

GLACIOLOGICAL LITERATURE

This selected list of glaciological literature has been prepared by J. W. Glen with the assistance of T. H. Ellison, W. B. Harland, Miss D. M. Johnson, and the Staff of the Scott Polar Research Institute. Its field is 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. Glen of publications of glaciological interest.

In this list, to avoid repetition, the references to papers in the proceedings of a recent conference have been abbreviated. The full reference to the publication is given in the section CONFERENCES below.

CONFERENCES

[UNION GÉODÉSIQUE ET GÉOPHYSIQUE INTERNATIONALE.] Variations du régime des glaciers existants. *Union Géodésique et Géophysique Internationale. Association Internationale d'Hydrologie Scientifique. Commission des Neiges et Glaces. Colloque d'Obergurgl, 10-9-18-9 1962.* Gentbrugge, Association Internationale d'Hydrologie Scientifique, 1962. 312 p. Bel. fr. 350. (Publication No. 58 de l'Association Internationale d'Hydrologie Scientifique.) [For details of papers presented, see elsewhere in this list.]

GENERAL GLACIOLOGY

- [GLACIOLOGICAL RESEARCH: JAPAN.] Review of study on snow and ice in Japan during recent years (1950-1958). *Researches on Snow and Ice* (Tokyo), No. 3, 1960, 139 p. [Brief reviews in Japanese followed by subject bibliography. In English and Japanese.]
- HOPPE, G. Naturgeografisk fältstation i Kebnekajsc. *Svensk Geografisk Årsbok*, Årg. 37, 1961, p. 224-26. [Field research station, mainly glaciology, opened at Tarfala, Kebnekajse, north Sweden, on 20 August 1961.]
- MINARD, J. P. *Glaciology and glacial geology of Antarctica*. Washington, D.C., U.S. Antarctic Projects Officer, 1961. 43 p. [General account.]
- PICCIOTTO, E. Quelques résultats scientifiques de l'Expédition Antarctique Belge 1957-1958. *Ciel et Terre*, 77^e An., Nos. 4-5-6, 1961, p. 126-67. [Base Roi Baudouin. Radioactivity of air; isotopic composition of precipitation; snow accumulation; microscopic study of ice crystals; reconnaissance of Sør-Rondane mountains.]
- THORARINSSON, S. Glaciological knowledge in Iceland before 1800: a historical outline. *Jökull*, År 10, 1960, p. 1-18.

GLACIOLOGICAL INSTRUMENTS AND METHODS

- AMBACH, W., and HABICHT, H. L. Ein thermoelektrischer Strahlungsbilanzmesser zur Bestimmung der in oberflächennahen Eisschichten eines Gletschers absorbierten Strahlungsenergie. *Archiv für Meteorologie, Geophysik und Bioklimatologie*, Ser. B, Bd. 11, Ht. 2, 1961, p. 241-50. [Very small instrument for measuring radiation balance used to determine radiation absorbed in upper layers of a glacier.]
- THIEL, E., and OSTENSO, N. A. Seismic studies on Antarctic ice shelves. *Geophysics*, Vol. 26, No. 6, 1961, p. 706-15. [Discussion of methods.]

PHYSICS OF ICE

- AL'FTAN, E. A. Sveccheniye l'da [Ice glow]. *Priroda* [Nature], 1961, No. 3, p. 105-06. [Optical effect in sea ice. Comments by I. A. Tyutyunov and P. A. Shumskiy.]
- BUETTNER, J. P., and JACHE, A. W. The ice region of the system AgF-HF-H₂O at -15°. *Journal of Inorganic and Nuclear Chemistry*, Vol. 19, Nos. 3-4, 1961, p. 376. [Study of phase diagram.]
- BUKINA, L. A. Laboratornyy metod issledovaniya skorosti rosta kristallov vnutrivodnogo l'da [A laboratory method for studying the rate of growth of underwater ice crystals]. *Izvestiya Akademii Nauk SSSR. Seriya Geograficheskaya* [News of the Academy of Sciences of the U.S.S.R. Geographical Series], 1961, No. 6, p. 947-50.
- FRIEMEL, G. Der Trenneffekt beim teilweisen Ausfreiren fuhender wässeriger Lösungen. *Kältetechnik*, Bd. 13, Ht. 11, 1961, p. 362-67. [Study of effect of different conditions on structure and composition of ice and solution.]
- FUKUDA, T., and others. Yōkanamari tankeshōjō deno kōri no epitakushii [Epitaxy of ice at the surface of lead iodide crystals]. [By] T. Fukuda, I. Sano [and] M. Asaoka. *Kagaku* [Science], Vol. 30, No. 7, 1960, p. 366. [Experimental study.]
- FUKUTOMI, T. Effect of infra-red illumination on grain boundaries in ice. *Nature*, Vol. 193, No. 4812, 1962, p. 266-67. [Melting of grain boundaries.]
- GLIKI, N. V., and others. Obrazovaniye monokristal'noy granuly l'da pri zamerzanii pereokhlazhdennoy kapli vody [The formation of a monocrystalline granule of ice upon solidification of a supercooled drop of water]. [By] N. V. Gliko, A. A. Eliseyev [and] N. M. Marchenko. *Doklady Akademii Nauk SSSR* [Reports of the Academy of Sciences of the U.S.S.R.], Tom 135, No. 3, 1960, p. 591-94. [Experiments of structure and growth of ice from a supercooled water droplet.]

- HIGASHI, A., and SAKAI, N. Movement of small angle boundary of ice crystal. *Journal of the Physical Society of Japan*, Vol. 16, No. 11, 1961, p. 2359-60. [Experimental study on ice from Mendenhall Glacier, Alaska.]
- KYOGOKU, Y. Kōri no kijun shindō [Normal vibration of ice and heavy ice]. *Journal of the Chemical Society of Japan*, Pure Chemistry Section, Vol. 81, No. 11, 1960, p. 1648-52. [Computer used to identify modes of vibration found in absorption spectrum.]
- NEI, T. Investigations with the electron microscope of the sublimation of ice crystals at low temperatures. *Nature*, Vol. 192, No. 4808, 1961, p. 1177-78.
- LAND ICE. GLACIERS. ICE SHELVES
- AHMED, N. Milam Glacier, Kumaun Himalayas. *Union Géodésique . . . Obergurgl*, 1962, p. 230-33. [General description and deduction of past extent.]
- [APOLLONIO, S., and others.] The Devon Island expedition. *Arctic*, Vol. 14, No. 4, 1961, p. 252-65. [Summer 1961 season. Comprises narrative by Spencer Apollonio and preliminary reports on geology by J. W. Cowie, measurement of electrical resistivity of ice by K. Voegtli, glaciology by R. M. Koerner, observations of glacial movements by P. Cress and R. Wyness, measurements of electrical resistivity of ice-formations by J. P. Greenhouse.]
- ÁSKELSSON, J. Skeidarárhlaupt og umbrotin í Grímsvötnum 1945. *Jökull*, Ár 9, 1959, p. 22-29. [Study of *jökullhlaupt* in Skeidará and eruption at Grímsvötn, Vatnajökull, south-east Iceland, in 1945.]
- BAUER, A. Problems of the Greenland Ice Sheet. *Annals of the IGY*, Vol. 11, 1961, p. 300-01. [Present state of studies on the movement, regime and fluctuations.]
- BEHRENDT, J. C. Geophysical and glaciological studies in the Filchner Ice Shelf area of Antarctica. *Journal of Geophysical Research*, Vol. 67, No. 1, 1962, p. 221-34. [I.G.Y. results.]
- BENGTSON, K. B. Recent history of the Brady Glacier, Glacier Bay National Monument, Alaska, U.S.A. *Union Géodésique . . . Obergurgl*, 1962, p. 78-87. [Discussion of conditions for this glacier, which has retreated little since its maximum in about 1876.]
- BENSON, C. S. Stratigraphic studies in the snow and firn of the Greenland Ice Sheet. *Folia Geographica Danica*, Tom. 9, 1961, p. 13-37. [Detailed study of stratigraphy and mass balance.]
- BERTONE, M. Inventario de los glaciares existentes en la vertiente Argentina entre los paralelos 47° 30' y 51° S. *Instituto Nacional del Hielo Continental Patagónico, Publicación No. 3*, 1960, 103 p.
- BJÖRNSSON, F. Göngin í Hrutárjökli. *Jökull*, Ár 9, 1959, p. 30-32. [Descriptions and measurements of glacial tunnels in Hrutárjökull, south-east Iceland, observed in 1953 and 1959. English summary.]
- BREUCK, W. DE. Glaciology in eastern Queen Maud Land: preliminary report, third Belgian Antarctic expedition 1960. *Mededeelingen van de Koninklijke Vlaamse Academie voor Wetenschappen, Letteren en Schone Kunsten van België. Klasse der Wetenschappen*, Jaarg. 23, Nr. 6, 1961, 15 p. [Mainly studies of accumulation.]
- CARTER, H. A., and AHERTON, D. L. Milton Mount McKinley range expedition: glaciological research on the north fork of the Eldridge Glacier. *American Alpine Journal*, Vol. 12, No. 2, 1961, p. 291-96. [Work done in 1960.]
- CHIZHOV, O. P., and KORYAKIN, V. S. Recent changes in the regimen of the Novaya Zemlya Ice Sheet. *Union Géodésique . . . Obergurgl*, 1962, p. 187-93. [Budget deduced back to 1896. Over last 25 years budget agrees well with observed retreat.]
- CRARY, A. P., and ROBINSON, E. S. Oversnow traverse from McMurdo to the South Pole. *Science*, Vol. 135, No. 3500, 1962, p. 291-95. [Surface profile and accumulation results.]
- DAVIDOVICH, N. V. O roli nazemnogo sublimatsionnogo l'da v pitanii lednikovogo pokrova Novoy Zemli [Role of surface sublimation ice in feeding the ice cover of Novaya Zemlya]. *Akademiya Nauk SSSR. Mezhdunarodno-stvennyy Komitet po Provedeniyu Mezhdunarodnogo Geofizicheskogo Goda. Sbornik Statey. IX Razdel Programmy MGG (Glyatsiologiya)* [Academy of Sciences of the U.S.S.R. Interdepartmental Committee for Participation in the International Geophysical Year. Collected Papers. Section IX of the I.G.Y. Programme (Glaciology)], No. 6, 1961, p. 123-29. [Extensive formation of sublimation ice, but negligible compared with precipitation. English summary.]
- DAVIES, W. E. Glacier caves in Svartisen, Norway. *Bulletin of the National Speleological Society*, Vol. 23, No. 2, 1961, p. 75-76. [Description of caves extending 100 m. into the glacier.]
- DAVIES, W. E., and KRINSLEY, D. B. The recent regimen of the ice cap margin in north Greenland. *Union Géodésique . . . Obergurgl*, 1962, p. 119-30. [Evidence of retreat in this area.]
- DOLGUSHIN, L. D., and others. Current changes in the Antarctic Ice Sheet, [by] L. D. Dolgushin, S. A. Yevteyev and V. M. Kotlyakov. *Union Géodésique . . . Obergurgl*, 1962, p. 286-94. [Consideration of Antarctic mass budget. Suggestion that flow velocities are larger than has been assumed in earlier budgets, and that Antarctic is in equilibrium.]
- EUGSTER, U. Les récentes variations des petits glaciers du Pizol et de Sardona (Préalpes de Suisse orientale). *Union Géodésique . . . Obergurgl*, 1962, p. 166-72. [Fluctuations of these small glaciers since 1920 show a good correlation with mean annual temperature.]
- FINSTERWALDER, R. Measurement of glacier variations in the eastern Alps, particularly in the Gurgl area. *Union Géodésique . . . Obergurgl*, 1962, p. 7-15. [Discussion of measurements suitable for long-term study of glacier variation.]
- FITCH, F. J., and others. Glacier re-advance on Jan Mayen, [by] F. J. Fitch, D. J. J. Kinsman, J. W. Sheard and D. Thomas. *Union Géodésique . . . Obergurgl*, 1962, p. 201-11. [Advance associated with increasing precipitation.]
- FRISTRUP, B. Dänische glaziologische Untersuchungen im Internationalen Geophysikalischen Jahr. *Polarforschung*, Bd. 5, Jahrg. 30, Ht. 1-2, 1960 [pub. 1961], p. 3-11. [Results of studies on four Greenland glaciers.]
- GERLIB, R. K. Recent glacier fluctuations in the Selkirk Range, B.C. *Canadian Alpine Journal*, Vol. 44, 1961, p. 103-09. [Determination using tree rings of glacier fluctuations in past 250 years.]

- GOLDTHWAIT, R. P. Regimen of an ice cliff on land in northwest Greenland. *Folia Geographica Danica*, Tom. 9, 1961, p. 107-15. [Discussion of conditions under which ice cliffs can form based on work in Greenland.]
- GRIFFITHS, T. M. Some glacial investigations in the Thule area, Greenland. *Folia Geographica Danica*, Tom. 9, 1961, p. 116-26. [Ablation and accumulation on a local glacier and a lobe of the ice sheet. Ice velocity and moraine studies on the lobe.]
- GROSVAL'D, M. G., and KRENKE, A. N. Recent changes and the mass balance of glaciers on Franz Josef Land. *Union Géodésique . . . Obergurgl*, 1962, p. 194-200. [Intense retreat is explained by measurements of budget quantities.]
- GROSVAL'D, M. G., and KRENKE, A. N. Voprosy glytsiologii Zemli Frantsa-Iosifa [Questions of the glaciology of Zemlya Frantsa-Iosifa]. *Akademiya Nauk SSSR. Mezhdunarodnyy Komitet po Provedeniyu Mezhdunarodnogo Geofizicheskogo Goda. Sbornik Statey. IX Razdel Programmy MGG (Glytsiologiya)* [Academy of Sciences of the U.S.S.R. Interdepartmental Committee for Participation in the International Geophysical Year. Collected Papers. Section IX of the I.G.Y. Programme (Glaciology)], No. 6, 1961, p. 5-44. [General description, with special reference to ice caps on Ostrov Gukera. Based on work during I.G.Y. English summary.]
- HAEFELI, R. The ablation gradient and the retreat of a glacier tongue. *Union Géodésique . . . Obergurgl*, 1962, p. 49-59. [Importance of variation of ablation with altitude in determining response of glacier to climatic change.]
- HAEFELI, R. Eine Parallele zwischen der Eiskalotte Jungfrauoch und den grossen Eisschildern der Arktis und Antarktis. *Geologie und Bauwesen*, Jahrg. 26, Ht. 4, 1961, p. 191-213. [Observations 1950-60 of displacement and deformation inside ice cap of Jungfrauoch, Switzerland, used to formulate theory relating to Greenland and Antarctic Ice Sheets. English summary, p. 191.]
- HEINE, A. J. Glacier changes on Mount Ruapehu, New Zealand—1957-61. *Union Géodésique . . . Obergurgl*, 1962, p. 173-78. [Steady decline in glacier area.]
- HELK, J. V. Some questions on the ice-topography on the Greenland maps made by the Danish Geodetic Institute. *Folia Geographica Danica*, Tom. 9, 1961, p. 127-32. [Problems of mapping glacier features from aerial photography.]
- HOFMANN, W. Tellurometer measurements on the Greenland Ice Cap during the International Glaciological Greenland Expedition (EGIG), summer 1959. *Folia Geographica Danica*, Tom. 9, 1961, p. 133-39. [Method of surveying beacons.]
- HOINKES, H. C., and RUDOLPH, R. Variations in the mass-balance of Hintereisferner (Ötztal Alps), 1952-1961, and their relation to variations of climatic elements. *Union Géodésique . . . Obergurgl*, 1962, p. 16-28. [Based on data 1952-61.]
- JANGPANGI, B. S., and VOHRA, C. P. The retreat of the Shunkalpa (Ralam) Glacier in central Himalaya, Pithoragarh District, Uttar Pradesh, India. *Union Géodésique . . . Obergurgl*, 1962, p. 234-38. [Result of I.G.Y. expedition.]
- KICK, W. Variations of some central Asiatic glaciers. *Union Géodésique . . . Obergurgl*, 1962, p. 223-29. [Two examples of changes in these glaciers; Chogo Lungma Glacier (Karakoram) and glaciers flowing from Nanga Parbat.]
- KONDRATYEV, O. K. On some preliminary results of seismo-glaciological investigations on the Antarctic continent. *Annals of the IGY*, Vol. 11, 1961, p. 399-405. [Results of Soviet measurements of thickness of ice.]
- KOSACK, H.-P. Die Höhenlage der antarktischen Eiskuppel. *Polarforschung*, Bd. 5, Jahrg. 30, Ht. 1-2, 1960 [pub. 1961], p. 21-24. [Altitude determinations in Antarctica.]
- KOVALYEV, P. V. The fluctuations of glaciers in the Caucasus. *Union Géodésique . . . Obergurgl*, 1962, p. 179-84. [Summary of results over a wide area; discussion of general pattern and local variations.]
- KRENKE, A. N., and RAZUMEYKO, N. G. Lednikovyye kupola Zemli Frantsa-Iosifa [Ice caps of Zemlya Frantsa-Iosifa]. *Priroda [Nature]*, 1961, No. 4, p. 94-96. [Two apparently similar caps compared and contrasted.]
- KRUCHININ, YU. A. Nekotoryye dannyye o temperaturnom rezhime shelf'ovogo lednika Lazareva [Some data on the temperature regime of the Lazarev ice shelf]. *Informatsionnyy Byulleten' Sovetskoy Antarkticheskoy Ekspeditsii [Information Bulletin of the Soviet Antarctic Expedition]*, No. 30, 1961, p. 13-15. [Readings in 37 m. borehole, Dronning Maud Land, June-December 1959.]
- KURIEN, T. K., and MUNSHI, M. M. Sonapani Glacier, Kangra District, Punjab, India. *Union Géodésique . . . Obergurgl*, 1962, p. 239-44. [General description of glacier and its retreat.]
- LACHENBRUCH, A. H. Depth and spacing of tension cracks. *Journal of Geophysical Research*, Vol. 66, No. 12, 1961, p. 4273-92. [Theory of crevasse formation.]
- LANGWAY, C. C., jr. Some physical and chemical investigations of a 411 meter deep Greenland ice core and their relationship to accumulation. *Union Géodésique . . . Obergurgl*, 1962, p. 101-18. [Used to investigate accumulation over last 1,000 years.]
- LISTER, H. Accumulation and firmification in north Greenland. *Folia Geographica Danica*, Tom. 9, 1961, p. 163-74. [Results of British North Greenland Expedition, 1952-54.]
- LISTER, H. Micro-meteorology over dirt coned ice. *Jökull*, Ar 9, 1959, p. 1-5. [Effect of dirt layer on meteorological elements responsible for ablation. Field work on Breidamerkurjökull, south-east Iceland, by Durham University Exploration Society, 1951.]
- LLIBOUTRY, L., and others. Étude de trois glaciers des Alpes Françaises, [par] L. Lliboutry, M. Vallon et R. Vivet. *Union Géodésique . . . Obergurgl*, 1962, p. 145-59. [Detailed study of changes in surface level on Vallée Blanche, Mer de Glace and Glacier de Saint-Sorlin.]
- LUNDE, T. On the snow accumulation in Dronning Maud Land. *Norsk Polarinstitutt. Skrifter*, Nr. 123, 1961, 48p. (Den Norske Antarktisekspedisjonen, 1956-60. Scientific Results, No. 1.) [Annual accumulation determined for period 1940-59.]
- LYONS, J. B., and RAGLE, R. H. Thermal history and growth of the Ward Hunt Ice Shelf. *Union Géodésique . . . Obergurgl*, 1962, p. 88-97. [Discussion of formation of this shelf, believed to originate partly from sea ice.]

- MAKAREVICH, K. G. The regime of the glaciers in the Zailiiskiy Alatau in recent decades. *Union Géodésique . . . Obergurgl*, 1962, p. 249–61. [Retreat observed for many glaciers and changes of thickness and surface velocity on some.]
- MARKIN, V. A. Al'bedo lednikov Zemli Frantsa-Iosifa i yego rol' v radiatsionnom rezhime arhipelaga [The albedo of the Zemlya Frantsa-Iosifa glaciers and its role in the radiation regime of the archipelago]. *Akademiya Nauk SSSR. Mezhdudedomstvennyy Komitet po Provedeniyu Mezhdunarodnogo Geofizicheskogo Goda. Sbornik Statey. IX Razdel Programmy MGG (Glyatsiologiya)* [Academy of Sciences of the U.S.S.R. Interdepartmental Committee for Participation in the International Geophysical Year. Collected Papers. Section IX of the I.G.Y. Programme (Glaciology)], No. 6, 1961, p. 111–22. [Measurements. Emphasizes importance of albedo in reducing radiation balance.]
- MARKOV, K. K. Über die dynamik der antarktischen Eisdecke. *Petermanns Geographische Mitteilungen*, Jahrg. 105, 3 Quartalsheft, 1961, p. 238–47. [Survey of literature on dynamics of Antarctic land ice both now and in geological past.]
- MEIER, M. F., and POST, A. S. Recent variations in mass net budgets of glaciers in western North America. *Union Géodésique . . . Obergurgl*, 1962, p. 63–77. [Study of variation on one glacier from year to year, from glacier to glacier in the area, and, based on aerial photography, over a wide range.]
- MIKHAYLOV, N. I. Sovremennoye oledneniye Shapshal'skogo Khrebta (vostochnyy Altay) [Contemporary glacierization in the Shapshal'skiy Range (eastern Altay)]. *Izvestiya Akademii Nauk SSSR. Seriya Geograficheskaya* [News of the Academy of Sciences of the U.S.S.R. Geographical Series], 1961, No. 3, p. 76–81. [General description.]
- MÜLLER, F. Glacier mass-budget studies on Axel Heiberg Island, Canadian Arctic Archipelago. *Union Géodésique . . . Obergurgl*, 1962, p. 131–42. [Detailed investigations on White Glacier in 1960 and 1961.]
- NOBLES, L. H. Structure of the ice cap margin, northwestern Greenland. *Folia Geographica Danica*, Tom. 9, 1961, p. 188–204. [Detailed study and discussion of origin.]
- PAL'GOV, N. N. The relation between glacier retreat and the position of the firn line with special reference to the Zentralny Tuyuksu Glacier. *Union Géodésique . . . Obergurgl*, 1962, p. 40–48. [Based on data 1937–61.]
- PATTERSON, S. Glaciological research on Athabaska Glacier in 1960. *Canadian Alpine Journal*, Vol. 44, 1961, p. 110–11. [Includes drill-hole measurements, surface velocity, side slip, temperature and accumulation.]
- PEROV, V. F. Firnovyye lednichki Khibin [Firn glaciers of Khibin]. *Trudy Khibinskoy Geograficheskoy Stantsii* [Transactions of the Khibin Geographical Station], Vyp. 1, 1960, p. 105–18. [Description and discussion of origin of three unusual glaciers.]
- PÉWÉ, T. L. University of Alaska Gulkana Glacier Expedition 1961. *Arctic*, Vol. 14, No. 4, 1961, p. 236–37. [Work done.]
- PÉWÉ, T. L., and CHURCH, P. E. Glacier regimen in Antarctica as reflected by glacier-margin fluctuation in historic time with special reference to McMurdo Sound. *Union Géodésique . . . Obergurgl*, 1962, p. 295–305. [Evidence from glacier margins shows Antarctic ice to be steady, or in places retreating slightly.]
- PLAM, M. YA. O kharaktere nakopleniya snega v oblasti akkumulyatsii na El'bruse [The nature of snow accumulation in the accumulation zone of Mount El'brus]. *Akademiya Nauk SSSR. Mezhdudedomstvennyy Komitet po Provedeniyu Mezhdunarodnogo Geofizicheskogo Goda. Sbornik Statey. IX Razdel Programmy MGG (Glyatsiologiya)* [Academy of Sciences of the U.S.S.R. Interdepartmental Committee for Participation in the International Geophysical Year. Collected Papers. Section IX of the I.G.Y. Programme (Glaciology)], No. 6, 1961, p. 130–35. [I.G.Y. results: accumulation occurs in short periods during passage of cyclones and half is removed by wind.]
- QUERVAIN, M. R. DE. On the work carried out by the group "Glaciology inlandsis" of the International Glaciological Greenland Expedition 1959–1960 (EGIG). *Folia Geographica Danica*, Tom. 9, 1961, p. 217–23.
- SHARP, R. P., and EPSTEIN, S. Comments on annual rates of accumulation in West Antarctica. *Union Géodésique . . . Obergurgl*, 1962, p. 273–85. [Discrepancy between accumulation determined from pit stratigraphy and oxygen isotope variations.]
- SHUMSKIY, P. A., and others. Lednikovyy kupol ostrova Drigal'skogo [Ice cap of Drigalski Island]. [By] P. A. Shumskiy, V. M. Kotlyakov, S. A. Yevteyev. *Akademiya Nauk SSSR. Mezhdudedomstvennyy Komitet po Provedeniyu Mezhdunarodnogo Geofizicheskogo Goda. Sbornik Statey. IX Razdel Programmy MGG (Glyatsiologiya)* [Academy of Sciences of the U.S.S.R. Interdepartmental Committee for Participation in the International Geophysical Year. Collected Papers. Section IX of the I.G.Y. Programme (Glaciology)], No. 6, 1961, p. 45–69. [Structure and regime of ice cap which completely covers island near "Mirnyy". English summary.]
- SIGAFOOS, R. S., and HENDRICKS, E. L. Botanical evidence of the modern history of Nisqually Glacier, Washington; botanical evidence of glacier activity. *U.S. Geological Survey. Professional Paper 387-A*, 1961, iii, 20 p. [Estimates of fluctuation of this and other glaciers on Mount Rainier, based on tree and humus dates, etc.]
- [SOUTH POLE: ICE THICKNESS.] Tolshchina l'da v rayone yuzhnogo polysa [Thickness of the ice in the region of the South Pole]. *Informatsionnyy Byulleten' Sovetskoy Antarkticheskoy Ekspeditsii* [Information Bulletin of the Soviet Antarctic Expedition], No. 30, 1961, p. 39. [Results obtained by British, Russian and American parties.]
- TEWARI, A. P., and JANGPANGI, B. S. The retreat of the snout of the Pindari Glacier. *Union Géodésique . . . Obergurgl*, 1962, p. 245–48. [Result of I.G.Y. expedition.]
- TORII, T., and others. Preliminary reports on a traverse to the Yamato Mountains in 1960, by T. Torii, Y. Yoshida, K. Kizaki and T. Ishida. *Antarctic Record*, No. 13, 1961, p. 1–9. [Dronning Maud Land. Narrative and reports on geology, geomorphology, seismic soundings. In English with Japanese abstract.]
- TROITSKIY, L. S. Nekotoryye osobennosti sovremennoye oledneniya Polyarnogo Urala [Some features of the present glacierization of the Polar Urals]. *Akademiya Nauk SSSR. Mezhdudedomstvennyy Komitet po Provedeniyu Mezhdunarodnogo Geofizicheskogo Goda. Sbornik Statey. IX Razdel Programmy MGG (Glyatsiologiya)* [Academy of Sciences of the U.S.S.R. Interdepartmental Committee for Participation in the International Geophysical Year. Collected Papers. Section IX of the I.G.Y. Programme (Glaciology)], No. 6, 1961, p. 70–85. [I.G.Y. results.]

- TRONOV, M. V. On the role of summer snowfall in glacier variation. *Union Géodésique . . . Obergurgl*, 1962, p. 262–69. [Analysis of effect of snowfalls at different stages of summer.]
- TRYGGVASON, E. Earthquakes, jökullhlaups and subglacial eruptions. *Jökull*, År 10, 1960, p. 18–22. [Discussion of relationship between these phenomena based on observations of Icelandic glaciers.]
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ERRATA (Vol. 4, No. 33)

p. 264, line 37

for " $a_t = \lambda_0 h_t + \lambda_0 \dot{h}_t + \lambda_2 \ddot{h}_t + \dots$,"

read " $a_t = \lambda_0 h_t + \lambda_1 \dot{h}_t + \lambda_2 \ddot{h}_t + \dots$,"

p. 338 and 343

The situation is that the Swedish (Sandvik) spoon drill is used to determine the depth of the white ice-black ice interface, and then a SIPRE drill is used to determine the total ice thickness.