Appendix

Table A1. Atmospheric pressure database for the Arctic used in this article

No.	Region[a]	Location	φ	λ	Altitude m a.s.l.	Instrument	Source data with introduced corrections:		Final data set with introduced corrections (including corrections added by authors)		Ship/Station	Captain/ Observer	Years	Number of months	Resolution of observations	Comparable station	φ	λ	Period	Sources of historical data
							To gravity	To SLP	To gravity	To SLP										
1	Atlantic region	Akseløya	77°42′N	14°50′E	3	Aneroid/ barometer	–	–	daa	+	Station	–	09.1902 – 07.1903	11	t					Norwegian Meteorological Institute.
2		Akseløya	77°42′N	14°50′E	3	Aneroid/ barometer	–	–	daa	+	Station	–	11.1904 – 06.1905	10	t	Modern data(1961–1990) for historical sites have been interpolated (kriging method) based on SLP data taken from adjacent meteorological stations (GHCN Ver.2 dataset).				
3		Aleksadrovsk	69°12′N	32°28′E	30	Barometer	+	–	+	+	Station	–	01.1900 – 12.1904	60	m					History of the Murmansk Biological Station from1899–1905, K.M.Derjugin.
4		Angmagssalik	65°06′N	38°04′W	29	Barometer	+	+	+	+	Station	–	01.1895 – 12.1920	312	m	Angmagssalik	65°06′N	38°04′W	1961–1990	Polyakov IV, Bekryaev RV, Alekseev GV, Bhatt US, Colony RL, Johnson MA, Maskshtas AP, Walsh D. 2003. Variability and Trends of Air Temperature and Pressure in the Maritime Arctic, 1875–2000. Journal of Climate, 16: 2067–2077.
5		Barents Sea, Belusha Bay	71°14′N	48°29′N	~0	Barograph	Unknown	Unknown	daa	(+)	Ship	Charles Benard, Major Candiotti	07.1908 – 08.1908	2	varied	Modern data (1961–1990) for historical sites have been interpolated (kriging method) based on SLP data taken from adjacent meteorological stations (GHCN Ver.2 dataset).				Mission Arctique Cammandee par M. Charles Benard, Stations Scientifiques Cartographie - Meteorologie, Fascicule VI., Bordeaux, Au Siege dela societe,hotel de la marine nationale, 1911.
6		Bjørnøya	74°31′N	19°01′E	26	Aneroid/ barograph	–	+	daa	+	Station	C.A. Forsberg,	07.1889 – 08.1899	2	h					Meteorologische und Wasserstand-Beobachtungen auf Der Baren – Isel wahrendder Schwedischen expedition 1899 von C.A. Forsberg, Mitgeteilt den 11 October 1899, Hasselberg.
7		Bjørnøya	74°31′N	19°01′E	16	Barometer	+	+	+	+	Station	–	01.1911 – 04.1911	4	m	Bjørnøya	74°31′N	19°01′E	1961–1990	
8		Bjørnøya	74°31′N	19°01′E	16	Barometer	+	+	+	+	Station	–	03.1919 – 04.1919	2	m					Norwegian Meteorological Institute, eKlima: http://sharki.oslo.dnmi.no/portal/page_pageid=73,39035, 73_39049&_dad=portal&_schema=PORTAL.
9		Bjørnøya	74°31′N	19°01′E	16	Barometer	+	+	+	+	Station	–	01.1920 – 12.1920	12	m					
10		Bolvanskiy Nos	70°45′N	59°07′E	13	Barometer	+	+	+	+	Station	–	07.1914 – 06.1918	47	m	Balvanskiy Nos	70°45′N	59°07′E	1961–1990	Polyakov IV, Bekryaev RV, Alekseev GV, Bhatt US, Colony RL, Johnson MA, Maskshtas AP, Walsh D. 2003. Variability and Trends of Air Temperature and Pressure in the Maritime Arctic, 1875–2000. Journal of Climate, 16: 2067–2077.
11		Bolvanskiy Nos	70°45′N	59°07′E	13	Barometer	+	+	+	+	Station	–	08.1920 – 12.1920	5	m					
12		Danmarkshavn	76°46′N	18°46′W	6.3	Barometer	–	+	+	+	Station	–	08.1906 – 07.1908	24	h	Danmarkshavn	76°46′N	18°46′W	1961–1990	Brand W., 1911, Stundliche Werte des Luftdrucks und der Temperatur am Danmarks-Havn, Meddelelse rom Gronland, 14(5), Kobenhavn, 357-445, Wegener A. 1911, Meteorologische Terminbeobachtungen am Danmarks-Havn,Meddelelser om Gronland, 14(4), Kobenhavn,125-355.
13		Dikson	73°50′N	80°23′E	42	Barometer	+	+	+	+	Station	–	09.1916 – 08.1920	48	m	Dikson	73°50′N	80°23′E	1961–1990	Polyakov IV, Bekryaev RV, Alekseev GV, Bhatt US, Colony RL, Johnson MA, Maskshtas AP, Walsh D. 2003. Variability and Trends of Air Temperature and Pressure in the Maritime Arctic, 1875–2000. Journal of Climate, 16: 2067–2077.

Table A1. (*Continued*)

No.	Region[a]	Location	φ	λ	Altitude m a.s.l.	Instrument	Source data with introduced corrections:		Final data set with introduced corrections (including corrections added by authors)		Ship/Station	Captain/ Observer	Years	Number of months	Resolution of observations	Comparable station	φ	λ	Period	Sources of historical data
							To gravity	To SLP	To gravity	To SLP										
14		Franz Josef Land	79°43'N – 79°51'N	59°33'E – 58°56'E	~0	Barometer	–	–	+	(+)	ship Tegetthof	Weyprecht and Payer	08.1872 – 04.1874	21	m	O Heisa	80°37'E	58°03'E	1961–1990	Hann, J. Einige. 1904. Ergebnisse der meteorologischen Beobachtungen auf Franz JosefsLand zwischen1872 und 1900. Aus: Meteorologische Zeitschrift, p. 547-555 (after:) Wullerstorf-Urbair, Bernard von. Die meteorologischen Beobachtungen und die Ananlyse des Schiffcurses Wahrend der Polarexpedition unter Weyprecht und Payer, 1872–1874. Kaiserliche Akademire der Wissenschafteb, Denkschriften. Mathematisch-naturwissenschaftlisch Classe, 1878. Band 35, p.1-25.
15		Franz Josef Land, Cape Flora	79°50'N	49°41'E	14	Barometer	–	–	+	+	'Elmwood Hous' station, ship 'Windward'	Jackson-Harmsworth Polar Expedition/ Albert B. Armitage (obs.)	09.1894 – 09.1896	25	m	Nagurskaya	80°80'N	47°63'E	1961–1990	Hann J. Einige. 1904. Ergebnisse der meteorologischen Beobachtungen auf Franz Josefs-Land zwischen 1872 und 1900. Aus: Meteorologische Zeitschrift, p. 547-555 (after:) Some results of meteorological observations made at Cape Flora, Franz Josef Land. ByMr. Strachan, Meteorological Office, London. (in:) Jackson, Frederick George. A thousand days in the Arctic. With a preface by Admiral Sir Francis Leopold McClintock. London and New York: Harper and Brothers, 1899. 2 vols.
16		Franz Josef Land, Cape Tegetthoff	80°06'N	58°52'E	Unknown	Aneroid/ barograph	–	–	daa	(+)	station Harmsworth House	W.Wellman	08.1898 – 07.1899	12	m	O Heisa	80°37'E	58°03'E	1961–1990	Hann, J. Einige. 1904. Ergebnisse der meteorologischen Beobachtungen auf Franz Josefs Land zwischen1872 und 1900. Aus: Meteorologische Zeitschrift, p. 547-555 (after:) Met. Obser. of the socond Wellmann Expedition by Evelyn B. Baldwin, Observer Weather Bereau, Report of the Chief of the Weather Bareau1889-1900. Part VII, Washington 1901. p. 349-436.
17		Franz Josef Land, Nansen's Winter House	81°13'N	55°20'E	7.5	Unknown	Unknown	–	–	+	station Nansens Winter-Hütte	Fridthj of Nansen	09.1895 – 04.1896	8	m	O Rudolfa	81°48'E	57°58'E	1961–1990	Hann, J. Einige. 1904. Ergebnisse der meteorologischen Beobachtungen auf Franz JosefsLand zwischen1872 und 1900. Aus: Meteorologische Zeitschrift, p. 547-555.
18		Franz Josef Land, Teplitz Bay	81°47'N	58°04'E	4.1	Barometer	+	+	+	+	station	Luigi Amadeo di Savoia	08.1899 – 08.1900	13	m	O Rudolfa	81°48'E	57°58'E	1961–1990	Umberto Cagni and Luigi Amedeo di Savoia. Osservazioni Scientifiche eseguitedurante La Spedizione Polare di S.A.R. 1899-1900 (Italian), Milano:Ulrico Hoepll, 1903, 723p., data: p. 223-415.
19		Franz Josef Land, Teplitz Bay	81°47'N	57°56'E	9.3	Barometer	+	–	+	+	station, ship 'America'	William J. Peters	10.1903 – 04.1904	7	m	O Rudolfa	81°48'E	57°58'E	1961–1990	Fleming John A. (ed.). The Ziegler Polar expedition 1903-05. Scientific results obtained under the direction of William J. Peters. Washington: National Geographic Society,1907. 630p., data: p. 369-487, Section C: Meteorological Observations and Compilations by W. J. Peters and J.A. Fleming.
20		Franz Josef Land, Cape Flora	79°57'N	50°05'E	15.1	Aneroid/	+	+	+	+	Elmwood Hous station of the Jackson-Harmsworth Polar Expedition 1894–97, ship 'America'	William J. Peters	06.1904 – 07.1905	14	m	Nagurskaya	80°80'N	47°63' E	1961–1990	
21		Grønfjorden	78°18'N	15°30'E	4	Barometer	+	+	+	+	Station	–	12.1911 – 12.1920	109	m					Norwegian Meteorological Institute, eKlima: http://sharki.oslo.dnmi.no/portal/page_pageid=73,39035, 73_39049&_dad=portal&_schema=PORTAL
22		Halmanesøya	77°17'N	23°05'E	9.5	Aneroid/	–	–	daa	+	Station	–	09.1906 – 08.1907	12	t	Modern data(1961–1990) for historical sites have been interpolated (kriging method) based on SLP data taken from adjacent meteorological stations (GHCN Ver.2 dataset).				Norwegian Meteorological Institute
23		Isfiord Radio	78°01'N	13°06'E	7	Barometer	+	+	+	+	Station	–	01.1911 – 12.1911	12	m					Polyakov IV, Bekryaev RV, Alekseev GV, Bhatt US, Colony RL, Johnson MA, Maskshtas AP, Walsh D. 2003. Variability and Trends of Air Temperature and Pressure in the Maritime Arctic, 1875–2000. Journal of Climate, 16: 2067–2077.
24		Jan Mayen	71°00'N	8°28'W	10.7	Barometer	–	–	+	+	Station	–	08.1882 – 07.1883	12	h	Jan Mayen	71°00'N	8°28'W	1961–1990	Wohlgemuth. E.E. Von 1886, Osterreichische Polareexpedition nach Jan Mayen. Beobachtungs-Ergebnisse. Wien: Der Kaiserliche-Konigliche Hof und Staatsdruckerei.2 vols.III Theil,1 Abtheilung Meteorolgie bearbeitet von Adolf Sobieczky
25		Julianehåb (Qaqortoq)	60°44' N	45°59' W	8	Barometer	–	–	+	+	Station	–	10.1882 – 04.1892	72	m					Meteorologisk Aarbok Udgivet af det danske meteorologiske Intitut, Kjøbenhavn
26		Kapp Lee	78°06'N	20°55'E	5	Aneroid/	–	–	daa	+	Station	–	09.1904 – 08.1905	12	t					Norwegian Meteorological Institute
27		Kapp Thordsen	78°28'N	15°42'E	75.7	Barometer	–	–	+	+	Station	prof. Nils Ekholm	08.1882 – 08.1883	13	h	Modern data(1961–1990) for historical sites have been interpolated (kriging method) based on SLP data taken from adjacent meteorological stations (GHCN Ver.2 dataset).				Ekholm, N.G., 1890. Observations faites au Cap Thorsden, Spitzberg, par l'expédition suédoise. Stockholm: Kongl. Boktryckeriet. P.A. Norstedt & Söner. Tome I:3.Observations Météorogiques.

Table A1. (*Continued*)

No.	Region[a]	Location	φ	λ	Altitude m a.s.l.	Instrument	Source data with introduced corrections:		Final data set with introduced corrections (including corrections added by authors)		Ship/Station	Captain/ Observer	Years	Number of months	Resolution of observations	Comparable station	φ	λ	Period	Sources of historical data
							To gravity	To SLP	To gravity	To SLP										
28		Kara Sea	70°00'N – 71°45'N	62°29'E –65°25'E	1.15 ; 2.5 0.8	Barometer	–	–	+	+	Ship 'Varna'	–	09.1882 – 08.1883	13	h					Snellen M., Ekama H. 1910, Rapport sur Iexpedition Neerlandaise qui a hiverne dans la Mer de Kara en 1882/83, Utrecht: J.Van Boekhoven
29		Kara Sea	Drift		1.2	Barometer and barograph	+	–	+	(+)	Ship 'Eclipse'	I. Trzemesky	08.1914 – 09.1914	2	t					Observations faites per le Dr. I. Trzemesky a bord du Vaisseau 'Eclipse' eu 1914–1915, Pietrogrod, 1917
30		Kara Sea	Drift		1.2	Barometer and barograph	+	–	+	(+)	Ship 'Eclipse'	I. Trzemesky	08.1915 – 09.1915	2	t					Observations faites per le Dr. I. Trzemesky a bord du Vaisseau 'Eclipse' eu 1914–1915, Pietrogrod, 1917
31		Kara Sea	Drift		1.2	Barometer and barograph	+	–	+	(+)	Ship 'Eclipse'	I. Trzemesky	08.1916 – 09.1916	2	t	Modern data (1961–1990) for historical sites have been interpolated (kriging method) based on SLP data taken from adjacent meteorological stations (GHCN Ver.2 dataset).				
32		Longyearbyen	78°18'N	15°30'E	37	Barometer	+	+	+	+	Station	–	09.1911 – 05.1912	10	m					Norwegian Meteorological Institute, eKlima: http://sharki.oslo.dnmi.no/portal/page_pageid=73,39035, 73_39049&_dad=portal&_schema=PORTAL
33		Malye Karmakuly	72°23'N	52°36'E	7.1	Barometer	–	–	+	+	Station	–	09.1882 – 08.1883	12	m	Malye Karmakuly	72°23'N	52°36'E	1961–1990	Lenz R. (ed.), 1886b. Beobachtungen der Russischen Polarstation auf Nowaya Semlja. Expedition der Kaiserl. Russischen Geographischen Gesellschaft. II. Theil. Meteorologische Beobachtungen bearbeitet von K. Andrejeff.
34		Mare-Sale	69°72'N	66°82'E	24	Barometer	+	+	+	+	Station	–	09.1914 – 08.1918	48	m	Mare-Sale	69°72'N	66°82'E	1961–1990	Polyakov IV, Bekryaev RV, Alekseev GV, Bhatt US, Colony RL, Johnson MA, Maskshtas AP, Walsh D. 2003. Variability and Trends of Air Temperature and Pressure in the Maritime Arctic, 1875–2000. Journal of Climate, 16: 2067–2077.
35		Mare-Sale	69°72'N	66°82'E	24	Barometer	+	+	+	+	Station	–	09.1920 – 12.1920	4	m					Polyakov IV, Bekryaev RV, Alekseev GV, Bhatt US, Colony RL, Johnson MA, Maskshtas AP, Walsh D. 2003. Variability and Trends of Air Temperature and Pressure in the Maritime Arctic, 1875–2000. Journal of Climate, 16: 2067–2077.
36		Mosselbukta	79°53'N	16°04'E	12	Barometer	–	–	+	+	Station	–	09.1872 – 06.1873	10	m	Modern data(1961–1990) for historical sites have been interpolated (kriging method) based on SLP data taken from adjacent meteorological stations (GHCN Ver.2 dataset).				Wijkander und Koldewey 1876. Resultate der meteorolischen Beobachtungen auf Spitzbergen und Ost-Grönland. Geographie und Erfordchung der Polar-Regionen, Nr 119. Aus der 'Zeitschrift der Österr. Gesellschaft für Meteorologie', Nr. 8.
37		Nanortalik	60°8'N	45°11' W	9	Barometer	–	–	+	+	Station	–	01.1884 – 12.1884	12	m					Meteorologisk Aarbok Udgivet af det danske meteorologiske Intitut, Kjøbenhavn
38		Nanortalik	60°8'N	45°11' W	7	Barometer	–	–	+	+	Station	–	10.1889 – 05.1920	244	m					Meteorologisk Aarbok Udgivet af det danske meteorologiske Intitut, Kjøbenhavn
39		Pustervig	76°57'N	21°01'W	4	Barometer	–	+	+	+	Station	–	11.1907 – 05.1908	7	h					Brand W., Wegener A., 1912, Meteorologische Beobachtungen der Station Pustervig (in.) Meddelelser om Gronland, 42(6), København, 447-562
40		Sabine Insel	74°32'N	18°49'W	Unknown	Barometer	–	–	+	–	Station	–	08.1869 – 07.1870	12	m					Wijkander und Koldewey 1876. Resultate der meteorolischen Beobachtungen auf Spitzbergen und Ost-Grönland. Geographie und Erfordchung der Polar-Regionen, Nr 119. Aus der 'Zeitschrift der Österr. Gesellschaft für Meteorologie', Nr. 8.
41		Shannon Island	75°17'N	18°00'W	7	Barometer	+	+	+	+	Station	–	09.1909 – 08.1911	20	m					Hansen H.1922. Meteorological observations on the Alabama Expedition, 215-295 (in:) Meddelelser om Grønland udgvine af Kommissionen dor Ledelsen af de Geologiske og Geografiske undersøgelser i Grønland. Bind LII, København, pp. 295
42		Svarttangen	77°30'N	20°50'E	9.5	Aneroid	–	–	daa	+	Station	–	11.1904 – 03.1905	5	t					
43		Svarttangen	77°30'N	20°50'E	9.5	Aneroid	–	–	daa	+	Station	–	11.1906 – 07.1907	9	t					Norwegian Meteorological Institute
44		Svarttangen	77°30'N	20°50'E	9.5	Aneroid	–	–	daa	+	Station	–	10.1908 – 07.1909	8	t					

Table A1. (*Continued*)

No.	Region[a]	Location	φ	λ	Altitude m a.s.l.	Instrument	Source data with introduced corrections:		Final data set with introduced corrections (including corrections added by authors)		Ship/Station	Captain/ Observer	Years	Number of months	Resolution of observations	Comparable station	φ	λ	Period	Sources of historical data
							To gravity	To SLP	To gravity	To SLP										
45		Treurenberg	79°55'N	16°51'E	9	Barometer	+	–	+	+	Station	Jaderin Edvard	08.1899 – 08.1900	13	h					Westman J., 1904, Physique terrestre. Meteorologie. Histoire naturelle. 8ieme section. Meterologie. A. Observations a la station d'hivernage. Observations meterologiques faitesen1889–1901 a la Baiede Treurenberg, Spitzberg [in:] Jaderin, Edvard, leader. Missions scientifiques pour lamesured'un arc de meridienau Spitzberg enterprises en 1889-1900 sous les auspices des gouvernements russe etsuedois: Mission suedoise. T.2. Physique terrestre, meterologie, historie naturelle. Sect. 7-8. Stockholm: Aktiebolaget Centraltryckeriet, 2 (8A): ss. 218.
46		Zieglerøya	77°20'N	22°02'E	6.5	Unknown	–	–	–	+	Station	–	10.1904 – 06.1905	9	t					Norwegian Meteorological Institute.
47	Siberian region	Cap Wild	75°39'N	91°26'E	1.2	Barometer	+	–	+	+	Station, ship 'Eclipse'	–	09.1914 – 08.1915	12	t					Observations faites per le Dr. I. Trzemesky a bord du Vaisseau "Eclipse" eu 1914-1915, Pietrogrod, 1917.
48		Sagastyr	73°22'N	124°5'E	4.9	Barometer	–	–	+	+	Station	Lt. N. Jourgens	09.1882 – 06.1884	22	h	Sagyllah Ary Osrtov Dunay	73°09'N 73°56'N	128°54'E 124°30'E	1961–1990	Lenz R. (ed.), 1886a. Beobachtungen der Russischen Polarstation an der Lenamündung. Expeditionder Kaiserl. Russischen Geographischen Gesellschaft. II. Theil. Meteorologische Beobachtungen bearbeitet von A. Eigner.
49		Anadyr	64°08'N	177°06'E	64	Barometer	+	+	+	+	Station	–	01.1899 –12.1920	264	m	Anadyr	64°08'N	177°06'E	1961–1990	Polyakov IV, Bekryaev RV, Alekseev GV, Bhatt US, Colony RL, Johnson MA, Maskshtas AP, Walsh D. 2003. Variability and Trends of Air Temperature and Pressure in the Maritime Arctic, 1875–2000. Journal of Climate, 16: 2067–2077.
50		ChamissoIsland	66°13'N	161°49'W	~0	Barometer	–	–	+	(+)	Ship 'Plover'	T. E. L. Moore	01.1849 – 12.1850	12	m	Modern data(1961–1990) for historical sites have been interpolated (kriging method) based on SLP data taken from adjacent meteorological stations (GHCN Ver.2 dataset).				Strachan R. Contributions toOur Knowledge of the Meteorologyof the Arctic Regions, Authority of the Meteorology: London; PartI (1879), Part II(1880), Part III (1882), Part IV (1885), Part V (1888).
51	Pacific Region	Point Barrow	71°14'N	156°40'W	?	Barometer	–	–	+	(+)	Station	Commander Rochfort Maguire	01.1852 – 01.1854	23	m	Barrow	71°17'N	156°40'W	1961–1990	Ray P.H. 1885, Report of the International Polar Expedition to Point Barrow, Alaska, Washington, D.C., Government Printing Office
52		Point Barrow	71°14'N	157°40'W	5.2	Barometer	–	–	+	+	Station	Lt. P. Henry Ray	10.1881 – 08.1883	23	m					
53		Vega Expeditionens-Pitlekaie	67°05'N	173°23'W	~0	Barometer	–	–	+	(+)	Ship "Vega"	Nordenskiold, Serze Kamen	10.1878 – 07.1879	10	h	Modern data(1961–1990) for historical sites have been interpolated (kriging method) based on SLP data taken from adjacent meteorological stations (GHCN Ver.2 dataset).				VEGA – Expeditionens, Vetenskapliga Iakttagelser bearbetade af deltagare i resan och andra forskare , A.E. Nordenskiold, Stockholm 1882
54	Baffin Bay region	Godthåb	66°55'N	53°40'W	20	Barometer	+	+	+	+	Station	–	01.1873 – 12.1920	569	m	Godthåb	66°55'N	53°40'W	1961–1990	Polyakov IV, Bekryaev RV, Alekseev GV, Bhatt US, Colony RL, Johnson MA, Maskshtas AP, Walsh D. 2003. Variability and Trends of Air Temperature and Pressure in the Maritime Arctic, 1875–2000. Journal of Climate, 16: 2067–2077.
55		Gronnedal	61°14'N	48°6'W	32	Barometer	+	+	+	+	Station	–	01.1879 – 12.1920	516	m	Gronnedal	61°14'N	48°6'W	1961–1990	
56		Hebron	58°12'N	62°21'W	15	Barometer	–	–	+	+	Station	–	09.1882 – 08.1883	12	m					Neumayer G.B, Börgen C.N.J., 1886. Die Beobachtungs-Ergebnisse der Deutschen Stationen. Berlin: Verlag von A. Asher & Co., BandI. Kingua-Fjord und die meteorologischen Stationen II. Ordnung in Labrador: Hebron, Okak, Nain, Zoar, Hoffenthal, Rama, sowie die magnetischen Observationen in Breslau und Göttingen.
57		Hoffenthal	55°27'N	60°12'W	7.6	Barometer	–	–	+	+	Station	–	09.1882 – 08.1883	12	m	Modern data(1961–1990) for historical sites have been interpolated (kriging method) based on SLP data taken from adjacent meteorological stations (GHCN Ver.2 dataset).				Neumayer G.B, Börgen C.N.J., 1886. Die Beobachtungs-Ergebnisse der Deutschen Stationen.Berlin: Verlag von A. Asher & Co., BandI. Kingua-Fjord und die meteorologischen Stationen II. Ordnung in Labrador: Hebron, Okak, Nain, Zoar, Hoffenthal, Rama, sowie die magnetischen Observationen in Breslau und Göttingen.
58		Inglefield Bay	77°20'N	67°30'W	unk no wn	Barometer	+	–	+	–	Station	–	01.1916 – 10.1920	40	m					Meteorologisk Aarbok Udgivet af det danske meteorologiske Intitut, Kjøbenhavn.
59		Iviktut	61°12' N	48°11'W	5	Barometer	– (1875–1889)/ + (1890–1920)	– (1875–1889)/ +(1890–1920)	+	+	Station	–	01.1875 – 12.1920	543	m					years 1875–1889: Meteorologisk Aarbok Udgivet af det danske meteorologiske Intitut, Kjøbenhavn.;years 1890–1920: Cappelen, J., E. V.Laursen, P. V. Jørgensen, and C. Kern-Hansen (2005), DMI monthly climate data collection 1768–2004, Denmark, the Faroe Islands and Greenland, Tech. Rep. 09-05, Dan. Meteorol. Inst., Copenhagen.

Table A1. (*Continued*)

No.	Region[a]	Location	φ	λ	Altitude m a.s.l.	Instrument	Source data with introduced corrections:		Final data set with introduced corrections (including corrections added by authors)		Ship/Station	Captain/ Observer	Years	Number of months	Resolution of observations	Comparable station	φ	λ	Period	Sources of historical data
							To gravity	To SLP	To gravity	To SLP										
60		Jakobshavn	69°14′N	51°04′W	39	Barometer	+	+	+	+	Station	–	08.1873 – 12.1920	549	m	Jakobshavn	69°14′N	51°04′W	1961–1990	Polyakov IV, Bekryaev RV, Alekseev GV, Bhatt US, Colony RL, Johnson MA, Maskshtas AP, Walsh D. 2003. Variability and Trends of Air Temperature and Pressure in the Maritime Arctic, 1875–2000. Journal of Climate, 16: 2067–2077.
61		Karajak	70°26′N	50°33′W	22.5	Barometer	–	–	+	+	Station	–	08.1892 – 07.1893	12	m					Stade H. 1897. Meteorologishe Beobachtungen (in:) Grönland - Expedition der Gesellschaft für Erdkunde zu Berlin 1891–1893 unter Leitnung von Erich von Drygalski. Zweiter Band. Berli, W. H. Kühl.
62		Nain	56°33′N	61°41′W	4.2	Barometer	–	–	+	+	Station	–	09.1882 – 08.1883	12	m					Neumayer G.B, Börgen C.N.J., 1886. Die Beobachtungs-Ergebnisse der Deutschen Stationen. Berlin: Verlag von A. Asher & Co., Band I. Kingua-Fjord und die meteorologischen Stationen II. Ordnung in Labrador: Hebron, Okak, Nain, Zoar, Hoffenthal, Rama, sowie die magnetischen Observationen in Breslau und Göttingen.
63		North Star Bay	76°30′N	68°55′W	6.5	Barometer	+	–	+	+	Station	–	10.1910 – 05.1913	29	m					Meteorologisk Aarbok Udgivet af det danske meteorologiske Intitut, Kjøbenhavn.
64		Okak	57°34′N	61°56′W	7.5	Barometer	–	–	+	+	Station	–	09.1882 – 08.1883	12	m					Neumayer G.B, Börgen C.N.J., 1886. Die Beobachtungs-Ergebnisse der Deutschen Stationen. Berlin: Verlag von A. Asher & Co., Band I. Kingua-Fjord und die meteorologischen Stationen II. Ordnung in Labrador: Hebron, Okak, Nain, Zoar, Hoffenthal, Rama, sowie die magnetischen Observationen in Breslau und Göttingen.
65		Rama	58°53′N	63°15′W	3.3	Barometer	–	–	+	+	Station	–	09.1882 – 08.1883	12	m	Modern data (1961–1990) for historical sites have been interpolated (kriging method) based on SLP data taken from adjacent meteorological stations (GHCN Ver.2 dataset).				
66		Upernavik	72°47′N	55°10′W	19	Barometer	+	+	+	+	Station	–	01.1874 – 12.1920	560	m					Polyakov IV, Bekryaev RV, Alekseev GV, Bhatt US, Colony RL, Johnson MA, Maskshtas AP, Walsh D. 2003. Variability and Trends of Air Temperature and Pressure in the Maritime Arctic, 1875–2000. Journal of Climate, 16: 2067–2077.
67		Zoar	56°07′N	61°22′W	9.5	Barometer	–	–	+	+	Station	–	09.1882 – 08.1883	12	m					Neumayer G.B, Börgen C.N.J., 1886. Die Beobachtungs-Ergebnisse der Deutschen Stationen. Berlin: Verlag von A. Asher & Co., Band I. Kingua-Fjord und die meteorologischen Stationen II. Ordnung in Labrador: Hebron, Okak, Nain, Zoar, Hoffenthal, Rama, sowie die magnetischen Observationen in Breslau und Göttingen.
68	Canadian region	Assistance Bay	74°40′N	94°16′W	~0	Barometer	–	–	+	(+)	Ship 'Sophia'	Alex Sewart	05.1850 – 09.1851	17	m					
69		Beechey Island	74°43′N	91°54′W	~0	Barometer	–	–	+	(+)	Ship 'North Star'	J.W.S. Pullen	08.1852 – 08.1854	25	m					
70		Cambridge Bay	69°03′N	105°12′W	~0	Barometer	–	–	+	(+)	Ship 'Enterprise'	Sir Richard Collins	10.1852 – 08.1853	11	m	Cambridge Bay	69°06′N	105°08W	1961–1990	Strachan R. Contributions to Our Knowledge of the Meteorology of the Arctic Regions, Authority of the Meteorology: London; Part I (1879), Part II (1880), Part III (1882), Part IV (1885), Part V (1888).
71		Camden Bay	70°08′N	145°29′W	~0	Barometer	–	–	+	(+)	Ship 'Enterprise'	Sir Richard Collins	09.1853 – 07.1854	11	m	Modern data (1961–1990) for historical sites have been interpolated (kriging method) based on SLP data taken from adjacent meteorological stations				
72		Dealy Island	74°56′N	108°49′W	~0	Aneroid	–	–	daa	(+)	Ship 'Resolute', 'Intrepid'	Sir H. Kellett	11.1852 – 08.1853	10	m	(GHCN Ver.2 dataset).				
73		Dealy Island	74°56′N	108°49′W	~0	Aneroid	–	–	daa	(+)	Ship 'Resolute', 'Intrepid'	Sir F.L. McClintock	09.1852 – 08.1853	12	m					
74		Discovery Bay	81°44′N	65°03′W	~0	Barometer	–	–	+	(+)	Ship 'Discovery'	Sir George S. Nares	09.1875 – 08.1876	12	m					Results derived from the Arctic Expedition, 1875–1876, I.-Physical observations by Captain Sir Georges Nares, R.N. and Captain Feilden, &c (in:) Accounts and Papers: 39 (8) Arctic Expeditions, Session 17 January-16 August 1878, Vol. LII, London, Printed by G. E. Eyre and M. Spottiswoode, Printers to the Queen's Most Excellent Majesty, For Her Majesty's Stationery Office, 1878. http://www.umanitoba.ca/libraries/units/archives/collections/subject/arcticstudies/arcticbb/viewbb.php?t=1878&p=i1.
75		Felix Harbour	69°59′N	92°01′W	~0	Barometer	–	–	+	(+)	Ship'Victory'	Sir John Ross	11.1829 – 08.1830	10	m					Strachan R. Contributions to Our Knowledge of the Meteorology of the Arctic Regions, Authority of the Meteorology: London; Part I (1879), Part II (1880), Part III (1882), Part IV (1885), Part V (1888).

Table A1. (*Continued*)

No.	Region[a]	Location	φ	λ	Altitude m a.s.l.	Instrument	Source data with introduced corrections:		Final data set with introduced corrections (including corrections added by authors)		Ship/Station	Captain/ Observer	Years	Number of months	Resolution of observations	Comparable station	φ	λ	Period	Sources of historical data
							To gravity	To SLP	To gravity	To SLP										
76		Floeberg Beach	82°27'N	61°22'W	~0	Barometer	–	–	+	(+)	Ship 'Alert'	Sir George S. Nares	08.1875 – 08.1876	13	m					Results derived from the Arctic Expedition, 1875–1876,I.-Physical observations by Captain Sir Georges Nares, R.N. and Captain Feilden, &c (in:) Accounts and Papers: 39 (8) Arctic Expeditions, Session 17 January-16 August 1878, Vol. LII, London, Printed by G. E.Eyre and M. Spottiswoode, Printersto the Queen's Most Excellent Majesty, For Her Majesty's Stationery Office, 1878. http://www.umanitoba.ca/libraries/units/archives/collections/subject/arcticstudies/arcticbb/viewbb.phpt=1878&p=i1.
77		Griffith Island	74°34'N	95°20'W	~0	Barometer	–	+	+	+	Ship 'Resolute'	Sir Horati T. Austin	10.1850 – 09.1851	12	m					Strachan R. Contributions to Our Knowledge of the Meteorology of the Arctic Regions, Authority of the Meteorology: London; Part I (1879), Part II (1880), Part III (1882), Part IV (1885), Part V (1888).
78		Kingua Fjord	66°36'N	67°19'W	10.6	Barometer	–	–	+	+	Station	Dr W. Giese	09.1882 – 08.1883	12	m					Neumayer G.B, Börgen C.N.J., 1886. Die Beobachtungs-Ergebnisse der Deutschen Stationen.Berlin: Verlag von A. Asher & Co., Bandl. Kingua-Fjord und die meteorologischen Stationen II. Ordnung in Labrador: Hebron, Okak, Nain, Zoar, Hoffenthal, Rama, sowie die magnetischen Observationen in Breslau und Göttingen.
79		Lady Franklin Bay	81°44'N	64°45'W	7.4	Barometer	–	–	+	+	Station	–	08.1881 – 08.1883	25	m					Greely A.W., 1886. Report on the Proceedings of the United States expedition to Lady Franklin Bay, Grinnell Land. Washington, D.C.: Government Printing Office. 2 vols.
80		Melville Island	74°42'N	110°22'W	~0	Barometer	–	–	+	(+)	Heda/Griper	W.E. Parry/M. Liddon	09.1819 – 08.1820	12	m					Strachan R. Contributions to Our Knowledge of the Meteorology of the Arctic Regions, Authority of the Meteorology: London; Part I (1879), Part II (1880), Part III (1882), Part IV (1885), Part V (1888).
81		Mundy Harbour	70°18'N	91°35'W	~0	Barometer	–	–	+	(+)	Ship'Victory'	Sir John Ross	09.1831 – 04.1832	8	m					
82		Northumberland Sound	76°52'N	97°00'W	~0	Barometer	–	–	+	(+)	Ship 'Assistance'	Sir E. Belcher	09.1852 – 08.1853	12	m					
83		Polaris Bay	81°36'N	62°15'W	10.7	Barometer	–	+	+	+	Station	C.F. Hall	11.1871 – 08.1872	10	m					Bessels E. 1876. Scientific results of the United States Arctic expedition, steamer Polaris, C.F.Hall commanding. Vol.1. Physical observations, Washington, DC: Government Printing Office.
84		Polaris House	78°18'N	70°15'W	2.6	Barometer	–	+	+	+	Station	C.F. Hall	11.1872 – 05.1873	7	m					
85		Port Bowen	73°13'N	88°55'W	~0	Barometer	–	–	+	(+)	Ship 'Hecla', ' Fury'	Sir W.E. Parry, H. P. Hoppner	09.1824 – 08.1825	12	m					Strachan R. Contributions to Our Knowledge of the Meteorology of the Arctic Regions, Authority of the Meteorology: London; PartI (1879), Part II (1880), Part III (1882), Part IV (1885), Part V (1888).
86		Port Kennedy	72°01'N	94°14'W	~0	Aneroid	–	+	daa	+	Ship 'Fox'	Sir F.L. McClintock	09.1858 – 08.1859	12	m					
87		Port Leopold	73°50'N	90°12'W	~0	Barometer	–	–	+	(+)	Ship 'Enterprise', 'Investigator'	Sir James Clark Ross, E. J. Bird	09.1848 – 08.1849	12	m					
88		Princess Royal Islands	72°47'N	117°35'W	~0	Barometer	–	–	+	(+)	Ship 'Investigator'	Sir Robert J. McClure	09.1850 – 08.1851	12	m	Modern data (1961–1990) for historical sites have been interpolated (kriging method) based on SLP data taken from adjacent meteorological stations (GHCN Ver.2 dataset).				
89		Repulse Bay	66°32'N	86°56'W	~0	Barometer	–	–	+	(+)	Ship	–	10.1846 – 07.1847	9	m					
90		Victoria Harbour	70°08'N	91°35'W	~0	Barometer	–	–	+	(+)	Ship'Victory'	Sir John Ross	09.1830 – 08.1831	12	m					
91		Walker Bay	71°35'N	117°39'W	~0	Barometer	–	–	+	(+)	Ship 'Enterprise'	Sir Richard Collins	09.1851 – 08.1852	12	m					
92		Wellington Channell	75°31'N	92°10'W	~0	Barometer	–	–	+	(+)	Ship 'Assistance'	Sir Edward Belcher	09.1853 – 08.1854	12	m					
93		Winter Island	66°11'N	83°10'W	~0	Barometer	–	–	+	(+)	Ship 'Hecla', 'Fury'	Sir W.E. Parry,	08.1821 – 07.1822	12	m					
94		Wolstenholm Sound	76°34'N	68°45'W	~0	Aneroid	–	–	daa	(+)	Ship 'North Star'	James Saunders	08.1849 – 07.1850	12	m					

+, correction introduced;–, correction not introduced; ~0, for ships precise height of barometer is unknown, probably oscillated between 0.5 and 3.0 m a.s.l., for more information see the text; (+), for ships with height of barometer denoted as ~0 we assumed that the pressure values measured can represent pressure at sea level; daa, do not apply to aneroids and barographs.

[a]After Treshnikov (ed.) 1985.