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H. O. Pub. No. 240

BIBLIOGRAPHY ON ICE OF
THE NORTHERN HEMISPHERE

UNITED STATES NAVY DEPARTMENT
HYDROGRAPHIC OFFICE

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H. O. Pub. No. 240

BIBLIOGRAPHY ON ICE OF THE NORTHERN HEMISPHERE

The bibliography for H. O. Pub. No. 550, Ice Atlas of the Northern Hemisphere, now in preparation by
the Hydrographic Office, to which has been added an index of authors, subjects, and places.

ISSUED UNDER THE AUTHORITY OF THE SECRETARY OF THE NAVY

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BIBLIOGRAPHY ON ICE OF
THE NORTHERN HEMISPHERE

The bibliography for II, O. Pub. No. 391, for Atlas of the Northern Hemisphere, now in preparation by
the Hydrographic Office, in which has been added an index of subjects, subjects, and places.

ORDERED BY THE SECRETARY OF THE NAVY

UNITED STATES
NAVY
HYDROGRAPHIC OFFICE
WASHINGTON, D. C.

The following is a list of the publications of the Hydrographic Office, Washington, D. C.

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PREFACE

This is the first publication of bibliographic material compiled during World War II by the Hydrographic Office. The references in this list resulted from library research carried out in connection with the preparation of H. O. Pub. 550, *Ice Atlas of the Northern Hemisphere*, and with studies prepared by this office for the Joint Army-Navy Intelligence Service.

Sources of information not elsewhere mentioned in this bibliography are:

Lists of Current Publications on Snow and Ice, contained in the Transactions of the American Geophysical Union, vols. 20, 21, and 23, 1939, 1940, and 1942, by Carl Elges, R. G. Stone, B. P. Veinberg, R. W. Burhoe, and H. P. Boardman.

Die Erforschung des Polargebietes Russisch-Eurasiens See- und Landreisen während der Jahre 1912-1924. Petermanns Mittheilungen Ergänzungsheft 188. 1925. Die Erforschung des Nordpolargebiets in den Jahren 1913-1928 (Innere Arktis und Europäischer Sektor)...1913-1931 (Sibirischer und Amerikanischer Sektor). Geographisches Jahrbuch, v. 44, 1929. v. 47, 1932. By L. L. Breitfuss.

Bibliography of Meteorological Literature, pub. by the Royal Meteorological Society of London. v. 1, 1936 to date.

Indexes to the various publications of the Akademiâ nauk, Leningrad.

Index of Literature on Hydrology in the U. S. S. R. (In Russian.)

For 1928, pub. in *Izvestiâ* of the Gosudarstvennyi Hidrologicheskii Institut, v. 30, 1931. For 1929-1930, pub. separately by the Tsentralnoe Bûro Hidrologicheskoi Bibliografii of the same institute.

Publications of the Arctic Research Institute 1920-1939. (In Russian.)

Problemy Arktiki, 1940, no. 3, pp. 157-184.

Each issue of the monthly magazine: *Problemy Arktiki*, bibliography section. v. 1, 1937 to date.

In addition to these sources, there are excellent bibliographies in certain general textbooks listed herein, notably: H. T. Barnes (item 1341), B. P. Veinberg (item 1600), and N. N. Zubov (item 1628).

The geographical positions (coordinates), which are given in the geographical index, are intended to facilitate reference to charts and maps, and in many instances are only approximate.

The bibliography was compiled by Miss Mary C. Grier, former librarian at the Oceanographic Laboratories, University of Washington, Seattle, Washington. A number of titles were supplied by John C. Weaver, Lt. (j.g.) S-U.S.N.R.

ABBREVIATIONS OF PERIODICALS

Aarb. Norsk. geogr. selsk.	Norske geografiske selskab. Aarbok.
Abh. Preuss. met. inst.	Preussisches meteorologisches institut, Berlin. Abhandlungen.
Akad. nauk Sovet izuch. prirod. resursov. Ĭakutsk.	Akademiā nauk, Leningrad. Sovet po izucheniiu proizvoditel'nykh sil SSSR. Seriā Ĭakutskaiā. (Early years as Sovet po izucheniiu prirodnikh resursov.)
Allg. bauztg.	Allgemeine bauzeitung.
Allg. fischereiztg.	Allgemeine fischerei-zeitung. Munich.
Amer. almanac, Boston.	American almanac and repository of useful knowledge.
Amer. j. sci.	American journal of science.
Ann. chim.	Annales de chimie et de physique.
Ann. géogr.	Annales de géographie.
Ann. hydrogr., Berlin.	Annalen der hydrographie und maritime meteorologie, Berlin.
Ann. hydrogr., Paris.	Annales hydrographiques, Paris.
Ann. phys. n.f.	Annalen der physik. Neue folge.
Annu. rep. Engrs. dep.	U. S. Engineer department. Annual report Chief of engineers, U.S. Army.
Annu. Soc. mét. France.	Société météorologique de France. Annuaire.
Arb. Met. inst. Univ. Lettlands.	Riga. Latvijas universitate. Meteorologiskas institut. Darbi. (Riga. Universitat Lettlands. Meteorologische institut. Arbeiten.)
Arch. dtsch. Seewarte.	Hamburg. Deutsche Seewarte. Aus dem Archiv der deutschen Seewarte.
Arch. naturk. Dorpat.	Archiv für die naturkunde Liv-, Est- und Kurlands.
Arch. sci. phys. nat. Genève.	Bibliothèque universelle. Archives des sciences physiques et naturelles, Geneva.
Atti Congr. geogr. Ital.	Congresso geografico italiano. Atti.
Aurora.	Aurora; zeitschrift in monatlichen heften über witterungs- erd- und menschenkunde, Berlin.
Balt. wschr.	Baltische wochenschrift. Jurjev.
Beitr. geophys.	Gerlands beiträge zur geophysik.
Beitr. phys. fr. atm.	Beitraege zur physik der freien atmosphäre.
Beob.-ergeb. Int. Polarf.	Internationale polarforschung, 1882/83. Beobachtungen-ergebnisse.
Ber. Dtsch. wiss. komm. meer- esf. n.f.	Deutsche wissenschaftliche kommission für meeresforschung, Berlin. Berichte; neue folge.
Ber. mitt. Freunde naturw. Wien.	Gesellschaft der freunde der naturwissenschaften in Wien. Bericht über die mittheilungen.
Ber. Naturf. ges. Freiburg.	Naturforschende gesellschaft zu Freiburg. Berichte.
Bidr. Finl. nat. folk.	Bidrag till kännedom af Finlands natur och folk.
Būl. Arkt. inst.	Leningrad. Vsesoiūzniy arkticheskii institut. Būlleten.
Būl. Gos. gidrol. inst.	Leningrad. Gosudarstvennyi gidrologicheskii institut. Būlleten.
Būl. Obshch. izuch. kraia Muz. Tobol'sk. severa.	Tobolsk. Muzei Tobol'skogo severa. Obshchestvo izucheniiā kraia. Būlleten.
Būl. pogody i sost. mor. Feodosiā.	Būlleten pogody i sostoiāniā moriā Feodosiā.
Būl. St.-P. okr. put. soobshch.	Saint Peterburgskii okrug putei soobshcheniā. Būlleten. (Un-verified.)
Būl. Volkhov. gidro-elek.-sil. ust.	Volkhovskaiā gidro-elektro-sila ustanovka. Būlleten.

- Bül. Vost.-Sib. otd. Russ. geogr. obshch. Gosudarstvennoe russkoe geograficheskoe obshchestvo. Vostochno-Sibirskii otdel, Bülleten.
- Boll. Com. naz. geod. geofis. Italy. Consiglio nazionale della ricerche. Comitato nazionale per la geodesia e la geofisica. Bollettino.
- Bull. Akad. nauk. hist.-phil. Akademiâ nauk, Leningrad. Classe historico-philologique. Bulletin.
- Bull. Amer. geogr. soc. American geographical society, N.Y. Bulletin.
- Bull. Amer. met. soc. American meteorological society. Bulletin.
- Bull. Assn. sci. France. Association scientifique de France. Bulletin hebdomadaire.
- Bull. Biol. bd. Can. Canada. Biological board. Bulletin.
- Bull. Cent. met. obs. Japan. Central meteorological observatory. Bulletin.
- Bull. Cercle. géogr. Liègeois. Cercle des géographes liègeois. Bulletin.
- Bull. Hydrogr. dept. Tokyo. Japan. Hydrographic Department. Bulletin.
- Bull. Inst. océan. Institut océanographique, Monaco. Bulletin.
- Bull. Int. geod. geophys. un. Assn. sci. hydrol. International geodetic and geophysical union. Association of scientific hydrology. Bulletin.
- Bull. Mineral.-geol. inst. Upsala univ. Upsala. Universitet. Mineralogisk-geologiska institut. Bulletin.
- Bull. Nat. res. coun. National research council. Bulletin.
- Bull. Soc. d'océan. France. Société d'océanographie de France. Bulletin.
- Bull. Soc. géogr. Bordeaux. Société de géographie commerciale de Bordeaux. Bulletin.
- Bull. Soc. geophys. Varsovie. Towarzystwo geofizyczne w Warszawie. Biuletyn.
- Bull. U.S.C.G. U.S. Coast guard. Bulletin.
- Bull. U.S.G.S. U.S. Geological survey. Bulletin.
- Bull. U.S.W.B. U.S. Weather Bureau. Bulletin.
- C.R. Acad. d'Athènes. Akadēmia Athēnōn. Praktika.
- C.R. Acad. sci. Paris. Academie des sciences, Paris. Comptes rendus.
- C.R. Akad. nauk. Akademiâ nauk, Leningrad. Comptes rendus (Doklady.)
- Carl's repert. phys. Repertorium der physik. (Carl) Munich.
- Comm. Hydrol. conf. Baltic States. Hydrological conference Baltic States, 1st-6th. Communications. (In various languages.)
- Comment. phys.-math., Helsingfors. Finska vetenskaps-societeten, Helsingfors. Commentationes physico-mathematicae.
- Contract rec. Contract record and engineering review. Toronto.
- Denkschr. Akad. wiss. Wien. Math.-naturh. kl. Akademie der wissenschaft, Vienna. Mathematisch-naturhistorische klasse. Denkschriften.
- Dtsch. rdsch. geogr. stat. Deutsche rundschau für geographie und statistik. Vienna.
- Edinb. phil. j. Edinburgh philosophical journal.
- Finnl. hydrogr.-biol. undersuch. Finnlandische hydrographisch-biologische untersuchungen.
- Fiskeridir. skr. s. havunders. Norway. Fiskeridirektoratet. Skrifter, serie havundersøkelser.
- Forh. Tekn. foren. Finl. Tekniska foreningens i Finland. Forhandlingar.
- Forsch. ing.-wes. Forschung auf dem gebiete des ingenieurwesens. (Verein Deutscher Ingenieur.)
- Geofiz. sborn. Leningrad. Glavnaâ geofizicheskââ observatoriâ. Geofizicheskii sbornik.
- Geofys. publ. Geofysiske publikasjoner.
- Géogr. La Géographie.
- Geogr. abh. Geographische abhandlungen.
- Geogr. ann. Geografiska annaler, Stockholm.

Geogr. j.	Geographical journal, London.
Geogr. jb.	Geografisches Jahrbuch.
Geogr. rev.	Geographical review.
Geogr. tidsskr.	Norsk geografisk tidsskrift.
Geol. issled. zolot. obl. Sib.	Geologicheskii issledovaniia zolotonosnykh oblasti Sibiri. St. Peterburg. (Explorations géologiques dans les régions aurifères de Sibérie.)
Geophys. mem.	Great Britain. Meteorological office. Geophysical memoirs.
H. ex. doc.	U.S. Congress. House executive document.
H. misc. doc.	U.S. Congress. House miscellaneous document.
Handl. Svensk. vetensk.-akad.	Svenska vetenskapsakademien, Stockholm. Handlingar.
Hydrogr. bull. (Suiro Yoho).	Hydrographic bulletin (Suiro Yoho). Hydrographic department, Tokyo.
Hydrogr. rev.	Hydrographic review. International hydrographic bureau, Monaco.
Hydrol. obsns. mar. exped. 2d Int. Polar yr. exped.	International Polar year expedition, 2d, 1932-33. Hydrological observations of marine expedition.
Inform. biul. ukrmetu, Kiev.	Informatsionnyi biulleten ukrmetu, Kiev. (Unverified.)
Int. rev. hydrob.	Internationale revue der gesamten hydrobiologie und hydrographie
Issled. mor. SSSR	Issledovaniia morei SSSR. (Leningrad. Gosudarstvennyi gidrologicheskii institut.)
Issled. rek SSSR	Issledovaniia rek SSSR. (Leningrad. Gosudarstvennyi gidrologicheskii institut.)
Iziusk. issled. Svistr.	Iziuskaniia i issledovaniia Svistroia. (Unverified.)
Izv. Akad. nauk fiz.-khim. inst.	Akademiia nauk, Leningrad. Fizikokhimicheskii institut. Izvestiia.
Izv. Akad. nauk s. geogr. geofiz.	Akademiia nauk, Leningrad. Izvestiia. Otdelenie matematicheskikh i estestvennykh nauk. Seriia geograficheskai i geofizicheskai.
Izv. Arkhangel'sk. obshch. izuch. russ. severa.	Arkhangel'skoe obshchestvo izucheniia russkogo severa, Archangel. Izvestiia.
Ivz. Assof's. nauchn.-issled. inst. Mosk. univ.	Moscow. Universitet. Fiziko-matematicheskii fakul'tet. Assof'siia nauchno-issledovatel'skikh institutov. Izvestiia.
Izv. Donsk. politekhn. inst.	Donskii politekhnicheskii institut. Izvestiia.
Izv. Glavn. geofiz. obs.	Leningrad. Glavnaia geofizicheskai observatoriia. Izvestiia.
Ivz. Gos. gidrol. inst.	Leningrad. Gosudarstvennyi gidrologicheskii institut. Izvestiia.
Izv. Ākut'sk. otd. Russ. geogr. obshch.	Gosudarstvennoe russkoe geograficheskoe obshchestvo. Ākutskii otdel. Izvestiia.
Izv. Inst. gidrotekhn.	Leningrad. Nauchno-issledovatel'skii institut gidrotekhniki. Izvestiia.
Izv. Russ. geogr. obshch.	Gosudarstvennoe russkoe geograficheskoe obshchestvo. Izvestiia.
Izv. Sobr. inzh. put. soobshch.	Sobranie inzhenerov putei soobshcheniia, St. Peterburg. Izvestiia.
Izv. Sred.-Sib. geogr. obshch.	Sredne-Sibirskoe gosudarstvennoe geograficheskoe obshchestvo-Krasnoyarsk. Izvestiia.
Izv. Tomsk. tekhnol. inst.	Tomskii industriial'nyi institut. Izvestiia. (Through 1924 as Tomskii tekhnologicheskii institut.)
Izv. T'sentr. gidromet. biuro.	T'sentralnoe gidrometeorologicheskoe biuro. Izvestiia. (U.S.S.R.)
Izv. Turkestansk. otd. Russ. geogr. obshch.	Sredne-Aziatskoe geograficheskoe obshchestvo, Tashkent. Izvestiia.
Izv. Vost.-Sib. otd. Russ. geogr. obshch.	Gosudarstvennoe russkoe geograficheskoe obshchestvo. Vostochno-Sibirskii otdel, Irkutsk. Izvestiia.
J. appl. phys.	Journal of applied physics.
J. Assn. Chin. Amer. engrs.	Association of Chinese and American engineers, Peking. Journal.

J. cons. explor. mer.	International council for the study of the sea, Copenhagen. Journal du conseil.
J. Franklin inst.	Franklin institute. Journal.
J. geogr.	Journal of geography.
J. Met. soc. Jap.	Meteorological society of Japan. Journal.
J. ocean.	Journal of oceanography. (Kobe, Japan. Imperial Marine observatory.)
J. Roy. geogr. soc.	Royal geographical society, London. Journal.
J. Roy. soc. Dublin.	Royal society of Dublin. Journal.
J. Roy. soc. N.S.W.	Royal society of New South Wales. Journal.
J. Scot. met. soc. Edinb.	Scottish meteorological society, Edinburgh. Journal.
Jap. j. phys.	Japanese journal of physics.
Jber. Geogr. ges. München.	Geographische gesellschaft, München. Jahresbericht.
Jber. Naturh. mus. Wien. Arch. polarforsch.	Vienna. Naturhistorisches museum. Jahresbericht des Archivs für polarforschung.
Maine agric. rep.	Maine. Department of agriculture. Report of the commissioner.
Mar. obs.	Marine observer.
Mat. Hidrol. sluzhbi gidrol. r. Kiiv. Hidromet. shchorichnik.	This reference has not been located. (Materials of the Hydrologic service. Hydrology of river Kiev. Hydrometeorological annual.)
Matér. étude calam.	Matériaux pour l'étude des calamités. (Société de géographie de Genève.)
Mater. Kom. Ĭakutsk. A.S.S.R.	Komissii po izucheniū Ĭakutskoe A.S.S.R. Materiāly.
Mater. opis. russ. rek.	Materiāly dlā opisaniā russkikh rek, St. Peterburg.
Medd. Danske met. inst.	Denmark. Meteorologiske institut. Meddelelser.
Medd. Norges Svalb. Ishavsundersøk.	Norges Svalbard- og Ishavs-undersøkelser. Meddelelse.
Medd. om Grønland.	Meddelelser om Grønland.
Medd. Svensk. met.-hydrogr. anstalt.	Sweden. Meteorologisk-hydrografiska anstalt. Meddelanden.
Mem. Akad. nauk.	Akademiiā nauk, Leningrad. Memoirs.
Mem. Akad. nauk s.8 Math.-phys.	Akademiiā nauk, Leningrad. Memoirs . . . sciences mathématiques, physiques et naturelles.
Mem. Manchester lit. phil. soc.	Manchester literary and philosophic society. Memoirs.
Mem. trav. Soc. ing. civ. France.	Société des ingenieurs civils de France, Paris. Memoires et travaux.
Mem. Wern. soc.	Wernerian natural history society, Edinburgh. Memoirs.
Merent. julk.	Finland. Havforskningsinstitutet. Merentutkimuslaitos julkaisu.
Met. i. gidrol.	Meteorologiiā i gidrologiā.
Met. mag.	Meteorological magazine.
Met. vestn.	Meteorologicheskii vestnik.
Met. z.	Meteorologische zeitschrift.
Mil. engr.	Military engineer.
Miss. sci. suéd. Spitzberg.	Missions scientifiques pour le mesure d'un arc de meridien au Spitzberg . . . 1899-1902. Mission suédoise.
Mitt. Geogr. ges. Hamburg.	Geographische gesellschaft, Hamburg. Mittheilungen.
Mitt. Geogr. ges. Wien.	Geographische gesellschaft, Vienna. Mittheilungen.
Mitt. Ver. erdk. Dresden.	Verein für erdkunde, Dresden. Mittheilungen.
Mon. weath. rev.	Monthly weather review.
Mondo sotter.	Mondo sotteraneo. Rivista per lo studio delle grotte e dei fenomeni carsici. Udine.

Münchener geogr. stud.	Münchener geographische studien.
Nat. geogr. mag.	National geographic magazine.
Naturw. wschr.	Naturwissenschaftliche wochenschrift.
Naut. mag.	Nautical magazine.
Naut.-met. aarb.	Denmark. Meteorologiske institut. Nautisk-meteorologisk aarbog.
Nov. acta Vetensk.-soc. Upsala.	Vetenskaps-societeten i Upsala. Nova acta.
Nya handl. Svensk. vetensk. akad.	Svenska vetenskapsakademien, Stockholm. Nya handlingar.
Ofvers. förh. Svensk. vetensk. akad.	Svenska vetenskapsakademien, Stockholm. Ofversigt af förhandlingar.
Pap. phys. ocean. met.	Massachusetts institute of technology. Papers in physical oceanography and meteorology.
Petermanns mitt. ergänz.	Petermanns mittheilungen. Ergänzungsheft.
Phil. mag.	London, Edinburgh, and Dublin philosophical magazine.
Phil. trans. Roy. soc.	Royal society of London. Philosophical transactions.
Prace Pozn. towarz. przyj. nauk Kom. mat.-przys.	Poznanskie towarzystwo przyjaciół nauk, Posen. Komisja matematyczno-przyrodnicza. Prace.
Proc. Amer. phil. soc.	American philosophical society. Proceedings.
Proc. Engrs. club Phila.	Engineers and engineering. (1879-1917 as Engineers' club of Philadelphia. Proceedings.)
Proc. Roy. geogr. soc.	Royal geographical society. Proceedings.
Proc. Roy. inst. Gr. Brit.	Royal institution of Great Britain. Proceedings.
Proc. Roy. soc. Pt. A.	Royal society of London. Proceedings. Pt. A.
Proc. trans. Roy. soc. Can.	Royal society of Canada. Proceedings and transactions.
Proc. U.S. nav. inst.	United States naval institute. Proceedings.
Prot. 2-ogo met. s'ezd Akad. nauk.	Meteorologicheskii s'ezd pri Akademii nauk, 2-ogo, St. Petersburg, 1909. Protokoly.
Publ. circ. cons. explor. mer.	International council for the study of the sea, Copenhagen. Publication de circonstance.
Publ. Østgrønland.	Publikationer om Østgrønland, udg. af Kapt. Alf Trolle og Hustrus begat til minde om Danmark-ekspeditionen 1906-1908.
Publ. U.S.H.O.	U.S. Hydrographic office. Publication.
Quart. j. Roy. met. soc.	Royal meteorological society. Quarterly journal.
Rab. Oskafâ biol. sta.	Murom. Oskafâ biologicheskafâ stantsiâ. Raboty.
Rapp. cons. explor. mer.	International council for the study of the sea, Copenhagen. Rapports et proces-verbaux.
Rep. Hydrol. conf. Baltic states.	Hydrological conference of the Baltic states, 1st-6th. Reports. (In various languages.)
Rep. Int. congr. navig.	International congress of navigation. Report.
Rep. Jt. bd. engrs. St. Lawrence.	Joint board of engineers on St. Lawrence waterway project (U.S. and Canada.) Report.
Rep. Smith. inst.	Smithsonian institution. Annual report.
Report. met. Dorpat.	Repertorium für meteorologie. (Gosudarstvennoe russkoe geograficheskoe obshchestvo.) Dorpat.
Report. met. suppl.	Meteorologicheskii sbornik. Repertorium für meteorologie. Supplementband.
Rev. gén. sci. pures appl.	Revue générale des sciences pures et appliquées.
Rev. géogr. alpine.	Revue de géographie alpine.
Rev. marit. n.s.	Revue maritime et coloniale, nouveau serie.
Rev. sci.	Revue scientifique.

- Rev. trav. Off. sci. techn. pêches marit. Office scientifique et technique des pêches maritimes. Revue des travaux.
- Riv. fis. mat. sci. nat. Rivista di fisica, matematica e scienze naturali, Pavia.
- Russ. sudokhod. Russkoe sudokhodstvo. St. Petersburg.
- S.B. Akad. wiss. Wien Math.-naturh. kl. Akademie der wissenschaften, Vienna. Mathematisch-naturhistorische klasse. Sitzungsberichte.
- S.B. Naturf. ges. Univ. Dorpat. Tartu. Estonia. Ulikool. Loodusuurijselts. Aruanded. (To 1905 as Dorpater naturforscher gesellschaft. Sitzungsberichte.)
- Sborn. gidr.-met. nabl. U.S.S.R. Gidrograficheskoe upravlenie. Sbornik gidro-meteorologicheskikh nablûdenii.
- Sborn. Inst. inzh. Leningradskii institut inzhenerov putei soobshcheniâ. Sbornik.
- Sborn. Leningrad. nauchn. issled. inst. vodosn. kanal. gidrotekhn. soor. inzh. gidrogeol. Leningrad. Nauchno-issledovatel'skii institut vodosnabsheeniâ kanalizatsii, gidrotekhnikh sooruzhenii i inzhenernyi gidrogeologicheskikh. Sbornik. (Unverified.)
- Sborn. morsk. kraeved. obshch. [Aroslavl']. This reference has not been located. May be a publication of [Aroslavskoe estestvenno-istoricheskoe i kraevedcheskoe obshchestvo.
- Sborn. otch. prem. i nagrad. Akad. nauk. Akademiâ nauk, Leningrad. Sbornik otchetov o premiakh i nagradakh, prisuzhdaemykh.
- Schr. Inst. Östeurop. wirtsch. Königsberg. Universität. Institut für Östeuropäische wirtschaft. Schriften.
- Sci. res. Norw. N. Polar exped. Norwegian North Polar expedition with the Fram, 1893-1896 . . . with the Maud, 1918-1925. Scientific results.
- Scot. geogr. mag. Scottish geographical magazine.
- Skr. Norsk. vidensk.-akad. Mat.-naturv. kl. Norske videnskaps-akademi, Oslo. Matematisk-naturvidenskapelig klasse. Skrifter.
- Skr. Svensk. hydrogr.-biol. komm. Sweden. Hydrografisk-biologiska kommissioner. Skrifter.
- Soobshch. nauchn.-tekhn. rab. v resp. Soobshcheniâ o nauchno-tekhnicheskikh rabotakh v respublike.
- Spec. publ. Amer. geogr. soc. American geographical society, N.Y. Special publication.
- Suppl. pap. Roy. geogr. soc. Royal geographical society. Supplementary papers.
- Tekn. tidskr. Teknisk tidskrift, Stockholm.
- Termt. közl. Természettudományi közlöny. Budapest.
- Terra. Terra. Suomen maantieteellinen seura. Helsingfors.
- Tijdschr. K. Inst. ing. K. Instituut van ingenieurs, The Hague. Tijdschrift.
- Trans. Amer. geophys. un. American geophysical union. Transactions.
- Trans. Amer. soc. mech. engrs. American society of mechanical engineers. Transactions.
- Trans. Canad. soc. civ. engrs. Engineering institute of Canada. Transactions. (To 1918 as Canadian society of civil engineers, Montreal.)
- Trans. Roy. soc. Can. Royal society of Canada. Transactions.
- Transp. i. khoz. Transport i khozâistvo.
- Trav. Cab. geogr. phys. Univ. St.P. Leningrad. Universitet. Kabinet fizicheskoi geografii. Trudy.
- Trav. géogr. Tchêques. Prague. Universita Karlova. Institut géographique. Travaux géographiques Tchêques.
- Treas. dep. doc. U.S. Treasury department. Document.
- Trud. Arkt. inst. Vsesoûznyy Arkticheskii institut, Leningrad. Trudy.
- Trud. Baikal'sk. limnol. stants. Akademiâ nauk, Leningrad. Baikal'skaya limnologicheskaya stantsiâ. Trudy.
- Trud. Gos. gidrol. inst. Leningrad. Gosudarstvennyi gidrologicheskii institut. Trudy.
- Trud. Gos. okean. inst. Gosudarstvennyi okeanograficheskii institut, Moscow. Trudy.

Trud. Inst. gidrotekhn. Sborn. ledotekhn.	Sbornik ledotekhniki. Leningrad. Nauchno-issledovatel'skii institut gidrotekhniki. Trudy.
Trud. Inst. izuch. severa.	Institut po izucheniiu severa. Trudy.
Trud. Irkutsk. magn. met. obs.	Irkutskaiu magnitnaiu i meteorologicheskaiu observatoriui. Trudy.
Trud. Kom. Iakutsk. ASSR.	Komissiiu po izucheniiu Iakutskoi A.S.S.R. Trudy.
Trud. Kom. izuch. vechn. merzl.	Komissiiu izucheniiu vechnoi merzloty. Akademiiu nauk, Leningrad. Trudy.
Trud. Leningrad. otd. Vse. nauchn. inzh.-tekhn. obshch. vodn. transp.	Vsesoiuznoe nauchnoe i inzhenernotekhnicheskoe obshchestvo vognogo transporta. Leningradskoe otdelenie. Trudy.
Trud. Morsk. nauchn. inst.	Morskoi nauchnyi institut, Moscow. Trudy.
Trud. Novocherkassk. inzh.-meliorat. inst.	Novocherkasskii inzhenerno-melioratsii institut. Trudy. (Unverified.)
Trud. Novosibirsk. inst. voen. inzh. zhel.-dorozhn. transp.	Novosibirskii institut voennykh inzhenerov zhelezno-dorozhnogo transporta. Trudy.
Trud. Sibirsk. fiz.-tekhn. inst.	Sibirskii fiziko-tekhnikeskii institut, Tomsk. Trudy.
Trud. Sungari. biol. sta.	Obshchestvo izucheniiu Manchzhurskogo kraia, Harbin, China. Izdatel'stvo. s.B. Trudy Sungariiskoi rechnoi biologicheskoi stantsii.
Trud. Taimyrsk. gidrogr. eksped.	Taimyrskaiu gidrograficheskaiu ekspeditsiiu. Trudy.
Trud. Vost.-Sib. otd. Russ. geogr. obshch.	Gosudarstvennoe russkoe geograficheskoe obshchestvo. Vostochno-Sibirskii otdel. Trudy.
Trud. Vse. gidrol. s'ezd. Leningrad.	Vsesoiuznyi gidrologicheskii s'ezd, Leningrad, 1928. Trudy.
Trud. Vse. nauchn. inzh. tekhn. obshch. sudostr.	Vsesoiuznoe nauchnoe inzhenerno tekhnicheskoe obshchestvo sudostroeniia, Leningrad. Trudy.
Uchen. zap. s. geol.-pochv.-geogr. Leningrad univ.	Leningrad. Universitet. Uchenye zapiski. Seriiu geologo-pochvenno-geograficheskaiu.
Välj. Tartu ulik. eesti veek. uur. kom.	Tartu. Estonia. Ulikool. Ulikooli eesti veekogude uurimise komisjoni. Väljaanne.
Verh. Dtsch. phys. ges.	Deutsche physikalische gesellschaft, Berlin. Verhandlung.
Verh. Int. geogr.-kongr.	International geographical congress. 7th, Berlin, 1899. Verhandlungen Internationalen geographen-kongresses Berlin, 1899.
Verh. Int. ver. theor. angew. limnol.	Internationale vereinigung für theoretischen und angewandte limnologie. Verhandlungen.
Verh. Schweiz. naturf. ges.	Schweizerische naturforschende gesellschaft. Verhandlungen.
Veröff. Inst. meeresk. Berlin.	Berlin. Universitet. Institut für meereskunde. Veröffentlichungen.
Versl. meded. Akad. wet. afd. natuurk.	K. Akademie van wetenschappen. Amsterdam. Afdeeling natuurkunde. Verslagen en mededeelingen.
Vestn. Dalnevost. fil. Akad. nauk.	Akademiiu nauk, Leningrad. Dal'nevostochnyi filial, Vladivostok. Vestnik.
Vestn. Russ. geogr. obshch.	Gosudarstvennoe russkoe geograficheskoe obshchestvo. Vestnik.
Vestn. Saratovsk. otd. Russ. tekhn. obshch.	Russkoe tekhnicheskoe obshchestvo, St. Petersburg. Saratovskoe otdelenie. Vestnik. (Unverified.)
Vodn. transp.	Vodnyi transport, Moscow.
Wash. univ. publs. ocean.	Washington (State) University. Publications in oceanography.
Wash. univ. studies n.s. sci. techn.	Washington university, St. Louis. Studies, science and technology; new series.
Weltall.	Das Weltall. Illustrierte zeitschrift für astronomie und verwandte gebiete. Berlin.
Wetter.	Das Wetter. Meteorologische monatsschrift. Berlin.
Wiss. meeresunters. Abt. Kiel.	Wissenschaftliche meeresuntersuchungen. Abt. Kiel.
Wiss. veröff. Mus. länderk. n.f.	Leipzig. Museum für länderkunde. Wissenschaftliche veröfentlichungen; neue folge.

Wittenb. wbl.	Wittenbergisches wochenblatt zum aufnehmen der naturkunde und des ökonomischen gewerbes.
Wschr. Österr. ing. archit.-ver.	Österreichischer ingenieur- und architekten vereins. Wochenschrift.
Z. bauw.	Zeitschrift für bauwesen.
Z. geophys.	Zeitschrift für geophysik.
Z. geopolitik.	Zeitschrift für geopolitik.
Z. Ges. erdk.	Gesellschaft für erdkunde, Berlin. Zeitschrift.
Z. gewässerkr.	Zeitschrift für gewässerkunde.
Z. met.	Oesterreichische gesellschaft für meteorologie, Vienna. Zeitschrift.
Z. Sibirsk.	Zeitschrift Sibirsk, Novonikolaevsk. (Unverified.)
Z. Ver. dtsch. ing.	Verein Deutscher ingenieure, Berlin. Zeitschrift.
Zap. Akad. nauk. Prilozh.	Akademiâ nauk, Leningrad. Zapiski; prilozhenie.
Zap. gidrogr.	Zapiski po gidrografii.
Zap. Gos. gidrol. inst.	Leningrad. Gosudarstvennyi gidrologicheskii institut. Zapiski.
Zap. Inst. gidrotekhn.	Leningrad. Nauchno-issledovatel'skii institut gidrotekhniki. Zapiski.
Zap. Obshch. izuch. Amur. kraïa.	Gosudarstvennoe russkoe geograficheskoe obshchestvo. Vladivostokskii otdel. Zapiski. (Obshchestvo izucheniâ Amurskogo kraïa.)
Zap. Russ. geogr. obshch.	Gosudarstvennoe russkoe geograficheskoe obshchestvo. Zapiski.
Zbl. bauverw.	Zentralblatt der bauverwaltung.
Zes. Pol. wiad. sluzby hydrogr.	Poland. Wiadomosci sluzby hydrograficznej. Zeszyt.
Zh. Fis.-khim. obshch. chast' fiz.	Russkoe fiziko khimicheskoe obshchestvo. Chast' fizicheskafâ. Zhurnal.
Zh. geofiz.	Zhurnal geofiziki, Moscow.
Zh. geofiz. met.	Zhurnal geofiziki i meteorologii, Moscow.
Zh. Min. put. soobshch.	Russia (Imp.) Ministerstvo putei soobshcheniâ. Zhurnal.
Zh. obshch. khim.	Zhurnal obshchei khimi.
Zh. prikl. fiz.	Zhurnal prikladnoi fiziki.
Zh. tekhn. fiz.	Zhurnal tekhnicheskoi fiziki.

Listed below are abbreviations used throughout the bibliography:

...	= omissions.	Izd.	= Izdanie, izdatel' (Publication, publisher.).
()	= number, when in periodical reference.	L.	= leaves.
[]	= additions supplied by cataloguer.	m.	= meters.
append.	= appendix, appendices.	p., pp.	= pages.
ch.	= chapter.	p. L.	= preliminary leaf.
col.	= colored.	photos.	= photographs.
Comp.	= compiler, compiled.	pl.	= plates.
corr.	= corrected.	prelim.	= preliminary.
diags.	= diagrams.	prep.	= prepared, preparation.
Doc.	= document.	pub.	= published.
ed.	= edition, editor.	ref.	= reference.
fold.	= folding, folded.	s.	= series.
fol.	= following.	spec.	= special.
hrsg.	= herausgegeben.	Str.	= Strait, Straits.
I.	= Island.	suppl.	= supplement.
illus.	= illustrated, illustrations.	t.-p.	= title-page.
Imp.	= imprimerie (printing office).	Tip.	= Tipografiâ (printing office.)
incl.	= including.	transl.	= translated, translation.
Is.	= Islands.	v.	= volume.

Asterisks indicate standard general references on ice or sources of particular significance for the regions indicated.

WORLD-WIDE

1. *Denmark. Meteorologiske Institut.
1892–1938. Isforholdene i de Arktiske Have. The state of the ice in the Arctic seas, 1890–1938. Naut. met. aarb. 1892–1938. [Title varies. Remarks and charts for April to August.]
2. *Deutsche seewarte, Hamburg.
1942. Atlas der vereisungsverhältnisse Russlands und Finnlands, ihrer küstengewässer sowie wirtschaftlich und militärisch wichtigen binnenwasserstrassen mit textlichen vorberemerkungen und tabellen. Berlin, Oberkommando der Kriegsmarine. 20 p. incl. tables. 94 charts. (Nr. 2197.) [Mean monthly temperatures; ice and navigational conditions 1925/26–1931/32 in Black, Azov and Caspian seas; same 1922/23–1938/39, middle and northern Baltic Sea. Charts show extent, duration, types of ice in mild, medium, severe and very severe winters, for North and Baltic seas, White Sea, Soviet Arctic seas, Eurasian rivers and lakes, Okhotsk Sea, Black, Azov and Caspian seas.]
3. Germany. Oberkommando der Kriegsmarine. Chef Marinewetterdienst.
1943. Monatskarten klimatologischer mittelwerte für den Nordatlantischen Ozean und seine östlichen randmeere (10°–80°N, 75°W–75°0). Bearb. vom Marineobservatorium Wilhelmshaven. 4 p. 14 charts. (M.W.D. 51.) [Includes ice limits on charts.]
4. *Gt. Brit. Hydrographic department.
1922. Ice charts of the northern hemisphere (in twelve sheets) showing general maximum limits of ice and also those for each month of the year, comp. from information supplied by the Meteorological office. London, The Admiralty. D31–D42.
5. Gt. Brit. Hydrographic department.
1943. World climatic chart—sheet I–II, January and July. 5301–5302. [Includes: wind, swell, currents, fog, and ice.]
6. *Gt. Brit. Meteorology office.
1944. Monthly ice charts for the Arctic seas, Hudson Bay to Kara Sea. MOM 390a. Rev. ed.
7. Hennessy, J.
1933. Ice in the northern hemisphere. Mar. obs. 10:95–98.
8. Lemke, M.
1931. Vereisung der häfen. (In: Winkler, Arno, ed. Beiträge zur wirtschaftsgeographie. pp. 113–124. [Extensive tables of ports of the entire world, showing ice limits.]
9. Nadein, I. K.
1908. Neskol'ko slov o nablūdeniâkh nad lediânym pokrov russkikh vod. (Some remarks on observations of ice on Russian waters.) Met. vestn. 18:379–388.

10. Shaw, Sir Napier.
1928. Manual of meteorology. Vol. II. Cambridge, England.
[Maps: Ice limits in June and August; icebergs and the
currents in which they drift.]
11. *U.S.S.R. Gidrograficheskoe upravlenie.
1905-1911. Nablūdeniā nad vskrytiem i zamerzaniem morei u beregov
Rossi v 1904-1906, 1907-1908, 1909, 1910 gg. Sborn.
gidr.-met. nabl. 7:427-500. 8:335-339. 9:179-236. 10:
207-254.
12. *U.S.S.R. Gidrograficheskoe upravlenie. Gidrometeorologicheskii sektor.
1926-1936. Svedeniā o sostoiānii l'dov na moriākh SSSR. (The state
of the ice in the seas of USSR.) Vup. I-VIII; 1924/25-
1931/32. Leningrad. 8 nos. illus., tables, charts. [Tables
of freezing and breaking up of the ice. Stations listed.]
13. U. S. Army. Army specialized training division.
1943. Atlas of world maps for the study of geography in the Army
specialized training program. XIII p. 30 maps. (Army
service force manual M-101.) [Includes ocean currents
and sea ice,—no. 3.]
14. Vallaux, Camille.
1933. Géographie générale des mers. Paris. vii, 791 1 p. illus.
[References to ice conditions throughout, but especially
Bk. VI. Les Mers glacées. Ch. II. Mer intérieure Arctique.]
15. *Zukriegel, J.
1935. Cryologia maris. Trav. géogr. Tchéques. 15. 177 p.

1. ARCTIC OCEAN

16. Alekseev, A. and N. Zhukov.
1938. L'dy tsentralnoi chasti Poliarnogo basseina. (Ice in central portion of Polar basin.) Sovetskaiâ arktika. 1938(5):33-36.
17. American geographical society, New York.
1928. Problems of Polar research. A series of papers by 31 authors. Spec. publ. 7.
18. Amundsen, Roald.
1921. ... Nordostpassagen. Maudfaerden langs Asiens kyst 1918-1920. H. U. Sverdrups ophold blandt Tsjuktsjerne. Godfred Hansens depotekspedition 1919-1920. Kritsiania (etc.) Gyldendal.
19. Anufriev, I. P.
1925. Ledokol'naiâ praktika i poliarnye ledovye plavaniâ v Severnom Ledovitom Okeana. (Die erfahrungen der eisbrecher im nördlichen Polar-ozean.) Zap. gidrogr. 50:143-156.
20. Arngol'd, E. E.
1929. Po zavetnomu puti. Vospominaniâ o poliarnykh plavaniâkh i otkrytiâkh na ledokolakh "Taimyr" i "Vaigach" v ekspeditsiâkh 1910-1915 gg. (On the sacred route. Recollections of the polar voyages and discoveries on the ice-breakers "Taimyr" and "Vaigach" during the 1910-1915 expedition.) Moscow-Leningrad. 196 p. illus., charts.
21. Badigin, K. S.
1940. Na korable "Georgii Sedov" cherez Ledovityi Okean. (On the ship "Georg Sedov" across the Arctic Ocean.) Zapiski kapitana. Moskva-Leningrad, Izdatel'stvo Glavsevmorputi. 606 p. illus., tables, charts. Added t.-p.: Zapiski o zhizni i rabote na ledokol'nom parokhode "Georgi Sedov" dreifovavshem s 23 oktiâbrîâ 1937 g. po 12 iânvariâ 1940 g. v Severnom Ledovitom Okeane. Sostavlennye chlenami ekipazha. I. kn. (Account of the life and work on the Arctic vessel "Georg. Sedov" adrift from 23 Oct. 1937 to 13 Jan. 1940 in the Arctic Ocean. Personnel and equipment, Bk. I.)
22. Badigin, K. S.
1940. Na korable "Georgii Sedov" cherez Ledovityi Okean (prodolzhenie). (On the "Sedov" across the Arctic Ocean continuation.) Novyi mir. 1940(9):156-189.
23. Badigin, K. S.
1940. Nashi meteorologicheskie nablûdeniâ (rabota na dreifuûshchem l/p "G. Sedov", 1937-40 gg.) (Meteorological observations of drifting ice-breaker "G. Sedov". 1937-40.) Sovetskaiâ arktika. 1940(10):49-57.
24. Barnes, Kathleen.
1939. Gradual progress on the Northern Sea Route. Far eastern survey. 8:275-276.

25. Bekasov, N. M.
1940. 812 dnei vo l'dakh Severnogo Ledovitogo Okeana. (812 days on the ice in the North Polar Sea.) Sovetskafâ informatsiâ. 1940(2):7-11.
26. Biasutti, R.
1905. La temperatura circumpolaire. Riv. fis. mat. sci. nat. 11: 97-112.
27. Blüthgen, Joachim.
1938. Probleme der vereisung von meeresräumen. Naturwissenschaften. 26:618-624. [Includes chart of drift in Polar seas.]
28. Bodnarski, M. S.
1926. Die grosse nordische seeroute. Geschichtliche und geographische skizze. (In Russian.) Moscow. 251 p.
29. Breitfuss, L. L.
1904. Zur frage über den sibirischen seeweg nach osten. Petermanns mitt. 50:285-290.
30. Breitfuss, L. L.
1915. Gidrograficheskafâ ekspeditsiâ Severnogo Ledovitogo Okeana i mery k ee osvobozhdeniû iz vynyzhdennoi okolo Taimyrskogo poluostrova zimovki v 1914/1915 g. (The hydrographical expedition in the North Polar Sea and the action of freeing it from the ice on the coast of the Taimyr Peninsula in the winter of 1914/1915.) Zap. gidrogr. 39:88-136.
31. Breitfuss, L. L.
1931. Der Sibirische seeweg und seine physikalischen verhältnisse. Arktis 4:27-31, 73-109. [Chart of ice limits.]
32. Breitfuss, L. L.
1937. Die driftende nordpolarstation der USSR und ihre ergebnisse. Petermanns mitt. 83:284-285.
33. Breitfuss, L. L.
1943. Das Nordpolargebiet, seine natur, bedeutung und erforschung ... Berlin, Springer. vi, 179, 1 p. (Verständlicher wissenschaften. 48.)
34. Brounshtein, V.
1938. "Ermak" vo l'dakh. (The "Ermak" in the ice.) Leningrad, Glavsevmorputi. 240 p.
35. Brown, R. N. R.
1923. A naturalist at the poles. The life, work and voyages of Dr. W. S. Bruce, the polar explorer. London, Seeley, Service & Co. 2 p.L, 11-316 p. maps.
36. Brown, R. N. R.
1927. The Polar regions. London. ix, 245 p. map. [Sea-ice and its natural history, pp. 57-63. Arctic currents and ice, pp. 72-82.]
37. Bruce, W. S.
1911. Polar exploration. London. [Ice, pp. 54-70.]

38. Brusilov, G. L.
1914. Polîarnaia ekspeditsiia Lt. G. L. Brusilova na skune "Sv. Anna". (The Polar expedition of Lt. G. L. Brusilov on the schooner "St. Anna.") Zap. gidrogr. 38(4) prilozh.1. 76 p.
39. Bryce, George.
1910. The seige and conquest of the North Pole. London, Gibbings & Co. xv, 334 p. maps.
40. Buinitskii, V. KH.
1940. Nauchnye issledovaniia vo vremia dreifa ledokola "Georgii Sedov" s 1938 po 1940 g. (Scientific research during the drift of the "Sedov," 1938-40.) C.R. Akad. nauk. n.s. 27(2):119-125.
41. Buinitskii, V. KH.
1940. Nauchnye raboty vo vremia dreifa "Sedova" (1937-1940 g.g.) (Scientific work during the drift of the "Sedov", 1937-1940.) Izv. Russ. geogr. obshch. 72(3):301-305.
42. Buinitskii, V. KH.
1940. Nauchnye raboty vo vremia dreifa "Sedova". (Scientific work during the drift of the "Sedov".) Problemy arktiki. 1940(2):27-33.
43. Buinitskii, V. KH.
1940. Obrabotka materialov nablûdenii dreifa l/p "Sedov." (Working up the material from the observations of the "Sedov" drift.) Problemy arktiki. 1940(6):100-101.
44. Chaplygin, E.
1940. Gidrologicheskie raboty poliarnykh stantsii Morei Karskogo, Laptevykh i Vostochnosibirskogo na zimovku 1938-39 g. (Scientific work of the Polar stations in the Kara, Laptev and E. Siberian seas during the winter 1938/39.) Problemy arktiki. 1940(7/8):103-106.
45. Chavanne, J.
1875. Die eisverhältnisse im arktischen polarmeere und ihre periodischen veränderungen. Petermanns mitt. 21:134-142, 245-280.
46. Chelûskin expedition, 1933-1934.
1935. The Voyage of the Chelyuskin, by members of the expedition; tr. by Alec Brown . . . New York, Macmillan. 325 p. [Partial contents.—Fakidov, I. S. The measurement of ice waves, pp. 71-75.—Khmyznikov. P. K. What the drift revealed, pp. 76-80.]
47. Dubravin, A. I.
1936. Samolety v arkticheskikh usloviakh. (Airplanes in Arctic conditions.) Leningrad, ONTI. 132 p.
48. Dunin-Gorkovič, A.
1909. The northern route from the Atlantic to the Pacific Ocean. (In Russian.) Russ. sudokhod. 24(2):54-76; (6):19-36; (7):38-52; (8):90-103; (10):40-53.

49. Efremov, A. G.
1940. *Gidrologicheskie i meteorologicheskie raboty na ledokole "Georgii Sedov" s 1938 po 1940 g. (Hydrologic and meteorologic results of the "Sedov" 1938-1940.)* C. R. Akad. nauk. n.s. 27:126-130. 2 figs.
50. Exler, I.
1930. *L'expédition arctique du brise-glace "Sedov". (In Russian.)* Moscow, Federacija. 166 p.
51. Gakkel, IĀ. IĀ.
1937. *Opyt otsenki prokhodimosti l'dov na trasse Severnogo morskogo puti za navigatsiĭu 1933 i 1935 godov. (Experiments in estimating the practicability of the ice on the Northern Sea Route, for the navigation seasons of 1933 and 1935.)* Problemy arktiki. 1937(1):81-101. English summary.
52. Gakkel, IĀ. IĀ.
1937. *Prokhodimost' l'dov na Severnom morskom puti. (Navigability of the ice on the Northern Sea Route.)* SovetskaiĀ arktika. 1937(8):92-98. [Figures for 1933 and 1935.]
53. Gakkel, IĀ. IĀ.
1938. *Nauchnye rezul'taty ekspeditsii skvoznoġo plavaniĀ na p/kh "Vantsetti" v 1935 g. Gidrologicheskie meteorologicheskie i gidrograficheskie raboty. (Scientific results of the expedition on "Vanzetti" thru the Northern Sea Route in 1935.)* Trud. Arkt. inst. 129. 63 p. [Kara, Laptev, E. Siberian, Chukotsk seas and Bering Strait. Includes ice, drift, wind, color.]
54. Garde, T. V.
1901. *Die verbreitung des treibeises in den arktischen meeren, nach den arbeiten des Dänischen meteorologischen instituts.* Verh. Int. geogr.-kongr. 7:343-347.
55. Gel'val'd, V. B.
1884. *In the region of eternal ice. History of journeys to the North Pole. (In Russian.)* St. Petersburg.
56. *Gidrologicheskie* *materiĀly poberezhĀ morei Sovetskogo sektora Arktiki*
1937. *po nablūdeniĀm poliĀrnykh stantsii. (Hydrological material on the coasts of the seas of the Soviet Arctic according to observations of the Polar stations.)* Trud. Arkt. inst. 88. 67 p. [Contents.—State of the ice in the region of the Kamenev Is. during 1930-34, pp. 23-37.—Ice in the eastern part of Yugorsky Str., pp. 7-22.—Material on the winter hydrologic regime in Chaunsky Gulf. pp. 55-67.]
57. Gordeev, V. K.
1938. *Vzryvnye raboty vo l'dakh proizvedennie ekspeditsiei na "Chelĭuskine". Nauchnye rezultaty raboty ekspeditsii na "Chelĭuskine" i v lagere Shmidta. (Explosive work on ice performed on the "Cheliuskin" expedition. Scientific results of the work on the "Cheliuskin" expedition and at Camp Schmidt.)* Leningrad, Glavsevmorputi. v. 2: 189-243.

58. Gratsĭanskii, A.
1939. Na ledovoi razvedke. (On the ice air patrol.) Sovetskaiĭ arktika. 1939(12):57-59. [General discussion.]
59. Gray, R. W.
1929. Icebergs in a high altitude. Nature. 124:479-480. [Arctic and Greenland seas.]
60. Gt. Brit. Hydrographic department.
1933. Arctic pilot, vol. I. Comprising the coasts of Finland, and the U.S.S.R. from Jakobselv in Europe to Cape Severni (North) in Asia, including the White Sea, Novaya Zemlya, Franz Josef Land; the Gulfs and Rivers of Ob' and Yenisei and all the islands eastward to Wrangell and Herald islands. 4th ed. London. 625 p. illus., photos., chart.
61. Gt. Brit. Parliament.
1852. Additional papers relative to the Arctic expedition under the orders of Captain Austin and Mr. William Penny. London. 368 p.
62. Gr. Brit. Parliament.
1878. Results derived from the Arctic expedition of 1875-76. London.
63. Greely, A. W.
1909. Handbook of Polar discoveries. 4th ed. Boston, Little, Brown & Co. vi, 3 L., 3-306 p. illus., maps.
64. Greely, A. W.
1928. The Polar regions in the 20th century; their discovery and industrial evolution. Boston, Little, Brown and Co. x, 270 p. illus., map.
65. Gusev, A. M.
1940. O prognozakh temperatury po trasse Severnogo morskogo puti v svĭazi s prognozami ledovitosti. (On the prognoses of average monthly temperature of air and ice conditions along the Northern Sea Route.) Izv. Akad. nauk. s. geogr. geofiz. 1940(2):239-252. English summary.
66. Herrmann, Ernst.
1940. Wege zum Nordpol. Forscher und abenteuer im ewigen eis. Braunschweig, G. Wenzel & sohn. 288 p.
67. Islĭamov, I. I.
1901. Probnoe plavanie "Ermaka" na sever v 1899 g. (Navigational trials of the "Ermak", winter 1899.) Zap. gidrogr. 23:192-217.
68. Ivanov, B.
1939. Arkticheskomu moreplavaniĭu-operationuĭu ledovuĭu sluzhbu. (Arctic navigational operations of the Ice Service.) Sovetskaiĭ arktika. 1939(2):64-71.
69. Ivanov, B.
1939. Na ledovoi vakhte. (On the ice patrol.) Leningrad, Glav-sevmorputi. 27 p. (Bibliotekha "Stakhanovĭsy arktiki", kn. 1.)

70. Ivanov, B.
1940. Regulârnnye plavaniâ v zimnikh usloviâkh. (Regular navigation during winter conditions.) Sovetskaiâ arktika. 1940(5):70-75.
71. Ivanov, I. M.
1938. Severnyi Ledovityi Okean. Arkhangel'sk, Arkh. obl. izd. 135 p. tables. Bibliography.
72. Karelin, D. B.
1937. Izokhrony zamerzaniâ i vskrytiâ pribrezhnoi zony polîarnykh morei Sôûza v zimu 1934-35 goda. (Freezing and opening isochroms of the coastal region in the Polar seas of the USSR in the winter 1934/35.) Severnyi morskoi put'. 6:88-97.
73. Karelin, D. B.
1937. Ledovyi pokrov poberezh'â Sovetskoi arktiki. (Ice cover on the Soviet Arctic coasts.) Met. i gidrol. 3(2):43-50.
74. Karelin, D. B.
1937. Nekotorye dannye o ledîanom pokrove Arktiki. (Some data on ice-cover in the Arctic.) Priroda. 26(6):32-38. [1. The growth of ice. 2. Forecasting the dates of break-up and freezing.]
75. Karelin, D. B.
1938. Dvizhenie polîarnykh l'dov. (Drift of polar ice.) Priroda. 1938(3):16-21.
76. Karelin, D. B.
1938. Ledovnye nablûdenie polîarnykh stantsii. (Ice observations of the Polar stations.) Sovetskaiâ arktika. 1938(2):51-52.
77. Karelin, D. B.
1938. O svîazi termicheskogo i ledovogo rezhima v arkticheskikh morîakh. (Relation of temperature and ice cycles in Arctic seas.) Problemy arktiki 1938(2):145-152.
78. King, Richard.
1836. Narratives of a journey to the shores of the Arctic Ocean, 1833-1835, under the command of Capt. Back. London. 2 v.
79. Kissler, F.
1934. Eisgrenzen und eisverschiebungen in der Arktis zwischen 50° W und 105° O in 34 jährigen zeitraum 1898-1931. Beitr. geophys. 42:12-55.
80. Knipovich, N. M.
1905. Hydrologische untersuchungen im Europäischen Eismeer. Ann. hydrogr., Berlin. 33:193-205, 241-260, 289-308, 337-346.
81. Koch, Lauge.
1926. Ice cap and sea ice in North Greenland. Geogr. rev. 16: 98-107.

82. Kolchak, A.
1928. The Arctic pack and the polynya. Spec. publ. Amer. geogr. soc. 7:125-141.
83. Krebs, Wilhelm.
1904. Ueber probleme der polarklimate—kaltpole und eistriften. (Vortrag.) Verh. Dtsch. phys. ges. 6:282-283.
84. Kushakov, P. G.
1918-1920. Dva goda vo l'dakh na puti k Severnomu pol'usu s ekspeditsieiŭ starshego leitenanta Sedova (s predisloviem L. L. Breitfusa). (Two years in the ice in the Arctic with Lt. Sedov expedition.) Zap. gidrogr. 42(1):17-108 (2):235-276 (3):361-394; 43(1):11-64 (2):143-175.
85. Kuz'min, D. N.
1936. Severnym morskim putem iz Vladivostoka v Murmansk. (Plavanie p/kh "Anadyr' " v 1935 g.) (The Great Northern Sea Route from Vladivostok to Murmansk. Trip of "Anadyr" in 1935.) Severnyi morskoi put'. suppl. 1:33-48. [Chart showing ice.]
86. Laktionov, A. F.
1935. Sudovye nabl'udeniia nad sostoianiem l'dov v pol'arnykh moriakh v navigatsiiu 1934 g. (Ships observations on the ice-conditions in the Arctic seas, navigation season 1934.) Trud. Arkt. inst. 32. 99 p. charts.
87. Laktionov, A. F.
1936. Meteorologicheskie nabl'udeniia proizvedenye ekspeditsiei na l/p "Sedov" i g/s "Taimyr" v 1934 g. (Meteorological observations carried on by expeditions of "Sedov" and "Taimyr" in 1934.) Trud. Arkt. inst. 64:171-193.
88. Laktionov, A. F.
1940. Dreif l/p "Sedov" v tsentral'nom Poliarnom basseine. (Drift of the "Sedov" in the central Arctic basin.) Priroda. 29(2):12-17. 2 tables, 1 chart.
89. Lappo, S. D.
1937. Biuro ledovykh prognozov. (Bureau for ice forecasting.) Sovetskaiia arktika. 1937(1):68-69.
90. Lappo, S. D.
1937. Ledovyi pokrov v arkticheskikh moriakh. (Po nabl'udeniiam samoleta farikha v aprele-mae 1937 g.) (Ice cover of the Arctic seas. Observations by airplanes during April-May 1937.) Sovetskaiia arktika. 1937(9):78-82.
91. Lappo, S. D.
1937. Nekotorye dannye o ledovykh prognozakh v arkticheskikh moriakh. (Data on ice prognosis in Arctic seas.) Met. i gidrol. 3(9):94-97.
92. Lappo, S. D.
1940. Okeanograficheskii spravochnik Arkticheskikh morei SSSR (Obshchaiia lotsiia). (Oceanographic information on the Arctic seas. General sailing directions.) Leningrad, Izd. Glavsevmorputi. 184 p. illus.

93. *Leshaft, Emil.
1913. L'dy Severnago Ledovitago Okeana i morskoi put' iz Evropy v Sibir'. (The ice of the northern Arctic Ocean and the sea route from Europe to Siberia.) St. Peterburg. 237 p. illus., tables, diagrs., charts.
94. Leslie, Alexander.
1879. The Arctic voyages of A. E. Nordenskiöld, 1858-1879. London, Macmillan. xiv, 447 p. illus., maps.
95. Mason, Kenneth.
1940. Notes on the Northern Sea Route. Geogr. j. 96:26-41.
96. Mikkelsen, Einer.
1909. Conquering the Arctic ice. London. xviii, 470 p. illus., maps, diagrs.
97. Nansen, Fridtjof.
1897. In nacht und eis. Die Norwegischen polarexpedition 1893-1896. Mit ein beitrage von O. Sverdrup. Leipzig, Brockhaus. 2 v.
98. Nansen, Fridtjof.
1902. Oceanography of the North Polar basin. Sci. res. Norw. Polar exped. 1893-96. 3(9). 427 p. [Formation of ice on the sea-surface, pp. 321-326; influence of the wind upon the ice-drift pp. 365-368; relative velocity of ice-drift produced by wind, pp. 381-386.]
99. Nansen, Fridtjof.
1906. Northern waters. Captain Roald Amundsen's oceanographic observations in the Arctic seas in 1901. Skr. Norsk. vidensk.-akad. Mat.-naturv. kl. 3.
100. Nansen, Fridtjof and Jonas Lied.
1914. The sea-route to Siberia. I. The voyage. II. On the ice conditions and the possibility of regular navigation. Geogr. j. 43:481-500.
101. Nazarov, V. S.
1939. O ledovykh usloviyakh navigatsii 1938 g. (Ice conditions for 1938 navigation.) Sovetskaya arktika. 1939(1):20-28.
102. Nordenskiöld, A. E.
1879. The Arctic voyages of Adolf Erik Nordenskiöld, 1858-1879. London, Macmillan. 447 p.
103. Nordenskiöld, A. E.
1883. Die wissenschaftlichen ergebnisse der Vegaexpedition, hrsg. v. A. E. Nordenskiöld. Leipzig, Brockhaus. 2 v.
104. Nordenskiöld, A. E.
1885. Studien und forschungen, veranlasst durch meine reisen im höhen norden, hrsg. v. A. E. Nordenskiöld. Leipzig, Brockhaus. 521 p.
105. Nordenskiöld, Otto.
1922. Arktis und Antarktis. (In: E. Banse. Illustrierter länderkunde. Braunschweig.)

106. Nordenskiöld, Otto.
1926. Nord- und Südpolarländer. (In: Enzyklopädie der erdkunde. Leipzig und Wien.)
107. Nordenskiöld, Otto.
1928. The ice in the Polar regions. Spec. publ. Amer. geogr. soc. 8:23-38.
108. Nordenskiöld, Otto and Ludwig Mecking.
1928. The geography of the Polar regions. Spec. publ. Amer. geogr. soc. 8. 359 p.
109. Notkin, A. I.
1925. Die Nordsibirische seeroute. (In Russian.) Severnaia Aziia. 1925(1):28-44; (4):53-76.
110. O Zamerzanii i vskrytii Severnogo Morskogo poberezh'ia. (On the freezing and opening of the Arctic shores.) Sovetskaiia arktika. 1936(11):108.
111. Panov, D. G.
1938. Priroda tsentral'noe chasti Arktiki i nauchnye raboty sovet-skoi dreifuushchei stantsii "Severnyi Poliūs". (The nature of the central part of the Arctic basin and the scientific work of the Soviet North Pole drifting station.) Izv. Russ. geogr. obshch. 70:335-349. illus., plates, charts. [Ice chart of Polar regions; drifts of various ships; drift of the Polar Station.]
112. Papanin, I.
1939. Life on an ice floe: diary of I. Papanin. N. Y., Julian Messner. 300 p.
113. Peary, R. E.
1898. Northward over the "great ice"; a narrative of life and work along the shores upon the interior ice-cap of northern Greenland in the years 1886, and 1891-1897. New York, F. A. Stokes Co. 2 v.
114. Peary, R. E.
1903. Report of the R. E. Peary, C.E., U.S.N., on work done in the Arctic in 1898-1902. Bull. Amer. geogr. soc. 35: 496-534.
115. Peary, R. E.
1907. Nearest the pole: a narrative of the polar expedition of the Peary Arctic club in the S.S. Roosevelt, 1905-1906. New York, Doubleday, Page & Co. xx, 411 p., illus., maps.
116. Peary, R. E.
1910. The North Pole. Its discovery in 1909 under the auspices of the Peary Arctic club ... New York, F. A. Stokes Co. xxxii, 373 p., illus.
117. Petermann, August.
1865. Die eisverhältnisse in den polar-meeren und die möglichkeit des vordringens in schiffen bis zu den höchsten breiten. Petermanns mitt. 11:136-146.

118. Petrichenko, A. N.
1940. Dreif l/p "Sedov". (Drift of the "Sedov".) Problemy arktiki. 1940(1):100-101. [Table of monthly direction and speed of drift.]
119. Petrichenko, A. N.
1940. Predvaritel'nye dannye dreifa "Sedova" v 1937 i 1938 godakh. (Prelim. data on drift of "Sedov" 1937-38.) Problemy arktiki. 1940(2):69-85.
120. Platt, R. R.
1939. Recent exploration in the Polar regions. Geogr. rev. 29: 303-309.
121. Pokhod "Cheliūsina" (Cheliuskin expedition). Pod obshchei red. O. IŮ.
1934. Schmidta, I. L. Baevskogo, L. Z. Mekhlisa. I-II. Moskva.
122. Pokhod "Krasina". Sbornik statei uchastnikov ekspeditsii (1928 g.) (The Krasin expedition. Collection of articles by participants in the expedition, 1928.) Moscow-Leningrad, "Zemliā i fabrika". 243 p.
123. Pokrovskaiā, T. V.
1936. Klimaticheskie dannye dliā Severnogo Morskogo puti za navigatsionnyi period po ekspeditsionnym i stationarnym nablūdeniām. (Climatological data for the Northern Sea Route for navigational seasons based on observations of expeditions and shore stations.) Leningrad, Izd. Glavsevmorputi. 76 p., illus., charts, diagrs. [Kara, Laptev, E. Siberian and Chukchi seas. Discussion of wind blowing ice onto or away from shores.]
124. Prognoz sostoiāniā l'dov Severnogo Ledovitogo Morīa na leto 1934 g. (Forecast of state of the ice, summer 1934 for the Arctic seas.) Met. vestn. 1934 (4/7):224.
125. Prognoz sostoiāniā l'dov. Supposed ice conditions in the northern seas. (In Russian and English.) Būl. Arkt. inst. 1935:263, 292-293.
126. Rabot, C.
1938. En dērive pendant neuf mois sur un glaçon polaire. Illustration. 96:183-189. illus. [Papanin's drift.]
127. Reichard, A. C.
1911-1913. Die eisverhältnisse an der nordpolaren meere im jahre 1910-1912. Ann. hydrogr., Berlin. 39:215-216. 41:120-121.
128. Reis ledokola "Krasin". (Trip of the icebreaker "Krasin".) Būl. Arkt. inst. 1932(6):112-121.
129. Rusanov, V. A.
1911. K voprosu o Severnom morskome puti v Sibir'. (On the Northern Sea Route to Siberia.) Materiāly issledovaniā Novoi Zemli. 2:111-143.
130. Schmidt, O. IŮ.
1933. Skvoznoi Severnyi morskoi put'. (The straight Northern Sea Route.) Sovetskii sever. 4(1):63-71. [Genl. discussion.]

131. Schulz, Bruno.
1938. Eine wissenschaftliche beobachtungsstation auf dem arktischen treibeise 1937/38. *Ann. hydrogr.*, Berlin. 66:121-126. [The drifting North Polar station.]
132. Sergievski, V. A.
1928. Severnyi morskoi put' i gidrograficheskaiâ sluzhba v Sibiri. (The Northern Sea Route and the hydrographic service in Siberia.) *Severnaia Aziia*. 1928(6):167-173.
133. Shirshov, P. P.
1938. Oceanological observations. (North Pole drifting station.) *C. R. Akad. nauk. Leningrad*. 19(8):569-580. [Includes ice conditions encountered by drifting station.]
134. Shirshov, P. P. and E. Fedorov.
1938. O nauchnykh rabotakh dreifuûshehei stantsii "Severnyi Polûs". (On scientific results of the drifting North Polar station.) *Problemy arktiki*. 1938(2):9-13.
135. Shirshov, P. P. and E. Fedorov.
1938. Scientific work of the drifting North Polar station. *Nature* 141:629-632.
136. Shokalskii, Iû. M.
1940. "Sedov", ego dreif i geografiâ Severnogo Polârnogo basseina. ("Sedov", its drift and the geography of the North Polar basin.) *Problemy arktiki*. 1940(2):34-38.
137. Somov, M. M.
1939. O postroenii skhemy dreifa l'dov v Polârnôm basseine. (On the construction of an ice-drift chart of the Polar basin.) *Problemy arktiki*. 1939(5):25-32.
138. Speerschneider, C.
1927. Indsamling af oplysninger om den arktiske is. *Geogr. tidsskr.* 30:89-95.
139. *Spindler, I. B.
1893. Vskrytie i zamerzanie morei u beregov Rossii. (Thawing and freezing on the seacoasts of Russia.) *Zap. gidrogr.* 14, prilozh. 1-2.
140. Starokadomski, L. M.
1916. Cherez Ledovityi okean iz Vladivostoka v Arkhangel'sk. (Through the Arctic from Vladivostok to Archangel.) *Morskoi sbornik*. 1916(2):1-40.
141. Stefansson, Vilhjalmur.
1920. The region of maximum inaccessibility in the Arctic. *Geogr. rev.* 9:167-172.
142. Stefansson, Vilhjalmur.
1940. Znachenie dreifa "Sedova" dlia mirovoi nauki. (The importance of the drift of the "Sedov" for world science.) *Problemy arktiki*. 1940(2):47-50.
143. Stefansson, Vilhjalmur.
July 1942. Arctic supply line. *Fortune*. 26:65-66, 154-156, 158.

144. Stepanov, N. M.
1936. Perevozka po Severnomu morskomu puti. (Transportation over the Northern Sea Route.) Sovetskaiâ arktika. 1936 (12):79-83.
145. Svedeniâ o sostoiânii l'da u beregov sovetsskoi arktiki za zimu 1933-34 gg.
1936. (Data about ice conditions at the shores of the Soviet Arctic, winter season of 1933-1934.) Trud. Arkt. inst. 45. 56 p. English summary. Preface signed by K. Gomonov. [General table summarizing . . . navigability of icefields. Describes formation and disappearance of ice; illustrates different characteristics of states of the ice-fields.]
146. Sverdrup, H. U.
1928. The wind-drift of the ice on the north Siberian shelf. Sci. res. Norw. N. Polar expd. 1918-1925. 4(1). 46 p.
147. Sverdrup, Otto.
1904. New land, four years in the Arctic regions . . . from the Norwegian by Ethel H. Hearn. London, Longmans. 2 v.
148. Taracouzio, T. A.
1938. Soviets in the Arctic. New York. 564 p. 7 maps.
149. Toll, Eduard von
1902. Les travaux de l'expédition polaire russe in 1901. Ymer. 22: 422-424.
150. U.S.S.R. Glavnoe upravlenie Severnogo morskogo puti.
n.d. Kratkoe rukovodstvo dliâ plavaniâ vo l'dakh po Severnom puti. (Brief manual for navigation of the ice on the Northern Sea Route.) 114 L., 2 L. tables. Typewritten. [The first attempt on the part of the Soviet Northern Sea Route Administration at collecting information supplied by various Arctic navigators.]
151. U.S.S.R. Glavnoe upravlenie Severnogo morskogo puti.
1937. Al'bom kart sostoiâniâ l'da v Severnykh Poliânykh Moriâkh v navigatsiû 1936 goda. (Atlas of state of the ice in the North Polar seas for the navigation season 1936.) N. A. Ul'ianovym . . . red. N. I. Evgenova na osnove kart no. 1105, 1077 . . . Leningrad, Glavsevmorputi. 10 charts.
152. U.S.S.R. Glavnoe upravlenie Severnogo morskogo puti.
1940. Trudy Dreifushchei stantsii "Severnyi Poliûs". (Transactions of the "North Pole" drifting station.) Tom I. Leningrad, Glavsevmorputi. 334 p. illus., tables, photos. [Contents: Expedition to the pole.—Drifting station.—Polar radio station "Upol".—Astronomical observations.]
153. U.S.S.R. Glavnoe upravlenie Severnogo morskogo puti. Sluzhby pogody i ledovoi.
1935-1936. Dekadnyi i ezhemesiachnyi bûlleten'. (Ten-day and monthly bulletin) 1935-1936. [Meteorological tables, 2 weather charts, text on state of the ice during each month, by A. Chausov and V. Vasnetsov. 1935 title: Dekadnyi meteorologicheskii i ledovyi bûlleten, by V. Paritskii.]

154. Varnek, A. I.
1902. *Raspredelenie l'dov i usloviâ plavaniâ na morskome puti v Sibir.* (Distribution of ice and navigation of the sea route to Siberia.) *Morskoi sbornik.* 1901(3):63-91. *Izv. Russ. geogr. obshch.* 38:306-341.
155. Vasil'ev, A. S.
1925. *Ocean glacial arctique.* (In Russian.) Leningrad.
156. Veer, Gerrit de.
1876. *The three voyages of William Barents to the Arctic regions (1594, 1595 and 1596).* 2d ed. with an introduction by Lt. K. Beynen. London, The Hakluyt society. 289 p. (Hakluyt society no. 54.)
157. Veinberg, B. P.
1937. *Problema arkticheskogo paka.* (Problems of the Arctic pack.) *Met. i. gidrol.* 3(6):59-65.
158. Vil'kitskii, A.
1912. *Severnyi morskoi put'.* (Northern Sea Route.) *Zap. gidrogr.* 35, prilozh.
159. Vize, V. IŮ.
1933. *O dreife l'dov v polârnom basseine.* (On the ice drift in North Polar basin.) *Zap. Gos. gidrol. inst.* 10:327-336. [Tables of buoy-drifts for 1924.]
160. Vize, V. IŮ.
1934. *Na "Sibiriâkove" v Tikhi Okean.* (On the "Sibiriakov" to the Pacific Ocean.) Leningrad, Glavsevmorputi. 145 p.
161. Vize, V. IŮ.
1935. *Sudovye nablŭdeniâ nad sostoiâniem l'dov v polârnnykh moriâkh v navigatsii 1933 g.* (Observations of vessels on the state of the ice in Polar seas during 1933 navigational season.) *Trud. Arkt. inst.* 20. 46 p.
162. Vize, V. IŮ.
1936. *O pokholodanii priatlanticheskoi Arktiki.* (On the cooling off of the Arctic adjoining the Atlantic.) *Sovetskaiâ arktika.* 1936(3):79-80.
163. Vize, V. IŮ.
1936. *Vladivostok-Murmansk na "Litke".* (From Vladivostok to Murmansk on the "Litke.") Leningrad, Glavsevmorputi. 154 p.
164. Vize, V. IŮ.
1937. *Dreif l'dov iz Karskogo Morâ v Grenlandskoe.* (Ice-drift from the Kara Sea into the Greenland Sea.) *Problemy arktiki.* 1937(1):103-116.
165. Vize, V. IŮ.
1937. *Prichina potepleniâ arktiki.* (Reasons for the warming up of the Arctic.) *Sovetskaiâ arktika.* 1937(1):59-68.

166. Vize, V. Iŭ.
1940. Nauchnye raboty na "Sedove". (Scientific work on the "Sedov".) Problemy arktiki. 1940(2):39-46.
167. Vize, V. Iŭ.
1940. Severnyi morskoi put'. (Northern Sea Route.) Leningrad-Moscow, Glavsevmorputi. 93 p.
168. Volkov, N.
1940. Ledovaiâ sluzhba v vostochnom sektore Arktiki v navigatsiï 1940 goda. (Ice service in the eastern section of the Arctic during the navigational year 1940.) Problemy arktiki. 1940(12):89-91.
169. Weyprecht, Carl.
1875-1876. Bilder aus dem hohen norden. 2. Das eis. 3. Die bildung des packeises. 4-5. Eispressungen. Petermanns mitt. 21:349-351, 403-409. 22:90-93.
170. Wilkins, Sir Hubert.
1928. The flight from Alaska to Spitsbergen, 1928, and the preliminary flights of 1926 and 1927. Geogr. rev. 18:527-555.
171. Zapiski o zhizni i rabote na ledokol'nom parakhode "Georgii Sedov" dreifovavshem s 23 Oktâbrîâ 1937 g. po 13 îanvariâ 1940 g. v Severnom Ledovitom Okeane sostavlennye Chlenami ekipazha ... (Life and work on the ice-breaker "George Sedov" adrift in the Arctic Ocean from 23 October 1937 to 13 January 1940.) 1 v. illus., plates, maps.
172. Zubov, N. N.
1933. Nekotorye soobrazheniâ o plavanii vo l'dakh Polîarnogo basseina. (Ice navigation in the Polar basin.) Zap. gidrogr. 1933(2):32-42.
173. Zubov, N. N.
1933. Some considerations of ice navigation in the Polar Basin. Hydr. rev. 10(2):224-232. [Author considers that the biological indicators of the approach to the ice that he gave in this article are simpler and more reliable than the plankton indicators recommended on results obtained by "Litke" expedition—Note, p. 50, Severnyi morskoi put'. Vol. 2. 1935.]
174. Zubov, N. N.
1939. The drift of the "Sedov". Nature 143:837-840. Extract in Hydrogr. rev. 16(2):93-97. 17(2):67-73. [Extensive remarks on relation between wind and drift; isobars and drift.]
175. Zubov, N. N.
1939. O dreife ledokol'nogo parokhoda "Sedov". (On the drift of the icebreaker "Sedov".) Severnyi morskoi put'. 14:5-16.
176. Zubov, N. N.
1940. Dreif "Sedova". (Drift of the "Sedov".) Sovetskaîâ arktika. 1940(2):55-67. 5 charts.
177. Zubov, N. N.
1940. The drift of the ice-breaker *Sedov*. Nature. 145:533-539.

178. Zubov, N. N.
1940. V tsentr Arktiki. (In the central Arctic.) Leningrad-Moscow, Glavsevmorputi. 240 p. [Includes section on water and ice of the central Arctic basin.]
179. Zubov, N. N. i M. M. Somov.
1940. Dreif l'da tsentral'noi chasti Poliarnogo basseina. (Ice drift in the central part of the Polar basin.) Problemy arktiki. 1940(2):51-68.
180. Die Zweite deutsche nordpolarfahrt in den jahren 1869 u. 1870 unter führung 1871-1874. Kap. Koldeway. Vorträge und mittheilungen, hrsg. v. dem Verein f. die dtsh. nordpolarfahrt zu Bremen. Berlin, D. Reimer (Leipzig, Brockhaus) 2 v. [Contents.—1 bd. Erzählender theil. 2 bd. Wissenschaftliche ergebnisse.]

SEE ALSO: 1, 2, 197, 634, 648, 649, 650, 938, 1659, 1672, 1691.

2. COASTAL WATERS OF NORTHEASTERN NORTH AMERICA
(INCLUDING WEST GREENLAND
NORTH OF 67° N.)

181. Adams, Capt.
1876. Remarks on the weather, winds and ice in the Arctic seas during the past season, as affecting the prospects of the Arctic expedition. From observations in Davis Strait and Baffin Bay 1873. Proc. Roy. geogr. soc. 20:160-161. [Whaling ship "Arctic".]
182. Baschin, O.
1912. Das treibeis der Neufundlandbank und seine gefahr für die schiffahrt. Naturw. wschr. n.f. 11(27):353-357.
183. Belknap, R. L.
1934. The Michigan-Pan American Airways Greenland expedition. Geogr. rev. 24:205-218.
184. Bowditch, N.
1925. American practical navigator: an epitome of navigation and nautical astronomy. (H.O. publ. 9.) [Ch. 22 "Ice and its movement in the North Atlantic Ocean". pp. 261-270.]
185. Bowie, E. H.
1914. Ice patrol over the North Atlantic Ocean. Mon. weath. rev. 42:232-233.
186. Brennecke, Wilhelm.
1913. Neuere beobachtungen aus dem treibeisgebiet bei der Neufundland-Bank. Ann. hydrogr., Berlin. 41:607-613.
187. Canada. Hydrographic and map service.
1931. Sailing directions for Lake Melville and approaches, coast of Labrador. 36 p.
188. Canada. Hydrographic and map service.
1931. St. Lawrence pilot Quebec Harbour to Montreal Harbour and including Richelieu River. 105 p.
189. Canada. Hydrographic and map service.
1940. Nova Scotia (S.E. coast) and Bay of Fundy pilot. 303 p.
190. Canada. Hydrographic and map service.
1941. Gulf of St. Lawrence pilot. 2d ed. 373 p.
191. Defant, A.
1933. Eisberge und eissicherungsdienst im Nordatlantischen Ozean. Polarbuch. 1:55-84.
192. France. Service hydrographique.
1930. Côte S. E. de la Nouvelle-Ecosse et baie de Fundy. Instructions nautiques. 167 p. (11-351.)
193. France. Service hydrographique.
1937. Golfe et fleuve Saint-Laurent. Instructions nautiques. 381 p. (11-388.)

194. France. Service hydrographique.
1937. Terre-Neuve et côte ouest du Groenland. Instructions nautiques. 494 p. (11-386.)
195. Garbett, L. G.
1924. Ice drift in the North Atlantic. Quart. j. Roy. met. soc. 50: 121-126.
196. Gt. Brit. Hydrographic department.
1875. Remarks on Davis Strait, Baffin Bay, Smith Sound, and the channels thence northward to $82\frac{1}{4}^{\circ}\text{N}$. Comp. from various authorities. London. 55 p. tables.
197. Gt. Brit. Hydrographic department.
1931. Arctic pilot, vol. III. Comprising Davis Strait, Baffin Bay, and the channels leading therefrom to the Polar Sea, with the west and north-west coasts of Greenland, the Arctic coast of Canada and the Arctic Archipelago; also Hudson Strait and Bay. 3d ed. London. 435 p. [Ice, pp. 46-61. Includes terminology, occurrence, icebergs and navigation in ice.]
198. Gt. Brit. Hydrographic department.
1934. East coast of the United States pilot, Vol. I. Comprising the east coast of the United States of America from West Quoddy head to Barnegat Inlet, including Grand Manan Channel. 4th ed. 606 p.
199. Gt. Brit. Hydrographic department.
1934. Nova Scotia (South-east coast) and Bay of Fundy pilot. Comprising the Great Bank of Newfoundland, Sable Island, the South-east coast of Nova Scotia, and the Bay of Fundy. 8th ed. 322 p.
200. Gt. Brit. Hydrographic department.
1939. Newfoundland and Labrador pilot, vol. I. Comprising the south-eastern and southern coasts of Newfoundland from Cape Ray, including Saint Pierre and Miquelon; the Strait of Belle Isle and its approaches; and the western coast of Newfoundland from Flower Island to Cape Ray. 7th ed. 316 p.
201. Gt. Brit. Hydrographic department.
1939. Newfoundland and Labrador pilot, vol. II. Comprising the north-eastern coast of Newfoundland from Cape Saint Francis to Cape Bauld, Belle Isle, the eastern and north-eastern coasts of Labrador from Cape Saint Charles to Cape Chidley. 7th ed. 378 p.
202. Gt. Brit. Hydrographic department.
1943. St. Lawrence pilot. Comprising the Gulf and the River St. Lawrence, including the Banks of Newfoundland, and approaches to the Gulf by Cabot Strait, the Strait of Belle Isle and the Gut of Canso. 10th ed. 552 p.
203. Groissmayr, F. B.
1939. Schwere und leichte eisjahre bei Neufundland und das vorwetter. Ann. hydrogr., Berlin. 67:26-30.

204. Habenicht, W.
1910. Eis- und wetterbericht vom Nord-Atlantischen Ozean und Europa. Weltall. 10:101-118.
205. Hammer, R. R. J.
1893. Undersøgelser ved Jacobshavn Isfjord og naermeste omegn i vintern 1879-1880. Medd. om Grønland. 4:1-67. 1 pl., 1 fold. chart. [Ice temperature, thickness and movement.]
206. Hautreaux, A.
1897. Atlantique Nord. Vents, courants et glaces en 1895-1896. Bull. Soc. géogr. Bordeaux. 1897:280-281.
207. Hautreaux, A.
1908. Les glaces et les brumes de l'Atlantique nord. Revue Philomathique Bordeaux. 11:94-107.
208. Hennessy, J.
1924-1939. Ice in the western North Atlantic, season of 1923-1938. (Title varies.) Mar. obs. 1:31-34. 1924. 2:35-37. 1925. 3:77-79. 1926. 4:77-79. 1927. 5:69-75. 1928. 6:81-90. 1929. 7:84-91. 1930. 8:82-89. 1931. 9:76-82. 1932. 10:58-60. 1933. 11:56-58. 1934. 12:71-74. 1935. 13:58-61. 1936. 14:62-65. 1937. 15:60-63. 1938. 16:59-62. 1939.
209. Howard, A. G. W.
1920-1923. Ice in the Atlantic, its origin and drift, its relation to currents and fog. Gt. Brit. Met. Office. Mon. met. charts N. Atlantic. Feb. 1920, Mar. 1920, Feb. 1922, Feb. 1923.
210. Huntsman, A. G.
1930. Arctic Ice on our eastern coast. Bull. Biol. bd. Can. 13:1-12.
211. Icebergs in the North Atlantic.
1938. Science n.s. 87, suppl. Jun 24, p. 8.
212. *International ice observation and ice patrol service.
1915-1941. Summary of ice conditions. Table of ice and other obstructions. Charts giving surface water temperature and isotherms. Monthly ice charts. Bull. U.S.C.G. 3, 5, 7-13, 15-18, 20-30; season of 1914-1940.
213. International ice observation and ice patrol service.
1927. Chart of the drifts of bergs 1914-1927. (In its: Report 1927, p. 68.) Bull. U.S.C.G. 16.
214. International ice observation and ice patrol service.
1927. Distribution of icebergs south of Newfoundland 1900-1926. (In its: Report for 1926 season, opp. p. 77.) chart. Bull. U.S.C.G. 15.
215. Japan. Hydrographic department.
1923. Iceberg and its menace in the North Atlantic. (In Japanese.) Hydrogr. bull. (Suiro Yoho). 10:259-267. fold. charts. [From U. S. ice patrol.]

216. Kindle, E. M.
1922. Notes on the forest of southeastern Labrador. Geogr. rev. 12:57-71. [Ice in Hamilton Inlet, p. 60.]
217. Kreuschner, C. R.
1904. Eis und eisberge im Atlantischen Ozean. Wetter. 21:156-159.
218. Labrador current and icebergs.
1931. Science n.s. 73, suppl. May 15, p. 12.
219. Laktionov, A. F.
1940. K voprosu o predskazanii kolichestva aisbergov v raione N'ufauldlanda. (On the problem of forecasting quantity of icebergs in the Newfoundland region.) Problemy arktiki. 1940(4):114-117.
220. Linssen, Rudolf.
1914. Beiträge zur kenntnis der physischen verhältnisse im gebiete der Neufundlandbank. Borna-Leipzig. 46 p. diags. Inaug.-diss. — Königsberg.
221. Loewe, Fritz.
1935. Hydrographische untersuchungen in fjörden Westgrönlands. Arctica 3:55-78.
222. Ludlow, William.
1882. Ice harbor at the head of Delaware Bay. Annu. rep. Engrs. dep. 1882, pt. 1:784-790. [Tables of crushing strength of ice, pp. 788-790.]
223. M'Lellan, A. G.
1910. North Atlantic ice movements. Naut. mag. 83:1-8, 149-157.
224. Matthews, D. J., G. I. Taylor and L. R. Crawshaw.
1914. Report on the work carried out by the S. S. "Scotia", 1913. London, H. M. Stationery office. 141 p. maps, diags. [Charts show field ice and distribution of bergs in Newfoundland and Labrador waters during March through August.]
225. Mecking, Ludwig.
1906. Die eisdrift aus dem bereich der Baffin Bai beherrscht von strom und wetter. Veröff. Inst. meeresk. Berlin 7. 132 p.
226. Mecking, Ludwig.
1907. Die treibeiserscheinungen bei Neufundland in ihrer abhängigkeit von witterungsverhältnisse. Ann. hydrogr., Berlin. 35:348-355, 396-409.
227. Nederlandsch meteorologisch instituut.
1915. Mededeelingen van de Afdeeling oceanographie en maritieme meteorologie van het Meteorologisch instituut. Ijs en temperatuur van het zeewater bij de Newfoundland banken. De Zee. 37(8):535-537.
228. Norman-Jones, Gerald.
1926. Atlantic field ice during April and May, 1926. Naut. mag. 116:9-12.

229. Pettersson, Otto.
1901. Om drifisen i norra Atlanten. Ymer. 20:157-189.
230. Porsild, M. P.
1918. On "Savssats": a crowding of Arctic animals at holes in the ice. Geogr. rev. 6:215-228. [Ice conditions in Disko Bay, pp. 215-216.]
231. Reuter, F.
1936. Die halbjährige luftzirkulation in beziehung zu den schwankungen der ozeanischen zirkulation und des eisvorkommens bei Island und Neufundland. Ann. hydrogr., Berlin. 64:286-291.
232. Riis-Carstensen, Eigil.
1931. The Godthaab expedition, 1928. Report on the expedition. Medd. om Grønland. 78(1). [Discussion and tables of ice, W. Greenland waters.]
233. Rink, H. J.
1877. Bemaerkninger om de Grønlandske jøklers bevaegelser og produktion af svømmende isfjelde. Kjøbenhavn. 9 p.
234. Robinson, G.
1889. A report on the movements of the ice currents and tidal streams on the coast of Newfoundland and in the Gulf of St. Lawrence. London, Hydrographic dept. 107 p.
235. Rodman, H.
1890. Reports on ice and ice movements in the North Atlantic Ocean. Publ. U.S.H.O. 93:1-26.
236. Römer, E.
1932. Die tätigkeit des Amerikanischen eiswachdienstes und der stand der eisvorhersage. I-II. Seewart. 1932:178-188, 239-246.
237. Sandström, J. W.
1936. Geophysische untersuchungen im Nordatlantischen Meer. V. Das schmelzen des eises. Beitr. geophys. 48:73-80.
238. Schell, I. I.
1940. Foreshadowing the severity of the iceberg season south of Newfoundland. Bull. Amer. met. soc. 21:7-10.
239. Schott, Gerhard.
1903. Die diesjährige grosse eistrift an der ostkante der Neufundlandbank. Ann. hydrogr., Berlin. 31:204-206.
240. Schott, Gerhard.
1904. Die grosse eistrift bei der Neufundlandbank und die wärmeverhältnisse des meerwassers im jahre 1903. Ann. hydrogr., Berlin. 32:277-287.
241. Smith, E. H.
1922. Some meteorological aspects of the ice patrol work in the North Atlantic. Mon. weath. rev. 50:629-631.

242. Smith, E. H.
1924. The ice drift in the north Atlantic. Suppl. U.S.H.O. Pilot chart N. Atlantic Mar.
243. Smith, E. H.
1931. The Marion expedition to Davis Strait and Baffin Bay under direction of the U. S. Coast Guard 1928: Scientific results, pt. III, Arctic ice, with especial reference to its distribution to the North Atlantic Ocean. Bull. U.S.C.G. 19, pt. 3. 221 p. maps.
244. Smith, E. H.
1940. Recent movements of North Atlantic ice and a proposed Coast Guard expedition to the West Greenland glaciers. Trans. Amer. geophys. un. 1940(2):668-671.
245. Smith, E. H.
1941. U. S. Coast Guard cutter *Northland's* ice and oceanographic observation cruise, Baffin Bay and Davis Strait, autumn of 1940. Trans. Amer. geophys. un. 22:788-791. chart. ["Map of iceberg distribution in Baffin Bay, Davis Strait, and West Greenland coastal waters, September 5 to 23, 1940".]
246. U. S. Engineer department. Rivers and harbors board.
1940. Transportation lines on the Atlantic, Gulf, and Pacific coasts. Washington, D. C. xxii, 195 p. (Transportation series no. 5.)
247. U. S. Hydrographic Office.
1922. Current observations and ice movements in North Atlantic. Verso Pilot chart N. Atlantic Apr.
248. U. S. Hydrographic Office.
1934. Sailing directions for Gulf and River St. Lawrence. 6th ed. 469 p. (H.O. 100.)
249. U. S. Hydrographic Office.
1941. Sailing directions for Labrador, Greenland and Iceland including the western shores of Davis Strait. (Emergency ed.) 544 p. (H.O. 74.)
250. U. S. Hydrographic Office.
1938-1942. The ice drift in the North Atlantic Ocean. Verso Pilot chart N. Atlantic April 1939, 1940, 1942; Mar. 1938, 1941; Central American waters April 1938-1939.
251. U. S. Hydrographic Office.
1939. Nova Scotia pilot, including the Bay of Fundy and all of Cape Breton Island. 8th ed. 443 p. (H.O. no. 99.)
252. U. S. Hydrographic Office.
1942. Sailing directions for Newfoundland, including the coast of Labrador from Cape St. Lewis to Long Point. 6th ed. 728 p. (H.O. 73.)
253. U. S. Hydrographic Office.
1942-1943. Arctic ice. Verso Pilot chart Northern N. Atlantic Sept. 1942, 1400-b; Greenland and Barents seas Sept. 1943, 1400-c.

254. U. S. Hydrographic Office.
1944. Arctic ice and its drift into the North Atlantic Ocean. 8th ed. Pilot chart N. Atlantic Apr. Also issued as 1 sheet suppl.
255. U. S. Navy Department. Bureau of navigation.
1868. Memoir of the dangers and ice in the North Atlantic Ocean . . . Washington. 32 p. fold. chart. ["Ice in the North Atlantic", by W. C. Redfield. pp. 12-19. 1 chart.]
256. Vallaux, Camille.
1926. Le danger des icebergs sur les routes maritimes de l'Atlantique nord. Mater. étude calam. 2:283-305.
257. Vallaux, Camille.
1931. Ice observations and patrol in the waters of Newfoundland in 1929. Hydrogr. rev. 8(1):59-69.
258. Wheeler, E. P., 2d.
1935. The Nain-Oak section of Labrador. Geogr. rev. 25:240-254.
259. Wright, G. F. and Warren Upham.
1896. Greenland icefields and life in the North Atlantic . . . New York, Appleton. xv, 497 p. illus., maps.

SEE ALSO: 1, 3, 269, 295, 297, 310, 1658, 1662, 1663.

3. GREENLAND SEA (INCLUDING SOUTHWEST COAST OF GREENLAND NORTH TO 67° N.)

260. Boyd, L. A.
1933. Further exploration in East Greenland. *Geogr. rev.* 24:
465-477.
261. Brennecke, Wilhelm.
1904. Beziehungen zwischen der luftdruckverteilungen und den
eisverhältnissen des Ostgrönländischen Meeres. *Ann. hy-*
drogr., Berlin. 32:49-62.
262. Brennecke, Wilhelm.
1909. Die eisverhältnisse an der Westgrönländischen küste im
juli 1909. *Ann. hydrogr.*, Berlin. 37:516-517.
263. Brooks, C. E. P.
1932. The influence of the ice in the Davis Strait on the weather
of the British Isles. *Met. mag.* 67:153-157.
264. Charcot, J.
1929. À la recherche du "Latham 47". *Bull. Soc. d'océan. France.*
9:865-875, 881-894.
265. *Deutsche seewarte, Hamburg.
1940. Eis um Island und Ost-Grönland; mit 10 jahrgängen eiskarten
für die monate April bis August. Neubearb. von der Deut-
schen Seewarte. Hamburg, Oberkommando der Kriegs-
marine. 69 p. incl. charts.
266. Devaux, J.
1933. Études des glaces de terre et de mer au Scoresbysund (croi-
sière 1932 du Pourquoi-pas?). *Ann. hydrogr.*, Paris. s.
3, 12:58-61.
267. Devik, Olaf.
1936. Norwegische untersuchungen betreffs eisverhältnisse, eis-
bildung und wärmeumsatz. *Rep. 5th Hydrol. conf. Baltic*
States. 7E. 4 p.
268. Dorst, F. J.
1877. Die eisbewegung im Grönländischen meere für 1869, auf-
genommen am bord des Rosenthal'schen dampfers "Bien-
enkorb". *Petermanns mitt.* 23:174-182.
269. Ekblaw, W. E.
1920. On the sudden discharge of icebergs from Greenland's fiords.
Geogr. rev. 10:46. [Review of Porsild, 1919.]
270. Ette, Henry.
1925. East Greenland. *Geographical teacher.* 13:209-212. illus.,
plate.
271. France. Service hydrographique.
1936. Islande et Faeroe, Jan Mayen, Bjornoya, Svalbard et côte
Est du Groenland. 402 p. (11-382.)

272. Fuchs, V. E. and W. F. Whittard.
1930. The East Greenland ice-pack and the significance of its derived shells. *Geogr. j.* 76:419-425.
273. Garde, T. V.
1929. The navigation of Greenland. *Greenland.* 3:215-242. [Remarks on ice.]
274. Germany. Oberkommando der kriegsmarine.
1932. Handbuch West- und Nordküste Norwegens. II. teil. Von Trondheim bis zur norwegisch-finnischen Grenze. 4. aufl. 534 p.
275. Germany. Reichs marine amt.
1916. Eis um Island und Ost-Grönland. Mit 19 jahrgangen eiskarten für die monate mai bis august. Berlin. 66 p. charts.
276. Graah, W. A.
1832. Undersøgelses-reise til østkysten af Grønland. Efter kongelig befaling, udført i aarene 1828-31. Kjøbenhavn. xvii, 216 p. illus., map. [New ed. by Kaj Kirbet-Smith. Copenhagen, 1932.]
277. Graah, W. A.
1837. Narrative of an expedition to the east coast of Greenland, sent by order of the King of Denmark, in search of the lost colonies, under the command of Capt. W. A. Graah . . . Tr. from the Danish by the late G. Gordon Macdougall. London. xvi, 199 p. map.
278. Gt. Brit. Hydrographic department.
1931. Norway pilot, Pt. II. Comprising the west coast of Norway from Lindesnes to Trondheim, including the Halten Islands. 5th ed. 771 p.
279. Gt. Brit. Hydrographic department.
1934. Arctic pilot, vol. II. Comprising Iceland, Jan Mayen, Svalbard, and the east coast of Greenland, together with the Greenland and Barents seas. 4th ed. London. 456 p. [Ice, pp. 27-45. Includes terminology, occurrence.]
280. Gt. Brit. Hydrographic department.
1939. Norway pilot, Pt. III. Comprising the north-western and northern coasts of Norway from Halten to Jacobselva. 3d ed. 804 p.
281. Gt. Brit. Naval meteorological branch.
1941. Ice conditions and passage through Denmark Strait. Memo. 106/41.
282. Hamberg, Axel.
1906. Hydrographische arbeiten der von A. G. Nathorst geleiten Schwedischen polarexpedition 1898. *Handl. Svensk. vetensk.-akad. n.f.* 41(1). 56 p. charts. [Notes on ice.]
283. Hellwald, Friedrich von.
1879-1881. Im ewigen eis. Geschichte der Nordpol fahrten von den ältesten zeiten bis auf die gegenwart. Stuttgart, J. G. Cotta. viii, 953 p. illus.

284. Hoffmeyer, N.
1880. Strömungs- und temperaturverhältnisse des meeres bei Island. Ann. hydrog., Berlin. 8:173-192. [Remarks on drift ice.]
285. Irminger, C.
1856. The Arctic current around Greenland. J. Roy. geogr. soc. 26:36-43. tables.
286. Irminger, C.
1861. Currents and icedriffs on the coasts of Iceland. Proc. Roy. geogr. soc. 5:225-234. [Other eds. in various languages.]
287. Iversen, Th.
1936. Sydøstgrønland, Jan Mayen. Fiskeriundersøkelser. Fiskeridir. skr. s. havunders. 5(1). 171 p. [Ice, depths, currents.]
288. Jennov, J. G.
1935. Østgrønlandsk fangstkompani "Nanok" 's "Gefion"-ekspedition til Danmarkshavn og Hvalrosodden Juli-September 1932 og nogle iagttagelser vedrørende isforhold ved den Grønlandske nordøstkyst. Publ. Østgrønland. 2. 54 p. [Ice observations at Germaniahavn, 1932-34; Hvalrosodden, Hochstetter and Besselfjord, 1932-34; dates of new ice, fast, free of ice, etc.]
289. Koch, Lauge.
1933. The Danish three-year expedition to King Christian X Land. Geogr. rev. 23:599-607.
290. Koldewey, Karl.
1871. Eisverhältnisse im Grönländischen meere und ansichten über weitere förderung praktischer entdeckungen. Mitt. Geogr. ges. Wien. 14:282-295.
291. Laktionov, A. F.
1938. Dreif l'dov v Grenlandskom more. (Drift ice in Greenland Sea.) Nauka i tekhnika. 1938(2):1-3.
292. Laktionov, A. F.
1938. L'dy Grenlandskogo more. (Ice in Greenland Sea.) Moscow, Gosudarstvennyi Univ. 32 p.
293. Luksch, J. und J. Wolf.
1886. Temperatur und specifisches gewicht des seewassers. Beob.-ergeb. Int. polarforsch. 1882-83. Österreich. polarstation Jan Mayen. Bd. I, tl. III, abt. 2. 76 p. fold. charts. [Mentions presence of floating ice.]
294. Makarov, S. O.
1901. Ermak vo ldakh. (The "Yermak" in the ice.) St. Peterburg. 507, XXI p. illus., plates, fold. charts. [Includes material on "Lofoten" and "Kronstadtski" also. Ermak from Finnish Gulf to Spitsbergen on two trips.]
295. Mecking, Ludwig.
1939. Die periodizität der eisbedeckung in der Davisstrasse. Ann. hydrogr., Berlin. 67:23-26.

296. Meinardus, Wilhelm.
1906. Periodische schwankungen der eistrift bei Island. Ann. hydrogr., Berlin. 34:148-162, 227-239, 278-285.
297. Meinardus, Wilhelm.
1908. Zu den beziehungen zwischen der eisverhältnissen bei Island und der Nordatlantischen zirkulation. Ann. hydrogr., Berlin. 36:318-321.
298. Meinardus, Wilhelm.
1934. Die ergebnisse der eisdickenmessungen auf der Deutschen Grönland-expedition Alfred Wegener. Z. Ges. erdk. 1934: 343-351.
299. Mezin, M. et M. Striffling.
1937. Relations entre l'état des glaces dans la Mer du Groenland et les situations météorologiques. Ann. hydrogr., Paris. s.3, 14:38-52.
300. Mikkelsen, Einar.
1915. Notes on the sea-ice along the East coast of Greenland. (Alabama expeditionen til Grønlands nordostkyst 1909-1912 under ledelse Ejnar Mikkelsen.) Medd. om Grønland. 52:185-214.
301. Mikkelsen, Einar.
1933. The Blosseville coast of East Greenland. Geogr. j. 81: 385-403.
302. Mossman, R. C.
1909. The Greenland Sea; its summer climate and ice distribution. Scot. geogr. mag. 25:281-310.
303. Nathorst, A. G.
1900-1901. Two summers in the Arctic Ocean. King Charles Land, circumnavigation of Spitzbergen; search for Andrée in N. E. Greenland. (In Swedish.) Stockholm. 2 v. xxxv, 352, xiii, 414 p.
304. Norway. Norges sjøkartverk.
1926. Den Norske los. 10de hefte. Tromsø til grensen mot Finnland. 155 p.
305. Petermann, August.
1868. Die Deutsche nordpol-expedition. Wind- und eisverhältnisse im Grönländischen meere zwischen 70° und 80° N. br. vom märz bis juli 1868. Petermanns mitt. 14:339-340.
306. Porsild, M. P.
1919. Om de Gronlandske Isfjordes saakaldte udskydning. Geogr. ann. 1:149-157. ["On the sudden discharge of icebergs from Greenland's fiords."—Reviewed by W. E. Ekblaw in Geogr. rev. 10:46. 1920.]
307. Rabot, Charles.
1923. Norwegian navigation on the eastern coast of Greenland. Geogr. rev. 13:624-625.

308. Rasmussen, Knud.
1933. Explorations in southeastern Greenland: preliminary report of the 6th and 7th Thule expeditions. *Geogr. rev.* 23: 385-393.
309. Sandström, J. W.
1930. Den Svenska ishavsexpeditionen 1929. *Ymer.* 50:75-117. [Ice: pp. 99-109, Greenland and Barents seas.]
310. Schott, Gerhard.
1904. Über die grenzen des treibeises bei der Neufundland bank sowie über eine beziehung zwischen Neufundländischen und Ostgrönländischen treibeis. *Ann. hydrogr.*, Berlin. 32:305-309. chart.
311. Scoresby, William.
1818. On the Greenland or Polar ice. *Mem. Wern. soc.* 2:261-338.
312. Scoresby, William.
1820. An account of the Arctic regions, with a history and description of the northern whale-fishery. Edinburgh. 2 v. [V. 1, Ch. 4, sec. 1: Description of the various kinds or denominations of ice, pp. 225-238. sec. 2: On the formation of ice in the sea, pp. 238-241. Sec. 3: Description of ice-fields, and remarks on their formation and tremendous concussions, pp. 241-250.]
313. Scoresby, William.
1821. State of the ice of the east coast of West Greenland in summer 1820, as observed by Capt. Scoresby. *Edinb. phil. j.* 4:221-223. [A letter.]
314. Snelling, W. J.
1831. The Polar regions of the western continent explored; embracing a geographical account of Iceland, Greenland, the islands of the frozen sea, and the northern parts of the American continent . . . together with the adventures, discoveries, trials of Parry, Franklin, Lyon, and other navigators, in those regions. Boston, Mass. 1 p. L., xii, 501 p. map.
315. Soem, B.
1937-1938. Isrek vid Greanland og Island arid 1936-1937. *Aegir* (Reykjavik.) 30:168-170. 31:170-173.
316. Speerschneider, C. J. H.
1931. The state of the ice in Davis Strait, 1820-1930. *Medd. Danske met. inst.* 8. 53 p.
317. Teichert, C.
1933. Das Ostgrönländische packeis. *Natur und museum.* 63: 107-112.
318. Terry, Beatrice.
1940. Narvik, Norway. *J. geogr.* 39:183-186.
319. Thoroddsen, Th.
1884. Den gronlandska drifisen vid Island. *Ymer.* 4:145-160.

320. Trolle, Alf.
1913. Hydrographical observations from the "Danmark"-expedition. (Danmark-ekspeditionen til Grønlands nordøstkyst 1906-1908, Bd. 1-2.) Medd. om Grønland. 41:275-468. ["Observations on ice conditions in Greenland Sea and in the fjords and sounds at ca. 76°N in NE Greenland, 1906-1908." Tables ice thickness.]
321. U. S. Hydrographic Office.
1931. The Northwest and north coasts of Norway. From Feje Fjord to North Cape, and thence to Jakobselva, including Spitsbergen and Jan Mayen Island. 3d ed. 466 p. (H.O. 136.)
322. U. S. Hydrographic Office.
1941. Greenland: August-October average ice conditions. Verso Pilot charts Northern N. Atlantic Ocean August-October. 1400b.
323. U. S. Hydrographic Office.
1941. Normal ice conditions in Greenland waters. Verso Pilot chart Northern N. Atlantic Ocean June.
324. U. S. Hydrographic Office.
1941-1943. Seasonal movement of ice in Greenland waters. Verso Pilot chart Northern N. Atlantic Ocean July.
325. U. S. Hydrographic Office.
1943. Sailing directions for the East coast of Greenland from Prince Christian Sound to Cape Morris Jesup and Iceland, including the Island of Jan Mayen. 585 p. (H.O. 75.)
326. Vize, V. IŮ.
1922. Die einwirkung des polareises im Grönländischen meer auf die Nordatlantische zykonalen tätigkeit. Ann. hydrogr., Berlin. 50:271-280.
327. Vize, V. IŮ.
1925. Znachenie rezhima l'dov vesnoŮ ve Grenlandskom More i Vostochno-Islandskogo techeniâ dlâ temperatury vozdukha v posleduŮshchuŮ zimu v Evrope. (Die bedeutung der eisverhältnisse im frühling im Grönländischen Meere und des Ost-Islandischen polarströmes für die temperaturverhältnisse des nachfolgenden winters in Europa.) Izv. Gos. gidrol. inst. 14:52-59. German summary.
328. Vize, V. IŮ.
1940. SostoŮanie l'dov v Grenlandskom More letom 1939 g. (State of the ice in Greenland Sea summer of 1939.) Problemy arktiki. 1940(10):102.
329. Wandel, C. F.
1887. Ueber strom- und eisverhältnisse, sowie navigirung an den küsten Islands. Ann. hydrogr., Berlin. 15:271-279.
330. Wandel, C. F.
1893. Om de hydrografiske forhold i Davis-Straedet. (Sur les conditions hydrographiques du Détroit de Davis.) Medd. om Grønland. 7:55-103, 251-263. French résumé. [Notes on ice and discussion of ice drift.]
331. Watkins, H. G.
1932. The British Arctic air route expedition. Geogr. j. 79:466-497.
- SEE ALSO: 1, 3, 6, 59, 164, 194, 197, 231, 232, 243, 245, 249, 253, 254, 398, 1661.

4. BARENTS SEA (INCLUDING SPITSBERGEN)

333. Ahlmann, H. W.
1933. Scientific results of the Swedish-Norwegian Arctic expedition in the summer of 1931. Geogr. ann. 15:1-67. [Ice, pp. 4-5.]
334. Al'banov, V. I.
1917. Po űug k Zemle Frantsa-Iosifa. Pokhod shturmana V. I. Al'banova po l'du so shkhuny "Sv. Anna" ekspeditsii leitenanta G. L. Brusilova. S ocherkom ekspeditsii leitenanta G. L. Brusilova, sostavlennym L. L. Breitfusom. (South of Franz Josef Land. Expedition piloted by V. I. Al'banov in the ice aboard "St. Anna". Lt. G. L. Brusilov expedition.) Zap. gidrogr. prilozh. (suppl.) 41(4/5,6). 194 p.
335. Arnold-Alfâb'ev, V. I.
1932. Nauchnye raboty Gidrometeorologicheskogo komiteta na borty 1/k "Krasin" v Barentsovom More zimou 1932 g. (Scientific work of the Hydrometeorological committee on the icebreaker "Krasin" in the Barents Sea, winter 1932.) Būl. Arkt. inst. 1932(7):155-158, 173-174. [Mechanical tests of ice porosity and salinity.]
336. Arnold-Alfâb'ev, V. I.
1939. O prochnosti l'da Barentsova i Karskogo Morei. (Strength of ice of Barents and Kara seas.) Problemy arktiki. 1939(6): 21-30.
337. Berezkin, Vl. A.
1931. Hidrologicheskie, meteorologicheskie i ledovye nablūdeniâ 1/k "Krasin" za vremâ plavaniâ u beregov Shpitsbergena i Zemli Frantsa Iosifa letom 1829 goda. (Hydrological meteorological and ice observations of the "Krasin" during the navigational season of 1928 near Spitzbergen and Franz Josef Land.) Trud. Inst. izuch. severa. 50:21-126. German summary.
338. Burkov, P. I.
1929. Donesenie o lediânom pokrove v Barentsovom More v 1927 g. (Information on ice cover in Barents.) Trud. Morsk. nauchn. inst. 4(1):134-137.
339. Deutsche seewarte, Hamburg.
1901. Aus den wissenschaftlichen ergebnissen der polarfahrt des "Matador" unter fūhrung des . . . Oskar Bauendahl, herbst und winter 1900-1901. Tl. 1. Ueber die eisverhâltnisse. Ann. hydrogr., Berlin. 29:414-425. [Sep. 1900 to Jul. 1901.]
340. Deutsche seewarte, Hamburg.
1913. Die eisverhâltnisse um Spitzbergen in der zweiten hâlftē des juni 1912. Ann. hydrogr., Berlin. 41:118-120.

341. Ekspeditsiia ledokola "Krasin" na Novuiu Zemliu v Marte-Aprele 1933 goda. (Expedition of the "Krasin" to Novaya Zemlya in March and April 1933.) *Bull. Arkt. inst.* 1933:125-130. [Ice conditions discussed, pp. 127-128.]
342. Evgenov, N. I.
1929. Plavanie L. P. "Sedov" u beregov Zemli Frantsa Iosifa v 1928 g. (Cruise of the icebreaker Sedov near Franz Josef Land in 1928.) *Morskoi sbornik.* 1929(2):43-54. Ice chart.
343. France. Service hydrographique.
1936. Côtes de Norvège, Finlande et U.S.S.R., de la presqu'île de Stadt au Cap Kanin. 412 p. (11-379.)
344. Frommeyer, Maria.
1928. Die eisverhältnisse um Spitzbergen und klimatischen faktoren. *Ann. hydrogr., Berlin.* 56:209-214, 240-248. [Inaugural dissertation — Münster, 1927.]
345. Germany. Oberkommando der Kriegsmarine.
1916. Handbuch Spitzbergen. 280 p.
346. Glen, A. R.
1937. The Oxford University Arctic expedition, Northeast Land, 1935-36. *Geogr. j.* 90:193-222.
347. Glen, A. R.
1938. Sea ice conditions around Northeast Land during the year 1935-1936. *Geogr. ann.* 20:152-169.
348. Gromov, B.
1930. Pokhod "Sedova". Ekspeditsiia "Sedova" na Zemliu Frantsa-Iosifa v 1929 g. (Voyage of the "Sedov" to Franz Joseph Land in 1929.) Moscow, "Molodaiâ gvardiia". 85 p.
349. Hahn, O.
1883. Die Osterreichisch-Ungarische nordpolexpedition. Prague, Freytag. 84 p.
350. Hoel, Adolf.
1916. Isforholdene paa Spitsbergens vestkyst sommern 1915. *Aarb. Norsk. geogr. selsk.* 26/27:111-133.
351. Hoel, Adolf.
1917. L'État des glaces autour du Spitsberg pendant l'été 1915. *Géogr.* 31:189-196.
352. Hoel, Adolf et Sverre Røvig.
1918. Rapport préliminaire de l'expédition norvégienne de 1917 au Spitsberg. *Géogr.* 32:96-101. [Ice, p. 99.]
353. Horn, Gunnar.
1930. Franz Josef Land, natural history, discovery, exploration, and hunting. *Skrifter om Svalbard og Ishavet.* 29.
354. Isachsen, Gunnar.
1908. Les glaces autour du Spitzberg en 1907. *Bull. Inst. océan.* 114.

355. Isachsen, Gunnar.
1911. Die eisverhältnisse an den küsten Spitzbergens sowie im Ost- und Westeise 1910. *Petermanns mitt.* 57(1):241-243.
356. Ivanov, I. M.
1932. Kharakteristika ledovogo rezhima Zemli Frantsa-Iosifa v period s 25 iūl'â 1930 g. po 21 iūl'â 1931 g. (Characteristics of ice regime at Franz Josef Land from 25 July 1930 to 21 July 1931.) *Būl. Arkt. inst.* 1932(2):29-30.
357. Jackson, F. G.
1899. A thousand days in the Arctic. London, Harper. xxiii, 940 p. illus., maps.
358. Jansen, Capt.
1865. Notes on the ice between Greenland and Nova Zembla, being the results of investigations into the records of early Dutch voyages in the Spitzbergen seas. *Proc. Roy. geogr. soc.* 9:163-181.
359. Karelin, D. B.
1935. O ledovykh prognozakh dlâ Murmanskogo poberezh'â. (On ice prognosis for Murman coast.) *Zap. gidrogr.* 1935(2):60-65.
360. Knipovich, N. M.
1906. Osnovy gidrologii Evropeiskago Ledovitago okeana. Grundzüge der hydrologie des Europäischen Eismeer. *Zap. Russ. geogr. obshch.* 42. 1510 p. tables. [Ice, pp. 806-810, 1254-1290.]
361. Kogan.
1916. Plavaniâ ekspeditsionnago sudna "Gerta" dlâ poiskov Lt. Brusilova i ego sputnikov v 1915 g. (Navigation of the expedition on the "Gerta" in search of Lt. Brusilov and his party in 1915.) *Zap. gidrogr.* 40:129-170. [Shows ice limits around Spitsbergen.]
362. Kotel'nokov, D. F.
1929. Aisbergi u Murmana. (Icebergs near Murman.) *Zap. gidrogr.* 56:177.
363. Laktionov, A. F.
1935. Sostoânie l'da v more, omyvâushchem severo-zapadnye berega Zemli Frantsa-Iosifa v 1932/33 g. (po nablûdeniâm stantsii za Zemle Frantsa-Iosifa). (State of the ice at sea and offshore NW of Franz Joseph Land during 1932/33, according to observations of the station on Franz Joseph Land.) *Trud. Arkt. inst.* 34:45-52.
364. Laktionov, A. F.
1935. Sostoânie l'dov v Barentsovom More i Severnoi chasti Karskogo Morâ po nablûdeniâm na sudne "Lomonosov" v 1931 g. (State of the ice in the Barents and north part of the Kara seas according to observations of the "Lomonosov" in 1931.) *Trud. Arkt. inst.* 18:85-90.

365. Laktionov, A. F.
1940. O srednikh kromkakh l'da Barentsova Moria. (On mean ice limits of Barents Sea.) Problemy arktiki. 1940(7/8):26. 1 table.
366. Lavrov, A. M.
1929. Sostoianie l'da u Vostochnykh beregov Sval'barda (iun' i iul' 1928 goda). Nauchnyi rezul'taty eksp. na ledokole "Malygin" v Barentsovom More letom 1928 g. (State of the ice on the east shores of Spitzbergen in the summer of 1928.) Trud. Inst. izuch. severa. 45:56-82.
367. Ledovye predskazaniia dlia morei. (Forecasting ice conditions for the seas.)
1927. Izv. TSentr. gidromet. buro. 7:321-323. [The 1926/27 forecasts for the Barents, Kara, White seas and Finnish Gulf.]
368. Leningrad. Vsesoiznyi arkticheskii institut.
1934. Nauchnye raboty stantsii v Bukhte Tikhoi na Zemle Frantsa Iosifa.—Meteorologicheskie nabludeniia 1929—1930. (Scientific work of the station at Tikhi Bay on Franz Josef Land.—Meteorological observations 1929-1930.) Trud. Arkt. inst. 5. 71 p. [Observations on state of the ice, pp. 63-70.]
369. Luigi, Duke of the Abruzzi.
1903. On the "Polar Star" in the Arctic Sea ... London. 2 v. [Across Barents Sea from Archangel to Franz Josef Land and on toward pole.]
370. Markham, A. H.
1881. A Polar reconnaissance; being a voyage of the "Isbjørn" to Novaya Zemlya in 1879. London, C. K. Paul & Co. xvi, 361 p. illus., maps.
371. Markham, C. R.
1881. The voyage of the "Eira" and Mr. Leigh Smith's arctic discoveries in 1880. Proc. Roy. geogr. soc. 3:129-150. illus.
372. Markham, C. R.
1883. 2d voyage of the "Eira" to Franz-Josef Land. Proc. Roy. geogr. soc. 5:204-228. [Narrative account; some remarks on ice.]
373. Mesafsev, J. J.
1927. Die verteilung des eises im Barentsmeer im jahre 1926. Petermanns mitt. 73:277-279.
374. Mukhanov, L.
1934. V stranu ledianogo molchaniia. Pokhod ledokola "Georgii Sedov" na Zemliu Frantsa-Iosifa i Zemliu Severnuu 15/VI-14/IX 1930. (Into the land of icy silence. The Georg Sedov expedition to Franz Josef Land and North Land, 15 June—14 September 1930.) Izd. 2-e. Arkhangel'sk. 198 p.

375. Nalivaiko, G.
1929. O l'dakh v Kaninsko-Pechorskom raione. (Ice in the Kanin-Pechora region.) Vodn. transp. 12:35-36.
376. Nalivaiko, G. and T. Mariutin.
1922. Predvaritel'nyi otchet o portovykh izyskaniyakh v ust'akh rek Indigi i Peshi Severnogo Ledovitogo okeana, proizvedennykh b 1920-1922 gg. (Preliminary report on investigations of ports at the mouths of the Indiga and Pechora rivers, Arctic Ocean, carried out during 1920-1922.) Leningrad, Izd. Gl. uprav. gosud. str-va. viii, 67 p. 17 charts, plates. (Reprint LXIV. Trudy Otdela Vodnogo stroitel'stva. Materialy po portostroeniyu.)
377. Nansen, Fridtjof.
1921. Spitzbergen. Leipzig, Brockhaus. 327 p. illus.
378. Nord, B. P.
1931. L'dy i liudi. (Ice and people.) Arkhangel'sk. 200 p. (On the "Sedov", Barents and Kara seas.)
379. Nordenskiöld, A. E.
1869-1870. Meteorologiska iakttagelser, anställda på Beeren-Eiland vintern 1865-1866 af Sievert Tobiesen, och inom Norra Polarhavet sommaren 1868 af F. W. von Otter och L. Palander. Handl. Svensk. vet-akad. 8(11). 1869. Petermanns mitt. 16:249-255. 1870.
380. Norway. Norges sjøkartverk.
1929. Farvannsbeskrivelser Kysten av Bjørnøya. (The Coast of Bear Island.) 24 p. (Medd. Norges Sval. Ishavsundersøk. nr. 6.)
381. Orleans, Louis Philippe Robert, Duc d'.
1907. Croisière océanographique accomplie à bord de la Belgica dans la Mer du Gronland 1905. Resultats scientifiques. Brussels. [Journal gives ice conditions, June-August 1905, pp. 28-67.]
382. Orleans, Louis Philippe Robert, Duc d'.
1911. Compagne arctique de 1907. Journal de bord et physique du globe. Brussels. [Ice conditions July-September 1907 in Barents and Kara seas, pp. 1-31.]
383. Payer, Julius.
1875. New lands within the Arctic circle: narrative of the discoveries of the Austrian ship "Tegetthoff" in the years 1872-1874. London. 2 v. [Ch. I, v. 1, "The frozen ocean", contains definitions of types of sea ice.]
384. Pettersen, Karl.
1880. Ice in the Spitzbergen seas in 1879. Proc. Roy. geogr. soc. n.s. 2:128.
385. Pettersen, Karl.
1884-1886. Det Europæiske Polarhav i sommaren 1884, 1885, 1886. Ymer. 4:223-232. 5:229-245. 6:369-381. charts.

386. Pettersen, Karl.
1926. Isforholdene i Nordishavet i 1881 og 1882. Med en innledning, av Adolf Hoel. Geogr. tidssk. 1:209-225.
387. Pinegin, N. V.
1935. Nablūdeniâ nad sostoiâniem l'dov v avguste i sentiâbre 1932 g., vedennye na bortu l/p "Malygin". (Ice conditions in the Barents Sea and off Franz-Joseph Land in Aug.-Sep. 1932, etc.) Trud. Arkt. inst. 34:31-37. English summary.
388. Pinegin, N. V.
1935. Nablūdeniâ nad temperaturoi, solenost'ū i shchelochnost'ū poverkhnostnogo sloiâ moriâ. (Scientific results of the expedition on the icebreaker "Malygin" to Franz-Josef Land in 1932. Observations on temperature, salinity, and alkalinity of the surface layers.) Trud. Arkt. inst. 34:17-23. [Remarks on ice.]
389. Rabot, Charles.
1919. The Norwegians in Spitsbergen. Geogr. rev. 8:209-226.
390. Rabot, Charles.
1922. Norwegian explorations in Spitsbergen, 1919, 1920, and 1921. Geogr. rev. 12:303-304.
391. Rabot, Charles.
1929. Arrivée anormale d'icebergs sur la côte nord de la Norvège. C.R. Acad. sci. Paris. 188:1563-1565.
392. Rabot, Charles.
1929. Glaces polaires sur les côtes de Norvège. La Natur 57(2): 481-484. Illus.
393. Robitzsch, Max.
1914. Eis in und um Spitzbergen. Petermanns mitt. 60(2):187-190.
394. Samoilovich, R. L.
1934. Vo l'dakh Arkitiki. Pokhod "Krasina" letom 1928 goda. (In the Arctic ice. The "Krasin" expedition 1928) 3. izd. Leningrad, Izd. Vsesoiūznogo Arkticheskogo instituta. 340 p. [Chart of the ice around Spitzbergen.]
395. Schulz, Bruno.
1930. Die hydrographie des Barentsmeeres. J. cons. explor. mer. 5:291-319. [Covers expeditions from 1904 to 1927.]
396. Schulz, Bruno und A. Wulff.
1929. Hydrographie und oberflächenplankton des westlichen Barentsmeeres im sommer 1927. Ber. Dtsch. wiss. komm. meeresf. n.f. 4(5):235-372. plates. [Drift ice, pp. 253-254.]
397. Shar-Baronov, L.
1940. 4 reisa ledokol'nogo parokhoda "Vl. Rusanov" v 1939 g. (The 4 trips of the icebreaker "Vl. Rusanov" in 1939.) Sovetskaiâ arktika. 1940(3):10-20. [Barents and Kara seas; Franz Josef Land, Tikhi Bay and Rudolph I.]

398. Sverdrup, H. U.
1931. Scientific results of the Andrée expedition. 1. Drift-ice and ice-drift. Geogr. ann. 13:121-140. [Based on notes left by Andrée describing condition of ice crossed by his party, N of Spitsbergen. Remarks by author on ice-drift buoys put out by Andrée, and their resulting drift.]
399. Timofeevski, N.
1925. Ledîanoi pokrov Eniseiskogo Zaliva. (Ice cover of Gulf of Yenisei.) Izv. Russ. geogr. obshch. 57(2):23-32.
400. U.S.S.R. Hidrograficheskoe upravlenie.
1939. Lotsiâ Barentsova Moriâ. Chast' III. Îugovostochnââ chast'. (Sailing directions for Barents Sea. Pt. III. South-east part.) 173 p.
401. U.S.S.R. Hidrograficheskoe upravlenie.
1941. Lotsiâ Barentsova Moriâ. Chast' II. Murmanskii bereg. (Sailing directions for the Barents Sea. Pt. II. Murman coast.) 464 p.
402. U.S.S.R. Hidrograficheskoe upravlenie.
1942. Lotsiâ Barentsova Moriâ. Chast' I. Ostrova Medvezhii, Shpitsbergen, Îân-Maien i Zemlia Frantsa Iosifa. (Sailing directions for the Barents Sea. Pt. I. Medvezhi Is., Spitzbergen, Jan Mayen and Franz Joseph Land.)
403. Varnek, A.
1901. Ob usloviâkh obrazovaniâ l'dov v vodakh, omyvaïushchikh severnoe poberezh'e Evropeiskoi Rossii, i v Karskom more. (Concerning the condition of ice information on the waters washing the northern shores of European Russia and in Kara Sea.) Russ. sudokhod. 231/235:117-129.
404. Vize, V. ÎU.
1923. O vozmozhnosti predskazaniâ sostoïaniâ l'dov v Barentsovom more. (On the possibility of predicting the state of the ice for the Barents Sea.) Izv. TŠentr. gidromet. biûro. 1:1-45. tables, charts. German summary, pp. 41-45.
405. Vize, V. ÎU.
1924. L'dy v Barentsovom More i temperatura vozdukhâ v Europe. (Eis im Barents Meere und lufttemperatur in Europa.) Izv. TŠentr. gidromet. biûro. 3:1-30. German summary, pp. 27-30.
406. Vize, V. ÎU.
1927. Sostoïanie l'dov v Barentsovom i Karskom Moriâkh letom 1925 goda i sravnenie ego s predkazannym. (Comparison of the observed ice in Barents and Kara seas during summer 1925, with the predictions.) Izv. TŠentr. gidromet. biûro. 6:301-306. German summary.

407. Vize, V. IŮ.
1927-1928. Sravnenie predskazannogo na navigatsiŮ 1926-1927 gg. sostoiŮaniŮ l'dov v BarentsŮovom i Karskom morŮakh s deistvitel'no nablŮudavshimsŮ. (Comparison of the forecasts for navigational seasons 1926-1927 for state of the ice in the Barents and Kara seas, with the actual observations.) Izv. TŮentr. gidromet. bŮuro. 7:323-324. 8: 393-394.
408. Vize, V. IŮ.
1928. Nekotorye dannye po glatsiologii Zemli Frantsa Iosifa. (Data on glaciology of Franz Josef Land.) Izv. Gos. gidrol. inst. 22:61-78.
409. Vize, V. IŮ.
1928. Die vorhersage der eisverhŮltnisse im Barents-Meer. Arktis. 1:81-83.
410. Vize, V. IŮ.
1929. Nauchnye raboty ekspeditsii na ledokole "Malygin" v BarentsŮovom More letom 1928 goda. (Scientific results of the "Malygin" expedition in the Barents Sea, summer 1928.) Trud. Inst. izuch. severa. 45:15-55. [Ice on Banc de Svalbard.]
411. Vize, V. IŮ.
1930. Aisbergi u Severnykh beregov Evropy v 1929 g. (Icebergs on Europe's northern coasts in 1929.) Izv. Gos. gidrol. inst. 29:77-84.
412. Vize, V. IŮ.
1930. O znachenii sistematicheskogo izucheniiŮ BarentsŮova MorŮa dlŮ meteorologicheskikh i gidrologicheskikh prognozov. Die bedeutung systematischer untersuchungen des Barents-meeres fŮr meteorologische und hydrologische pronosen. Issled. mor. SSSR. 11:5-20. German summary. [Discussion of relation of water temperature and state of the ice of the Barents Sea to the air temperature of North Europe, with figures.]
413. Vize, V. IŮ.
1930. UsloviŮa plavaniŮa k Zemle Frantsa Iosifa. (Conditions of navigation to Franz Josef Land.) Trud. Inst. izuch severa 47:59-67. illus. [Ice limits, June-August 1898-1922; bergs in Barents Sea, 1899-1928.]
414. Vize, V. IŮ.
1931. Nauchnye rezul'taty Arkticheskoi ekspeditsii na "Sedove" v 1930 godu. GidrologiŮa i meteorologiŮa. (Scientific results of the Arctic expedition on the "Sedov" in 1930. Surface observations in the Barents and Kara seas.) Trud. Arkt. inst. 1:1-42. tables, charts. [Ice conditions noted.]

415. Vize, V. Iŭ.
1931. Nauchnye rezul'taty ekspeditsii na Zemlĭu Frantsa Iosifa letom 1929 g. Nablŭdeniĭa nad temperaturoi i solenost'ĭu poverkhnostnogo sloĭa morĭa. (Scientific results of the expedition to Franz Josef Land, 1929. Observations on temperature and salinity of surface layers.) Trud. Inst. izuch. severa. 49:46-59. [Remarks on ice.]
416. Vize, V. Iŭ.
1931. Sostofĭanie l'dov v Barentsovom More i v raione Zemli Frantsa Iosifa letom 1929 g. po nablŭdeniĭam l/p "Sedov". (State of the ice in Barents Sea and in the region of Franz Josef Land summer 1929 from observations of "Sedov".) Trud. Inst. izuch. severa. 49:60-70. 3 figs. German summary.
417. Vize, V. Iŭ.
1933. Nekotorye dannye po zimnemu gidrologicheskomu rezhimu Pechorskogo Morĭa. (Contributions to winter hydrobiological regime in Pechora Sea.) Arctica. 1:99-114. [Text also in German.]
418. Vize, V. Iŭ.
1933. Reis ledokola "Malygin" na Zemlĭu Frantsa-Iosifa v 1931 g. (Die fahrt des eisbrechers "Malygin" nach Franz-Joseph Land 1931.) Trud. Arkt. inst. 6. 41 p.
419. Vize, V. Iŭ.
1933. Sostofĭanie l'dov v Barentsovom More i v Severnoi chasti Karskogo Morĭa letom 1930 g. po nablŭdeniĭam l/p "Sedov". (Die eisverhĕltnisse im Barents-Meer und im nŭrdlichen teil des Karischen Meeres 1930.) Trud. Arkt. inst. 1:109-126.
420. Vize, V. Iŭ.
1934. Sopostavlenie ledovykh gidrologicheskikh prognozov, dannykh Gos. gidrologicheskim institutom na navigatsiĭu 1933 g. dlĭa Barentsova i Karskogo Morei, s deistvitel'no nablŭdavshimsia sostofĭaniem l'da. (Comparison of the ice prognosis for Barents and Kara seas in 1933 with actual conditions of the ice.) Izv. Gos. gidrol. inst. 66:49-52.
421. Voronin, V. I.
1929. Map of ice met by icebreaker "Sedov" during navigation of 1928. Morskoi sbornik. 1929(2):54.
422. Wegener, Kurt.
1914. Die eisverhĕltnisse in Nordwestspitzbergen 1912/13. Ann. hydrogr., Berlin. 42:429-432.
423. Westman, Jonas.
1905. Sur les glaces de mer et la couverture de neige en 1899 et en 1900 ĕ la baie de Treurenberg, Spitzberg. Mission sci. suĕd. Spitzberg. 2, 8, B, I. 57 p. plates.

424. Zubov, N. N.
1924. Osobo blagopriiatnye usloviia nauchno-issledovatel'skoi raboty v severnykh moriakh v 1924 g. (Particularly favorable conditions for scientific research in the Arctic Ocean during 1924.) Bülleten Postoiannogo büro S'ezdov po isucheniiu proizvoditel'nykh sil SSSR. (Moscow.) 3:12-20. [On ice conditions in Kara and Barents seas.]
425. Zubov, N. N.
1932. 20 dnei na Ledovom More (Barentsovo More). (Twenty days in the Arctic Ocean, Barents Sea.) Moskva, Gidrometeorologicheskogo komiteta. 63 p. illus. (Komitet po provedeniiu vtorogo Mezhdunarodnogo poliarnogo goda v SSSR.)
426. Zubov, N. N.
1933. The circumnavigation of Franz Josef Land. Geogr. rev. 23: 394-401.
427. Zubov, N. N.
1933. Vokrug Zemli Frantsa-Iosifa. (A trip to Franz Josef Land.) Moskva, Gidrometeorologicheskogo komiteta. 29 p. illus.
- SEE ALSO: 1, 3, 6, 12, 164, 271, 272, 279, 282, 294, 303, 309, 321, 429, 435, 437, 451, 473, 481, 482, 483, 487, 1661, 1698, 1700.

5. WHITE SEA

428. Anufriev, I. P.
1909. Belomorskie l'dy. (White Sea ice.) Izv. Arkhangel'sk. obshch. izuch. russ. severa. 1(1):5-26.
429. Anufriev, I. P.
1910. Vetry i l'dy 1910 g. v Belom More i u Novoi Zemli. (Wind and ice in 1910 on the White Sea and to Novaya Zemlya.) Izv. Arkhangel'sk. obshch. izuch. russ. severa. 2(16):1-7.
430. Anufriev, I. P.
1923. K voprosu izucheniâ techenii i dvizheniâ l'dov v Belom More. (Currents and drift ice in White Sea.) Severnoe khoziâistvo. 6:53-55.
431. Berezkin, Vl. A.
1923. Usloviâ zimnego plavaniâ v gorle Belogo Morâ. (Winter conditions for navigation of White Sea—"Gorlo".) Zap. gidrogr. 47:29-36. [Extent of ice in various months and its characteristics.]
432. Burke, A.
1924. Neskol'ko zamechaniï k "Rukovodstvu dlâ plavaniâ vo l'dakh Belogo Morâ". (Some remarks on "Handbook for the navigation of the White Sea ice.") Zap. gidrogr. 48:107-140.
433. Burke, A.
1932. Materiâly dlâ sostavleniâ atlasa l'dov Belogo Morâ. (Material for an ice atlas of the White Sea.) Zap. gidrogr. 1932(1):71-82.
434. Derûgin, K. M.
1928. Die fauna des Weissen Meeres und ihre existenzbedingungen. (In Russian.) Issled. mor. SSSR 7-8. 511 p. charts.
435. Germany. Oberkommando der Kriegsmarine.
1930. Handbuch Nordküste Russlands, I. teil. Murman-küste und Weisses Meer. 3. aufl. 605 p.
- 436 *Iljina, A.
1925. Ledîanoi pokrov v Kandalakskom Zalive i Kemskikh shkhe-rakh v 1914-1920 g.g. (Über die eisdecke in der Kandalak-schabucht in den jahren 1914-20.) Zap. gidrogr. 49:225-235.
437. Kopytov, N. L.
1924. L'dy i sudokhodstvo Belogo, Murmanskogo i Pechorskogo morei. (Ice and navigation of the White, Murman and Pechora seas.) Severnoe khoziâistvo. 5:61-64.
438. Kreps, G.
1925. O sostoiânii l'dov v gorle Belogo Morâ vesnogo 1924 g. (State of the ice in the "Gorlo" spring 1924.) Raboty Murmanskoi biologicheskoi stantsii. 1:145-152.
439. Laktionov, A. F., and A. Shepelevskij.
Reduction and analysis of observations on the temperature of ice in Kandalaksha Bay. (In Russian.) (Ms. in the Editorial Section of Arctic Institute, U.S.S.R.)
440. Leshaft, Emil.
1916. Vskrytie Belogo Morâ po dannym mašachnoi sluzhby morskogo vedomstva. (Breaking up of the ice of the White Sea, based on data of Marine Dept. Lighthouse Service.) Zap. gidrogr. 40:453-465.

441. Leshaft, Emil.
1918. Zamerzanie i sezon l'dov v Belom More, po dannym Mafâchnoi sluzhby Morskogo vedomstva. (Freezing and ice season of the White Sea, based on data of Marine Dept. Lighthouse service.) Zap. gidrogr. 41:806-832.
442. Morozov, N.
1921. Rukovodstvo dlâ plavanîâ vo ldakh Belogo Morîâ. (Manual for ice navigation in the White Sea.) Petrograd, Comm. for study of Arctic Ocean. 69 p.
443. O Prodlenii navigatsii v Arkhangel'ske. (On the retardation of navigation at Archangel.) Transp. i khoz. 6/7:147-148.
444. Pohle, Richard.
1922. Arbeit des eises an den küsten des Weissen Meeres und an see- und flussufern Nordeuropas. Berlin, Borntraeger. 7 p. 6 plates.
445. Ratmanov, N.
1924. Ledokhod 1924 goda v raione Arkhangel'skogo porta. (Ice drive of 1924 in the region of the port of Archangel.) Arkhangel'sk. 13 p. 1 graph. (Dopolnenie k vesennemu bûlletenû 1924 Gidrometeorologicheskogo otdela "Ubeko Sever".)
446. Richter, J.
1934. Die eisverhältnisse des Weissen meeres. Ann. hydrogr., Berlin. 62:89-95.
447. U.S.S.R. Gidrograficheskoe upravlenie.
1939. Lotsiâ Belogo Morîâ. (White Sea pilot.) 464 p. Dopolnenie (suppl.) 1. 1940.
448. Vichnîak, J.
1916. La navigation dans la Mer Blanche. Rev. gén. sci. pures appl. 27:330.
449. Vize, V. ÎU.
1925. Über die möglichkeit der prognose der eisverhältnisse im sund des Weissen Meeres (Gorlo). (In Russian; German summary.) Izv. TŠentr. gidromet. bûro. 4: [Unverified reference.]
450. Vize, V. ÎU.
1926. Beiträge zur kenntnis des bewegungen des eises im Weissen Meer. (In Russian; German summary.) Izv. TŠentr. gidromet. bûro. 6:113-134.
451. Zamfâtkin, I. N.
1929. Donesenie o ledîanom pokrove v Gorle Belogo Morîâ i v Barentssovom More v 1928 g. (Information on the ice cover of the Gorlo of White Sea and of the Barents Sea in 1928.) Trud. Morsk. nauchn. inst. 4(1):138-141.
452. Zubov, N. N. i V. E. Lfâkhniŕskii.
1930. Vesennii ledokhod i polovod'e v Arkhangel'ske i meropliâtîâ po zashchite porta. (Spring ice-drive and floods at Archangel and means of protecting the port.) Izv. TŠentr. gidromet. bûro. 9:123-138.

SEE ALSO: 1, 2, 4, 11, 12, 139, 145, 151, 153, 367.

6. KARA SEA

453. Alekseev, N. N.
1938. Zimovka gidrograficheskogo otrîada na g/s "Toros" v arhipelage Nordenshel'da v 1936/37 g. (Hydrographical details of the "Toros" wintering 1936/37 in Nordenskiöld Archipelago.) Severnyi morskoi put'. 9:104-106.
454. Anufriev, I. P.
1913. Periodizität der bewegung des eises in der Kara See. (In Russian.) Izv. Arkhangel'sk. obshch. izuch. russ. severa. 1913(6).
455. Arnold-Alîab'ev, V. I.
1935. Nauchnye raboty v Karsko-Lenskoï ekspeditsii na borty l/p "Malygin" letom 1934 g. (Scientific work of the Kara-Lena expedition of "Malygin", summer 1934.) Bûl. Arkt. inst. 1935(5/6):145-146. [Friction, strength, porosity, salinity of the ice.]
456. Arnold-Alîab'ev, V. I.
1938. Moshchnost, stroenie i polostnost' l'da Karskogo Morîa po dannym ekspeditsii na l/p "Malygin" v 1934 g. (Thickness, structure, and cavities of Kara Sea ice ... data of "Malygin" 1934 expedition.) Tr. Arkt. inst. 110:57-81.
457. Bogdanov, D. A.
1936. Materîaly po lotsii Îzhno-Taimyrskogo vodnogo puti. (Material for sailing directions of the southern Taimyr water routes.) Leningrad, Glavsevmorputi.
458. Borisov, A. A.
1930. Karskoe more. (The Kara Sea.) Khosîaistvo severa. 1930 (9/10):29-41. [Deals with state of the ice.]
459. Breitfuss, L. L.
1915. Gidrograficheskaiâ ekspeditsiia Severnogo Ledovitogo Okeana i mery k ee osvobozhdeniû iz vynyzhdennoi okolo Taimyrskogo poluostrova zimovki v 1914/1915 g. (The hydrographical expedition in the North Polar Sea and the action of freeing it from the ice on the coast of the Taimyr Peninsula in the winter of 1914/15.) Zap. gidrogr. 39:88-136.
460. Breitfuss, L. L.
1915. Severnye poliârnye ekspeditsii 1912 g. i ikh poiski. (North Polar expeditions 1912 and the search for them.) Zap. gidrogr. 39:279-322.
461. Breitfuss, L. L.
1916. Über die tätigkeit der Suchexpedition an bord der S. S. "Andromeda" und "Kit" im jahre 1915. (In Russian.) Zap. gidrogr. 40:431-452.
462. Bruns, B. P. i K. M. Derjugin.
Sostav i prochnost' l'da u Mysa Zhelaniia v 1934/35. (Occurrence and the strength of the ice at Cape Zhelaniya in 1934/35.) (Ms. in Arctic Institute, U.S.S.R.)

463. Burmakin, E. V.
1938. Sostoianie ledoianogo pokrova v Obskoi Gube. (State of the ice cover of Ob Bay.) Problemy arktiki. 1938(3):85-92.
464. Chernigovski, N. T.
1936. Sostoianie l'da v Prolive Matochkin Shar i prilegaŭtsei chasti Karskogo Moria v 1931-1933 gg. (State of the ice in Matochkin Shar Strait and neighboring part of Kara Sea in 1931-1933.) Trud. Arkt. inst. 44:31-59. English summary. [Tables of ice-forms and thickness.]
465. Danilov, B. I.
1940. O zimnem gidrologicheskom rezhime v prolive Shokal'skogo. (Winter hydrological regime in Shokalsky Str.) Problemy arktiki. 1940(6):21-27. diagrs. [Based on April 1936 data of Cape Cheliushkin Polar station.]
466. *Demme, N. P.
1937. Sostoianie l'dov v raione Ostrova Sergeia Kameneva (Sev. Zemlia) v 1930-34 gg. (State of the ice in the region of Sergei Kamenev I., Northland during 1930-34.) Trud. Arkt. inst. 88:23-37.
467. Dzerdzeŭski, B. L.
1939. Sinopticheskie tipy blagopriiatnykh i neblagopriiatnykh v ledovom otnoshenii navigatsionnykh periodov u Poluoostrova Taimyr. (Favorable and unfavorable synoptic types during the navigational period at the Taimir Peninsula.) Met. i. gidrol. 5(2):19-30.
468. Egorova, A. A.
1940. Mikrobiologicheskoe issledovanie vozdukha, snega i l'da Karskogo Moria. (Microbiological study of air, snow, and ice of Kara Sea.) Mikrobiologia. 1940(9/10):888-894.
469. Evgenov, N. I.
1926. L'dy Karskogo Moria v navigatsiiu 1925 g. (Die eisverhaeltnisse im Karischen meere waehrend der navigation 1925.) Zap. gidrogr. 51:117-152. chart.
470. Evgenov, N. I.
1929. Po voprosu o l'dakh Karskogo Moria. (State of the ice in Kara Sea.) Trud. 2. Vse. gidrol. s'ezd, Leningrad. 2: 427-430.
471. Evgenov, N. I.
1930. Das noerdliche eismeer. Lotsenbuch des Karischen Meeres und von Nowaja Semlja. (In Russian.) Leningrad, Gidrograficheskoe upravlenie. 92, 181 p.
471. Evgenov, N. I.
1935. O raspredelenii poverkhnostnykh solenostei v zapadnoi chasti Karskogo Moria v 1927 g. i rol' l'dov pri etom. (Distribution of surface salinity in the western part of the Kara in 1927 and the role of the ice.) Issled. mor. SSSR. 21: 57-64. [Chart of salinity and ice.]
473. Germany. Oberkommando der Kriegsmarine.
1919. Die fahrt nach dem Ob und Jenissei.

474. Golitzin, B.
1900. Über meteorologische beobachtungen auf Nowaja Semlja.
Mem. Akad. nauk. s.8, 9(3).
475. Golovkov, M. P.
1936. K petrografii l'da Karskogo Morîa. Kristallopticheskoe
issledovanie l'dov Karskogo Morîa vo vremîa ekspedi-
tsionnogo reisa l/k "Malygin" v navigatsionnyi period 1934
g. (Petrography of the ice of Kara Sea. Crystallographic
research on the Kara Sea ice during the "Malygin" 1934
expedition.) Trud. Arkt. inst. 60:7-40. German summary.
476. Golovkov, M. P.
1937. K voprosy o strukture l'da Karskogo Morîa. (Ice structure
of Kara Sea.) Uchen. zap. Leningrad univ. 3(16) geol.-
pochv.-geogr. 4:9-32. English summary.
477. Gomonov, K. A.
1937. Ledovyi pokrov Vostochnoi chasti proliva Îugorskii Shar.
(Ice cover eastern part of Jugorsky Str.) Trud. Arkt. inst.
88:7-22.
478. Herrmann, J.
1906. Die fahrt nach dem Ob und dem Jenissei im jahre 1905. Ann.
hydrogr., Berlin. 34:193-219. [Ice conditions at mouths
of rivers Ob and Yenissei.]
479. Hovgaard, A.
1884. Die eiszustände im Karischen Meer. Petermanns mitt. 30:
253-259.
480. Îudin, O.
1939. Ledovyi dreif g/s "Professor Vize" v severovostochnoi chasti
Karskogo Morîa v avguste-sentiâbre 1937 g. (Ice-drift
of the "Vize" in the NE part of the Kara Sea during August-
September 1937.) Severnyi morskoi put'. 13:5-18.
481. Johannesen, E. H.
1870. Observationer af stromsaetninger, isforholde og dybde under
fangstreisen paa Novasemlia i sommeren 1869. Uddragen
af Journalen ombard i skonnerten "Nordland". Ofvers.
förh. Svensk. vetensk. akad. 27:111-115.
482. Johannesen, E. H.
1871. Hydrografiske iakttagelser under en fangsttour 1870 rundt
om Novaja-Semlia. Ofvers förh. Svensk. vetensk. akad.
28:157-168. 1 chart.
483. Kedrolivanskii, V. N. and V. Î. Vize.
1923. Novye dannye po gidrologii Karskogo Morîa. Gidrolo-
gicheskie i meteorologicheskie nablûdeniâ v Karskom
i Barentsovom Morîakh v 1921 godu. (New data on the
hydrology of the Kara Sea. Hydrological and meteorologi-
cal observations in the Kara and Barents during 1921.)
Zap. gidrogr. 47:81-130.

484. Khmyznikov, P. K.
1933. K gidrologii vostochnoi chasti Karskogo Moria. (Hydrology of the eastern part of the Kara Sea.) Issled. Mor. SSSR. 18:1-48. German summary. [Ice cover, pp. 43-46.]
485. *Kolchak, A.
1909. Led Karkogo i Sibirskogo Morei. (Ice in Kara and Siberian seas.) St. Petersburg. Mem. Akad. nauk. s.8, cl. phys.-math. 26(1). Résultats scientifiques de l'expédition polaire Russe en 1900-1903. Sec. B: géogr. phys. et math. no. 1. v, 169 p. illus., tables.
486. Komov, N. N. i O. N. Komova.
1938. Meteorologicheskie nablûdeniia v ekspeditsii na "Cheliuskine" i v lagere Shmidta. (Meteorological observations of "Cheliuskin" expedition and of Camp Schmidt.) (In: Schmidt & Gakkel. Nauchnye rezul'taty rabot ekspeditsii na "Cheliuskine" i v lagere Shmidta. Tom. I. 1938. pp. 143-220.) [Tables for August 1933 to February 1934, include ice of Kara, Laptev, and E. Siberian seas.]
487. Koshkin, V. N.
1940. Ledovyi patrol' v Karskom More na z/s "Nerpa" v navigatsiiu 1939 goda. (Ice patrol of the "Nerpa" in the Kara Sea during the navigation season of 1939.) Problemy arktiki. 1940(4):92-96.
488. Koshkin, V. N. i A. I. Noskov.
1940. Ledovyi patrol' v Karskom i Barentsovom moriakh. (Ice patrol in the Kara and Barents seas.) Leningrad-Moscow, Izd. Glavsevmorputi. 40 p. illus. (Bibliotekha "Stakanovtsy Arktiki". Kn. 22.) [The 1938-1939 patrol on the "Murmanets" and "Nerpa".]
489. Laktionov, A. F.
1935. Scientific results of the Arctic expedition on the "Lomonosoff" in 1931. Hydrology and meteorology. (In Russian.) Trud. Arkt. inst. 18. [State of the ice, pp. 85-90.]
490. Laktionov, A. F.
1936. Ekspeditsiia na ledokol'nom parokhode "Sedov" v Severo-Vostochnuû chast' Karskogo Moria v 1934 g. (Expedition of the ice-breaker Sedov to NE part of Kara Sea in 1934.) Trud. Arkt. inst. 64:7-41. English summary. [Ice pictures and discussion.]
491. Laktionov, A. F.
1940. Aisbergi v raione Severnoi Zemli. (Icebergs in region of Northland.) Problemy arktiki. 1940(9):92-94.
492. Lappo, S. D.
1936. Cherez Karskie l'dy v Khatangskii zaliv. (Plavanie l/p "Rusanov" v 1934 g.) (Across Kara Sea ice to Khatanga gulf. "Rusanov" trip in 1934.) Severnyi morskoi put'. suppl. 1:5-23. illus., 19 figs. [Good pictures of ice.]

493. Lappo, S. D.
1936. O techeniâkh moriâ Laptevykh i Karskogo moriâ. (Currents in the Laptev and Kara seas.) Severnyi morskoi put'. 5:72-82. English summary. Tables, diagrs. ["Rusanov" 1934. Remarks on ice drift.]
494. Lavrov, A.
1931. Severnyi morskoi put' (Karskoe more.) (The Great Northern Sea Route, Kara Sea.) Morskoi sbornik. 1931(7):79-95. [Descriptive; good ice photos.]
495. *Leshaft, Emil.
1913. L'dy Karskago Moriâ i dostupnost ego dliâ soobshchenii s Sibiriu. (Ice in Kara Sea and its use in communication with Siberia.) Zap. gidrogr. 37:161-260. [Ice conditions 1869-1911; wind directions analyzed.]
496. Leshaft, Emil.
1914. Das Karische Meer als seeweg nach Sibirien. Ann. hydrogr., Berlin. 42:1-14, 65-76. [Tables for state of the ice 1869-1911.]
497. Meteorologicheskie i gidrologicheskie nablûdeniâ proizvedennye na m/s "Belukha" v 1930 godu. (Meteorological and hydrological observations of the M.S. "Belukha" in 1930.) Trud. Arkt. inst. 1:151-173. illus. [October ice record in Kara Sea.]
498. Nazarov, V.
1935. Predskazaniâ vremeni vskrytiâ Eniseiskogo Zaliva. (Forecasting time of opening of Yenisei Gulf.) Vodn. transp. 13(7):26-27.
499. Pettersson, Otto.
1883. Contributions to the hydrography of the Siberian Sea. Vega-ekspeditionens vetenskapliga iakttagelser. 2:325-380. [Ice encountered in Kara and Siberian seas.]
500. Pinegin, N. V.
1933. V lediânykh prostorakh. (In the ice expanse. Sedov's expedition to the North Pole, in 1912-1914.) 2d ed. Leningrad. (1st ed. 1924.)
501. Rabot, Charles.
1920. A recent drift in the Kara Sea. Geogr. rev. 9:361-362.
502. Raikhenberg, M.
1940. Gibel' "Sv. Anny". (Ekspeditsiâ leitenanta G. L. Brusilova v 1912 g.) (Wreck of the St. Anna. Brusilov expedition 1912.) Sovetskaiâ arktika. 1940(3):66-77. illus., chart of drift.
503. Rosenthal, A. E.
1934. Ledovoi rezhim ūzhnoi chasti Gydaŕâmskogo (Nydaŕâmskogo) Zaliva v zimu 1931-1932 g. (Ice conditions in a part of Gidayamo (Nudayama) Gulf during the winter of 1931-32.) Severnyi morskoi put'. 1:18-32. English summary.

504. Roze, N.
1922. O zadachakh issledovaniâ Karskogo Morâ. (Problems of research in the Kara Sea.) Met. vestn. 32(1/4). 144 p. [Ice, ice-drift, wind, currents (especially in Kara Str.).] [Unverified reference.]
505. Rybin, S.
1925. Das Karische Meer und sein eis. (In Russian.) Z. Sibirsk. no. 3. [Unverified reference.]
506. Samoilovich, R.
1935. Exploration of the Polar part of U.S.S.R. in 1934 and the Sedov-expedition. Geogr. ann. Sven Hedin memorial vol. 17:663-667. [Contains excellent chart of N. Kara Sea showing ice conditions.]
507. Schell, I. I.
1942. Weather types and navigation around the Taimyr Peninsula. Geogr. rev. 32:322. [A review of Dzerdzeevski, B. L., 1939.]
508. Schmidt, O. IŮ. i IĀ. Gakkel, eds.
1938. Nauchnyi rezul'taty rabot ekspeditsii na "CheliŮskine" i v lagere Shmidta. Tom I. (Scientific results of the "Chelyushkin" expedition and of Camp Schmidt.) Leningrad, Izd. Glavsevmorputi. 249 p. illus., fold. charts, diagrs.
509. Sergievski, V. A.
1928. Usloviâ plavaniâ v Karskom More v svâzi s ledovym sostoianiem ego. (Navigation of Kara Sea relative to its ice conditions.) Severnâiâ Aziâ. 1928(3):79-91. [Conditions during 1926.]
510. Shokalskii, IŮ. M.
1918. Kratiâ svedeniâ po meteorologii i okeanografii Karskogo i Sibirskogo morei. (Succinct information on the meteorology and oceanography of the Kara and Siberian seas.) Petrograd, Gidrometizdat. 114 p.
511. Shuleikin, V. V.
1935. Elementy teplogo rezhima Karskogo Morâ. (Elements of heat balance in Kara Sea.) Trud. Taimyrsk. gidrogr. eksped., 1932. 2:7-48.
512. Shuleikin, V. V.
1935. Temperaturye volny v ledovom pokrove morâ. (Temperature waves of the ice cover of the sea.) Trud. Taimyrsk. gidrogr. eksped. 2:49-68.
513. Snellen, Maurits et Henri Ekama.
1910. Rapport sur l'expédition polaire néerlandaise qui a hiverné dans la mer de Kara en 1882-83. Utrecht, J. van Boekhoven.
514. Sokolov, M. P.
1935. Poloustrov Taimyr i Severnyi morskoi put'. (The Taimyr Peninsula and the great Northern Sea Route.) Severnyi morskoi put'. 2:7-39. (English summary.) [Ice occurrence and behavior in this region; information on voyage through Vilkitsky Str.]

515. Tayron, K.
1929. Formu l'da u vostochnogo berega Novoi Zemli v raione ot Matochkina Shara do Zaliva Medvezh'ego. (Eisformen an der ostküste von Nowaja-Semlja im rayon zwischen Matotschkin-Schar und der Medweschijbucht.) Zap. gidrogr. 55:105-117.
516. Timofeevskii, N.
1925. Ledianoi pokrov Eniseiskogo Zaliva. (Ice cover of Gulf of Yenisei.) Izv. Russ. geogr. obshch. 57(2):23-32.
517. U.S.S.R. Gidrograficheskoe upravlenie.
1938. Lotsiâ Karskogo Morîa. Chast' I. Karskoe More i Novaiâ Zemliâ. (Kara Sea pilot, pt. I. Kara and Novaya Zemlya.) 546 p. Dopolnenie (suppl.) 2. 1940. Dopolnenie no. 3. 1941.
518. U.S.S.R. Gidrograficheskoe upravlenie.
1939. Lotsiâ Karskogo Morîa. Chast' II. Ob'-Eniseiskii raion. (Kara Sea pilot. Pt. II. Ob-Yenisei region.) 314 p. Dopolnenie (suppl.) 2. 1941.
519. Vangengeim, G. IÂ.
1930. Materiâly dlâ sinopticheskoi kharakteristiki Karskogo Morîa. (Prilozhenie k lotsii Karskogo Morîa i Novoi Zemli.) (Material on synoptical characteristics of the Kara Sea. Suppl. to the Kara Sea and Novaya Zemlya pilot.) Leningrad, Komsevernoput'. 52 p.
520. Vasnetsov, V. A.
1936. Materiâly k gidrologii Karskogo Morîa v svîazi s rol'û Atlanticheskikh vod v ego rezhime. (Hydrological material on the Kara Sea in connection with the role of Atlantic water on its regime.) Leningrad, Glavsevmorputi. 70 p. 18 figs.
521. Vize, V. IÛ.
1930. O ledovitosti Karskogo Morîa. (Die verteilung des eises im Karischen Meer.) Izv. TŠentr. gidromet. bûro. 9:235-242. German summary.
522. Vize, V. IÛ.
1931. Meteorological observations of the Sedov Polar expedition. v. 1. Observations of Foka-Bay, Novaya Zemlya, 1912-1913. (In Russian; titles in English.) Materials for the study of the Arctic. 1:5-252. [Includes state of the ice.]
523. Vize, V. IÛ.
1938. K izucheniiû dvizheniâ l'dov v prolive Vil'kitzkogo. (Study of the movement of the ice in Vilkitsky Strait.) Problemy arktiki. 1938(1):41-45.
524. Vorob'ev, V. I.
1934. Materiâly po lotsii Tazovskoi guby. (Material for a Tazovskaya Bay pilot.) Leningrad, Glavsevmorputi. 58 p. tables, diagrs.

525. Vorob'ev, V. I.
1940. Karskoe More. (Kara Sea.) Leningrad, Glavsevmorputi.
128 p. 2 charts.
526. Zhitkov, B. M.
1911. Poluoostrov Ĭamal. (The Yamal Peninsula.) Zap. gidrogr.
33:239-269. Reviewed in Petermanns mitt. 57(2):11-14.
527. Zinger, M.
Skvoz' l'dy v Sibir'. Ocherki Karskoi ekspeditsii 1929 goda.
("Through the ice to Siberia. Sketch of the Kara expedition,
1929.") Moscow-Leningrad, "Zemlâ i fabrika".
153 p.

SEE ALSO: 2, 6, 11, 12, 30, 44, 56, 164, 336, 364, 367, 374, 378, 382, 397,
406, 407, 414, 419, 420, 424, 532, 1657.

7. LAPTEV SEA

528. Cheliuskin expedition, 1933-1934.
1935. The voyage of the Chelyuskin, by members of the expedition,
tr. by Alec Brown . . . New York, Macmillan. 325 p.
529. Chirikhin, J. D.
1935. Izuchennost' morei Laptevykh i Vostochno-Sibirskogo v
gidrograficheskom otnoshenii k nachalu 1935 g. (On the
hydrographic knowledge acquired up to 1934 about the
Laptev and the North Siberian seas.) Severnyi morskoi
put'. 2:59-73. English summary.
530. Birŭlin, G. M. i M. M. Somov.
1940. Vliŭanie dreifa na ledovitost' Morŭa Laptevykh. (Influence
of drift on state of ice Laptev Sea.) Problemy arktiki.
1940(7/8):5-12.
531. Douglas, M.
1899. White north; with Nordenskiöld, DeLong and Nansen.
London. 237 p.
532. Gakkel', IĀ. IĀ. i P. K. Khmyznikov.
1938. Nauchnye rezul'taty gidrografo-gidrologicheskikh rabot eks-
peditsii na "Chelŭskine", proizvedennykh v Karskom
More, More Laptevykh i Vostochnosibirskom More.
(Scientific results of hydrographic-hydrologic work of the
"Cheliuskin" in Kara, Laptev, and E. Siberian seas.) (In:
Schmidt & Gakkel. Nauchnye rezul'taty rabot ekspeditsii
na "Chelŭskine". Vol. 1. pp. 25-140.) [Tables of ice.]
533. Khmyznikov, P. K.
1932. Nekotorye dannye o zimnem rezhime v 1927-28 gg. prolivov
arkhipelaga Novo-Sibirskikh o-vov i IĀnskogo Zaliva.
(Winter regime in the straits of the New Siberian Archipelago
and in Jana Gulf.) Issled. mor. SSSR. 15:33-62. German
summary. [Tables of ice thickness, salinity; discussion of
ice forms, occurrence.]
534. Lappo, S. D.
1935. Mater'ŭaly po lofsii pribrezhnoi zony Morŭa Laptevykh ot
ust'ŭa reki Leny do mysa Chelŭskina. (Sailing direction
data for the Laptev Sea coast, from Lena delta to C.
Cheliuskin.) Leningrad, Glavsemorputi. 38 p. [Ice, pp.
9-11.]
535. Lappo, S. D.
1939. More Laptevykh. (Laptev Sea.) Sovetskafŭ arktika. 1939
(11):71-82. [Ice conditions, p. 74.]
536. Lavrov, A.
1931. Severnyi morskoi put' (More Laptevykh i Vostochno-Sibirskoe
More.) (The Northern Sea Route, Laptev and Eastern
Siberian seas.) Morskoi sbornik. 1931(8):80-93. [Des-
criptive; good ice photos.]

537. Morozov, R.
1934. Lenskii pokhod. (Lena expedition.) Moscow, "Molodaia gvardia". 116 p.
538. Popov, A. M.
1932. Gidrobiologicheskii ocherk Moria Laptevykh. (Hydro-biological sketch of the Laptev Sea.) Issled. mor. SSSR. 15:189-230. English summary. [Ice cover, p. 194.]
539. Shadrin, N. E.
1936. Dolzhen li zamerzat' Lenskii flot? (Is it necessary for the Lena fleet to freeze in?) Sovetskaya arktika. 1936(5):44-50.
540. Storozhev, N. M.
1940. Dreif l'dov v More Laptevykh pod vlianiem prilivo-otlivnykh iavlenii. (Ice drift in the Laptev Sea under the influence of tides.) Problemy arktiki. 1940(3):69-83.
541. Storozhev, N. M.
1940. Gidrologicheskaya rabota na dreifyushchikh l'dakh. (Hydrological work on the drifting ice.) Leningrad, Glavsevmorputi 44 p. (Prolitupravlenie Glavsevmorputi pri S.N.K. SSSR. Biblioteka "Stakhanovtsy Arktiki" kn. 24.) [Laptev Sea 1937-38 on icebreaker "Lenin".]
542. Sverdrup, H. U.
1930. Sostoianie l'dov v More Laptevykh i Vostochno-Sibirskom More letom 1924 i 1925 gg. po nabluzhdeniyam s sudna "Mod". (State of the ice in the Laptev and East Siberian seas during the summers of 1924 and 1925 from observations of the "Maud".) Mater. Kom. Yakutsk. ASSR. 30:369-376.
543. U. S. S. R.
1936. Glavnoe upravlenie Severnogo morskogo puti. Ot ust'ia Leny v Khatangskii zaliv. (From the Lena delta to Khatangskii Gulf.) Leningrad, Glavsevmorputi. 168 p. illus., photos., tables, charts. [Lappo, S. Hydrographic work on schooner "Pioneer". pp. 1-93. Voeikov, A. A. & V. M. Stokharov. Winter conditions at Tiksi Bay. pp. 94-168.]
544. Vize, V. I.
1933. Sostoianie l'dov v Ledovitom More mezhdru Novoi Zemlei i Beringovym prolivom po nabluzhdeniyam l/p "Sibirjakov" v 1932 godu. (Die eisverhältnisse im nördlichen eismeer zwischen Nowaja Semlja und der Bering-Strasse nach beobachtungen des eisbrechers "Sibirjakow" im jahre 1932.) Trud. Arkt. inst. 10:89-101. German summary.
545. Vize, V. I.
1934. Expédition du Sibirjakov in 1932. Première pte. Recit de l'expédition à bord du brise-glaces Sibirjakov en 1932. Rev. trav. Off. sci. techn. pêches marit. 7:275-290.
546. Vize, V. I.
1935. Sostoianie l'dov v Ledovitom More letom 1934 g. po nabluzhdeniyam l/p "Litke". (Die eisverhältnisse im nördlichen eismeer in sommer 1934.) Trud. Arkt. inst. 29:40-46.

547. Zinger, M. E.
1934.

Lenskii pokhod. Ocherki 1-i Lenskoi ekspeditsii ledokola "Krasin", Arkhangel'skikh sudov "Stalin", "Pravda", "Volodarskii" i Omskogo teplokhoda "Pervaiâ" piatiletka vokrug Taimyrskogo poluostrova k ust'iu Leny, v Bukhtu Tiksi. ("Lena expedition. Sketches of the first Lena expedition of the "Krasin" etc. around the Taimyr Peninsula and the mouth of the Lena, in Tiksi Bay.") Leningrad, Leningradskoe obl. izd-vo. 85 p.

SEE ALSO: 2, 11, 12, 44, 56, 455, 485, 486, 493, 508, 511, 551, 555, 558, 559, 560, 562.

8. EAST SIBERIAN SEA

548. Bitte, M. P.
1913. Materiāly dliā loŭsii Severnago Ledovitago Okeana i ust'ā reki Kolymy. (Material for sailing directions of Arctic Ocean and mouth of the Kolyma River.) Zap. gidrogr. 36:278-283.
549. Chaurov, A. K.
1937. Materiāly po zimnemu gidrologicheskomu rezhimu, Chaunskoi guby. (Hydrological winter regime at Chaunskaya Gulf.) Trud. Arkt. inst. 88:55-67.
550. Davydov, B. V.
1912. Materiāly dliā izucheniā Severnogo Ledovitogo Okeanā ot Mysa Dezhneva do r. Kolymy, sobrannye v 1910 i 1911 gg. Gidrograficheskikh ekspeditsii Severn. Ledovit. Ok. (Material for study of the Arctic Ocean from Cape Dezhnev to the river Kolyma collected in 1910-1911 by the Hydrographic expedition to the Arctic Ocean.) St. Petersburg.
551. De Long, G. W.
1897. The voyage of the Jeannette. The ship and ice journals. Ed. by Emma De Long. Boston. 2 v.
552. Evgenov, N. I.
1936. State of the ice in the East-Siberian Sea in 1932/33, observed by the Narkomvod North-east Polar expedition on the icecutter "F. Litke" and other ships. (In English and Russian.) Hydrol. obsns. mar. exped. 2d Int. Polar Yr. exped. 6/7:5-13, 36-41. 2 charts.
553. Gomoŭnov, K.
1939. Vostochno-Sibirskoe more. (East Siberian Sea.) Sovetskaiā arktika. 1939(10):46-55. illus., tables. ["Ice cover": pp. 52-53. Chart showing limits.]
554. Leningrad. Glavnaia geofizicheskaiā observatoriia. Institut klimatologii.
1936. Meteorologicheskie nablūdeniia poliarnoĭ stantsii na O. Bolshoi Liakhovskii, zimovki: 1928-29, 1929-30, 1930-31. Meteorological observations of the Polar station at Bolshoy Liakovsky I., winterings of 1928-29, 1929-30, 1930-31. Pod red. V. N. Kedrolivanskogo. Leningrad, TSUEGMS. 109 p.
555. Neupokoev, K. K.
1922. Materiāly po loŭsii Sibirskogo Moria. (Sailing directions material for Siberian Sea.) Zap. gidrogr. prilozh. (suppl.) 46. 53 p.
556. Protopopov, I. D.
1936. State of the ice in the East-Siberian Sea in 1932, observed by the expedition of the All-Union Arctic Institute on the ice-breaking steamer "Sibiriakov". (In English and Russian.) Hydrol. obsns. mar. exped. 2d Int. Polar Yr. exped. 6/7:13, 41-42. 1 fold. chart.

557. Ratmanov, G. E.
1931. K gidrologii Vostochno-Sibirskogo Morâ. (Hydrology of the East Siberian Sea. Scientific results of the "Litke" expedition to the Wrangel I. in 1929 no. 1.) Issled. mor. SSSR. 13:5-104. tables, charts. [Notes on occurrence of ice in text and in tables.]
558. Rudovitz, L. F.
1929. Prichiny dreifa l'da v Sibirskom More. (Consideration of ice drift in the Siberian Sea.) Zap. gidrogr. 55:141-142.
559. Shostakovitch, V. B.
1925. Die eisdecke der gewässer Ostsibiriens. Met. z. 42:282-285.
560. *Sokolov, A. V.
1929. Materiâly po lotsii Sibirskogo Morâ. (Material for sailing directions for the Siberian Sea.) Zap. gidrogr. prilozh. 55. 58 p. fold. chart of part from Kolyma to Lena rivers. [Ice, pp. 54-57.]
561. U.S.S.R. Gidrograficheskoe upravlenie.
1939. Lotsifâ Vostochno-Sibirskogo Morâ. (East Siberian Sea Pilot.) Dopolnenie (suppl.) 1. 1940.
562. Vize, V. IÛ.
1926. Gidrologicheskii ocherk Morâ Laptevykh i Vostochnosibirskogo Morâ. (Hydrological sketch of the Laptev and East Siberian seas.) Mater. Kom. Iakutsk. A.S.S.R. 5. 86 p.
563. Vize, V. IÛ.
1926. Zur frage der 4- bis 5-jährigen periode in dem schwankungen hydrometeorologischer elemente. Ann. hydrogr., Berlin. 54:178-179. [Between Bering Strait and mouth of the Kolyma R.]
564. Wrangell, Ferdinand von.
1840. Narrative of an expedition to the Polar Sea, in the years 1820-1823. London. 413 p. [Appendix contains remarks on the ice of the Polar Sea.]

SEE ALSO: 2, 11, 12, 44, 56, 485, 486, 499, 508, 511, 529, 531, 532, 533, 536, 542, 544, 1674.

9. CHUKCHI SEA

565. Alekseev, N. N.
1936. K ostrovam Vrangeliâ i Gerał'da na p/kh "Sovet". (The icebreaker "Soviet" near Wrangel and Herald islands.) Severnyi morskoi put'. 5:22-72. English summary.
566. Dupliŕskii, D. S.
1936. Nauchnye raboty ekspeditsii na ledokole "Krasin" v 1935 godu (Scientific work of the "Krasin" expedition during 1935.) pod redaktsiei D. S. Dupliŕskogo i. G. E. Ratmanova. Leningrad, Glavsevmorput'. 178 p. [From Bering Strait to Wrangel Island.]
567. Evgenov, N. I.
1935. Expedition of the ice-breaker "Krasin" in 1934 into the NE part of the Soviet Arctic. (In Russian; English summary.) Biŭl. Arkt. inst. 1935(1/2):6-11, 45-48.
568. Evgenov, N. I.
1936. State of the ice in the Bering Strait and Chukchee Sea in 1932/33 on the way to the mouth of R. Kolyma, observed by the Narkomvod North-east Polar expedition on the ice-cutter "F. Litke" and other ships. (In English and Russian.) Hydrol. obsns. mar. exped. 2d Int. Polar Yr. exped. 6/7:19-30, 46-54. 2 charts.
569. Evgenov, N. I.
1937. Materiâly po loŕsii Ostrova Vrangeliâ i Ostrova Gerał'd. (Navigation of Wrangell and Herald is.) Leningrad, Gidrograficheskoe upravlenie. 78 p.
570. Georgievskii, N.
1939. Opyty uskoreniâ taŕaniâ snego i l'da v raione Mysa Schmidta v 1937 g. (Experiences in hastening the melting of snow and ice in the region of Cape Schmidt, 1937.) Severnyi morskoi put'. 13:29-35.
571. Gromov, B. V.
1934. Pokhod "Sibiriâkova". (The Sibiriakov expedition.) Moscow, "Sovetskaiâ literatura". 252 p. [From Novaya Zemlya to Bering Str. Mostly in Chukotsk Sea.]
572. Grum-Grzhimailo, M. M.
1936. State of the ice in the Bering Strait and Chukchee Sea in 1932 observed by the expedition of the Kamchatka joint-stock society (AKO LTD) on S/S "Soviet". (In English and Russian.) Hydrol. obsns. mar. exped. 2d Int. Polar Yr. exped. 6/7:31-35, 56-59. [Tables of direction and speed of ice drift. 1 fold. chart.]
573. Healy, M. A.
1889. Report of the cruise of the revenue marine steamer Corwin in the Arctic Ocean in the year 1884. Washington, G.P.O. 128 p. illus., plates. (H. misc. doc. 602. 50th cong., 1st sess. Ser. no. 2583.) [Ice, pp. 23-24.]

574. Hooper, C. L.
1881. Report of the cruise of the U.S. revenue steamer Corwin in the Arctic Ocean. Washington, G.P.O. 71 p. illus., fold. tables, chart. (Treas. dep. doc. 118.)
575. Hooper, C. L.
1884. Report of the cruise of the U.S. revenue steamer Thomas Corwin, in the Arctic Ocean, 1881. Washington, G.P.O. 147 p. illus., plates. (Treas. dep. doc. 601.)
576. International Polar Year expedition, 2d, 1932-33.
1936. Hydrological observations of marine expedition of the 2d International Polar Year 1932/33. Vol. 6-7. East Siberian and Chukchee seas, Bering Strait and Bering Sea. (In Russian and English.) Ed. by I. A. Kireeva. Leningrad-Moscow, Hydrometeorological section of Hydrographic department. 180 p. incl. tables. 9 charts.
577. Karelin, D. B.
1940. Ledovaiâ sluzhba v Vostochnom sektore Arktiki v 1939 g. (The ice service in the eastern sector of the Arctic in 1939.) Sovetskaiâ arktika. 1940(4):39-43. [Photos of ice at Wrangel I. and Schmidt Bay.]
578. Khmyznikov, P. K.
1935. Dreif l'da v Chukotskom More. (Drift ice in Chukotsk Sea.) Severnyi morskoi put'. 3:5-20. English summary.
579. Kotzebue, O. E. von.
1821. Eisberge von ausgezeichneter art in Kotzebue's Sund, und der nordwestküste Americas. Ann. phys. 69:143-148.
580. Ovchinnikov, I.
1939. Opyt predskazaniâ ledovit'osti Chukotskogo Morâ. (Experience in forecasting the ice conditions in Chukotsk Sea.) Met. i. gidrol. 5(4):89-94.
581. Piotrovich, V. V.
1936. Kratkie rezul'taty gidrofizicheskikh nablûdenii na l/k "Krasin". (Summary of the results of the hydrophysical obsns. on board the "Krasin".) (In: Dupliŭskii, D. S., ed. Nauchnye raboty eksped. na l/k "Krasin" v 1935 g. Leningrad. pp. 99-111.) [Includes: Thermal study of surface layer; melting of marine ice; detn. porosity of ice; photographs of ice forms; formation and structure of ice.]
582. Protopopov, I. D.
1936. State of the ice in the Chukchee Sea and Bering Strait in 1932, observed by the expedition of the All-Union Arctic Institute on the ice-breaking steamer "Sibiriakov". (In English and Russian.) Hydrol. obsns. mar. exped. 2d Int. Polar Yr. exped. 6/7:30-31, 55. 1 fold chart.
583. Radvilovich, K. A.
1936. Meteorologicheskie usloviâ raspredeleniâ l'da v navigatsiû 1935 g. v Vostochnom sektore Arktiki. (Meteorological conditions, distribution of ice during the season of navigation 1935, in the eastern section of the Arctic.) (In: Dupliŭskii, D. S. Nauchnye raboty ekspeditsii na l/k "Krasin" v 1935 g. Leningrad. pp. 140-150. tables.)

584. Ratmanov, G. E.
1936. State of the ice in the Bering Strait and Chukchee Sea in 1932, observed by the expedition of the State hydrological institute and the Pacific fisheries institute on trawler "Dalnevostotchnik". (In English and Russian.) Hydrol. obsns. mar. exped. 2d Int. Polar Yr. exped. 6/7:14-16, 43-44. 1 chart.
585. Ratmanov, G. E.
1936. State of the ice in the Chukchee Sea in 1933, observed by the expedition of the State Hydrological institute and the Pacific fisheries institute on trawler "Krasnoarmeyetz". (In English and Russian.) Hydrol. obsns. mar. exped. 2d Int. Polar Yr. exped. 6/7:17-19, 45-46. 1 chart.
586. Ratmanov, G. E.
1937. K gidrologii Beringova i Chukotskogo morei (Hydrography of the Bering and Chukotsk seas.) Issled. mor. SSSR 25:10-118. [State of the ice in Bering Strait and in Chukotsk Sea during summers 1932-1933, pp. 112-116. charts.]
587. Ratmanov, G. E. i D. N. Sergievskii.
1936. Kratkie svedeniâ o plavanii ledokola "Krasin" v 1935 g. i ledovye usloviâ v Chukotskom more. (Brief information on the navigation of the "Krasin" during 1935, and ice conditions in Chukotsk Sea.) (In. Duplitskii, D. S. Nauchnye raboty ekspeditsii na l/k "Krasin" v 1935 g. Leningrad. pp. 151-169. illus., fold. charts.) [Chart of course; ice charts for July and August.]
588. Shestiperov, N. A.
Observations on ice-drift at Cape Schmidt. (In Russian.) (Ms. in Editorial Section of Arctic Institute, U.S.S.R.)
589. Shirshov, P. P.
1936. Plankton kak indikator ledovogo rezhima moriâ. (Plankton as indicators of ice regime of the sea.) (In Duplitskii, D. S. Nauchnye raboty ekspeditsii na l/k "Krasin" v 1935 g. Leningrad. pp. 59-73. illus.) [Discussion of color and melting of ice related to phytoplankton.]
590. Shirshov, P. P.
1937. Sezonnye îavleniâ v zhizni fitoplanktona poliârnykh morei v sviâzi s ledovym rezhimom. (Seasonal changes of the phytoplankton of the Polar seas in connection with ice regime.) Trud. Arkt. inst. 82:47-111. English summary.
591. Tolmachev, I. P.
1911. Po Chukotskomu poberezhîu Ledovitogo Okeana. (Along the Chukchi coast of the Arctic Sea.) St. Petersburg. 117 p. map.
592. Tolstikov, E. I.
1940. Sluzhba pogody na Myse Shmidta. (Weather service on Cape Schmidt.) Moscow-Leningrad, Glavsevmorputi. 36 p. (Bibliotekha "Stakhanovtsy Arktiki". Kn. 7.) [Includes state of ice reports.]

593. U.S.S.R. Hidrograficheskoe upravlenie.
1938. Lotsiâ Chukotskogo Moriâ. (Chukchee Sea pilot.) Dopolenie (suppl.) 3, 1941.
594. Vize, V. IŮ.
1933. Die triften des "Sibirjakow" im Tschuktschen Meer. (In Russian; German summary.) Izv. Gos. Gidrol. inst. 10:103-124.
- SEE ALSO: 2, 11, 12, 531, 544, 546, 550, 551, 555, 558, 559, 562, 564, 966.

10. BEAUFORT SEA

595. Collinson, Richard.
1855. Account of the proceedings of H.M.S. Enterprise from Behring Strait to Cambridge Bay. *J. Geogr. soc.* 25:194-205.
596. Collinson, Richard.
1889. Journal of H.M.S. Enterprise, on the expedition in search of Sir John Franklin's ships by Behring Strait, 1850-55. By Captain Richard Collinson . . . commander of the expedition. With a memoir of his other services. Ed. by his brother, Major-general T. B. Collinson . . . London, S. Low, Marston, Searle and Rivington, Ltd. xi, [1] 531 p. col. front., port., 6 fold. maps.
597. International Polar expedition to Pt. Barrow, Alsaka, 1881-1883.
1885. Report. Washington, D. C. 695 p. (H. ex. doc. 44, 48th cong., 2d sess.) [Notes on ice in narrative and table of ice-thickness, p. 686.]
598. Smith, P. S.
1925. Explorations in northwestern Alaska. *Geogr. rev.* 15:237-254.
599. Stefansson, Vilhjalmur.
1934. An Eskimo discovery of an island north of Alaska. *Geogr. rev.* 24:104-114.
600. Storkersen's ice-drift in the Beaufort Sea.
1920. *Geogr. j.* 55:481-482.

SEE ALSO: 613.

11. NORTHWEST PASSAGES

601. Adams, J. Q.
1941. Settlements of the northeastern Canadian Arctic. *Geogr. rev.* 31:112-126.
602. Allen, R. C., W. P. Snow and E. A. Inglefield.
1853. Remarks on Baffin Bay. London, Hydrographic office. 31 p. [Remarks on passage of H.M.S. Resolute and Assistance through Baffin Bay in 1850-1851; the Prince Albert in 1850; the Isabel in 1852.]
603. Amundsen, Roald.
1907. Nordvestpassagen; beretning om Gjøa-expeditionen, 1903-1907. Kristiania, H. Aschehoug. 511 p.
604. Amundsen, Roald.
1908. Roald Amundsen's "The North-west Passage": being the record of a voyage of exploration of the ship "Gjøa" 1903-1907 . . . with a supplement by 1st lieut. Hansen. London, Constable. 2 v.
605. Anderson, J. W.
1941. The 1941 voyage of the R.M.S. "Nascopie". *The Beaver.* 272:7-8.
606. Anderson, J. W.
1943. Wartime voyage, the 1942 cruise of the HBC S.S. "Nascopie". *The Beaver.* 273:38-39.
607. Anderson, R. M.
1917. Recent explorations on the Canadian Arctic coast. *Geogr. rev.* 4:241-266.
608. Armstrong, Sir Alexander.
1857. Personal narrative of the discovery of the Northwest Passage, with incidents of travel and adventure during nearly five years service in the Arctic regions, while in search of the expedition under Sir John Franklin. London, Hurst and Blackett. xxii, 616 p. illus., map.
609. Bartlett, R. A. and R. T. Hale.
1916. The last voyage of the Karluk, flagship of Vilhjalmur Stefansson's Canadian Arctic expedition of 1913-1916. Boston. 329 p.
610. Belcher, Sir Edward.
1855. The last of the Arctic voyages; being a narrative of the expedition in HMS Assistance under the command of Captain Sir Edward Belcher . . . in search of Sir John Franklin during the years 1852-54, with notes on the natural history by Sir John Richardson, Prof. Owen, & Evans Bell. J. W. Slater, & Lovell Reeve. London, L. Reeve. 2 v.
611. Bellot, J. R.
1855. Memoirs of Lt. Joseph René Bellot . . . with his journal of a voyage in the Polar seas, in search of Sir John Franklin. London, Hurst and Blackett. 2 v. [Second voyage of "Prince Albert".]

612. Bellot, J. R.
1875. *Journal d'un voyage aux mers polaires à la recherche de Sir John Franklin.* 3 éd. Paris, Garnier frères. xliv, 363 p. illus., map. [Second voyage of "Prince Albert".]
613. Bethune, W. C.
1937. *Canada's western northland; its history, resources, population and administration.* Ottawa, Department of mines and resources, lands, parks and forests branch. 162 p. illus., tables, maps. [Brief remarks; no data.]
614. Brandes, Karl.
1854. *Sir John Franklin; die unternehmung für seine rettung und die nordwestliche durchfahrt... Nebst einer tabelle der arktische temperaturen, von Prof. H. W. Dove... Berlin, Nicolai.* viii, 312 p. tables, map.
615. Brown, John.
1860. *The North-west Passage...* 2d ed. with a sequel, including the voyage of the "Fox". London. xiii, 463 p. maps.
616. Brown, W. E.
1936. *Man and machine against the Arctic.* *The Beaver.* 267:26. [Note on the Northwest Passage.]
617. Burwash, L. T.
1931. *Canada's western Arctic. Report on investigations in 1925-26, 1928-29 and 1930.* Ottawa. 116 p. illus., maps.
618. Chipman, K. G. and J. R. Cox.
1924. *Geographical notes on the Arctic coast of Canada. Rep. Canadian Arctic expedition, 1913-1918.* XI, Geology & geography. Pt. B. 42 p. illus.
619. Cyriax, R. J.
1939. *Sir John Franklin's last Arctic expedition. A chapter in the history of the Royal Navy.* London, Methuen. xviii, 222 p.
620. Franklin, Sir John.
1823. *Narrative of a journey to the shores of the Polar Sea in the years 1819, 20, 21 and 22.* London, J. Murray. 2 p. L., vii-xvi. 768 p. illus., maps. [Various editions.]
621. Franklin, Sir John.
1828. *Narrative of a second expedition to the shores of the Polar Sea in... 1825-1827... including an account of the progress of a detachment to the eastward, by J. Richardson.* London, J. Murray. xxiv, 320, clvii p., illus., maps.
622. Freuchen, Peter and Therkel Mathiassen.
1925. *Contributions to the physical geography of the region north of Hudson Bay. (In: Knud Rasmussen. The Danish ethnographic and geographic expedition to Arctic America: preliminary report of the 5th Thule expedition.)* *Geogr. rev.* 15:549-561. [Contains references to ice.]
623. Gilder, W. H.
1881. *Schwatka's search, sledging in the Arctic in quest of the Franklin records... with maps and illus.* N. Y., Scribner's. xv, 316 p.

624. Great Britain. Meteorological Office.
1879-1888. Contributions to our knowledge of the meteorology of the Arctic regions . . . Pt. I-V. London. 2 v. front. (fold. chart) 4 pl., tables, diagrs. (Official publ. 34.) [Gives ice thickness for Gulf Boothia, Griffith I., Assistance B., Walker B., Cambridge B., Camden B., Melville Sd.; also sea temperature, wind, drift of ice and vessels in various places.]
625. Great Britain. Parliament.
1852. Additional papers relative to the Arctic expedition under the orders of Captain Austin and Mr. William Penny. London. 368 p.
626. Great Britain. Parliament.
1852. Proceedings of the Arctic expedition under the command of Capt. Sir Edward Belcher, employed in the further search of Sir John Franklin. London. 88 p.
627. Great Britain. Parliament.
1855. Further papers relative to the recent Arctic expeditions in search of Sir John Franklin and the crews of H.M.S. Erebus & Terror. London. 958 p.
628. Greely, A. W.
1886. Three years of Arctic service; an account of the Lady Franklin Bay expedition of 1881-84, and the attainment of the farthest north. New York, Scribners. 2 v. illus., maps. [Vol. 2, Ch. 33, pp. 43-60, Polar ice.]
629. Greely, A. W.
1888. Report on the Proceedings of the U. S. expedition to Lady Franklin Bay, Grinnell Land. Washington. 2 v.
630. Green, Fitzhugh.
1917. Arctic duty with the Crocker Land expedition. Proc. U. S. Nav. inst. 43:1941-1976.
631. Hall, C. F.
1864. Life with the Esquimaux; the narrative of Capt. C. F. Hall, from the 29th May, 1860, to the 13th Sept., 1862. With . . . the discovery of actual relics of Martin Frobisher . . . and deductions in favour of yet discovering some of the survivors of Sir J. Franklin's expedition. London. 2 v. illus. maps.
632. Harrison, A. H.
1908. In search of a Polar continent, 1905-1907. London, E. Arnold. xx, 292 p. illus., map.
633. Harrison, A. H.
1908. In search of an Arctic continent. Geogr. j. 31:277-287.
634. Hayes, I. I.
1867. The Open Polar sea: a narrative of a voyage of discovery towards the North Pole in the schooner United States. New York, Hurd & Houghton. xxiv, 454 p. illus., maps.

635. Hooper, W. H.
1853. Ten months among the tents of the Tuski, with incidents of an Arctic boat expedition in search of Sir John Franklin, as far as the Mackenzie River, and Cape Bathurst. London, J. Murray. xv, 417 p. illus., maps. [An account of the expedition of HMS Plover under Capt. T. E. L. Moore, 1848-51.]
636. Inglefield, Sir E. A.
1853. A summer search for John Franklin, with a peep into the Polar basin, with short notices by . . . Dr. Sutherland on the meteorology and geology. London, T. Harrison. xxi, 232 p. illus., map.
637. Kane, E. K.
1856. Arctic explorations. The Second Grinnell expedition in search of Sir John Franklin, 1853-1855. Philadelphia. 2 v.
638. Kane, E. K.
1860. Arctic voyages and discovery. The exploring voyages of Dr. Kane. London.
639. Kane, E. K.
1865. The far north: explorations in the Arctic regions. Edinburgh.
640. Kennedy, William.
1853. A short narrative of the second voyage of the Prince Albert, in search of Sir John Franklin. London, W. H. Dalton. xiii, 1, xxv, 27-202 p. illus., maps.
641. Kulerich, A.
1933. Nordvandet. Et forsøg paa en forklaring af det isfri lav område i Smith Sund. Geogr. tidssk. 36:53-61.
642. Leslie, Sir John.
1860. Discovery and adventure in the Polar seas and regions, by Sir J. Leslie and H. Murray . . . with a narrative of the recent expeditions in search of Sir J. Franklin, including the voyage of the "Fox" and the discovery of the fate of the Franklin expedition, by R. M. Ballantyne. London.
643. McClintock, F. L.
1881. Fate of Sir John Franklin. The voyage of the Fox in the Arctic seas in search of Franklin and his companions. 5th ed. London. xxiv, 78, 336 p.
644. McClintock, Sir F. L.
1863. Meteorological observations in the Arctic seas . . . made on board the Arctic searching yacht "Fox", in Baffin Bay and Prince Regent Inlet in 1857, 1858 and 1859. Reduced and discussed by Charles A. Schott. Smithsonian contributions to knowledge. 13 (3). 160 p. 1 map.
645. McCormick, Robert.
1854. Narrative of a boat expedition up the Wellington Channel in the year 1852, under the command of R. McCormick . . . in HMB "Forlorn Hope" in search of Sir John Franklin. London, Eyre & Spottiswoode. 60 p. illus., map.

646. M'Dougall, G. F.
1857. The eventful voyage of HM discovery ship "Resolute" to the Arctic regions, in search of Sir John Franklin and the missing crews of HM discovery ships "Erebus" and "Terror" 1852, 1853, 1854. London, Longman. xl, 530 p. illus., map.
647. McGahan, J. A.
1876. Under the northern lights. London, S. Low, etc. viii, 339 p. illus., map.
648. McMillan, D. B.
1927. Etah and beyond; or, Life within twelve degrees of the pole. Boston, Houghton Mifflin. xix, 287 p. illus., maps.
649. McMillan, D. B.
1933. Four years in the white north. Boston, Hale, Cushman & Flint. 11 p.L., 428 p. illus.
650. McMillan, D. B.
1934. How Peary reached the pole; the personal story of his assistant . . . Boston, Houghton Mifflin. xii, 306 p. illus., maps.
651. Markham, A. H.
1875. A whaling cruise to Baffin's Bay and the Gulf of Boothia, and an account of the rescue of the crew of the *Polaris*. 2d ed. London, S. Low, Marsten, Low, and Searle. xxxi, 307 p. illus., map.
652. Markham, A. H.
1878. The great frozen sea. A personal narrative of the voyage of the "*Alert*" during the Arctic expedition of 1875-76. London. xx, 440 p.
653. Markham, A. H.
1891. Life of Sir John Franklin and the North-west Passage. London, G. Philip & Son. xii, 324 p. illus., maps.
654. Nares, G. S.
1878. Narrative of a voyage to the Polar sea during 1875-76 in H.M. ships "*Alert*" and "*Discovery*". With notes on the natural history, ed. by H. W. Feilden. 4th ed. London. 2 v.
655. Notes on sea ice in the Canadian Arctic.
1936-1942. *The Beaver*. 267:63. 273:39.
656. Parry, W. E.
1821. Journal of a voyage for the discovery of a northwest passage from the Atlantic to the Pacific, performed . . . 1819-20 in HMS *Hecla* and *Griper*. London. xxix, 310, clxxix p.
657. Parry, W. E.
1835. Three voyages for the discovery of a northwest passage from the Atlantic to the Pacific, and a narrative of an attempt to reach the North Pole. London. 4 v. [Later ed. New York, 1868. 2 v.]

658. Putnam, G. P.
1928. The Putnam Baffin Island expedition. *Geogr. rev.* 18:1-40.
659. Rae, John.
1850. Narrative of an expedition to the shores of the Arctic Sea, 1846 and 1847. London, T. & W. Boone. viii, 247 p. map.
660. Rasmussen, Knud.
1921. Greenland by the Polar Sea; the story of the Thule expedition from Melville Bay to Cape Morris Jesup. Tr. from the Danish . . . London, W. Heinemann. xxiii, 326 p. illus., maps, diags.
661. Rasmussen, Knud.
1925-1926. Fra Grønland til Stillehavet, rejser og mennesker; fra 5. Thule-ekspedition 1921-24. København. Gyldendal, Nordisk forlag. 2 v. illus., maps.
662. Rasmussen, Knud.
1927. Across Arctic America: narrative of the Fifth Thule expedition. New York, Putnam's. xx, 388 p. illus., maps. An abridged tr. of *Fra Grønland til Stillehavet*.
663. Richardson, Sir John.
1851. Arctic searching expedition: a journal of a boat-voyage through Rupert's Land and the Arctic Sea, in search of the discovery ships under the command of Sir John Franklin. With an appendix on the physical geography of North America. London, Longman. 2 v. illus., map. Various editions.
664. Ross, Sir John.
1819. A voyage of discovery made under the orders of the Admiralty in His Majesty's ships *Isabella* and *Alexander* for the purpose of exploring Baffin's Bay and inquiring into the probability of a north-west passage. London, J. Murray. 2 p.L., xxxix, 252 p. illus., maps, tables.
665. Seeman, B.
1853. Voyage of HMS "*Herald*" 1845-51; a circumnavigation of the globe and three cruises to the Arctic regions in search of Sir John Franklin. 2 v.
666. Simmonds, P. L.
1852. Sir John Franklin and the Arctic regions; with detailed notices of the expeditions in search of the missing vessels under Sir J. Franklin . . . To which is added an account of the American expedition under the patronage of H. Grinnell, esq. With an introduction to the American ed. by J. C. Lord. Buffalo. 396 p.
667. Simmonds, P. L.
1860. The Arctic regions, and Polar discoveries during the 19th century, with the discoveries made by Capt. McClintock as to the fate of the Franklin expedition. London. 294 p.

668. Simpson, Sir Thomas.
1843. Narrative of the discoveries on the north coast of America; effected by the officers of the Hudson's Bay company during the years 1836-39. London, R. Bentley. xix, 419 p. maps.
669. Snow, W. P.
1851. Voyage of the Prince Albert in search of Sir John Franklin, a narrative of every-day life in the Arctic seas. London. xvi, 416 p.
670. Soper, J. D.
1930. Explorations in Foxe Peninsula and along the west coast of Baffin Island. *Geogr. rev.* 20:397-424.
671. Stefansson, Vilhjalmur.
1913. Victoria Island and the surrounding seas. *Bull. Amer. geogr. soc.* 45(2):93-106.
672. Stefansson, Vilhjalmur.
1921. The Friendly Arctic. New ed. with new material. New York, Macmillan. 812 p. illus.
673. Sutherland, P. C.
1852. Journal of a voyage in Baffin's Bay and Barrow Straits, in the years 1850-51, performed by HM ships "Lady Franklin" and "Sophia", etc. London, 2 v.
674. Thomas, H. R. Rokeby.
1944. South-east Victoria Island and the Queen Maud Gulf. *Geogr. j.* 103:203-210. [Ice conditions discussed.]
675. Tyson, G. E.
1874. Arctic experiences; containing Capt. George E. Tyson's wonderful drift on the ice-floe, a history of the Polaris expedition, the cruise of the Tigress, and rescue of the Polaris survivors. Ed. by E. Vale Blake. London. New York, Harper. 486 p. illus., map.
676. U. S. Naval observatory.
1876. Narratives of the North Polar expedition U.S.S. "Polaris", Capt. C. F. Hall, commanding, ed. by C. H. Davis. Washington. 2 v.
677. Young, Sir A. W.
1876. Cruise of the "Pandora". From the private journal kept by Allen Young. London, W. Clowes. viii, 90 p. map.

SEE ALSO: 64, 81, 115, 194, 196, 197, 306, 314, 322, 323, 324, 595, 596, 682, 683, 697, 1673, 1676.

12. HUDSON BAY AND STRAIT

678. Bajkov, A. D.
1941. The ice conditions of Hudson Bay. *The Beaver*. 271:15-19.
679. Bell, C. N.
1884. Our northern waters, a report presented to the Winnipeg Board of trade, regarding the Hudson's Bay and Straits . . . Also notes on navigation of these waters together with historical events and meteorological and climatic data. Winnipeg. 1 p.L., 78 p., 1 L. 2 fold. maps.
680. Bell, Robert.
1879. Report on an exploration of the east coast of Hudson's Bay, 1877. Montreal. Geological survey of Canada. Reports of explorations and surveys, 1877-8. C, V. 37 p.
681. Bell, Robert.
1881. Report on Hudson's Bay and some of the lakes and rivers lying to the west of it. Geological and natural history survey of Canada. Report of progress, 1879-80. C, IV. 113 p.
682. Bernier, J. E.
1909. Report on the Dominion Government expedition to the Arctic islands and the Hudson Strait on board the C.G.S. "Arctic", 1906-07. Ottawa. iv, 127 p. illus., plates, map.
683. Bernier, J. E.
1910. Report on the Dominion of Canada government expedition to the Arctic islands and Hudson Strait on board the C.G.S. "Arctic". Ottawa. 529 p.
684. Binney, George.
1929. Hudson Bay in 1928. *Geogr. j.* 74:1-27.
685. *Canada. Department of transport.
1930-1939. Navigation conditions on the Hudson Bay route from the Atlantic seaboard to Port Churchill. Season of navigation 1929-1938. Ottawa. 10 nos. 1929-1934 have title: Navigational conditions in Hudson Bay and Strait during seasons of navigation.
686. Canada. Department of transport.
1939. Churchill and the Hudson Bay route. Ottawa. 50 p. illus.
687. Canada. Hydrographic and map service.
1940. Sailing directions for the Hudson Bay route from the Atlantic Ocean to Churchill Harbour. 2d ed. 119 p.
688. Cormie, J. A.
1917. The Hudson Bay route. *Geogr. rev.* 4:26-40.
689. Flaherty, R. J.
1918. The Belcher Islands of Hudson Bay; their discovery and exploration. *Geogr. rev.* 5:433-458.
690. Gordon, A. R.
1885. Report of the Hudson's Bay expedition under the command of Lt. A. R. Gordon, R. N., 1884. Ottawa. 41 p. map. (Canada. Department of marine and fisheries.)

691. Gordon, A. R.
1885. Report of the second Hudson's Bay expedition under the command of Lt. A. R. Gordon, R. N., 1885. Ottawa. 112 p. illus., charts.
692. Gordon, A. R.
1887. Report of the Hudson's Bay expedition of 1886 under the command of Lt. A. R. Gordon. Ottawa. 133 p. illus., maps.
693. Innis, H. A.
1930. The Hudson Bay railway. Geogr. rev. 20:1-30.
694. Kindle, E. M.
1925. The James Bay coastal plain; notes on a journey. Geogr. rev. 15:226-236.
695. Kindle, E. M.
1928. Canada north of fifty-six degrees, the land of long summer days. The Canadian field-naturalist. 42:53-86. [Hudson Bay and MacKenzie R.]
696. Leith, C. K. and A. T. Leith.
1912. A summer and winter on Hudson Bay. Madison, Wis. Cartwell printing co. 203 p. illus., maps.
697. Low, A. P.
1906. Report on the Dominion Government expedition to Hudson Bay and the Arctic Islands on board the D.G.S. "Neptune", 1903-04. Ottawa. 355 p.
698. McLean, N. B.
1929. Report of the Hudson Strait expedition. Ottawa, Acland. 221 p. [Data on thickness of ice; text material on ice.]
699. Markham, A. H.
1889. Hudson's Bay and Strait. Suppl. pap. Roy. geogr. soc. 2, pt. 4:615-660.
700. Mecking, Ludwig.
1929. Die Hudsonbai-bahn, ihr hafen und ihr seeweg. Petermanns mitt. 75:249-257. [Ice conditions.]
701. Palmer, F.
1927. Report on the selection of a terminal port for the Hudson Bay railway. London. 34 p. At head of title: Hudson Bay. ["This report was made to the Minister of Railways and Canals in Ottawa."]
702. Tremaudan, A. H. de.
1915. The Hudson Bay road. London and Toronto. xvi, 264 p. maps.
703. Wakeham, William.
1898. Report of the expedition to Hudson Bay and Cumberland Gulf in the Steamship "Diana" ... in the year 1897. Ottawa, Department of marine and fisheries. 2 p. L., 83 p. maps.

SEE ALSO: 6, 197.

13. GREAT LAKES

704. Canada. Department of transport.
1943. Data on opening and closing dates of Canadian Great Lakes ports. Ms.
705. Canada. Hydrographic and map service.
1922. Sailing directions for the Canadian shores of Lake Superior, including St. Marys River above Sault Ste. Marie. 262 p.
706. Canada. Hydrographic and map service.
1933. Great Lakes pilot, vol. I. Kingston to Sarnia; including Lake Ontario, Welland Ship Canal, Niagara River, Lake Erie, Detroit River, Lake St. Clair, St. Clair River, Rideau Canal, Trent Canal system, also canal "Rules and regulations". 177 p.
707. Canada. Hydrographic and map service.
1942. St. Lawrence pilot (Canadian ed.) Montreal Harbour to Kingston Harbour and including Ottawa River. 4th ed. 103 p.
708. Canada. Hydrographic and map service.
1943. Great Lakes pilot, vol. II. Lake Huron and Georgian Bay, St. Marys River, Trent Canal system. 5th ed. 404 p.
709. Canada. Hydrographic and map service.
1943. St. Lawrence River pilot, below Quebec, comprising sailing directions from Cap des Rosiers (south shore) and St. John River (north shore) to Quebec. 6th ed. 157 p.
710. Conger, N. B.
1908. Storms and ice on the Great Lakes. Mon. weath. rev. 136: 236-244. tables.
711. Down to the lakes in ships.
1940. Fortune. 22:31-42, 100-102.
712. Du Hamel, N. Y.
1941. Great Lakes ports and waterways. Mil. engr. 33:123-132.
713. Freeman, J. R.
1926. Regulation of elevation and discharge of the Great Lakes. Providence. 548 p. tables. ["A report to the Chicago Sanitary district". Ice coverage of Great Lakes: pp. 91-95.]
714. Hudgins, Bert.
1937. Waterworks intakes of the Great Lakes. Geogr. rev. 27:457-466.
715. Mills, J. C.
1910. Our inland seas, their shipping and commerce for three centuries. Chicago, McClurg. 380 p.
716. *U.S. Engineer department.
1889-1944. Survey of northern and northwestern lakes. Bulletin. 1-53; suppl. 1-7. (Each bulletin supersedes all previous bulletins. Contain notes on navigation season for U. S. lake ports.)

717. U. S. Engineer department. Rivers and harbors board.
1936-1937. Transportation lines on the Great Lakes, 1935. Washington,
D. C., 1936. x, 83 p. plates, maps. (Transportation series
no. 3.) Rev. ed. 1937.
718. U. S. Hydrographic office.
1921. Great Lakes pilot. Vol. I-II. 2d ed. (Discontinued; with-
drawn from issue.)
719. *U. S. Weather bureau.
1933-1944. Summary of ice conditions for the Great Lakes. Issued weekly
during the ice season. Each year numbered separately.

14. BALTIC AND NORTH SEAS

720. D'Allinge, H. L.
1932. Die eistrift der "Gotaalf" im Februar-März 1929. *Ann. hydrogr.*, Berlin. 60:22-25.
721. D'Allinge, H. L.
1939. Die witterungsmässige eisbildung an der Deutschen Ostseeküste im winter 1932-33. *Der Seewarte*. 8(2):40-43.
722. Arnold-Alîab'ev, V. I.
1923. K voprosu o ledîanom rezhime Finskogo Zaliva i issledovaniâkh ego v zimu 1921-1922. (On the question of the ice regime in the Finnish Gulf and investigations during winter of 1921-1922.) *Zap. gidrogr.* 47:197-207.
723. Arnold-Alîab'ev, V. I.
1924. K voprosu o vliânii Ladozhsko-Nevskogo nanosnogo l'da na rezhim portovykh vod i Finskogo Zaliva. (Influence of Ladoga-Neva drift-ice on waters in ports of Finnish Gulf.) *Zap. gidrogr.* 48:301-306.
724. Arnold-Alîab'ev, V. I.
1924. Usloviâ zimnego plavaniâ v Finskom Zalive i v Baltiiskom More s pomoshch'iu ledokolov. (Conditions of winter navigation of Finnish Gulf and of Baltic Sea with aid of icebreakers.) *Vodn. transp.* 1:90-95.
725. Arnold-Alîab'ev, V. I.
1925. Die eisverhältnisse im Finnischen Meerbusen während der winter 1922-1925 in verbindung mit der eisbrechertätigkeit. *Ann. hydrogr.*, Berlin. 53:312-318.
726. Arnold-Alîab'ev, V. I.
1925. O metodakh issledovaniâ l'dov Finskogo Zaliva s ledokolov. (On methods of investigation of ice in the Finnish Gulf from the icebreakers.) *Zh. geofiz. met.* 2:79-88. English summary.
727. Arnold-Alîab'ev, V. I.
1925. O nekotorykh osobennostiâkh ledîanogo pokrova Finskogo Zaliva po dannym nablûdenii s ledokolov. (On certain peculiarities of the ice cover of Finnish Gulf.) *Zap. gidrogr.* 49:237-269.
728. Arnold-Alîab'ev, V. I.
1926. Obedinennyi shifr dliâ ledovykh izveshcheniâ Baltiiskogo Moria. (Ice code for the Baltic Sea.) *Zap. gidrogr.* 51:281-289.
729. Arnold-Alîab'ev, V. I.
1926. Über die schiffahrtsverhältnisse im Finnischen meerbusen im dezember und januar 1925-26 in verbindung mit der tätigkeit der eisbrecher. *Ann. hydrogr.*, Berlin. 54:367-372.
730. Arnold-Alîab'ev, V. I.
1927. Ledîanoi pokrov v territoriâlnykh vodakh Leningradskogo torgovogo Porta v zimu 1922-23 gg. (Ice cover of the water of the Leningrad harbour during winter of 1922-23.) *Izv. Gos. gidrol. inst.* 18:63-72.

731. Arnold-Alîab'ev, V. I.
1928. Ledovye avarii v Balticheskogo More. (Ice averages in the Baltic Sea.) Morskoi sbornik 1928(4):162-181.
732. *Arnold-Alîab'ev, V. I.
1929. Issledovaniâ prochnosti l'da Finskogo Zaliva v 1923, 1927, i 1928 gg. (Investigation of the strength of the ice in the Gulf of Finland in 1923, 1927, & 1928.) Izv. Glavn. geofiz. obs. 1929(2):15-28.
733. Arnold-Alîab'ev, V. I.
1929. Rezul'taty piatiletnikh ledovykh i gidrologicheskikh issledovaniï s russkikh ledokolov v Finskom Zalive i Baltiiskom More. (Results of five years ice and hydrologic research by Russian ice-breakers in the G. of Finland and the Baltic.) Trud. 2. Vse. gidrol. s'ezd, Leningrad. 2:417-426.
734. Arnold-Alîab'ev, V. I.
1929. Usloviâ plavaniâ vo l'dakh Finskogo Zaliva pod provodkoi ledokolov v zimu 1926-27 g. (Conditions for ice navigation of the Finnish Gulf by icebreakers in winter of 1926-27.) Zap. gidrogr. 55:89-104.
735. Arnold-Alîab'ev, V. I.
1932. Die eisdecke des Finnischen meerbusens nach untersuchungen an bord der russischen eisbrechers 1922-1929 (eine strukturbeschreibung). Int. rev. hydrob. 28:68-89.
736. Arnold-Alîab'ev, V. I.
1933. Ice service and the ice station of the Leningrad Hydrometeorological directorate. Rep. 4th Hydrol. conf. Baltic states. 76.
737. Arnold-Alîab'ev, V. I.
1933. K voprosu o khimizme l'da Finskogo Zaliva, v svâzi s izucheniem ego prochnosti. (On the chemical properties of the ice of the Finnish Gulf in relation to its strength.) Izv. Akad. nauk. Fiz.-khim. inst. 6:229-233.
738. *Arnold-Alîab'ev, V. I.
1933. L'dy Finskogo Zaliva po dannym issledovaniï s sovetskikh ledokolov za period 1922-1932. (Ice in Finnish Gulf according to observations of Soviet icebreakers during the period 1922-1932.) Rep. 4th Hydrol. conf. Baltic states. 77.
739. Arnold-Alîab'ev, V. I.A.
1928. The ice-conditions of the Baltic Sea and their study. (In Russian.) Trud. Leningrad. otd. Vse. nauchn. inzh.-tekhn. obshch. vodn. transp. 2/3:85-116. [Unverified reference.]
740. *Bachmanov, B. M.
1930-1932. State of the ice in Neva Bay 1929, 1930, 1931. (In Russian; title varies.) Zap. gidrogr. 63:78-79. 65:153-155. 1932(3):138-139.

741. Bachmanov, B. M.
1930. Zimnie nablūdeniâ v ust'e r. Nevy. (Winter observations in Neva Gulf.) Vodn. transp. 8(5):33-34.
742. Barabanov, G. and A. Richter.
1933. Die wirkung des eises auf die wasserbauten in der Newabucht. Rep. 4th Hydrol. conf. Baltic states. 78.
743. Blūthgen, Joachim.
1936. Die eisverhāltnisse des Bottnischen Meerbusens. Arch. Dtsch. seewarte. 55(3):63 p.
744. Blūthgen, Joachim.
1937. Eisbeobachtungen in der Gāvlebucht. Arch. Dtsch. seewarte. 57(9):23 p.
745. Blūthgen, Joachim.
1937. Neuere arbeiten über die vereisung der Ostsee. Ann. hydrogr., Berlin. 65:18-21. [Review of recent papers.]
746. Blūthgen, Joachim.
1938. Die eisverhāltnisse der Ostsee in genetischqualitativer betrachtung. Petermanns mitt. 84:177-182. 1 karte.
747. Blūthgen, Joachim.
1938. Eisverhāltnisse des Finnischen und Rigaschen meerbusens. Arch. Dtsch. seewarte. 58(3): 122 p.
748. Blūthgen, Joachim.
1938. Die vereisung der Ostsee und ihre probleme. Geogr. ann. 20:113-151. charts.
749. Braun, Gustav.
1924. Die natürlichen und wirtschaftlichen grundlagen des staates Finnland. Z. geopolitik. 1:74-81.
750. *Czekanska, M.
1935. Zlodzenie bałtyku. Die vereisung der Ostsee. Badania geograficzne. 15. 62 p. tables, maps. German summary, pp. 41-62.
751. *Denmark. Meteorologiske institut.
1906-1931. The state of the ice in Danish waters during the winters 1906-1931. Naut. met. aarb.
752. *Denmark. Meteorologiske institut.
1931. Statistical summary over the state of the ice in Danish waters during the winters 1906/07-1930/31. Naut. met. aarb. 1931:XI-XIV.
753. Denmark. Ministeriet for handel og fiskeri.
1936. Danish ice service and ice investigations. Answers to a questionnaire sent by the permanent bureau of the Baltic hydrological conferences, by the Ministry for shipping and fisheries. Helsingfors. 24 p. (Rep. 5th Hydrol. conf. Baltic states. 13B.) [Consists of Ice-breaking and Ice-information services. Includes discussion of ice conditions; description of kinds of ice.]

754. Denmark. K. Søkort-arkivs.
1925. Den danske lods. 10de udg.
755. Denmark. K. Søkort-arkivs.
1936. Den danske havnelods. 12te udg.
756. Denmark. Statens isbrydnings og ismeldingstjeneste.
1940-41. Is- og beseljingsforholdene i de Danske farvande i vinteren.
[Unverified reference.]
757. *Deutsche seewarte, Hamburg.
1900-1938. Eisverhältnisse an den deutschen küsten im winter 1899/1900-
1937/38. Ann. hydrogr., Berlin. 28:536-541. 32:401-
407. 33:308-314. 34:325-331. 35:289-296. 36:288-295.
37:289-296. 38:329-334. 39:345-349. 40:345-351. 41:
333-337. 42:374-378. 44:97-103. 409-412. 45:341-345.
46:299-302. 47:227-233. 48:352-361. 49:316-322. 50:
244-251. 51:225-228. 52:213-220. 53:193-197. 55:215-
219. 56:233-239. 57:192-193. 58:225-227. 59:222-224.
60:344-346. 61:210-212. 62:216-218. 63:247-249. 64:
310-313. 65:385-388. 66:349-352.
758. *Deutsche seewarte, Hamburg.
1908-1941. Eisverhältnisse an den ausserdeutschen küsten, 1907/1908-
1938/1939. (Title varies.) Ann. hydrogr., Berlin. 36:
388-406. 37:385-398, 480. 38:467-475. 39:457-464.
40:641-648. 41:613-621. 43:473-482. 44:16-20, 519-
525. 45:394-400. 46:313-317. 47:241-244. 49:257-263.
50:136-138. 51:46-50, 257-262. 53:9-16, 319-326. 55:
18-21, 41-49, 345-347, 378-385. 56:386-398. 57:398-
405. 58:427-433. 60:499-503. 62:21-33, 173, 478-482.
63:439-441. 64:479-485. 65:556-562. 66:579-584. 68:
17-24.
- 759 *Deutsche seewarte, Hamburg.
1933-1939. Eisbericht mit eisübersichtskarte. Daily, except Sundays.
Reports, 23 Nov. 1933 to 28 Apr. 1938; charts 2 Jan. 1934
to Apr. 1939. [Information on the entire Baltic.]
760. Deutsche seewarte, Hamburg.
1933. Monatskarten für die Nord- und Ostsee. Hamburg, Gustav
Schmidt. 12 charts in atlas. [Average ice limits at be-
ginning, middle and end of months.]
761. *Deutsche, seewarte, Hamburg.
1942. Atlas der eisverhältnisse im deutschen und benachbarten Ost-
und Nordseegebiet, bearb. von der Deutschen Seewarte.
Berlin. Oberkommando der kriegsmarine. 10 p. incl.
tables. 31 charts. (Nr. 2198.) [Tables: mean dates of
first and last ice; average no. days of ice, interference with
shipping, closed to shipping. Charts: Average appearance
and disappearance of ice, no. of days with ice for mild,
average, severe and very severe winters; relative abundance
during average ice period; no. days interference with ship-
ping, no. days stopped shipping.]
762. Eichstadt, Franz.
1922. Die eisverhältnisse im Kaiser-Wilhelm-Kanal. Wiss. meere-
sunters. abt. Kiel. n.f. 19:1-48.

763. Ennes, Fr.
1810. Observationer, angaende den genom Gefle stad flytande Gefle åns uppbrytande och islågning undersidst franflutne 21 år. (1789-1809.) Nya handl. Svensk. vetensk. akad. 31:76.
764. Estonia.
1927. Estnisches segel- und lotsenhandbuch. (In Estonian.) By Joh. Mey. 207 p.
765. Estonia. Bureau central de statistique.
1925. Statistique economiques. Vol. II, Ports, marine marchande et navigation en 1923 et 1924. Tallinn.
766. Finland. Havforskninginstitutet.
1913-1937. Das meereis im winter 1913/14-1936/37 an den küsten Finnlands. (In Finnish.) Its. Merent. julk. no. 3, 22, 23, 28, 37, 40, 42, 44, 50, 55, 56, 57, 64, 71, 79, 85, 87, 97, 102, 108, 113. (Title varies.)
767. France. Service hydrographique.
1935. Skagerrak et Kattegat. Instructions nautiques. 391 p. (11-378.)
768. France. Service hydrographique.
1937. Sund et Belts. Instructions nautiques. 316 p. (11-387.)
769. France. Service Hydrographique.
1938. Mer Baltique, côtes sud et est: de Darsserort au golfe de Bothnie. 346 p. (11-392.)
770. France. Service hydrographique.
1939. Golfe de Bothnie. Instructions nautiques. (11-401.)
771. Frankcom, C. E. N.
1940. Ice conditions in the Baltic and Danube areas Dec. 1, 1939 to Jan. 23, 1940. Met. mag. 75:1-8. chart.
772. Frisch, K.
1924-1925. Die eisverhältnisse der Revaler Reede und ihre beziehungen zur luft- und wassertemperatur der Ostsee. S. B. Naturf. ges. Univ. Dorpat. 31:1-16. 1924. Ann. hydrogr., Berlin. 53:28-29. 1925. [Review.]
773. Frisch, K.
1933. Average distribution of ice along the coast of Esthonia. Rep. 4th Hydrol. conf. Baltic states. 19 p.
774. *Frisch, K. and K. Kirde.
1924-1936. Merejää vaatlused 1923/24-1935/36 a. talvel Eestis. (Sea ice conditions 1923/24-1935/36 during the winter in Estonia.) Välj. Tartu uli. eesti veek. uur. kom. 1, 3-4, 6-7, 10-11, 15, 17, 19-20, 23, 27.
775. *Gallé, P. H.
1908-1915. Overzicht der ijswaarnemingen langs de Noordzeeën Zuiderzeekusten en mondingen der groote rivieren. De Zee 30:477-485. 31:555-561. 32:457-459. 33:535-537. 34:528-535. 35:533-537. 36:678-685. 37:387-389.

776. Geographical society of Finland.
1928. Atlas of Finland. Helsingfors Kustannusosakeyhtio Otava.
8 p. 38 double-face maps (col.). [T.-p. and text in Finnish, English, and Swedish. Contains maps showing greatest extent of ice in mild, severe, normal winters; formation of ice; regress of ice; freezing and breaking-up of inland ice.]
777. Germany. Oberkommando der kriegsmarine.
1926. Handbuch Belte und Sund. Belte und Sund, Flensburger förde, Fahrwasser südlich von Fünen und Smaalands-fahrwasser. 2. aufl. 522 p.
778. Germany. Oberkommando der kriegsmarine.
1927. Handbuch Skagerrak und Kattegat. Nordwest-und Ostküste von Jutland, Nordküste der Dänischen Inseln, Südküste von Norwegen, Westküste von Schweden. 6. aufl. 587 p.
779. Germany. Oberkommando der kriegsmarine.
1929. Handbuch Ostsee, mittlerer teil. Ostküste Schwedens von Torhamnsudde bis Grislehamn, Litauische, Lettische und Estnische küste, Finnischer Meerbusen. 6. aufl. 633 p.
780. Germany. Oberkommando der kriegsmarine.
1931. Handbuch Ostsee, südlicher teil. Von Schleimunde-Vejsnäs-Nakke bis Nimmersatt-Torhamnsudde. 8. aufl.
781. Germany. Oberkommando der kriegsmarine.
1939. Handbuch Ostsee, nördlicher teil. Der Bottnische meerbusen und die Ålands-Inseln. 7. aufl. 581 p.
782. Granqvist, Gunnar och Risto Jurva.
1937. Istjtansten i Finland. Helsingfors, Statsradets tryckeri. 65 p.
[Good photos of ice types, ice-breaker types; codes used; general discussion of conditions.]
783. Granqvist, H. and others.
1939. Die eisverhältnisse der Ostsee und ihre erforschung. Rep. 6th Hydrol. conf. Baltic states. pp. 144-152. [Code for navigational conditions and for ice conditions, in German and English.]
784. Gt. Brit. Admiralty. Naval Intelligence division.
1920. A hand book of Norway and Sweden. London 476 p. (I. D. 1214.)
785. Gt. Brit. Hydrographic department.
1926. Baltic pilot, v. I. Comprising the Kattegat, Sound, Great and Little Belts, and the channels leading therefrom to the Baltic. 6th ed. 518 p.
786. Gt. Brit. Hydrographic department.
1933. Norway pilot, Pt. I. Comprising the southern coast of Norway, eastward from Lindesnes, and the western coast of Sweden southward to Marstrandsfjord. 6th ed. 579 p.
787. Gt. Brit. Hydrographic department.
1937. Baltic pilot, vol. III. Comprising the Gulfs of Finland and Bothnia, and the Åland Islands; the Åland Sea. 3d ed. 495 p.

788. Gt. Brit. Hydrographic department.
1938. Baltic pilot, v. II. Comprising the Baltic Sea, excluding the Gulf of Finland and Gulf of Bothnia. 7th ed. 514 p.
789. Gt. Brit. Hydrographic department.
1942. Ice conditions in N. W. Europe. Y330. [Col. chart and notes.]
790. Die Häfen und die Handelsflotte Estlands.
1928. Völkermagazin. 3:21-23.
791. "Hango" winter-harbour. Hango, The Committee of traffic at Hango. 7 p.
1927. illus.
792. *Heinrichs, Axel.
1903. Isförhållandena i Östersjön och des Vikar. I. Material. Fennia. 21(1). 169 p. [Data covers 1889-1895.]
793. Helaakoski, O. R.
1943. Bewegungsrichtungen des inlandeises an der küste von Pohjanmaa und in der umgebung von Tampere. Fennia. 67
794. *Hellström, R. H.
1913. Bidrag till kännedom av isförhållandena i Bottenhavet, vintrarna 1899-1909. Fennia. 33(3). 364 p. charts.
795. *Hellström, R. H.
1915. Bidrag till kännedom av isförhållandena i Bottenhavet II. Inverkan av lufttemperaturen, vindförhållandena samt nederbörden på utvecklingen av isförhållandena i Bottenhavet vintrarna 1899-1909. Fennia. 38(2). 155 p. bleats..
796. Hellström, R. H.
1921. Isförhållandena i Bottenhavet. Terra, Helsingfors. 33:39-42.
797. Hellström, R. H.
1923. Winterverkehr auf dem Bottnischen meere. IV. Erfahrungen im winter 1916. (In Finnish; German summary.) Fennia. 43(6). 29 p.
798. Helsinki, Finland. Harbour board.
1927. The Port of Helsinki, official handbook, ed. by Otto E. Jaatinen. Helsinki, Holger Schildt, Ltd. 119 p. illus., maps, diags.
799. Hennig, R.
1909. Katalog bemerkenswerter witterungsereignisse von dem älteren zeiten bis zum jahre 1800. Abh. Preuss. met. inst. 2(4):1-75.
800. Hoppu, K. W.
1938. Port of Helsinki. Helsinki. 80 p. illus., maps, diags.
801. Joeden, U. v.
1918. Die mittlere vereisung der Ostsee. Z. Ges. erdk. 1918:316-324.
802. *Jurva, Risto.
1924. Merenjaat saaristomereen rajoittuvissa ymparoivien merien osissa. Open sea ice in the parts of the sea surrounding the archipelago. (With abstract.) Terra. 36:181-195. tables, charts. [Based on data for 1912-1922.]

803. Jurva, Risto.
1929. Itameren jaatymisesta. (Ice conditions of the whole Baltic.) Suomen paperi- ja puutavaralehti. 1929(4):142, 144. charts.
804. *Jurva, Risto.
1937. Über die eisverhältnisse des Baltischen meeres an den küsten Finnlands. Fennia. 64. 248 p. and atlas. Merent. julk. 114.
805. *Kaminskii, A. A.
1921. Ledñanoi pokrov v Nevskoi Gube i v ust'e Nevy v zimy 1918–1919 gg. i 1919–1920 gg. (Ice cover of Neva Bay and mouth of the Neva winters 1918–1919 and 1919–1920.) Izv. Gos. gidrol. inst. 1/3:70–82. German summary. [Tables of ice thickness.]
806. *Karsten, G.
1887. Studie über die eisverhältnisse im Kieler Hafen gestützt auf beobachtungen von 1848–49 bis 1885–86. Ann. hydrogr., Berlin. 15:87–91.
807. *Karsten, Hugo.
1911. Untersuchungen über die eisverhältnisse im Finnischen meerbusen und im nördlichen teile der Ostee. 1. Beobachtungen während der winter 1897–1902. Finnl. hydrogr.-biol. unters. 6. 91 p.
808. Karte des Danziger hafens, mit hafenpolizei-verordnung, hafenabgaben—lagergeld — und krangebühren — tarifen etc. Hamburg, Meissner and Christiansen. 182 p.
809. Koch, Harry.
1936. Swedish air photos of the ice in the Gulf of Bothnia in the spring of 1936. Comm. 5th Hydrol. conf. Baltic states. 13 C. 4 p. incl. photos.
810. Konczak, Stanislaw.
1937. Zarys klimatologii obszaru bałtyckiego. (Aperçu sur la climatologie de la Baltique.) Przegląd geograficzny. 16:63–106. French résumé. pp. 104–106. [Includes remarks on ice; isochrones of duration of ice, dates of freezing of rivers and lakes.]
811. Lakowitz, C.
1905. Die Danziger Bucht. (In: Beiträge zur landeskunde Westpreussens. Festschrift dem XV. Deutschen geographen-tag in Danzig. pp. 42–66.)
812. Latvia. Jurniecibas departamenta hidrografiska nodala.
1939–1940. Ledus apstakli Latvijas piekraste (Sea-ice conditions at the coast of Latvia during the winters) 1938/39–1939/40. Riga.
813. Leppik, E.
1925. Narva- Joesuu sadamaolud 1923/24 a. andmetel. (Harbour conditions of Narva estuary 1923/24.) Estonia. Sisevete uurimise Buroo. Sisevete uurimise andmed. 6.

814. *Levänen, S.
1889. Bearbetning af tiderna för islossningar och osläggningar Wanda å och i södra hamnen i Helsingfors. Fennia. 1(9). 8 p. [Tables of data 1836-1888.]
815. Lindgren, K. R.
1925. Kotka als verkehrs- und hafenstadt. Kirjapaino. 32 p.
816. Lithuania. Susisiekimo ministerija.
1933. Klaipėdos uosto direkcijos metinė apyskaita, 1933. Klaipėda, Spaustuve "Lithuania". 90 p. tables, diagrs.
817. *Matseino, A. I.
1923-1925. Ledjānoi pokrov v Nevskoi Gube i v ust'i r. Navy v zimu 1920-21, 1921-22, 1922-23, 1923-25. (The ice cover of Neva Bay and the mouth of the Neva River, winters of 1920-21 to 1924-25.) Izv. Tsent. gidromet. būro. 1: 64-72. 2:85-89. 3:119-132. 5:222-236.
818. Matseino, A. I.
1933. Stationäre und exkursionsbeobachtungen der eisdecke des Finnischen meerbusens. Rep. 4th Hydrol. conf. Baltic states. 80.
819. Mead, W. R.
1939. Finland and the winter freeze. Geography. 24:221-229.
820. Meyer, H. A.
1871. Untersuchungen über physikalische verhältnisse des westlichen teiles der Ostsee. Ein beitrag zur physik des meeres. Kiel, Schwers. vii, 204 p. illus., tables.
821. Norrköpings hamn 1931, och dess utveckling fran äldre tider. Norrköping, 1931. Norrköpings tidningars aktiebolag. 98 p. illus., maps.
822. Oellrich, H.
1938. Die eisverhältnisse an den Deutschen küsten, von Memel und der Freien Stadt Danzig im winter 1937-38. Der Seewart. 7(7):202-206.
823. *Östman, C. J.
1937. Isförhållandena vid Sveriges kuster 1870-1935. Medd. Svensk. met.-hydrogr. anstalt. 6(6).
824. Östman, C. J.
1939. On sambandet mellan isläggningen vid svenska ostkusten och meteorologiska faktoren. (On the relation between ice formation on the Swedish east coast and meteorologic factors. Medd. Svensk. met. hydrogr. anstalt. 7(5). 16 p.
825. Palmén, K. E.
1894. Om isbrytarefartyg och vintersjöfart. Förh. Tekn. fören. Finl. 14:7-67. 12 plates.
826. Petersen, P.
1928. Eisbeobachtungen auf see. Ann. hydrogr., Berlin. 56:102-103.

827. Petersen, P. and H. Oellrich.
1930. Die eisverhältnisse an den deutschen küsten, einschliesslich Memel und Danzig. Nach 25 jährigen beobachtungen vom winter 1903/04 bis 1927/28. Ann. hydrogr., Berlin. 58: 25-36.
828. The Port of Gefle.
1928. Reprint from Directory of Swedish ports and shipping 1927-28. Norrköping, Norrköpings tidningars aktiebolags tryckeri. 35 p. illus., maps.
829. The Port of Hälsingborg and harbours within the Hälsingborg city limits.
1928. Reprint from Directory of Swedish ports and shipping 1927-28. Norrköping, Norrköpings tidningars aktiebolags tryckeri. 23 p. illus., maps.
830. The Port of Härnosand.
1928. Reprint from Directory of Swedish ports and shipping 1927-28. Norrköping, Norrköpings tidningars aktiebolags tryckeri. 8 p. illus., maps.
831. The Port of Kalmar.
1928. Reprint from Directory of Swedish ports and shipping 1927-28. Norrköping, Norrköpings tidningars aktiebolags tryckeri. 11 p. illus., maps.
832. The Port of Sundsvall.
1928. Reprint from Directory of Swedish ports and shipping 1927-28. Norrköping, Norrköpings tidningars aktiebolags tryckeri. 11 p. illus., maps.
833. The Port of Västerås.
1928. Reprint from Directory of Swedish ports and shipping 1927-28. Norrköping, Norrköpings tidningars aktiebolags tryckeri. 24 p. illus., maps.
834. The Port of Landskrona.
1929. Reprint from Directory of Swedish ports and shipping 1927-28. Norrköping, Norrköpings tidningars aktiebolags tryckeri. 11 p. illus., map.
835. Prüfer, G.
1942. Die eisverhältnisse in den deutschen und den ihnen benachbarten Ost- und Nordseegebieten. Ann. hydrogr., Berlin. 70:33-50. 25 charts.
836. Reinicke, G.
1905. Die eisverhältnisse in schwedischen und russischen gewässern vom frühling 1903 bis zum ausbruch des eises 1905. Ann. hydrogr., Berlin. 33:387-396.
837. Reinicke, G.
1906. Die eisverhältnisse in gewässern der Ostsee im winter 1905/06. Ann hydrogr., Berlin. 34:464-472.
838. Reinicke, G.
1907. Die eisverhältnisse des winters 1906/07 in den dänischen holländischen und belgischen gewässern. Ann. hydrogr., Berlin. 35:426-431.

839. Reinicke, G.
1907. Die eisverhältnisse des winters 1906/07 in den russischen und schwedischen gewässern der Ostsee. Ann. hydrogr., Berlin. 35:413-426.
840. Richter, J.
1933. Vereisung der Beltsee und südlichen Ostsee im winter 1928/29. Arch. Dtsch. seewarte 52(5).
841. Rozen, M. F.
1929. Plotnost' l'da Nevskoi guby u Oranienbauma i morfologicheskaiâ kharakteristika ego. (Thickness of Neva Bay ice and its morphological characteristics.) Izv. TSentr. gidromet. biuro. 8:221-232.
842. *Rudovitz, L. F.
1918. Ledîanoi pokrov Rizhkago zaliva. (Ice in Riga Bay 1888/89-1916/17.) Zap. gidrogr. 41:725-788.
843. Rudovitz, L. F.
1929. Ledîanoi pokrov Rizhkogo Zaliva zimoi 1928-29 g. (Ice in Gulf of Riga winter 1928-29.) Zap. gidrogr. 57:70.
844. Salomanov, V.
1933. Der eisenachrichtendienst des Baltischen Meeres. Rept. 4th Hydrol. conf. Baltic states. 81.
845. Schmulders, V.
1928. Eisverhältnisse im Rigaschen meerbusen. Rep. 2d Hydrol. conf. Baltic States. 12. 8 p.
846. Schott, Gerhard.
1897. "Grundeis" im seewasser. Ann. hydrogr., Berlin. 25:72-74.
847. Slaucitajs, L.
1929. Beobachtungen der eisdecke d. Rigaschen meerbusens vom flugzeug aus. Ann. hydrogr., Berlin. 57:164-165.
848. Slaucitajs, L.
1929. Die eisverhältnisse an den küsten Lettlands, 1928/29. Arb. Met. inst. Univ. Lettlands. 11:15-19.
849. Slaucitajs, L.
1929. Spaltenbildung in der eisdecke und eisschiebungen an der küste des Rigaschen meerbusens im winter 1928/29. Ann. hydrogr., Berlin. 57:411-414.
850. Slaucitajs, L.
1936. Die eisverhältnisse an den Lettlandischen küsten des Rigaer meerbusens und die temperaturen während der eiswinter. Rep. 5th Hydrol. conf. Baltic States. 13B. 9 p.
851. Sovetov, S. A.
1907. Ledîanoi pokrov na Baltiiskom More v kholodnuû zimû 1901-1902 g. i tepluû zimû 1902-1903 g. (Ice of the Baltic Sea during cold winter of 1901-02 and warm winter 1902-03.) Met. vestn. 17:409-415. chart.

852. Sovetov, S. A.
1924. Protsessy zamerazniâ i vskrytiâ iûzhnoi chasti Ladozhskogo ozera, r. Nevy i vostochnoi chasti Finskogo Zaliva. (Freezing and breaking up of the southern part of Lake Ladoga, Neva River and eastern part Gulf of Finland.) Zap. gidrogr., 48:289-299.
853. *Speerschneider, C. J. H.
1915. Om isforholdene i Danske farvande i ældre og nyere tid aarene 690-1860. Medd. Dansk. met. inst. 2. 141 p.
854. Speerschneider, C. J. H.
1925. Eisbildung und eismeldedienst in Dänischen fahrwassern. Ann. hydrogr., Berlin. 53:305-312.
855. *Speerschneider, C. J. H.
1927. Om isforholdene i Danske farvande aarene 1861-1906. Medd. Dansk. met. inst. 6.
856. Spindler, I. B.
1893. Ledîanoi pokrov na Baltiiskom More v 1892-1893. (Ice cover of Baltic Sea 1892-1893.) Zap. gidrogr. 14:47-58.
857. *Stakle, P.
1936. Die eisverhältnisse der Ostsee und ihre erforschung. Rep. 5th Hydrol. conf. Baltic states, 13A. 106 p.
858. Steffens, O.
1911. Die eisverhältnisse an den deutschen küsten ... vom winter 1903/04 bis 1910/11. Ann. hydrogr., Berlin. 39:633-641.
859. Struiski, N.
1925. K voprosu o plavanii vo l'dakh Finskogo Zaliva. (Navigation of ice in Finnish Gulf.) Zap. gidrogr. 49:193-223.
860. *Sweden. Meteorologisk-hydrografiska anstalt.
1920-1944. Arsbok, 1919-1942. Stockholm. [Section V. Hydrografiska matningar i Sverige, contains freezing and thawing dates.]
861. Sweden. K. Sjökarteverket.
1934. Svensk lots. Del V. Ostersjön, östra delen, Rügen — Odensholm. 150 p.
862. Sweden. K. Sjökarteverket.
1935. Svensk lots. Del I. Skagerrak, Kattegatt och Oresund, huvudsakligen Svenska kusten. 330 p.
863. Sweden. K. Sjökarteverket.
1936. Svensk lots. Del IV. Segelbara inlandsfarvatten. 251 p.
864. Sweden. K. Sjökarteverket.
1940. Svensk lots. Del II. Ostersjön, Svenska kusten. Falsterboudde—Arholma. 165 p.
865. Sweden. K. Sjökarteverket.
1942. Svensk lots. Del III. Bottenhavet och Bottenviken, Svenska kusten. 120 p.

866. Szychliński, Franciszek.
1922. Zjawiska zamarzania u polskiego wybrzeża Bałtyku. (Les phénomènes de la glace aux côtes polonaises de la Baltique.) Prace Pozn. towarz. przyj. nauk. Kom. mat.-przyr. s.A, 1:119-142. fold. table.
867. Turku (Abo); modern port and industrial town.
1934. Finnish trade review. 5(1):17-32.
868. Turku, Finland. The Harbour board.
1938. Port of Turku-Abo. Turko, Kirjapaino grafia. 7 p.
869. Turku Suomi, the harbour 1935. Turku, Kirjapaino grafia. 6 p.
1934.
870. U.S.S.R. Gidrograficheskoe upravlenie.
1917. Ledñanoi pokrov Finskago zaliva i Alandskago Moria. (Ice cover of Gulf of Finland and Åland Sea.) Petrograd. 13 p. tables, charts, diagrs.
871. U.S.S.R. Gidrograficheskoe upravlenie.
1936. Lotsiñ Baltiiskogo Moria. Chast' II. Srednññ chast' Moria. 299 p. Dopolnenie (suppl.) 3. 1941.
872. U.S.S.R. Gidrograficheskoe upravlenie.
1937. Lotsiñ Baltiiskogo Moria. Chast' I. Finskii i Rizhskii zalivy s Mukhuveinom. 358 p. Dopolnenie (suppl.) 3. 1941.
873. U.S.S.R. Gidrograficheskoe upravlenie.
1939. Lotsiñ Baltiiskogo Moria. Chast' III. Ûzhnññ chast' moria. Dopolnenie (suppl.) 2. 1941.
874. U.S.S.R. Gidrograficheskoe upravlenie.
1940. Lotsiñ Baltiiskogo Moria. Chast' IV. Botnicheskii zaliv. 523 p. Dopolnenie (suppl.) 1. 1941.
875. U.S.S.R. Gidrograficheskoe upravlenie. Gidrometeorologicheskii otel.
1930-1936. Ledovññ nauchno-metodicheskññ morskññ stantñññ. Zhurnal ispytaniï prochnosti l'da Finskogo zaliva za 1930-1936 gg. (Journal of investigations of strength of ice in the Finnish Gulf 1930-1936.) Ed. by S. M. Andreev and V. I. Arnold-Alññ' ev. [Unverified reference.]
876. U. S. Hydrographic office.
1929. Scandinavia pilot. Vol. II. The Kattegat to Cape Arkona, including the Sound, Great and Little Belts, and Kiel Bay. 3d ed. 603 p. (H.O. 141.)
877. U. S. Hydrographic office.
1930. Baltic pilot, Vol. I. The Baltic Sea from Falsterbo Point and Cape Arkona to the entrances of the Gulfs of Finland and Bothnia. 3d ed. 432 p. (H.O. 142.)
878. U. S. Hydrographic office.
1933†. Port facilities (Consular form). Submitted each year by various consuls. Ice information from: Gävle, Hudiksvall, Luleå, Oxelösund, Stockholm, Sundsvall, Västervik, and one special report on Swedish ports in the Stockholm consular district, Memel (Lithuania) and Liepāja (Latvia).

879. U. S. Hydrographic office.
1934. Sailing directions for the Baltic. Vol. III. The Gulf of Finland, the Åland Islands, and the Gulf of Bothnia. 2d ed. 385 p. (H.O. 143.)
880. Veinberg, B. P.
1925. K stat'e V. I. Arnold-Alfâb'eva "O nekotorykh osobennostîakh lediânogo pokrova Finskogo Zaliva po dannym nablûdenii s ledokolov." (On Arnold-Alfâb'ev's article "On certain peculiarities of the ice-cover of the Finnish Gulf according to observations of the ice-breakers.") Zap. gidrogr. 49: 269-272.
881. Viipuri uuras. Viipuri, Kirjalan Kirjapaino osakeyhtio.
1930. 31 p. illus., maps.
882. Vinberg, Sal.
1935. The Port of Stockholm. Stockholm, Ahlberg and Lundquist. 94 p. illus., maps.
883. Vize, V. IŮ.
1925. Einige beziehungen zwischen der zeit des erscheinens des eises im Finnischen meerbusen und hydrographischen und meteorologischen phänomenen. Ann. hydrogr., Berlin. 53:191-193.
884. Vize, V. IŮ.
1925. K voprosu o dolgosrochnom proskazanii vremeni ochishcheniâ ot l'dov Finskogo Zaliva. (Zur frage über die landfristige vorhersage der zeit der enteisung des Finnischen meerbusens.) Izv. TŮSentr. gidromet. bŮuro. 5:85-100. tables. German summary.
885. Zalomanov, V.
1929. Predpolagaemoe vskrytie Finskogo Zaliva vesnoi 1929 g. (Forecasting breaking-up of ice in Finnish Gulf spring 1929.) Met. vestn. 1929(3): 80. [Unverified reference.]

SEE ALSO: 2, 3, 11, 12, 153, 278, 367, 1196, 1660.

15. BLACK AND AZOV SEAS

886. Bel'chenko, K. A.
1930. L'dy v ūgo-zapadnoi chasti Chernogo Morîa zimoŭ 1928-29 g. (Ice in SW part of the Black Sea 1928-29.) Zap. gidrogr. 62:73-75.
887. Chikachev, M. P.
1855. Considérations historiques sur les phénomènes de congélation constatés dans le bassin de la mer Noire. Annu. Soc. mét. France. 3:12-37. [Tables on Danube at Vienna. Data on marine and freshwater.]
888. France. Service hydrographique.
1932. Mer Noire et mer d'Azov. Instructions nautiques. 247 p. (11-357.)
889. Germany. Oberkommando der Kriegsmarine.
1921. Handbuch Schwarzes Meer. Schwarzes und Asowsches Meer. 2. Aufl. 678 p.
890. Gt. Brit. Hydrographic department.
1942. Black Sea pilot. Comprising the Dardenelles, Sea of Marmara, Bosphorus, Black Sea, and Sea of Azov. 9th ed. (Under revision.) 453 p.
891. Köppen, W.
1929. Viel eis im Schwarzen meere im winter 1928/29. Ann. hydrogr., Berlin. 57:163-164.
892. Mariolopoulos, E. G. and L. Alexandrou.
1933. La congélation de la mer dans le Golfe de Thessalonique. C. R. Acad. d'Athènes. 8:234-238.
893. Perov, B. A.
1933. Donnyi led v ust'e R. Dnepra i Dneprovsko-Bugskom limane. (Anchor ice in the mouth of the Dnieper River and in the Dnieper-Bug estuaries.) Zap. gidrogr. 1933(2):97-98.
894. Philippson, A.
1903. Eisbildung auf der Bucht von Salonik im letzten winter. Met. z. 20:369-370. tables.
895. Potochkii, P.
1908. Nablŭdeniâ nad zamerzaemost'iu Dzharyl'gatskago i Karkinit'skago zalivov v zimu 1907-1908 g. (Observations on freezing of Dzharyl'gatski and Karkinit'ski bays during winter 1907-08.) St. Petersburg. 12 p. 6 charts.
896. Prishletsov, V. I.
1930. Ledŭanoi pokrov na Azovskom More v zimu 1928-29 g. (Ice on the Azov Sea during winter 1928-29.) Izv. T'Sentr. gidromet. bŭro. 9:243-247.
897. Prodolzhitel'nost' ledostava v portakh Azovskogo Morîa v 1928-29 g. (Duration of the ice at Azov Sea ports during 1928-29.) Bŭl. pogody i sost. mor. Feodosiâ. 23:10.

898. Reinicke, G.
1913. Eis und schiffahrt der funf winter von 1907/08 bis 1911/12 in den hâfen des Schwarzen Meeres. Ann. hydrogr., Berlin. 41:86-91.
899. Rudovitz, L. F.
1929. L'dy v ûgo-zapadnoi chasti Chernogo Morîa zimoi 1928-29 goda. (Ice in the SW part of Black Sea 1928-29.) Zap. gidrogr. 57:69-70.
900. Shustov, B. S.
1930. Ledîanoi pokrov Azovskogo Morîa. (Ice on the Sea of Azov.) Izv. Assofs. nauchn.-issled. inst. Mosk. univ. 3(1A): 103-127. 6 figs. German summary, pp. 127-128.
901. *Shustov, B. S.
1934. Ledîanoi pokrov Chernogo Morîa. (Ice in the Black Sea.) Zemlevedenie. 36:376-395. tables, chart.
902. Shustov, B. S.
1934. Veroîatnost' vstrechi so l'dami v Dneprosko-Bugskom limane i v Severo-Zapadnoi chasti Chernogo Morîa. (Probability of encountering ice in the Dneiper and Bug estuaries and in the NW part of the Black Sea.) Zemlevedenie. 36:396-398. [Charts Nov.-Apr.]
903. Snezhinskii, V. A. and B. S. Vorontsov.
1932. Donnyi led v Azovskom More. (Anchor ice in the Azov Sea.) Zap. gidrogr. 1932(3):138.
904. Starov, D. K.
1929. Led v Sevastopol'skoi bukhte. (Ice in the Bay of Sevastopol.) Zap. gidrogr. 56:170-171.
905. Svedeniîa o sostoiânii ledîanogo pokrova. (Azovskogo i Chernogo Morei po dekadam). (Information on the state of the ice by ten day intervals in Azov and Black seas.) Bûl. pogody i sost. mor. Feodosiâ. 1928:1-11, 33-36.
906. U. S. S. R. Hidrograficheskoe upravlenie.
1937. Lofsiâ Azovskogo Morîa. (Azov Sea pilot.) 237 p. Dopolnenie (suppl.) 3. 1940.
907. U. S. Hydrographic office.
1926. Black Sea pilot. The Dardanelles, Sea of Marmara, Bosphorous, Black Sea, and the Sea of Azov. 2d ed. 474 p. (H. O. 155.)
908. Vize, V. ÎU.
1927. Ledîanoi pokrov v Dneprovsko-Bugskom limane i na Dnepre nizhe Khersona v zimu 1925-26 gg. Die eisdecke in den limanen des Dnjeprs und Bugs und auf dem unteres lauf des Dnjeprs im winter 1925/26. Izv. T'Sentr. gidromet. bûro. 7:62-90. tables, diagrs. German summary.

SEE ALSO: 2, 3, 1660.

16. CASPIAN AND ARAL SEAS

909. Berg, L.
1902. Materiâly dlâ gidrologii Aral'skago Morâ. (Nauchnye rezul'taty Aral'skoi ekspeditsii. Vup. 1.) (Hydrology of the Aral Sea. Scientific results of the Aral expedition, v. 1.) Izv. Turkestansk. otd. Russ. geogr. obshch. 3:1-62.
910. Krasnova, V. S.
1937. Khimicheskii sostov l'da Kaspiiskogo Morâ. (The chemical composition of the ice of the Caspian Sea.) Zh. obshch. khim. 7:(12):1747-1748.
911. Razumovskii, N. I.
1930. Sostoianie l'da v severnoi chasti Kaspiiskogo Morâ zimou 1927-1928 gg. (State of the ice in the northern part of the Caspian Sea during the winter 1927-28.) Izv. T'Sentr. gidromet. biuro. 9:42-66.
912. T'Surikov, V. L.
1939. Nekotorye dannye o l'de Aral'skogo Morâ. (Some data on the ice of Aral Sea.) Izv. Russ. geogr. obshch. 71:1200-1219.
913. U.S.S.R. Gidrograficheskoe upravlenie.
1935. Lotsiâ Kaspiiskogo Morâ. (Caspian Sea pilot.) 260 p.
914. Wood, Herbert.
1876. The shores of Lake Aral. London, Smith, Elder & Co. 352 p. [Ice, pp. 105 & 321.]

SEE ALSO: 2, 3, 1645.

17. YELLOW SEA

915. Chatley, Herbert.
1940. The port of Tientsin, the shipping center of North China.
Dock and harbour authority. 20:129-134.
916. The China year book, 1939. Shanghai, North China daily news and herald,
1939. Ltd.
917. Chinwangtao.
1929. Chinese economic journal. 4:162-166.
918. France. Service hydrographique.
1936. Mer Jaune et golfe du Petchili. Instructions nautiques.
223 p. (11-381.)
919. Gt. Brit. Foreign office. Historical section.
1920. China, Japan, Siam. London. Peace handbooks. 12.
920. Gt. Brit. Hydrographic department.
1937. China Sea pilot, vol. III. Comprising the coasts of China
and Manchuria from Fokai Point to the Oryuku Kō; the
north coast of Luzon; Formosa; and the western coast of
Korea. London. 644 p.
921. Hitch, Margaret.
1935. The port of Tientsin and its problems. Geogr. rev. 25:367-381
922. Li, Shu-T'ien.
1933. The present status of the site of the great northern port
J. Assn. Chin. Amer. engrs. 14(3):1-20.
923. The Manchukuo year book. Hsinking.
1941.
924. Niinomy, K.
1927. Observations on sea ice of Dairen Bay, Manchuria. (In
Japanese.) Chikyu (Globe). 7:354-377.
925. U. S. Foreign and domestic commerce bureau.
1926. China, a commercial and industrial handbook. 818 p. (Trade
promotion series no. 38.)
926. U. S. Hydrographic office.
1943. Sailing directions for the Coast of China from Yalu River to
the approach to Hong Kong—the Yangtze River—the
coasts of Taiwan (Formosa) and the Pescadores Islands.
4th ed. Washington, D. C. 691 p. (H. O. 124.)

SEE ALSO: 2, 8, 938.

18. OKHOTSK AND JAPAN SEAS

927. France. Service hydrographique.
1935. Japon et Sibérie (côte est) y compris la Mer intérieure du Japon et les archipels et îles détachées dans le sud, le S.W. et le N.E. du Japon. 491 p. (11-377.)
928. Gt. Brit. Hydrographic department.
1937. South and east coasts of Korea, east coast of Siberia, and Sea of Okhotsk pilot. Comprising the coast from the south-west extreme of Korea to Cape Shipunski on the eastern coast of the Kamchatka Peninsula; and Quelpart Island, Tsushima and Sakhalin. 3d ed. London. 650 p.
929. Gt. Brit. Hydrographic department.
1938. Japan pilot, Vol. I. Comprising Honshu (except its southern coast), Hokkaido, the southern coast of Karafuto, and Chishima Retto. 4th ed. 427 p.
930. Japan. Meteorological observatories, Nemuro, Abasira, and Syana.
1929-1937. Report of the ice-drift and freezing of sea-water. (In Japanese.) J. ocean. 1:51-53. 2:89-90, 276-277. 3:201-206, 649-653. 5:241-250, 427-429. 6:287-288. 8:103-111. 9:57-72. 10:233-242.
931. Knipping, E.
1893. Die deutsche bark "Conrad Hinrich", Kapt. F. H. C. Brandt, im Okhotskischen meere vom eise besetzt, April 1879. Ann. hydrogr., Berlin. 21:432-435.
932. Luks, K.
1928. Vo l'dakh Īaponskogo Morĭâ. (In the ice of the Japan Sea.) Vokrug sveta. 10:158-159.
933. Luks, K.
1932. Okhotskoe More i zimnii reis 1931-1932 goda. (The Okhotsk Sea and winter voyage during 1931/32.) Sovetskii sever. 3(5):72-80.
934. Matumoto, K.
1929. Report on the ice-drift and freezing of the seawater observed at Shara and Abasiri. (In Japanese.) J. ocean. 1:125-130.
935. Mecking, Ludwig.
1931. Japans häfen, ihre beziehungen zur landesnatur und wirtschaft. Mitt. Geogr. Ges. Hamburg. 42. 592 p. illus., plates, maps. [Includes ice.]
936. *Okada, T.
1931. The climate of Japan. Bull. Cent. met. obs. 4(2):89-416. [Table of data, 1909-1928, of first and last ice dates for 72 stations, pp. 355-356.]
937. Popov, V. L.
1929. Problema Okhotskogo Morĭâ. (The problem of the Okhotsk Sea.) Severnaĭa Aziĭa. 1929(3):12-25.
938. *Purin, A. A.
1924. L'dy Īaponskogo, Okhotskogo morei i Severnogo Ledovitogo Okeana. (Ice of the Japan and Okhotsk seas and the Arctic Ocean.) Viestnik Azii. 52:301-333. tables.

939. Rudovits, L.
1916. *Klimat Okhotskago Moria*. (Okhotsk Sea climate.) *Zap. gidrogr.* 40:882-894. [Ice, pp. 892-893, with chart of S.W. area.]
940. Snow, H. J.
1897. *Notes on the Kuril Islands*. London, Royal geographic society. 91 p.
941. Suda, K.
1932. On the salinity of sea-ice in the Nemuro Bay. (In Japanese.) *J. ocean.* 4:265-267.
942. Suda, K.
1932. On the sea-ice of the Soya-strait in Aniwa Bay. (In Japanese.) *J. ocean.* 3:438-446.
943. Suda, K. and K. Seki.
1932. On the first and last dates of the ice-drift and freezing of sea-water at several ports along the coast of the Bering Sea, Okhotsk Sea, and adjacent seas of Japan. (In Japanese.) *J. ocean.* 3:697-702.
944. Taguti, K.
1933. On the state of sea-ice in the Bering Sea, Okhotsk Sea, and the northern part of the Japan Sea. (In Japanese.) *J. ocean.* 4:489-508.
945. Tarasov, N. I.
1940. *Īaponskoe More (fiziko-geograficheskii ocherk)*. (The Japan Sea; a physico-geographical sketch.) *Morskoi sbornik*. 1940 (8):50-79. [Ice chart.]
946. Uda, Mititaka.
1941. Physical problems of the sea-ice in the northern waters adjacent to Japan. (In Japanese.) *Nippon setsuhyo kyokai zasshi. Setsu hyo.* 3(1). [Unverified reference.]
947. U.S.S.R. *Gidrograficheskoe upravlenie*.
1933. *Lot'siia Tikhogo okeana. Chast' V. Īaponskoe More berega Īaponii*. (Pacific Ocean pilot, pt. V. Japan Sea shores of Japan.) Leningrad. 96 p.
948. U.S.S.R. *Gidrograficheskoe upravlenie*.
1934. *Lot'siia Tikhogo Okeana. Chast' IV. Īaponskoe More. Tatarskii Proliy*. (Pacific Ocean pilot, pt. IV. Japan Sea. Tartary Strait.) Leningrad. 169 p.
949. U.S.S.R. *Gidrograficheskoe upravlenie*.
1935. *Lot'siia Tikhogo Okeana. Chast' II. Īaponskoe More, vostochnyi iuzhnyi berega Korei*. (Pacific Ocean pilot, pt. II. Japan Sea, east and south shores of Korea.) Leningrad, *Gidrograficheskogo otdela U.M.S. R.K.K.A.* 311 p.
950. U.S.S.R. *Gidrograficheskoe upravlenie*.
1938. *Lot'siia Okhotskogo Moria*. (Okhotsk Sea pilot.) Leningrad. 509 p. *Dopolnenie (suppl.)* 1. 1941.

951. U.S.S.R. Gidrograficheskoe upravlenie.
1940. *Lot'siia Tikhogo Okeana. Severnyi bereg Ostrova Khonsu, berega Ostrova Khokkaido, ūzhnyi i vostochnyi berega Ostrova Sakhalina, Ostrova Sutsetso Moto i Tsisima Retto. (Pacific Ocean pilot. N shores of Honshu, shores of Hokkaido, S and E shores of Sakhalin, Suisho Shoto and Chishima Retto.)* Sost. N. A. Mamontov. Leningrad, Izd. Gidrogr. upr. NKVMF. 312 p. illus.
952. U. S. Hydrographic office.
1930. *Asiatic pilot vol. II. The Japanese archipelago.* 3d ed. Washington, D. C. H.O. 123. 857 p. (Suppl. pub. 1943.)
953. U. S. Hydrographic office.
1932. *Sailing directions for Siberia and Chosen from Cape Syeverni and Wrangell Island to the Oryoku Ko (Yalu River) including Sakhalin Island.* 3d ed. Washington, D. C. 578 p. (H.O. 122.)
954. U. S. Hydrographic office.
1944. *Sailing directions for Chishima Retto (Kuril Islands.)* Advance publication of Chapter II of H. O. Pub. 123A, *Sailing directions for Japan, Vol. 1, now in preparation by the Hydrographic office.* 118 p. map.
955. U. S. Hydrographic office.
1944. *Sailing directions for Hokkaido.* 129 p. (H.O. 123Y.) Advance publication of Chapter III of H.O. 123A.
956. U. S. Hydrographic office.
1944. *Sailing directions for southeastern coast of Kamchatka from Mys Afrika to Mys Lopatka.* 57 p. (H.O. 122X.) Advance publication of part of Chapter III of H.O. 122A.
957. U. S. Hydrographic office.
1944. *Translation of Japan Pilot vol. 10-A, East and South coasts of Korea. [Tables of ice on navigable rivers.]*
958. U. S. Hydrographic office.
1944. *Translation of Japanese sailing directions for the Chishima Retto and the southern coast of Karafuto.* 279 L. Mimeographed. Partial translation only.
959. Ushakov, P.
1940. *Okhotskoe More (fiziko-geograficheskaiâ spravka v svâzi s trekhsotletiem otkrytiâ Okhotskoiu moriâ).* (The Okhotsk Sea; a physico-geographic report in connection with the tricentenary of the discovery of the Okhotsk Sea.) Morskoi sbornik. 1940(1):69-92. diagrs., charts.
960. Zhdanko, M.
1908. *Vremâ vskrytiâ i zamerzaniâ nekotorykh zalivov, bukht i rek v predelakh Primorskoï oblasti i otchasti vne eâ.* (Time of opening and closing of some gulfs, bays and rivers of the coastal and offshore regions.) Zap. Obsheh. izuch. Amur kraia. 12-foll. p. 66. 2 p. table.

SEE ALSO: 2, 12.

19. BERING SEA, BERING STRAIT AND GULF OF ALASKA

961. Brooks, A. H.
1925. The value of Alaska. *Geogr. rev.* 15:25-50. map. [Map shows southern ice limit, dates of navigability around coasts.]
962. Collier, A. J., F. L. Hess, P. S. Smith and A. H. Brooks.
1908. The gold placers of parts of Seward Peninsula, Alaska. *Bull. U.S.G.S.* 328. 343 p. [Notes on ice in Bering Sea; river and harbor ice.]
963. Collins, H. B., jr.
1932. Prehistoric eskimo culture on St. Lawrence Island. *Geogr. rev.* 23:107-119.
964. Fitton, E. M.
1930. The climates of Alaska. *Mon weath. rev.* 58:85-103.
965. France. Service hydrographique.
1938. Alaska. *Instructions nautiques.* 334 p. (11-396.)
966. Goodman, J. R., J. H. Lincoln, T. G. Thompson and F. A. Zeusler.
1942. Physical and chemical investigations: Bering Sea, Bering Strait, Chukchi Sea during the summers of 1937 and 1938. *Wash. Univ. Publs. ocean.* 3(4):105-169 and append., 117 pp. [Ice, pp. 161-167.]
967. Gt. Brit. Hydrographic department.
1932. South-east Alaska pilot. Comprising the coast and off-lying islands from Dixon Entrance to Cook Inlet. 2d. ed. 502 p.
968. Gt. Brit. Hydrographic department.
1940. Bering Sea and Strait pilot. Comprising the North-western and Northern coasts of Alaska from Cape Douglas to Demarcation Point, the Northern coast of Canada from Demarcation Point to Cape Bathurst; the Aleutian Islands; and the North-eastern coast of Siberia from Cape Shipunski to Cape Shmidt. 2d ed. 497 p.
969. Hegemann, P. F. A.
1890. Eis und strom im Beringsmeer. *Ann. hydrogr., Berlin.* 18:401-425.
970. Jenness, D.
1929. Little Diomedé Island, Bering Strait. *Geogr. rev.* 19:78-86.
971. Page, James.
1900. Ice and ice movements in Bering Sea during spring months. *Publ. U.S.H.O.* 116. 19 pp. map.
972. Simpson, E.
1890. Report of ice and ice movements in Bering Sea and the Arctic basin...under direction...C. H. Stockton...commanding U.S.S. Thetis. Washington. 25 p. fold. chart. (H. O. 92.)

973. U.S.S.R. Hidrograficheskoe upravlenie.
1938. Lofsiâ Beringova Morîâ, chast' I. Vostochnyi bereg Kamchatki ot Mysa Lopatka do Mysa Olûutorskogo i Komandorskie Ostrova. (Sailing directions for the Bering Sea. Pt. I. E shores of Kamchatka from C. Lopatka to Olyutorskiy and Komandorski Is.) Leningrad. 283 p. Dopolnenie (suppl.) 1. 1941.
974. U. S. Coast and geodetic survey.
1932. U. S. coast pilot Alaska pt. 1. Dixon Entrance to Yakutat Bay. 8th ed. Washington, D. C., 492 p. (Serial 545.)
975. U. S. Coast and geodetic survey.
1938. U. S. coast pilot Alaska pt. II. Yakutat Bay to Arctic Ocean. 4th ed. Washington, D. C. 490 p. (Serial 607.)
976. U. S. Hydrographic office.
1899-1902. Ice in the Bering Sea. Season 1899, 1900, 1901. Verso Pilot chart N. Pacific Oct. 1899, Apr. 1901, Feb. 1902.
977. U. S. Hydrographic office.
1934. Naval air pilot, Alaska Peninsula, southern and southeastern Alaska. 235 p. (H. O. 188.)
978. U. S. Hydrographic office.
1943. Special Aleutian Islands supplement to United States coast pilot Alaska, pt. II. Yakutat Bay to Arctic Ocean, 4th (1938) ed. Prep. by U. S. C. & G. S. and pub. by the H. O. 230 p. (H.O. 139.) Photolithographed.
979. Volkov, N. A.
1938. Okeanograficheskie raboty v Beringovom Prolyve v zimovku 1936/37 goda. (Oceanographic work in Bering Str. during the winter 1936/37.) Problemy arktiki. 1938(4):99-103.
980. *Weightman, R. H.
1941. Special data regarding the opening and closing of navigation in Bering Sea. Mon. weath. rev. suppl. 45:59. [Data for St. Michael Bay, Alaska, 1875-1931.]
981. Zeusler, F. A.
1941. Ice in the Bering Sea and Arctic Ocean. Proc. U. S. Nav. inst. 67:1102-1106.

SEE ALSO: 938, 1691.

20. RIVERS AND LAKES

NORTH AMERICA

982. Bell, J. M.
1929. Great Slave Lake. *Geogr. rev.* 19:556-580.
983. Blanchet, G. H.
1926. Great Slave Lake area, North West Territories. Ottawa, North West Territories and Yukon branch Department of the interior. 1 p.L., 5-58 p. illus., tables, fold. map.
984. Break-up of the Yukon River ice at Dawson.
1916. *Geogr. rev.* 2:60.
985. Cameron, A. D.
1910. The new north. New York, Appleton. xix, 398 p.
986. *Canada. Dominion bureau of statistics.
1942. The Canada year book, 1942. Ottawa. ["Duration of the season of open navigation on the St. Lawrence ship channel, 1912-1940." p. 615. For years 1881-1911 see 1934/35 ed., p. 756.]
987. Canada. Dominion water and power bureau.
1914-1944. Surface water supply of Canada. Pacific drainage. British Columbia and Yukon Territory. 1911/12-1936/38. Ottawa. Water resources paper no. 1, 8, 14, 18, 21, 23, 25, 30, 35, 39, 43, 47, 51, 53, 59, 61, 65, 67, 72, 78, 80, 86.
988. Canada. Dominion water and power bureau.
1921-1942. Surface water supply of Canada. Atlantic drainage (south of the St. Lawrence River), New Brunswick, Nova Scotia, Prince Edward Island. Climatic year 1918/19-1937/38. Ottawa. Water resources papers 29, 37, 45, 52, 63, 69, 73, 81, 83.
989. Canada. Dominion water and power bureau.
1921-1944. Surface water supply of Canada. St. Lawrence and southern Hudson Bay drainage. 1919/20-1937/39. Ottawa. Water resources papers 28, 34, 38, 42, 58, 64, 70, 74, 76, 79, 85.
990. Canada. Dominion water and power bureau.
1922-1943. Surface water supply of Canada. Arctic and western Hudson Bay drainage (and Mississippi drainage in Canada) in British Columbia, Alberta, Saskatchewan, Manitoba, the Northwest territories, and western Ontario. 1919/20-1937/38-1938/39. Ottawa. Water resources papers 31, 36, 40, 44, 46, 50, 54, 57, 62, 66, 68, 71, 75, 82, 84.
991. Canada. Hydrographic and map service.
1934. Sailing directions for the Saint John River from Saint John Harbour to Fredericton and Kennebecasis Bay. 73 p.
992. Canada. Topographical survey of Canada.
1934. Average date, start and end of flying season for float and boat planes. Ottawa. 1 map. 1:20,000,000.

993. Damage from ice accumulation at Niagara Falls.
1938. Engineering. 145:397-398. [Illustrated description of conditions in Jan. 1938.]
994. *Dearborn, Henry and others.
1865. Opening and closing of the Kennebec River, at Gardiner, Maine, from 1785 to 1865. Maine agric. rep. 10:181-182.
995. Dyer, Jerome.
1898. The routes and mineral resources of northwestern Canada. London. 268 p. fold. maps. ["Ice on rivers and lakes": pp. 169-172.]
996. Ewens, W. E.
1938. Control of ice jams in large rivers; causes of heavy ice accumulations and methods of using thermit and calcium chloride in reducing pressure. Some experiments with thermit conducted. Canad. engr. 74(5):11-13. [Photos of Niagara River.]
997. Frazier, A. H.
1934. Effects of ice on the flow of the upper Mississippi River. Trans. Amer. geophys. un. 15:421-427.
998. The Freezing of the Niagara Falls.
1936. Scot. geogr. mag. 52:253-254.
999. Gardiner, Frederic.
1865. On the ice in Kennebec River. Amer. j. sci. 40:20-22.
1000. *Gardiner, R. H.
1858. Observations on the opening and closing of Kennebec River, Maine. Rep. Smith. inst. 1858:434-436. [Data for 1785-1857.]
1001. Gibbs, G. S.
1906. The "breaking up" of the Yukon. Nat. geogr. mag. 17: 268-272.
1002. Henry, A. J.
1918. Ice in rivers 1917-18. Mon. weath. rev. 46:85-95.
1003. Kindle, E. M.
1920. Arrival and departure of winter conditions in the Mackenzie River basin. Geogr. rev. 10:388-399.
1004. Koeppe, C. E.
1931. The Canadian climate. Bloomington, Ill. 3 p.L., 280 p. maps, diagrs.
1005. Lloyd, Trevor.
1943. The Mackenzie waterway, a northern supply route. Geogr. rev. 33:415-434.
1006. Miller, Eric.
1935. Dates of opening and closing of Lake Mendota and Lake Monona, 1851-1935. 4 p.
1007. *Opening and closing of the Hudson River near Albany, N.Y., 1817-36. Amer. 1837-1838. almanac (Boston). 1837. Ann. phys. 43:192. 1838.

1008. Parsons, W. J., jr.
1940. Ice in the northern streams of the United States. *Trans. Amer. geophys. un.* 21:970-973.
1009. *Record of ice break-up on Rock Lake, Jefferson County, Wisconsin. Data from 1887 to 1940. (Mss. in Dept. of Wildlife management, University of Wisconsin College of agriculture.)
1110. *Shipman, T. G.
1938. Ice-conditions on the Mississippi River at Davenport, Iowa. *Amer. geophys. un.* 19:590-594. [Tables for 1841/42-1934/35.]
1011. Swenson, Bennett.
1942. Opening and closing dates of river-navigation in the United States. *Mon. weath. rev.* 70:280. [Tables of average, earliest and latest closing and opening dates; average, maximum and minimum period of suspended navigation, for 14 places on 6 rivers.]
1012. U. S. Engineer department.
1932-1941. Annual reports of Chief of Engineers, U. S. Army. Pt. 2. Commercial statistics water-borne commerce of the United States for the calendar year 1932-1941. 10 v. [Navigation season included in notes for each harbor.]
1013. U. S. Engineer department.
1935. The Ohio River. 5th ed. rev. to June 30, 1934. Washington. iii, 438 p. illus., map.
1014. U. S. Engineer department. Rivers and harbors board.
1936. Transportation lines on the Mississippi River system, 1936. Washington, D. C. vii, 124 p. plates, maps. (Transportation series no. 4.)
1015. *U. S. Weather bureau.
Closing and opening dates of river navigation in the United States due to ice. (Mss. from unpublished data in the Weather bureau.) [Data for 16 places.]
1016. *U. S. Weather bureau.
1926. Summary of climatological data for Alaska, by sections. Section 2, The Interior valleys of Alaska. *Bull. W. U.S.W.B.* Vol. III. [Tables: "Date ice broke in spring and river closed in autumn", give data from 1882-1921 for various stations on Iditarod, Koyukuk, Kuskokwim, Takotna, Tanana and Yukon rivers. Some stations do not have data for all above-mentioned years.]
1017. Wentworth, C. K.
1932. The geologic work of ice jams in subarctic rivers. *Wash. Univ. studies sci. tech. n. s.* 7:49-80. [Dates of opening and closing of Yukon River, pp. 57-58.]
1018. Wing, L. W.
1943. Freezing and thawing dates of lakes and rivers as phenological indicators. *Mon. weather. rev.* 71:149-157.

SEE ALSO: 187, 188, 193, 202, 248, 632, 633, 680, 681, 695, 704-720, 962.

21. RIVERS AND LAKES

EURASIA

1019. Abel's, G.
1892. Izmereniâ plotnosti snega v Ekaterinburge zimofû 1890-91 g. (Sudden freezing of snow at Ekaterinburg... winter 1890/91.) Zap. Akad. nauk. 69, prilozh. 2. 24 p. [On one of the Lena tributary streams. 56°49'N, 78°15'E.]
1020. Al'tberg, V. ÎĀ.
1931. Donnyi led i problemy Angary i Bol'shoi Volgi. (Anchor ice and problems of the Angara and Greater Volga.) Izv. Gos. gidrol. inst. 39/40:36-55.
1021. Al'tberg, V. ÎĀ.
1934. Geograficheskoe rasprostranenie donnogo l'da na territorii SSSR i gidrotekhnicheskoe stroitel'stvo. (The geographical distribution of anchor-ice in the territory of U.S.S.R. and its hydrotechnical construction.) Gidrotekhnicheskoe stroitel'stvo. 1934(6):32-34.
1022. Al'tberg, V. ÎĀ.
1936. Flusseis und winterregime; sammelbericht von der UdSSR zum punkt 7 des programms der V. Hydrologischen konferenz der Baltischen Staaten. Einschliesslich referate von S. A. Sovetov, Über eisstaue auf der Newa; F. N. Sofronov, Grundlagen der vorausberechnung der eisbildung und der gestaltung der eisdecke in wasserlaufen. Rep. 5th Hydrol. conf. Baltic states. 7D. 28 p.
1023. Al'tberg, V. ÎĀ.
1938. Twenty years of work in the domain of under-water ice-formation (1915-1935). Bull. Int. geod. geophys. un. Assn. sci. hydrol. 23:373-407.
1024. Al'tberg, V. ÎĀ., V. K. Al'tberg, E. A. Popov i P. I. Syrnikov.
1932. Materialy po issledovaniû zimnego reshima reki Volkhova v 1929-1931 g.g. v. raione 6-i GES. (Material on research of winter regime of the Volkov River 1929-1931.) Issled. rek SSSR. 2:3-60. illus., tables, diagrs.
1025. Ångström, Anders.
1937. On the function of ice in the river Götaälv as a function of the meteorological factors. Geogr. ann. 19:126-130. Bull. Int. geod. geophys. un. Assn. sci. hydrol. 23:343-346.
1026. Antonov, V. S.
1940. V nizov'îakh Eniseîa (opyt Ust'-Kureiskoi ledoissledovatel'skoi stanŕsii.) (On the lower part of the Yenesei River. From Ust-Kureikin ice station). Moscow-Leningrad. 40 p. (Politupravlenie Glavsevmorputi. Bibliotekha "Stakh-anovŕsy Arktiki." Kn. 31.)
1027. *Anzahl der tage, an denen die schiffahrt auf der Elbe bei Hamburg durch eis gehemmt war (1815-74.) Ann. hydrogr., Berlin. 3:64-65. From Hamburgischen borsenhalle, no. 19475, 19 January 1875.

1028. Arenstein, Joseph.
1849–1850. Eisverhältnisse der Donau in Pesth in der jahren 1847–49, 1849–50. S.B. Akad. wiss. Wien. Math.-phys. kl. 3:331–336. 5:201–206. tables, diagrs.
1029. Artemonov, D. S.
1933. Deistvie lediânogo pokrova na rekakh Volzhskogo basseina (po prakticheskim nablûdeniâm sudokhodstva). (Work of the ice in the Volga River basin.) Trud. Inst. gidrotekh. Sborn. ledotekh. 1:97–164.
1030. Aufgang und zufrieren der Dwina bei Archangel in den jahren 1734–1819.
1820. Aurora. 2:64.
1031. Austria. Bundesministerium für land- und forstwirtschaft. Wasserbausektion.
1932. Der eisstoss an der österreichischen Donau im winter 1928/29. Wasserwirtschaft. 25:99–107. [Data beginning 1829/30.]
1032. *Avinov, I. N.
1858. Vskrytie r. Oki v Kasimovskom uезде. (Opening of the Oka in the district of Kasimoff, 1837–1857.) Vestn. Russ. geogr. obshch. 22(5):93–94.
1033. Balashov, K. N. i I. I. Tamarskii.
1938. Gidrologicheskii ocherk reki Ebetem. (Hydrology of Ebetem River.) Trud. Arkt. inst. 105:51–71. [Ice conditions, pp. 59–63. Tributary of Lena.]
1034. Basin, M. M.
1937. Ispytaniâ soprotivoeniâ lediânogo pokrova r. Sviri szhatiû, srezu i islomu v period tafân'ia vesnoi 1934 (Rukopis' v Institute gidrotekhniki.) (Tests for strength of ice of Svir R. to pressure, shearing and breaking during the spring thaw 1934. Ms. Hydrotechn. inst.)
1035. Bayer, D.
1893. Ein eisgang an Oberrhein. Erinnerung an selbsterlebtes. Allg. bauztg. 58:98–99.
1036. Behning, Arvid.
1926. Der eisgang der Wolga 1926. Int. rev. hyrob. 16:272–275.
1037. *Bernadskie, N. M. i V. M. Bernadskie.
1924. Vskrytie i zamerzanie reki Volkhova. (Breaking up and freezing of the Volkhov River.) Materiâly po issledovaniû reki Volkhova i ego basseina. 1:27–71, 205–217. illus. [Data 1881–1920. Novgorod, Volkhovo, Gostinopol'e i Novoladoga.]
1038. Bessonov, E. A.
1914–1923. Issledovanie l'da r. Tomi pred ledokhodom 1913–1915 gg. (Ice observations on the river Tom during ice years 1913–1915.) Izv. Tomsk. tekhnol. inst. 35:1–6. 1914. 43(3): 26–27, 27–28. 1923.
1039. Blanchard, Raoul and R. E. Crist.
1935. Geography of Europe. New York, Henry Holt. 490 p.
1040. Bogardus, J. F.
1934. Europe, a geographical survey. New York, Harper & Brothers. 713 p.

1041. Bogdanov, D. A.
1936. Materiâly po lotsii Îzhno-Taimyrskogo vodnogo puti. (Material for sailing the S. Taimyr waterways.) Leningrad, Glavsevmorputi. 117, 2 p. illus. [Rybnaya River, Noril'skaya River, Piasin River and Lake, Avamo-Tachenarsky portage.]
1042. Bogovoi, I.
1924. Ledokhod na Severnoi Dvine v 1923-1924 gg. i nekotorye vyvody. (Floating of the ice in the North Dvina 1923-1924 and some results.) Severnoe khozâistvo. 7:51-67.
1043. *Boguslawski, G. H. von.
1873. Uebersicht der tage, an welchen die mündungen der Oder (Peene, Swine, Divenow) vom eise des winters freigeworden sind (von 1828 bis 1873). Ann. hydrogr., Berlin. 1:78-80.
1044. Borodai, N. I.
1939. Materiâly k izucheniiu stroeniâ ledianogo pokrova Baikala. (Materiaux pour l'étude de la structure de la nappe de glace du Lac Baikal.) Trud. Baikal'sk. limnol. stants. 9:71-114.
1045. Botkin, A.
1900. Materiâly dlia izucheniâ ozera Baikal. (Material for the study of Lake Baikal.) St. Peterburg, Izd. Morskogo ministerstva.
1046. Braun, Gustav.
1916. Deutschland. Berlin, Gebrüder Borntraeger. 363 p.
1047. Bregman, G. R.
1940. Atlas of the opening and freezing of rivers of the European part of USSR. (In Russian.) (Ms. in State Hydrological Institute, Leningrad.)
1048. Briest.
1907. Ueber die eisverhältnisse des Ryck unfern des Greifswalder bodden. Met. z. 24:129.
1049. Bydin, F. I.
1931. K voprosu ob issledovanii ledokhodnogo rezhima rek. (On questions concerning research in the ice regime of rivers.) Zap. Gos. gidrol. inst. 4:5-19. 2 tables. French résumé.
1050. Bydin, F. I.
1932. Izuchenie rosta l'dav prirodnkh usloviâkh. (Study of ice formation under natural conditions.) Izv. Inst. gidrotekhn. 4:175-183. English summary. [Study of river Svir.]
1051. Bydin, F. I.
1933. Zimnii rezhim rek i metody ego izucheniâ. Regime hivernal des fleuves et les méthodes de son étude. Issled. rek SSSR. 5. 237, 2 pp. illus., fold. diags. [Ice regime, pp. 89-115.]
1052. Bydin, F. I.
1933. Nekotorye kharakteristiki letnego i zimnego rezhima r. Volgi. (Some characteristics of summer and winter regimes of the Volga River.) Issled. rek. SSSR. 6:21-73. illus., fold. diags. [Data on N.-Novgorod and Samara-Luki regions.]

1053. Bydin, F. I.
1934. Bor'ba so l'dom na r. Svir. (Struggle against the ice on the river Svir.) Svir'stoi. 158 p. English summary.
1054. Bydin, F. I.
1934. Ice-formation on the Svir River and its peculiarities. (In Russian.) Izv. Gos. gidrol. inst. 3:111-147. [Unverified reference.]
1055. Bydin, F. I.
1934. Opyt dolgosrochnogo prognoza zamerzaniâ vodoemov po SSSR v zimu 1934-35 g. (Attempt at long-range forecasting of freezing of the basins of the USSR during winter 1934-35.) Izv. Gos. gidrol. inst. 66:52-62. [Tables include 78 rivers.]
1056. Bydin, F. I.
1935. Skhema raionirovaniâ tolshechin l'da po SSSR. (A scheme to district the ice-thickness over USSR.) Gidrotekhnicheskoe stroitel'stvo. 1935(10):34-38.
1057. Bydin, F. I.
1937. Thermal and ice-regime of some rivers in USSR and the conditions of foreseeing the same. Bull. Int. geod. geophys. un. Assn. sci. hydrol. 23:245-273. tables, diags.
1058. Bydin, F. I.
1939. Termicheskie i ledovye rezhimy nekotorykh rek SSSR i usloviâ ego predskazaniâ. (Thermal and ice regime of some rivers of USSR and conditions of forecasting same.) Trud. Gos. gidrol. inst. 9:14-28.
1059. Bydin, F. I. i N. N. Petrunichev.
1932. Issledovanie formuly inzh. Poryvkina po narastaniû poverkhnostnogo l'da. (Investigation of the formula of growth of surface-ice proposed by M. P. Porivkin.) Izv. Inst. gidrotekhn. 4:184-195. [Tables for rivers Volkhov and Volga.]
1060. *Champoiseau, Ch.
1875. Tableau des prises et des débâcles du Danube à Galatz, pendant les quarante dernières années. (1836-1875.) C.R. Acad. sci. Paris. 80(1):1034-1035.
1061. Clarinval, A.
1872. Remarques sur la formation des premiers glaçons sur les rivières. Bull. Assn. sci. France. 9:379-381. [On the Moselle River.]
1062. Commission du régime des eaux du Danube.
1934. Étude sur le régime des glaces du Danube. Avec une préface de M. Carlo Rossetti. Mailand. 165 p. 41 tables.
1063. Danilov, L. G.
1908. O zamerzaniî Volzhsko-Kamskago basseina. (On freezing in the Volga-Kama basins.) Met. vestn. 18:56-57.

1064. *Davydov, L. K.
1939. Vskrytie rek arkticheskoi i subarticheskoi zony SSSR. (Breaking up of the rivers of the Soviet Arctic and subarctic zones.) Problemy arktiki. 1939(1):15-31. [Tables of dates of opening and freezing of 48 rivers.]
1065. Devik, Olaf.
1931. Thermische und dynamische bedingungen der eisbildung in wasserläufen auf Norwegische verhältnisse angewandt. Geofys. publ. 9(1). 100 p.
1066. Devik, Olaf.
1932. Die berechnung des längenprofils eines flusses und dessen änderung bei einsetzender eisbildung. Beitr. phys. fr. atm. 19:220-232. [Theoretical study based on Norwegian and Swedish streams.]
1067. Devik, Olaf.
1938. Über wasserstandsänderung eines flusses bei eisbildung, auf Götaälv angewandt. Rep. 6th Hydrol. conf. Baltic states. 3B. 5 p. [Unverified reference.]
1068. Devik, Olaf.
1944. Ice formation in lakes and rivers. Geogr. j. 103:193-203.
1069. Der Diesjährige eisgang auf der Weichsel. Zbl. bauverw. 3:143-145.
1883.
1070. Dits, F.
1924. Donnyi led v praktike eksploatafsii Arkhangel'skoi gorodskoi elektricheskoi stantsii. (Practical aspects of bottom ice in Archangel elec. station.) Severnoe khoziaistvo. 1:37-40. [Ice in pipes on bottom of North Dvina.]
1071. Dufour, Charles.
1904. Les époques d'apparition des premières glaces au Japon. Annu. soc. mét. France. 52:203-204.
1072. Dybovskii, V. i V. Godlevskii.
1897. Fiziko-geograficheskie issledovaniâ na Baikale v 1869-1876 gg. (Physico-geographical research on Baikal 1869-1876.) Trud. Vost.-Sib. otd. Russ. geogr. obshech. 1:1-62. Baikal'skii sbornik. 1. [Ice, pp. 12-17.]
1073. Ebeling, E.
1929. Die eisverhältnisse der Elbe in Sachsen. Mitt. Ver. erdk., Dresden. 1929:107-136.
1074. Die Eisbildung bei Frankfurt a. M. am 28. XII. 1890. Zbl. bauverw. 1891. 11:79.
1075. K. Elbstrombauverwaltung in Magdeburg.
1898. Der Elbstrom, sein stromgebiet und seine wichtigsten nebenflüsse. Berlin. 3 v. Atlas of 30 charts.
1076. Encyclopedia of Soviet Siberia ... (In Russian.) Novosibirsk. 3 v. 1929-1932.

1077. Fänner, Gottlieb.
1888. Der eisstoss der Donau. Wschr. Österr. ing. archit.-ver.
13(34):301-304.
1078. Fickeler, Paul.
1926. Die winterlichen eisbildungen in Mittelasien. Petermanns
mitt. 72:247-253.
1079. Fickeler, Paul.
1927. Der Baikalsee. Naturwissenschaften. 15:84-90. [Remarks
on ice conditions.]
1080. Fujiwara, S. and R. Sekiguti.
1936. Analysis of the data for freezing of Lake Suwa. (In Japanese;
English summary.) J. Met. soc. Jap. n.s. 14:587-591.
1081. *Finland. Valtion meteorologinen laitos.
1904-1907. État des glaces et des neiges en Finlande pendant l'hiver
1892/93-1897/98. Kuopio & Helsinki. Continued to date,
in Finnish Meteorologisches jahrbuch, 1901+.
1082. Fischer, Karl.
1911-1912. Die wasserstands- und eisverhältnisse in den Norddeutschen
stromgebieten im Dezember 1910, Januar-September 1911,
Januar-März, 1912. Zbl. bauverw. 31:44,116,196,236,308,
352,472,504,624. 32:84,198-200.
1083. Fischer, Karl.
1913-1914. Die wasserstands- und eisverhältnisse in den norddeutschen
stromgebieten im jahre 1913. Zbl. bauverw. 33:88,140,
192,244,335,348,484,531,612,684. 34:24.
1084. Forel, F. A.
1880. La congélation des lacs Suisses et Savoyards pendant l'hiver
1879-80. L'Écho des Alpes, Genève. 1880(2):94-112, (3):
149-167.
1085. Fritsch, Karl.
1855. Über die constanten verhältnisse des wasserstandes der Donau
bei Wien. S.B. Akad. wiss. Wien. Math.-nat. kl. 15:169-
199. [Ice on the Donau, pp. 180-188.]
1086. *Fritsch, Karl.
1864. Die eisverhältnisse der Donau in Österreich ob und unter
der Ems und Ungarn in den jahren 1851/52 bis 1860/61.
Denk. Akad. wiss. Wien. Math.-nat. kl. 23(1):121-244.
[Tables of 1st and last and greatest ice, pp. 231-244.]
1087. *Fritsch, Karl.
1867. Die eisverhältnisse der Donau bei Wien, 1853-1862. S.B.
Akad. wiss. Wien. Math.-nat. kl. 46(2):413-461. 1 map.
1088. Fritsch, Karl.
1867. Die eisverhältnisse der Donau in den beiden jahren 1860/1
und 1861/2. S.B. Akad. wiss. Wien. Math.-nat. kl. 55(2):
432-479. tables, diagrs.
1089. Fritsch, Karl.
1868. Die eisverhältnisse der Donau in den beiden jahren 1862/3
und 1863/4. S.B. Akad. wiss. Wien. Math.-nat. kl. 57(2):
115-163.

1090. Fritsch, Karl.
1868. Die eisverhältnisse der Donau in den jahren 1864/5 bis 1867/8. S.B. Akad. wiss. Wien. Math.-nat. kl. 58(1): 1015-1024.
1091. *Fritsch, Karl.
1874. Die eisverhältnisse der Donau im lande Österreich ob und unter der Ems in den jahren 1868/9 bis 1872/3. S.B. Akad. wiss. Wien. Math.-nat. kl. 69:677-709. [Tables include amt. of ice, water level, and air temperature.]
1092. Gapanovich, I. I.
1934. Russia in northeastern Asia. (In Russian.) Peking, Press of the Russian Peking Mission. 2v. 186 & 202 p. T.-p. in Russian and English.
1093. Geistbeck, Alois.
1886. Die eisverhältnisse der Isar und ihrer nebenflüsse. Jber. Geogr. ges. München. 10:1-7.
1094. Germany's inland water communications.
1940. Bulletin of international news. 17:66-75.
1095. Giandotti, M.
1929. La formazione dei ghiacci nel Po nell inverno 1929. (Ice formation on Po River, winter 1929.) Annali dei Lavori pubblici. 67:755-771 incl. photos. [Air and water temperature data Jan/Feb 1929.]
1096. * Gorod Eniseisk.
1863. (The Yenisei route.) (In: Einseiskii okrug i ego zhizn. Ch. 7.) Zap. Russ. geogr. obshch. 4:94-109. [Tables of opening and freezing of the Yenisei River, 1790-1805, 1821-1859. pp. 96-97.]
1097. Görz, M.
1888. Die eisbrecharbeiten im Weichselstrom. Z. bauw. 38:351-376.
1098. Gosudarstvennoe russkoe geograficheskoe obshchestvo. Kommissii po izucheniiu donnago l'da.
1905. Otchet . . . ob eia rabotakh v 1904 gody. (Report of the work of 1904, carried out by the Commission for the study of anchor ice of the Russian geographic society.) Izv. Russ. geogr. obshch. 41(2):289-396. tables, map of distribution of anchor ice in Russian territories.
1099. Götzing, Gustav.
1909. Studien über das eis des Lunzer Unter- und Obersees. Int. rev. hydrob. 2:386-396.
1100. Gravelius, H.
1901. Die eisverhältnisse des Dnjepr. Zeit. f. gewässerkde. 4(2): 103-108.
1101. *Gt. Brit. Naval staff. Naval intelligence division.
1920. A Handbook of Siberia and Arctic Russia. Vol. I. General. London. 384 p. (I.D. 1207.) ["Freezing and thawing of the rivers of Siberia": pp. 38-43.]

1102. Guttonbergen, Heinrich.
1930. Eisgang und hochwasserkatastrophe 1830. *Unsere heimat.*
n.f. 3(3):70-90. [Vienna and its suburbs.]
1103. Haidinger, Wilhelm von.
1847. Betrachtungen über den eisgang der flüsse. *Ber. mitt.*
Freunde. naturw. Wien. 2:278-282.
1104. Haidinger, Wilhelm von.
1848. Beobachtungen der veränderungen an der Donau während der
bildung und zerstörung der eisdecke. *Ber. mitt. Freunde.*
naturw. Wien. 4:142-148.
1105. Haidinger, Wilhelm von.
1849. Ueber das eis der Donau in dem gegenwartigen winter 1848-49.
S. B. Akad. wiss. Wien. Math.-phys. kl. 2:24-28.
1106. *Haidinger, Wilhelm von.
1854. Tabelle der eisbedeckung der Donau bei Galacz (45°26' N. Br.,
25°43' O. L. von Paris) in den jahren 1836 bis 1853. *S. B.*
Akad. wiss. Wien. 12:9-11. *Ann. phys.* 92:496.
1107. Haidinger, Wilhelm von.
1860. Bericht über die eisdecke der Donau in Ungarn im winter und
ihren bruch im März 1858. *Denkschr. Akad. wiss. Wien.*
Math.-naturh. kl. 18:1-8. fold. chart.
1108. *Haidinger, Wilhelm von.
1860. Die eisverhältnisse der Donau in den jahren 1851-1860. *S.B.*
Akad. wiss. Wien. 42:739-741.
1109. Hamberg, Axel.
1919. Observations on the movement of lake ice in Lake Sommen
in 1918 and remarks on the geographical distribution of
similar phenomena. *Bull. Mineral.-geol. inst. Upsala univ.*
16:181-194.
1110. *Hambruch, Paul.
1905. Die eisverhältnisse auf der Unterelbe. *Ann. hydrogr., Berlin.*
33:435-454. tables, diag. [Ice occurrence at Hamburg
1870-1904.]
1111. Hassert, K.
1931. Allgemeine verkehrsgeographie. Bd. 1. Berlin, W. de
Gruyter.
1112. Heinrichs, Axel.
1892-1898. Snö- och isförhållandena i Finland år 1890-1892. *Bidr. Finl.*
nat. folk. 51:231-284. 1892. 54:73-154. 1894. 57:221-625.
1898. diagrs., fold. maps.
1113. Herpich, Hans.
1910. Die eisverhältnisse in den Südbayerischen seen. *Münchener*
geogr. stud. 26. 89 p. tables, 3 charts. (Inaug.-diss.-Tech.
hochschule, München.)
1114. *Hildebrandsson, H. H. et C. A. Rundland.
1879. Prise et débacle des lacs en Suède automne 1871-printemps
1877. *Nov. acta Vetensk.-soc. Upsala.* s.3, 10, pt. 2 (7).
8 p. tables, charts.

1115. Hohnschild, Fritz.
1936. Der einfluss der witterung auf den verkehr der Markischen wasserstrassen in den jahren 1928 bis 1933. Giessen, Buchdruckerei Meyer. 101 p. [Ice, pp. 20-25.]
1116. Holmsen, Andreas.
1901. Isforholdene ved de norske indsjøer. (Ice conditions of Norwegian lakes.) Skr. Norsk. vidensk.-akad. Mat.-natur. kl. 4. 271 p. French résumé. [Diagrs. cover data 1870-1899.]
1117. *Hülphers, A. A.
1765. Observationer på is-lossningen i Mälaren, vid Westerås, sedan år 1712. (1712-1765.) Handl. Svensk. vetensk. akad. 26:116-118.
1118. Āchevskii, L.
1904. K voprosu ob obrazovanii rechnogo l'da i o ego vliĀnii na skul'pturu beregov reki. (On the question of river ice and its action in sculpturing the courses of the streams.) Geol. issled. zolot. obl. Sib. 5:53-132. illus. French résumé, pp. 129-132.
1119. Āroslavtsev, G. G.
1925. Burnyi ledokhoda na Rione v Ānvarē 1925 g. (Stormy ice-drive on the Rion River Jan. 1925.) Izv. TŠentr. gidromet. bĀuro. 5:182-184. illus. [Black Sea area.]
1120. Idman, S. och Einar Meinander.
1894. Solfläckarnes inflytande på islossningstiderna i Finlands floder och på vattenståndet i finska viken. Einfluss der sonnenflecken auf die aufgangszeiten der flüsse Finnlands und den wasserstand in Finnischen meerbusen. Fennia. 9(4). 22 p. tables.
1121. Ihrig, D.
1935. Az 1935. Evi Februari Mohacsi jeges arviz. Das eishochwasser bie Mohacs im Februar 1935. Vizügyi közlemények. 17:483-495. German, English, French and Italian abstracts. [Description of ice barrier in Mohacs, Bezdan reach of Danube; cause of formation of ice barriers.]
1122. Īrev, B. N.
1934. NavigatsiĀ k ust'Ī reki Pechory. (Navigation of the mouth of the Pechora River.) KhoziĀistvo severa. 1934(5):73-83. 5 tables.
1123. Jackson, J. R.
1835. Congelation of the Neva at St. Petersburg and temperature of its waters when covered with ice. J. Roy. geogr. soc. 5:1-22. diagrs. [Chronological table of freezing and opening from 1718-1834.]
1124. *Jackson, J. R.
1838-1841. Uebersicht der auf- und zugänge der Newa, 1718-1840. Ann. phys. 43:426-430. 1838. 52:638-641. 1841.
1125. Jakushov, P.
1934. Beispiel eines einfriervorganges, eisstosses und einer wasserstandserhöhung im Newafluss. Wasserwirtschaft. 27: 217-219.

1126. Jakushov, P.
1934. Über die eisverhältnisse im Nawa- und im Swirfluss. Wasserwirtschaft und technik. n.s. 1:59-61. [Blockade of ice 1928/29.]
1127. Jakushov, P.
1934. Das winterregime des Wolchowflusses. Wasserwirtschaft und technik. n.s. 1:27-30.
1128. Johanson, E. I.
1927. Zimnii rezhim r. Volkova i oz. Ilmen'. (Winter regime of Volkhova River and Lake Ilman.) Materiâly po issledovanii reki Volkhova i ego basseina. 14. 187, 77, VI pp. 15 fold. charts.
1129. *Johansson, O. V.
1932. Isförhållandena vid Uleåborg och i Torne älv. Bidr. Finl. nat. folk. 84(3). 45 p. [Various tables covering ice conditions of several rivers for many years.]
1130. Keöpeczi-Nagy, Z. von.
1940. Die eisverhältnisse der flüsse in Ungarn im winter 1939/40. Időjárás. 44:102.
1131. Khmyznikov, P. K.
1930. Predvaritel'nyi otchet o rabote Iânskogo gidrologicheskogo otrîada Iâkutskoi ekspeditsii 1927-1929 godov i voprosy sudokhodstva po reke Iâne. (Preliminary report on work of Jakutsk hydrological expedition to the Jana in 1927-29 and problems of navigation of the Jana.) Mater. Kom. Iâkutsk. A.S.S.R. 35. 48 p. illus. [Table of freezing and opening of Jana, p. 41.]
1132. Khmyznikov, P. K.
1934. Gidrologiâ basseina reki Iâny. (Hydrology of the Yana River basin.) Akad. nauk. Sovet izuch. prirod. resursov. s. Iâkutsk. 19. 251 p. 35 figs. 85 tables, charts, diagsr.
1133. Kolupaila, S.
1937. Le Niemen, étude hydrologique. Rev. géogr. alpine. 25: 381-409.
1134. *Komarnitski, S.
1923. L'odove vskrittîâ r. Desni bilîâ m. Chernigova. (Breaking up of the ice in river Desna near the city of Chernigov.) Inform. bûl. ukrmetu, Kiev. 1/3:40-44. [Data in tables and graphs for 1884-1921.]
1135. Kuposov, V. V.
1929. Ledîanoi pokrov na reke Neve v raione Ivanovskikh porogov v febrale 1929 g. (Ice cover of Neva River at Ivanov bridge in Feb. 1929.) Zap. gidrogr. 56:168-170.
1136. Korovkin, I. P.
1940. Materiâly po gidrologii reki Khatangi. (Hydrologic material on river Khatangi.) Severnyi. morskoi put'. 16:79-98. [Ice regime: pp. 83-84.]

1137. Korzhavin, K. N.
1938. Nablūdeniā nad izmeneniiem prochnosti l'da r. Obi u r. Novosibirska k periodu vesennego ledokhoda 1934 g. (V svāzi s rabotoi ledorezov mosta). (Observations on the changes of strength of ice in the river Ob' at Novosibirsk during the period of spring ice-drifting of 1934.) Trud. Novosibirsk. inst. voen. inzh. zhel.-dorozhn. transp. 3: 68-76. [Unverified reference.]
1138. Korzhavin, K. N.
1938. The work of ice-cutters of bridge-piers under the conditions of ice-drifting in Siberian rivers. (In Russian.) Trud. Novosibirsk. inst. voen. inzh. zhel.-dorozhn. transp. 3:3-54. [Unverified reference.]
1139. Laptev, S. N.
1925. Donnyi led i ego obrazovanie na r. Angare. Būl. Vost.-Sib. otd. Russ. geogr. obshch. 6:94-96.
1140. Lászlóffy, W.
1934. A folyók jegviszonyai, kueloenoes tekintettel a magyar Dunara. (Ice conditions on rivers, especially in regard to Hungarian Danube.) Vizūgyi közlemenyek. 16:369-435. plates.
1141. Lebedev, V. N.
1911. Predvaritel'nyi otchet ob izsledovanii vod Kamchatki v 1908-1909 g. (Preliminary report on exploration of Kamchatka waters 1908-09.) Izv. Russ. geogr. obshch. 47:27-81. Chart of mouth of Kamchatka River.
1142. Lebedev, V. V.
1936. Materiāly po gidrologii r. Pīasiny. (Material on hydrology of Piasina River.) Trud. Arkt. inst. 75. 47 p. illus. [Ice conditions, pp. 26-31.]
1143. Leningrad. Vsesoūznyi arkticheski institut.
1934. Materiāly po lotsii Ūzhnotaimyrskogo vodnogo puti. Reka Rybnafā, reka Noril'skafā, ozero Pīasino, reka Pīasina, Avamo-Tachenarskii volok. (Sailing directions material for the S. Taimyr waterways. Rybnaya River, Norilskaya River, Lake Piasin, Piasin River, Avamo-Tachenarsky portage.) Leningrad. 60 p. Suppl. to "Atlasu lotsmanskoi karty". [Results of Hydrographic section of S. Taimyr expedition of the Glavsevmorputi, 1933.]
1144. Leopold, E.
1930. Über die behinderung der binnenschiffahrt durch elementäre naturvorgänge. 1. Frostsperren. Deutsche wasserwirtschaft. 25:71-77. [Number of days interruption of shipping on German rivers.]
1145. Leopold, E.
1935. The role of inland waterways in the general transportation network of a country. Rep. 16th Int. congr. navig., Brussels, 1935. 53.

1146. Levänen, S.
1889. Medelepokerna jämte deras sekulära förändringar för islossningen och isläggningen i Kumo'elf. Fennia. 1(8). 10 p. tables.
1147. *Levänen, S.
1890. Bearbetning af tiderna för islossningar i Aura å. Calcul des données sur l'époque de la débâcle de la rivière d'Aura. Fennia. 3(10). 6 p. French résumé. [Table of data 1740-1764.]
1148. Liljequist, G.
1941. Winter temperatures and ice conditions on Lake Vetter. Geogr. ann. 23:24-52. Medd. Svensk. Met.-hydrogr. anstalt. 35. 29 p.
1149. Listov, IŮ. A.
1879. NablŮdeniâ nad zamerzaniem solŮnago ozera bliz g. Iletska, Orenburgskoi gubernii. (Observations on the freezing of a salt water lake near Iletzk, government of Orenburg.) Zap. Russ. geogr. obshch. 8:229-248.
1150. Lohr, A.
1929. Eisbeobachtungen auf der Elbe vom flugzeug aus. Ann. hydrogr., Berlin. 57:219-222.
1151. Lokhtin, V.
1906. LedŮanoi nanos i zimnie zatory na r. Neve. (Floating ice and winter block on the Neva River.) St. Peterburg. 85 p. illus. (Mater. opis. russk. rek. 10.)
1152. Lokhtin, V.
1908. Zamerzanie rek. (Freezing of rivers.) Izv. sobr. inzh. put. soobshch. 25:26-31, 43-48.
1153. Lorenzi, Arrigo.
1906. Alcune notizie sul gelo dell'Adige nel gennaio del 1905. Mondo sotter. 2:32-33.
1154. Lorenzi, Arrigo.
1908. La congelazione del l'Adige a Boara nel gennaio del 1907. Atti VI Congr. geogr. ital. 2:89-94.
1155. *Loveiko, M. V.
1930. Sinopticheskie usloviâ vskrytiâ rek v Evropeiskoi chasti SSSR. (Synoptic conditions of the breaking-up of the rivers in European Russia.) Geofiz. sborn. 7(2):95-117. charts. English summary. [Data 1881-1910.]
1156. Ludensee, S.
1929. Eisbeobachtungen auf see vom flugzeug aus während eines eiserkundigungsfluges am 2. März 1929. Ann. hydrogr., Berlin. 57:232-233.
1157. Lyde, L. W.
1930. The continent of Europe. 4th ed. London, Macmillan. 456 p.

1158. *Maass.
1877. Über den eisgang der Elbe. Z. bauw. 27:175-190. tables.
[Data for Barbyer, 1844/45-1874/75; Magdeburg, 1829/30-1874/75.]
1159. *Mädler, J. H.
1856. Die eisbedeckung des Embach in Dorpat (1840-1853.) Arch. naturk. Dorpat. s.2. 1:351-352. [Table lists day of appearance, disappearance and number of days occurrence.]
1160. Maillet, Edmond.
1909. Études relatives à la formation des glaces sur le fleuve de la Neva. Annu. Soc. mét. France. 57:73-74. [Review of Timonov and Tsionglinski. Mem. Congr. navig. XI., 1908.]
1161. Maillet, Edmond.
1914. Sur les conditions de la prise par les glaces de la Seine à Paris. Annu. soc. mét. France. 62:97-98.
1162. Maksimov, A.
1929. O vskrytii i zamerzanii r. Sosvy u Berezova. (On the breaking-up and freezing of the Sosva River at Berezova.) Būl. Obshch. izuch. kraia Muz. Tobol'sk. severa. 2(4):21-23.
1163. Matseino, A. I.
1922. Snegomernafâ s'emka v basseine r. Lavy, Novoladozhskogo uezda, Petrogradskoi gub. (Snow survey of the Lava River, Novoladozhk section, St. Petersburg Gulf.) Būl. Gos. gidrol. inst. 5:4-5.
1164. Matusiewicz, J.
1939. Badania nad zlodzeniem jezior w Polsce. (Étude du regime des glaces des lacs en Pologne.) Zes. Pol. Wiad. sluz. hydrogr. 1:49-59.
1165. Maurer, J.
1929. Der strenge winter und die grossen seegefrörne Februar/März 1929 in der Schweiz. Das Wetter. 46:97-101.
1166. Meier, H.
1891. Ueber grundeisbildung. Ann. hydrogr., Berlin. 19:137-141. [Data on the Elbe River near Hamburg.]
1167. Meier, H.
1892. Weiteres über grund- und siggeis. Ann. hydrogr., Berlin. 20:297-302. [Data on Elbe River near Hamburg.]
1168. Melin, Ragnar.
1938. Investigations regarding the formation and breaking up of the ice and of its thickness on lakes and rivers in Sweden. Bull. Int. geod. geophys. un. Assn. sci. hydrol. 23:341-342.
1169. *Mel'nikov, S.
1856. O vskrytii Volgi v Jaroslavle s 1766-1786 gg. (Opening of the Volga at Jaroslavl 1766-1786.) Vestn. Russ. geogr. obshch. 18(5):25.

1170. Merlin, M.
1929. L'hiver 1929 et la navigation rhénane. La Navigation du Rhin. 7:114-121. illus.
1171. Molodykh, I. F.
1927. Puti soobshcheniia Ĭakutii. (Ways of communication in Iakutia.) (In: Ĭakutiia. Leningrad, Akad. nauk. pp. 575-673. fold. diagrs., map.)
1172. Mozheiko, L. J.
1934. On ice-phenomena on Lake Ladoga in the region of the Osinovets lighthouse. (In Russian.) Sborn. Leningrad. nauchn.-issled. inzh. inst. vodosn. kanal. gidrotekhn. soor. inzh. gidrogeol. 1:24-31. [Unverified reference.]
1173. *Müllner, Johann.
1903. Die vereisung der Österreichischen Alpenseen in den wintern 1894/95 bis 1900/01. Geogr. abh. 7:49-200. tables.
1174. *Neese, Nicolaus.
1854. Einfrieren der Duna bei Riga. (1601-1852.) Correspondance métérologique. 1853:xiv.
1175. Nei, E.
1907. Vskrytie i zamerzanie Volgi. (Opening and freezing of the Volga.) Trav. Cab. géogr. phys. Univ. St. P. 3:95-121. illus. French résumé, pp. 118-121.
1176. Netherlands. Department van waterstaat.
1889-1930. Verslag van het voorgevallene tijdens den ijsgang op de Nederlandsche rivieren in den winter 1887/88, 1890/91, 1928/29. (Title varies.) (Other reports have been issued; not located.)
1177. Obruchev, V. A.
1892. Nashi svedeniia ob obrazovanii Angarskogo i Baikal'skogo l'da. (Unsere kenntnisse ueber bildung und eigenschaften der eisdecke der Angara und des Baikalsees.) Izv. Vost.-Sib. otd. Russ. geogr. obshch. 23(4):1-42. German summary.
1178. Odenwall, E.
1936. Lake Lappajarvi. Bathymetric charts, notes on thermal conditions, etc. Comm. 5th Hydrol. conf. Baltic States. 2A. 24 p. [Ice, pp. 17-18. Table data for 1911-1931 of number of continuous ice-cover days.]
1179. Oettingen, H. von.
1907. Ueber die grundeisbildung in unseren gewässern. Balt. wschr. 9:68-69.
1180. Ogievskii, A. V.
1929. Nekotorye dannye o zimnem i ledovom rezhime Ukrainskikh rek i ego izuchenii. (Some data on the winter and ice regimes of the Ukrainian rivers.) Trud. 2. Vse. gidrol. s'ezd, Leningrad, 2:84-89.

1181. Ogievskii, A. V.
1929. Zagal'ni risi stanu l'dovogo vskrytiâ za zimovii period 1905-1926 rr. na richkakh vodozboriv Ukraini. (General conditions of freezing and ice on river reservoirs of the Ukraine during the period 1905-1926.) Mat. Hidrol. sluzhbi 1925-26 gidrol. Kiiiv. Hidromet. shchorichnik. 4:56-57. chart. [Unverified reference.]
1182. Ohti, S.
1925. On the freezing of rivers in Korea and southern Manchuria. (In Japanese.) J. Met. soc. Jap. s.2, 3:211-221. illus. English summary, pp. 26-27, in Reviews and abstracts sections. [Dates of complete freezing for 20 years at 5 stations for rivers Liao, Ohryokuko, Daidoko and Kanko.]
1183. Ovodov, A.
1875. Zametka o vremeni vskrytiâ i zamerzaniâ vod v nekotorykh mestnostoakh Ufimskoi gubernii. (Notes on freezing and opening of waters in the government of Ufa.) Zap. Russ. geogr. obshch. Orenburgskii otd. 3:449-457. tables.
1184. Paczoska, Zofia.
1938. Congélation des fleuves en Pologne. Rep. 6th Hydrol. conf. Baltic States. 3C. 35 p. [Unverified reference.]
1185. Paczoska, Zofia.
1937-38. Zamarzanie rzek w Polsce. (Freezing of the rivers in Poland.) Zes. Pol. Wiad. sluz. hydrogr. 5:187-205. Badania geograficzne. 18/19:29-69. 1937. French summary.
1186. Pavlov, P. A.
1926. Freezing and breaking up of the ice on the Sungaree at Harbin, 1898-1925. Trud. Sungari. biol. sta. 1(3), s.B., pp. 1-12.
1187. Pawłowski, Stanisław.
1912. Zlodzenie górnej Wisły, górnego Dniestru, oraz ich dopływów. (Freezing of the upper Vistula and Dniester rivers and their tributaries.) Sprawozdanie Dyrekcji Akad. handlowej we Lwowie 1911/12:1-50.
1188. Pedder, A. Ū.
1929. Nabliŭdeniâ nad krepost'ŭ l'da reki Angary. (Observations on the strength of the ice of the Angara River.) Zh. geofiz. met. 6:69-76. tables. [Describes experiments 1925-28 on breaking rectangular strips of Angara ice and gives observed values of resistibility for 57 separate determinations.]
1189. Pedder, A. Ū.
1929. Opredeleniâ prochnosti l'da r. Angary. (Accurate ice forecasting for river Angara.) Zh. geofiz. met. 1:70-76.
1190. Peppler, W.
1929. Zur frage des zufrierens von binnenseen. Ann. hydrogr., Berlin. 57:215-218.
1191. Persiānov, V. V.
1908. K voprosu o zamerzanii rek i o proiskhozhenii lediānykh zatorov. (On the question of freezing of rivers and occurrence of blocking by ice.) Zh. Min. put. soobshch. 1908 (9):125-131.

1192. Piskacek, Ottokar.
1917. Die Donau . . . Wien und Leipzig, Waldheim-Eberle a.g. 87 p.
plates, maps, diagrs.
1193. Popesco, Georges.
1931. Inland ports, general dispositions . . . Rep. 15th Int. cong.
navig., Venice, 1931. 49.
1194. Poryvkin, N. P.
1926. Formula narastaniâ l'da v svîazi s dannymi issledovaniâ r.
Volkhova. (Formula for the formation of ice in connection
with data of investigations made on the Volkhov River.)
Bûl. Volkhov. gidro-elek. sil. ust. 7:84-110.
1195. Prussia. Wasser-ausschuss.
1896. Der Oderstrom, sein stromgebiet und seine wichtigsten neben-
flüsse. Berlin, D. Reimer. 3 v. illus., tables.
1196. Prussia. Wasser-ausschuss.
1899. Memel-, Pregel-, und Weichselstrom, ihre stromgebiete und
ihre wichtigen nebenflüsse . . . Berlin, D. Reimer. 4 v.
[Ice conditions for rivers and lakes and for the river mouths.]
1197. Ratz, Friedrich.
1930. Eisverhältnisse an der mainstufe Viereth bei Bamberg. Wasser-
kraft und wasserwirtschaft. 25:25-29. [Diagr. of data for
Main at Bischberg 1904-1929.]
1198. Reinberg, A. M.
1938. Materiâly po gidrologii nizov'ev reki Leny. (Hydrology of
lower reaches of the Lena River.) Trud. Arkt. inst. 105:
7-50. [Ice conditions, pp. 32-38.]
1199. Renqvist, H.
1936. The inland waters of Finland. Comm. 5th Hydrol. conf.
Baltic States, 1936. 1. 55 p. [Remarks on ice: p. 23.]
1200. Reymann, F.
1910. Die eisverhältnisse der Mur und Drau. Ein kritisch method-
ische untersuchung. Mitt. Geogr. ges. Wien. 53:509-579.
tables. [Data for 1896/97-1905/06.]
1201. Rodevich, V. M., ed.
1937. Gidrologiâ rek Sovetskoi arktiki. Vup. 3. Materiâly po
gidrologii reki Anabar. (Hydrology of the rivers of the
Soviet Arctic. Vol. 3. Hydrological material on the Anabar
River.) Trud. Arkt. inst. 106. 53 p. [Includes tables of
icing and breaking up.]
1202. Rouch, J.
1929. Le gel du Rhin en 1929. Rev. sci. 67:385-393. illus.
1203. Rouch, J.
1929. Le Rhin navigable. Rev. sci. 67:747-758.
1204. Rykachev, M. A.
1866. Dates moyennes de la débâcle et de la congélation des rivières
et des lacs de la Russie. Ann. Soc. mét. France. 14:154-
158.

1205. Rykachev, M. A.
1887. Über den auf- und zugang der gewässer des Russisches reiches.
Repert. mét. suppl. 2. 103, 309 p. plates.
1206. Rykachev, M. A.
1909. Otzyv o trude V. M. Lokhtina: "Ledîanoi nanos i zimnie zatory na r. Neve". (On V. M. Lokhtin's article: Ice drifting and blocking of river Neva by ice.) Sborn. otch. prem. i nagrađ. Akad. nauk. 1908:1-15.
1207. Samburenko, I. Z.
1938. Materiîaly po gidrologii nizov'ev reki Kolymy. (Hydrology of lower reaches of Kolyma River.) Trud. Arkt. inst. 105: 183-241. [Ice conditions: pp. 220-235.]
1208. Samel, J. U.
1938. Der wasserhaushalt der flüsse im nördlichen und mittleren Schweden. Wiss. veröff. Mus. länderk. n.f. 5:99-140.
1209. Samoilov, B. L.
1939. The ice on the Don at the beginning of April. (In Russian.) Vodosnabzhenie i sanitarnaya tekhnika. 10/11:39-41. [Unverified reference.]
1210. Satow, G.
1930. Das bodeneis in der Arktis. Tatsachen und hypothesen. Arch Dtsch. seewarte. 49(5). 43 p.
1211. *Schmid.
1858. Nachrichten über die ströme des preussischen staats. 3. Der Weichselstrom. Z. bauw. 8:185-194. [Tables of ice appearance and disappearance in 1809-1859.]
1212. Schmolders, V.
1928. Eisverhältnisse im Rigaschen meerbusen. Rep. 2d Hydrol. conf. Baltic states. 12. 8 p. illus. [Data for 1925/26-1927/28.]
1213. Schwalbe, Gustav.
1927. Über eisbildung und eisabgang auf flüssen und über die eisverhältnisse der Deutschen ströme und flüsse. Arch. Dtsch. seewarte. 44(2):27-28.
1214. Schwalbe, Gustav.
1929. Die eisverhältnisse der Elbe bei Magdeburg im winter 1928/29 im vergleich zu früheren jahren. Das Wetter. 46:254-256. [Data for 1813/14-1928/29.]
1215. Schwalbe, Gustav.
1930. Eisverhältnisse und temperaturverteilung der Deutschen flüsse. Erde und wirtschaft. 3:62-67.
1216. Schwartekopp, Maria.
1930. Die eisverhältnisse im Dortmund-Ems Kanal. Emsdetten, H. & J. Lechte. 34 p. Inaug.-diss. — Münster i. Westfalen.
1217. Semenov-Tiân'shanskii, I. P., comp.
1863-1885. Geographical-statistical encyclopedia of the Russian Empire. (In Russian.) St. Petersburg. 4 v.

1218. Semenov-Tiān'shanskii, I. P., ed.
1913. Russia, a complete geographical description of our country.
(In Russian.) St. Petersburg. 19 v.
1219. Semenov-Tiān'shanskii, I. P.
1939. O predskazanii srokov vskrytiā rek po metodu mirovoi pogody. (On predicting data of break-up of a river by weather prediction methods.) Trud. Gos. gidrol. inst. 9:29-45.
1220. Shaposhnikov, D. G.
1939. Zimnii rezhim kanalov. (Winter regime of canals.) Trud. Novosibirsk. inzh.-meliorat. inst. 3:95-125.
1221. Shchukin.
1846. Obrazovanie l'da na dne reki Angary i drugih rek Vostochnoi Sibiri. (Formation of ice on the bottom of the Angara River and other rivers of eastern Siberia.) Otechestvennyiā zapiski. 49(VIII):15-21.
1222. Shipchinski, V.
1916. K voprosu ob izmenenii normal'nago rezhima kolebanii urovnīa reki S. Dviny u goroda Arkhangel'ska pod vliāniem vesennikh polovodii. (On the change in the normal water level of the N. Dvina River at Archangel under influence of the spring floods.) Izv. Arkhangel'sk. obshch. izuch. russ. severa. 1916:477-483. [Table of date of opening of the ice 1901-1916, p. 479.]
1223. *Shirkina, N. A.
1930. Sinopticheskie usloviā zamerzaniā rek Evropeiskoi chasti SSSR. (Synoptic conditions of freezing of the rivers of European Russia.) Geofiz. sborn. 7(2):73-94 incl. charts, English summary. [Data 1881-1910.]
1224. Shostakovich, V. B.
1903. O vskrytii i zamerzanii rek. (On opening and freezing of rivers.) Met. vestn. 13:174-180.
1225. Shostakovich, V. B.
1904. O prichinakh pozdnīago zamerzaniā r. Atary. (Reason for late freezing of Atara River.) Izv. Vost.-Sib. otd. Russ. geogr. obshch. 34(1):1-18. [Unverified reference.]
1226. Shostakovich, V. B.
1904. Tolshchina lediānogo pokrova na vodoemakh vostochnoi Sibiri. (Strength of ice on eastern Siberian waters.) Izv. Vost.-Sib. otd. Russ. geogr. obshch. 34(2):105-113. [Unverified reference.]
1227. Shostakovich, V. B.
1904. Vskrytie i zamerzanie rek Vostochnoi Sibiri v 1902 g. (Opening and freezing of E. Siberian rivers in 1902.) Izv. Vost.-Sib. otd. Russ. geogr. obshch. 34(2):114-127. [Unverified reference.]
1228. Shostakovich, V. B.
1907. O temperature rek Vostochnoi Sibiri. (Temperature of the eastern Siberian rivers.) Mem. Akad. nauk. s. 8 Math.-phys. 20(4). 57 p.

1229. Shostakovich, V. B.
1908. Led na ozere Baikal. Lotsiâ ozera Baikal. Chast' II. Fiziko-geograficheskii ocherk Baikala. (Ice on Lake Baikal. Baikal pilot, pt. II. Physical-geographical sketch of Baikal.) St. Petersburg, Izd. Glavn. gidrograficheskoe upravlenie.
1230. *Shostakovich, V. B.
1908. Vskrytie i zamerzanie vod v Aziâtskoi Rossii (po 1902 god). (Opening and freezing of waters of Asiatic Russia to 1902.) Izv. Akad. nauk. s. 6, 2(7):497-510, 553-570. [Tables of dates, numbers of days, etc. also charts showing isochrons for both opening and freezing. Rivers and lakes.]
1231. Shostakovich, V. B.
1909. Materiâly k klimatologii Aziâtskoi Rossi. I. Vskrytie i zamernanie vod Aziâtskoi Rossii. (Material on the climatology of Asiatic Russia. I. Opening and closing of the Asiatic Russian waters.) Izv. Vost.-Sib. otd. Russ. geogr. obshch. 37:1-33, 1-179, i-xi. charts.
1232. Shostakovich, V. B.
1913. Ozero Baikal. (Lake Baikal.) Met. vestn. 23:136-143.
1233. Skopinzev, B. A.
1940. Podlednyi zimnii gidrokhimicheskii rezhim Volgi za vremâ s 1908 po 1939 g. (K vyâsneniiû prichin zamora na r. Volge zimoi 1939 g.) (Winter hydrochemical regime of the river Volga under ice, for the period between 1908-1939.) Met. i. gidrol. 6(5/6):62-70.
1234. Skvortsov, E. F.
1930. Meteorologicheskie nablûdeniâ vo vremâ Lensko-Kolym-skoi ekspeditsii 1909 g. (Meteorological observations on the Lena-Kolyma expedition 1909.) Trud. Kom. Îakutsk. ASSR. 15:288-298, 380.
1235. Slyunin, N. V.
1900. Okhotsk-Kamchatsk region; natural historical sketch. (In Russian.) St. Petersburg. 2 v.
1236. Sokolov, A.
1846. Opis' Udskago berega i Shantarskikh ostrovov, Poruchika Kosmina, v 1829, 1830 i 1831 godakh. (Description of the Udscoe shores and the Shantar Is. by Lt. Kozmina, 1829-1831.) Zap. Hidrogr. dept. 4:1-78. tables. [Ice on the Uda River and estuary.]
1237. Sokolovski, Ivan.
1862. Zeit des gefrierens und aufgehens der Wolga bei Kostroma nach den beobachtungen Ivan Sokolovski (1815-1859). Repert. met. Dorpat. 2:194.
1238. Speranski, M.
1922. Ledânoi pokrov na Onezhskom ozere v zimu 1919-20 goda i svâz' zamerzaniâ vodoemov s meteorologicheskimi usloviâmi. (The ice cover of Lake Onega 1919-20 and the relation of freezing to meteorological conditions.) Met. vestn. 32:95-97.

1239. Stakle, Peter.
1927. Geodätische ermittlungen auf den gewässern Lettlands. Rep. 1st Hydrol. conf. Baltic states. pp. 19-22. [Photos of ice on the Dūna and Windau in 1926.]
1240. Stakle, Peter.
1938. Frazil and anchor ice in the rivers of Latvia. Bull. Int. geod. geophys. un. Assn. sci. hydrol. 23:351-366.
1241. Strøm, K. M.
1934. Flakevatn. A semi-Arctic lake in central Norway. Skr. Norsk. vidensk.-akad. Mat.-naturv. kl. 1934(5). 28 p.
1242. Strøm, K. M.
1932. Tyrifjord, a limnological study. Skr. Norsk. vidensk.-akad. Mat.-naturv. kl. 1(3). 84 p.
1243. Strøm, K. M.
1933. Nordfjord lakes, a limnological survey. Skr. Norsk. vidensk.-akad. Mat.-naturv. kl. 1932(8). 56 p. [Ice cover, pp. 41-42.]
1244. Strøm, K. M.
1938. Moskenesoy: a study in high latitude cirque lakes. Skr. Norsk. vidensk.-akad. Mat.-naturv. kl. 1938(1). 32 p. [Ice cover, pp. 25-28.]
1245. Suslov, I. M.
1937. Reka Olenek. Leningrad, Izd. Glavseморputi. 165, 5 p. illus., tables. [Breaking-up and freezing of the river, pp. 31-39.]
1246. Svedeniâ o vremeni vskrytiâ i zamerzaniâ Priladozhskikh kanalov za posledniâ 10 let. (Information on time of opening and freezing of Ladoga canal for the last 10 years.) Bûl. St.-P. okr. put. soobshch. 1912(6):10-11.
1247. *Svedeniâ o vskrytii i zamerzanii reki Eniseiâ u g. Eniseiska. (Notes on the freezing and opening of the Jenissei River.) Izv. Russ. geogr. obshch. 14:253. [Data for 1790-1875.]
1248. *Swarowsky, Anton.
1891. Die eisverhältnisse der Donau in Bayern und Österreich von 1850-1890. Geogr. abh. 5:1-68. tables.
1249. Thielmann.
1907. Die eisverhältnisse an der Elbe und ihren nebenflüssen. 30 p. Inaug.-diss.- Halle-Wittenberg.
1250. Titius, J. D.
1781. Nachricht an welchen tagen die Nawa zeit 1718 bis 1780 auf- und zugegangen ist. Wittenb. wbl. 14:36-38. [Author only unverified.]
1251. Toorn, J. van der.
1885. Über eis und eisaufräumung in den holländischen flüssen. Tijdschr. K. Inst. ing. 1884/85:125-129, 146-149.

1252. Treskov, A. A.
1926. O zavisimosti mezhdru naibol'shei tolshchiny l'da i temperaturai zimy na Baikale. (The relation between the thickest ice and the temperature during the winter on Lake Baikal.) Trud. Irkutsk. magn. met. obs. 1.
1253. TSiionglinskii, M.
1905. O nablūdeniâkh nad zamerzaniem rek Nevyy i izsledovaniâkh zatorov na nei, proizvedennykh v 1903 g. po proucheniū Pravleniâ S.-Petersburgskago okruga putei soobshcheniâ. (Observations on freezing of the Neva and formation of ice blocks, taken in 1903, for St. Petersburg district Ministry of communications.) St. Petersburg. 48 p. 3 tables.
1254. TSiurikov, V. L.
1939. Nablūdeniâ nad lediânym pokrovom ūzhnogo Baikala v 1934 g. (Observations sur la nappe de glace du Baikal.) Trud. Baikal. limnol. stant. 9:23-43.
1255. TSiurikov, V. L.
1939. Neskol'ko zamechaniy otnositel'no formul narastaniâ lediânogo pokrova. (Einige bemerkungen über die formeln der eisbildung.) Trud. Baikal. limnol. stant. 9:115-125.
1256. Tumonov, V. E.
1933. Ob ustroistve na r. Neve postoiânnoi raionnoi ledoisledovatel'skoi stantsii. (On the establishment on the Neva River of a permanent regional ice observation station.) Trud. Inst. gidrotekhn. Sborn. ledotekhn. 1:177-220. illus.
1257. U.S.S.R. Gidrologicheskoe upravlenie. Gidrometeorologicheskii sluzhby.
1919. River ice bulletins of the Dvina River for 1919. Arkhangel'sk. (In Russian.) (Mss. in Weather Bureau library.)
1258. Uspenskii, L.
1930. Vremâ ledostava i vskrytiâ reki Volgi na protîâzhenii riâda let. (Season of ice and breaking up of ice on the Volga over a long number of consecutive years.) Sborn. Morsk. kraeved. obshch. Iâroslavl'. 1(10). [Unverified reference.]
1259. Val'man, V. N.
1933. Zimnii rezhim r. Sviri (po issledovaniâam, proizvedennym Svirskim stroitel'stvom v 1928-1930 gg.) (Winter regime of the Svir River from observations of the Svir plant during 1928-30.) Trud. Inst. gidrotekhn. Sborn. ledotekhn. 1:74-96.
1260. Van Valkenburg, S. and E. Huntington.
1935. Europe. New York; John Wiley & sons. x, 651 p. maps, diagrs.
1261. Veen, J. van.
1939. Vermindering der ijsperioden op de Nederlandsche rivieren sinds 1879. De Ingenieur. no. 18.

1262. Vendrov, S. L.
1933. Kratkii otchet o rabote G.G.I. po izucheniiu osenne-zimnego ledostava i zazhora na r. Neva v 1932-33 g. (Brief account of the work of the State Hydrological institute on research into the stoppage of the ice floe and sub-ice water of the Neva River during autumn-winter of 1932-33.) *Izv. Gos. gidrol. inst.* 55:63-72.
1263. Vereshchagin, G. Iŭ.
1936. Baikal. Spravochnik po vodnym resursam SSSR. Leno-Eniseiskii raion. 16(1).
1264. Vereshchagin, G. Iŭ.
1939. Ledianoi pokrov Baikala v arione istoka Angary. (La nappe du Lac Baikal dans la région de sortie de la rivière Angara.) *Trud. Baikal. limnol. stant.* 9:45-69.
1265. Vereshchagin, G. Iŭ.
1939. Raboty Baikal'skoi limnologicheskoi stanitsii po izucheniiu ledianogo pokrova Baikala. (Travaux de la station limnologique du Lac. Baikal sur la nappe de glace du Lac Baikal. *Trud. Baikal. limnol. stant.* 9:5-21.
1266. *Vesselovsky, K. S.
1856. Époques des débâcles de la prise par les glaces de la Dwina à Arkhangel. *Bull. Akad. nauk. hist.-phil.* 13:209-216. [Data for 1734-1854 on freezing and opening dates and number of navigable days.]
1267. Vize, V. Iŭ.
1927. Klimat IĀkutii. (The climate of Jakutsk.) (In: IĀkutiĀ. Leningrad, Akad. nauk. pp. 241-273.) [Tables on opening and freezing of rivers taken from Shostakovich 1908.]
1268. Vladimirov, L. L.
1904. Obrazovanie l'da na dne rek; ĩavlennie ledokhoda ot vsplyvaniĀ donnago l'da. (Formation of ice on bottom of rivers; the ice-drive as a consequence of rising anchor-ice.) *St. Peterburg*, viii, 42 p. illus.
1269. Vladimirov, L. L.
1904. Usloviu zamerzaniĀ reki Nevy. Vozmozhnost udlinit' navigatsiu i predupredit' obrazovanie podvodnykh zatorov l'da. (V prilozhenii: DanniĀ o Ladozhskom ledokhode i grafiki temperatur pochvy i vody r. Nevy.) (Freezing conditions for Neva River. The possibility of prolonging navigation season and preventing the ice from blocking. With an appendix: Data on Ladoga ice-drive and temperature graph of earth and Neva River water.) *St. Peterburg*. 57 p. tables.
1270. Vladimirov, L. L.
1907. NoviĀ ponĀtiĀ o protsessakh zamerzaniĀ rek i ob obrazovanii zimnikh zatorov l'da. (New consideration of process of freezing of rivers and the formation of winter ice block). *Zh. Min. put. soobshch.* 2:133-163. 3:3-45.

1271. Vlasov, V. A.
1908. Otchet o meteorologicheskikh usloviâkh v pribrezhnoi polose zapadnoi Ladogi, o protsesse zamerzaniâ vody i o îâvlenii donnago l'da zimoîu 1906-1907 gg. (Report on meteorological conditions on western shores of Lake Ladoga and on the freezing process and anchor ice formation in winter 1906-1907.) (In: Spindler, I. B. Otchet po fiziko-geograficheskomu izsledovaniiu îûgo-zapadnago raiona Ladozhskado Oзера. St. Peterburg. pp. 25-63.)
1272. Voekov, A. I.
1881. Congélation d'un lac sale. Arch. sci. phys. nat. Genève. s.3, 6:413-417. [Lake Ilezk near Orenburg, for 1878.]
1273. Voekov, A. I.
1907. Temperatur des Ural. Met. z. 24:114-119.
1274. Vorontsov, B. S.
1929. Ledokhod 1928 goda na rekakh Severnogo basseina. Ch. 2. Reki Severnogo basseina. Arkhangel'sk, Izd. Gidrometeorol. otd. Ubeko-Severnogo bûro pogody. 47 p. 3 charts. [Time of the ice-drive in 1929 on the rivers of the Arctic basin. Pt. 2. Rivers of the Arctic basin.]
1275. Voznesenskii, A. V.
1938. Some observations on the obstruction of the Angara River at Irkutsk through ice in the winters of 1907 and 1908. (In Russian.) Trud. Leningrad. otd. Vse. nauchn. inzh.-tekhn. obshch. vodn. transp. 2/3:31-50. [Unverified reference.]
1276. Vremiâ zamerzaniâ i vskrytiâ rek i ozer ÎAkutii po dannym s.-kh. sektory ÎAkutskogo statupravleniâ. (Season of freezing and breaking-up of the rivers and lakes of Jakutsk.) Izv. ÎAkutsk. otd. Russ. geogr. obshch. 3:61-81.
1277. Vskrytie i zamerzanie rek i ozer na territorii ÎASSSR po dannym korrespondentov ÎAkutskogo otdeneniâ Geograficheskogo Obshchestva za 1916 god. (Breaking-up and freezing of the rivers and lakes in the territory of the Jakutsk ASSR from data of Jakutsk correspondents of the Russian Geographic society for 1916.) Izv. ÎAkutsk. otd. Russ. geogr. obshch. 3:88-91.
1278. Wallén, Alex.
1930. Climate of Sweden. Stockholm, Statens meteorologisk hydrografiska anstalt. 65 p. illus. (Nr. 279.)
1279. Welner, A.
1936. Die wasserstande und eisverhältnisse des Narvaflusses. Rep. 5th Hydrol. conf. Baltic States. 7A.
1280. Wendling, P.
1929. Der Eisbrechdienst auf der Unterelbe unter besonderer berücksichtigung des eisganges im winter 1928-29. Werft, reederei, hafen. 10:432-434.

1281. Wendling, P.
1929. Die eisverhältnisse auf der Unterelbe unter besonderer
berücksichtigung des winters 1928-29. *Ann. hydrogr.*,
Berlin. 57:405-411.
1282. Williams, F. M. and F. P. Williams.
1926. Steps taken during recent years in order to reduce the periods
of closure on canals and canalized rivers. *Rep. 14th Int.
congr. navig.*, Cairo, 1926. no. 24.
1283. *Zaburin, A. I.
1870. Vskrytie, pokrytie i pr. Volgi u Astrakhani. (Freezing and
opening of the Volga at Astrachan.) *Izv. Russ. geogr.
obshch.* 6(2):24-28. [Data for 1827-1867.]
1284. Zamerzannâ ta skres ričok Ukraini 1925-26 gidrol. roku. Zamerzannâ ta
1929. skres ozer i stavkiv Ukraini 1925-26 r. (Freezing and
opening of Ukrainian rivers during 1925-26. Freezing and
opening of lakes and pools of the Ukraine 1925-26.) *Mat.
gidrol. sluzhbi 1925-26 gidrol. r. Kiiv. Gidromet. shchorich-
nik.* 4. 3 unnumb. p. [Unverified reference.]
1285. *Zeit der bedeckung der Weichsel mit eis (1725-1838). *Repert. met. Dorpat.*
1862. 2:235-236.
1286. Zhadin, V. I.
1923. Ocherk reki Oki u gor. Muroma. (Sketch of the Oka River
near Murom.) *Rab. Okskaâ. biol. sta.* 2(2):7-12. [Mater-
ial on freezing and breaking-up of ice.]
1287. Zhukov, N.
1939. Ledovaâ razvedka. Leningrad, Izd. Glavsevmorputi. 24 p.
illus. [Ice research in Arctic seas, 1933-1936, by aero-
reconnaissance.]
1288. Zhukov, N.
1939. Opyt ledovoi (avia-) razvedki. (Ice aero-reconnaissance.)
Sovetskââ Arktika. 1939(5):38-46.
1289. Zubrzycki, T.
1927. eriod de conglation des eaux en Pologne. *tudes mtoro-
logique et hydrographique*, Warsaw. 4.
1290. *Zufrieren und aufthauen der unteren Donau zwischen der mndungen des
1879. Lereth und Pruth. (1837-1879.) *Ann. hydrogr.*, Berlin.
7:476-477.
1291. Zufrieren und eisgang der Donau bei Galatz (1836-75.) *Z. met.* 10:192-193.
1875. [Data is for 10 year averages only.]
1292. Zusammenstellung der gefrier- und aufthauzeiten der Russischen gewsser,
1873. 1873. *Ann. hydrogr.*, Berlin. 1:215-216.

SEE ALSO: 2, 805, 814, 817, 819, 852, 887.

GENERAL REFERENCES

1293. Abramov, N. T.
1916. Propriétés mécaniques de la glace. (Resumé only.) *Izv. Donsk. politekhn. inst.* 5, suppl. pp. 1-16.
1294. Afonas'ev, V. I.
1897. Ledokoly. (Ice breakers.) *Kotlin* (Kronstadt newspaper). 49:318.
1295. Afonas'ev, V. I.
1897. Prokhozhdenie tolstykh l'dov. (Crossing thick ice.) *Kotlin* (Kronstadt newspaper). 105:374. 120:389. 122:391.
1296. Aitken, J.
1917. Ground-ice. *J. Scot. met. soc. Edinb.* 18:13-18.
1297. Al'tberg, V. IĀ.
1916-1917. Issledovanie donnago l'da v laboratornykh i v prirodnykh usloviĭakh. I-II. Sur la reproduction du phénomène de la glace de fond par un procédé de laboratoire. *Geofiz. sborn.* 3(1):77-90. (2):21-39.
1298. Al'tberg, V. IĀ.
1921. Novoe o prirode donnago l'da. (New information on anchor ice.) *Izv. Gos. gidrol. inst.* 1/3:40-69.
1299. Al'tberg, V. IĀ.
1922. O prichinakh obrazovaniĭ l'da na dne rek i ozer. (On bottom ice formation on rivers and lakes.) *Izv. Gos. gidrol. inst.* 4:75-88. German summary: Ueber die ursachen der bildung des grundeises.
1300. Al'tberg, V. IĀ.
1924. Die physikalischen bedingungen der eisbildung auf dem grunde von flüssen und seen. *Ann. hydrogr., Berlin.* 52:225-229, 273-275.
1301. Al'tberg, V. IĀ.
1928. Donnyi led i perspektivy bor'by s nim. (Anchor ice and possible measures against it.) *Klimat i pogoda.* 6(21): 161-171.
1302. Al'tberg, V. IĀ.
1931. Donnyi led. (Bottom ice.). Leningrad-Moscow, *Izd. Gos. gidrol. inst.* 76 p.
1303. Al'tberg, V. IĀ.
1932. Anchor-ice and conditions of its formation. (In Russian.) *Klimat i pogoda.* 8:65-75. [Unverified reference.]
1304. Al'tberg, V. IĀ.
1932. Est' li osnovaniĭa dlĭa zameny ponĭatiĭa "donnyi led" "nanosnym"? (Are there reasons for changing the term "anchor-ice" to "deposited ice"?) *Issled. rek SSSR.* 2:69-74. French résumé.

1305. Al'tberg, V. IĀ.
1933. Donnyi led i ego priroda. (Anchor-ice and its nature.) Priroda. 22(7):12-22.
1306. Al'tberg, V. IĀ.
1934. O podvodnom (donnom) l'de. Sur la glace de fond. C. R. Akad. nauk n.s. 1934(2):168-172.
1307. Al'tberg, V. IĀ.
1937. 20 let rabote v oblasti podvodnogo ledoobrazovaniĀ (1915-1935). (Twenty years of work in the domain of ice-formation.) Priroda. 26(2):25-35.
1308. Al'tberg, V. IĀ.
1939. Podvodnyi led. (Submerged ice.) Moscow-Leningrad, GONTI. 195 p. [Reviewed in: Problemy arktiki 1939(6):104-105.]
1309. Al'tberg, V. IĀ., V. K. Al'tberg i N. O. IĀkobi.
1925. O nekotorykh rezul'tatakh primeneniĀ elektricheskogo termometra pri nablūdeniĀkh nad zarodyshevmy l'dom. Über einige ergebnisse der keimeis- (grundeis-) beobachtungen unter anwendung des widerstandsthermometers. Izv. Tsentr. gidromet. biūro. 5:73-78. illus. [Barnes 1906 experiments checked and found in error.]
1310. Antonov, V. S.
1940. K voprosu o taĭanii l'dov. (On the question of melting ice.) Problemy arktiki. 1940(11):23-29.
1311. Arnold-Alĭab'ev, V. I.
1929. Das tellereis. (Sludge-ice.) Verh. Int. ver. theor. angew. limnol. 4:144-172.
1312. Arnold-Alĭab'ev, V. I.
1931. Opreĉleniie polostei vo l'du i pribory dliĀ etoi tseli. (The determination of cavities in ice and instruments for this purpose.) Izv. Glavn. geofiz. obs. 4:34-36. German summary.
1313. Arnold-Alĭab'ev, V. I.
1934. Metody opredeleniĀ plotnosti i rykhlosti l'da v ekspeditsionnoi obstanovke. (Methods of determination solidity and porosity of the ice.) Trud. Kom. izuch. vechn. merzl. 3:127-150.
1314. Arnold-Alĭab'ev, V. I.
1937. O primenenii vodoboĭĀ (gidromonitora) v bor'be so l'dom. (Use of engine for breaking up ice.) Severnyi morskoi put'. 6:98-109.
1315. Arnold-Alĭab'ev, V. I.
1937. Ob izmerenii torosov. (On measuring hummocks.) Zap. gidrogr. 1937(1):93-97.
1316. Arnold-Alĭab'ev, V. I.
1937. Opyty po vneshnemu treniū l'da. (On external friction of ice.) Zh. tekhn. fiz. 7:873-878.
1317. Arnold-Alĭab'ev, V. I.
1938. The external friction of ice. Bull. int. geod. geophys. un. Assn. sci. hydrol. 23:563-570.

1318. Arnold-Alfâb'ev, V. IĀ.
1938. Ob izmerenii tolschiny l'da s borta sudna na khudu. (On measurement of ice-thickness from a ship in motion.) *Met. i gidrol.* 4(11/13):149-153.
1319. Arzybyshev, S. and V. Jushakov.
1929. Der wärmeleitvermögen des natürlichen eises. *Ann. hydrogr.*, Berlin. 57:213-215.
1320. Bachmanov, B. M.
1934. K voprosu o terminologii navigatsionnoi kharakteristiki l'dov i ponĭatii, svĭazannykh s poslednimi. (On the problem of the terminology of the navigational characteristics of the ice and related concepts.) *Zap. gidrogr.* 1934(1):113-115.
1321. Barnes, H. T.
1899. Notes on frazil and anchor-ice with considerations as to the freezing point of water. *Trans. Roy. soc. Can. s.2, sec.3*, 5:17-22.
1322. Barnes, H. T.
1901. Ice formation in Canadian waters and the physical laws governing its formation. *Trans. Canad. soc. civ. engrs.* 15(1):78-86; disc. 87-92.
1323. Barnes, H. T.
1904. On the artificial production of frazil ice, together with measurements of the temperature conditions in the water. *Trans. Roy. soc. Can. s.2, sec. 3*, 10:29-32.
1324. Barnes, H. T.
1905. Formation of anchor ice and precise temperature measurements. *Trans. Amer. soc. mech. engrs.* 26:558-583. illus.
1325. Barnes, H. T.
1906. Anchor-ice formation from the standpoint of the radiation theory, together with some early memoirs on ground-ice. *Trans. Roy. soc. Can. s. 2, sec. 4*, 12:65-109.
1326. Barnes, H. T.
1906. Ice formation, with special reference to anchor-ice and frazil. N. Y. 260 p. ["While dealing mainly with river ice, specifically St. Lawrence, Ch. 4, "Sheet-ice, frazil, and anchor-ice" deals with the definition of types of ice that also occur at sea."]
1327. Barnes, H. T.
1907. Formation of anchor ice, or ground ice, at the bottom of running water. *Mon. weath. rev.* 34:465-467. *Nature.* 77: 412-413.
1328. Barnes, H. T.
1908. Equilibrium between ice and water. *Trans. Roy. soc. Can. s.3, sec. 3*, 1:29-30.
1329. Barnes, H. T.
1909. The physical constants of ice. *Trans. Roy. soc. Can. s.3, sec. 3*, 3:3-27.

1330. Barnes, H. T.
1910. Marine microthermograms and the influence of icebergs on the temperature of the sea. *Nature*. 85:137-138.
1331. Barnes, H. T.
1910. On the apparent sinking of surface ice in lakes. *Science n.s.* 31:856-857.
1332. Barnes, H. T.
1912. The rise of temperature associated with the melting of icebergs. *Nature*. 90:408-410. *Mon. weath. rev.* 40:1754-1756.
1333. Barnes, H. T.
1912-1914. Icebergs and their location in navigation. *Nature*. 89:411-414. 1912. *Proc. Roy. soc.* 20:161-168. 1914.
1334. Barnes, H. T.
1913. Iceberg melting. *Nature*. 90:671-673.
1335. Barnes, H. T.
1914. The crushing strength of ice. *Trans. Roy. soc. Can. sec. 3*, 8:19-22.
1336. Barnes, H. T.
1927. Demolishing icebergs. *Naut. mag.* 117:193-197.
1337. Barnes, H. T.
1927. Experimenting with icebergs. *Mar. obs.* 4:93-98.
1338. Barnes, H. T.
1927. How can ice formation be controlled? *Contract rec.* 41: 1085-1087. [Methods by which ice jams can be relieved; underlying causes of ice formation.]
1339. Barnes, H. T.
1927. Some physical properties of icebergs and a method for their destruction. *Proc. Roy. soc.* A114:161-168.
1340. Barnes, H. T.
1928. Ice destruction. *Mar. obs.* 5:234-238.
1341. *Barnes, H. T.
1928. Ice engineering. Montreal. 364 p. [Ch. VIII, "Ice navigation and ice breaking", pp. 229-299.]
1342. Barnes, H. T. and H. L. Cooke.
1902. On the density of ice. *Trans. Roy. soc. Can. s.2, sec. 3*, 8:143-155.
1343. Barnes, H. T., J. W. Hayward and Norman McLeod.
1914. The expansive force of ice. *Trans. Roy. soc. Can. sec. 3*, 8:29-50.
1344. Bartlett, R. A.
1928. Ice navigation. Problems of polar research. Spec. publ. *Amer. geogr. soc.* 7:427-442.
1345. Belokon', P. N.
1938. O koefitsiente sherokhovatosti ledianogo pokrova. (On the coefficient of friction in the ice-cover.) *Met. i gidrol.* 4(11/12):116-131.

1346. Belokon', P. N.
1940. Inzhenernaia gidravlika potoka pod ledianym pokrovom. Moscow-Leningrad, Gosenergoizdat. 160 p. illus., diagrs. [Engineering hydraulics of streams under ice.]
1347. Belousov, M. P.
1940. O taktike ledovogo plavaniia. (Tactical principles of navigation in ice.) Moscow-Leningrad, Glavsevmorputi. 70 p. illus. [Includes: Types of ships in Arctic fleet; signals in ice navigation; ice scale; descriptions of kinds of ice; glossary of Russian ice terms.]
1348. Bencker, H.
1931. Ice terminology. Hydrogr. rev. 8(2):114-131. [Includes list of terms in English and Russian, and a bibliography.]
1349. Berdennikov, V. P.
1940. O soprotivlenii ledianogo pokrova pri viazkom dreife. (On the resistance of the ice when drift is formed of pieces frozen together.) Problemy arktiki. 1940(12):28-41. illus.
1350. Bevan, Benjamin.
1826. An account of experiment on the elasticity of ice. Phil. trans. Roy. soc. 1826(3):304-306.
1351. Birge, E. A.
1910. The apparent sinking of ice in lakes. Science n.s. 32:81-82.
1352. Blizniak, E. V.
1929. Zimnii rezhim rek. Issledovaniia zimnego rezhima rek. (Investigations on the winter regimes of rivers.) Trud. 2. Vse. gidrol. s'ezd, Leningrad. 2:73-83. [General remarks on methods, etc.]
1353. Blüthgen, Joachim.
1936. Eisverhältnisse und klima. Ein beitrag zur klimakunde Nordeuropas. Z. Ges. erdk. 1936:114-120.
1354. Blüthgen, Joachim.
1936. Schnee-eis. Ann. hydrogr., Berlin. 64:439-441.
1355. Bogdanov, D.
1908. Obrazovanie donnago l'da. (Formation of anchor ice.) Russ. sudokhod. 23(7):85-93.
1356. Bogdanov, N. F. i O. A. Spengler.
1932. O metodike obrabotki nabludenii nad vskrytiem i zamerzaniem vod. (On method of observation of break-up and freezing of rivers.) Issled. rek SSSR. 2:61-67. French résumé.
1357. Bogorov, V. G.
1939. Mestnye ledovye prognozy po biologicheskim priznakam. (Monthly ice forecasts based on biological indicators.) Problemy arktiki. 1939(1):32-38.
1358. Bossolasco, M.
1932. Ice formation and related problems in hydrology. Boll. Com. naz. geod. geofis. 2:28-30, 41-50. [Unverified reference.]

1359. Boyle, R. W. and Reid, C. D.
1926. Practical experiments on the detection of icebergs and on sounding by means of an ultra sonic beam. Proc. trans. Roy. soc. Can. s.3, sec. III, 20:233-243.
1360. Bragg, Wm.
1938. Ice. Proc. Roy. inst. Gt. Brit. 30:283-301.
1361. Bregman, G. R. and B. V. Proskuriakov, eds.
1943. Lediane perepravy. (Crossing on ice). Moskva, Gidrometeoizdat. 151 p. illus., tables. (Trudy Nauchno-issledovatel'skikh uchezhdenii. Gidrologiia sushi. s.4, vup. 5.)
1362. Brodskii, A. I., N. P. Padchenko i B. L. Stolskaiia.
1939. Izotopnyi sostav arkticheskikh vod i l'dov. (Isotopic structure of Arctic water and ice.) Zh. fiz. khim. 1939(10): 1494-1501.
1363. Brooks, C. E. P.
1928. Arctic ice and British weather. Met mag. 63:214-217.
1364. Brooks, C. E. P. and Quennell, W. A.
1928. The influence of Arctic ice on the subsequent distribution of pressure over the eastern N. Atlantic and western Europe. Geophys. mem. 5(41). 36 p.
1365. Brown, E. W.
1928. Experiments on strength of ice. Append. F, Rep. Jt. bd. engrs. St. Lawrence. pp. 423-445.
1366. Bruns, B. P.
1937. Nabludeniia nad protsessami obrazovaniia i taniia morskogo l'da. (Nauchnye rezul'taty ekspeditsii na "Sedove" v 1934 gody. vup. 2.) (Observations on process of formation and melting of ice.) Trud. Arkt. inst. 83:75-97.
1367. Bubendey, J. F.
1894. Die temperatur des fliessenden wassers zur zeit der eisbildung. Ann. hydrogr., Berlin. 22:1-6. [Elbe River study.]
1368. Buchanan, J. Y.
1874. Some observations on sea-water ice. Proc. Roy. soc. 22: 431-432. [On temperature of melting sea ice.]
1369. Buchanan, J. Y.
1908. Ice and its natural history. London, Wm. Clowes & Sons, Ltd., 34 p., illus., plates.
1370. Burke, A.
1936. O periodichnosti v ledovom rezhime. (Periodicity of the ice regime.) Sovetskaiia arktika 1936(5):86-88.
1371. Burke, A.
1940. Morskie l'dy. (Marine ice.) Leningrad, Glavsevmorputi. 96 p. 43 figs.
1372. Bydin, F. I.
1931. Anchor-ice and methods of dealing with it. (In Russian.) Gidrotekhnicheskoe stroitel'stvo. 1931(2):44-48. [Un-verified reference.]

1373. Bydin, F. I.
1932. O prirode donnogo l'da. (The nature of anchor-ice.) Izv. Inst. gidrotekhn. 5:107-134. English*summary. [Observations on Svir River.]
1374. Bydin, F. I.
1933. K voprosu o prirode donnogo l'da i meraĭh bor'by s nim. (Anchor-ice problem and methods of dealing with it.) Trud. Inst. gidrotekhn. Sborn. ledotekhn. 1:9-58.
1375. Bydin, F. I.
1935. Issledovaniâ v oblasti metodiki prognozov po ledovomu rezhimu. (Investigations in the methodology of forecasting the ice-regime.) Izv. Inst. gidrotekhn. 15:185-203.
1376. Chaplygin, E.
1940. Poplavykovi ledomer. (Float for measuring ice.) Problemy arktiki. 1940(1):111. fig.
1377. Chirvinsky, P. N.
1935. Acoustical phenomena of snow and ice and methods of their study. (In Russian.) Klimat i pogoda. 11(5):20-22.
1378. Copland, M.
1912. A method for the detection of the proximity of ice at sea. Nature 89:295.
1379. Davydov, V. V.
1938. Teoreticheskoe issledovanie udara korablâ o l'dinu. (Theoretical investigation of impact of a ship on ice.) Problemy arktiki. 1938(5/6):103-124.
1380. Dawson, W. B.
1913. Actual conditions affecting icebergs. Nature. 90:700.
1381. Dawson, W. B.
1927. Icebergs in relation to water temperature. Nature. 111:236.
1382. Devik, Olaf.
1933. Über die eisbildung eines wasserlaufes und ihren einfluss auf das langenprofil. Deutsche wasserwirtschaft. 28:201-205, 223-229.
1383. Dibos, M.
1908. Glaces de mer, glaces de rivières, manoeuvres de preservation et de deglaçage. Mem. trav. Soc. ing. civ. France. 1908(2): 860-923.
1384. Diesen, G. van.
1871. Over den wederstand van ijs tegen verbrijzeling. Versl. meded. Akad. wet. afd. natuurk. 5:325-331.
1385. *Dobrowolsky, A. B.
1923. Historia naturalina lodu. (The natural history of ice.) Warsaw. 940 p. 340 figs.
1386. Dobrowolsky, A. B.
1934. O teoriâkh professa zamerzaniâ vod v chastnosti obrazovaniâ donnogo l'da i shugi. (On the theories of freezing of water and especially on the formation of anchor-ice and frazil.) Izv. Inst. gidrotekhn. 14:77-80.

1387. Dobrowolsky, A. B.
1935. Sur les théories relatives au processus de la congélation des eaux, et en particulier, à celui de la formation de la "glace de courant", et de la glace de fond. Bull. Soc. geophys. de Varsovie. 11/12:20-24.
1388. Drygalski, E. von.
1910. Die vereisung von meeresräumen, ihre möglichkeiten, entwicklung und wirkung. Verh. Schweiz. naturf. ges. 93. jahresvers., Basel 1910, 1:102-117.
1389. Drygalski, Erich von.
1935. Über grundeis. Z. geophys. 11:109-111. [North Greenland lake observations.]
1390. Dumble, J. H.
1859. Ice phenomena, from observations on Rice Lake. J. Franklin inst. s.3, 37:50-56.
1391. Dumble, J. H.
1891. Some observations on the expansion and contraction of ice on Canadian waters. Trans. Canad. soc. civ. engrs. 5: 270-308.
1392. Edlund, E.
1864. Ueber die bildung des eises im meere. Ann. phys. 121:513-551.
1393. Ekwall, A.
1930. Isoferhållanden i profilreglerade vattendrag. (Ice conditions in watercourses of regulated profile.) Tekn. tidskr. 60: 135-139. 4 figs. [Ice formation in water courses may be minimized by regulating flow of water.]
1394. Engeln, O. D. von.
1915. Experimental studies and observations on ice structure. Amer. j. sci. 40:449-472.
1395. Estifeev, A. M.
1932. Prichiny obrazovaniâ polynoi i meropriâtiâ v tselâkh ustanovleniâ lediânogo pokrova. (Causes of formation of polynia and measures toward establishing the ice-cover.) Izv. Inst. gidrotekhn. 5:213-217.
1396. Estifeev, A. M.
1934. Opyt postroeniâ praktocheskoi klassifikatsii i terminologii glavneishikh ledovykh obrazovaniï. (Contribution to drawing-up a practical classification and terminology for an official ice organization.) Izv. Inst. gidrotekhn. 12:203-209. [Considers earlier terminologies. Very good.]
1397. Ewing, M., A. P. Crary and A. M. Thorne, jr.
1934. Propagation of elastic waves in ice. Pt. 1. J. appl. phys. 5: 165-168.
1398. Fabian, Oskar
1877. Über dehnbarkeit und elastizität des eises. Carl's rept. phys. 13:447-452.

1399. Fakidov, I. G.
1934. Vibrations of the ice-cap of polar seas. *Nature*. 134:536-537.
1400. Fakidov, I. G.
1936. Morskoi led. (Marine ice.) *Sovetskaiâ arktika*. 1936(11): 95-98.
1401. Finlayson, J. N.
1927. Tests on the shearing strength of ice. *Canadian engineer*. 53:101-103.
1402. Francis, J. B.
1881. Anchor ice. *Trans. Amer. soc. civ. engr.* 10:192-194.
1403. Frühling, A.
1885. Beitrag zur frage über die festigkeit des eises. *Z. Ver. dtsh. ing.* 29:357-359.
1404. Gain, L.
1935. Les glaces flottantes. *La météorologie*. 1935:400-415.
1405. Gakkel, IĀ. IĀ.
1939. Opređenje količestva l'da. (Determination of amount of ice.) *Problemy arktiki*. 1939(7/8):81-88. [Scale illustrated.]
1406. Gakkel, IĀ. IĀ.
1940. Instruksiâ dlâ proizvodstva nablûdenii nad l'dami s kora-blâ. (Instructions for taking observations of ice on ships.) red. V. IŪ. Vize. 2-e izd. Leningrad, Glavsevmorputi. 48 p.
1407. *Gakkel', IĀ. IĀ. i A. F. Laktionov.
1940. Al'bom ledovykh ovrazovanii. Pod obshchei red. Prof. V. IŪ. Vize. 2-e izd. Leningrad-Moscow, Izd. Glavsevmorputi. 76 p. illus. (62 figs.)
1408. Gardiner, R. H.
1861. On the disappearance of ice. *Rep. Smith. inst.* 1860:401-403. [Discussion of "white" and "black" ice; difference in time of melting on lakes and rarely on rivers.]
1409. Gay-Lussac, J. L.
1836. Sur l'origine de la glace qu'on trouve au fond des rivières. *Ann. chim.* 63:359-368.
1410. Gevorkian, R. G. and E. I. Chaplygin.
1940. O vetrovom dreife vody i lediânykh polei. (On wind drift of water and ice fields.) *Problemy arktiki*. 1940(9):5-19.
1411. Gevorkian, R. G. and E. I. Chaplygin.
1940. Svobodnyi dreif lediânykh polei. (Free drift of ice fields.) *Problemy arktiki*. 1940(11):5-22.
1412. Gitterman, K. E.
1937. Thermal analysis of sea-water. (In Russian.) *Trudy Soliânoi laboratorii Akad. nauk*. 5(1):5-23. [Unverified reference.]

1413. Gordeev, V.
1940. Ledîanaia podushka "Sedova". (Ice cushion of the "Sedov".) Sovetskaiâ arktika. 1940(8):54-56. 3 figs. [Explanation of the protection afforded the Sedov by the ice upon which she rested during the wintering.]
1414. Gt. Brit. Hydrographic dept.
1942. Notes on navigation in ice. H.D. 372.
1415. Gr. Brit. Meteorological committee.
1935. A handbook of weather, currents and ice, for seamen. London. M.O. 379. 154 p. 34 figs., tables.
1416. Gunther, Siegmund.
1885. Lehrbuch der geophysik und physikalischen geographie. Stuttgart. 2 v. (2d ed. entitled Handbuch der geophysik. v.2, 1899.) [V. 2, Sec. 6, Ch. 6, Das eis des meeres.]
1417. Hamberg, Axel.
1895. Studien über meereis und gletschereis. Handl. Svensk. vetensk.-akad. Bihang. 21(avd. II, no. 2.)
1418. Hell, Hans.
1911. Über die plastizität des eises. Ann. phys. 36:449-492.
1419. Henry, A. J.
1929. C.E.P. Brooks and W. Quennell on the influence of Arctic ice on the subsequent distribution of pressure over the eastern N. Atlantic and Western Europe. Mon. weath. rev. 57:99-102.
1420. *Hess, D.
1933. Das eis der erde. (Handbuch der geophysik. VII(L), Beno Gutenberg.) 121 p.
1421. Hess, H.
1902. Elastizität und innere reibung des eises. Ann. phys. s.4, 8:405-431.
1422. Hübner, H.
1928. Erscheinungsformen des flusseises. Deutsche wasserwirtschaft. 23:190.
1423. Humphreys, W. J.
1932. The colder the air the thinner the ice. Mon. weath. rev. 60:60-61. [On the Great Lakes.]
1424. Iâchevskii, L.
1907. Materiâly po voprosu ob izuchenii uslovii obrazovaniâ donnago l'da. (Material for research on formation of anchor ice.) St. Peterburg. 20 p. illus.
1425. Itin, Vivian.
1936. Kolebaniâ ledovitosti. (Changes in the state of the ice.) Sovetskaiâ arktika. 1936(1):74-78 (3):80-92.
1426. Ivanov, G. S. and N. P. Polevaia.
1940. Investigation of the process of crystallization of water of different salinities. (In Russian.) Ms. Gos. gidrol. inst.

1427. Iversen, T.
1927. Drivis og selfangst. Aarsberetning Norges fiskerier. 1.
1428. Jakushov, P.
1934. Das grundeis. Z. geophys. 10:308-316.
1429. Jakushov, P.
1934. Über das grundeis. Wasserwirtschaft 27:135-137, 169-172.
[Descriptive; anchor and floating ice; the formation of ice islands in rivers.]
1430. Jakushov, P.
1934. Über wasser und eis. Wasserwirtschaft. 27:98-100, 122-126.
1431. Jasmund, R.
1911. Fliessende gewässer. 10. Eisverhältnisse. (In: Handbuch d. ingenieurwissenschaften. 4. aufl. Leipzig. Teil III, bd. 1, lief. 2, pp. 323-334.)
1432. Johnston, C. E.
1915. Definitions (of ice terms) in: International ice observation and ice patrol service in the North Atlantic Ocean from February to August 1914. Bull. U.S.C.G. 3:38.
1433. Karelin, D. B.
1936. O periodichnosti ledogo rezhima. (On the periodicity of the ice cycle.) Sovetskaiâ arktika. 1936(11):106.
1434. Karelin, D. B.
1940. K diskussii po ledovym prognozam. (On the discussion of ice forecasting.) Problemy arktika. 1940(7/8):13-20.
1435. Karelin, D. B.
1940. Rabota nad ledovymi prognozami v 1940 g. (Work on ice forecasting during 1940.) (Sektor ledovoi sluzhby Ark-ticheskogo Instituta.) (Ice service of Arctic Institute.) Problemy arktiki. 1940(6):95-97.
1436. Karelin, D. B.
1940. Sluzhba ledovykh prognozov. (Section of ice forecasting.) Leningrad, Glavsevmorputi. 60 p. (Politupravlenie glav-sevmorputi pri S.N.K. SSSR. Bibliotekha "Stakhnovtsy Arktiki". Kn. 39.)
1437. Karelin, D. B.
1940. Tafanie l'da v Arktike. (Melting of the ice in the Arctic.) Problemy arktiki. 1940(5):118-119.
1438. Karelin, D. B.
1940. Tafanie l'da v Arktike pod vliâniem temperatur vozdukha. (Melting of Arctic ice as influenced by air temperature.) Met. i. gidrol. 6(4):71-75. [Marine.]
1439. Karelin, D. B.
1940. Znachenie nablûdenii "Sedova" dlâ ledovykh prognozov. (Significance of the "Sedov" observations for ice forecasting.) Problemy arktiki. 1940(2):111-113.

1440. Karelin, D. B. i I. G. Ovchinnikov.
1940. Kratkosrochnye ledovye prognozy. (Short-term ice forecasting.) Problemy arktiki. 1940(3):55-68.
1441. Katanskii, V.
1917. Transmission of freight wagons along the track laid on the ice of r. Volga near Saratov in the winter 1915-16 and execution of observations on the influence of a load on the state of the ice cover. (In Russian.) Vestn. Saratovsk, otd. Russ. tekhn. obshch. 1917(11/12):231-246. [Unverified reference.]
1442. Khrenov, A. F.
1939. Ledovye perepravy. (Crossing on ice.) Tekhnika i vooruzhenie. no. 22.
1443. Kitsinskii, A. A.
1907. Donnyi led, ego rol' i znachenie v vodnom dele. (Anchor-ice, its role and significance in hydraulic industry.) Vodnoe delo. 1907:72-73, 109-114. [Unverified reference.]
1444. Knudsen, Martin.
1903. Gefrierpunkttabelle für meerwasser. Publ. circ. Cons. explor. mer. 5:11-13.
1445. Koch, H.
1935. Die schiffahrt im eis. Der Seewart. 4:60-63.
1446. Koch, K. R.
1885, 1913-1914. Über die elastizität des eises. Ber. Naturf. ges. Freiburg. 8(3):314-329. 1885. Ann. phys. s.4, 25:438-450. 1885. 41:709-727. 1913. 45:237-258. 1914.
1447. Koch, L.
1903-1905. Die eisbedeckung der fliessenden gewässer im winter. Dtsch. rdsch. geogr. stat. 25:272-274. 1903. Allg. fischereiztg. 30:45-47. 1905.
1448. Kolesnikov, A. G.
1940. O skorosti narastaniâ l'da v more. (On rapid formation of sea ice.) Problemy arktiki. 1940(9):19-26.
1449. Komarovskiy, A. N.
1932. Struktura i fizicheskie svoistva lediânogo pokrova presnykh vod. (Structure and physical properties of the ice cover over fresh water.) Moscow, Gosenergizdat.
1450. Kondrat'eva, E. A.
1940. Podbor i analiz predveshchaûshchikh ledoobrazovanie temperatur dliâ rek severa. (Selection and analysis of temperatures forecasting the ice formation for the rivers in the north.) Met. i gidro. 6(3):62-67.
1451. Korunov, M. M.
1940. Raschet lediânykh pereprav. (Calculations for crossing on ice.) Leningrad, Gostekhzdat.

1452. Korzhavin, K. N.
1938. Observations on the changes of strength of ice in the river Ob at Novosibirsk during the period of spring ice-drift of 1934. (In Russian.) Trud. Novosibirsk. inst. voenn. inzh. zhel.-dorozhn. transp. 3:3-54. [Unverified reference.]
1453. Korzhavin, K. N.
1940. Issledovanie mekhanicheskikh svoistv rechnogo l'da. (Investigations on mechanical properties of river ice.) Trud. Novosibirsk. inst. voenn. inzh. zhel.-dorozh. transp. 4(2):1-36.
1454. Kosoi, A. I.
1940. O metodike opredeleniâ skloneniâ na dreifuûshchem l'du. (On methods of determining the declination of drifting ice.) Severnyi morskoi put'. 16:75-79.
1455. Krasnova, V. S.
1937. K voprosu o khimicheskom sostave morskogo l'da. (Contribution to the question of the chemical composition of sea-ice.) Zh. obshch. khim. 7(12):1742-1746. ["Persey" expedition of May, 1935.]
1456. Krebs, W.
1913. Temperatur-erscheinungen bei eisbergen. Hansa 50:328-329.
1457. Krilov, A. N.
1901. Nablûdeniâ nad krepost'û l'da i soprotivleniem ego dvizheniû ledokola "Ermak". (Observations on the strength of ice and resistance to it shown by the "Ermak".) (In: Makarov, S. O. Ermak vo l'dakh. St. Petersburg. pp. 418-435.)
1458. Krylov, M. M.
1927. Zimnee namorazhivanie l'da. (Winter freezing of ice.) Kholodil'noe delo. 5(1):8-11, (2):4-6.
1459. Kuznetsov, P. A.
1939. Deistvie l'da na sooruzheniâ morskikh portov i zashchita ot nego. (The action of ice on port constructions and measures against the ice.) Leningrad. 156 p. illus. (Nauchno-issledovatel'skaiâ gruppa IO KBF. Vup. V.) [Scientific investigations, Engineering Division, Red Baltic Fleet.]
1460. Laktionov, A. F.
1931. O svoistvakh morskogo l'da. (Properties of ocean ice.) Trud. Inst. izuch. severa. 49:71-96. [Difference in salinity of 1-yr. and older ice.]
1461. Laktionov, A. F.
1940. O metodike ledovykh prognozov po planktonu. (On method of ice forecast by plankton.) Problemy arktika. 1940(9): 27-34.
1462. Lappo, S. D.
1938. Uluchshit' delo ledovykh prognozov. (Improvement in ice forecasting.) Sovetskaiâ arktika. 1938(2):48-50.

1463. Lebedev, V. V.
1938. Rost l'da v arkticheskikh rekakh i moriakh v zavisimosti ot otritsatel'nykh temperatur vozdukha. (The growth of ice in the Arctic rivers and seas in dependence on negative air temperatures.) Problemy arktiki. 1938(5/6):9-26.
1464. Lebedev, V. V.
1940. Novye formuly rosta l'da v arkticheskikh rekakh i moriakh. (New formulas of the growth of ice in Arctic rivers and seas.) Met. i gidrol. 6(8):40-51.
1465. Lednev, V. A., V. I. Prishletsov i V. S. Samoilenko.
1939. Instruktsiia dlia proizvodsta ledovykh nabludenii na sudakh. (Instructions for taking ice-observations on ships.) Moscow-Leningrad, Pishchepromizdat. 16 p. illus., charts. [Some connection with work of VNIRO.]
1466. Leningrad. Gosudarstvennyi gidrologicheskii institut.
1942. ... Rukovodstvo dlia prognozov tolschiny ledianogo pokrova na rekakh i ozerakh. (Instructions for forecasting thickness of ice cover on rivers and lakes.) Moskva, Gidrometeoizdat. 55 p.
1467. Lieckfeldt.
1902. Über eisbildung. Zbl. bauverw. 22:139-140.
1468. Listov, IŮ.
1897. Nabludeniiâ nad zamerzaniem solianogo ozera bliz g. Iлека. (Congelation on salt lakes near Gulf Iлека.) Zap. Russ. geogr. obshch. 8(2):229-248.
1469. Ludensee, S.
1928. Meereisbeobachtungen vom flugzeug aus. Ann. hydrogr.. Berlin. 56:87-89.
1470. Ludlow, William.
1884. Observations on the crushing strength of ice. Proc. Engrs. club Phila. 4:93-99. [Delaware River.]
1471. Macy, R. H.
1940. Icebreakers. Proc. U.S. Nav. inst. 66:669-674.
1472. *Malmgren, Finn.
1928. On the properties of sea ice. Sci. res. Norw. N. Polar exped. 1918-1925. 1(5). 67 p.
1473. Mariutin, T. P.
1936. O kreposti morskogo l'da. (On the firmness of the sea ice.) Met. i gidrol. 1(2):70-73.
1474. Markham, C. R. and H. R. Mill.
1901. Ice nomenclature. (In: "The Anarctic manual for the use of the expedition of 1901." Roy. Geog. soc. 1901. pp. xiv-xvi.)
1475. *Maurstad, A.
1935. Atlas of sea ice. Geofys. publ. 10(11). 17 pp. 40 figs.
1476. Mecking, Ludwig.
1909. Das eis des meeres. Meereskunde. 3(11).

1477. Merkushev, G.
1939. Snegovoi pokrov i tolschina l'da. (The snow cover and thickness of ice.) Zap. gidrogr. 1939(1):121-123.
1478. Meymier, A.
1937. Terminologie des glaces flottantes. Ann. geogr. 46:106-107.
1479. Moesveld, A. L. T.
1934. Ijsbestrijding (Ice control). Chemisch weekblad. 31:170-175. [Difficulties experienced by shipping and power stations due to ice formation in water. Experiments on influencing ice formation by chemicals.]
1480. Molchanov, I. V.
1925. O stroenii i strukture ozernogo l'da v svîazi s meteorologicheskimi usloviîami. (Sur la structure de la glace des lacs suivent les conditions météorologiques.) Izv. Gos. gidrol. inst. 14:31-51.
1481. Mordovin, P.
1868. Ob obrazovanii l'da v moriâkh, ozerakh i rekakh. (On the freezing of seas, lakes, and rivers.) Morskoi sbornik. 98(9):13-17.
1482. Moseley, Henry.
1870. On the mechanical properties of ice. Phil. mag. 39:1-8.
1483. Moskatov, K. A.
1938. On the landing of airplanes upon ice. (In Russian; English summary.) Trud. Arkt. inst. 110:43-55.
1484. Müllner, J.
1926. Problematisches im vereisungsbeginne der binnenseen. Geogr. ann. 8:177-216.
1485. Murphy, John.
1921. The ice problem in Canada . . . with comments and explanation by Col. Charles Keller. Mil. engr. 13:104-105. [Frazil and anchor ice formation discussed.]
1486. Nazarov, V. S.
1938. K izucheniiu svoistv morskogo l'da. (Studies on the properties of sea ice.) Trud. Arkt. inst. 110:101-108.
1487. Nazarov, V. S.
1938. Nekotorye dannye o skorosti dreifa l'da pod deistviem vetra. (Velocity of ice drift under the influence of wind.) Severnyi morskoi put'. 10:68.
1488. Nazarov, V. S.
1938. Nekotorye dannye o skorosti poverkhnostnogo techeniâ i driefa l'da pod deistviem vetra. (Certain data on speed of surface currents and ice drift due to wind.) Met. i gidrol. 4(4):122.
1489. Nazarov, V. S.
1938. Opyt ucheta vozdushnykh potokov dlîa ledovykh prognozov. (Experiments in consideration of air currents for ice forecasting.) Met. i gidrol. 4(4):118-121.

1490. Nazarov, V. S.
1938. Sovremennoe sostofanie ledovykh prognozov. (Modern ice forecasting.) Sovetskafâ arktika. 1938(2):36-46. Met. i gidrol. 4(1):52-63.
1491. Nazarov, V. S.
1939. Plovuchest' morskogo l'da. (The buoyancy of sea-ice.) Severnyi morskoi put'. 11:62-63. [Table of load limit of winter and spring ice, relative to thickness.]
1492. Nazarov, V. S. and N. Belinski.
1939. Problemy ledovykh prognozov arkticheskikh morei. (Problems of Arctic Ocean ice forecasting.) Problemy arktiki. 1939(2): 9-26.
1493. Organization météorologique internationale, Secretariat de.
1936. Les messages synoptiques du temps. fasc. 1. Manual des codes internationaux. No. 9. 2d ed. Leyde, Eduard Ijdo S. A. [Ch. II. Glace.]
1494. Ovchinnikov, I. G.
1940. K voprosu o kratkosrochnykh ledovykh prognozakh. (On the problems of short-term ice prediction.) Problemy arktiki. 1940(1):24-28.
1495. Palibin, I.
1925. Mikroorganizmy, kak razrushiteli morskikh l'dov. (Mikroorganismen als zerstörer der polareises.) Izv. TŠentr. gidromet. bñuro. 5:56-66.
1496. Pasqueau, A.
1881. Les embâcles de glaces en 1879-80. Conférence faite à la Sorbonne le 25 mars 1881. Bull. Assn. sci. France. s.2, 3:101-114.
1497. Pečsi, Albert.
1909. Jégképzodés a folyóvizekven. (Ice formation in rivers.) Termt. közl. 41:816-817.
1498. Petrichenko, A.
1940. O novyshenii kachestva nablñudenii nad l'dami. (On the improvement of the quality of ice observation.) Problemy arktiki. 1940(12):101-103. illus. [Notes on reckoning denseness of ice and recording thereof.]
1499. Petrunichev, N. N.
1934. Uchet ubyli l'da za schet skorostei techeniâ. (Reduction of the ice-thickness due to the action of currents.) Izv. Inst. gidrotekhn. 11:180-192. [Influence of currents on ice during process of formation.]
1500. Pettersson, Otto.
1883. On the properties of water and ice. Vega-expeditionens vetenskapliga iakttagelser. 2:247-323.

1501. Pettersson, Otto.
1904-1907. On the influence of ice-melting upon oceanic circulation.
Geogr. j. 24:285-333. 1904. 30:273-303, 671-675. 1907.
Skr. Svensk. hydrogr.-biol. komm. 2(8). 16 p. 1905.
1502. Pettersson, Otto.
1910. De l'influence de la fusion de la glace sur la circulation océanique. Rev. marit. 186:513-535. [Transl. of his article in Geogr. j. 1907.]
1503. Pfaff, Fr.
1875. Versuche über die plastizität des eises. Ann. phys. 155: 169-174.
1504. Pinegin, N. V.
1924. Predvaritel'noe soobshchenie ob issledovanii prochnosti rechnogo l'da v svîazi s temperaturnymi izmeneniiâmi. (Preliminary communication on research of strength of river ice in relation to temperature differences.) Soobshch. nauch.-tekhn. rab. v. resp. 12:12-14.
1505. Piotrovich, V. V.
1933. Sposob opredeleniâ poristosti i kolochestva lediânykh mass v rechnykh zazhorakh. (Means of determination of porosity and quantity of ice which accumulates on rivers.) Izv. Gos. gidrol. inst. 59:27-30.
1506. Pobedonostsev, B. D.
1936. O sposobakh izmereniâ shugi. (Methods of sludge measurements.) Met. i gidrol. 1936(8):19-34. [Variations of "shugi": Ice crystals formed at river mouths from open water surface, with running water current (ordinary shugi). Floating bottom ice. Frozen sheets of surface origin, partly destroyed lumps of frozen bottom ice, and crushed remnants of ice and snow.]
1507. Pogachev, I. M.
1939. K voprosu o prokhodimosti l'dov dlîa sudov. (On the question of ice navigation by ships.) Severnyi morskoi put'. 11: 52-55. [Tables of state of ice (bala) and loss of speed of motion by ships.]
1508. Priestley, R. E.
1922. Sea ice definitions. (In: C. S. Wright and R. E. Priestley. Glaciology. Sci. rep. British (Terra Nova) Antarctic expedition, 1910-1913. London. pp. 393-394.)
1509. Rastaplivanie poliârnykh l'dov. (Melting of polar ice.) Vestnik znaniâ.
1934. 1934(11):766. [On sailing conditions in Polar ice and on the use of thermite or ammonal for battling the ice.]
1510. Repa, A. G.
1937. Freezing out of sea water on a free ice surface. (In Russian.) Vestn. Dalnevost. fil. Akad. nauk. 25:59-74.
1511. Reusch, E.
1880. Elastizitätmodul des eises. Ann. phys. 9:329-334.

1512. Ringer, W. E.
1928. Über die veränderungen in der zusammensetzung des meereswassersalzes beim ausfrieren. Rapp. Cons. explor. mer. 47 Rapp. jubilaire: 226-236.
1513. Romanowicz, H. & E. J. M. Hönigmann.
1932. Zug- und druckfestigkeit von eis. Forsch. ing. wes. 3:99.
1514. Römer, E.
1894. Ueber grund- und siggeis. Ann. hydrogr., Berlin. 22:105-107.
1515. Rossby, C. G. and R. B. Montgomery.
1935. The Layer of frictional influence in wind and ocean currents. Pap. phys. ocean. met. 3(3). [Wind drift of the ice: pp. 75-84.]
1516. Royen, N.
1922. Istryek vid temperatur hogningar. (In: Hyllmingskrift tilagnad F. Vilh. Hansen på sextioårsdagen. Stockholm. pp. 356-383.)
1517. Rudovitz, L. F.
1929. Nomenklatura l'dov, vyrabotannafâ Osoboi Komissei pri Hidrograficheskome upravlenii. (Nomenclature of ice . . .) Trud. 2 Vse. gidrol. s'ezd, Leningrad. 2:409-416.
1518. Rykachev, M. A.
1870. O znachenii nablûdenii nad vskrytiem i zamerzaniem rek i ozer. (On the importance of observations on the freezing and opening of rivers and lakes.) Izv. Russ. geogr. obshch. 6:145-148.
1519. Sandström, J. W.
1905. On ice melting in seawater and currents raised by it. Skr. Svensk. hydrogr.-biol. komm. 2(9):5 p.
1520. Sarapkin, P. S.
1928. K kharakteristike fizicheskikh svoistv vody, snega, i l'da . . . (Physical properties of water, snow, and ice.) Omskii meditsinskii zhurnal. 3:1-8. [On salt-water lake Karachi and fresh-water lake Uzul-Kulia.]
1521. Scheibel.
1910. Die feste eisdecke, der eisaufbruch, eisgang und die damit verbundenen eisversetzungen auf flüssen und strömen. Wetter. 27:2-9.
1522. Scheibel.
1910. Der hergang und anfang bei bildung des grundeises auf flüssen und strömen. Wetter. 27:25-29.
1523. Schell, I. I.
1940. Polar ice as a factor in seasonal weather. Mon. weath. rev. suppl. 39:27-51. 9 figs. [Contemporary and subsequent relationship between ice in the Polar seas and general circulation as indicated by pressure distribution as well as temperature, cyclonic activity and rainfall over the N. Atlantic and Europe.]
1524. Schmauss, A.
1924. Über grundeisbildung. Met. z. 41:116. [Brief; insignificant.]

1525. Schoklitsch, Armin.
1930. Der wasserbau. Bd. I, tl. 2, G. Das eis in stehenden und fleissenden gewässern. Wien. pp. 152-160.
1526. Schulz, Bruno.
1930. Die untersuchungen der "Maud"-expedition über die eigenschaften des meereises. Ann. hydrogr., Berlin. 58:20-24.
1527. Schuster.
1882. Über maassregeln bei eisgangen. Deutsche bauzeitung. 16: 564-566.
1528. Scoresby, W.
1868. Remarks as to the dependence on the thermometer as a means of detecting the vicinity of ice. (In: U.S. Navy dept. Bureau of navigation. Memoir of the dangers and ice in the North Atlantic Ocean. pp. 19-20.)
1529. Seifert, R.
1925. Über die eisbildung und den wärmehaushalt der gewässer. Zbl. bauverw. 45:397-399, 431-434.
1530. Shchurnikov, V. L.
1940. O novom metode izucheniâ vnutrennikh napriâzhenii lediânogo pokrova. (On a new method of studying internal tension of ice.) Problemy arktiki. 1940(1):107-111.
1531. Shenrok, A. M.
1905. Meteorologicheskiiâ usloviâ obrazovaniâ donnago l'da. (Meteorological conditions for the formation of anchor ice.) Izv. Russ. geogr. obshch. 41(2):339-342.
1532. Shenrok, A. M.
1934. K voprosu ob obrazovanii donnogo l'da. (Contribution to the question of formation of anchor-ice.) Izv. Gos. gidrol. inst. 64:57-58.
1533. Shepelevskii, A. A.
1940. Skorost' narastaniâ presnogo l'da pri zadannoi temperature verknei ego poverkhnosti. (On the velocity of growth of freshwater ice-cover at a given temperature of the upper surface of the ice.) Problemy arktiki. 1940(10):9-22.
1534. Shimanskii, IŮ. A.
1938. Uslovnye izmeriteli ledovykh kachestv sudna. (Conditional standards of ice qualities of a ship.) Trud. Arkt. inst. 130. 59 p.
1535. Shishov, N. D.
1940. K voprosu o prochnosti l'da (s kartoi). (On the question of durability of ice.) Sbornik: "Proizvodstvo izyskanii na vodnom transporte". Leningrad. pp. 106-110.
1536. Shokalskii, IŮ. M.
1906. Sur la formation de la glace de fond. C. R. Acad. sci. Paris. 143:261-263.

1537. Shokalskii, IŮ. M.
1910. O postanovke nablŮdenii nad sostoĭaniem ledĭanogo pokrova v russkikh vodakh. (On the organization for ice observation in Russian waters.) Prot. 2-ogo met. s'ezd. Akad. nauk. pp. 27-34.
1538. Shokalskii, IŮ. M.
1917. Okenografiya. Petrograd. [Ch. 6, pt. 2: The freezing of fresh and sea water, section on "Sea-ice; ice fields and their formation; the Polar pack." pp. 184-193.]
1539. Shostakovich, V. B.
1926. Ůber den auf- und zugang der flŮsse. Ann. hydrogr., Berlin. 54:194-198.
1540. Shuleikin, V. V.
1932. Temperature volny v ledovom pokrove morĭa. (The temperature-curve in the ice-cover of seas.) Trud. Taimyrsk. gidrogr. eksped. 2:49-68.
1541. Shuleikin, V. V.
1933. Termit i ammonal, kak sredstva bor'by so l'dom. (Thermite and ammonal use in struggle against ice.) Trud. Gos. okean. inst. 2(3):30-40.
1542. Shuleikin, V. V.
1937. Dreif ledĭanykh polei. (Drift of Polar ice.) Izv. Akad. nauk. s. geogr. i geofiz. 1:3-22. English summary.
1543. Shuleikin, V. V.
1938. The drift of ice-fields. (Soviet Polar drift station.) C. R. Akad. nauk. 19:589-594. [Mathematical discussion.]
1544. Shuleikin, V. V., N. I. Rusanov i V. A. Riabchikov.
1931. Zavisimost' mezhdru teploprovodnost'Ů l'da i ego strukturoi. (The relation between the thermal conductivity and the structure of ice.) Zh. geofiz. 1:179-186.
1545. Simmersbach, Bruno.
1909. Betrachtungen ůber eis und eisbildung. Prometheus. 20: 583-585, 599-603, 619-622.
1546. Smirnov, D. A.
1906. K voprosu o donnom l'de. (On the anchor-ice question.) Met. vestn. 16:177-187.
1547. Smith, E. H.
1932. Ice in the sea. Physics of the earth. v.5. Oceanography. Bull. Nat. res. coun. 85:384-408.
1548. Sofronov, F. N.
1933. On forecasting ice-phenomena on rivers and channels. Rep. 4th Hydrol. conf. Baltic States. 95B:10-13.
1549. Sofronov, F. N.
1938. Forecasting the formation of ice and ice-cover on rivers and channels. (In Russian.) Trud. Leningrad, otd. Vse. nauchn. inzh.-tekhn. ohshch. vodn. transp. 2/3:51-84. [Unverified reference.]

1550. Soley, J. C.
1915. Currents in Arctic and Antarctic Oceans, with attention to water temperatures, color and formation of ice, and other physical conditions. Verso Pilot chart N. Atlantic Ocean. 1400. N. Pacific Ocean. 1401.
1551. Solov'ev, I. A.
1939. Oput primeneniâ ruchnogo ledobura pri promerakh so l'da. (An attempt to utilize a hand ice-borer in measurements of ice.) Met. i. gidrol. 5(2):116-118.
1552. Somov, M. M.
1939. K voprosy o srednei tolshechine l'da v okrainnykh moriâkh. (On the problem of the mean thickness of the ice in bordering seas.) Problemy arktiki. 1939(6):11-20.
1553. Somov, M. M.
1939. Po povodu stati V. Nazarova i N. Belinskogo "Problemy ledovykh prognozov arkticheskikh morei." (Apropos Nazarov and Belinski's article "Problems of Arctic Ocean ice-forecasting.") Problemy arktiki 1939(5):46-49.
1554. Somov, M. M.
1940. O putiâkh razvitiâ ledovykh prognozov. (Ways of developing ice forecasting.) Problemy arktiki. 1940(1):13-18.
1555. Speersschneider, C. J. H.
1926. Arctic ice. Mar. obs. 3:73-77.
1556. Speranskii, M. I.
1929. Novyi kod dlâ ledovykh soobshchenii (proekt, vyrabotannyi osoboi komissiei pri Gidrograficheskom upravlenii.) (A new code for ice information.) Trud. 2d Vse. gidrol. s'ezd. Leningrad. 2:431-433.
1557. Starokadomskii, L.
1930. Termit — novoe sredstvo bor'by s lediânymi peremychkami i nagromozhdeniâmi l'da vo vremâ plavanîâ sudov v poliârnykh vodakh. (Thermite — a new means of combatting ice during navigation season in Polar waters.) Zap. gidrogr. 59:73-76.
1558. Stefan, I.
1891. Über die theorie der eisbildung insbesondere über die eisbildung im Polarmeere. Ann. phys. n.f. 42:269-286.
1559. Suda, K.
1931. On the nomenclature of ice forms. (In Japanese.) J. Ocean. 2:752-757. [A review.]
1560. Sukhorukov, A. J.
1938. The types of ice-breakers and their shape. (In Russian.) Trud. Leningrad. otd. Vse. nauchn. inzh.-tekhn. obshch. vodn. transp. 1938(2/3):117-148.
1561. Sychev, K.
1940. Registrator tolshechiny l'da. (Register for thickness of ice.) Sovetskââ arktika. 1940(5):92.

1562. Takeuchi, T. & T. Inai.
1936. Specific volumes of heavy water and its ice at freezing point.
Jap. j. phys. 11(2):67-68.
1563. Tamura, S. T.
1905. Mathematical theory of ice formation. Mon. weath. rev.
33:55-59.
1564. Tarshis, M. K.
1938. Nauchnye itogi issledovaniâ prochnosti ledokol'nykh sudov.
(Scientific investigations of the strength of icebreakers.)
Problemy arktiki. 1938(2):115-143.
1565. Thoulet, Jules.
1890. Océanographie. (Statique) Paris. [Pt. V: "Les glaces".
Ch. 2: La glace dans la nature. "Synonymie des termes
relatifs aux glaces de mer", "La glace de mer." "Glaces
côtières", pp. 468-483.]
1566. Thoulet, Jules.
1904. L'Océan: ses lois et ses problèmes. Paris. [Ch. 10, "La
glace", section on "Glace de mer", pp. 306-309.]
1567. Thoulet, Jules.
1922. L'Océanographie. Paris. ["La glace". "La glace de pack"
and "Glaces côtières", pp. 212-216.]
1568. Timonov, V. E.
1935. K voprosu o teoreticheskikh obosnovaniâkh glavneishikh
ledovykh profsessov v vodoemakh. On the theoretical
basis for the establishment of a working hypothesis for ex-
planation of ice phenomena in lakes and rivers. Izv. Inst.
gidrotekhn. 16:15-53. English abstract. pp. 50-53.
1569. Timonov, V. E.
1938. On the establishment of a working hypothesis of ice pheno-
mena in lakes and rivers. Bull. Int. geod. geophys. un.
Assn. sci. hydrol. 23:367-372. illus.
1570. *Transehe, N. A.
1928. The ice cover of the Arctic Sea, with a genetic classification of
sea ice. Spec. publ. Amer. geogr. soc. 7:91-123.
1571. Trufanov, A.
1939. O krivoi skorostei dliâ potoka, poverkhnost' kotorogo pokryta
l'dom ili sherokhovatou plenkou. (On the curve of the
velocity for a stream, the surface of which is covered with
ice or a rough pellicle.) Met. i gidrol. 5(1):51-57.
1572. T'Surikov, V. L.
1938. O vliâanii snega na narastanie morskogo l'da. (Influence
of snow on formation of marine ice.) Met. i gidrol. 4(7):
113-127.
1573. T'Surikov, V. L.
1939. O narastanii morskogo l'da. (On growth of marine ice.)
Severnyi morskoi put'. 14:38-53.

1574. TSurikov, V. L.
1940. K voprosu o prochnosti l'da. (On the question of the solidity of ice.) Severnyi morskoi put'. 16:45-74.
1575. TSurikov, V. L.
1940. O novom metode izucheniâ vnutrennikh napriâzhenii lediânogo pokrova. (New method of measuring internal strain of the ice cover.) Problemy arktiki. 1940(1):107-111.
1576. Ulmer, Joseph.
1931. Movements of icefloes in the Arctic. Arktis. 4:25-27.
1577. U.S.S.R. Gidrograficheskoe upravlenie.
1937. Svod' shifrov meteorologicheskikh i ledovykh telegramm. (Code for meteorological and ice telegrams.) Leningrad, izd. G. U. UMS RKKA. xiv, 263 p. charts (part fold.)
1578. U.S.S.R. Gidrograficheskoe upravlenie.
1938. Kody meteorologicheskikh i ledovykh telegramm. (Code for meteorological and ice telegrams.)
1579. U.S.S.R. Gidrograficheskoe upravlenie. Gidrometeorologicheskii otdel.
1930. Al'bom ledovykh obrazovaniï. (Album of ice forms.) 40 figs.
1580. U.S.S.R. TSentralnoe upravlenie edinoi gidro-meteorologicheskoi slyzhby.
1935. Rudovodstvo k sostavleniû sudovykh meteorologicheskikh telegramm i ledovykh soobshchenii sudov i beregovykh stantsii. (Manual for composing ship and meteorological telegrams and ice reports of ships and coastal stations.) Leningrad. 27 p. tables.
1581. U.S.S.R. TSentral'noe upravlenie edinoi gidrometeorologicheskoi sluzhby,
1942. Krasnoi armii.
Rukovodstvo dliâ prognozov tolshchiny lediânogo pokrova na rekakh i ozerakh. (Instructions for forecasting ice on rivers and lakes.) Moskva, Gidrometeoizdat. 55 p. (Gosudarstvennyi gidrologicheskii institut. 194.)
1582. U. S. Hydrographic Office.
1913. Influence of icebergs and land on temperature of the sea. Verso Pilot charts N. Pacific and Indian Mar.
1583. U. S. Hydrographic Office.
1913. Temperature of the sea in the vicinity of icebergs and other parts of the ocean. Verso Pilot chart N. Atlantic Sep.
1584. U. S. War department.
1941. Operations in snow and extreme cold. Field manual 31-15. Rev. ed. Sep.
1585. Usachev, P. I.
1938. Biological analysis of ice-floes. C. R. Akad. nauk. n.s. 19:645-648.
1586. Variation de la température et de la salinité de l'eau de mer au voisinage d'un
1913. iceberg. Annu. Soc. mét. France. Jan. 1913:34-35.
1587. Vasenko, B. P.
1899. Ice. (In Russian.) Sborn. Inst. inzh. 50:497-528.

1588. Vedel, P.
1895. On the growth and sustaining power of ice. J. Franklin inst. 140:355-370, 437-455.
1589. Veinberg, P.
1905-1907. Über die innere reibung des eises. Ann. phys. 18:81-91. 1905. 22:321-332. 1907.
1590. Veinberg, P.
1906. O vnutrennem trenii l'da. (On the internal friction of ice.) Zh. Fiz.-khim. obshch. chast'. fiz. 38:186-224, 256-281, 289-394. English abstract.
1591. Veinberg, B. P.
1913. Pribory dliã bystrogo i dostatochno tochnogo opredeleniã udel'nogo vesa l'da i soprotivleniã ego na izlom. (Apparatus for rapid and accurate determination of specific gravity of ice and its resistance to bending fracture.) Izv. Tomsk. tekhn. inst. 29:1-7.
1592. Veinberg, B. P.
1929. Vliãnie temperatury na mekhanicheskoe soprotivlenierechnogo l'da. (Influence of temperature on mechanical resistance of river-ice.) Izv. Glav. geofiz. obs. 1929(2):29-33.
1593. Veinberg, B. P.
1936. Izuchenie svoistv l'da v svete osvoeniã trassy severnogo morskogo puti. (Studies of the properties of ice and the mastery of the Soviet Arctic.) Bûl. Arkt. inst. 1936(8/9): 369-375, 430-431. [Table 4: solidity of ice, values for crushing, bending, tearing, shear, and twisting. Table 5: Influence of temperature on strength.]
1594. Veinberg, B. P.
1936. Ob izuchenii soprotivleniã l'da na izlom v estestvennykh usloviãkh. (On the study of the resistance of ice to breaking under natural conditions.) Met. i gidrol. 2(11/12): 89-90.
1595. Veinberg, B. P.
1936. Sneg, inei, grad, led i ledniki, izdaniã. (Snow, hoar-frost, hail, ice and glaciers.) Moscow-Leningrad, ONTI. 237 p.
1596. Veinberg, B. P.
1938. An attempt at a program of theoretical and experimental investigations of the properties of snow and ice. Bull. Int. geod. geophys. un. Assn. sci. hydrol. 23:536-544.
1597. Veinberg, B. P.
1938. Mechanical properties of ice. Bull. Int. geod. geophys. un. Assn. sci. hydrol. 23:509-536.
1598. Veinberg, B. P.
1939. Obrazovanie l'da. (Formation of ice.) Vestn. znaniã. 1939(2):48-55.
1599. Veinberg, B. P.
1940. Izuchenie mekhanicheskikh svoistv lediãnogo i snezhnogo pokrova. (Study of mechanical properties of ice and snow cover.) Nauka i zhizn. 1940(3):27-30.

1600. *Veinberg, B. P.
1940. Led; svoistva, vzniknovenie i ischeznovenie l'da. (Ice: properties, breaking-up and disappearance of ice.) Moskva-Leningrad, Gosudarstvennoe izdatel'stvo Tekhnikoteoreticheskoi literatury. 524 p. illus.
1601. Veinberg, B. P. and S. M. Andreev.
1939. The limit of plasticity of river-ice. (In Russian.) Trud. Sibirsk. fiz.-tekh. inst. 5(3):15-31. [Unverified reference.]
1602. Ven'ukov, M. I.
1881. O toplote i zamerzanii vody v ozerakh. (On the temperature and freezing of the water in lakes.) Izv. Russ. geogr. obshch. 17:59-71.
1603. Vitman, F. F. and N. P. Shandrikov.
1938. Nekotorye issledovaniâ mekhanicheskoi prochnosti l'da. (Some investigations on the mechanical strength of ice) Trud. Arkt. inst. 110:83-100.
1604. Vize, V. IŮ.
1924. L'dy v poliarnykh moriakh i obshchaâ tsirkulatsiâ v atmosfere. (Ice in the Polar seas and the general circulation of the atmosphere.) Zh. geofiz. i met. 1:78-84. English summary.
1605. Vize, V. IŮ.
1924. Polareis und atmosphärische schwankungen. Geogr. ann. 6:273-299.
1606. Vize, V. IŮ.
1930. Zur kenntnis der salze des meereises. Ann. hydrogr., Berlin. 58:282-286.
1607. Vize, V. IŮ.
1936. Mezhdunarodnyi ledovyi kod. (International ice code.) BŮl. Arkt. inst. 1936(8/9):400-404.
1608. Vize, V. IŮ.
1937. Sovremennoe sostoiânie voprosa o ledovykh prognozakh. (Present status of the problem of ice-forecasting.) Problemy arktiki. 1937(1):67-80.
1609. Vize, V. IŮ.
1940. Po povodu stat'i M. M. Somova "O putiakh razvitiâ ledovykh prognozov". (In regard to M. M. Somov's "Ways of developing ice forecasting.") Problemy arktiki. 1940(1):19-23.
1610. Voeikov, A. A.
1935. Parovoi bur dlâ l'da i rabota s nim. (Steam borer for the ice and its use.) Severnyi morskoi put'. 2:101-106. English summary.
1611. Volkov, G.
1940. Ledovye aerodromy. (Airdromes on ice.) Morskoi sbornik. 1940(3):77-88. illus., diagrs. [Strength, properties, etc. of ice.]

1612. Volkov, N. A.
1940. O priblizhenii ledovykh prognozov k trebovaniâam praktiki. (On the approach of ice prediction to practical requirements.) Problemy arktiki. 1940(1):29-35.
1613. Von Engeln, O. D.
1915. Experimental studies and observations on ice structure. Amer. j. sci. s.4, 40:449-473.
1614. Waidner, C. W., H. C. Dickinson and J. J. Crowe.
1913. Observations on ocean temperatures in the vicinity of icebergs and in other parts of the ocean. Bull. U. S. Standards Bureau. 10:267-278. Proc. U. S. Nav. inst. 39:1525-1549. tables.
1615. Walker, David.
1860. Ice observations. J. roy. soc. Dublin. 2:371-380. Proc. Roy. soc. 9:609-611. 1858. (Abstract). [On freezing of sea water and salinity changes.]
1616. Wemelsfelder, P. J.
1940. De invloed van het ijs op de waterstanden der groote rivieren. Ingenieur. 55(7):A57-59. [Influence of ice on water levels of large rivers; theoretical discussion.]
1617. Weyprecht, Karl.
1897. Die metamorphosen des polareises. Oesterreichisch Ungarische Nordpol-expedition in den jahren 1872-1874. Vienna, M. Perles. 284 pp. [Chap. I, "Verschiedene formen des eises und deren ursprung."]
1618. Whitman, W. G.
1926. The elimination of salt from sea-water ice. Amer. j. sci. 11:126-132.
1619. Wood, R. W.
1891. Effects of pressure on ice. Amer. j. sci. 40:30-37. Nature. 43:309.
1620. Wordie, J. M. and B. B. Roberts.
1944. Sea ice: terminology, formation and movement. Polar record. 4(27):126-133. ["The Hydrographer has recently made a revision of the sections on sea ice for future editions of the Antarctic Pilot and the . . . Arctic Pilot . . . The article which follows . . . is published by permission of the Hydrographer".—Note.]
1621. Wright, C. S.
1926. The detection of icebergs. Nature. 119:750-751.
1622. Wüst, Georg.
1934. Neue anschauungen über eisberge. Petermanns mitt. 80: 176-177.
1623. Zil'berman, A. N.
1935. O donnom l'de. (On anchor ice.) Met. vestn. 1935(3/4): 16-22.

1624. Zubov, N. N.
1932. Nekotorye svoystva morskogo l'da. (Some properties of marine ice.) Moskva, Gidro-meteorologicheskii komitet. 43 p. (Komitet po provedeniû 2-go Mezhdunarodnogo poliarnogo v SSSR.)
1625. Zubov, N. N.
1934. K voprosu o dvizhenii l'dov pod vlianiem vetra. (On the motion of ice under the influence of winds.) Severnyi morskoi put'. 1:78-83. English summary.
1626. Zubov, N. N.
1935. O biologicheskikh svoystvakh morskogo l'da. (Biological characteristics of marine ice.) Severnyi morskoi put'. 2:45-51. English summary. [Possibility of predicting by the plankton, the approach to the ice edge; factors determining the abundance of organic life in vicinity of melting ice.]
1627. Zubov, N. N.
1935. Soobrazheniâ o dvizhenii l'dov pod vlianiem vetra. (Über die eisbewegung unter einfluss des windes.) Issled. mor. SSSR. 21:113-119.
1628. *Zubov, N. N.
1938. Morskie vody i l'dy. (Marine water and ice.) Moscow, Gidrometeoizdat. 453 p. illus., tables, diags. "Literatura": pp. 433-447.
1629. Zubov, N. N.
1938. O predel'noi tolshchine morskikh mnogoletnikh l'dov. (Thickness limit of marine Polar ice.) Met. i gidrol. 4(4):123-131.
1630. Zubov, N. N.
1939. O normal'noi tolshchine morskikh l'dov v raionakh ikh vynosa. (On the normal thickness of marine ice in region where it is carried off.) Problemy arktiki. 1939(5):43-45.
1631. Zubov, N. N.
1939. O pokazatele zamerzaniâ morâ. (Index of freezing of sea-water.) Problemy arktiki. 1939(4):5-12.
1632. Zubov, N. N.
1940. O skorosti taniâniâ l'dov. (Speed of melting of ice.) Problemy arktiki. 1940(5):13-18.
1633. Zubov, N. N.
1940. O vertikal'nykh dvizheniâkh l'dov v svâzi s izmeneniâmi ikh tolshchiny. (On the vertical movement of ice in connection with modification of its thickness.) Problemy arktiki. 1940(12):42-50.
1634. Zubov, N. N.
1942. Osnovy ustroystva dorog na ledianom pokrove. (Fundamentals of road construction on ice.) Moskva, Gidrometeoizdat. 73 p. (SSSR. Glavnoe upravlenie gidrometeorologicheskoi sluzhby, Krasnoi armii.)

ADDENDA

1635. Al'tberg, V. IĀ.
1918. O donnom l'de. (On anchor ice.) Zap. gidrogr. 41:833-853.
1636. Al'tberg, V. IĀ.
1939. Fiziko-khimicheskie osnovy profsessa ledoobrezovaniĀ v gidrosfere. (Physico-chemical basis of the process of ice-formation in the hydrosphere.) Priroda 28(1):7-13.
1637. Bachmanov, B. M.
1933. Sfericheskie formy l'da. (Spherical form of ice.) Zap. gidrogr. 1933(1):85-86.
1638. Bachmanov, B. M.
1934. K voprosu o blinchatom l'de. (On pancake ice.) Zap. gidrogr. 1934(1):115-116.
1639. Barnes, H. T. and A. S. B. Lucas.
1904. The growth of ice crystals in the Bunsen ice calorimeter. Trans. Roy. soc. Can. s.2, sec. 3, 10:33-39.
1640. Bel'chenko, K. A.
1943. MekhanizatsiĀ promera so l'da. (Mechanical measuring of ice.) Zap. gidrogr. 1943(1):115-116.
1641. Benedicks, C. und P. Sederholm.
1943. Regarding the formation of anchor (ground) ice. Arkiv f. matematik, astronomi och fysik. 29 A(22). 7 p. chart.
1642. Blackwelder, E.
1938-1940. The hardness of ice. Amer. j. sci. 237:146-148. 238:61-62. 240:449. [Mountain, fresh-water and glacier ice.]
1643. Blizniak, E. V.
1915. Fiziko-geograficheskoe opisanie r. EniseiĀ. KolebaniĀ gorizontov vody, zimnei sostoiĀnie, zamerzanie i vskrytie, skorosti techeniĀ, raskhody vody. (Enisei ot Minusinska do KrasnoĀrska.) (Physico-geographical study of the Yenisei River. Fluctuation of water level, winter conditions, freezing and breaking up, speed of current, volume of water. Yenisei River from Minusinsk to Krasnoyarsk.) Materialy dlĀ opisaniĀ russkikh rek. 57(1).
1644. Brown, E. W.
1932. Ice thrust in connection with hydroelectric plant design with special reference to the plant at Island Falls on the Churchill River. J. Engineering inst. Canada. 15:18-25. [Pressure exerted by ice in expanding as its temperature rises. Cube of ice allowed to rise gradually in temperature while held in a testing machine.]
1645. Büdel, Julius.
1943. Das eis im Kaspisee. Ann. hydrogr., Berlin. 71:118-121. illus., col., fold. chart.
1646. Chernigovski, N. T.
1935. Some experiments on radiation properties of snow and ice of the Kara Sea at the UedineniĀ Island in 1935. Arctica. 4:137-142.

1647. Chernigovski, N. T.
1938. O radiatsionnykh svoistvakh snega i l'da v prolive Borisa Vil'kitskogo u Mysa Cheliŭskina. (Radiation properties of snow and ice at Vilkitsky Str. near Cape Cheliuskin.) Problemy arktiki. 1938(1):47-51. English summary.
1648. Chernogovski, N. T.
1939. O radiatsionnykh svoistvakh snegovogo pokrova i l'da arkticheskikh morei. (Radiation properties of snow cover and of ice in Arctic seas.) Problemy arktiki. 1939(6):31-37.
1649. Chohnoky, Eugen von.
1909. Das eis des Balatonsees. Resultate der wissenschaftlichen erforschungen des Balaton. 1(5) sec. 4. 113 p. illus., plates (photos.) diags.
1650. Corder, Henry and E. L. Kelting
1940. The freezing of a tidal river. Met. mag. 75:55-56, 87. [In England.]
1651. Daly, R. A.
1900. Drift ice and theory of ocean currents. Mon. weath. rev. 28:433-434.
1652. Devik, Olaf.
1942. Supercooling and ice formation in open waters. Geofys. publ. 13(8). [Unverified reference.]
1653. Domrachev, P. F.
1930. Nekotorye rezul'taty nablŭdenii gidrometeorologicheskogo posta na Oz. Il'mene za 1925-1927 g.g. (Some results of hydrometeorological observations made at Lake Ilmen 1925-1927.) Izv. Gos. gidrol. inst. 29:85-94. tables. [Includes ice thickness for ten-day periods Dec.-Apr., 1923/24-1926/27.]
1654. Eberlin, P.
1889. Storisens transport af ler, grus og sten. (Transport of clay, gravel and rock by field ice.) Medd. om Grønland. 9:264-270. French summary.
1655. Embo, E.
1917. Led i ego vliŭanie na zimnii raskhod vody v rekakh Severo-Amerikanskikh Soedinennykh Shtatov. (Ice and its relationship to winter volume of water in rivers of the U. S. A.) Puti soobshcheniŭa rossii. 1917(1):67-72.
1656. Fedorov, Evgeny.
1939. On the drifting ice: a short description of the life of the North Pole scientific expedition. Moscow-Leningrad. 89 p.
1657. Germany. Oberkommando der kriegsmarine.
1940. Die naturverhŕltnisse des Sibirischen seeweges... Hamburg. 169 p. illus., plates, charts (part fold.) Fold. charts in envelopes mounted on front and rear covers. [Ice, pp. 75-164; temperature, salinity for Kara Sea; surface salinity E. Siberian Sea; surface currents for whole area.]

1658. Germany. Oberkommando der kriegsmarine.
1942. Ubootshandbuch der Osküste Kanadas (atlas). Berlin.
232 p. illus., charts (part col., part fold.) (M.Dv.nr. 299,
atlas.) [Ice, pp. 217-229.]
1659. Germany. Oberkommando der kriegsmarine.
Nov. 1942. Merkblatt für die eiskundung durch flugzeuge. Ausgabe
für Europäisches Nordmeer und Nordpolarmeer. Bearb.
von der Deutschen seewarte. 15 p. illus., photos. (Nr.
2199A.) [Illustrates various kinds of sea ice, viewed from
airplane.]
1660. Germany. Oberkommando der kriegsmarine.
Jan. 1945. Merkblatt für die eiskundung durch flugzeuge. Ausgabe
für Nordsee, Ostsee und Schwarzes Meer. Bearb. von der
Deutschen seewarte. 26 p. illus., photos. (Nr. 2310.)
[Illustrates various kinds of sea ice, viewed from airplane.]
1661. Gt. Brit. Meteorological office.
1941. Weather in home waters and the North-eastern Atlantic.
Vol. II. pt. 7. The Norwegian and Barents seas. 196 p.
(M. O. 446b.) [Ice: p. 111-117.]
1662. Gt. Brit. Meteorological office.
1942-1943. Ice charts of the Western North Atlantic, Jan.-Dec. 1943.
12 charts. (M.O. 262B.)
1663. Gt. Brit. Meteorological office. Marine branch.
1944. Monthly ice charts Western North Atlantic, lat. 37°N to
53°N, long. 35°W to 72°W. 29 p. incl. charts and inside
back cover. (MOM 465.) [Includes: "Descriptive terms
and reporting of ice". p. 2.]
1664. Kalitin, N. N.
1932. Neskol'ko opytov nad radiatsionnymi svoistvami l'da.
(Quelques expériences sur la transparence de la glace par
rapport à la radiation.) Izv. Glavn. geofiz. obs. 1932(1/2):
37-44. French résumé.
1665. Kalitin, N. N.
1935. Quelques données sur la transparence de la glace pour la
radiation ultra-violette du soleil. C. R. Akad. nauk. n. s.
9:145-146.
1666. Kalitin, N. N.
1936. O prozrachnosti l'da dlâ ul'traioletovoi radiatsii solntsa.
(On the transparency of ice to the ultra-violet radiation of
the sun.) Trud. Arkt. inst. 39:55-70. French résumé.
1667. Knipovich, N. M.
1938. Gidrologiâ morei i solonovatykh vod (v primenenii k promys-
lovmu delu). (Hydrology of oceans and brackish water as
applied to their economy.) Moskva-Leningrad. [Ice, pp.
155-165.]
1668. Lange, E.
1943. Polarisationsinflüsse auf voltapotentiale und reifschichten.
tl. 2. Gleichsinnige und gegensinnige polarisation, wider-
stand und dielektrische eigenschaften von eis. Met. z.
60:303-314. tables, diagrs.

1669. McConnell, J. C. and D. A. Kidd.
1888. On the plasticity of glacier and other ice. *Proc. Roy. soc. Pt. A.* 44:331-367. [Lake ice included.]
1670. Maslennikov, N. I.
1930. Nablūdeniâ nad ledñanyĭ pokrovom Oz. Kaban v zimy 1926/27 i 1927/28 godov. (Observations on the ice of Lake Kaban 1926/27-1927/28.) *Izv. Gos. gidrol. inst.* 26/27: 57-67. tables, diagrs.
1671. Nagel', A. A.
1939. Materialy k izuchennosti ozer Īakutskoi ASSR. (Material for the study of lakes of the Yakutsk Republic.) *Izv. Russ. geogr. obshch.* 71:1386-1391.
1672. Papanin, I.
1939. The Soviet wintering station on the drifting ice. Moscow, Foreign languages publishing house. 31 p. incl. illus. (photos.)
1673. Patrols of the Royal Canadian mounted police, 1942-1943.
Jan. 1945. *Polar record.* 4:213-220. ["Nascopie" records.]
1674. Ratmanov, G. E.
1930. Kratkii predvaritel'nyi otchet o gidrologicheskikh rabotakh ekspeditsii "Litke". (Short résumé of hydrological work of *Litke* expedition.) *Izv. Gos. gidrol. inst.* 26/27:144-147. [East Siberian Sea in 1929. Includes state of ice.]
1675. Remus, K.
1903. Über eisbildung. *Prometheus.* 14:765-767.
1676. Robinson, J. L.
Feb. 1945. Conquest of the Northwest Passage by R.C.M.P. Schooner *St. Roch.* *Canad. geogr. j.* 30:52-73. illus., photos., charts. [From Halifax, N. S. to British Columbia, during 1940-1944.]
1677. Roman, Irwin.
1938. Electrical resistivity of snow and ice. *Bull. Int. geod. geophys. un. Assn. sci. hydrol.* 23:483-491.
1678. Russia. Glavnoe upravlenie voennykh soobshcheniĭ. Otdel vodnykh, shosseĭnykh i gruntovykh puteĭ soobshcheniâ.
1916. Svedeniâ o naibolee vysokikh i naibolee nizkikh stoâniâkh urovnâ vody i o vskrytii i zamerzanii rek basseĭnov Chernogo i Baltiĭskogo Morei po nablūdeniâĭm vodomernykh postov s 1881 po 1910 god. *Sbornik I.* (Information on the highest and lowest water level and on the breaking up and freezing of river basins of the Black and Baltic seas from observations of hydrometers from 1881 to 1910. Symposium I.) Kazan. 323 p. illus., graphs.
1679. Selâkov, N. J.
1937. The nature of ordinary ice. *C. R. Akad. nauk. n. s.* 14: 183-186.
1680. Selâkov, N. J.
1936. Some remarks on α - and β -ice. *C. R. Akad. nauk. n.s.* 2(6):227.

1681. Sel'akov, N. J.
1936. To what class of symmetry does ordinary ice belong? C. R. Akad. nauk. n.s. 1(7):293-294. [Experiments on distilled water.]
1682. Shipchinski, V.
1917. Kratkii otchet o rabotakh na r. Severnoi Dvine v raione Arkhangel'skogo porta zimoiu 1915-16 g., proizvedennykh Tsentral'noi stantsiei Gidro-meteorologicheskoi sluzhby Severnogo Ledovitogo Okeana i Belogo Moria i predvaritel'nyi plan rabot na zimu 1916-17 g. (Brief sketch of the work on the North Dvina River in the region of Archangel during the winter of 1915-16, carried out by the Central stations of the Hydro-meteorological service of the Arctic Ocean and White Sea, and preliminary plans for 1916-17.) Leningrad. 36 p. 2 charts.
1683. Shipchinski, V.
1917. Vskrytie r. Severnoi Dviny v 1917 godu i organizatsiia sluzhby po preduprezhdeniiu o momente vskrytiia reki u G. Arkhangel'ska. (The breaking up of the North Dvina river in 1917 and organization of the service to warn of the moment of breaking up of the rivers near Archangel.) Izv. Arkhangel'sk. obsch. izuch. russ. severa. 6:232-243.
1684. Shostakovich, V. B.
1917. Donnyi led. (Anchor ice.) Priroda. 1917:158-174.
1685. Shuleikin, V. V.
1927. Metod opredeleniia udel'nogo vesa l'da. (Method of determination of the specific weight of ice.) Zh. prikl. fiz. 4(3):75-77.
1686. Smellie, J. and A. Watt.
1916. On a curious case of "ground-ice". J. Scot. met. soc. Edinb. 17:166-173. [Anchor ice in Scotch lakes.]
1687. Sovetov, S. A.
1917. Fiziko-geograficheskii ocherk Onezhskago Oзера. (Physico-geographical sketch of Lake Onega.) Zap. gidrogr. 41:231-262, 431-562. illus., tables, charts, diagrs. [Ice cover of Lake Onega, pp. 527-552.]
1688. Timonov, V. V.
1944. O vozmozhnosti uluchshaniia i uproshcheniia schisleniia pri plavanii vo l'du. (On the practicability of improvement and simplification of reckoning for navigation of ice.) Zap. gidrogr. 1944(1):142-148.
1689. Trofimov, A. B.
1935. Podlednaia i podvodnaia osveshchennost' v verkhnikh gorizontakh moria. (The sub-ice and sub-water illumination in the upper strata of the sea.) Zh. geofiz. 5:444-465. [For White and Caspian seas.]
1690. U. S. Army air forces. Weather information branch.
June 1943. Glossary of ice terms, with Russian equivalents. 22 p. (Rep. 386.)

1691. U. S. Hydrographic office.
1942-1943. Ice in the Arctic Ocean and Bering Sea. Verso Pilot chart North Atlantic Ocean, Jan. 1942, Aug. 1943; Northern North Atlantic Ocean, May 1942; Greenland and Barents seas, Aug. 1943.
1692. U. S. Weather bureau.
1919-1943. Weekly weather and crop bulletin with snow and ice data. Dec. 1919-Mar. 1943. [Snow and ice data for weeks of Dec.-Mar., issued irregularly from 1919-1943.]
1693. Veinberg, B. P.
1938. Rezhel'fatiâ l'da i snega. (On the regelation of ice and snow.) Trud. Arkt. inst. 110:5-13.
1694. Veinberg, B. P.
1938. The role of regelation in the condensation of the snow cover. Bull. Int. geod. geophys. un. Assn. sci. hydrol. 23:492-508.
1695. Vinokurov, G. A.
1938. K voprosu o sposobnosti vody k samoproizbol'noi kristallizatsii. (Contribution to the question of the capacity of water to arbitrary crystallisation.) Trud. Arkt. inst. 110:39-41.
1696. Vlasov, L. I. A. i P. N. Uspenski.
1931. Zavisimost' teploprovodnosti chistogo l'da i poristogo l'da, soderzhashchego uglekislyi gaz, ot davleniâ. (Variation of thermal conductivity of ice with pressure.) Zh. geofiz. 1:187-192. English summary. [Experiments on porous ice from mineral water.]
1697. Vremâ zamerzaniâ i vskrytiâ rek v 1913-14 godu po basseïnam i po uezdâ Chernigovskoi gubernii. (Time of freezing and breaking up of rivers for 1913-14 in the basin and district of Chernigov.) (In: Sel'sko khoziaistvennyi obzor Chernigovskoi gubernii za 1914 g. Chernigov. pp. 3-4. tables.) [Desna River system.]
1698. Zhdanko, M.
1914. Spasatel'naâ ekspeditsiâ na sudne "Gerta" dlâ poiskov starshago leitenanta Sedova i ego sputnikov. (Rescue expedition of the *Gerta* in the search for Lt. Sedov and his companions.) Zap. gidrogr. 38:615-620. chart. [Barents Sea west of Novaya Zemlya to Franz Josef Land; ice chart.]
1699. Zhukov, V. K.
1940. Opyt vymorozki sudov. (Experiments in freeing ships of ice.) Leningrad, Glavsevmorputi. 79 p. illus., tables.
1700. Zubov, N. N.
1930. Srednie temperatury gidrologicheskikh razrezov po Kol'skomu Meridianu i ledovitost' Barentseva Morâ. (Monthly temperatures of the hydrologic section along the Kola Meridian and state of the ice in the Barents Sea.) Zap. gidrogr. 59:66-71. tables, charts. [Chart of mean ice limits from 1890-1922.]

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