

## 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

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### GENERAL GLACIOLOGY

- AYERS, R. C., jr., and others. Oil spills in the Arctic Ocean: extent of spreading and possibility of large-scale thermal effects, [by] R. C. Ayers, Jr., H. O. Jahns, J. L. Glaeser. *Science*, Vol. 186, No. 4166, 1974, p. 843–45. [Criticism of article by S. Martin and W. J. Campbell, *ibid.*, Vol. 181, No. 4094, 1973, p. 56–58. Reply by Martin and Campbell, p. 845–46.]
- KUROIWA, D., ed. *Kyokuchihyō shōhyō no butsuriteki kakaguteki kenkyū* [Physical and chemical studies in ices [sic] from glaciers and ice sheets]. *Monbushō Kagaku Kenpi Sōgō Kenkyū (A). Hokukusho*, [1973], [pub.] 1974, [iv], 125 p. [Collection of papers. Contents: A. Higashi and H. Shōji, "Nankyoku hyōshō shinbuhyō no rikigakuteki seishitsu [Mechanical properties of deep ice core samples obtained at Byrd station, Antarctica]", p. 1–13; D. Kuroiwa and T. Kawamura, "Jinkōteki ni atsumitsu shita seppyō no nankyoku seppyō no danseiritsu to naibu masatsu [Elastic modulus and internal friction of artificially compressed snow and Antarctic snow and ice]", p. 15–22; T. Yamada, "Mizuho kansoku-kyoten yori saishū saretā bōringu koā (fukasa 75 m) no kōzō, soshiki to tatenami, yokonami no denpan sokudo to no kankei [Relation between sonic wave velocities and structures of core samples obtained at Mizuho camp, Antarctica]", p. 23–27; S. Mae and K. Yamamoto, "Nankyoku hyōshō teibu no jikkenteki kenkyū (I). Kenkyū mokuteki to kōatsu jikken sōchi [An experimental apparatus for study of physical properties of ice under high pressure]", p. 29–32; D. Kuroiwa, "Sekisetsu no atsumitsu ni tomonau yūdenteki seishitsu [Change of dielectric properties of snow associated with uniaxial confined compression]", p. 33–44; N. Maeno, "Investigations of electrical properties of deep ice cores obtained by drilling in Antarctica", p. 45–56 (in English); T. Yamada and T. Hasemi, "Mizuho kansoku-kyoten ni okeru hyōmen sekisetsu-sō no soshiki to netsudendōritsu to no kankei ni tsuite [On the relation between structure and thermal conductivity of sub-surface snow at Mizuho camp, Antarctica]", p. 57–63; M. Murozumi and S. Nakamura, "Kyokuchi hyōshōhyō no kakaguteki kenkyū [Chemical studies on ice cores from the Antarctic ice sheet]", p. 65–75; Y. Endō, "Tōnankyoku tairiku no sekisetsu no atsumitsu [Densification of snow in south-east Antarctica]", p. 77–83; K. Kizaki, "Ice fabrics no kenkyūshi to sono mondaiten [History of ice fabric study and related problems]", p. 85–93; M. Kumazawa, "Aisu faburikkusu no rironteki kenkyū [A theoretical study on ice fabrics]", p. 95–97; G. Wakahama, "Nankyoku Amerii-dana hyō, Uirukusu-hyōkyū oyobi Forugā-misaki no shinsōhyō no kōzō soshiki ni tsuite [On the structure and texture of deep ice cores from Amery Ice Shelf, Wilkes Dome and Cape Folger, Antarctica]", p. 99–108; M. Nakawo [i.e. Nakao] and S. Tanaka, "Tō nankyoku, heitō hyōga no bōringu koā no keshō shujiku hōi bunpu ni tsuite [On the orientational distribution of *c*-axis of ice crystals of core samples]", p. 109–13; S. Tanaka, "Kōri no keshō soshiki oyobi hyōtai kōzō to faburikku patān no kisokusei ni tsuite [On the regularity of fabric patterns found in ice core samples]", p. 115–19; M. Nakawo [i.e. Nakao] and G. Wakahama, "Arasuka-shū Makkōru-hyōga chūryūiki no bōringu koā no kaiseki [Fabric studies of glacier ice obtained from McCall Glacier, Alaska]", p. 121–25.]
- LORIUS, C. Glaciological studies at dome C. *Antarctic Journal of the United States*, Vol. 10, No. 4, 1975, p. 159. [Preliminary results of mean annual temperature, annual snow accumulation, and mean isotopic content at 74° 39' S., 123° 10' E.]
- MILTON, D. J. Carbon dioxide hydrate and floods on Mars. *Science*, Vol. 183, No. 4125, 1974, p. 654–56. [Postulates floods at some past epoch when CO<sub>2</sub> · 6H<sub>2</sub>O forming ground ice on Mars dissociated on pressure release as cause of observed terrain features.]
- NARUSE, R., ed. *Glaciological research program in Mizuho Plateau—west Enderby Land, east Antarctica. Part 3, 1973–1974*. Tokyo, National Institute of Polar Research, 1975. i.l., 121 p. (Japanese Antarctic Research Expedition. JARE Data Reports, No. 28 (Glaciology).) [Contents include: R. Naruse, "Outline of glaciological traverse in 1973–1974", p. 1–6; R. Naruse and K. Yokoyama, "Position, elevation and ice thickness of stations", p. 7–47; R. Naruse, "Movement of the ice sheet observed by a triangulation chain", p. 48–61; K. Yokoyama, "Net accumulation by stake measurements", p. 62–82.]



- SEKANINA, Z. A study of the icy tails of the distant comets. *Icarus*, Vol. 25, No. 2, 1975, p. 218-38. [Tests of this theory of composition of comet tails.]
- SHIMIZU, H., ed. *Glaciological research program in Mizuho Plateau—west Enderby Land, east Antarctica. Part 2, 1969-1973*. Tokyo, National Institute of Polar Research, 1975. ii, 235 p. (Japanese Antarctic Research Expedition. JARE Data Reports, No. 27 (Glaciology).) [Contents: T. Yamada, H. Narita, F. Okuhira, H. Fukutani, I. Fujisawa and T. Shiratsuchi, "Net accumulation of snow by stake measurements in Sôya Coast—Mizuho Plateau in 1971-1972", p. 10-67; T. Yamada, "Stratigraphy of snow cover in Mizuho Plateau in 1971-1972", p. 68-83; M. Nakawo [i.e. Nakao], "Variation of surface micro-relief of snow cover at Mizuho camp in 1971-1972", p. 84-105; T. Yamada and H. Narita, "Drifting snow at Syowa station and Mizuho camp in 1971-1972", p. 106-113; T. Yamada, "Net radiation at the snow surface at Mizuho camp in 1971-1972", p. 114; T. Yamada, "Snow temperature at Mizuho camp in 1971-1972", p. 115-44; T. Yamada and H. Narita, "Snow temperature at 10 meters below the surface in Mizuho Plateau in 1972-1973", p. 145; S. Kawaguchi, T. Yamada and H. Sasaki, "Surface meteorological condition in Mizuho Plateau in 1971-1972", p. 146-61; H. Shimizu, A. Yoshimura, R. Naruse, O. Watanabe, M. Nakawo [i.e. Nakao] and F. Okuhira, "Movement of ice sheet and glaciers in Sôya Coast in 1969-1972", p. 162-74; A. Yoshimura and T. Kimura, "Surface topography of Mizuho camp area in 1970-1971", p. 175-76; T. Yamada, "Thermal cracks in snow cover at Mizuho camp in 1971", p. 177; T. Yamada, "Rising of water level in a drill hole in glacier ice, Sôya Coast in 1972", p. 178-79; R. Naruse, "Density and hardness of snow in Mizuho Plateau in 1969-1970", p. 180-86; O. Watanabe, "Density and hardness of snow in Mizuho Plateau—west Enderby Land in 1970-1971", p. 187-235.]

## GLACIOLOGICAL INSTRUMENTS AND METHODS

- BOGORODSKIY, V. V. *Radiozondirovaniye l'da [Radio sounding of ice]*. Leningrad, Gidrometeoizdat, 1975. 64 p. [Short account of method as applied to glaciers, frozen ground, and fresh-water and sea ice.]
- GARELIK, I. S., and others. *Ispol'zovaniye materialov s'yemok so sputnikov dlya glytsiologicheskikh issledovaniy [The use of satellites in glaciological studies]*. [By] I. S. Garelik, A. M. Grinberg, A. N. Krenke. *Izvestiya Akademii Nauk SSSR. Seriya Geograficheskaya*, 1975, No. 1, p. 93-101. [Based on satellite photographs of Altay and Tyan'-Shan'.]
- JAIPELL, R. L. A sturdy probe for measuring deep snowdrifts. *U.S. Dept. of Agriculture. Forest Service. Research Note RM-301*, 1975, 3 p. [Sections of hexagonal aluminium rod joined with pump couplings form rigid probe which will sample drifts as deep as 40 ft.]
- RAMSEIER, R. O., and WEAVER, R. J. *Floating ice thickness and structure determination—heated wire technique*. Ottawa, Environment Canada. Inland Waters Directorate. Water Resources Branch, 1975. v, 8 p. (Technical Bulletin No. 88.) [Quick means of making *in situ* thickness measurements on fresh-water and sea ice. Describes method and presents details of construction of gauge with engineering drawings.]
- RAND, J. H. 100-meter ice cores from the South Pole and the Ross Ice Shelf. *Antarctic Journal of the United States*, Vol. 10, No. 4, 1975, p. 150-51. [Describes operation of CRREL shallow drill.]
- SLESARENKO, YU. YE. Ul'trazvukovoy sposob opredeleniya fazovogo sostava ledyanikh obrazovaniy iz morskoy vody i rastvorov [Ultrasonic method of determining the phase composition of ice formations from sea-water and solutions]. (In Tsytovich, N. A., and others, ed. *Vtoraya Mezhdunarodnaya Konferentsiya po Merzlotovedeniyu. Doklady i soobshcheniya*. [Edited by] N. A. Tsytovich, B. A. Savel'yev, I. N. Vot'yakov. Vyp. 4. Yakutsk, Yakutskoye Knizhnoye Izdatel'stvo, 1973, p. 215-18.) [Propagation of ultrasonic waves in ice in sea-water determined and used to deduce phase composition.]
- STENGLE, T. R., and others. Sampling of glacial snow for pesticide analysis: the high plateau glacier of Mt. Logan, [by] T. R. Stengle, J. J. Lichtenberg and C. S. Houston. (In Bushnell, V. C., and Marcus, M. G., ed. *Icefield Ranges Research Project. Scientific results. Vol. 4*. New York, American Geographical Society; Montreal, Arctic Institute of North America, 1974, p. 225-26.) [Describes technique for obtaining samples free from contamination, under adverse conditions with simple equipment.]

## PHYSICS OF ICE

- BALES, B. L., and others. Separation of isotropic and anisotropic hyperfine constants in disordered systems by analysis of electron paramagnetic resonance lines at two different microwave frequencies: applications to the molecular structure around excess electrons in  $\gamma$ -irradiated 10M sodium hydroxide alkaline ice glass, [by] B. L. Bales, M. K. Bowman and L. Kevan, R. N. Schwartz. *Journal of Chemical Physics*, Vol. 63, No. 7, 1975, p. 3008-14.
- BENDITKIS, R. S., and others. Issledovaniye vliyaniya rastvora nitrit-nitrata khlorida kal'tsiya na mekhanicheskiye svoystva l'da [Effect of a calcium chloride nitrite-nitrate solution on the mechanical properties of ice]. [By] R. S. Benditkis, Yu. M. Luzhnov, N. N. Lyapushkin. *Zhurnal Fizicheskoy Khimii*, Tom 49, Vyp. 8, 1975, p. 2157-58. [Abstract of paper deposited with VINITI. English translation in *Russian Journal of Physical Chemistry*, Vol. 49, No. 8, 1975, p. 1269.]
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- BROWELL, E. V., and ANDERSON, R. C. Ultraviolet optical constants of water and ammonia ices. *Journal of the Optical Society of America*, Vol. 65, No. 8, 1975, p. 919-26. [Refractive index and upper limit on absorption coefficient for ice Ih, amorphous ice and amorphous ammonia ice measured.]
- BUDD, W. F., and MATSUDA, M. Nijiku-kuriipu asshuku ni okeru takesshōhyō no sentaku-hōisei ni tsuite [On preferred orientation of polycrystalline ice by biaxial creep]. *Teion-kagaku: Low Temperature Science*, Ser. A, [No.] 32, 1974, p. 261-65.



- CHESSIN, H., and others. Investigation of the pseudobinary solid solutions of AgI-CuI by means of X-ray diffraction, [by] H. Chessin, R. E. Passarelli, Jr., and B. Vonnegut. *Inorganic Chemistry*, Vol. 14, No. 10, 1975, p. 2551-52. [Effectiveness of solid solutions as ice nucleators increases with decreasing mismatch between (0001) plane of ice and (111) plane of solution.]
- DAVIS, B. L., and others. An explanation for the unusual nucleating ability of aerosols produced from the AgI-NH<sub>4</sub>I-acetone system, by B. L. Davis, L. R. Johnson and F. J. Moeng. *Journal of Applied Meteorology*, Vol. 14, No. 5, 1975, p. 891-96. [Attributed to existence of a complex compound with better epitaxial fit to ice than AgI.]
- DOSTOVALOV, B. N. Struktury, fazovyye perekhody i svoystva svobodnoy i svyazannoy vody [Structures, phase transitions and properties of free and bound water]. (In Tsyrovich, N. A., and others, ed. *Vtoraya Mezhdunarodnaya Konferentsiya po Merzlotovedeniyu. Doklady i soobshcheniya*. [Edited by] N. A. Tsyrovich, B. A. Savel'yev, I. N. Volyakov. Vyp. 4. Yakutsk, Yakutskoye Knizhnoye Izdatel'stvo, 1973, p. 116-25.) [Theoretical model used to discuss structures of ice, water and water vapour.]
- ERMOLIEFF, A. Brillouin scattering in ice and deuterated ice as a function of temperature. *Solid State Communications*, Vol. 17, No. 8, 1975, p. 1013-16. [Elastic constants deduced from light scattering measurements from sound waves in ice. Anomalies observed between 70 and 130 K.]
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- FUKUTA, N. A study of the mechanism of contact ice nucleation. *Journal of the Atmospheric Sciences*, Vol. 32, No. 8, 1975, p. 1597-603. [Nuclei acted 2-3 deg higher temperature on contact than if already immersed in drop.]
- GAGIN, A. The ice phase in winter continental cumulus clouds. *Journal of the Atmospheric Sciences*, Vol. 32, No. 8, 1975, p. 1604-14. [Measurements from instrumented aircraft.]
- GOLUBEV, V. N. Zavisimost' struktury l'da ot solenosti zamerzayushchey vody [Relation of ice structure to the salinity of freezing water]. (In Tsyrovich, N. A., and others, ed. *Vtoraya Mezhdunarodnaya Konferentsiya po Merzlotovedeniyu. Doklady i soobshcheniya*. [Edited by] N. A. Tsyrovich, B. A. Savel'yev, I. N. Volyakov. Vyp. 4. Yakutsk, Yakutskoye Knizhnoye Izdatel'stvo, 1973, p. 180-84.) [Relation between number of crystals and salinity found.]
- HALLETT, J., and SHRIVASTAVA, S. K. Nucleation of supercooled water by large single crystals of silver iodide. *Journal de Recherches Atmosphériques*, Vol. 6, Nos. 1-3, 1972, p. 223-36. [Effect of various treatments on initial freezing temperature.]
- JELLINEK, H. H. G. Adhesion of ice frozen from dilute electrolyte solutions. (In Mittal, K. L., ed. *Adsorption at interfaces. Papers from a symposium . . . at the 167th meeting of the American Chemical Society, Los Angeles, Calif., April 2-5, 1974*. Washington, D.C., American Chemical Society, 1975, p. 248-60. (ACS Symposium Series, [No.] 8.) [Analysis of reported results implies adhesion is due to shearing an interfacial liquid solution layer.]
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- KING, W. D., and FLETCHER, N. H. Pressures and stresses in freezing water drops. *Journal of Physics D*, Vol. 6, No. 18, 1973, p. 2157-73. [Calculation of pressure within freezing drop and comparison with experiments.]
- KOLOSOV, A. P., and SHVAYSHTYEN, Z. I. Vliyanie temperatury fronta kristallizatsii na strukturu l'da pri geterogennom ledoobrazovanii [Effect of crystallization front temperature on ice structure in heterogeneous ice formation]. *Trudy Arkhticheskogo i Antarkticheskogo Nauchno-Issledovatel'skogo Instituta*, Tom 317, 1975, p. 61-66. [Study of crystal size and orientations during freezing.]
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- KVLIVIDZE, V. I., and others. YaMR podirzhnoy fazy vody na poverkhnosti l'da [N.M.R. of the mobile water phase on the surface of ice]. [By] V. I. Kvlividze, V. F. Kiselev, L. A. Ushakova. *Vestnik Moskovskogo Universiteta. Fizika i Astronomiya*, Tom 15, No. 6, 1974, p. 736-38. [Confirmation that narrow signal is due to mobile water molecules on ice surface.]
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- MIZUNO, Y. X-sen topogurafu ni yoru shimo oyobi heihanhyō no keshō-kekkan no kenkyū [X-ray topographical studies on crystal defects in hoarfrost and tabular ice]. *Teion-kagaku: Low Temperature Science*, Ser. A, [No.] 32, 1974, p. 13-24. [Dislocations observed with  $\frac{1}{2}a\langle 11\bar{2}0 \rangle$  and  $a\langle 10\bar{1}0 \rangle$  Burgers vectors, also stacking faults on (0001) planes. Chemical etch pits more dense than dislocations. English summary, p. 22-24.]
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- OGURO, M. Hyōtankesshō-chū no ten'i ni yoru X-sen kaseki topogurafu-jō no zō konturasuto [Contrast of images on X-ray topographs of dislocations in ice single crystals]. *Hokkaidō Daigaku Kogakubu Kenkyū Hokoku*, 69, 1973, p. 137-46. [Theory of X-ray topographic imaging of dislocations in ice and causes of double-image phenomenon.]
- OGURO, M. Yōzai fujunbutsu o fukumu hyōtankesshō no ikusei. Ten'i kōzō to fujunbutsu no sonzai jōtai [Growth of ice single crystals from dilute aqueous solutions by the modified Bridgman method. Distribution of impurities and structure of dislocations]. *Hokkaidō Daigaku Kogakubu Kenkyū Hokoku*, 74, 1975, p. 83-94. [Crystals with  $\text{NH}_3$ ,  $\text{NH}_4\text{F}$  and  $\text{NaCl}$  impurities studied.]
- PANYUSHKIN, A. V., and others. Vliyaniye elektricheskogo polya na adgeziyu l'da k poverkhnosti perflorirovannogo gidrofobnogo sloya [Effect of an electric field on ice adhesion to the surface of a perfluorinated water-repellant coating]. [By] A. V. Panyushkin, Yu. D. Sinochkin, N. A. Sergacheva. *Trudy Arkticheskogo i Antarkicheskogo Nauchno-Issledovatel'skogo Instituta*, Tom 317, 1975, p. 99-102. [Hardening the finishing coat in an electric field produces surface with very low ice adhesion.]
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## GLACIAL GEOLOGY

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- FILLON, R. H. Deglaciation of the Labrador continental shelf. *Nature*, Vol. 253, No. 5491, 1975, p. 429–31. [Evidence including moraines and glacial landforms shows extent of Quaternary glaciation in Hamilton Bank area and suggests deglaciation was in progress 9 000 B.P.]
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## FROST ACTION ON ROCKS AND SOIL. FROZEN GROUND. PERMAFROST

- ALEKSEYEV, V. P. Naledi Leno-Amurskogo mezhdurech'ya [Naleds of the Lena-Amur interfluvium]. *Sibirskiy Geograficheskiy Sbornik*, 10, 1975, p. 46-127. [Survey of studies on formation and distribution of naleds in area.]
- ALKIRE, B. D., and others. Improving low temperature compaction of a granular soil, [by] B. D. Alkire and W. M. Haas and T. J. Kaderabek. *Canadian Geotechnical Journal*, Vol. 12, No. 4, 1975, p. 527-30. [Dry density of silty sand compacted below 0°C can be improved by using CaCl<sub>2</sub> as additive.]
- BARSCHE, D., and KING, L. An attempt to date fossil rock glaciers in Grison, Swiss Alps. (A preliminary note.) *Quaestiones Geographicae* (Poznań), No. 2, 1975, p. 5-14. [Radiocarbon dating of organic material suggests rock glaciers near present timber line are 2 500 yr inactive or fossil.]
- BERG, I. Flyplassprosjektet på Svalbard. Anleggstekniske arbeider. *Frost i Jord*, No. 15, 1975, p. 23-29. [Describes construction of civil air-field near Longyearbyen, Spitsbergen. From June to September only, thawing depth of soil may be 50-100 cm. English summary, p. 28-29.]
- BOUT, P. Le périglaciaire du Massif Central de la France. *Biuletyn Peryglacialny*, No. 24, 1975, p. 187-210. [Presents evidence showing that at onset of Quaternary, this region showed effects of periglacial climate.]
- BOYD, D. W. Computing freezing and thawing degree-days from monthly temperatures. *Canada. National Research Council. Division of Building Research. Technical Paper No. 444*, 1975, [29] p. [Development of equation and reasons for rejecting alternatives are discussed.]
- BROCKIE, W. J. Experimental frost-shattering. (In Stokes, E., ed. *Proceedings of the seventh New Zealand Geography Conference, Hamilton, August 1972*. [Christchurch], New Zealand Geographical Society, 1973, p. 177-86. (Conference Series No. 7.)) [Attempts to relate qualitative results to specific landscape situations.]
- CLAPPERTON, C. M. Further observations on the stone runs of the Falkland Islands. *Biuletyn Peryglacialny*, No. 24, 1975, p. 211-17. [Presents evidence supporting theory that stone runs were derived by frost-shattering and moved by solifluction. Suggests probable sequence of landform evolution leading to development.]
- DANILOV, I. D. Plastovyye l'dy v subakval'nykh otlozheniyakh severa Zapadnoy Sibiri [Stratified ice in subaqueous deposits in the north of Western Siberia]. *Prirodnyye Usloviya Zapadnoy Sibiri*, Vyp. 5, 1975, p. 205-15. [Describes horizontal beds of ice and vertical veins in permanently frozen rocks.]
- DIONNE, J.-C. Bibliographie annotée sur les formes et structures périglaciaires fossiles au Canada méridional. *Biuletyn Peryglacialny*, No. 24, 1975, p. 369-71.
- [EFFECTS OF FROZEN GROUND ON ROADS.] *Road research. Frost action on roads. Proceedings of the symposium on frost action on roads held at the Norwegian Road Research Laboratory in Oslo on 1st, 2nd and 3rd October 1973*. [Paris], Organisation for Economic Co-operation and Development, [c1974]. 229 p. [Summaries of 54 papers and discussions at each session.]
- FAHEY, B. D. Nonsorted circle development in a Colorado alpine location. *Geografiska Annaler*, Vol. 57A, Nos. 3-4, 1975, p. 153-64. [Examines characteristics, origin, development and dynamics of group of non-sorted circles produced by seasonal frost heaving and discusses age relations with other periglacial features in area.]



- FUKUDA, M. Tōketsu-yūkai ni yoru ganseki no fūka [Rock weathering by freeze-thaw cycles]. *Teion-kagaku: Low Temperature Science*, Ser. A, [No.] 32, 1974, p. 243-49. [Describes field work and results. English summary, p. 249.]
- FUKUDA, M., and INOUE, M. Tōjō shita tsuchi no kōzō to danseiha-sokudo [Structure of frost-heaved soil and velocity of compressive waves]. *Teion-kagaku: Low Temperature Science*, Ser. A, [No.] 32, 1974, p. 283-86.
- GOLTE, W., and HEINE, K. Fossile Riesen-Eiskeilnetze am Niederrhein. *Eiszeitalter und Gegenwart*, Bd. 25, 1975, p. 132-40. [Describes fossil ice wedge polygons in lower Rhine valley.]
- HEDGES, J. Multiple cycles of cryoplanation on Sugarloaf Mountain, Maryland. *Biuletyn Peryglacjalny*, No. 24, 1975, p. 233-43. [Mountain was widely though superficially modified by episodes of periglacial climate during Pleistocene. Landforms described.]
- HEIDMANN, L. J. Predicting frost heaving susceptibility of Arizona soils. *U.S. Dept. of Agriculture. Forest Service. Research Note RM-295*, 1975, 7 p. [Study to identify frost-susceptible soils. By using variables of bulk density, sand content and calcium, equation was constructed which accounted for 83% of total variation in heaving.]
- HEIDMANN, L. J., and THORUD, D. B. Effect of bulk density on frost heaving of six soils in Arizona. *U.S. Dept. of Agriculture. Forest Service. Research Note RM-293*, 1975, 4 p. [For all soils and depths, frost heaving increased with bulk density.]
- HOEKSTRA, P., and others. Ground and airborne resistivity surveys of permafrost near Fairbanks, Alaska, [by] P. Hoekstra, P. V. Sellmann and A. Delaney. *Geophysics*, Vol. 40, No. 4, 1975, p. 641-56. [Discusses VLF (very low frequency) surveys.]
- HVÄRINEN, H., and RITCHE, J. C. Pollen stratigraphy of Mackenzie pingo sediments, N.W.T., Canada. *Arctic and Alpine Research*, Vol. 7, No. 3, 1975, p. 261-72. [Growth of two eroded pingos was probably initiated about 2 500 years ago.]
- INSTANES, B. Svalbard lufthavn. Hangar og kontrolltårn. *Frost i Jord*, No. 15, 1975, p. 31-37. [Describes construction of hangar and control tower at civil air-field near Longyearbyen, Spitsbergen, with reference to difficulties encountered through presence of permafrost. English summary, p. 35-37.]
- JERSAK, J. Frost fissures in loess deposits. *Biuletyn Peryglacjalny*, No. 24, 1975, p. 245-58. [Describes and discusses formation of these polygonal fissures, with examples from Poland.]
- KATASONOV, E. M. Frozen-ground and facial analysis of Pleistocene deposits and paleogeography of central Yakutia. *Biuletyn Peryglacjalny*, No. 24, 1975, p. 33-40. [Follows development of permafrost since Pleistocene in this region.]
- KINOSITA [i.e. KINOSHITA], S., ed. *Arasuka Kanada-hokubu no eikyū tōdo ni okeru kanrei chikei oyobi seibutsu kankyō no sōgo chōsa. Shōwa 49-nen 6-7 gatsu [Joint studies on physical and biological environments in the permafrost, Alaska and north Canada. June to July, 1974].* Sapporo, Institute of Low Temperature Science, Hokkaido University, 1975. [iv], 143 p. [Contains the following papers: S. Kinoshita [i.e. Kinoshita], "Eikyū tōdo-ken gakujutsu chōsa no sōsetsu [General outline of joint studies on physical and biological environments in the permafrost]", p. 1-32 (English summary, p. 31-32); S. Kinoshita [i.e. Kinoshita], Y. Suzuki, K. Horiguchi, M. Fukuda, "Eikyū tōdo hyōsōbu no dammen kansoku [Core samplings in the upper layer of permafrost]", p. 33-61 (English summary, p. 61); M. Fukuda, "Eikyū tōdo chiiki no chikei hattatsu to dai-yonki chishi [Quaternary histories of landform development in permafrost]", p. 62-84 (English summary, p. 83-84); K. Horiguchi, "Eikyū tōdo hyōsōdo no kagakuteki seishitsu toku ni sanseido ni tsuite [Chemical properties, especially pH, of the upper layer of permafrost]", p. 85-94 (English summary, p. 93-94); A. Sakai and S. Yoshida, M. Saitō, "Eikyū tōdo chitai ni okeru shinrin shokusei no seitai teki tokuchō [Ecological characteristics of forests on permafrost]", p. 95-126 (English summary, p. 125-26); K. Tanno, "Eikyū tōdo dojō dōbutsu [Permafrost and invertebrates]", p. 127-43 (English summary, p. 142-43).]
- KINOSITA [i.e. KINOSHITA], S., and others. Tomakomai ni okeru tōjō kansoku (Shōwa 48-49 nen tōki) [Frost heave in Tomakomai (1973-74)]. [By] S. Kinoshita [i.e. Kinoshita], Y. Suzuki, K. Horiguchi, M. Fukuda, M. Inoue. *Teion-kagaku: Low Temperature Science*, Ser. A, [No.] 32, 1974, p. 251-60. [Observations near Hokkaido. Minimum air temperature -21.8°C. English summary, p. 260.]
- KONOROVSKIY, A. K. *Rezhimy merzlotnykh poymennykh pochv doliny Leny [Regimes of frozen soil of flood terraces of the Lena valley].* Novosibirsk, "Nauka", 1974. 168 p. [Includes hydrological and chemical regimes; effect of using fertilisers.]
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