
| APR | 1        | 21 43 48.(1) 6<br>NWT-YUKON BORDE              |                                       | 136.49 W(0.17) FT MCPHERSON        | 1.1        | ML=3.4(0.0)      | 4  | 9      | 3  | F |
| APR | 2        | 10 36 22.(1) 7<br>BEAUFORT SEA                 | 4.19 N(0.07)                          | 129.89 W(0.33)                     | 2.6        | ML=4.6(0.2)      | 10 | 19     | 8  | F |
| APR | 3        |  |                                       | 104.13 W(0.25)<br>NWT. FORESHOCK ( | _          |                  | 3  | 6      | 2  | 0 |
| APR | 3        |  |                                       | 104.31 W(0.22)<br>NWT. MAIN SHOCK  |            | MN=3,2(0,1)      | 8  | 15     | 4  | F |
| APR | 7        | 06 03 32.(1) 6<br>SOUTHEAST OF CH              |                                       | 94.30 W(0.19)                      | 2.4        | MN=2.8(0.2)      | 6  | 18     | 5  | F |
| APR | 7        |  |                                       | 113.79 W(0.21)<br>RICK ISLAND NWT  | 0.9        | ML=2.5(0.4)      | 4  | 6      | 2  | 0 |
| APR | 6        |  |                                       | 117.60 W(0.43)<br>AND. MAIN SHOCK  | -          | ML=3.9(0.2)      | 6  | 11     | 5  | F |
| APR | 8        |  |                                       | 117.21 W(0.00)<br>AND. AFTERSHOCK  |            |                  | 2  | 3      | 2  | 0 |
| APR | 9        | 11 38 07. (1) 6<br>HOME BAY, EAST              |                                       | 68.45 W(0.17)<br>N ISLAND          | 2.0        | MN=3.4(8.2)      | 8  | 11     | 8  | F |
| APR | 12       | 04 29 43.(1) 7<br>NORTHEAST OF ME              |                                       | 107.13 W(0.17)<br>NWT              | 0.9        | MN=2.7(0.2)      | 4  | 7      | 2  | F |
| APR | 16       | 01 31 45.(1) 6<br>NORTHERN LABRAD              |                                       | 60.68 W(0.15)                      | 2.3        | ML=4.3(0.2)      | 9  | 19     | 3  | F |
| APR | 16       | 13 22 25. (0) 6<br>HOME BAY, EAST              |                                       | 67.77 W(0.00)<br>N ISLAND          | 0.0        | MN=2.6(0.1)      | 3  | 3      | 2  | 0 |
| APR | 18       | 21 47 57.(2) 6<br>NWT-YUKON BORDE              |                                       | 132.15 W(0.35) IAN WELLS           | 1.0        | ML=2.8( )        | 3  | 6      | 1  | 0 |
| APR | 19       | 23 59 26.(1) 6<br>SOUTH OF FORT G              |                                       | 128.70 W(0.07)                     | 0.5        | MN=2.6(0.1)      | 3  | 6      | 2  | F |
| APR | 21       | 04 25 57. (2) 6<br>NORTHERN YUKON              |                                       | 139.62 W(0.20)                     | 1.3        | ML=2.7(0.0)      | 3  | 8      | 2  | F |

| DAT<br>197 |    | H-TIME (GNT)<br>HR MN SEC      | LATITUDE<br>DEG                  | LONGITUDE<br>DEG                            | RMS<br>SEC | MAGNITUDE   |    |                | DATA |   |
|------------|----|--------------------------------|----------------------------------|---|------------|-------------|----|----------------|------|---|
| APR        | 21 |                                | 67.16 N(0.00)<br>S ISLAND IN FOX | 76.33 W(0.00)<br>(E BASIN NWT               | 0.0        | MN=2.4( )   | 3  | 3              | 1    | 0 |
| APR        | 22 |                                |                                  | 135.39 W(0.11)<br>JTHWEST OF FT MC          |            |             | 6  | 12             | 4    | F |
| APR        | 22 |                                |                                  | 135.98 W(0.18)<br>JTHWEST OF FT MC          |            |             | 5  | 9              | 3    | F |
| APR        | 23 |                                | 68.63 N(0.05)<br>COPPERMINE NWT  | 118.99 W(0.13)                              | 2.0        | MN=2.9(0.1) | 5  | 11             | 3    | F |
| IS         | C  | 00 39 16.(0)<br>00 39 16.      | 60.51 N(0.06)                    | 139.05 W(0.08)<br>139.09 W(0.08)<br>139.0 W | 1.7        |             | 17 | 10<br>17<br>14 | 0    | F |
| APR        | 25 | 09 42 59. (3)                  |                                  | 74.88 W(0.36)                               | 1.8        | MN=2.9(0.3) | 4  | 5              | 4    | 0 |
| APR        | 26 | 22 50 14. (1)<br>NORTHERN HUDS |                                  | 85.70 W(0.08)                               | 1.4        | MN=2.4(0.2) | 5  | 6              | 5    | 0 |
| APR        | 29 |                                |                                  | 134.49 W(0.38)<br>STERN YUKON TERR          |            | MT=5.8( )   | 3  | 7              | 1    | F |
| APR        | 30 | 07 25 26.(2)<br>BEAUFORT SEA   | 71.49 N(0.06)                    | 134.95 H(0.47)                              | 0.9        | ML=2.5(0.1) | 3  | 4              | 2    | 0 |
| MAY        | 2  |                                | 65.53 N(0.04)<br>Noman Wells NWI | 126.00 W(0.95)                              | 0.3        | MN=2.4(0.0) | 3  | 5              | 2    | 0 |
| MAY        | 6  |                                |                                  | 96.65 W(0.61)<br>STERN DEVON ISLA           |            | ML=2.1( )   | 2  | 4              | 1    | 0 |
| MAY        | 6  |                                | 76.38 N(0.04)<br>CORNWALLIS ISLA | 97.45 W(0.28)<br>AND NWT                    | 2.1        | MN=3.3(8.2) | 6  | 11             | 4    | F |
| MAY        | 8  |                                | 65.21 N(0.06)<br>NORTHEASTERN Y  | 133.28 W(0.14)<br>JKON TERRITORY            | 1.3        | MN=3.1(0.0) | 5  | 12             | 3    | F |
| MAY        | 11 |                                |                                  | 135.28 W(0.23)<br>JTH OF FT NCPHER          |            | MN=3.2( )   | 5  | 10             | 1    | F |
| MAY        | 19 |                                | 81.19 N(0.03)<br>ELLESMERE ISLAN | 87.22 W(0.17)                               | 0.4        | ML=3.2(0.1) | 3  | 6              | 3    | F |
| MAY        | 21 |                                | 81.16 N(0.12)<br>ELLESMERE ISLAN | 87.19 N (0.63)                              | 0.6        | ML=2.6( )   | 3  | 4              | 1    | 0 |
| MAY        | 21 |                                | 71.34 N(0.00)<br>NORTHERN BAFFIN | 73.33 W(0.00)<br>N ISLAND                   | 0.0        | MN=2.4(0.4) | 3  | 3              | 3    | 0 |
| MAY        | 24 |                                |                                  | 133.90 W(0.30)<br>STERN YUKON TERR          |            | ML=3.0( )   | 3  | 9              | 1    | F |
| MAY        | 25 | 03 17 05.(1)<br>BEAUFORT SEA   | 71.42 N(0.02)                    | 135.86 W(0.16)                              | 0.5        | ML=3.3(0.5) | 4  | 7              | 4    | F |
| MAY        | 30 |                                |                                  | 65.67 H(8.70)<br>N BAFFIN ISLAND            | 2.4        | MN=2.5(0.1) | 4  | 5              | 3    | 0 |
| JUN        | 2  | 20 47 49.(1)<br>NORTHERN BAFF  |                                  | 67.56 W(0.17)                               | 2.2        | ML=4.6(0.2) | 11 | 19             | 5    | F |
| JUN        | 9  | 20 02 15.(0)<br>SOUTH OF BROO  |                                  | 114.26 W(0.00)                              | 0.0        | ML=2.3( )   | 2  | 4              | 1    | 0 |

|        | H-TIME (GMT)<br>HR MN SEC     | LATITUDE<br>DEG                  | LONGITUDE<br>DEG                                 | RMS<br>SEC | MAGNITUDE   |    | OF D |   |   |
|--------|-------------------------------|----------------------------------|--|------------|-------------|----|------|---|---|
| JUN 10 |                               | 62.58 N(B.06)<br>, SOUTHERN BAFF | 66.25 W(0.26)<br>IN ISLAND                       | 1.8        | MN=2.7(0.2) | 4  | 6    | 3 | F |
| JUN 17 |                               |                                  | 94.92 W(0.28)<br>TERN DEVON ISLAN                |            |             | 2  | 4    | 1 | 0 |
| JUN 17 |                               | 68.45 N(0.04)<br>T COAST OF BAFF | 68.03 W(0.16)<br>IN ISLAND                       | 2.3        | MN=3.7(0.2) | 8  | 21   | 8 | F |
| JUN 20 | 00 19 53.(0)<br>WESTERN BAFFI |                                  | 71.81 W(0.00)                                    | 0.0        | MN=2.7(0.3) | 3  | 3    | 3 | 0 |
| JUN 20 |                               |                                  | 135.62 W(0.33)<br>THWEST OF FT MCP               |            |             | 5  | 8    | 2 | F |
| JUN 21 | 02 27 41.(0)<br>GULF OF BOOTH |                                  | 90.13 W(0.02)                                    | 0.1        | MN=2.6(0.2) | 4  | 4    | 3 | 0 |
| JUN 23 |                               |                                  | 134.71 W(0.34) SOUTH OF FT MCP                   |            |             | 3  | 6    | 1 | F |
| JUN 24 |                               | 81.71 N(0.11)<br>ELLESMERE ISLAN | 85.46 W(0.53)                                    | 1.5        | ML=3.1( )   | 3  | 7    | 1 | F |
| JUN 25 | 15 16 00.(1)<br>BEAUFORT SEA  | 71.81 N(0.08)                    | 130,22 W(0.40)                                   | 8.9        | ML=2.9(0.1) | 3  | 5    | 2 | 0 |
| JUN 26 |                               | 65.43 N(0.14)<br>DER SOUTHWEST O | 132.61 W(0.48)<br>F FT GOOD HOPE                 | 1.3        | ML=3.0( )   | 4  | 7    | i | F |
| JUN 26 |                               | 63.89 N(0.12)<br>FT NORMAN NWT   | 129.46 W(0.16)                                   | 1.8        | MN=3.0(0.1) | 4  | 11   | 3 | F |
| JUN 27 | NORTHWEST COA                 |                                  | 95.77 W(0.19) ISLAND NWT. EVEN TABLE 9.          |            |             | 11 | 20   | 7 | F |
| JUN 38 |                               |                                  | 135.59 W (0.28)                                  |            |             | 5  | 8    | 3 | F |
| JUL 2  |                               | 80.75 N(0.21)<br>AND NORTHEAST 0 | 80.12 W(1.09)<br>F EUREKA                        | 1.3        | ML=2.7( )   | 3  | 5    | 1 | 0 |
| JUL 4  | 19 31 20.(0)<br>LANCASTER SOU | 74.23 N(0.02)                    | 81.85 W(0.08)                                    | 1.2        | MN=3.7(0.1) | 12 | 21   | 9 | F |
| JUL 6  | 04 48 38.(3)<br>WEST OF FORT  |                                  | 124.12 W(0.23)                                   | 1.7        | MN=2.9( )   | 2  | 6    | 1 | 0 |
| JUL 6  |                               | 70.78 N(0.86)<br>SOUTH OF CAPE   | 72.40 W(0.19)<br>ADAIR                           | 1.4        | MN=2.9(0.2) | 5  | 6    | 5 | 0 |
| JUL 13 | 01 32 12.(1)<br>SOUTHERN DAVI |                                  | 57.45 W(0.15)                                    | 8.3        | ML=3.8(0.4) | 2  | 4    | 2 | 0 |
| JUL 18 | 21 16 35.(1)<br>BEAUFORT SEA  |                                  | 132.60 W(0.41)                                   | 0.8        | ML=3.1(0.4) | 3  | 5    | 3 | 0 |
| JUL 21 |                               | 72.98 N(0.05)<br>COAST OF BAFFI  | 70.05 W(0.25)<br>N ISLAND                        | 1.8        | ML=3.9(0.3) | 5  | 10   | 4 | F |
| JUL 22 |                               | 65.35 N(0.11)<br>NORTHEASTERN YU | 133.31 W(0.30)<br>KON TERRITORY                  | 1.7        | ML=3.2( )   | 3  | 8    | 1 | F |
| JUL 24 | NORTHWEST COA                 |                                  | 96.13 W(0.12)<br>ISLAND. MAIN SHO<br>EE TABLE 9. |            | MN=4.0(0.1) | 12 | 24   | 9 | F |

| DATE   | H-TIME (GMT) LATITU  | DE LONGI        | TUDE RMS       | MAGNITUDE   | NO. | OF D | ATA |   |
|--------|--|-----------------|----------------|-------------|-----|------|-----|---|
| 1971   |  |                 |                |             |     |      |     |   |
| JUL 24 | 22 38 99.(1) 73.67 N<br>NH COAST SOMERSET ISL  |                 |                |             | 3   | 6    | 1   | F |
| JUL 25 | 20 43 54. (1) 67.73 N<br>HOME BAY, EAST COAST  |                 | W(0.15) 3.8    | MN=4.2(0.2) | 16  | 33   | 12  | F |
| JUL 26 | 13 36 58.(0) 71.59 N<br>BUCHAN GULF, NORTHERN  |                 | W(0.00) 0.0    | MN=3.0(0.1) | 3   | 3    | 2   | 0 |
| JUL 39 | 11 10 38.(0) 72.31 N<br>NORTHEAST COAST OF BA  |                 | W(0.00) 0.0    | MN=3.1(0.1) | 3   | 3    | 3   | 0 |
| JUL 31 | 22 57 52. (1) 71.76 N<br>BUCHAN GULF, NORTHERN   |                 | W(0.18) 3.1    | MN=4.0(0.1) | 13  | 22   | 12  | F |
| JUL 31 | 23 18 36. (2) 65.35 N<br>ROES WELCOME SOUND NO   |                 | W(0.15) 1.8    | MN=2.6(0.1) | 3   | 5    | 2   | 0 |
| AUG 8  | 23 45 38.(2) 70.73 N<br>NORTHERN DAVIS STRAIT  |                 | W(0.39) 1.3    | ML=3.7(0.2) | 3   | 6    | 2   | F |
| AUG 14 | 02 00 57.(0) 65.38 N<br>CUMBERLAND PENINSULA,  |                 |                | MN=3.3( )   | 2   | 3    | 1   | 0 |
| AUG 14 | 02 02 48.(1) 65.39 N<br>CUMBERLAND PENINSULA,  |                 |                | MN=3.5(0.2) | 3   | 4    | 2   | 0 |
| AUG 14 | 02 04 06.(0) 65.38 N<br>CUMBERLAND PENINSULA,  |                 |                | MN=3.2( )   | 2   | 3    | 1   | 0 |
| AUG 25 | 04 37 22.(3) 62.77 N<br>WEST OF WRIGLEY NWT  | 1(0.23) 125.54  | W(0.27) 1.2    | ML=3.3( )   | 2   | 5    | 1   | 0 |
| AUG 27 | 01 23 50.(3) 64.05 N<br>SOUTH OF FT NORMAN NO  |                 | W(0.44) 1.6    | ML=3.3(0.1) | 2   | 6    | 2   | 0 |
| SEP 2  | 19 36 86.(1) 66.97 N<br>NORTHERN YUKON TERRIT  |                 |                |             | 6   | 10   | 3   | F |
| SEP 7  | 14 40 00.(5) 70.68 N<br>EAST COAST OF BAFFIN   |                 |                | MN=3.1(0.2) | 3   | 4    | 2   | 0 |
| SEP 10 | 15 36 26. (0) 67.67 N<br>HOME BAY, EAST COAST  |                 |                | MN=3.0( )   | 2   | 3    | 1   | 0 |
| SEP 11 | 04 21 39.(3) 68.08 N<br>HOME BAY, EAST COAST   |                 |                | MN=3.5(0.3) | 4   | 7    | 3   | F |
| SEP 20 | 13 42 12.(2) 73.84 N<br>DEPTH RESTRICTED TO 5<br>SOMERSET ISLAND NWT.                          | KM              |                |             | 3   | 5    | 1   | 0 |
| SEP 20 | 18 35 46.(3) 73.88 N<br>DEPTH RESTRICTED TO S<br>SOMERSET ISLAND NWT.                          | K#              |                |             | 3   | 5    | 1   | 0 |
| SEP 20 | 23 01 41.(1) 73.81 N<br>DEPTH RESTRICTED TO S<br>SOMERSET ISLAND NWT.<br>WITH 3 FORESHOCKS AND | MAIN SHOCK. EWE | ENT ASSOCIATED |             | 10  | 16   | 7   | F |
| SEP 21 | 09 00 06.(2) 73.87 N<br>DEPTH RESTRICTED TO S<br>SOMERSET ISLAND NWT.                          | KM              |                |             | 3   | 5    | 1   | 0 |
| SEP 27 | 21 49 27.(1) 70.95 N<br>BEAUFORT SEA   | (0.04) 131.96   | W(0.21) 1.1    | ML=4.3(0.1) | 4   | 8    | 3   | F |

| DATE<br>1971          | H-TIME (GNT) LATITUDE<br>HR MN SEC DEG   | LONGITUDE<br>DEG   | RMS<br>SEC            | MAGNITUDE        |     | OF D           |             |   |
|-----------------------|--|--|-----------------------|------------------|-----|----------------|-------------|---|
| SEP 28                | 12 28 37.(3) 66.75 N(0.08)<br>NORTHERN YUKON TERRITORY SOUT  |  |                       |                  | 3   | 5              | 1           | 0 |
| OCT 2<br>ISG<br>NEIC  | 03 19 28.(0) 64.20 N(0.03) 03 19 29.(0) 64.40 N(0.03) 03 19 28. 64.4 N ISC DEPTH = 27 +/- 8 KM NEIC DEPTH RESTRICTED TO 16 DEPTH RESTRICTED TO 21 KM (HA SOUTHAMPTON ISLAND IN NORTHER FELT AT CORAL HARBOUR AND CHE EVENT FOLLOWED BY 2 SMALL AFT | 86.66 W(0.06)<br>86.5 W<br>KM<br>ASHIZUME,1974-SE<br>N HUDSON BAY. R<br>ESTERFIELD INLET | 1.7<br>0.8<br>EE TEXT | MB=5.0<br>MB=5.0 | 142 |                | 24          | F |
| OCT 2                 | 04 00 09.(2) 64.25 N(0.11)<br>SOUTHAMPTON ISLAND. AFTERSHOO  |  |                       |                  | 4   | 5              | 1           | 0 |
| OCT 2                 | 04 59 37.(0) 64.36 N(0.00)<br>SOUTHAMPTON ISLAND. AFTERSHOO  |  |                       |                  | 3   | 3              | 1           | 0 |
| OCT 6                 | 00 09 16.(1) 68.81 N(0.06)<br>NORTH OF GREAT BEAR LAKE NWT   |  | 1.8                   | ML=3.1(0.1)      | 4   | 7              | 2           | F |
| OCT 15                | 00 02 13.(1) 71.65 N(0.03)<br>BEAUFORT SEA   | 135.21 W(0.19)   | 0.6                   | ML=3.4(0.1)      | 3   | 6              | 2           | F |
| OCT 18<br>ISC<br>NEIC | 17 04 27.(1) 61.52 N(0.05)<br>17 04 26.(0) 61.62 N(0.05)<br>17 04 26. 61.6 N<br>ISC AND NEIC DEPTH RESTRICT<br>SOUTHWESTERN YUKON TERRITORY  | 140.58 W(0.09)<br>140.6 W  | 1.6                   |                  | 18  | 14<br>18<br>13 | 1<br>0<br>2 | F |
| OCT 20                | 09 02 04.(0) 65.41 N(0.01)<br>BONNET PLUME RIVER, NORTHEASI  |  |                       | ML=3.5(0.1)      | 5   | 9              | 2           | F |
| OCT 30                | 19 01 12.(1) 64.30 N(0.09)<br>SOUTHAMPTON ISLAND IN NORTHER  |  | 1.4                   | MN=2.8(0.1)      | 4   | 5              | 2           | 0 |
| OCT 31                | 23 07 21.(0) 62.20 N(0.01)<br>HUDSON STRAIT  | 71.89 W(0.02)  | 0.2                   | MN=2.8(0.2)      | 4   | 5              | 2           | 0 |
| NOV 3                 | 03 32 02.(1) 60.70 N(0.03)<br>SOUTHERN YUKON TERRITORY NORI  |  |                       |                  | 6   | 11             | 2           | F |
| NO₩ 9                 | 02 14 49. (1) 66.17 N(0.04)<br>PEEL RIVER, NORTHEASTERN YUKO   |  | 1.7                   | ML=3.6(0.2)      | 5   | 10             | 2           | F |
| NOV 10                | 08 12 21.(1) 63.24 N(0.06)<br>WEST OF WRIGLEY NWT  | 127.38 W(0.11)   | 1.7                   | ML=3.7(0.2)      | 3   | 7              | 3           | F |
| NOV 14                | 21 54 41.(1) 72.76 N(0.06)<br>EAST COAST OF SOMERSET ISLAND  |  | 2.8                   | MN=2.9(0.1)      | 6   | 10             | 3           | F |
| NOV 16                | 18 08 44.(2) 66.79 N(0.08)<br>NORTHERN YUKON TERRITORY SOUT  |  |                       |                  | 3   | 7              | 1           | F |
| NOV 19                | 15 19 06.(1) 66.54 N(0.03)<br>NEAR REPULSE BAY NWT   | 85.58 W(0.07)  | 1.0                   | MN=2.9(0.1)      | 3   | 6              | 3           | 0 |
| NOV 20                | 05 34 17.(3) 71.91 N(0.12)<br>BUCHAN GULF, NORTHERN BAFFIN   |  | 1.8                   | MN=2.8(0.3)      | 3   | 4              | 3           | 0 |
| NOV 21                | 13 24 57.(1) 65.92 N(0.03)<br>PEEL RIVER, NORTHEASTERN YUKO  |  | 1.3                   | ML=4.2(0.1)      | 8   | 14             | 2           | F |
| NOA 55                | 07 45 24.(4) 75.15 N(0.11)<br>DEVON ISLAND NHT   | 90.11 W(0.69)  | 2.1                   | MN=2.6( )        | 3   | 6              | 1           | F |

| DATE<br>1971          | H-TIME (GMT)<br>HR MN SEC                                 | LATITUDE<br>DEG  | LONGITUDE<br>DEG                         | RMS<br>SEC | MAGNITUDE        |                | OF O |     |   |
|-----------------------|---|--|--|------------|------------------|----------------|------|-----|---|
| NOV 23                | 22 29 19.(1)<br>ELLEF RIGNES                              | 78.41 N(0.05)<br>ISLAND NWT                                | 102.93 W(0.10                            | 0.2        | ML=2.8(0.3)      | 2              | 4    | 2   | 0 |
| NOV 29                | 12 04 40.(1)<br>AXEL HEIBERG                              | 78.70 N(0.06)<br>ISLAND NWT                                | 91.85 W(8.47                             | 1,7        | ML=3.5( )        | 3              | 7    | 1   | F |
| DEC 2                 | 01 00 32.(1)<br>BAFFIN BAY                                | 73.92 N(0.04)  | 73.57 W(0.21                             | 1.9        | MN=3.3(0.1)      | 7              | 14   | 2   | F |
| DEC 2                 | 08 42 10.(1)<br>BEAUFORT SEA                              | 71.38 N(0.04)  | 132.81 W(0.31                            | 1.0        | ML=2.7(0.2)      | 3              | 5    | 2   | 0 |
| DEC 2                 | 12 24 29.(1)<br>ROES WELCOME                              | 66.34 N(0.06)<br>SOUND NWT                                 | 85.68 W(0.13                             | 1.1        | ML=2.7( )        | 4              | 4    | 1   | 0 |
| DEC 4                 |   | 80.89 N(0.05)<br>EF RIGNES ISLAND                          |  | 1.1        | ML=3.7(0.2)      | 5              | 8    | 3   | F |
| 0EC 4                 |   | 67.75 N(0.17)<br>ST COAST OF BAFF                          |  | 1.2        | MN=3.0( )        | 2              | 4    | 1   | 0 |
| DEC 12                |   | 74.31 N (0.03)<br>T SOUTHEAST OF R                         |  | ) 1.5      | MN=3.4(0.1)      | 7              | 9    | 3   | F |
| DEC 14                |   | 66.58 N(0.04)<br>YUKON TERRITORY                           |  |            | ML=3.8(0.2)      | 4              | 7    | 2   | F |
| DEC 16                | 13 56 37. (1)<br>PRINCE REGENT                            | 71.94 N(0.04)<br>T INLET NWT                               | 91.96 W(D.25                             | 2.5        | MN=3.0(0.2)      | 7              | 12   | 2   | F |
| DEC 18                |   | 82.89 N(0.19)<br>OF ELLESMERE ISL                          |  |            | ML=3.7( )        | 4              | 5    | 1   | 0 |
| DEC 19                | 04 11 56.(1)<br>NEAR PELLY B                              | 68.04 N(0.04)<br>AY NWT                                    | 91.97 W(0.15                             | 0.9        | MN=2.2( )        | 4              | 4    | 1   | 0 |
|                       |   | B. UNIT  | ED STATES EPIC                           | ENTRES     |                  |                |      |     |   |
| JAN 15                | 21 47 03.(1)<br>NORTHEASTERN                              | 68.84 N(0.86)<br>ALASKA                                    | 143.30 W(0.20                            | 1.3        | ML=3.7( )        | 6              | 11   | 1   | F |
| JAN 28<br>ISC<br>NEIS | 05 06 44.(1)<br>05 06 44.(1)<br>05 06 44.<br>EASTERN ALAS |  | 141.44 W(0.14<br>142.0 W(0.14<br>142.0 W | 2.5        |                  | 14<br>18<br>14 | 18   | 1 0 | F |
| JAN 29<br>ISC         |   | 60.67 N(0.05)  |  |            |                  |                | 12   |     | F |
| NEIS                  | 07 58 53.<br>SOUTHERN ALAS                                |  | 143.7 W                                  | 1.3        | M8=3.7<br>ML=3.9 | 10             | 10   | 1   |   |
| FE <b>8 1</b> 6       | 12 45 58.(0)<br>SOUTHERN ALAS                             | 61.38 N(0.00)<br>SKA                                       | 150.87 W(0.00                            | ) 0.0      | M1=4.0( )        | 2              | 3    | 1   | 0 |
| FEB 24                | 10 06 05.(2)<br>SOUTHEASTERN                              | 63.20 N(0.08)<br>ALASKA                                    | 144.95 W(0.32                            | 1.2        | ML=3.9( )        | 5              | 7    | 1   | F |
| MAR 2                 |   | 70.23 N(0.09)<br>COAST OF ALASKA                           |  | 2,3        | ML=4.3(0.4)      | 6              | 11   | 6   | F |
| MAR 3                 | 10 36 17. (4)<br>SOUTHERN ALAS                            | 62.23 N(0.37)  | 152.32 W(0.91                            | 2.6        | ME=3.9( )        | 5              | 6    | 1   | 0 |
| MAR 27<br>ISC         | 22 00 03,(1)  | 60.05 N(0.05)<br>60.05 N(0.04)<br>= 21 +/- 11 KM<br>ALASKA |  |            |                  | _              | 12   |     | F |

| DAT<br>197 |    | H-TIME (GMT)<br>HR MN SEC      | LATITUDE<br>DEG                  | LONGITUDE<br>DEG | RMS<br>SEC | MAGNITUDE    |   | OF DA |   |   |
|------------|----|--------------------------------|----------------------------------|------------------|------------|--------------|---|-------|---|---|
| MAR        | 28 | 19 18 11.(2)<br>NORTHWESTERN   |                                  | 161.25 W(0.24)   | 0.6        | ML=3.8(0.1)  | 3 | 5     | 2 | 0 |
| APR        | 6  | 20 58 09.(1)<br>WESTERN ALASH  |                                  | 155.84 W(0.19)   | 0.7        | ML=4.2( )    | 3 | 5     | 1 | 0 |
| APR        | 15 | 20 48 27.(2)<br>NORTHWESTERN   |                                  | 161.15 \(0.30)   | 1.0        | ML=4.0 (0.0) | 4 | 6     | 2 | F |
| APR        | 15 | 21 45 44.(1)<br>NORTHWESTERN   | 68.32 N(0.05)<br>ALASKA          | 161.19 W(0.16)   | 0.5        | ML=3.9(0.1)  | 4 | 6     | 2 | F |
| APR        | 15 | 22 40 36.(2)<br>NORTHWESTERN   |                                  | 161.69 W(0.36)   | 1.1        | ML=3.9( )    | 4 | 5     | 1 | 0 |
| APR        | 16 | 01 39 04.(6)<br>NORTHWESTERN   | 67.88 N(0.23)<br>ALASKA          | 161.06 W(0.90)   | 2.6        | ML=4.2(0.1)  | 4 | 6     | 3 | 0 |
| APR        | 16 | 13 46 18.(5)<br>EASTERN ALASE  | 66.12 N(0.19)                    | 141.79 W(0.72)   | 2.2        | ML=3.4( )    | 2 | 5     | 1 | 0 |
| APR        | 30 | 02 10 28.(2)<br>NORTHEASTERN   | 67.71 N(0.09)<br>ALASKA          | 146.19 W(0.22)   | 1.1        | ML=3.0( )    | 3 | 7     | 1 | 0 |
| MAY        | 8  |                                | 80.81 N(0.00)<br>NORTH OF ALASKA | 167.07 W(0.00)   | 0.0        | ML=3.4( )    | 2 | 3     | 1 | 0 |
| HAY        | 8  |                                | 80.62 N(0.23)<br>NORTH OF ALASKA | 165.80 W(2.25)   | 1.5        | ML=3.5(0.2)  | 3 | 4     | 2 | 0 |
| JUN        | 1  | 08 34 47.(3)<br>NORTHEASTERN   | 69.67 N(0.26)<br>ALASKA          | 144.42 W(0.57)   | 1.7        | ML=2.9( )    | 3 | 6     | 1 | 0 |
| JUN        | 18 | 01 54 42.(4)<br>NORTHEASTERN   |                                  | 147.73 W(0.39)   | 1.4        | ML=3.1( )    | 2 | 5     | 1 | 0 |
| JUN        | 29 | 14 52 58.(0)<br>NORTHEASTERN   | 68.12 N(0.00)<br>ALASKA          | 148.75 W(0.00)   | 0.0        | ML=3.4(0.5)  | 2 | 3     | 2 | 0 |
| JUL        | 1  | 01 58 02.(1)<br>NORTHEASTERN   |                                  | 148.31 W(0.21)   | 2.0        | MB=4.3 (0.2) | 9 | 15    | 5 | F |
| JUL        | 4. | 13 01 11.(0)<br>NORTHEASTERN   | 68.37 N(0.00)<br>ALASKA          | 148.44 W(0.00)   | 9.0        | ML=2.8( )    | 2 | 3     | 1 | 0 |
| JUL        | 4  | 21 17 03.(6)<br>NORTHEASTERN   | 68.14 N(0.23)<br>ALASKA          | 148.41 W(0.76)   | 1.5        | ML=3.7(0.2)  | 2 | 4     | 2 | 0 |
| JUL        | 5  |                                | 72.25 N(0.05)<br>OFF NORTH COAST |                  | 0.5        | MT=3.6(0.0)  | 2 | 4     | 2 | 0 |
| JUL        | 5  | 11 49 32.(0)<br>NORTHEASTERN   | 67.98 N(0.00)<br>ALASKA          | 148.82 W(0.00)   | 0.0        | ML=3.0( )    | 2 | 3     | 1 | 0 |
| JUL        | 5  | 12 53 38.(0)<br>Northeastern   | 68.37 N(0.00)<br>ALASKA          | 147.90 W(0.00)   | 0.0        | ML=2.5( )    | 2 | 3     | 1 | 0 |
| SEP        | 12 | 13 36 32.(3)<br>EASTERN ALAS   | 63.47 N(0.06)                    | 145.25 W(0.33)   | 1.3        | ML=4.0(0.3)  | 2 | 6     | 2 | 0 |
| SEP        | 19 | 19 40 52.(4)<br>CENTRAL ALASE  | 64.85 N(0.22)<br>(A              | 151.68 W(8.58)   | 0.4        | ML=4.5(0.4)  | 4 | 4     | 3 | 0 |
| T          | 12 | 17 58 32. (2)<br>CENTRAL ALASH | 65.18 N(0.06)                    | 151.07 W(9.21)   | 1.3        | ML=4.6(0.5)  | 3 | 7     | 3 | F |
| ; <b>T</b> | 28 | 00 29 44.(3)<br>Southeastern   | 60.14 N(0.17)<br>ALASKA          | 140.62 W(0.33)   | 2.0        | ML=3.9( )    | 3 | 5     | 1 | 0 |

| DATE<br>1971 | H-TIME (GMT)<br>HR MN SEC      | DEG DEG                            | LONG   | ITUDE<br>EG | RMS<br>SEC | MAGNITUDE | Ξ    |   | OF D |   |   |
|--------------|--------------------------------|------------------------------------|--------|-------------|------------|-----------|------|---|------|---|---|
| DEC 27       | 13 86 35. (6)<br>SOUTHEASTERN  | 60.14 N(0.14)<br>ALASKA            | 141.46 | W(0.43)     | 2.2        | ML=3.8(   | )    | 4 | 5    | 1 | 0 |
|              |                                | C. GRE                             | ENLAND | EPICENTR    | ES         |           |      |   |      |   |   |
| JAN 1        |                                | 80.32 N(0.39)<br>AST OF GREENLAND  | 17.30  | W(1,32)     | 1.5        | ML=3.7(   | )    | 3 | 4    | 1 | 0 |
| JAN 8        | 20 39 24. (0)<br>NORTH COAST 0 | 81.81 N(0.01)<br>OF GREENLAND      | 54.30  | W(0.05)     | 0.2        | ML=3.6(   | )    | 3 | 5    | 1 | 0 |
| JAN 30       |                                | 79.44 N(0.12)<br>AST OF GREENLAND  | 18.28  | W(0.42)     | 1.0        | ML=4.0(8  | , 3) | 3 | 6    | 2 | F |
| FEB 12       |                                | 86.29 N(0.08)<br>NORTH OF GREENLA  |        | W(8.79)     | 1.0        | ML=3.3(0  | ,4)  | 4 | 7    | 2 | F |
| FEB 17       | 02 43 51. (1)<br>NORTHERN GREE | 80.06 N(0.10)<br>ENLAND SEA        | 5.87   | W(0.41)     | 0.3        | ML=3.8(0, | ,3)  | 3 | 5    | 2 | 0 |
| FEB 18       | 03 36 00.(2)<br>NORTHEAST OF   | 84.04 N(0.05)<br>GREENLAND         | 2.43   | W(0.90)     | 8.4        | ML=3,3(   | )    | 2 | 4    | 1 | 0 |
| FEB 18       | 04 23 32.(2)<br>NORTHEAST OF   | 84.20 N(0.12)<br>GREENLAND         | 1.73   | W(1,52)     | 8.6        | ML=3.5(   | )    | 3 | 4    | 1 | 0 |
| FEB 25       | 19 12 47. (2)<br>NORTHERN GREE | 80.94 N(0.23)<br>NLAND SEA         | 7.68   | W(1.37)     | 1.8        | ML=3.7(0  | ,2)  | 6 | 9    | 2 | F |
| MAR 4        | 08 45 23.(2)<br>NORTHERN GREE  | 81.37 N(0.19)<br>NLAND SEA         | 4.73   | W(1.15)     | 1.4        | ML=3.4(   | )    | 4 | 7    | 1 | 0 |
| APR 5        | 15 09 18.(2)<br>NORTHWESTERN   | 76.54 N(0.11)<br>GREENLAND         | 63.18  | W(0.36)     | 2.1        | MN=3.6(   | )    | 4 | 10   | 1 | F |
| MAY 7        | 06 15 34.(2)<br>NORTHEAST OF   | 85.51 N(0.12)<br>GREENLAND         | 8.84   | E(1.93)     | 1.1        | ML=4.2(   | )    | 4 | 5    | 1 | 0 |
| MAY 18       | 00 37 32.(2)<br>WEST COAST OF  | 75.47 N(8.07) GREENLAND            | 56.76  | W(0.34)     | 0.7        | ML=3.6(   | )    | 3 | 5    | 1 | 0 |
| MAY 31       |                                | 68.92 N(0.03)<br>ST GREENLAND NEAR |        |             | 0.9        | ML=4.2(0  | ,1)  | 6 | 11   | 3 | F |
| JUN 13       |                                | 80.12 N(0.21)<br>AST OF GREENLAND  | 14.61  | W(2.16)     | 0.9        | ML=3.2(   | )    | 3 | 4    | 1 | 0 |
| JUL 4        |                                | 68.91 N(0.06)<br>T GREENLAND NEAR  |        |             | 1.4        | ML=3.9(0  | ,1)  | 5 | 8    | 2 | F |
| JUL 23       | 08 03 19.(1)<br>GREENLAND SEA  | 75.92 N(0.02)                      | 0.35   | M (0 .55)   | 0.3        | ML=4.5(   | 4    | 3 | 5    | 1 | 0 |
| NOV 1        |                                | 83.33 N(0.36)<br>ST OF GREENLAND   | 57.06  | W(1.99)     | 2.3        | ML=2.5(   | )    | 3 | 5    | 1 | 0 |

TABLE 3

# EARTHQUAKES OF WESTERN CANADA AND ADJACENT AREAS

#### 1971

# (F=FILLED. 0=0PEN SYMBOL ON EPICENTRE MAPS)

# A. CANADIAN EPICENTRES

| DATE<br>1971                 | H-TIME (GNT) LATITUDE<br>HR MN SEC DEG   | LONGITUDE<br>DEG            | RMS MAGNITUD                                 | E NO.    | OF D           | ATA<br>MAG       |   |
|------------------------------|--|-----------------------------|--|----------|----------------|------------------|---|
|                              | 06 50 53. (1) 47.78 N (0.05)<br>06 50 53. 47.8 N<br>SOUTHWEST OF VANCOUVER ISLAN | n                           |  |          |                |                  | F |
| JAN 4                        | 08 37 31. 50.0 N<br>WEST OF VANCOUVER ISLAND                                     | 130.0 W                     | MT=3.0                                       | 2        | 2              | 2                | 0 |
| JAN 15                       | 14 58 53. 53.5 N<br>100 KM EAST OF MICA CREEK ON                                 |                             |  | 3        | 5              | 2                | 0 |
| JAN 16                       | 22 33 54.(1) 53.09 N(0.07)<br>EAST OF JASPER ALBERTA                             | 117.32 W(0.07)              | 0.9 NN=2.2(                                  | ) 3      | 6              | 1                | 0 |
| JAN 22                       | 07 07 25. 48.5 N<br>WEST OF VANCOUVER ISLAND                                     | 129.0 W                     | ML=3.2                                       | 6        | 8              | 6                | 0 |
| FEB 5<br>ISC<br>NEIS<br>NEIS | 07 33 28. 51.75 N<br>07 33 27.(0) 51.78 N(0.03)<br>07 33 29. 51.89 N             | 130.86 W                    | ML=5.5<br>1.6 MB=5.1<br>1.2 MB=5.1<br>MS=5.7 | 87       | 7<br>161<br>87 | 3<br>9<br>9<br>6 | F |
|                              | ISC DEPTH = 20 +/- 3 KM SOUTH OF QUEEN CHARLOTTE ISL AND CAPE ST JAMES           | ANDS. FELT AT SA            | NDSPIT                                       |          |                |                  |   |
| FEB 5                        | 08 00 119 51.8 N<br>QUEEN CHARLOTTE ISLANDS. AFT                                 |                             |  | 3        | 6              | 3                | 0 |
| FEB 5                        | 08 03 58. 51.8 N<br>QUEEN CHARLOTTE ISLANDS. AFT                                 |                             |  | 3        | 6              | 3                | 0 |
| FEB 5                        | 08 07 01. 51.8 N<br>QUEEN CHARLOTTE ISLANDS. AFT                                 |                             |  | 3        | 6              | 3                | 0 |
| FEB 5                        | 08 58 39. 51.8 N<br>QUEEN CHARLOTTE ISLANDS. AFT                                 | 130.7 W<br>ERSHOCK OF 05 FE | ML=2.7                                       | 2        | 4              | 2                | 0 |
| FEB 5                        | 89 18 19. 51.8 N<br>QUEEN CHARLOTTE ISLANDS. AFT                                 | 130.7 W<br>ERSHOCK OF 05 FE | ML=2.5                                       | 2        | 4              | 2                | 0 |
| FEB 5                        | 09 46 21. 51.8 N<br>QUEEN CHARLOTTE ISLANDS. AFT                                 |                             |  | 3        | 6              | 3                | 0 |
| FE8 5                        | 11 00 08. 51.8 N<br>QUEEN CHARLOTTE ISLANDS. AFT                                 |                             |  | 3        | 6              | 3                | 0 |
| FEB 6                        | 17 37 04. 51.8 N<br>QUEEN CHARLOTTE ISLANDS. AFT                                 |                             |  | 2        | 4              | 2                | 0 |
| FEB 11<br>ISC<br>NEIS        | 06 24 43. (1) 54.39 N (0.10)<br>06 24 46. 54.7 N<br>NORTHWEST OF QUEEN CHARLOTTE | 135.2 W                     | 2.4<br>0.8 MB=4.6                            | 21<br>12 | 21             | 6                | F |
| FEB 25                       | 06 45 34. 50.0 N<br>WEST OF VANCOUVER ISLAND                                     | 130.0 W                     | ML=3.4                                       | 5        | 6              | 4                | 0 |
| FEB 28                       | 20 42 14.(3) 50.95 N(0.87)<br>NEAR CALGARY ALBERTA                               | 113.77 W(0.16)              | 1.2 MN=2.4(                                  | ) 3      | 5              | 1                | 0 |

| DATE<br>1971                  | H-TIME (GMT)<br>HR MN SEC                               | LATITUDE<br>DEG  | LONG                     |                   |     |                                      |               | OF D           |                  |   |
|-------------------------------|---|--|--------------------------|-------------------|-----|--------------------------------------|---------------|----------------|------------------|---|
| MAR 6                         | 11 52 29.<br>WEST OF VANCO                              | 50.5 N<br>UVER ISLAND  | 130.0                    | М                 |     | ML=3.6                               | 3             | 4              | 2                | 0 |
| MAR 10<br>ISC<br>NEIS         | 15 38 29.   | 49.35 N(0.02)<br>49.3 N<br>8 +/- 10 KM                           | 127.2<br>127.46<br>127.4 | W<br>W(0.05)<br>W | 1.0 | MB=5.0<br>MB=5.0                     | 6<br>63<br>40 | 6<br>63<br>40  | 0<br>8<br>10     | F |
| MAR 12                        | 21 01 50.<br>WEST OF VANCO                              | 49.0 N<br>UVER ISLAND  | 130.0                    | M                 |     | ML=2.9                               | 3             | 4              | 3                | 0 |
| MAR 13<br>ISC<br>NEIS<br>NEIS | 23 51 34. (0)   | 50.56 N<br>50.61 N(0.02)<br>50.6 N                               | 129.99                   | W(0.04)           | 1.3 | ML=6.4<br>MB=5.7<br>MB=5.7<br>MS=6.1 | 231           | 231            | 39               |   |
|                               | ISC DEPTH = WEST OF VANCO                               | 22 +/- 2 KM<br>UVER ISLAND                                       |                          |                   |     |                                      |               |                |                  |   |
| MAR 14                        | 00 10 39.<br>WEST OF VANCO                              | 50.6 N<br>UVER ISLAND  | 129.9                    | М                 |     | ML=4.3                               | 6             | 12             | 6                | 0 |
| MAR 14                        | 00 44 16.<br>WEST OF VANCO                              | 50.6 N<br>UVER ISLAND  | 129.9                    | И                 |     | ML=4.0                               | 5             | 10             | 5                | 0 |
| MAR 14<br>ISC<br>NEIS         | 00 51 07.<br>00 51 09.(1)<br>00 51 09.<br>WEST OF VANCO | 50.6 N<br>50.78 N(0.08)<br>50.8 N<br>UVER ISLAND                 | 129.9<br>129.7<br>129.6  | W<br>W(0.15)<br>W | 2.4 | ML=4.3<br>MB=4.2                     | 5<br>23<br>16 | 10<br>23<br>16 | 5<br>0<br>5      | F |
| ISC                           | 04 42 01. (1)<br>04 41 58.                              | 50.6 N<br>50.76 N(0.06)<br>50.7 N<br>39 +/- 16 KM<br>UVER ISLAND | 129.4                    | W(0.13)           | 2.0 |                                      | 26            | 26             | 104              |   |
| ISC                           | 05 18 54.   |  | 129.6                    | M (0.06)          | 1.2 | ML=4.2<br>MB=4.8<br>MB=4.8           |               |                | 2<br>5<br>12     |   |
| APR 3                         | 11 53 28.<br>WEST OF VANCO                              | 50.0 N<br>UVER ISLAND  | 130.0                    | М                 |     | ML=3.4                               | 4             | 7              | 4                | 0 |
| APR 24                        |   | 53.72 N(0.03)<br>ERNESS PROVINCIA<br>T                           |                          |                   |     |                                      | 8             | 23             | 4                | F |
| MAY 9                         | 04 46 30.<br>WEST OF VANCO                              | 48.5 N<br>UVER ISLAND  | 128.5                    | M                 |     | ML=3.0                               | 5             | 9              | 4                | 0 |
| MAY 17                        | 19 41 17.<br>GULF ISLANDS                               | 48.9 N   | 123.2                    | M                 |     | ML=2.6                               | 3             | 4              | 1                | 0 |
| MAY 26<br>ISC<br>NEIS<br>NEIS | 12 11 03.<br>12 11 03.(0)<br>12 11 03.                  | 52.81 N(0.04)<br>52.8 N  | 132.4<br>132.89<br>132.9 |                   |     | ML=4.6<br>MB=4.6<br>MB=4.7<br>MS=4.6 | 5<br>59<br>35 | 5<br>59<br>35  | 1<br>4<br>8<br>1 | 0 |
| JUN 21                        | 11 04 24.(1)<br>EAST OF JASPE                           | 52.88 N(0.09)<br>R ALBERTA                                       | 116.82                   | W(0.08)           | 1.2 | ML=2.7(0.3)                          | 3             | 6              | 2                | F |
| ISC                           | 06 28 26. (1)<br>06 28 27.                              | 51.2 N<br>51.3 N(0.11)<br>51.2 N<br>VANCOUVER ISLAND             | 130.0<br>129.8           | W(0.17)           | 2.5 | ML=4.2<br>MB=4.4                     | 18            | 5<br>18<br>12  | 0                | 0 |

| DATE<br>1971          | H-TIME (GMT) LATITUDE<br>HR MN SEC DEG  | LONGITUDE<br>DEG                               |       |                      | NO.<br>STN    | OF D                  | ATA<br>MAG    |   |
|-----------------------|---|--|-------|----------------------|---------------|-----------------------|---------------|---|
| JUL 15<br>ISC<br>NEIC | 00 24 02. 54.6 N<br>00 24 03.(1) 54.0 N(0.10)<br>00 24 02. 54.2 N<br>NORTHWEST OF QUEEN CHARLOTTE<br>CLEMENTS, QUEEN CHARLOTTE CI<br>CHARLOTTE ISLANDS, AND IN AL | 133.7 W<br>ISLANDS. FELT A<br>TY AND MASSET ON | T POR | MB=5.2<br>T<br>QUEEN | 8<br>90<br>35 | 9<br>9 <b>0</b><br>35 | 2<br>11<br>17 | F |
| JUL 22<br>ISC<br>NEIC | 14 05 30. 50.6 N<br>14 05 32.(1) 50.77 N(0.07)<br>14 05 32. 50.8 N<br>WEST OF VANCOUVER ISLAND  | 129.2 W<br>129.4 W(0.14)<br>129.4 W            | 2.2   | Mi=4.2<br>MB=4.1     | 6<br>24<br>15 | 6<br>24<br>15         | 3<br>0<br>4   | F |
| AUG 18                | 05 16 08.(1) 53.89 N(0.10)<br>NORTHEAST OF JASPER ALBERTA   |  | 0.6   | MN=3.0( )            | 2             | 5                     | 1             | 0 |
| AUG 21<br>ISC<br>NEIC | 11 11 44. 50.6 N<br>11 11 45.(7) 50.6 N(0.10)<br>11 11 46. 50.6 N<br>ISC DEPTH = 16 +/- 62 KM<br>WEST OF VANCOUVER ISLAND   | 130.0 W<br>129.6 W(0.23)<br>129.4 W            | 2.7   | ML=3.4<br>MB=4.3     | 5<br>15<br>10 | 6<br>15<br>10         | 2 0 3         | 0 |
| AUG 31                | 00 30 47. 51.7 N<br>SOUTH OF QUEEN CHARLOTTE ISL  | 130.6 W<br>ANDS                                |       | ML=3.2               | 2             | 3                     | 1             | 0 |
| SEP 26                | 22 27 31. 49.9 N<br>WEST COAST OF VANCOUVER ISLA  |  |       | ML=2.3               | 3             | 4                     | 3             | 0 |
| SEP 29                | 00 00 40. 51.4 N<br>SOUTH OF QUEEN CHARLOTTE ISL  | 131.1 W<br>ANDS                                |       | ML=3.0               | 2             | 3                     | 2             | 0 |
| OCT 12                | 19 09 53.(4) 59.78 N(0.15)<br>NORTHWESTERN BRITISH COLUMBI  |  |       | ML=3.4( )            | 3             | 5                     | 1             | 0 |
| OCT 13                | 15 40 17. 51.6 N<br>SOUTH OF QUEEN CHARLOTTE ISL  |  |       | ML=2.8               | 3             | 4                     | 1             | 0 |
| OCT 15                | 09 04 04.(3) 52.99 N(0.18)<br>WEST OF EDMONTON ALBERTA  | 116.16 W(0.21)                                 | 1.4   | ML=2.7(0.1)          | 3             | 5                     | 2             | 0 |
| OCT 19                | 20 02 29. 50.0 N<br>WEST OF VANCOUVER ISLAND  | 129.5 W  |       | ML=2.9               | 3             | 4                     | 3             | 0 |
| OCT 27                | 13 57 14. 50.0 N<br>WEST OF VANCOUVER ISLAND  | 130.0 W  |       | ML=3.3               | 4             | 7                     | 4             | 0 |
| NOV 6                 | 11 12 52. (4) 51.15 N (0.21)<br>SOUTHWEST OF QUEEN CHARLOTTE  | 135.28 W(0.29)                                 | 1.8   | ML=4.0(0.3)          | 5             | 7                     | 2             | 0 |
| NOV 14                | 10 43 07. 51.6 N<br>SOUTH OF QUEEN CHARLOTTE ISL  |  |       | ML=3.1               | 2             | 3                     | 1             | 0 |
| NOV 18                | 02 46 17. 51.0 N<br>WEST OF VANCOUVER ISLAND  | 129.7 W  |       | ML=3.1               | 2             | 3                     | 1             | 0 |
| ISC<br>NEIC<br>NEIC   | 21 24 42.(0) 48.79 N(0.02)<br>21 24 43. 48.8 N  |  |       |                      | 171           | 6<br>171<br>104       | 22            | F |
|                       | MEST OF VANCOUVER ISLAND  |  |       |                      |               | 1000                  |               |   |
|                       | 22 04 19. 50.6 N<br>WEST OF VANCOUVER ISLAND  |  |       | ML=2.4               |               |                       |               | 0 |
| NOV 25                | 07 10 08.(3) 59.19 N(0.87)<br>NORTHWESTERN BRITISH COLUMBI  |  |       | ML=3.3(0.0)          | 3             | 7                     | 2             | F |

| DATE<br>1971                 | H-TIME (GMT)<br>HR MN SEC                                | LATITUDE<br>DEG                                    | LONG                     |           | RMS<br>SEC | MAGNITUDE                            |                | OF D           |                    |   |
|------------------------------|--|--|--------------------------|-----------|------------|--------------------------------------|----------------|----------------|--------------------|---|
| NOV 25<br>ISC<br>NEIC        | 23 01 38.  | 49.38 N(0.03)<br>49.4 N<br>8 +/- 26 KM             |                          | W(0.09)   | 1.0        |                                      | 23             | 23             | 0                  | 0 |
| ISC                          | 23 40 08.<br>23 40 13.(0)<br>23 40 12.<br>WEST OF VANCOU |  | 129.16                   | W(0.06)   | 1.7        | ML=5.1<br>MB=5.1<br>MB=5.1           | 111            | 6<br>111<br>42 | 2<br>13<br>22      | F |
| NO <b>V</b> 25               | 23 05 01.<br>WEST OF VANCOU                              | 49.4 N<br>JVER ISLAND                              | 129.4                    | М         |            | ML=2.8                               | 2              | 3              | 1                  | 0 |
| NOV 29                       | 06 48 58.<br>WEST OF VANCOU                              | 48.7 N<br>UVER ISLAND                              | 129.0                    | М         |            | ML=2.9                               | 4              | 5              | 4                  | 0 |
| NON 59                       |  | 59.44 N(0.06)<br>BRITISH COLUMBIA                  |                          |           |            | ML=2.6(0.6)                          | 3              | 4              | 2                  | 0 |
| NOV 29,                      | 22 21 41.<br>WEST OF VANCOU                              |  | 129.0                    | W         |            | ML=2.7                               | 5              | 5              | 3                  | 0 |
| DEC 5<br>ISC<br>NEIC<br>NEIC | 05 50 06.<br>ISC AND NEIC                                | 49.4 N<br>49.53 N(0.05)<br>49.6 N<br>DEPTH RESTRIC | 129.4<br>TED TO          | W<br>5 KM | 0.9        | MB=5.6<br>MS=6.0                     | 5<br>168<br>56 | 5<br>168<br>56 | 2<br>16<br>22<br>4 | F |
|                              |  | JVER ISLAND. THE                                   |                          |           |            |                                      |                |                |                    |   |
| DEC 5<br>ISC<br>NEIC         | 06 12 51. (0)<br>06 12 51.                               |  | 129.25                   | W(0.06)   | 1.4        | ML=5.0<br>MB=5.1<br>MB=5.1           | 94             | 94<br>39       |                    | F |
| DEC 8<br>ISC<br>NEIC         | 08 25 02.(0)   | 49.2 N<br>49.23 N(0.03)<br>49.2 N<br>UVER ISLAND   | 128.41                   | W(0.06)   | 1.2        |                                      | 33             | 33<br>26       |                    |   |
| ISC                          | 08 38 24.<br>ISC DEPTH =                                 |  | 128.1<br>128.53<br>128.5 | W (0.06)  | 1.7        | ML=5.0<br>MB=5.3<br>MB=5.2<br>MS=5.3 | 3<br>115<br>71 | 115<br>71      | 1<br>7<br>13<br>2  | F |
| DEC 10                       | WEST OF VANCO  | UVER ISLAND  | 129.0                    | М         |            | ML=4.0                               | 3              | 4              | 1                  | F |
| ISC                          | 20 25 14.(2) 20 25 13.                                   | 49.80 N(0.07)<br>49.8 N<br>41 +/- 24 KM            | 129.0                    | W(0.17)   | 2.9        | MB=4.2                               | 31             | 31<br>15       | 0                  |   |
| ISC                          | 10 39 12. (1)<br>10 39 12.                               | DEPTH RESTRIC                                      | 128.39                   | W(0.08)   | 1.4        | ML=4.2<br>MB=4.5                     | 28             | 28<br>19       | 0                  | F |
| DEC 16                       | 09 35 42.<br>WEST OF VANCO                               | 49.0 N<br>UVER ISLAND                              | 129.5                    | М         |            | ML=3.0                               | 2              | 3              | 2                  | 0 |
| ISC                          | 09 15 08.<br>09 15 09.(1)<br>09 15 08.<br>WEST OF VANCO  | 49.20 N(0.04)<br>49.1 N                            | 128.5<br>128.45<br>128.5 | W(0.08)   | 1.4        | ML=3.8<br>M8=3.9                     |                | 3<br>21<br>15  | 0                  | 0 |

|                       | H-TIME (GNT)<br>HR MN SEC   | LATITUDE<br>DEG  | LONG                     |                       | RMS<br>SEC |                  |             | OF D           |             |   |
|-----------------------|---|--|--------------------------|-----------------------|------------|------------------|-------------|----------------|-------------|---|
| DEC 23                | 18 48 57.<br>BUTE INLET REG   |  | 124.5                    | М                     |            | M1=3.3           | 6           | 12             | 6           | 0 |
| DEC 24                | 11 38 01.(3)<br>SOUTH OF CALGA  |  | 114.10                   | W(0.19)               | 1.4        | ML=2.1(0.2)      | 3           | 5              | 2           | 0 |
| DEC 25<br>ISC<br>NEIC | 18 18 35.<br>18 18 37.(4)<br>16 18 41.<br>ISC DEPTH =<br>WEST OF VANCOU       | 49.25 N(0.05)<br>49.3 N<br>1 +/- 27 KM   | 128.48                   | W (0.08)              | 1.1        | ML=4.3<br>MB=4.5 | 25          | 25             |             | 0 |
| DEC 26                | 15 17 05.<br>WEST OF VANCOU   |  | 130.5                    | И                     |            | ML=3.5           | 3           | 6              | 3           | 0 |
| DEC 27                | 10 15 50.(2)<br>SOUTHEAST OF J  | 52.48 N(0.08)<br>ASPER ALBERTA   |                          | W(0.12)               | 1.6        | ML=2.6(0.3)      | 4           | 7              | 2           | F |
| DEC 28                | 19 57 12.<br>WEST OF VANCOU   |  | 131.0                    | W                     |            | ML=3.4           | 4           | 8              | 4           | 0 |
| DEC 30<br>ISC<br>NEIC | 07 45 11.<br>07 45 11.(1)<br>07 45 10.<br>WEST OF VANCOU                      | 48.9 N   | 128.8<br>128.8<br>128.8  | W<br>W (0.10)<br>W    | 1.7        | ML=4.0<br>MB=4.2 | 14          | 14             | 0           | 0 |
|                       |   | B. UNITE   | ED STATI                 | ES EPICENT            | TRES       |                  |             |                |             |   |
| JAN 01<br>ISC<br>NEIS |   |  |                          | ₩(0.84)<br>М          | 1.0        | MB=5.1<br>MB=5.2 | 108         | 108            | 20<br>13    | F |
| JAN 02<br>ISC<br>NEIS | 19 09 50.   | 59.58 N(0.05)<br>59.5 N<br>DEPTH RESTRIC   | 144.8                    | M                     | 2.0        | M8=4.8<br>MB=4.9 | 65<br>30    | 65<br>30       | 8           | F |
| JAN 14                | 03 26 21.<br>SOUTH END OF P   |  | 123.0                    | М                     |            | ML=2.6           | 3           | 6              | 3           | 0 |
| JAN 14<br>ISC<br>NEIS | 08 29 35.(1) 08 29 36. NEIS DEPTH RE ISC DEPTH = SOUTH END OF P AREA. MAXIMUM | 47.5 N 47.35 N(0.05) 47.3 N STRICTED TO 40 80 +/- 5 KM UGET SOUND. FEI INTENSITY IVUNITED STATES | 123.47<br>123.4<br>KM    | W(8.09)<br>W          | 1.3        | Α .              | 22          | 3<br>22<br>19  |             | 0 |
| JAN 20<br>ISC<br>NEIS | 01 19 13. (0)<br>01 19 13.  | 58.93 N(0.05)<br>58.97 N(0.05)<br>58.9 N<br>DLE SW OF HAINE                                      | 137.16<br>137.2          | W(0.08)               | 1.6        |                  | 24          | 22<br>24<br>21 | 6<br>3<br>5 | F |
| JAN 25                | VICINITY OF LO  | 48.7 N PEZ ISLAND IN S TO IV IN VICTOR GHAM, AND SEAT  | RIA. AL                  | N ISLANDS             |            | ML=3.8           | 4           | 5              | 3           | 0 |
| FEB 25<br>ISC<br>NEIS | 14 40 46.(1)<br>14 40 45.<br>ISC AND NEIS                                     | DEPTH RESTRICT   | 115.4<br>115.2<br>TED TO | W(0.21)<br>W<br>17 KM | 1.2        |                  | 7<br>8<br>6 | 8              | 2<br>B<br>0 | F |

| DATE<br>1971          | H-TIME (GMT)<br>HR MN SEC                                   | LATITUDE<br>DEG                                       | LONGITUDE<br>DEG                           | RMS<br>SEC            |                     |          | OF DA    |        |   |
|-----------------------|---|---|--|-----------------------|---------------------|----------|----------|--------|---|
| APR 8                 |   | 59.13 N (0.11)<br>NDLE SW OF HAIN                     | 136.50 W(0.68)<br>ES                       | 0.9                   | ML=4.8( )           | 3        | 4        | 1      | 0 |
| JUN 24<br>ISC<br>NEIC | 14 05 46.   | 48.3 N<br>DEPTH RESTRIC                               |  |                       | ML=4.0              |          | 17<br>11 | 0      | F |
| AUG 7                 | 09 09 51.<br>NORTHWESTERN                                   | 48.1 N<br>WASHINGTON STAT                             | 121.9 W<br>E                               |                       | ML=2.2              | 3        | 2        | 1      | 0 |
| SEP 22                |   | 48.8 N<br>KER IN NW WASHI                             |  |                       | ML=3.0              | 2        | 3        | 1      | 0 |
| SEP 28                |   | 59.92 N(0.03)<br>SOUTHEASTERN AL                      | 139.59 W(0.11)<br>ASKA                     | 0.6                   | ML=3.0(0.0)         | 3        | 5        | 2      | 0 |
| NOV 17                |   | 59.57 N(B.07)<br>ALASKA NEAR YAK                      | 138.86 W(0.24)                             | 1.1                   | ML=3.0(0.5)         | 3        | 5        | 2      | 0 |
| NOV 19                |   | 58.90 N(0.89) NDLE SOUTHWEST                          | 137.01 W(0.34)<br>OF HAINES                | 1.4                   | ML=3.0(0.2)         | 3        | 5        | 2      | 0 |
| NOV 23                |   | 48.32 N(0.13)<br>INGTON STATE                         | 121.44 W(0.09)                             | 2.5                   | ML=4.1( )           | 6        | 11       | 1      | F |
| NOV 28                | 18 52 42.<br>OFF COAST OF                                   |   | 125.0 W                                    |                       | ML=2.8              | 3        | 4        | 2      | 0 |
| NOV 30                | 01 47 24.(2)<br>NORTHWESTERN                                |   | 115.30 w(0.06)                             | 1.2                   | ML=3.0(0.1)         | 4        | 7        | 2      | F |
| DEC 9                 |   | 56.43 N(0.11)<br>ALASKAN PANHAND                      | 135.59 W(0.17)<br>LE                       | 1.8                   | ML=4.2( )           | 4        | 7        | 1      | F |
| 0EC 16                | 22 53 43. (3)<br>NORTHWESTERN                               |   | 115.35 W(0.11)                             | 1.8                   | ML=2.9(0.2)         | 3        | 5        | 2      | 0 |
| DEC 23                | 07 03 13 (1)<br>07 03 09                                    | 60.35 N(0.06)<br>60.2 N<br>104 +/- 18 KM              | 141.62 W(0.06)<br>142.3 W(0.16)<br>141.8 W | 1.2                   |                     | 14       |          | 1 0 3  | F |
| DEC 28<br>ISC<br>NEIC | 07 50 00.<br>ISC AND NEIC<br>WASHINGTON ST<br>SQ KM OF SOUT | 47.6 N DEPTH RESTRIC TATE. FELT OVER THEAST PUGET SOU |  | 0.8<br>X. 47<br>NSITY | M8=4.0<br>00<br>IV. | 17<br>13 |          | D<br>1 | F |

# TABLE 4

# EARTHQUAKES OF CENTRAL CANADA AND ADJACENT AREAS

#### 1971

# (F=FILLED, 0=OPEN SYMBOL ON EPICENTRE MAPS)

# A. CANADIAN EPICENTRES

| DATE<br>1971 | H-TIME (GMT)<br>HR MN SEC    | LATITUDE<br>DEG | LONGITUDE<br>DEG                   | RMS<br>SEC | MAGNITUDE  |      | OF C |   |   |
|--------------|------------------------------|-----------------|------------------------------------|------------|------------|------|------|---|---|
| NOA 50       |                              |                 | 89.45 M(0.06)<br>SOUTHEAST OF CAPE |            |            | ) 4  | 5    | 1 | 0 |
|              |                              | B. UNI          | TED STATES EPICEN                  | ITRES      |            |      |      |   |   |
| OCT 1        | 08 47 28.(2)<br>NORTHEASTERN |                 | 105.62 W(0.11)                     | 1.6        | MN=2.7(0.2 | 2) 3 | 9    | 2 | F |

TABLE 5
UNLOCATED EVENTS RECORDED AT INK

|        |                                     |            | UNLOGATE         | D EVENIS KECOKDED AT INK   |
|--------|-------------------------------------|------------|------------------|--|
| 0475   |                                     |            |                  | 2544246  |
|        | H-TIME (GMT)                        |            | MAGNITUDE        | REMARKS  |
| 1971   | HR MN SEC                           | KM         |                  |  |
|        |                                     |            |                  |  |
|        |                                     |            |                  |  |
| JAN 8  | 22 17 48.                           | 198        | M1=2.0           |  |
| JAN 9  | 00 20 53.                           | 204        | ML=2.6           |  |
|        | 09 09 11.                           | 287        | ML=2.1           |  |
|        |                                     | -01        |                  |  |
|        | 14 56 06.                           | 82<br>833  | ML=1.2           | Lativa, a communication and a communication an |
| JAN 19 | 04 08 32.                           | 833        |                  | PROBABLY SW YUKON TERRITORY  |
| JAN 23 | 00 27 27.                           | 842        | ML=3.5           | PROBABLY ALASKA OR SW YUKON TERRITORY  |
| JAN 25 | 07 10 47.                           | 842<br>386 | ML= 3.0          |  |
| JAN 29 | 05 20 59.                           |            | ML=2.3           |  |
|        |                                     |            |                  |  |
| FEB 2  | 00 07 25.                           | 224        | ML=2.1           |  |
|        |                                     |            |                  |  |
| FEB 8  | 07 46 48.                           | 230        | ML=1.9           |  |
| FEB 10 | 03 22 07.                           | 195        | ML=2.2           |  |
| FEB 10 | 13 20 32.                           | 372        | ML=2.6           |  |
| FEB 18 | 22 26 25.                           | 217        | ML=1.9           |  |
| FEB 20 | 00 38 25.                           | 211        | ML=1.7           |  |
|        |                                     | 205        | ML = 1.8         |  |
| FEB 25 | 02 30 22.                           | 205<br>408 | ML= 2.8          |  |
|        | 01 00 20                            | 101        | ML=2.8           |  |
| FED CO | 01 05 28.<br>15 30 20.              | 191        |                  |  |
| FEB 28 | 15 30 20.                           | 181        | ML=2.5           |  |
|        | NEW YORK COMMISSION                 |            |                  |  |
| MAR 3  | 17 59 27.                           | 130        | ML=1.9           |  |
| MAR 4  | 20 37 56.                           | 208        | ML=2.3           |  |
| MAR 7  | 02 47 34.                           | 181        | ML=1.2           |  |
|        | 10 13 11.                           | 339        | ML=2.3           |  |
|        | 15 02 49.                           | 114        | ML=1.7           |  |
|        |                                     |            |                  |  |
| MAR 12 | 12 38 08.                           | 128        | ML=1.7           |  |
| MAR 13 | 07 41 05.                           | 160        | ML=1.3           | SOUTHWEST OF INK   |
| MAR 14 | 04 55 58.                           | 208        | ML=1.9           |  |
| MAR 16 | 04 13 45.                           | 95         | ML=1.0           |  |
| MAR 16 | 06 12 57.                           | 256        | ML=1.6           |  |
|        | 20 19 20.                           |            | ML=2.6           |  |
| MAD 21 | 20 13 15                            | 221.       | ML=1.5           |  |
| HAR 22 | 27 17 10                            | 170        | MI = 2 4         |  |
| MAR 23 | 23 47 48.<br>04 58 59.<br>03 00 26. | 179        | ML=2.1<br>ML=1.7 |  |
| MAR 25 | 04 58 59.                           | 133        | ML=1.7           |  |
| MAR 27 | 03 00 26.<br>19 54 38.              | 885        | ML=3.6           | SW YUKON TERRITORY OR ALASKA<br>SW YUKON TERRITORY OR ALASKA   |
|        | 19 54 38.                           | 874        | ML=3.3           | SW YUKON TERRITORY OR ALASKA   |
| MAR 31 | 21 52 04.                           | 264        | ML=2.6           |  |
|        |                                     |            |                  |  |
| APR 1  | 14 59 33.                           | 125        | ML=1.5           |  |
|        |                                     |            |                  |  |
| APR 2  |                                     | 131        | ML=1.8           |  |
| APR 2  | 03 23 43.<br>14 02 31.              | 128        | ML=1.2           |  |
| APR 4  | 14 02 31.                           | 182        | ML=1.2           |  |
| APR 6  | 09 08 20.                           | 284        | ML = 2.3         |  |
| APR 19 | 08 24 30.                           | 197        | M1=1.8           |  |
| APR 19 | 08 51 11.                           | 361        | ML=2.6           |  |
| APR 19 | 16 56 34.                           | 195        | ML=1.8           |  |
| APR 20 | 18 04 34.                           | 341        |                  | APPROX. 920 KM FROM YKC  |
|        |                                     |            |                  | MELLON O DE O VII L'KOU IVO  |
| APR 22 | 19 11 50.                           | 284        | ML=1.9           |  |
| APR 23 | 10 07 17.                           | 230        | ML=2.0           |  |
| APR 24 | 05 56 34.                           | 193        | ML=1.9           |  |
| APR 26 | 03 09 47.                           | 189        | ML=1.6           |  |
|        |                                     |            |                  |  |
| MAY 3  | 06 07 58.                           | 275        | ML=2.3           |  |
| MAY 4  | 03 56 56.                           | 238        | ML=2.3           |  |
| MAY 7  | 20 37 56.                           | 31 7       | ML=2.5           |  |
|        | 06 06 29.                           | 190        | ML=1.4           |  |
|        |                                     |            |                  |  |
| MAY 8  | 10 53 12.                           | 438        | ML=2.5           |  |
| MAY 8  | 22 23 52.                           | 196        | ML=1.5           |  |
| MAY 9  | 18 34 21.                           | 281        | ML=2.3           |  |
| MAY 10 | 22 47 44.                           | 128        | M1=1.1           |  |
| MAY 11 | 13 08 00.                           | 768        | ML=3.4           |  |
| MAY 12 | 03 00 15.                           | 182        | ML=1.2           |  |
| MAY 12 | 12 00 55.                           | 645        | ML=3.1           |  |
|        |                                     |            |                  |  |
| MAY 12 | 20 01 26.                           | 352        | ML=2.6           |  |
| MAY 13 | 01 01 56.                           | 762        | ML=3.5           |  |
| MAY 13 | 06 38 52.                           | 166        | ML=1.3           |  |
| MAY 13 | 21 49 02.                           | 116        | ML=1.1           |  |
| MAY 18 | 03 45 42.                           | 553        | ML=2.9           |  |
| MAY 23 | 01 41 27.                           | 212        | M1=2.2           |  |
| MAY 30 | 04 54 46.                           | 226        | ML=1.8           |  |
|        | -1 27 700                           |            | 11               |  |
| 0.4    |                                     |            |                  |  |

# TABLE 5 (CONTINUED)

# UNLOCATED EVENTS RECORDED AT INK

| DATE<br>1971   | H-TIME (GMT)<br>HR MN SEC   | DELTA MAGNITUDE  | REMARKS  |
|--|---|--|--|
| JUN 1 JUN 4 JUN 5 JUN 7 JUN 10 JUN 12 JUN 13 JUN 16 JUN 19 JUN 21 JUN 22     | 15 55 05.<br>15 57 08.<br>03 41 39.<br>10 17 33.<br>19 47 43.<br>08 41 07.<br>05 48 59.<br>20 19 02.<br>22 11 55.<br>05 13 04.<br>14 10 44. | 172 ML=2.5<br>133 ML=2.3<br>762 ML=3.5<br>275 ML=2.1<br>173 ML=1.6<br>224 ML=1.8<br>182 ML=2.0<br>310 ML=2.4<br>179 ML=1.6<br>731 ML=3.3<br>304 ML=2.0               | ALASKA OR SW YUKON TERRITORY  ALASKA OR SW YUKON TERRITORY |
| JUN 26<br>JUN 27<br>JUN 28<br>JUN 29   | 19 45 11.<br>12 01 35.<br>12 40 59.<br>20 28 38.  | 316 HL=2.7<br>115 HL=1.4<br>125 HL=1.2<br>205 HL=2.6   |  |
| JUL 1 JUL 8 JUL 14 JUL 14 JUL 19 JUL 21 JUL 21 JUL 25                        | 04 58 25.<br>01 51 57.<br>01 54 10.<br>02 08 05.<br>04 44 25.<br>04 44 05.<br>14 01 20.<br>23 28 25.<br>08 06 59.                           | 300 ML=2.1<br>153 ML=1.9<br>364 ML=2.4<br>605 ML=3.0<br>377 ML=2.3<br>281 ML=2.0<br>227 ML=2.2<br>311 ML=2.8<br>95 ML=0.8  |  |
| AUG 5<br>AUG 7<br>AUG 14<br>AUG 24<br>AUG 31                                 | 11 33 25.<br>09 21 57.<br>12 43 46.<br>05 47 50.<br>04 54 51.   | 206 ML=1.6<br>94 ML=2.1<br>173 ML=2.1<br>180 ML=1.6<br>179 ML=1.6  |  |
| SEP 16<br>SEP 19<br>SEP 21<br>SEP 25<br>SEP 25<br>SEP 26<br>SEP 26<br>SEP 29 | 17 51 35.<br>05 15 44.<br>11 21 25.<br>19 11 27.<br>06 00 17.<br>16 48 23.<br>01 38 40.<br>21 45 16.<br>21 11 56.                           | 181 ML=2.8<br>284 ML=2.1<br>216 ML=1.9<br>192 ML=1.8<br>198 ML=2.1<br>125 ML=2.7<br>125 ML=2.2<br>498 ML=2.9<br>170 ML=2.6   | WEST OF INK  |
| OCT 16   | 04 18 48.<br>13 15 26.<br>17 50 41.<br>07 17 35.<br>09 29 38.<br>09 36 15.<br>17 27 51.<br>15 40 11.<br>03 02 40.<br>05 20 17.<br>06 13 26. | 167 ML=1.5<br>202 ML=1.8<br>223 ML=2.1<br>287 ML=2.5<br>179 ML=1.4<br>169 ML=1.5<br>180 ML=1.7<br>210 ML=2.5<br>173 ML=2.5<br>186 ML=2.0<br>ML=1.9                   | SOUTHWEST FROM INK   |
| NOV 7 NOV 9 NOV 10 NOV 10 NOV 21 NOV 21 NOV 21 NOV 22 NOV 23 NOV 27          | 10 48 28.<br>06 49 30.<br>09 18 17.<br>22 51 37.<br>11 55 35.<br>07 34 55.<br>08 44 52.<br>22 05 08.<br>16 51 08.<br>17 19 29.<br>08 44 45. | 181 ML=1.8 205 ML=2.4 281 ML=1.9 129 ML=1.5 179 ML=1.7 281 ML=2.4 280 ML=2.1 210 ML=1.9 243 ML=1.9 193 ML=1.6 223 ML=2.6 217 ML=1.7 363 ML=2.4 411 ML=2.3 183 ML=1.2 | APPROX. 720 KM FROM WHC                                    |

# TABLE 5 (CONTINUED)

#### UNLOCATED EVENTS RECORDED AT INK

| DA1   |                           |                            |                                  | SEC  | DEL TA<br>KM   | MAGNITUDE  |  | REMARKS |
|---|---------------------------|----------------------------|----------------------------------|--|--|--|--|---------|
| DEC<br>DEC<br>DEC<br>DEC<br>DEC<br>DEC<br>DEC | 8<br>10<br>14<br>18<br>22 | 01<br>07<br>03<br>04<br>09 | 30<br>43<br>36<br>55<br>09<br>23 | 41.<br>25.<br>19.<br>43.<br>20.<br>33.<br>46.<br>30. | 132<br>142<br>166<br>198<br>186<br>171<br>186<br>179 | ML=1.5<br>ML=1.4<br>ML=1.7<br>ML=2.5<br>ML=1.7<br>ML=1.6 |  |         |

# TABLE 6

#### UNLOCATED EVENTS RECORDED AT WHO

| DATE                                 | H-TIME(GMT)                                      | DELTA MAGNITUDE                                      | REMARKS  |
|--------------------------------------|--|--|--|
| 1971                                 | HR MN SEC  | KM   |  |
| SEP 6<br>SEP 16<br>SEP 26            | 20 48 28.<br>16 17 08.<br>22 49 55.              | 245 ML=2.2<br>217 ML=2.9<br>173 ML=2.6               | APPROX. 310 KM FROM SHAFT CREEK<br>APPROX. 320 KM FROM SHAFT CREEK |
| OCT 1<br>OCT 3                       | 20 41 56.<br>03 11 35.<br>08 21 15.              | 256 ML=3.0<br>159 ML=1.9<br>211 ML=2.1               | APPROX. 370 KM FROM SHAFT CREEK                                    |
| OCT 12<br>OCT 15<br>OCT 15<br>OCT 18 | 00 39 05.<br>15 47 15.<br>16 37 41.<br>15 41 04. | 319 ML=3.4<br>217 ML=2.9<br>230 ML=2.3<br>225 ML=2.4 | APPROX. 670 KM FROM SHAFT CREEK<br>APPROX. 490 KM FROM SHAFT CREEK |
| OCT 21                               | 02 52 04.  | 203 ML=2.0   | APPROX. 380 KM FROM SHAFT CREEK                                    |
| OCT 24                               | 22 08 51.  | 278 ML=3.5   | APPROX. 240 KM FROM SHAFT CREEK                                    |
| OCT 31                               | 04 02 22.  | 179 ML=1.8   | APPROX. 350 KM FROM SHAFT CREEK                                    |
| NOV 6                                | 04 08 25.  | 166 ML=2.2   | APPROX. 350 KM FROM SHAFT CREEK                                    |
| NOV 6                                | 07 52 03.  | 163 ML=1.7   |  |
| NOV 7                                | 13 34 13.  | 142 ML=1.9   |  |
| NOV 11                               | 23 06 06.  | 358 ML=2.9   |  |
| NOV 20                               | 04 51 52.  | 186 ML=2.4   |  |
| NOV 22                               | 12 03 35.  | 338 ML=3.0   |  |
| NOV 30                               | 20 06 14.  | 243 ML=2.2   |  |
| DEC 3 DEC 19 DEC 24 DEC 28 DEC 28    | 11 31 54.  | 26 9 ML = 2.7  | APPROX. 380 KM FROM SHAFT CREEK                                    |
|                                      | 16 39 26.  | 24 9 ML = 3.0  | APPROX. 630 KM FROM SHAFT CREEK                                    |
|                                      | 13 21 40.  | 28 1 ML = 2.7  | APPROX. 570 KM FROM SHAFT CREEK                                    |
|                                      | 14 06 31.  | 26 9 ML = 2.9  | APPROX. 380 KM FROM SHAFT CREEK                                    |
|                                      | 15 08 06.  | 25 6 NL = 2.8  | APPROX. 360 KM FROM SHAFT CREEK                                    |

# TABLE 7

# UNLOCATED EVENTS RECORDED AT YKC

|        | H-TINE(GMT)<br>HR MN SEC | DEL TA | MAGNITUDE | REMARKS |
|--------|--------------------------|--------|-----------|---------|
| DEC 30 | 06 08 54.                | 334    | ML=2.6    |         |

#### TABLE 8

#### UNLOCATED EVENTS RECORDED AT BLC

| DATE<br>1971 | H-TIME(GMT)<br>HR MN SEC | DELTA | MAGNITUDE |          |       | REMARKS |
|--------------|--------------------------|-------|-----------|----------|-------|---------|
| SEP 30       | 11 09 06.                | 179   | ML=1.7    | NORTH OR | SOUTH | OF BLC  |

# TABLE 9 UNLOCATED EVENTS RECORDED AT RES

| DATE<br>1971 | H-TIME(GMT)<br>HR MN SEC | DELTA MAGNITUDE<br>KM  | REMARKS   |
|--------------|--------------------------|------------------------|---|
| JAN 8        | 19 14 46.<br>19 21 49.   | 72 ML=1.6<br>73 ML=1.9 | PROBABLY SOUTH OF RES PROBABLY SOUTH OF RES   |
| JAN 9        | 02 42 05.                | 243 ML=1.8             |   |
| JAN 25       | 01 55 40.                | 52 ML=1.9              | SOUTHEAST OF RES  |
| JAN 27       | 01 48 31.                | 60 ML=1.3              |   |
| FEB 6        | 02 30 34.                | 60 ML=0.9              |   |
| MAR 4        | 01 05 18.                | 163 ML=1.6             |   |
| MAR 4        | 02 23 40.                | 99 ML=0.8              |   |
| MAR 5        | 00 35 24.                |                        |   |
|              |                          |                        |   |
| MAR 8        | 22 84 35.                | 198 ML=2.0             |   |
| MAR 12       | 03 37 14.                | 87 ML=1.0              |   |
| MAR 17       | 16 58 39.                | 42 ML=1.0              | THESE 12 EVENTS ARE AFTERSHOCKS OF THE EVENT OF 17 MAR                                    |
| MAR 17       | 17 45 17.                | 41 ML=1.8              | 16H ON CORNWALLIS ISLAND. IN ADDITION THERE ARE 38  |
| MAR 17       | 18 16 45.                | 44 ML=1.4              | OTHER AFTERSHOCKS OCCURRING BETWEEN 17 MAR 16H AND  |
| MAR 17       | 18 30 42.                | 41 ML=1.4              | 21 MAR 05H WITH MAGNITUDES BETWEEN ML-0.5 AND MLO.6                                       |
| MAR 17       | 19 01 10.                | 41 ML=0.9              |   |
| MAR 17       | 21 11 15.                | 44 ML=1.5              |   |
| MAR 18       | 01 39 17.                | 43 ML=1.8              |   |
| MAR 18       | 02 32 00.                | 41 M1=0.8              |   |
| MAR 18       |                          | 44 ML=1.1              |   |
| MAR 19       |                          | 42 ML=0.9              |   |
| MAR 23       |                          | 42 ML=0.9              |   |
| MAR 24       | 00 42 38.                | 42 ML=0.4              |   |
| MAR 24       | 23 15 03.                |                        | COUTH CHORE OF COCHHALLTO TOLAND FOR FROM BEC   |
| MAR 24       | 23 15 03.                | 32 ML=0.2              | SOUTH SHORE OF CORNWALLIS ISLAND, ESE FROM RES  |
| APR 1        | 19 13 17.                | 20 ML=1.3              | BARROW STRAIT SOUTHEAST OF RES  |
| APR 8        | 01 07 47.                | 42 ML=1.9              | CORNWALLIS ISLAND NNE OF RES  |
| APR 11       | 06 23 45.                |                        | CORNWALLIS ISLAND NNE OF RES  |
| APR 11       | 16 14 42.                |                        | CORNWALLIS ISLAND NNE OF RES  |
| APR 15       | 13 01 53.                | 6 ML=0.3               | NNE OF RES. DEPTH RESTRICTED TO 5 KM  |
| MAY 2        | 04 34 03.                | 41 ML=0.7              |   |
|              | 19 31 11.                | 37 ML=1.4              | DA CORDITATION TRACT OF DCC   |
|              |                          |                        | BARROW STRAIT SOUTHEAST OF RES  |
| MAY 5        |                          | 41 ML=1.7              | CORNWALLIS ISLAND NNE OF RES  |
| MAY 7        | 11 24 30.                | 49 ML=1.4              |   |
| MAY 9        | 21 04 52.                | 48 ML=0.7              |   |
| MAY 12       | 02 25 13.                | 214 ML=1.6             |   |
| MAY 15       | 04 57 05.                | 197 ML=1.7             |   |
| MAY 31       | 22 31 03.                | 52 ML=1.7              |   |
| JUN 10       | 19 59 46.                | 43 ML=1.8              | CORNWALLIS ISLAND NORTH OF RES  |
| JUN 11       | 04 19 53.                | 49 ML=1.2              |   |
| JUN 11       | 04 37 43.                | 38 ML=0.4              |   |
| JUN 26       |                          | 142 ML=1.4             |   |
|              | 16 55 48.                | 144 ML=2.1             | SOMERSET ISLAND. AFTERSHOCK OF EVENT OF 27 JUN 3H   |
| JUN 28       |                          | 142 ML=1.5             | SOMERSET ISLAND. AFTERSHOCK OF EVENT OF 27 JUN 3H   |
| JUL 3        | 01 46 56.                | 142 ML=1.4             |   |
| JUL 4        |                          | 370 ML=2.3             | DOSCIDLE VELEBORIOUN DE P. HIL 40H IN LANGACIER COUNT                                     |
| JUL 9        | 10 26 52.                | 192 ML=2.1             | POSSIBLE AFTERSHOCK OF 4 JUL 19H IN LANCASTER SOUND PROBABLY SOMERSET ISLAND SOUTH OF RES |
|              |                          |                        |   |
| JUL 9        | 22 21 40.                | 43 ML=0.9              | EAST OF RES   |
| JUL 10       | 14 26 43.                | 104 ML=1.2             | NAPTHIEST OF DEG  |
| JUL 11       | 18 42 48.                | 28 ML=1.7              | NORTHWEST OF RES  |
| JUL 11       | 19 47 55.                | 108 ML=1.3             |   |
| JUL 19       |                          | 89 ML=2.4              | SOUTH OF RES APPROX. 1040 KM FROM BLC   |
| JUL 24       |                          | 99 ML=1.5              | COAST OF SOMERSET ISLAND. AFTERSHOCK OF 24 JUL 22H  |
| JUL 26       |                          | 167 ML=1.7             |   |
| JUL 26       | 17 36 33.                | 108 ML=1.6             | (A)   |
| AUG 2        | 18 03 36.                | 99 ML=1.6              |   |
|              | 07 54 55.                | 35 ML=0.5              |   |
|              | 08 14 38.                | 179 ML=1.6             |   |
| AUG 20       |                          | 18 ML=0.2              |   |
| AUG 29       |                          | 540 ML=3.1             | PROBABLY NORTH COAST OF BAFFIN ISLAND   |
| AUG 31       |                          | 108 ML=1.5             | LUCONDET HOLLI CONST OF DALLIN TOTAMO   |
| 400 01       | 25 00 228                | -00 HE-103             |   |

# TABLE 9 (CONTINUED)

# UNLOCATED EVENTS RECORDED AT RES

| DATE<br>1971   | H-TIME(GMT) HR MN SEC   | DELTA MAGNITUDE<br>KM   | REMARKS  |
|--|---|---|--|
| SEP 10<br>SEP 14<br>SEP 21<br>SEP 21<br>SEP 23<br>SEP 26<br>SEP 26<br>SEP 26 | 06 34 03. 06 58 59. 13 35 23. 20 15 59. 22 17 12. 07 02 00. 05 17 02. | 35 ML=1.2<br>95 ML=1.6<br>12 ML=0.0<br>91 ML=1.5<br>60 ML=1.4<br>108 ML=1.2<br>108 ML=1.4<br>82 ML=1.5<br>99 ML=1.4 | WEST OF RES. DEPTH RESTRICTED TO 5 KM<br>SOMERSET ISLAND. FORESHOCK OF EVENT OF 20 SEP 23H<br>SOMERSET ISLAND. AFTERSHOCK OF EVENT OF 20 SEP 23H<br>SOMERSET ISLAND. AFTERSHOCK OF EVENT OF 20 SEP 23H |
| SEP 3  |   | 198 ML=2.2  |  |
| OCT 20   |   | 12 ML=0.5<br>25 ML=0.6  |  |
| NOV 2<br>NOV 2<br>NOV 2<br>NOV 2<br>NOV 2                                    | 12 38 02.<br>15 14 01.<br>17 35 37.<br>17 54 53.<br>09 04 56.         | 108 ML=2.2<br>99 ML=1.5<br>99 ML=1.3<br>23 ML=0.1<br>15 ML=0.1<br>19 ML=0.2   |  |
| DEC 2  |   | 48 ML=1.6<br>23 ML=0.5  |  |

TABLE 10

# UNLOCATED EVENTS RECORDED AT MBC

| DATE<br>1971 |     | H-TIME (GMT)           | DEL TA     | MAGNI TUDE       | REMARKS   |
|--------------|-----|------------------------|------------|------------------|---|
| - 31 -       |     | 1114 320               | 1011       |                  |   |
|              |     | 18 39 05.              |            | ML=1.2           | NORTHERN PRINCE PATRICK ISLAND. FORESHOCK OF 03 FEB 13H |
|              | 3   | 05 04 32.              |            | ML=2.0           | NORTHERN PRINCE PATRICK ISLAND. FORESHOCK OF 03 FEB 13H |
| FEB          |     | 13 55 17.<br>13 56 30. | 125<br>126 | ML=1.5           | THESE 9 EVENTS ARE AFTERSHOCKS OF THE EVENT OF          |
| FEB<br>FEB   |     |                        | 125        | ML=0.9           | 03 FEB 13H ON NORTHERN PRINCE PATRICK ISLAND.           |
| FEB          |     |                        |            | ML=0.8           |   |
| FEB          |     | 13 58 36.<br>16 01 28. | 126        | ML=1.0<br>ML=1.5 |   |
|              | 3   | 21 03 42.              | 121        | ML=1.5           |   |
| FEB          |     | 11 55 29.              | 121        | ML=1.8           |   |
| FEB          |     | 05 34 56.              |            | ML=1.2           |   |
| FEB 1        |     | 17 59 59.              |            | ML=1.5           |   |
| LED I        |     | 11 99 990              | TLI        | ME-TOD           |   |
| MAR          | 7   | 15 26 58.              | 84         | ML=1.3           | NORTH OF MBC  |
| APR 1        | 1.  | 12 04 48.              | 163        | ML=1.2           |   |
| APR 1        |     | 12 20 54.              | 163        | ML=1.5           |   |
| APR I        | . 4 | 12 20 540              | 100        | WF=102           |   |
| MAY 1        | n   | 04 53 55.              | 80         | ML= 0.9          |   |
| MAY 1        |     | 17 30 51.              |            | ML=1.6           |   |
| MAY 1        |     | 19 26 24.              |            | ML= 2.0          | NNE OF MBC  |
| MAY 2        |     | 06 37 08.              |            | ML=1.6           | NAC OF ABO  |
| IIAI C       | - ) | 00 01 000              | 1-7        | 116-200          |   |
| JUN          | 7   | 11 17 38.              | 98         | ML=0.9           | NORTHERN PRINCE PATRICK ISLAND                          |
|              |     |                        |            |                  |   |
| JUL 2        | 4   | 11 03 34.              | 138        | ML=1.2           |   |
| OCT          |     | 02 10 50.              | 116        | ML = 1.4         |   |
| OCT          |     | 02 31 19.              | 116        | ML=0.9           |   |
|              | 1   | 02 31 56.              | 112        | ML=0.8           |   |
|              | 1   | 03 46 19.              | 116        | ML=0.7           |   |
| OCT 1        |     | 04 30 26.              |            | ML = 1.4         |   |
| OCT 1        | 4   | 11 51 42.              | 28         | ML=1.0           |   |
| NOV 2        | 24  | 16 27 31.              | 69         | ML=1.9           |   |
| 1404 5       | . 4 | TO C. 010              | 0 9        | 115-702          |   |

TABLE 11
UNLOCATED EVENTS RECORDED AT ALE

| DATE<br>1971     | H-TIME (GMT) HR MN SEC | DELTA MAGNITUDE          | RE MARKS   |
|------------------|------------------------|--------------------------|--|
| - 31 -           | THE PIN SEO            | N.O.                     |  |
| JAN 1            | 07 53 02.              | 202 ML=1.8               |  |
| JAN 17           | 22 34 42.              | 502 ML=3.4               | NORTH COAST OF GREENLAND APPROX. 240 KM FROM NOR   |
| FEB 9            | 17 05 07.              | 36 ML=1.?                | ESE FROM ALE   |
| MAR 1            |                        | 99 ML=1.4                | 477774 24 0 day 77774 407  |
| MAR 27<br>MAR 28 | 23 00 59.<br>11 04 16. | 801 ML=3.2<br>405 ML=2.3 | APPROX. 240 KM FROM NOR  |
| APR 17           | 15 16 20.              | 845 ML=3.5               | APPROX. 180 KM FROM NOR  |
| MAN 27           | 46 36 40               | 127 41 - 2 0             | DESCRIPTION HORTH BOACT OF CASTANAND ACREMY FROM NOD   |
| MAY 23           | 16 26 18.              | 423 ML=2.8               | PROBABLY NORTH COAST OF GREENLAND. 260 KM FROM NOR   |
| JUN 10           | 09 34 58.              | 254 ML=2.2               |  |
| JUN 11           | 03 54 22.              | 144 ML=1.7               |  |
| JUL 2            | 11 31 27.              | 823 ML=3.7               | NORTHEAST OF ALE   |
| JUL 19           |                        | 823 ML=3.5               |  |
| JUL 19           | 16 26 04.              | 823  ML = 3.3            | APPROX. 170 KM FROM NOR  |
| JUL 23           | 21 55 03.              | 317 ML=2.4               |  |
| AUG 13           | 08 34 47.              | 922 ML=3.7               | APPROX. 220 KM FROM NOR  |
| AUG 14           | 21 30 52.              | 922 ML=3.5               |  |
| AUG 15<br>AUG 20 | 12 17 19.<br>04 44 09. | 966 ML=3.6<br>798 ML=3.4 | APPROX. 280 KM FROM NOR NORTHEAST FROM ALE   |
| AUG 20           | 04 44 09.              | /90 HL=3.4               |  |
| SEP 8            | 20 13 37.              | 812 	 ML = 3.2           | The state of the s |
| SEP 13           | 08 35 02.              |                          | APPROX. 210 KM FROM NOR  |
| SEP 15           | 00 34 38.              |                          | APPROX. 210 KM FROM NOR  |
| SEP 21           | 20 21 36.              | 889 ML=3.5               | APPROX. 200 KM FROM NOR  |
| OCT 8            | 04 17 08.              | 790 ML=3.6               |  |
| OCT 8            | 19 41 58.              | 785 ML=3.6               |  |
| OCT 15           | 13 40 07.              | 823 ML=3.2               | i  |
| NOV 26           | 23 21 37.              | 818 ML=3.6               | APPROX. 230 KM FROM NOR  |
| DEC 5            | 21 37 04.              | 134 ML=1.5               | PROBABLY ENE FROM ALE  |
| DEC 5            | 21 50 21.              | 129 ML=1.4               | PROBABLY ENE FROM ALE  |
| DEC 13           | 02 59 31.              | 515 ML=2.8               | APPROX. 270 KM FROM NOR  |
| DEC 14           | 17 18 12.              | 125 NL=1.5               |  |
| DEC 17           | 03 58 34.              | 1109 ML=3.4              |  |
| DEC 23           | 11 59 32.              | 757 ML=2.9               |  |
| DEC 26           | 10 46 19.              | 277 ML=2.6               | APPROX. 480 KM FROM NOR  |
| DEC 31           | 14 34 31.<br>12 19 33. | 163 ML=1.4<br>812 ML=3.7 |  |
| DEC 31           | 15 19 000              | 01c MF-001               |  |

TABLE 12

# UNLOCATED EVENTS RECORDED AT FBC

| DATE<br>1971 | H-TIME(GMT) DELTA MAGNITUDE<br>HR MN SEC KM | REMARKS                                 |
|--------------|---|---|
|              |   |   |
| MAR 22       | 07 33 22. 252 ML=2.1                        |   |
| MAY 12       | 08 46 57. 293 ML=2.2                        |   |
| MAY 12       | 16 06 25. 262 ML=2.6                        |   |
| JUL 6        | 16 34 48. 460 ML=3.1                        | POSSIBLY FROM DAVIS STRAIT              |
| JUL 11       | 07 00 38. 504 ML=3.2                        | POSSIBLY FROM DAVIS STRAIT              |
| JUL 29       | 18 05 30. 471 ML=3.2                        | POSSIBLY FROM DAVIS STRAIT              |
| JUL 29       | 19 45 16. 460 ML=2.7                        | POSSIBLY FROM DAVIS STRAIT              |
| JAF 30       | 09 40 07. 449 ML=3.1                        | POSSIBLY FROM DAVIS STRAIT              |
| AUG 4        | 19 07 20. 205 ML=2.0                        |   |
| AUG 15       | 05 24 54. 491 MN=2.6                        | NORTH FROM FBC APPROX. 1290 KM FROM BLC |
| AUG 23       | 11 26 49. 240 ML=2.4                        |   |

# TABLE 13

# UNLOCATED EVENTS RECORDED AT SFA

|        |                          |              | UNLOCATE   | DEVENTS  | RECORDED AT SFA   |           |       |
|--------|--------------------------|--------------|------------|----------|-------------------|-----------|-------|
|        | H-TIME(GMT)<br>HR MN SEC | DEL TA       | MAGNI TUDE |          | RE MARKS          |           |       |
| AUG 20 | 06 12 43.                | 15           | ML=1.0     | EAST OF  | SF A              |           |       |
| DEC 27 | 09 50 42.                | 28           | ML=1.8     | NEAR BAI | E-ST-PAUL QUEBEC. | 75 KM FR0 | H CHQ |
|        |                          |              |            |          |                   |           |       |
|        |                          |              |            | TABLE    | 14                |           |       |
|        |                          |              | UNLOCATE   | D EVENTS | RECORDED AT HAL   |           |       |
|        | H-TIME(GMT)<br>HR MN SEC | DELTA        | MAGNITUDE  |          | REMARKS           |           |       |
| JUN 13 | 01 35 21.                | 205          | ML=2.3     |          |                   |           |       |
|        |                          |              |            | TABLE    | 15                |           |       |
|        |                          |              | UNLOCATE   | D EVENTS | RECORDED AT ALB   |           |       |
| DATE   | H-TIME(GMT)              | DELTA        | MAGNITUDE  |          | REMARKS           |           |       |
| 1971   | HR MN SEC                | KM           |            |          |                   |           |       |
| FEB 25 | 20 38 37.                | 56           | ML=2.2     |          |                   |           |       |
| APR 17 | 00 07 12.                | 60           | ML=1.6     |          |                   |           |       |
| JUN 2  | 09 14 48.                | 75           | ML=2.8     | APPROX.  | 125 KM FROM VIC   |           |       |
|        |                          |              |            |          |                   |           |       |
|        |                          |              |            | TABLE    | 16                |           |       |
|        |                          |              | UNLOCATE   | D EVENTS | RECORDED AT MCC   |           |       |
|        | H-TIME(GMT)<br>HR MN SEC |              | MAGNITUDE  |          | REMARKS           |           |       |
| FEB 6  | 07 36 13.                | 75           | ML=2.4     |          |                   |           |       |
| JUN 21 | 11 04 36.                | 125          | ML=2.3     |          |                   |           |       |
| NOV 20 | 18 45 12.                | 254          | ML=2.6     |          |                   |           |       |
|        |                          |              |            |          |                   |           |       |
|        |                          |              |            | TABLE    | 17                |           |       |
|        |                          |              | UNLOCATE   | D EVENTS | RECORDED AT PNT   |           |       |
|        | H-TIME(GMT)<br>HR MN SEC | DEL TA<br>KM | MAGNITUDE  |          | REMARKS           |           |       |
| MAY 1  | 22 57 00.                | 70           | ML=2.8     | APPROX.  | 240 KM FROM VIC   |           |       |

TABLE 16
UNLOCATED EVENTS RECORDED AT PHC

| DATE<br>1971     | H-TIME(GMT)<br>HR MN SEC | DELTA MAGNITUDE          | RE MARKS                                   |
|------------------|--------------------------|--------------------------|--|
| JAN 5<br>JAN 12  | 03 38 41.<br>14 57 46.   | 150 ML=3.0<br>130 ML=3.1 |  |
| FEB 10           | 03 24 39.                | 170 ML=3.1               |  |
| FEB 11           | 17 08 38.                | 170 ML=2.6               | MOST OF THE EVENTS IN THIS TABLE PROBABLY  |
| FEB 13           | 10 14 46.                | 170 ML=2.8               | ORIGINATE WEST OF VANCOUVER ISLAND         |
| FEB 16           | 14 49 53.                | 170 ML=2.1               |  |
| FEB 16           | 16 28 06.                | 170 ML=3.1               |  |
| FEB 17           | 13 41 54.                | 170 ML=2.9               |  |
| MAR 5            | 04 30 51.                | 150 ML=2.8               |  |
| MAR 15           | 04 16 21.                | 178 ML=3.1               |  |
| MAR 15           | 05 15 42.                | 170 ML=3.3               |  |
| MAR 15           | 07 59 40.                | 170 ML=2.6               |  |
| MAR 15           | 13 29 46.                | 170 ML=2.6               |  |
| MAR 19<br>MAR 20 | 19 05 54.<br>07 32 59.   | 170 ML=2.5<br>170 ML=1.6 |  |
| MAR 20           | 10 39 54.                | 170 ML=1.5               |  |
| MAR 20           | 15 33 04.                | 170 ML=1.5               |  |
| MAR 20           | 16 27 53.                | 170 ML=1.4               |  |
| MAR 28           | 11 30 47.                | 170 ML=1.9               |  |
| APR 1            | 01 23 01.                | 170 ML=3.2               |  |
| APR 4            | 18 55 58.                | 55 ML=2.3                | APPROX. 155 KM FROM ALB                    |
| APR 4            | 22 42 27.                | 170 ML=2.6               |  |
| APR 16           | 15 23 51.                | 170 ML=3.4               |  |
| MAY 2            | 03 50 54.                | 170 ML=2.8               |  |
| MAY 3            | 05 49 28.                | 170 ML=2.3               |  |
| MAY 6            | 16 35 43.                | 170 ML=2.5               |  |
| MAY 17           | 08 00 52.                | 170 ML=2.3               |  |
| MAY 20           | 07 41 58.                | 170 ML=2.5               |  |
| MAY 27<br>MAY 30 | 07 12 47.<br>17 32 49.   | 100 ML=2.4<br>170 ML=3.1 |  |
| 7                | 44 20 57                 | 470 41-27                |  |
| JUN 3<br>JUN 7   | 11 28 53.<br>01 27 58.   | 170 ML=2.4<br>170 ML=3.5 |  |
| JUN 20           | 08 07 37.                | 100 ML=2.2               |  |
| JUN 28           | 04 40 21.                | 170 ML=2.5               |  |
| JUN 28           | 14 06 53.                | 170 ML=2.3               |  |
| JUN 29           | 16 00 12.                | 170 ML=2.5               | PROBABLY AFTERSHOCK OF EVENT OF 29 JUN 16H |
| JUL 5            | 05 59 13.                | 170 ML=2.3               |  |
| JUL 5            | 07 29 58.                | 170 ML=2.4               |  |
| JUL 10           | 03 47 06.                | 130 ML=2.4               |  |
| JUL 21           | 10 29 27.                | 170 ML=2.7               |  |
| JUL 22           | 00 41 22.                | 170 ML=2.8               |  |
| JUL 22<br>JUL 24 | 14 12 47.<br>14 07 52.   | 170 ML=2.6<br>170 ML=2.4 |  |
| JUL 28           | 03 56 22.                | 170 ML=2.5               |  |
| JUL 30           | 06 02 36.                | 170 ML=2.7               |  |
| AUG 5            | 14 29 39.                | 170 NL=3.2               |  |
| AUG 5            | 16 43 48.                | 170 ML=2.3               |  |
| AUG 13           | 10 43 08.                | 170 ML=2.3               |  |
| AUG 27           | 10 46 13.                | 170 ML=2.4               |  |
| SEP 13           | 21 04 52.                | 170 ML=3.1               | APPROX. 250 KM FROM QCC                    |
| SEP 19           | 06 29 00.                | 170 ML=2.2               |  |
| SEP 19           | 06 41 12.                | 450 ML=3.4               |  |
| SEP 25           | 09 23 24                 | 170 ML=2.8               |  |
| OCT 14           | 05 35 24.                | 140 ML=2.4               |  |
| NOV 11           | 12 42 22.                | 206 ML=2.4               |  |
| NOV 22           | 13 35 51.                | 170 ML=2.4               |  |
|                  |                          |                          |  |

# TABLE 18 (CONTINUED)

# UNLOCATED EVENTS RECORDED AT PHC

|                  |                        |              | 0 NE 00 N 1 E 0  | THE MEDINAL HIT IND   |
|------------------|------------------------|--------------|------------------|---|
| DATE             | H-TIME (GMT)           | DELTA        | MAGNITUDE        | REMARKS   |
| 1971             | HR MN SEC              | KM           |                  |   |
|                  |                        |              |                  |   |
| NOW 22           | 45 00 23               | 470          |                  |   |
| NOA 55           | 15 00 27.<br>17 10 31. | 17 0<br>17 0 | ML=2.6<br>ML=2.6 |   |
| NOV 25           | 04 51 29.              | 170          | ML=2.6           |   |
| NOV 27           | 14 14 12.              | 170          | ML= 2.4          |   |
| NOV 30           | 00 53 32.              | 170          | ML=2.5           |   |
|                  |                        |              |                  |   |
| DEC 5            | 07 03 01.              | 170          | ML= 2.4          |   |
| DEC 5            | 07 48 52.              | 170          | ML=2.9           |   |
| DEC 5            | 09 26 28.              | 170          | ML=2.6           |   |
| OEC 5            | 10 33 24.              | 170          | ML=3.2           |   |
| DEC 5            | 11 12 42.<br>11 33 44. | 170          | ML=2.4           |   |
| DEC 5<br>DEC 5   | 11 46 53.              | 170<br>170   | ML=2.5<br>ML=2.4 |   |
| DEC 5            | 12 44 01.              | 170          | ML=3.1           |   |
| DEC 5            | 14 36 03.              | 170          | ML=2.3           |   |
| DEC 5            | 15 02 41.              | 170          | ML=2.4           |   |
| DEC 5            | 17 07 32.              | 170          | ML=2.3           |   |
| DEC 5            | 18 35 38.              | 170          | ML=2.8           |   |
| DEC 6            | 00 53 25.              | 170          | ML=2.3           |   |
| DEC 6            | 01 32 21.              | 170          | ML=2.5           | THESE EVENES IN DESCRIPTION AND DATE AT A SHAPE   |
| DEC 6            | 01 45 32.<br>02 11 01. | 17 0<br>17 0 | ML=2.3           | THESE EVENTS IN DECEMBER ARE PART OF A SWARM  |
| DEC 6            | 04 47 17.              | 170          | ML=2.5<br>ML=2.4 | OF EARTHQUAKES WHICH OCCURRED WEST OF VANCOUVER ISLAND BEGINNING IN NOVEMBER. THE LARGEST SHOCK |
| DEC 6            | 06 02 48.              | 170          | ML=2.4           | IN THIS SERIES OCCURRED ON 5 DEC 5H - SEE TABLE 3   |
| DEC 6            | 09 12 42.              | 170          | ML=2.2           | an into designed opposition of a pro- and a section of  |
| DEC 6            | 09 09 04.              | 170          | ML=2.4           |   |
| DEC 6            | 10 08 51.              | 170          | ML=2.2           |   |
| DEC 6            | 11 33 24.              | 170          | ML=2.2           |   |
| DEC 6            | 12 56 16.<br>15 23 56. | 170          | ML=2.6           |   |
| DEC 6            | 22 16 48.              | 17 0<br>17 0 | ML=2.3<br>ML=2.4 |   |
| DEC 8            | 16 26 13.              | 170          | ML= 2.4          |   |
| DEC 8            | 16 45 08.              | 170          | ML=2.4           |   |
| DEC 8            | 19 20 15.              | 170          | ML=2.3           |   |
| DEC 8            | 19 22 BL.              | 170          | ML=2.4           |   |
| DEC 8            | 20 19 11.              | 170          | ML=2.2           |   |
| DEC 9            | 09 49 52.<br>13 10 29. | 170          | ML=2.5           |   |
| DEC 9            | 13 12 55.              | 17 0<br>17 0 | ML=2.4<br>ML=2.6 |   |
| DEC 9            | 13 24 31.              | 170          | ML=2.3           |   |
| DEC 9            | 13 40 56.              | 170          | ML=2.5           |   |
| DEC 9            | 14 58 16.              | 170          | ML=2.9           |   |
| DEC 9            | 15 04 24.              | 170          | ML=2.2           |   |
| DEC 9            | 18 58 52.              | 170          | ML=2.8           |   |
| DEC 9            | 19 08 59.              | 170          | ML=2.5           |   |
| DEC 9            | 19 56 58.<br>21 50 27. | 170<br>170   | ML=2.8<br>ML=2.3 |   |
| DEC 9            | 22 20 55.              | 170          | ML=2.9           |   |
| DEC 10           | 18 46 51.              | 170          | ML=2.5           |   |
| DEC 10           | 22 04 49.              | 170          | ML=2.5           |   |
| DEC 11           | 09 37 39.              | 170          | ML=2.2           |   |
| DEC 11           | 10 04 58.              | 170          | ML=2.4           |   |
| DEC 11           | 10 06 43.<br>16 41 39. | 170          | ML=2.7<br>ML=2.3 |   |
| DEC 11           | 20 04 16.              | 170<br>170   | ML=2.5           |   |
| DEC 13           | 03 50 14.              | 170          | ML= 2.4          |   |
| DEC 16           | 20 11 49.              | 170          | ML=2.4           |   |
| DEC 17           | 00 07 53.              | 170          | ML=2.5           |   |
| DEC 17           | 10 15 46.              | 170          | ML=2.5           |   |
| DEC 17           | 19 13 12.              | 170          | ML=2.3           |   |
| DEC 19           | 02 13 00.              | 170          | ML=2.3           |   |
| DEC 22<br>DEC 23 | 12 37 39.<br>09 17 26. | 170<br>170   | ML=2.4<br>ML=3.1 |   |
| DEC 25           | 11 43 08.              | 170          | ML= 2.4          |   |
| DEC 27           | 06 57 02.              | 170          | ML=2.4           |   |
| DEC 30           | 08 31 58.              | 170          | ML=2.8           |   |
| DEC 30           |                        | 4-0          |                  |   |
|                  | 08 44 16.              | 170          | ML=3.0           |   |
| DEC 31           | 05 10 11.              | 170          | ML=3.0           |   |
|                  |                        |              |                  |   |

TABLE 19
UNLOCATED EVENTS RECORDED AT SANDSPIT

| DATE<br>1971 | H-TIME (GMT) DELT                              | A MAGNITUDE | REMARKS                         |
|--------------|--|-------------|---------------------------------|
| FEB 22       | 15 50 20. 160<br>11 53 53. 160<br>15 41 58. 90 | ML= 2.7     | WEST OF QUEEN CHARLOTTE ISLANDS |

TABLE 20
UNLOCATED EVENTS RECORDED AT QCC

| DATE<br>1971                                   | H-TIME(GMT)<br>HR MN SEC   | DELTA MA             | GNITUDE  |         |        | REMARKS  |
|--|--|----------------------|--|---------|--------|----------|
|  | 10 06 29.<br>10 28 14.<br>09 46 03.<br>21 11 14.<br>12 25 40.<br>20 01 58. | 82<br>94<br>58<br>82 | ML=3.0<br>ML=2.5<br>ML=2.6<br>ML=2.3<br>ML=2.5<br>ML=2.5 |         |        |          |
| SEP 22<br>SEP 30                               | 02 01 52.<br>23 32 17  |                      | ML=1.9<br>ML=1.7   |         |        |          |
| OCT 6<br>OCT 10<br>OCT 25                      | 19 59 00.<br>01 16 28.<br>09 18 28.  | 120                  | ML=2.1<br>ML=2.6<br>ML=2.9                               |         |        |          |
| NOV 11<br>NOV 11<br>NOV 17<br>NOV 22<br>NOV 27 | 11 33 19.<br>14 42 36.<br>03 13 44.<br>02 47 55.<br>14 23 31.              | 41<br>35<br>58       | ML=2.6<br>ML=2.7<br>ML=1.8<br>ML=2.7<br>ML=2.5           |         |        |          |
| DEC 7<br>DEC 26<br>DEC 27                      | 08 44 04.<br>15 17 12.<br>11 42 09.  | 230                  | ML=2.5<br>ML=3.0<br>ML=2.6                               | APPROX. | 270 KM | FROM FSJ |

TABLE 21

# UNLOCATED EVENTS RECORDED AT VIC

| DA1 |    |    |    | SEC | DELTA | MAGNITUDE |         |     |    | REMA | RKS |
|-----|----|----|----|-----|-------|-----------|---------|-----|----|------|-----|
|     |    |    |    |     |       |           |         |     |    |      |     |
| JAN | 15 | 08 | 38 | 14. | 72    | ML=2.3    |         |     |    |      |     |
| JAN | 23 | 06 | 41 | 52. | 80    | ML=2.2    |         |     |    |      |     |
| JAN | 28 | 01 | 20 | 18. | 80    | ML=2.5    |         |     |    |      |     |
| JAN | 29 | 06 | 23 | 45. | 30    | ML=1.7    |         |     |    |      |     |
| MAR | 9  | 18 | 53 | 02. | 110   | M1=3.0    |         |     |    |      |     |
| JUL | 12 | 13 | 48 | 00. | 65    | ML=2.3    |         |     |    |      |     |
| JUL | 24 | 10 | 02 | 59. | 140   | ML=2.4    |         |     |    |      |     |
| AUG | 27 | 01 | 24 | 48. | 90    | ML=2.3    |         |     |    |      |     |
| AUG | 27 | 20 | 10 | 15. | 30    | ML=1.3    |         |     |    |      |     |
| SEP | 5  | 03 | 32 | 02. | 58    | ML=2.8    |         |     |    |      |     |
| SEP | 12 | 19 | 56 | 55. | 125   | ML=2.2    |         |     |    |      |     |
| SEP | 24 | 09 | 16 | 45. | 2 0   | ML=1.6    |         |     |    |      |     |
| OCT | 4  | 18 | 45 | 13  | 25    | ML=1.9    | APPROX. | 120 | KM | FROM | ALB |

