

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.

CONFERENCES

- SCHRAM, K., and THAMS, J. C., ed. 9. Internationale Tagung für alpine Meteorologie in Brig und Zermatt 14.-17. Sept. 1966. *Veröffentlichungen der Schweizerischen Meteorologischen Zentralanstalt*, Nr. 4, 1967. v, 366 p. [Proceedings of conference which included as one theme the relation between Alpine meteorology and glaciology. For relevant papers see elsewhere in this list.]
- [UNION GÉODÉSIQUE ET GÉOPHYSIQUE INTERNATIONALE.] *Union de Géodésie et Géophysique Internationale. Association Internationale d'Hydrologie Scientifique. Assemblée générale de Berne, 25 sept.-7 oct. 1967.* [Commission de Neiges et Glaces.] *Rapports et discussions*. Gentbrugge, Association Internationale d'Hydrologie Scientifique, 1968. 461 p. (Publication No. 79 de l'Association Internationale d'Hydrologie Scientifique.) Bel. fr. 500. [For details of papers see elsewhere in this list.]

GENERAL GLACIOLOGY

- AVSYUK, G. A., and KRENKE, A. N. The beginning of the Soviet glaciological investigations in the IHD programme. *Union de Géodésie . . . Berne, 1967.* [Commission de Neiges et Glaces.] *Rapports et discussions*, 1968, p. 292-99. [Report of progress in forming programme for International Hydrological Decade, and some early results.]
- BENDER, J. A. Snow and ice. *Transactions. American Geophysical Union*, Vol. 48, No. 2, 1967, p. 724-29. [Review of recent work.]
- BOSTOCK, H. S. A catalogue of selected airphotographs. *Canada. Geological Survey. Paper* 67-48, 1968, iii, 163 p., map. [Description of aerial photographs of geomorphological phenomena in Canada. Includes many glaciological and glacial geological items.]
- HAEFELI, R. Research on snow, avalanches, ice and glaciers. (*In* Thams, J. C., ed. *The development of geodesy and geophysics in Switzerland . . .* Zurich, Berichthaus, 1967, p. 72-83.) [General account of early and recent Swiss research.]
- HANSEN, J. E., and CHEYNEY, H. Comments on the paper by D. G. Rea and B. T. O'Leary, "On the composition of the Venus clouds". *Journal of Geophysical Research*, Vol. 73, No. 18, 1968, p. 6136-37. [Criticism of conclusion of paper, *ibid.*, Vol. 73, No. 2, 1968, p. 665-75, that ice crystals, if they exist, must be submicron in diameter.]
- HOINKES, H. C. Glaciology in the International Hydrological Decade. *Union de Géodésie . . . Berne, 1967.* [Commission de Neiges et Glaces.] *Rapports et discussions*, 1968, p. 7-16. [Presidential address to Commission de Neiges et Glaces. Survey of glaciological programme of I.H.D.]
- MOKHNACH, D. O. O vozmozhnosti otsenki razmerov i mass ledyanogo yadra komety [Possible evaluation of the dimensions and masses of the ice nucleus of a comet]. *Doklady Akademii Nauk SSSR*, Tom 180, No. 5, 1968, p. 1067-70. [Discussion of interpretation of optical observations in terms of photodissociation of molecules.]
- OWEN, T. Ice on Venus: can it exist? *Science*, Vol. 161, No. 3844, 1968, p. 915-16. [Arguments against existence of ice sheets on Venus and discussion of anomalous water content of Venus compared with Earth.]
- POLLACK, J. B., and SAGAN, C. The case for ice clouds on Venus. *Journal of Geophysical Research*, Vol. 73, No. 18, 1968, p. 5943-49. [Discussion of experimental evidence on reflectivity.]
- REA, D. G., and O'LEARY, B. T. On the composition of the Venus clouds. *Journal of Geophysical Research*, Vol. 73, No. 2, 1968, p. 665-75. [Spectroscopic evidence that ice crystals can only be present if they are submicron in size, which is not likely.]

GLACIOLOGICAL INSTRUMENTS AND METHODS

- ADAMS, W. P. A note on the pressure pillow method of snow measurement. *McGill Sub-Arctic Research Laboratory. Research Paper* No. 23, 1967, p. 94-97. [Describes method of use.]
- AMBACH, W., and others. Investigations of fission products in the accumulation area of an alpine glacier (Kesselwandferner, Oetztal Alps), [by] W. Ambach, H. Eisner and F. A. Prantl. *Union de Géodésie . . . Berne, 1967.* [Commission de Neiges et Glaces.] *Rapports et discussions*, 1968, p. 117-25. [Studies show that ¹³⁷Cs from nuclear tests remains within a firn layer and so can be used for dating.]
- AMBACH, W., and others. Tritium content in the firn layers of an alpine glacier, [by] W. Ambach, H. Eisner and L. L. Thatcher. *Union de Géodésie . . . Berne, 1967.* [Commission de Neiges et Glaces.] *Rapports et discussions*, 1968, p. 126-34. [Study of tritium from thermonuclear tests in Kesselwandferner, Austria. Results show that despite changes due to melt water, layers retain high tritium content. Use as tracer in run-off studies.]

- JACCARD, C. Apparatus for growing large monocrystals of ice with radial refining. *Zeitschrift für angewandte Mathematik und Physik*, Vol. 18, Fasc. 5, 1967, p. 758–60. [Method of producing pure ice crystals or ice crystals doped with HF but otherwise pure.]
- JACCARD, C. Automatic thin section analysis with the tomograph. *Union de Géodésie . . . Berne, 1967*. [Commission de Neiges et Glaces.] *Rapports et discussions*, 1968, p. 345–51. [Description of apparatus which identifies optically the crystallographic orientation of ice at any point in a thin section, and by scanning can determine crystallite boundaries.]
- LORIUS, C., and others. Détermination des épaisseurs de glace par une méthode gravimétrique simplifiée, Terre Adélie, campagnes d'été 1964–65 et 1965–66, par C. Lorius, G. Rouillon, F. Helly. *Expéditions Polaires Françaises, Missions Paul-Émile Victor, Publication No. 295*, 1967, 35 p. [Description of simplified gravimetric method used to determine ice thickness and verified by direct boring. English and Russian summaries.]
- OESCHGER, H., and others. Radiocarbon dating of ice, by H. Oeschger, B. Alder, H. Loosli, C. C. Langway, Jr., and A. Renaud. *Earth and Planetary Science Letters*, Vol. 1, No. 2, 1966, p. 49–54. [Development of special counter to allow dating with 20–100 mg of carbon.]
- UEDA, H. T., and GARFIELD, D. E. Deep-core drilling program at Byrd station (1967–1968). *Antarctic Journal of the United States*, Vol. 3, No. 4, 1968, p. 111–12. [Report of drilling operations that penetrated Antarctic ice sheet.]
- WALKER, J. W., and others. Airborne radar soundings of the Greenland ice cap: flight 1, [by] J. W. Walker, D. C. Pearce, A. H. Zanella. *Geological Society of America. Bulletin*, Vol. 79, No. 11, 1968, p. 1639–46. [Feasibility of airborne radar for ice thickness measurements studied on basis of flight over Greenland.]

PHYSICS OF ICE

- BARNES, P., and TABOR, D. Plastic flow and pressure melting in the deformation of ice I. *Union de Géodésie . . . Berne, 1967*. [Commission de Neiges et Glaces.] *Rapports et discussions*, 1968, p. 303–15. [Marked drop in hardness of ice very close to melting point attributed to pressure melting along grain boundaries. Experiments confirm this view and explain large grain size and loss of bubbles of such ice. Discussion, by E. R. LaChapelle, R. Haefeli, N. S. Stehle, P. V. Hobbs and J. F. Nye, p. 313–15.]
- BARTLETT, J. T., and READINGS, C. J. Some optical effects in deformed single crystals of ice. *Union de Géodésie . . . Berne, 1967*. [Commission de Neiges et Glaces.] *Rapports et discussions*, 1968, p. 316–25. [Observation of stress-optical effects in crystals which have asymmetry, also of interference bands parallel to traces of basal planes, interpreted as evidence for non-basal glide.]
- BERTIE, J. E., and others. Far-infrared spectra of ice II, V and IX, by J. E. Bertie, H. J. Labbé and E. Whalley. *Journal of Chemical Physics*, Vol. 49, No. 2, 1968, p. 775–80. [Spectra obtained in range 360–20 cm^{-1} . In ice II and IX the bands are sharp while in ice V they are broad confirming the disorder of ice V and order of ice II and IX.]
- BERTIE, J. E., and others. Infrared spectrum of ice VI in the range 4000–50 cm^{-1} , [by] J. E. Bertie, H. J. Labbé and E. Whalley. *Journal of Chemical Physics*, Vol. 49, No. 5, 1968, p. 2141–44. [Spectrum showing that ice VI recovered at liquid-nitrogen temperature is orientationally disordered.]
- BULLEMER, B., and others. Conductivity of ice by a guarded potential probe method, [by] B. Bullemer, I. Eisele, H. Engelhardt, N. Riehl and P. Seige. *Solid State Communications*, Vol. 6, No. 9, 1968, p. 663–64. [Determination of bulk conductivity and activation energy.]
- COLOMBINO, P., and others. Positronium annihilation in water and ice down to -144°C by angular correlation measurements, [by] P. Colombino, B. Fiscella and L. Trossi. (In Stewart, A. T., and Roelling, L. O., ed. *Positron annihilation. Proceedings of the conference held at Wayne State University on July 27–29, 1965*, New York, London, Academic Press, 1967, p. 353–56.) [Explanation of differences in terms of changes in number of hydrogen bonds in ice.]
- CROSS, J. D. Thermolectrets. (In Stickland, A. C., ed. *Static electrification. Proceedings of the conference organized by the Institute of Physics and the Physical Society, Static Electrification Group, London, May 1967*. London, Institute of Physics and Physical Society, 1967, p. 22–28. (Institute of Physics and Physical Society Conference Series, No. 4.)) [Results of measurements at -78°C on, among other things, ice. Effect attributed to impurities. Discussion by J. Hart, M. Block, W. G. Lawson and J. Latham, p. 27–28.]
- DANTL, G. Die elastischen Moduln von Eis-Einkristallen. *Physik der kondensierten Materie*, Bd. 7, Ht. 5, 1968, p. 390–97. [Measurement of velocity of sound in ice single crystals from 0° to -140°C and deduction of elastic constants.]
- DEFRAIN, A., and others. Sur les changements de phase dans les dépôts de glace, d'acétamide, d'ortho-crésol et de phénol, obtenus par condensation de vapeur sur un support maintenu à basse température, par A. Defrain, N. T. Linh et J. Pouille. *Journal de Chimie Physique et Physicochimie Biologique*, Tom. 65, No. 9, 1968, p. 1510–18. [Study of vitreous phase formed by low temperature deposition by X-rays and differential thermal analysis. English summary.]
- FLETCHER, N. H. Surface structure of water and ice. II. A revised model. *Philosophical Magazine*, Eighth Ser., Vol. 18, No. 156, 1968, p. 1287–1300. [Theoretical study shows preferred orientation of water molecules at surface and resulting quasi-liquid layer which accounts for surface electrical conductivity.]
- GILRA, N. K. Homogeneous nucleation temperature of supercooled water. *Physics Letters*, Vol. 28A, No. 1, 1968, p. 51–52. [Calculated value on various precrystallization theories and structure models agree with observed values.]
- GLEN, J. W. The importance of the hydrogen atom arrangement in determining how ice can deform plastically. *Union de Géodésie . . . Berne, 1967*. [Commission de Neiges et Glaces.] *Rapports et discussions*, 1968, p. 352–55. [Theory of movement of dislocations in ice. Movement of electrical point defects can limit dislocation movement. Discussion by J. T. Bartlett, C. J. Readings, P. Barnes and C. Jaccard, p. 354–55.]

- GOKHALE, N. R., and GOOLD, J., jr. Droplet freezing by surface nucleation. *Journal of Applied Meteorology*, Vol. 7, No. 5, 1968, p. 870-74. [Laboratory study in which nucleating particles were sprinkled on supercooled drops.]
- HAEFELI, R., and others. Deformation of polycrystalline ice under combined uniaxial and hydrostatic pressure, by R. Haefeli, C. Jaccard and M. de Quervain. *Union de Géodésie . . . Berne, 1967*. [Commission de Neiges et Glaces.] *Rapports et discussions*, 1968, p. 341-44. [Effect of hydrostatic pressure is to increase creep rate at constant temperature, but to reduce creep rate at constant temperature-difference from melting point.]
- HOBBS, P. V., and ALKEZWEENY, A. J. The fragmentation of freezing water droplets in free fall. *Journal of the Atmospheric Sciences*, Vol. 25, No. 5, 1968, p. 881-88. [Laboratory experiments under conditions similar to those in natural clouds.]
- JOHNSON, D. A., and HALLETT, J. Freezing and shattering of supercooled water drops. *Quarterly Journal of the Royal Meteorological Society*, Vol. 94, No. 402, 1968, p. 468-82. [Laboratory observations of conditions under which drops shatter on freezing.]
- JONES, S. J., and GLEN, J. W. The mechanical properties of single crystals of ice at low temperatures. *Union de Géodésie . . . Berne, 1967*. [Commission de Neiges et Glaces.] *Rapports et discussions*, 1968, p. 326-40. [Results of tensile and compressive tests on pure and HF-doped ice single crystals down to -90°C . Discussion by C. Jaccard, p. 340.]
- JULIENNE, P. S., and GARY, L. P. Trapped electrons in ice. *Molecular Crystals*, Vol. 5, No. 1, 1968, p. 135-39. [Theoretical study of hydrated electron in ice. Model predicts trapping only in region of defect.]
- KAMB, W. B., and PRAKASH, A. Structure of ice III. *Acta Crystallographica*, Vol. B24, Pt. 10, 1968, p. 1317-27. [X-ray determination of structure of this phase; discussion of possible proton ordering.]
- KETCHAM, W. M., and HOBBS, P. V. Step growth on ice during the freezing of pure water. *Philosophical Magazine*, Eighth Ser., Vol. 18, No. 153, 1968, p. 659-61. [Direct observation of steps on basal plane of ice growing in water.]
- KEVAN, L., and others. Optical absorption spectrum of trapped dielectrons in alkaline ice, [by] L. Kevan, D. R. Renneke and R. J. Friauf. *Solid State Communications*, Vol. 6, No. 7, 1968, p. 469-71. [At heavy γ irradiation an optical absorption band appears that is interpreted as two electrons trapped on the same vacancy site.]
- KNIGHT, C. A. Growth of ice crystals after a method by Helmholtz. *Nature*, Vol. 220, No. 5162, 1968, p. 62-63. [Letter. Study of growth of ice in a vessel sealed under vacuum immersed in an open ice-water bath.]
- KORMER, S. B., and others. Fazovoye prevrashcheniye vody v led VII pri udarnom szhatii [Phase transformation of water into ice VII by shock compression]. [By] S. B. Kormer, K. B. Yushko [and] G. V. Krishkevich. *Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki*, Tom 54, Vyp. 6, 1968, p. 1640-45. [Optical observations of loss of transparency and diffuse scattering demonstrate existence of ice VII when shock waves above 20-40 kbar pass through water. English summary. English translation in *Soviet Physics—JETP*, Vol. 27, No. 6, 1968, [c1969], p. 879-81.]
- KRAUSZ, A. S. A rate theory of dislocation mobility. *Acta Metallurgica*, Vol. 16, No. 7, 1968, p. 897-902. [Theory of dislocation velocity applied to various substances including ice.]
- KUHNS, I. E. The nucleation of water droplets at deep supercooling in different gaseous environments. *Journal of the Atmospheric Sciences*, Vol. 25, No. 5, 1968, p. 878-80. [Experimental study of freezing temperature of supercooled droplets in different gases.]
- LATHAM, J. The importance in atmospheric electricity of charge transfer associated with temperature gradients in ice. (In Stickland, A. C., ed. *Static electrification. Proceedings of the conference organized by the Institute of Physics and the Physical Society, Static Electrification Group, London, May 1967*. London, Institute of Physics and Physical Society, 1967, p. 44-51. (Institute of Physics and Physical Society Conference Series, No. 4.)) [Review of work on thermoelectric effect in ice and its relevance to electrification processes in ice. Application to meteorological phenomena.]
- LEVI, L., and LUBART, L. On the electric properties of ice doped with NH_4F . *Physik der kondensierten Materie*, Bd. 7, Ht. 5, 1968, p. 368-71. [Measurement of dielectric constant and electric conductivity. Activation energy of 0.10 eV is not the same as that of pure ice.]
- MOSSOP, S. C. Silver iodide as nucleus for water condensation and crystallization. *Journal de Recherches Atmosphériques*, Vol. 3, 1968, Nos. 1-2, p. 185-90. [At small supercoolings laboratory tests show ice-forming ability of aerosols of AgI and NaI depends on supersaturation in test cloud.]
- O'NEIL, J. R. Hydrogen and oxygen isotope fractionation between ice and water. *Journal of Physical Chemistry*, Vol. 72, No. 10, 1968, p. 3683-84. [Experimental determination of fractionation of D and ^{18}O on freezing of water.]
- PISTORIUS, C. W. F. T., and others. Phase diagrams of H_2O and D_2O at high pressures, by C. W. F. T. Pistorius, E. Rapoport and J. B. Clark. *Journal of Chemical Physics*, Vol. 48, No. 12, 1968, p. 5509-14. [Study of the phase boundaries between ice VI, ice VII and ice VIII and of melting curve of ice VII in H_2O and D_2O .]
- PRASK, H., and others. The frequency distribution of ice by neutron scattering, [by] H. Prask and H. Boutin and S. Yip. *Developments in Applied Spectroscopy*, Vol. 6, 1968, p. 265-76. [Determination of phonon frequency distribution and comparison with thermodynamic data.]
- RABIDEAU, S. W., and others. Neutron diffraction study of ice polymorphs. I. Ice IX, [by] S. W. Rabideau, E. D. Finch, G. P. Arnold and A. L. Bowman. *Journal of Chemical Physics*, Vol. 49, No. 6, 1968, p. 2514-19. [Neutron diffraction verification of proton-ordered structure.]
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- SCHWEITZER, D. G. Origin of irreversibility from conventional equilibrium concepts. *Physics Letters*, Vol. 27A, No. 6, 1968, p. 402-04. [Discussion with water-ice equilibrium as specific example.]
- SCOTT, W. D., and HOBBS, P. V. The spectra of charging events due to the collision of natural ice particles with an ice surface. *Quarterly Journal of the Royal Meteorological Society*, Vol. 94, No. 402, 1968, p. 510-22. [Measurements in natural conditions of charges acquired.]

- TAUB, I. A., and EIBEN, K. Transient solvated electron, hydroxyl, and hydroperoxy radicals in pulse-irradiated crystalline ice. *Journal of Chemical Physics*, Vol. 49, No. 6, 1968, p. 2499-2513. [Optical and electron spin resonance studies used to study transient intermediates produced in ice by electron irradiation.]
- WHALLEY, E. Structures of ice and water as investigated by infrared spectroscopy. *Developments in Applied Spectroscopy*, Vol. 6, 1968, p. 277-96. [Review of infra-red spectra of ice and water and their interpretation.]
- ZANDER, R. Additional details on the near-infrared reflectivity of laboratory ice crystals. *Journal of Geophysical Research*, Vol. 73, No. 20, 1968, p. 6581-84. [Additional information on experiments previously reported, *ibid.*, Vol. 71, No. 2, 1966, p. 375-78.]

LAND ICE. GLACIERS. ICE SHELVES

- AMBACH, W., and EISNER, H. Klimatologische Interpretationen eines Firnpollenprofils. *Veröffentlichungen der Schweizerischen Meteorologischen Zentralanstalt*, Nr. 4, 1967, p. 25-31. [Determination of net annual accumulation from pollen profile and comparison with climatic elements in Vent. French and English summaries.]
- AMBACH, W., and others. The altitude effect on the isotopic composition of precipitation and glacier ice in the Alps, by W. Ambach, W. Dansgaard, H. Eisner and J. Möller. *Tellus*, Vol. 20, No. 4, 1968, p. 595-600. [Study of effect in rain, snow and glacier ice.]
- BENSON, C. S. Glaciological studies on Mount Wrangell, Alaska, 1961. *Arctic*, Vol. 21, No. 3, 1968, p. 127-52. [Results of snow pit studies in the caldera of this volcano. Surface velocity measurements of caldera rim.]
- BLACK, R. F., and BOWSER, C. J. Salts and associated phenomena of the termini of the Hobbs and Taylor Glaciers, Victoria Land, Antarctica. *Union de Géodésie . . . Berne, 1967. [Commission de Neiges et Glaces.] Rapports et discussions*, 1968, p. 226-38. [Study of these salt deposits, the origin of which is still unknown.]
- BUDD, W. The longitudinal velocity profile of large ice masses. *Union de Géodésie . . . Berne, 1967. [Commission de Neiges et Glaces.] Rapports et discussions*, p. 58-77. [A local ice cap at the edge of the Antarctic ice sheet has provided data which are analysed in terms of glacier flow theory. Discussion by W. S. B. Paterson, G. de Q. Robin, L. Lliboutry and J. W. Glen, p. 75-77.]
- CLAPP, J. L. Ice-flow studies on Roosevelt Island. *Antarctic Journal of the United States*, Vol. 3, No. 4, 1968, p. 114. [Brief account of work done.]
- CLARKE, G. K. C. Geophysical measurements on Kaskawulsh and Hubbard Glaciers, Yukon Territory. *Arctic Institute of North America. Technical Paper* No. 20, 1967, 36 p. [Depth measurements by gravity and seismic means; surface velocity measurements.]
- CLAUSEN, H. B., and others. Si³² dating of an alpine glacier, by H. B. Clausen and B. Buchmann [and] W. Ambach. *Union de Géodésie . . . Berne, 1967. [Commission de Neiges et Glaces.] Rapports et discussions*, 1968, p. 135-40. [Ice from snout of Hintereisferner, Austria, has ³²Si activity one-fifth of that of neighbouring glacier of Kesselwandferner implying age of 1200 years for snout ice of Hintereisferner.]
- CLOUGH, J. W., and others. Ice-thickness investigations on SPQMLT III, by J. W. Clough, C. R. Bentley, and C. K. Poster. *Antarctic Journal of the United States*, Vol. 3, No. 4, 1968, p. 96-97. [Seismic and electromagnetic reflection measurements during traverse.]
- COLLINS, I. F., and SWITHINBANK, C. W. M. Rifts at the foot of Beardmore Glacier, Antarctica. *Union de Géodésie . . . Berne, 1967. [Commission de Neiges et Glaces.] Rapports et discussions*, 1968, p. 109-14. [Suggestion that rifts are not annual but a flow phenomenon. Discussion by J. F. Nye and W. H. Ward, p. 113-14.]
- DAHL, R. The retreat of the Reintind glacier (Frostisen). *Norsk Geografisk Tidsskrift*, Bd. 22, Ht. 4, 1968, p. 271-73. [Report of measurements of the margin of Reintindbreen made in 1950 and 1951 and comparison with data for 1906, 1934 and 1963.]
- FIREMAN, E. L. Studies of material in polar ice. *Antarctic Journal of the United States*, Vol. 3, No. 6, 1968, p. 250-52. [Collection and analysis of particulate material from Greenland ice sheet.]
- GIOVINETTO, M. B., and ZUMBERGE, J. H. The ice regime of the eastern part of the Ross Ice Shelf drainage system. *Union de Géodésie . . . Berne, 1967. [Commission de Neiges et Glaces.] Rapports et discussions*, 1968, p. 255-66. [Estimate of components of mass balance for this ice shelf suggests positive net balance for whole of Ross Ice Shelf and of Antarctic ice sheet. Discussion by M. F. Meier and G. de Q. Robin, p. 265-66.]
- GOW, A. J. Preliminary analysis of ice cores from Byrd station. *Antarctic Journal of the United States*, Vol. 3, No. 4, 1968, p. 113-14. [Study of cores from first boring to penetrate Antarctic ice sheet.]
- GOW, A. J., and others. Antarctic ice sheet: preliminary results of first core hole to bedrock, [by] A. J. Gow, H. T. Ueda, D. E. Garfield. *Science*, Vol. 161, No. 3845, 1968, p. 1011-13. [Temperature and density measurements and study of ice cores for hole bored "Byrd" station.]
- HOINKES, H. C. Gletscherschwankung und Wetter in den Alpen. *Veröffentlichungen der Schweizerischen Meteorologischen Zentralanstalt*, Nr. 4, 1967, p. 9-24. [Discussion of relation between general weather situations and glacier mass balance.]
- HOINKES, H. C., and WENDLER, G. Die Berechnung des Strahlungsanteiles an der Ablation im Gebiet des Hintereis- und Kesselwandferners (Öztaleralpen) im Sommer 1958. *Veröffentlichungen der Schweizerischen Meteorologischen Zentralanstalt*, Nr. 4, 1967, p. 43-45. [Preliminary report of study of radiation contribution to ablation.]
- IVES, J. D. Glacier terminal and lateral features in northeast Baffin Island: illustrations with descriptive notes. *Geographical Bulletin* (Ottawa), Vol. 9, No. 2, 1967, p. 106-14. [Photographs showing terminal and lateral sections of five glaciers with notes.]
- JUDSON, S., and HOLLIN, J. T. Testing for Antarctic surges. *Antarctic Journal of the United States*, Vol. 3, No. 5, 1968, p. 183-84. [Programme to test whether Wilson's surge theory of ice ages is correct.]
- KICK, W. Experiences in comparing geometric elements of glacier variations. *Union de Géodésie . . . Berne, 1967. [Commission de Neiges et Glaces.] Rapports et discussions*, 1968, p. 173-81. [Statistical analysis of measurements of length variations and of ice level variations show much less dispersal for level variations. Discussion by J. W. Glen and J. F. Nye, p. 180-81.]

- LA CHAPELLE, E. R. Glaciers. *Transactions. American Geophysical Union*, Vol. 48, No. 2, 1967, p. 729–36. [Reviews recent work, including Arctic and Antarctic regions.]
- LANG, H. Relations between glacier runoff and meteorological factors observed on and outside the glacier. *Union de Géodésie . . . Berne, 1967*. [Commission de Neiges et Glaces.] *Rapports et discussions*, 1968, p. 429–39. [Study on the Grosser Aletschgletscher of run-off from whole glacier and from a small drainage basin on the ice surface. Discussion by H. Lister and M. de Quervain, p. 438–39.]
- LANG, H. Über den Tagesgang im Gletscherabfluss. *Veröffentlichungen der Schweizerischen Meteorologischen Zentralanstalt*, Nr. 4, 1967, p. 32–38. [Comparison between melt-water run-off from glacier and meteorological factors. French and English summaries.]
- LANGWAY, C. C., jr. Deep ice core study program: Greenland. *Antarctic Journal of the United States*, Vol. 3, No. 5, 1968, p. 184–85. [Report of tests being made on all the “Site 2” and “Camp Century” cores.]
- LLIBOUTRY, L. Théorie complète du glissement des glaciers, compte tenu du fluage transitoire. *Union de Géodésie . . . Berne, 1967*. [Commission de Neiges et Glaces.] *Rapports et discussions*, 1968, p. 33–48. [Generalization of theory presented in *Journal of Glaciology*, Vol. 7, No. 49, 1968, p. 21–58, by using a computer to extend the range of variables and to include effects of transient creep, which can introduce some instability. Discussion by J. F. Nye, p. 48. English summary.]
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