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Bibliography of Seismology

January to June, 1951

7571. ALIVERTI, G., and SOLAINI, L., "Sulla Velocita' di Propagazione delle onde sismiche su brevi percorsi", *Annali di Geofisica*, Vol. 3, No. 4, 485-487, Rome, 1950.
7572. ANTSYFEROV, M. S., "The Secondary Resonances of a Seismograph with Spring Suspension", *Akad. Nauk. SSSR Izv.*, Vol. 14, No. 4, 317-333, Moscow, 1950.
7573. BENIOFF, H., "Earthquakes and Rock Creep", *Bulletin, Seismological Society of America*, Vol. 41, No. 1, 31-62, 20 fig., 3 tab., bib., Berkely, Jan., 1951.
7574. BENIOFF, Hugo, "Global Strain Accumulation and Release as Revealed by Great Earthquakes", *Bulletin, Geological Society of America*, Vol. 62, No. 4, 331-338, 7 fig., bib., New York, April, 1951.
7575. BREKHOVSKIKH, L. M., "Reflection of Plane Waves from Stratified Media", *Zhurnal Teknich. Fiziki.*, Vol. 19, No. 10, 1126-1135, Moscow, 1949.
Geoph. Abst.
7576. BREKHOVSKIKH, L. M., "Reflection and Refraction of Spherical Waves", *Uspekhi Fizich. Nauk.*, Vol. 38, No. 1, Moscow, 1949.
7577. BULLARD, E. C., and STANLEY, J. P., "The Age of the Earth", *Suomen Geodeettisen Laitoksen Julkaisuja Veroffentlichungen des Finnischen Geodatischen Institutes*, No. 36, 33-40, 2 fig., 2 tab., bib., Helsinki, 1949.
7578. BULLEN, K. E.,
(1) "An Earth Model Based on a Compressibility-Pressure Hypothesis", *Royal Astronomical Society Geophysical Supplement*, Vol. 6, 50-59, London, 1950.
(2) "On the Constitution of Mars", *Ibid*, Vol. 109, 688-693, London, 1950.
K.E.B.
7579. BYERLY, Perry, and EVERNDEN, Jack F., "First Motion in Earthquakes Recorded at Berkeley", *Bulletin, Seismological Society of America*, Vol. 40, No. 4, 291-298, 1 fig., 1 tab., Berkeley, Oct., 1950.
7580. CALOI, P., and GIORGI, M., "Studio del Terremoto delle Isole Lipari del 13 aprile 1938", *Annali di Geofisica*, Vol. 4, No. 1, 9-26, 6 tab., bib., Rome, 1951.
7581. CALOI, P., and PERONACI, F., "Sulla superficie di discontinuita' alla profondita' di 950 km circa", *Annali di Geofisica*, Vol. 4, No. 1, 107-110, 3 fig., bib., Rome, 1951.
7582. CANADIAN GEOPHYSICAL BULLETIN. "Canadian Geophysical Bulletin", *National Research Council of Canada*, Vol. 4, No. 3, 43 pp., Ottawa, 1951.
7583. CHARLIER, Ch., "Propositions d'unification des symboles à utiliser dans les bulletins des mouvements microsismiques", *Publications du Service Séismologique et Gravimétrique*, Serie S, No. 4, Uccle, 1949.

- CHARLIER, Ch., and FOURMARIER, P., "Les séismes dans la Province du Hainaut de 1900 à 1949". See No. 7596 of this list.
7584. COULOMB, J., and MOLARD, P., "Ondes Séismiques au fond de la mer des Antilles", *Annales de Géophysiques*, Vol. 5, No. 3, 2 pp., 1 tab., bib., Paris, 1949.
- CRARY, A. P., KATZ, S., OLIVER, J., PRESS, F., and EWING, M., "Air-coupled Flexural Waves in Floating Ice". See No. 7637 of this list.
7585. DOBRIN, Milton B., "Dispersion in Seismic Surface Waves", *Geophysics*, Vol. 16, No. 1, 63-80, 17 fig., bib., Menasha, Jan., 1951.
7586. DOLLAR, A. T. J., "Review of Scottish Earthquakes 1916-1949", *The Advancement of Science*, Vol. 7, No. 27, p. 2, London, 1950.
7587. DONN, William L., "Studies of Frontal, Cyclonic and Hurricane Microseisms Generated in the Western North Atlantic", *Lamont Geological Observatory*, Report No. 7, Oct., 1950.
7588. EARTHQUAKE ENGINEERING RESEARCH INSTITUTE. "The Earthquake Research Engineering Institute", January, 1951.
- EVERNDEN, Jack F., and BYERLY, Perry, "First Motion in Earthquakes Recorded at Berkeley". See No. 7579 of this list.
7589. EVISON, F. F., "An Electromechanical Source of Elastic Waves in the Ground", *The Proceedings of the Physical Society*, Vol. 64, Part 4, 311-322, London, 1951.
- EWING, M., CRARY, A. P., KATZ, S., OLIVIER, J., and PRESS, F., "Air-coupled Flexural Waves in Floating Ice". See No. 7637 of this list.
7590. EWING, Maurice, and PRESS, Frank, "Crustal Structure and Surface-Wave Dispersion", *Bulletin, Seismological Society of America*, Vol. 40, No. 4, 271-280, 5 fig., bib., Berkeley, Oct., 1950.
7591. FAUST, L. Y., "Seismic Velocity as a Function of Depth and Geologic Time", *Geophysics*, Vol. 16, No. 2, 192-206, 6 fig., 6 tab., bib., Menasha, April, 1951.
7592. FINCH, R. H., "Earthquakes Accompanying the 1949 Eruption of Mauna Loa", *Bulletin, Seismological Society of America*, Vol. 40, No. 4, 263-266, 1 fig., 1 tab., bib., Berkeley, Oct., 1950.
7593. FINCH, R. H., "The December 1950 Subsidence at Kilauea", *The Volcano Letter*, No. 510, 4 pp., Honolulu, 1950.
- FINCH, R. H., and MACDONALD, Gordon A., "The June 1950 Eruption of Mauna Loa". See No. 7618 of this list.
7594. FINSEN, W. S., "The Geographical Distribution of some South African Earthquakes", *Circular No. 110, 1950, July, of the Union Observatory*, Vol. 5, Pt. 10, 457-472, 1 tab., bib., Cape Town, 1950.
7595. FINSEN, W. S., "The Statistics of Witwatersrand Earth Tremors", *Circular No. 110, 1950, July, of the Union Observatory*, Vol. 5, Pt. 10, 444-456, 8 tab., bib., Cape Town, 1950.

7596. FOURMARIER, P., and CHARLIER, Ch., "Les séismes dans la Province du Hainaut de 1900 à 1949", *Bulletin de l'Académie Royale de Belgique*, Vol. 36, Brussels, 1950.
7597. GALANOUPOULOS, A. G., "Die Seismizität von Messenien", *Gerlands Beiträge Zur Geophysik*, Vol. 61, No. 3, 2 fig., bib., Leipzig, 1950.
- GIORGI, M., and CALOI, P., "Studio del terremoto delle Isole Lipari del 13 aprile 1938". See No. 7580 of this list.
7598. GOGUEL, Jean M., "Seismic Refraction with Variable Velocity", *Geophysics*, Vol. 16, No. 1, 18-101, Fig. 21, 5 tab., bib., Menasha, Jan., 1951.
7599. GUTENBERG, B., "Travel Times from Blasts in Southern California", *Bulletin, Seismological Society of America*, Vol. 41, No. 1, 5-12, 3 fig., 5 tab., bib., Berkeley, Jan., 1951.
7600. GUTENBERG, B., "Crustal Layer of the Continents and Oceans", *Bulletin, Geological Society of America*, Vol. 62, No. 5, 427-439, 5 fig., 1 tab., bib., New York, May, 1951.
7601. GUTENBERG, B., "Approximations in Geophysics", *Suomen Geodeettisen Laitoksen Julkaisuja Veröffentlichungen des Finnischen Geodatischen Institutes*, No. 36, 41-44, Helsinki, 1949.
7602. GUTENBERG, B., and RICHTER, C. F., "Géographie des tremblements de terre et dynamique de la croûte terrestre", *Annales de l'Institut de Physique du Globe*, Vol. 5, 3-11, 5 fig., 1 tab., bib., Strasbourg, 1950.
7603. HAFNER, W., "Stress Distributions and Faulting", *Bulletin, Geological Society of America*, Vol. 62, No. 4, 373-398, 9 fig., bib., New York, April, 1951.
- HARADA, Y., MUTO, K., and OKUDA, T., "The Land Deformation Accompanying the Fukui Earthquake of June 28, 1948". See No. 7625 of this list.
7604. HARDTWIG, E., "Untersuchungen ueber mikroseismik in Deutschland Waehrend des zweiten Weltkrieges", *Annali di Geofisica*, Vol. 4, No. 1, 95-106, Rome, 1951.
7605. HAYES, R. C., "Seismological Observatory", *Seismological Observatory Bulletin*, No. R-35, 3 pp., Wellington, 1950.
7606. HOMMA, S., "On the Propagation of Dispersive Seismic Waves", *The Geophysical Magazine*, Vol. 12, No. 3, 209-236, Tokyo, Feb., 1951.
7607. HUBBERT, M. King, "Mechanical Basis for Certain Familiar Geologic Structures", *Bulletin, Geological Society of America*, Vol. 62, No. 4, 355-372, 16 fig., 2 tab., bib., New York, April 1951.
7608. HUGHES, J. S., "International Seismological Summary", *The Advancement of Science*, Vol. 7, No. 27, London, 1950.
7609. INOUE, E., and ONO, H., "The Horizontal Displacements of the Earth's Crust Accompanying the Great Kwantung Earthquake 1923", *Bulletin of the Geographical Survey Institute*, Vol. 2, No. 1, 61-72, Tokyo, 1950.

7610. JARDETSKY, W. S., "The Problem of Mountain Chains", *Transactions, American Geophysical Union*, Vol. 31, No. 6, 901-913, 4 fig., bib., Washington, Dec., 1950.
7611. KATO, YOSIO,
 (1) "Investigation of the Changes in the Earth's Magnetic Field Accompanying Earthquakes or Volcanic Eruptions", *Science Reports of the Tohoku Imperial University*, Series 1, Vol. 27, No. 1, Sendai, 1938.
 (2) "Investigation of the Changes in the Earth's Magnetic Field Accompanying Earthquakes or Volcanic Eruptions", *Ibid*, Vol. 29, No. 3, 1940.
7612. KATO, Y., and SHOJI, R., "Determination of the Underground Structure of the New Volcano of Mt. Showa by the Seismic Prospecting", *The Science Reports of the Tohoku University*, Series 5, Vol. 1, No. 1, Sendai, 1949.
7613. KATO, Y., SHOJI, R., and NORITOMI, K., "The Report of the Prospecting of the Deep Underground Structure by the Seismic Method", *The Science Reports of the Tohoku University*, Series 5, Vol. 1, No. 2, Sendai, 1949.
7614. KATO, Y., and UTASHIRO, S., "On the Changes of the Terrestrial Magnetic Field Accompanying the Great Nankaido Earthquake of 1946", *The Science Reports of the Tohoku University*, Series 5, Vol. 1, No. 1, Sendai, 1949.
7615. KATO, Y., UTASHIRO, S., and OSSAKA, J., "On the Changes of the Terrestrial Magnetic Field Accompanying the Tochigi Earthquake of 26 Dec. 1949", *The Science Reports of the Tohoku University*, Series 5, Vol. 2, No. 2, Sendai, 1950.
- KATZ, S., OLIVER, J., PRESS, F., EWING, M., and CRARY, A. P., "Air-coupled Flexural Waves in Floating Ice". See No. 7637 of this list.
7616. KELLY, Sherwin, F., "Geophysics", *Mining Engineering*, Feb., 1951.
7617. LEET, L. Don, "Further Review of the Microseismic Storm of September 30—October 1, 1947", *Bulletin, Seismological Society of America*, Vol. 40, No. 4, 299-303, 2 fig., Berkeley, Oct., 1950.
7618. MACDONALD, Gordon A., and FINCH, R. H., "The June 1950 Eruption of Mauna Loa", *The Volcano Letter*, No. 509, 8 pp., Honolulu, 1950.
7619. MACGREGOR, A. G., "Prediction in Relation to Seismo-volcanic Phenomena in the Caribbean Volcanic Arc", *Bulletin Volcanologique*, Vol. 8, Series 2, 69-86, 2 fig., bib., Naples, 1949.
7620. MEINESZ, F. A. Vening, "Geodesy and Geophysics", *Suomen Geodeettisen Laitoksen Julkaisuja Veroffentlichungen des Finnischen Geodatischen Institutes*, No. 36, 255-260, Helsinki, 1949.
7621. MERRELL, Richard H., "The Distribution and Frequency of Alaskan Earthquakes, 1939-1948", *Bulletin, Seismological Society of America*, Vol. 40, No. 4, 267-269, 1 fig., bib., Berkeley, Oct., 1950.

- MOLARD, P., and COULOMB, J., "Ondes séismiques au fond de la mer des Antilles". See No. 7584 of this list.
7622. MOONEY, H. M., "A study of the Energy Content of the Seismic Waves P and pP", *Bulletin, Seismological Society of America*, Vol. 41, No. 1, 13-30, 9 fig., 3 tab., bib., Berkeley, Jan., 1951.
7623. MUKHERJEE, S. M., "Microseisms and Sea Waves", *Bulletin, Seismological Society of America*, Vol. 41, No. 1, 1 fig., bib., Berkeley, Jan. 1951.
7624. MURPHY, L. M., "Earthquake Notes", Vol. 21, No. 3, pp. 17-28, Washington, Sept., 1950.
The above publication is the organ of the Eastern Section of the Seismological Society of America. The issue listed contains: Earthquakes in the Ste. Genevieve (Mo.) Fault Zone" by Ross R. Heinrich; Sub-committee on Seismology of the Pan American Institute of Geography and History by Frank Neumann; South Amboy Explosion; Two Microseismic Storms by Ross R. Heinrich; Travel Time Anomalies for P and S Earthquake Waves from the Aleutians, Central and South America by Donald P. Venker; Instrumental Notes by Laurie R. Burgess; Earthquakes Recorded by Microbarographs by Ross R. Heinrich; Dayton Tremors; Note on the Assam Earthquake of August 14, 1950; Reviews of Books and Articles; Purchase of Back Numbers of the Bulletin; Note on Frequency and Energy of Earthquakes; Station Notes; Epicentres.
7625. MUTO, K., OKUDA, T., and HARADA, Y., "The Land Deformation Accompanying the Fukui Earthquake of June 28, 1948", *Bulletin of the Geographical Survey Institute*, Vol. 2, Part 1, 27-36, Tokyo, 1950.
7626. NAKAMURA, S. T., "On the Seismic Energy and the Age of the Earth", *The Science Reports of the Tohoku University*, Vol. 2, No. 3, 206-208, Sendai, Dec., 1950.
7627. NAKANO, T., "Relation between Damages by Earthquakes and Topography", *Bulletin of the Geographical Survey Bureau*, Vol. 1, Part 1, 27-36, Tokyo, Oct., 1948.
- NORITOMI, K., KATO, Y., and SHOJI, R., "The Report of the Prospecting of the Deep Underground Structure by the Seismic Method". See No. 7613 of this list.
7628. OFFICER, Charles B., Jr., "Normal Mode Propagation in Three Layered Liquid Half-space by Ray Theory", *Geophysics*, Vol. 16, No. 2, 207-212, 4 fig., bib., Menasha, April, 1951.
7629. OKUDA, T., "On the Mode of the Vertical Land Deformation Accompanying the Great Nankaido Earthquake 1946", *Bulletin of the Geographical Survey Institute*, Vol. 2, No. 1, 37-60, Tokyo, 1950.
- OKUDA, T., HARADA, Y., and MUTO, K., "The Land Deformation Accompanying the Fukui Earthquake of June 28, 1948". See No. 7625 of this list.
- OLIVER, J., PRESS, F., EWING, M., CRARY, A. P., and KATZ, S., "Air-coupled Flexural Waves in Floating Ice". See No. 7637 of this list.
- ONO, H., and INOUE, E., "The Horizontal Displacements of the Earth's Crust Accompanying the Great Kwanto Earthquake 1923". See No. 7609 of this list.

- OSSAKA, J., KATO, Y., and UTASHIRO, S., "On the Changes of the Terrestrial Magnetic Field Accompanying the Tochigi Earthquake of 26 Dec. 1949". See No. 7615 of this list.
7630. OULIANOFF, N., "Considerations géologiques sur l'altimétrie de la région Sierre-Montana-Sion après le séisme du 25 janvier 1946", *Bulletin des Laboratoires de Géologie, Minéralogie, Géophysique et du Musée Géologique de l'Université de Lausanne*, No. 94, 20 pp., 3 fig., 1 tab., bib., Lausanne, 1949.
7631. OULIANOFF, Nicolas, "Séismes d'origine proche, dans les régions à tectoniques superposées", *Publications du Bureau Central Séismologique International*, Série A., Travaux Scientifiques, Fasc. 17, 133-142, 2 fig., bib., Strasbourg, 1948.
7632. OULIANOFF, N., "Commentaires géologiques des résultats du nivellement dans la région Sierre-Montana-Sion effectué à la suite du séisme du 25 janvier 1946", *Actes de la Société Helvétique des Sciences Naturelles*, 103-105, Lausanne, 1949.
7633. OULIANOFF, N., "Séismologie et structure du soubassement des Alpes", *International Geological Congress*, Part 5, 110-118, 2 fig., 2 tab., London, 1948.
7634. OXFORD, UNIVERSITY OBSERVATORY. "International Seismological Summary, 1939, July, August, September," 295-413, Richmond, Oct., 1950.
7635. OXFORD, UNIVERSITY OBSERVATORY.
 1. "The International Seismological Summary, 1939 October, November, December", pp. 417-529, Richmond, Dec., 1950.
 2. "Catalogue of Epicentres for International Seismological Summary for 1939", *Ibid.*
7636. PAIGE, Sidney et al, "Application of Geology to Engineering Practice", Geological Society of America, 326 pp., 13 chapters, New York, 1950.
- PERONACI, F., and CALOI, P., "Sulla superficie di discontinuità alla profondità di 950 km circa". See No. 7581 of this list.
- PRESS, Frank and EWING, Maurice, "Crustal Structure and Surface-wave Dispersion". See No. 7590 of this list.
7637. PRESS, F., EWING, M., CRARY, A. P., KATZ, S., and OLIVER, J., "Air-coupled Flexural Waves in Floating Ice", *Geophysical Research Papers*, No. 6, 46 pp., bib., Cambridge, 1950.
7638. RABBITT, Mary C., and VESSELOWSKY, S. T., "Geophysical Abstracts 142 July-September 1950", *Geological Survey Bulletin*, No. 976-C, 141-209, Washington, 1950.
7639. RAMIREZ, J. Emilio, "El gran terremoto Ecuatoriano de Pelileo", *Instituto Geofísico de los Andes Colombianos*, Serie A, No. 7, 129-139, Bogota, 1950.
7640. RAMIREZ, J. Emilio, "Gran Terremoto Ecuatoriano de Pelileo", *Revista de la Academia Colombiana*, Vol. 8, No. 29, 129-139, Bogota, 1950.

7641. RICHTER, C. F., "Velocities of P at Short Distances", *Bulletin, Seismological Society of America*, Vol. 40, No. 4, 281-289, 4 tab., bib., Berkeley, Oct., 1950.
- RICHTER, C. F., and GUTENBERG, B., "Géographie des tremblements de terre et dynamique de la croûte terrestre". See No. 7602 of this list.
7642. ROTHÉ, J. P., "La structure de l'Atlantique", *Annali di Geofisica*, Vol. 4, No. 1, 27-41, 3 fig., bib., Rome, 1951.
7643. SAVARENISKII, E. F., "Earthquakes, Their Causes and Study", *Pravda*, 23 pp. Moscow, 1949.
7644. SCIENCE NEWS LETTER.
Articles of interest to seismologists have appeared in recent issues of Vol. 58 of the above publication (Washington, 1950-51) as follows:
(1) "New Hebrides Area Site of Big Quake", No. 25, p. 392, Dec. 16.
7645. SEMANATE, P. Alberto D., "Sismología del terremoto de Pelileo", *Casa de la Cultura Ecuatoriana*, 103 pp., Quito, 1950.
- SHOJI, R., and KATO, Y., "Determination of the Underground Structure of the New Volcano of Mt. Showa by the Seismic Prospecting". See No. 7612 of this list.
- SHOJI, R., NORITOMI, K., and KATO, Y., "The Report of the Prospecting of the Deep Underground Structure by the Seismic Method". See No. 7613 of this list.
- SOLAINI, L., and ALIVERTI, G., "Sulla velocità di propagazione delle onde sismiche su brevi percorsi". See No. 7571 of this list.
- STANLEY, J. P., and BULLARD, E. C., "The Age of the Earth". See No. 7577 of this list.
7646. STONELEY, R., "Polarisation of the S-phase of Seismograms", *Annali di Geofisica*, Vol. 4, No. 1, 3-8, 2 tab., 1 fig., bib., Rome, 1951.
- 7647 TAYLOR, E. G. R., "The origin of Continents and Oceans: A Seventeenth Century Controversy", *The Geographical Journal*, Vol. 116, Nos. 4-6, 193-198, London, Dec., 1950.
7648. TOLSTOY, Ivan, "Submarine Topography in the North Atlantic", *Bulletin, Geological Society of America*, Vol. 62, No. 5, 441-450, New York, May, 1951.
7649. THE INSURANCE SOCIETY OF NEW YORK, "The Churchill Collection", *News Letter*, No. 119, p. 14, New York, Jan., 1951.
- UTASHIRO, S., and KATO, Y., "On the Changes of the Terrestrial Magnetic Field Accompanying the Great Nankaido Earthquake of 1946". See No. 7614 of this list.
- UTASHIRO, S., OSSAKA, J., and KATO, Y., "On the Changes of the Terrestrial Magnetic Field Accompanying the Tochigi Earthquake of 26 Dec. 1949". See No. 7615 of this list.

7650. VAN GILS, J. M., "La chronique séismologique en Belgique", *Ciel et Terre*, Vol. 66, No. 9-10, Brussels, 1950.
7651. VAN GILS, J. M., "Bulletin des mouvements microséismiques enregistrés à Uccle pendant les années 1947 et 1948", *Publications du Service Séismologique et Gravimétrique*, Série S, No. 4, Uccle, 1949.
- VESSELOWSKY, S. T., and RABBITT, Mary C., "Geophysical Abstracts 142 July-September 1950". See No. 7638 of this list.
7652. WATANABE, A., "The Geomorphology of the Coastal Districts of Southern Part of Sikoku Island, and its Bearing on the Crustal Deformation Accompanying Great Nankai Earthquakes", *Bulletin of the Geographical Survey Bureau*, Vol. 1, Part 1, 37-72, Tokyo, Oct., 1948.