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Energy, Mines and  
Resources Canada

Énergie, Mines et  
Ressources Canada

Earth Physics Branch

Direction de la physique du globe

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**NOT TO BE TAKEN FROM THE ROOM  
POUR LA CONSULTATION SUR PLACE**

## **Index of Geophysical Publications, Series and Contributions — Second Edition**

## **Liste des Publications, Séries et Contributions Géophysiques — Deuxième Edition**

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GEOLOGICAL SURVEY  
COMMISSION GÉOLOGIQUE



Energy, Mines and  
Resources Canada

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Ressources Canada

Earth Physics Branch

Direction de la physique du globe

1 Observatory Crescent  
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INDEX OF GEOPHYSICAL PUBLICATIONS,  
SERIES AND CONTRIBUTIONS  
OF THE DOMINION OBSERVATORY  
AND ITS SUCCESSOR  
THE EARTH PHYSICS BRANCH  
OF THE DEPARTMENT OF ENERGY, MINES  
AND RESOURCES, CANADA,  
THROUGH SEPTEMBER, 1978  
SECOND EDITION

LISTE DES PUBLICATIONS,  
DES SERIES ET DES CONTRIBUTIONS  
DE L'OBSERVATOIRE FEDERAL  
ET SON SUCCESSEUR  
LA DIRECTION DE LA PHYSIQUE DU GLOBE  
DU MINISTERE DE L'ENERGIE, DES MINES  
ET DES RESSOURCES, CANADA,  
JUSQU'A SEPTEMBRE, 1978  
DEUXIEME EDITION

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GEOLOGICAL SURVEY  
COMMISSION GÉOLOGIQUE  
OTTAWA, 1978



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INTRODUCTION  
to the Second Edition

This index lists all geophysical publications that have been issued up to September, 1978 by the Earth Physics Branch of the Department of Energy, Mines and Resources, Canada, together with those issued by the same institution under previous names (the Dominion Observatory and the Observatories Branch). Several types of publications are represented:

a) Series - Included in this group are publications that continue to present, from year to year, observations of natural phenomena concerning the Canadian landmass or specialized instrumental data or that present regional and detailed geophysical maps:

- the Seismological Series
- the Geothermal Series
- the Geomagnetic Series
- the Gravity Map Series
- the Geodynamics Series

b) Publications - These are scientific papers and reports that are published directly by the Earth Physics Branch.

c) Contributions - These are scientific papers that have appeared in outside journals and for which a limited number of reprints are available from the Branch.

d) Miscellaneous - From time to time regional and national geophysical maps and non-technical papers or brochures explaining the work of the Branch or discussing some general geophysical problem are published directly by the Branch or by other means.

The Gravity Division of the Earth Physics Branch also publishes an index which gives the geographical locations of the reports and maps in the Gravity Map Series and lists in detail other services available from the Gravity Division.

The Library and scientific Services of the Branch (Seismological, Geothermal, Geomagnetic, Gravity, Geodynamics) offer certain services to industry and the public. Further details are given on pages iii-v.

AVAILABILITY OF PUBLICATIONS

The present policy of the Earth Physics Branch regarding distribution of publications will continue. The policy is as follows:

INTRODUCTION  
à la Deuxième Edition

Cette liste constitue un recueil de toutes les publications en géophysique publiées avant le mois de septembre 1978 par la Direction de la physique du globe du ministère de l'Énergie, des Mines et des Ressources ainsi que de celles qui ont été publiées par la même Direction, mais sous une appellation différente (l'Observatoire fédérale et la Direction des observatoires). Plusieurs genres de publications y sont représentés:

a) Les Séries - Sont incluses dans ce groupe, les publications qui continuent de présenter, d'année en année, des observations sur des phénomènes naturels concernant le territoire canadien ou des données sur des appareils spécialisés ou encore, des cartes géophysiques régionales détaillées:

- Série séismologique
- Série géothermique
- Série géomagnétique
- Série de cartes gravimétriques
- Série géodynamique

b) Les Publications - Ce sont les textes scientifiques et rapports qui sont publiés directement par la Direction de la physique du globe.

c) Contributions - Il s'agit de textes scientifiques parus dans des publications à l'extérieur et dont la Direction possède un nombre limité de réimpressions.

d) Divers - De temps à autre des cartes géophysiques régionales et nationales et des textes ou brochures non techniques décrivant les travaux de la Direction ou traitant de problèmes généraux en géophysique sont publiés directement par la Direction ou par autres moyens.

La division de la gravité de la Direction de la physique du globe publie également la liste des emplacements géographiques qui ont fait l'objet de rapports et cartes, et établit une énumération détaillée des services offerts par la Division de la gravité.

La bibliothèque et les Services scientifiques de la Direction (séismologique, géothermique, géomagnétique, gravité, géodynamique) mettent certains services à la disposition de l'industrie et du public. Des renseignements supplémentaires sont indiqués sur les pages iii-v.

DISPONIBILITE DES PUBLICATIONS

Les politiques courantes concernant la distribution des publications de la Direction de la physique du globe continueront. Ces politiques s'établissent comme suite:

a) A copy of any Publication, Series or Miscellaneous that is not noted as being out of print and for which no price is given will be sent to requestors free of charge as long as supplies last.

b) A copy of any Contribution or Miscellaneous that is not noted as being out of print will be sent to requestors free of charge as long as supplies last.

c) Copies of Publications, Series and Miscellaneous which bear a price may be purchased by remitting the posted amount by cheque or money order in Canadian funds made payable to the 'Receiver General for Canada' to:

Publications  
Earth Physics Branch  
Department of Energy, Mines and  
Resources  
Ottawa, Ontario, Canada  
K1A 0Y3

Current Publications and Series may also be obtained through bookstores and maps may be obtained from the DEMR Canada Map Office, 615 Booth Street, Ottawa, Canada, K1A 0E9. Payment in Canadian funds must accompany the order in all cases.

Certain institutions with which the Earth Physics Branch has an exchange agreement may be given special consideration. Depository libraries will continue to be served by the Publishing Centre of DSS.

d) Lists of new Earth Physics Branch publications will be sent to interested institutions and individuals quarterly. Inclusion on this free mailing list may be assured by writing to the above address.

#### Note:

1. An asterisk (\*) beside an item indicates that the item is out of print.
2. Non-geophysical Contributions have been omitted.

#### Availability of Other Services

The Earth Physics Branch offers certain services of a specialized nature to industry and the public. These services are described in general terms below. As well, some internal reports, contractor reports, and field survey results are made available as Open Files. These are announced from time to time in our quarterly Supplements to this Index, and may be obtained upon payment of commercial reproduction rates.

a) Un exemplaire de toute Publications, Séries ou Divers sur lequel il n'est pas noté que l'édition est épuisée et pour lequel aucun prix n'est indiqué sera envoyé gratuitement à ceux qui en feront la demande, tant que les stocks ne soient pas épuisés.

b) Un exemplaire de toute Contribution ou Divers sur lequel il n'est pas noté que l'édition est épuisée sera envoyé gratuitement à ceux qui en feront demande, tant que les stocks ne soient pas épuisés.

c) Il est possible de se procurer des exemplaires des Publications, des Séries et Divers pour lesquels un prix est indiqué en envoyant le montant indiqué par chèque ou mandat de poste, en monnaie canadienne, payable au Receveur général et à l'adresse suivante:

Publications  
Direction de la physique du globe  
Ministère de l'Énergie, des Mines  
et des Ressources  
Ottawa, Ontario, Canada  
K1A 0Y3

Les Publications et Séries actuelles sont aussi disponibles aux librairies, et les cartes sont disponibles par Distribution des Cartes, E.M.R., 615 rue Booth, Ottawa, Canada, K1A 0E9. Dans chaque cas, les paiements doivent être faits en monnaie canadienne.

Certaines institutions qui ont une entente d'échange avec la Direction de la physique du globe peuvent avoir des arrangements spéciaux. Les bibliothèques dépositaires continueront d'être servies par le Centre d'Édition, DAS.

d) Des listes des nouvelles publications de la Direction de la physique du globe seront envoyées aux institutions et particuliers intéressés à chaque trimestre. En écrivant à l'adresse mentionnée ci-dessus, les intéressés pourront s'assurer de recevoir cette liste gratuitement.

#### Nota:

1. Un item qui port un astérisque (\*) signifi que cet item est épuisé.
2. Les Contributions non géophysiques ont été omises.

#### Autres services offerts

La Direction de la Physique du Globe offre à l'industrie et au public certains services de nature spécialisés. Nous les décrivons sommairement ci-dessous. Nous mettons également à la disposition du public, sous la forme de "dossiers publics", des rapports internes, des rapports d'entrepreneurs et des résultats de levés sur le terrain. La liste en est donnée dans les suppléments trimestriels de ce Liste; on peut se les procurer en acquittant simplement les frais de reproduction commerciaux.

### Seismological Data Services

The Seismological Service maintains a digital file of Canadian earthquakes, which is updated annually from Canadian earthquake catalogues; digital files of seismic data recorded on arrays, special stations and strong motion seismographs; and archives of paper seismograms, microfilm and analogue magnetic tape recordings. The Service also maintains a computer program to compute peak ground acceleration, for any site in Canada, equivalent to that displayed on the 1970 Seismic Zoning map. Copies of the earthquake and seismic data files, computations of peak ground accelerations and other related services are available at a nominal cost. Microfilm copies of Canadian seismograms are available from World Data Center A for Seismology, Boulder, Colorado, U.S.A. Loans of original Canadian seismograms and copies of analogue tape data can be made available on special request. Information on cost and availability of these and other specialized services may be obtained by writing to the Director, Division of Seismology and Geothermal Studies, Earth Physics Branch, DEMR, Ottawa, Ontario, Canada, K1A 0Y3.

### Geothermal Data Services

The Geothermal Service maintains a digital file of temperature data from wells in the permafrost zone, which is augmented annually by field observations. Data and calculated equilibrium temperature and permafrost depths are published annually in the Geothermal Series of the Earth Physics Branch. Estimates of permafrost thickness at other locations can be made on request. A digital file is maintained of data on temperature and thermal properties of rock samples from wells in all parts of Canada. Information on cost and availability of these and other specialized services may be obtained by writing to the Director, Division of Seismology and Geothermal Studies, Earth Physics Branch, DEMR, Ottawa, Ontario, Canada, K1A 0Y3.

### Services des Données Séismologiques

Le Service Séismologique entretient un fichier numérique des tremblements de terre canadiens, qui est mis à jour annuellement grâce aux catalogues des tremblements de terre canadiens; des fichiers numériques des données séismiques enregistrées par des réseaux, des stations spéciales et des accélérographes. Le Service archive également les séismogrammes sur papier et sur microfilm et les enregistrements analogiques sur bandes magnétiques. Le Service dispose aussi d'un programme d'ordinateur pour calculer l'accélération maximale du sol en n'importe quel lieu du Canada, équivalente aux valeurs indiquées sur la carte de zones séismiques de 1970. Des copies des fichiers des séismes et des données séismiques, des calculs de l'accélération maximale du sol et autres services semblables sont disponibles à un prix modéré. Les séismogrammes canadiens sur microfilm sont disponibles du World Data Center A for Seismology, Boulder, Colorado, Etats-Unis. Sur demande spéciale, le Service peut prêter les originaux de séismogrammes canadiens et des reproductions de bandes magnétiques de données analogiques. Pour tous renseignements concernant ces services, ainsi que les autres services spécialisés que nous pouvons mettre à votre disposition, et leur prix, prière de s'adresser par écrit au Directeur de la Division de la séismologie et des études géothermiques, Direction de la Physique du Globe, MEMR, Ottawa, Ontario, Canada, K1A 0Y3.

### Services des données géothermiques

Le Service géothermique entretient un fichier de données numériques des températures dans les puits forés dans les zones du pergélisol, ce fichier est augmenté tous les ans des nouvelles observations faites sur le terrain. Nous publions dans la série Géothermique de la Direction de la Physique du Globe les données observées, les températures d'équilibre calculées et les épaisseurs du pergélisol. Nous pouvons faire, sur demande, des estimations des épaisseurs du pergélisol dans d'autres régions. Nous entretenons un fichier de données numériques sur les températures et les propriétés thermiques d'échantillons de roches provenant des puits forés dans toutes les régions du Canada. Pour tous renseignements concernant ces services, ainsi que les autres services spécialisés que nous pouvons mettre à votre disposition, et leur prix, prière de s'adresser par écrit au Directeur de la Division de la séismologie et des études géothermiques, Direction de la Physique du Globe, MEMR, Ottawa, Ontario, Canada, K1A 0Y3.



## Geomagnetic Data Services

The Geomagnetic Service maintains files of observatory data from the Canadian Magnetic Observatory Network; descriptions of magnetic repeat stations where magnetic compasses and other instruments may be calibrated; files of land, sea and air magnetic survey data; files of values of magnetic declination, inclination, horizontal and vertical components, total intensity, and their secular change; computer-readable files of worldwide paleomagnetic measurements, directions and poles. Observatory data are available in a variety of forms (digital magnetic tape, paper magnetograms, microfilm and tables), presenting observed, reduced and interpreted data. Survey data and geomagnetic reference field values are also available in computer printout or magnetic tape form. Other services include the provision of forecasts of magnetic activity, the provision of charts of the elements of the geomagnetic field and their annual change, tables of historical values of declination for verification of property boundaries, and the provision of non-magnetic facilities in Ottawa for the testing and calibration of magnetic instruments in a protected environment. Information on cost and availability of these and other specialized services may be obtained by writing to the Director, Division of Geomagnetism, Earth Physics Branch, DEMR, Ottawa, Ontario, Canada, K1A 0Y3.

## Gravity Data Services

The Gravity Service maintains a national gravity data base containing gravity anomaly data, gravity control station data and control station descriptions. These data are available as principal facts in computer listing, card or magnetic tape format or as Bouguer or free air anomaly plots. Open file and final Bouguer and free air anomaly maps are available for large areas of the Canadian landmass and off-shore areas. Station descriptions and gravity values are also available for several land gravimeter calibration lines and for dynamic gravimeter evaluation lines at sea. Tables of theoretical gravity between latitude 40°N and 90°N are available based on the Geodetic Reference System 1967. Several computer programs for the interpretation of gravity anomalies and calculation of terrain corrections are also available in listing or card image form. The Rock Physics Section will examine materials of possible meteoritic origin or materials that may have suffered shock metamorphism due to meteoritic impact. Information on cost and availability of these and other specialized services may be

## Services des données géomagnétiques

Le Service de géomagnétisme entretient plusieurs fichiers en ce qui concerne: les données d'observation provenant du Réseau d'observatoires magnétiques canadiens; la description des stations de mesures magnétiques répétitives où l'on peut étalonner les boussoles et d'autres instruments magnétiques; les données des levés magnétiques (terrestres, marins et aériens); les valeurs de la déclinaison, de l'inclinaison, des composantes horizontales et verticales, de l'intensité totale du champ magnétique et de leur variation séculaire; les résultats, sous forme assimilable par l'ordinateur, des mesures paléomagnétiques mondiales, relatives aux directions et aux pôles. Les données d'observation sont disponibles sous plusieurs formes (bandes magnétiques de données numériques, magnétogrammes sur papier, microfilms et tables), qu'il s'agisse de données observées, réduites et interprétées. Les données des levés et des valeurs du champ géomagnétique de référence sont disponibles sous forme d'imprimés d'ordinateur ou de bandes magnétiques. Nous offrons d'autre services: prévisions de l'activité magnétique; cartes des éléments du champ géomagnétique et leur variations séculaires annuelles, tables des valeurs anciennes de la déclinaison pour vérifier les limites cadastrales; installations non-magnétiques à Ottawa destinées aux essais et à l'étalonnage des instruments dans un environnement protégé contre perturbations. Pour tous renseignements concernant ces services, ainsi que les autres services spécialisés que nous pouvons mettre à votre disposition, et leur prix, prière de s'adresser par écrit au Directeur de la Division du géomagnétisme, Direction de la Physique du Globe, MEMR, Ottawa, Ontario, Canada, K1A 0Y3.

## Services des données gravimétriques

Le Service gravimétrique entretient une base de données gravimétriques nationale où se trouve les données des anomalies de gravité et des stations gravimétriques de contrôle, ainsi que la description de ces stations. Ces données sont disponibles comme faits principaux sous forme de liste imprimée, de cartes perforées, ou de bandes magnétiques, ou bien sous forme de représentations graphiques d'anomalie de Bouguer ou d'anomalie à l'air libre. Des dossiers publics et des cartes définitives d'anomalie de Bouguer et d'anomalie à l'air libre sont disponibles pour de grandes étendues du Canada (aire continentale et régions au large des côtes). La description des stations et les valeurs gravimétriques pour plusieurs profils d'étalonnage gravimétrique sur terre et des profils d'évaluation gravimétrique par méthodes dynamiques en mer, sont aussi à la disposition du public. Il existe aussi des tables de la gravité théorique entre les latitudes 40°N et 90°N, basés sur le Système de référence géodésique de 1967. Plusieurs programmes d'interpréter les

obtained by writing to the Director, Gravity and Geodynamics Division, Earth Physics Branch, DEMR, Ottawa, Ontario, Canada, K1A 0Y3.

#### Geodynamics Data Services

The Geodynamics Service maintains files of astronomical observations of time and latitude at Calgary and Ottawa. These data can be supplied in the standard form used for transmission to the Bureau International de l'Heure and the International Polar Motion Service, or reduced to the Conventional International Origin. Gravity tide corrections, precise, annually updated, gravity differences for calibration purposes, and a file of first-order relevelled segments for crustal stability monitoring are available. Information on cost and availability of these and other specialized services may be obtained by writing to the Director, Gravity and Geodynamics Division, Earth Physics Branch, DEMR, Ottawa, Ontario, Canada, K1A 0Y3.

anomalies gravimétriques et pour calculer les réductions topographiques, sont aussi disponibles. La Section de la physique des roches examinera les matériaux d'origine probablement météorique ou les matériaux qui ont subi un métamorphisme de choc dû à un impact météorique. Pour tous renseignements concernant ces services, ainsi que les autres services spécialisés que nous pouvons mettre à votre disposition, et leur prix, prière de s'adresser par écrit au Directeur de la Division de la gravité et de la géodynamique, Direction de la Physique du Globe, MEMR, Ottawa, Ontario, Canada, K1A 0Y3.

#### Services des données géodynamiques

Le Service de la géodynamique entretient des fichiers de données d'observations astronomiques du temps et des latitudes, et d'observations des positions provenant des satellites Doppler aux observatoires du mouvement polaire près de Calgary et d'Ottawa. Nous pouvons fournir les données astronomiques (PZT) soit comme observations brutes en forme normalisée utilisée pour leur transmission au Bureau international de l'heure, soit sous forme réduite à l'origine conventionnelle internationale et corrigées pour les variations saisonnières et lisées au besoin. Nous mettons aussi à la disposition du public: les corrections gravimétriques de marée; les différences de gravité, mesurées avec précision et mises à jour annuellement, en vue de l'étalonnage des appareils; un fichier de segments de nivellement de premier-ordre, mesurés de façon répétée, pour surveiller la stabilité de la croûte terrestre. Pour tous renseignements concernant ces services, ainsi que les autres services spécialisés que nous pouvons mettre à votre disposition, et leur prix, prière de s'adresser par écrit au directeur de la Division de la gravité et de la géodynamique, Direction de la Physique du Globe, MEMR, Ottawa, Ontario, Canada, K1A 0Y3.



CONTRIBUTIONS FROM THE DOMINION OBSERVATORY  
 CONTRIBUTIONS DE L'OBSERVATOIRE FEDERAL

Vol. 1

- No. 1\* Analysis of travel times from rockbursts at Kirkland Lake, Ontario, by John H. Hodgson. (Reprinted from Bulletin of the Seismological Society of America, 37, 5-17, 1947.)
- No. 2\* Gravity anomalies in northwestern Canada, by M.J.S. Innes. (Reprinted from Canadian Journal of Research, Section A, 26, 199-203, 1948.)
- No. 3\* The search for the north magnetic pole, by R. Glenn Madill. (Reprinted from Arctic, 1, 8-18, 1948.)
- No. 4\* Gravity in the interior of the earth, by R. Meldrum Stewart. (Reprinted from Journal of the Royal Astronomical Society of Canada, 43, 129-137, 1949.)
- No. 5\* Measurements of gravity in the Canadian Arctic and Greenland, by Michael Beer. (Reprinted from Canadian Journal of Research, Section A, 28, 535-541, 1950.)
- No. 6\* Direction of faulting in certain earthquakes of the North Pacific. by J.H. Hodgson and W.G. Milne. (Reprinted from Bulletin of the Seismological Society of America, 41, 221-242, 1951.)
- No. 7\* Love waves of the Queen Charlotte Islands earthquake of August 22, 1949, by J. Coulomb. (Reprinted from Bulletin of the Seismological Society of America, 42, 29-36, 1952.)
- No. 8\* Tables extending Byerly's fault-plane techniques to earthquakes of any focal depth, by J.H. Hodgson and R.S. Storey. (Reprinted from Bulletin of the Seismological Society of America, 43, 49-61, 1953.)
- No. 9\* The marine clays of eastern Canada and their relation to earthquake hazards, by Ernest A. Hodgson. (Reprinted from Journal of the Royal Astronomical Society of Canada, 21, 257-264, 1927.)
- No. 10\* Direction of faulting in the Ancash, Peru, earthquake of November 10, 1946, from teleseismic evidence, by J.H. Hodgson and P.C. Bremner. (Reprinted from Bulletin of the Seismological Society of America, 44, 57-83, 1954.)
- No. 11\* Direction of faulting in some of the larger earthquakes of 1949, by J.H. Hodgson and R.S. Storey. (Reprinted from Bulletin of the Seismological Society of America, 44, 57-83, 1954.)
- No. 12\* Gravity measurements in North America with the Cambridge pendulum apparatus, by G.D. Garland. (Reprinted from Proceedings of the Royal Society, A, 219, 215-233, 1953.)
- No. 13\* Gravity measurements on the Barnes Icecap, Baffin Island, by C.A. Littlewood. (Reprinted from Arctic, 5, 118-124, 1952.)
- No. 14\* Fault-plane solution for the Tango, Japan, earthquake of March 7, 1927, by John H. Hodgson. (Reprinted from Bulletin of the Seismological Society of America, 45, 37-41, 1955.)
- No. 15\* General statistical hydro-dynamics in porous media. by A.E. Scheidegger. (Reprinted from Geofisica pura e applicata, 30, 17-26, 1955.)
- No. 16\* A determination of the differences in gravity between the National Physical Laboratory, Teddington, the Dominion Observatory, Ottawa, and the National Bureau of Standards, Washington, by G.D. Garland and A.H. Cook. (Reprinted from Proceedings of the Royal Society, A, 229, 445-458, 1955.)
- No. 17\* Features of seismic pP and PP rays, by K.E. Bullen. (Reprinted from monthly notices of the Royal Astronomical Society, Geophysical Supplement, 7, 49-59, 1955.)
- No. 18\* Direction of faulting in Pacific earthquakes, by John H. Hodgson. (Reprinted from Geofisica pura e applicata, 32, 31-42, 1955.)
- No. 19\* Heat flow measurements in permafrost at Resolute Bay, N.W.T., by A.D. Misener, P.C. Bremner and J.H. Hodgson. (Reprinted from Journal of the Royal Astronomical Society of Canada, 50, 14-24, 1956.)
- No. 20\* Gravity measurements in North America with the Cambridge pendulum apparatus II, by G.D. Garland. (Reprinted from Proceedings of the Royal Society, A, 233, 203-213, 1955.)

- No 21\* The physics of orogenesis in the light of new seismological evidence, by A.E. Scheidegger. (Reprinted from Transactions of the Royal Society of Canada, Ser. III, Sect. 4, 49, 65-93, 1955.)
- No. 22\* Finite displacements in rheological bodies, by A.E. Scheidegger. (Reprinted from Canadian Journal of Physics, 34, 498-509, 1956.)
- No. 23\* Direction of faulting in the deep-focus Spanish earthquake of March 29, 1954, by J.H. Hodgson and J. Irma Cock. (Reprinted from Tellus, 8, 321-328, 1956.)
- No. 24\* Correlation tensors in statistical hydrodynamics in porous media, by A.E. Scheidegger. (Reprinted from Canadian Journal of Physics, 34, 692-698, 1956.)
- No. 25\* Phase change of PP and pP on reflection at a free surface, by R.E. Ingram, S.J., and J.H. Hodgson. (Reprinted from Bulletin of the Seismological Society of America, 46, 203-213, 1956.)
- No. 26\* The geometrical representation of fault-plane solutions of earthquakes, by Adrian E. Scheidegger. (Reprinted from Bulletin of the Seismological Society of America, 47, 89-110, 1957.)
- No. 27\* A comparison of magnetic disturbance at Resolute Bay and Baker Lake, Canada, by K. Whitham and E.I. Loomer. (Reprinted from Tellus, 8, 276-278, 1956.)
- No. 28\* A portable electrical magnetometer, by P.H. Serson and W.L.W. Hannaford. (Reprinted from Canadian Journal of Technology, 34, 232-243, 1956.)
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117. Wrigley-Providence, 118. Arctic Red River-Norman Wells. 119. Inuvik-Horton River.

The gravity field in the Richmond Gulf-Fort Chimo area, Quebec, by J.G. Tanner and R.K. McConnell, 1970. Price \$6.00. 7. Fort Harrison, 8. Payne Lake, 9. Belcher-Lake Minto, 10. Fort Chimo, 48. Fort McKenzie.

Gravity measurements in Northern Ontario, by R.A. Gibb and R.K. McConnell, 1970. Price \$6.00. 25. Moosonee, 28. Kowkash-Martin Falls, 29. Pickle Crow-Armstrong. 30. Wunnummin Lake, 31. Attawapiskat. 32. Akimiski Island, 33. Winisk River, 34. Severn River, 35. Cape Tatnam, 36. Henrietta Maria.

Gravity measurements over the Queen Elizabeth Islands and Polar Continental Margin, by L.W. Sobczak and J.R. Weber, 1970. Price \$3.50. 115. Queen Elizabeth Islands (East), 116. Queen Elizabeth Islands (West).

Geophysical measurements in British Columbia, by R.A. Stacey and J.P. Steele, 1970. Price \$3.50. 120. Strait of Georgia, 121. Juan De Fuca Strait.

The gravity field of Northern Alberta, and part of the Northwest Territories and Saskatchewan, by R.I. Walcott and J.B. Boyd, 1971. Price \$6.00. 103. Lac La Biche-Peter Pond, 104. Whitecourt Athabasca, 105. Grande Prairie, 106. Peace River. 107. Wabasca River, 108. Fort Vermilion, 109. Hay Lake, 110. Providence, 111. Great Slave Lake.

Results of underwater gravity surveys over the Nova Scotia Continental Shelf, by L.E. Stephens, A.K. Goodacre and R.V. Cooper, 1971. Price \$2.50. 123. Halifax-Burgeo.

Gravity measurements in the Sudbury area. by J. Popelar, 1971. Price \$2.50. 138. Sudbury.

Gravity measurements in the Slave and Bear Structural Provinces, Northwest Territories, by R.W. Hornal and J.B. Boyd, 1972. Price \$6.00. 89. Artillery Lake, 90. Rae, 91. Camsell River, 92. Upper Back River, 93. Bathurst Inlet, 94. Cambridge Bay, 95. Dolphin and Union Strait.

Results of reconnaissance gravity surveys of Hudson Bay, by A.K. Goodacre, R.V. Cooper and J.R. Weber, 1972. Price \$3.50. 112. Hudson Bay North, 113. Hudson Bay South.

Gravity measurements on Banks Island, N.W.T., by L.E. Stephens, L.W. Sobczak and E.S. Wainwright, 1972. Price \$2.50. 150. Banks Island.

Results of underwater gravity surveys over the Southern Nova Scotia Continental Shelf, by L.E. Stephens and R.V. Cooper, 1973. Price \$2.50. 149. Yarmouth-Burgeo.

Gravity measurements over the Beaufort Sea, Banks Island and MacKenzie Delta, by L.W. Sobczak, L.E. Stephens, P.J. Winter and D.B. Hearty, 1973. Price \$2.50. 151. MacKenzie Delta-Banks Island.

Gravity measurements in British Columbia. by R.A. Stacey, J.B. Boyd, L.E. Stephens and W.E.F. Burke, 1973. Price \$5.50. 152. Kootenay River, 153. Fraser River, 154. Parsnip River, 155. Skeena River.

The gravity field over Northeastern Ellesmere Island, Northern Greenland and Lincoln Sea, by L.W. Sobczak and L.E. Stephens, 1974. Price \$2.50. 114. Lincoln Sea.

Gravity measurements in southern district of Keewatin and southeastern district of Mackenzie, by R.A. Gibb and D.W. Halliday, 1974. Price \$6.00. 124. Fort Smith-Nonacho. 125. Wholdaia Lake, 126. Kazan River, 127. Nueltin Lake, 128. Eskimo Point, 129. Chesterfield Inlet, 130. Dubawnt Lake, 131. Aberdeen lake.

Results of underwater and surface regional gravity surveys off the coast of Labrador. 1972, by H.D. Valliant, R.F. Macnab, L.E. Stevens, S.T. Grant and R.V. Cooper, 1974. Price \$3.50. 156. Hamilton Inlet (Bouguer), 156. Hamilton Inlet (Free Air).

The correlation of gravity and geology in southeastern Quebec and southern Labrador with maps, by M.D. Thomas, 1974. Price \$6.00. 64. Mingan-Cape Whittle, 65. Clarke City-Mingan, 66. Northwest River. 67. Ashuanipi, 96. Battle Harbour-Cartwright, 97. Hamilton-Hopedale, 98. Naskaupi.

Gravity measurements in Northern District of Keewatin and parts of District of Mackenzie and District of Franklin, N.W.T., by R.A. Gibb and D.W. Halliday, 1975. Price: Canada \$6.00; Other Countries \$7.20. 139. Southampton Island South, 140. Southampton Island North, 141. Wager Bay, 142. Ogden Bay, 143. Chantrey Inlet, 144. Melville South. 145. Melville North, 146. Rae Strait. 147. King William Island, 148. Boothia.

The gravity field of the Central Labrador Trough, Northern Quebec, by P. Kearey and D.W. Halliday, 1976. Price: Canada \$2.50; Other Countries \$3.00. 162. Lac Nachicapau-Central Labrador Trough.

The Bouguer anomaly field of the Notre Dame Bay area, Newfoundland, by H.G. Miller and E.R. Deutsch, 1978. Price: Canada \$2.50; Other Countries \$3.00. 163. Notre Dame Bay

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| No. 3*  | Seismological Bulletin,<br>Seismological Service of Canada.<br>January-March, 1956.                 | No. 20* | Seismological Bulletin,<br>Seismological Service of Canada.<br>April-June, 1960.       |
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| No. 6*  | Seismological Bulletin,<br>Seismological Service of Canada.<br>October-December, 1956.              | No. 23* | Canadian Earthquakes, 1960, by W.G.<br>Milne and W.E.T. Smith.                         |
| No. 7*  | Seismological Bulletin,<br>Seismological Service of Canada.<br>January-March, 1957.                 | No. 24* | Seismological Bulletin,<br>Seismological Service of Canada.<br>January-March, 1961.    |
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| No. 9*  | Seismological Bulletin,<br>Seismological Service of Canada.<br>July-September, 1957.                | No. 26* | Seismological Bulletin,<br>Seismological Service of Canada.<br>July-September, 1961.   |
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- No. 36\* Seismological Bulletin,  
Seismological Service of Canada.  
January-March, 1963.
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Seismological Service of Canada.  
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- No. 38\* Seismological Bulletin.  
Seismological Service of Canada.  
July-December, 1963.
- No. 39\* Earthquakes of Eastern Canada and  
adjacent areas, 1954-1959, by W.E.T.  
Smith, 1963.
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Seismological Service of Canada.  
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Seismological Service of Canada.  
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Eastern Canada, by W.E.T. Smith,  
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Seismological Service of Canada.  
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1969.
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Halliday, 1969.

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- ✓ No. 61\* Seismological Bulletin. January-December, 1970.
- Out of print  
No. 62\* Canadian Earthquakes-1966, by A.E. Stevens, W.G. Milne, R.J. Wetmiller and R.B. Horner, 1972.
- ✓ No. 63 Discrimination Between Earthquakes and Underground Explosions Employing an Improved Ms Scale: Supplementary Magnitude Data on Eurasian Events, by P.W. Basham and P.D. Marshall, 1972.
- ✓ No. 64 Seismological Bulletin, Seismological Service of Canada. January-December, 1971.
- ✓ No. 65 Canadian Earthquakes-1967, by A.E. Stevens, W.G. Milne, R.J. Wetmiller and G. Leblanc, 1973.
- ✓ No. 66\* Seismological Bulletin, Seismological Service of Canada. January-December, 1972.
- ✓ No. 67 Canadian Earthquakes-1969, by R.B. Horner, W.G. Milne and G.A. McMechan, 1974.
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- ✓ No. 2 Annual Report for Magnetic Observatories - 1970, by E.I. Loomer, 1975. Price: Canada \$3.50; Other Countries \$4.20.
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- ✓ No. 10 Catalogue of Paleomagnetic Directions and Poles, Fifth Issue: Cenozoic Results 1927-1975, by E. Irving, E. Tanczyk and J. Hastie, 1976. Price: Canada \$3.00; Other Countries \$3.60.
- ✓ No. 11 Annual Report for Magnetic Observatories - 1974, by E.I. Loomer, 1977. Price: Canada \$3.50; Other Countries \$4.20.
- ✓ No. 12 Annual Report for Magnetic Observatories - 1975, by E.I. Loomer, 1978. Price: Canada \$4.00; Other Countries \$4.80.
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Daily PZT observations and time signals are available in a monthly bulletin from January 1961 through December 1971 (Bulletin A-1 through A-63), published by the Dominion Observatory. Subsequent PZT observations of time and latitude are given in the following annual Bulletins.

Les observations PZT quotidiennes et les signaux horaires sont disponibles dans un bulletin mensuel publié de janvier 1961 à décembre 1971 (Bulletin A-1 à A-63), publié par l'Observatoire Fédérale. Les observations PZT de l'heure et de latitude subséquentes sont publiées dans les Bulletins annuels suivants.

Bulletin

- ✓ 64 PZT observations of time and latitude Ottawa and Calgary, 1972, by J. Popelar, S.B. Sim and M.O. Wheeler, 1974.
- ✓ 65 PZT observations of time and latitude Ottawa and Calgary, 1973, by J. Popelar, S.B. Sim and M.O. Wheeler, 1974.
- ✓ 66 PZT observations of time and latitude Ottawa and Calgary, 1974, by J. Popelar, S.B. Sim and M.O. Wheeler, 1975. Price: Canada \$1.00; Other Countries \$1.20.

- ✓ 67 Tidal gravity measurements at Ottawa and Alert, 1967-1974, by D.R. Bower, A. Lambert and J. O'Brien, 1976. Price: Canada \$1.00; Other Countries \$3.00.
- ✓ 68 PZT observations of time and latitude Ottawa and Calgary, 1975, by J. Popelar, S.B. Sim and M.O. Wheeler, 1976. Price: Canada \$1.00; Other Countries \$1.20.
- ✓ 69 PZT observations of time and latitude Ottawa and Calgary, 1976, by J. Popelar, S.B. Sim and M.O. Wheeler, 1977. Price: Canada \$1.00; Other Countries \$1.20.

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615, rue Booth  
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Bouguer gravity anomaly map of Canada, GMS  
74-1, 1974. Scale 1:5,000,000 in one sheet.  
Price \$3.00 a copy.

Bouguer anomaly maps of the Sudbury Basin.  
Scale 1:50,000. Sudbury Basin East; Sudbury  
Basin West; Agnew Lake. Price \$1.00 each.

The following charts are available as above  
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Division of Geomagnetism  
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Division du géomagnétisme  
Direction de la physique du globe  
Ministère de l'Énergie, Mines et Ressources  
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Anomalies in the magnetic vertical component  
over British Columbia, 1969. Scale  
1:2,000,000. Price: \$1.50.

Magnetic total intensity over British  
Columbia, 1969. Scale 1:2,000,000. Price:  
\$1.50.

Magnetic declination over British Columbia,  
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Magnetic horizontal intensity over British  
Columbia, 1969. Scale 1:2,000,000. Price:  
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Isogonic Chart of Canada, 1975.0 (D1975.0)  
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1:10,000,000. Price/Prix: \$2.00.

Isoclinic Chart of Canada, 1975.0 (I1975.0)  
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1:10,000,000. Price/Prix: \$2.00.

Vertical Intensity Chart of Canada, 1975.0  
(Z1975.0)  
Carte de l'intensité verticale 1975.0,  
Scale/échelle 1:10,000,000. Price/Prix:  
\$2.00.

Horizontale Intensity Chart of Canada, 1975.0  
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Carte de l'intensité horizontale 1975.0,  
Scale/échelle 1:10,000,000. Price/Prix:  
\$2.00.

Total Intensity Chart of Canada, 1975.0  
(F1975.0).  
Carte de l'intensité totale 1975.0,  
Scale/échelle 1:10,000,000. Price/Prix:  
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The following chart is available from:

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1675, rue Russell  
Ottawa, Ontario  
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Magnetic Chart of Canadian Arctic, 1975.0  
(10200).  
Carte magnétique de l'Arctique Canadien  
1975.0, Scale/échelle 1:7,500,000.  
Price/Prix: \$2.00.

EARTH PHYSICS BRANCH - MISCELLANEOUS

DIRECTION DE LA PHYSIQUE DU GLOBE - DIVERS

There are earthquake risks in Canada, by J.H. Hodgson. (Reprinted from Canadian Consulting Engineer, Vol. 7, No. 7, 1965.)

Les tremblements de terre au Canada, par J.H. Hodgson. (Tiré de la revue Le Jeune Scientifique, février, 1966.)

Earthquakes, by A.E. Stevens. (Reprinted from Science Affairs, September, 1969.)

The new seismic zoning map for Canada, 1970 edition, by K. Whitham, W.G. Milne and W.E.T. Smith. (Reprinted from the Canadian Underwriter, June 15, 1970.)

Depth of permafrost, by Alan M. Jessop. (Reprinted from Oilweek, January 12, 1970.)

Using seismology to explore the deep interior of the earth, by G.G.R. Buchbinder, 1970.

Protection of the public from earthquake hazards in Canada, by K. Whitham and W.G. Milne. (Reprinted from EMO National Digest Vol. 12, 1972.)

Mont-Tremblant: la région qui porte son nom, par Gabriel Leblanc et Anne E. Stevens. (Tiré de Geos, Fall, 1972.)

Teaching Aid

The Earth Physics Branch has produced a set of 35 mm colour slides showing various aspects of its 4 ft. diameter model tectonic globe. Price for 21 slides and legend: Canada \$46.00; Other Countries \$55.00.

Aide à l'enseignement

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Looking inside the Earth, Info. Ser. 113, a 36 page description of the work of the Earth Physics Branch, 1973. Revised and reprinted, 1978.

En observant l'intérieur de la Terre, Info. Ser. 113F, une description en 36 pages du travail de la Direction de la physique du globe, 1973.

The Seismological Service of Canada, a folder describing in general and non-technical terms the work of this Service, 1970.

Le Service Sismologique du Canada, un dépliant descriptif et non technique du travail de ce service, 1973.

Division of Geomagnetism, a folder describing in general and non-technical terms the work of this Division, 1973.

Division de Géomagnétisme, un dépliant descriptif et non technique du travail de ce service, 1973.

Gravity, a folder describing in general and non-technical terms the work of this Division, 1973.

Gravité, un dépliant descriptif et non technique du travail de ce service, 1973.

Impact Craters in Canada, 1976.

Cratères Météoriques au Canada, 1976.

Index of Publications, 1948-1973, Gravity Division of the Earth Physics Branch, 1974, with Supplement, 1974-75.

Liste des publications, 1948-1975, Division de la gravité et de la géodynamique, 1976.

Canadian Geophysical Bulletin/Bulletin canadien de géophysique, editor/rédacteur R.M. Farquhar: Vol. 28\* (1975), Vol. 29 (1976), Vol. 30 (1977).

\* National Report for Canada, Geomagnetism and Aeronomy, 1971-1974, compiled by C.M. Carmichael and H.M. Sullivan, 1975.

\* National Report, Gravity Research in Canada, 1971-1974, compiled by H.D. Valliant, 1975.

\* National Report for Canada, Seismology and Physics of the Earth's Interior, 1971-1974, compiled by P.W. Basham, 1975.

\* Thermistor Cable Installation in Permafrost Materials with a Water-Jet Drilling Method, by A.S. Judge, J.A. Hunter, R.L. Good, J. Cowan and G. Robb. (Geological Survey of Canada, Paper 76-1A, 479-481, 1976.)

\* Anomalous Shallow Seismic Velocities in Mackenzie Bay, Northwest Territories, by A.S. Judge, H.A. MacAulay and J.A. Hunter. (Geological Survey of Canada, Paper 76-1A, 481-486, 1976.)

\* Permafrost and Frozen Sub-Seabottom Materials in the Southern Beaufort Sea, by J.A.M. Hunter, A.S. Judge, H.A. MacAulay, R.L. Good, R.M. Gagne and R.A. Burns. (Beaufort Sea Project Technical Report No. 22, pp. 174, 1976.)

Earthquake - Studies of the Seismic Risk in British Columbia, by W.G. Milne. (Reprinted from GEOS, 5-7, Summer/Été, 1976.)

\* Permafrost studies provide data for future arctic developments, by A.E. Taylor and A.S. Judge. (Reprinted from Oilweek, August 23, 1976.)

- \* Canadian engineers study Chinese earthquake technology, by A.C. Heidebrecht et al. (Engineering Journal, 59, 35-38, 1976.)

En sondant le sol de Charlevoix, par J.J. Labrecque. (Tirage à part de GEOS, Spring/Printemps, 1977.)

The Slate Islands Structure: A Partially Submerged Impact Crater in Lake Superior, by R.A.F. Grieve and P.B. Robertson. (Reprinted from GEOS, Spring/Printemps, 1977.)

A Question of Gravity, by R.A. Gibb and M.D. Thomas. (Reprinted from GEOS, Winter/Hiver, 1977.)

Earthquakes in a Québec Hydro Development, by Goetz Buchbinder. (Reprinted from GEOS, Fall, 1977.)

Ancient Upheaval on the Prairies, by P.A. Camfield. (Reprinted from GEOS, Spring/Printemps, 1978.)

- \* Gravity Anomalies and Deep Structure of the Cape Smith Foldbelt, Northern Ungava, Quebec: Reply, by M.D. Thomas and R.A. Gibb. (Geology, 5, 651-653, 1977.)

- \* Permafrost, Hydrates and the Offshore Thermal Regime, by A.S. Judge. (Proceedings Symposium on Permafrost Geophysics, Published by the Associate Committee Geotechnical Research Technical Memorandum 119, pp. 99-103, 1977.)

- \* The Petrology of Cordierite-Anthophyllite Gneisses and Associated Mafic and Pelitic Gneisses at Manitouwadge, Ontario, by R.S. James, R.A.F. Grieve and L. Pauk. (Reprinted from American Journal of Science, 278, 41-63, 1978.)

Apparent polar wander paths and the joining of the Superior and Slave provinces during early Proterozoic time: Comment and reply, by J.L. Roy, W.A. Morris, P.L. Lapointe, E. Irving, J.K. Park, and P.W. Schmidt. (Reprinted from Forum, 132-135, 1978.)

The role of the chi-square test in the analysis of samples of repeated observations, by M. Romanowski, R.K. McConnell and J.F. Halpenny. (Reprinted from NRC Tech. Memo. 16608, 35 pp., 1978.)

Earthquake Study in Quebec/Etudes des tremblements de terre en Québec, by G. Buchbinder. (Reprinted from Emergency Planning Canada/Planification d'urgence Canada March-April/mars-avril 1978.)