

## GLACIOLOGICAL LITERATURE

THIS is a selected list of glaciological literature on the scientific study of snow and ice and of their effects on the earth; for the literature on polar expeditions, and also on the "applied" aspects of glaciology, such as snow ploughs, readers should consult the bibliographies in each issue of the *Polar Record*. For Russian material the system of transliteration used is that agreed by the U.S. Board on Geographic Names and the Permanent Committee on Geographical Names for British Official Use in 1947. Readers can greatly assist by sending reprints of their publications to the Society, or by informing Dr. J. W. Glen of publications of glaciological interest. It should be noted that the Society does not necessarily hold copies of the items in this list, and also that the Society does not possess facilities for microfilming or photocopying.

### GENERAL GLACIOLOGY

- [ANTARCTIC REGIONS: GLACIOLOGY.] U.S. Antarctic activities: long-range projection, 1965–70. Part 1. Scientific plans. *Antarctic Journal of the U.S.*, Vol. 1, No. 3, 1966, p. 79–83. [Including the major future glaciological programmes.]
- MILLER, M. M., and PROUTY, C. E. A field institute concept in the glaciological sciences. *Proceedings of the 16th Alaskan Science Conference, College, Alaska, August 29–September 1, 1965*, 1966, p. 97–103. [Description of Summer Institute of Glaciological Sciences, its activities, aims and achievements.]
- [SOVIET CENTRAL ASIA: GLACIOLOGY.] *Akademija Nauk Kazakhskoy SSR. Sektor Fizicheskoy Geografii. Glyatsiologicheskiye issledovaniya v Kazakhstane* [Academy of Sciences of the Kazakh S.S.R. Sector of Physical Geography. Glaciological investigations in Kazakhstan]. Vyp. 6. Alma-Ata, Izdatel'stvo "Nauka" Kazakhskoy SSR [Publishing House "Nauka" of the Kazakh S.S.R.], 1966, 140 p. [Continuation of five volumes published 1961–65. Contains the following papers, all in Russian with English summaries: P. A. Cherkasov, "Main features of recent glaciation of the Dzhungar Alatau eastern part", p. 5–28; P. A. Cherkasov and N. V. Yerasov, "Recent glaciation of the Rgaty river basin in the Dzhungar Alatau range", p. 29–49; P. A. Cherkasov and V. A. Zenkova, "Glacial ablation of the basin Aganakty Tentek in the Dzhungar Alatau range", p. 50–68; K. Sh. Diyarova and L. P. Koneva, "Weather and radiation conditions in the Dzhungar Alatau range glacial zone", p. 69–81; K. G. Makarevich, "Static [i.e. mass] balance of some small glaciers in the Zailiysky Alatau", p. 82–92; N. N. Pal'gov, "Characteristics of some interconnections in the hydrological regime of one of the central Tuyuksu glacier[s]", p. 93–111; L. N. Filatova, "On influence of versant altitude and orientation on the time of snow cover deposition (by the example of the Malaya Almatinka river basin)", p. 112–22; I. S. Sosedov and I. V. Severskiy, "Influence of avalanches on run-off formation in the Zailiysky Alatau midmountain zone", p. 123–32; T. Ya. Denisova, "Accumulated radiation in the Zailiysky Alatau range Alpine zone", p. 133–39.]
- WHITMORE, G. D., and SOUTHERD, R. B. Topographic mapping in Antarctica by the U.S. Geological Survey. *Antarctic Journal of the U.S.*, Vol. 1, No. 2, 1966, p. 40–50.

### GLACIOLOGICAL INSTRUMENTS AND METHODS

- ANDERSON, E. Computer model for forecasting runoff from melting snow. *Proceedings of the Eastern Snow Conference*, 22nd annual meeting, 1965, p. 50–70. [Reports method and results.]
- [CONFERENCES.] Symposium on the heat exchange at snow and ice surfaces, 26 October 1962. *Canada. National Research Council. Associate Committee on Soil and Snow Mechanics. Technical Memorandum No. 78*, 1963, ii, 82 p. [Papers on energy exchange and instruments for measuring it.]
- LAMBERT, G., and others. Corrélations entre le dépôt de plomb  $^{210}$  dans l'Antarctique et l'activité solaire, par G. Lambert, M. Nezami et J. Labeyrie. *Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences* (Paris), Tom. 260, No. 2, 1965, p. 619–22. [Found that concentration of  $^{210}\text{Pb}$  in Antarctic snow passes through maximum after each period of maximum solar activity.]
- WINSTON, W. A comprehensive procedure for evaluating snow ablation. *Proceedings of the Eastern Snow Conference*, 22nd annual meeting, 1965, p. 71–113. [Empirical method for evaluating ablation from meteorological data.]

### PHYSICS OF ICE

- BRIVATI, J. A., and others. Electron spin resonance studies of the hydroxyl radical in  $\gamma$ -irradiated ice, by J. A. Brivati, M. C. R. Symons, D. J. A. Tilling, H. W. Wardale, and D. O. Williams. *Chemical Communications*, 1965, No. 17, p. 402–03. [Results and brief interpretation.]
- COULSON, C. A., and EISENBERG, D. Interactions of  $\text{H}_2\text{O}$  molecules in ice. I. The dipole moment of an  $\text{H}_2\text{O}$  molecule in ice.—II. Interaction energies of  $\text{H}_2\text{O}$  molecules in ice. *Proceedings of the Royal Society, Ser. A*. Vol. 291, No. 1427, 1965, p. 445–53; p. 454–59. [I: calculation of field arising from 85 nearest neighbours and hence of dipole moment of molecule itself. II: calculation for hexagonal and cubic ice.]
- DIBDIN, G. H. New structure in the electron spin resonance spectrum of  $\gamma$ -irradiated single crystals of ice. *Nature*, Vol. 209, No. 5021, 1966, p. 394–95. [Letter. Results at 77° K. interpreted as evidence that  $\text{OH}^-$  ion defects in ice are on normal oxygen sites.]
- EVANS, L. F. Ice nucleation by proteins and surface films. *Nature*, Vol. 211, No. 5046, 1966, p. 281–82. [Pepsin, egg albumen, and a whole range of long-chain films do not promote ice nucleation.]
- KAMB, W. B. Overlap interaction of water molecules. *Journal of Chemical Physics*, Vol. 43, No. 11, 1965, p. 3917–24. [Calculations and comparison with properties of ice VII and ice II. Discussion of stability of ice VII at very high pressures.]

- KNIGHT, C. A., and KNIGHT, N. C. "Negative" crystals in ice: a method for growth. *Science*, Vol. 150, No. 3705, 1965, p. 1819-21. [Made by inserting hypodermic needle and connecting to vacuum. Study of habit as function of temperature and growth rate.]
- LAVROV, V. V. K probleme mekhanicheskikh svoystv l'da [The problem of the mechanical properties of ice]. *Problemy Arktiki i Antarktiki [Problems of the Arctic and Antarctic]*, Vyp. 21, 1965, p. 60-65. [Ways to avoid difficulties arising from scaling up of results obtained from small samples.]
- MACKLIN, W. C., and RYAN, B. F. Habits of ice grown in supercooled water and aqueous solutions. *Philosophical Magazine*, Eighth Ser., Vol. 14, No. 130, 1966, p. 847-60. [Observations of deviations from basal plane in the growth of dendrites with increasing supercooling. Explanation proposed.]
- MONTEFINALE, A. C., and PAPÉE, H. Nucleation of ice by some porous particles. *Zeitschrift für angewandte Mathematik und Physik*, Vol. 16, Fasc. 6, 1965, p. 740-45. [Effect of absorbed water and of desorption of gas on nucleating properties of kaolin, silica gel and alumina.]
- MUGURUMA, J. Pairs of spiral etch pits in ice crystals. *Nature*, Vol. 208, No. 5006, 1965, p. 180-81. [Letter. Observation of phenomenon when etching (0001) surface and two possible explanations.]
- MUGURUMA, J., and others. Void formation by non-basal glide in ice single crystals, by J. Muguruma, S. Mae and A. Higashi. *Philosophical Magazine*, Eighth Ser., Vol. 13, No. 123, 1966, p. 625-29. [Results of tensile tests of ice crystals with tensile axis perpendicular to c-axis.]
- VALI, G., and STANSBURY, E. J. Time-dependent characteristics of the heterogeneous nucleation of ice. *Canadian Journal of Physics*, Vol. 44, No. 3, 1966, p. 477-502. [Study of nucleation of drops as function of temperature and time and interpretation.]
- VONNEGUT, B., and LATHAM, J. Electrification of frost deposits. *Quarterly Journal of the Royal Meteorological Society*, Vol. 91, No. 389, 1965, p. 369-74. [Letters. Question from Vonnegut concerning Latham's statement (*ibid.*, Vol. 90, No. 386, 1964, p. 486) that there is no evidence that convective processes could generate sufficient charge to explain thunderstorms and reply by Latham.]
- WYLLIE, G. Kinetic theory and transport in ice and water. (In Fogg, G. E., ed. *The state and movement of water in living organisms. Symposia of the Society for Experimental Biology*, No. 19, 1965, p. 33-54.) [Review article. Includes discussion of similarities and differences between diffusion, heat transfer and electrical transport in water and ice.]

#### LAND ICE. GLACIERS. ICE SHELVES

- ASHWELL, I. Y. Drummond Glacier, Rocky Mountains in Alberta. *Annual Report. British Schools Exploring Society*, 1964-65, p. 89-90. [Account of work by Dept. of Geography, University of Alberta, on contribution of glacier melt water to flow of upper Red Deer River.]
- BRECHER, H. H. Measurements of ice surface movement by aerial triangulation. *Antarctic Journal of the U.S.*, Vol. 1, No. 4, 1966, p. 139. [Comparison with the accumulation figures from the stratigraphic studies indicated that the latter underestimated the accumulation by 4 to 28 per cent.]
- BURGOS, F. O., and others. Tareas glaciologicas en la campaña Enero-Febrero de 1964, [by] F. O. Burgos, S. M. Olivares, B. S. Ratto, D. Rossetti [and] S. Shinjo. *Instituto Nacional del Hielo Continental Patagónico. Publicación* (Buenos Aires), No. 7, 1964, p. 3-13.
- DOLGUSHIN, L. D. *Regional'nyye problemy oledeneniya po issledovaniyam na Urale, v Tsentral'noy Azii i Antarktide* [Regional problems of glaciation from investigations in the Urals, in Central Asia and Antarctica]. Moscow, Akademiya Nauk SSSR. Institut Geografii [Academy of Sciences of the U.S.S.R. Geographical Institute], 1963, 55 p. [Dissertation.]
- GLOZZI, J. Size-distribution analysis of microparticles in two Antarctic firn cores. *Journal of Geophysical Research*, Vol. 71, No. 8, 1966, p. 1993-98. [Variation with depth described and analysed.]
- GOW, A. J. Glaciological studies in Antarctica. *Antarctic Journal of the U.S.*, Vol. 1, No. 4, 1966, p. 140. [Brief report.]
- HAMILTON, W. L., and BULL, C. [B. B.] A comparison of the dust flux in the upper atmosphere and on the polar ice sheets. *Journal of Geophysical Research*, Vol. 71, No. 10, 1966, p. 2679-83. [Letter. Particles in ice cores show concentration that suggests most of upper atmosphere flux arrives at surface.]
- [ICELAND: ICE CAPS.] Vatnajökull—the biggest glacier in Europe. *Iceland Review*, Vol. 3, No. 3, 1965, p. 24-29.
- IZRAEL', YU. A., and others. O soderzhanii tritiya v lednikakh [On the tritium content of glaciers]. [By] Yu. A. Izrael', V. N. Kolesnikova, V. V. Romanov [and] V. N. Soyfer. *Doklady Akademii Nauk SSSR* [Reports of the Academy of Sciences of the U.S.S.R.], Tom 156, No. 1, 1964, p. 72-73. [Results of tritium sampling on Lednik Fedchenko.]
- KEHLE, R. O. Deformation of the Ross Ice Shelf, Antarctica. *Geological Society of America. Bulletin*, Vol. 75, No. 4, 1964, p. 259-86. [Study of structural features of Camp Michigan area on north-east margin of Ross Ice Shelf. Attempt made to extend data obtained from ice to study of rock faults.]
- KENNEDY, P. Reconnaissance gravity and magnetic surveys of part of the Larsen Ice Shelf and adjacent mainland. *British Antarctic Survey Bulletin*, No. 8, 1966, p. 49-62. [Results give the sub-ice topography of much of the east coast of Graham Land.]
- LARSSON, R. A. Notes on ice-velocity data from observations on Mikkaglaciären, 1895-1962. *Geografiska Annaler*, Vol. 48A, No. 1, 1966, p. 40-42. [Ice-movement observations from 1895 to 1962, especially from the aspect of decrease in velocity. Different methods used for point-marking are examined and a new method is described.]
- LIESTØL, O. Bremålinger i Norge 1964. *Norsk Polarinstitutt. Årbok*, 1964 [pub. 1966], p. 155-64. [Regime measurements on nine glaciers in Norway in 1964; detailed data on Storbreen and Hardangerjøkulen. Ice front fluctuations for 13 glaciers. English summary.]
- LLIBOUTRY, L. Bottom temperatures and basal low-velocity layer in an ice sheet. *Journal of Geophysical Research*, Vol. 71, No. 10, 1966, p. 2535-43. [Suggestion that layer of low seismic wave velocity found in Antarctica may consist of temperate pure ice, not cold ice with morainal material.]

- MAGNANI, M. Über mexikanische Gletscher. *Polarforschung*, Bd. 5, Jahrg. 34, Ht. 1–2, 1964 [pub. 1965] p. 275–78. [Discussion of present glaciers in Mexico and their extension in the Pleistocene.]
- MAKSIMOV, YE. V. Oledeneniye basseynov severnoy i yuzhnay Shamsi v Kirgizskom Alatau [Glacierization of northern and southern Shamsi basin in Kirgizskiy Alatau]. *Izvestiya Vsesoyuznogo Geograficheskogo Obschestva [News of the All-Union Geographical Society]*, Tom 95, Vyp. 5, 1963, p. 420–29. [General description of 29 glaciers in this region.]
- OELSNER, C. Ergebnisse von Gravimetermessungen im Kingsbay-Gebiet (Westspitzbergen). *Petermanns Geographische Mitteilungen*, Jahrg. 110, 2. Quartalsht., 1966, p. 111–16. [Gravimetric measurements for the determination of ice thickness carried out on glaciers in Kongsfjorden, Westspitzbergen. Ice thicknesses of more than 200 m. were recorded.]
- PICCIOTTO, E. E., and KANE, H. S. Glaciological studies on the South Pole–Queen Maud Land traverse. II. *Antarctic Journal of the U.S.*, Vol. 1, No. 4, 1966, p. 132. [Report of intensive glaciological programme.]
- PICCIOTTO, E. E., and WILGAIN, S. Radioaktivitätsmessungen zur Bestimmung der Firnrücklagen eines Alpengletschers. *Die Naturwissenschaften*, Jahrg. 52, Ht. 7, 1965, p. 154. [Connection between atomic bomb tests and the beta activity of the firn layers.]
- REED, J. C., jr. Rate of ice movement and estimated ice thickness in part of the Teton Glacier, Grand Teton National Park, Wyoming. *U.S. Geological Survey. Professional Paper* 525-B, 1965, p. 137–41.
- SCHULZE, O. Die Eisverhältnisse an der Prawda-Küste während der VI sowjetischen Antarktisexpedition 1961/1962. *Abhandlungen des Meteorologischen Dienstes der Deutschen Demokratischen Republik*, Bd. 10, Nr. 75, 1965, p. 19–35. [Ice thickness measurements obtained from Mirny station on coastal region of Davis Sea, May 1961–January 1962.]
- SCHYTT, V. Notes on glaciological activities in Kebnekaise, Sweden, during 1965. *Geografiska Annaler*, Vol. 48A, No. 1, 1966, p. 43–50. [Mass balance studies on Storglaciären, and variations of the extent of Swedish glaciers.]
- SELLEVOLL, M. A., and KLOSTER, K. Seismic measurements on the glacier Hardangerjokulen, western Norway. *Norsk Polarinstitutt. Årbok*, 1964 [pub. 1966], p. 87–91. [Field work in 1963.]
- SHIMIZU, H., and WAKAHAMA, G. Kasukaurushu hyōga (Kanada) genryūki ni okeru sekisetsu chōsa [On the firn study in the accumulation area of Kaskawulsh Glacier, Canada]. *Tēion-kagaku [Low Temperature Science]*, Ser. A, Vol. 23, 1965, p. 137–56. [Measurements of properties and dating of layers in 15 m. pit. English summary.]
- STENBORG, T. Some observations of differential ice-movements on Mikkaglaciären. *Geografiska Annaler*, Vol. 48A, No. 1, 1966, p. 32–39. [Measurements of movement vectors show a relatively large lateral component of glacier movement in the lee of a sharp bend on the eastern margin.]
- TAYLOR, L. D. Glaciological studies on the South Pole traverse, 1962–1963. *Ohio State University. Institute of Polar Studies. Report No. 17*, 1965, iv, [24] leaves. [Measurements of accumulation, temperature, density and hardness of firn at 25 stations between South Pole and Queen Maud Mountains.]
- VIVIAN, R. La catastrophe du glacier Allalin. *Revue de Géographie Alpine*, Tom. 54, Fasc. 1, 1966, p. 97–112. [Description of condition of glacier which led to portion of snout breaking away, and of measurements made subsequently.]
- VOIGT, U. Die Arbeiten der Überwinterungsgruppe der Deutschen Spitzbergen-Expedition 1964/65. *Petermanns Geographische Mitteilungen*, Jahrg. 110, 1. Quartalsht., 1966, p. 43. [Motion of glaciers, mapping of 61 glacier fronts in Kongsfjorden, meteorology, etc.]
- YABLOKOV, A. A. Aksuyskiye ledniki [The Aksu glaciers]. *Izvestiya Vsesoyuznogo Geograficheskogo Obschestva [News of the All-Union Geographical Society]*, Tom 95, Vyp. 5, 1963, p. 452–54. [General description of glaciers in Turkistan.]
- ZOTIKOV, I. A. O temperaturakh v tolshche lednikov Antarktidy [Temperatures of Antarctic glaciers]. (*In Antarktika. Doklady Komissii*, 1963 [*Antarctica. Reports of the Commission*, 1963]). Moscow, Izdatel'stvo Akademii Nauk SSSR [Publishing House of the Academy of Sciences of the U.S.S.R.], 1964, p. 61–105. [Analysis of glacier temperature due to heat conduction and ice movement in simple model.]

## ICEBERGS, SEA, RIVER AND LAKE ICE

- APOLLONIO, S. Chlorophyll in Arctic sea ice. *Arctic*, Vol. 18, No. 2, 1965, p. 118–22. [Measurements under various depths of sea ice.]
- ARNELL, S., and DUNBAR, MOIRA, comp. *A bibliography on ice in navigable waters in Canada, 1945–64. Compiled in the Defence Research Board under the auspices of the Working Group on Ice in Navigable Waters*. . . . Ottawa, National Research Council of Canada, 1964. [viii], 64 p. (N.R.C. 8503.)
- BARANOV, G. I. O fiziko-mekhanicheskikh svyostvakh morskogo antarkticheskogo l'da [Physical and mechanical properties of Antarctic sea ice]. *Informatsionnyy Byulleten' Sovetskoy Antarkticheskoy Ekspeditsii [Information Bulletin of the Soviet Antarctic Expedition]*, No. 54, 1965, p. 43–46.
- BLACK, W. A. Cartographic techniques for mapping sea ice. *Cartographer*, Vol. 2, No. 1, 1965, p. 9–13. [Methods used to present results of aerial surveys of Gulf of St. Lawrence.]
- BUKINA, L. A. O koefitsiyente teplootdachi kristallov vnutrivodnogo l'da diskobraznay formy [On the coefficient of heat emission of disk-like frazil ice crystals]. *Izvestiya Akademii Nauk SSSR. Seriya Geofizicheskaya [News of the Academy of Sciences of the U.S.S.R. Geophysical Series]*, 1963, No. 7, p. 1131–39. [Derivation of formula for heat emission coefficient from empirical data on rate of growth. English translation in *Bulletin of the Academy of Sciences of the U.S.S.R. Geophysical Series*, 1963, No. 7, p. 689–93.]
- GANTON, J. H., and MILNE, A. R. Temperature- and wind-dependent ambient noise under midwinter pack ice. *Journal of the Acoustical Society of America*, Vol. 38, No. 3, 1965, p. 406–11. [Measurement of noise reveals two sources, cracking due to thermal stresses and wind effects.]

- HARRISON, J. D. Measurement of brine droplet migration in ice. *Journal of Applied Physics*, Vol. 36, No. 12, 1965, p. 3811-15. [Observations of velocity and changes of size and shape of droplets of NaCl, KF, and KI through ice from  $-6^{\circ}$  to  $0^{\circ}$  C.]
- IZRAILEVA, N. I., and KRASIL'NIKOV, V. N. Otrazheniye izgibnykh voln torosami [Reflection of flexural waves by ice hummocks]. *Akusticheskiy Zhurnal [Acoustic Journal]*, Tom 10, No. 3, 1964, p. 301-08. [Theoretical analysis of reflection of waves by sea-ice hummocks. English translation in *Soviet Physics—Acoustics*, Vol. 10, No. 3, 1965, p. 256-61.]
- KOSLOWSKI, G. Über den Zusammenhang zwischen Grosswetterlagen und Eisbildung im Finnischen Meerbusen. *Deutsche Hydrographische Zeitschrift*, Jahrg. 17, Ht. 6, 1964, p. 273-85. [Discussion of connection between general weather situation and the growth of ice in the Gulf of Finland. English and French summaries.]
- KUZ'MIN, P. P. Issledovaniya i raschetы ledovyykh yavleniy na rekakh i vodokhranilishchakh [Studies and calculations of ice phenomena on rivers and reservoirs]. *Trudy Gosudarstvennogo Gidrologicheskogo Instituta [Transactions of the State Hydrological Institute]*, Vyp. 129, 1965, 80 p. [Aspects of behaviour of ice on inland waters.]
- LEWIS, E. L., and others. Frozen sea research, by E. L. Lewis, P. H. Bridge, R. W. Mackay, R. W. Sawler and B. Trudel. *Bedford Institute of Oceanography. Third Annual Report*, 1964, p. 6-7. [Canada. Account of work in 1964 at Bedford, N.S., Cambridge Bay, N.W.T. and Victoria, B.C.]
- LIESKE, B. J. Net radiation over fast sea ice during spring breakup at Pt. Barrow, Alaska. *Proceedings of the fifteenth Alaskan Science Conference, College, Alaska, August 31-September 4, 1964*, 1965, p. 52-60. [Importance of different factors in deterioration of sea ice.]
- LIKENS, G. E., and RAGOTZKIE, R. A. Vertical water motions in a small ice-covered lake. *Journal of Geophysical Research*, Vol. 70, No. 10, 1965, p. 2333-44. [Earlier measurements discussed theoretically.]
- MACKAY, D. K. Break-up on the Mackenzie River and its delta, 1964. *Geographical Bulletin* (Ottawa), Vol. 7, No. 2, 1965, p. 117-28. [Aerial and ground observations.]
- MAKSIMOV, I. V. O prichinakh vnezapnogo obloma shel'fovyykh lednikov Antarktidy [Causes of sudden rupture of ice shelves in Antarctica]. *Informatsionnyy Byulleten' Sovetskoy Antarkticheskoy Ekspeditsii [Information Bulletin of the Soviet Antarctic Expedition]*, No. 54, 1965, p. 29-32. [Icebergs may be calved as a result of a wave originated by a cyclone.]
- MÜLLER, W. "Seegfrörni" in Zürich. *Wetter und Leben*, Bd. 15, Ht. 5-6, 1963, p. 107-09. [Discussion of conditions in 1963 which caused the Zürcher See to freeze over for the first time since 1929.]
- OLIVER, D. R. A limnological investigation of a large Arctic lake, Nettilling Lake, Baffin Island. *Arctic*, Vol. 17, No. 2, 1964, p. 69-83. [Includes details of lake ice.]
- ONO, N. Kaihyō no netsu no seishitsu no kenkyū. I. Usu i tōhyō no netsu dendōritsu no sokutei.—II. Fukinshitsuna hyōsō no  $K/cp$  no atai o motomeru. [Thermal properties of sea ice. I. Measurements of the thermal conductivity of young winter ice.—II. A method for determining the  $K/cp$ -value of a non-homogeneous ice sheet.] *Tetra-kagaku [Low Temperature Science]*, Ser. A, Vol. 23, 1965, p. 167-76; p. 177-83. [English summaries.]
- PREDOEHL, M. C., and SPANO, A. F. Airborne albedo measurements over the Ross Sea, October–November 1962. *Monthly Weather Review*, Vol. 93, No. 11, 1965, p. 687-96. [Includes values for sea ice.]
- STEPANOV, V. N. O vozmozhnosti i tselenoobraznosti unichtozheniya arkticheskikh l'dov [On the possibility and expediency of destroying Arctic ice]. *Problemy Severa [Problems of the North]*, Vyp. 7, 1963, p. 118-22. [Discusses whether Arctic sea ice would reappear if destroyed and what effects would be. English translation: *Problems of the North*, No. 7, 1964, p. 129-33 (National Research Council of Canada).]
- SYTINSKIY, A. D., and TRIPOL'NIKOV, V. P. Nekotorye rezul'taty issledovaniy testestvennykh kolebaniy ledyanikh poley tsentral'noy Arktiki [Some results of investigations of the natural vibrations of ice fields of the central Arctic]. *Izvestiya Akademii Nauk SSSR. Seriya Geofizicheskaya [News of the Academy of Sciences of the U.S.S.R. Geophysical Series]*, 1964, No. 4, p. 615-21. [Seismological observations. Discussion of importance of various kinds of vibrations. English translation in *Bulletin of the Academy of Sciences of the U.S.S.R. Geophysical Series*, 1964, No. 4, p. 370-74.]
- TABATA, T., and FUJINO, K. Kaihyō no rikigaku no seishitsu no kenkyū. VIII [Studies of the mechanical properties of sea ice. VIII]. *Tetra-kagaku [Low Temperature Science]*, Ser. A, Vol. 23, 1965, p. 157-66. [Results of cantilever beam tests on shore-fast ice *in situ*. English summary.]
- WILLIAMS, G. P. Correlating freeze-up and break-up with weather conditions. *Canadian Geotechnical Journal*, Vol. 2, No. 4, 1965, p. 313-26. [The results of studies, and usefulness of these relationships for a small fresh-water lake.]

## GLACIAL GEOLOGY

- BENNETT, R. G. Glacial lake overflow channels, south Svartisen. *Norsk Polarinstitutt. Årbok*, 1964 [pub. 1966], p. 236-39. [Nordland, north Norway. Field work during Cambridge expeditions 1959-64.]
- CRAIG, B. G. Notes on moraines and radiocarbon dates in northwest Baffin Island, Melville Peninsula, and northeast District of Keewatin. *Canada. Geological Survey, Paper 65-20*, 1965, [iii], 7 p.
- CRANDELL, D. R., and MILLER, R. D. Post-hypsithermal glacier advances at Mount Rainier, Washington. *U.S. Geological Survey. Professional Paper 501-D*, 1964, p. D110-14. [Volcanic ash layers and tree ring data used to date advances 3500-2000 B.P.]
- DERBYSHIRE, E., and others. A glacial map of Tasmania, by E. Derbyshire, M. R. Banks, J. L. Davies and J. N. Jennings. *Royal Society of Tasmania. Special Publication No. 2*, 1965, 11 p., map. [A summary of present knowledge of the glacial features of Tasmania.]
- DORT, W., jr. Antarctic cirques and glaciated valleys. *Antarctic Journal of the U.S.*, Vol. 1, No. 4, 1966, p. 137-38. [Studies conducted at 48 different locations, and highly informative aerial observations. The purpose was for comparison with temperate region types.]

- GILLBERG, M. A statistical study of till from Sweden. *Geologiska Föreningens i Stockholm Förhandlingar*, Vol. 87, Pt. 1, No. 520, 1965, p. 84–108. [Study of particle size distribution and weight distribution. Suggests method may be useful in developing theories of transport and deposition.]
- GJESSING, J. Deglaciation of southeast and east-central south Norway. *Norsk Geografisk Tidsskrift*, Bd. 20, Ht. 5, 1965–66, [pub.] 1966, p. 133–49. [A short survey of the deglaciation, stressing the glacio-fluvial activity.]
- HOLMES, G. W., and LEWIS, C. R. Quaternary geology of the Mount Chamberlin area, Brooks Range, Alaska. *U.S. Geological Survey, Bulletin* 1201-B, 1965, 32 p. [Includes glacial deposits and frozen ground features.]
- KUC, M. Deglaciation of Treskelen-Treskelodden in Hornsund, Vestspitsbergen, as shown by vegetation. *Studia Geologica Polonica* (Warszawa), Vol. 11, 1964, p. 197–205. [Field work in 1958. Succession of plant communities during retreat of glacier 1890–1958. Polish summary.]
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