

CANADA  
DEPARTMENT OF MINES AND TECHNICAL SURVEYS  
DOMINION OBSERVATORIES

---

## PUBLICATIONS

OF THE

# Dominion Observatory

OTTAWA

Volume XIV

## Bibliography of Seismology

No. 14

Items 8302-8546

July to December, 1953

BY

W. E. T. SMITH

---

EDMOND CLOUTIER, C.M.G., O.A., D.S.P.  
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY  
OTTAWA, 1955

This document was produced  
by scanning the original publication.

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

THE  
DOMINION OBSERVATORY

OTTAWA

VOLUME XIV

Bibliography of zoology

1914

THE  
DOMINION OBSERVATORY

OTTAWA

VOLUME XIV

Bibliography of zoology

1914

# Bibliography of Seismology

July to December, 1953

- 
- AKI, K., and TOMODA, Y., "Frequency Analysis of Local Tremors of the Ground by Means of a Magnetic Microseismic Spectrometer". See No. 8523 of this list.
- AKI, K., and TOMODA, Y., "Magnetic Recording Seismometer by Means of Moving Magnet". See No. 8524 of this list.
- AKI, K., and TOMODA, Y., "Magnetic Recording Seismometer by Means of Moving Magnet". See No. 8525 of this list.
8302. AKIMA, T., "A Torsion Pendulum Low-pass Filter Applied to the Study of Earthquake Waves" (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 1, No. 2, 37-39, Tokyo, 1948.
8303. ALLEN, Clarence R., and SMITH, George I., "Seismic and Gravity Investigations on the Malaspina Glacier, Alaska", *Transactions, American Geophysical Union*, Vol. 34, No. 5, 755-760, 6 fig., bib., Washington, Oct., 1953.
- ANDERSON, D. V., and NORTHWOOD, T. D., "Model Seismology". See No. 8463 of this list.
8304. ASADA, T., and DEN, N., "On a Trigger for High Sensitive Seismometer" (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 5, No. 1, page 29, Tokyo, 1952.
8305. ASADA, T., and SUZUKI, Z., "Unknown Phases in Earthquake Motions of Very Near Shocks" (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 5, No. 2, page 30, Tokyo, 1952.
8306. ASADA, T., SUZUKI, Z., and TOMODA, Y., "On Energy and Frequency of Earthquakes" (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 3, No. 1, 11-15, Tokyo, 1950.
8307. BÄTH, Markus, "Seismicity of Fennoscandia and Related Problems", *Gerlands Beiträge zur Geophysik*, Band 63, Heft 3, 173-208, 12 fig., 3 tab., Leipzig, 1953.
- BEAUFILS, Y., and TABUTEAU, François, "Travaux séismologiques de la première expédition en Terre Adélie (1950)". See No. 8510 of this list.
8308. BENIOFF, Hugo, "Seismographs", *Sphere*, 3 pages, 6 fig., Jan.-Feb., 1953.
8309. BENIOFF, Hugo, "Earthquakes", *Engineering and Science Monthly*, 8 pages, 13 fig., Pasadena, Nov., 1953.
8310. BENIOFF, Hugo, "Observations on the Form of the Principal Seismic Impulse" (abstract), *Bulletin, Geological Society of America*, Vol. 64, No. 12, Part 2, page 1523, New York, Dec., 1953.

8311. BENIOFF, Hugo, "Progress Report on Capacity-Transducer Seismographs" (abstract), *Bulletin, Geological Society of America*, Vol. 64, No. 12, Part 2, page 1523, New York, Dec., 1953.
8312. BENIOFF, Hugo, "Very Long Period *G* Waves and an Unidentified Wave Observed with a Three-minute Period Strain Seismograph" (abstract), *Bulletin, Geological Society of America*, Vol. 64, No. 12, Part 2, page 1523, Dec., 1953.
8313. BENIOFF, Hugo, GUTENBERG, Beno, and RICHTER, C. F., "Progress Report, Seismological Laboratory, California Institute of Technology, 1952", *Transactions, American Geophysical Union*, Vol. 34, No. 5, 785-791, 4 fig., 1 tab., bib, Washington, 1953.
8314. BERNARD, Pierre, "Recherche de l'origine des microséismes enregistrés à Port-Martin", *Annales de Géophysique*, Tome 9, No. 3, 280-283, 5 fig., bib., Paris, July-Sept., 1953.
8315. BERSON, I. C., "On the Demarcation of the Regions of Registration of Reflected and Refracted Waves on Combined Hodographs" (in Russian), *Reports of the Academy of Sciences U.S.S.R., Geophysical Series*, No. 3, 209-214, 2 fig., bib., Moscow, 1953.
8316. BIJLAARD, P. P., "Theory of Local Plastic Deformations", *Mémoires, Association Internationale de Ponts et Charpentes*, Vol. 16, 27-44, 22 fig., Zurich, 1940/41.
8317. BIJLAARD, P. P., "On the Linear Patterns of the Earth's Crust", *Proceedings, Koninklijke Nederlandsche Akademie Van Wetenschappen*, Vol. 51, No. 4, 450-456, 9 fig., Amsterdam, 1948.
- BLAIK, Maurice, and DONN, William L., "A study and Evaluation of the Tripartite Seismic Method of Locating Hurricanes". See No. 8338 of this List.
8318. BODLE, Ralph, R., and MURPHY, Leonard, M., "United States Earthquakes 1946", *United States Department of Commerce Publications*, Serial No. 714, 48 pages, 14 fig., 5 tab., Washington, 1948.
8319. BOSSOLASCO, Mario, "La microsismica come mezzo di prospezione del sottosuolo", *Geofisica e Meteorologia*, Vol. 1, No. 2-3, 1 page, Genova, 1953.
8320. BOSSOLASCO, Mario, "I recenti terremoti delle Isole Ionie e la determinazione degli epicentri", *Geofisica e Meteorologia*, Vol. 1, No. 6, 1 page, Genova, 1953.
8321. BROCK, Paul, "The Nature of Solutions of a Rayleigh-type Forced Vibration Equation with a large Coefficient of Damping", *Journal of Applied Physics*, Vol. 24, No. 8, 1004-1007, 4 fig., Lancaster, Aug., 1953.
- BRYAN, J. G., HURLEY, P. M., WADSWORTH, G. P., and ROBINSON, E. A., "Determination of Reflections on Seismic Records by Linear Operators". See No. 8539 of this list.
8322. BULLEN, K. E., "The Rigidity of the Earth's Inner Core", *Annali di Geofisica*, Vol. 6, No. 1, 1-10, bib., Rome, Jan., 1953.
8323. BURKE-GAFFNEY, T. N., S. J., "A Search for the Phase *PKJPK*", *Bulletin, Seismological Society of America*, Vol. 43, No. 4, 331-334, 2 tab., Berkeley, Oct., 1953.

8324. BURZACO, Jose Manuel Gutierrez, "Chronómetro a péndulo de gravedad para sismógrafo", *Meteoros*, Ano III, No. 4, 436-438, 4 fig., Buenos Aires, Oct.-Dec., 1953.
8325. BUWALDA, John P., and ST. AMAND, Pierre, "Arvin-Tehachapi and Bakersfield Earthquakes of July-August, 1952" (abstract), *Bulletin, Geological Society of America*, Vol. 64, No. 12, Part 2, page 1500, Dec., 1953.
8326. CALOI, P., "Osservazioni sismiche e clinografiche presso grandi dighe di sbarramento", *Annali di Geofisica*, Vol. 6, No. 3, 321-366, 44 fig., bib., Rome, July, 1953.
8327. CALOI, P., and SPADEA, M. C., "Le sesse del lago di Garda. Parte IV", *Annali di Geofisica*, Vol. 6, No. 4, 451-466, 7 fig., 2 tab., bib., Rome, Oct., 1953.
8328. CARDER, Dean S., "Storm Microseisms and Storms", (abstract), *Bulletin, Geological Society of America*, Vol. 64, No. 12, Part 2, page 1524, Dec., 1953.
- CAROME, Edward F., and NASH, Harry C., "The Seismolog: A Photoelectric Earthquake Indicator for a Seismograph". See No. 8454 of this list.
- CLOUD, William K., and MURPHY, Leonard M., "United States Earthquakes 1951". See No. 8451 of this List.
8329. CONKLIN, Glenn M., "Problem Areas for the Seismologist", *Geophysics*, Vol. 18, No. 4, 827-843, 11 fig., bib., Menasha, Oct., 1953.
8330. CONTINI, C., "La diffrazione nei rilievi sismici a riflessione", *Annali de Geofisica*, Vol. 6, No. 1, 73-111, 15 fig., bib., Rome, Jan., 1953.
8331. CONTINI, C., "Appunti per la prospezione sismica delle zone con riflessioni searse o insufficienti", *Annali di Geofisica*, Vol. 6, No. 2, 213-227, bib., Rome, April, 1953.
8332. CORKAN, R. H., "A Determination of the Earth's Tide from Tilt Observations at Two Places", *Monthly Notices of the Royal Astronomical Society, Geophysical Supplement*, Vol. 6, No. 7, 431-441, London, Sept., 1952.
8333. CORTES, Henry C., "Geophysical Progress", *Geophysics*, Vol. 18, No. 3, 510-524, 9 fig., bib., Menasha, July, 1953.
8334. DALY, John, "A Universal Slide Rule for Computing the Dips of Reflecting Horizons on the Assumption of Linear Increase of Velocity", *Geophysics*, Vol. 18, No. 4, 820-823, 2 fig., bib., Menasha, Oct., 1953.
- DEN, N., and ASADA, T., "On a Trigger for High Sensitive Seismometer". See No. 8304 of this list.
8335. DiFILIPPO, D., "Ulteriore studio sulle sesse del lago di Bolsena", *Annali di Geofisica*, Vol. 6, No. 3, 405-416, 4 fig., 2 tab., bib., Rome, July, 1953.
8336. DMITRIEV, A. A., "Waves on the Surface of a Viscous Liquid, Caused by a Pulsating Source" (in Russian), *Reports of the Academy of Sciences U.S.S.R., Geophysical Series*, No. 4, 335-345, 2 fig., Moscow, 1953.

8337. DOBRIN, Milton B., LAWRENCE, Philip L., and SENGBUSH, Raymond L., "Unusual Rayleigh Waves from Explosions" (abstract), *Bulletin, Geological Society of America*, Vol. 64, No. 12, page 1524, Dec., 1953.
8338. DONN, William L., and BLAIK, Maurice, "A Study and Evaluation of the Tripartite Seismic Method of Locating Hurricanes", *Bulletin, Seismological Society of America*, Vol. 43, No. 4, 311-329, 7 fig., 3 tab., bib., Berkeley, Oct., 1953.
- DORMAN, James, EWING, Maurice, HEEZEN, Bruce C., ERICSON, D. B., and NORTHROP, John, "Exploration of the Northwest Atlantic Mid-ocean Canyon". See No. 8346 of this list.
- DOTY, William E., and FRANK, Harold R., "Signal-to-noise Ratio Improvement by Filtering and Mixing". See No. 8350 of this list.
8339. EATON, J. P., "Constants of the Short Period Sprengnether Seismograph" (abstract), *Bulletin, Geological Society of America*, Vol. 64, No. 12, Part 2, page 1524, New York, Dec., 1953.
8340. ECKHARDT, E. A., "Geophysical Activity in 1952", *Geophysics*, Vol. 18, No. 3, 501-509, 6 fig., 2 tab., Menasha, July, 1953.
8341. ENGLE, H. M., "Earthquake Provisions in Building Codes", *Bulletin, Seismological Society of America*, Vol. 43, No. 3, 233-238, Berkeley, July, 1953.
8342. ERICSON, David B., "Further Evidence for Turbidity Currents from the 1929 Grand Banks Earthquake" (abstract), *Bulletin, Geological Society of America*, Vol. 64, No. 12, Part 2, page 1560, New York, Dec., 1953.
- ERICSON, D. B., NORTHROP, John, DORMAN, James, EWING, Maurice, and HEEZEN, Bruce C., "Exploration of the Northwest Atlantic Mid-ocean Canyon". See No. 8346 of this list.
8343. EVERNDEN, Jack Foord, "Direction of Approach of Rayleigh Waves and Related Problems: Part I", *Bulletin, Seismological Society of America*, Vol. 43, No. 4, 335-374, 6 fig., 14 tab., Berkeley, Oct., 1953.
8344. EVISON, F. F., "The Inadequacy of the Standard Seismic Techniques for Shallow Surveying", *Geophysics*, Vol. 17, No. 4, 867-875, 2 fig., bib., Menasha, Oct., 1952.
8345. EVISON, F. F., "An improved Electromechanical Seismic Source Tested in Shattered Rock", *New Zealand Journal of Science and Technology*, Section B, Vol. 35, No. 1, 4-13. 4 fig., bib., Wellington, July, 1953.
8346. EWING, Maurice, HEEZEN, Bruce C., ERICSON, D. B., NORTHROP, John, and DORMAN, James, "Exploration of the Northwest Atlantic Mid-ocean Canyon", *Bulletin, Geological Society of America*, Vol. 64, 865-868, 1 fig., bib., New York, July, 1953.
8347. EWING, Maurice, and PRESS, Frank, "Mechanisms of *T* Wave Propagation", *Annales de Géophysique*, Tome 9, No. 3, 248-249, bib., Paris, July-Sept., 1953.

8348. EWING, Maurice, and PRESS, Frank, "Mantle Rayleigh Waves from the Kamchatka Earthquake of 4 November 1952" (abstract), *Bulletin, Geological Society of America*, Vol. 64, No. 12, Part 2, page 1524, New York, Dec., 1953.
- EWING, Maurice, PRESS, Frank, and OLIVER, Jack, "Crustal Structure and Surface-wave Dispersion. Part IV: Atlantic and Pacific Ocean Basins". See No. 8466 of this list.
8349. FEDOCEENKO, N. E., and GROSHEVOJ, G. V., "Method of checking the Sensitivity and Determining the Frequency and Amplitude Characteristics of Seismo-receiving Ducts by Means of a Magneto-electric Generator", *Reports of the Academy of Sciences U.S.S.R., Geophysical Series*, No. 5, 424-428, 7 fig., bib., Moscow, 1953.
- FORBUSH, S. E., and VESTINE, E. H., "Statistical Study of Waves from Blasts Recorded in the United States". See No. 8538 of this list.
8350. FRANK, Harold R., and DOTY, William E., "Signal-to-noise Ratio Improvements by Filtering and Mixing", *Geophysics*, Vol. 18, No. 3, 587-604, 16 fig., Menasha, July, 1953.
- FURUKAWA, E., KOTAKI, T., TAKAHASHI, K., NISHIMURA, G., and SUZUKI, M., "A New-designed Prospecting Apparatus". See No. 8459 of this list.
8351. GAETA, F. S., and IMBO, G., "Considerazioni sui metodi di Holmes e di Jeffreys par la determinazione dell'eta della crosta terrestre", *Annali di Geofisica*, Vol. 6, No. 3, 417-425, 3 fig., 3 tab., Rome, July, 1953.
8352. GALANOPOULOS, A., "Katalog der Erdbeben in Griechenland für die Zeit von 1879 bis 1892", *Annales Géologiques des Pays Helléniques*, Vol. 5, 114-229, 5 fig., Athenes, 1953.
8353. GAMBURTSEV, G. A., "Sondage séismique profond de l'écorce terrestre", (in Russian), *Dokl. Akad. Nauk, S.S.S.R.*, Vol. 87, No. 6, 943-946, Moscow, 1952.  
Trans. A.G.U.
8354. GAMBURTSEV, G. A., "Two Regimes of Performance of the Horizontal Pendulum" (in Russian), *Reports of the Academy of Sciences U.S.S.R., Geophysical Series*, No. 3, 201-208, 2 fig., Moscow, 1953.
8355. GASKELL, T. F., and SWALLOW, J. C., "Seismic Refraction Experiments in the Indian Ocean and in the Mediterranean Sea", *Nature*, No. 4377, Vol. 172, 535-537, 2 fig., 2 tab., bib., London, Sept. 19, 1953.
8356. GASSMANN, F., "Über mechanische Empfänger von Seismographen und Schwingungsmessern mit einem Freiheitsgrad", *Mitteilungen aus dem Institut für Geophysik*, No. 22, page 1, Zurich, Sept., 1952.
8357. GASSMANN, F., "Dämpfung durch Abstrahlung elastischer Wellen und gedämpfte Stabschwingungen", *Mitteilungen aus dem Institut für Geophysik*, No. 22, page 2, Zurich, Sept., 1952.
8358. GASSMANN, F., WEBER, M., and VÖGTLI, K., "Über Longitudinalschwingungen von Gesteinsstäben", *Mitteilungen aus dem Institut für Geophysik*, No. 22, 3-5, 2 fig., Zurich, Sept., 1952.



8359. GASSMANN, F., WEBER, M., and VÖGTLI, K., "Beitrag zur Ermittlung der innern Dämpfung (Werkstoffdämpfung) von Gesteinsstäben", *Mitteilungen aus dem Institut für Geophysik*, No. 22, 5-8, 1 fig., 1 tab., Zurich, Sept., 1952.
8360. GERMAIN-JONES, D. T., "Geophysical Prospecting", *Nature*, Vol. 171, 202-203, London, 1953.
8361. GIRLANDA, A., "La Stazione sismica di Messina", *Annali di Geofisica*, Vol. 6, No. 1, 47-59, 9 fig., Rome, Jan., 1953.
8362. GIRLANDA, A., "Il Terremoto dello Hokkaido del 4 marzo 1952", *Annali di Geofisica*, Vol. 6, No. 2, 173-181, 2 tab., bib., Rome, April, 1953.
8363. GIRLANDA, A., "Il Terremoto dello Hokkaido del 4 marzo 1952", *Annali di Geofisica*, Vol. 6, No. 4, 499-510, 5 fig., 4 tab., bib., Rome, Oct., 1953.
8364. GREVE, S. Fredrico, "Guia de las instituciones sismologicas de America", *Publication No. 6 de la Comision de Cartografia, Comite de Sismología Universidad de Chile*, Santiago de Chile, 1953.
- GROSHEVOJ, G. V., and FEDOCEENKO, N. E., "Method of Checking the Sensitivity and Determining the Frequency and Amplitude Characteristics of Seismo-receiving Ducts by Means of a Magneto-electric Generator". See No. 8349 of this list.
8365. GUTENBERG, Beno, "Earthquakes: Past and Future", *Sphere*, Vol. 1, 9-11, 4 fig., 1952.
8366. GUTENBERG, Beno, "Seismische Bodenunruhe und Wetter", *Umschau*, Vol. 21, 646-648, Frankfurt, 1952.
8367. GUTENBERG, Beno, "Wave Velocities at Depths between 50 and 600 Kilometers", *Bulletin, Seismological Society of America*, Vol. 43, No. 3, 223-232, 3 fig., 3 tab., bib., Berkeley, July 1953.
8368. GUTENBERG, Beno, "Travel Times of Longitudinal Waves from Surface Foci", *Proceedings, National Academy of Sciences*, Vol. 39, No. 8, 849-853, 1 fig., 2 tab., bib., Washington, Aug., 1953.
8369. GUTENBERG, Beno, "Results from Teleseismic Records of the 1952 Kern County, California Shocks" (abstract), *Bulletin, Geological Society of America*, Vol. 64, No. 12, Part 2, page 1525, New York, Dec., 1953.
8370. GUTENBERG, Beno, "Some General Features of Low-velocity Layers" (abstract), *Bulletin, Geological Society of America*, Vol. 64, No. 12, Part 2, page 1525, New York, Dec., 1953.
- GUTENBERG, Beno, RICHTER, C. F., and BENIOFF, Hugo, "Progress Report, Seismological Laboratory, California Institute of Technology, 1952". See No. 8313 of this list.
8371. HAMILTON, J. H., "Operational Characteristics of the Benioff Variable Reluctance Seismometer" (abstract), *Bulletin, Geological Society of America*, Vol. 64, No. 12, Part 2, page 1525, New York, Dec., 1953.

8372. HARADA, Y., "On the Earth-crust Deformation in the Miura Promontory" (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 1, No. 2, page 52, Tokyo, 1948.
8373. HARADA, Y., "On the Earth's Crust Deformation in the Miura Promontory" (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 2, No. 1, 17-19, Tokyo, 1949.
8374. HAYAKAWA, M., "Time Variation in Seismic Wave-velocity" (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 2, No. 2, 41-46, Tokyo, 1949.
8375. HAYAKAWA, M., "On Time and Space Distributions of Earthquakes in Tohoku District" (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 2, No. 2, 52-54, Tokyo, 1949.
- HAYAKAWA, M., and IDA, K., "On Regions of Anomalous Seismic Wave Velocity". See No. 8392 of this list.
8376. HAYES, R. C., "Earthquake Origins in New Zealand During the Year 1952", *New Zealand Department Scientific and Industrial Research, Geophysical Division, Seismological Observatory Bulletin S-98*, 5 pages, 1 map, Wellington, 1953.
8377. HEAPS, H. S., "Stresses in the Earth's Crust Under an Axial Symmetrical Load", *Transactions, American Geophysical Union*, Vol. 34, No. 5, 769-775, 4 fig., 1 tab., bib., Washington, Oct., 1953.
8378. HEELAN, Patrick A., S.J., "Radiation from a Cylindrical Source of Finite Length", *Geophysics*, Vol. 18, No. 3, 685-696, 5 fig., Menasha, July, 1953.
8379. HEELAN, Patrick A., S.J., "On the Theory of Head Waves", *Geophysics*, Vol. 18, No. 4, 871-893, 9 fig., 5 tab., bib., Menasha, Oct., 1953.
- HEEZEN, Bruce C., ERICSON, D. B., NORTHROP, John, DORMAN, James, and EWING, Maurice, "Exploration of the Northwest Atlantic Mid-ocean Canyon". See No. 8346 of this list.
8380. HILL, M. N., and KING, W. R. B., "Seismic Prospecting in the English Channel and Its Geological Interpretation", *Quarterly Journal of the Geological Society of London*, No. 433, Vol. 109, 1-19, 6 fig., 3 tab., bib., London, Nov., 1953.
8381. HIRONO, T., and HISAMOTO, S., "On a Method of Drawing the Front Lines of Tsunami Wave on a Stereographic Map" (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 4, No. 2, 17-21, Tokyo, 1951.
8382. HISADA, T., and NAKAGAWA, K., "An Analysis of Vibration of Masonry Buildings" (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 5, No. 2, 21-28, Tokyo, 1952.
- HISAMOTO, S., and HIRONO, T., "On a method of Drawing the Front Lines of Tsunami Wave on a Stereographic Map". See No. 8381 of this list.

- HOLTZSCHERER, Jean-Jacques, and JOSET, Alain, "Étude des vitesses de propagation des ondes séismiques sur l'Inlandeis du Groenland". See No. 8401 of this list.
8383. HOMMA, S., "Elastic Waves Generated from an Initial Displacement" (Japanese with summary in English). *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 4, No. 2, 5-10, Tokyo, 1951.
8384. HOMMA, S., and SEKI, A., "A Relation between the Area of Aftershock Region and the Radius of Sensibility Circle (continued)" (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 3, No. 2, 4-8, Tokyo, 1950.
- HOMMA, S., and SEKI, A., "A Relation between the Area of Aftershock Region and the Radius of Sensibility Circle". See No. 8501 of this list.
8385. HONDA, H., and NAKAMURA, K., "On the Reflection and Refraction of the Explosive Sounds at the Ocean Bottom", *Science Reports of the Tohoku University, Geophysics*, Vol. 4, No. 3, 125-133, 6 fig., bib., Sendai, March, 1953.
8386. HONDA, H., and NAKAMURA, K., "Notes on the Problems on the Motion of the Surface of an Elastic Solid Produced by a Linear Source", *Science Records of the Tohoku University*, Vol. 5, No. 2, 58-66, bib., Sendai, Oct., 1953.
8387. HOSOYAMA, K., "On Secular Change of Latitude" (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 5, No. 2, 11-14, Tokyo, 1952.
8388. HOSOYAMA, K., "Ground-tilts Caused by Pumping-up the Underground Water" (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol 5, No. 3, 33-17, Tokyo, 1952.
8389. HOSOYAMA, K., "On a Mercury Tiltmeter and Its Application", *Disaster Prevention Research Institute, Kyoto University, Bulletin No. 6*, 17-35, 7 fig., bib., Kyoto, Oct., 1953.
- HOSOYAMA, K., and OZAWA, I., "Precise Levelling from Wakayama to Yuasa". See No. 8468 of this list.
8390. HOUSNER, G. W., "A Dislocation Theory of Earthquakes", *California Institute of Technology, Earthquake Research Laboratory, Fourth Technical Report*, 34 pages, California, 1953.
- Trans. A.G.U.
8391. HOUSNER, G. W., "Impulsive fluid Pressures on Walls of Containers" (abstract), *Bulletin, Geological Society of America*, Vol. 64, No. 12, Part 2, page 1526, Dec., 1953.
- HURLEY, P. M., WADSWORTH, G. P., ROBINSON, E. A., and BRYAN, J. G., "Determination of Reflections on Seismic Records by Linear Operators". See No. 8539 of this list.
8392. IIDA, K., and HAYAKAWA, M., "On Regions of Anomalous Seismic Wave Velocity" (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 2, No. 2, page 55, Tokyo, 1949.

8393. IKEGAMI, Ryohei, "On Aftershocks of Imaichi Earthquake Observed at Kanuma Station", *Bul. Tokyo Gakuzei Univ., Ser. Phys. Math. and Geol.*, Vol. 4, 3-10, Tokyo, 1953.  
Trans. A.G.U.
- INEGAMI, R., YOSHIOKA, H., and KISHINOUE, F., "An Apparatus for Examination of Seismograms". See No. 8420 of this list.
- IMBO, G., and GAETA, F. S., "Considerazioni sui metodi di Holmes e di Jeffreys per la determinazione dell'eta della crosta terrestre". See No. 8351 of this list.
- ISHIZAKI, Hatsuo, and TANABASHI, Ryo, "Earthquake Damage and Elastic Properties of the Ground", See No. 8516 of this list.
8394. JACOBS, J. A., "Temperature of the Interior of the Earth" (letter to editor), *Nature*, Vol. 170, page 838, London, Nov. 15, 1952.
8395. JACOBS, J. A., "The Earth's Inner Core", *Nature*, No. 4372, Vol. 172, 297-298, bib., London, Aug. 15, 1953.
8396. JEFFREYS, Harold, "Half a Century in Geophysics", *The Advancement of Science*, No. 38, Vol. 10, 113-119, London, Sept., 1953.
8397. JOBERT, G., and JOBERT, N., "Application du principe de Rayleigh à la dispersion d'ondes superficielles", *Annales de Géophysique*, Tome 9, No. 3, 250-255, bib., Paris, July-Sept., 1953.
8398. JOBERT, N., "Dispersion des ondes de surface dans la couche superficielle du glacier du Groenland", *Annales de Géophysique*, Tome 9, No. 4, 345-357, 8 fig., 10 tab., bib., Paris, Oct.-Dec., 1953.
- JOBERT, N., and JOBERT, G., "Application du principe de Rayleigh à la dispersion d'ondes superficielles". See No. 8397 of this list.
8399. JOLLY, R. N., "Deep-hole Geophone Study in Garvin County, Oklahoma", *Geophysics*, Vol. 18, No. 3, 662-670, 8 fig., Menasha, July, 1953.
8400. JONES, Owen A., "The New University of Queensland Seismological Station", *Bulletin, Seismological Society of America*, Vol. 43, No. 3, 247-254, 4 fig., Berkeley, July, 1953.
8401. JOSET, Alain, and HOLTZSCHERER, Jean-Jacques, "Étude des vitesses de propagation des ondes séismiques sur l'Inlandeis du Groenland", *Annales de Géophysique*, Tome 9, No. 4, 330-344, 23 fig., 3 tab., bib., Paris, Oct.-Dec., 1953.
- KAJIURA, Kinjiro, MIYOSHI, Hisashi, and YOSHIDA, Kozo, "On the Tsunami of March 4, 1952". See No. 8543 of this list.
8402. KAMITSUKI, Akira, and MIKUMO, Takeshi, "Investigation of the Structure of the Earth's Crust in Relation to Local Earthquakes", *Disaster Prevention Research Institute, Kyoto University, Bulletin No. 6*, 39-47, 3 fig., bib., Kyoto, Oct., 1953.

8403. KANAI, K., "Distribution of the Passive Seismicity Index Number for Very Strong (V) and Disastrous (VI) Earthquakes in Japan" (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 1, No. 1, page 17, Tokyo, 1948.
8404. KANAI, K., "On the Natures of Seismic Vibrations" (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 1, No. 2, 44-47, Tokyo, 1948.
8405. KANAI, K., "Relation between the Nature of Surface Layer and the Amplitude of Earthquake Motions II", *Bulletin, Earthquake Research Institute, Tokyo University*, Vol. 31, Part 3, 219-226, 7 fig., 1 tab., Tokyo, Sept., 1953.
8406. KANAI, K., "Examination of the Assumption of the Concentrated Mass in the Vibration of Framed Structure (Rahmen)", *Bulletin, Earthquake Research Institute, Tokyo University*, Vol. 31, Part 3, 245-248, 1 fig., 2 tab., Tokyo, Sept., 1953.
8407. KANAI, K., OSADA, K., and YOSHIZAWA, S., "The Relation between the Amplitude and the Period of Earthquake Motion", *Bulletin, Earthquake Research Institute, Tokyo University*, Vol. 31, Part 1, 45-56, 11 fig., 3 tab., bib., Tokyo, March, 1953.
8408. KANAI, K., OSADA, K., and YOSHIZAWA, S., "Observational Study of Earthquake Motion in the Depth of the Ground IV. (Relation between the Amplitude at Ground Surface and the Period)", *Bulletin, Earthquake Research Institute, Tokyo University*, Vol. 31, Part 3, 227-234, 12 fig., 2 tab., Tokyo, Sept., 1953.
8409. KANAI, K., and SUZUKI, T., "Relation between the Property of Building Vibration and the Nature of Ground. (Observation of Earthquake Motion at Actual Building)", *Bulletin, Earthquake Research Institute, Tokyo University*, Vol. 31, Part 4, 305-316, 26 fig., 5 tab., Tokyo, Dec., 1953.
- KANAI, K., and TANAKA, T., "A Smoked-paper Recorder for High Sensitive Seismometer", See No. 8517 of this list.
8410. KANAI, K., TANAKA, T., and SUZUKI, T., "Relation between the Earthquake Damage and the Nature of the Ground", *Bulletin, Earthquake Research Institute, Tokyo University*, Vol. 31, Part 1, 56-62, 5 fig., Tokyo, March, 1953.
8411. KANAI, K., and YOSHIZAWA, S., "Relation between the Amplitude of Earthquake Motions and the Nature of Surface Layer III", *Bulletin, Earthquake Research Institute, Tokyo University*, 274-280, 8 fig., Tokyo, Dec., 1953.
8412. KARNIK, Vit, "The Effect of the Earth's Ellipticity on the Precision of Seismological Calculations" (only a summary is in English), *Czechosl. Journ. Phys.*, Vol. 2, 64-70, 4 fig., 1 tab., bib., Prague, 1953.
8413. KASAHARA, K., "Experimental Studies on the Mechanism of Generation of Elastic Waves II", *Bulletin, Earthquake Research Institute, Tokyo University*, Vol. 31, Part 1, 71-79, 4 fig., 1 tab., Tokyo, March, 1953.

8414. KASAHARA, K., "Experimental Studies on the Mechanism of Generation of Elastic Waves III", *Bulletin, Earthquake Research Institute, Tokyo University*, Vol. 31, Part 3, 235-243, 8 fig., Tokyo, Sept., 1953.
8415. KATAOKA, A., and SANÔ, S., "Ground Vibration Caused by Reciprocating Motion of the Piston of Air Compressor" (Japanese with summary in English), *Zisin, Journal of the Seismology Society of Japan, Second Series*, Vol. 5, No. 3, page 41, Tokyo, 1952.
8416. KATO, Y., NORITOMI, K., OSSAKA, J., and TAKAGI, A., "Report of Tsunami in Shizugawa Harbour Accompanying Tokachi Earthquake on March 4, 1952", *Science Reports of the Tohoku University, Geophysics*, Vol. 4, No. 3, 143-145, 5 fig., 1 tab., bib., Sendai, March, 1953.
8417. KATO, Y., and TAKAGI, A., "Further Note on the Investigation of the Changes in the Earth's Magnetic Field Accompanying Earthquake or Volcanic Eruption", *Science Reports of the Tohoku University, Geophysics*, Vol. 5, No. 2, 67-74, 19 fig., 1 tab., bib., Sendai, Oct., 1953.
8418. KAWADA, K., "Geology Around the Ikari Dam Site, Tochigi Prefecture with Special Reference to the Past Earthquakes in the District" (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 5, No. 3, 28-32, Tokyo, 1952.
- KING, W. R. B., and HILL, M. N., "Seismic Prospecting in the English Channel and Its Geological Interpretation". See No. 8380 of this list.
8419. KISHIMOTO, Y., "On a 13° Discontinuity of the Earth's Mantle" (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 5, No. 1, 7-12, Tokyo, 1952.
8420. KISHINOUE, F., IKEGAMI, R., and YOSHIOKA, H., "An Apparatus for Examination of Seismograms" (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 4, No. 2, page 31, Tokyo, 1951.
- KISHINOUE, F., OKADA, A., and NASU, N., "Levelling of the Subsiding Area in the South-eastern Part of Tokyo". See No. 8456 of this list.
8421. KISSLINGER, Carl, "The effect of Variations in Chemical Composition on the Velocity of Seismic Waves in Carbonate Rocks", *Publication No. 66 of the Institute of Technology, Saint Louis University*, 104-115, 1 tab., bib., Saint Louis, 1952.
8422. KITAZAWA, G., "On the Relation between Earthquake Damages and the Hardness of the Ground" (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 1, No. 2, 48-49, Tokyo, 1948.
8423. KITAZAWA, G., "Distribution of Seismic Intensities in the Down-town of Tokyo" (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 3, No. 1, page 32, Tokyo, 1950.
8424. KOBAYASHI, Hiroyoshi, "Damage of Buildings in Southern Hokkaido by Earthquake of March 4, 1952" (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 5, No. 4, 32-38, Tokyo, 1952.

- KOBAYASHI, N., and TSUBOI, C., "A Device for Preventing the Jumping of Smoke Seismograph Recording Pen". See No. 8527 of this list.
8425. KONING, L. P. G., "Summarizing Considerations on the Distribution of Earthquakes in Relation to Their Magnitude and Focal Depth", *Geologie en Mijnbouw*, Vol. 15, No. 7, 271-276, The Hague, July, 1953. J.F.S.
8426. KOSHIKAWA, Y., "Seismometrical Note of the Tōnankai Earthquake on Dec. 7, 1944. (A Study of the Earthquake Taken Place in the Submarine Area, the First Report.)", (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 1, No. 2, 40-43, Tokyo, 1948.
8427. KOSMINSKAJA, I. P., "Interférence des ondes séismiques provoquées par une source harmonique" (in Russian), *Izvest. Akad. Nauk. S.S.S.R. Ser. Geofiz*, No. 4, 33-54, Moscow, 1952. Trans. A.G.U.
- KOTAKI, T., TAKAHASHI, K., NISHIMURA, G., SUZUKI, M., and FURUKAWA, E., "A New-designed Prospecting Apparatus". See No. 8459 of this list.
8428. KUBOTERA, A., "Damping of the Surface-waves of Artificial Earthquakes" (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 3, No. 1, 16-21, Tokyo, 1950.
8429. KUBOTERA, A., "Damping and Dispersion of Seismic Body-wave in the Earth's Crust" (Japanese with summary in English) *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 5, No. 3, 9-16, Tokyo, 1952.
8430. LAPINA, M. I., "Geomagnetism and Seismic Phenomena" (in Russian), *Reports of the Academy of Sciences U.S.S.R., Geophysical Series*, No. 5, 393-404, 10 fig., bib., Moscow, 1953.
- LAWRENCE, Philip L., SENGBUSH, Raymond L., and DOBRIN, Milton B., "Unusual Rayleigh Waves from Explosions" (abstract). See No. 8337 of this list.
8431. LEES, G. M., "The Evolution of a Shrinking Earth", *Quarterly Journal of the Geological Society of London*, No. 434, Vol. 109, 217-257, 11 fig., 1 tab., bib., London, Dec., 1953.
8432. LEHMANN, I., "On the Shadow of the Earth's Core", *Bulletin, Seismological Society of America*, Vol. 43, No. 4, 291-306, 13 fig., 3 tab., Berkeley, Oct. 1953.
- LILL, Gordon G., and PERKINS, B., Jr., "Velocity Studies on Bikini Island". See No. 8470 of this list.
8433. LONGWELL, Chester R., "Tectonic Theory Viewed from the Basin Ranges", *Bulletin, Geological Society of America*, Vol. 61, No. 5, 413-434, 8 fig., 3 pl., New York, May, 1950.
8434. MACDONALD, G. A., "The South Hawaii Earthquakes of March and April, 1952", *Volcano Letter*, No. 515, 1-5, 4 fig., Hawaii, Jan.-March, 1952.
8435. MACDONALD, G. A., "Thomas Augustus Jaggar" (biography), *Volcano Letter*, No. 519, 1-4, 1 photo, Hawaii, Jan.-March, 1953.

8436. MACELWANE, J. B., S.J., "Annual Survey of Geophysical Education, 1952-1953", *Geophysics*, Vol. 18, No. 3, 698-701, 2 tab., Menasha, July, 1953.
8437. MATUMOTO, T., "Transmission and Reflection of Seismic Waves through Multilayered Elastic Medium", *Bulletin, Earthquake Research Institute, Tokyo University*, Vol. 31, Part 4, 261-274, 4 fig., 2 tab., bib., Tokyo, Dec., 1953.
8438. MATUZAWA, T., "On Seismic Tidal Waves. Part I. Two Dimensional Problems in an Incompressible Water" (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 1, No. 1, page 18, Tokyo, 1948.
8439. MATUZAWA, T., "On Seismic Tidal Waves. Part 2. Numerical Evaluation of the Related Integrals" (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 2, No. 2, 33-36, Tokyo, 1949.
8440. MATUZAWA, T., "Feldtheorie der Erdbeben", *Bulletin, Earthquake Research Institute, Tokyo University*, Vol. 31, Part 3, 179-201, 5 fig., 4 tab., Tokyo, Sept., 1953.
8441. MATUZAWA, T., "Feldtheorie der Erdbeben; Vergleichung vom Grossbeben vom 21. Dez. 1946 mit dem Nachbeben vom 18. April 1948", *Bulletin, Earthquake Research Institute, Tokyo University*, Vol. 31, Part 4, 249-254, 2 fig., Tokyo, Dec., 1953.
8442. MEINESZ, F. A. Vening, "Convection-currents in the Earth and the Origin of the Continents", *Proceedings of the Royal Netherlands Academy of Sciences, Series B.*, Vol. 55, No. 5, 528-553, 3 fig., 1 map, Amsterdam, Nov.-Dec., 1952.
8443. MIKI, H., "The Physical Properties of the Earth's Core" (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 5, No. 1, 13-18, Tokyo, 1952.
8444. MIKI, H., "The Physical Properties of the Earth's Core (II)", (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 5, No. 2, 15-21, Tokyo, 1952.
- MIKUMO, Takeshi, and KAMITSUKI, Akira, "Investigation of the Structure of the Earth's Crust in Relation to Local Earthquakes". See No. 8402 of this list.
8445. MILNE, W. G., "Seismological Investigations in British Columbia", (abstract), *Bulletin, Geological Society of America*, Vol. 64, No. 12, Part 2, page 1526, New York, Dec., 1953.
8446. MIYABE, N., and OOI, T., "On Longitudinal Vibration Tests", (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 1, No. 1, 2-3, Tokyo, 1948.
8447. MIYAMURA, DE S., and TSUJIURA, M., "Pri la Transdono de Tempo-signaloj kaj Parola Komuniko por Sisma Observado pere de la Altfrekvenca Telefonado tra la Funkcianto Telefon-fadeno", (in Japanese), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 4, No. 2, 1-4, Tokyo, 1951.
- MIYOSHI, Hisashi, YOSHIDA, Kozo, and KAJIURA, Kinjiro, "On the Tsunami of March 4, 1952". See No. 8543 of this list.



8448. MUNK, Walter H., "Small Tsunami Waves Reaching California from the Japanese Earthquake of March 4, 1952", *Bulletin, Seismological Society of America*, Vol. 43, No. 3, 219-222, 2 fig., 1 tab., Berkeley, July, 1953.
8449. MURAUCHI, S., "A Study on the Variation in the Seismic Activities before and after Great Earthquakes", (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 2, No. 2, 47-51, Tokyo, 1949.
8450. MURAUCHI, S., "Explosive Activities of Myojin Reef, 1952", (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 5, No. 4, 39-45, Tokyo, 1952.
- MURPHY, Leonard M., and BODLE, Ralph R., "United States Earthquakes 1946". See No. 8318 of this List.
8451. MURPHY, Leonard M., and CLOUD, William K., "United States Earthquakes 1951", *United States Department of Commerce Publications*, Serial No. 762, 50 pages, 14 fig., 7 tab., Washington, 1953.
8452. MURPHY, Leonard M., and ULRICH, Franklin P., "United States Earthquakes 1948", *United States Department of Commerce Publications*, Serial No. 746, 50 pages, 14 fig., 4 tab., Washington, 1951.
8453. MURPHY, Leonard M., and ULRICH, Franklin P., "United States Earthquakes 1949", *United States Department of Commerce Publications*, Serial No. 748, 64 pages, 13 fig., 7 tab., Washington, 1951.
- NAGATA, Takesi, and OKADA, Atusi, "Land Deformation of the Neighbourhood of Muroto Point after the Nankaido Great Earthquake in 1946". See No. 8465 of this list.
- NAKAGAWA, K., and HISADA, T., "An Analysis of Vibration of Masonry Buildings". See No. 8382 of this list.
- NAKAMURA, K., and HONDA, H., "On the Reflection and Refraction of the Explosive Sounds at the Ocean Bottom". See No. 8385 of this list.
- NAKAMURA, K., and HONDA, H., "Notes on the Problems on the Motion of the Surface of an Elastic Solid Produced by a Linear Source". See No. 8386 of this list.
- NAKAMURA, K., and SUZUKI, Z., "On the Heights of the Tsunami on March 4, 1952, in the District near Erimomisaki". See No. 8508 of this list.
8454. NASH, Harry C., and CAROME, Edward F., "The Seismolog: A Photoelectric Earthquake Indicator for a Seismograph", *Bulletin, Seismological Society of America*, Vol. 43, No. 4, 283-289, 4 fig., Berkeley, Oct., 1953.
8455. NASU, N., "Devices Against the Skipping of Index-end on Smoked Paper", (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 5, No. 3, page 42, Tokyo, 1952.

8456. NASU, N., KISHINOUE, F., and OKADA, A., "Levelling of the Subsiding Area in the South-eastern Part of Tokyo", (in Japanese), *Bulletin, Earthquake Research Institute, Tokyo University*, Vol. 31, Part 4, 335-337, 2 fig., Tokyo, Dec., 1953.
8457. NEUMANN, Frank, "Principios fundamentales para la interpretacion de sismogramas", *Instituto Panamericano de Geografia e Historia, Publication No. 134*, 82 pages, 11 fig., Santiago de Chile, 1952.
8458. NISHIMURA, Eiichi, "On Some Destructive Earthquakes Observed with the Tiltmeter at a Great Distance", *Disaster Prevention Research Institute, Kyoto University, Bulletin No. 6*, 1-15, 7 fig., bib., Kyoto, Oct., 1953.
8459. NISHIMURA, G., SUZUKI, M., FURUKAWA, E., KOTAKI, T., and TAKAHASHI, K., "A New-designed Prospecting Apparatus", *Bulletin, Earthquake Research Institute, Tokyo University*, Vol. 31, Part 4, 317-334, 12 fig., 1 tab., Tokyo, Dec., 1953.
8460. NISHITAKE, T., "On the Discontinuities of the Earth Mantle", (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 3, No. 2, 17-21, Tokyo, 1950.
8461. NISKANEN, E., "Some Remarks on the Geoidal Undulations and the Theory of Plasticity", *Publications of the Isostatic Institute of the International Association of Geodesy*, No. 29, 18 pages, bib., Helsinki, 1953.
8462. NOMURA, Y., and TAKAKU, K., "On the Propagation of Elastic Waves in an Inhomogeneous Sphere, Part II," *Science Reports of the Tohoku University, Geophysics*, Vol. 5, No. 1, 22-23, 9 fig., bib., Sendai, Aug., 1953.
- NORITOMI, K., OSSAKA, J., TAKAGI, A., and KATO, Y., "Report of Tsunami in Shizugawa Harbour Accompanying Tokachi Earthquake on March 4, 1952". See No. 8416 of this list.
- NORITOMI, K., OSSAKA, J., TAKAGI, A., and SUZUKI, Z., "On the Tsunami in Sanriku District Accompanying the Tokachi Earthquake, March 4, 1952". See No. 8509 of this list.
- NORTHROP, John, DORMAN, James, EWING, Maurice, HEEZEN, Bruce C., and ERICSON, D. B., "Exploration of the Northwest Atlantic Mid-ocean Canyon". See No. 8346 of this list.
8463. NORTHWOOD, T. D., and ANDERSON, D. V., "Model Seismology", *Bulletin, Seismological Society of America*, Vol. 43, No. 3, 239-245, 6 fig., Berkeley, July, 1953.
8464. OFFICER, Charles B., Jr., "The Refraction Arrival in Water Covered Areas", *Geophysics*, Vol. 18, No. 4, 805-819, 9 fig., 1 tab., bib., Menasha, Oct., 1953.
8465. OKADA, Atusi, and NAGATA, Takesi, "Land Deformation of the Neighbourhood of Muroto Point after the Nankaido Great Earthquake in 1946", *Bulletin, Earthquake Research Institute, Tokyo University*, Vol. 31, Part 2, 169-177, 5 fig., 2 tab., Tokyo, June, 1953.

- OKADA, A., NASU, N., and KISHINOUE, F., "Levelling of the Subsiding Area in the South-eastern Part of Tokyo". See No. 8456 of this list.
8466. OLIVER, Jack, EWING, Maurice, and PRESS, Frank, "Crustal Structure and Surface-wave Dispersion. Part IV: Atlantic and Pacific Ocean Basins", (abstract), *Bulletin, Geological Society of America*, Vol. 64, No. 12, Part 2, page 1526, New York, Dec., 1953.
8467. OMOTE, S., "Earthquake Damage and Its Relation to the Structures of Earth Ground", (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 2, No. 1, 1-4, Tokyo, 1949.
- OOI, T., and MIYABE, N., "On Longitudinal Vibration Tests". See No. 8446 of this list.
- OSADA, K., YOSHIKAWA, S., and KANAI, K., "The Relation between the Amplitude and the Period of Earthquake Motion". See No. 8407 of this list.
- OSADA, K., YOSHIKAWA, S., and KANAI, K., "Observational Study of Earthquake Motion in the Depth of the Ground IV. (Relation between the Amplitude at Ground Surface and the Period)". See No. 8408 of this list.
- OSSAKA, J., TAKAGI, A., KATO, Y., and NORITOMI, K., "Report of Tsunami in Shizugawa Harbour Accompanying Tokachi Earthquake on March 4, 1952". See No. 8416 of this list.
- OSSAKA, J., TAKAGI, A., SUZUKI, Z., and NORITOMI, K., "On the Tsunami in Sanriku District Accompanying the Tokachi Earthquake, March 4, 1952". See No. 8509 of this list.
8468. OZAWA, I., and HOSOYAMA, K., "Precise Levelling from Wakayama to Yuasa", (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 2, No. 1, page 20, Tokyo, 1949.
8469. PEREZ, Coloma A., "Sobre la velocidad de propagación de las ondas superficiales en un medio elástico-viscoso", *Rev. Geofis.*, No. 44, Vol. 11, 319-327, Madrid, 1952.  
Trans. A.G.U.
8470. PERKINS, B., JR., and LILL, Gordon G., "Velocity Studies on Bikini Island", *Mon. Res. Rep., Off. Nav. Res.*, 13-17, 1948.  
Trans. A.G.U.
8471. PERONACI, F., "Il terremoto sardo del 13 Novembre 1948", *Annali di Geofisica*, Vol. 6, No. 4, 569-578, 2 fig., 1 tab., bib., Rome, Oct., 1953.
8472. PINAR, Nuriye, "Preliminary Note on the Earthquake of Yenice-Gönen, Turkey, March 18, 1953", *Bulletin, Seismological Society of America*, Vol. 43, No. 4, 307-310, 1 fig., Berkeley, Oct., 1953.
8473. POLLI, S., "L'attuale deformazione della crosta terrestre", *Annali di Geofisica*, Vol. 6, No. 4, 555-560, 1 fig., 1 tab., Rome, Oct., 1953.
8474. POUGH, Frederick H., "All about Volcanoes and Earthquakes", 150 pages, illus. Price \$1.95. Random House, New York, 1953.

- PRESS, Frank, and EWING, Maurice, "Mechanisms of *T* Wave Propagation". See No. 8347 of this list.
- PRESS, Frank, and EWING, Maurice, "Mantle Rayleigh Waves from the Kamchatka Earthquake of 4 November 1952". See No. 8348 of this list.
- PRESS, Frank, OLIVER, Jack, and EWING, Maurice, "Crustal Structure and Surface-wave Dispersion. Part IV: Atlantic and Pacific Ocean Basins". See No. 8466 of this list.
8475. RAMIREZ, J. E., S.J., "La sismologia investiga el interior de la tierra", *Revista de la Academia Colombiana de Ciencias Exactas Fisica y Naturales*, Vol. 9, Nos. 33 and 34, 32-36, 5 fig., Bogota, May, 1953.
8476. REICH, Hermann, Von, "Über reflektierte Refraktionsimpulse", *Geol. Jahrb.*, Band 67, 135-142, 9 fig, bib., Hannover, Oct., 1952.
8477. RESEARCH GROUP FOR EXPLOSION SEISMOLOGY, TOKYO, "Observation sismique par explosion d'Isibuti", (Japanese with summary in French), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 3, No. 2, page 37, Tokyo, 1950.
8478. RESEARCH GROUP FOR EXPLOSION SEISMOLOGY, "The Third Explosion Seismic Observations in the North-eastern Japan", *Bulletin, Earthquake Research Institute*, Vol. 31, Part 4, 281-290, 9 fig., Tokyo, Dec., 1953.
8479. RICHARDS, T. C., "European Association of Exploration Geophysicists: Paris Meeting", (seven papers on seismic methods were read), *Nature*, No. 4370, Vol. 172, 189-191, London, Aug. 1, 1953.
8480. RICHTER, C. F., "Kern County Aftershocks: Progress Report", (abstract), *Bulletin, Geological Society of America*, Vol. 64, No. 12, Part 2, page 1526, Dec., 1953.
- RICHTER, C. F., BENIOFF, Hugo, and GUTENBERG, Beno, "Progress Report, Seismological Laboratory, California Institute of Technology, 1952". See No. 8313 of this list.
8481. RICKER, Norman, "Wavelet Contraction, Wavelet Expansion, and the Control of Seismic Resolution", *Geophysics*, Vol. 18, No. 4, 769-792, 24 fig., Menasha, Oct., 1953.
8482. RIKITAKE, T., "The Transmission of Tsunami-waves in a Sea of which Depth Varies Linearly", (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 2, No. 1, 10-12, Tokyo, 1949.
8483. RITSEMA, A. R., "Some New Data about Earthquake Movements at Great Depth in the Indonesia Archipelago", *Indonesian Journal for Natural Science*, Nos. 1-3, Bandung, Jan.-June, 1953.
8484. ROBERTS, E. B., and ULRICH, F. P., "Seismological Activities of the U.S. Coast and Geodetic Survey in 1951", *Bulletin, Seismological Society of America*, Vol. 43, No. 3, 255-268, 4 fig., 2 tab., Berkeley, July, 1953.
- ROBINSON, E. A., BRYAN, J. G., HURLEY, P. M., and WADSWORTH, G. P., "Determination of Reflections on Seismic Records by Linear Operators". See No. 8539 of this list.

8485. ROCKWELL, D. W., "The Geologic Significance of Seismic Data in the Golden Lane-Poza Rica Area", *Bulletin, Mexico Association of Petroleum Geology*, Vol. 4, Nos. 7-8, 283-296, Mexico, July, 1952.
8486. ROTHÉ, J. P., "Sondages séismiques au Groenland", *Annales de Géophysique*, Tome 9, No. 4, page 329, Paris, Oct.-Dec., 1953.
8487. RÜEGG, Werner, "Rasgos geologicos y geomorfologicos de la depresión del ucayali y Amazonas Superior", *Revista de la Asociación Geologica Argentina*, Tomo 7, No. 2, 106-124, 2 fig., bib., Buenos Aires, 1952.
8488. RÜEGG, Werner, "The Camana Formation and its Bearing on the Andean Post-orogenic Uplift", *Bull. Ass. Suisse des Géol. et Ing. du Pétrole*, Vol. 19, No. 57, 7-12, 2 fig., bib., Zürich, Dec., 1952.
8489. SAKUMA, S., "Elastic and Viscous Properties of Volcanic Rocks at High Temperatures. Part 3. Oosima lava", *Bulletin, Earthquake Research Institute*, Vol. 31, Part 4, 290-303, 9 fig., 2 tab., Tokyo, Dec., 1953.
8490. SANO, S., "Crustal Deformation Associated with Oga Earthquake, 1939", (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 1, No. 2, 50-51, Tokyo, 1948.
8491. SANO, S., "Levelling Survey along the Northern Coast of Bay of Ise", (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 5, No. 1, 23-27, Tokyo, 1952.
- SANO, S., and KATAOKA, A., "Ground Vibration Caused by Reciprocating Motion of the Piston of Air Compressor", See No. 8415 of this list.
8492. SATO, Y., "Direction of Earthquake-sound", (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 1, No. 1, 4-7, Tokyo, 1948.
8493. SATO, Y., "Velocity of Elastic Waves Propagated in Media with Small Obstacles", *Bulletin, Earthquake Research Institute, Tokyo University*, Vol. 31, Part 1, 1-18, 3 fig., Tokyo, March, 1953.
8494. SATO, Y., "Study of Surface Waves VIII. Nomogram for the Phase Velocity of Love-waves and Maximum Thickness of the Surface Layer", *Bulletin, Earthquake Research Institute, Tokyo University*, Vol. 31, Part 2, 81-87, 3 fig., 2 tab., Tokyo, June, 1953.
8495. SATO, Y., "Study on Surface Waves IX. Nomogram for the Group Velocity of Love-waves", *Bulletin, Earthquake Research Institute, Tokyo University*, Vol. 31, Part 4, 254-260, 1 fig., 1 tab., Tokyo, Dec., 1953.
8496. SCHEIDEGGER, Adrian E., "Orogenese", *Leben und Umwelt*, Vol. 9, 258-262, 3 fig., Aarau, 1953.
8497. SCHEIDEGGER, Adrian E., "On Some Physical Aspects of the Theory of the Origin of Mountain Belts and Island Arcs", *Canadian Journal of Physics*, Vol. 31, No. 7, 1148-1155, 8 fig., bib., Ottawa, Nov., 1953.

8498. SCHNEIDER-RIQUELME, Oscar, "Nomogram for Computation of Exact Values of Normal Move-out Times", *Geophysics*, Vol. 18, No. 4, 824-826, 1 fig., bib., Menasha, Oct., 1953.
8499. SCHWARSBACH, M., "Erdbebenchronik für das Rheinland 1950-51 and Mitteilung über die Errichtung eines Erdbebenbeobachtungsdienstes des nordlichen Rheinlande", *Decheniana Geol., I Köln*, Vol. 105-106, 49-50, 1951-1952. Trans. A.G.U.
8500. SCIENCE NEWS LETTER, Articles of interest to seismologists have appeared in various issues of Vol. 64, of this periodical (Washington 1953), as follows:
- (1) "Pulsating Crystal Reveals Earth's Secrets", No. 2, page 28, July 11.
  - (2) "Aftershocks Come When Earth Creeps Back", No. 9, page 137, Aug. 29.
  - (3) "Earth's Iron Heart Both Molten and Solid", No. 9, page 139, Aug. 29.
  - (4) "Spot Weather Changes", No. 9, page 143, Aug. 29.
8501. SEKI, A., and HOMMA, S., "A Relation between the Area of Aftershock Region and the Radius of Sensibility Circle", (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 2, No. 2, 37-40, Tokyo, 1949.
- SEKI, A., and HOMMA, S., "A Relation between the Area of Aftershock Region and the Radius of Sensibility Circle (continued)". See No. 8384 of this list.
- SENGBUSH, Raymond L., DOBRIN, Milton B., and LAWRENCE, Philip, L., "Unusual Rayleigh Waves from Explosions", (abstract). See No. 8337 of this list.
8502. SHAWINIGAN JOURNAL. An Article of interest to seismologists entitled "Earthquake in 1663" (near Trois-Rivières, Quebec, Canada), appeared in the above journal, Vol. 10, No. 6, page 21, Montreal, Nov.-Dec., 1953.
8503. SHIMAZU, Y., "Density Distribution and Concentration of Heavy Materials within the Earth". (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 4, No. 1, 1-8, Tokyo, 1951.
8504. SHIMAZU, Y., "Propagation of Elastic Waves in a Medium under Finite Initial Strains", (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 5, No. 2, 1-10, Tokyo, 1952.
8505. SHOR, G. G., Jr., "Travel Times of Reflected Phases in Southern California Earthquakes", (abstract), *Bulletin, Geological Society of America*, Vol. 64, No. 12, Part 2, page 1527, Dec., 1953.
- SMITH, George I., and ALLEN, Clarence R., "Seismic and Gravity Investigations on the Malaspina Glacier, Alaska". See No. 8303 of this list.
8506. SPADEA, M. C., "Studio preliminare sulle oscillazioni libere del lago di Idro", *Annali di Geofisica*, Vol. 6, No. 1, 5 fig., 2 tab., Rome, Jan., 1953.
- SPADEA, M. C., and CALOI, P., "Le sesse del lago di Garda. Part IV". See No. 8327 of this list.

- ST. AMAND, Pierre, and BUWALDA, John P., "Arvin-Tehachapi and Bakersfield Earthquakes of July-August, 1952. See No. 8325 of this list.
- SUZUKI, M., FURUKAWA, E., KOTAKI, T., TAKAHASHI, K., and NISHIMURA, G., "A New-designed Prospecting Apparatus". See No. 8459 of this list.
- SUZUKI, T., and KANAI, K., "Relation between the Property of Building Vibration and the Nature of Ground. (Observation of Earthquake Motion at Actual Buildings)". See No. 8409 of this list.
- SUZUKI, T., KANAI, K., and TANAKA, T., "Relation between the Earthquake Damage and the Nature of the Ground". See No. 8410 of this list.
8507. SUZUKI, Ziro, "On the Frequency Response of the Seismometer with Air Damper", (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 5, No. 4, 46-51, Tokyo, 1952.
- SUZUKI, Z., and ASADA, T., "Unknown Phases in Earthquake Motions of Very Near Shocks". See No. 8305 of this list.
8508. SUZUKI, Z., and NAKAMURA, K., "On the Heights of the Tsunami on March 4, 1952, in the District near Erimomisaki", *Science Reports of the Tohoku University, Geophysics*, Vol. 4, No. 3, 193-142, 2 fig., 1 tab., 6 pl., bib., Sendai, March, 1953.
8509. SUZUKI, Z., NORITOMI, K., OSSAKA, J., and TAKAGI, A., "On the Tsunami in Sanriku District Accompanying the Tokachi Earthquake, March 4, 1952", *Science Reports of the Tohoku University, Geophysics*, Vol. 4, No. 3, 134-138, 5 fig., 1 tab., 6 pl., Sendai, March, 1953.
- SUZUKI, Z., TOMODA, Y., and ASADA, T., "On Energy and Frequency of Earthquakes". See No. 8306 of this list.
- SWALLOW, J. C., and GASKELL, T. F., "Seismic Refraction Experiments in the Indian Ocean and in the Mediterranean Sea". See No. 8355 of this list.
8510. TABUTEAU, François, and BEAUFILS, Y., "Travaux séismologiques de la première expédition en Terre Adélie (1950)", *Annales de Géophysique*, Tome 9, No. 3, 277-279, 2 fig., 1 tab., Paris, July-Sept., 1953.
8511. TAJIME, K., "A Simple Method for Measuring the Voltage-sensitivity of an Electro-magnetic Transducer" (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 3, No. 2, 26-30, Tokyo, 1950.
8512. TAJIME, K., "Improvements of the Equipments for Acquiring the Uniform Rotation by Self-Maintained Vibration", (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 4, No. 1, page 23, Tokyo, 1951.
- TAKAGI, A., and KATO, Y., "Further Note on the Investigation of the Changes in the Earth's Magnetic Field Accompanying Earthquake or Volcanic Eruption". See No. 8417 of this list.

- TAKAGI, A., KATO, Y., NORITOMI, K., and OSSAKA, J., "Report of Tsunami in Shizugawa Harbour Accompanying Tokachi Earthquake on March 4, 1952". See No. 8416 of this list.
- TAKAGI, A., SUZUKI, Z., NORITOMI, K., and OSSAKA, J., "On the Tsunami in Sanriku District Accompanying the Tokachi Earthquake, March 4, 1952". See No. 8509 of this list.
- TAKAHASHI, K., NISHIMURA, G., SUZUKI, M., FURUKAWA, E., and KOTAKI, T., "A New-designed Prospecting Apparatus". See No. 8459 of this list.
- TAKAKU, K., and NOMURA, Y., "On the Propagation of Elastic Waves in an Inhomogeneous Sphere, Part II". See No. 8462 of this list.
8513. TAKATA, N., "On the Strain and Criterion for Earthquake-proof of Wooden Houses", (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 2, No. 1, 5-9, Tokyo, 1949.
8514. TAKEYAMA, K., "Seismic Factors for Structural Design of Buildings in Japan", (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 4, No. 1, 17-22, Tokyo, 1951.
8515. TAMS, E., "Über den seismophysikalischen Nachweis des Bruchcharakters der randständigen Tiefseerinnen und die globale Verkoppelung von Grossbeben nach H. Benioff", *Gerlands Beiträge zur Geophysik*, Band 63, Heft 3, 241-249, bib., Leipzig, 1953.
8516. TANABASHI, Ryo, and ISHIZAKI Hatsuo, "Earthquake Damages and Elastic Properties of the Ground", *Disaster Prevention Research Institute, Kyoto University, Bulletin* No. 4, 70 pages, 54 fig., 13 tab., Kyoto, May, 1953.
8517. TANAKA, T., and KANAI, K., "A Smoked-paper Recorder for High Sensitive Seismometer", (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 5, No. 3, page 43, Tokyo, 1952.
- TANAKA, T., SUZUKI, T., and KANAI, K., "Relation between the Earthquake Damage and the Nature of the Ground". See No. 8410 of this list.
- TAPPER, Mary L., and WILLIAMS, J. Stewart, "Earthquake History of Utah, 1850-1949". See No. 8541 of this list.
8518. TILLOTSON, Ernest, "Earthquake Swarm in the Ionian Sea", *Nature*, No. 4373, Vol. 172, 332-333, 1 map, London, Aug. 22, 1953.
8519. TILLOTSON, Ernest, "The Constitution of the Earth to a Depth of 750 Kilometres", *Occasional Notes, Royal Astronomical Society of London*, Vol. 3, No. 15, 14-27, 3 fig., 3 tab., London, October, 1953.
8520. TOLSTOY, Ivan, and USDIN, Eugene, "Dispersive Properties of Stratified Elastic and Liquid Media: A Ray Theory", *Geophysics*, Vol. 18, No. 4, 844-870, 12 fig., bib. Menasha, Oct., 1953.



8521. TOMODA, Y., "On the Space Distribution Law of Earthquake Epicentre", (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 5, No. 1, 1-6, Tokyo, 1952.
8522. TOMODA, Y., "A Simple Starter for Recording Earthquake Motion", (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 5, No. 1, page 28, Tokyo, 1952.
8523. TOMODA, Y., and AKI, K., "Frequency Analysis of Local Tremors of the Ground by Means of a Magnetic Microseismic Spectrometer", (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 5, No. 3, 17-22, Tokyo, 1952.
8524. TOMODA, Y., and AKI, K., "Magnetic Recording Seismometer by means of Moving Magnet", (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 5, No. 4, 13-16, Tokyo, 1952.
8525. TOMODA, Y., and AKI, K., "Magnetic Recording Seismometer by Means of Moving Magnet", (in Japanese with abstract in English), *Geophysical Notes of the Geophysical Institute, Tokyo University*, Vol. 6, No. 1, 132-135, 7 fig., Tokyo, Sept., 1953.
- TOMODA, Y., ASADA, T., SUZUKI, Z., "On Energy and Frequency of Earthquakes". See No. 8306 of this list.
- TOMODA, Y., TSUBOI, C., "Optimum Number of Levers for Obtaining a Given Magnification in a Mechanical Seismometer". See No. 8528 of this list.
8526. TSUBOI, C., "Frequency Distribution of  $P$ - $S$  Duration Times in Relation to Geographic Distribution of Earthquake Origins", (Japanese with summary in English), *Zisin, Journal of The Seismological Society of Japan, Second Series*, Vol. 1, No. 1, 8-11, Tokyo, 1948.
8527. TSUBOI, C., and KOBAYASHI, N., "A Device for Preventing the Jumping of Smoke Seismograph Recording Pen", (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 5, No. 2, page 32, Tokyo, 1952.
8528. TSUBOI, C., and TOMODA, Y., "Optimum Number of Levers for Obtaining a Given Magnification in a Mechanical Seismometer", (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 4, No. 2, page 30, Tokyo, 1951.
- TSUJURA, M., and MIYAMURA, DE S., "Pri la Transdono de Temposignaloj kaj Parola Komuniko por Sisma Observado pere de la Altfrekvenca Telefonado tra la Funkciaanta Telefon-fadeno". See No. 8447 of this list.
- ULRICH, Franklin P., and MURPHY, Leonard M., "United States Earthquakes 1948". See No. 8452 of this list.
- ULRICH, Franklin P., MURPHY, Leonard M., "United States Earthquakes 1949". See No. 8453 of this list.

- ULRICH, F. P., and ROBERTS, E. B., "Seismological Activities of the U.S. Coast and Geodetic Survey in 1951". See No. 8484 of this list.
8529. UNITED STATES COAST AND GEODETIC SURVEY. "Wave Reporting Manual for Tide Observers in the Seismic Sea Wave Warning System", Special publication No. 294, U.S. Coast and Geodetic Survey, 36 pages, Washington, 1953.
8530. UREY, Harold C., "On the Origin of Continents and Mountains", *Proceedings, National Academy of Sciences*, Vol. 39, No. 9, 933-946, 1 fig., bib., Washington, Sept., 1953.
8531. USAMI, T., "On the Effect of Ocean upon Rayleigh-waves", *Geophysical Notes of the Geophysical Institute of Tokyo University*, Vol. 3, No. 37, 6 pages, 4 fig., bib., Tokyo, 1950.
8532. USAMI, T., "Reflection and Refraction of *SH* waves incident upon a Highspeed Layer", (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 5, No. 3, 3-8, Tokyo, 1952.
- USDIN, Eugene, and TOLSTOY, Ivan, "Dispersive Properties of Stratified Elastic and Liquid Media: A Ray Theory". See No. 8520 of this list.
8533. VALLE, P. E., "Sulle proprietà elastiche del mantello interno della Terra", *Annali di Geofisica*, Vol. 6, No. 3, 373-380, 2 fig., 2 tab., bib., Rome, July, 1953.
8534. VANEK, Jiri, "A Contribution to the Theory of Elastic Waves Produced by Shock", *Czechosl. Journ. Phys.*, Vol. 3, 97-119, 18 fig., bib., Praha-Stresovice, 1953.
8535. VAN MELLE, F. A., and WEATHERBURN, K. R., "Ghost Reflections Caused by Energy Initially Reflected above the Level of the Shot", *Geophysics*, Vol. 18, No. 4, 793-804, 9 fig., bib., Menasha, Oct., 1953.
8536. VERHOOGEN, J., "Elasticity of Olivine and Constitution of the Earth's Mantle", *Journal of Physical Research*, Vol. 58, No. 3, 337-346, 3 tab., Baltimore, Sept., 1953.
8537. VESTINE, E. H., "Note on Analytical Tests for Distinguishing Types of Seismic Waves", *Journal, Geophysical Research*, Vol. 58, No. 3, 401-404, bib., Baltimore, Sept., 1953.
8538. VESTINE, E. H., and FORBUSH, S. E., "Statistical Study of Waves from Blasts Recorded in the United States", *Journal, Geophysical Research*, Vol. 58, No. 3, 381-400, 10 fig. bib., Baltimore, Sept., 1953.
- VÖGTTL, K., GASSMANN, F., and WEBER, M., "Über Longitudinalschwingungen von Gesteinsstäben". See No. 8358 of this list.
- VÖGTTL, K., GASSMANN, F., and WEBER, M., "Beitrag zur Ermittlung der innern Dämpfung (Werkstoffdämpfung) von Gesteinsstäben". See No. 8359 of this list.
8539. WADSWORTH, G. P., ROBINSON, E. A., BRYAN, J. G., and HURLEY, P. M., "Detection of Reflections on Seismic Records by Linear Operators", *Geophysics*, Vol. 18, No. 3, 539-586, 21 fig., 4 tab., bib., Menasha, July, 1953.
- WEATHERBURN, K. R., and VAN MELLE, F. A., "Ghost Reflections Caused by Energy Initially Reflected above the Level of the Shot". See No. 8535 of this list.

- WEBER, M., VÖGTLI, K., and GASSMANN, F., "Über Longitudinalschwingungen von Gesteinsstäben". See No. 8358 of this list.
- WEBER, M., VÖGTLI, K., and GASSMANN, F., "Beitrag zur Ermittlung der innern Dämpfung (Werkstoffdämpfung) von Gesteinsstäben". See No. 8359 of this list.
8540. WENTWORTH, Chester K., "Destruction of Water Tanks During the Kona Earthquake of August 21, 1951", *Volcano Letter*, No. 514, 1-3, 1 fig., Hawaii, Oct.-Dec., 1951.
8541. WILLIAMS, J. Stewart, and TAPPER, Mary L., "Earthquake History of Utah, 1850-1949", *Bulletin, Seismological Society of America*, Vol. 43, No. 3, 191-218, 2 tab., Berkeley, July, 1953.
8542. WOOLLARD, George P., "Progress Report on Seismic Studies in the Southern Half of the Atlantic Coastal Plain", *Univ. of Wisconsin, Dept. of Geol.*, 6 pages, June 1, 1953.
8543. YOSHIDA, KOZO, KAJIURA, Kinjiro, and MIYOSHI, Hisashi, "On the Tsunami of March 4, 1952", *Geophysical Notes of the Geophysical Institute, Tokyo University*, Vol. 6 No. 1, 99-104, 4 fig., bib., Tokyo, Sept., 1953.
- YOSHIOKA, H., KISHINOUE, F., and IKEGAMI, R., "An Apparatus for Examination of Seismograms". See No. 8420 of this list.
8544. YOSHIYAMA, R., "On the Nankaido Earthquake and One of its After-shocks", (Japanese with summary in English), *Zisin, Journal of the Seismological Society of Japan, Second Series*, Vol. 3, No. 1, 22-26, Tokyo, 1950).
- YOSHIZAWA, S., and KANAI, K., "Relation between the Amplitude of Earthquake Motions and the Nature of Surface Layer, III". See No. 8411 of this list.
- YOSHIZAWA, S., KANAI, K., and OSADA, K., "The Relation between the Amplitude and the Period of Earthquake Motion". See No. 8407 of this list.
- YOSHIZAWA, S., KANAI, K., and OSADA, K., "Observational Study of Earthquake Motion in the Depth of the Ground IV. (Relation between the Amplitude at Ground Surface and the Period)". See No. 8408 of this list.
8545. ZERBE, W. B., "The Seismic Sea Wave Warning System", *The Journal, Coast and Geodetic Survey, U.S. Department of Commerce*, No. 5, 132-133, 1 fig., Washington, June, 1953.
8546. ZERBE, W. B., "The Tsunami of November 4, 1952 as Recorded at Tide Stations", United States Government Printing Office, 62 pages. Price \$0.35, Washington 1953.

## ERRATA

The following are corrected versions of portions of Vol. XIV, No. 13, of the *Bibliography*:

8281. SUZUKI, Ziro, "On S Waves", (in Japanese), *Seismol. Soc. Japan Jour.*, Vol. 3, No. 1, 7-10, 1950.
8283. TAKAGI, S., "Distribution of Initial Motions of the Great Kwanto Earthquake", (in Japanese), *Seismol. Soc. Japan Jour.*, Vol. 3, No. 1, 27-31, 1950.

## LIST OF COLLABORATORS

The initials appended to various items throughout the *Bibliography* indicate, in each case, the contribution by the respective collaborator.

STEENHUIS, J. F., Haarlem, Kleverparkstraat 16, The Netherlands.

J.F.S.

TRANSACTIONS AMERICAN GEOPHYSICAL UNION, Washington, U.S.A.

Trans. A.G.U.

## SUBJECT INDEX FOR THE YEAR 1953

The following subject index for the items listed in the *Bibliography of Seismology* for the year 1953 has been prepared in the same form as that for the items listed in 1952 (see pp. 252-255, Vol. XIV, No. 12, of these *Publications*), and may be considered a continuation of that index.

- A1. Aids to Seismological Study: Nos. 8139, 8187, 8222, 8245, 8315, 8334, 8498.  
See also M1. (Maps).
- A2. Air, Sound vibrations in; Pressure of: No. 8154.
- C1. Catalogues of Earthquakes, Lists of Aftershocks, etc.: Nos. 8129, 8130, 8141, 8156, 8176, 8177, 8178, 8244, 8248, 8253, 8273, 8277, 8278, 8286, 8299, 8318, 8352, 8376, 8451, 8452, 8453, 8480, 8499.  
See also R2. (Reports).
- C3. Cosmogony; Theoretical Discussions of Similar Nature; Continental Drift, Orogeny, etc.: Nos. 8122, 8125, 8153, 8188, 8433, 8442, 8496, 8497, 8530.
- C4. Cycles, Earthquake: Nos. 8306, 8375, See also P 5. (Prediction).
- D2. Deformations, Gradual, of the Earth's Crust: Nos. 8142, 8198, 8211, 8254, 8372, 8373, 8465, 8473, 8490, 8500 (2).  
See also G1. (Geodesy) and T2. (Tides).
- D3. Descriptions, General, of Earthquakes in Canada or the United States: No. 8127, 8325, 8342, 8369, 8445.
- D4. Descriptions, General, of Earthquakes other than those in Canada or the United States: Nos. 8155, 8197, 8199, 8205, 8207, 8223, 8233, 8238, 8249, 8255, 8259, 8261, 8262, 8284, 8320, 8362, 8363, 8393, 8426, 8434, 8471, 8472, 8544.
- E1. Effects of Earthquakes, on Buildings, Ground, etc., Observed during or after the Disturbance: Nos. 8422, 8424, 8467, 8516, 8540.  
See also L1. (Landslides), and D3 and D4. (Descriptions of Earthquakes).
- E1.2 Electrical, Magnetic, or Luminous Phenomena, Nos. 8417, 8430.
- E1.3 Measurements of the Magnitude or Intensity of Earthquakes: Nos. 8123, 8189, 8190, 8193.

- E2. Engineering; Particular Applications to Seismology or of Seismology: Nos. 8114, 8341, 8409, 8410, 8513, 8514.  
See also B1. (Building Construction) and D1. (Dams).
- E3. Explosions; Studies of Wave Propagation from: Nos. 8149, 8257, 8337, 8385, 8450, 8477, 8478, 8538.  
See also S3. (Seismic Prospecting).
- F1. Foci, Depth of Earthquake: No. 8425.
- F1.1 Deep-focus Earthquakes: No. 8151.
- F2. Fault-planes and Origin Mechanisms as Suggested by Earthquake Records: Nos. 8128, 8186, 8187, 8210, 8225, 8226, 8283, 8290, 8390.
- G1. Geodesy and Surveying Applied to Seismology: Nos. 8164, 8243, 8412, 8456, 8461, 8468, 8491.
- G3. Geology of Interest to Seismologists: Nos. 8181, 8418, 8485, 8487, 8488.  
See also M1 (Maps).
- H1. Historical Studies of Seismological Interest: Nos. 8215, 8502, 8541.
- I1. Instruments; Seismographs and Accessories: Nos. 8121, 8138, 8140, 8191, 8236, 8274 (1), 8296, 8302, 8304, 8308, 8311, 8339, 8349, 8350, 8356, 8371, 8389, 8454, 8455, 8459, 8500 (1), 8507, 8511, 8512, 8515, 8517, 8522, 8523, 8524, 8525, 8527, 8528.  
See also P2.1 (Time-Keeping).
- I3. Isostasy and Gravity; Papers of Interest to Seismologists: No. 8115.
- L1. Landslides, Mudflows, Subsidences, etc.; Nos. 8202, 8247, 8388.
- M2. Materials of the Earth's Crust, Laboratory Tests of: Nos. 8268, 8489.
- M3. Mathematical Physics, as Applied to Seismological Problems: Nos. 8143, 8147, 8162, 8175, 8192, 8214, 8216, 8218, 8221, 8237, 8263, 8270, 8271, 8275, 8316, 8317, 8321, 8336, 8354, 8359, 8370, 8377, 8378, 8379, 8386, 8391, 8406, 8437, 8440, 8441, 8462, 8469, 8493, 8504, 8520, 8534.
- M4. Microseisms: Nos. 8117, 8118, 8148, 8169, 8170, 8227, 8231, 8234, 8282, 8297, 8314, 8319, 8328.
- M5. Meteorology of Interest to Seismologists: Nos. 8328, 8338, 8366, 8500 (4).
- M6. Mining, as Related to Seismology: Nos. 8116, 8167.
- M7. Model Seismology: Nos. 8132, 8463.
- O1. Obituaries: No. 8435.
- O2.1 T(s)unamis (Tidal Waves): Nos. 8276, 8381, 8416, 8448, 8482, 8508, 8509, 8529, 8543, 8545, 8546.

- O3. Organizations for Seismological Investigations; Inaugurations, Reports, New Equipment, etc.: Nos. 8289, 8361, 8364, 8400.
- O4. Origins of Earthquakes; Methods of Locating Epicentres and Results of that Work: Nos. 8133, 8301, 8492, 8501, 8521.
- P2. Physics, Experimental, As Applied to Seismological Problems: Nos. 8224, 8232, 8251, 8357, 8358, 8413, 8414, 8421, 8427, 8446.
- P2.1 Time Keeping, Chronometers, Radio Methods, etc.: Nos. 8324, 8447.
- P3. Physics of the Earth; Density, Viscosity, Rigidity, Elasticity, Temperature, etc.: Nos. 8145, 8217, 8264, 8274 (3), 8274 (4), 8287, 8322, 8394, 8395, 8431, 8443, 8444, 8500 (3), 8503, 8536.  
See also M3. (Mathematical Physics).
- P4. Popular Presentations of Various Phases of Seismology: Nos. 8309, 8365.
- P5. Prediction of Earthquakes: Nos. 8168, 8288.  
See also C4. (Cycles).
- R1. Records, Evaluation of Earthquake: Nos. 8212, 8420, 8432, 8457, 8539.  
See also T4. (Time-Distance Curves) and W1. (Wave Study).
- R2. Reports, Seismological; Regular Series: Nos. 8235, 8256, 8280, 8313, 8333, 8340, 8396, 8436, 8479, 8484, 8510.  
See also C1. (Catalogues).
- R2.1 Reviews of Various Phases of Seismology: Nos. 8309, 8329, 8384, 8449.
- R3. Rotation Period of the Earth, Variations Therein; Wandering of the Pole; Variation of Latitude: No. 8387.
- S2. Seismicity of Particular Regions: Nos. 8113, 8134, 8135, 8159, 8160, 8200, 8201, 8203, 8204, 8206, 8208, 8209, 8213, 8240, 8241, 8242, 8246, 8258, 8260, 8266, 8307, 8403, 8423, 8518.  
See also C1. (Catalogues), D3, and D4. (Descriptions of Particular Earthquakes), M1. (Maps), O4. (Origins), and R2. (Reports).
- S3. Seismic Prospecting: Nos. 8119, 8120, 8124, 8126, 8136, 8137, 8146, 8161, 8165, 8171, 8172, 8173, 8174, 8179, 8180, 8182, 8195, 8220, 8230, 8239, 8265, 8267, 8293, 8295, 8303, 8315, 8326, 8330, 8331, 8344, 8345, 8360, 8380, 8399, 8401, 8464, 8476, 8481, 8535.  
See also E3. (Explosions).
- S4. Surface Waves: Nos. 8157, 8196, 8279, 8312, 8343, 8397, 9398, 8428, 8466, 8494, 8495, 8531.
- S5. Seiches: Nos. 8327, 8335, 8506.
- T1. Textbooks; General Treatises on Seismology or Its Applications: Nos. 8152, 8228, 8294, 8474.

- T3. Tides, Earth: Nos. 8250, 8252, 8269, 8332, 8438, 8439, 8458.
- VI. Vibrations of the Ground, Buildings, etc., Caused by Non-seismic Disturbances Other Than Explosions, as Traffic, Machinery, Falling Weights, Meteors, Frost: Nos. 8114, 8166, 8274 (2), 8292, 8298, 8382, 8415.  
See also E2. (Engineering).
- W1. Waves; Studies of Earthquakes Based on Observational Data; Velocity, Paths, Nature, etc.; Nos. 8150, 8194, 8229, 8272, 8281, 8291, 8305, 8310, 8312, 8323, 8347, 8368, 8374, 8392, 8404, 8407, 8408, 8411, 8429, 8505, 8526, 8532, 8537.
- W1.2 Seismological Studies of Earth Crustal Structure: Nos. 8131, 8144, 8163, 8183, 8184, 8185, 8219, 8285, 8346, 8351, 8355, 8402, 8405, 8470, 8486, 8542.
- W1.3 Seismological Studies of Deep Structure of the Earth; Velocity-Depth Curves: Nos. 8300, 8348, 8353, 8367, 8419, 8460, 8475, 8483, 8519, 8533.