

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

- GERDEL, R. W. Filling the gap in cold regions environmental data. *Proceedings of the Institute of Environmental Sciences*, 1963, p. 229–40. [Summary of recent work by Cold Regions Research and Engineering Laboratory.]
LINTON, D. L. Some contrasts in landscapes in British Antarctic Territory. *Geographical Journal*, Vol. 129, Pt. 3, 1963, p. 274–82. [Includes the contrasts in glacierization in various districts, details of rime accumulations and contrasts in glacial structures.]
MILLER, M. M. A field institute of glaciological and expeditionary sciences in Alaska. *Appalachia*, New Series, Vol. 29, No. 7, 1963, p. 499–508. [Establishment in 1961 of Summer Institute of Glaciological Sciences, Juneau, Alaska.]
PILLEWIZER, W. Zur Gletscherkartographie im Internationalen Geophysikalischen Jahr. *Petermanns Geographische Mitteilungen*, Jahrg. 106, Quartalsheft 1, 1962, p. 69–70. [Review.]
[UNION GÉODÉSIQUE ET GÉOPHYSIQUE INTERNATIONALE.] Colloque d'Obergurgl (suite). *Bulletin de l'Association Internationale d'Hydrologie Scientifique*, 8e An., No. 2, 1963, p. 50–142. [Discussions, excursion notes and list of participants for the symposium "Variations du régime des glaciers existants", the papers for which were printed in a separate volume.]

GLACIOLOGICAL INSTRUMENTS AND METHODS

- AMBACH, W. Isotopenforschung in der Glaziologie. *Die Pyramide*, Jahrg. 11, Ht. 1, 1963, p. 19–23. [Review of isotopic dating methods and their use in glaciology.]
AVER'YANOV, V. G. O metodike izmerenija osadkov v tsentral'noj Antarktide [Methods of precipitation measurements in central Antarctica]. *Akademija Nauk SSSR. Mezhdviedomstvennyj Geofizicheskiy Komitet. IX Razdel Programmy MGG: Glyatsiologicheskiye Issledovaniya. Sbornik Statey* [Academy of Sciences of the U.S.S.R. Interdepartmental Geophysical Committee. IX Section of Programme for the I.G.Y.: Glaciological Investigations. Collected Papers], No. 9, 1963, p. 195–97. [Discussion of methods used at Soviet stations and of changes needed to get reliable results. English summary.]
BLACHUT, T. J. Photogrammetric determination of glacier movement, rate of ablation, and profiles. *Canadian Surveyor*, Vol. 17, No. 2, 1963, p. 112–22. [Experience with Jacobsen-McGill University Arctic Research Expedition to Axel Heiberg Island, 1959–62.]
CHEREMNYKH, G. D. Yesheche o metodike opredeleniya skorosti dvizheniya poverkhnosti lednika po materialam aerofotos"yemki [Some additional remarks on the methods of determining movement velocities of a glacier's surface from aerial photographic data]. *Akademija Nauk SSSR. Mezhdviedomstvennyj Geofizicheskiy Komitet. IX Razdel Programmy MGG: Glyatsiologicheskiye Issledovaniya. Sbornik Statey* [Academy of Sciences of the U.S.S.R. Interdepartmental Geophysical Committee. IX Section of Programme for the I.G.Y.: Glaciological Investigations. Collected Papers], No. 9, 1963, p. 179–82. [Discussion of accuracy of the method compared with terrestrial triangulation. English summary.]
DOLGUSHIN, L. D. Skorost' dvizheniya lednikov Antarktidy po povtornym aerofotos"yemкам i morfologicheskim priznakam [Movement velocities of Antarctic glaciers from repeated aerial photography and morphological data]. *Akademija Nauk SSSR. Mezhdviedomstvennyj Geofizicheskiy Komitet. IX Razdel Programmy MGG: Glyatsiologicheskiye Issledovaniya. Sbornik Statey* [Academy of Sciences of the U.S.S.R. Interdepartmental Geophysical Committee. IX Section of Programme for the I.G.Y.: Glaciological Investigations. Collected Papers], No. 9, 1963, p. 164–78. [Principles of method and results. English summary.]
EVANS, S. Radio techniques for the measurement of ice thickness. *Polar Record*, Vol. 11, No. 75, 1963, p. 795. [Draws attention to early attempts by W. Stern in 1927.]
HAUMANN, D. Surveying glaciers on Axel Heiberg Island. *Canadian Surveyor*, Vol. 17, No. 2, 1963, p. 81–93, maps [in end-pocket]. [During Jacobsen-McGill University Arctic Research Expedition, 1959–62.]
LORIUS, C. Le deutérium: possibilités d'application aux problèmes de recherche concernant la neige, le névé et la glace dans l'Antarctique. *CNRA (Comité National Français des Recherches Antarctiques)*, No. 8, 1963, viii, 102 p. [Application of deuterium analysis to Antarctic glaciology.]
MCKORTEL, T. A. The reproduction of the Thompson Glacier map. *Canadian Surveyor*, Vol. 17, No. 2, 1963, p. 93–95, map [in end-pocket]. [Axel Heiberg Island. Methods, techniques, problems.]
MASON, B. J. Ice. (In Gilman, J. J., ed. *The art and science of growing crystals*. New York, London, John Wiley and Sons, Inc., [c.1963], p. 119–50.) [Survey of methods of growing ice crystals from the vapour.]
MÜLLER, F. An Arctic research expedition and its reliance on large-scale maps. *Canadian Surveyor*, Vol. 17, No. 2, 1963, p. 96–112, maps [in end-pocket]. [Jacobsen-McGill University Arctic Research Expedition to Axel Heiberg Island, 1959–62.]

- NOTTARP, K. Hochantennen für Telluromettermessungen in der Antarktis. *Allgemeine Vermessungsnachrichten*, 1963, Ht. 8, p. 304–07. [Description and use of a mast to record tellurometer measurements.]
 SHUMSKIY, P. A. K metodike opredeleniya skorosti pitaniya lednikov [Method of determining the growth rate of glaciers]. *Akademija Nauk SSSR. Mezhdunarovnyy Geofizicheskiy Komitet. IX Razdel Programmy MGG: Glyatsiologicheskiye Issledovaniya. Sbornik Statey [Academy of Sciences of the U.S.S.R. Interdepartmental Geophysical Committee. IX Section of Programme for the I.G.Y.: Glaciological Investigations. Collected Papers]*, No. 9, 1963, p. 183–91. [Discussion of method of determining accumulation where refreezing is important. English summary.]

PHYSICS OF ICE

- AMBACH, W., and HABICHT, H. L. Untersuchungen der Extinktions-eigenschaften des Gletschereises und Schnees. *Archiv für Meteorologie, Geophysik und Bioklimatologie*, Ser. B, Bd. 11, Ht. 4, 1962, p. 512–32. [Measurement of absorption of radiation as a function of depth and orientation in glacier ice and snow.]
 COHAN, N. V., and WEISSMAN, M. Valence defects in ice. *Nature*, Vol. 201, No. 4918, 1964, p. 490. [Calculation of properties of these defects. Errata in *Nature*, Vol. 202, No. 4930, 1964, p. 339.]
 FUKUTA, N., and MASON, B. J. Epitaxial growth of ice on organic crystals. *Journal of the Physics and Chemistry of Solids*, Vol. 24, No. 6, 1963, p. 715–18. [Experimental study and discussion of physical reasons for effect.]
 GOLD, L. W. Crack formation in ice plates by thermal shock. *Canadian Journal of Physics*, Vol. 41, No. 10, 1963, p. 1712–28. [Study of orientation, stress and penetration of cracks induced in ice by contact with a colder ice block. Also published as *Canada. National Research Council. Division of Building Research. Research Paper No. 199, 1963.*]
 LYUBOMIROVA, K. S. Dependence of ice albedo on incidence angle of solar rays. *Soviet Hydrology. Selected Papers*, No. 2, 1962, p. 124–27. [Translated from Russian. Experimental data used to formulate rules for measurement of albedo of dry and wet ice.]
 LYUBOMIROVA, K. S. O radiatsionnykh svoystvakh l'da [On the radiation properties of ice]. (*In Akademija Nauk SSSR. Institut Geografii. Issledovaniya lednikov i lednikovykh rayonov [Investigations on glaciers and glacierized regions]*. Moscow, Izdatel'stvo Akademii Nauk SSSR [Publishing House of the Academy of Sciences of the U.S.S.R.], Vyp. 2, 1962, p. 200–09.) [Survey of previous work and analysis of measurements in the Polar Urals.]
 MACKLIN, W. C., and RYAN, B. F. On the formation of spongy ice. *Quarterly Journal of the Royal Meteorological Society*, Vol. 88, No. 378, 1962, p. 548–49. [Experiments on the structure of ice formed in supercooled water.]
 MUGURUMA, J. Etch pits on prism planes of plastically deformed ice crystals. *Journal of the Faculty of Science, Hokkaido University*, Ser. 2, Vol. 6, No. 1, 1963, p. 11–22. [Description and suggested method of formation. Also includes observations of slip lines by electron micrography.]
 MUGURUMA, J., and HIGASHI, A. Non-basal glide bands in ice crystals. *Nature*, Vol. 198, No. 4880, 1963, p. 573. [Observations of etch pits on basal planes, interpretation in terms of dislocations that move on non-basal slip planes.]
 MUGURUMA, J., and HIGASHI, A. Observation of etch channels on the (0001) plane of ice crystal produced by nonbasal glide. *Journal of the Physical Society of Japan*, Vol. 18, No. 9, 1963, p. 1261–69.
 PRUPPACHER, H. R. The effect of an external electric field on the supercooling of water drops. *Journal of Geophysical Research*, Vol. 68, No. 15, 1963, p. 4463–74. [Experimental study to test how electric field triggers nucleation of ice.]
 READEY, D. W., and KINGERY, W. D. Plastic deformation of single crystal ice. *Acta Metallurgica*, Vol. 12, No. 2, 1964, p. 171–78. [Constant strain-rate tensile tests from -42°C . to 0°C . and analysis of results.]
 SAVEL'YEV, B. A. Uprugo-vyazko-plasticheskiye svoystva l'da [Elastic-viscous-plastic properties of ice]. (*In Doklady na mezdunarodnoy konferentsii po merzlotovedeniyu [Proceedings of international conference on frozen ground studies]*. Moscow, Izdatel'stvo Akademii Nauk SSSR [Publishing House of the Academy of Sciences of the U.S.S.R.], 1963, p. 229–35.) [Includes numerical data for various kinds of ice.]
 TELFORD, J. W., and TURNER, J. S. The motion of a wire through ice. *Philosophical Magazine*, Eighth Ser., Vol. 8, No. 87, 1963, p. 527–31. [Measurement as function of temperature and discussion of phenomenon when temperature too low for pressure melting.]
 VOYTKOVSKIY, K. F. Mekhanicheskiye svoystva l'da [Mechanical properties of ice]. (*In Doklady na mezdunarodnoy konferentsii po merzlotovedeniyu [Proceedings of international conference on frozen ground studies]*. Moscow, Izdatel'stvo Akademii Nauk SSSR [Publishing House of the Academy of Sciences of the U.S.S.R.], 1963, p. 236–44.) [Summary of properties.]

LAND ICE. GLACIERS. ICE SHELVES

- AITKENHEAD, N. An ice caldera in north-east Graham Land. *British Antarctic Survey Bulletin*, No. 1, 1963, p. 9–15. [Detailed description of probable process of formation.]
 AMBACH, W. Mechanik des Gletschervorstoßes. *Die Pyramide*, Jahrg. 11, Ht. 4, 1963, p. 121–28. [Explained in terms of flow law of ice and general account of glacier flow.]
 AMBACH, W. Untersuchungen zum Energieumsatz in der Ablationszone des grönlandischen Inlandeises (Camp IV-EGIG, $69^{\circ} 40' 05''\text{N}$, $49^{\circ} 37' 58''\text{W}$). *Meddeleser om Grönland*, Bd. 174, Nr. 4, 1963, 311 p. [Study of energy balance in ablation zone of Greenland Ice Sheet. English summary.]
 AMBACH, W. Zur Bedeutung der Strahlungsextinktion im Gletschereis für Energieumsatzstudien. *Acta Physica Austriaca*, Bd. 16, Ht. 3–4, 1963, p. 382–84. [The porosity of the ice layers near the surface can be measured by the absorption of the radiation falling on it.]

- BEHRENDT, J. C. Seismic measurements on the ice sheet of the Antarctic Peninsula. *Journal of Geophysical Research*, Vol. 68, No. 21, 1963, p. 5973-90. [The Antarctic Peninsula is shown to be an island separated from the Sentinel Range.]
- BELIN, M. Sondage séismique du Glacier de Saint-Sorlin. *Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences (Paris)*, Tom. 255, No. 3, 1962, p. 546-48. [Presents map showing bedrock contours of this glacier.]
- BULL, C. Gravity observations in the Koettlitz Glacier area, southern Victoria Land, Antarctica. *New Zealand Journal of Geology and Geophysics*, Vol. 5, No. 5, 1962, p. 810-19. [Includes measurement of thickness across three glaciers.]
- CHIZHOV, O. P. Balans massy l'da Novozemel'skogo lednikovogo pokrova po nablyudeniyam na lednike Shokalskogo v 1957-1959 gg. [Mass balance of ice of the glacier cover on Novaya Zemlya according to observations on Lednik Shokalskiy in 1957-59]. Akademiya Nauk SSSR. Mezhdvedomstvennyy Geofizicheskiy Komitet. IX Razdel Programmy MGG: Glyatsiologicheskiye Issledovaniya. Sbornik Statey [Academy of Sciences of the U.S.S.R. Interdepartmental Geophysical Committee. IX Section of Programme for the I.G.Y.: Glaciological Investigations. Collected Papers], No. 9, 1963, p. 72-81. [Results of I.G.Y. study of this glacier. English summary.]
- CRARY, A. P., and CHAPMAN, W. H. Additional glaciological measurements at the abandoned Little America Station, Antarctica. *Journal of Geophysical Research*, Vol. 68, No. 21, 1963, p. 6064-65.
- FALCONER, G. Glaciers of northern Baffin and Bylot Islands, N.W.T. Canada. Department of Mines and Technical Surveys. Geographical Branch. *Geographical Paper* No. 33, 1962, [50] p. map [in end-pocket]. [Recent glacier variations.]
- FRISTRUP, B. *Indlandsisen*. [København], Rhodos, 1963. 240 p. [Greenland Ice Sheet: history of exploration and summary of glaciological research.]
- GIOVINETTO, M. B. Distribution of diagenetic snow facies in Antarctica and in Greenland. *Arctic*, Vol. 17, No. 1, 1964, p. 33-40. [The "dry" snow line usually lies above 100 m. between lat. 85° and 67° S.]
- GOLDTHWAIT, R. P., and others. Fluctuations of Crillon Glacier system, south-east Alaska, [by] R. P. Goldthwait, I. C. McKellar and C. Cronk. *Bulletin de l'Association Internationale d'Hydrologie Scientifique*, 8e An., No. 1, 1963, p. 62-74. [Fluctuations of the glacier in the recent past and back to about 9,000 yr. ago.]
- HATTERSLEY-SMITH, G. Rapid advance of glacier in northern Ellesmere Island. *Nature*, Vol. 201, No. 4915, 1964, p. 176. [Catastrophic advance of the Otto Fiord Glacier between 1950 and 1959.]
- HOINKES, H. C., and LANG, H. Der Massenhaushalt von Hintereis- und Kesselwandferner (Ötztaler Alpen), 1957/58 und 1958/59. *Archiv für Meteorologie, Geophysik und Bioklimatologie*, Ser. B, Bd. 12, Ht. 1, 1962, p. 284-320. [The mass balance of these two glaciers was estimated from direct measurement of accumulation and ablation, and by precipitation, discharge and evaporation. Both showed considerable negative balances.]
- [ITALY: GLACIERS.] *Catasto dei ghiacciai italiani, Anno Geofisico 1957-1958*. Vol. 4. *Ghiacciai delle tre Venezie (escluso Ortles-Cevedale) e dell' Appennino (con carte schematiche dei ghiacciai delle Alpi Venete)*. Torino, Comitato Glaciologico Italiano, 1962. xxviii, 309 p. [Photographs, maps and information relating to glaciers of Venetian alps.]
- KOERNER, R. M. Glaciological observations in Trinity Peninsula and the islands in Prince Gustav Channel, Graham Land, 1958-60. *British Antarctic Survey Scientific Reports*, No. 42, 1964, 45 p. [Little sign of recession at present, although ice cover has decreased since the maximum. The most recent retreat appears to be due to a shift in the track of depressions.]
- KOSIBA, A. Changes in the Werenskiold Glacier and Hans Glacier in SW Spitsbergen. *Bulletin de l'Association Internationale d'Hydrologie Scientifique*, 8e An., No. 1, 1963, p. 24-35. [Results of Polish I.G.Y. and I.G.C. expeditions.]
- KOTLYAKOV, V. M. Zavisimost' sovremennoy evolyutsii lednikov ot ikh razmerov i geograficheskogo polozheniya [Dependence of present evolution of glaciers on their size and geographical location]. Akademiya Nauk SSSR. Mezhdvedomstvennyy Geofizicheskiy Komitet. IX Razdel Programmy MGG: Glyatsiologicheskiye Issledovaniya. Sbornik Statey [Academy of Sciences of the U.S.S.R. Interdepartmental Geophysical Committee. IX Section of Programme for the I.G.Y.: Glaciological Investigations. Collected Papers], No. 9, 1963, p. 41-56. [Inconsistency between mass budget of Antarctic Ice Sheet and behaviour of margins discussed in terms of synchronism between glaciations in different parts of the Earth. English summary.]
- KRENKE, A. N. Rayonirovaniye lednikov Arktiki v svyazi s tsirkulyatsiyey atmosfery [Grouping of glaciers in the Arctic according to atmospheric circulation]. Akademiya Nauk SSSR. Mezhdvedomstvennyy Geofizicheskiy Komitet. IX Razdel Programmy MGG: Glyatsiologicheskiye Issledovaniya. Sbornik Statey [Academy of Sciences of the U.S.S.R. Interdepartmental Geophysical Committee. IX Section of Programme for the I.G.Y.: Glaciological Investigations. Collected Papers], No. 9, 1963, p. 57-71. [Suggestion of climatological grouping and implications for selection of glaciers for regular observation. English summary.]
- KRENKE, A. N., and others. Nakopleniye i preobrazovaniye snezhnogo pokrova na vershine lednikovogo kupola Churlyanisa (Zemliya Frantsa-Iosifa) [Accumulation and metamorphism of the snow cover on the top of the Churlyanis ice cap], [by] A. N. Krenke, T. V. Psareva [and] N. G. Razumeyko. (In Akademiya Nauk SSSR. Institut Geografii. Issledovaniya lednikov i lednikovyykh rayonov [Investigations on glaciers and glacierized regions]. Moscow, Izdatel'stvo Akademii Nauk SSSR [Publishing House of the Academy of Sciences of the U.S.S.R.], Vyp. 2, 1962, p. 50-65.)
- LIMBERT, D. W. S. The snow accumulation budget at Halley Bay in 1959, and associated meteorological factors. *British Antarctic Survey Bulletin*, No. 2, 1963, p. 73-92. [Observations on the Brunt Ice Shelf; details of the accumulation, settling of the snow, losses through evaporation and drift, and the annual accumulation budget.]
- LLIBOUTRY, L. Régime thermique et déformation de la base des calottes polaires. *Annales de Géophysique*, Tom. 19, No. 2, 1963, p. 149-56. [Thermal regime and deformation at base of polar ice sheets.]

- LIBOUTRY, L. Sub-glacial "supercavitation" as a cause of the rapid advances of glaciers. *Nature*, Vol. 202, No. 4927, 1964, p. 77. [Theory of effect of melt water on catastrophic glacier advances.]
- MARKIN, V. A. Principal features of the radiation regime of glaciers on Franz-Joseph Land. *Soviet Hydrology. Selected Papers*, No. 1, 1962, p. 22-27. [Translated from Russian. Study on glaciers of Ostrov Gukera.]
- MERCER, J. H. Glacier variations in the Karakoram. *Glaciological Notes*, No. 14, 1963, p. 19-33. [Advances and recessions.]
- NUTT, D. C. Significance and techniques in the study of gas inclusions in glacier ice. *Polarforschung*, Bd. 5, Jahrg. 31, Ht. 1-2, 1961 [pub. 1963], p. 82-87. [Origin of the gas inclusions; dating technique developed for determining nature of ancient air.]
- NYE, J. F. The response of a glacier to changes in the rate of nourishment and wastage. *Proceedings of the Royal Society*, Ser. A, Vol. 275, No. 1360, 1963, p. 87-112. [Theory of the change in thickness and length of a glacier due to sinusoidal variations in mass balance, and of the deduction of past mass balance from known history of glacier variation.]
- ØSTREM, G. Litt om breene i Storsteinsfjell-området. *Norsk Geografisk Tidsskrift*, Bd. 18, Ht. 5-6, 1961-62, [pub.] 1963, p. 239-45. [Glacier inventory of Storsteinsfjell region, Nordland, north Norway, based on aerial photographs. English summary. Also published as *Hydrologiske Avdeling ved Norges Vassdrags- og Elektrisitetsvesen. Meddelelse* Nr. 3.]
- ØSTREM, G., and LIESTØL, O. Glaciologiske undersøkelser i Norge 1963. *Norsk Geografisk Tidsskrift*, Bd. 18, Ht. 7-8, 1961-62, [pub.] 1964, p. 281-340. [Results of mass balance studies on seven Norwegian glaciers and of start of studies on more. Variation of glacierization limit and firm line in Norway. Mapping of glaciers; map for Blåmannsisen-Sulitjelma area presented. English summary. Also published as *Hydrologiske Avdeling ved Norges Vassdrags- og Elektrisitetsvesen. Meddelelse* Nr. 4.]
- RAZUMYEKO, N. G., and others. Marshrutnoye termozondirovaniye na lednikakh Sovetskogo Soyuza [Thermosoundings on the glaciers of the Soviet Union]. [by] N. G. Razumeyko, I. F. Khmelevskoy, E. N. Tsykin [and] G. A. Tsykina. (*In Akademiya Nauk SSSR. Institut Geografii. Issledovaniya lednikov i lednikovykh rayonov [Investigations on glaciers and glacierized regions]*). Moscow, Izdatel'stvo Akademii Nauk SSSR [Publishing House of the Academy of Sciences of the U.S.S.R.], Vyp. 2, 1962, p. 5-33. [Temperature profiles of glaciers along a meridional profile from Zemlya Frantsa-Josifa to Tyan Shan.]
- REGENSBERGER, K. Comparative measurements on the Fedtschenko Glacier. *Bulletin de l'Association Internationale d'Hydrologie Scientifique*, 8e An., No. 1, 1963, p. 57-61. [Results of survey in 1958 compared with 1928.]
- RUDOLPH, R. Abflusstudien an Gletscherbächen. Methoden und Ergebnisse hydrologischer Untersuchungen in den zentralen Ötztaler Alpen in den Jahren 1953-1955. *Veröffentlichungen des Museum Ferdinandea in Innsbruck*, Bd. 41, Jahrg. 1961, [pub.] 1962, p. 117-266. [Detailed account of researches on Hintereisferner and Kesselwandferner; methods, runoff, accumulation and ablation balance.]
- SCHATZ, H. Observations on the Hintereis and Vernagtferner. *Bulletin de l'Association Internationale d'Hydrologie Scientifique*, 8e An., No. 1, 1963, p. 94-96. [Continuation of measurements begun almost 80 years ago. Profiles of glaciers and velocity from displacement of stones.]
- SHINODA, G. Velocity of sliding of an ice-fall. *Nature*, Vol. 199, No. 4889, 1963, p. 165-66. [Photographs of Himalayan ice fall used to deduce flow rate.]
- SHUMSKIY, P. A. Kinematika statcionarnogo lednika [Kinematics of a stationary glacier]. *Akademiya Nauk SSSR. Mezhdvudomstvennyy Geofizicheskiy Komitet. IX Razdel Programmy MGG: Glyatsiologicheskiye Issledovaniya. Sbornik Statey [Academy of Sciences of the U.S.S.R. Interdepartmental Geophysical Committee. IX Section of Programme for the I.G.Y.: Glaciological Investigations. Collected Papers]*, No. 9, 1963, p. 19-40. [Theoretical study. English summary.]
- SHUMSKIY, P. A. On the theory of glacier variations. *Bulletin de l'Association Internationale d'Hydrologie Scientifique*, 8e An., No. 1, 1963, p. 45-56. [Theory and its application to ice cap on Drygalsky Island, Antarctica.]
- SHUMSKIY, P. A. Polya davleniya i plotnosti lednikov [Pressure and density fields of glaciers]. *Akademiya Nauk SSSR. Mezhdvudomstvennyy Geofizicheskiy Komitet. IX Razdel Programmy MGG: Glyatsiologicheskiye Issledovaniya. Sbornik Statey [Academy of Sciences of the U.S.S.R. Interdepartmental Geophysical Committee. IX Section of Programme for the I.G.Y.: Glaciological Investigations. Collected Papers]*, No. 9, 1963, p. 5-18. [Theory of relation between pressure, density and temperature in glaciers. English summary.]
- SIFFRE, M., and others. Sur le glacier souterrain du gouffre de Scarasson, massif du Marguareis, [par] M. Siffre, C. Lloris et L. Merlinat. *Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences* (Paris), Tom. 256, No. 22, 1963, p. 4703-06. [Gives plan and section of cave with glacier in it.]
- SWITHINBANK, C. W. M. The valley glaciers that feed the Ross Ice Shelf. *Polar Record*, Vol. 12, No. 76, 1964, p. 80-82. [Place-names and relative sizes clarified. Reprinted from *Polar Notes* (Hanover, N.H.), No. 5, 1963, p. 51-56.]
- THOMAS, R. H. Studies on the ice cap of Galindez Island, Argentine Islands. *British Antarctic Survey Bulletin*, No. 2, 1963, p. 27-43. [Budget of accumulation and ablation, movement mechanism and temperature.]
- WEIDICK, A. Differential behaviour of the ice cap margin in the Julianehåb district, West Greenland. *Polarforschung*, Bd. 5, Jahrg. 31, Ht. 1-2, 1961 [pub. 1963], p. 91-94. [Discussion of the geomorphological effects of the various ice ages.]
- WEIDICK, A. Glacial variations in West Greenland in postglacial time. *Bulletin de l'Association Internationale d'Hydrologie Scientifique*, 8e An., No. 1, 1963, p. 75-82. [Survey of fluctuations in last few centuries.]
- YEVTEYEV, S. A. Glyatsiologicheskiye issledovaniya na amerikanskoy antarkticheskoy stantsii Mak-Merdo v 1960-1961 gg. [Glaciological studies at the American Antarctic station McMurdo, 1960-61]. *Izvestiya Vsesoyuznogo Geograficheskogo Obshchestva [News of the All-Union Geographical Society]*, Tom 95, Vyp. 6, 1963, p. 544-47. [Summary of work done by Soviet exchange scientist.]

ZOTIKOV, I. A. Bottom melting in the central zone of the ice shield on the Antarctic continent and its influence upon the present balance of the ice mass. *Bulletin de l'Association Internationale d'Hydrologie Scientifique*, 8e An., No. 1, 1963, p. 36-44.

ICEBERGS, SEA, RIVER AND LAKE ICE

- DUNBAR, MOIRA. The drift of North Pole 7 after its abandonment. *Canadian Geographer*, Vol. 6, Nos. 3-4, 1962, p. 129-42.
- HEINE, A. J. Ice breakout around the southern end of Ross Island, Antarctica. *New Zealand Journal of Geology and Geophysics*, Vol. 6, No. 3, 1963, p. 395-401. [The known dates and extents of the breakout of the winter fast ice near the United States and New Zealand bases are listed.]
- HOEL, A. Isfjell på kysten av Øst-Finnmark. *Norsk Geografisk Tidsskrift*, Bd. 18, Ht. 5-6, 1961-62, [publ.] 1963, p. 228-38. [Unique observations of icebergs off east Finnmark, north Norway, in spring of 1929.]
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