

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 *Recent Polar Literature* (supplement to 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.

CONFERENCES

- REED, J. C., and SATER, J. E., ed. *The coast and shelf of the Beaufort Sea. Proceedings of a symposium on Beaufort Sea coast and shelf research.* Arlington, Virginia, Arctic Institute of North America, 1974. 750 p. [Symposium held 7-9 January 1974 in San Francisco. Three categories of papers: air-ice-water, geology, biology. Includes: J. E. Sater, J. E. Walsh and W. I. Wittmann, "Impingement of sea ice on the north coast of Alaska", p. 85-105; A. Kovacs and M. Mellor, "Sea ice morphology and ice as a geologic agent in the southern Beaufort Sea", p. 113-61; O. H. Løken, "Discussion of paper by Mr. Kovacs and Mr. Mellor", p. 163-64; W. J. Stringer, "Morphology of the Beaufort Sea shorefast ice", p. 165-72; M. D. Coon and R. S. Pritchard, "Application of an elastic-plastic model of Arctic pack ice", p. 173-93; R. D. Nelson, "Measurements of tide- and temperature-generated stresses in shorefast sea ice", p. 195-204; H. A. Illich, G. H. Davis and W. L. Hill, "Crystal fabric variations in Arctic sea ice", p. 205-19; W. S. Dehn, "Ice forecasting in the Beaufort Sea", p. 221-31; W. E. Markham, "Discussion of paper by Mr. Dehn", p. 233-34; P. F. Cooper, Jr., "Landfast ice in the southeastern part of the Beaufort Sea", p. 235-42; L. A. LeSchack, "Potential use of satellite infrared data for ice thickness mapping", p. 243-67; V. F. Wetzel, R. K. Atwater and T. E. Huta, "Arctic ice movement and environmental data stations", p. 269-84; W. D. Hibler III, S. F. Ackley, W. K. Crowder, H. L. McKim and D. M. Anderson, "Analysis of shear zone ice deformation in the Beaufort Sea using satellite imagery", p. 285-96; E. Reimnitz and P. W. Barnes, "Sea ice as a geologic agent on the Beaufort Sea shelf of Alaska", p. 301-53; L. D. Brooks, "Ice scour on northern continental shelf of Alaska", p. 355-66; W. M. Sackinger and J. C. Rogers, "Dynamics of breakup in shorefast ice", p. 367-76; K. R. Croasdale, "Crushing strength of Arctic ice", p. 377-99; J. A. Hunter and G. D. Hobson, "Seismic refraction method of detecting subsea bottom permafrost", p. 401-16; R. I. Lewellen, "Offshore permafrost of Beaufort Sea, Alaska", p. 417-26; A. Judge, "Occurrence of offshore permafrost in northern Canada", p. 427-37; P. W. Barnes and E. Reimnitz, "Sedimentary processes on Arctic shelves off the northern coast of Alaska", p. 439-76; A. D. Short, J. M. Coleman and L. D. Wright, "Beach dynamics and nearshore morphology of the Beaufort Sea coast, Alaska", p. 477-88; H. J. Walker, "The Colville River and the Beaufort Sea: some interactions", p. 513-40; B. R. Pelletier, "Discussion of papers on geological action of sea ice, sedimentation, and sea floor morphology", p. 541-42.]

GENERAL GLACIOLOGY

- LESCA, C. La partecipazione italiana al "World inventory of perennial ice and snow masses". *Bollettino del Comitato Glaciologico Italiano*, Ser. 2, No. 22, 1974, p. 127-42. [Describes Italian activities in this International Hydrological Decade project.]
- PARRY, R. B., and WORSLEY, P. *Okstindan research project 1973. Preliminary report.* Reading, University of Reading, Dept. of Geography, 1975. xi, [81] p. [Glaciology in north Norway. Project initiated in 1968.]
- THORARINSSON, S., and others. ERTS-1 image of Vatnajökull: analysis of glaciological, structural, and volcanic features, [by] S. Thorarinsson, K. Sæmundsson, R. S. Williams, Jr. *Jökull*, År 23, 1973 [pub. 1974], p. 7-17. [Image from 31 January 1973 revealed previously unknown features partly or wholly buried under ice. Icelandic summary, p. 16-17.]
- WILLIAMS, R. S., jr., and THORARINSSON, S. ERTS-1 image of the Vatnajökull area: general comments. *Jökull*, År 23, 1973 [pub. 1974], p. 1-6. [Analysis of image from 31 January 1973. Icelandic summary, p. 5-6.]

GLACIOLOGICAL INSTRUMENTS AND METHODS

- ARMSTRONG, R. L., and others. Development of methodology for evaluation and prediction of avalanche hazard in the San Juan mountain area of southwestern Colorado, [by] R. L. Armstrong, E. R. LaChapelle, M. J. Bovis, J. D. Ives. *University of Colorado. Institute of Arctic and Alpine Research. Occasional Paper No. 13*, 1974, iii, 141 p. [Describes research carried out from August 1973 to August 1974.]
- BARTHELMEY, J. L. *Snow road construction by layered compaction—construction and maintenance guide.* Port Hueneme, California, [U.S.] Naval Construction Battalion Center. Civil Engineering Laboratory, 1975. 21 p. (Technical Report R 819.) [Describes methods recommended. Appendix gives design and performance characteristics of each piece of equipment.]
- BOGORODSKIY, V. V., and SPITSYN, V. A., ed. Radiofizicheskiye metody issledovaniy vodnykh mass, snega i l'da [Radiophysical methods of study of water masses, snow and ice]. *Trudy Arkticheskogo i Antarkticheskogo Nauchno-Issledovatel'skogo Instituta*, Tom 324, 1974, [232] p. [Articles based on research on determining magnetic, acoustic and optical characteristics of water masses, snow and ice in polar regions.]

- HARRISON, A. E. Reoccupying unmarked camera stations for geological observations. *Geology*, Vol. 2, No. 9, 1974, p. 469–71. [Method described for finding site of station, based on repeated trials until transparent plastic overlay of landmarks in original picture fitted scene to be repeated. Examples of glacier photographs shown.]
- LESICA, C. Emploi de la photogrammétrie analytique pour la détermination de la vitesse superficielle des glaciers et des profondeurs relatives. *Bollettino del Comitato Glaciologico Italiano*, Ser. 2, No. 22, 1974, p. 169–86. [Describes method of measuring surface velocity of glacier, with reference to Ghiacciaio del Miage, Mont Blanc. Depth may be calculated by Somigliana's formula.]
- LESICA, C. Méthode topographique de précision pour la détermination de la vitesse superficielle des glaciers. *Bollettino del Comitato Glaciologico Italiano*, Ser. 2, No. 22, 1974, p. 153–68. [Discusses topographic methods for measuring surface velocities of glaciers, with reference to Ghiacciaio del Miage, Mont Blanc.]
- LISSEY, A. Groundwater flow in the permafrost active layer, Inuvik, N.W.T. Project 690054. *Canada. Geological Survey. Paper 75-1*, Pt. B, 1975, p. 185–86. [Examines feasibility of measuring rate and direction of groundwater flow through permafrost using shallow piezometers installed in heavily bulldozed plot.]
- POTOCKY, G. J. *Alaskan area 15- and 30-day ice forecasting guide*. Washington, D.C., [U.S.] Naval Oceanographic Office, 1975. vi, 190 p. (Naval Oceanographic Office Special Publication 263.) [Describes procedures for preparing long-range forecasts of sea ice distribution, freeze-up and break-up in Bering, Chukchi and Beaufort seas.]

PHYSICS OF ICE

- ALBEN, R., and BOUTRON, P. Continuous random network model for amorphous solid water. *Science*, Vol. 187, No. 4175, 1975, p. 430–32. [Hand-built model constructed and used to predict X-ray and neutron scattering of amorphous ice agreeing quite well with experiment.]
- BEKE, G., and others. Investigation of supercooled water by light scattering, [by] G. Beke, G. Inzelt and L. Janszó. *Acta Chimica Academiae Scientiarum Hungaricae*, Tom. 83, Fasc. 3–4, 1974, p. 237–45. [No significant variation found from +8°C to –8°C. Relation to theory of homogeneous nucleation of ice.]
- BERG, J. O., and ROBINSON, G. W. An approach to the understanding of radiation chemistry in the condensed phase. *Chemical Physics Letters*, Vol. 34, No. 2, 1975, p. 211–15. [Theory of radiationless transitions applied to electrons in condensed phases, including ice.]
- BUXTON, G. V., and others. Pulse radiolysis of aqueous solids at 76 K. An absorption band in the infrared, by G. V. Buxton, H. A. Gillis, N. V. Klassen. *Chemical Physics Letters*, Vol. 32, No. 3, 1975, p. 533–36. [Band found in crystalline D₂O and amorphous D₂O solutions of ethylene glycol, MgCl₂ and LiCl tentatively attributed to electron captured in a D-defect.]
- CHANG, K. J. Compression of columnar-grained ice and some further aspects of brittle fracture. *Dissertation Abstracts International*, B, Vol. 35, No. 12, 1975, p. 5903-B. [Constant strain-rate tests show ice to be ideal brittle material. Crack extension problem studied. Abstract of Ph.D. thesis, University of Iowa, 1974. University Microfilms order no. 75-13734.]
- COUTURE, L., and LE PAILLIER-MALÉCOT, A. Optical absorption spectra of Nd³⁺ ions trapped in ordinary ice. *Journal of Physics C*, Vol. 8, No. 5, 1975, p. L67–72. [Results from 225 K to 2 K show ions to be in sites of axial or lower symmetry. Method could be useful to study other ice phases.]
- DEREVYANKO, A. I., and others. Dielektricheskoye povedeniye zamorozhennoy emulsii vody v vazelinovom masle, stabilizirovannoy stearatom magniya [Dielectric behaviour of frozen water emulsion in liquid paraffin oil stabilized by magnesium stearate.] [By] A. I. Derevyanko, V. S. Sperkach, I. P. Sapon, O. D. Kurilenko. *Kolloidnyy Zhurnal*, Tom 37, Vyp. 2, 1975, p. 364–66. [Measurements 10²–10⁶ Hz and > –60°C. Behaviour consistent with Maxwell–Wagner and Debye dispersions. English summary, p. 366.]
- ESTRIN, J., and others. Secondary nucleation due to fluid forces upon a polycrystalline mass of ice, [by] J. Estrin, M. L. Wang and G. R. Youngquist. *A.I.Ch.E. Journal* [American Institute of Chemical Engineers], Vol. 21, No. 2, 1975, p. 392–95. [Nuclei when jet of brine used on ice found to be ~1 μm radius. Possible origins of these nuclei discussed.]
- FARHADIEH, R. Interferometric study of the two-dimensional Bénard convection cells (rolls) and their effects on the formation of ice. *Dissertation Abstracts International*, B, Vol. 35, No. 10, 1975, p. 4911-B. [Study in distilled water and sea-water shows shape of ice–water interface is coupled with convection currents. Abstract of Ph.D. thesis, Northwestern University, 1974. University Microfilms order no. 75-7909.]
- FIRMONT, L. E., and SOMORJAI, G. A. Low-energy electron diffraction studies of molecular crystals. The surface structures of vapor-grown ice and naphthalene. *Journal of Chemical Physics*, Vol. 63, No. 2, 1975, p. 1037–38. [Observation of ice deposited epitaxially on (111) surface of a platinum crystal at 125–155 K.]
- GANGWANI, G. S., and others. Thermal-neutron transport processes in heavy water in the temperature range of 253 to 4 K, [by] G. S. Gangwani and S. P. Tewari and L. S. Kothari. *Nuclear Science and Engineering*, Vol. 57, No. 1, 1975, p. 63–74. [Calculations of neutron spectra in D₂O ice assemblies.]
- GINGLE, A., and KNASEL, T. M. Undergraduate laboratory investigation on the dielectric constant of ice. *American Journal of Physics*, Vol. 43, No. 2, 1975, p. 161–67. [Description of experiment to measure real and imaginary parts of the dielectric permittivity of ice.]
- GROSS, G. W., and others. Concentration dependent solute redistribution at the ice/water phase boundary. I. Analysis, [by] G. W. Gross, C. McKee and Chen-ho Wu. *Journal of Chemical Physics*, Vol. 62, No. 8, 1975, p. 3080–84. [Theory of distribution of impurities during freezing.]
- GROSS, G. W., and others. Concentration dependent solute redistribution at the ice/water phase boundary. II. Experimental investigation, [by] G. W. Gross, Chen-ho Wu, L. Bryant and C. McKee. *Journal of Chemical Physics*, Vol. 62, No. 8, 1975, p. 3085–92. [Results of experiments freezing solutions of HCl, HF, NH₄OH and NH₄F.]

- GURIKOV, YU. V., and others. Vozmozhnoye ob'yasneniye voznikoveniya raznosti potentsialov mezhdru rastvorom elektrolita i rastyshchim kristallom l'da [Possible explanation of the emergence of a difference in potentials between an electrolyte solution and a growing ice crystal]. [By] Yu. V. Gurikov, E. M. Savel'yeva, N. F. Bondarenko. *Zhurnal Fizicheskoy Khimii*, Tom 49, Vyp. 6, 1975, p. 1447-49. [English translation in *Russian Journal of Physical Chemistry*, Vol. 49, No. 6, 1975, p. 853-54.]
- JOHARI, G. P., and JONES, S. J. Study of the low-temperature "transition" in ice Ih by thermally stimulated depolarization measurements. *Journal of Chemical Physics*, Vol. 62, No. 10, 1975, p. 4213-23. [Measurements in H₂O and D₂O ice. Peaks interpreted and low temperature permittivity deduced. No evidence for a ferroelectric transition.]
- KELL, G. S. Completely hydrogen-bonded interpenetrating networks in low-temperature liquid water: their geometrical possibility and stability. *Chemical Physics Letters*, Vol. 30, No. 2, 1975, p. 223-26. [Discusses possibility of interpenetrating networks in liquid water and amorphous ice.]
- KLINGER, J. Thermal conductivity of ice doped with helium. *Solid State Communications*, Vol. 16, No. 7, 1975, p. 961-63. [He doping followed by de-doping reduces low-temperature thermal conductivity. Explanation discussed.]
- KOLOMEYCHUK, R. J., and others. The fragmentation and electrification of freezing drops, by R. J. Kolomeychuk, D. C. McKay and J. V. Iribarne. *Journal of the Atmospheric Sciences*, Vol. 32, No. 5, 1975, p. 974-79. [Experiments on freezing free-floating droplets.]
- LEVKOV, L. On a case of variation of AgI ice-forming activity. *Doklady Bolgarskoy Akademii Nauk*, Tom. 28, No. 4, 1975, p. 477-79. [Washed AgI particles have fewer "particular sites" for nucleation on them and so act at lower temperatures. KNO₃ added to washed AgI stimulates ice formation.]
- MAE, S. Tyndall figures at grain boundaries of pure ice. *Nature*, Vol. 257, No. 5525, 1975, p. 382-83. [Description of figures formed at grain boundary and of perturbations of shape which result.]
- MAZZACURATI, V., and NARDONE, M. Raman scattering from amorphous ice films. *Chemical Physics Letters*, Vol. 32, No. 1, 1975, p. 99-102. [Interpretation of O-H-stretching spectrum and background scattering.]
- MIDDLEMISS, K. M., and SANTRY, D. P. Intermolecular charge transfer in molecular crystals. *Journal of Chemical Physics*, Vol. 61, No. 12, 1974, p. 5400-03. [Includes calculation of molecular charge distributions in ice II.]
- MILLER, J. R. Reactions of trapped electrons by quantum mechanical tunneling observed by pulse radiolysis of an aqueous glass. *Journal of Physical Chemistry*, Vol. 79, No. 11, 1975, p. 1070-78. [Reactions observed in alkaline amorphous ice are best explained by tunnelling.]
- NASON, D., and FLETCHER, N. H. Photoemission from ice and water surfaces. Quasiliquid layer effect. *Journal of Chemical Physics*, Vol. 62, No. 11, 1975, p. 4444-49. [Results suggest a water-like phase is stable on ice surface above -160°C.]
- PEREZ, J., and others. Comportement dynamique des dislocations dans la glace, par J. Perez, J. Tatibouet, R. Vassoille et P.-F. Gobin. *Philosophical Magazine*, Eighth Ser., Vol. 31, No. 5, 1975, p. 985-99. [Theoretical model of dislocation movement in ice.]
- SPYERS-DURAN, P. The effect of repeated activation on depositional ice nuclei. *Journal of Applied Meteorology*, Vol. 14, No. 4, 1975, p. 628-29. [Statistics on sites which reactivated or did not and on new sites.]
- VENKATESH, C. G., and others. A Raman spectral study of amorphous solid water, [by] C. G. Venkatesh, S. A. Rice and J. B. Bates. *Journal of Chemical Physics*, Vol. 63, No. 3, 1975, p. 1065-71. [Measurements for H₂O, D₂O and a mixture from 30 to 120 K. Results more like water than ice. No basic structural changes in this temperature range.]
- VENKATESH, S. Laboratory studies of the friction of rubber on ice. *Tribology International*, Vol. 8, No. 2, 1975, p. 51-55.
- WANG, MAW-LING. Secondary nucleation in batch ice-brine crystallization. *Dissertation Abstracts International*, B, Vol. 35, No. 11, 1975, p. 5406-B. [Study of this phenomenon experimentally and theoretically. Abstract of Ph.D. thesis, Clarkson College of Technology, 1975. University Microfilms order no. 75-1789.]
- WENZEL, J., and others. Amorphous solid water. Neutron diffraction study, [by] J. Wenzel, C. U. Linderström-Lang, S. A. Rice. *Science*, Vol. 187, No. 4175, 1975, p. 428-30. [Structure factor of amorphous ice shows it to have a true liquid-like structure.]
- WONG, P. T. T., and WHALLEY, E. Optical spectra of orientationally disordered crystal. V. Raman spectrum of ice Ih in the range 4 000-350 cm⁻¹. *Journal of Chemical Physics*, Vol. 62, No. 6, 1975, p. 2418-25. [Results to make deductions about O-H stretching vibrations.]

LAND ICE. GLACIERS. ICE SHELVES

- [ANTARCTICA: GLACIERS.] Los glaciares: una ecuación geológica de potencia y belleza. *Antártida*, 1974, No. 4, p. 4-9. [Popular article on Antarctic glaciers.]
- BARRETT, P. J. Seawater near the head of the Ross Ice Shelf. *Nature*, Vol. 256, No. 5516, 1975, p. 390-92. [Describes newly discovered natural access to sea-water, 550 km south of shelf front and 770 km from South Pole.]
- BJÖRNSSON, H. Freezing on a rotary drill in temperate glacier ice. *Jökull*, År 23, 1973 [pub. 1974], p. 53-54. [Cause of freezing suggested and prevention discussed.]
- BOCHKAREV, A. I. Kristalloopticheskaya orientirovka lednikovogo pokrova v tsentral'noy chasti Antarktidi [Crystal orientation in the ice sheet in central Antarctica]. *Trudy Sovetskoy Antarkticheskoy Ekspeditsii*, Tom 62, 1974, p. 190-92.
- BOCHKAREV, A. I. Ob osobennostyakh formirovaniya i stroyeniya verkhnykh sloev lednikovogo pokrova v tsentral'noy chasti Antarktidi [On features of formation and structure of the upper layers of the ice sheet in central Antarctica]. *Trudy Sovetskoy Antarkticheskoy Ekspeditsii*, Tom 62, 1974, p. 199-205.

- BOCHKAREV, A. I. Sluchay konzhelyatsionnogo l'doobrazovaniya v tsentral'noy chasti Antarktity [An example of congelation ice formation in central Antarctica]. *Trudy Sovetskoy Antarkticheskoy Ekspeditsii*, Tom 62, 1974, p. 195-98. [Research at "Vostok".]
- BONDAREV, L. G. *Ledniki i tektonika* [Glaciers and tectonics]. Leningrad, Izdatel'stvo "Nauka", 1975. 132 p. [Influence of relief and climate on glaciers and forms of glacial relief.]
- BUDD, W. F., and McINNES, B. J. Modeling periodically surging glaciers. *Science*, Vol. 186, No. 4167, 1974, p. 925-27. [Numerical model developed which produces surging as characteristic for a certain accumulation and bedrock distribution. Results presented showing how magnitude of changes in length, thickness and velocity of surging glaciers can be simulated by model.]
- CIGNOLO, G. Impiego degli altimetri per i rilievi topografici in alta montagna. *Bollettino del Comitato Glaciologico Italiano*, Ser. 2, No. 22, 1974, p. 143-52. [Discusses corrections for altimeter usage in glacier surveys on high mountains.]
- COSLETT, P. H., and others. Optical levelling across an Antarctic ice shelf, by P. H. Coslett, M. Guyatt and R. H. Thomas. *British Antarctic Survey Bulletin*, No. 40, 1975, p. 55-63. [Re-levelling after interval of three years showed no significant changes in surface profile of Brunt Ice Shelf. Concluded that interval of 10 years would be required to show changes in steady state.]
- DESIO, A. Una vista al Ghiacciaio Kuthiah nel Karakorum centrale (Pakistan). *Bollettino del Comitato Glaciologico Italiano*, Ser. 2, No. 22, 1974, p. 39-44. [Glacier visited in 1973. Has retreated 750 m in 19 years, when it surged 10 km in three months.]
- DREWRY, D. J. Radio echo sounding map of Antarctica ($\sim 90^\circ$ E- 180°). *Polar Record*, Vol. 17, No. 109, 1975, p. 359-74. [Presents map of ice surface topography and sub-ice bedrock relief, and describes how data were collected and reduced.]
- GOVORUKHA, L. S., and others. Vodnyye resursy lednikov i lednikovyy stok Arktiki [Water resources of glaciers and glacial run-off of the Arctic]. [By] L. S. Govorukha, V. V. Ivanov, O. P. Chizhov. *Problemy Arktiki i Antarktiki*, Vyp. 45, 1974, p. 5-12. [Based on results obtained since 1930.]
- HIGASHI, A. Nankyoku no michi o sagura [Investigations of Antarctic ice]. *Kyokuchi: Polar News*, Vol. 10, No. 2, 1975, p. 48-52. [Physical properties.]
- KEMMERIKH, A. O. Stok lednikov Pamira i Pamiro-Alaya [Run-off of glaciers of the Pamir and Pamir-Alay mountain range]. *Izvestiya Akademii Nauk SSSR. Seriya Geograficheskaya*, 1974, No. 5, p. 88-94. [Calculation of part played by run-off in feeding rivers.]
- KIVER, E. P. The first exploration of Mount Baker ice caves. *Explorers Journal*, Vol. 53, No. 2, 1975, p. 84-87. [Describes caves in sub-summit crater of mountain in North Cascades, Washington, U.S.A.]
- KOVACS, A., and GOW, A. J. Brine infiltration in the McMurdo Ice Shelf, McMurdo Sound, Antarctica. *Journal of Geophysical Research*, Vol. 80, No. 15, 1975, p. 1957-61. [Impulse radar profiler used to monitor depth characteristics and lateral extent of brine soaking.]
- NILSSON, J., and SUNDBLAD, B. The internal drainage of Storglaciären and Isfallsglaciären described by an autoregressive model. *Geografiska Annaler*, Vol. 57A, Nos. 1-2, 1975, p. 73-98. [Theory of linear reservoirs applied to discharge data from these two glaciers in Kebnekaise, north Sweden.]
- ÖSTREM, G. Studier av glaciärers massbalans och av materialtransporten i glaciärälvar som grundval för planering av vattenkraftverk i Norge. *Uppsala Universitet. Naturgeografiska Institutionen. Rapport* 34, 1974, p. 511-31. [Glacier mass balance and sediment transport in glacier streams studied in some glaciated areas in Norway since 1962 as basis for hydroelectric power planning. English summary, p. 511.]
- PANTALEO, M. Note toponomastiche sui ghiacciai delle Alpi marittime, Cozie, Graie e Pennine. *Bollettino del Comitato Glaciologico Italiano*, Ser. 2, No. 22, 1974, p. 67-126. [Notes about names of 264 glaciers in the Italian western and Pennine Alps.]
- RICCOBONI, A. Sullo svolgersi delle osservazioni glaciologiche nel Gruppo di Brenta origini ad oggi. *Bollettino del Comitato Glaciologico Italiano*, Ser. 2, No. 22, 1974, p. 49-58. [Early and recent observations on glaciers of the Brenta group, in the Italian Alps.]
- RIST, S. Jöklabreytingar 1931/64, 1964/72 og 1972/73. *Jökull*, ÁR 23, 1973 [pub. 1974], p. 61-66. [Glacier variations in Iceland during these periods.]
- RIST, S. Jökulhlaupannáll 1971, 1972 og 1973. *Jökull*, ÁR 23, 1973 [pub. 1974], p. 55-60. [Lists and describes jökulhlaups in Iceland during 1971-73. English summary, p. 60.]
- RÖTHLISBERGER, F. Étude des variations climatiques d'après l'histoire des cols glaciaires. Le Col d'Hérens (Valais, Suisse). *Bollettino del Comitato Glaciologico Italiano*, Ser. 2, No. 22, 1974, p. 9-34. [By dating old routes through Alps, conclusions made about maximum position of glaciers during Roman and medieval times.]
- SCHYTT, V. Inland ice sheets—recent and Pleistocene. *Geologiska Föreningens i Stockholm Förhandlingar*, Vol. 96, Pt. 4, No. 559, 1974, p. 299-309. [Presents some results of research on ice sheets of Antarctica and Greenland, and compares with Pleistocene ice sheets.]
- SIGBJARNARSON, G. Katla and Askja. *Jökull*, ÁR 23, 1973 [pub. 1974], p. 45-51. [Concludes from comparison of two volcanoes, Askja, central Iceland, and Katla, Mýrdalsjökull, south Iceland, that jökulhlaups from latter can occur anywhere in vicinity. Icelandic summary, p. 51.]
- THEÓDÓRSSON, P. Djúpbörnun í Bárðarbungu 1972. *Jökull*, ÁR 23, 1973 [pub. 1974], p. 67-69. [Describes deep core drilling operations at Bárðarbunga, north-western part of Vatnajökull, in 1972.]

ICEBERGS. SEA, RIVER AND LAKE ICE

- AAGAARD, K. K., and COACHMAN, L. K. Toward an ice-free Arctic Ocean. *Eos. Transactions. American Geophysical Union*, Vol. 56, No. 7, 1975, p. 484-86. [Considers consequences of existing large salinity stratification and of possible partial removal by suggested Soviet river diversions.]

- ALEKSEYEV, G. V., and BUZUYEV, A. YA. K opredeleniyu zimnego narastaniya l'da v razvod'yakh s uchetom torosheniya [Determination of winter ice accretion in leads with consideration of hummocking]. *Problemy Arktiki i Antarktiki*, Vyp. 45, 1974, p. 125-27. [Arctic basin.]
- ALLAN, A. J. *The breaking of sea ice by ocean waves. A preliminary report on fieldwork carried out in south Labrador during January to April 1975.* Cambridge, University of Cambridge. Scott Polar Research Institute, Sea Ice Group, 1975. [25] p. [Break-up of all observed fast ice in Forteau Bay was caused by wave action: this could be predicted with a geophysical wire strainmeter.]
- ANDERSON, J. C., and ANDERSON, R. J. Progress report on winter distribution of flow in the Mackenzie Delta, N.W.T. Canada. *Task Force on Northern Oil Development. Environmental-Social Committee, Northern Pipelines. Report 74-12*, 1974, p. 225-54. [Hydrometric study includes measurement of ice levels and ice thicknesses on major delta channels during winter (March).]
- BROECKER, W. S. Floating glacial ice caps in the Arctic Ocean. *Science*, Vol. 188, No. 4193, 1975, p. 1116-18. [Presents arguments in favour of (1) existence of thicker ice in Arctic Ocean during glacial times (based on Greenland air temperature record obtained from isotopic studies), and (2) full Arctic ice cap in glacial times (based on isotope record of benthic foraminifera from Pacific core).]
- BUYNITSKIY, V. KH., and others. Mikroskopicheskiye vodorosli v pripaynykh l'dakh morya Deyvisa [Microscopic algae in the fast ice of the Davis Sea]. [By] V. Kh. Buynitskiy, T. F. Kozyrenko, V. A. Shamont'yev. *Problemy Arktiki i Antarktiki*, Vyp. 45, 1974, p. 100-09.
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FROST ACTION ON ROCKS AND SOIL. FROZEN GROUND. PERMAFROST

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