

XVI. *Contributions to Terrestrial Magnetism.*—No. XIII.By General Sir EDWARD SABINE, *K.C.B., V.P.R.S.*

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IN this, the XIII.th Number of the “Contributions to Terrestrial Magnetism,” I have the pleasure of presenting to the Royal Society the Magnetic Survey of the North Polar Regions of the Globe, in a suitable form and arrangement to entitle it to be regarded as a companion to the Magnetic Survey of the South Polar Regions, presented to the Society in 1868; constituting, with the present contribution, a moiety of the Magnetic Survey of the Globe corresponding to the general epoch 1840 to 1845. The area comprised in the present communication is coextensive with that of the South Polar Survey, and the epochs are the same, viz. 1840 to 1845, or more simply 1842·5; the chief distinction between the two surveys being, that the South Polar Survey is the work of a single nation,—executed by the authority of its Government and at the national expense in the brief interval comprised between the years 1840 and 1845, and thus requiring no corrections to be introduced for secular change, a troublesome and not very certain operation; whilst its companion, the present communication, comprehends the cooperative labours of many European and American contributors, acting for the most part independently of each other, within the limits of about twenty years preceding, and twenty years following, the mean epoch of 1842·5: the results, therefore, when brought together, require the introduction of “corrections for secular change,” where these are practicable, and where they can be made with safety.

The general form in which the observations collected in this Contribution are arranged is that of *zones*—each zone comprehending the observations of successive five degrees of latitude, in all longitudes, commencing with Greenwich as the first meridian and proceeding easterly until the circumference of the globe is completed. The zones are eight in number:—

Zone 1,	comprehending from latitude 40° N. to latitude 45° N.
Zone 2,	“ “ 45° N. “ 50° N.
Zone 3,	“ “ 50° N. “ 55° N.
Zone 4,	“ “ 55° N. “ 60° N.
Zone 5,	“ “ 60° N. “ 65° N.
Zone 6,	“ “ 65° N. “ 70° N.
Zone 7,	“ “ 70° N. “ 75° N.
Zone 8,	“ “ 75° N. “ 80° N.

Zone 8 includes also the few observations in latitudes exceeding 80° N.

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The values of the Declination and of the Inclination, recorded by the several observers being in themselves *absolute* determinations, require for their correlation no other corrections than those for secular change. It is otherwise, however, in the case of the values representing the Magnetic Force, *prior* to the introduction of the practice now so generally adopted of determining and recording the values of the Magnetic Force, at the respective base stations, in *absolute measure*. Antecedently to the improvements in method and apparatus introduced by M. GAUSS, it was the general practice of magneticians to express their results in reference to the force at a Base Station represented by an arbitrary value, which in London was usually taken 1·372, or, as written by M. GAUSS, 1372. The base stations of British observers were commonly in the immediate vicinity of London, and as such may be fitly represented by the *Kew Observatory*, where the absolute magnetic force corresponding to a definite epoch, and its variation by reason of secular change, have been for some years past carefully determined. In the *Philosophical Transactions* for 1863, Art. XII. p. 302, and in the *British Association Reports* for 1861, p. 273, will be found the premises from which the following Table has been obtained, showing the (at least approximate) value of the Magnetic Force at the Kew Observatory in absolute measure in each year between 1830 and 1860*, which values have now been substituted at the corresponding dates for the arbitrary value 1·372, the force at the other stations of the respective surveys being expressed proportionally:—

1830, July. 10·27	1840, July. 10·28	1850, July. 10·29	1860, July. 10·30
1831, „ 10·27	1841, „ 10·28	1851, „ 10·29	1861, „ 10·30
1832, „ 10·27	1842, „ 10·28	1852, „ 10·29	1862, „ 10·30
1833, „ 10·27	1843, „ 10·28	1853, „ 10·29	1863, „ 10·31
1834, „ 10·27	1844, „ 10·28	1854, „ 10·29	1864, „ 10·31
1835, „ 10·27	1845, „ 10·28	1855, „ 10·30	1865, „ 10·31
1836, „ 10·27	1846, „ 10·28	1856, „ 10·30	1866, „ 10·31
1837, „ 10·27	1847, „ 10·29	1857, „ 10·30	1867, „ 10·31
1838, „ 10·28	1848, „ 10·29	1858, „ 10·30	1868, „ 10·31
1839, „ 10·28	1849, „ 10·29	1859, „ 10·30	1869, „ 10·31

In the general Table in which the observations collected in this memoir are arranged, the primary classification is in zones depending upon latitude as already stated, the position within the zone being determined by the longitude: the name of the observer and the date of the observation are given in all cases. So far the several entries are simply statements of facts. The additional columns,—viz. those in which the endeavour has been made to assign corrections for the effects of secular change, in the brief intervals between the dates of the observation and the mean epoch (1842·5),—have been supplied (with two notable exceptions) upon the best judgment which a careful comparison of the facts so placed in juxtaposition has enabled me to make. Generally

* Since continued to 1869.

speaking, and excepting for very special reasons, the limit of about eighteen years before and after the mean epoch has not been departed from. In the large contribution made by Dr. LAMONT, extending over a considerable portion of the European continent, I have only had to approve and to adopt his own estimate of secular change, and to apply the corrections accordingly. In a yet more extensive series, the well-known observations of MM. HANSTEEN, ERMAN, and DUE, in the northern parts of Eastern Europe and of Asia, I have been aided by my early and valued friend Professor ADOLPH ERMAN, of Berlin, by whom the secular corrections of the three elements at the Land Stations of the three observers in Zones 3, 4, 5, and 6 have been supplied. I am also indebted to Professor ERMAN for the secular corrections applied to the observations of WRANGEL and ANJOU in North-eastern Asia.

For a manuscript communication of a large portion of the Magnetic Determinations on the coasts and islands of the Asiatic Polar Sea, I have been indebted to the early and valued friendship of Admiral Count LÜTKE, himself a magnetician of no ordinary note, and who now holds the distinguished position of President of the Imperial Academy of Sciences at St. Petersburg. In assigning the Secular Corrections for these, and for other determinations around and eastward of the White Sea, I have been greatly aided by the publication (in the Russian language) of Captain BELAVENETZ, of the Russian Imperial Navy, Director of the Compass Observatory at Cronstadt.

On the American continent, and until the Arctic Regions are approached, the observations themselves furnish on the whole satisfactory materials for the assignment of secular change. The Inclination, indeed, appears to have been nearly stationary in Canada and in the northern states of America for some years before and after the mean epoch of 1842·5—a conclusion which is confirmed by the records of the Toronto Observatory, and is quite in accordance with the excellent observations and discussions in the volumes of the United States Coast Survey. But in Zones 6, 7, and 8 the American portions present more than ordinary difficulties in respect to secular change,—especially in the case of the Declination, in which element a satisfactory conclusion seemed especially desirable, as likely to possess a more than ordinary theoretical value, in addition to that attaching to it for the sake of corrections to the mean epoch. The observations are tolerably numerous, both in the earlier and in the later portions of the included time; and it must also be said that the difficulty referred to is only *partially* due to the increased amount of probable error in the observations, incident to a region where the intensity of the Terrestrial Magnetic Force acting on the Declination Magnet is so greatly reduced. This latter inconvenience is one which it has in many cases been possible to counteract in some degree, by forming *groups* of results, with due regard to proximity in time and space; but the intercomparison of such groups (so far as they might admit of intercomparison), and the general and particular consideration of the data in various ways with a view to the derivation of secular change, have failed to enable me to derive conclusions in regard to the secular change which may have taken place in those localities between 1818 and 1860 which I could put forward with sufficient

confidence. The impression produced on my own mind is the probability of a *reversal* having taken place in the direction of the secular change at some time in the interval between 1818 and 1860, whereby the direction of the change which had been "increasing Easterly" or "decreasing Westerly" in the space between Melville Island and Baffin's Bay became "decreasing Easterly" or "increasing Westerly" in the same localities. The epoch of a change of this description may indeed be supposed to have synchronized approximately with the reversal in the direction of the secular change of the Declination and of the Inclination which is now generally believed to have taken place in or about the same meridians in Canada* and the United States; and it may be right to connect both with the easterly progression of the phenomena in *North-eastern Asia*, attesting the approach of the present Asiatic point of maximum Force to the American continent. These, however, are matters which may be safely left to the elucidation they may receive from future researches in the same or in approximate localities; towards which the best service which can be at present rendered is the assemblage in groups, approximate in time and locality, of the facts which we now possess. Such an assemblage will be found at the close of Zone 8.

Amongst the Magnetic Determinations *made at sea*, the fine series of Professor ADOLPH ERMAN in the corvette 'Krotkoi' (commencing at Kamtschatka in October 1829, passing round Cape Horn, and terminating at St. Petersburg in October 1830) may claim a special notice, both on account of the extent of oceanic surface which it covers, and the regard given to all the incidental circumstances which are conducive to the accuracy of conclusions obtained on board ship. The results are found in his well-known publication, the 'Reise um die Erde' (Berlin, 1841). I have found nothing either to alter or to add in the Declinations and Inclinations recorded in that volume (excepting the introduction of the secular corrections furnished by himself, of which I have already spoken); in regard, however, to the values assigned to the magnetic *Force*, I have availed myself of the observations made by Professor ERMAN, in the return voyage to Europe, at Portsmouth in August 1830, to bring the whole series of his sea observations of the Force, of which those at Portsmouth formed a part, into direct comparison with the values assigned by British observers. The Magnetic Survey of the British Islands (Phil. Trans. 1870, Art. XIV.) assigns as the value of the Total Force at the "Mother-

* There is direct evidence of a reversal in the direction of the secular change in the Declination having taken place at York Fort, from Easterly increasing to Easterly diminishing, about the date 1842, in the record of three careful observers, FRANKLIN, LEFROY, and BLAKISTON (Proceedings of the Royal Society, January 7, 1858).

The observations of FRANKLIN in September 1819 gave	6 00 E.
Those of LEFROY in July 1843 gave	9 25 E.
Those of BLAKISTON in August 1857 gave	7 37 E.

The reversal in the direction of the secular change of the Declination possibly took place at York Fort, as it may have done at Toronto, somewhat earlier than 1842·5; it is impossible to speak with *certainty* in regard to the precise epoch of the reversal at Toronto, because the Magnetic Observatory at that station was only established in 1840.

bank" at Portsmouth, in 1836 and 1837, 10.23 in British units, which in Professor ERMAN'S Table (*Reise*, p. 579) has the corresponding value 1.33019 in the scale adopted by him. The ratio thus established between ERMAN'S scale and the corresponding values in British units, when carried back to the value assigned in the 'Reise' to the Force at Kamtschatka (*viz.* 1.47370, p. 576), shows an amount of loss in the magnetism of the needle employed which may well be deemed insignificant in a voyage which lasted an entire year, and in which the magnetic instruments were in constant employment.

I have again to express how greatly these Contributions have been and are indebted to the Hydrographer of the Admiralty, Admiral RICHARDS, F.R.S., for his kind permission to have the Maps (which accompany this and former Numbers of the Contributions) prepared at the Hydrographic Office; and have again to make my special acknowledgments to the Assistant Hydrographer, Captain FREDERICK JOHN EVANS, R.N., F.R.S., for the very valuable superintendence which he has kindly given to their preparation and execution.

Those who are familiar with the records of our early British navigators, the honoured predecessors of our modern British Polar Voyagers, will scarcely need to be reminded of their *Magnetical* Observations, bearing testimony to the fact that at that early period Inclinations of a much higher value than those which are now observed in the same localities prevailed on the coast of Norway, and in the Spitzbergen and Nova-Zembla seas. The careful and apparently dependable observations of HENRY HUDSON and others in the first years of the 17th century contain the record of systematic observations exceeding 80° of Inclination (*viz.* from 80° to upwards of 86°) in localities where the Inclinations are now fully 10° less. It was at that period the frequent practice to observe the Inclination at sea on days suitable for the observation, and great attention appears to have been given to the subject: no doubt the instruments of those days were less precise than modern ones; but, on the other hand, the very small amount of iron then used in the construction of ships must have obviated in great measure the chief difficulty attaching to more modern magnetic determinations at sea in the higher latitudes. There is much to make it probable that the high values of the Inclination which have since prevailed on the northern coast of Asia, and are now found on the northern coast of America, were then existing on the northern coasts of Europe, and are now adducible in evidence of that progress of secular change, with which are also connected the now well-established phenomena in the northern parts of Siberia, which I have elsewhere ventured to regard as, in part at least, an effect of *cosmical* influence.

ZONE I.—LATITUDE 40° TO 45° N.

Authorities.

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|-----------------------|---|--|
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Younghusband . . . }
Renwick }
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- Various observers }
at sea in the } Contrib. to Terr. Mag. No. IX. Phil. Trans. 1849, Art. XII.; and MSS. communicated
Atlantic Ocean . . } by the Hydrographic Office.

ZONE I.—Lat. 40° to 45° N.

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.	Observers.
				Observed.	Correction to Epoch 1842-5.	Corrected.	Observed.	Correction to Epoch 1842-5.	Corrected.		
Agen	44 13	0 36	1858-0	19 15 w.	1 58 w.	21·2 w.	63 22	+42	64·1	9·91	Lamont.
Salon	41 07	1 13	1833-5	.....	.....	.....	62 26	-24	62·0	.....	Norwegian Officers.
Toulouse	43 36	1 26	1858-0	18 45 w.	1 58 w.	20·7 w.	62 46	+42	63·5	9·89	Lamont.
Martorell	41 31	1 45	1869-0	17 12 w.	3 21 w.	20·6 w.	62 01	+72	63·2	9·78	Perry.
			1858-0	18 12 w.	1 58 w.	20·2 w.	60 52	+42	61·6	9·72	Lamont.
Barcelona	41 23	2 11	1858-0	18 05 w.	1 58 w.	20·1 w.	60 42	+42	61·4	9·88	Lamont.
			1860-5	17 53 w.	2 14 w.	20·1 w.	60 31	+49	61·3	9·71	Lamont.
Carcassonne	43 13	2 21	1858-0	18 17 w.	1 58 w.	20·3 w.	62 12	+42	62·9	9·83	Lamont.
At sea	40 03	2 22	1842-5	18 30 w.	.....	18·5 w.	.....	.....	.....	.....	Bérard.
Arenys de Mar	41 35	2 23	1858-0	17 52 w.	1 58 w.	19·8 w.	60 48	+42	61·5	9·71	Lamont.
At sea	40 35	2 29	1842-5	20 00 w.	.....	20·0 w.	.....	.....	.....	.....	Bérard.
At sea	41 11	2 38	1842-5	19 30 w.	.....	19·5 w.	.....	.....	.....	.....	Bérard.
Gerona	41 52	2 48	1858-0	17 54 w.	1 58 w.	19·9 w.	.....	.....	.....	.....	Lamont.
			1858-0	17 59 w.	1 58 w.	20·0 w.	61 48	+42	62·5	9·78	Lamont.
Perpignan	42 42	2 55	1860-5	17 48 w.	2 14 w.	20·0 w.	61 30	+49	62·3	.....	Lamont.
Figueras	42 16	2 57	1860-5	17 37 w.	2 14 w.	19·9 w.	60 59	+49	61·8	9·72	Lamont.
Narbonne	43 11	3 00	1858-0	18 01 w.	1 58 w.	20·0 w.	62 06	+42	62·8	9·82	Lamont.
Cette	43 24	3 12	1858-0	17 08 w.	1 58 w.	19·1 w.	.....	.....	.....	.....	Lamont.
At sea	41 26	3 51	1842-5	19 30 w.	.....	19·5 w.	.....	.....	.....	.....	Bérard.
Montpellier	43 36	3 53	1858-0	.....	.....	.....	62 15	+42	63·0	9·83	Lamont.
			1869-0	16 32 w.	3 21 w.	19·9 w.	61 37	+72	62·8	9·75	Perry.
At sea	41 32	4 17	1842-5	19 00 w.	.....	19·0 w.	.....	.....	.....	.....	Bérard.
Nismes	43 51	4 21	1838-5	.....	.....	.....	63 26	-11	63·3	.....	Fox.
Montelimar	44 34	4 45	1858-0	17 36 w.	1 58 w.	19·6 w.	62 53	+42	63·6	9·87	Lamont.
At sea	42 04	4 47	1842-5	18 30 w.	.....	18·5 w.	.....	.....	.....	.....	Bérard.
Avignon	43 57	4 48	1869-0	16 03 w.	3 21 w.	19·4 w.	61 50	+72	63·0	9·79	Perry.
Orange	44 08	4 48	1838-5	.....	.....	.....	63 38	-11	63·5	.....	Fox.
			1858-0	17 28 w.	1 58 w.	19·4 w.	62 37	+42	63·3	9·87	Lamont.
Valence	44 56	4 53	1838-5	.....	.....	.....	64 11	-11	64·0	.....	Fox.
			1860-5	17 20 w.	2 17 w.	19·6 w.	62 57	+49	63·8	9·85	Lamont.
Marseilles	43 18	5 22	1854-0	17 35 w.	1 24 w.	19·0 w.	61 58	+31	62·5	.....	De La Rive.
			1858-0	17 04 w.	1 58 w.	19·0 w.	61 41	+42	62·3	9·73	Lamont.
			1859-5	.....	.....	.....	61 47	+45	62·5	.....	Fox.
			1869-0	15 41 w.	3 21 w.	19·0 w.	60 35	+72	61·8	9·61	Perry.
Toulon	43 07	5 55	1826-5	19 40 w.	2 02 E.	17·6 w.	63 47	-43	63·1	.....	D'Urville.
			1826-5	19 19 w.	2 02 E.	17·3 w.	62 58	-43	62·3	.....	Blosseville.
			1836-5	19 16 w.	0 46 E.	18·5 w.	62 52	-16	62·6	9·84	Darondeau.
			1843-5	.....	.....	.....	62 27	0	62·5	9·84	Norwegian Officers.
			1860-5	16 31 w.	2 14 w.	18·7 w.	61 31	+49	62·3	9·78	Lamont.
Nice	43 42	7 17	1859-5	.....	.....	.....	61 40	+46	62·4	.....	Fox.
Monaco	43 43	7 25	1869-5	14 31 w.	3 21 w.	17·9 w.	61 22	+72	62·6	9·72	Perry.
Mentone	43 43	7 36	1859-5	.....	.....	.....	61 44	+46	62·5	.....	Fox.
Oneglia	43 55	8 00	1859-5	.....	.....	.....	61 35	+46	62·4	.....	Fox.
Sagona	42 06	8 41	1824-5	19 19 w.	2 17 E.	17·0 w.	.....	.....	.....	.....	Hall.
Ajaccio	41 55	8 44	1824-5	18 45 w.	2 17 E.	16·5 w.	.....	.....	.....	.....	Hall.
Calvi	42 34	8 45	1824-5	18 26 w.	2 17 E.	16·2 w.	.....	.....	.....	.....	Hall.
Genoa	44 24	8 54	1839-5	.....	.....	.....	62 53	-08	62·8	9·82	Quetelet.
La Ruta	44 18	9 10	1839-5	.....	.....	.....	61 38	+46	62·4	9·85	Fox.
Spezzia	44 04	9 51	1867-5	.....	.....	.....	61 09	+67	62·3	.....	Kämtz, L. F.
Boliaccio	44 10	10 00	1859-5	.....	.....	.....	61 38	+46	62·4	9·84	Fox.
Leghorn	43 33	10 18	1828-0	19 20 w.	1 46 E.	17·6 w.	.....	.....	.....	.....	Becquerel.
			1867-5	.....	.....	.....	60 34	+67	61·7	.....	Kämtz, L. F.
Porto Ferrajo	42 49	10 20	1828-0	16 29 w.	1 46 E.	14·7 w.	.....	.....	.....	.....	Becquerel.
Pisa	43 43	10 24	1839-5	.....	.....	.....	62 19	-08	62·0	9·80	Quetelet.
			1859-5	.....	.....	.....	60 54	+46	.....	.....	Fox.
Modena	44 39	10 56	1867-5	.....	.....	.....	61 27	+67	62·6	.....	Kämtz, L. F.
			1838-5	.....	.....	.....	62 05	-11	61·9	.....	Bache.
Florence	43 46	11 14	1839-5	.....	.....	.....	62 21	-08	62·2	.....	Amici.
			1839-5	.....	.....	.....	62 12	-08	62·1	.....	Quete et.
			1859-5	.....	.....	.....	61 00	+46	61·8	.....	Fox.
Bologna	44 50	11 21	1867-5	.....	.....	.....	61 19	+67	62·4	.....	Kämtz, L. F.

ZONE I.—Lat. 40° to 45° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.	Observers.	
				Observed.	Correction to Epoch 1842.5.	Corrected.	Observed.	Correction to Epoch 1842.5.	Corrected.			
Levane	43 33	11 40	1859.5	.....	.....	.....	60 40	+46	61.4	.....	Fox.
Cortona	43 17	11 59	1859.5	.....	.....	.....	60 22	+46	61.1	9.75	Fox.
Rome	41 54	12 26	1838.5	60 14	-11	60.1	9.67	} 9.66	Bache. Quetelet. D'Abbadie. Secchi. Fox.
			1839.5	.....	.....	.....	60 08	-08	60.0	9.58	
			1839.5	.....	.....	.....	60 16	-08	60.1	9.76	
			1859.5	13 49 w.	2 09 w.	16.0 w.	59 12	+46	60.0	9.76		
			1859.5	.....	.....	.....	59 17	+46	60.1	9.62	
Terni	42 35	12 30	1859.5	.....	.....	.....	59 52	+46	60.6	9.68	Fox.
Spoletto	42 45	12 36	1859.5	.....	.....	.....	59 48	+46	60.6	9.71	Fox.
Terracina	41 18	13 15	1859.5	.....	.....	.....	58 37	+46	59.4	.....	Fox.
Ancona	43 38	13 30	1850.0	14 16 w.	0 53 w.	15.2 w.	61 06	+20	61.4	.....	Kreil.
Pola	44 53	13 50	1850.0	14 16 w.	0 53 w.	15.2 w.	62 14	+20	62.6	.....	Kreil.
Naples	40 15	14 15	1838.5	59 05	-11	58.9	9.53	} 9.55	Bache. Quetelet. Norwegian Officers. Fox. Fox.
			1839.5	.....	.....	.....	58 59	-08	58.9	9.55	
			1843.5	.....	.....	.....	58 42	+03	58.8	9.55	
			1859.5	.....	.....	.....	58 09	+46	58.9	9.56	
Sorrento.....	40 35	14 25	1859.5	.....	.....	.....	58 02	+46	58.8	9.52	Fox.
Lussin Piccolo	44 32	14 28	1850.0	14 13 w.	0 53 w.	15.1 w.	61 53	+20	62.2	9.76	Kreil.	
Cava	40 40	14 43	1859.5	.....	.....	.....	57 59	+46	58.8	9.48	Fox.
Zara	44 07	15 15	1850.0	13 53 w.	0 53 w.	14.8 w.	61 53	+19	62.2	9.72	Kreil.	
Ottocaz	44 51	15 24	1850.0	13 59 w.	0 53 w.	14.9 w.	61 57	+19	62.3	9.79	Kreil.	
Mali Hallan	44 22	15 43	1850.0	.....	.....	.....	61 33	+19	61.9	9.79	Kreil.
Sebenico	43 44	15 59	1850.0	13 37 w.	0 53 w.	14.5 w.	60 58	+18	61.3	9.74	Kreil.	
Lissa	43 05	16 11	1850.0	13 08 w.	0 53 w.	14.0 w.	59 44	+18	60.1	9.65	Kreil.	
Spalato	43 31	16 27	1850.0	13 28 w.	0 53 w.	14.4 w.	60 43	+18	61.0	9.72	Kreil.	
Lesina	43 11	16 27	1850.0	13 18 w.	0 53 w.	14.2 w.	.....	.....	.....	.....	Kreil.
Molfetta.....	41 13	16 41	1850.0	12 51 w.	0 53 w.	13.7 w.	58 05	+18	58.4	9.51	Kreil.	
Lagosta	42 47	16 52	1850.0	12 58 w.	0 53 w.	13.9 w.	.....	.....	.....	.....	Kreil.
Curzola	42 59	17 08	1850.0	12 58 w.	0 53 w.	13.9 w.	59 55	+17	60.2	9.66	Kreil.	
Brindisi	40 39	18 00	1850.0	12 16 w.	0 53 w.	13.2 w.	57 21	+17	57.6	9.55	Kreil.	
			1870.0	10 06 w.	3 12 w.	13.3 w.	Ast. Nach. 1871.
Gravosa	42 40	18 05	1850.0	12 26 w.	0 53 w.	13.3 w.	59 21	+17	59.6	9.60	Kreil.	
Ragusa	42 38	18 07	1850.0	12 18 w.	0 53 w.	13.2 w.	59 30	+15	59.8	9.57	Kreil.	
At sea.....	42 14	18 24	1859.5	10 14 w.	1 59 w.	12.2 w.	.....	.....	.....	.....	Novara.
Megline	42 27	18 31	1850.0	12 31 w.	0 53 w.	13.4 w.	59 04	+15	59.3	9.59	Kreil.	
Cattaro	42 25	18 46	1850.0	12 03 w.	0 53 w.	12.9 w.	59 24	+15	59.7	9.71	Kreil.	
Cettigne	42 24	18 59	1850.0	.....	.....	.....	59 06	+15	59.4	9.63	Kreil.
Antivari.....	42 06	19 09	1850.0	12 13 w.	0 53 w.	13.1 w.	58 36	+15	58.9	9.54	Kreil.	
Durazzo	41 19	19 28	1850.0	11 56 w.	0 53 w.	12.8 w.	58 02	+15	58.3	9.55	Kreil.	
Valona	40 29	19 30	1850.0	11 51 w.	0 53 w.	12.7 w.	57 05	+15	57.3	9.49	Kreil.	
Poschega	43 52	19 59	1850.0	11 54 w.	0 53 w.	12.8 w.	60 36	+15	60.9	9.81	Kreil.	
Semlin	44 50	20 24	1850.0	11 27 w.	0 53 w.	12.3 w.	61 13	+15	61.5	9.73	Kreil.	
Belgrade	44 48	20 25	1850.0	11 18 w.	0 53 w.	12.2 w.	61 16	+15	61.5	9.88	Kreil.	
Weisskirchen.....	44 54	21 25	1850.0	11 02 w.	0 53 w.	11.9 w.	61 08	+15	61.4	9.77	Kreil.	
Alexinatz	43 34	21 36	1850.0	11 32 w.	0 53 w.	12.4 w.	60 08	+15	60.4	9.79	Kreil.	
Orsowa	44 42	22 24	1850.0	10 35 w.	0 53 w.	11.5 w.	60 47	+15	61.0	9.75	Kreil.	
Mehadia	44 53	22 25	1850.0	10 37 w.	0 53 w.	11.5 w.	60 40	+15	60.9	9.67	Kreil.	
Tschernetz	44 38	22 42	1831.5	14 51 w.	1 17 E.	13.6 w.	.....	.....	.....	.....	Russian Officers.
Kalafat	44 00	22 56	1831.5	11 43 w.	1 17 E.	10.4 w.	.....	.....	.....	.....	Russian Officers.
			1850.0	10 19 w.	0 53 w.	11.2 w.	60 22	+15	60.6	9.81	Kreil.	
Kraiowa	44 19	23 47	1831.5	12 48 w.	1 17 E.	11.5 w.	.....	.....	.....	.....	Russian Officers.
Aidos	42 42	24 48	1829.5	11 32 w.	1 31 E.	10.0 w.	.....	.....	.....	.....	Russian Officers.
Statina	44 26	24 50	1831.5	13 23 w.	1 17 E.	12.1 w.	.....	.....	.....	.....	Russian Officers.
Piteschti.....	44 51	24 51	1831.5	12 47 w.	1 17 E.	11.5 w.	.....	.....	.....	.....	Russian Officers.
Mogurini	43 44	24 52	1831.5	11 02 w.	1 17 E.	9.8 w.	.....	.....	.....	.....	Russian Officers.
Tirgowist	44 56	25 27	1831.5	12 48 w.	1 17 E.	11.5 w.	.....	.....	.....	.....	Russian Officers.
Ploeshti	44 56	26 01	1828.5	11 49 w.	1 38 E.	10.2 w.	.....	.....	.....	.....	Russian Officers.
Bucharest	44 26	26 05	1829.5	9 14 w.	1 31 E.	7.7 w.	.....	.....	.....	.....	Russian Officers.
			1850.0	9 03 w.	0 53 w.	9.9 w.	60 14	+15	60.5	9.81	Kreil.	
Shursha	43 54	26 07	1829.5	9 07 w.	1 31 E.	8.6 w.	.....	.....	.....	.....	Russian Officers.
Simmniza	43 39	26 20	1831.5	10 15 w.	1 17 E.	9.0 w.	.....	.....	.....	.....	Russian Officers.
Demotika	41 21	26 30	1829.5	11 41 w.	1 31 E.	10.2 w.	.....	.....	.....	.....	Russian Officers.

ZONE I.—Lat. 40° to 45° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.	Observers.
				Observed.	Correction to Epoch 1842.5.	Corrected.	Observed.	Correction to Epoch 1842.5.	Corrected.		
Adrianople.....	41 41	26 35	1829.5	11 35 w.	1 31 E.	10.1 w.	.....	.....	.....	.....	Russian Officers.
Tarkutai.....	44 04	26 35	1829.5	11 36 w.	1 31 E.	10.1 w.	.....	.....	.....	.....	Russian Officers.
Karnabat.....	42 39	27 01	1829.5	11 20 w.	1 31 E.	9.8 w.	.....	.....	.....	.....	Russian Officers.
Janibasar.....	43 21	27 13	1830.5	11 06 w.	1 24 E.	9.7 w.	.....	.....	.....	.....	Russian Officers.
Kalarash.....	44 11	27 19	1829.5	11 14 w.	1 31 E.	9.7 w.	.....	.....	.....	.....	Russian Officers.
Prawodi.....	43 11	27 28	1830.5	14 41 w.	1 24 E.	13.3 w.	.....	.....	.....	.....	Russian Officers.
Burgas.....	42 30	27 31	1829.5	11 25 w.	1 31 E.	9.9 w.	57 26	+12	57 6	9.89	.....
			1850.0	8 01 w.	0 53 w.	8.9 w.					
			1859.5	6 36 w.	1 59 w.	8.6 w.					
Anchiola.....	42 33	27 42	1829.5	11 19 w.	1 31 E.	9.8 w.	56 40	+28	57.1	.....	.....
			1859.5	.....	.....	.....		
Sisopol.....	42 25	27 45	1859.5	6 28 w.	1 59 w.	8.5 w.	.....	.....	.....	.....	Dirkoff.
Miserwi.....	42 40	27 47	1829.5	10 48 w.	1 31 E.	9.3 w.	.....	.....	.....	.....	Russian Officers.
Basardshik.....	43 34	27 54	1830.5	10 41 w.	1 24 E.	9.3 w.	.....	.....	.....	.....	Russian Officers.
Hirsowa.....	44 41	27 54	1828.5	11 49 w.	1 38 E.	10.2 w.	.....	.....	.....	.....	Russian Officers.
Simieni-dindel.....	44 22	27 56	1828.5	11 40 w.	1 38 E.	10.0 w.	.....	.....	.....	.....	Russian Officers.
Varna.....	43 12	27 57	1829.5	9 50 w.	1 31 E.	8.3 w.	.....	.....	.....	.....	.....
			1859.5	7 00 w.	1 59 w.	9.0 w.					
			1859.5	6 24 w.	1 59 w.	8.4 w.					
Inada.....	41 55	28 00	1859.5	6 24 w.	1 59 w.	8.4 w.	.....	.....	.....	.....	Dirkoff.
Balchik.....	43 25	28 12	1859.5	6 43 w.	1 59 w.	8.7 w.	.....	.....	.....	.....	Dirkoff.
Kavarna.....	43 50	28 22	1830.5	10 12 w.	1 24 E.	8.8 w.	.....	.....	.....	.....	Russian Officers.
Cape Kalakri.....	43 23	28 29	1850.5	7 47 w.	0 53 w.	8.7 w.	.....	.....	.....	.....	Kreil.
Mangalia.....	43 48	28 37	1830.5	12 13 w.	1 24 E.	10.8 w.	.....	.....	.....	.....	Russian Officers.
Kustendje.....	44 10	28 42	1829.5	11 33 w.	1 31 E.	10.0 w.	58 49	+17	59.1	.....	.....
			1859.5	6 44 w.	1 59 w.	8.7 w.					
Constantinople.....	41 00	28 55	1838.0	.....	.....	.....	56 34	- 4	56.5	.....	Ainsworth.
Ortakoi.....	41 04	29 01	1850.0	7 39 w.	0 53 w.	8.5 w.	56 18	+ 7	56.4	9.55	Kreil.
Bairik Déré.....	41 10	29 03	1859.5	.....	.....	.....	56 05	+17	56.4	.....	Dirkoff.
Bojuk Liman.....	41 11	29 06	1850.0	7 34 w.	0 53 w.	8.5 w.	56 11	+ 7	56.3	9.60	Kreil.
Penderekli.....	41 17	31 26	1859.5	6 21 w.	1 59 w.	8.3 w.	56 02	+15	56.3	.....	Dirkoff.
Amastro.....	41 45	32 25	1859.5	5 39 w.	1 59 w.	7.6 w.	56 10	+15	56.4	.....	Dirkoff.
Cape Chersonese.....	44 34	33 21	1850.0	6 13 w.	0 53 w.	7.1 w.	59 48	+ 6	59.9	9.79	Kreil.
Sebastopol.....	44 37	33 31	1859.5	4 31 w.	1 59 w.	6.5 w.	59 12	+15	59.5	.....	Dirkoff.
Niopol.....	42 00	33 45	1859.5	4 40 w.	1 59 w.	6.7 w.	56 29	+15	56.7	.....	Dirkoff.
Yalta.....	44 30	34 12	1859.5	4 10 w.	1 59 w.	6.2 w.	58 59	+15	59.2	.....	Dirkoff.
Agios Antonios.....	41 55	34 23	1859.5	4 02 w.	1 59 w.	6.0 w.	.....	.....	.....	.....	Dirkoff.
Cape Indje.....	42 08	34 50	1850.0	.....	.....	.....	57 49	+ 4	57.9	9.77	.....
			1859.0	3 07 w.	1 59 w.	5.1 w.					
Ak Liman.....	42 05	35 04	1859.5	4 23 w.	1 59 w.	6.4 w.	55 58	+ 9	58.1	.....	Dirkoff.
Sinope.....	42 00	35 10	1824.5	8 50 w.	2 06 E.	6.7	57 42	+ 3	57.8	9.72	.....
			1850.0	5 43 w.	0 53 w.	6.6					
			1859.5	5 30 w.	1 59 w.	7.5					
Kerge.....	41 40	35 14	1859.5	3 42 w.	1 59 w.	5.7 w.	.....	.....	.....	.....	Dirkoff.
Samsun.....	41 17	36 21	1859.5	3 09 w.	1 59 w.	5.1 w.	55 41	+ 6	55.8	.....	Dirkoff.
Anapa.....	44 53	37 18	1859.5	2 39 w.	1 59 w.	4.6 w.	59 22	+ 6	59.5	.....	Dirkoff.
Unia.....	41 08	37 18	1859.5	3 03 w.	1 59 w.	5.0 w.	.....	.....	.....	.....	Dirkoff.
Novorosisk.....	44 43	37 47	1859.5	2 37 w.	1 59 w.	4.6 w.	59 00	+ 6	59.1	.....	Dirkoff.
Kerasunda.....	40 55	38 24	1859.5	2 42 w.	1 59 w.	4.7 w.	.....	.....	.....	.....	Dirkoff.
Trebizonde.....	41 00	39 46	1824.5	7 30 w.	1 48 E.	5.7	56 10	+ 3	56.2	9.78	.....
			1850.0	3 05 w.	0 45 w.	5.8					
			1859.5	2 21 w.	1 42 w.	4.1					
Pitsunda.....	43 08	40 17	1859.5	1 53 w.	1 42 w.	3.6 w.	57 21	+ 5	57.4	.....	Dirkoff.
Riso.....	41 04	40 35	1859.5	2 33 w.	1 42 w.	4.3 w.	.....	.....	.....	.....	Dirkoff.
Soukhem Kaleh.....	43 00	41 00	1859.5	1 48 w.	1 42 w.	3.5 w.	57 22	+ 4	57.4	.....	Dirkoff.
Redout Kaleh.....	42 15	41 35	1859.5	1 43 w.	1 42 w.	3.4 w.	.....	.....	.....	.....	Dirkoff.
Batum.....	41 39	41 37	1859.5	2 03 w.	1 42 w.	4.8 w.	.....	.....	.....	.....	Dirkoff.
Fort St. Nicholas.....	41 54	41 46	1859.5	1 52 w.	1 42 w.	3.6 w.	56 14	+ 4	56.3	.....	Dirkoff.
Platigorsk.....	44 03	43 00	1869.5	0 01 w.	2 28 w.	2.5 w.	58 04	+ 4	58.1	10.11	Wild.
Tifis.....	41 43	44 50	1833.5	3 47 w.	0 50 E.	2.9 w.	55 34	0	55.6	.....	.....
			1843.5	1 52 w.	0 05 w.	2.0 w.					
			1845.5	.....	.....	.....		
			1869.5	0 02 E.	2 28 w.	2.4 w.					
Petrousk.....	43 00	47 39	1862.5	1 00 E.	1 40 w.	0.7 w.	56 49	- 5	56.7	10.06	.....

ZONE I.—Lat. 40° to 45° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.	Observers.		
				Observed.	Correction to Epoch 1842-5.	Corrected.	Observed.	Correction to Epoch 1842-5.	Corrected.				
Tehetchen Island	43 59	47 47	1862-5	1 21 E.	1 40 W.	0-3 W.	58 06	- 5	58-0	10-15	Ivatsinsk.		
Derbend	42 04	48 22	1862-5	1 07 E.	1 40 W.	0-6 W.	56 02	- 5	56-0	10-03	Ivatsinsk.		
Bulla Island	40 00	49 46	1862-5	0 51 E.	1 40 W.	0-8 W.	53 31	- 5	53-4	9-78	Ivatsinsk.		
Baku	40 22	49 58	1862-5	1 05 E.	1 40 W.	0-6 W.	54 03	- 5	54-0	9-87	Ivatsinsk.		
Kulali Island	44 53	50 07	1862-5	2 24 E.	1 40 W.	0-7 E.	58 58	- 5	58-9	10-27	Ivatsinsk.		
Cape Karagan	44 33	50 23	1862-5	2 21 E.	1 40 W.	0-7 E.	58 37	- 5	58-5	10-24	Ivatsinsk.		
Ibitche	41 37	50 27	1862-5	2 24 E.	1 40 W.	0-7 E.	58 38	- 5	58-6	10-25	Ivatsinsk.		
Jeloi Island	40 20	50 43	1862-5	1 23 E.	1 40 W.	0-3 W.	53 57	- 5	53-9	9-88	Ivatsinsk.		
Alexander Bay	43 38	51 19	1862-5	2 05 E.	1 40 W.	0-4 E.	57 03	- 5	57-0	10-18	Ivatsinsk.		
Kinderlinski	42 44	52 42	1862-5	2 24 E.	1 40 W.	0-7 E.	56 47	- 5	56-7	10-16	Ivatsinsk.		
Karabugazski	41 02	53 04	1862-5	1 43 E.	1 40 W.	0-1 E.	55 07	- 5	55-0	9-90	Ivatsinsk.		
Krasnovodsky	40 00	53 07	1862-5	1 40 E.	1 40 W.	0 0	54 87	- 5	54 0	10-04	Ivatsinsk.		
Wernoie	43 16	77 00	1859-5	.....	.....	.....	58 42	0	58-7	.....	Golouchef.	
Zaire Ussu	44 47	106 56	1831-5	0 09 E.	.....	.....	60 50	+33	61-4	.....	Fuss.	
			1868-0	0 26 E.	.....	0-3 E.	63 07	-76	62-8	62-1	12-30	Fritsche.
Sendshi	44 45	110 25	1831-5	0 30 W.	.....	0-5 W.	60 43	+33	61-3	.....	Fuss.	
Kutull	43 58	110 37	1831-5	.....	.....	.....	60 13	+33	60-8	.....	Fuss.	
Zsamein Chuduck	43 37	110 50	1831-5	.....	.....	.....	59 23	+33	59-9	.....	Fuss.	
Sehara Muren	42 24	111 13	1832-0	0 05 W.	0 10 W.	0-3 W.	58 07	+32	58-7	58-8	.....	Fuss.
			1868-0	0 43 W.	0 26 E.	0-3 W.	60 07	-76	58-9	.....	11-76	Fritsche.
Gaschun	44 23	111 18	1831-5	.....	.....	.....	60 17	+33	60-8	.....	Fuss.	
Charatain Sudshi	44 50	112 05	1831-5	.....	.....	.....	61 03	+33	61-6	.....	Fuss.	
Mingan	43 03	112 29	1831-5	.....	.....	.....	58 49	+33	59-4	.....	Fuss.	
Batchai	44 21	112 54	1831-5	0 59 W.	0 11 W.	1-2 W.	60 18	+33	60-9	.....	Fuss.	
Sudshi	42 28	113 50	1831-5	.....	.....	.....	58 05	+33	58-6	.....	Fuss.	
Kulchuduck	43 29	113 51	1831-5	.....	.....	.....	59 14	+33	59-8	.....	Fuss.	
Scharabudurguna	43 14	114 06	1831-5	0 46 W.	0 11 W.	1-0 W.	59 03	+33	59-6	.....	Fuss.	
Zackildaek	42 48	114 16	1831-5	.....	.....	.....	58 25	+33	59-0	.....	Fuss.	
Zsamein-ussu	41 46	114 37	1831-5	.....	.....	.....	57 24	+33	58-0	.....	Fuss.	
Zagan Balgassu	41 18	114 43	1831-5	.....	.....	.....	56 41	+33	57-2	.....	Fuss.	
Chalgan	40 49	115 57	1831-5	1 13 W.	0 11 W.	1-4 W.	56 17	+33	56-8	56-7	11-14	Fuss.	
			1868-0	1 59 W.	0 26 E.	1-6 W.	57 53	-76	56-6	11-68	11-3	Fritsche.
Wladimir Bay	43 55	135 28	1859-0	.....	.....	.....	58 38	?	?	.....	.....	Shadwell.
At sea	40 56	139 40	1855-5	3 27 W.	.....	3-5 W.	.....	.....	.....	.....	.....	Richards.
Island of Yesso	41 47	140 40	1855-5	3 38 W.	.....	3-6 W.	.....	.....	.....	.....	.....	Richards.
Kamedia	41 49	140 48	1854-5	4 30 W.	.....	4-5 W.	.....	.....	.....	.....	.....	Richards.
Hakodadi	41 46	140 59	1855-5	4 12 W.	.....	4-2 W.	.....	.....	.....	.....	.....	Rodgers.
At sea	40 13	156 40	1851-5	.....	.....	.....	51 55	.....	51-9	.....	.....	Collinson.
At sea	42 08	156 41	1828-5	2 26 E.	?	2-4 E.	.....	.....	.....	.....	.....	Lütke.
At sea	41 45	162 15	1849-5	5 15 E.	.....	5-3 E.	.....	.....	.....	.....	.....	Kellett.
At sea	44 53	162 40	1850-5	.....	.....	.....	56 14	.....	56-2	.....	.....	Collinson.
At sea	42 10	168 58	1850-5	.....	.....	.....	55 47	.....	55-8	.....	.....	Collinson.
At sea	41 31	169 03	1850-5	11 10 E.	.....	11-2 E.	.....	.....	.....	.....	.....	Collinson.
At sea	43 29	173 06	1848-5	.....	.....	.....	58 26	.....	58-4	.....	.....	Moore.
At sea	41 52	174 36	1848-5	.....	.....	.....	56 00	.....	56-0	.....	.....	Moore.
At sea	41 17	178 00	1848-5	.....	.....	.....	57 33	.....	57-5	.....	.....	Moore.
At sea	40 05	182 44	1848-5	.....	.....	.....	57 14	.....	57-2	.....	.....	Moore.
At sea	44 43	190 53	1852-5	16 02 E.	.....	16-0 E.	.....	.....	.....	.....	.....	Crane.
At sea	42 11	193 46	1852-5	15 42 E.	.....	15-7 E.	.....	.....	.....	.....	.....	Crane.
At sea	44 31	197 24	1849-5	18 54 E.	.....	18-9 E.	.....	.....	.....	.....	.....	Kellett.
At sea	43 20	200 32	1849-5	18 06 E.	.....	18-1 E.	.....	.....	.....	.....	.....	Kellett.
At sea	42 39	204 30	1849-5	18 08 E.	.....	18-1 E.	.....	.....	.....	.....	.....	Kellett.
At sea	41 59	207 07	1849-5	19 08 E.	.....	19-1 E.	.....	.....	.....	.....	.....	Kellett.
At sea	40 29	212 54	1849-5	17 31 E.	.....	17-5 E.	.....	.....	.....	.....	.....	Kellett.
At sea	40 28	213 35	1827-5	17 11 E.	.....	17-2 E.	62 44	.....	62-7	11-32	.....	Lütke.
At sea	41 43	214 41	1851-5	14 07 E.	.....	14-1 E.	.....	.....	.....	.....	.....	Collinson.
At sea	44 54	214 50	1827-5	.....	.....	.....	65 40	.....	65-7	12-23	.....	Lütke.
At sea	40 02	214 51	1849-5	16 52 E.	.....	16-9 E.	.....	.....	.....	.....	.....	Kellett.
At sea	43 17	230 04	1829-5	.....	.....	.....	66 40	.....	66-7	12-07	.....	Erman.
At sea	40 19	233 08	1829-5	17 06 E.	.....	17-1 E.	.....	.....	.....	.....	.....	Erman.
At sea	40 03	233 20	1829-5	16 12 E.	.....	16-2 E.	63 57	.....	64-0	11-80	.....	Erman.
Port Orford	42 44	235 31	1852-0	18 29 E.	.....	18-5 E.	.....	.....	.....	.....	.....	U. S. Coast Survey.
Crescent City Light	41 45	235 49	1851-5	17 52 E.	.....	17-9 E.	.....	.....	.....	.....	.....	U. S. Coast Survey.
Bucksport	40 47	235 49	1853-5	17 06 E.	.....	17-1 E.	.....	.....	.....	.....	.....	U. S. Coast Survey.
Shelter Cove	40 01	235 57	1857-5	17 02 E.	.....	17-0 E.	.....	.....	.....	.....	.....	U. S. Coast Survey.

ZONE I.—Lat. 40° to 45° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.	Observers.
				Observed.	Correction to Epoch 1842.5.	Corrected.	Observed.	Correction to Epoch 1842.5.	Corrected.		
River Sandiam	44 35	237 33	1830-0	.....	.....	.....	68 28	-02	68.4	12.51	Douglas.
Salt Lake City	40 46	247 52	1850-0	15 34 E.	.....	15.6 E.	.....	.....	.....	.....	U. S. Officers.
St. Peters	44 53	266 54	1823-0	10 29 E.	0 39 W.	9.8 E.	.....	.....	.....	.....	Long.
Prairie du Chien	43 01	268 51	1839-5	9 05 E.	0 06 W.	9.0 E.	.....	.....	73.3	13.83	Locke.
Brown's Settlement	42 02	268 54	1839-0	9 04 E.	0 06 W.	9.0 E.	72 21	.....	72.4	13.76	Locke.
Mahoqueta River	42 14	269 05	1839-0	.....	.....	.....	72 44	.....	72.7	13.76	Locke.
Mahoqueta River	42 23	269 08	1839-5	8 45 E.	0 06 W.	8.7 E.	72 51	.....	72.9	13.71	Locke.
Fort Crawford	43 03	269 08	1823-0	8 49 E.	0 39 W.	8.2 E.	.....	.....	.....	.....	Long.
Turkey River	42 42	269 12	1839-5	9 00 E.	0 06 W.	8.9 E.	73 11	.....	73.2	13.71	Locke.
White Water River	42 18	269 22	1839-5	9 10 E.	0 06 W.	9.1 E.	72 55	.....	72.9	13.80	Locke.
Little Mahoqueta	42 31	269 29	1839-5	8 30 E.	0 06 W.	8.4 E.	73 08	.....	73.1	13.80	Locke.
Davenport	41 30	269 34	1839-5	8 13 E.	0 06 W.	8.1 E.	71 55	.....	71.9	13.76	Locke.
Dubuques Town	42 29	269 37	1839-5	8 22 E.	0 06 W.	8.3 E.	73 05	.....	73.1	13.76	Locke.
Wabiseppinnicon River	41 44	269 37	1839-5	8 22 E.	0 06 W.	8.3 E.	72 15	.....	72.3	13.86	Locke.
Farmers Creek	42 13	269 37	1840-5	9 08 E.	0 04 W.	9.1 E.	72 36	.....	72.6	13.90	Locke.
Platteville	42 43	269 46	1841-5	.....	.....	.....	73 17	.....	73.3	.....	Loomis.
Galina	42 28	269 47	1841-5	9 25 E.	0 02 W.	9.4 E.	73 03	.....	73.1	.....	Loomis.
Lostgrove	41 39	269 51	1840-0	8 10 E.	0 05 W.	8.1 E.	72 02	.....	72.0	13.79	Locke.
Mineral Point	42 50	270 02	1839-5	8 40 E.	0 06 W.	8.6 E.	73 21	.....	73.4	13.76	Locke.
			1841-5	.....	.....	.....	73 23	.....	73.4	.....	Loomis.
Hickoks	42 58	270 13	1841-0	.....	.....	.....	73 40	.....	73.7	.....	Loomis.
Blue Mound	43 01	270 22	1839-0	8 38 E.	0 06 W.	8.5 E.	73 41	.....	73.7	13.82	Locke.
			1841-0	.....	.....	.....	73 35	.....	73.6	.....	Loomis.
Pekin	40 35	270 24	1841-0	.....	.....	.....	71 13	.....	71.2	.....	Loomis.
Campbells	43 01	270 34	1841-0	8 48 E.	0 03 W.	8.8 E.	73 28	.....	73.5	.....	Loomis.
Madison	43 04	270 54	1839-0	.....	.....	.....	74 03	.....	74.1	14.09	Locke.
			1841-0	7 30 E.	0 03 W.	7.5 E.	74 07	.....	74.1	.....	Loomis.
			1841-5	.....	.....	.....	71 51	.....	71.9	.....	Loomis.
Peru	41 23	270 55	1841-5	.....	.....	.....	71 50	.....	71.9	.....	Nicollet.
Juliet	41 30	271 09	1841-0	.....	.....	.....	72 16	.....	72.3	.....	Nicollet.
Ottawa	41 15	271 10	1841-0	.....	.....	.....	72 20	.....	72.3	.....	Nicollet.
			1841-0	.....	.....	.....	72 48	.....	72.8	.....	Loomis.
Chicago	41 53	272 16	1841-0	.....	.....	.....	72 46	.....	72.8	.....	Nicollet.
			1842-0	.....	.....	.....	72 39	.....	72.7	13.78	Younghusband.
St. Mary's	40 32	275 41	1845-0	3 04 E.	0 06 E.	3.2 E.	72 00	.....	72.0	13.66	Locke.
Piqua	40 06	275 47	1840-0	.....	.....	.....	71 36	.....	71.6	13.61	Locke.
Urbana	40 05	276 12	1840-0	.....	.....	.....	71 40	.....	71.7	13.74	Locke.
Ann Arbor	42 18	276 15	1840-0	.....	.....	.....	73 15	.....	73.2	.....	Loomis.
			1843-0	.....	.....	.....	73 14	.....	73.2	13.84	Locke.
Ypsilanti	42 14	276 22	1841-0	.....	.....	.....	73 18	.....	73.3	.....	Loomis.
Maumee	41 34	276 23	1839-0	.....	.....	.....	72 49	.....	72.8	.....	Loomis.
Toledo	41 41	276 28	1839-0	.....	.....	.....	73 06	.....	73.1	.....	Loomis.
Munroe	41 55	276 32	1841-0	.....	.....	.....	73 26	.....	73.4	.....	Loomis.
Stoney Point	41 56	276 45	1848-0	2 07 E.	0 11 E.	2.3 E.	.....	.....	.....	.....	U. S. Engineers.
Amherstburg	42 06	276 47	1845-0	.....	.....	.....	73 30	.....	73.5	13.79	Lefroy.
West Sister Island	41 44	276 54	1847-0	2 20 E.	0 09 E.	2.5 E.	.....	.....	.....	.....	U. S. Engineers.
			1840-5	1 56 E.	0 04 W.	1.9 E.	73 39	.....	73.7	.....	Loomis.
			1841-0	.....	.....	.....	73 33	.....	73.5	.....	Nicollet.
			1841-5	.....	.....	.....	73 33	.....	73.6	.....	Nicollet.
Detroit	42 25	277 04	1842-0	.....	.....	.....	73 29	.....	73.5	13.82	Younghusband.
			1843-0	.....	.....	.....	73 32	.....	73.5	13.73	Locke.
			1845-0	.....	.....	.....	73 39	.....	73.7	13.72	Lefroy.
East Sister Island	41 49	277 09	1847-5	2 18 E.	0 10 E.	2.5 E.	.....	.....	.....	.....	U. S. Coast Survey.
Sandusky	41 29	277 13	1839-0	.....	.....	.....	72 58	.....	73.0	.....	Loomis.
Kelly's Island	41 36	277 17	1846-0	2 13 E.	0 07 E.	2.3 E.	.....	.....	.....	.....	U. S. Coast Survey.
Port Sarnia	42 58	277 26	1845-0	.....	.....	.....	74 16	.....	74.3	13.81	Lefroy.
Huron	41 26	277 33	1843-0	.....	.....	.....	73 00	.....	73.0	13.75	Locke.
Frazerburg	40 09	277 52	1841-0	.....	.....	.....	71 49	.....	71.8	.....	Loomis.
Goderich	43 45	278 08	1845-0	.....	.....	.....	75 05	.....	75.1	13.84	Lefroy.
Brooklyn	41 30	278 17	1841-0	.....	.....	.....	73 16	.....	73.3	.....	Loomis.
			1840-0	1 19 E.	0 05 W.	1.2 E.	73 04	.....	73.1	.....	Loomis.
Cleveland	41 30	278 18	1842-0	.....	.....	.....	73 04	.....	73.1	13.67	Younghusband.
			1843-0	.....	.....	.....	73 08	.....	73.1	13.80	Locke.

ZONE I.—Lat. 40° to 45° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.	Observers.		
				Observed.	Correction to Epoch 1842.5.	Corrected.	Observed.	Correction to Epoch 1842.5.	Corrected.				
Clinton	40 58	278 20	1841.0	.....	.....	.....	72 44	.....	72.7	.....	Loomis.
Fulton	40 55	278 22	1841.0	.....	.....	.....	72 39	.....	72.7	.....	Loomis.
Bedford	41 24	278 28	1840.0	.....	.....	.....	72 58	.....	73.0	.....	Loomis.
Dover.....	40 33	278 30	1841.0	1 56 E.	0 03 W.	1.9 E.	72 19	.....	72.3	.....	Loomis.
Tallinadge	41 06	278 33	1840.5	.....	.....	.....	72 51	.....	72.9	.....	Loomis.
Hudson	41 15	278 34	1840.0	1 52 E.	0 04 W.	1.8 E.	72 49	.....	72.8	.....	Loomis.
Twinsburgh	41 20	278 34	1840.0	.....	.....	.....	72 51	.....	72.9	.....	Loomis.
Aurora	41 20	278 40	1840.0	.....	.....	.....	72 56	.....	72.9	.....	Loomis.
Streetsborough	41 15	278 40	1840.0	.....	.....	.....	72 53	.....	72.9	.....	Loomis.
Shakersville	41 15	278 47	1840.0	.....	.....	.....	72 57	.....	73.0	.....	Loomis.
Windham	41 15	278 57	1840.0	.....	.....	.....	73 03	.....	73.1	.....	Loomis.
Ashtabula	41 52	279 08	1844.0	.....	.....	.....	72 25	.....	72.4	14.04	Locke.
Warren	41 16	279 11	1840.0	.....	.....	.....	73 01	.....	73.0	73.0	Loomis.
			1841.5	.....	.....	.....	73 00	.....	73.0		Bache.
			1844.0	.....	.....	.....	72 56	.....	72.9		Locke.
Ashtabula Landing ...	41 54	279 13	1841.5	.....	.....	.....	72 24	.....	72.4	.....	Bache.
Wheeling	40 08	279 13	1840.5	72 09	72.2	72.2	Bache.	
			1845.0	2 04 E.	0 07 E.	2.2 E.	72 14	.....	72.2		Locke.	
Bazetta	41 20	279 15	1840.0	.....	.....	.....	73 00	.....	73.0	.....	Loomis.
Wellsville	40 38	279 16	1844.0	.....	.....	.....	72 35	.....	72.6	13.58	Locke.
Steubenville	40 25	279 21	1840.5	.....	.....	.....	72 33	.....	72.6	.....	Bache.
Kinsman	41 30	279 26	1840.0	.....	.....	.....	73 08	.....	73.1	.....	Loomis.
Hartford	41 19	279 26	1840.0	.....	.....	.....	73 00	.....	73.0	.....	Loomis.
Beaver	40 44	279 33	1839.0	.....	.....	.....	72 40	.....	72.7	.....	Loomis.
Economy	40 37	279 44	1840.5	.....	.....	.....	72 35	.....	72.6	.....	Bache.
Mercer	41 14	279 44	1841.5	0 51 E.	0 03 W.	0.8 E.	72 57	.....	73.0	13.64	Bache.	
Hudson	41 15	279 45	1839.5	.....	.....	.....	72 47	.....	72.8	.....	Loomis.
Erie	42 08	279 54	1841.5	0 30 W.	0 03 W.	0.6 W.	73 47	73.8	73.8	13.57	13.50	Bache.
			1862.5	1 33 W.	1 00 E.	0.6 W.	73 52	-04	73.8		13.42		Schott.
Pittsburg	40 32	279 58	1839.0	72 39	Loomis.	
			1840.5	0 08 W.	0 06 W.	0.2 W.	72 32	72.7	13.49	Bache.	
			1842.5	72 44	Locke.	
			1845.5	0 33 W.	0 09 E.	0.4 W.	72 47	Locke.	
Penctanquishene	44 49	279 59	1844.0	.....	.....	.....	76 20	.....	76.3	14.08	Locke.
			1848.5	1 28 W.	0 18 E.	1.2 W.	.....	.....	.....	.....	Lieut. Typen, R.N.
Mean of 7 Stations ...	41 48	280 03	1841.0	.....	.....	.....	73 31	.....	73.5	.....	Loomis.
Hamilton	43 16	280 04	1843.5	.....	.....	.....	74 55	.....	74.9	.....	Lefroy.
Mean of 7 Stations ...	40 15	280 05	1841.0	.....	.....	.....	72 13	.....	72.2	.....	Loomis.
Brownsville	40 00	280 12	1840.5	71 54	71.9	71.9	13.54	13.45	Bache.
			1862.5	1 14 W.	1 00 E.	0.2 W.	71 57	-04	71.9		13.35		Schott.
Berlin's Tavern.....	41 16	280 24	1844.5	.....	.....	.....	72 53	.....	72.9	.....	Bache.
Dunkirk.....	42 29	280 37	1841.5	0 53 W.	0 03 W.	0.9 W.	74 17	.....	74.3	.....	Bache.
Toronto Observatory...	43 39	280 39	1842.5	1 21 W.	.....	1.4 W.	75 15	.....	75.3	13.90	Observatory.
Niagara	43 05	280 51	1841.0	.....	.....	.....	74 52	.....	74.9	.....	Nicollet.
			1842.5	.....	.....	.....	74 51	.....	74.9	13.64	Bache.
			1845.5	.....	.....	.....	74 47	.....	74.8	13.79	Lefroy.
Armagh	40 29	280 56	1843.5	.....	.....	.....	72 19	.....	72.3	.....	Bache.
Buffaloe	42 53	281 06	1839.5	.....	.....	.....	74 41	.....	74.7	.....	Loomis.
			1844.5	.....	.....	.....	74 37	.....	74.6	13.81	Locke.
			1845.5	1 25 W.	0 09 E.	1.3 W.	74 37	.....	74.6	13.73	Lefroy.	
Lockport	43 11	281 14	1844.5	.....	.....	.....	74 44	.....	74.7	13.68	Locke.
Ellicottville	42 30	281 16	1841.5	2 36 W.	0 03 W.	2.7 W.	74 18	.....	74.3	13.77	Bache.	
Carwinsville	40 58	281 24	1841.5	1 45 W.	0 03 W.	1.8 W.	72 50	.....	72.8	13.55	Bache.	
Alleghany Summit ...	40 27	281 50	1845.5	.....	.....	.....	72 27	.....	72.5	13.62	Locke.
Belvidere	42 13	281 54	1841.5	.....	.....	.....	74 10	.....	74.2	.....	Bache.
Huntingdon	40 31	281 58	1840.5	1 52 W.	0 06 W.	2.0 W.	72 18	.....	72.3	13.51	Bache.	
Rochester	43 08	282 09	1843.5	74 44	74.7	74.7	Bache.	
			1844.5	74 39	74.7		13.67	Locke.	
Bellefonte	40 55	282 11	1841.5	.....	.....	.....	72 42	.....	72.7	.....	Bache.
Heiner's Run.....	41 22	282 12	1856.5	3 19 W.	0 42 E.	2.6 W.	.....	.....	.....	.....	U. S. Coast Survey.
Mean of 6 Stations ...	43 12	282 21	1844.0	.....	.....	.....	74 53	.....	74.9	.....	Loomis.

ZONE I.—Lat. 40° to 45° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.	Observers.
				Observed.	Correction to Epoch 1842-5.	Corrected.	Observed.	Correction to Epoch 1842-5.	Corrected.		
Lewiston	40 35	282 24	1840-5	.....	.....	.....	72 30	.....	72-5	.....	Bache.
Bath	42 21	282 39	1841-5	3 31 w.	0 03 w.	3-6 w.	74 28	.....	74-4	13-72	Bache.
			1862-5	4 48 w.	1 00 E.	3-8 w.	74 26	-04	74-4	13-56	Schott.
Mean of 10 Stations	41 25	282 43	1841-5	.....	.....	.....	73 18	.....	73-3	.....	Loomis.
Geneva	42 53	282 58	1843-5	.....	.....	.....	74 33	.....	74-6	13-63	Bache.
Williamsport	41 14	282 58	1841-5	3 31 w.	0 03 w.	3-6 w.	72 54	.....	72-9	13-55	Bache.
			1862-5	4 26 w.	1 00 E.	3-4 w.	72 51	-04	72-9	13-31	Schott.
Duncan's Island	40 25	282 59	1840-5	.....	.....	.....	72 35	.....	72-6	.....	Bache.
Harrisburg	40 16	283 07	1840-5	3 13 w.	0 06 w.	3-3 w.	72 21	.....	72-4	13-44	Bache.
			1862-5	3 45 w.	1 00 E.	2-8 w.	72 32	-04	72-4	13-36	Schott.
Cumberland	40 13	283 10	1844-5	.....	.....	.....	71 36	.....	71-6	13-54	Locke.
			1839-5	.....	.....	.....	75 11	.....	.....	.....	Loomis.
Oswego	43 26	283 24	1843-5	.....	.....	.....	75 07	.....	75-2	.....	Bache.
			1845-5	.....	.....	.....	75 08	.....	.....	.....	Nicollet.
Kingston	44 13	283 25	1842-5	.....	.....	.....	77 19	.....	77-3	.....	Lefroy.
			1845-5	.....	.....	.....	77 14	.....	.....	.....	Younghusband.
Owego	42 08	283 43	1841-5	.....	.....	.....	74 14	.....	74-2	.....	Bache.
Syracuse	43 03	283 51	1839-5	.....	.....	.....	74 51	.....	74-9	.....	Loomis.
			1843-5	.....	.....	.....	74 51	.....	74-9	13-61	Bache.
Silverlake	41 57	283 58	1841-5	4 30 w.	0 03 w.	4-6 w.	73 42	.....	73-7	13-47	Bache.
Wilkesbarre	41 14	284 02	1841-5	.....	.....	.....	73 10	.....	73-2	.....	Bache.
Reading	40 19	284 05	1840-5	.....	.....	.....	72 32	.....	72-5	.....	Bache.
Brockville	44 35	284 15	1845-5	.....	.....	.....	76 19	.....	76-3	13-71	Younghusband.
Whitehill	40 08	284 17	1846-5	4 22 w.	0 12 E.	4-2 w.	.....	.....	.....	.....	U. S. Coast Survey.
Fort Delaware	40 05	284 26	1846-5	3 13 w.	0 12 E.	3-0 w.	.....	.....	.....	.....	U. S. Coast Survey.
Easton	40 42	284 45	1841-5	3 38 w.	0 03 w.	3-7 w.	72 39	.....	72-7	.....	Bache.
Utica	43 05	284 46	1839-5	.....	.....	.....	74 57	.....	.....	.....	Loomis.
			1843-5	.....	.....	.....	74 50	.....	74-9	.....	Bache.
			1844-5	.....	.....	.....	74 49	.....	.....	13-69	Locke.
Doylestown	40 18	284 50	1841-5	.....	.....	.....	72 23	.....	72-4	.....	Bache.
Williamsburg	44 55	284 53	1843-5	.....	.....	.....	76 30	.....	76-5	.....	Lefroy.
Bushkill	41 07	284 58	1841-5	.....	.....	.....	73 31	.....	73-5	.....	Bache.
Vanuxem	40 07	285 07	1846-5	4 22 w.	0 12 E.	4-2 w.	72 22	.....	72-4	13-43	Locke.
Milford	41 19	285 08	1841-5	.....	.....	.....	73 48	.....	73-8	13-50	Bache.
Bristol	40 06	285 13	1842-5	.....	.....	.....	72 25	.....	72-4	13-38	Locke.
White Hill	40 08	285 16	1846-5	4 22 w.	0 12 E.	4-2 w.	72 06	.....	72-1	13-50	Locke.
Mount Rose	40 22	285 17	1852-5	5 32 w.	0 30 E.	5-0 w.	72 43	.....	72-7	13-90	U. S. Coast Survey.
Trenton	40 13	285 20	1841-5	.....	.....	.....	71 59	.....	72-0	13-55	Locke.
Princeton	40 22	285 20	1839-5	.....	.....	.....	72 47	.....	.....	.....	Loomis.
			1842-5	.....	.....	.....	72 44	.....	72-7	13-50	Lefroy.
			1843-5	.....	.....	.....	72 40	.....	72-7	13-55	Locke.
New Brunswick	40 30	285 25	1844-5	.....	.....	.....	72 43	.....	72-7	13-51	Locke.
Mean of 8 Stations	41 42	285 35	1843-5	.....	.....	.....	73 48	.....	73-8	.....	Loomis.
Cole	40 32	285 46	1846-5	5 38 w.	0 12 E.	5-4 w.	72 34	.....	72-6	13-44	Locke.
			1841-5	.....	.....	.....	72 49	.....	.....	13-50	Locke.
Newark	40 45	285 53	1844-5	.....	.....	.....	72 48	.....	72-8	.....	Locke.
			1846-5	5 35 w.	0 12 E.	5-4 w.	72 52	.....	72-8	13-46	U. S. Coast Survey.
New York, Lunatic Asylum	40 49	285 57	1822-5	.....	.....	.....	73 00	.....	.....	13-57	Sabine.
			1841-5	.....	.....	.....	72 40	.....	.....	13-48	Locke.
			1842-0	.....	.....	.....	72 40	.....	72-7	13-44	Bache.
			1842-5	.....	.....	.....	72 40	.....	72-7	13-44	Lefroy.
			1844-5	.....	.....	.....	72 42	.....	72-7	13-48	Locke.
			1844-5	.....	.....	.....	72 49	.....	72-7	.....	Renwick.
New York, Columbia College	40 43	285 59	1834-5	.....	.....	.....	72 52	.....	.....	.....	Bache.
			1839-5	.....	.....	.....	72 52	.....	.....	.....	Loomis.
			1841-5	.....	.....	.....	72 41	.....	72-8	13-51	Locke.
			1844-5	6 13 w.	0 06 E.	6-1 w.	72 38	.....	72-8	13-64	Renwick.
			1844-5	.....	.....	.....	72 43	.....	72-8	13-51	Locke.
			1845-5	6 25 w.	0 09 E.	6-3 w.	72 41	.....	72-8	.....	Renwick.
Governor's Island	40 42	285 59	1855-5	6 40 w.	0 39 E.	6-0 w.	72 46	-03	72-7	13-25	U. S. Coast Survey.

ZONE I.—Lat. 40° to 45° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.	Observers.
				Observed.	Correction to Epoch 1842.5.	Corrected.	Observed.	Correction to Epoch 1842.5.	Corrected.		
West Point	41 24	285 59	1834.5	.....	.....	.....	73 27	.....	73.4	13.67	Bache. Loomis. Graham. Bache. Lefroy.
			1839.5	.....	.....	.....	73 27	.....		
			1840.5	.....	.....	.....	73 20	.....		
			1842.5	.....	.....	.....	73 25	.....		
			1842.5	.....	.....	.....	73 30	.....		
Sandy Hook	40 28	286 00	1844.5	5 51 w.	0 06 E.	5.8 w.	72 38	.....	72.7	13.66	Renwick.
			1855.5	6 11 w.	0 39 E.	5.6 w.	72 52	-03			
Mount Prospect	40 40	286 02	1846.5	5 55 w.	0 12 E.	5.7 w.	72 28	.....	72.6	13.45	Locke.
			1860.5	6 44 w.	0 54 E.	5.8 w.	72 41	-04			
Cold Spring	41 25	286 03	1855.5	5 34 w.	0 39 E.	4.9 w.	73 55	-03	73.9	13.68	U. S. Coast Survey.
					
Bloomington Asylum.	40 49	286 03	1846.5	5 10 w.	0 12 E.	5.0 w.	72 39	.....	72.7	13.44	Locke.
Scheneatady	42 48	286 04	1839.5	.....	.....	.....	74 36	.....	74.8	13.45	Loomis.
			1843.5	.....	.....	.....	74 55	.....		
Powkeepsie	41 41	286 05	1844.5	.....	.....	.....	74 05	.....	74.1	13.52	Locke.
Legget	40 49	286 07	1847.5	5 41 w.	0 15 E.	5.4 w.	72 53	.....	72.9	13.51	U. S. Coast Survey.
					
New Rochelle	40 53	286 13	1844.5	5 30 w.	0 06 E.	5.4 w.	72 44	.....	72.7	12.95	U. S. Coast Survey.
			1841.5	.....	.....	.....	74 40	.....		
Albany and Greenbush	42 40	286 16	1841.5	.....	.....	.....	74 40	.....	74.7	13.60	Lefroy.
			1841.5	.....	.....	.....	74 45	.....		
			1842.5	.....	.....	.....	74 45	.....		
			1844.5	.....	.....	.....	74 40	.....		
Saw Pits.	41 00	286 21	1844.5	5 58 w.	0 06 E.	5.9 w.	72 53	.....	72.9	.....	U. S. Coast Survey.
Stamford	41 04	286 28	1844.5	6 36 w.	0 06 E.	6.5 w.	73 02	.....	73.0	13.32	U. S. Coast Survey.
Oyster Bay	40 53	286 29	1844.5	6 54 w.	0 06 E.	6.8 w.	72 59	.....	73.0	13.23	Renwick and
Lloyd's Harbour	40 56	286 35	1844.5	6 12 w.	0 06 E.	6.1 w.	72 51	.....	72.9	13.08	U. S. Coast Survey.
Norwalk	41 07	286 36	1844.5	6 49 w.	0 06 E.	6.7 w.	73 10	.....	73.2	.....	U. S. Coast Survey.
Tashua	41 16	286 45	1863.5	8 03 w.	1 03 E.	7.0 w.	73 01	-04	73.0	13.26	U. S. Coast Survey.
Ivy Hill	41 52	286 47	1863.5	8 26 w.	1 03 E.	7.4 w.	73 32	-04	73.5	13.41	U. S. Coast Survey.
Blackrock	41 09	286 47	1845.5	6 54 w.	0 09 E.	6.8 w.	.....	.....	.....	.....	U. S. Coast Survey.
Bridgeport	41 11	286 48	1845.5	6 19 w.	0 09 E.	6.2 w.	73 21	.....	73.4	13.05	Renwick.
Fire Island	40 38	286 48	1860.5	7 46 w.	0 54 E.	6.9 w.	73 00	-04	72.9	13.34	U. S. Coast Survey.
Burlington	44 28	286 50	1845.5	9 22 w.	0 09 E.	9.2 w.	75 37	.....	75.6	75.7	U. S. Coast Survey.
			1855.5	9 57 w.	0 39 E.	9.3 w.	75 57	-03			
Drowned Meadow	40 56	286 56	1845.5	6 04 w.	0 09 E.	5.9 w.	.....	.....	.....	.....	U. S. Coast Survey.
Newhaven	41 18	287 02	1839.5	6 13 w.	0 09 w.	6.4 w.	73 27	.....	73.5	13.35	Loomis.
			1842.5	.....	.....	.....	73 30	.....		
			1842.5	.....	.....	.....	73 27	.....		
			1844.5	.....	.....	.....	73 21	.....		
			1845.5	6 17 w.	0 09 E.	6.1 w.	.....	.....	
Oyster Point	41 17	287 05	1848.5	6 32 w.	0 18 E.	6.2 w.	73 33	-01	73.6	13.29	U. S. Coast Survey.
			1855.5	7 03 w.	0 39 E.	6.4 w.	73 45	-03			
Rutland	43 36	287 05	1859.5	9 49 w.	0 51 E.	9.0 w.	75 20	-03	75.3	13.68	U. S. Coast Survey.
Fort Wooster	41 17	287 07	1848.0	7 26 w.	0 18 E.	7.1 w.	74 15	-01	74.2	13.40	U. S. Coast Survey.
Chesterfield	42 24	287 09	1859.5	8 54 w.	0 51 E.	8.1 w.	74 21	-03	74.3	13.60	U. S. Coast Survey.
Sachem's Head	41 17	287 17	1845.5	6 15 w.	0 09 E.	6.1 w.	.....	.....	.....	.....	U. S. Coast Survey.
Hartford	41 46	287 19	1839.5	.....	.....	.....	73 58	.....	74.0	13.58	Loomis.
			1859.5	.....	.....	.....	74 07	-03			
Longmeadow	42 02	287 24	1839.5	.....	.....	.....	74 05	.....	74.1	.....	Loomis.
Deerfield	42 33	287 24	1859.5	9 25 w.	0 51 E.	8.6 w.	74 35	-03	74.5	13.61	U. S. Coast Survey.
Springfield	42 06	287 28	1835.0	.....	.....	.....	.....	.....	74.2	13.65	Bache.
			1839.5	8 39 w.	0 09 w.	8.8 w.	74 07	.....		
			1841.5	.....	.....	.....	74 11	.....		
			1859.5	8 39 w.	0 51 E.	7.8 w.	74 15	-03			
Box Hill	41 48	287 35	1862.0	8 30 w.	1 00 E.	7.5 w.	73 58	-04	73.9	13.50	U. S. Coast Survey.
Greenport	41 06	287 38	1845.5	7 14 w.	0 09 E.	7.1 w.	72 58	.....	73.0	13.14	Renwick.
Saybrook	41 16	287 40	1845.5	6 50 w.	0 09 E.	6.7 w.	74 34	.....	74.6	.....	U. S. Coast Survey.
Sag Harbour	41 00	287 43	1860.5	8 28 w.	0 54 E.	7.6 w.	73 21	-03	73.3	13.62	U. S. Coast Survey.
Troy Village	42 50	287 49	1861.5	9 03 w.	0 57 E.	8.1 w.	74 46	-04	74.7	13.89	U. S. Coast Survey.
Bald Hill	41 58	287 49	1861.5	8 50 w.	0 57 E.	7.9 w.	73 59	-04	73.9	13.43	U. S. Coast Survey.
Groton Point	41 18	288 00	1845.5	7 30 w.	0 09 E.	7.4 w.	.....	.....	.....	.....	U. S. Coast Survey.
Warren	43 56	288 05	1830.5	9 08 w.	0 36 w.	9.7 w.	.....	.....	.....	.....	Graham.

ZONE I.—Lat. 40° to 45° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.	Observers.	
				Observed.	Correction to Epoch 1842.5.	Corrected.	Observed.	Correction to Epoch 1842.5.	Corrected.			
Stonington.....	41 20	288 05	1845-0	7 38 w.	0 09 E.	7.5 w.	73 25	.....	73.4	13.13	Renwick.
West Rumney	43 49	288 07	1839.5	9 38 w.	0 36 w.	10.2 w.	.....	.....	.....	.....	Graham.
Wachusett.....	42 29	288 07	1860.5	8 48 w.	0 54 E.	7.9 w.	74 29	-03	74.4	13.54	U. S. Coast Survey.	
Watch Hill	41 19	288 09	1847.5	7 33 w.	0 15 E.	7.3 w.	.....	.....	.....	.....	U. S. Coast Survey.
Worcester	42 16	288 12	1839.5	.....	.....	.....	74 21	.....	74.4	.....	Loomis.
Plymouth	43 45	288 18	1830.5	8 32 w.	0 36 w.	9.1 w.	.....	.....	.....	.....	Graham.
Mount Unkonoone.....	42 59	288 25	1848.5	9 04 w.	0 18 E.	8.8 w.	75 09	-01	75.1	13.54	U. S. Coast Survey.	
Spencer Hill	41 41	288 31	1844.5	9 06 w.	0 06 E.	9.0 w.	75 07	.....	75.1	.....	U. S. Coast Survey.
Lake Winnississette.....	44 43	288 31	1830.5	7 53 w.	0 36 w.	8.5 w.	.....	.....	.....	.....	Graham.
Near Mt. Washington.....	44 16	288 31	1845.5	11 31 w.	0 09 E.	11.4 w.	75 40	.....	75.7	13.47	Locke.
Point Judith's Light.....	41 22	288 31	1847.5	9 00 w.	0 15 E.	8.8 w.	73 45	-01	73.7	13.54	U. S. Coast Survey.	
McSparran's Hill.....	41 30	288 33	1844.5	8 49 w.	0 06 E.	8.7 w.	73 48	.....	73.8	.....	U. S. Coast Survey.
Beacon Pole Hill	42 00	288 33	1844.5	9 27 w.	0 06 E.	9.3 w.	74 22	.....	75.4	.....	U. S. Coast Survey.
Providence.....	41 49	288 35	1839.5	.....	.....	.....	74 00	.....	.....	13.41	Loomis.
			1841.5	74 03	13.38	Bache.
			1842.5	.....	.....	.....	74 00	.....	.....	13.48	Lefroy.
			1855.5	9 32 w.	0 39 E.	8.9 w.	74 16	-03	.....	13.24	U. S. Coast Survey.
Gunstock	43 31	288 38	1860.5	10 54 w.	0 54 E.	10.0 w.	75 44	-03	75.7	13.80	U. S. Coast Survey.	
Goreham	44 27	288 47	1845.5	.....	.....	.....	75 33	.....	75.6	13.58	Locke.
Patucawa.....	43 07	288 48	1849.5	10 43 w.	0 21 E.	10.4 w.	76 50	-01	76.8	13.26	U. S. Coast Survey.	
			1839.5	.....	.....	.....	74 20	.....	.....	.....	Loomis.
Cambridge.....	42 22	288 52	1841.5	9 15 w.	0 03 w.	9.3 w.	74 17	.....	.....	.....	Graham and Bond.
			1842.5	.....	.....	.....	74 15	.....	74.3	13.47	Locke.
			1842.5	.....	.....	.....	74 20	.....	.....	13.50	Lefroy.
			1845.5	.....	.....	.....	74 19	.....	.....	13.39	Locke.
Blue Hill	42 13	288 53	1845.5	9 14 w.	0 09 E.	9.1 w.	75 06	.....	75.1	13.68	U. S. Coast Survey.
Dorchester.....	42 19	288 55	1842.5	.....	.....	.....	74 13	.....	74.2	.....	Lefroy.
Copecut Hill.....	41 43	288 57	1844.5	9 09 w.	0 06 E.	9.1 w.	74 10	.....	74.2	.....	U. S. Coast Survey.
Dorchester Heights	42 20	288 58	1846.5	9 31 w.	0 12 E.	9.3w.	74 13	-01	.....	13.19	U. S. Coast Survey.
			1855.5	10 14 w.	0 39 E.	9.6w.	74 30	-03	74.3	13.26	13.22	U. S. Coast Survey.
Croton Point.....	41 19	288 59	1844.5	7 29 w.	0 06 E.	7.4 w.	.....	.....	.....	.....	Renwick.
Boston	42 22	289 01	1839.5	.....	.....	.....	74 09	.....	.....	13.39	Loomis.
			1841.5	74 06	13.34	Graham.
			1842.5	.....	.....	.....	74 06	.....	.....	13.37	Locke.
			1855.5	.....	.....	.....	.....	.....	.....	13.26	U. S. Coast Survey.
Little Nehant	42 26	289 04	1849.5	9 41 w.	0 21 E.	9.3 w.	74 30	-01	74.5	13.30	U. S. Coast Survey.	
Fort Point.....	41 38	289 05	1845.5	8 57 w.	0 09 E.	8.8 w.	.....	.....	.....	.....	U. S. Coast Survey.
Nantasket.....	42 18	289 06	1847.5	9 37 w.	0 15 E.	9.4 w.	74 16	-01	74.3	13.16	U. S. Coast Survey.	
Fairhaven	41 37	289 06	1845.5	8 54 w.	0 09 E.	8.8 w.	74 40	.....	74.7	13.58	U. S. Coast Survey.
Fort Lee	42 32	289 08	1849.5	10 15 w.	0 21 E.	9.9w.	.....	.....	.....	.....	U. S. Coast Survey.
			1855.5	10 50 w.	0 39 E.	10.2w.	75 37	-02	75.6	14.04	U. S. Coast Survey.	
Coddon's Hill	42 31	289 09	1849.5	11 50 w.	0 21 E.	11.5 w.	.....	.....	.....	.....	U. S. Coast Survey.
Bethel	44 27	289 09	1845.5	11 50	0 09 E.	11.7 w.	75 51	.....	75.9	13.54	Locke.
Ipswich	42 41	289 10	1859.5	11 14 w.	0 51 E.	10.4 w.	74 37	-03	74.6	13.57	U. S. Coast Survey.	
Plum Island.....	42 48	289 11	1850.5	10 06 w.	0 24 E.	9.7w.	74 55	-02	.....	13.57	U. S. Coast Survey.
			1859.5	10 58 w.	0 51 E.	10.1w.	74 53	-03	74.9	13.53	13.55	U. S. Coast Survey.
Mount Pleasant.....	44 02	289 11	1851.5	14 32 w.	0 27 E.	14.1 w.	76 02	-02	76.0	13.30	U. S. Coast Survey.	
Baker's Island Light.....	42 32	289 13	1849.5	12 17 w.	0 21 E.	11.9 w.	74 19	-01	74.3	13.52	U. S. Coast Survey.	
Tarpaulin Cove.....	41 28	289 15	1846.5	9 12 w.	0 12 E.	9.0 w.	73 50	.....	73.8	13.28	U. S. Coast Survey.
Boiling Rock.....	43 05	289 15	1844.5	9 47 w.	0 06 E.	9.7 w.	74 51	.....	74.9	.....	Boundary Survey.
Portsmouth	43 03	289 16	1844.5	.....	.....	.....	74 51	.....	74.9	.....	Graham and Whipple.
Locke's Mills.....	44 24	289 16	1845.5	12 08 w.	0 09 E.	12.0 w.	75 51	.....	75.9	13.52	Locke.
			1850.5	10 30 w.	0 24 E.	10.1w.	74 57	-02	.....	13.48	U. S. Coast Survey.
Kittery Point.....	43 05	289 17	1859.5	11 15 w.	0 51 E.	10.6w.	75 04	-03	75.0	13.57	13.53	U. S. Coast Survey.
Thompson	42 37	289 17	1859.5	11 09 w.	0 51 E.	10.3 w.	74 30	-03	74.5	13.75	U. S. Coast Survey.	
Mount Agamenticus.....	43 13	289 19	1847.5	10 10 w.	0 15 E.	9.9 w.	74 55	-01	74.9	13.28	U. S. Coast Survey.	
Annis Quam	42 39	289 20	1849.5	11 37 w.	0 21 E.	11.3 w.	.....	.....	.....	.....	U. S. Coast Survey.
			1859.5	.....	.....	.....	74 56	-03	74.9	13.81	U. S. Coast Survey.
Beacon Hill	42 36	289 22	1849.5	11 21 w.	0 21 E.	11.0w.	74 26	-01	74.6	13.48	13.67	U. S. Coast Survey.
			1859.5	12 03 w.	0 51 E.	11.2w.	74 46	-03	.....	13.86	U. S. Coast Survey.
Indian Hill	41 28	289 22	1846.0	8 46 w.	0 12 E.	8.6 w.	73 35	-01	73.6	13.20	U. S. Coast Survey.	

ZONE I.—Lat. 40° to 45° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.	Observers.	
				Observed.	Correction to Epoch 1842-5.	Corrected.	Observed.	Correction to Epoch 1842-5.	Corrected.			
Isle of Shoals	42 59	289 23	1847-5	10 04 w.	0 15 E.	9-8 w.	74 44	-01	74-7	13-22	U. S. Coast Survey.	
Cape Neddick	43 12	289 24	1851-5	11 09 w.	0 27 E.	10-7 w.	74 58	-02	74-9	13-56	U. S. Coast Survey.	
Rockport	42 40	289 24	1859-5	11 37 w.	0 51 E.	10-8 w.	75 06	-03	75-1	13-72	U. S. Coast Survey.	
Mahomet Hill	41 56	289 25	1845-5	9 17 w.	0 09 E.	9-1 w.	74 30	.....	74-3	13-52	U. S. Coast Survey.
			1846-5	.....	.....	.....	74 01	.....		.....
Sampson's Hill.....	41 23	289 31	1846-5	8 49 w.	0 12 E.	8-6 w.	73 25	.....	73-4	13-15	U. S. Coast Survey.
Kennebunk	43 21	289 32	1851-5	11 24 w.	0 27 E.	11-0 w.	75 14	-02	75-2	13-53	U. S. Coast Survey.	
Shootflying Hill	41 41	289 39	1845-5	9 38 w.	0 09 E.	9-5 w.	74 10	.....	74-2	13-42	U. S. Coast Survey.
Fletchersneck	43 27	289 40	1850-5	11 18 w.	0 24 E.	10-9 w.	75 18	-02	75-3	13-56	U. S. Coast Survey.	
Mount Independence..	43 46	289 41	1849-5	11 46 w.	0 21 E.	11-4 w.	75 24	-01	75-4	13-33	U. S. Coast Survey.	
Hyannis.....	41 38	289 42	1846-5	9 22 w.	0 12 E.	9-2 w.	73 49	.....	73-8	13-21	U. S. Coast Survey.
Portland	43 39	289 44	1845-5	11 28 w.	0 09 E.	11-3 w.	75 13	75-2	13-44	13-36	U. S. Coast Survey.
			1851-5	11 41 w.	0 27 E.	11-2 w.	75 14	-02		13-54		U. S. Coast Survey.
			1859-5	12 20 w.	0 51 E.	11-5 w.		13-30		U. S. Coast Survey.
			1863-5	12 18 w.	1 03 E.	11-3 w.	75 05	-04		13-16		U. S. Coast Survey.
Richmond Island	43 33	289 46	1850-5	12 18 w.	0 24 E.	11-9 w.	75 08	-02	75-1	13-50	U. S. Coast Survey.	
Provincetown	42 03	289 48	1835-5	9 20 w.	0 21 W.	9-7 w.	.....	.....	74-1	13-40	Graham.
			1860-5	11 24 w.	0 54 E.	10-5 w.	74 10	-04		13-40	U. S. Coast Survey.	
Nantucket	41 18	289 54	1846-5	9 14 w.	0 12 E.	9-0 w.	73 44	-01	73-9	13-05	13-10	U. S. Coast Survey.
			1855-5	9 58 w.	0 39 E.	9-3 w.	74 01	-03		13-16		U. S. Coast Survey.
Freeport	43 51	289 54	1863-5	14 12 w.	1 03 E.	13-2 w.	75 20	-04	75-3	13-27	U. S. Coast Survey.	
Mount Sebattis.....	44 09	289 55	1853-5	12 54 w.	0 33 E.	12-4 w.	75 41	-02	75-7	13-50	U. S. Coast Survey.	
Welfleet.....	41 56	289 59	1860-5	10 44 w.	0 54 E.	9-8 w.	74 20	-04	74-3	13-48	U. S. Coast Survey.	
Chatham Lights	41 40	290 03	1860-5	11 12 w.	0 54 E.	10-3 w.	73 46	-04	73-7	13-39	U. S. Coast Survey.	
Cape Small	43 47	290 10	1851-5	12 06 w.	0 27 E.	11-7 w.	75 02	-02	75-0	13-11	U. S. Coast Survey.	
Bath	43 55	290 11	1863-5	12 52 w.	1 03 E.	11-8 w.	75 26	-04	75-4	13-19	U. S. Coast Survey.	
Ragged Mountain.....	44 13	290 51	1854-5	14 17 w.	0 36 E.	13-7 w.	75 41	-02	75-7	13-50	U. S. Coast Survey.	
Mount Harris	44 40	290 51	1855-5	14 35 w.	0 39 E.	13-9 w.	76 14	-03	76-2	13-60	U. S. Coast Survey.	
Rockland	44 06	290 54	1863-5	15 02 w.	1 03 E.	14-0 w.	75 31	-04	75-5	13-13	U. S. Coast Survey.	
Camden	44 12	290 55	1854-5	13 57 w.	0 36 E.	13-4 w.	75 42	-02	75-7	13-52	U. S. Coast Survey.	
Belfast	44 26	291 00	1863-5	15 30 w.	1 03 E.	14-5 w.	75 38	-04	75-6	13-28	U. S. Coast Survey.	
Bangor	44 48	291 13	1841-5	76 12	76-1	13-36	Graham.
			1857-5	15 20 w.	0 45 E.	14-6 w.	76 13	-03		13-53		U. S. Coast Survey.
			1863-5	76 05	-04		13-20		U. S. Coast Survey.
Mount Saunders	44 39	291 24	1856-5	14 59 w.	0 42 E.	14-3 w.	75 59	-03	75-9	13-48	U. S. Coast Survey.	
Mount Desert	44 21	291 47	1856-5	15 14 w.	0 42 E.	14-5 w.	76 09	-03	76-1	13-61	U. S. Coast Survey.	
Humpback Mount	44 52	291 54	1858-5	15 48 w.	0 48 E.	15-0 w.	76 12	-03	76-2	13-52	U. S. Coast Survey.	
At sea.....	41 06	292 04	1841-5	10 08 w.	0 03 W.	10-2 w.	.....	.....	.....	.....	Barnett.
Western Ridge	44 59	292 32	1859-5	16 32 w.	0 51 E.	15-7 w.	76 20	-03	76-3	13-44	U. S. Coast Survey.	
At sea.....	41 04	293 19	1841-5	11 55 w.	0 03 W.	12-0 w.	.....	.....	.....	.....	Barnett.
Waterville.....	44 33	293 23	1847-5	.....	.....	.....	75 58	-01	76-0	13-28	Keely.
Annapolis	44 45	294 04	1847-5	.....	.....	.....	75 42	-01	75-7	.....	Keely.
Bridgetown	44 51	294 22	1847-5	.....	.....	.....	75 41	-01	75-7	13-07	Keely.
At sea.....	41 29	294 22	1841-5	12 27 w.	.....	12-5 w.	.....	.....	.....	.....	Barnett.
At sea.....	41 28	294 57	1841-5	13 05 w.	.....	13-1 w.	.....	.....	.....	.....	Barnett.
Hiltz	44 57	295 09	1847-5	.....	.....	.....	75 37	-01	75-6	.....	Keely.
At sea.....	41 28	295 34	1841-5	13 08 w.	.....	13-4 w.	.....	.....	.....	.....	Barnett.
Halifax	44 39	296 23	1838-5	74 45	75-2	13-07	Estcourt.
			1847-5	75 37	-01			Keely.
			1852-5	18 10 w.	0 15 E.	17-55 w.		Bayfield.
At sea.....	41 48	297 38	1841-5	15 54 w.	.....	15-9 w.	.....	.....	.....	.....	Barnett.
At sea.....	41 34	304 23	1841-5	18 28 w.	.....	18-5 w.	.....	.....	.....	.....	Barnett.
At sea.....	41 50	307 14	1839-5	19 00 w.	.....	19-0 w.	.....	.....	.....	.....	Bérard.
At sea.....	42 54	307 37	1841-5	22 22 w.	.....	22-4 w.	.....	.....	.....	.....	Barnett.
At sea.....	43 19	313 35	1841-5	24 57 w.	.....	25-0 w.	.....	.....	.....	.....	Barnett.
At sea.....	43 34	314 42	1842-5	26 49 w.	.....	26-8 w.	74 29	.....	74-5	.....	Lefroy.
At sea.....	43 06	315 00	1842-5	26 15 w.	.....	26-3 w.	74 12	.....	74-2	.....	Lefroy.
At sea.....	43 00	316 10	1841-5	25 43 w.	.....	25-7 w.	.....	.....	.....	.....	Barnett.
At sea.....	43 30	317 51	1839-5	23 55 w.	.....	23-9 w.	.....	.....	.....	.....	Bérard.
At sea.....	44 33	318 47	1842-5	27 37 w.	.....	27-6 w.	74 27	.....	74-5	.....	Lefroy.
At sea.....	43 37	319 18	1842-5	28 17 w.	.....	28-3 w.	73 53	.....	73-9	.....	Lefroy.
At sea.....	42 20	320 18	1842-5	27 07 w.	.....	27-1 w.	73 02	.....	73-0	.....	Lefroy.

ZONE I.—Lat. 40° to 45° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.	Observers.	
				Observed.	Correction to Epoch 1842.5.	Corrected.	Observed.	Correction to Epoch 1842.5.	Corrected.			
At sea.....	42 59	321 28	1842.5	27 20 w.	.....	27.3 w.	73 10	.....	73.2	.....	Lefroy.
At sea.....	43 26	322 00	1841.5	28 51 w.	.....	28.9 w.	.....	.....	.....	.....	Barnett.
At sea.....	44 14	323 22	1842.5	28 32 w.	.....	28.5 w.	73 29	.....	73.5	.....	Lefroy.
At sea.....	40 32	323 26	1837.5	24 52 w.	.....	24.9 w.	.....	.....	.....	.....	Vaillant.
At sea.....	40 30	323 56	1837.5	25 35 w.	.....	25.6 w.	.....	.....	.....	.....	Vaillant.
At sea.....	43 42	324 30	1841.5	27 47 w.	.....	27.8 w.	.....	.....	.....	.....	Barnett.
At sea.....	42 03	325 11	1837.5	24 25 w.	.....	24.4 w.	.....	.....	.....	.....	Vaillant.
At sea.....	40 37	325 13	1837.5	26 42 w.	.....	26.7 w.	.....	.....	.....	.....	Vaillant.
At sea.....	40 09	325 13	1830.5	24 51 w.	.....	24.9 w.	69 31	.....	69.5	11.16	Erman.
At sea.....	41 27	327 18	1830.5	25 20 w.	.....	25.3 w.	70 11	.....	70.2	10.96	Erman.
At sea.....	42 29	328 33	1830.5	.....	.....	.....	69 47	.....	69.8	11.33	Erman.
At sea.....	43 26	329 27	1830.5	26 38 w.	.....	26.6 w.	.....	.....	.....	.....	Erman.
At sea.....	41 22	329 31	1839.5	.....	.....	.....	69 57	.....	69.9	.....	Sullivan.
At sea.....	42 39	329 55	1837.5	23 26 w.	.....	23.4 w.	.....	.....	.....	.....	Vaillant.
At sea.....	44 24	330 56	1830.5	27 35 w.	.....	27.6 w.	71 17	.....	71.3	11.30	Erman.
At sea.....	41 37	331 37	1839.5	22 07 w.	.....	22.1 w.	.....	.....	.....	.....	Du Petit Thouars.
At sea.....	43 18	333 04	1837.5	24 22 w.	.....	24.4 w.	.....	.....	.....	.....	Vaillant.
At sea.....	44 03	336 25	1837.5	24 20 w.	.....	24.3 w.	.....	.....	.....	.....	Vaillant.
At sea.....	40 35	337 15	1836.5	25 00 w.	.....	25.0 w.	.....	.....	.....	.....	Fitz Roy.
At sea.....	41 28	338 29	1836.5	25 38 w.	.....	25.6 w.	.....	.....	.....	.....	Fitz Roy.
At sea.....	42 06	339 54	1836.5	26 00 w.	.....	26.0 w.	.....	.....	.....	.....	Fitz Roy.
At sea.....	43 14	340 17	1839.5	22 52 w.	.....	22.9 w.	.....	.....	.....	.....	Du Petit Thouars.
At sea.....	41 08	341 02	1850.5	23 47 w.	.....	23.8 w.	.....	.....	.....	.....	Collinson.
At sea.....	44 05	344 05	1839.5	23 09 w.	.....	23.2 w.	.....	.....	.....	.....	Du Petit Thouars.
At sea.....	40 15	346 10	1836.5	24 45 w.	.....	24.8 w.	.....	.....	.....	.....	Fitz Roy.
At sea.....	41 00	346 30	1836.5	24 49 w.	.....	24.8 w.	.....	.....	.....	.....	Fitz Roy.
At sea.....	42 31	347 20	1836.5	24 18 w.	.....	24.3 w.	.....	.....	.....	.....	Fitz Roy.
At sea.....	42 37	347 30	1836.5	23 34 w.	.....	23.6 w.	.....	.....	.....	.....	Fitz Roy.
At sea.....	43 20	348 00	1836.5	23 50 w.	.....	23.8 w.	.....	.....	.....	.....	Fitz Roy.
At sea.....	41 06	348 10	1840.0	.....	.....	.....	.....	.....	.....	9.93	Ross.
At sea.....	41 44	349 38	1838.0	.....	.....	.....	63 26	.....	63.4	.....	Stanley.
At sea.....	40 52	350 45	1838.0	.....	.....	.....	63 50	.....	63.8	.....	Stanley.
Vigo.....	42 14	351 15	1850.0	22 34 w.	1 58 w.	24.5 w.	63 35	+42	64.3	10.03	Lamont.	
Santiago.....	42 52	351 31	1858.0	22 35 w.	1 58 w.	24.6 w.	63 58	+42	64.7	10.05	Lamont.	
Coimbra.....	40 12	351 35	1859.5	20 39 w.	3 21 w.	24.0 w.	.....	.....	.....	.....	Observatory.
Corunna.....	43 23	351 37	1858.0	22 42 w.	1 58 w.	24.7 w.	64 09	+42	64.9	10.06	Lamont.	
Santander.....	43 28	356 12	1858.0	20 52 w.	1 58 w.	22.8 w.	63 34	+42	64.3	10.00	Lamont.	
Madrid.....	40 25	356 18	1855.0	.....	.....	.....	61 18	+34	61.9	.....	Mahmoud.
Guadalajara.....	40 37	356 56	1858.0	20 08 w.	1 58 w.	22.1 w.	61 06	+42	61.8	61.8	9.95	Lamont.
Bilbao.....	43 16	357 03	1858.0	20 29 w.	1 58 w.	22.5 w.	63 22	+42	64.1	9.98	Lamont.	
Vittoria.....	42 51	357 19	1858.0	20 15 w.	1 58 w.	22.2 w.	62 49	+42	63.5	9.93	Lamont.	
Logrono.....	42 09	357 33	1858.0	.....	.....	.....	62 34	+42	63.3	9.92	Lamont.
St. Sebastian.....	43 19	357 39	1858.0	20 13 w.	1 58 w.	22.2 w.	63 03	+42	63.8	9.90	Lamont.	
Pamplona.....	42 50	358 18	1858.0	19 57 w.	1 58 w.	21.9 w.	62 40	+42	63.4	9.90	Lamont.	
Calatayud.....	41 24	358 20	1858.0	19 35 w.	1 58 w.	21.6 w.	61 25	+42	62.1	9.74	Lamont.	
Abbadia.....	43 23	358 25	1856.0	.....	.....	.....	63 06	+36	63.7	.....	D'Abbadie.
Bayonne.....	43 29	358 34	1869.0	18 14 w.	3 21 w.	21.6 w.	62 28	+72	63.7	63.7	9.84	Perry.
Tarragona.....	41 07	358 45	1858.0	18 58.0	1 58 w.	21.9 w.	63 07	+42	63.8	9.93	Lamont.	
La Teste de Buch.....	44 38	358 58	1858.0	18 24 w.	3 21 w.	21.8 w.	62 30	+72	63.7	63.8	9.86	Perry.
Saragossa.....	41 39	359 13	1858.0	18 21 w.	1 58 w.	20.3 w.	60 38	+42	61.3	9.69	Lamont.	
Bordeaux.....	44 50	359 25	1858.0	20 04 w.	1 58 w.	22.0 w.	64 00	+42	64.7	10.01	Lamont.	
Mont de Marsan.....	43 53	359 30	1858.0	19 17 w.	1 58 w.	21.3 w.	61 36	+42	62.3	9.79	Lamont.	
Pau.....	43 18	359 37	1869.0	20 00 w.	1 58 w.	22.0 w.	64 06	+42	64.8	10.01	Lamont.	
				18 13 w.	3 21 w.	21.6 w.	63 23	+72	64.6	64.7	9.85	Perry.
				19 40 w.	1 58 w.	21.6 w.	63 19	+42	64.0	9.93	Lamont.	
				17 50 w.	3 21 w.	21.2 w.	61 58	+72	63.2	9.75	Perry.	

ZONE II.—LATITUDE 45° TO 50° N.

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ZONE II.—Lat. 45° to 50° N.

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.	Observers.									
				Observed.	Correction to Epoch 1842-5.	Corrected.	Observed.	Correction to Epoch 1842-5.	Corrected.											
Havre.....	49 29	0 06	1840-0																	
Angoulême	45 39	0 09	1858-0	19 50 w.	1 58 w.	21·8 w.	64 39	+42	65·4	10-17	Lamont.									
Le Mans	48 00	0 12	1858-0	20 26 w.	1 58 w.	22·4 w.	66 18	+42	67·0	10-27	Lamont.									
Poitiers	46 35	0 20	1858-0	19 56 w.	1 58 w.	21·9 w.	65 08	+42	65·8	10-16	Lamont.									
			1869-0	18 19 w.	3 21 w.	21·7 w.	64 28	+72	65·7											
Tours	47 24	0 41	1858-0	19 54 w.	1 58 w.	21·9 w.	65 44	+42	66·4	10-22	Lamont.									
			1869-0	17 41 w.	3 21 w.	21·0 w.	63 24	+72	64·6											
Périgueux	45 11	0 43	1858-0	19 27 w.	1 58 w.	21·4 w.	.....	.....	.....	9-89	Perry.						
			1869-0	17 41 w.	3 21 w.	21·0 w.	.....	.....	64·6									
Limoges	45 50	1 15	1858-0	19 24 w.	1 58 w.	21·4 w.	.....	.....	.....	10-16	Lamont.						
Chateauroux	46 48	1 41	1858-0	19 22 w.	1 58 w.	21·3 w.	65 07	+42	65·8	10-16	Lamont.									
Orleans	47 54	1 54	1858-0	19 25 w.	1 58 w.	21·4 w.	65 53	+42	66·6	10-23	Lamont.									
Étampes.....	48 26	2 10	1858-0	.....	.....	.....	66 15	+42	67·0	10-28	Lamont.						
Amiens	49 54	2 18	1858-0	19 56 w.	1 58 w.	21·9 w.	.....	.....	.....	.....	Lamont.					
			1869-0	18 19 w.	3 21 w.	21·7 w.	66 48	+72	68·0											
Paris	48 53	2 20	1827-5	.....	.....	.....	.....	.....	.....	10-15	Sabine.			
			1833-5	67 33	-24	67·2			10-13	Blosseville.							
			1834-5	67 21	-22	67·0					Duperrey.						
			1835-5	22 04 w.	0 53 E.	21·2 w.	67 24	-19	67·1						Arago.					
			1836-5	67 26	-16	67·2							Lottin.				
			1837-5	67 21	-14	67·1								Bache.			
			1838-5	21 38 w.	0 30 E.	21·1 w.	67 15	-11	67·1									Darondeau.		
			1839-5	67 13	- 8	67·1										Quetelet.	
			1839-5	67 13	- 8	67·1											D'Abbadie.
			1842-5	21 29 w.	21·5 w.	67 06	67·1												Lamont.
1869-0	17 51 w.	3 21 w.	21·2 w.	65 53	+72	67·1	Perry.													
Bourges	47 05	2 24	1869-0	17 00 w.	3 21 w.	20·4 w.		64 33	+72	65·8	9-97	Perry.								
Fontainebleau	48 24	2 38	1838-5		66 59	-11	66·8	10-03	Fox.								
Meaux	48 58	2 53	1858-0	19 16 w.	1 58 w.	21·2 w.		66 24	+42	67·1	10-27	Lamont.								
Clermont	45 46	3 00	1838-5		65 12	-10	65·0	10-09	Fox.								
			1858-0	18 34 w.	1 58 w.	20·5 w.		64 12	+42	64·9										
Nevers	47 00	3 09	1838-5		65 56	-10	65·8	9-94	Fox.								
St. Pourcain	46 19	3 17	1838-5		65 33	-10	65·4	Fox.								
Moulins.....	46 34	3 20	1838-5		65 33	-10	65·4	10-12	Lamont.								
			1858-0	18 39 w.	1 58 w.	20·6 w.		64 43	+42	65·4										
1869-0	16 30 w.	3 21 w.	19·9 w.	64 05	+72	65·3	.....	.....	9-92	Perry.								
Brioude.....	45 18	3 23	1858-0	18 22 w.	1 58 w.	20·3 w.	63 44	+42	64·4	10-04	Lamont.									
Épernay	49 03	3 57	1858-0	.....	.....	.....	66 36	+42	67·3	10-37	Lamont.						
Rheims	49 15	4 02	1869-0	16 43 w.	3 21 w.	20·1 w.	65 56	+72	67·1	10-10	Perry.									
St. Etienne.....	45 26	4 23	1869-0	14 55 w.	3 21 w.	18·3 w.	63 04	+72	64·3	9-85	Perry.									
Villefranche	45 59	4 42	1869-0	17 00 w.	3 21 w.	20·4 w.	63 30	+72	64·7	9-83	Perry.									
Lyons.....	45 46	4 49	1837-5	.....	.....	.....	64 49	-14	64·6	9-94	Bache.						
			1859-5	63 53	+48	64·7			9-88	Fox.							
			1869-0	.....	.....	.....	63 16	+72	64·5								
Tournon	45 04	4 50	1858-0	17 41 w.	1 58 w.	19·7 w.	63 18	+42	64·0	10-00	Lamont.									
Macon	46 18	4 50	1860-5	17 36 w.	2 17 w.	19·9 w.	64 14	+49	65·1	.....	Lamont.								
Dijon	47 19	5 02	1858-0	17 56 w.	1 58 w.	19·9 w.	64 55	+42	65·6	10-09	Lamont.									
.....	.....	.....	1869-0	16 36 w.	3 21 w.	20·0 w.	64 24	+72	65·6									
Dôle	47 06	5 29	1869-0	16 05 w.	3 21 w.	19·4 w.	64 13	+72	65·4	9-93	Perry.									
Mont Rolland	47 09	5 29	1869-0	.....	.....	.....	64 15	+72	65·5	9-97	Perry.						
Grenoble	45 12	5 43	1838-5	.....	.....	.....	64 11	-10	64·0	9-73	Fox.						
.....	.....	.....	1869-0	15 48 w.	3 21 w.	19·2 w.	62 54	+72	64·1									
.....	.....	.....	1838-5	.....	.....	.....	64 36	-11	64·4						
Aix.....	45 44	5 55	1838-5	.....	.....	.....	64 36	-11	64·4	.....	Fox.					
N. D. de Myans	45 31	5 59	1869-0	15 11 w.	3 21 w.	18·5 w.	62 53	+72	64·1	9-83	Perry.									
Geneva	46 12	6 08	1829-0	.....	.....	.....	.....	.....	.....	9-93	Quetelet.			
			1834-5	65 05	-27	64·6			9-92	Forbes.							
			1837-5	64 50	-14	64·6					9-86	Bache.					
			1838-5	64 55	-11	64·7							9-86	Fox.			
			1843-0	18 57 w.	19·0 w.									9-86	Plantamour.	
1859-5	.....	.....	.....	63 53	+48	64·7											
Vesoul	45 37	6 09	1842-5	19 22 w.	.....	19·4 w.	.....	.....	.....	Lamont.						
Ancecy	45 54	6 10	1838-5	.....	.....	.....	64 44	-11	64·6	9-81	Fox.						
Metz	49 07	6 10	1869-0	15 58 w.	3 21 w.	19·3 w.	65 27	+72	66·7	10-00	Perry.									

ZONE II.—Lat. 45° to 50° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.	Observers.	
				Observed.	Correction to Epoch 1842·5.	Corrected.	Observed.	Correction to Epoch 1842·5.	Corrected.			
Nancy	48 12	6 11	1842·5	19 39 w.	.....	19·7 w.	.....	.....	.....	.....	Lamont.
Mont Breven.....	45 56	6 50	1832·5	.....	.....	.....	64 54	-27	64·5	.....	Forbes.
Belfort	47 38	6 52	1842·5	19 04 w.	.....	19·1 w.	.....	.....	.....	.....	Lamont.
Chamouni	45 55	6 52	1832·5	.....	.....	.....	65 00	-27	64·6	.....	Forbes.
Payerne	46 48	6 56	1838·5	.....	.....	.....	65 11	-10	65·0	.....	Fox.
Le Jardin	45 55	6 59	1832·5	.....	.....	.....	64 58	-27	64·5	.....	Forbes.
Sarrebourg.....	48 44	7 03	1842·5	19 08 w.	.....	19·1 w.	.....	.....	.....	.....	Lamont.
Bex	46 15	7 03	1832·5	.....	.....	.....	65 00	-27	64·6	.....	Forbes.
St. Bernard	45 52	7 10	1832·5	.....	.....	.....	64 55	-27	64·5	.....	Forbes.
Neweneck	46 53	7 17	1838·5	.....	.....	.....	65 10	-10	65·0	.....	Fox.
Isenheim	48 01	7 17	1839·0	15 47 w.	3 21 w.	19·1 w.	64 36	+72	65·8	9·96	Perry.	
Aosta.....	45 44	7 20	1832·5	.....	.....	.....	64 47	-26	64·3	.....	Forbes.
Homburg	49 19	7 21	1842·5	19 03 w.	.....	19·1 w.	66 49	.....	66·8	10·17	Lamont.
Berne	46 57	7 25	1838·5	.....	.....	.....	65 10	-10	65·0	9·87	Fox.
Basle	47 33	7 33	1838·5	.....	.....	.....	65 35	-10	65·4	9·95	Fox.
Oettingen	47 33	7 36	1842·5	18 38 w.	.....	18·6 w.	65 23	.....	65·4	10·05	Lamont.
Pirmasenz	49 12	7 37	1842·5	18 53 w.	.....	18·9 w.	66 49	.....	66·8	10·19	Lamont.
Turin	45 05	7 42	1838·5	.....	.....	.....	63 52	-11	63·7	9·85	Bache.
			1839·5	63 56	-08	63·8	9·90	9·88	Quetelet.
			1867·5	.....	.....	.....	62 26	+67	63·6	.....	L. F. Kämtz.
Kaiserslautern	49 28	7 45	1842·5	18 50 w.	.....	18·8 w.	66 52	.....	66·9	10·18	Lamont.
Strasbourg	48 35	7 45	1860·0	15 35 w.	3 21 w.	18·9 w.	64 40	+72	65·9	9·94	Perry.	
Kenzingen	48 10	7 47	1838·5	.....	.....	.....	66 06	-11	65·9	10·00	Forbes.
Kehl	48 34	7 49	1842·5	18 46 w.	.....	18·8 w.	66 08	.....	66·1	10·10	Lamont.
Freiburg	48 10	7 51	1842·5	18 32 w.	.....	18·5 w.	65 48	.....	65·8	10·11	Lamont.
Interlachen	46 42	7 52	1832·5	.....	.....	.....	65 23	-27	64·9	.....	Fox.
			1832·5	.....	.....	.....	65 23	-27	64·9	.....	Forbes.
Offenburg	48 28	7 56	1842·5	18 37 w.	.....	18·6 w.	66 03	.....	66·1	10·09	Lamont.
Neustadt	49 22	8 08	1842·5	18 40 w.	.....	18·7 w.	66 47	.....	66·8	10·16	Lamont.
Langenkandel	49 05	8 12	1842·5	18 39 w.	.....	18·7 w.	66 29	.....	66·5	10·15	Lamont.
Baden	48 45	8 17	1838·5	.....	.....	.....	66 20	-11	66·2	.....	Fox.
Lucerne	47 03	8 19	1859·5	.....	.....	.....	64 08	+48	64·9	.....	Fox.
Carlsruhe	49 01	8 24	1842·5	18 24 w.	.....	18·4 w.	66 28	.....	66·5	10·14	Lamont.
Ludwigshafen	49 29	8 26	1842·5	18 27 w.	.....	18·5 w.	66 55	.....	66·9	10·21	Lamont.
Speyer	49 18	8 26	1842·5	18 29 w.	.....	18·5 w.	66 41	.....	66·7	10·17	Lamont.
Mannheim.....	49 29	8 27	1838·5	.....	.....	.....	66 49	-11	66·6	10·02	Fox.
			1842·5	18 25 w.	18·4 w.	66 50	66·8	10·17	10·10	Lamont.
Durlach	49 00	8 28	1842·5	18 22 w.	.....	18·4 w.	66 27	.....	66·5	10·14	Lamont.
Donauschingen	47 57	8 28	1842·5	18 15 w.	.....	18·3 w.	65 38	.....	65·6	10·06	Lamont.
Isola Bella	45 53	8 32	1850·0	17 27 w.	0 55 w.	18·4 w.	62 45	+20	64·1	9·81	Kreil.	
St. Gothard	46 32	8 33	1832·5	.....	.....	.....	65 10	-26	64·7	9·91	Forbes.
Zurich	47 23	8 33	1867·5	.....	.....	.....	64 00	+67	65·1	.....	L. F. Kämtz.
Oberndorf	48 17	8 34	1842·5	16 31 w.	.....	16·5 w.	65 15	.....	65·3	10·01	Lamont.
Schaffhausen	47 42	8 38	1859·5	.....	.....	.....	64 33	+48	65·4	.....	Fox.
Darmstadt	49 52	8 39	1842·5	18 03 w.	.....	18·1 w.	67 19	.....	67·3	10·10	Lamont.
Pforzheim	48 54	8 41	1842·5	18 23 w.	.....	18·4 w.	66 29	.....	66·5	10·18	Lamont.
Heidelberg.....	48 39	8 41	1842·5	18 20 w.	.....	18·3 w.	66 40	.....	66·7	10·11	Lamont.
Stockach.....	47 51	8 59	1842·5	18 06 w.	.....	18·1 w.	65 35	.....	65·6	10·07	Lamont.
Tubingen	48 31	9 03	1842·5	18 09 w.	.....	18·2 w.	.....	.....	.....	.....	Lamont.
Como	45 48	9 04	1850·0	16 47 w.	0 55 w.	17·7 w.	63 40	+20	64·0	9·83	Kreil.	
			1867·5	.....	.....	.....	62 42	+67	63·8	.....	L. F. Kämtz.
Pavia	45 11	9 10	1850·0	17 07 w.	0 55 w.	18·0 w.	63 08	+20	63·5	9·81	Kreil.	
			1867·5	.....	.....	.....	62 12	+67	63·3	.....	L. F. Kämtz.
Milan.....	45 28	9 11	1838·5	.....	.....	.....	63 55	-11	63·7	.....	Bache.
			1839·5	.....	.....	.....	64 16	-08	64·1	.....	Quetelet.
			1850·0	17 13 w.	0 55 w.	18·1 w.	63 08	+20	63·5	.....	Kreil.
			1867·5	.....	.....	.....	62 27	+67	63·6	.....	L. F. Kämtz.
Heilsbronn	49 09	9 13	1842·5	17 19 w.	.....	17·3 w.	.....	.....	.....	.....	Lamont.
Mittenberg	49 42	9 15	1842·5	18 22 w.	.....	18·4 w.	66 50	.....	66·8	10·14	Lamont.
Meersburg	47 41	9 17	1842·5	17 55 w.	.....	17·9 w.	65 24	.....	65·4	10·00	Lamont.
Bregenz	47 30	9 41	1850·0	16 27 w.	0 55 w.	17·4 w.	64 49	+20	65·2	9·93	Kreil.	

ZONE II.—Lat. 45° to 50° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.	Observers.
				Observed.	Correction to Epoch 1842·5.	Corrected.	Observed.	Correction to Epoch 1842·5.	Corrected.		
Bludenz	47 09	9 49	1850·0	16 28 w.	0 55 w.	17·4 w.	64 30	+20	64·8	9·90	Kreil.
Sondrio	46 10	9 53	1850·0	16 09 w.	0 55 w.	17·1 w.	63 50	+20	64·2	9·83	Kreil.
Wurzburg	49 47	9 55	1842·5	17 51 w.	.....	17·9 w.	66 39	.....	66·7	10·11	Lamont.
Arnstein	49 58	9 57	1842·5	17 48 w.	.....	17·8 w.	66 49	.....	66·8	10·16	Lamont.
Weiler	47 35	9 57	1842·5	17 30 w.	.....	17·5 w.	65 14	.....	65·2	10·05	Lamont.
Ulm	48 25	10 00	1842·5	17 35 w.	.....	17·6 w.	65 43	.....	65·7	10·07	Lamont.
Crailsheim.....	49 08	10 04	1842·5	17 38 w.	.....	17·6 w.	.....	.....	.....	.....	Lamont.
Aalen.....	48 50	10 05	1842·5	.....	.....	.....	65 59	.....	66·0	10·04	Lamont.
Ellwangen	48 58	10 08	1842·5	17 41 w.	.....	17·7 w.	65 58	.....	66·0	10·02	Lamont.
Heidenheim	48 41	10 09	1842·5	17 44 w.	.....	17·7 w.	.....	.....	.....	.....	Lamont.
Rothenburg	49 23	10 11	1842·5	17 38 w.	.....	17·6 w.	66 22	.....	66·4	10·09	Lamont.
Memmingen	48 00	10 11	1842·5	17 28 w.	.....	17·5 w.	65 23	.....	65·4	10·03	Lamont.
Brescia	45 32	10 11	1850·0	16 22 w.	0 55 w.	17·3 w.	63 10	+20	63·5	9·81	Kreil.
St. Christopher	47 08	10 12	1850·0	.....	.....	.....	64 16	+20	64·6	9·82	Kreil.
Uffenheim	49 33	10 13	1842·5	17 41 w.	.....	17·7 w.	66 26	.....	66·4	10·07	Lamont.
Immenstadt	47 33	10 13	1842·5	17 26 w.	.....	17·4 w.	65 06	.....	65 1	10·01	Lamont.
Gunzberg	48 27	10 15	1842·5	17 26 w.	.....	17·4 w.	65 43	.....	65·7	10·06	Lamont.
Kempten	47 43	10 18	1842·5	17 22 w.	.....	17·4 w.	65 12	.....	65·2	10·01	Lamont.
Dinkelsbühl	49 04	10 19	1842·5	17 31 w.	.....	17·5 w.	66 08	.....	66·1	10·07	Lamont.
Bormio	46 30	10 22	1850·0	16 17 w.	0 55 w.	17·2 w.	63 56	+20	64·3	9·82	Kreil.
Burgau	48 26	10 24	1842·5	17 23 w.	.....	17·4 w.	65 44	.....	65·7	10·07	Lamont.
St. Maria	46 31	10 24	1850·0	16 09 w.	0 55 w.	17·1 w.	63 57	+20	64·3	9·85	Kreil.
Sailing	47 32	10 25	1842·5	17 08 w.	.....	17·1 w.	65 00	.....	65·0	10·00	Lamont.
Lauingen	48 34	10 25	1842·5	17 29 w.	.....	17·5 w.	.....	.....	.....	.....	Lamont.
Stilfersjoch	46 32	10 26	1850·0	.....	.....	.....	63 58	+20	64·3	.....	Kreil.
Nordlingen	48 51	10 29	1842·5	17 25 w.	.....	17·4 w.	.....	.....	.....	.....	Lamont.
Mindelheim	48 03	10 29	1842·5	17 20 w.	.....	17·3 w.	65 21	.....	65·3	10·02	Lamont.
Dillengen	48 35	10 30	1842·5	17 21 w.	.....	17·3 w.	65 46	.....	65·8	10·05	Lamont.
Mals	46 41	10 30	1850·0	16 05 w.	0 55 w.	17·0 w.	64 01	+20	64·3	9·85	Kreil.
Landeck	47 08	10 31	1850·0	16 10 w.	0 55 w.	17·1 w.	64 22	+20	64·7	9·90	Kreil.
Ansbach	49 18	10 34	1842·5	.....	.....	.....	66 19	.....	66·3	10·11	Lamont.
Oettingen	48 57	10 36	1842·5	17 21 w.	.....	17·3 w.	65 59	.....	66·0	10 05	Lamont.
Kaufbeuren	47 53	10 37	1842·5	17 21 w.	.....	17·3 w.	65 09	.....	65·1	9·97	Lamont.
Imst	47 14	10 40	1850·0	16 08 w.	0 55 w.	17·1 w.	64 23	+20	64·7	9·84	Kreil.
Fussen	47 34	10 42	1842·5	17 09 w.	.....	17·1 w.	65 00	.....	65 0	9·81	Lamont.
Wending	48 53	10 43	1842·5	17 28 w.	.....	17·5 w.	.....	.....	.....	.....	Lamont.
Gunzenhausen	49 07	10 45	1842·5	17 22 w.	.....	17·4 w.	66 07	.....	66·1	10·08	Lamont.
Donauwörth	48 43	10 47	1842·5	17 14 w.	.....	17·2 w.	65 53	.....	65·9	10 07	Lamont.
Mantua	45 09	10 47	1850·0	15 43 w.	0 55 w.	16·6 w.	62 55	+20	63·3	9·82	Kreil.
Buchdorf	48 47	10 49	1842·5	17 13 w.	.....	17·2 w.	.....	.....	.....	.....	Lamont.
Riva	45 53	10 50	1850·0	.....	.....	.....	63 16	+20	63·6	9·82	Kreil.
Berolsheim	49 01	10 51	1842·5	18 04 w.	.....	18·1 w.	.....	.....	.....	.....	Lamont.
Landsberg	48 03	10 53	1842·5	17 08 w.	.....	17·1 w.	65 21	.....	65·3	10·02	Lamont.
Bamberg	49 53	10 53	1842·5	17 16 w.	.....	17·3 w.	66 40	.....	66·7	9·86	Lamont.
Pfaffenhofen.....	48 33	10 54	1842·5	16 55 w.	.....	16·9 w.	65 39	.....	65·7	10·05	Lamont.
Augsburg	48 22	10 54	1842·5	17 09 w.	.....	17·1 w.	65 35	.....	65·6	10·04	Lamont.
Peititing	47 48	10 55	1842·5	17 08 w.	.....	17·1 w.	.....	.....	.....	.....	Lamont.
Verona	45 26	10 58	1850·0	15 39 w.	0 55 w.	16·6 w.	63 06	+20	63·4	9·85	Kreil.
Furth	49 29	10 59	1842·5	17 12 w.	.....	17·2 w.	.....	.....	.....	.....	Lamont.
Erlangen	49 36	11 00	1842·5	17 17 w.	.....	17·3 w.	66 23	.....	66·4	10·11	Lamont.
Schwabach	49 20	11 01	1842·5	17 14 w.	.....	17·2 w.	66 05	.....	66·1	10·04	Lamont.
Hohenpreissenburg	47 48	11 01	1842·5	17 02 w.	.....	17·0 w.	65 08	.....	65·1	10·01	Lamont.
Forchheim.....	49 43	11 03	1842·5	17 16 w.	.....	17·3 w.	.....	.....	.....	.....	Lamont.
Hornle	47 39	11 03	1842·5	16 59 w.	.....	17·0 w.	64 56	.....	64·9	.....	Lamont.
Kohlgrub	47 40	11 03	1842·5	17 00 w.	.....	17·0 w.	64 55	.....	64·9	9·95	Lamont.
Monheim	48 51	11 04	1842·5	.....	.....	.....	66 01	.....	66·0	10·08	Lamont.
Nuremberg	49 27	11 04	1842·5	17 13 w.	.....	17·2 w.	66 15	.....	66·3	.....	Lamont.
Partenkirchen	47 30	11 06	1842·5	16 56 w.	.....	16·9 w.	64 50	.....	64·8	9·95	Lamont.
Trient	46 04	11 06	1837·5	.....	.....	.....	64 05	-13	63·9	9·88	Forbes.
			1850·0	15 57 w.	0 55 w.	16·9 w.	63 18	+20	63·6	9·78	Kreil.
Abensberg	18 49	11 07	1842·5	16 47 w.	16·8 w.	65 52	65·9	10·09	Lamont.
Meran	46 40	11 08	1850·0	16 07 w.	0 55 w.	17·0 w.	63 54	+20	64·2	9·84	Kreil.

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ZONE II.—Lat. 45° to 50° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.	Observers.	
				Observed.	Correction to Epoch 1842.5.	Corrected.	Observed.	Correction to Epoch 1842.5.	Corrected.			
Weilheim	47 50	11 09	1842.5	17 01 w.	.....	17.0 w.	65 10	.....	65.2	10.01	Lamont.
Neuburg, D.	48 45	11 11	1842.5	17 07 w.	.....	17.1 w.	65 47	.....	65.8	10.05	Lamont.
Murnau	47 41	11 16	1842.5	16 55 w.	.....	16.9 w.	64 58	.....	65.0	9.87	Lamont.
Lauf	49 31	11 17	1842.5	17 10 w.	.....	17.2 w.	66 15	.....	66.3	10.08	Lamont.
Botzen	46 30	11 18	1850.0	16 03 w.	0 55 w.	17.0 w.	63 52	+20	64.2	9.88	Kreil.	
Altdorf	49 25	11 21	1842.5	17 03 w.	.....	17.1 w.	.....	.....	.....	.....	Lamont.
Kochel	47 39	11 22	1842.5	16 50 w.	.....	16.8 w.	65 01	.....	65.0	10.00	Lamont.
Innsbruck	47 16	11 24	1834.5	65 01	-22	64.6	64.6	9.88	Lamont. Listing. Forbes. Quetelet. Kreil.
			1837.5	.....	.....	.....	64 49	-13	64.6		
			1839.5	.....	.....	.....	64 44	-08	64.6		
			1850.0	15 51 w.	0 55 w.	16.8 w.	64 15	+20	64.6			
Benedictbeurn	47 43	11 24	1842.5	16 51 w.	.....	16.9 w.	65 05	.....	65.1	10.01	Lamont.
Hersbruck	49 31	11 25	1842.5	17 05 w.	.....	17.1 w.	66 19	.....	66.3	10.10	Lamont.
Brenner	47 00	11 25	1850.0	15 50 w.	0 55 w.	16.7 w.	63 58	+20	64.3	9.83	Kreil.	
Ingoldstadt	48 46	11 25	1842.5	16 53 w.	.....	16.9 w.	65 58	.....	66.0	10.04	Lamont.
Wolfrathshausen	47 55	11 25	1842.5	16 50 w.	.....	16.8 w.	65 12	.....	65.2	10.01	Lamont.
Benedictenwand	47 39	11 27	1842.5	16 47 w.	.....	16.8 w.	64 59	.....	65.0	9.99	Lamont.
Greding	49 03	11 27	1842.5	16 59 w.	.....	17.0 w.	66 03	.....	66.1	10.09	Lamont.
Neunmarkt	49 16	11 29	1842.5	16 59 w.	.....	17.0 w.	66 10	.....	66.2	10.11	Lamont.
Tann	49 10	11 31	1842.5	17 49 w.	.....	17.8 w.	.....	.....	.....	.....	Lamont.
Tolz	47 46	11 33	1842.5	16 39 w.	.....	16.7 w.	64 58	.....	65.0	9.95	Lamont.
Vicenza	45 32	11 33	1850.0	15 38 w.	0 55 w.	16.5 w.	63 02	+20	63.4	9.86	Kreil.	
Bayreuth	49 57	11 35	1842.5	17 11 w.	.....	17.2 w.	66 32	.....	66.5	10.09	Lamont.
Geisenfeld	48 41	11 36	1842.5	16 52 w.	.....	16.9 w.	.....	.....	.....	.....	Lamont.
Munich	48 09	11 36	1842.5	16 47 w.	.....	16.8 w.	65 19	.....	65.3	10.01	Lamont.
Rattenberg	47 27	11 37	1850.0	15 36 w.	0 55 w.	16.5 w.	64 23	+20	64.7	9.90	Kreil.	
Holzkirchen	47 52	11 42	1842.5	16 43 w.	.....	16.7 w.	65 03	.....	65.1	9.98	Lamont.
Sulzbach	49 30	11 44	1842.5	16 54 w.	.....	16.9 w.	66 22	.....	66.4	10.14	Lamont.
Freyding	48 24	11 45	1842.5	16 41 w.	.....	16.7 w.	65 29	.....	65.5	10.02	Lamont.
Rovigo	45 04	11 46	1850.0	15 02 w.	0 55 w.	15.9 w.	62 39	+20	63.0	9.86	Kreil.	
Miesbach	47 47	11 51	1842.5	16 31 w.	.....	16.5 w.	65 02	.....	65.0	9.99	Lamont.
Schliersee	47 44	11 52	1842.5	16 31 w.	.....	16.5 w.	64 54	.....	64.9	9.96	Lamont.
Amberg	49 27	11 52	1842.5	16 52 w.	.....	16.9 w.	66 13	.....	66.2	10.09	Lamont.
Padua	45 24	11 52	1850.0	15 10 w.	0 55 w.	16.1 w.	62 53	+20	63.2	9.87	Kreil.	
Kelheim	48 55	11 52	1842.5	16 43 w.	.....	16.7 w.	65 47	.....	65.8	10.05	Lamont.
Brunnecken	46 48	11 54	1850.0	15 42 w.	0 55 w.	16.6 w.	63 51	+20	64.2	9.85	Kreil.	
Erding	48 18	11 55	1842.5	16 41 w.	.....	16.7 w.	65 22	.....	65.4	10.02	Lamont.
Moosburg	48 28	11 56	1842.5	16 40 w.	.....	16.7 w.	.....	.....	.....	.....	Lamont.
Osterhofen	47 41	12 00	1842.5	16 38 w.	.....	16.6 w.	64 52	.....	64.9	9.96	Lamont.
Aibling	47 52	12 00	1842.5	16 28 w.	.....	16.5 w.	65 03	.....	65.1	9.90	Lamont.
Wendelstein	47 42	12 01	1842.5	.....	.....	.....	64 53	.....	64.9	9.96	Lamont.
Agordo	46 17	12 03	1850.0	15 39 w.	0 55 w.	16.6 w.	63 28	+20	63.8	9.89	Kreil.	
Schwandorf	49 20	12 07	1842.5	16 41 w.	.....	16.7 w.	66 06	.....	66.1	10.08	Lamont.
Roth	47 59	12 07	1842.5	.....	.....	.....	66 15	.....	66.3	10.13	Lamont.
Landshut	48 32	12 08	1842.5	16 36 w.	.....	16.6 w.	65 32	.....	65.5	10.03	Lamont.
Rosenheim	47 52	12 08	1842.5	16 24 w.	.....	16.4 w.	.....	.....	.....	10.00	Lamont.
Weiden	49 41	12 09	1842.5	.....	.....	.....	65 25	.....	65.4	9.74	Lamont.
Haag	48 10	12 10	1842.5	16 29 w.	.....	16.5 w.	65 15	.....	65.3	9.99	Lamont.
Nabburg	49 27	12 10	1842.5	16 54 w.	.....	16.9 w.	66 14	.....	66.2	10.11	Lamont.
Belluno	46 08	12 13	1850.0	14 35 w.	0 55 w.	15.5 w.	63 19	+20	63.7	9.89	Kreil.	
Mitterteich	49 57	12 14	1842.5	16 45 w.	.....	16.7 w.	.....	.....	.....	.....	Lamont.
Wasserburg	48 03	12 14	1842.5	16 31 w.	.....	16.5 w.	65 08	.....	65.1	9.97	Lamont.
Velden	48 22	12 15	1842.5	16 29 w.	.....	16.5 w.	65 24	.....	65.4	10.02	Lamont.
Giesenhhausen	48 28	12 16	1842.5	16 32 w.	.....	16.5 w.	.....	.....	.....	.....	Lamont.
Conegliano	45 53	12 18	1850.0	15 15 w.	0 55 w.	16.2 w.	63 06	+20	63.4	9.87	Kreil.	
Venice	45 26	12 20	1838.5	63 22	-11	63.2	63.1	9.86	Bache. Quetelet. Kreil.
			1839.5	.....	.....	.....	63 06	-08	63.0		
			1850.0	15 04 w.	0 55 w.	16.0 w.	62 48	+20	63.1			
			1867.5	.....	.....	.....	62 04	+67	63.2		
St. Johann	47 32	12 20	1850.0	15 15 w.	0 55 w.	16.2 w.	64 24	+20	64.7	9.90	Kreil.	
Vilsbiburg	48 27	12 21	1842.5	16 28 w.	.....	16.5 w.	.....	.....	.....	.....	Lamont.

ZONE II.—Lat. 45° to 50° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.	Observers.
				Observed.	Correction to Epoch 1842.5.	Corrected.	Observed.	Correction to Epoch 1842.5.	Corrected.		
Muhldorf	48 14	12 32	1842.5	16 23 w.	.....	16.4 w.	65 15	.....	65.3	9.98	Lamont.
Straubing	48 52	12 34	1842.5	16 24 w.	.....	16.4 w.	65 43	.....	65.7	10.05	Lamont.
Hochberg	47 50	12 39	1842.5	16 12 w.	.....	16.2 w.	65 02	.....	65.0	9.99	Lamont.
Stallwang	49 03	12 40	1842.5	16 24 w.	.....	16.4 w.	65 48	.....	65.8	10.03	Lamont.
Cham	49 13	12 40	1842.5	16 24 w.	.....	16.4 w.	65 59	.....	66.0	10.07	Lamont.
Altotting	48 14	12 40	1842.5	16 41 w.	.....	16.7 w.	65 10	.....	65.2	9.98	Lamont.
Plan	49 52	12 41	1850.0	15 33 w.	0 55 w.	16.5 w.	65 54	+20	66.2	10.08	Kreil.
Lienz	46 50	12 44	1850.0	15 20 w.	0 55 w.	16.2 w.	63 49	+20	64.1	9.88	Kreil.
Tittmoning	48 04	12 45	1842.5	16 13 w.	.....	16.2 w.	65 07	.....	65.1	10.18	Lamont.
Eggenfelden	48 24	12 47	1842.5	16 16 w.	.....	16.3 w.	65 15	.....	65.3	9.97	Lamont.
Burghausen	48 09	12 50	1842.5	16 11 w.	.....	16.2 w.	65 09	.....	65.2	9.98	Lamont.
Reichenhall	47 43	12 53	1842.5	16 06 w.	.....	16.1 w.	64 56	.....	64.9	9.73	Lamont.
Viechtach	49 05	12 53	1842.5	.....	.....	.....	65 45	.....	65.8	10.02	Lamont.
Deggendorf	48 50	12 58	1842.5	16 11 w.	.....	16.2 w.	65 40	.....	65.7	10.11	Lamont.
Laufen	47 57	12 59	1842.5	16 11 w.	.....	16.2 w.	65 03	.....	65.1	9.98	Lamont.
Berchtesgaden	47 38	13 00	1842.5	.....	.....	.....	64 43	.....	64.7	9.97	Lamont.
Salzburg	47 48	13 02	1837.5	.....	.....	.....	65 04	-13	64.9	9.96	Forbes.
			1842.5	16 12 w.	.....	16.2 w.	64 58	.....	65.0	9.99	Lamont.
Bockstein	47 00	13 02	1850.0	15 17 w.	0 55 w.	16.2 w.	64 36	+20	64.9	9.94	Kreil.
			1850.0	.....	.....	.....	63 46	+20	64.1	9.83	Kreil.
Gastein	47 10	13 05	1850.0	14 58 w.	0 55 w.	15.9 w.	63 59	+20	64.3	9.93	Kreil.
Gaisberg	47 47	13 07	1842.5	16 05 w.	.....	16.1 w.	64 52	.....	64.9	9.95	Lamont.
Golling	47 35	13 08	1850.0	15 00 w.	0 55 w.	15.9 w.	64 25	+20	64.8	9.93	Kreil.
Regen	48 57	13 08	1842.5	16 11 w.	.....	16.2 w.	65 44	.....	65.7	10.04	Lamont.
Altheim	48 15	13 11	1842.5	16 34 w.	.....	16.6 w.	.....	.....	.....	.....	Lamont.
Udine	46 04	13 15	1850.0	.....	.....	.....	63 06	+20	63.4	9.87	Kreil.
Schomberg	48 51	13 20	1842.5	16 03 w.	.....	16.1 w.	65 27	.....	65.5	10.02	Lamont.
Klattau	49 24	13 22	1850.0	15 23 w.	0 55 w.	16.3 w.	65 14	+20	65.6	9.87	Kreil.
Pilsen	49 55	13 23	1850.0	.....	.....	.....	65 33	+20	65.9	9.94	Kreil.
Grafenau	48 52	13 23	1842.5	16 07 w.	.....	16.1 w.	.....	.....	.....	.....	Lamont.
Scherding	48 27	13 24	1850.0	14 52 w.	0 55 w.	15.8 w.	64 44	+20	65.1	9.88	Kreil.
Passau	48 34	13 28	1842.5	16 01 w.	.....	16.0 w.	65 26	.....	65.4	.....	Lamont.
Radstadt	47 23	13 28	1850.0	14 52 w.	0 55 w.	15.8 w.	64 11	+20	64.5	9.95	Kreil.
Gmund	46 54	13 30	1850.0	15 06 w.	0 55 w.	16.0 w.	63 43	+20	64.1	9.87	Kreil.
St. George	47 55	13 31	1850.0	15 07 w.	0 55 w.	16.0 w.	64 40	+20	65.0	9.97	Kreil.
Ischl	47 43	13 34	1850.0	15 00 w.	0 55 w.	15.9 w.	64 22	+20	64.7	9.86	Kreil.
Vocklabruck	48 01	13 36	1850.0	14 42 w.	0 55 w.	15.6 w.	64 38	+20	64.9	9.94	Kreil.
Parenzo	45 14	13 36	1850.0	14 46 w.	0 55 w.	15.7 w.	.....	.....	.....	.....	Kreil.
Gorz	45 56	13 38	1850.0	13 59 w.	0 55 w.	14.9 w.	62 57	+20	63.3	9.86	Kreil.
Bleiberg	46 36	13 42	1850.0	14 38 w.	0 55 w.	15.6 w.	63 25	+20	63.7	9.90	Kreil.
Rachel	48 59	13 43	1842.5	15 52 w.	.....	15.9 w.	65 43	.....	65.7	10.04	Lamont.
Trieste	45 39	13 45	1838.5	.....	.....	.....	63 21	-11	63.2	9.88	Bache.
			1850.0	14 22 w.	0 55 w.	15.5 w.	62 44	+20	63.1	9.85	Kreil.
			1858.5	13 46 w.	1 55 w.	15.7 w.	62 19	+43	63.0	.....	Novara.
			1867.5	.....	.....	.....	61 56	+67	63.1	.....	L. F. Kämtz.
Kremsmunster	48 03	14 08	1850.0	14 32 w.	0 55 w.	15.5 w.	64 42	+20	65.0	9.94	Kreil.
			1853.5	14 17 w.	1 20 w.	15.6 w.	64 25	+30	64.9	9.87	Reslhuber.
			1867.5	.....	.....	.....	63 55	+67	65.0	.....	L. F. Kämtz.
Pisek	49 19	14 09	1850.0	14 53 w.	0 55 w.	15.8 w.	65 09	+20	65.5	9.89	Kreil.
Adelsberg	45 46	14 14	1850.0	13 50 w.	0 55 w.	14.7 w.	62 46	+20	63.1	9.85	Kreil.
Lietzen	47 34	14 15	1850.0	14 35 w.	0 55 w.	15.5 w.	64 10	+20	64.5	9.94	Kreil.
Linz	48 18	14 16	1837.5	.....	.....	.....	65 15	-13	65.0	10.01	Forbes.
			1850.0	14 39 w.	0 55 w.	15.6 w.	64 42	+20	65.0	9.95	Kreil.
Klagenfurt	46 37	14 18	1850.0	14 28 w.	0 55 w.	15.4 w.	63 27	+20	63.8	9.92	Kreil.
St. Lambrecht	47 04	14 18	1850.0	14 33 w.	0 55 w.	15.5 w.	63 49	+20	64.1	9.93	Kreil.
Fiume	45 19	14 27	1850.0	14 21 w.	0 55 w.	15.3 w.	62 25	+20	62.7	9.83	Kreil.
Admont	47 35	14 28	1850.0	14 13 w.	0 55 w.	15.1 w.	64 00	+20	64.3	9.92	Kreil.
Budweis	49 00	14 28	1850.0	.....	.....	.....	65 04	+20	65.4	9.98	Kreil.
Laibach	46 03	14 30	1837.5	.....	.....	.....	63 24	-13	63.2	9.85	Forbes.
			1850.0	13 59 w.	0 55 w.	14.9 w.	62 54	+20	63.2	9.86	Kreil.
Steinberg	48 35	14 40	1850.0	.....	.....	.....	64 51	+20	65.2	9.93	Kreil.
Silberberg	48 38	14 43	1850.0	.....	.....	.....	64 45	+20	65.1	9.89	Kreil.

ZONE II.—Lat. 45° to 50° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.	Observers.
				Observed.	Correction to Epoch 1842-5.	Corrected.	Observed.	Correction to Epoch 1842-5.	Corrected.		
Kallevang	47 27	14 45	1850-0	14 09 w.	0 55 w.	15-1 w.	63 49	+20	64-1	9-89	Kreil.
Gratzen	48 48	14 47	1850-0	14 22 w.	0 55 w.	15-3 w.	64 55	+20	65-3	9-89	Kreil.
Eisenerz	47 32	14 53	1850-0	14 09 w.	0 55 w.	15-1 w.	63 55	+20	64-3	9-91	Kreil.
St. Paul	46 43	14 54	1850-0	13 56 w.	0 55 w.	14-9 w.	63 21	+20	63-7	9-91	Kreil.
Neuhaus	49 08	14 59	1850-0	14 26 w.	0 55 w.	15-4 w.	65 06	+20	65-4	9-93	Kreil.
Neustadt	45 48	15 12	1850-0	13 19 w.	0 55 w.	14-2 w.	62 39	+20	63-0	9-92	Kreil.
Afenz	47 32	15 14	1850-0	13 52 w.	0 55 w.	14-8 w.	63 54	+20	64-2	.....	Kreil.
Bruck	47 25	15 17	1850-0	13 52 w.	0 55 w.	14-8 w.	63 51	+20	64-2	9-92	Kreil.
Seelau	49 32	15 17	1850-0	14 12 w.	0 55 w.	15-1 w.	65 24	+20	65-7	9-96	Kreil.
Cilli	46 14	15 18	1850-0	13 41 w.	0 55 w.	14-6 w.	62 53	+20	63-2	9-89	Kreil.
Melk	48 14	15 21	1850-0	13 57 w.	0 55 w.	14-9 w.	64 35	+20	64-9	9-96	Kreil.
Caslau	49 57	15 22	1850-0	14 05 w.	0 55 w.	15-0 w.	65 31	+20	65-9	9-97	Kreil.
Gratz	47 04	15 28	1850-0	13 49 w.	0 55 w.	14-7 w.	63 30	+20	63-8	.....	Kreil.
Carlstadt	45 29	15 35	1850-0	13 48 w.	0 55 w.	14-7 w.	62 24	+20	62-7	9-83	Kreil.
Iglau	49 25	15 38	1850-0	13 56 w.	0 55 w.	14-9 w.	65 17	+20	65-6	10-02	Kreil.
Horn	48 40	15 39	1850-0	13 40 w.	0 55 w.	14-6 w.	64 42	+20	65-0	9-95	Kreil.
Marburg	46 35	15 41	1850-0	13 28 w.	0 55 w.	14-4 w.	63 13	+20	63-5	9-89	Kreil.
Schottwein	47 39	15 52	1850-0	13 53 w.	0 55 w.	14-8 w.	63 55	+20	64-3	9-91	Kreil.
Gleichenberg	46 52	15 57	1850-0	13 21 w.	0 55 w.	14-3 w.	63 28	+20	63-8	9-93	Kreil.
Agram	45 49	15 59	1850-0	13 37 w.	0 55 w.	14-5 w.	62 30	+20	62-8	9-84	Kreil.
Znaim	48 51	16 05	1850-0	13 35 w.	0 55 w.	14-5 w.	64 48	+20	65-1	10-00	Kreil.
Steinamanger	47 12	16 16	1850-0	.....	.....	.....	63 51	+20	64-2	10-01	Kreil.
Petrina	45 26	16 18	1850-0	13 26 w.	0 55 w.	14-4 w.	62 17	+20	62-6	9-81	Kreil.
Warasdin	46 08	16 18	1850-0	.....	.....	.....	62 49	+20	63-1	9-88	Kreil.
Leitomischl	49 53	16 19	1850-0	13 34 w.	0 55 w.	14-5 w.	65 31	+20	65-9	10-01	Kreil.
Vienna	48 15	16 22	1842-5	14 27 w.	.....	14-5 w.	64 42	.....	64-7	.....	Lamont.
			1850-0	13 31 w.	0 55 w.	14-4 w.	64 17	+20	64-6	9-94	Kreil.
Odenburg	47 41	16 35	1850-0	13 23 w.	0 55 w.	14-3 w.	64 02	+20	64-4	9-98	Kreil.
Brunn	49 11	16 37	1850-0	13 48 w.	0 55 w.	14-7 w.	65 15	+20	65-6	9-98	Kreil.
Bellovar	45 53	16 52	1850-0	13 11 w.	0 55 w.	14-1 w.	62 36	+20	62-9	9-87	Kreil.
Lundenburg	48 45	16 54	1850-0	13 11 w.	0 55 w.	14-1 w.	64 43	+20	65-1	10-02	Kreil.
Pressburg	48 09	17 06	1850-0	13 22 w.	0 55 w.	14-3 w.	64 00	+20	64-3	9-94	Kreil.
Olmutz	49 36	17 15	1850-0	13 06 w.	0 55 w.	14-0 w.	65 19	+20	65-7	10-04	Kreil.
Neu Gradisca	45 14	17 26	1850-0	12 55 w.	0 55 w.	13-8 w.	61 56	+20	62-3	9-80	Kreil.
Troppau	49 56	17 53	1850-0	12 46 w.	0 55 w.	13-7 w.	65 21	+20	65-7	10-06	Kreil.
Trentschin	48 52	18 03	1850-0	.....	.....	.....	64 49	+20	65-1	10-08	Kreil.
Kenese	47 02	18 08	1850-0	12 40 w.	0 55 w.	13-6 w.	63 24	+20	63-7	9-96	Kreil.
Komorn	47 45	18 12	1850-0	12 30 w.	0 55 w.	13-4 w.	63 40	+20	64-0	9-94	Kreil.
Funfkirchen	46 04	18 15	1850-0	12 36 w.	0 55 w.	13-5 w.	62 28	+20	62-8	9-85	Kreil.
Teschchen	49 45	18 37	1850-0	12 35 w.	0 55 w.	13-5 w.	65 05	+20	65-4	10-03	Kreil.
Esseg	45 32	18 42	1850-0	12 18 w.	0 55 w.	13-2 w.	62 00	+20	62-3	9-80	Kreil.
Tolna	46 25	18 49	1850-0	12 32 w.	0 55 w.	13-5 w.	62 47	+20	63-1	9-90	Kreil.
Schemnitz	48 27	18 55	1850-0	12 20 w.	0 55 w.	13-3 w.	64 04	+20	64-4	9-99	Kreil.
Ofen	47 29	19 03	1850-0	12 23 w.	0 55 w.	13-3 w.	63 30	+20	63-8	9-92	Kreil.
St. Miklos	49 04	19 40	1850-0	11 52 w.	0 55 w.	12-8 w.	64 35	+20	64-9	10-04	Kreil.
Losonetz	48 19	19 42	1850-0	11 32 w.	0 55 w.	12-5 w.	64 07	+20	64-5	10-02	Kreil.
Carlowitz	45 11	19 57	1850-0	11 04 w.	0 55 w.	12-0 w.	61 14	+20	61-6	9-90	Kreil.
Wieliczka	49 59	20 04	1850-0	11 45 w.	0 55 w.	12-7 w.	65 14	+20	65-6	10-13	Kreil.
Szegedin	46 15	20 08	1850-0	11 20 w.	0 55 w.	12-3 w.	62 24	+20	62-7	9-85	Kreil.
Szolnok	47 10	20 15	1850-0	11 43 w.	0 55 w.	12-6 w.	63 10	+20	63-5	9-95	Kreil.
Erlau	47 53	20 23	1850-0	11 48 w.	0 55 w.	12-7 w.	63 31	+20	63-9	9-99	Kreil.
Kesmark	49 08	20 29	1850-0	11 25 w.	0 55 w.	12-3 w.	64 40	+20	65-0	10-08	Kreil.
Sandec	49 34	20 34	1850-0	11 33 w.	0 55 w.	12-5 w.	64 46	+20	65-1	10-02	Kreil.
Leutschau	49 01	20 39	1850-0	11 19 w.	0 55 w.	12-2 w.	64 30	+20	64-8	10-06	Kreil.
Temesvar	45 45	21 01	1850-0	10 50 w.	0 55 w.	11-8 w.	61 41	+20	62-0	9-76	Kreil.
Kaschau	48 41	21 19	1850-0	11 02 w.	0 55 w.	12-0 w.	64 17	+20	64-6	10-04	Kreil.
Arad	46 11	21 19	1850-0	10 55 w.	0 55 w.	11-8 w.	62 00	+20	62-3	9-78	Kreil.
Tokay	48 07	21 28	1850-0	10 48 w.	0 55 w.	11-7 w.	63 20	+20	63-7	9-94	Kreil.
Debreczin	47 32	21 41	1850-0	10 44 w.	0 55 w.	11-7 w.	63 10	+20	63-5	9-94	Kreil.
Krosno	49 41	21 47	1850-0	11 01 w.	0 55 w.	11-9 w.	64 46	+20	65-1	10-02	Kreil.
Groswardein	47 04	21 59	1850-0	10 54 w.	0 55 w.	11-8 w.	62 47	+20	63-1	9-89	Kreil.

ZONE II.—Lat. 45° to 50° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.	Observers.
				Observed.	Correction to Epoch 1842.5.	Corrected.	Observed.	Correction to Epoch 1842.5.	Corrected.		
Karansebes	45 24	22 12	1850-0	10 25 w.	0 55 w.	11-3 w.	61 06	+20	61-4	9-70	Kreil.
Sanok	49 33	22 13	1850-0	10 17 w.	0 55 w.	11-2 w.	64 42	+20	65-0	10-06	
Ungvar	48 37	22 22	1850-0	10 24 w.	0 55 w.	11-3 w.	63 47	+20	64-1	10-00	Kreil.
Dobra	45 54	22 33	1850-0	10 15 w.	0 55 w.	11-2 w.	61 34	+20	61-9	9-79	
Munkacz	48 26	22 47	1850-0	10 17 w.	0 55 w.	11-2 w.	63 40	+20	64-0	9-96	Kreil.
Przemisl	49 47	22 49	1850-0	9 37 w.	0 55 w.	10-5 w.	64 49	+20	65-1	10-14	
Szatmer	47 47	22 56	1850-0	10 11 w.	0 55 w.	11-1 w.	63 18	+20	63-6	9-98	Kreil.
Veretzke.....	48 46	23 08	1850-0	9 47 w.	0 55 w.	10-7 w.	63 55	+20	64-3	9-98	
Sambor	49 31	23 13	1850-0	9 28 w.	0 55 w.	10-4 w.	64 32	+20	64-9	10-05	Kreil.
Skole	49 01	23 34	1850-0	9 31 w.	0 55 w.	10-4 w.	64 05	+20	64-4	10-05	
Nagybanya	47 39	23 38	1850-0	9 51 w.	0 55 w.	10-8 w.	62 52	+20	63-2	9-98	Kreil.
Karlsburg	46 04	23 39	1850-0	9 42 w.	0 55 w.	10-6 w.	61 37	+20	61-9	9-89	
Klausenburg	46 45	23 40	1850-0	9 54 w.	0 55 w.	10-8 w.	62 21	+20	62-7	9-90	Kreil.
Stry	49 15	23 53	1850-0	9 24 w.	0 55 w.	10-3 w.	64 12	+20	64-5	10-08	
Lemberg	49 50	24 02	1850-0	9 11 w.	0 55 w.	10-1 w.	64 40	+20	65-0	10-07	Kreil.
Dolina	48 58	24 04	1850-0	9 06 w.	0 55 w.	10-0 w.	64 02	+20	64-4	10-05	
Hermannstadt	45 47	24 13	1850-0	9 33 w.	0 55 w.	10-5 w.	61 17	+20	61-6	9-86	Kreil.
Bistriz	47 07	24 33	1850-0	9 50 w.	0 55 w.	10-8 w.	62 34	+20	62-9	9-95	
Maros Vasarhely	46 32	24 38	1850-0	10 12 w.	0 55 w.	11-1 w.	62 15	+20	62-6	9-95	Kreil.
Stanislaw	48 55	24 45	1850-0	9 05 w.	0 55 w.	10-0 w.	63 55	+20	64-3	10-04	
Schassburg	46 13	24 52	1850-0	10 10 w.	0 55 w.	11-1 w.	61 43	+15	62-0	9-91	Kreil.
Fogaros	45 50	25 03	1850-0	9 41 w.	0 55 w.	10-6 w.	61 20	+15	61-6	9-85	
Kolomea	48 31	25 05	1850-0	9 03 w.	0 55 w.	10-0 w.	63 29	+15	63-7	9-97	Kreil.
Jakobeny	47 26	25 23	1850-0	8 50 w.	0 55 w.	9-8 w.	62 35	+15	62-8	9-95	
Tarnopol	49 33	25 37	1850-0	9 17 w.	0 55 w.	10-2 w.	64 23	+15	64-6	10-07	Kreil.
Czortkow	49 01	25 50	1850-0	8 50 w.	0 55 w.	9-8 w.	63 33	+15	63-8	10-00	
Czernowitz.....	48 17	26 01	1850-0	9 26 w.	0 55 w.	10-4 w.	63 21	+15	63-6	10-05	Kreil.
Suczawa	47 38	26 19	1850-0	8 50 w.	0 55 w.	9-8 w.	62 44	+15	63-0	9-96	
Busio	45 09	26 48	1829-0	12 30 w.	1 30 E.	11-0 w.	.....	.....	.....	.....	Russian Officers.
Butuschan	47 45	26 50	1831-0	9 44 w.	1 17 E.	8-5 w.	.....	.....	.....	.....
Roman	46 55	26 55	1828-0	11 31 w.	1 38 E.	9-9 w.	.....	.....	.....	.....	Russian Officers.
Jokshan	45 42	27 10	1829-0	11 19 w.	1 30 E.	9-8 w.	.....	.....	.....	.....
Jassi	47 10	27 35	1828-0	11 51 w.	1 38 E.	10-2 w.	.....	.....	.....	.....	Russian Officers.
Berlat	46 14	27 39	1830-0	10 45 w.	1 24 E.	9-4 w.	.....	.....	.....	.....
Brailow	45 16	27 58	1830-0	10 43 w.	1 24 E.	9-3 w.	.....	.....	.....	.....	Russian Officers.
Galatz.....	45 26	28 03	1830-0	10 43 w.	1 24 E.	9-3 w.	.....	.....	.....	.....
Kilia	45 26	29 20	1838-5	.....	.....	.....	.....	.....	.....	.....	Russian Officers.
			1850-0	7 40 w.	0 56 w.	8-6 w.	.....	.....	.....	.....
Sulina.....	45 09	29 42	1828-0	8 53 w.	1 38 E.	7-3 w.	.....	.....	.....	Kreil.	
1850-0	7 18 w.	0 48 w.	8-1 w.	.....	.....	.....	.....	.....
Serpent's Island	45 14	30 13	1850-0	6 52 w.	0 48 w.	7-7 w.	60 41	.....	60-7	10-04	Kreil.
Thiodousi Island	45 16	30 15	1859-5	5 34 w.	1 42 w.	7-3 w.	59 49	.....	59-8	.....
Odessa	46 29	30 43	1830-0	10 30 w.	1 12 E.	9-3 w.	.....	.....	.....	.....	Dirkoff.
			1850-0	8 37 w.	0 45 w.	9-4 w.	.....	.....	.....	.....
Otchakoff	46 37	31 32	1859-0	7 22 w.	1 39 w.	9-0 w.	62 09	.....	62-2	10-44	Kreil.
			1859-5	5 49 w.	1 42 w.	7-5 w.	61 32	.....	61-5	.....
Nicolaieff	46 59	31 58	1859-5	4 43 w.	1 42 w.	6-4 w.	61 14	.....	61-2	.....	Dirkoff.
Ak Mechel.....	45 30	32 42	1859-5	4 31 w.	1 42 w.	6-2 w.	60 08	.....	60-1	.....
Eupatoria	45 14	33 25	1859-5	4 32 w.	1 42 w.	6-2 w.	.....	.....	.....	.....	Dirkoff.
Theodosia	45 03	35 22	1820-5	8 10 w.	2 12 E.	6-0 w.	.....	.....	.....	.....
Cape Takli.....	45 06	36 27	1859-5	3 42 w.	1 42 w.	5-4 w.	.....	.....	.....	.....	Gauttier.
			1850-0	4 21 w.	0 45 w.	5-1 w.	60 14	.....	60-2	.....
Kertch	45 22	36 31	1859-5	2 56 w.	1 42 w.	4-6 w.	.....	.....	.....	.....	Dirkoff.
			1830-0	1 53 w.	1 12 E.	0-7 w.	62 14	.....	62-2	10-25	
Zaritzin	48 42	44 30	1830-0	1 52 w.	1 12 E.	0-7 w.	.....	.....	.....	.....	Hansteen.
			1850-0	.....	.....	.....	62 40	.....	62-7	10-19	
1869-5	2 10 E.	2 45 w.	0-6 w.	62 24	.....	62-4	10-32	.....		
Sarepta	48 30	44 36	1829-5	.....	.....	.....	62 16	+06	62-4	.....	Humboldt.
Wiasowskoie	48 19	45 33	1830-0	.....	.....	.....	61 56	+06	62-0	10-25	
Tschernoi Jarr	48 04	46 14	1830-0	1 38 w.	0 48 E.	0-8 w.	61 55	+06	62-0	.....	Hansteen.
			
Kopanowskaia	47 25	46 58	1830-0	.....	.....	.....	61 13	+06	61-3	10-21	Hansteen.

ZONE II.—Lat. 45° to 50° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.	Observers.	
				Observed.	Correction to Epoch 1842-5.	Corrected.	Observed.	Correction to Epoch 1842-5.	Corrected.			
Seroglasinskaia	46 59	47 29	1830-0	.....	.....	.....	60 43	+06	60.8	10.20	Hansteen.
Dschanger Chan	48 46	47 32	1830-0	0 50 W.	0 48 E.	0.0	62 23	+06	62.5	10.40	Hansteen.	
Birutchissa Island.....	45 44	47 39	1829-5	59 21	+06	59.5	59.5	10.28	Humboldt.
			1862-5	1 53 E.	1 40 W.	0.2 E.	59 40	-10	59.5			Ivatsinsk.
			1829-5	59 58	+06	60.1			Humboldt.
Astrachan	46 21	48 05	1830-5	1 12 W.	0 48 E.	0.4 W.	60 06	+06	60.2	60.2	10.33	Hansteen.
			1850-5	60 28	-04	60.4			Sawalief.
			1862-5	2 05 E.	1 40 W.	0.4 E.	60 23	-10	60.2			Ivatsinsk.
Goimenoi	48 57	49 48	1830-0	0 20 E.	0 48 E.	1.1 E.	62 27	+06	62.6	10.44	Hansteen.	
N. Coast of Caspian...	46 41	50 09	1862-5	2 50 E.	1 40 W.	1.2 E.	60 57	-10	60.8	.....	Ivatsinsk.
Kisilbinskoi	49 36	50 34	1830-0	0 49 E.	0 48 E.	1.6 E.	62 54	+06	63.0	10.43	Hansteen.	
Kannanow	49 26	50 35	1830-0	0 50 E.	0 48 E.	1.6 E.	.....	.....	.....	.....	Hansteen.
1 st E. Coast of Caspian	45 00	51 10	1862-5	2 59 E.	1 40 W.	1.3 E.	59 05	-10	58.9	10.31	Ivatsinsk.	
Mergenew	49 56	51 16	1830-0	1 17 E.	0 48 E.	2.1 E.	63 11	+06	63.3	10.53	Hansteen.	
Rakutchenaya	47 06	51 56	1862-5	3 53 E.	1 40 W.	2.2 E.	61 21	-10	61.2	10.41	Ivatsinsk.	
Ust Kamenogorsk.....	49 57	82 35	1829-5	64 48	+26	65.2	65.2	Humboldt.
			1834-5	7 02 E.	7.0 E.	64 57	+16	65.2			Federow.
			1830-5	65 14	+30	65.7			Fuss.
Baingol	48 52	105 23	1830-5	.....	.....	.....	64 30	+28	65.0	12.11	Fuss.
Chunzal	48 13	106 26	1831-5	1 06 E.	.....	1.1 E.	64 05	+28	64.6	11.97	Fuss.
Urga	47 56	106 41	1831-5	1 16 E.	1.3 E.	64 05	+28	64.6	64.6	11.89	Fuss.
			1868-0	1 13 E.	1.2 E.	65 41	-64	64.6			Fritsche.
			1831-5	63 21	+28	63.8			Fuss.
Nalaicha.....	47 47	107 17	1831-5	.....	.....	.....	63 39	+28	64.1	11.81	Fuss.
Bain-Chara	46 31	107 55	1831-5	.....	.....	.....	62 59	+28	63.5	11.74	Fuss.
Olon Obo	46 21	108 01	1831-5	0 02 W.	0 05 W.	0.1 W.	.....	.....	.....	.....	Fuss.
Dshidinskoi	49 58	108 12	1832-5	0 12 E.	0 05 W.	0.1 E.	.....	.....	.....	.....	Fuss.
Chapchaktu	46 02	108 34	1831-5	.....	.....	.....	62 24	+28	62.9	11.42	Fuss.
Giltgentai	46 54	108 45	1830-5	.....	.....	.....	63 13	+30	63.7	11.84	Fuss.
Mogoitu	45 50	108 52	1831-5	.....	.....	.....	61 49	+28	62.3	11.47	Fuss.
Mendshinskoi	49 26	108 54	1832-5	0 12 W.	0 05 W.	0.3 W.	65 31	+25	65.9	12.10	Fuss.	
Uizsyn	45 34	109 15	1831-5	.....	.....	.....	61 44	+28	62.2	11.46	Fuss.
Schibétu	46 29	109 37	1830-5	.....	.....	.....	62 34	+30	63.1	11.95	Fuss.
Kukuderissu	45 08	109 41	1831-5	.....	.....	.....	61 12	+28	61.7	11.46	Fuss.
Zsulgétu	46 16	110 09	1830-5	.....	.....	.....	62 38	+30	63.1	11.62	Fuss.
Chologur	46 00	110 33	1832-0	0 49 W.	0 07 W.	0.9 W.	61 54	-25	62.3	11.73	Fuss.	
Durbanderetu	45 48	111 13	1832-5	.....	.....	.....	61 47	+25	62.2	11.76	Fuss.
Ergi	45 32	111 24	1832-5	1 08 W.	0 07 W.	1.3 W.	61 22	+25	61.8	11.58	Fuss.	
Alsanskoi	49 28	111 29	1832-5	0 48 W.	0 07 W.	0.9 W.	65 21	+25	65.8	12.04	Fuss.	
Abagaitujewskoi	49 35	117 49	1832-5	2 54 W.	0 07 W.	3.0 W.	64 48	+25	65.2	11.77	Fuss.	
At sea.....	49 36	157 53	1849-5	5 22 E.	.....	5.4 E.	.....	.....	.....	.....	Kellett.
At sea.....	48 49	158 13	1849-5	4 23 E.	.....	4.4 E.	.....	.....	.....	.....	Kellett.
At sea.....	45 27	159 02	1827-5	3 58 E.	.....	4.0 E.	57 56	.....	57.9	9.74	Lütke.
At sea.....	47 28	159 45	1849-5	4 00 E.	.....	4.0 E.	.....	.....	.....	.....	Kellett.
At sea.....	47 16	160 55	1828-0	3 13 E.	.....	3.2 E.	.....	.....	.....	.....	Lütke.
At sea.....	45 33	161 05	1849-5	4 30 E.	.....	4.5 E.	.....	.....	.....	.....	Kellett.
At sea.....	48 50	162 01	1850-0	4 37 E.	.....	4.6 E.	.....	.....	.....	.....	Kellett.
At sea.....	48 34	164 38	1851-5	7 10 E.	.....	7.2 E.	.....	.....	.....	.....	Collinson.
At sea.....	49 31	165 18	1851-5	.....	.....	.....	60 46	.....	60.8	.....	Collinson.
At sea.....	49 58	166 25	1850-5	.....	.....	.....	61 57	.....	62.0	.....	Collinson.
At sea.....	49 12	167 08	1854-5	.....	.....	.....	61 30	.....	61.5	.....	Collinson.
At sea.....	46 19	169 50	1848-5	.....	.....	.....	59 42	.....	59.7	.....	Moore.
At sea.....	45 04	170 23	1848-5	.....	.....	.....	57 17	.....	57.3	.....	Moore.
At sea.....	48 10	170 27	1848-5	.....	.....	.....	60 19	.....	60.3	.....	Moore.
At sea.....	48 31	171 06	1848-5	.....	.....	.....	60 58	.....	61.0	.....	Moore.
At sea.....	48 15	171 09	1829-5	10 25 E.	.....	10.4 E.	.....	.....	.....	.....	Erman.
At sea.....	47 04	176 36	1829-5	13 03 E.	.....	13.1 E.	.....	.....	.....	.....	Erman.
At sea.....	47 58	186 47	1829-5	13 07 E.	.....	13.1 E.	.....	.....	.....	.....	Erman.
At sea.....	48 50	190 34	1852-5	15 52 E.	.....	15.9 E.	.....	.....	.....	.....	Crane.
At sea.....	46 16	191 07	1852-5	16 10 E.	.....	16.2 E.	.....	.....	.....	.....	Crane.
At sea.....	48 41	193 00	1850-0	17 05 E.	.....	17.1 E.	.....	.....	.....	.....	Kellett.
At sea.....	46 56	196 53	1850-0	17 34 E.	.....	17.6 E.	.....	.....	.....	.....	Kellett.
At sea.....	49 54	197 34	1829-5	21 01 E.	.....	21.0 E.	.....	.....	.....	.....	Erman.
At sea.....	45 19	200	1850-0	17 46 E.	.....	17.8 E.	.....	.....	.....	.....	Kellett.
At sea.....	45 14	200 19	1850-0	18 45 E.	.....	18.8 E.	.....	.....	.....	.....	Kellett.
At sea.....	48 08	213 21	1827-5	22 35 E.	.....	22.6 E.	.....	.....	.....	.....	Lütke.

ZONE II.—Lat. 45° to 50° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.	Observers.			
				Observed.	Correction to Epoch 1842-5.	Corrected.	Observed.	Correction to Epoch 1842-5.	Corrected.					
At sea.....	48 44	216 37	1827-5	23 01 E.	.....	23-0 E.	.....	.....	68 26	.....	12-36	Lütke.		
At sea.....	48 27	225 55	1829-5	21 55 E.	.....	21-9 E.	.....	.....	.....	.....	.....	Erman.		
Hecate Bay	49 15	234 04	1861-5	22 39 E.	1 35 W.	21-1 E.	.....	.....	72 37	.....	72-6	.....	Richards.	
New Dungeness Light.	48 11	234 54	1856-5	21 43 E.	1 10 W.	20-6 E.	.....	.....	.....	.....	.....	.....	U. S. Coast Survey.	
Onchucklin Harbour...	49 00	235 00	1861-5	24 13 E.	1 35 W.	22-6 E.	.....	.....	.....	.....	.....	.....	Richards.	
Henry Bay	49 36	235 09	1860-5	.....	.....	.....	.....	.....	72 25	.....	72-4	.....	Richards.	
Barclay Sound	49 14	235 10	1861-5	24 37 E.	1 15 W.	23-4 E.	.....	.....	.....	.....	.....	.....	Richards.	
Talooch Island Light..	48 23	235 16	1852-5	21 30 E.	1 40 W.	19-8 E.	.....	.....	.....	.....	.....	.....	U. S. Coast Survey.	
Neeah Bay.....	48 22	235 23	1855-5	21 47 E.	-1 05 W.	20-7 E.	.....	.....	71 07	.....	71-1	.....	U. S. Coast Survey.	
			1855-5	.....	.....	.....	.....	.....	71 16	.....	71-3	71-2	13-21	Troubridge.
			1830-5	.....	.....	.....	.....	.....	69 30	.....	69-5	.....	.....	Douglas.
Cape Disappointment.	46 17	235 58	1839-5	19 12 E.	0 15 E.	19-5 E.	.....	.....	69 27	.....	69-5	69-5	12-52	Belcher.
			1842-5	20 00 E.	.....	20-0 E.	.....	.....	.....	.....	.....	.....	12-39	Duplot de Mopas.
			1851-5	20 32 E.	0 45 W.	19-8 E.	.....	.....	.....	.....	.....	.....	.....	U. S. Coast Survey.
Portland (Oregon) ...	45 31	236 00	1858-5	20 00 E.	1 20 W.	18-7 E.	.....	.....	69 31	.....	69-5	.....	.....	Friesach.
Namaimo	49 10	236 00	1862-5	22 57 E.	1 40 W.	21-3 E.	.....	.....	71 54	.....	71-9	.....	.....	Richards.
Whiffen Spit.....	48 22	236 16	1864-5	20 20 E.	1 28 W.	18-9 E.	.....	.....	.....	.....	.....	.....	.....	Pender.
Point George.....	46 11	236 20	1830 0	.....	.....	.....	.....	.....	69 17	.....	69-3	.....	.....	Douglas.
Esquimalt	48 26	236 33	1859-5	21 58 E.	0 51 W.	21-1 E.	.....	.....	71 34	.....	71-6	13-15	.....	Haig.
			1862-5	.....	.....	.....	.....	.....	71 52	.....	71-9	71-7	.....	Richards.
			1864 0	22 10 E.	1 05 W.	21-1 E.	.....	.....	.....	.....	.....	.....	.....	Pender.
Victoria	48 26	236 35	1858-5	21 40 E.	0 45 W.	20-9 E.	.....	.....	71 39	.....	71-7	71-7	.....	Friesach.
Laurel Point, Victoria	48 25	236 37	1862-5	22 18 E.	1 00 W.	21-3 E.	.....	.....	71 39	.....	71-7	.....	.....	Richards.
Garry Pt., Frazer River	49 07	236 49	1864 5	22 58 E.	1 06 W.	21-9 E.	.....	.....	.....	.....	.....	.....	.....	Pender.
Burrard Inlet	49 16	236 50	1859-5	.....	.....	.....	.....	.....	72 14	.....	72-2	.....	.....	Richards.
Semiahmoo Spit	48 59	237 00	1858-5	.....	.....	.....	.....	.....	72 15	.....	72-3	.....	.....	Richards.
Olympia.....	47 03	237 05	1856-5	20 47 E.	0 42 W.	20-1 E.	.....	.....	.....	.....	.....	.....	.....	U. S. Coast Survey.
New Westminster.....	49 13	237 07	1862-5	22 40 E.	1 00 W.	21-7 E.	.....	.....	72 15	.....	72-3	.....	.....	Richards.
River Multnomah.....	45 15	237 13	1830-0	.....	.....	.....	.....	.....	68 57	.....	69-0	.....	.....	Douglas.
Point Hudson	48 07	237 15	1856-5	21 39 E.	0 28 W.	21-2 E.	.....	.....	.....	.....	.....	.....	.....	U. S. Coast Survey.
			1830-5	.....	.....	.....	.....	.....	69 40	.....	69-7	.....	.....	Douglas.
Fort Vancouver.....	45 37	237 32	1839-5	19 22 E.	0 06 E.	19-5 E.	.....	.....	69 22	.....	69-4	69-5	12-63	Douglas.
			1860-0	20 05 E.	0 35 W.	19-5 E.	.....	.....	69 17	.....	69-3	.....	12-60	Belcher.
			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13-05	Haig.
Nisqually	47 07	237 35	1859-0	21 23 E.	0 33 W.	20-8 E.	.....	.....	70 40	.....	70-7	.....	.....	Haig.
Sumass Prairie	49 01	237 48	1858-5	21 30 E.	0 32 W.	21-0 E.	.....	.....	72 22	.....	72-4	.....	.....	Haig.
Schweltza Lake	49 02	238 00	1859-5	21 37 E.	0 34 W.	21-1 E.	.....	.....	72 04	.....	72-1	.....	.....	Haig.
Rapids of Columbia R.	45 40	238 12	1830-0	.....	.....	.....	.....	.....	69 27	.....	69-5	.....	.....	Douglas.
Chilukweyh Lake	49 02	238 37	1860-0	.....	.....	.....	.....	.....	72 31	.....	72-5	.....	.....	Haig.
Dallas, 3 mile Camp...	45 35	239 11	1860-0	.....	.....	.....	.....	.....	69 42	.....	69-7	69-9	.....	Haig.
Dallas, 8 mile Camp...	45 40	239 11	1860-0	.....	.....	.....	.....	.....	70 05	.....	70-1	.....	.....	Haig.
Ashtnolou River	49 10	240 00	1860-0	21 50 E.	0 35 W.	21-3 E.	.....	.....	72 37	.....	72-6	.....	.....	Haig.
Ashtnolou Station.....	49 00	240 00	1860-0	22 40 E.	0 35 W.	22-1 E.	.....	.....	72 27	.....	72-5	.....	.....	Haig.
Oakanagan	48 05	240 33	1833-0	.....	.....	.....	.....	.....	71 45	.....	71-8	.....	.....	Douglas.
Osoyous.....	49 00	240 36	1860-0	22 14 E.	0 35 W.	21-7 E.	.....	.....	.....	.....	.....	.....	.....	Haig.
River Walla Walla	46 03	241 12	1830 0	.....	.....	.....	.....	.....	70 14	.....	70-2	.....	.....	Douglas.
Fort Walla Walla.....	46 04	241 12	1853-0	19 40 E.	0 21 W.	19-3 E.	.....	.....	.....	.....	.....	.....	.....	U. S. Exploration.
Inshwintum.....	49 00	241 32	1860-0	20 17 E.	0 35 W.	19-7 E.	.....	.....	72 49	.....	72-8	.....	.....	Haig.
Fort Colville.....	48 40	241 55	1860-0	21 40 E.	0 35 W.	21-1 E.	.....	.....	72 42	.....	72-7	.....	.....	Haig.
Chemikane River	48 00	242 15	1861-0	21 28 E.	0 37 W.	20-9 E.	.....	.....	72 04	.....	72-1	.....	.....	Haig.
Sinyakwateen	48 09	243 16	1861-0	21 16 E.	0 37 W.	20-7 E.	.....	.....	72 35	.....	72-6	.....	.....	Haig.
Pack River	48 22	243 32	1861-0	22 51 E.	0 37 W.	22-2 E.	.....	.....	72 46	.....	72-8	.....	.....	Haig.
Chelemta	48 41	243 41	1861-0	22 11 E.	0 37 W.	21-6 E.	.....	.....	73 08	.....	73-1	.....	.....	Haig.
Kootenay, S. Crossing.	48 22	244 39	1860-0	22 16 E.	0 35 W.	21-7 E.	.....	.....	72 48	.....	72-8	.....	.....	Haig.
On Kootenay River ...	48 40	244 43	1861-0	23 24 E.	0 37 W.	22-8 E.	.....	.....	73 07	.....	73-1	.....	.....	Haig.
Tobacco Plains	48 57	244 52	1861-0	.....	.....	.....	.....	.....	73 23	.....	73-4	.....	.....	Haig.
Wigwam River	49 00	245 15	1861-0	23 52 E.	0 19 W.	23-6 E.	.....	.....	73 31	.....	73-5	.....	.....	Haig.
Akamina	49 01	245 56	1861-0	23 12 E.	0 19 W.	22-9 E.	.....	.....	73 43	.....	73-7	.....	.....	Haig.
Fort Owen.....	46 31	246 02	1853-0	19 25 E.	.....	19-4 E.	.....	.....	.....	.....	.....	.....	.....	U. S. Exploration.
Fort Benton.....	47 52	249 24	1853-0	19 00 E.	.....	19-0 E.	.....	.....	.....	.....	.....	.....	.....
Fort Union	48 00	256 01	1853-0	16 48 E.	.....	16-8 E.	.....	.....	.....	.....	.....	.....	.....

ZONE II.—Lat. 45° to 50° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.	Observers.
				Observed.	Correction to Epoch 1842.5.	Corrected.	Observed.	Correction to Epoch 1842.5.	Corrected.		
Upper Fort Garry	49 53	262 58	1843.5	16 00 E.	0 03 E.	16.1 E.	78 18	.....	78.3	14.07	Lefroy.
Halting Place	49 26	265 12	1857.5	10 17 E.	0 45 E.	11.0 E.	.....	.....	.....	.....	Palliser.
Lake of the Woods	49 19	265 18	1843.5	.....	.....	.....	78 04	.....	78.1	14.13	Lefroy.
Lake of the Woods	49 28	265 18	1843.5	12 53 E.	0 03 E.	12.9 E.	78 17	.....	78.3	14.05	Lefroy.
Rat Portage	49 46	265 25	1843.5	.....	.....	.....	78 08	.....	78.1	14.01	Lefroy.
Rainy River	48 48	265 29	1843.5	13 07 E.	0 03 E.	13.2 E.	77 57	.....	78.0	.....	Lefroy.
Halting Place	48 50	266 02	1857.5	11 20 E.	0 45 E.	12.1 E.	.....	.....	.....	.....	Palliser.
Fort Francis	48 37	266 31	1843.5	10 38 E.	0 05 E.	10.7 E.	77 34	.....	77.6	14.10	Lefroy.
			1845.5	.....	.....	.....	77 32	.....	77.5		Rae.
			1857.5	9 31 E.	1 15 E.	10.8 E.	.....	.....	.....		Palliser.
Rainy Lake	48 32	267 04	1843.5	11 28 E.	0 05 E.	11.6 E.	77 48	.....	77.8	14.07	Lefroy.
Sturgeon Lake	48 27	267 19	1843.5	.....	.....	.....	77 45	.....	77.8	14.08	Lefroy.
Halting Place	48 27	267 30	1857.5	9 53 E.	1 15 E.	11.1 E.	.....	.....	.....	.....	Palliser.
Second Portage	48 15	267 33	1843.5	10 15 E.	0 05 E.	10.3 E.	77 40	.....	77.7	14.04	Lefroy.
Lake à la Crosse	48 24	267 50	1843.5	7 53 E.	0 05 E.	8.0 E.	77 51	.....	77.9	14.08	Lefroy.
River St. Lewis	46 43	267 50	1824.5	12 30 E.	1 30 W.	11.0 E.	.....	.....	.....	.....	Bayfield.
Point on Coast	46 42	268 10	1824.5	12 20 E.	1 30 W.	10.8 E.	.....	.....	.....	.....	Bayfield.
Point on Coast	46 48	268 30	1824.5	12 27 E.	1 30 W.	11.0 E.	.....	.....	.....	.....	Bayfield.
Two Rivers Portage	48 35	268 33	1843.5	11 00 E.	0 05 E.	11.1 E.	77 49	.....	77.8	13.99	Lefroy.
Perch Lake	48 35	268 48	1857.5	8 14 E.	1 15 E.	9.5 E.	.....	.....	.....	.....	Palliser.
French Portage	48 35	268 53	1843.5	.....	.....	.....	78 20	.....	78.3	14.08	Lefroy.
La Pointe	46 47	269 02	1843.5	.....	.....	.....	76 56	.....	76.9	14.19	Locke.
S. Point of Madeline Island	46 45	269 05	1824.5	9 48 E.	1 30 W.	8.3 E.	.....	.....	.....	.....	Bayfield.
Point on Coast	47 33	269 10	1824.5	10 30 E.	1 30 W.	9.0 E.	.....	.....	.....	.....	Bayfield.
Savannah Portage	48 53	269 52	1843.5	.....	.....	.....	78 22	.....	78.4	14.13	Lefroy.
			1844.5	7 46 E.	0 10 E.	7.9 E.	.....	.....	.....		Lefroy.
			1857.5	6 53 E.	1 15 E.	8.1 E.	.....	.....	.....		Palliser.
Point on Coast	46 48	269 59	1824.5	10 15 E.	1 30 W.	8.8 E.	.....	.....	.....	Bayfield.	
Prairie Portage	48 58	269 59	1843.5	.....	.....	.....	78 26	.....	78.4	14.12	Lefroy.
Trembling Portage	48 31	270 00	1857.5	6 21 E.	1 15 E.	7.6 E.	.....	.....	.....	.....	Palliser.
Halting Place	48 55	270 06	1857.5	9 05 E.	1 15 E.	10.3 E.	.....	.....	.....	.....	Palliser.
Halting Place	48 45	270 07	1857.5	8 54 E.	1 15 E.	10.2 E.	.....	.....	.....	.....	Palliser.
Grand Portage	47 58	270 11	1824.5	11 00 E.	1 30 W.	9.5 E.	.....	.....	.....	.....	Bayfield.
Portage Bearté	48 25	270 15	1843.5	.....	.....	.....	77 14	.....	77.2	14.02	Lefroy.
Bad Portage	48 29	270 20	1843.5	5 33 E.	0 05 E.	5.6 E.	.....	.....	.....	.....	Lefroy.
Dog Lake	48 47	270 20	1843.5	6 26 E.	0 05 E.	6.5 E.	.....	.....	.....	.....	Lefroy.
Dog Portage	48 39	270 26	1843.5	.....	.....	.....	78 27	.....	78.5	14.14	Lefroy.
Ontanogon River	46 52	270 30	1824.5	8 40 E.	1 30 W.	7.2 E.	.....	.....	.....	.....	Bayfield.
			1843.5	.....	.....	.....	77 13	.....	77.2	14.12	Locke.
			1824.5	9 05 E.	1 30 W.	7.6 E.	.....	.....	.....	Bayfield.	
Fort William	48 24	270 37	1844.5	6 21 E.	0 10 E.	6.5 E.	78 06	.....	78.1	14.01	Lefroy.
			1845.5	.....	.....	.....	78 11	.....	78.2		Rae.
		
Pointe Tonnerre	48 19	270 58	1843.5	.....	.....	.....	78 23	.....	78.4	14.20	Lefroy.
Little Trout River	47 09	271 06	1824.5	9 12 E.	1 30 W.	7.7 E.	.....	.....	.....	.....	Bayfield.
Mean of 5 Stations	47 29	271 10	1843.5	.....	.....	.....	78 05	.....	78.1	.....	Locke.
Isle Royale	48 07	271 11	1824.5	9 39 E.	1 30 W.	8.2 E.	.....	.....	.....	.....	Bayfield.
			1843.5	.....	.....	.....	78 08	.....	78.1	14.30	Locke.
Eagle River	47 27	271 37	1843.5	.....	.....	.....	77 55	.....	77.9	14.08	Locke.
Mean of Stations	47 16	271 49	1843.5	.....	.....	.....	77 44	.....	77.7	.....	Locke.
Huron River	46 55	271 53	1824.5	7 56 E.	1 30 W.	6.4 E.	.....	.....	.....	.....	Bayfield.
Isle Saint Ignace	48 45	271 58	1824.5	8 15 E.	1 30 W.	6.8 E.	.....	.....	.....	.....	Bayfield.
Houghton's River	47 28	271 59	1843.5	.....	.....	.....	77 17	.....	77.3	13.94	Locke.
Point Keewai	47 29	272 06	1824.5	7 32 E.	1 30 W.	6.0 E.	.....	.....	.....	.....	Bayfield.
Terre Platte	48 40	272 15	1843.5	5 40 E.	0 05 E.	5.8 E.	78 54	.....	78.9	14.03	Lefroy.
Encampment	46 44	272 17	1843.5	.....	.....	.....	76 58	.....	77.0	14.05	Locke.
Lake Superior	48 46	272 20	1844.5	.....	.....	.....	78 24	.....	78.4	.....	Lefroy.
Small River	46 32	272 50	1824.5	7 21 E.	1 30 W.	5.9 E.	.....	.....	.....	.....	Bayfield.
Point on Coast	48 44	273 00	1824.5	7 42 E.	1 30 W.	6.2 E.	.....	.....	.....	.....	Bayfield.
Grand Island	46 27	273 18	1824.5	6 16 E.	1 30 W.	4.8 E.	.....	.....	.....	.....	Bayfield.
Fort Pic	48 38	273 21	1844.5	5 31 E.	0 10 E.	5.7 E.	78 38	.....	78.6	13.90	Lefroy.
Peninsular Harbour	48 44	273 32	1824.5	6 20 E.	1 30 W.	4.8 E.	78 34	.....	78.6	.....	Bayfield.

ZONE II.—Lat. 45° to 50° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.	Observers.			
				Observed.	Correction to Epoch 1842·5.	Corrected.	Observed.	Correction to Epoch 1842·5.	Corrected.					
White River	48 33	273 33	1844·5	2 10 E.	0 10 E.	2·3 E.	78 33	.....	78·6	14·12	Lefroy.		
Otter Head	48 05	273 50	1824·5	5 07 E.	1 30 W.	3·6 E.	.....	.....	.....	.....	Bayfield.
Le Petit Mort	47 58	274 11	1843·5	4 59 E.	0 05 E.	5·1 E.	.....	.....	.....	.....	Lefroy.
South Manitou Island	45 05	274 22	1841·5	.....	.....	.....	75 59	.....	76·0	76·0	Loomis.
Near Chienne River...	47 52	274 36	1842·5	75 57	76·0		13·97	Younghusband.		
Gargantua	47 35	274 49	1824·5	4 06 E.	1 30 W.	2·6 E.	.....	.....	.....	.....	Bayfield.
White Fish Point.....	46 46	274 54	1844·0	.....	.....	.....	77 56	.....	77·9	.....	Lefroy.
Michipicou.....	47 56	274 56	1824·5	4 50 E.	1 30 W.	3·3 E.	.....	.....	.....	.....	Bayfield.
			1824·5	4 33 E.	1 30 W.	3·1 E.	.....	.....	.....	.....	Bayfield.
			1844·5	3 49 E.	0 10 E.	4·0 E.	3·5 E.	78 07	78·1	78·1	13·98	Lefroy.	
Pointe au Crêpe	46 58	275 02	1843·5	2 15 E.	0 05 E.	2·3 E.	77 12	.....	77·2	14·21	Lefroy.		
Wangoshane Point ...	45 45	275 04	1853·5	2 13 E.	0 55 E.	3·1 E.	.....	.....	.....	.....	U. S. Coast Survey.
Old Michilima- chinac Point	45 47	275 06	1824·5	5 02 E.	1 30 W.	3·5 E.	.....	.....	.....	.....	Bayfield.
Montreal Island	47 19	275 08	1824·5	3 28 E.	1 30 W.	2·0 E.	.....	.....	.....	.....	Bayfield.
Point Iroquois	46 29	275 13	1824·5	3 22 E.	1 30 W.	1·9 E.	.....	.....	.....	.....	Bayfield.
Gros Cap	46 32	275 17	1841·5	.....	.....	.....	77 05	.....	77·1	.....	Loomis.
Machinac	45 51	275 19	1841·5	76 35	76·6	76·6	14·10	Nicollet.		
			1841·5	76 38	76·6			Loomis.		
			1843·5	76 39	76·7			Locke.		
Pointe aux Pins	46 29	275 19	1843·0	77 13	77·2	77·2	14·09	Lefroy.		
			1845·0	77 16	77·3			Rae.		
Sault St. Marie.....	46 31	275 28	1843·0	77·3	14·08	Locke.		
			1843·5	1 08 E.	0 05 E.	1·2 E.	13·98	Lefroy.
			1845·0	0 46 E.	0 13 E.	1·0 E.	1·1 E.		Lefroy.
Fort Brady	46 30	275 36	1845·0	.....	.....	.....	77 20	.....	77·3	.....	Rae.
Head of Lake George..	46 32	275 40	1841·5	.....	.....	.....	77 30	.....	77·5	.....	Loomis.
St. Joseph's Island ...	46 04	275 51	1825·5	3 19 E.	1 25 W.	1·9 E.	.....	.....	.....	.....	Bayfield.
Portlock Harbour.....	46 20	275 53	1822·5	3 00 E.	1 40 W.	1·3 E.	.....	.....	.....	.....	Bayfield.
Duncan City	45 36	275 53	1822·5	2 51 E.	1 40 W.	1·2 E.	.....	.....	.....	.....	Bayfield.
Bear Encampment ...	46 20	276 04	1815·5	1 53 E.	0 45 E.	2·6 E.	.....	.....	.....	.....	U. S. Coast Survey.
False Detour	45 53	276 18	1845·5	0 03 E.	0 15 E.	0·3 E.	.....	.....	.....	.....	Lefroy.
False Presqu'île	45 18	276 23	1819·5	3 13 E.	1 55 W.	1·3 E.	.....	.....	.....	.....	Bayfield.
Tessalon Point	46 16	276 29	1817·5	2 59 E.	2 05 W.	0·9 E.	.....	.....	.....	.....	Bayfield.
Missesauga.....	46 08	276 50	1843·5	0 31 W.	0 05 E.	0·4 W.	76 59	.....	77·0	14·02	Lefroy.		
Cranberry Bay	46 11	276 57	1843·5	0 55 W.	0 05 E.	0·8 W.	.....	.....	.....	.....	Lefroy.
Snake Island	46 09	277 05	1845·5	0 25 W.	0 15 E.	0·2 W.	.....	.....	.....	.....	Lefroy.
Fort La Cloche.....	46 07	277 35	1843·5	.....	.....	.....	77 06	.....	77·1	13·87	Lefroy.
S.E. Point of Mani- toulin Island	45 28	278 06	1843·5	1 58 W.	0 05 E.	1·9 W.	76 50	.....	76·8	13·64	Lefroy.		
Cape Hurd.....	45 14	278 09	1821·5	1 13 E.	1 45 W.	0·5 W.	.....	.....	.....	.....	Bayfield.
Lake Huron	46 00	278 10	1821·5	0 21 E.	1 45 W.	1·4 W.	.....	.....	.....	.....	Bayfield.
Rattlesnake Harbour..	45 32	278 11	1843·5	.....	.....	.....	77 06	.....	77·1	13·93	Lefroy.
S.W. Point of Bears Rump Island.....	45 19	278 20	1821·5	0 50 E.	1 45 W.	0·9 W.	.....	.....	.....	.....	Bayfield.
Point on Coast	45 57	278 22	1821·5	0 24 E.	1 45 W.	1·4 W.	.....	.....	.....	.....	Bayfield.
Half Moon Island.....	45 27	278 25	1821·5	0 31 W.	1 45 W.	2·3 W.	.....	.....	.....	.....	Bayfield.
Lake Huron	45 57	278 28	1821·5	0 22 E.	1 45 W.	1·4 W.	.....	.....	.....	.....	Bayfield.
White Shingle Bank...	45 37	278 29	1843·5	0 38 W.	0 05 E.	0·6 W.	.....	.....	.....	.....	Lefroy.
Cabot's Head, Wing- field Basin	45 15	278 34	1821·5	0 21 E.	1 45 W.	1·4 W.	.....	.....	.....	.....	Bayfield.
Chin Cape	45 07	278 35	1819·5	0 24 E.	1 55 W.	1·5 W.	.....	.....	.....	.....	Bayfield.
Point au Croix	45 55	278 42	1819·5	0 39 E.	1 55 W.	1·3 W.	.....	.....	.....	.....	Bayfield.
Islet off Pt. Grondine..	45 54	278 45	1843·5	0 32 W.	1 45 W.	2·3 W.	76 31	.....	76·5	14·02	Lefroy.		
Ricolet Falls	45 57	278 59	1821·5	.....	.....	.....	.....	.....	.....	.....	Bayfield.
Islet off Henvey Inlet.	45 51	279 07	1821·5	1 33 E.	1 45 W.	0·2 W.	76 45	.....	76·8	14·15	Lefroy.		
Islet off Franklin Inlet	45 33	279 22	1821·5	0 40 E.	1 45 W.	1·1 W.	.....	.....	.....	.....	Bayfield.
Western Isles	45 05	279 35	1820·5	1 25 E.	1 50 W.	0·4 W.	.....	.....	.....	.....	Bayfield.
Lake Nipissing	46 13	280 01	1843·5	.....	.....	.....	77 10	.....	77·2	13·90	Lefroy.
Lac du Grand Vase ...	46 18	280 34	1843·5	.....	.....	.....	77 22	.....	77·4	13·97	Lefroy.

ZONE II.—Lat. 45° to 50° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.	Observers.			
				Observed.	Correction to Epoch 1842·5.	Corrected.	Observed.	Correction to Epoch 1842·5.	Corrected.					
Portage du Grand Vase	46 19	280 53	1843·5	3 52 w.	0 05 E.	3·8 w.	.....	.....	.....	.....	Lefroy.
Little River	46 18	281 17	1843·5	.....	.....	.....	77 29	.....	77·5	13·91	Lefroy.
Tron Portage	46 15	281 27	1843·5	.....	.....	.....	77 24	.....	77·4	13·93	Lefroy.
Roche Capitaine	46 15	281 40	1843·5	4 48 w.	0 05 E.	4·7 w.	.....	.....	.....	.....	Lefroy.
Deux Joachim's Point.	46 12	281 41	1843·5	.....	.....	.....	77 04	.....	77·1	13·85	Lefroy.
Pointe Baptême	46 06	282 34	1843·5	.....	.....	.....	77 27	.....	77·5	13·79	Lefroy.
Fort Coulange	45 56	283 04	1843·5	.....	.....	.....	77 30	.....	77·5	13·95	Lefroy.
Fort Portage	45 36	283 07	1843·5	5 11 w.	0 05 E.	5·1 w.	.....	.....	.....	.....	Lefroy.
Grand Calumet	45 45	283 20	1843·5	.....	.....	.....	76 44	.....	76·7	13·82	Lefroy.
Chat Falls	45 26	283 28	1843·5	.....	.....	.....	.....	.....	.....	13·93	Lefroy.
Point Aylmer	45 29	284 12	1843·5	6 58 w.	0 05 E.	6·9 w.	76 41	.....	76·7	13·81	Lefroy.		
Alfred Township	45 37	284 48	1843·5	6 58 w.	0 05 E.	6·9 w.	.....	.....	.....	.....	Lefroy.
Pointe aux Chênes	45 37	285 05	1843·5	7 28 w.	0 05 E.	7·4 w.	76 55	.....	76·9	13·66	Lefroy.		
Cornwall	45 02	285 13	1845·0	.....	.....	.....	76 16	.....	76·3	13·79	Youngusband.
Carillon	45 36	285 28	1843·5	8 41 w.	0 05 E.	8·6 w.	.....	.....	.....	.....	Lefroy.
River La Graise	45 36	285 38	1843·5	8 26 w.	0 05 E.	8·4 w.	.....	.....	.....	.....	Lefroy.
La Combes	45 32	285 51	1843·5	.....	.....	.....	76 51	.....	76·9	13·81	Lefroy.
Montreal and St. Helen's	45 30	286 25	1834·5	8 00 w.	0 40 w.	8·7 w.	77 09	77·2	77·1	13·78	13·65	Bayfield.	
			1842·5	8 58 w.	9·0 w.								} 8·9 w.
			1843·5	.....	.....	.....					
			1845·5	.....	.....	.....					
			1859·5	.....	.....	.....					
Rouse's Point	45 00	286 40	1844·5	11 28 w.	0 10 E.	11·3 w.	76 40	.....	76·7	.....	Graham.	
Ile de Grace	46 06	286 53	1830·5	10 27 w.	1 00 w.	11·5 w.	.....	.....	.....	.....	Bayfield.
Stone Island	46 06	286 58	1830·5	10 30 w.	1 00 w.	11·5 w.	.....	.....	.....	.....	Bayfield.
Sorel	46 03	287 00	1830·5	11 00 w.	1 00 w.	12·0 w.	77 17	77·3	77·3	13·74	13·74	Bayfield.	
			1842·5	11 22 w.	.....	11·4 w.							
St. John's	45 19	287 00	1842·5	11 22 w.	11·4 w.	77 00	77·0	Lefroy.		
Ice, Lake St. Peter	46 14	287 16	1828·5	11 15 w.	1 10 w.	12·4 w.	Bayfield.		
River St. Maurice	46 21	287 17	1835·5	11 32 w.	0 35 w.	12·1 w.	Bayfield.		
Three Rivers	46 19	287 24	1842·5	11 58 w.	.....	12·0 w.	77 11	.....	77·2	13·82	Lefroy.	
Drumondville	45 53	287 26	1842·5	12 28 w.	12·5 w.	Lefroy.		
Ile Bigot	46 26	287 36	1835·5	12 52 w.	0 35 w.	13·5 w.	Bayfield.		
River Champlain	46 27	287 36	1835·5	12 31 w.	0 35 w.	13·1 w.	Bayfield.		
Grouldine	46 34	287 36	1835·5	12 27 w.	0 35 w.	13·0 w.	Bayfield.		
Lake Memphremagog	45 01	287 41	1845·5	76 09	76·2	Whipple.		
Stanstead	45 02	287 50	1842·5	76 20	76·3	13·61	Lefroy.		
Platon Point	46 40	288 06	1837·5	12 52 w.	0 25 w.	13·3 w.	Boundary Survey.		
Canaan Corner	45 01	288 30	1845·5	12 22 w.	0 15 E.	12·1 w.	76 24	76·4	Bayfield.		
Quebec	46 49	288 44	1834·0	14 14 w.	0 42 w.	14·9 w.	77 15	77·3	77·2	13·80	13·68	Bayfield.	
			1842·5	14 12 w.	.....	14·2 w.							
			1845·5	.....	.....	.....					
			1859·5	16 17 w.	1 25 E.	14·9 w.								
Prospect Hill	45 15	288 46	1845·5	12 17 w.	0 15 E.	12·0 w.	Boundary Survey.		
Connecticut River	45 15	288 47	1845·5	12 00 w.	0 15 E.	11·8 w.	Boundary Survey.		
Highland Boundary	45 18	288 55	1845·5	13 20 w.	0 15 E.	13·1 w.	Boundary Survey.		
Arnold's River	45 20	289 05	1845·5	13 30 w.	0 15 E.	13·3 w.	Boundary Survey.		
Dead River	45 26	289 12	1845·5	13 10 w.	0 15 E.	12·9 w.	Boundary Survey.		
Highland Boundary	45 31	289 17	1845·5	13 25 w.	0 15 E.	13·2 w.	Boundary Survey.		
Highland Boundary	45 37	289 23	1844·5	13 37 w.	0 10 E.	13·5 w.	Boundary Survey.		
Crane Island	47 05	289 28	1831·5	14 28 w.	0 55 w.	15·4 w.	77 15	77·1	77·2	13·63	13·61	Bayfield.	
At sea	47 08	289 28	1842·5	14 00 w.	.....	14·0 w.							
Highland Boundary	45 42	289 32	1844·5	13 50 w.	0 10 E.	13·7 w.								
Ile aux Condres	47 25	289 34	1831·5	15 17 w.	0 55 w.	16·2 w.	Bayfield.	
Taschereaus	45 49	289 36	1844·5	14 07 w.	0 10 E.	14·0 w.	76 50	76·8	Graham.	
Stone Pillar	47 12	289 38	1831·5	14 49 w.	0 55 w.	15·7 w.	Bayfield.	
At sea	47 20	289 42	1842·5	14 16 w.	14·3 w.	Lefroy.	
Moose River	45 39	289 44	1844·5	76 49	76·8	Graham.	
St. John's River	46 25	289 56	1844·5	77 25	77·4	Graham.	

ZONE II.—Lat. 45° to 50° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.	Observers.	
				Observed.	Correction to Epoch 1842.5.	Corrected.	Observed.	Correction to Epoch 1842.5.	Corrected.			
Gaspe Basin	48 50	295 30	1832.0	22 04 w.	0 50 w.	22.9 w.	22.7 w.	78 50	.....	78.8	.....	Bayfield.
			1846.0	22 49 w.	0 20 E.	22.5 w.		
Cape Henry (Anticosti)	49 48	295 36	1830.0	24 22 w.	1 00 w.	25.4 w.		.....	.....	.....	.....	Bayfield.
Shediac Island	46 15	295 37	1839.5	19 59 w.	0 15 w.	20.2 w.		.....	.....	.....	.....	Bayfield.
Windsor	45 10	295 44	1847.5	.....	.....	.....		75 41	.....	75.7	13.02	Keely.
Casumpeque	46 48	295 57	1845.5	21 10 w.	0 15 E.	20.9 w.		.....	.....	.....	.....	Bayfield.
Cape Tormentine	46 10	296 10	1840.5	20 00 w.	0 10 w.	20.2 w.		.....	.....	.....	.....	Bayfield.
Bedeque Harbour	46 24	296 12	1841.5	20 12 w.	0 05 w.	20.3 w.		.....	.....	.....	.....	Bayfield.
Carleton Head	46 15	296 17	1840.5	20 18 w.	0 10 w.	20.5 w.		.....	.....	.....	.....	Bayfield.
Richmond Bay	46 34	296 17	1845.5	21 00 w.	0 15 E.	20.8 w.		.....	.....	.....	.....	Bayfield.
Pugwash Harbour.....	45 53	296 19	1840.5	19 40 w.	0 10 w.	19.8 w.		.....	.....	.....	.....	Bayfield.
Wallace Harbour	45 49	296 34	1840.5	19 50 w.	0 10 w.	20.0 w.		.....	.....	.....	.....	Bayfield.
Cape Turner	46 30	296 40	1845.5	21 41 w.	0 15 E.	21.4 w.		.....	.....	.....	.....	Bayfield.
Charlotte Town	46 14	296 52	1842.5	21 03 w.	.....	21.1 w.		.....	.....	.....	.....	Bayfield.
Pictou Harbour.....	45 42	297 20	1841.5	20 19 w.	0 05 w.	20.4 w.		.....	.....	.....	.....	Bayfield.
George Town	46 11	297 27	1843.5	21 58 w.	0 05 E.	21.9 w.		.....	.....	.....	.....	Bayfield.
Merigomish Harbour..	45 38	297 33	1842.5	20 15 w.	.....	20.3 w.		.....	.....	.....	.....	Bayfield.
At sea.....	49 34	298 07	1842.5	27 23 w.	.....	27.4 w.		.....	.....	.....	.....	Lefroy.
Amherst Harbour.....	47 15	298 10	1833.5	22 36 w.	0 45 w.	23.4 w.		.....	.....	.....	.....	Bayfield.
E. Point of Anticosti..	49 08	298 18	1830.5	25 19 w.	1 00 w.	26.3 w.		.....	.....	.....	.....	Bayfield.
Bryon Island.....	47 48	298 34	1835.5	23 30 w.	0 35 w.	24.1 w.		.....	.....	.....	.....	Bayfield.
At sea.....	49 26	298 40	1842.5	27 48 w.	.....	27.8 w.		79 12	.....	79.2	.....	Lefroy.
Isle Madame	45 28	298 57	1862.5	.....	.....	.....		75 31	.....	75.5	.....	Shadwell.
Isle Madame	45 30	299 04	1848.5	21 05 w.	0 30 E.	20.6 w.		.....	.....	.....	.....	Keely.
Isle Madame	45 35	299 05	1848.5	22 30 w.	0 30 E.	22.0 w.		.....	.....	.....	.....	Keely.
Cape Breton	46 17	299 37	1848.5	23 41 w.	0 30 E.	23.2 w.		.....	.....	.....	.....	Keely.
At sea.....	48 05	299 40	1842.5	26 57 w.	.....	27.0 w.		78 29	.....	78.5	.....	Lefroy.
At sea.....	49 11	299 47	1842.5	28 16 w.	.....	28.3 w.		.....	.....	.....	.....	Lefroy.
Cape Breton	46 16	299 52	1862.5	.....	.....	.....		76 03	.....	.....	.....	Shadwell.
Louisburg	45 53	300 00	1862.5	.....	.....	.....		76 00	.....	.....	.....	Shadwell.
At sea.....	47 18	300 15	1842.5	25 34 w.	.....	25.6 w.		78 06	.....	78.1	.....	Lefroy.
Cod Roy Island	47 53	300 35	1835.5	25 00 w.	0 35 w.	25.6 w.		.....	.....	.....	.....	Bayfield.
At sea.....	46 11	304 29	1842.5	25 39 w.	.....	25.7 w.		77 03	.....	77.1	.....	Lefroy.
At sea.....	46 13	304 53	1842.5	26 32 w.	.....	26.5 w.		.....	.....	.....	.....	Lefroy.
At sea.....	45 52	306 49	1842.5	28 29 w.	.....	28.5 w.		76 09	.....	76.2	.....	Lefroy.
St. John's Harbour ..	47 34	307 18	1844.5	29 36 w.	0 10 E.	29.4 w.		.....	.....	.....	.....	Bayfield.
At sea.....	45 12	309 48	1842.5	26 49 w.	.....	26.8 w.		76 07	.....	76.1	.....	Lefroy.
At sea.....	46 09	323 37	1842.5	30 38 w.	.....	30.6 w.		74 21	.....	74.3	.....	Lefroy.
At sea.....	48 11	324 30	1842.5	31 31 w.	.....	31.5 w.		74 59	.....	75.0	.....	Lefroy.
At sea.....	47 06	325 40	1842.5	32 24 w.	.....	32.4 w.		74 23	.....	74.4	.....	Lefroy.
At sea.....	46 41	326 36	1842.5	30 47 w.	.....	30.8 w.		74 00	.....	74.0	.....	Lefroy.
At sea.....	47 21	330 56	1842.5	30 49 w.	.....	30.8 w.		73 27	.....	73.4	.....	Lefroy.
At sea.....	45 35	332 25	1830.5	.....	.....	.....		70 47	.....	70.8	.....	Erman.
At sea.....	45 52	333 32	1830.5	27 58 w.	.....	28.0 w.		.....	.....	.....	.....	Erman.
At sea.....	46 53	334 07	1841.5	29 40 w.	.....	29.7 w.		.....	.....	.....	.....	Barnett.
At sea.....	49 55	335 00	1846.5	.....	.....	.....		72 32	.....	72.5	.....	Moore.
At sea.....	46 20	335 05	1830.5	28 23 w.	.....	28.4 w.		.....	.....	.....	.....	Erman.
At sea.....	47 20	335 09	1842.5	31 07 w.	.....	31.1 w.		72 27	.....	72.5	.....	Lefroy.
At sea.....	46 46	335 41	1830.5	.....	.....	.....		70 07	.....	70.1	10.99	Erman.
At sea.....	46 49	336 05	1841.5	30 04 w.	.....	30.1 w.		.....	.....	.....	.....	Barnett.
At sea.....	45 45	336 26	1839.5	25 30 w.	.....	25.5 w.		.....	.....	.....	.....	Bérard.
At sea.....	47 33	336 56	1842.5	31 17 w.	.....	31.3 w.		72 08	.....	72.1	.....	Lefroy.
At sea.....	46 43	338 23	1839.5	27 00 w.	.....	27.0 w.		.....	.....	.....	.....	Bérard.
At sea.....	46 53	338 25	1841.5	30 51 w.	.....	30.9 w.		.....	.....	.....	.....	Barnett.
At sea.....	47 03	339 07	1830.5	27 54 w.	.....	27.9 w.		.....	.....	.....	.....	Erman.
At sea.....	47 37	339 46	1841.5	30 30 w.	.....	30.5 w.		.....	.....	.....	.....	Barnett.
At sea.....	48 02	340 55	1842.5	30 51 w.	.....	30.9 w.		71 30	.....	71.5	.....	Lefroy.
At sea.....	47 55	342 25	1841.5	28 23 w.	.....	28.4 w.		.....	.....	.....	.....	Barnett.
At sea.....	45 27	342 53	1839.0	.....	.....	.....		69 30	.....	69.5	.....	Sullivan.
At sea.....	48 11	343 18	1841.5	29 26 w.	.....	29.4 w.		.....	.....	.....	.....	Barnett.
At sea.....	49 17	343 31	1846.5	.....	.....	.....		70 47	.....	70.8	.....	Moore.
At sea.....	49 16	343 51	1846.5	32 01 w.	.....	32.0 w.		.....	.....	.....	.....	Moore.

ZONE II.—Lat. 45° to 50° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.	Observers.	
				Observed.	Correction to Epoch 1842·5.	Corrected.	Observed.	Correction to Epoch 1842·5.	Corrected.			
At sea.....	47 47	343 58	1830·5	.....	.....	.....	70 04	.....	70·1	10·53	Erman.
At sea.....	48 18	344 23	1842	29 29 w.	.....	29·5 w.	70 45	.....	70·8	.....	Lefroy.
At sea.....	47 45	344 24	1830	.....	.....	.....	70 07	.....	70·1	10·55	Erman.
At sea.....	47 56	345 03	1830	26 18 w.	.....	26·3 w.	.....	.....	.....	.....	Erman.
At sea.....	49 17	345 31	1846·5	.....	.....	.....	70 55	.....	70·9	.....	Moore.
At sea.....	48 34	346 00	1841	28 37 w.	.....	28·6 w.	.....	.....	.....	.....	Barnett.
At sea.....	47 07	346 52	1839	.....	.....	.....	68 52	.....	68·9	.....	Sullivan.
At sea.....	48 13	347 07	1830	.....	.....	.....	69 30	.....	69·5	10·51	Erman.
At sea.....	48 27	348 32	1830	26 06 w.	.....	26·1 w.	.....	.....	.....	.....	Erman.
At sea.....	48 48	349 28	1842	27 44 w.	.....	27·7 w.	69 45	.....	69·7	.....	Lefroy.
At sea.....	49 25	350 15	1846	27 46 w.	.....	27·8 w.	.....	.....	.....	.....	Moore.
At sea.....	48 57	350 28	1830	25 58 w.	.....	26·0 w.	.....	.....	.....	.....	Erman.
At sea.....	47 47	350 42	1840	.....	.....	.....	.....	.....	.....	10·55	Ross.
At sea.....	46 18	351 54	1839	24 14 w.	.....	24·2 w.	.....	.....	.....	.....	Du Petit Thouars.
At sea.....	46 38	351 54	1842	27 10 w.	.....	27·2 w.	.....	.....	.....	.....	Jehenne.
At sea.....	49 16	351 57	1830	.....	.....	.....	69 15	.....	69·3	10·59	Erman.
At sea.....	49 22	352 22	1846	.....	.....	.....	69 09	.....	69·2	.....	Moore.
At sea.....	49 11	352 22	1842	26 16 w.	.....	26·3 w.	69 19	.....	69·3	.....	Lefroy.
At sea.....	49 37	354 55	1846	.....	.....	.....	68 34	.....	68·6	.....	Moore.
At sea.....	48 09	355 02	1839	24 03 w.	.....	24·1 w.	.....	.....	.....	.....	Du Petit Thouars.
Brest.....	48 24	355 30	1834	.....	.....	.....	68 20	-20.	68·0	10·32	Duperrey.
			1837	24 58 w.	0 28 E.	24·5 w.	67·8	10·22	Darondeau.
			1869	21 01 w.	3 21 w.	24·4 w.	66 26	+72	67·6	.....	Perry.
At sea.....	49 58	356 27	1842·5	25 22 w.	.....	25·4 w.	68 46	.....	68·8	.....	Lefroy.
Vannes.....	47 40	357 14	1869·0	20 14 w.	3 21 w.	23·6 w.	65 47	+72	67·0	10·08	Perry.	
Cherbourg.....	49 39	358 22	1836·5	23 32 w.	0 46 E.	22·8 w.	68 35	-16	68·3	68·3	10·34	Lottin.
			1840·0	68 23	-7	68·3	10·36	Gaimard.
Nantes.....	47 12	358 27	1842·5	22 51 w.	22·9 w.	66 36	66·6	10·19	Lamont.
Laval.....	48 04	359 13	1869·0	19 05 w.	3 22 w.	22·5 w.	65 48	+72	67·0	10·07	Perry.
			1842·5	22 09 w.	22·2 w.	66 36	66·6	10·20	Lamont.
Angers.....	47 28	359 26	1839·0	19 06 w.	3 21 w.	22·5 w.	65 08	+72	66·3	66·5	10·11	Perry.

ZONE III.—LATITUDE 50° TO 55° N.

To this Zone belong the Stations (151 in number) comprised between the Latitudes of 50° N. and 55° N., printed in the Philosophical Transactions for 1870, Art. XIV. It has not been deemed necessary to reprint those stations here, as they admit of easy reference being made to them.

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ZONE III.—Lat. 50° to 55° N.

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.			Observers.		
				Observed.	Correction to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.			
At sea.....	50 42	0 35	1840.0	.....	.....	.....	68 29	.....	68.5	10.17	.....	10.17	Ross.
Douai.....	50 22	1 35	1869.0	18 03 w.	3 21 w.	21.4 w.	66 47	+72	68.0	10.13	.....	10.13	Perry.	
Lille.....	50 39	1 36	1856.0	.....	.....	.....	67 31	+34	68.1	.....	.....	.....	Mahmoud.
Boulogne.....	50 55	1 37	1869.0	18 13 w.	3 21 w.	21.6 w.	67 07	+72	68.3	10.15	.....	10.15	Perry.	
Calais.....	50 58	1 51	1856.0	.....	.....	.....	67 59	+34	68.6	.....	.....	.....	Mahmoud.
Dunkirk.....	51 02	2 22	1833.5 1858.0	20 07 w.	1 56 w.	22.1 w.	68 55 67 56	-24 +39	68.5 68.6	10.36 10.32 -02	10.36 10.30	10.33	Blosseville. Lamont.	
Arras.....	50 18	2 46	1858.0	.....	.....	.....	67 23	+40	68.1	10.27	.....	10.25	Lamont.
Ostend.....	51 14	2 55	1856.0	.....	.....	.....	68 03	+34	68.6	.....	.....	.....	Mahmoud.
Courtrai.....	50 50	3 16	1856.0	.....	.....	.....	67 40	+34	68.2	.....	.....	.....	Mahmoud.
Valenciennes.....	50 21	3 31	1856.0	.....	.....	.....	67 23	+34	68.0	.....	.....	.....	Mahmoud.
Ghent.....	51 03	3 43	1856.0 1858.0	19 34 w.	1 56 w.	21.5 w.	67 50 68 00	+34 +39	68.4 68.7	68.5	10.28	Mahmoud. Lamont.	
Mons.....	50 30	3 58	1856.0	.....	.....	.....	67 23	+34	68.0	.....	.....	.....	Mahmoud.
The Hague.....	52 04	4 18	1856.0	.....	.....	.....	68 19	+34	68.9	.....	.....	.....	Mahmoud.
Brussels.....	50 51	4 22	1838.5 1842.5	21 31 w.	21.5 w.	68 28 68 13	-10	68.3 68.2	68.2	10.27 10.28	10.28	Forbes. Quetelet.	
Antwerp.....	51 13	4 24	1856.0	.....	.....	.....	67 53	+34	68.5	.....	.....	.....	Mahmoud.
Rotterdam.....	51 55	4 29	1838.5 1856.0 1856.0	68 49 68 12 68 16	-10 +34 +34	68.7 68.8 68.8	68.7	10.17	Fox. Mahmoud. Mahmoud.	
Leyden.....	52 09	4 29	1858.0	19 15 w.	1 56 w.	21.2 w.	68 22	+39	69.0	68.9	10.33	-02	10.31	10.31	Mahmoud. Lamont.
Malines.....	51 02	4 29	1858.0	19 13 w.	1 56 w.	21.2 w.	67 39	+39	68.3	10.28	-02	10.26	Lamont.		
Amsterdam.....	52 23	4 53	1856.0	.....	.....	.....	68 24	+34	69.0	.....	.....	.....	Mahmoud.
Utrecht.....	52 06	5 07	1858.0	18 48 w.	1 56 w.	20.7 w.	68 12	+39	68.9	10.32	-02	10.30	Lamont.		
Liège.....	50 37	5 35	1839.0	.....	.....	.....	68 05	- 9	67.9	10.35	.....	10.35	Quetelet.
Arnheim.....	52 00	5 50	1838.0	.....	.....	.....	68 45	-11	68.6	.....	.....	.....	Fox.
Aix La Chapelle.....	50 47	6 04	1858.0	19 15 w.	1 56 w.	21.2 w.	67 27	+39	68.1	10.26	-02	10.24	Lamont.		
Cologne.....	50 57	6 46	1838.0	.....	.....	.....	67 54	-11	67.7	10.05	.....	10.05	Fox.
Oberhausen.....	51 29	6 51	1858.0	17 56 w.	1 56 w.	19.9 w.	67 39	+39	68.3	10.23	-02	10.21	Lamont.		
Bonn.....	50 44	7 06	1838.5 1858.0 1859.5	17 38 w.	1 56 w.	19.6 w.	67 51 67 12 67 09	+39 -10 +39 +42	67.7 67.9 67.9	67.8	10.20 10.18	-02	10.20 10.16	10.18	Forbes. Lamont. Fox.
Emden.....	53 22	7 12	1858.0	18 09 w.	1 56 w.	20.1 w.	68 52	+39	69.5	10.38	-02	10.36	Lamont.		
Münster.....	51 58	7 38	1858.0	17 29 w.	1 56 w.	19.4 w.	67 53	+39	68.5	10.29	-02	10.27	Lamont.		
Marburg.....	50 09	8 46	1850.0	17 40 w.	0 56 w.	18.6 w.	67 18	+19	67.6	10.23	.....	10.23	Lamont.	
Flensburg.....	54 47	9 26	1858.0	.....	.....	.....	69 24	+39	70.0	10.38	-02	10.36	Lamont.
Cassel.....	51 20	9 30	1858.0	16 23 w.	1 56 w.	18.3 w.	67 11	+39	67.8	10.22	-02	10.20	Lamont.		
Fulda.....	50 34	9 30	1850.0	17 16 w.	0 56 w.	18.2 w.	68 13	+19	68.5	.....	.....	.....	Lamont.
Göttingen.....	51 32	9 56	1842.5	17 52 w.	.....	17.9 w.	67 40	.....	67.7	.....	.....	.....	Observatory.
Altona.....	53 33	9 57	1839.5	.....	.....	.....	69 04	- 7	68.9	10.39	.....	10.39	Hansteen.
Kiel.....	54 20	10 09	1840.0	.....	.....	.....	69 28	- 6	69.4	10.41	.....	10.41	Hansteen.
Schweinfurt.....	50 03	10 14	1850.0	16 51 w.	0 56 w.	17.8 w.	66 32	+19	66.9	10.17	-02	10.15	Lamont.		
Gotha.....	50 57	10 44	1858.0	15 38 w.	1 56 w.	17.6 w.	66 50	+39	67.5	10.19	-02	10.17	Lamont.		
Culmbach.....	50 06	11 29	1850.0	16 15 w.	0 56 w.	17.2 w.	66 25	+19	66.7	10.11	-01	10.10	Lamont.		
Lichtenfels.....	50 09	11 31	1850.0	16 30 w.	0 56 w.	17.4 w.	66 29	+19	66.8	10.14	-01	10.13	Lamont.		
Halle.....	51 30	11 58	1867.5	.....	.....	.....	66 34	+63	67.6	.....	.....	.....	Kämtz, L. F.
Wunsiedel.....	50 02	12 01	1850.0	15 53 w.	0 56 w.	16.8 w.	66 27	+19	66.8	10.17	-01	10.16	Lamont.		
Rostock.....	54 05	12 09	1858.0	15 17 w.	1 56 w.	17.2 w.	68 39	+39	69.3	10.39	-02	10.37	Lamont.		
Franzenbad.....	50 07	12 20	1850.0	.....	.....	.....	66 13	+19	66.5	10.08	-01	10.07	Kreil.
Leipzig.....	51 20	12 22	1825.0 1850.0 1858.0 1867.5	15 40 w. 14 45 w.	0 56 w. 1 56 w.	16.6 w. 16.7 w.	68 08 67 05 66 46 66 16	-44 +19 +39 +63	67.4 67.4 67.4 67.4	67.4 10.15 -02 10.13	10.13	Keilhau. D'Arrest. Lamont. Kämtz, L. F.
Carlsbad.....	50 14	12 53	1838.5 1850.0	15 36 w.	0 50 w.	16.4 w.	66 44 66 10	-12 +17	66.5 66.5	66.5	10.12 10.08	10.12 10.08	10.10	Forbes. Kreil.
Potsdam.....	52 23	13 05	1828.0	17 33 w.	1 04 E.	16.5 w.	68 31	-48	67.7	.....	.....	.....	Erman.
Chiesch.....	50 06	13 16	1850.0	15 24 w.	0 50 w.	16.2 w.	65 51	+17	66.1	9.99	.....	9.99	Kreil.	
Berlin.....	52 32	13 24	1842.5	16 12 w.	.....	16.2 w.	67 53	.....	67.9	10.03	.....	10.03	Erman.
Komotau.....	50 27	13 25	1850.0	15 14 w.	0 50 w.	16.1 w.	66 10	+17	66.5	9.98	.....	9.98	Kreil.	
Dresden.....	51 03	13 44	1826.5 1867.5	67 41 66 15	-32 +50	67.2 67.1	67.1	10.38	10.38	10.38	Keilhau. Kämtz, L. F.

ZONE III.—Lat. 50° to 55° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.			Observers.		
				Observed.	Correction to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.			
Toplitz	50 39	13 47	1826.5	.....	.....	.....	67 12	-53	66.3	66.5	10.35	.....	10.35	Keilhau. Kreil. Kreil. Kreil.
			1850.0	15 00 w.	0 50 w.	15.8 w.	66 25	+15	66.7		10.04	.....	10.04	
Bodenbach	50 46	14 12	1850.0	14 55 w.	0 50 w.	15.8 w.	66 32	+15	66.8		10.12	.....	10.12	
Prague	50 05	14 27	1842.5	15 28 w.	.....	15.5 w.	66 13	.....	66.2		10.14	.....	10.14	
Leipa	50 41	14 33	1850.0	.....	.....	.....	66 18	+15	66.6		10.06	.....	10.06	Kreil.
Stettin	53 25	14 34	1858.0	13 32 w.	1 41 w.	15.2 w.	67 52	+31	68.4		10.25	-02	10.23	Lamont.	
Gorlitz	51 09	14 58	1858.0	13 34 w.	1 41 w.	15.3 w.	66 30	+31	67.0		10.14	-02	10.12	Lamont.	
Reichenberg	50 46	15 04	1850.0	.....	.....	.....	66 23	+15	66.6		10.06	.....	10.06	Kreil.
Landsberg	52 44	15 15	1858.0	13 17 w.	1 41 w.	15.0 w.	67 27	+31	68.0		10.22	-02	10.20	Lamont.	
Chlumetz	50 09	15 27	1850.0	14 08 w.	0 50 w.	15.0 w.	65 47	+15	66.0		9.96	.....	9.96	Kreil.
Posen	52 25	15 34	1858.0	12 16 w.	1 41 w.	14.0 w.	67 05	+31	67.6		10.19	-02	10.17	Lamont.	
Hohenelbe	50 37	15 36	1850.0	.....	.....	.....	66 12	+15	66.5		10.05	.....	10.05	Kreil.
Nachod	50 25	16 08	1850.0	.....	.....	.....	65 50	+15	66.1		9.94	.....	9.94	Kreil.
Kwasnei	50 11	16 16	1850.0	13 50 w.	0 48 w.	14.6 w.	65 38	+15	65.9		9.97	.....	9.97	Kreil.
Senftenberg	50 05	16 27	1850.0	13 32 w.	0 48 w.	14.3 w.	65 43	+15	66.0		10.04	.....	10.04	Kreil.
Breslau	51 07	17 02	1858.0	12 12 w.	1 39 w.	13.9 w.	66 08	+31	66.7		10.09	-02	10.07	Lamont.	
Bromberg	53 08	18 01	1858.0	11 19 w.	1 39 w.	13.0 w.	67 20	+23	67.7		10.25	-02	10.23	Lamont.	
Dirschau	54 04	18 38	1858.0	10 36 w.	1 39 w.	12.3 w.	68 18	+23	68.7		10.35	-02	10.33	Lamont.	
Cracow	50 04	19 57	1850.0	11 36 w.	0 48 w.	12.4 w.	65 22	+11	65.6	65.6	10.09	.....	10.09	Kreil. Kämtz, L. F. Erman.
			1867.5	64 51	+37	65.5		
			1828.5	13 21 w.	1 30 E.	11.9 w.	.....	.....	.....		.....	.....	.....
Königsberg	54 43	20 30	1829.5	.....	.....	.....	69 26	-20	69.1	69.2	.....	.....	.....	Humboldt. Lamont.
			1858.0	10 12 w.	1 39 w.	11.9 w.	68 49	+23	69.2			10.31	-02		10.29
Tarnow	50 01	21 01	1850.0	11 12 w.	0 48 w.	12.0 w.	65 24	+11	65.6		10.20	.....	10.20	Kreil.
Warsaw	52 13	21 02	1867.5	.....	.....	.....	66 37	+37	67.2		.....	.....	.....	Kämtz, L. F.
Rzeszow	50 03	22 00	1850.0	10 24 w.	0 48 w.	11.2 w.	65 03	+11	65.2		10.13	.....	10.13	Kreil.
Nisko	50 34	22 09	1850.0	10 08 w.	0 48 w.	10.9 w.	65 16	+11	65.5		10.10	.....	10.10	Kreil.
Rawa Ruska	50 17	23 39	1850.0	9 19 w.	0 48 w.	10.1 w.	65 08	+11	65.3		10.08	.....	10.08	Kreil.
Grodno	53 41	23 50	1867.5	.....	.....	.....	67 11	+37	67.8		.....	.....	.....	Kämtz, L. F.
Brody	50 05	25 11	1850.0	9 03 w.	0 48 w.	9.9 w.	64 44	+11	64.9		10.14	.....	10.14	Kreil.
Woroneje	51 40	39 20	1829.0	.....	.....	.....	65 12	-20	64.9		.....	.....	.....	Humboldt.
Wasiliew Maidan	54 54	44 48	1830.0	1 34 E.	0 26 E.	2.0 E.	67 39	-11	67.5		10.93	-04	10.89	Hansteen.	
Pensa	53 11	44 59	1830.5	0 06 E.	0 27 E.	0.6 E.	66 02	-10	65.9	66.1	10.60	-04	10.56	Hansteen. Sawalief.	
			1850.0	66 10	+6	66.3		
Saransk	54 11	45 13	1830.5	0 24 w.	0 27 E.	0.1 E.	67 02	-10	66.9		10.65	-04	10.61	Hansteen.	
Tschunakowsk	52 30	45 15	1830.5	0 51 E.	0 27 E.	1.3 E.	65 23	-10	65.2		10.57	-04	10.53	Hansteen.	
Nowokutlina	53 40	45 15	1830.5	0 23 E.	0 27 E.	0.8 E.	.....	.....	.....		.....	.....	.....	Hansteen.
Kamyschin	50 06	45 24	1830.5	.....	.....	.....	63 46	-9	63.6	63.9	10.40	-04	10.36	Hansteen. Sawalief.
			1850.0	64 03	+6	64.2		
			1829.5	.....	.....	.....	64 41	-9	64.5		.....	.....	.....	Humboldt.
Saratow	51 32	46 04	1830.5	0 07 w.	0 27 E.	0.3 E.	64 40	-9	64.6	64.6	10.52	-03	10.49	Hansteen. Sawalief.	
			1850.5	64 49	+6	64.9		
Chewalinsk	52 30	48 07	1850.5	.....	.....	.....	65 54	+6	66.0		.....	.....	.....	Sawalief.
Simbirsk	50 19	48 25	1850.5	.....	.....	.....	67 05	+6	67.2		.....	.....	.....	Sawalief.
Samara	53 10	50 05	1850.5	.....	.....	.....	66 24	+6	66.5	66.5	.....	.....	.....	Sawalief. Wild.
			1869.5	6 51 E.	?	66 13	?			10.89		10.89
Sergiewsk	53 55	51 14	1850.5	.....	.....	.....	67 48	+5	67.9		11.05	.....	11.05	Sawalief.
Uralsk	51 12	51 24	1829.5	.....	.....	.....	64 19	-8	64.2	64.2	.....	.....	.....	Humboldt. Hansteen.
			1830.5	2 32 E.	0 27 E.	3.0 E.	64 15	-8	64.1			10.85	-02		10.83
Irtek	51 31	52 37	1830.5	2 22 E.	0 28 E.	2.8 E.	64 29	-7	64.4		10.81	-02	10.79	Hansteen.	
Osernaia	51 36	53 57	1830.0	3 05 E.	0 28 E.	3.6 E.	.....	.....	.....		.....	.....	.....	Hansteen.
Iletskaia	51 07	55 01	1830.0	.....	.....	.....	64 42	-4	64.6		10.80	-02	10.78	Hansteen.
			1829.5	.....	.....	.....	64 41	-2	64.7	64.8	10.92	-01	10.91	Humboldt. Hansteen. Federow.
Orenburg	51 46	55 06	1830.5	3 18 E.	0 32 E.	3.8 E.	64 48	-2	64.8			10.92	-01		10.91
			1832.5	3 27 E.	0 27 E.	3.9 E.	64 47	-1	64.8		
Meleus	53 04	55 49	1829.5	3 11 E.	0 32 E.	3.7 E.	66 14	-1	66.2		11.05	-01	11.04	Hansteen.	
Ufa	54 43	55 56	1830.0	.....	.....	.....	67 37	-1	67.6		11.20	-01	11.19	Hansteen.
Tolbasi	54 05	55 57	1830.0	.....	.....	.....	67 13	-1	67.2		11.13	-01	11.12	Hansteen.
Miask	54 59	60 06	1829.5	.....	.....	.....	67 40	+2	67.7		.....	.....	.....	Humboldt.
Koielskaia	54 43	60 54	1830.0	.....	.....	.....	67 47	+2	67.8		11.39	.....	11.39	Hansteen.
Troisk	54 05	61 35	1829.0	6 41 E.	0 35 E.	7.3 E.	67 21	+3	67.4	67.4	11.41	.....	11.41	Hansteen. Humboldt.
			1829.5	67 14	+3	67.3		
Kotscherdinsk	54 21	64 44	1828.5	7 07 E.	0 36 E.	7.7 E.	67 41	+6	67.8		11.47	+02	11.49	Hansteen.	

ZONE III.—Lat. 50° to 55° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.			Observers.	
				Observed.	Correction to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.		
Swerinogolowsk	54 24	65 00	1834.0	7 35 E.	0 37 E.	8.2 E.	67 49	+ 6	67.9	.....	.....	.....	Federow.
Presnogorskaia	54 30	66 15	1829.5	6 59 E.	0 37 E.	7.6 E.	67 48	+ 7	67.9	11.52	+ .02	11.54	Hansteen.	
Novorybinskoi	54 39	67 53	1829.5	7 47 E.	0 38 E.	8.4 E.	68 08	+ 9	68.3	11.74	+ .03	11.77	Hansteen.	
St. Peter's	54 52	69 06	1829.5	.....	.....	.....	68 18	+ 9	68.5	.....	.....	.....	Humboldt.
			1829.5	8 16 E.	0 38 E.	8.9 E.	68 26	+ 9	68.6	68.6	11.73	+ .03	11.76	Hansteen.
Lebiasja	54 58	71 09	1829.5	.....	.....	.....	68 47	+ 11	69.0	11.85	+ .03	11.88	Hansteen.
			1829.5	68 54	+ 13	69.1	Humboldt.
Omsk	54 59	73 24	1829.5	8 49 E.	0 39 E.	9.5 E.	68 54	+ 13	69.1	11.95	+ .04	11.99	Hansteen.	
			1830.0	68 58	+ 13	69.2	Fuss, G. von.
			1834.0	9 22 E.	0 14 E.	9.6 E.	68 59	+ 10	69.2	Federow.
			1867.5	11 36 E.	?	?	69 42	?	?	12.02	- 7	11.97	Fritsche.
Pokrousk	54 29	74 00	1828.5	8 44 E.	0 37 E.	9.4 E.	12.21	Hansteen.
			1829.5	69 39	+ 13	69.9	69.9	12.17	+ .04	12.21	Erman.
Isylbaschkoi	54 29	74 20	1828.5	.....	.....	.....	68 30	+ 13	68.7	12.03	+ .04	12.07	Hansteen.
Schelesinskaia	53 32	75 13	1828.5	8 16 E.	0 35 E.	8.9 E.	67 47	+ 14	68.0	12.15	+ .04	12.19	Hansteen.	
Peschtschanoi	52 38	76 54	1828.5	7 25 E.	0 36 E.	8.0 E.	.....	.....	.....	.....	.....	.....	Hansteen.
Presnoi	52 46	77 23	1829.5	.....	.....	.....	67 15	+ 17	67.5	11.90	+ .04	11.94	Hansteen.
Jamyschewsk	51 50	77 26	1828.5	7 16 E.	0 36 E.	7.9 E.	66 31	+ 17	66.8	11.94	+ .05	11.99	Hansteen.	
			1834.5	7 45 E.	0 21 E.	8.1 E.	66 29	+ 19	66.7	66.7	Federow.
Semijarskoi	50 53	78 21	1828.5	5 56 E.	0 36 E.	6.5 E.	65 48	+ 10	66.1	11.90	+ .05	11.95	Hansteen.	
Sempalatinsk	50 24	80 21	1828.5	6 43 E.	0 36 E.	7.3 E.	65 18	+ 20	65.6	11.88	+ .06	11.94	Hansteen.	
Schulbinskoi	50 23	81 14	1828.5	6 33 E.	0 36 E.	7.2 E.	65 14	+ 21	65.6	11.65	+ .06	11.71	Hansteen.	
Smeinogorsk	51 09	82 25	1828.5	7 19 E.	0 36 E.	7.9 E.	66 02	+ 23	66.4	12.02	+ .07	12.09	Hansteen.	
			1829.5	66 06	+ 23	66.5	66.5	Humboldt.
Kalmytskaia	51 45	82 46	1829.5	.....	.....	.....	66 46	+ 25	67.2	12.00	+ .07	12.07	Hansteen.
Besgolowskaia	52 30	83 20	1829.5	.....	.....	.....	67 21	+ 25	67.8	12.12	+ .07	12.19	Hansteen.
Barnaoul	53 20	83 57	1829.5	7 25 E.	0 36 E.	8.0 E.	68 15	+ 27	68.7	12.27	+ .07	12.34	Hansteen.	
			1829.5	68 10	+ 27	68.6	68.7	Humboldt.
Legostaiewa	54 29	84 14	1829.5	.....	.....	.....	69 32	+ 27	70.0	12.35	+ .07	12.42	Hansteen.
Nishne Udinsk	54 55	99 02	1829.5	4 40 E.	0 22 E.	5.0 E.	70 36	+ 30	71.1	12.74	+ .10	12.84	Hansteen.	
Kursan	54 31	100 03	1829.0	.....	.....	.....	70 10	+ 30	70.7	12.65	+ .11	12.76	Erman.
Tunkinska	51 45	100 49	1832.5	2 56 E.	0 18 E.	3.2 E.	.....	.....	.....	.....	.....	.....	Fuss.
Kuitunskaja	54 15	101 21	1829.0	3 34 E.	0 18 E.	3.9 E.	70 23	+ 31	70.9	12.77	+ .11	12.88	Hansteen.	
Sima	53 50	101 34	1829.5	69 32	+ 31	70.1	Erman.
			1867.5	3 35 E.	?	?	71 09	- 62	70.1	70.1	Fritsche.
Salaria	53 31	102 03	1829.0	.....	.....	.....	69 15	+ 31	69.8	12.70	+ .11	12.81	Erman.
			1829.0	69 18	+ 31	69.8	69.7	12.58	+ .11	12.69	Hansteen.
			1867.0	70 36	- 62	69.6	Fritsche.
Telminskoi	52 34	103 10	1829.0	.....	.....	.....	68 36	+ 32	69.1	12.58	+ .11	12.69	Hansteen.
Balagansk	53 40	103 11	1829.5	.....	.....	.....	69 35	+ 32	70.1	12.71	+ .11	12.82	Hansteen.
Jandinskoi	54 36	103 16	1829.5	2 44 E.	0 16 E.	3.0 E.	70 19	+ 33	70.9	12.72	+ .12	12.84	Hansteen.	
Angara	53 21	103 23	1829.5	.....	.....	.....	69 25	+ 33	70.0	12.81	+ .12	12.93	Hansteen.
Irkutzk	52 17	104 20	1820.0	2 03 E.	?	?	67 11	+ 59	68.2	Wrangel.
			1829.5	68 13	+ 34	68.8	Due.
			1829.5	1 52 E.	0 14 E.	2.1 E.	68 07	+ 34	68.7	68.7	12.49	+ .12	12.61	Erman.
			1829.5	1 36 E.	0 14 E.	1.8 E.	68 12	+ 34	68.8	68.8	12.58	+ .12	12.70	Hansteen.
			1829.5	68 13	+ 34	68.8	Due.
			1830.5	1 25 E.	0 13 E.	1.6 E.	68 20	+ 31	68.9	Fuss.
1868.0	2 42 E.	0 42 W.	2.0 E.	69 45	- 62	68.7	.....	.....	12.66	?	?	Fritsche.	
Listwinischnoi	51 54	104 30	1830.0	.....	.....	.....	67 58	+ 34	68.5	12.52	+ .12	12.64	Fuss.
Charazaiska	50 29	104 44	1830.5	2 27 E.	0 13 E.	2.7 E.	66 57	+ 34	67.5	12.31	+ .12	12.43	Fuss.	
Olsonsk	53 02	104 59	1829.5	.....	.....	.....	68 44	+ 34	69.3	12.49	+ .12	12.91	Erman.
Kadilnaia	52 00	104 59	1829.0	.....	.....	.....	67 34	+ 34	68.1	12.75	+ .12	12.57	Erman.
			1829.0	67 40	+ 34	68.2	68.2	12.56	+ .12	12.68	Hansteen.
Tjumenowsk	54 15	105 20	1829.5	.....	.....	.....	70 12	+ 34	70.8	12.75	+ .12	12.87	Erman.
Ponamarsewsk	54 59	105 22	1829.5	.....	.....	.....	70 23	+ 34	71.0	12.83	+ .12	12.95	Due.
Chogotskaia	53 38	105 25	1829.5	.....	.....	.....	68 49	+ 34	69.4	12.57	+ .12	12.69	Due.
Mansursk	53 25	105 41	1829.5	1 18 E.	0 12 E.	1.5 E.	.....	.....	.....	.....	.....	.....	Erman.
Baikal	52 02	106 10	1829.0	1 03 E.	0 11 E.	1.2 E.	Erman.
			1829.0	0 43 E.	0 11 E.	0.9 E.	67 58	+ 34	68.5	68.5	13.10	+ .12	13.22	Hansteen.
Possolsk	52 01	106 17	1832.5	.....	.....	.....	68 02	+ 34	68.6	12.38	+ .12	12.50	Fuss.
Stepnoi	52 10	106 20	1830.5	1 08 E.	0 11 E.	1.3 E.	68 11	+ 34	68.8	12.69	+ .12	12.81	Fuss.	

ZONE III.—Lat. 50° to 55° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.			Observers.	
				Observed.	Correction to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.		
At sea.....	50 50	166 37	1850.5	5 54 E.	.....	5.9 E.	.....	.....	.....	.....	.....	.....	Collinson.	
At sea.....	51 02	166 52	1854.5	.....	.....	.....	.....	64 22	.....	64.4	.....	.....	Collinson.	
At sea.....	52 05	167 12	1851.5	6 05 E.	.....	6.1 E.	.....	.....	.....	.....	.....	.....	Collinson.	
At sea.....	51 25	167 48	1845.5	.....	.....	.....	.....	63 11	.....	63.2	.....	.....	Moore.	
At sea.....	53 46	168 20	1845.5	.....	.....	.....	.....	65 26	.....	65.4	.....	.....	Moore.	
At sea.....	54 16	168 36	1850.0	9 30 E.	.....	9.5 E.	.....	.....	.....	.....	.....	.....	Kellett.	
At sea.....	51 54	168 38	1854.5	8 36 E.	.....	8.6 E.	.....	.....	.....	.....	.....	.....	Collinson.	
At sea.....	53 35	169 45	1850.5	10 20 E.	.....	10.3 E.	.....	.....	.....	.....	.....	.....	Collinson.	
At sea.....	52 45	170 03	1854.5	9 25 E.	.....	9.4 E.	.....	.....	.....	.....	.....	.....	Collinson.	
At sea.....	53 38	170 18	1850.5	.....	.....	.....	.....	65 20	.....	65.3	.....	.....	Collinson.	
At sea.....	53 39	171 52	1854.5	.....	.....	.....	.....	64 50	.....	64.8	.....	.....	Collinson.	
At sea.....	54 35	173 29	1854.5	.....	.....	.....	.....	66 31	.....	66.5	.....	.....	Collinson.	
Amchitcha.....	51 27	178 20	1830.0	14 05 E.	.....	14.1 E.	.....	.....	.....	.....	.....	.....	Etoline.	
At sea.....	54 03	185 00	1849.5	18 18 E.	.....	18.3 E.	.....	.....	.....	.....	.....	.....	Crane.	
At sea.....	54 03	185 00	1849.5	17 35 E.	.....	17.6 E.	.....	.....	.....	.....	.....	.....	Kellett.	
Ateha.....	52 17	185 48	1830.0	16 21 E.	.....	16.4 E.	.....	.....	.....	.....	.....	.....	Etoline.	
At sea.....	53 31	186 13	1849.5	19 08 E.	.....	19.1 E.	.....	.....	.....	.....	.....	.....	Crane.	
At sea.....	53 31	186 13	1849.5	18 09 E.	.....	18.2 E.	.....	.....	.....	.....	.....	.....	Kellett.	
At sea.....	52 53	187 36	1849.5	19 52 E.	.....	19.9 E.	.....	.....	.....	.....	.....	.....	Crane.	
At sea.....	52 53	187 36	1849.5	18 53 E.	.....	18.9 E.	.....	.....	.....	.....	.....	.....	Kellett.	
At sea.....	50 29	189 46	1849.5	20 35 E.	.....	20.6 E.	.....	.....	.....	.....	.....	.....	Crane.	
At sea.....	50 29	189 46	1849.5	19 14 E.	.....	19.2 E.	.....	.....	.....	.....	.....	.....	Kellett.	
Unalashka.....	53 54	193 30	1829.0	19 54 E.	.....	19.9 E.	.....	68 26	.....	68.4	12.47	.....	12.47	Lütke.
Croyalgu Island.....	54 17	195 13	1826.5	20 50 E.	.....	20.8 E.	.....	.....	.....	.....	.....	.....	.....	Beechey.
At sea.....	51 54	198 37	1827.0	20 27 E.	.....	20.5 E.	.....	.....	.....	.....	.....	.....	.....	Lütke.
At sea.....	54 08	198 43	1850.5	20 20 E.	.....	20.3 E.	.....	70 55	.....	70.9	.....	.....	.....	Collinson.
At sea.....	50 21	199 04	1830.5	21 05 E.	.....	21.1 E.	.....	.....	.....	.....	.....	.....	.....	Erman.
At sea.....	50 28	200 38	1830.5	24 29 E.	.....	24.5 E.	.....	.....	.....	.....	.....	.....	.....	Erman.
At sea.....	54 53	202 22	1850.5	.....	.....	.....	.....	69 45	.....	69.8	.....	.....	.....	Collinson.
At sea.....	50 59	203 12	1830.5	25 37 E.	.....	25.6 E.	.....	.....	.....	.....	.....	.....	.....	Erman.
At sea.....	51 03	203 24	1830.5	.....	.....	.....	.....	67 17	.....	67.3	11.81	.....	11.81	Erman.
At sea.....	51 46	207 24	1830.5	24 05 E.	.....	24.1 E.	.....	.....	.....	.....	.....	.....	.....	Erman.
At sea.....	53 00	210 04	1830.5	25 33 E.	.....	25.6 E.	.....	.....	.....	.....	.....	.....	.....	Erman.
At sea.....	53 35	213 25	1830.5	.....	.....	.....	.....	71 06	.....	71.1	12.34	.....	12.34	Erman.
At sea.....	53 36	216 22	1850.5	24 46 E.	.....	24.8 E.	.....	.....	.....	.....	.....	.....	.....	Collinson.
At sea.....	51 55	216 27	1827.0	24 30 E.	.....	24.5 E.	.....	.....	.....	.....	.....	.....	.....	Lütke.
At sea.....	54 27	221 01	1830.5	.....	.....	.....	.....	73 36	.....	73.6	12.79	.....	12.79	Erman.
Anchor Cove.....	53 12	227 46	1866.5	24 59 E.	.....	25.0 E.	.....	.....	.....	.....	.....	.....	.....	Pender.
Fort Simpson.....	54 34	229 35	1862.5	.....	.....	.....	.....	74 53	.....	74.9	.....	.....	.....	Richards.
Alpha Bay.....	53 52	229 42	1866.5	26 34 E.	.....	26.6 E.	.....	.....	.....	.....	.....	.....	.....	Pender.
Carter Bay.....	52 50	231 35	1866.5	25 59 E.	.....	26.0 E.	.....	.....	.....	.....	.....	.....	.....	Pender.
Kynumft Harbour.....	52 12	231 48	1866.5	26 10 E.	.....	26.2 E.	.....	.....	.....	.....	.....	.....	.....	Pender.
Safety Cove.....	51 32	232 03	1864.5	23 38 E.	.....	23.6 E.	.....	.....	.....	.....	.....	.....	.....	Pender.
Treadmill Harbour.....	51 06	232 26	1864.5	24 08 E.	.....	24.1 E.	.....	.....	.....	.....	.....	.....	.....	Pender.
Beaver Harbour.....	50 43	232 35	1860.5	.....	.....	.....	.....	72 37	.....	72.6	.....	.....	.....	Richards.
			1864.5	24 39 E.	.....	24.7 E.	.....	.....	.....	.....	.....	.....	.....	Pender.
			1865.5	24 24 E.	.....	24.4 E.	.....	.....	.....	.....	.....	.....	.....	Pender.
			1866.5	24 30 E.	.....	24.5 E.	.....	.....	.....	.....	.....	.....	.....	Pender.
Tracey Harbour.....	50 51	233 07	1863.5	26 40 E.	.....	26.7 E.	.....	.....	.....	.....	.....	.....	.....	Pender.
N. Bentinck Arm.....	52 23	233 12	1864.5	24 46 E.	.....	24.8 E.	.....	.....	.....	.....	.....	.....	.....	Pender.
Port Neville.....	50 31	233 56	1860.5	.....	.....	.....	.....	72 19	.....	72.3	.....	.....	.....	Richards.
Squirrel Cove.....	50 08	235 03	1864.5	23 56 E.	.....	23.9 E.	.....	.....	.....	.....	.....	.....	.....	Pender.
Frazer Lake.....	54 03	235 20	1833.5	.....	.....	.....	.....	75 48	.....	75.8	12.97	.....	12.97	Douglas.
Stuart's Lake.....	54 27	235 40	1833.5	.....	.....	.....	.....	76 09	.....	76.2	13.05	.....	13.05	Douglas.
Fort Alexandria.....	52 33	237 31	1833.5	.....	.....	.....	.....	74 50	.....	74.8	12.82	.....	12.82	Douglas.
Thompson's River.....	50 41	239 49	1833.5	.....	.....	.....	.....	73 43	.....	73.7	12.72	.....	12.72	Douglas.
Fort Assiniboine.....	54 20	245 32	1844.5	24 39 E.	.....	24.7 E.	.....	78 15	.....	78.3	.....	.....	.....	Lefroy.
Pembina River.....	54 08	246 06	1844.5	22 23 E.	.....	22.4 E.	.....	77 55	.....	77.9	.....	.....	.....	Lefroy.
Fort Edmonton.....	53 34	247 08	1844.5	24 16 E.	.....	24.3 E.	.....	77 54	.....	77.9	13.86	.....	13.86	Lefroy.
Saskatchewan River.....	54 05	248 16	1844.5	24 26 E.	.....	24.4 E.	.....	78 05	.....	78.1	13.71	.....	13.71	Lefroy.
Saskatchewan River.....	53 50	249 30	1844.5	24 27 E.	.....	24.5 E.	.....	78 34	.....	78.6	13.84	.....	13.84	Lefroy.
Fort Pitt.....	53 34	250 41	1844.5	23 09 E.	.....	23.2 E.	.....	78 41	.....	78.7	14.15	.....	14.15	Lefroy.
Saskatchewan River.....	53 07	251 30	1844.5	.....	.....	.....	.....	78 28	.....	78.5	14.24	.....	14.24	Lefroy.

ZONE III.—Lat. 50° to 55° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.			Observers.
				Observed.	Correction to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.	
Rigoulette	54 11	301 35	1860.5	41 09 w.	1 30 E.	39.7 w.	80 05	.....	80.1	.....	.....	.....	McClintock.
Mistanoque Harbour...	51 16	301 47	1834.5	31 15 w.	0 40 w.	31.9 w.	.....	.....	.....	.....	.....	.....	Bayfield.
Cato Islet	54 22	302 06	1860.5	40 39 w.	1 30 E.	39.2 w.	.....	.....	.....	.....	.....	.....	McClintock.
Belles Amours Harb.	51 27	302 33	1834.5	32 00 w.	0 40 w.	32.7 w.	.....	.....	.....	.....	.....	.....	Bayfield.
Bradore Harbour	51 28	302 45	1834.5	32 30 w.	0 40 w.	33.2 w.	.....	.....	.....	.....	.....	.....	Bayfield.
Fortew Bay	51 28	303 03	1833.5	32 26 w.	0 45 w.	33.2 w.	.....	.....	.....	.....	.....	.....	Bayfield.
Green Island.....	51 24	303 26	1833.5	33 30 w.	0 45 w.	34.3 w.	.....	.....	.....	.....	.....	.....	Bayfield.
Red Bay.....	51 44	303 34	1835.5	34 30 w.	0 35 w.	35.1 w.	.....	.....	.....	.....	.....	.....	Bayfield.
Chateau Bay	52 00	304 09	1835.5	35 30 w.	0 35 w.	36.1 w.	.....	.....	.....	.....	.....	.....	Bayfield.
Cape St. Lewis	52 21	304 21	1835.5	37 30 w.	0 35 w.	38.1 w.	.....	.....	.....	.....	.....	.....	Bayfield.
At sea.....	54 00	316 24	1846.5	44 00 w.	.....	44.0 w.	.....	.....	.....	.....	.....	.....	Moore.
At sea.....	52 28	321 12	1846.5	.....	.....	.....	76 18	.....	76.3	.....	.....	.....	Moore.
At sea.....	52 17	321 45	1846.5	39 18 w.	.....	39.3 w.	.....	.....	.....	.....	.....	.....	Moore.
At sea.....	51 47	325 00	1846.5	37 40 w.	.....	37.7 w.	75 11	.....	75.2	.....	.....	.....	Moore.
At sea.....	51 33	325 46	1846.5	37 29 w.	.....	37.5 w.	74 42	.....	74.7	.....	.....	.....	Moore.
At sea.....	51 10	327 09	1846.5	37 43 w.	.....	37.7 w.	.....	.....	.....	.....	.....	.....	Moore.
At sea.....	50 14	330 46	1846.5	35 55 w.	.....	35.9 w.	73 41	.....	73.7	.....	.....	.....	Moore.
At sea.....	53 39	347 28	1853.5	31 26 w.	.....	31.4 w.	.....	.....	.....	.....	.....	.....	Staunton.
At sea.....	50 10	357 10	1846.5	.....	.....	.....	68 34	.....	68.6	10.01	.....	10.01	Moore.
At sea.....	50 17	357 26	1840.5	.....	.....	.....	68 48	.....	68.8	10.29	.....	10.29	Ross.
At sea.....	50 40	358 25	1830.5	26 15 w.	.....	26.3 w.	.....	.....	.....	.....	.....	.....	Erman.
Portsmouth	50 44	358 52	1830.5	.....	.....	.....	68 33	.....	68.6	10.23	.....	10.23	Erman.

ZONE IV.—LATITUDE 55° TO 60° N.

Authorities.

To this Zone belong the Stations (89 in number) comprised between the latitudes of 55° and 60°, forming part of the Magnetic Survey of the British Islands, Phil. Trans. 1870, Art. XIV. It has not been deemed necessary to reprint these Stations in this communication as they may be so easily referred to.

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ZONE IV.—Lat. 55° to 60° N.

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.			Observers.
				Observed.	Correction to Epoch 1842·5.	Corrected.	Observed.	Cor. to Epoch 1842·5.	Corrected.	Observed.	Cor. to Epoch 1842·5.	Corrected.	
Flekkerøe	58 05	8 01	1844·5	.....	.....	.....	71 39	+0 03	71·7	10·50	.....	10·50	Danish Officers. Hansteen. Hansteen. Hansteen. Hansteen.
Kolding	55 27	9 24	1824·5	.....	.....	.....	70 50	-0 27	70·4	10·56	-0·03	10·53	
Heggen	59 54	9 52	1825·5	.....	.....	.....	73 47	-0 25	73·4	10·98	-0·03	10·95	
Aalberg	57 03	9 56	1824·5	.....	.....	.....	71 27	-0 27	71·0	10·22	-0·03	10·19	
Johnsrud	59 58	10 23	1825·5	.....	.....	.....	73 23	-0 25	73·0	11·05	-0·03	11·02	
Christiania	59 55	10 43	1842·5	18 36 w.	0 00	18·6 w.	71 45	0 00	71·8	10·75	0·00	10·75	Hansteen.
Corsoer	55 20	11 07	1858·0	16 25 w.	1 17 w.	17·7 w.	69 36	+0 23	70·0	10·38	+0·03	10·41	Lamont.
Fredrikshald	59 10	11 23	1828·5	19 46 w.	1 10 E.	18·6 w.	72 29	-0 21	72·1	10·57	-0·03	10·54	Hansteen.
Ny Elfsborg	57 42	11 51	1842·5	.....	.....	.....	71 05	0 00	71·1	10·52	0·00	10·52	Hansteen.
Tängelanda	58 35	12 08	1828·5	18 42 w.	1 10 E.	17·5 w.	71 46	-0 21	71·4	10·57	-0·03	10·54	Hansteen.
Wenersborg	58 22	12 22	1828·5	.....	.....	.....	71 44	-0 21	71·4	10·53	-0·03	10·50	Hansteen.
Copenhagen	55 41	12 35	1842·5	.....	.....	.....	69 50	0 00	69·8	10·41	0·00	10·40	Hansteen.
			1858·0	15 12 w.	1 17 w.	16·5 w.	69 28	+0 23	69·8	10·37	+0·03	10·40	Lamont.
Carlstad	59 23	13 30	1825·5	.....	.....	.....	72 33	-0 25	72·1	10·69	-0·03	10·66	Hansteen.
Mariestad	58 42	13 53	1828·5	.....	.....	.....	71 42	-0 21	71·4	10·51	-0·03	10·48	Hansteen.
Ystad	55 26	13 56	1824·5	.....	.....	.....	70 13	-0 27	69·8	.....	.....	.....	Erichsen.
Haystorp	58 38	14 08	1828·5	.....	.....	.....	71 43	-0 21	71·4	10·51	-0·03	10·48	Hansteen.
Forsvik	58 35	14 23	1828·5	17 41 w.	1 10 E.	16·5 w.	71 34	-0 21	71·2	10·41	-0·03	10·38	Hansteen.
Rodesund	58 33	14 30	1828·5	17 26 w.	1 10 E.	16·3 w.	.....	.....	.....	.....	.....	.....	Hansteen.
Motala	58 36	14 57	1828·5	16 38 w.	1 10 E.	15·5 w.	.....	.....	.....	.....	.....	.....	Hansteen.
Orebroe	59 17	15 13	1830·5	.....	.....	.....	71 56	-0 18	71·6	10·63	-0·03	10·60	Hansteen.
Linkoping	58 24	15 41	1828·5	.....	.....	.....	71 22	-0 21	71·0	10·35	-0·03	10·32	Hansteen.
Norrkoping	58 36	16 11	1828·5	.....	.....	.....	71 27	-0 21	71·1	10·43	-0·03	10·40	Hansteen.
Stockholm	59 20	18 03	1830·5	14 54 w.	1 00 E.	13·9 w.	71 45	-0 18	71·5	10·62	-0·03	10·59	Hansteen. Rudberg. Hansteen. Hansteen. Humboldt.
			1833·0	14 58 w.	0 53 E.	14·1 w.	71 40	-0 14	71·4	10·32	-0·02	10·30	
			1842·5	.....	.....	.....	71 22	0 00	71·4	10·57	0·00	10·57	
			1851·5	.....	.....	.....	71 14	+0 14	71·5	10·56	+0·03	10·59	
			1829·5	.....	.....	.....	69 40	-0 20	69·3	.....	.....	.....
Sandkrug	55 42	21 08	1829·5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Arensburg	58 15	22 25	1848·5	.....	.....	.....	70 51	+0 09	71·0	10·39	-0·01	10·38	Kämtz, L. S.
Kobbit	58 20	22 40	1848·5	.....	.....	.....	71 09	+0 09	71·3	10·14	-0·01	10·13	Kämtz, L. S.
Werder	58 35	23 40	1848·5	.....	.....	.....	69 32	+0 09	69·7	10·36	-0·01	10·35	Kämtz, L. S.
Pernan	58 22	24 32	1848·5	.....	.....	.....	70 36	+0 09	70·8	10·32	-0·01	10·31	Kämtz, L. S.
Rewal	59 35	24 43	1848·5	.....	.....	.....	70 50	+0 07	71·0	10·35	0·00	10·35	Kämtz, L. S.
Nawast	58 35	25 34	1848·5	.....	.....	.....	70 41	+0 07	70·8	10·29	0·00	10·29	Kämtz, L. S.
Kardis	58 51	26 17	1848·5	.....	.....	.....	70 17	+0 07	70·4	10·39	0·00	10·39	Kämtz, L. S.
Uellenorm	58 19	26 43	1847·5	.....	.....	.....	70 10	+0 06	70·3	10·46	0·00	10·46	Kämtz, L. S.
Dorpat	58 23	26 43	1828·5	9 01 w.	1 24 E.	7·6 w.	.....	.....	.....	.....	.....	.....	Kämtz, L. S.
			1832·5	8 56 w.	1 00 E.	7·9 w.	70 45	-0 13	70·5	.....	.....	.....	Federow.
			1837·5	8 29 w.	0 30 E.	8·0 w.	70 51	+0 10	71·0	10·67	.....	10·67	Struve.
			1850·5	.....	.....	.....	.....	.....	.....	.....	.....	.....	Kämtz, L. S.
Petersburg	59 56	30 19	1828·5	6 48 w.	?	.....	71 06	-0 18	70·8	10·60	-0·02	10·58	Erman.
			1828·5	6 41 w.	?	.....	71 18	-0 18	71·0	10·66	-0·02	10·64	Hansteen.
			1829·5	.....	?	.....	71 12	-0 17	70·9	.....	.....	.....	Humboldt.
			1832·5	.....	?	.....	71 10	-0 13	71·0	.....	.....	.....	Kupffer.
			1842·5	6 18 w.	.....	6·3 w.	71 00	0 00	71·0	.....	.....	.....	Observatory.
			1867·5	.....	?	.....	70 46	+0 31	71·3	10·70	?	?	Fritsche.
			1869·5	2 26 w.	?	.....	70 45	+0 33	71·3	.....	.....	.....	Wild.
			1870·5	2 05 w.	?	.....	70 45	+0 34	71·3	.....	.....	.....	Rikatscheff.
Schlisselburg	59 57	31 02	1870·5	.....	.....	.....	70 39	+0 35	71·2	9·97	.....	9·97	Belavenetz.
Pomeranie	59 20	31 16	1828·5	.....	.....	.....	71 01	-0 17	70·7	10·67	-0·02	10·65	Erman.
Novgorod	58 31	31 19	1828·5	6 21 w.	1 27 E.	4·9 w.	70 26	-0 16	70·2	10·77	-0·02	10·75	Erman.
Rachino	58 07	32 43	1828·5	6 26 w.	1 27 E.	5·0 w.	70 35	-0 16	70·3	10·65	-0·02	10·63	Hansteen.
			1830·5	.....	.....	.....	70 39	-0 16	70·4	.....	.....	.....	Hansteen.
Waldai	57 56	33 15	1828·5	.....	.....	.....	69 58	-0 16	69·7	10·82	-0·02	10·80	Erman.
			1830·0	5 50 w.	1 25 E.	4·4 w.	70 12	-0 16	69·9	10·63	-0·02	10·61	Hansteen.
Wolotschok	57 37	34 40	1828·5	.....	.....	.....	69 52	-0 15	69·6	10·66	-0·02	10·64	Erman.
			1830·5	4 20 w.	1 25 E.	2·9 w.	70 01	-0 13	69·8	.....	.....	.....	Hansteen.
Torschok	57 02	35 03	1830·5	.....	.....	.....	69 25	-0 13	69·2	10·77	-0·02	10·75	Hansteen.
Twer	56 52	35 57	1828·5	.....	.....	.....	68 32	-0 14	68·3	10·49	-0·02	10·47	Erman.
			1867·5	.....	.....	.....	68 28	+0 25	68·9	.....	.....	.....	Fritsche.

ZONE IV.—Lat. 55° to 60° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.			Observers.	
				Observed.	Correction to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.		
Moscow	55 46	37 36	1828.5	2 59 W.	1 21 E.	1.6 W.	68 58	-0 13	68.8	68.9	10.71	-0.02	10.69	Erman. Hansteen. Humboldt. Fritsche. Wild.
			1828.5	3 03 W.	1 21 E.	1.7 W.	69 00	-0 13	68.8		10.71	-0.02	10.69	
			1829.5	.....	.....	.....	68 57	-0 12	68.8		.....	.....	.....
			1867.5	1 04 E.	2 25 W.	1.4 W.	68 28	+0 23	68.9		.....	.....	.....
Bogorodsk	55 47	38 23	1869.5	1 07 E.	2 37 W.	1.5 W.	68 39	+0 23	69.0	.....	0.00	10.70	Erman. Hansteen.
			1828.5	3 25 W.	1 21 E.	2.1 W.	.....	.....	.....	.....	.....	.....
			1828.5	3 19 W.	1 21 E.	2.0 W.	.....	.....	.....	.....	.....	.....
Platowa	55 47	38 43	1828.5	68 25	-0 12	68.2	68.4	10.56	-0.02	10.54	Erman. Hansteen.
Vologda	59 14	39 53	1828.5	.....	.....	.....	68 44	-0 12	68.5		10.71	-0.02	10.69
Dmitrewsk	56 00	40 05	1870.5	3 25 E.	2 42 W.	0.7 E.	70 27	+0 24	70.9	68.0	10.91	0.00	10.91	Belavenetz. Erman.
			1828.5	.....	.....	.....	68 09	-0 12	68.0		11.10	-0.01	11.09
Wladimir	56 08	40 25	1828.5	68 03	-0 12	67.9	68.0	10.77	-0.01	10.76	Hansteen. Fuss.
			1830.0	.....	.....	.....	68 08	-0 09	68.0		.....	.....	.....
10 Versts from Sudogda	55 57	40 51	1828.5	1 23 W.	1 22 E.	0.0	.....	.....	.....	.....	.....	.....	Erman. Hansteen.
Murom	55 35	42 04	1828.5	.....	.....	.....	67 58	-0 11	67.8	10.71	-0.01	10.70	
Osablikowo	55 54	42 26	1828.5	0 15 W.	1 26 E.	1.2 E.	68 15	-0 11	68.1	68.1	Erman. Hansteen.
Teplaia	55 27	42 49	1828.5	.....	.....	.....	68 18	-0 11	68.1		10.88	-0.01	10.87
Doskino	56 09	43 34	1830.5	67 59	-0 10	67.8	10.73	-0.01	10.72	Hansteen.
			1828.5	0 23 E.	1 26 E.	1.8 E.	68 59	-0 11	68.8	.....	10.94	-0.01	10.93
Nishnei Novgorod	56 19	43 57	1828.5	68 35	-0 11	68.4	68.6	10.71	-0.01	10.70	Erman. Hansteen.
			1828.5	0 53 E.	1 29 E.	2.4 E.	68 41	-0 11	68.5		10.92	-0.01	10.91	
			1828.5	.....	.....	.....	68 33	-0 11	68.4		10.77	-0.01	10.76
Tschuguni	56 06	45 40	1867.5	4 39 E.	2 36 W.	2.0 E.	68 45	?	?	.....	.....	.....	Fritsche.
			1828.5	1 27 E.	1 30 E.	3.0 E.	68 39	-0 10	68.5	11.02	-0.01		11.01
Angikowa	55 44	48 09	1828.5	68 39	-0 10	68.5	68.5	10.94	-0.01	10.93	Erman. Hansteen.
			1828.5	1 37 E.	1 29 E.	3.1 E.	68 35	-0 10	68.4		11.03	-0.01	11.10	
			1828.5	.....	.....	.....	68 35	-0 10	68.4		10.94	-0.01	10.93
Kasan	55 48	49 07	1828.5	2 22 E.	1 32 E.	3.9 E.	68 21	-0 08	68.2	68.4	10.92	-0.01	10.91	Erman. Hansteen. Humboldt. Fuss. Simonoff. Simonoff. Observatory. Sawalief. Fritsche. Wild.
			1828.5	.....	.....	.....	68 27	-0 08	68.3		10.90	-0.01	10.89
			1829.5	.....	.....	.....	68 27	-0 07	68.3		10.92	-0.01	10.91
			1830.5	.....	.....	.....	68 26	-0 06	68.3		.....	.....	.....
			1832.5	2 34 E.	0 59 E.	3.6 E.	68 24	-0 05	68.3		.....	.....	.....
			1841.5	3 24 E.	0 06 E.	3.5 E.	68 22	0 00	68.3		.....	.....	.....
			1842.5	.....	.....	.....	68 26	0 00	68.4		.....	.....	.....
			1850.5	.....	.....	.....	68 31	-0 01	68.5		10.85	0.00	10.85
1867.5	6 05 E.	2 31 W.	3.5 E.	68 27	-0 02	68.4	.....	.....	.....		
1869.5	6 12 E.	2 43 W.	3.5 E.	68 40	-0 02	68.6	11.02	0.00	11.02					
Mitieschka	56 13	49 55	1828.5	2 43 E.	1 35 E.	4.3 E.	68 46	-0 08	68.6	68.7	11.08	-0.01	11.07	Erman. Hansteen.
1828.5	.....	.....	.....	68 55	-0 08	68.8	11.06	-0.01	11.05				
Milet	56 40	50 38	1828.5	68 42	-0 08	68.6	68.7	11.14	-0.01	11.13	Erman.
1828.5	5 09 E.	1 35 E.	6.7 E.	68 50	-0 08	68.7	11.17	-0.01	11.16					
Kojil	57 12	51 25	1828.5	69 22	-0 07	69.2	11.30	0.00	11.30	Hansteen.
Suri	57 33	53 04	1828.5	70 20	-0 07	70.2	70.3	11.19	0.00	11.19	Erman. Hansteen.
1828.5	.....	.....	.....	70 36	-0 07	70.5	11.29	0.00	11.29				
Dubrowa	57 42	54 30	1828.5	6 00 E.	1 41 E.	7.7 E.	69 52	-0 06	69.8	69.8	11.27	0.00	11.27	Erman. Hansteen.
			1828.5	.....	.....	.....	69 56	-0 06	69.8		11.37	0.00	11.37
Ochansk	57 47	55 09	1828.5	70 13	-0 06	70.1	11.44	0.00	11.44	Hansteen.
Asamatowa	55 36	56 06	1830.0	68 16	-0 05	68.2	11.20	0.00	11.20	Hansteen.
Kultavka	57 57	56 08	1828.5	5 54 E.	1 44 E.	7.6 E.	.....	.....	.....	.....	.....	.....	Hansteen.
Perm	58 00	56 14	1828.5	6 21 E.	1 44 E.	8.1 E.	70 02	-0 06	69.9	70.0	11.29	0.00	11.29	Erman. Hansteen. Fuss.
			1828.5	6 04 E.	1 44 E.	7.8 E.	70 09	-0 06	70.1		11.42	0.00	11.42	
			1830.5	.....	.....	.....	69 54	-0 05	69.8		.....	.....	.....
			1867.5	9 35 E.	2 24 W.	7.2 E.	70 24	-0 17	70.1		.....	.....	.....
Jänygi	57 42	56 36	1828.5	6 23 E.	1 43 E.	8.1 E.	.....	.....	.....	.....	.....	.....	Hansteen. Erman.
Krylasowo	57 34	56 37	1828.5	6 10 E.	1 43 E.	7.9 E.	70 01	-0 05	69.9	70.0	11.57	0.00		11.57
1828.5	6 07 E.	1 43 E.	7.8 E.	70 03	-0 05	70.0	11.48	0.00	11.48					
Aprelowa	55 44	57 00	1830.0	68 31	-0 05	68.4	11.32	0.00	11.32	Hansteen.
Buikowa	56 53	57 26	1828.5	7 11 E.	1 42 E.	8.9 E.	69 50	-0 05	69.8	69.8	11.49	0.00	11.49	Erman. Hansteen.
			1828.5	7 03 E.	1 42 E.	8.8 E.	69 51	-0 05	69.8		11.50	0.00	11.50	
Masägutowa	55 33	58 05	1830.0	68 18	-0 04	68.2	11.31	0.00	11.31	Hansteen.
Klenowskaia	56 50	58 44	1828.5	6 50 E.	1 43 E.	8.6 E.	.....	.....	.....	.....	.....	.....	Hansteen.
Satkinskoi	55 08	58 58	1829.5	67 43	-0 04	67.7	11.39	0.00	11.39	Hansteen.

ZONE IV.—Lat. 55° to 60° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.			Observers.	
				Observed.	Correction to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.		
Kirgischansk	56 50	59 06	1828-5	6 41 E.	1 44 E.	8.4 E.	69 48	-0 04	69.7	69.8	11.61	0.00	11.61	Erman. Hansteen.
			1828-5	6 14 E.	1 44 E.	8.0 E.	69 51	-0 04	69.8	69.8	11.67	0.00	11.67	
Kuschwa	58 18	59 42	1828-5	7 57 E.	1 48 E.	9.7 E.								Hansteen. Erman.
			1828-5	7 46 E.	1 48 E.			70 51	-0 04	70.8	70.8	11.45	0.00		11.45
Zlatoust	55 08	59 50	1829-5	5 25 E.	1 41 E.	7.1 E.	67 44	-0 03	67.7	67.7	11.41	0.00	11.41	Humboldt.
			1829-5	.....	.....	.....	67 43	-0 03	67.7	67.7	.....	.....	.....
N. Tagilsk	57 55	59 59	1828-5	5 53 E.	1 47 E.	7.7 E.	69 47	-0 04	69.7	69.8	11.50	0.00	11.50	Hansteen. Humboldt.
			1829-5	.....	.....	.....	69 30	-0 04	69.4	69.6	.....	.....	.....
N. Turinsk	58 41	60 00	1828-5	.....	.....	.....	71 02	-0 04	71.0	71.0	11.73	0.00	11.73	Hansteen. Humboldt.
			1829-5	.....	.....	.....	70 59	-0 04	71.0	71.0	.....	.....	.....
Bogoslowsk	59 45	60 00	1828-5	9 09 E.	1 49 E.	11.0 E.	71 36	-0 04	71.5	71.4	11.61	0.00	11.61	Hansteen. Erman.
			1828-5	.....	.....	.....	71 25	-0 04	71.4	71.4	11.57	0.00	11.57	
Newiansk	57 24	60 05	1828-5	.....	.....	.....	69 36	-0 03	69.6	69.6	11.59	0.00	11.59	Hansteen.
Rischota	56 54	60 23	1828-5	5 25 E.	1 45 E.	7.2 E.	.....	.....	.....	.....	.....	.....	.....	Hansteen.
			1828-5	7 23 E.	1 45 E.	9.1 E.	69 24	-0 03	69.4	69.4	11.54	0.00	11.54	Erman. Hansteen. Humboldt. Fuss. Federow. Observatory. Fritsche.
			1828-5	6 27 E.	1 45 E.	8.2 E.	69 42	-0 03	69.7	69.7	11.65	0.00	11.65	
			1829-5	.....	.....	.....	69 10	-0 03	69.1	69.1	.....	.....	.....
			1830-5	.....	.....	.....	69 19	-0 02	69.3	69.3	.....	.....	.....
			1832-5	.....	.....	.....	69 15	-0 02	69.2	69.2	.....	.....	.....
			1842-5	6 39 E.	0 00	6.7 E.	69 51	-0 00	69.9	69.9	.....	.....	.....
Catherinburg	56 50	60 34	1867-5	8 33 E.	1 52 W.	6.7 E.	70 07	-0 13	69.9	69.9	.....	.....	.....
Pitalewskoi	59 17	60 36	1828-5	8 38 E.	1 52 E.	10.5 E.	.....	.....	.....	.....	.....	.....	.....	Hansteen.
Nicharoschowa	58 49	60 40	1828-5	6 17 E.	1 50 E.	8.1 E.	.....	.....	.....	.....	.....	.....	.....	Hansteen.
Kyschtim	55 42	60 44	1829-5	.....	.....	.....	68 46	-0 03	68.7	68.7	.....	.....	.....	Humboldt.
Beresowsk	56 55	60 45	1829-5	.....	.....	.....	69 13	-0 03	69.2	69.2	.....	.....	.....	Humboldt.
Werchoturie	58 52	60 46	1828-5	8 48 E.	1 51 E.	10.39 E.	70 58	-0 04	70.9	71.0	11.66	0.00	11.66	Erman. Hansteen.
			1828-5	.....	.....	.....	71 12	-0 04	71.1	71.0	11.73	0.00	11.73	
Bjelaika	56 50	61 53	1828-5	.....	.....	.....	69 29	-0 05	69.4	69.4	11.42	0.00	11.42	Erman. Hansteen.
			1828-5	.....	.....	.....	69 25	-0 05	69.4	69.4	11.52	0.00	11.52	
Sugazk	57 00	63 44	1828-5	.....	.....	.....	69 54	-0 02	69.9	69.9	11.75	+0.01	11.76	Hansteen. Erman.
			1828-5	7 54 E.	1 47 E.	9.7 E.	69 35	-0 02	69.6	69.7	11.37	+0.01	11.38	
			1828-5	.....	.....	.....	70 15	-0 02	70.2	70.2	11.85	+0.01	11.86	Hansteen.
Tjumen	57 10	65 27	1828-5	9 09 E.	1 49 E.	10.9 E.	69 45	-0 02	69.7	70.0	.....	.....	.....	Erman. Fuss. Fritsche.
			1830-5	.....	.....	.....	70 02	-0 02	70.0	70.0	.....	.....	.....
			1867-5	11 54 E.	1 46 W.	10.1 E.	70 43	-0 32	70.2	70.2	11.63	-0.02	11.61	
Jujakowo	57 32	67 06	1828-5	9 17 E.	1 51 E.	11.1 E.	70 31	-0 01	70.5	70.5	11.90	+0.01	11.91	Hansteen. Erman.
			1828-5	9 14 E.	1 51 E.	11.1 E.	70 29	-0 01	70.5	70.5	11.85	+0.01	11.86	
Chutarbitka	57 58	68 00	1828-5	9 22 E.	1 51 E.	11.2 E.	70 39	0 00	70.6	70.4	11.96	+0.01	11.97	Hansteen. Erman.
			1828-5	.....	.....	.....	70 15	0 00	70.3	70.4	11.62	+0.01	11.63	
			1828-5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
			1828-5	9 46 E.	1 54 E.	11.7 E.	70 58	0 00	71.0	71.0	11.90	+0.01	11.91	Hansteen. Erman. Humboldt. Fuss. Federow. Fritsche.
			1828-5	9 44 E.	1 54 E.	11.6 E.	71 07	0 00	71.1	71.1	11.85	+0.01	11.86	
			1829-5	.....	.....	.....	70 56	0 00	70.9	71.0	11.98	+0.01	11.99	
			1830-5	.....	.....	.....	71 02	0 00	71.0	71.0	.....	.....	.....
			1833-5	10 20 E.	1 12 E.	11.5 E.	71 02	0 00	71.0	71.0	.....	.....	.....
			1867-5	12 23 E.	?	?	71 29	?	?	?	11.84	-0.02	11.82	
Uwazk	59 03	68 45	1829-0	.....	.....	.....	71 13	0 00	71.2	71.2	12.03	+0.01	12.04	Erman.
Istiatskaia	57 24	68 50	1829-0	.....	.....	.....	70 24	+0 01	70.4	70.4	11.84	+0.01	11.85	Hansteen.
Gotoputowa	56 51	69 51	1829-0	.....	.....	.....	70 12	+0 01	70.2	70.2	11.99	+0.01	12.00	Hansteen.
Tugalowsk	59 45	69 55	1829-0	.....	.....	.....	72 26	+0 01	72.5	72.5	12.01	+0.01	12.02	Erman.
Denjikowo	59 58	69 55	1829-0	10 52 E.	2 02 E.	12.9 E.	.....	.....	.....	.....	.....	.....	.....	Erman.
Balachlanska	57 42	70 43	1829-0	10 53 E.	1 56 E.	12.8 E.	.....	.....	.....	.....	.....	.....	.....	Hansteen.
Kototschikowo	56 39	70 45	1829-0	.....	.....	.....	70 21	+0 01	70.4	70.4	11.80	+0.01	11.81	Erman.
Orlowa	56 00	70 55	1829-0	.....	.....	.....	69 28	+0 01	69.5	69.5	11.68	+0.01	11.69	Hansteen.
Ajewskji Wolok	56 35	71 49	1829-0	9 15 E.	1 49 E.	11.1 E.	.....	.....	.....	.....	.....	.....	.....	Erman.
Tjukalinsk	55 57	72 14	1829-0	9 12 E.	1 49 E.	11.0	69 57	+0 02	70.0	70.0	.....	.....	.....	Erman. Fritsche.
			1867-5	11 23 E.	?	?	70 08	?	?	?	.....	.....	.....
Tara	56 54	74 04	1829-0	9 36 E.	1 49 E.	11.4 E.	70 28	+0 03	70.5	70.5	12.03	+0.02	12.05	Erman.
Baschenowa	55 40	74 25	1829-0	.....	.....	.....	69 28	+0 03	69.5	69.5	12.03	+0.02	12.05	Hansteen.
Mogilnaia	56 04	74 32	1829-0	.....	.....	.....	69 46	+0 03	69.8	69.8	12.05	+0.02	12.07	Hansteen.
Muraschewa	55 46	75 35	1829-0	.....	.....	.....	69 41	+0 04	69.8	69.8	12.09	+0.02	12.11	Hansteen.
Spaskoie	55 44	76 26	1829-0	.....	.....	.....	69 43	+0 04	69.8	69.8	12.11	+0.02	12.13	Hansteen.
Pokrowsk	55 42	77 28	1829-0	.....	.....	.....	69 39	+0 04	69.7	69.7	12.28	+0.02	12.30	Erman.
Antoschkino	55 40	77 54	1829-0	.....	.....	.....	69 33	+0 06	69.7	69.7	12.09	+0.03	12.12	Hansteen.
Kainsk	55 27	78 18	1829-0	.....	.....	.....	69 36	+0 06	69.7	69.7	12.22	+0.03	12.25	Hansteen.

ZONE IV.—Lat. 55° to 60° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.			Observers.
				Observed.	Correction to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.	
Osinowi Kolki	55 29	78 56	1829-0	.....	.....	.....	69 37	+0 06	69.7	12.24	+0.03	12.27	Hansteen.
Ubinskaia	55 18	79 52	1829-0	.....	.....	.....	69 40	+0 07	69.8	12.24	+0.03	12.27	Hansteen.
Kargask Dubrowa.....	55 13	80 42	1829-0	.....	.....	.....	69 46	+0 08	69.9	12.18	+0.03	12.21	Hansteen.
Narym	58 54	80 50	1829-0	9 18 E.	2 02 E.	11.3 E.	72 51	+0 08	73.0	12.43	+0.03	12.46	Hansteen.
Tschuluim	55 06	81 14	1829-0	8 59 E.	1 45 E.	10.7 E.	69 33	+0 10	69.7	11.85	+0.03	11.88	Erman.
Owstschinikowa	55 34	82 03	1829-0	9 03 E.	1 47 E.	10.8 E.	69 42	+0 09	69.9	12.25	+0.03	12.28	Hansteen.
Tugursk	58 40	83 00	1829-0	.....	.....	.....	72 24	+0 09	72.6	12.50	+0.03	12.53	Hansteen.
Kolywan	55 20	83 03	1829-0	.....	.....	.....	70 06	+0 09	70.2	12.38	+0.03	12.41	Erman.
Taisakowa	58 03	83 30	1829-0	11 40 E.	1 57 E.	13.6 E.	70 02	+0 09	70.2	12.28	+0.03	12.31	Hansteen.
Anbarsk	57 30	83 33	1829-0	.....	.....	.....	71 53	+0 10	72.1	12.50	+0.03	12.53	Due.
Bolotna	56 00	83 56	1829-0	.....	.....	.....	70 22	+0 10	70.5	12.36	+0.04	12.40	Due.
Ojasch	55 37	84 00	1829-0	8 09 E.	1 47 E.	9.9 E.	.....	.....	.....	.....	.....	.....	Erman.
Michailowschi	57 00	84 16	1829-0	.....	.....	.....	71 39	+0 10	71.8	12.47	+0.04	12.51	Due.
Tomsk	56 30	85 09	1829-0	8 39 E.	1 51 E.	10.7 E.	70 59	+0 11	71.2	12.23	+0.04	12.27	Erman.
			1829-5	8 32 E.	1 51 E.	10.4 E.	70 46	+0 11	71.1	12.29	+0.04	12.33	Hansteen.
			1830-5	.....	.....	.....	70 51	+0 11	71.0	.....	.....	.....	Fuss.
			1867-5	11 25 E.	?	?	71 52	?	?	12.63	?	?	Fritsche.
Osinowka	55 57	85 27	1829-5	8 49 E.	1 48 E.	10.6 E.	70 22	+0 11	70.6	12.44	+0.04	12.48	Hansteen.
Potschitansk	56 11	87 05	1829-0	.....	.....	.....	70 57	+0 12	71.2	12.48	+0.04	12.52	Hansteen.
Birukulsk	56 22	87 41	1829-5	7 31 E.	1 49 E.	9.3 E.	.....	.....	.....	.....	.....	.....	Hansteen.
Podjelnik	56 23	88 02	1829-0	.....	.....	.....	71 12	+0 13	71.4	12.34	+0.05	12.39	Erman.
Bogotolsk	56 10	90 11	1829-5	.....	.....	.....	71 11	+0 13	71.4	.....	.....	.....	Hansteen.
Nazimowsk	59 30	91 01	1829-5	4 55 E.	1 59 E.	6.9 E.	71 06	+0 15	71.4	12.64	+0.05	12.69	Hansteen.
				.....	.....	.....	73 49	+0 15	74.1	12.85	+0.04	12.89	Hansteen.
Atschinsk	56 16	91 00	1829-0	7 09 E.	1 47 E.	8.9 E.	70 55	+0 16	71.2	.....	.....	.....	Erman.
			1829-5	7 27 E.	1 47 E.	9.1 E.	71 06	+0 16	71.4	12.64	+0.05	12.69	Hansteen.
			1867-5	9 41 E.	?	?	72 18	?	?	.....	.....	.....	Fritsche.
Kasulka	56 01	91 46	1829-0	7 10 E.	1 37 E.	8.8 E.	.....	.....	.....	.....	.....	.....	Erman.
Malo Kamtschugskaia	56 06	91 50	1829-0	.....	.....	.....	71 22	+0 17	71.7	12.69	+0.05	12.74	Hansteen.
Anziferowa.....	59 08	92 03	1829-5	3 31 E.	1 56 E.	5.5 E.	73 27	+0 15	73.7	12.79	+0.05	12.84	Hansteen.
Jeniseisk	58 27	92 11	1829-5	6 57 E.	1 54 E.	8.9 E.	73 24	+0 16	73.7	12.75	+0.05	12.80	Hansteen.
			1829-0	6 37 E.	1 41 E.	8.3 E.	70 53	+0 18	71.2	12.59	+0.05	12.64	Erman.
Krasnojarsk	56 01	92 57	1829-5	6 43 E.	1 41 E.	8.4 E.	70 57	+0 18	71.3	12.66	+0.05	12.71	Hansteen.
			1833-5	7 26 E.	1 10 E.	8.6 E.	71 08	+0 12	71.3	.....	.....	.....	Federow.
Maloi Kantat	56 58	93 11	1829-5	6 06 E.	1 47 E.	7.9 E.	.....	.....	.....	.....	.....	.....	Hansteen.
Botoi	55 56	93 15	1829-5	.....	.....	.....	70 50	+0 18	71.1	.....	.....	.....	Erman.
			1867-5	.....	.....	.....	72 18	?	?	.....	.....	.....	Fritsche.
Kazatschinsk	57 37	93 54	1829-5	.....	.....	.....	72 54	+0 18	73.2	12.77	+0.05	12.82	Hansteen.
Great Ourinsk	56 10	95 32	1829-5	5 41 E.	1 40 E.	7.3 E.	71 45	+0 19	72.1	12.54	+0.05	12.59	Erman.
			1867-5	7 37 E.	?	?	72 37	?	?	12.75	-0.09	12.66	Fritsche.
Kansk	55 48	96 06	1829-0	.....	.....	.....	71 30	+0 20	71.9	12.70	+0.06	12.76	Erman.
			1829-0	5 47 E.	1 38 E.	7.4 E.	71 38	+0 20	71.9	12.79	+0.06	12.85	Hansteen.
Potaskoisk	58 29	97 00	1829-5	.....	.....	.....	73 19	+0 20	73.7	12.85	+0.03	12.90	Hansteen.
Kamyschetsk	55 09	98 32	1829-0	.....	.....	.....	70 51	+0 22	71.2	12.78	+0.07	12.85	Hansteen.
Alsalewsk	55 27	98 36	1829-0	4 50 E.	1 36 E.	6.4 E.	.....	.....	.....	.....	.....	.....	Erman.
Tschadobez	58 39	98 57	1829-5	5 31 E.	1 45 E.	7.3 E.	73 36	+0 21	74.0	12.99	+0.06	13.05	Hansteen.
Keschemskaja	58 58	101 14	1829-5	3 57 E.	1 44 E.	5.7 E.	73 56	+0 22	74.3	12.97	+0.06	13.03	Hansteen.
Bratskoi	56 05	101 53	1829-5	3 12 E.	1 30 E.	4.7 E.	71 33	+0 23	71.9	12.89	+0.07	12.96	Hansteen.
Padunskoi	56 11	101 54	1829-5	3 35 E.	1 31 E.	5.1 E.	71 47	+0 23	72.2	12.87	+0.07	12.94	Hansteen.
Schamansky	57 14	102 27	1829-5	3 28 E.	1 34 E.	5.0 E.	72 34	+0 23	73.0	12.75	+0.07	12.82	Hansteen.
Judorma	58 31	102 29	1829-5	4 53 E.	1 39 E.	6.5 E.	73 45	+0 23	74.1	12.69	+0.07	12.76	Hansteen.
Botowsk	55 10	105 22	1829-5	1 25 E.	1 20 E.	2.8 E.	71 14	+0 26	71.7	13.19	+0.08	13.26	Erman.
Bojarsk	56 16	105 57	1829-5	.....	.....	.....	71 33	+0 26	72.0	12.90	+0.08	12.98	Erman.
Ustkuzk	56 46	105 57	1829-5	2 14 E.	1 25 E.	3.7 E.	.....	.....	.....	.....	.....	.....	Erman.
Osmolewskaia	56 28	106 10	1829-5	1 58 E.	1 24 E.	3.4 E.	71 49	+0 26	72.3	12.88	+0.08	12.96	Due.
Suchowsk	57 02	106 47	1829-5	.....	.....	.....	72 20	+0 26	72.8	12.90	+0.08	12.98	Due.
Potapowsk	57 23	107 38	1829-5	.....	.....	.....	72 20	+0 27	72.8	12.96	+0.08	13.04	Erman.
Kirensk	57 47	108 04	1829-5	0 58 E.	1 26 E.	2.4 E.	73 03	+0 27	73.5	12.91	+0.08	13.00	Erman.
			1829-5	0 57 E.	1 26 E.	2.4 E.	73 15	+0 27	73.6	13.04	+0.08	13.12	Due.
Itschora	58 30	109 35	1829-5	.....	.....	.....	73 17	+0 26	73.7	13.11	+0.08	13.19	Erman.
Iwanowsk	58 38	110 34	1829-5	0 59 E.	1 23 E.	2.4 E.	.....	.....	.....	.....	.....	.....	Erman.
			1829-5	0 23 E.	1 23 E.	1.8 E.	73 31	+0 28	74.0	13.05	+0.08	13.13	Due.

ZONE IV.—Lat. 55° to 60° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.			Observers.
				Observed.	Correction to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.	
Parschinsk.....	59 07	111 31	1829.5	0 35 E.	1 23 E.	2.0 E.	73 54	+0 28	74.4	13.29	+0.07	13.36	Erman.
Wittinsk.....	59 27	112 20	1829.5	0 49 W.	1 22 E.	0.6 E.	74 09	+0 28	74.6	13.22	+0.07	13.29	Due.
Krestowzk.....	59 45	113 10	1829.5	3 35 W.	1 22 E.	2.2 W.	74 18	+0 29	74.8	13.14	+0.07	13.21	Due.
Kantinsk.....	59 54	114 05	1829.5	{ 1 35 W.	1 20 E.	0.3 W. } 0.3 W.	74 32	+0 30	75.0 } 75.0	13.23	+0.07	13.30	Erman.
Nochtuisk.....	59 56	117 43	1829.5	2 18 W.	1 12 E.	1.1 W.	74 37	+0 30	75.1	13.10	+0.07	13.17	Due.
Beresowsk.....	59 44	117 51	1829.5	.....	.....	.....	74 00	+0 31	74.5	12.98	+0.08	13.06	Due.
Daban.....	59 16	118 55	1829.5	.....	.....	.....	74 05	+0 29	74.6	13.40	+0.07	13.47	Erman.
Chrestiach.....	58 56	119 08	1829.5	0 14 W.	1 05 E.	0.9 E.	73 41	+0 32	74.2	13.27	+0.08	13.35	Due.
.....	.....	.....	.....	.....	.....	.....	72 53	+0 32	73.4	13.17	+0.08	13.25	Due.
Churanach.....	59 59	119 40	1829.5	.....	.....	.....	73 50	+0 32	74.4	13.04	+0.08	13.12	Due.
Zitschanda.....	59 16	132 28	1829.5	4 50 W.	0 36 E.	4.2 W.	.....	.....	.....	.....	.....	.....	Kosmin.
Ochozk.....	59 21	143 11	1829.5	2 20 W.	0 19 E.	2.0 W.	70 41	+0 38	71.3	12.33	+0.14	12.47	Erman.
Sea of Ochozk.....	58 45	146 05	1829.5	.....	.....	.....	69 23	+0 39	70.0	12.56	+0.14	12.70	Erman.
Sea of Ochozk.....	58 15	150 35	1829.5	0 35 E.	0 07 E.	0.7 E.	69 08	+0 40	69.8	.....	.....	.....	Erman.
Sea of Ochozk.....	58 16	151 53	1829.5	2 53 E.	0 05 E.	3.0 E.	69 04	+0 39	69.7	12.01	+0.14	12.15	Erman.
Sea of Ochozk.....	58 16	157 12	1829.5	.....	.....	.....	68 12	+0 40	68.9	11.97	+0.16	12.13	Erman.
Mouth of the Tigil.....	58 01	158 14	1829.5	4 12 E.	.....	4.2 E.	68 28	+0 42	69.2	11.96	+0.17	12.13	Erman.
Tigilsk.....	57 46	158 36	1829.5	4 01 E.	.....	4.0 E.	.....	.....	.....	.....	.....	.....	Erman.
Maschura.....	55 04	158 55	1829.5	3 43 E.	0 05 W.	3.6 E.	66 09	+0 43	66.9	11.81	+0.19	12.00	Erman.
Kosuirewsk.....	55 52	159 34	1829.5	5 23 E.	0 04 W.	5.3 E.	66 53	+0 42	67.6	11.74	+0.18	11.92	Erman.
Kliutschewsk.....	56 20	160 42	1829.5	6 25 E.	0 03 W.	6.4 E.	.....	.....	.....	.....	.....	.....	Erman.
Chartschinsk.....	56 31	160 43	1829.5	6 25 E.	0 03 W.	6.4 E.	68 11	+0 42	68.9	11.90	+0.18	12.08	Erman.
Jelowka.....	56 54	160 54	1829.5	6 20 E.	0 03 W.	6.3 E.	67 51	+0 41	68.5	11.84	+0.17	12.01	Erman.
Kuruginsk.....	58 34	163 27	1829.5	6 20 E.	0 01 W.	6.3 E.	69 13	+0 40	69.9	11.91	+0.17	12.08	Lütke.
At sea.....	55 59	163 47	1849.5	6 14 E.	.....	6.2 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	55 06	164 02	1849.5	5 51 E.	.....	5.9 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	55 14	164 33	1849.5	7 38 E.	.....	7.6 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	56 15	165 00	1849.5	6 51 E.	.....	6.9 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	57 14	166 48	1849.5	7 58 E.	.....	8.0 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	58 19	169 08	1849.5	9 41 E.	.....	9.7 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	58 45	169 21	1849.5	8 39 E.	.....	8.7 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	59 05	169 49	1849.5	10 17 E.	.....	10.3 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	55 36	170 22	1850.5	10 14 E.	.....	10.2 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	58 28	170 52	1850.5	11 08 E.	.....	11.1 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	59 38	171 10	1849.5	10 54 E.	.....	10.9 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	58 00	171 13	1848.5	9 57 E.	.....	10.0 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	56 55	171 18	1848.5	.....	.....	.....	68 05	.....	68.1	.....	.....	.....	Moore.
At sea.....	55 20	171 37	1851.5	.....	.....	.....	66 06	.....	66.1	.....	.....	.....	Collinson.
At sea.....	57 50	172 17	1848.5	.....	.....	.....	69 07	.....	69.1	.....	.....	.....	Moore.
At sea.....	59 16	172 54	1850.5	13 11 E.	.....	13.2 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	57 48	173 05	1848.5	.....	.....	.....	68 52	.....	68.9	.....	.....	.....	Moore.
At sea.....	59 32	173 12	1849.5	10 28 E.	.....	10.5 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	55 06	173 20	1850.5	.....	.....	.....	67 02	.....	67.0	.....	.....	.....	Collinson.
At sea.....	55 31	173 23	1850.5	11 00 E.	.....	11.0 E.	.....	.....	.....	.....	.....	.....	Collinson.
At sea.....	59 05	173 30	1848.5	12 05 E.	.....	12.1 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	57 13	174 03	1851.5	.....	.....	.....	67 57	.....	68.0	.....	.....	.....	Collinson.
At sea.....	58 14	174 04	1848.5	.....	.....	.....	69 17	.....	69.3	.....	.....	.....	Moore.
At sea.....	56 16	174 23	1850.5	.....	.....	.....	68 30	.....	68.5	.....	.....	.....	Collinson.
At sea.....	56 16	174 40	1854.5	.....	.....	.....	67 16	.....	67.3	.....	.....	.....	Collinson.
At sea.....	59 04	174 52	1848.5	.....	.....	.....	69 53	.....	69.9	.....	.....	.....	Moore.
At sea.....	56 46	175 38	1850.5	.....	.....	.....	68 20	.....	68.3	.....	.....	.....	Collinson.
At sea.....	58 57	176 08	1851.5	.....	.....	.....	68 44	.....	68.7	.....	.....	.....	Collinson.
At sea.....	57 21	176 24	1854.5	12 40 E.	.....	12.7 E.	68 42	.....	68.7	.....	.....	.....	Collinson.
At sea.....	59 14	176 32	1851.5	11 46 E.	.....	11.8 E.	.....	.....	.....	.....	.....	.....	Collinson.
At sea.....	58 02	176 55	1850.5	.....	.....	.....	69 52	.....	69.9	.....	.....	.....	Collinson.
At sea.....	58 37	177 04	1850.5	13 24 E.	.....	13.4 E.	.....	.....	.....	.....	.....	.....	Collinson.
At sea.....	57 52	177 15	1854.5	.....	.....	.....	68 43	.....	68.7	.....	.....	.....	Collinson.
At sea.....	58 03	177 33	1854.5	14 19 E.	.....	14.3 E.	.....	.....	.....	.....	.....	.....	Collinson.
At sea.....	59 06	178 04	1850.5	.....	.....	.....	71 21	.....	71.3	.....	.....	.....	Collinson.
At sea.....	59 43	178 33	1850.5	14 20 E.	.....	14.3 E.	.....	.....	.....	.....	.....	.....	Collinson.
At sea.....	59 40	178 54	1850.5	.....	.....	.....	71 25	.....	71.4	.....	.....	.....	Collinson.
At sea.....	59 00	179 25	1854.5	17 33 E.	.....	17.6 E.	.....	.....	.....	.....	.....	.....	Collinson.
At sea.....	59 54	179 39	1851.5	.....	.....	.....	70 46	.....	70.8	.....	.....	.....	Collinson.

ZONE IV.—Lat. 55 to 60° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.			Observers.		
				Observed.	Correction to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.			
At sea.....	59 14	179 50	1854.5	.....	.....	.....	70 34	.....	70.6	.....	.....	.....	Collinson.
At sea.....	56 16	183 38	1850.5	17 43 E.	.....	17.7 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	57 11	183 51	1849.5	17 40 E.	.....	17.7 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	56 16	185 38	1850.5	17 43 E.	.....	17.7 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	57 10	189 00	1852.5	20 06 E.	.....	20.1 E.	.....	.....	.....	.....	.....	.....	Crane.
At sea.....	57 40	192 57	1850.5	.....	.....	.....	71 53	.....	71.9	.....	.....	.....	Collinson.
At sea.....	55 31	194 09	1850.5	.....	.....	.....	70 40	.....	70.7	.....	.....	.....	Collinson.
Amok Island.....	55 27	195 58	1827.5	21 15 E.	.....	21.3 E.	.....	.....	.....	.....	.....	.....	Lütke.
Cape Black.....	58 43	197 55	1827.5	25 10 E.	.....	25.2 E.	.....	.....	.....	.....	.....	.....	Lütke.
Wrangel Harbour.....	56 59	202 03	1827.5	24 00 E.	.....	24.0 E.	.....	.....	.....	.....	.....	.....	Lütke.
Suwaroff Cape.....	58 42	203 00	1827.5	26 15 E.	.....	26.3 E.	.....	.....	.....	.....	.....	.....	Lütke.
Kodiack.....	57 20	207 09	1839.5	26 44 E.	.....	26.7 E.	72 43	.....	72.7	12.11	.....	12.11	Belcher.
At sea.....	55 43	208 19	1850.5	25 36 E.	.....	25.6 E.	.....	.....	.....	.....	.....	.....	Collinson.
At sea.....	55 33	220 45	1830.0	.....	.....	.....	75 33	.....	75.6	12.64	.....	12.64	Erman.
At sea.....	57 02	221 00	1850.5	29 01 E.	.....	29.0 E.	.....	.....	.....	.....	.....	.....	Collinson.
At sea.....	56 54	223 35	1830.0	.....	.....	.....	76 59	.....	77.0	12.59	.....	12.59	Erman.
Sitka.....	57 03	224 37	1827.5	28 50 E.	28.8 E.	75 55	75.9	12.98	12.98	12.89	Lütke.	
			1830.0	28 16 E.	28.3 E.	75 51	75.9	12.90	12.90		Erman.	
			1838.5	28 37 E.	28.6 E.	75 51	75.9	12.77	12.77		Belcher.	
			1842.5	28 53 E.	28.9 E.	75 51	75.9	Observatory.
			1851.0	29 14 E.	29.2 E.	76 20	76.3	Collinson.
Fort Dunvegan.....	55 56	241 35	1844.5	27 20 E.	.....	27.3 E.	78 46	.....	78.8	13.86	.....	13.86	Lefroy.
River Cadotte.....	56 47	242 58	1844.5	27 03 E.	.....	27.1 E.	79 21	.....	79.4	.....	.....	.....	Lefroy.
Peace River.....	57 57	243 00	1844.5	29 56 E.	.....	29.9 E.	80 01	.....	80.0	.....	.....	.....	Lefroy.
Peace River.....	57 19	243 32	1844.5	28 53 E.	.....	28.9 E.	79 27	.....	79.5	.....	.....	.....	Lefroy.
Fort Vermilion.....	58 25	243 50	1844.5	32 40 E.	.....	32.7 E.	80 48	.....	80.8	13.89	.....	13.89	Lefroy.
Lesser Slave Lake.....	55 30	244 07	1844.5	.....	.....	.....	78 39	.....	78.7	13.87	.....	13.87	Lefroy.
Lesser Slave Lake.....	55 30	244 33	1844.5	26 38 E.	.....	26.6 E.	.....	.....	.....	.....	.....	.....	Lefroy.
Point Dejala.....	55 26	244 59	1844.5	.....	.....	.....	78 30	.....	78.5	.....	.....	.....	Lefroy.
Falls of Peace River.....	58 24	245 06	1844.5	30 22 E.	.....	30.4 E.	80 51	.....	80.9	.....	.....	.....	Lefroy.
Poplar Island.....	58 38	246 03	1844.5	.....	.....	.....	81 05	.....	81.1	.....	.....	.....	Lefroy.
Forks of Athabasca R.....	55 13	246 10	1844.5	26 28 E.	.....	26.5 E.	78 55	.....	78.9	.....	.....	.....	Lefroy.
Peace River.....	58 58	247 01	1844.5	.....	.....	.....	81 37	.....	81.6	.....	.....	.....	Lefroy.
Peace River.....	58 58	247 25	1844.5	31 30 E.	.....	31.5 E.	.....	.....	.....	.....	.....	.....	Lefroy.
Point Providence.....	58 58	247 50	1844.5	.....	.....	.....	81 46	.....	81.8	.....	.....	.....	Lefroy.
Pelican Portage.....	59 58	248 09	1844.5	36 15 E.	.....	36.3 E.	82 27	.....	82.5	.....	.....	.....	Lefroy.
Pointe Brulée.....	58 07	248 35	1843.5	.....	.....	.....	81 31	.....	81.5	14.01	.....	14.01	Lefroy.
Fort Chipewyan, or Athabasca.....	58 43	248 42	1825.5	25 30 E.	?	81 27	?	?	13.93	Franklin. Simpson.	
			1837.5	26 06 E.	.....	?	81 37	.....	81.6	13.93	.....	13.93	
			1843.5	28 43 E.	.....	28.7 E.	80 36	.....	80.6	13.93	.....	13.93	
			1843.5	27 21 E.	.....	27.4 E.	80 37	.....	80.6	13.92	.....	13.92	
Clearwater River.....	56 39	249 11	1843.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	Lefroy.
Portage de la Loche.....	56 38	250 12	1843.5	27 21 E.	.....	27.4 E.	.....	.....	.....	.....	.....	.....	Lefroy.
Methy Portage.....	56 30	250 26	1843.5	28 02 E.	.....	28.0 E.	.....	.....	.....	.....	.....	.....	Lefroy.
River de la Loche.....	56 15	250 37	1843.5	.....	.....	.....	80 20	.....	80.3	13.86	.....	13.86	Lefroy.
Snake Island.....	55 51	250 44	1843.5	25 37 E.	.....	25.6 E.	.....	.....	.....	.....	.....	.....	Lefroy.
Buffaloe Lake.....	56 05	251 09	1843.5	.....	.....	.....	80 37	.....	80.6	14.00	.....	14.00	Lefroy.
Ile à la Crosse.....	55 27	252 06	1825.5	23 19 E.	?	79 55	?	?	14.01	Franklin. Back.	
			1834.5	.....	.....	?	79 28	?	?	.....	.....	.....
			1843.5	25 04 E.	.....	25.1 E.	80 10	.....	79.9	14.01	.....	14.01	
Portage Sonnante.....	55 54	252 34	1843.5	25 43 E.	.....	25.7 E.	80 11	.....	80.2	14.06	.....	14.06	Lefroy.
Snake Rapid.....	55 46	253 30	1843.5	.....	.....	.....	80 39	.....	80.7	14.18	.....	14.18	Lefroy.
Pine Portage.....	55 43	254 10	1843.5	.....	.....	.....	80 40	.....	80.7	14.26	.....	14.26	Lefroy.
Great Devil's Portage..	55 40	255 11	1843.5	.....	.....	.....	80 31	.....	80.5	14.19	.....	14.19	Lefroy.
Little Rock Portage....	55 34	255 27	1843.5	.....	.....	.....	80 17	.....	80.3	.....	.....	.....	Lefroy.
Frog Portage.....	55 28	256 30	1843.5	.....	.....	.....	80 59	.....	81.0	14.06	.....	14.06	Lefroy.
Portage des Epinettes..	55 04	257 18	1843.5	.....	.....	.....	80 53	.....	80.9	14.16	.....	14.16	Lefroy.
Long Portage.....	55 15	265 35	1843.5	13 00 E.	.....	13.0 E.	82 14	.....	82.2	14.22	.....	14.22	Lefroy.
Hill River.....	55 22	266 00	1843.5	12 00 E.	.....	12.0 E.	82 55	.....	82.9	14.16	.....	14.16	Lefroy.
Morgan's Portage.....	55 29	266 08	1843.5	11 17 E.	.....	11.3 E.	.....	.....	.....	.....	.....	.....	Lefroy.
White Earth Portage..	55 33	266 10	1843.5	11 49 E.	.....	11.8 E.	83 03	.....	83.1	14.09	.....	14.09	Lefroy.
Shamatowa.....	56 21	267 04	1843.5	12 42 E.	.....	12.7 E.	83 36	.....	83.6	14.08	.....	14.08	Lefroy.

ZONE IV.—Lat. 55° to 60° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.			Observers.	
				Observed.	Correction to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.		
York Factory	57 00	267 34	1819.5	6 00 E.	..... ?	? °	.....	.....	.....	.....	.....	.....	Franklin. Lefroy. Blakiston. Moore. Moore. Moore.	
			1843.5	9 25 E.	..... ?	9.4 E.	83 47	.....	83.8	14.05	.....	14.05		14.05
			1857.5	7 37 E.	..... ?	.....	.....	.....	.....	14.02	.....	14.02		
On ice.....	57 15	277 07	1846.5	15 57 w.	.....	16.0 w.	.....	84 34	.....	84.6	.....	.....	Moore. Moore.	
At sea.....	58 53	277 08	1846.5	20 52 w.	.....	20.9 w.	.....	85 48	.....	85.8	.....	.....
At sea.....	59 11	277 15	1846.5	.....	.....	.....	.....	86 30	.....	86.5	.....	13.64	13.64	Moore.
At sea.....	57 09	277 18	1846.5	17 16 w.	.....	17.3 w.	.....	84 36	.....	84.6	.....	.....	.....	Moore.
At sea.....	57 37	277 21	1846.5	17 52 w.	.....	17.9 w.	.....	84 25	.....	84.4	.....	.....	.....	Moore.
At sea.....	57 32	277 23	1846.5	16 15 w.	.....	16.3 w.	.....	85 15	.....	85.3	13.28	.....	13.28	Moore.
At sea.....	57 04	277 23	1846.5	.....	.....	.....	.....	84 31	.....	84.5	.....	.....	.....	Moore.
On ice.....	57 15	277 27	1846.5	15 57 w.	.....	16.0 w.	.....	84 30	.....	84.5	13.59	.....	13.59	Moore.
At sea.....	56 29	277 28	1846.5	15 48 w.	.....	15.8 w.	.....	.....	.....	.....	.....	.....	.....	Moore.
At sea.....	55 29	277 36	1846.5	.....	.....	.....	.....	83 48	.....	83.8	13.26	.....	13.26	Moore.
At sea.....	55 25	277 46	1846.5	11 53 w.	.....	11.9 w.	.....	84 00	.....	84.0	13.59	.....	13.59	Moore.
At sea.....	56 40	278 03	1846.5	.....	.....	.....	.....	84 42	.....	84.7	13.55	.....	13.55	Moore.
At sea.....	56 24	278 10	1846.5	.....	.....	.....	.....	84 10	.....	84.2	.....	.....	.....	Moore.
Aulezavik	59 48	295 45	1860.5	51 23 w.	..... ?	..... ?	.....	82 15	.....	82.3	12.52	.....	12.52	Officers U. States.
At sea.....	59 55	303 20	1846.5	52 29 w.	.....	52.5 w.	.....	81 17	.....	81.3	12.85	.....	12.85	Moore.
At sea.....	58 04	304 49	1846.5	.....	.....	.....	.....	81 31	.....	81.5	.....	.....	.....	Moore.
At sea.....	59 10	306 05	1846.5	.....	.....	.....	.....	79 58	.....	80.0	12.72	.....	12.72	Moore.
At sea.....	58 46	307 00	1846.5	50 05 w.	.....	50.1 w.	.....	80 00	.....	80.0	12.60	.....	12.60	Moore.
At sea.....	56 49	310 26	1846.5	45 45 w.	.....	45.7 w.	.....	79 48	.....	79.8	.....	.....	.....	Moore.
At sea.....	57 54	310 34	1846.5	48 45 w.	.....	48.8 w.	.....	79 02	.....	79.0	.....	.....	.....	Moore.
On ice.....	59 49	311 51	1819.5	48 38 w.	.....	48.6 w.	.....	.....	.....	.....	.....	.....	.....	Parry and Sabine.
At sea.....	57 42	315 57	1846.5	47 44 w.	.....	47.7 w.	.....	78 02	.....	78.0	12.10	.....	12.10	Moore.
At sea.....	57 55	319 03	1819.5	46 16 w.	.....	46.3 w.	.....	.....	.....	.....	.....	.....	.....	Parry and Sabine.
At sea.....	57 30	319 20	1846.5	45 28 w.	.....	45.5 w.	.....	77 36	.....	77.6	11.98	.....	11.98	Moore.
At sea.....	57 21	321 05	1846.5	44 33 w.	.....	44.6 w.	.....	76 53	.....	76.9	11.81	.....	11.84	Moore.
At sea.....	56 14	322 10	1846.5	.....	.....	.....	.....	76 23	.....	76.4	11.74	.....	11.74	Moore.
At sea.....	56 10	322 50	1846.5	.....	.....	.....	.....	76 15	.....	76.2	.....	.....	.....	Moore.
At sea.....	57 05	324 10	1846.5	43 16 w.	.....	43.3 w.	.....	76 03	.....	76.1	11.59	.....	11.59	Moore.
At sea.....	56 35	326 44	1846.5	.....	.....	.....	.....	75 31	.....	75.5	.....	.....	.....	Moore.
At sea.....	56 25	327 15	1846.5	40 19 w.	.....	40.3 w.	.....	76 05	.....	76.1	11.58	.....	11.58	Moore.
At sea.....	56 24	327 20	1846.5	.....	.....	.....	.....	75 43	.....	75.7	.....	.....	.....	Moore.
At sea.....	56 15	329 18	1846.5	40 14 w.	.....	40.2 w.	.....	75 39	.....	75.7	11.43	.....	11.43	Moore.
At sea.....	56 17	332 48	1846.5	.....	.....	.....	.....	74 48	.....	74.8	11.26	.....	11.26	Moore.
At sea.....	56 16	333 02	1846.5	38 18 w.	.....	38.3 w.	.....	74 12	.....	74.2	11.26	.....	11.26	Moore.
At sea.....	56 14	333 16	1846.5	.....	.....	.....	.....	74 52	.....	74.9	11.34	.....	11.34	Moore.
At sea.....	56 00	335 06	1846.5	36 52 w.	.....	36.9 w.	.....	74 11	.....	74.2	.....	.....	.....	Moore.
At sea.....	56 08	336 30	1846.5	.....	.....	.....	.....	74 29	.....	74.5	.....	.....	.....	Moore.
At sea.....	55 41	336 55	1846.5	36 26 w.	.....	36.4 w.	.....	.....	.....	.....	.....	.....	.....	Moore.
At sea.....	55 53	337 05	1846.5	35 32 w.	.....	35.5 w.	.....	73 56	.....	73.9	.....	.....	.....	Moore.
At sea.....	56 02	337 50	1846.5	35 47 w.	.....	35.8 w.	.....	73 51	.....	73.9	.....	.....	.....	Moore.
At sea.....	56 23	338 20	1846.5	36 00 w.	.....	36.0 w.	.....	74 07	.....	74.1	10.93	.....	10.93	Moore.
At sea.....	56 19	341 08	1846.5	34 19 w.	.....	34.3 w.	.....	73 55	.....	73.9	.....	.....	.....	Moore.
At sea.....	57 18	344 00	1846.5	.....	.....	.....	.....	74 02	.....	74.0	.....	.....	.....	Moore.
At sea.....	57 57	345 33	1846.5	32 14 w.	.....	32.2 w.	.....	74 15	.....	74.3	10.59	.....	10.59	Moore.
At sea.....	58 14	349 03	1846.5	31 25 w.	.....	31.4 w.	.....	73 15	.....	73.3	.....	.....	.....	Moore.
St. Kilda	57 49	351 28	1831.5	30 30	.....	30.5 w.	.....	.....	.....	.....	.....	.....	.....	Vidal.
At sea.....	59 00	351 42	1846.5	.....	.....	.....	.....	73 29	.....	73.5	.....	.....	.....	Moore.
At sea.....	59 00	351 39	1846.5	30 55 w.	.....	30.9 w.	.....	73 26	.....	73.4	.....	.....	.....	Moore.
At sea.....	58 51	356 29	1846.5	.....	.....	.....	.....	73 10	.....	73.2	10.56	.....	10.56	Moore.
At sea.....	58 16	357 49	1846.5	26 43 w.	26.7 w.	Moore.
At sea.....	56 30	359 12	1846.5	23 58 w.	24.0 w.	Moore.

ZONE V.—LATITUDE 60° TO 65° N.

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ZONE V.—Lat. 60° to 65° N.

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.			Observers.	
				Observed.	Correction to Epoch 1842-5.	Corrected.	Observed.	Cor. to Epoch 1842-5.	Corrected.	Observed.	Cor. to Epoch 1842-5.	Corrected.		
Bergen	60 24	5 18	1860-5				72 43	+27	73-2				Hansteen.	
Ullensvang	60 20	6 38	1825-5	22 51 w.	1 34 E.	21-3 w.	73 44	-25	73-3	10-66		10-66	Hansteen.	
Laxen	63 34	9 20	1839-0				74 02	-05	74-0	10-83		10-83	Gaimard.	
Laurgard	61 54	9 21	1832-5				73 54	-15	73-7	10-90		10-90	Hansteen.	
Köngswold	62 16	9 37	1832-5				73 53	-15	73-6	10-81		10-81	Hansteen.	
Hundorp	61 33	9 57	1832-5				73 56	-15	73-7	10-03		11-03	Hansteen.	
Gusdal	61 15	10 10	1832-5				73 34	-15	73-3	10-84		10-84	Hansteen.	
Storen	63 01	10 22	1825-5				74 28	-25	74-1	11-02		11-02	Hansteen.	
Drontheim	63 26	10 23	1823-5				74 43	-29	74-2	10-79		10-79	Sabine. Hansteen. Hansteen. Böck and Meyer. Gaimard.	
			1825-5				74 41	-25	74-3			10-79		
			1832-5				74 12	-15	74-0		74-1	10-79		10-79
			1838-5				73 58	-06	73-9			10-80		10-80
			1840-0	19 30 w.	0 14 E.	19-3 w.						10-78		10-78
Nebye	62 18	10 58	1825-5				74 34	-25	74-2	11-05		11-05	Hansteen.	
Ydset	62 57	11 18	1825-5				74 49	-25	74-4	11-28		11-28	Hansteen.	
Biornestad	61 03	11 28	1825-5				73 50	-25	73-4	11-05		11-05	Hansteen.	
Grundsät	60 56	11 35	1825-5				73 59	-25	73-6	11-17		11-17	Hansteen.	
Roros	62 34	11 35	1825-5				74 41	-25	74-3	11-17		11-17	Hansteen.	
			1838-5				74 01	-06	73-9					
Kongsvinger	60 12	11 58	1825-5				73 58	-25	73-6	11-02		11-02	Hansteen.	
Suul	63 47	12 12	1825-5				74 39	-25	74-2	10-91		10-91	Hansteen.	
Ostersund	63 10	14 30	1825-5				73 56	-25	73-5	11-00		11-00	Hansteen. Gaimard.	
			1840-0				73 18	-03	73-3					
Grimnäs	62 50	15 10	1825-5				74 07	-25	73-7	11-04		11-04	Hansteen.	
Alsta	62 29	16 00	1825-5				73 43	-25	73-3	11-03		11-03	Hansteen.	
Sundswall	62 22	17 16	1825-5				73 38	-25	73-2	10-98		10-98	Hansteen.	
Hernosand	62 38	17 53	1825-5				73 56	-25	73-5	11-02		11-02	Hansteen.	
Doeksta	63 05	18 16	1825-5				74 04	-25	73-7	10-95		10-95	Hansteen.	
Umea	63 49	20 16	1825-5				74 04	-25	73-7	10-96		10-96	Hansteen.	
Degerby	60 02	20 20	1830-5				72 13	-18	71-9	10-56		10-56	Hansteen.	
Johannisdal	62 21	21 21	1847-0				73 27	+07	73-6	10-50		10-50	Kämtz, L. S.	
Tjock	62 17	21 22	1825-5				73 21	-25	72-9	10-91		10-91	Hansteen.	
			1847-0				72 43	+07	72-8					
Björneborg	61 29	21 37	1825-5				72 55	-25	72-5	10-86		10-86	Hansteen.	
			1825-5				73 49	-25	73-4					
Wasa	63 04	21 42	1847-5	12 38 w.	1 33 E.	11-1 w.	73 01	+07	73-1	10-78		10-78	Kämtz, L. S.	
Abo	60 27	22 17	1830-5				72 05	-25	71-7	10-85		10-85	Hansteen.	
			1847-0	10 41 w.	1 06 E.	9-6 w.	71 55	-18	71-6					
Nye Carleby	63 38	22 34	1825-5				73 48	-25	73-4	10-97		10-97	Hansteen.	
Sundby	63 36	22 40	1847-5				73 19	+07	73-4	10-47		10-47	Kämtz, L. S.	
Wehnwarpe	61 46	22 49	1847-5				72 06	+07	72-2	10-54		10-54	Kämtz, L. S.	
Handela	60 24	23 00	1830-5				71 58	-18	71-7	10-67		10-67	Hansteen.	
Lambola	60 15	23 10	1847-5				71 29	+07	71-6	10-43		10-43	Kämtz, L. S.	
Bjorsby	60 05	23 27	1830-5				71 29	-18	71-2	10-62		10-62	Hansteen.	
Kyrola	64 05	23 30	1847-5				73 25	+07	73-5	10-72		10-72	Kämtz, L. S.	
Knutjarvie	61 28	24 02	1847-5				72 02	+07	72-2	10-52		10-52	Kämtz, L. S.	
Kyrkstad	60 10	24 05	1847-5				71 22	+07	71-5	10-36		10-36	Kämtz, L. S.	
Bollstad	60 09	24 13	1847-5				71 30	+07	71-6	10-40		10-40	Kämtz, L. S.	
Tavastchus	61 00	24 28	1847-5				72 08	+07	72-3	10-44		10-44	Kämtz, L. S.	
Lassila	64 45	24 38	1847-5				73 50	+07	74-0	10-97		10-97	Kämtz, L. S.	
Brahestad	64 41	24 40	1825-0	10 38 w.	1 37 E.	9-0 w.	74 10	-25	73-8	10-25		11-25	Hansteen.	
Turkhanta	60 50	24 47	1847-5				72 15	+07	72-4	10-44		10-44	Kämtz, L. S.	
Nukari	60 22	24 55	1847-5				71 40	+07	71-8	10-51		10-51	Kämtz, L. S.	
Helsingfors	60 10	24 57	1830-5	10 45 w.	1 06 E.	9-7 w.	72 00	-18	71-7	10-60		10-60	Hansteen. Haleström. Nervander. Kämtz, L. S. Kämtz, L. S.	
			1833-0				71 40	-14	71-4					
			1840-0				71 25	-04	71-4					
			1847-5				71 22	+07	71-5					
			1849-0				71 20	+10	71-5					
Borga	60 24	25 36	1830-5				71 34	-18	71-3	10-67		10-67	Hansteen.	
Tuomala	64 25	26 00	1847-5				73 31	+05	73-6	10-83		10-83	Kämtz, L. S.	
Aho	64 02	26 27	1847-5				73 25	+05	73-5	10-67		10-67	Kämtz, L. S.	
Abborfors	60 30	26 30	1847-5				71 20	+05	71-4	10-52		10-52	Kämtz, L. S.	

ZONE V.—Lat. 60° to 65° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.			Observers.
				Observed.	Correction to Epoch 1842-5.	Corrected.	Observed.	Cor. to Epoch 1842-5.	Corrected.	Observed.	Cor. to Epoch 1842-5.	Corrected.	
Salahmi	63 47	27 00	1847-5	.....	.....	.....	73 14	+05	73-3	10-60	.....	10-60	Kämtz, L. S.
Wirda	63 37	27 03	1847-5	.....	.....	.....	73 09	+05	73-2	10-63	.....	10-63	Kämtz, L. S.
Frederikshamn	60 35	27 11	1830-5	9 15 w.	1 06 e.	8-2 w.	71 42	-12	71-5	10-69	.....	10-69	Hansteen.
Sawojarwi	63 22	27 13	1847-5	.....	.....	.....	72 53	+05	73-0	11-30	.....	11-30	Kämtz, L. S.
Gronvik	60 33	27 30	1830-5	8 02 w.	1 06 e.	6-9 w.	71 50	-12	71-6	10-68	.....	10-68	Hansteen.
Kuopio	62 55	27 33	1847-5	.....	.....	.....	71 32	+05	71-6	10-43	.....	10-43	Kämtz, L. S.
Warkaus Sluss	62 20	27 58	1842-5	.....	.....	.....	72 54	+05	73-0	10-59	.....	10-59	Kämtz, L. S.
Gulf of Finland	60 05	28 07	1830-5	.....	.....	.....	70 50	-12	70-6	.....	.....	.....	Erman.
Pumala	61 32	28 15	1847-5	.....	.....	.....	72 08	+05	72-2	10-52	.....	10-52	Kämtz, L. S.
Wilmanstrand	61 04	28 16	1847-5	.....	.....	.....	71 52	+05	72-0	10-55	.....	10-55	Kämtz, L. S.
Wiborg	60 44	28 50	1830-5	7 12 w.	1 06 e.	6-1 w.	71 42	-12	71-5	10-67	.....	10-67	Hansteen.
Imatra Falls	61 11	28 55	1847-0	.....	.....	.....	70 58	+05	71-1	.....	.....	.....	Kämtz, L. S.
Lodejnoe	60 44	33 33	1870-5	1 23 e.	2 48 w.	1-4 w.	71 49	+14	72-1	10-95	.....	10-95	Belavenetz.
Gomorowitschie	60 55	34 35	1849-0	.....	.....	.....	71 34	+04	71-6	10-67	.....	10-67	Kämtz, L. S.
Kem	64 57	34 39	1831-0	2 50 w.	1 09 e.	1-7 w.	.....	.....	.....	.....	.....	.....	Reinecke.
Sovena	64 16	35 28	1830-0	2 45 w.	1 15 e.	1-5 w.	.....	.....	.....	.....	.....	.....	Nelidoff.
Wytegra	61 00	36 27	1841-5	.....	.....	.....	71 31	.....	71-5	11-30	.....	11-30	Kämtz, L. S.
Cape Orloff	64 55	36 30	1830-0	1 00 w.	1 15 e.	0-3 e.	71 34	+03	71-6	10-82	.....	10-82	Kämtz, L. S.
Badoshkaia	60 48	37 30	1849-0	.....	.....	.....	71 34	+14	71-8	10-85	.....	10-85	Belavenetz.
Kio Island	64 00	37 55	1829-0	1 00 w.	1 21 e.	0-4 e.	.....	.....	.....	.....	.....	.....	Krotoff.
Onega	63 54	38 09	1829-5	1 05 w.	1 18 e.	0-2 e.	71 25	+03	71-5	10-78	.....	10-78	Kämtz, L. S.
Pertominski Convent..	64 48	38 30	1832-0	0 40 w.	1 00 e.	0-3 e.	73 38	-06	73-5	.....	.....	.....	Reinecke.
Kargopol	61 43	38 57	1849-0	.....	.....	.....	.....	.....	.....	.....	.....	.....	Reinecke.
Ustwelkskoie.....	61 55	39 12	1849-0	.....	.....	.....	72 08	+03	72-2	10-84	.....	10-84	Pakhtusoff.
Nicolsky Convent	64 35	39 54	1832-0	1 40 e.	1 00 e.	2-7 e.	.....	.....	.....	.....	.....	.....	Kämtz, L. S.
Krassnowskaia	62 10	40 10	1849-0	.....	.....	.....	72 15	+03	72-3	10-86	.....	10-86	Kämtz, L. S.
Mouth of the Dwina...	64 55	40 17	1832-0	2 04 e.	1 00 e.	3-1 e.	72 33	+03	72-6	10-88	.....	10-88	Reinecke.
Fort Novosdrinsk	64 42	40 28	1832-5	4 04 e.	1 33 w.	2-5 e.	.....	.....	.....	.....	.....	.....	Kämtz, L. S.
Lapominua	64 47	40 30	1832-5	2 00 e.	1 00 e.	3-0 e.	.....	.....	.....	.....	.....	.....	Reinecke.
Archangel	64 34	40 33	1832-0	2 16 e.	1 03 e.	3-3 e.	74 09	-05	74-1	11-06	.....	11-06	Reinecke.
Plesskaia	62 35	40 55	1849-0	5 45 e.	2 48 w.	3-0 e.	73 59	+03	74-0	10-97	.....	10-97	Kämtz, L. S.
Bobrowsk	64 28	41 00	1849-0	.....	.....	.....	73 51	+14	74-1	11-13	.....	11-13	Belavenetz.
Kaduish	62 55	41 30	1849-0	.....	.....	.....	72 47	+02	72-8	10-85	.....	10-85	Kämtz, L. S.
Cholmagory	64 12	41 50	1841-0	.....	.....	.....	74 01	+02	74-1	10-99	.....	10-99	Kämtz, L. S.
Pianda	62 56	42 35	1870-5	4 57 e.	2 48 w.	2-2 e.	.....	.....	.....	.....	.....	.....	Reinecke.
Veliky	60 46	46 18	1870-5	7 09 e.	2 48 w.	4-4 e.	73 20	+02	73-4	10-96	.....	10-96	Kämtz, L. S.
Beresow	63 56	65 04	1829-0	11 46 e.	2 12 w.	9-6 e.	73 28	+01	73-5	.....	.....	.....	Sawalief.
Kunduwansk	63 17	65 06	1829-0	.....	.....	.....	72 59	+07	73-1	10-93	.....	10-93	Belavenetz.
Schorkal	62 44	65 34	1829-0	11 12 e.	2 08 w.	9-1 e.	71 47	+07	71-9	11-17	.....	11-17	Belavenetz.
Kondinsk	62 24	66 28	1829-0	.....	.....	.....	74 54	-04	74-9	12-05	+01	12-06	Erman.
Kewaschinsk	61 37	67 45	1829-0	.....	.....	.....	74 03	-03	74-0	12-09	+01	12-10	Erman.
Jelisarowo	61 15	68 21	1829-0	11 39 e.	2 06 w.	9-6 e.	.....	.....	.....	.....	.....	.....	Erman.
Samarowo	60 45	68 42	1829-0	.....	.....	.....	73 07	-01	73-1	12-10	+01	12-11	Erman.
Sawodinsk	60 13	69 34	1829-0	.....	.....	.....	72 45	+01	72-8	12-03	+01	12-04	Erman.
Kangatowo	63 27	87 22	1829-5	13 14 e.	2 23 w.	10-9 e.	.....	.....	.....	.....	.....	.....	Hansteen.
Fatianskoie	64 04	87 37	1829-5	13 47 e.	2 26 w.	11-4 e.	76 15	+11	76-4	12-63	+03	12-66	Hansteen.
Werchne Inbak	63 10	87 38	1835-5	13 14 e.	1 17 w.	12-0 e.	76 38	+11	76-8	12-76	+04	12-80	Hansteen.
Tschernoostrowa	64 37	87 38	1829-5	14 38 e.	2 27 w.	12-2 e.	75 58	+7	76-1	.....	.....	.....	Federow.
Baikinskoie	64 59	87 54	1829-5	14 38 e.	2 30 w.	12-1 e.	76 56	+11	77-1	12-71	+04	12-75	Hansteen.
Tschulkowo	62 46	88 23	1829-5	12 36 e.	2 16 w.	10-3 e.	77 20	+11	77-5	12-82	+04	12-86	Hansteen.
Lebedowo	62 08	89 09	1829-5	10 39 e.	2 15 w.	8-4 e.	75 42	+12	75-9	12-72	+04	12-76	Hansteen.
Dubtscheskoie	61 02	89 37	1829-5	9 51 e.	2 08 w.	7-7 e.	75 29	+12	75-7	12-86	+04	12-90	Hansteen.
Komsino	61 52	89 42	1829-5	.....	.....	.....	74 39	+12	74-9	12-63	+04	12-67	Hansteen.
Somorokowo	61 40	89 48	1829-5	10 16 e.	2 12 w.	8-1 e.	75 19	+13	75-5	12-73	+04	12-77	Hansteen.
Osinowi	61 20	89 50	1829-5	.....	.....	.....	75 20	+13	75-6	12-89	+04	12-93	Hansteen.
Mikulina	60 26	90 05	1829-5	.....	.....	.....	75 16	+13	75-5	12-76	+04	12-80	Hansteen.
Mouth of the Sym	60 17	90 21	1835-5	10 34 e.	1 17 w.	9-3 e.	74 28	+14	74-7	12-73	+04	12-77	Hansteen.
							74 43	+7	74-8	.....	.....	.....	Federow.

ZONE V.—Lat. 60° to 65° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.			Observers.
				Observed.	Correction to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.	
At sea.....	63 29	187 28	1848.5	.....	.....	.....	75 08	.....	75.1	.....	.....	.....	Moore.
At sea.....	60 15	187 30	1827.5	19 37 E.	.....	19.6 E.	.....	.....	.....	.....	.....	.....	Lütke.
Ongayak	64 24	187 40	1849.0	.....	.....	.....	75 25	.....	75.4	.....	.....	.....	Moore.
At sea.....	62 47	187 44	1848.5	.....	.....	.....	75 25	.....	75.4	.....	.....	.....	Moore.
At sea.....	63 33	187 46	1854.5	22 15 E.	.....	22.3 E.	.....	.....	.....	.....	.....	.....	Collinson.
At sea.....	64 12	188 05	1850.5	22 52 E.	.....	22.9 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	63 48	188 15	1850.5	.....	.....	.....	75 04	.....	75.1	.....	.....	.....	Collinson.
At sea.....	62 16	188 38	1852.5	21 06 E.	.....	21.1 E.	.....	.....	.....	.....	.....	.....	Crane.
At sea.....	64 12	188 38	1849.5	22 56 E.	.....	22.9 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	64 12	188 52	1854.5	23 26 E.	.....	23.4 E.	.....	.....	.....	.....	.....	.....	Collinson.
At sea.....	62 40	189 18	1852.5	22 17 E.	.....	22.3 E.	.....	.....	.....	.....	.....	.....	Crane.
At sea.....	63 11	189 22	1848.5	.....	.....	.....	73 25	.....	73.4	.....	.....	.....	Moore.
At sea.....	61 44	189 38	1852.5	22 18 E.	.....	22.3 E.	.....	.....	.....	.....	.....	.....	Crane.
At sea.....	64 47	189 47	1849.5	24 58 E.	.....	25.0 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	61 01	190 06	1852.5	20 43 E.	.....	20.7 E.	.....	.....	.....	.....	.....	.....	Crane.
At sea.....	60 38	190 44	1852.5	20 54 E.	.....	20.9 E.	.....	.....	.....	.....	.....	.....	Crane.
At sea.....	63 14	191 31	1850.5	23 06 E.	.....	23.1 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	60 38	191 46	1850.5	.....	.....	.....	73 12	.....	73.2	.....	.....	.....	Collinson.
At sea.....	63 04	192 39	1852.5	22 23 E.	.....	22.4 E.	.....	.....	.....	.....	.....	.....	Crane.
At sea.....	60 24	192 40	1850.0	21 56 E.	.....	21.9 E.	.....	.....	.....	.....	.....	.....	Collinson.
At sea.....	64 35	192 57	1850.5	27 09 E.	.....	27.1 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	64 34	193 25	1850.0	26 22 E.	.....	26.4 E.	.....	.....	.....	.....	.....	.....	Collinson.
At anchor	62 27	193 36	1850.5	.....	.....	.....	74 44	.....	74.7	.....	.....	.....	Collinson.
At sea.....	63 53	194 00	1850.5	24 30 E.	.....	24.5 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	63 30	194 21	1852.5	25 11 E.	.....	25.2 E.	.....	.....	.....	.....	.....	.....	Crane.
At sea.....	64 02	194 24	1852.5	25 28 E.	.....	25.5 E.	.....	.....	.....	.....	.....	.....	Crane.
At sea.....	64 15	195 08	1850.5	25 32 E.	.....	25.5 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	64 23	195 39	1851.0	26 27 E.	.....	26.5 E.	.....	.....	.....	.....	.....	.....	Collinson.
At sea.....	63 53	195 55	1850.5	29 00 E.	.....	29.0 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	63 49	196 30	1850.5	29 00 E.	.....	29.0 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	64 04	197 47	1851.0	28 07 E.	.....	28.1 E.	.....	.....	.....	.....	.....	.....	Collinson.
Norton Sound	63 28	198 18	1827.5	30 30 E.	.....	30.5 E.	.....	.....	.....	.....	.....	.....	Lütke.
Port Etches	60 21	213 19	1837.5	31 39 E.	.....	31.7 E.	76 03	.....	76.1	12.94	.....	12.94	Belcher.
Fort Norman	64 31	235 16	1844.5	45 12 E.	.....	45.2 E.	82 34	.....	82.6	13.63	.....	13.63	Lefroy.
Fort Simpson	61 51	238 35	1825.5	37 42 E.	?	.....	81 51	?	.....	.....	.....	.....	Franklin.
			1837.5	37 10 E.	?	.....	81 52	?	.....	.....	.....	.....	Simpson.
			1844.5	37 48 E.	.....	37.8 E.	81 52	.....	81.9	13.84	.....	13.84	Lefroy.
Little Lake	61 23	242 15	1844.5	37 06 E.	.....	37.1 E.	.....	.....	.....	.....	.....	.....	Lefroy.
Big Island.....	61 12	243 22	1844.5	35 28 E.	.....	35.5 E.	82 09	.....	82.2	.....	.....	.....	Lefroy.
Hay River.....	60 48	244 42	1844.5	35 36 E.	.....	35.6 E.	.....	.....	.....	.....	.....	.....	Lefroy.
Fort Resolution	61 10	246 15	1833.5	37 20 E.	.....	37.3 E.	82 03	.....	82.1	.....	.....	.....	Back.
			1837.5	37 16 E.	.....	37.3 E.	82 45	.....	82.5	13.99	.....	13.99	Simpson.
			1844.5	37 07 E.	.....	37.1 E.	.....	.....	82.8	.....	.....	.....	Lefroy.
Portage Grand Detour	60 22	247 00	1844.5	35 53 E.	.....	35.9 E.	82 34	.....	82.6	.....	.....	.....	Lefroy.
Fort Reliance	62 46	250 59	1834.5	35 19 E.	.....	35.3 E.	84 01	.....	84.0	.....	.....	.....	Back.
Musk-ox Rapid.....	64 33	255 20	1834.5	44 24 E.	.....	44.4 E.	85 54	.....	85.9	.....	.....	.....	Back.
At sea.....	60 50	276 57	1846.5	30 35 W.	.....	30.6 W.	.....	.....	.....	.....	.....	.....	Moore.
At sea.....	61 07	277 10	1846.5	.....	.....	.....	87 00	.....	87.0	13.19	.....	13.19	Moore.
At sea.....	60 45	277 15	1846.5	.....	.....	.....	86 41	.....	86.7	13.58	.....	13.58	Moore.
At sea.....	60 25	277 18	1846.5	.....	.....	.....	86 36	.....	86.6	13.22	.....	13.22	Moore.
At sea.....	60 26	277 52	1846.5	34 00 W.	.....	34.0 W.	85 20	.....	85.3	13.57	.....	13.57	Moore.
At sea.....	62 20	278 48	1846.5	.....	.....	.....	86 07	.....	86.1	.....	.....	.....	Moore.
At sea.....	62 10	279 50	1846.5	.....	.....	.....	87 01	.....	87.0	13.36	.....	13.36	Moore.
At sea.....	63 17	281 05	1846.5	58 15 W.	.....	58.3 W.	86 35	.....	86.6	13.55	.....	13.55	Moore.
At sea.....	63 11	282 31	1846.5	59 21 W.	.....	59.4 W.	.....	.....	.....	.....	.....	.....	Moore.
At sea.....	63 13	282 55	1846.5	55 28 W.	.....	55.5 W.	86 25	.....	86.4	13.40	.....	13.40	Moore.
At sea.....	62 56	283 05	1846.5	52 16 W.	.....	52.3 W.	86 24	.....	86.4	13.16	.....	13.16	Moore.
At sea.....	63 10	283 10	1846.5	.....	.....	.....	86 19	.....	86.3	13.33	.....	13.33	Moore.
On ice	63 15	284 41	1846.5	58 54 W.	.....	58.9 W.	85 45	.....	85.8	13.60	.....	13.60	Moore.
At sea.....	63 20	284 53	1846.5	.....	.....	.....	85 34	.....	85.6	13.32	.....	13.32	Moore.
On ice	63 14	284 58	1846.5	58 54 W.	.....	58.9 W.	85 45	.....	85.7	13.60	.....	13.60	Moore.
At sea.....	63 12	286 01	1846.5	59 51 W.	59.9 W.	85 02	85.0	13.44	13.44	Moore.

ZONE VI.—LATITUDE 65° TO 70° N.

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ZONE VI.—Lat. 65° to 70° N.

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.			Observers.
				Observed.	Correction to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.	
Taraak	65 06	12 20	1827.5	.....	.....	.....	75 42	-22	75.3	11.44	.....	11.44	Keilhau.
Belsvaag	65 55	12 25	1827.5	.....	.....	.....	74 54	-22	74.5	10.69	.....	10.69	Keilhau.
Donnes	66 13	12 40	1827.5	.....	.....	.....	75 03	-22	74.7	10.96	.....	10.96	Keilhau.
Gilleskaal	67 03	14 09	1827.5	.....	.....	.....	76 09	-22	75.8	11.23	.....	11.23	Keilhau.
Lovöe	67 48	14 15	1827.5	.....	.....	.....	75 54	-22	75.5	11.10	.....	11.10	Keilhau.
Bodöe	67 15	14 28	1827.5	.....	.....	.....	75 54	-22	75.5	11.06	.....	11.06	Keilhau.
Vaagen	68 13	14 39	1828.5	.....	.....	.....	76 13	-21	75.9	.....	.....	.....	Keilhau.
Sandtorvholm	68 36	16 29	1827.5	.....	.....	.....	76 17	-22	75.9	11.26	.....	11.26	Keilhau.
Klöven	69 11	17 42	1828.5	.....	.....	.....	76 59	-21	76.6	11.60	.....	11.60	Keilhau.
Sandoe	68 56	17 49	1828.5	.....	.....	.....	76 42	-21	76.4	11.40	.....	11.40	Keilhau.
Gebostad	69 20	18 00	1827.5	.....	.....	.....	76 19	-22	76.0	11.00	.....	11.00	Keilhau.
Tromsöe	69 50	18 58	1827.5 1849.5 1868.5 1870.5	..... 11 28 w. 11 06 w.	..... 2 36 w. 2 48 w.	..... 14.0 w. 13.9 w. } 14.0 w.	77 01 76 11 76 06 76 23	-22 +11 +39 +42	76.7 76.4 76.8 77.1	11.55 10.93 10.87 11.14	..... ..... ..... .....	11.55 10.93 10.87 11.14	Keilhau. Kämtz, L. S. Lemström. Belavenetz.
Kirlli-jarvi	69 05	20 40	1849.5	.....	.....	.....	75 52	+11	76.1	10.90	.....	10.90	Kämtz, L. S.
Pitea	65 19	21 30	1825.5	.....	.....	.....	74 09	-25	73.7	11.24	.....	11.24	Hansteen.
Kaaresuando	68 24	22 08	1840.0 1849.5	10 52 w.	0 15 E.	10.6 w.	75 47 75 37	-03 +11	75.7 75.8	11.18 10.83	..... .....	11.18 10.83	Gaimard. Kämtz, L. S.
Paläjoensu	68 18	22 45	1849.5	.....	.....	.....	76 06	+11	76.3	10.92	.....	10.92	Kämtz, L. S.
Grötness	65 48	23 09	1825.5	.....	.....	.....	74 58	-25	74.6	11.22	.....	11.22	Hansteen.
Kalkesuando	68 07	23 22	1849.5	.....	.....	.....	75 32	+11	75.7	10.79	.....	10.79	Kämtz, L. S.
Kautokeino	69 01	23 22	1840.5	12 52 w.	0 12 E.	12.7 w.	75 44	-03	75.7	11.18	.....	11.18	Gaimard.
Bossekop	69 58	23 30	1840.5	10 42 w.	0 12 E.	10.5 w.	76 17	-03	76.2	11.14	.....	11.14	Gaimard.
Torneo	65 52	23 30	1847.5 1849.5	..... .....	..... .....	..... .....	74 52 74 48	+07 +11	75.0 75.0	11.91 10.93	..... .....	11.91 10.93	Kämtz, L. S. Kämtz, L. S.
Kiexisvara	67 14	23 38	1840.0 1847.5	8 19 w.	0 15 E.	8.1 w.	76 03 75 45	-03 +07	76.0 75.9	11.52 11.15	..... .....	11.52 11.15	Gaimard. Kämtz, L. S.
Haaparanda	65 51	23 40	1825.5 1840.0 1846.5 1849.5	12 07 w. 11 12 w.	0 15 E. 0 24 w.	11.9 w. 11.6 w. } 11.8 w.	75 13 74 53 74 35 74 28	-25 -03 +06 +11	74.8 74.8 74.7 74.7	11.21 11.10 10.93 10.69	..... ..... ..... .....	11.21 11.10 10.93 10.69	Hansteen. Gaimard. Leljehoer. Kämtz, L. S.
Kardis	67 00	23 40	1847.5	.....	.....	.....	75 04	+07	75.2	10.88	.....	10.88	Kämtz, L. S.
Turtola	66 42	23 40	1847.5	.....	.....	.....	74 48	+07	74.9	10.90	.....	10.90	Kämtz, L. S.
Muonioniska	68 09	23 42	1840.0 1848.5	..... .....	..... .....	..... .....	75 46 75 32	- 3 +10	75.7 75.7	11.20 10.95	..... .....	11.20 10.95	Gaimard. Kämtz, L. S.
Alkula	66 16	23 49	1825.5 1848.5	..... .....	..... .....	..... .....	75 05 74 18	-24 + 8	74.7 74.4	11.36 10.86	..... .....	10.36 10.86	Hansteen. Kämtz, L. S.
Kauliranda	66 27	23 50	1840.0	.....	.....	.....	75 58	- 3	75.9	.....	.....	.....	Gaimard.
Taluanen	66 36	23 52	1847.5	.....	.....	.....	74 32	+ 7	74.7	10.87	.....	10.87	Kämtz, L. S.
Kolare	67 23	23 52	1840.0	12 24 w.	0 15 E.	12.2 w.	76 07	- 4	76.1	11.34	.....	11.34	Gaimard.
Kantiola	65 47	24 40	1847.5	.....	.....	.....	74 50	+ 7	75.0	10.77	.....	10.77	Kämtz, L. S.
Wuornos	65 36	25 26	1847.5	.....	.....	.....	74 05	+ 7	74.2	10.75	.....	10.75	Kämtz, L. S.
Uleaborg	65 03	25 27	1825.5 1847.5	9 32 w.	1 45 E.	7.8 w. } 7.8 w.	74 44 74 06	-24 + 7	74.3 74.2	10.80 10.75	..... .....	10.80 10.75	Hansteen. Kämtz, L. S.
Shapkino	69 51	29 43	1826.5	6 30 w.	1 53 E.	4.6 w.	.....	.....	.....	.....	.....	.....	Reinecke.
Paza River	69 44	30 05	1826.5	6 20 w.	1 54 E.	4.4 w.	.....	.....	.....	.....	.....	.....	Reinecke.
Worjima River	69 47	30 49	1826.5	5 15 w.	1 54 E.	3.4 w.	.....	.....	.....	.....	.....	.....	Reinecke.
Jacobs Elv	69 48	30 51	1827.5	.....	.....	.....	76 37	-12	76.4	11.18	.....	11.18	Keilhau.
Pitschinga Bay	69 42	31 21	1826.5	5 26 w.	1 54 E.	3.5 w.	.....	.....	.....	.....	.....	.....	Reinecke.
Waida Bay	69 57	31 58	1826.5	4 35 w.	1 56 E.	2.7 w.	.....	.....	.....	.....	.....	.....	Reinecke.
Volokovaia	69 46	32 03	1826.5	3 40 w.	1 57 E.	1.7 w.	.....	.....	.....	.....	.....	.....	Reinecke.
Nova Zembla Harbour	69 43	32 06	1823.5	3 30 w.	2 21 E.	1.2 w.	77 24	-12	77.2	.....	.....	.....	Lütke.
Kandalaksh	67 08	32 26	1831.0	4 15 w.	1 26 E.	2.8 w.	75 14	- 7	75.1	.....	.....	.....	Reinecke.
Cape Monastery	69 36	32 45	1826.5	3 45 w.	1 58 E.	1.8 w.	.....	.....	.....	.....	.....	.....	Reinecke.
Cape Dobriagin	69 28	32 52	1826.5	3 36 w.	1 58 E.	1.6 w.	.....	.....	.....	.....	.....	.....	Reinecke.
Kola	68 53	33 00	1832.5	2 42 w.	1 15 E.	1.5 w. } 1.5 w.	.....	.....	.....	.....	.....	.....	Reinecke.
Cape Lavisheff	69 47	33 02	1870.0 1826.5	1 21 E. 2 50 w.	2 48 w. 1 58 E.	1.5 w. 0.9 w. } 1.5 w.	75 40	+14	75.9	11.05	.....	11.05	Belavenetz. Reinecke.
Catherine Harbour	66 13	33 27	1822.5 1826.5 1832.5	1 35 w. 1 40 w.	2 30 E. 2 03 E.	0.9 E. 0.4 E. } 0.6 E.	76 24 76 42 76 10	-15 -12 -07	76.2 76.5 76.1	..... 11.23 .....	..... ..... .....	..... 11.23	Lütke. Reinecke. Reinecke.
Keret Village	69 17	33 33	1831.5	4 24 w.	1 25 E.	3.0 w.	.....	.....	.....	.....	.....	.....	Reinecke.

ZONE VI.—Lat. 65° to 70° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.			Observers.
				Observed.	Correction to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.	
Mouth of Petchora ...	68 53	56 52	1824.5	11 37 E.	1 52 E.	13.5 E.	.....	.....	.....	.....	.....	Rogozine.	
Perevoznoi Noss	68 47	57 05	1824.5	11 00 E.	1 52 E.	12.9 E.	.....	.....	.....	.....	.....	Rogozine.	
Sinkine Noss.....	68 42	57 35	1824.5	11 13 E.	1 52 E.	13.1 E.	.....	.....	.....	.....	.....	Rogozine.	
Tugorski Schar.....	68 59	59 27	1823.5	9 05 E.	1 58 E.	11.1 E.	.....	.....	.....	.....	.....	Lütke.	
Nikolskaia River	69 40	60 40	1824.5	10 08 E.	1 52 E.	12.0 E.	.....	.....	.....	.....	.....	Lütke.	
Katschegatsk	65 03	64 59	1828.5	.....	.....	.....	75 15	- 2	75.2	11.98	+01	11.99	Erman.
Wandiask	66 30	65 39	1828.5	.....	.....	.....	75 59	- 2	76.0	12.19	+01	12.20	Erman.
Erman (Mean Position)	66 31	66 36	1848.5	16 33 E.	0 37 W.	15.9 E.	76 08	- 1	76.1	.....	.....	.....	Kowalski.
Obdorsk.....	66 31	66 42	1829.0	14 33 E.	2 10 E.	16.7 E.	76 07	- 1	76.1	12.07	+01	12.08	Erman.
Turuchansk	65 55	87 38	1829.5	15 00 E.	2 20 E.	17.3 E.	77 46	+11	78.0	12.78	+05	12.83	Hansteen.
Nishne Tunguska	65 47	87 43	1835.5	16 21 E.	1 10 E.	17.5 E.	77 49	+ 5	77.9	.....	.....	.....	Federow.
Baikinskoie	65 00	87 54	1829.5	14 38 E.	2 20 E.	17.0 E.	77 20	+11	77.5	12.82	+05	12.87	Hansteen.
Kostino	65 03	87 57	1829.5	.....	.....	.....	77 34	+11	77.8	12.86	+05	12.91	Hansteen.
Troitzkoi Kloster	65 48	88 15	1829.5	.....	.....	.....	77 46	+12	78.0	12.77	+05	12.82	Hansteen.
Liukajuda Island.....	67 43	122 39	1822.5	0 40 E.	2 35 E.	3.3 E.	.....	.....	.....	.....	.....	.....	Wrangel & Anjou.
Pustgdom	67 18	122 41	1822.5	1 00 W.	2 35 E.	1.6 E.	.....	.....	.....	.....	.....	.....	Wrangel & Anjou.
Schingansk	66 46	122 53	1822.5	2 15 W.	2 34 E.	0.3 E.	78 06	+33	78.6	.....	.....	.....	Wrangel & Anjou.
Dschetolak	68 25	123 54	1822.5	1 00 E.	2 31 E.	3.5 E.	.....	.....	.....	.....	.....	.....	Wrangel & Anjou.
Island in the Lena	69 38	125 54	1822.5	3 00 E.	2 25 E.	5.4 E.	.....	.....	.....	.....	.....	.....	Wrangel & Anjou.
Bulacha Tschaidal	65 51	132 17	1822.5	.....	.....	.....	77 06	+35	77.7	.....	.....	.....	Wrangel & Anjou.
Werchojansk.....	67 34	133 50	1822.5	.....	.....	.....	77 55	+35	78.5	.....	.....	.....	Wrangel & Anjou.
Kiunju	67 59	134 13	1822.5	.....	.....	.....	78 26	+35	79.0	.....	.....	.....	Wrangel & Anjou.
Schanki	69 43	135 20	1822.5	.....	.....	.....	79 15	+35	79.8	.....	.....	.....	Wrangel & Anjou.
Maloie Tehukotskoi ...	69 26	160 16	1821.5	11 45 E.	1 32 E.	13.3 E.	.....	.....	.....	.....	.....	.....	Wrangel & Anjou.
Nishne Kolymsk	68 32	160 40	1821.0	9 56 E.	1 29 E.	11.4 E.	77 28	+31	78.0	.....	.....	.....	Wrangel.
Station	68 42	160 51	1821.5	12 30 E.	1 28 E.	14.0 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Pochodsk	69 04	160 55	1821.5	11 45 E.	1 28 E.	13.2 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Station	68 57	161 15	1822.5	12 30 E.	1 25 E.	13.9 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Suchanoi Island	69 31	161 43	1822.5	13 30 E.	1 22 E.	14.9 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Station	69 18	162 03	1822.5	15 30 E.	1 20 E.	16.8 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Station	69 05	162 09	1822.5	15 00 E.	1 19 E.	16.3 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Station	68 53	162 09	1822.5	13 00 E.	1 19 E.	14.3 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Lobasnoie	67 03	162 20	1821.5	13 30 E.	1 18 E.	14.8 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Little Baranow	69 38	162 27	1821.5	12 30 E.	1 16 E.	13.8 E.	78 06	+30	78.6	.....	.....	.....	Wrangel.
Station	69 38	162 48	1822.5	12 05 E.	1 14 E.	13.3 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Plotbischtsche	68 01	162 55	1821.5	14 30 E.	1 13 E.	15.7 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Station	69 42	163 19	1822.5	13 00 E.	1 11 E.	14.2 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Station	69 44	163 51	1822.5	12 35 E.	1 09 E.	13.7 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Great Baranow	69 41	163 52	1822.5	13 30 E.	1 08 E.	14.6 E.	.....	.....	.....	.....	.....	.....	Wrangel.
North of Little Aniui..	69 24	164 02	1822.5	12 45 E.	1 07 E.	13.9 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Station	69 44	164 10	1822.5	12 35 E.	1 05 E.	13.7 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Station	69 36	164 32	1822.5	13 30 E.	1 03 E.	14.6 E.	.....	.....	.....	.....	.....	.....	Wrangel.
River Pogindena	68 37	164 43	1822.5	14 00 E.	1 04 E.	15.1 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Station	68 47	165 11	1822.5	15 00 E.	1 01 E.	16.0 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Station	68 37	165 12	1822.5	14 00 E.	1 01 E.	15.0 E.	.....	.....	.....	.....	.....	.....	Wrangel.
On the Coast.....	69 30	166 21	1822.5	15 26 E.	0 53 E.	16.3 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Station	69 09	166 29	1822.5	15 00 E.	0 51 E.	15.9 E.	.....	.....	.....	.....	.....	.....	Wrangel.
On the Tundra	69 23	166 31	1822.5	14 59 E.	0 51 E.	15.8 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Balagan	69 31	166 40	1822.5	15 25 E.	0 50 E.	16.3 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Station	69 43	167 30	1821.5	18 30 E.	0 47 E.	19.3 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Cape Matiushkin	69 45	170 47	1821.5	18 00 E.	0 37 E.	18.6 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Werkon River	69 53	173 32	1823.5	18 57 E.	0 18 E.	19.3 E.	79 59	+28	80.5	.....	.....	.....	Wrangel.
East of Cape Jakan ...	69 36	176 58	1823.5	21 30 E.	0 12 W.	21.3 E.	.....	.....	.....	.....	.....	.....	Wrangel.
North Cape	68 55	179 56	1823.5	21 40 E.	0 29 W.	21.2 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Holy Cross Bay	65 28	181 28	1828.5	21 04 E.	0 18 W.	20.8 E.	75 43	+18	76.0	12.80	.....	12.80	Lütke.
At sea, mean of two } observations	65 11	183 17	1828.5	19 15 E.	.....	19.3 E.	.....	.....	.....	.....	.....	.....	Lütke.
Wankarem River	67 43	183 33	1823.5	23 00 E.	0 24 W.	22.6 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Koliutschin Island	67 27	184 25	1823.5	23 26 E.	0 24 W.	23.0 E.	.....	.....	.....	.....	.....	.....	Wrangel.
At sea.....	69 28	184 50	1849.5	25 03 E.	.....	25.1 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	69 26	185 00	1849.5	26 12 E.	.....	26.2 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	69 54	185 38	1849.5	27 44 E.	.....	27.7 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	69 47	187 13	1849.5	27 45 E.	.....	27.8 E.	.....	.....	.....	.....	.....	.....	Kellett.

ZONE VI.—Lat. 65° to 70° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.			Observers.
				Observed.	Correction to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch. 1842.5.	Corrected.	
Salmon Island	67 50	244 30	1839.5	.....	.....	.....	86 43	.....	86.7	.....	.....	.....	Simpson.
Salmon Island	67 51	244 45	1849.5	56 45 E.	.....	56.8 E.	.....	.....	.....	.....	.....	.....	Rae.
Station	68 11	245 00	1849.5	56 08 E.	.....	56.1 E.	.....	.....	.....	.....	.....	.....	Rae.
Station	68 25	246 00	1849.5	59 08 E.	.....	59.1 E.	.....	.....	.....	.....	.....	.....	Rae.
Halting Place	67 40	246 45	1838.5	48 20 E.	.....	48.3 E.	.....	.....	.....	.....	.....	.....	Simpson.
Cape Barrow	68 04	249 00	1839.5	.....	.....	.....	87 13	.....	87.2	.....	.....	.....	Simpson.
Moore's Bay	67 44	250 00	1838.5	48 00 E.	.....	48.0 E.	.....	.....	.....	.....	.....	.....	Simpson.
Boat Haven	68 16	250 39	1838.5	46 00 E.	.....	46.0 E.	.....	.....	.....	.....	.....	.....	Simpson.
Victoria Land	68 57	252 00	1839.5	57 40 E.	.....	57.7 E.	.....	.....	.....	.....	.....	.....	Simpson.
Cape Alexander	68 56	253 20	1839.5	62 10 E.	.....	62.2 E.	88 15	.....	88.3	.....	.....	.....	Simpson.
Trap Cape	68 52	253 40	1838.5	63 00 E.	.....	63.0 E.	.....	.....	.....	.....	.....	.....	Simpson.
Simpson's Farthest ...	68 44	253 57	1838.5	60 38 E.	.....	60.6 E.	.....	.....	.....	.....	.....	.....	Simpson.
On ice	68 54	256 12	1853.5	.....	.....	.....	89 08	.....	89.1	.....	.....	.....	Collinson.
White Bear Point.....	68 07	256 23	1839.5	54 45 E.	.....	54.8 E.	88 20	.....	88.3	.....	.....	.....	Simpson.
On ice	68 35	257 45	1853.5	.....	.....	.....	89 40	.....	89.7	.....	.....	.....	Collinson.
On shore	68 45	257 57	1853.5	.....	.....	.....	89 40	.....	89.7	.....	.....	.....	Collinson.
On shore	69 33	258 51	1853.5	.....	.....	.....	89 28	.....	89.5	.....	.....	.....	Collinson.
On ice	69 43	258 56	1853.5	.....	.....	.....	89 22	.....	89.4	.....	.....	.....	Collinson.
On shore	69 56	259 05	1853.5	.....	.....	.....	89 14	.....	89.2	.....	.....	.....	Collinson.
King William's Land..	69 08	259 55	1859.5	.....	.....	.....	89 26	.....	89.4	.....	.....	.....	McClintock.
Point Victory	69 37	261 19	1859.5	.....	.....	.....	89 45	.....	89.8	.....	.....	.....	McClintock.
Cape Herschel	68 41	261 38	1839.5	.....	.....	.....	89 29	.....	89.5	.....	.....	.....	Simpson.
Rock Rapid	65 54	261 50	1834.5	29 16 E.	.....	29.3 E.	87 40	.....	87.7	.....	.....	.....	Back.
South of Cape Herschel	68 42	261 50	1859.5	.....	.....	.....	89 35	.....	89.6	.....	.....	.....	McClintock.
Station	68 33	262 00	1839.5	45 00 E.	.....	45.0 E.	.....	.....	.....	.....	.....	.....	Simpson.
Thunder Cove	68 21	262 35	1839.5	.....	.....	.....	89 30	.....	89.5	.....	.....	.....	Simpson.
Hammock Depôt	69 41	262 50	1859.5	.....	.....	.....	89 55	.....	89.9	.....	.....	.....	McClintock.
Point Zulloek	68 31	262 50	1859.5	.....	.....	.....	89 24	.....	89.4	.....	.....	.....	McClintock.
Point Duncan	67 50	263 23	1859.5	.....	.....	.....	89 32	.....	89.5	.....	.....	.....	McClintock.
N. of Montréal Island.	67 58	263 40	1859.5	.....	.....	.....	89 08	.....	89.1	.....	.....	.....	McClintock.
South of Cape Sabine..	69 32	263 50	1859.5	.....	.....	.....	89 51	.....	89.9	.....	.....	.....	McClintock.
Montréal Island	67 47	264 42	1834.5	.....	.....	.....	87 36	.....	87.6	.....	.....	.....	Back.
Point Beaufort	67 41	264 58	1834.5	.....	.....	.....	88 03	.....	88.1	.....	.....	.....	Back.
Point Ogle.....	68 14	265 02	1834.5	.....	.....	.....	89 24	.....	89.4	.....	.....	.....	Back.
On land or ice	69 35	265 07	1831.5	57 15 w.	.....	57.3 w.	89 42	.....	89.7	.....	.....	.....	Ross.
Cape Isabella.....	69 26	266 09	1831.5	.....	.....	.....	89 22	.....	89.4	.....	.....	.....	Ross.
Padleak	69 30	266 32	1831.5	.....	.....	.....	89 17	.....	89.3	.....	.....	.....	Ross.
Fort Hope.....	66 32	273 04	1847.5	62 50 w.	.....	62.8 w.	.....	.....	.....	.....	.....	.....	Rae.
Repulse Bay	66 31	273 30	1821.5	48 33 w.	.....	48.6 w.	88 07	.....	88.1	.....	.....	.....	Parry and Fisher.
Southampton Island...	65 30	274 45	1821.5	47 07 w.	.....	47.1 w.	87 28	.....	87.5	.....	.....	.....	Parry and Fisher.
York Bay	65 27	274 45	1821.5	47 34 w.	.....	47.6 w.	.....	.....	.....	.....	.....	.....	Parry.
On a Shoal.....	65 21	275 03	1821.5	46 41 w.	.....	46.7 w.	.....	.....	.....	.....	.....	.....	Parry.
Duckett Cove.....	66 13	275 20	1821.5	52 20 w.	.....	52.3 w.	87 31	.....	87.5	.....	.....	.....	Parry and Fisher.
Cape Welsford	65 28	275 20	1821.5	50 18 w.	.....	50.3 w.	.....	.....	.....	.....	.....	.....	Parry.
Gore Bay	66 24	275 20	1821.5	56 20 w.	.....	56.3 w.	.....	.....	.....	.....	.....	.....	Parry.
On ice	65 34	275 41	1821.5	50 34 w.	.....	50.6 w.	.....	.....	.....	.....	.....	.....	Parry.
Lyon Inlet.....	66 38	275 49	1821.5	54 00 w.	.....	54.0 w.	87 52	.....	87.9	.....	.....	.....	Parry and Fisher.
Safety Cove	66 32	276 11	1821.5	54 46 w.	.....	54.8 w.	.....	.....	.....	.....	.....	.....	Parry and Fisher.
On ice	69 48	276 31	1822.5	59 18 w.	.....	59.3 w.	88 21	.....	88.4	.....	.....	.....	Parry and Fisher.
On ice	65 31	276 40	1821.5	53 49 w.	.....	53.8 w.	.....	.....	.....	.....	.....	.....	Parry and Fisher.
Winter Island	66 12	277 06	1822.5	57 24 w.	.....	57.4 w.	87 51	.....	87.9	.....	.....	.....	Parry and Fisher.
On ice	65 27	278 03	1821.5	55 06 w.	.....	55.1 w.	.....	.....	.....	.....	.....	.....	Parry and Fisher.
On ice	69 36	278 05	1822.5	88 51 w.	.....	88.9 w.	.....	.....	.....	.....	.....	.....	Parry and Fisher.
On ice	66 56	278 21	1822.5	62 17 w.	.....	62.3 w.	87 47	.....	87.8	.....	.....	.....	Parry and Fisher.
On ice	69 32	278 23	1822.5	87 20 w.	.....	87.3 w.	.....	.....	.....	.....	.....	.....	Parry and Fisher.
Igloodik	69 21	278 23	1822.5	83 01 w.	.....	83.0 w.	88 10	.....	88.2	12.43	.....	12.43	Parry and Fisher.
On shore	67 03	278 32	1822.5	65 13 w.	.....	65.2 w.	.....	.....	.....	.....	.....	.....	Parry and Fisher.
On shore	67 11	278 36	1822.5	70 28 w.	.....	70.5 w.	.....	.....	.....	.....	.....	.....	Parry and Fisher.
On ice	69 32	278 37	1822.5	86 06 w.	.....	86.1 w.	88 06	.....	88.1	.....	.....	.....	Parry and Fisher.
On ice	69 34	278 46	1822.5	82 32 w.	.....	82.5 w.	87 37	.....	87.6	.....	.....	.....	Parry and Fisher.
On ice	69 33	278 49	1822.5	82 22 w.	.....	82.4 w.	.....	.....	.....	.....	.....	.....	Parry and Fisher.
On ice	69 24	279 58	1822.5	79 21 w.	.....	79.4 w.	.....	.....	.....	.....	.....	.....	Parry and Fisher.
On ice	65 08	280 25	1821.5	52 12 w.	.....	52.2 w.	87 09	.....	87.2	.....	.....	.....	Parry and Fisher.

ZONE VI.—Lat. 65° to 70° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.			Observers.		
				Observed.	Correction to Epoch 1842·5.	Corrected.	Observed.	Cor. to Epoch 1842·5.	Corrected.	Observed.	Cor. to Epoch 1842·5.	Corrected.			
Ice in Davis Strait ...	68 30	295 12	1820·5	.....	.....	.....	84 21	.....	84·4	.....	.....	.....	Sabine.
Baffin's Bay, on ice ...	66 50	301 09	1858·5	71 32 w.	.....	71·5 w.	.....	.....	.....	.....	.....	.....	McClintock.
Baffin's Bay, on ice ...	67 18	301 25	1858·5	72 00 w.	.....	72·0 w.	.....	.....	.....	.....	.....	.....	McClintock.
Baffin's Bay, on ice ...	68 17	301 28	1858·5	73 31 w.	.....	73·5 w.	.....	.....	.....	.....	.....	.....	McClintock.
Baffin's Bay, on ice ...	66 26	301 30	1858·5	69 55 w.	.....	69·9 w.	.....	.....	.....	.....	.....	.....	McClintock.
Baffin's Bay, on ice ...	66 39	301 40	1858·5	71 38 w.	.....	71·6 w.	.....	.....	.....	.....	.....	.....	McClintock.
Baffin's Bay, on ice ...	65 57	304 04	1857·5	58 00 w.	.....	58·0 w.	.....	.....	.....	.....	.....	.....	R. C. Allen.
Baffin's Bay, on ice ...	68 14	305 45	1818·5	67 52 w.	.....	67·9 w.	.....	.....	.....	.....	.....	.....	Sabine.
Baffin's Bay, on ice ...	68 23	306 13	1818·5	67 32 w.	.....	67·5 w.	83 08	.....	83·1	12·27	.....	12·27	James Ross.
Greenland	66 57	306 26	1836·5	.....	.....	.....	82 51	.....	82·9	.....	.....	.....	Bellot.
Lievely, Disco Island...	69 15	306 30	1853·5	.....	.....	.....	81 48	.....	81·8	12·22	.....	12·22	Inglefield.
Dog Islands	68 52	306 31	1852·5	.....	.....	.....	82 53	.....	82·9	.....	.....	.....	Hayes.
Godhavn	69 12	306 32	1861·5	.....	.....	.....	81 51	.....	81·9	12·43	.....	12·43	
Whale-fish Islands ...	68 59	306 42	1824·5	70 24 w.	70·4 w.)	82 54	-18	82·6	} 82·4	Parry.	
			1836·5	.....	.....	82 23	- 6	82·3	.....		.....	James Ross.	
			1848·5	.....	.....	82 24	+ 6	82·5	.....		.....	Ross & Robinson.	
			1850·5	.....	.....	82 12	+ 8	82·3	.....		.....	R. C. Allen.	
			1851·5	.....	.....	.....	.....	.....	.....		.....	Ommanney.	
			1852·5	70 47 w.	70·8 w.)	82 10	+10	82·3		12·15	12·15	Belcher.
1858·5	73 28 w.	.....	73·5 w.)	.....	.....	.....	.....	.....	.....	.....	.....	McClintock.	
Holsteinborg	66 52	306 44	1853·5	.....	.....	.....	82 16	.....	82·3	12·44	.....	12·44	Bellot.
On ice	69 24	308 14	1857·5	72 00 w.	.....	72·0 w.	.....	.....	.....	.....	.....	.....	R. C. Allen.
Graah Island.....	65 20	321 20	1829·5	54 26 w.	.....	54·4 w.	.....	.....	.....	.....	.....	.....	Graah.
Vapnaftord	65 24	345 12	1833·5	77 13	77·2	} 77·0	11·61	11·61	} 11·31	Blosseville
Nordfiord	65 10	346 21	1833·5	76 46	76·8		11·01	11·01		Blosseville.

ZONE VII.—LATITUDE 70° TO 75° N.

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(Omitted in Zone VI.)

Blosseville Hansteen, Transactions of the Royal Danish Academy of Sciences, 1861.

ZONE VII.—Lat. 70° to 75° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.			Observers.	
				Observed.	Correction to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.		
Cape Muller	73 37	57 40	1835.5	13 50 E.	0 45 E.	14.6 E.	.....	.....	.....	.....	.....	.....	Pakhtussoff.
At sea.....	70 25	57 45	1824.5	12 48 E.	1 52 E.	14.7 E.	.....	.....	.....	.....	.....	.....	Lütke.
At sea.....	70 25	58 17	1824.5	11 00 E.	1 52 E.	12.9 E.	.....	.....	.....	.....	.....	.....	Lütke.
Freygang Bay	74 07	58 30	1835.5	14 50 E.	0 45 E.	15.6 E.	.....	.....	.....	.....	.....	.....	Pakhtussoff.
Pakhtussoff Island	74 24	59 25	1835.5	14 10 E.	0 45 E.	14.9 E.	.....	.....	.....	.....	.....	.....	Pakhtussoff.
R. Taimyr S. Mylla ...	73 50	93 27	1843.5	.....	.....	.....	82 12	.....	82.2	.....	.....	.....	Middendorf.
Filipowsk	71 05	94 52	1843.5	.....	.....	.....	81 27	.....	81.5	.....	.....	11.99	Middendorf.
River Novaja.....	72 07	95 29	1843.5	.....	.....	.....	81 36	.....	81.6	.....	.....	12.90	Middendorf.
R. Taimyr Sonna Gette	74 17	95 40	1843.5	21 51 E.	.....	21.9 E.	82 16	.....	82.3	.....	.....	.....	Middendorf.
Chatangski.....	72 02	99 28	1843.5	13 55 E.	.....	13.9 E.	81 40	.....	81.7	.....	.....	12.69	Middendorf.
Sagatwere Village.....	73 22	127 08	1822.0	9 25 E.	3 35 E.	13.0 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Island in the Lena ...	72 00	127 35	1822.0	7 00 E.	3 05 E.	10.1 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Bulun Village	70 44	127 40	1822.0	4 30 E.	2 35 E.	7.1 E.	80 45	+42	81.5	.....	.....	.....	Wrangel.
Village W. of the Lena	71 29	127 43	1822.0	6 00 E.	2 50 E.	8.8 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Tschalbokoie	72 50	128 18	1822.0	8 10 E.	3 10 E.	11.3 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Saki Island	72 31	129 26	1822.0	7 15 E.	3 05 E.	10.3 E.	81 28	+42	82.2	.....	.....	.....	Wrangel.
Biawi (Mouth of).....	72 04	130 06	1822.0	6 30 E.	2 53 E.	9.4 E.	81 11	+42	81.9	.....	.....	.....	Wrangel.
Barkin	73 04	130 09	1822.0	.....	.....	.....	81 48	+42	82.5	.....	.....	.....	Anjou.
Cape Staib.....	70 55	131 00	1822.0	5 00 E.	2 25 E.	7.4 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Podkammen Guba ...	70 42	131 50	1822.0	.....	.....	.....	79 49	+42	80.5	.....	.....	.....	Anjou.
Stolb	72 02	136 16	1822.0	.....	.....	.....	82 11	+42	82.9	.....	.....	.....	Anjou.
Mouth of the Jana ...	70 55	136 31	1822.0	3 00 E.	2 05 E.	5.1 E.	79 54	+42	80.6	.....	.....	.....	Wrangel.
Jarow Island.....	71 32	136 41	1822.0	.....	.....	.....	80 11	+42	80.9	.....	.....	.....	Wrangel.
Murasch Village	71 32	136 43	1822.0	5 20 E.	2 15 E.	7.6 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Stolbowoi	74 02	136 45	1822.0	12 00 E.	3 00 E.	15.0 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Kotelnoi Island ...	74 50	138 37	1822.0	82 25	+42	83.1	Anjou.
(Winter Quarter)			
Wankina Bay.....	72 00	139 59	1822.0	6 38 E.	2 12 E.	8.8 E.	80 49	+43	81.5	.....	.....	.....	Wrangel.
Mouth of Urionkastach	72 31	141 22	1822.0	8 07 E.	2 18 E.	10.4 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Lachow Island	73 54	142 30	1822.0	.....	.....	.....	81 21	+44	82.1	.....	.....	.....	Wrangel.
Mouth of Chromve R..	71 38	145 48	1822.0	8 42 E.	1 40 E.	10.4 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Lake Mogostojewa ...	72 06	149 20	1822.0	11 03 E.	1 30 E.	12.6 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Indigirka River.....	71 00	149 30	1821.5	9 58 E.	1 16 E.	11.2 E.	79 22	+47	80.2	.....	.....	.....	Wrangel.
Indigirka River.....	70 50	153 43	1821.5	10 00 E.	1 06 E.	11.1 E.	.....	.....	.....	.....	.....	.....	Wrangel.
North Parnassus	71 01	158 10	1821.5	10 00 E.	1 03 E.	11.1 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Mouth of Keodägina R.	70 43	159 18	1823.5	.....	.....	.....	79 00	+45	79.8	.....	.....	.....	Wrangel.
Fourth Bear Island ...	70 47	161 40	1821.5	14 00 E.	0 54 E.	14.9 E.	.....	.....	.....	.....	.....	.....	Wrangel.
S.E. Point of ditto ...	70 37	162 24	1821.5	14 06 E.	0 50 E.	14.9 E.	79 49	+47	80.6	.....	.....	.....	Wrangel.
Station	70 13	162 40	1821.5	.....	.....	.....	78 15	+47	79.0	.....	.....	.....	Wrangel.
On ice	71 37	163 23	1821.5	.....	.....	.....	80 17	+47	81.1	.....	.....	.....	Wrangel.
On ice	70 41	165 22	1821.5	14 51 E.	0 47 E.	15.6 E.	.....	.....	.....	.....	.....	.....	Wrangel.
On ice	70 39	165 42	1822.5	14 30 E.	0 47 E.	15.3 E.	.....	.....	.....	.....	.....	.....	Wrangel.
On ice	71 13	166 04	1822.5	15 00 E.	0 54 E.	15.9 E.	.....	.....	.....	.....	.....	.....	Wrangel.
On ice	71 34	166 41	1822.5	17 00 E.	0 59 E.	18.0 E.	.....	.....	.....	.....	.....	.....	Wrangel.
On ice	71 52	166 51	1822.5	18 45 E.	1 00 E.	19.8 E.	.....	.....	.....	.....	.....	.....	Wrangel.
On ice	71 50	167 11	1822.5	18 45 E.	1 00 E.	19.8 E.	.....	.....	.....	.....	.....	.....	Wrangel.
On ice	71 18	167 54	1822.5	18 00 E.	0 54 E.	18.9 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Ice, distant from shore	70 53	170 00	1822.5	18 40 E.	0 42 E.	19.4 E.	81 09	+46	81.9	.....	.....	.....	Wrangel.
Station	70 53	170 31	1822.5	18 48 E.	0 42 E.	19.5 E.	79 58	+46	80.7	.....	.....	.....	Wrangel.
Cape Schelagskoi	70 03	171 03	1823.5	18 03 E.	0 30 E.	18.6 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Kosmin Rock	70 01	171 55	1823.5	18 00 E.	0 28 E.	18.5 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Station	70 20	174 13	1823.5	21 30 E.	0 28 E.	22.0 E.	.....	.....	.....	.....	.....	.....	Wrangel.
At sea.....	70 54	184 20	1849.5	29 44 E.	.....	29.7 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	70 27	185 44	1849.5	27 56 E.	.....	27.9 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	70 40	186 02	1849.5	28 13 E.	.....	28.2 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	70 18	186 46	1849.5	30 14 E.	.....	30.2 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	70 44	188 00	1849.5	29 07 E.	.....	29.1 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	70 59	189 33	1849.5	32 57 E.	.....	33.0 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	70 00	190 54	1849.5	29 34 E.	.....	29.6 E.	.....	.....	.....	.....	.....	.....	Kellett.
At sea.....	70 06	192 27	1850.5	32 16 E.	.....	32.3 E.	.....	.....	.....	.....	.....	.....	Kellett.

ZONE VII.—Lat. 70° to 75° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.			Observers.
				Observed.	Correction to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.	
Melville Island	74 27	248 18	1819.5	117 52 E.	.....	117.9 E.	88 37	.....	88.6	12.13	.....	12.13	Sabine.
Melville Island	74 49	248 48	1820.5	123 06 E.	.....	123.1 E.	.....	.....	.....	.....	.....	.....	Sabine.
Winter Harbour	74 47	249 12	1820.0	127 48 E.	.....	127.8 E.	88 42	.....	88.7	12.24	.....	12.24	Sabine.
Bay of Hecla and Griper	74 47	249 26	1819.5	126 17 E.	.....	126.3 E.	88 30	.....	88.5	.....	.....	.....	Sabine.
Dealy Island	74 56	251 11	1852.5	142 46 E.	.....	142.8 E.	88 22	.....	88.4	.....	.....	.....	Kellett and McDougall.
On shore	74 58	252 56	1819.5	151 30 E.	151.5 E.	
On ice	74 55	255 48	1819.5	.....	.....	.....	88 29	.....	88.5	.....	.....	.....	Sabine.
On ice	74 30	257 50	1857.5	179 40?	.....	179.7 ?	.....	.....	.....	.....	.....	.....	McDougall.
Ommanney Bay	73 01	258 17	1851.5	168 40 E.	.....	168.7 E.	.....	.....	.....	.....	.....	.....	Ommanney.
Prince of Wales Land	73 00	258 21	1851.5	169 07 E.	.....	169.1 E.	.....	.....	.....	.....	.....	.....	Ommanney.
Prince of Wales Land	73 03	258 52	1851.5	170 57 E.	.....	171.0 E.	.....	.....	.....	.....	.....	.....	Ommanney.
On ice and on shore (mean of 3 obs.).....	70 14	258 53	1851.5	.....	.....	.....	89 30	.....	89.5	.....	.....	.....	Collinson.
Prince of Wales Land	73 37	258 55	1853.5	172 00 E.	.....	172.0 E.	.....	.....	.....	.....	.....	.....	Ommanney.
On ice	70 08	258 58	1853.5	.....	.....	.....	89 26	.....	89.4	.....	.....	.....	Collinson.
Prince of Wales Land	73 06	259 08	1851.5	171 38	.....	171.6	.....	.....	.....	.....	.....	.....	Ommanney.
On shore	70 22	259 15	1853.5	.....	.....	.....	89 20	.....	89.3	.....	.....	.....	Collinson.
Prince of Wales Land	74 01	259 53	1851.5	166 20 w.	.....	166.3 w.	.....	.....	.....	.....	.....	.....	Ommanney.
Resting Place	73 55	260 35	1851.5	163 35 w.	.....	163.6 w.	88 16	.....	88.3	.....	.....	.....	Ommanney.
Prince of Wales Land	73 59	260 51	1851.5	159 02 w.	.....	159.0 w.	.....	.....	.....	.....	.....	.....	Ommanney.
Prince of Wales Land	74 03	261 35	1851.5	166 09 w.	.....	166.1 w.	.....	.....	.....	.....	.....	.....	Ommanney.
Cape Walker.....	74 06	262 22	1851.5	157 33 w.	.....	157.6 w.	88 11	.....	88.2	.....	.....	.....	Ommanney.
On land.....	70 05	263 14	1831.5	.....	.....	.....	89 59	.....	90.0	.....	.....	.....	Ross.
On ice	70 11	263 15	1859.5	.....	.....	.....	89 52	.....	89.9	.....	.....	.....	McClintock.
On shore ice	70 07	263 25	1859.5	.....	.....	.....	89 49	.....	89.8	.....	.....	.....	McClintock.
Point Hartstene	71 08	263 30	1859.0	.....	.....	.....	89 13	.....	89.2	.....	.....	.....	McClintock.
Low limestone shore.....	70 33	263 30	1859.5	.....	.....	.....	89 13	.....	89.2	.....	.....	.....	McClintock.
On land	70 49	263 30	1859.5	.....	.....	.....	89 16	.....	89.3	.....	.....	.....	McClintock.
Prince of Wales Land	74 25	263 57	1851.5	153 00 w.	.....	153.0 w.	.....	.....	.....	.....	.....	.....	Ommanney.
Prince of Wales Land	71 25	264 00	1859.5	.....	.....	.....	89 01	.....	89.0	.....	.....	.....	McClintock.
On the beach	73 22	264 18	1849.5	.....	.....	.....	88 27	.....	88.5	.....	.....	.....	Ross.
On ice, near Griffiths Island	74 37	264 20	1850.5	.....	.....	.....	87 53	.....	87.9	.....	.....	.....	R. C. Allen.
On the beach.....	73 12	264 29	1849.5	.....	.....	.....	88 31	.....	88.5	.....	.....	.....	Ross.
On ice, Winter Station	74 36	264 42	1851.5	.....	.....	.....	87 53	.....	87.9	12.39	.....	12.39	Ommanney.
On the beach.....	74 01	264 49	1849.5	.....	.....	.....	88 14	.....	88.2	.....	.....	.....	Ross.
Griffiths Island.....	74 35	264 50	1851.5	.....	.....	.....	87 58	.....	88.0	.....	.....	.....	Ommanney and Allen.
Cape Bird	71 59	264 52	1858.5	138 00 w.	.....	138.0 w.	88 12	.....	88.2	.....	.....	.....	McClintock.
Port Kennedy	72 01	265 40	1858.5	135 47 w.	.....	135.8 w.	88 27	.....	88.5	.....	.....	.....	McClintock.
Depôt Bay.....	72 01	265 49	1858.5	.....	.....	.....	88 23	.....	88.4	.....	.....	.....	McClintock.
Near Barlow's Inlet, on ice	74 43	266 41	1850.5	141 17 w.	.....	141.3 w.	87 34	.....	87.6	12.33	.....	12.33	Ommanney.
On the beach.....	74 08	267 09	1849.5	.....	.....	.....	87 36	.....	87.6	.....	.....	.....	Ross.
On the beach.....	74 00	267 57	1849.5	.....	.....	.....	87 44	.....	87.7	.....	.....	.....	Ross.
Sheriffs Bay	70 01	268 06	1831.0	96 12 w.	.....	96.2 w.	89 00	.....	89.0	.....	.....	.....	Ross.
On land	72 47	268 09	1825.5	129 24 w.	.....	129.4 w.	88 19	.....	88.3	.....	.....	.....	Parry.
Land ice, Beechey Id.	74 40	268 12	1850.5	.....	.....	.....	87 29	.....	87.5	.....	.....	.....	R. C. Allen.
Near Cape Riley	74 40	268 13	1819.5	129 00 w.	.....	129.0 w.	.....	.....	.....	.....	.....	.....	Sabine.
Cape Riley.....	74 42	268 17	1853.5	.....	.....	.....	.....	.....	.....	12.72	.....	12.72	Bellot.
Victory Harbour	70 09	268 29	1832.0	101 32 w.	.....	101.5 w.	88 55	.....	88.9	.....	.....	.....	Ross.
On land	73 06	268 40	1825.0	128 24 w.	.....	128.4 w.	88 02	.....	88.0	.....	.....	.....	Parry.
On the beach.....	74 02	268 53	1849.5	.....	.....	.....	87 36	.....	87.6	.....	.....	.....	Ross.
Barrow's Strait.....	74 35	268 55	1850.5	135 21 w.	.....	135.4 w.	.....	.....	.....	.....	.....	.....	Ommanney.
On ice	73 23	269 07	1825.5	125 36 w.	.....	125.6 w.	.....	.....	.....	.....	.....	.....	Parry.
Port Leopold.....	73 52	269 43	1849.0	129 13 w.	.....	129.2 w.	87 38	.....	87.6	13.05	.....	13.05	Robinson and Brown.
E. shore, Regent's Inlet	72 45	270 19	1819.5	118 16 w.	.....	118.3 w.	88 27	.....	88.5	12.46	.....	12.46	Sabine.
On ice	72 57	270 30	1819.5	.....	.....	.....	88 25	.....	88.4	.....	.....	.....	Sabine.
On shore	73 12	270 58	1819.5	114 17 w.	114.3 w.	Parry and Sabine.

ZONE VIII.—LATITUDE 75° TO 90° N.

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 Parry and Foster... Parry's Voyage, 1827.
 Gaimard Voyages en Scandinavie &c., 1838-1840.
 Parry & James Ross.. Parry's Voyage, 1827.
 Lütke MSS. in Magnetic Office, received from Admiral Count Lütke.
 Pakhtusoff { In Belavenetz, 1871 (in the Russian Language); and MSS. in the Magnetic Office,
 { received from Admiral Count Lütke.
 Johannesen Petermann, Mittheilungen, 1871.
 Allen MSS. in Magnetic Office, received from Mr. R. C. Allen, R.N., Master of the 'Resolute.'
 Belcher..... MSS. received from the British Hydrographic Office.
 Kane }
 Hayes }
 Sonntag } Smithsonian Contributions, vols. x. and xv.
 Radcliff }
 McCormick }
 Ommanney MSS. in Magnetic Office, communicated by Admiral Ommanney.
 McClintock MSS. in Magnetic Office, communicated by Admiral Sir Leopold McClintock.
 Bellot MSS. in Magnetic Office, communicated by Admiral Inglefield.
 Robinson } MSS. in Magnetic Office, communicated by Lieut. Robinson, R.N.
 Brown }

ZONE VIII.—Lat. 75 to 85° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.			Observers.
				Observed.	Correction to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.	
Belkow Island	75 52	136 50	1822.5	.....	.....	.....	82 58	+40	83.6	.....	.....	.....	Wrangel.
On ice	76 36	137 26	1822.5	16 00 E.	3 00 E.	19.0 E.	83 08	+40	83.8	.....	.....	.....	Anjou.
On ice	76 02	138 53	1822.5	14 43 E.	3 00 E.	17.7 E.	82 51	+40	83.5	.....	.....	.....	Anjou.
Cape Nerpowoi	75 47	143 33	1822.5	.....	.....	.....	82 26	+40	83.1	.....	.....	.....	Wrangel.
River Mutnaia	75 12	149 53	1822.5	.....	.....	.....	82 22	+40	83.0	.....	.....	.....	Anjou.
Mouth of the Mutnaia	75 04	150 34	1822.5	15 15 E.	2 20 E.	17.6 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Cape Kamenoi	75 06	150 53	1822.5	15 15 E.	2 20 E.	17.6 E.	.....	.....	.....	.....	.....	.....	Wrangel.
Melville Island	75 05	248 03	1820.5	123 48 E.	.....	123.8 E.	.....	.....	.....	.....	.....	.....	Sabine.
Melville Island	75 13	248 10	1820.5	125 15 E.	.....	125.3 E.	.....	.....	.....	.....	.....	.....	Sabine.
Melville Island	75 03	248 23	1820.5	126 02 E.	.....	126.0 E.	.....	.....	.....	.....	.....	.....	Sabine.
Melville Island	75 21	249 27	1820.5	131 47 E.	.....	131.8 E.	.....	.....	.....	.....	.....	.....	Sabine.
On ice	75 12	254 02	1854.5	158 00 E.	.....	158.0 E.	.....	.....	.....	.....	.....	.....	Kellett.
On ice	75 03	254 06	1819.5	158 04 E.	.....	158.1 E.	.....	.....	.....	.....	.....	.....	Sabine.
Byam Martin's Island.	75 10	256 16	1819.5	165 50 E.	.....	165.8 E.	88 26	- 9	88.3	12.35	.....	12.35	Sabine.
Harbour Hill, on shore	76 51	263 00	1852.5	150 47 w.	.....	150.8 w.	.....	.....	.....	.....	.....	.....	Belcher.
Pioneer Island	76 57	263 05	1852.5	155 23 w.	.....	155.4 w.	.....	.....	.....	.....	.....	.....	Belcher.
Mount Percy	76 43	263 15	1852.5	146 12 w.	.....	146.2 w.	.....	.....	.....	.....	.....	.....	Belcher.
Floe, Barrow's Bay	76 28	264 00	1853.5	152 00 w.	.....	152.0 w.	.....	.....	.....	.....	.....	.....	Belcher.
Mount Acland	76 27	264 05	1853.5	152 27 w.	.....	152.5 w.	.....	.....	.....	.....	.....	.....	Belcher.
Exmouth Island	77 16	264 10	1852.5	156 42 w.	.....	156.7 w.	.....	.....	.....	.....	.....	.....	Belcher.
Depôt Station	77 00	264 57	1853.5	146 42 w.	.....	146.7 w.	.....	.....	.....	.....	.....	.....	Belcher.
North Cornwall	77 34	265 03	1852.5	154 20 w.	.....	154.3 w.	.....	.....	.....	.....	.....	.....	Belcher.
Floe, East of Margaret Island	76 04	265 15	1853.5	153 17 w.	.....	153.3 w.	.....	.....	.....	.....	.....	.....	Belcher.
Refuge Bay	76 16	265 15	1853.5	151 38 w.	.....	151.6 w.	.....	.....	.....	.....	.....	.....	Belcher.
Off Baillie Hamilton Island	76 01	265 20	1853.5	149 49 w.	.....	149.8 w.	.....	.....	.....	.....	.....	.....	Belcher.
Gravel Island and Bank	76 56	265 32	1853.5	154 15 w.	.....	154.3 w.	.....	.....	.....	.....	.....	.....	Belcher.
Princess Royal Island.	76 58	265 40	1853.5	147 43 w.	.....	147.7 w.	.....	.....	.....	.....	.....	.....	Belcher.
Mount Parker	76 52	266 23	1853.5	149 28 w.	.....	149.5 w.	.....	.....	.....	.....	.....	.....	Belcher.
Floe, Baring Bay	75 37	267 52	1853.5	144 58 w.	.....	145.0 w.	.....	.....	.....	.....	.....	.....	Belcher.
Buckingham Island	77 10	268 53	1853.5	142 47 w.	.....	142.8 w.	.....	.....	.....	.....	.....	.....	Belcher.
On ice	76 08	281 39	1818.5	109 58 w.	.....	110.0 w.	86 00	- 9	85.9	12.39	.....	12.39	Sabine.
On ice	76 33	283 08	1818.5	106 08 w.	.....	106.1 w.	.....	.....	.....	.....	.....	.....	Sabine.
Cadogan Inlet	78 11	283 32	1861.5	.....	.....	.....	85 21	+19	85.7	.....	.....	.....	Hayes.
On ice	76 45	284 00	1818.5	.....	.....	.....	86 09	-24	85.8	12.45	.....	12.45	Sabine.
On ice	75 46	284 11	1850.5	106 35 w.	.....	106.6 w.	.....	.....	.....	.....	.....	.....	Ommanney.
At sea, mean of three observations	76 13	285 04	1850.5	101 50 w.	.....	101.8 w.	.....	.....	.....	.....	.....	.....	Ommanney.
On ice	76 32	286 15	1818.5	.....	.....	.....	85 44	-24	85.3	.....	.....	.....	Sabine.
Lyttelton Island	78 22	286 30	1861.5	.....	.....	.....	84 43	+19	85.0	.....	.....	.....	Hayes.
Hakluyt Island	77 23	286 50	1861.5	.....	.....	.....	85 00	+19	85.3	.....	.....	.....	Hayes.
Starr Island	78 18	286 54	1861.5	109 45 w.	.....	109.8 w.	.....	.....	.....	.....	.....	.....	Hayes.
Camp Hawks.	79 44	286 54	1861.5	115 38 w.	.....	115.6 w.	.....	.....	.....	.....	.....	.....	Hayes.
Islet	76 43	286 58	1851.5	.....	.....	.....	84 59	+ 9	85.2	.....	.....	.....	R. C. Allen.
Port Foulke	78 18	287 00	1861.5	111 40 w.	.....	111.7 w.	85 02	+19	85.4	12.52	.....	12.52	Hayes.
Cairn Point	78 31	287 01	1861.5	110 09 w.	.....	110.2 w.	.....	.....	.....	.....	.....	.....	Hayes.
Scouse Camp	79 30	287 07	1861.5	113 00 w.	.....	113.0 w.	.....	.....	.....	.....	.....	.....	Hayes.
Cary Islands	76 45	287 14	1850.5	.....	.....	.....	85 19	+ 8	85.5	12.22	.....	12.22	Ommanney.
On ice	76 30	287 25	1818.5	102 27 w.	.....	102.5 w.	.....	.....	.....	.....	.....	.....	Sabine.
Potato Camp	79 04	287 30	1861.5	105 34 w.	.....	105.6 w.	.....	.....	.....	.....	.....	.....	Hayes.
Northumberland Isl ^d .	77 11	287 40	1861.5	106 00 w.	.....	106.0 w.	.....	.....	.....	.....	.....	.....	Hayes & Radcliff.
Camp Separation	78 53	287 52	1861.5	105 04 w.	.....	105.1 w.	.....	.....	.....	.....	.....	.....	Hayes.
Last Camp	78 38	287 52	1861.5	108 36 w.	.....	108.6 w.	.....	.....	.....	.....	.....	.....	Hayes.
Cape Grinnell	78 34	288 26	1853.5	.....	.....	.....	85 08	+11	85.3	.....	.....	.....	Kane.
Foggy Camp	79 55	288 32	1861.5	106 53 w.	.....	106.9 w.	.....	.....	.....	.....	.....	.....	Hayes.
On ice	75 25	288 38	1850.5	.....	.....	.....	84 17	+ 8	84.4	.....	.....	.....	Ommanney.
Netlik	77 08	288 38	1861.5	106 49 w.	.....	106.8 w.	84 58	+19	85.3	12.65	.....	12.65	Hayes.
Observatory, Ransselaer Harbour	78 37	289 20	1854.5	108 12 w.	.....	108.2 w.	84 46	+12	85.0	12.48	.....	12.48	Kane.
Ice off Wolstenholme Island	76 19	290 30	1850.5	.....	.....	.....	84 56	+ 8	85.1	.....	.....	.....	Ommanney.

ZONE VIII.—Lat. 75° to 85° N. (continued).

Stations.	Lat. N.	Long. E.	Date.	Declination.			Inclination.			Force in British units.			Observers.
				Observed.	Correction to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.	Observed.	Cor. to Epoch 1842.5.	Corrected.	
Marshall Bay	78 52	291 00	1853.5	.....	.....	.....	84 49	+11	85.0	.....	.....	.....	Kane.
On ice	75 55	294 30	1818.5	93 40 w.	.....	93.7 w.	.....	.....	.....	.....	.....	.....	Sabine.
Bushman Island	76 05	294 30	1853.5	.....	.....	.....	.....	.....	.....	12.58	.....	12.58	Bellot.
Ice, Melville Bay	75 31	294 40	1857.5	.....	.....	.....	84 04	+15	84.3	.....	.....	.....	McClintock.
On land (mean of three observations) }	75 23	294 40	1857.5	94 40 w.	.....	94.7 w.	.....	.....	.....	.....	.....	.....	McClintock.
Baffin's Bay, on ice ...	75 59	295 13	1818.5	.....	.....	.....	84 52	-24	84.5	.....	.....	.....	Sabine.
Baffin's Bay, on ice ...	75 54	295 27	1818.5	90 43 w.	.....	90.7 w.	84 52	-24	84.5	.....	.....	.....	Sabine.
Ice, Melville Bay	75 28	295 54	1857.5	.....	.....	.....	83 51	+15	84.1	.....	.....	.....	McClintock.
On ice	75 45	296 00	1818.5	88 57 w.	.....	89.0 w.	.....	.....	.....	.....	.....	.....	Sabine.
Skene Islands	76 00	296 30	1853.5	.....	.....	.....	84 10	+11	84.4	.....	.....	.....	Bellot.
On ice	75 51	296 54	1818.5	.....	.....	.....	84 44	-24	84.4	12.09	.....	12.09	Sabine.
On ice	75 34	297 37	1848.5	.....	.....	.....	83 27	.....	.....	.....	.....	.....	Robinson.
Baffin's Bay, on ice ...	75 26	298 13	1850.5	.....	.....	.....	84 16	+ 8	84.4	.....	.....	.....	R. C. Allen.
On ice, Melville Bay...	75 24	298 16	1850.5	88 51 w.	.....	88.9 w.	.....	.....	.....	11.84	.....	11.84	Ommanney.
On ice	75 23	298 19	1852.5	89 24 w.	.....	89.4 w.	84 27	+10	84.6	.....	.....	.....	Belcher.
On ice	76 19	298 30	1850.5	101 14 w.	.....	101.2 w.	.....	.....	.....	.....	.....	.....	Ommanney.
On ice, Melville Bay...	75 25	298 38	1850.5	.....	.....	.....	84 17	+ 8	84.4	.....	.....	.....	Ommanney.
On ice	75 18	298 41	1852.5	88 42 w.	.....	88.7 w.	.....	.....	.....	.....	.....	.....	Kellett.
On ice	75 22	298 50	1850.5	89 20 w.	.....	89.3 w.	84 06	+ 8	84.2	.....	.....	.....	Ommanney.
On ice, Melville Bay...	75 21	298 54	1850.5	.....	.....	.....	84 04	+ 8	84.2	.....	.....	.....	Ommanney.
On ice, Baffin's Bay ...	75 22	298 54	1850.5	.....	.....	.....	84 02	+ 8	84.2	.....	.....	.....	R. C. Allen.
On ice	75 22	298 55	1852.5	89 12 w.	.....	89.2 w.	.....	.....	.....	.....	.....	.....	Kellett and Allen.
On ice, Melville Bay...	75 32	299 00	1818.5	87 55 w.	.....	87.9 w.	.....	.....	.....	.....	.....	.....	Sabine.
On ice, Melville Bay...	75 21	299 00	1850.5	.....	.....	.....	84 12	+ 8	84.3	.....	.....	.....	Ommanney.
On ice	75 28	299 25	1818.5	88 19 w.	.....	88.3 w.	.....	.....	.....	.....	.....	.....	Sabine.
On ice	75 04	299 51	1852.5	87 08 w.	.....	87.1 w.	83 52	+10	84.0	.....	.....	.....	Belcher.
On ice	75 04	299 57	1818.5	87 00 w.	.....	87.0 w.	84 25	-24	84.0	11.88	.....	11.88	Sabine.
Sabine Islands, land ice	75 25	300 10	1853.5	.....	.....	.....	83 42	+11	83.9	.....	.....	.....	Bellot.
Browne's Islands	75 12	301 00	1848.5	.....	.....	.....	84 04	.....	84.1	.....	.....	.....	Robinson.
On ice, S. of Browne's } Islands	75 00	301 00	1857.5	.....	.....	.....	83 28	+15	83.7	.....	.....	.....	McClintock.
On ice, near Cape } Seddon	75 10	301 00	1853.5	.....	.....	.....	.....	.....	.....	12.22	.....	12.22	Bellot.

The earliest conclusion of a systematic character regarding the phenomena of Terrestrial Magnetism, which is consistent with, and has been borne out by, our more recent as well as by our present knowledge, is that of HALLEY, contained in a paper presented to the Royal Society in 1683; in which paper he demonstrated the impossibility of reconciling the magnetic Declinations which had been observed by “persons of good skill and integrity” in different parts of the globe (of which Declinations he subjoined a Table), with the Theory, then recently proposed, of “Two Magnetical Poles, and an axis inclined to the Axis of the Earth.” Subsequent experience has abundantly confirmed the soundness of HALLEY’S conclusion. The Records of Navigators and of Travellers, in the nearly two centuries which have since elapsed, have practically demonstrated its truth. Slowly as conviction may have made its way, there are probably few remaining (who have studied with due care the researches of the past and of the present centuries) who still hesitate to accept the conclusion to which HALLEY was led by the careful study of the Phenomena as they were then known—viz. that “the Globe of the Earth may be regarded as one great magnet, having Four Magnetical Poles, or Points of Attraction, two of them near each Pole of the Equator; and that in those parts of the world which lie near any of those magnetical Poles, the needle is chiefly governed thereby, the nearest pole being always predominant over the more remote.”

HANSTEEN, in his memorable work, the ‘Magnetismus der Erde,’ published in 1819, brought together the observations of the Declination which had been previously scattered in voyages and travels and in the works of systematic writers (including those which had been collected by HALLEY), and formed from them maps of the phenomena corresponding to successive Epochs. Copies of the greater part of these maps were published in an abstract of the contents of the ‘Magnetismus der Erde’ which I drew up for the British Association for the Advancement of Science in 1835, and which was printed in the Report of the Dublin Meeting of the Association for that year. The first of these maps, corresponding to the observations of the Declination between 1600 and 1700, is the earliest digest of contemporary determinations sufficiently extensive to warrant general conclusions. The present contribution may be regarded as a progressive step in the work thus commenced by HALLEY and continued by HANSTEEN—a continuation in the same direction as that pursued by the two authorities whose footsteps I have endeavoured to follow, but with resources which attest the increased importance which has since attached to the subject.

The amount of “new material” which has accumulated since the publication of the ‘Magnetismus der Erde’ in 1819, abundantly testifies the increased interest with which this branch of Physical Geography has been since, and is now, regarded. The knowledge which we have since acquired of the magnetic phenomena in the northern portions of both the old and the new Continents may well be regarded as constituting an era in the history of its progressive advancement. What has been achieved for the northern parts of Europe and Asia by the researches of the eminent men who have made that field of research their own, has been paralleled in the New World by the prominence which

has been assigned to Magnetical Observations in the successive Polar Voyages, and by the assiduous labours of British Naval and Military Officers, and of the Magneticians of the United States, acting in concert with the operations of the Coast Survey. The earliest authoritative knowledge we possess of the magnetical state of the North-American Continent was contained in the same communication from HALLEY to the Royal Society in 1683 to which reference has already been made. In that paper, the Geographical Position of the "North-American Magnetic Pole" is stated to be in "a meridian corresponding with the middle of California," and "about 15° from the North Pole of the Globe." We have, indeed, no assured knowledge as to whether the Geographical Position thus indicated was designed by HALLEY to refer to the locality characterized by " 90° of Inclination," or to that of the "Maximum of Force,"—the distinction between these two localities being well known to HALLEY, as it was, in fact, established by himself. Our recent researches place the approximate localities of these points, in 1842·5,—that of the maximum of Inclination in 70° N. Latitude and 263° E. Longitude; whilst for the Maximum of Force we have the Latitude 53° N. and Longitude 268° E.,—both localities being to the East, and a little to the South, of the Geographical Position which HALLEY assigned to the Magnetic Pole in 1683. Admitting the probability, which appears to be generally recognized and acceded to, that the Easterly Progression terminated at an Epoch nearly coinciding with that of the Maps and Tables of the present memoir, viz. 1842·5, such probability may seem to render the present occasion a particularly suitable one for subjoining a few "Groups" of Results (as proposed in a previous page, p. 356) for convenient comparison with the Phenomena which may be observed at future periods.

Declination.

1. M ^c Clure. Epoch 1851·5.			2. Sabine. Epoch 1819-1820.			3. Sabine. Epoch 1819-1820.		
Lat. N.	Long. E.	Declination E.	Lat. N.	Long. E.	Declination E.	Lat. N.	Long. E.	Declination E.
° /	° /	° /	° /	° /	° /	° /	° /	° /
71 06	237 00	80 14	74 26	246 12	106 07	74 27	248 18	117 52
74 27	237 29	86 24	74 24	247 07	110 56	75 03	248 23	126 02
74 06	241 45	96 14	74 25	247 19	111 19	74 49	248 48	123 06
72 47	242 26	83 04	74 27	247 49	114 35	74 47	249 12	127 48
73 05	243 54	89 16	75 05	248 03	123 48	74 47	249 26	126 17
73 12	244 17	93 12	75 13	248 10	125 15	75 21	249 27	131 47
73 07	241 09	88 04 E.	74 40	247 25	115 20 E.	74 52	248 56	125 29 E.

4. Ommanney. Epoch 1850-1851.			5. Ommanney. Epoch 1850-1851.			6. Belcher. Epoch 1852·5.		
Lat. N.	Long. E.	Declination E.	Lat. N.	Long. E.	Declination W.	Lat. N.	Long. E.	Declination W.
° /	° /	° /	° /	° /	° /	° /	° /	° /
73 01	258 17	168 40	74 01	259 53	166 20	76 51	263 00	150 47
73 00	258 21	169 07	73 55	260 35	163 35	76 57	263 05	155 23
73 03	258 52	170 57	73 59	260 51	159 02	76 43	263 15	146 12
73 37	258 55	172 00	74 03	261 35	166 09	76 28	264 00	152 00
73 06	259 08	171 38				76 27	264 05	152 27
						77 16	264 10	156 42
73 09	258 43	170 28 E.	74 00	260 43	163 47 W.	76 47	263 36	152 15 W.

7. Belcher. Epoch 1853·5.			8. Hayes. Epoch 1861·5.			9. Sabine. Epoch 1818·5.		
Lat. N.	Long. E.	Declination W.	Lat. N.	Long. E.	Declination W.	Lat. N.	Long. E.	Declination W.
° /	° /	° /	° /	° /	° /	° /	° /	° /
77 00	264 57	146 42	78 18	286 54	109 45	75 55	294 30	93 40
77 34	265 03	154 20	79 44	286 54	115 38	75 54	295 27	90 43
76 04	265 15	153 17	78 18	287 00	111 40	75 45	296 00	88 57
76 16	265 15	151 38	78 31	287 01	110 09	75 32	299 00	87 55
76 56	265 32	154 15	79 30	287 07	113 00	75 28	299 25	88 19
76 58	265 40	147 43	79 04	287 30	105 34	75 04	299 57	87 00
76 52	266 23	149 28						
76 49	265 26	151 03 W.	78 54	287 04	110 58 W.	75 36	297 23	89 26 W.

10. Various Observers. Approx. General Epoch 1851·5.			
	Lat. N.	Long. E.	Declination W.
	° /	° /	° /
McClintock	75 23	294 40	94 40
Belcher	75 23	298 19	89 24
Ommanney	75 51	298 23	95 02
Kellett	75 18	298 41	88 42
Ommanney	75 22	298 50	89 20
Kellett	75 22	298 55	89 12
Belcher	75 04	299 51	87 08
	75 23	298 14	90 30 W.

Inclination.

1. Sabine. Epoch 1819-1820.			2. Simpson. Epoch 1839.			3. M ^c Clintock. Epoch 1859.		
Lat. N.	Long. E.	Inclination N.	Lat. N.	Long. E.	Inclination N.	Lat. N.	Long. E.	Inclination N.
° /	° /	° /	° /	° /	° /	° /	° /	° /
74 27	248 18	88 37	68 56	253 20	88 15	69 08	259 55	89 26
74 47	249 12	88 42	68 07	256 23	88 20	68 42	261 50	89 35
74 47	249 26	88 30	68 41	261 38	89 29	68 31	262 50	89 24
74 55	255 48	88 29	68 21	262 35	89 30	67 50	263 23	89 32
75 10	256 16	88 26				67 58	263 40	89 08
						69 32	263 50	89 51
74 49	251 48	88 33 N.	68 31	258 29	88 54 N.	68 37	262 35	89 29 N.
4. M ^c Clintock. Epoch 1859.			5. M ^c Clintock. Epoch 1859.			6. James Ross. Epoch 1831-5.		
Lat. N.	Long. E.	Inclination N.	Lat. N.	Long. E.	Inclination N.	Lat. N.	Long. E.	Inclination N.
° /	° /	° /	° /	° /	° /	° /	° /	° /
69 37	261 19	89 45	71 08	263 30	89 13	70 05	263 14	89 59
69 41	262 50	89 55	71 25	264 00	89 01	69 35	265 07	89 42
70 11	263 15	89 52	71 59	264 52	88 12	69 26	266 09	89 22
70 07	263 25	89 49	72 01	265 40	88 27	69 30	266 32	89 17
70 33	263 30	89 13	72 01	265 49	88 23	70 01	268 06	89 00
70 49	263 30	89 16				70 09	268 29	88 55
70 09	262 58	89 38 N.	71 43	264 46	88 39 N.	69 48	266 16	89 22 N.
7. James Ross and Ommanney. Epoch 1850.			8. Parry and Fisher. Epoch 1821-1822.			9. Parry and Fisher. Epoch 1821-1822.		
Lat. N.	Long. E.	Inclination N.	Lat. N.	Long. E.	Inclination N.	Lat. N.	Long. E.	Inclination N.
° /	° /	° /	° /	° /	° /	° /	° /	° /
O. 74 36	264 42	87 48	66 31	273 30	88 07	69 48	276 31	88 21
R. 74 01	264 49	88 14	65 30	274 45	87 28	69 21	278 23	88 10
O. 74 35	264 50	87 58	66 13	275 20	87 31	69 32	278 37	88 06
O. 74 43	266 41	87 34	66 38	275 49	87 52	69 34	278 46	87 37
R. 74 08	267 09	87 36	66 12	277 06	87 51			
R. 74 00	267 57	87 44	66 56	278 21	87 47			
R. 74 02	268 53	87 36	65 08	280 25	87 09			
74 18	266 26	87 47 N.	66 10	276 28	87 41 N.	69 34	278 04	88 03 N.
10. Sabine. Epoch 1818.			11. Kane and Hayes. Epoch 1854-1861.			12. Allen and Ommanney. Epoch 1851.		
Lat. N.	Long. E.	Inclination N.	Lat. N.	Long. E.	Inclination N.	Lat. N.	Long. E.	Inclination N.
° /	° /	° /	° /	° /	° /	° /	° /	° /
76 08	281 39	86 00	H. 78 11	283 32	85 21	A. 76 43	286 58	84 59
76 31	282 38	86 04	H. 78 22	286 30	84 43	O. 76 45	287 14	85 19
76 45	284 00	86 09	H. 77 23	286 50	85 00	O. 75 25	288 38	84 17
76 32	286 15	85 44	H. 78 18	287 00	85 02	O. 76 19	290 30	84 56
			K. 78 34	288 26	85 08			
			H. 77 08	288 38	84 58			
			K. 78 37	289 20	84 46			
			K. 78 52	291 00	84 49			
75 44	283 38	85 59 N.	78 11	287 39	84 58 N.	76 18	288 20	84 53 N.

Inclination (continued).

13. Various Observers. Epoch 1853.				14. Sabine. Epoch 1818.		
	Lat. N.	Long. E.	Inclination N.	Lat. N.	Long. E.	Inclination N.
	° ' "	° ' "	° ' "	° ' "	° ' "	° ' "
M ^c Clintock	75 31	294 40	84 04	75 59	295 13	84 52
M ^c Clintock	75 28	295 54	83 51	75 54	295 27	84 52
Bellot.....	76 00	296 30	84 10	75 51	296 54	84 44
Robinson	75 34	297 37	83 27	75 04	299 57	84 25
Allen	75 26	298 13	84 16	74 35	301 02	83 51
Belcher	75 23	298 19	84 27	74 01	302 08	84 09
	75 34	296 52	84 02 N.	75 14	298 27	84 29 N.

15. Various Observers. Epoch 1850.				16. Various Observers. Epoch 1850.			
	Lat. N.	Long. E.	Inclination N.		Lat. N.	Long. E.	Inclination N.
	° ' "	° ' "	° ' "		° ' "	° ' "	° ' "
Ommanney	75 25	298 38	84 17	Robinson	75 12	301 00	84 04
Ommanney	75 22	298 50	84 06	M ^c Clintock	75 00	301 00	83 28
Ommanney	75 21	298 54	84 04	Brown	74 35	301 02	83 51
Allen	75 22	298 54	84 02	Brown	74 35	301 13	84 00
Ommanney	75 21	299 00	84 12	Allen	74 35	301 13	83 49
Belcher	75 04	299 51	83 52	Ommanney	74 35	301 13	83 35
Bellot.....	75 25	300 10	83 42	Allen	74 01	302 08	83 47
	75 20	299 11	84 02 N.		74 39	301 16	83 48 N.

The Observations of the Force, in the portion of the Globe for which I have given groups of the other two Elements (viz. Arctic America for about fifty degrees of Longitude), are scarcely sufficiently numerous to receive the same mode of treatment. I have therefore merely assembled these observations in a separate List, arranged according to Longitude.

Date.	Observers.	Lat. N.	Long. E.	Force.	Date.	Observers.	Lat. N.	Long. E.	Force.
		° ' "	° ' "				° ' "	° ' "	
1819	Sabine	74 27	248 18	12-13	1861	Hayes.....	77 08	288 38	12-65
1820	Sabine	74 47	249 12	12-24	1854	Kane	78 37	289 20	12-48
1819	Sabine	75 10	256 16	12-35	1818	Sabine	70 35	293 05	12-41
1851	Ommanney	74 36	264 42	12-39	1853	Bellot	76 05	294 30	12-58
1850	Ommanney	74 43	266 41	12-33	1818	Sabine	75 51	296 54	12-09
1853	Bellot	74 42	268 17	12-72	1850	Ommanney	75 24	298 16	11-84
1849	Robinson and Brown..	73 52	269 43	13-05	1818	Sabine	75 04	299 57	11-88
1819	Sabine	72 45	270 19	12-46	1853	Bellot	75 10	301 00	12-22
1825	Parry and Foster	73 14	271 05	13-26	1850	Ommanney	74 35	301 13	12-00
1853	Bellot	74 35	277 45	12-91	1850	Ommanney	73 10	303 36	12-21
1818	Sabine	76 08	281 39	12-39	1861	Hayes.....	72 47	303 57	12-38
1819	Parry and Sabine	73 31	282 38	12-23	1853	Kane	72 23	304 30	12-84
1818	Sabine	76 45	284 00	12-45	1818	Sabine	70 26	305 08	12-12
1861	Hayes.....	78 18	287 00	12-52	1823	Sabine	74 32	341 10	11-54
1850	Ommanney	76 45	287 14	12-22					

In the following Tables I have placed, in comparison with each other, the values of the magnetic Elements at every fifth degree of Latitude between 40° N. and 90° N., and at every tenth degree of Longitude between 0° and 360°, as shown, 1°, in the Table pub-

lished by MM. GAUSS and WEBER, in the 'Atlas des Erdmagnetismus' (Leipsic, 1840); and 2°, in the Tables and Maps of the present paper. For the values of the magnetic Force, which in the Atlas of MM. GAUSS and WEBER are expressed in the Arbitrary Scale, of which the fundamental value is 1·372, or (as written by M. GAUSS) 1372—the Force in London in 1836, I have substituted the Absolute Values, corresponding to 10·28 as the Absolute Force in London at the same Epoch, in the scale which was originally adopted in conformity with the Report of the Committee of Physics of the Royal Society, 1840, page 21*. In all the three Elements there are some blanks in the columns derived from the data in the present paper, owing to observations being either wanting or insufficient in those localities. *Some* of these blanks, viz. those in the vicinity of the Pole of the Earth, it will, probably, never be possible to fill up; but many of those in Lats. 40° and 45° may probably be supplied, when the evidence which this paper affords is supplemented by results South of 40° of N. Latitude, which are now in hand.

* The Section of the Report in which the Scale is premised, in which the values of the magnetic Force should thenceforward be expressed, generally known as the "Scale of British Units," was from the pen of its Chairman, the late Sir JOHN HERSCHEL, Bart.; the Scale is thus defined by him:—"The number thus obtained, for the Force of the Earth's Magnetism, expresses the Ratio which that Force bears to the *Unit of Force*; the Unit of Force being that which acting on the Unit of *Mass*, through the Unit of *Time*, generates in it the unit of *Velocity*. For the unit of Mass we take, a *grain*; for the unit of Time, a *second*; and if a Foot be taken as the unit of *Space*, the unit of *Velocity* will be that of one foot per second."

Declination.

Latitudes.	Gauss. Sabine.		Gauss. Sabine.		Gauss. Sabine.		Gauss. Sabine.		Gauss. Sabine.		Gauss. Sabine.		Latitudes.
	Long. 0° E.		Long. 10° E.		Long. 20° E.		Long. 30° E.		Long. 40° E.		Long. 50° E.		
85 N.	46 03 w.	.....	37 17 w.	.....	29 47 w.	.....	20 54 w.	.....	13 19 w.	.....	6 07 w.	.....	85 N.
80 N.	36 00 w.	32 30 w.	28 00 w.	23 55 w.	20 28 w.	14 35 w.	13 16 w.	4 00 w.	6 40 w.	4 45 E.	0 41 w.	11 00 E.	80 N.
75 N.	31 09 w.	30 30 w.	23 39 w.	22 30 w.	16 28 w.	13 00 w.	9 45 w.	4 00 w.	3 37 w.	4 00 E.	1 46 E.	10 00 E.	75 N.
70 N.	28 39 w.	29 00 w.	21 34 w.	21 30 w.	14 46 w.	12 30 w.	8 17 w.	4 00 w.	2 26 w.	3 00 E.	2 36 E.	8 50 E.	70 N.
65 N.	27 17 w.	27 00 w.	20 40 w.	20 10 w.	14 08 w.	12 25 w.	7 55 w.	4 40 w.	2 16 w.	1 50 E.	2 33 E.	7 20 E.	65 N.
60 N.	26 29 w.	26 00 w.	20 22 w.	19 30 w.	14 10 w.	12 25 w.	8 09 w.	5 15 w.	2 39 w.	0 40 E.	2 03 E.	5 25 E.	60 N.
55 N.	25 54 w.	24 20 w.	20 22 w.	18 40 w.	14 33 w.	12 30 w.	8 43 w.	6 15 w.	3 19 w.	0 40 w.	1 20 E.	3 35 E.	55 N.
50 N.	25 23 w.	23 10 w.	20 29 w.	18 00 w.	15 02 w.	12 30 w.	9 26 w.	7 10 w.	4 07 w.	2 15 w.	0 32 E.	1 45 E.	50 N.
45 N.	24 52 w.	21 45 w.	20 38 w.	17 00 w.	15 37 w.	12 35 w.	10 14 w.	8 00 w.	4 58 w.	3 25 w.	0 16 w.	0 20 E.	45 N.
40 N.	24 20 w.	20 35 w.	20 48 w.	17 00 w.	16 13 w.	13 00 w.	11 03 w.	8 50 w.	5 49 w.	4 25 w.	1 04 w.	0 45 w.	40 N.

Long. 60° E.		Long. 70° E.		Long. 80° E.		Long. 90° E.		Long. 100° E.		Long. 110° E.		Latitudes.	
85 N.	0 38 E.	7 00 E.	12 58 E.	18 37 E.	23 58 E.	30 13 E.		.....	85 N.
80 N.	4 35 E.	16 40 E.	9 03 E.	.....	12 40 E.	.....	15 26 E.	30 30 E.	17 28 E.	.....	19 07 E.	.....	80 N.
75 N.	6 13 E.	15 25 E.	9 36 E.	20 00 E.	11 45 E.	24 00 E.	12 40 E.	23 00 E.	12 33 E.	20 00 E.	11 51 E.	18 25 E.	75 N.
70 N.	6 35 E.	14 00 E.	9 19 E.	17 30 E.	10 38 E.	19 00 E.	10 24 E.	17 20 E.	9 02 E.	14 20 E.	7 07 E.	10 35 E.	70 N.
65 N.	6 17 E.	12 00 E.	8 38 E.	15 20 E.	9 27 E.	15 50 E.	8 39 E.	13 50 E.	6 37 E.	9 15 E.	4 07 E.	4 30 E.	65 N.
60 N.	5 39 E.	10 00 E.	7 50 E.	12 30 E.	8 24 E.	13 00 E.	7 20 E.	10 55 E.	5 00 E.	6 30 E.	2 18 E.	1 30 E.	60 N.
55 N.	4 53 E.	7 20 E.	7 01 E.	10 00 E.	7 31 E.	10 25 E.	6 23 E.	8 25 E.	4 01 E.	4 35 E.	1 14 E.	0 00	55 N.
50 N.	4 07 E.	4 35 E.	6 16 E.	.....	6 48 E.	7 00 E.	5 42 E.	.....	3 24 E.	3 20 E.	0 41 E.	0 15 w.	50 N.
45 N.	3 23 E.	3 00 E.	5 37 E.	.....	6 14 E.	.....	5 14 E.	.....	3 03 E.	.....	0 26 E.	0 25 w.	45 N.
40 N.	2 42 E.	.....	4 56 E.	.....	5 47 E.	.....	4 55 E.	.....	2 52 E.	.....	0 24 E.	0 30 w.	40 N.

Long. 120° E.		Long. 130° E.		Long. 140° E.		Long. 150° E.		Long. 160° E.		Long. 170° E.		Latitudes.	
85 N.	34 22 E.	39 42 E.	45 27 E.	51 30 E.	58 16 E.	65 50 E.		.....	85 N.
80 N.	20 30 E.	.....	22 15 E.	.....	24 38 E.	.....	27 53 E.	.....	32 06 E.	.....	37 17 E.	.....	80 N.
75 N.	11 14 E.	16 30 E.	11 19 E.	15 30 E.	12 29 E.	16 00 E.	14 53 E.	17 45 E.	18 26 E.	20 00 E.	22 58 E.	26 15 E.	75 N.
70 N.	5 30 E.	7 00 E.	4 56 E.	5 05 E.	5 44 E.	6 10 E.	8 00 E.	9 00 E.	11 27 E.	13 00 E.	15 50 E.	17 50 E.	70 N.
65 N.	2 05 E.	0 00	1 17 E.	1 00 w.	2 02 E.	0 20 w.	4 15 E.	3 35 E.	7 40 E.	8 20 E.	11 57 E.	14 00 E.	65 N.
60 N.	0 06 E.	1 30 w.	0 46 w.	3 15 w.	0 04 w.	2 00 w.	2 10 E.	1 00 E.	5 33 E.	5 40 E.	9 41 E.	11 10 E.	60 N.
55 N.	0 59 w.	2 40 w.	1 53 w.	5 25 w.	1 11 w.	3 25 w.	1 01 E.	0 00	4 21 E.	4 35 E.	8 28 E.	10 02 E.	55 N.
50 N.	1 30 w.	3 40 w.	2 23 w.	.....	1 42 w.	3 40 w.	0 28 E.	0 30 w.	3 52 E.	4 25 E.	7 44 E.	9 30 E.	50 N.
45 N.	1 39 w.	.....	2 30 w.	.....	1 49 w.	3 50 w.	0 19 E.	0 30 w.	3 32 E.	4 05 E.	7 22 E.	9 15 E.	45 N.
40 N.	1 34 w.	.....	2 21 w.	.....	1 39 w.	.....	0 27 E.	.....	3 35 E.	4 10 E.	7 15 E.	.....	40 N.

Long. 180° E.		Long. 190° E.		Long. 200° E.		Long. 210° E.		Long. 220° E.		Long. 230° E.		Latitudes.	
85 N.	74 18 E.	83 54 E.	94 51 E.	107 01 E.	120 53 E.	136 24 E.		.....	85 N.
80 N.	43 27 E.	45 30 E.	50 35 E.	49 00 E.	59 03 E.	56 00 E.	68 19 E.	.....	79 43 E.	81 00 E.	94 09 E.	.....	80 N.
75 N.	28 17 E.	34 00 E.	34 14 E.	40 35 E.	40 41 E.	46 00 E.	47 33 E.	50 55 E.	54 51 E.	60 00 E.	62 45 E.	75 30 E.	75 N.
70 N.	20 51 E.	24 45 E.	26 15 E.	31 00 E.	31 49 E.	36 25 E.	37 14 E.	42 00 E.	42 22 E.	47 45 E.	46 50 E.	54 00 E.	70 N.
65 N.	16 47 E.	19 20 E.	21 48 E.	25 20 E.	26 42 E.	29 30 E.	31 14 E.	33 50 E.	35 04 E.	38 10 E.	37 48 E.	42 00 E.	65 N.
60 N.	14 23 E.	16 25 E.	19 03 E.	21 30 E.	23 25 E.	25 50 E.	27 13 E.	28 30 E.	30 06 E.	31 00 E.	31 39 E.	33 00 E.	60 N.
55 N.	12 53 E.	14 20 E.	17 12 E.	18 50 E.	21 07 E.	22 45 E.	24 13 E.	25 15 E.	26 21 E.	26 30 E.	27 09 E.	27 00 E.	55 N.
50 N.	11 55 E.	.....	15 53 E.	16 50 E.	19 16 E.	20 20 E.	21 49 E.	22 30 E.	23 18 E.	23 20 E.	23 35 E.	23 25 E.	50 N.
45 N.	11 18 E.	.....	14 53 E.	15 10 E.	17 46 E.	18 20 E.	19 45 E.	19 45 E.	20 44 E.	20 25 E.	20 38 E.	20 05 E.	45 N.
40 N.	10 55 E.	.....	14 05 E.	.....	16 28 E.	.....	17 56 E.	.....	18 28 E.	.....	18 08 E.	.....	40 N.

Long. 240° E.		Long. 250° E.		Long. 260° E.		Long. 270° E.		Long. 280° E.		Long. 290° E.		Latitudes.	
85 N.	153 27 E.	171 20 E.	170 42 w.	153 33 w.	137 32 w.	123 47 w.		.....	85 N.
80 N.	114 04 E.	.....	143 22 E.	.....	179 00 w.	.....	146 01 w.	.....	123 05 w.	122 00 w.	106 56 w.	.....	80 N.
75 N.	71 52 E.	94 00 E.	84 38 E.	130 00 E.	125 42 E.	.....	119 53 w.	132 30 w.	99 16 w.	109 30 w.	88 19 w.	98 30 w.	75 N.
70 N.	49 53 E.	62 15 E.	49 22 E.	70 00 E.	35 27 E.	75 30 E.	39 55 w.	93 30 w.	63 25 w.	90 30 w.	68 07 w.	85 30 w.	70 N.
65 N.	38 23 E.	43 40 E.	35 12 E.	43 00 E.	23 46 E.	32 35 E.	2 31 w.	30 00 w.	32 50 w.	56 20 w.	48 09 w.	64 20 w.	65 N.
60 N.	31 15 E.	34 00 E.	27 42 E.	32 45 E.	19 06 E.	23 00 E.	3 33 E.	5 00 w.	16 10 w.	33 00 w.	32 13 w.	47 20 w.	60 N.
55 N.	26 13 E.	27 00 E.	22 53 E.	25 35 E.	16 18 E.	19 00 E.	5 49 E.	4 00 E.	7 38 w.	16 40 w.	20 48 w.	30 10 w.	55 N.
50 N.	22 24 E.	22 45 E.	19 27 E.	20 40 E.	14 21 E.	16 45 E.	6 49 E.	7 30 E.	2 48 w.	8 00 w.	13 06 w.	19 35 w.	50 N.
45 N.	19 24 E.	19 15 E.	16 53 E.	17 40 E.	12 54 E.	.....	7 16 E.	8 00 E.	0 08 E.	3 00 w.	7 54 w.	13 00 w.	45 N.
40 N.	16 57 E.	.....	14 52 E.	14 45 E.	11 45 E.	.....	7 29 E.	.....	2 03 E.	0 00	4 20 w.	.....	40 N.

Long. 300° E.		Long. 310° E.		Long. 320° E.		Long. 330° E.		Long. 340° E.		Long. 350° E.		Latitudes.	
85 N.	109 32 w.	97 13 w.	85 39 w.	75 01 w.	64 52 w.	55 15 w.		.....	85 N.
80 N.	93 23 w.	92 30 w.	82 02 w.	77 30 w.	71 47 w.	63 00 w.	62 12 w.	54 00 w.	53 05 w.	45 45 w.	44 22 w.	.....	80 N.
75 N.	79 17 w.	86 00 w.	70 54 w.	74 00 w.	62 45 w.	61 30 w.	54 43 w.	53 00 w.	46 45 w.	45 35 w.	38 52 w.	38 00 w.	75 N.
70 N.	66 02 w.	78 00 w.	61 17 w.	70 00 w.	55 53 w.	58 40 w.	49 36 w.	51 15 w.	42 49 w.	44 15 w.	35 40 w.	36 10 w.	70 N.
65 N.	53 04 w.	66 40 w.	52 07 w.	62 30 w.	49 26 w.	55 00 w.	45 21 w.	48 30 w.	39 53 w.	41 40 w.	33 49 w.	34 10 w.	65 N.
60 N.	40 57 w.	53 00 w.	44 09 w.	53 00 w.	43 51 w.	49 20 w.	41 19 w.	43 50 w.	*	38 00 w.	32 09 w.	32 05 w.	60 N.
55 N.	30 29 w.	39 57 w.	35 56 w.	43 00 w.	37 53 w.	42 00 w.	37 15 w.	39 10 w.	34 43 w.	34 40 w.	30 48 w.	29 55 w.	55 N.
50 N.	22 08 w.	29 40 w.	28 34 w.	34 50 w.	32 09 w.	36 00 w.	33 10 w.	34 45 w.	32 06 w.	31 50 w.	29 22 w.	28 00 w.	50 N.
45 N.	15 46 w.	21 30 w.	22 20 w.	27 20 w.	26 53 w.	29 30 w.	29 13 w.	29 30 w.	29 29 w.	28 15 w.	27 56 w.	25 40 w.	45 N.
40 N.	11 03 w.	15 35 w.	17 17 w.	.....	22 17 w.	.....	25 34 w.	.....	26 57 w.	.....	26 29 w.	.....	40 N.

* Error in orig.

Inclination.

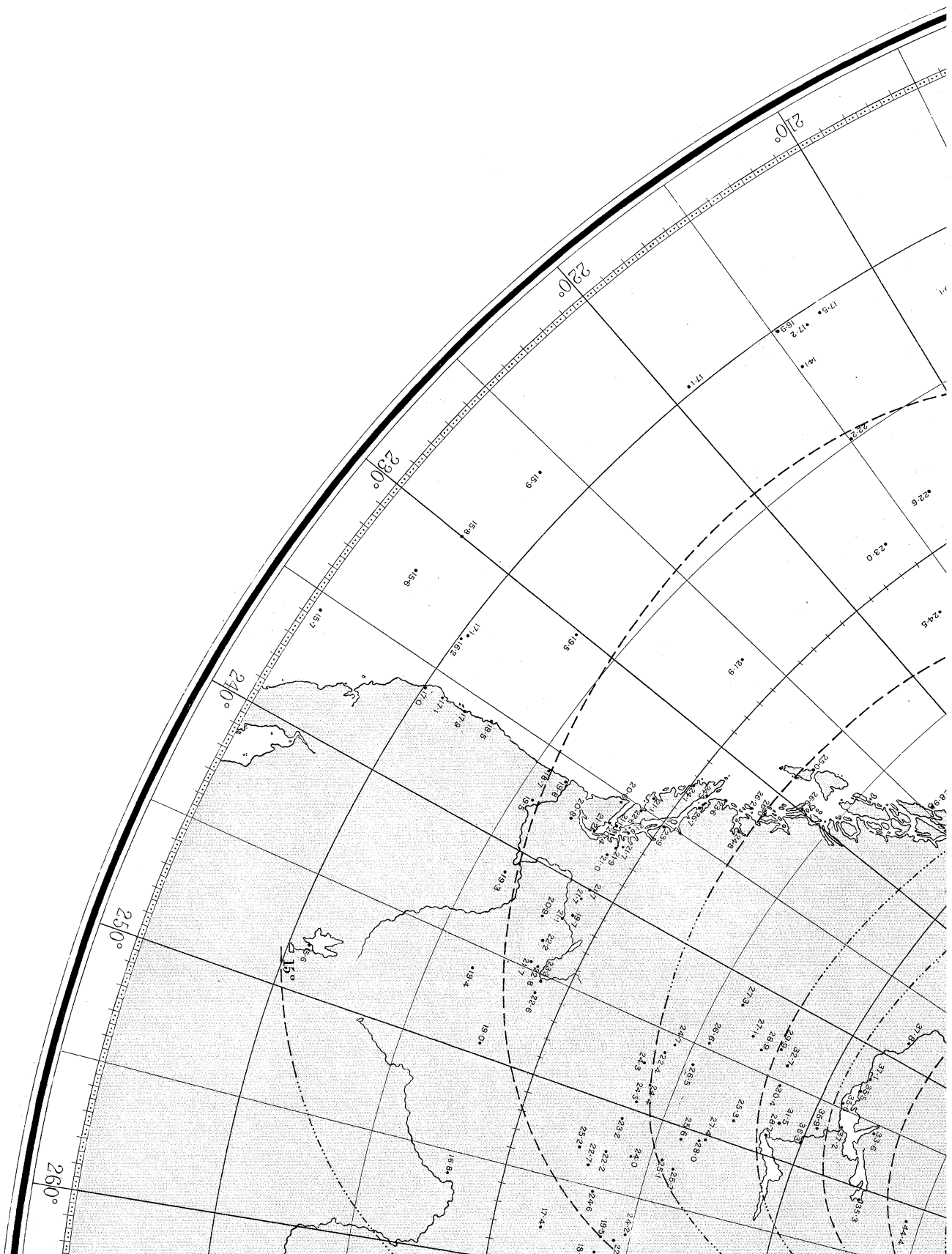
Latitudes.	Gauss.		Sabine.		Gauss.		Sabine.		Gauss.		Sabine.		Gauss.		Sabine.		Latitudes.
	Long. 0° E.		Long. 10° E.		Long. 20° E.		Long. 30° E.		Long. 40° E.		Long. 50° E.						
°	° /	° /	° /	° /	° /	° /	° /	° /	° /	° /	° /	° /	° /	° /	° /	°	
85 N.	84 20	.....	84 12	.....	84 07	.....	84 05	.....	84 06	.....	84 10	.....	85 N.
80 N.	82 24	81 30	82 07	.....	81 59	81 00	81 55	81 00	81 59	81 05	82 08	.....	80 N.		
75 N.	80 20	79 25	79 54	79 00	79 37	78 55	79 31	78 50	79 35	79 00	79 49	79 25	75 N.				
70 N.	78 12	77 20	77 32	76 45	77 04	76 30	76 51	76 35	76 52	76 35	77 07	77 05	70 N.				
65 N.	75 58	75 10	75 00	74 30	74 16	74 05	73 51	73 55	73 45	73 55	73 59	74 12	65 N.				
60 N.	73 34	73 00	72 13	72 15	71 08	71 32	70 26	71 05	70 10	70 55	70 21	70 55	60 N.				
55 N.	70 54	70 45	69 06	69 50	67 35	68 45	66 31	68 00	66 01	67 30	66 06	67 25	55 N.				
50 N.	67 56	68 00	65 35	66 35	63 33	65 30	62 01	64 25	61 14	63 35	61 10	63 25	50 N.				
45 N.	64 33	64 30	61 36	63 00	58 55	61 30	56 51	60 20	55 38	59 25	55 26	59 00	45 N.				
40 N.	60 44	61 00	57 04	58 55	53 38	57 25	50 53	55 40	49 12	54 55	48 47	54 10	40 N.				
	Long. 60° E.		Long. 70° E.		Long. 80° E.		Long. 90° E.		Long. 100° E.		Long. 110° E.						
85 N.	84 16	.....	84 24	.....	84 34	.....	84 44	.....	84 54	.....	85 02	.....	85 N.
80 N.	82 23	.....	82 41	.....	83 00	.....	83 20	.....	83 36	.....	83 51	.....	80 N.
75 N.	80 11	79 52	80 38	.....	81 07	.....	81 34	.....	81 55	.....	82 07	.....	75 N.
70 N.	77 35	77 25	78 11	.....	78 49	.....	79 23	79 25	79 47	79 50	79 56	.....	70 N.	
65 N.	74 32	74 35	75 15	75 28	76 02	.....	76 43	77 00	77 10	77 25	77 16	.....	65 N.		
60 N.	70 56	71 12	71 47	71 55	72 43	73 00	73 33	74 07	74 03	74 58	74 07	74 50	60 N.				
55 N.	66 43	67 30	67 43	68 00	68 50	68 55	69 49	70 00	70 24	70 50	70 28	70 35	55 N.				
50 N.	61 49	.....	62 58	.....	64 18	64 50	65 28	.....	66 11	.....	66 17	66 25	50 N.
45 N.	56 08	.....	57 28	.....	59 04	.....	60 29	.....	61 22	.....	61 31	61 25	45 N.
40 N.	49 32	.....	51 08	.....	53 02	.....	54 45	.....	55 50	.....	56 06	.....	40 N.
	Long. 120° E.		Long. 130° E.		Long. 140° E.		Long. 150° E.		Long. 160° E.		Long. 170° E.						
85 N.	85 15	.....	85 24	.....	85 33	.....	85 42	.....	85 51	.....	86 01	.....	85 N.
80 N.	83 59	.....	84 05	.....	84 09	.....	84 14	.....	84 20	.....	84 30	.....	80 N.
75 N.	82 10	.....	82 06	83 00	81 59	83 05	81 52	83 00	81 51	.....	81 57	.....	75 N.	
70 N.	79 50	.....	79 34	79 50	79 15	79 35	78 57	79 24	78 49	79 00	78 52	79 00	70 N.			
65 N.	77 02	.....	76 34	76 35	76 07	76 00	75 35	.....	75 21	.....	75 23	75 20	65 N.	
60 N.	73 46	74 05	73 08	73 00	72 25	72 05	71 49	71 25	71 31	70 50	71 34	70 40	60 N.				
55 N.	70 01	70 00	69 15	.....	68 22	.....	67 39	.....	67 17	66 30	67 24	66 25	55 N.	
50 N.	65 47	66 00	64 53	.....	63 52	.....	63 03	.....	62 41	62 25	62 53	62 06	50 N.	
45 N.	60 59	61 00	59 59	.....	58 51	59 40	57 59	.....	57 38	58 00	57 58	58 00	45 N.		
40 N.	55 33	.....	54 28	.....	53 15	.....	52 21	.....	52 05	53 40	52 38	54 20	40 N.
	Long. 180° E.		Long. 190° E.		Long. 200° E.		Long. 210° E.		Long. 220° E.		Long. 230° E.						
85 N.	86 12	.....	86 24	.....	86 42	.....	86 49	.....	87 00	.....	87 08	.....	85 N.
80 N.	84 44	.....	85 05	.....	85 32	.....	86 03	.....	86 38	.....	87 16	.....	80 N.
75 N.	82 14	.....	82 41	.....	83 17	.....	84 05	.....	85 01	.....	86 03	.....	75 N.
70 N.	79 11	79 10	79 45	79 30	80 33	80 20	81 35	81 05	82 48	82 25	84 08	83 50	70 N.				
65 N.	75 46	75 30	76 29	76 00	77 30	76 55	78 46	78 15	80 13	79 45	81 49	81 25	65 N.				
60 N.	72 03	71 05	72 56	72 00	74 09	73 25	75 39	75 00	77 21	76 37	79 09	78 35	60 N.				
55 N.	68 01	66 45	69 06	67 50	70 33	69 27	72 17	71 22	74 10	73 15	76 08	75 25	55 N.				
50 N.	63 40	62 30	64 59	63 30	66 40	65 20	68 37	67 25	70 40	69 30	72 45	71 22	50 N.				
45 N.	58 59	58 30	60 33	59 40	62 30	61 17	64 38	63 30	66 49	65 30	68 57	67 25	45 N.				
40 N.	53 55	55 00	55 47	56 00	57 59	57 35	60 16	59 40	62 32	61 45	64 42	.....	40 N.			
	Long. 240° E.		Long. 250° E.		Long. 260° E.		Long. 270° E.		Long. 280° E.		Long. 290° E.						
85 N.	87 13	.....	89 35	.....	87 07	.....	86 56	.....	86 41	.....	86 27	.....	85 N.
80 N.	87 51	.....	88 17	.....	88 21	.....	87 58	.....	87 20	.....	86 36	85 10	80 N.
75 N.	87 11	87 15	88 21	88 20	89 28	88 40	89 01	87 30	87 50	86 30	86 39	85 15	75 N.				
70 N.	85 34	85 30	87 03	87 30	88 26	88 50	88 45	89 00	87 49	87 30	86 25	85 20	70 N.				
65 N.	83 28	83 20	85 05	85 15	86 30	86 30	87 16	87 40	86 54	87 30	85 42	85 15	65 N.				
60 N.	80 58	80 35	82 42	82 30	84 10	84 25	85 06	85 35	85 12	85 40	84 26	84 05	60 N.				
55 N.	78 04	77 15	79 52	79 30	81 24	81 25	82 29	82 35	82 54	82 50	82 34	82 00	55 N.				
50 N.	74 45	73 30	76 36	75 40	78 13	77 40	79 26	79 10	80 06	79 35	80 08	79 25	50 N.				
45 N.	71 00	69 20	72 53	71 30	74 33	73 30	75 54	75 20	76 49	76 00	77 10	76 25	45 N.				
40 N.	66 44	65 00	68 39	67 10	70 24	69 10	71 54	71 05	73 02	72 00	73 40	.....	40 N.			
	Long. 300° E.		Long. 310° E.		Long. 320° E.		Long. 330° E.		Long. 340° E.		Long. 350° E.						
85 N.	86 02	.....	85 42	.....	85 22	.....	85 03	.....	84 46	.....	84 32	.....	85 N.
80 N.	85 51	84 22	85 07	83 35	84 26	83 00	83 48	82 25	83 14	.....	82 46	.....	80 N.		
75 N.	85 30	84 25	84 25	83 05	83 24	82 00	82 28	81 10	81 38	80 25	80 55	79 45	75 N.				
70 N.	85 00	83 55	83 37	82 20	82 21	80 55	81 09	79 40	80 02	78 37	79 02	77 52	70 N.				
65 N.	84 16	83 10	82 41	81 20	81 12	79 35	79 48	78 07	78 25	77 00	77 08	75 55	65 N.				
60 N.	83 10	82 00	81 38	79 55	80 01	78 10	78 22	76 30	*.....	75 08	75 06	73 55	60 N.				
55 N.	81 36	80 25	80 12	78 25	78 33	76 35	76 44	74 55	74 49	73 17	72 51	71 45	55 N.				
50 N.	79 30	78 22	78 20	76 45	76 45	75 00	74 51	73 00	72 41	71 10	70 21	69 35	50 N.				
45 N.	76 53	76 00	75 59	74 50	74 32	73 00	72 36	70 57	70 13	68 37	67 30	66 25	45 N.				
40 N.	73 43	.....	73 07	.....	71 50	70 55	69 54	68 20	67 21	65 30	64 14	63 00	40 N.		

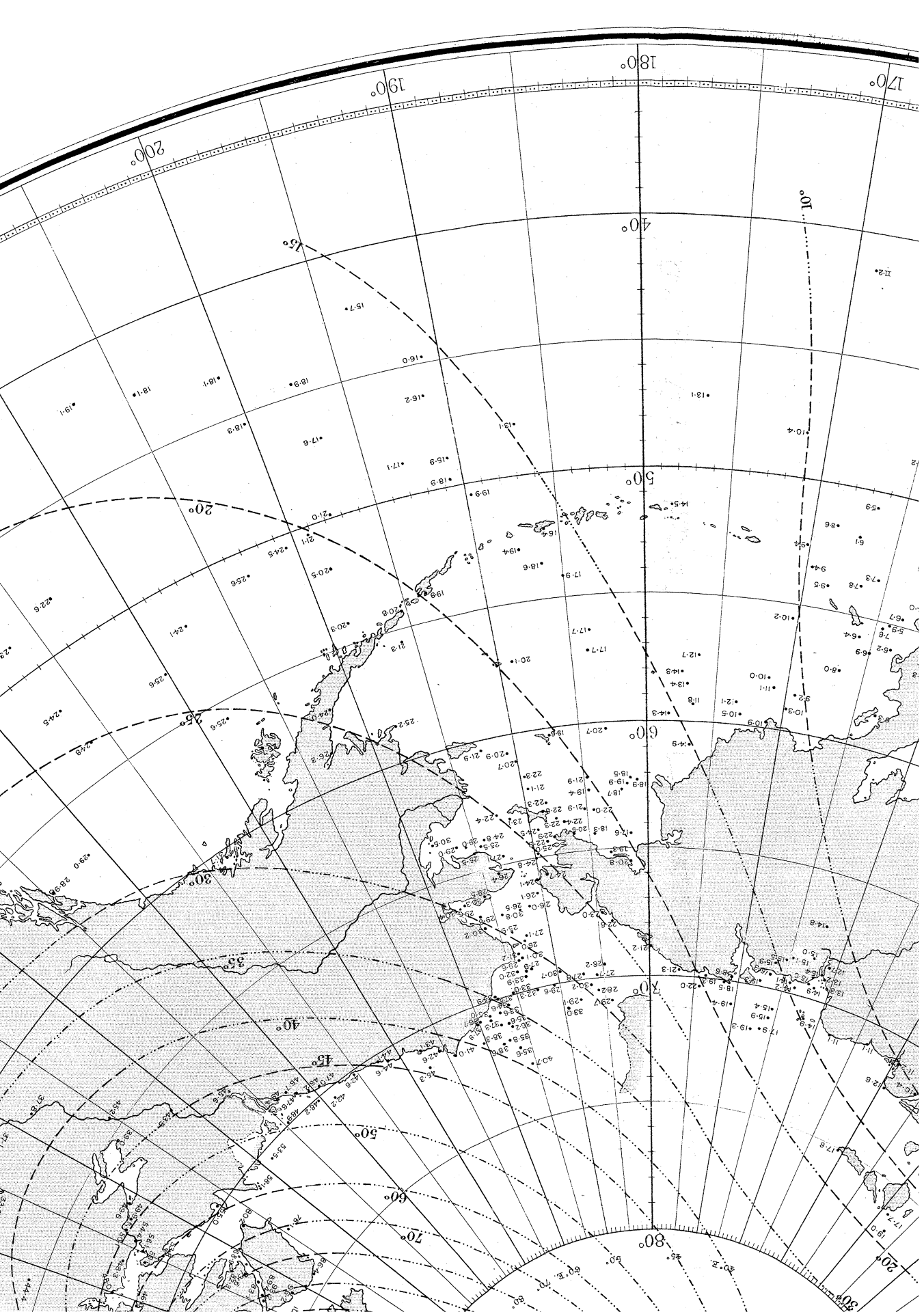
* Error in orig.

Force in British Units.

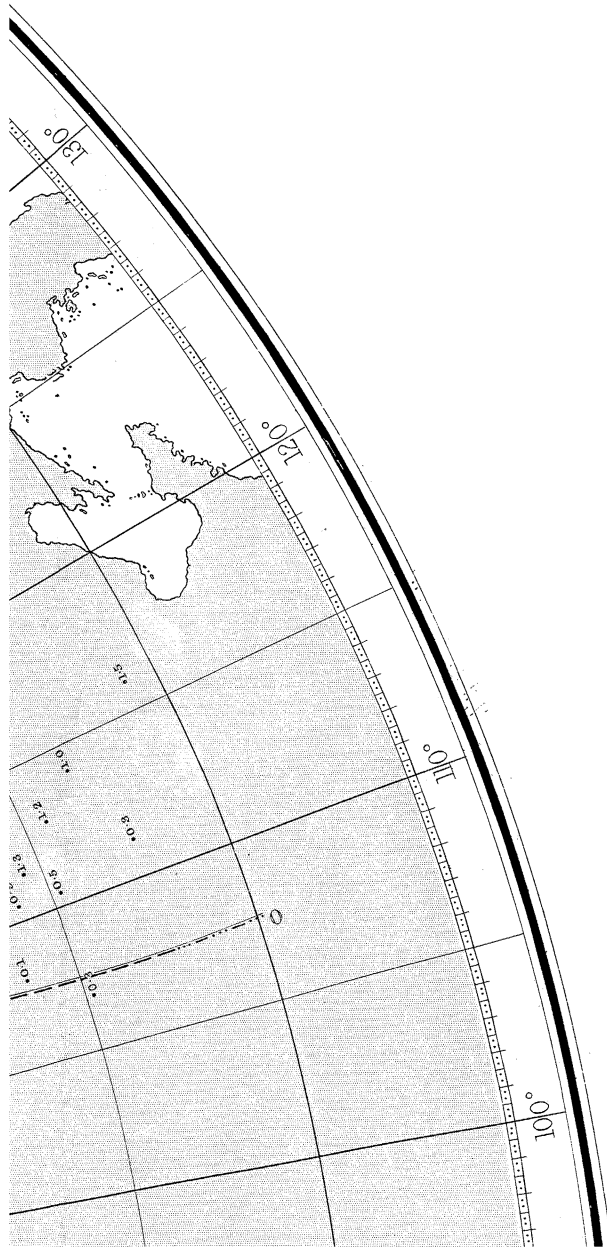
Latitudes.	Gauss.	Sabine.	Gauss.	Sabine.	Gauss.	Sabine.	Gauss.	Sabine.	Gauss.	Sabine.	Gauss.	Sabine.	Latitudes.
	Long. 0° E.		Long. 10° E.		Long. 20° E.		Long. 30° E.		Long. 40° E.		Long. 50° E.		
85 N.	12-20	.....	12-19	.....	12-21	.....	12-21	.....	12-24	.....	12-28	.....	85 N.
80 N.	11-97	11-7	11-97	.....	11-99	.....	12-03	.....	12-09	.....	12-16	.....	80 N.
75 N.	11-72	11-5	11-73	11-5	11-75	11-5	11-82	11-5	11-92	11-7	12-03	11-9	75 N.
70 N.	11-47	11-2	11-46	11-1	11-50	11-1	11-58	11-2	11-71	11-4	11-86	11-6	70 N.
65 N.	11-23	10-9	11-18	10-9	11-21	10-9	11-31	10-9	11-46	11-1	11-66	11-4	65 N.
60 N.	10-98	10-7	10-97	10-7	10-91	10-6	11-00	10-6	11-16	10-8	11-39	11-2	60 N.
55 N.	10-73	10-5	10-60	10-4	10-57	10-4	10-63	10-3	10-80	10-6	11-05	11-0	55 N.
50 N.	10-47	10-2	10-28	10-1	10-20	10-1	10-23	10-0	10-38	10-4	10-62	10-7	50 N.
45 N.	10-17	10-0	9-92	9-9	9-79	9-8	9-77	9-9	9-89	10-1	10-12	10-3	45 N.
40 N.	9-85	.....	9-53	.....	9-33	.....	9-28	.....	9-36	.....	9-57	.....	40 N.
	Long. 60° E.		Long. 70° E.		Long. 80° E.		Long. 90° E.		Long. 100° E.		Long. 110° E.		
85 N.	12-31	.....	12-34	.....	12-37	.....	12-41	.....	12-44	.....	12-46	.....	85 N.
80 N.	12-23	.....	12-31	.....	12-38	.....	12-45	.....	12-50	.....	12-54	.....	80 N.
75 N.	12-15	12-1	12-28	12-2	12-39	12-5	12-49	12-6	12-56	12-8	12-61	12-9	75 N.
70 N.	12-04	12-0	12-22	12-2	12-37	12-5	12-51	12-6	12-60	13-0	12-64	13-2	70 N.
65 N.	11-89	11-8	12-10	12-2	12-31	12-5	12-46	12-7	12-57	13-1	12-60	13-5	65 N.
60 N.	11-66	11-6	11-92	12-1	12-15	12-4	12-35	12-7	12-45	13-1	12-48	13-3	60 N.
55 N.	11-33	11-4	11-64	11-9	11-91	12-2	12-12	12-5	12-24	12-8	12-25	12-8	55 N.
50 N.	10-93	11-1	11-26	11-5	11-56	11-9	11-83	12-1	11-91	12-2	11-91	12-2	50 N.
45 N.	10-44	.....	10-79	.....	11-10	.....	11-35	11-7	11-47	11-7	11-46	11-7	45 N.
40 N.	9-88	.....	10-23	.....	10-56	.....	10-80	11-3	10-94	.....	10-93	.....	40 N.
	Long. 120° E.		Long. 130° E.		Long. 140° E.		Long. 150° E.		Long. 160° E.		Long. 170° E.		
85 N.	12-49	.....	12-51	.....	12-52	.....	12-53	.....	12-53	.....	12-54	.....	85 N.
80 N.	12-58	.....	12-60	.....	12-60	.....	12-61	.....	12-62	.....	12-62	.....	80 N.
75 N.	12-64	13-0	12-64	13-1	12-64	.....	12-63	.....	12-62	.....	12-62	.....	75 N.
70 N.	12-65	13-3	12-63	13-4	12-59	.....	12-56	13-0	12-58	.....	12-51	.....	70 N.
65 N.	12-59	13-5	12-53	13-2	12-45	13-0	12-37	12-7	12-31	.....	12-29	.....	65 N.
60 N.	12-43	13-1	12-33	13-0	12-20	12-7	12-07	12-4	11-99	12-3	11-96	.....	60 N.
55 N.	12-12	12-7	12-02	12-4	11-84	12-2	11-68	12-0	11-56	11-9	11-52	.....	55 N.
50 N.	11-83	12-1	11-62	11-9	11-39	.....	11-18	.....	11-04	.....	11-00	.....	50 N.
45 N.	11-33	.....	11-11	.....	10-85	.....	10-62	.....	10-45	.....	10-41	.....	45 N.
40 N.	10-78	.....	10-53	.....	10-25	.....	9-98	.....	9-82	.....	9-79	.....	40 N.
	Long. 180° E.		Long. 190° E.		Long. 200° E.		Long. 210° E.		Long. 220° E.		Long. 230° E.		
85 N.	12-54	.....	12-54	.....	12-54	.....	12-54	.....	12-53	.....	12-52	.....	85 N.
80 N.	12-62	.....	12-63	.....	12-64	.....	12-65	.....	12-65	.....	12-65	.....	80 N.
75 N.	12-63	.....	12-65	.....	12-68	.....	12-71	.....	12-74	.....	12-76	.....	75 N.
70 N.	12-52	.....	12-57	.....	12-63	12-9	12-71	13-0	12-78	.....	12-85	13-6	70 N.
65 N.	12-31	.....	12-39	.....	12-50	12-6	12-64	12-8	12-77	13-1	12-90	13-5	65 N.
60 N.	12-00	.....	12-11	.....	12-27	12-3	12-47	12-5	12-68	12-8	12-87	13-2	60 N.
55 N.	11-58	.....	11-72	.....	11-95	12-0	12-22	12-3	12-51	12-6	12-77	13-0	55 N.
50 N.	11-07	.....	11-26	.....	11-54	.....	11-87	12-0	12-22	12-4	12-57	12-7	50 N.
45 N.	10-50	.....	10-73	.....	11-05	.....	11-44	.....	11-85	.....	12-24	12-4	45 N.
40 N.	9-89	.....	10-14	.....	10-50	.....	10-93	.....	11-39	.....	11-82	.....	40 N.
	Long. 240° E.		Long. 250° E.		Long. 260° E.		Long. 270° E.		Long. 280° E.		Long. 290° E.		
85 N.	12-51	.....	12-47	.....	12-46	.....	12-43	.....	12-39	.....	12-36	.....	85 N.
80 N.	12-63	.....	12-60	.....	12-57	.....	12-52	.....	12-45	.....	12-37	12-5	80 N.
75 N.	12-75	13-0	12-75	12-3	12-71	12-4	12-63	12-7	12-54	12-7	12-43	12-6	75 N.
70 N.	12-90	13-7	12-90	.....	12-87	.....	12-79	13-0	12-68	13-0	12-53	12-8	70 N.
65 N.	12-99	13-8	13-04	13-7	13-02	13-6	12-95	13-5	12-82	13-4	12-67	13-0	65 N.
60 N.	13-03	13-8	13-12	14-1	13-15	14-0	13-08	13-8	12-94	13-6	12-74	13-3	60 N.
55 N.	12-98	13-5	13-13	13-9	13-19	14-3	13-15	14-1	13-02	13-8	12-81	13-4	55 N.
50 N.	12-84	13-1	13-04	13-6	13-14	.....	13-14	14-2	13-02	13-9	12-82	13-4	50 N.
45 N.	12-58	12-8	12-83	.....	12-97	.....	13-00	13-9	12-92	13-9	12-72	13-6	45 N.
40 N.	12-20	.....	12-50	.....	12-68	.....	12-75	.....	12-70	13-6	12-53	.....	40 N.
	Long. 300° E.		Long. 310° E.		Long. 320° E.		Long. 330° E.		Long. 340° E.		Long. 350° E.		
85 N.	12-33	.....	12-30	.....	12-26	.....	12-24	.....	12-22	.....	12-20	.....	85 N.
80 N.	12-30	.....	12-22	.....	12-14	.....	12-07	.....	12-02	.....	11-98	.....	80 N.
75 N.	12-31	12-2	12-17	12-2	12-04	12-0	11-92	11-7	11-83	11-6	11-76	11-6	75 N.
70 N.	12-35	12-4	12-16	12-3	11-98	11-9	11-81	11-7	11-66	11-5	11-54	11-3	70 N.
65 N.	12-42	12-6	12-18	12-4	11-93	11-9	11-70	11-6	11-50	11-3	11-33	11-0	65 N.
60 N.	12-49	12-8	12-20	12-4	11-90	11-9	11-62	11-5	11-36	11-1	11-14	10-8	60 N.
55 N.	12-53	12-9	12-22	12-4	11-87	11-9	11-54	11-4	11-21	11-0	10-94	10-7	55 N.
50 N.	12-53	12-9	12-19	12-4	11-81	11-8	11-44	11-3	11-06	10-9	10-73	10-5	50 N.
45 N.	12-45	12-9	12-10	12-3	11-71	11-30	10-89	10-8	10-50	10-3	45 N.
40 N.	12-27	11-93	11-54	11-11	10-67	10-23	10-0	40 N.

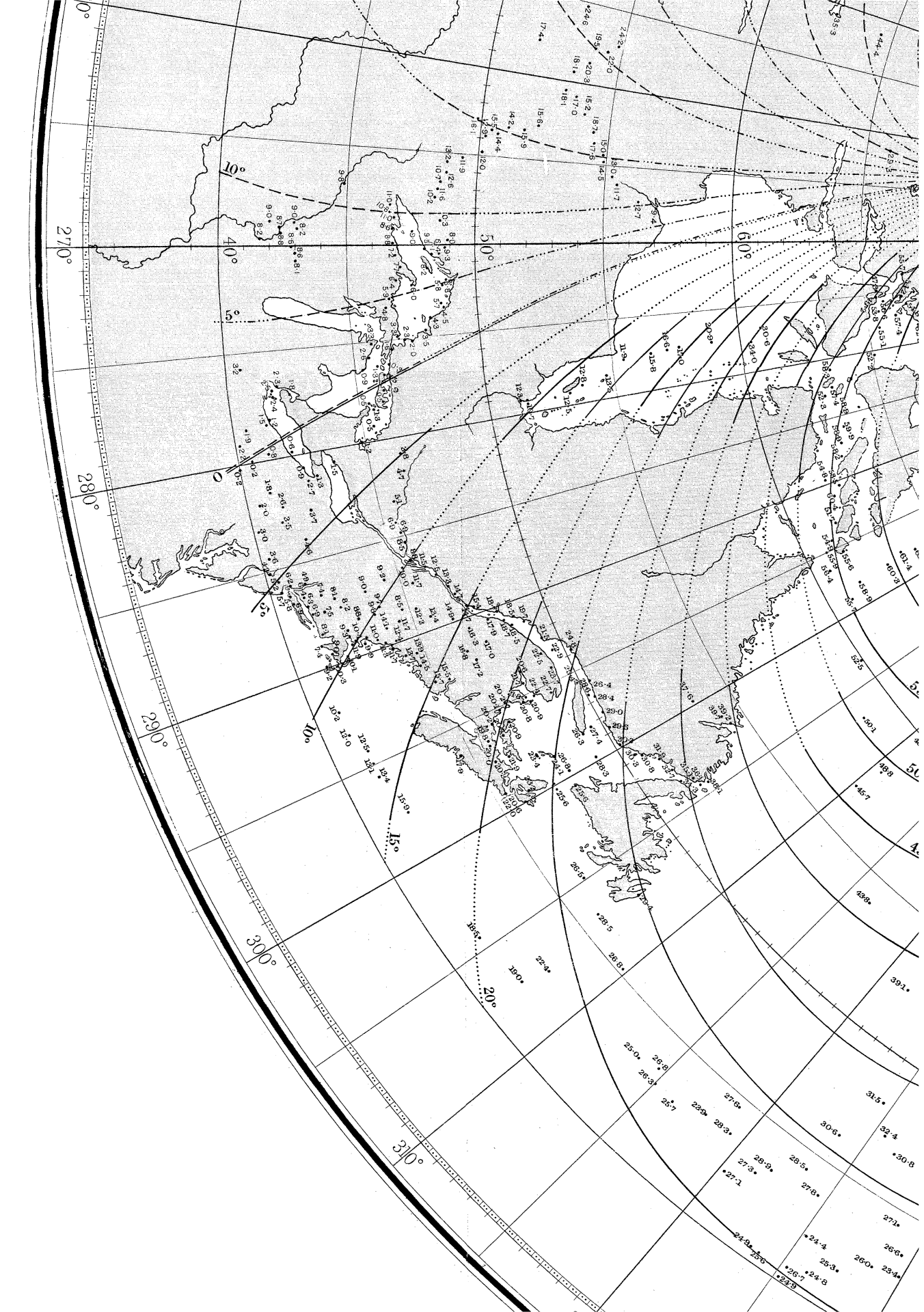
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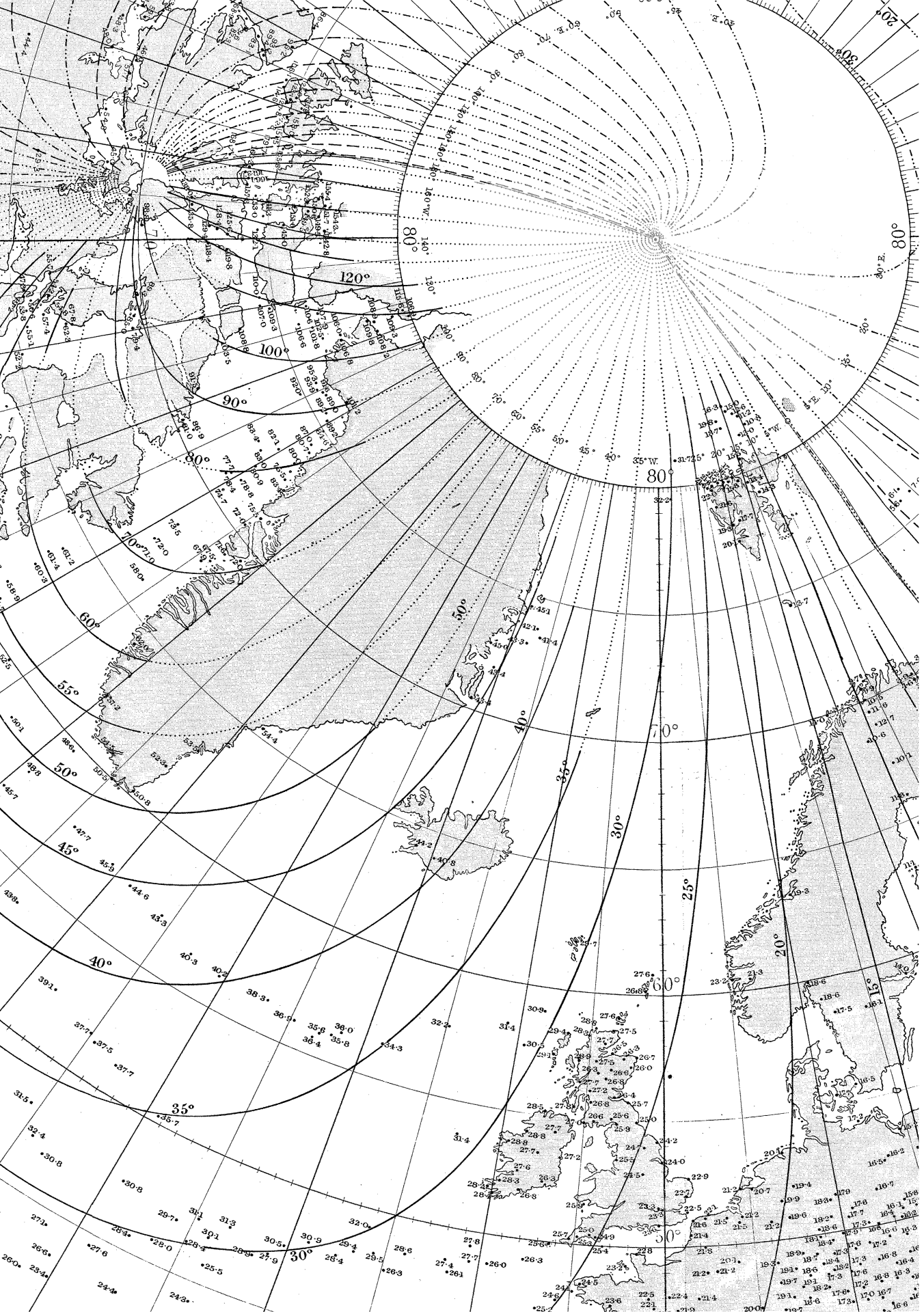


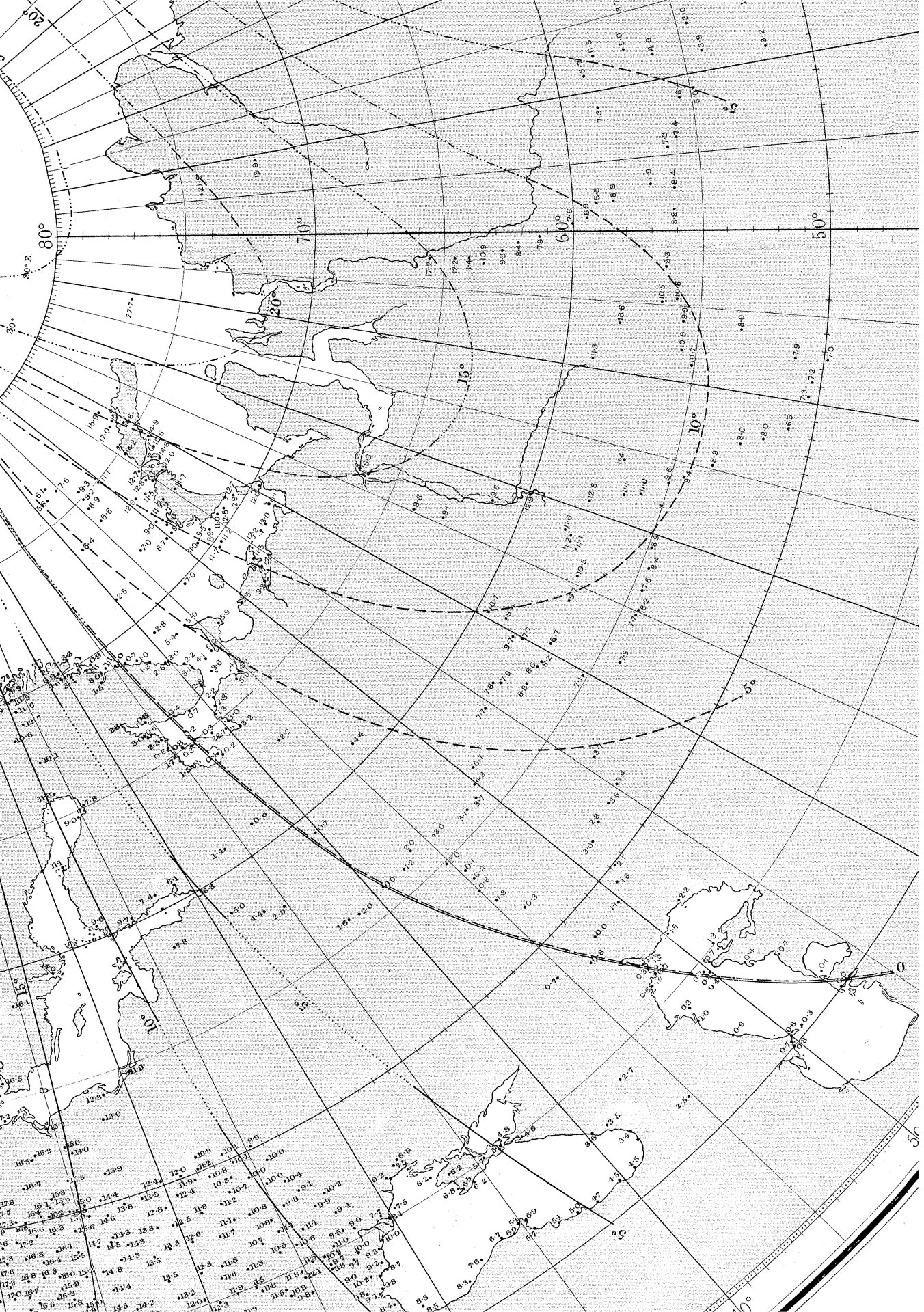




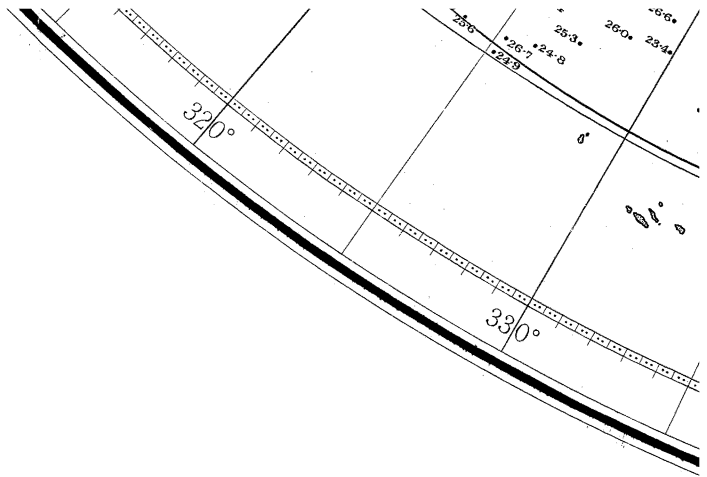










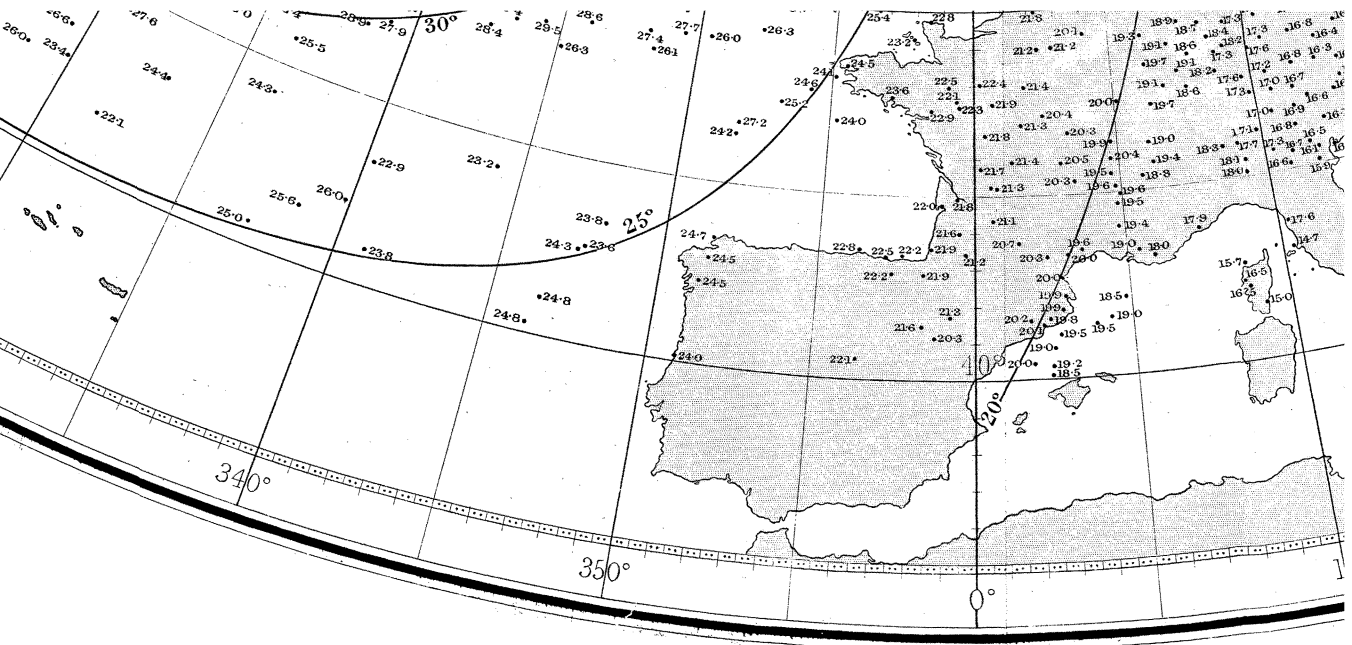


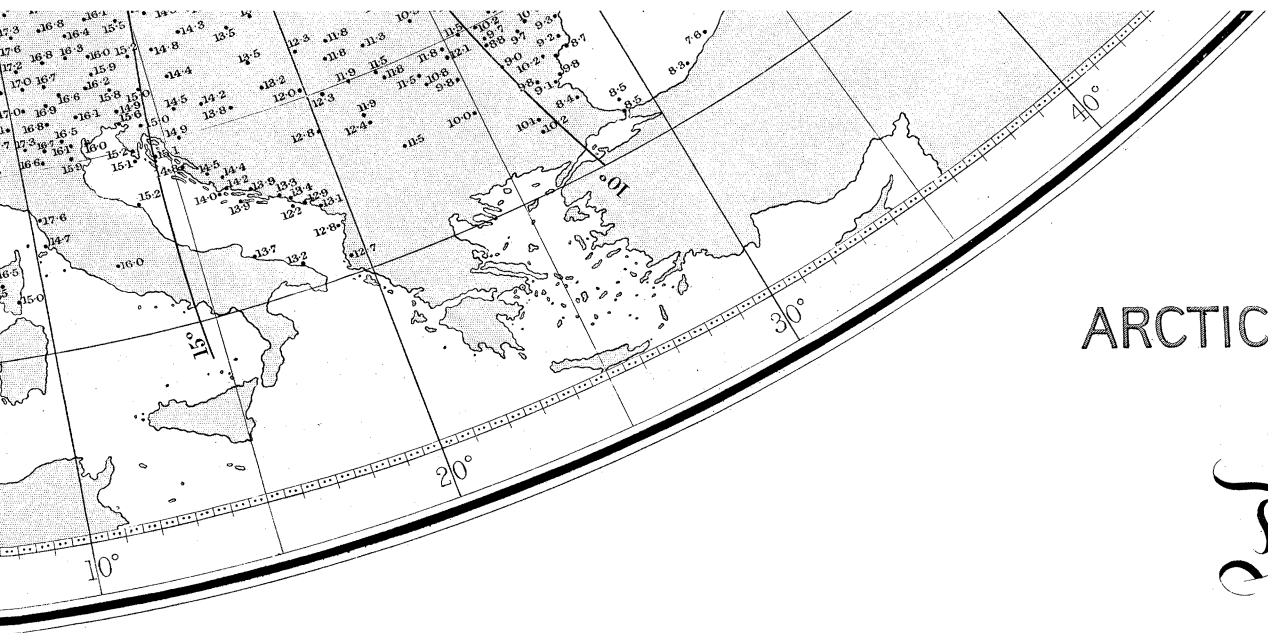
Easterly Declination represented thus -----

..... (approx; lines)

Westerly Declination represented -----

..... (approx; lines)





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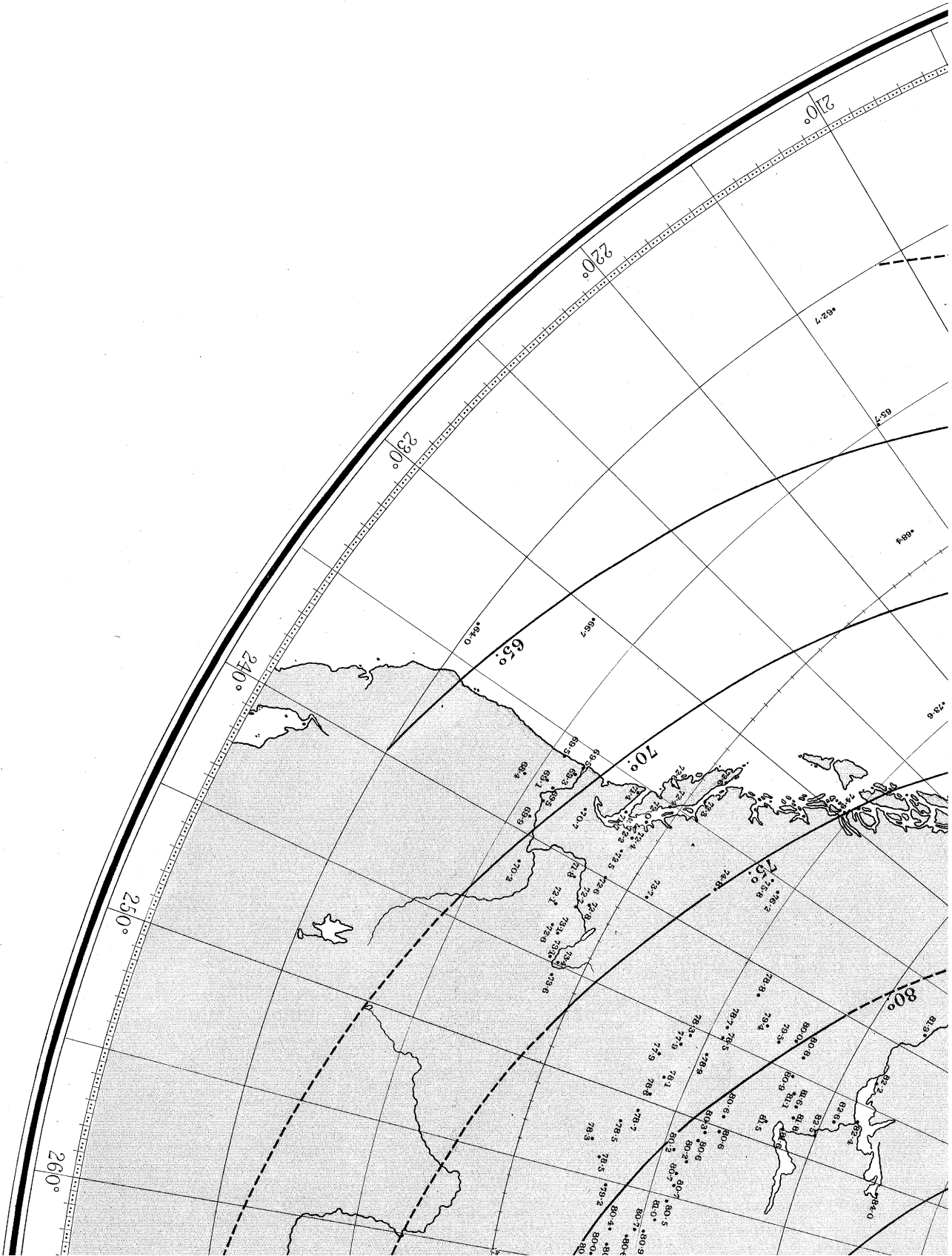
C MAGNETIC SURVEY

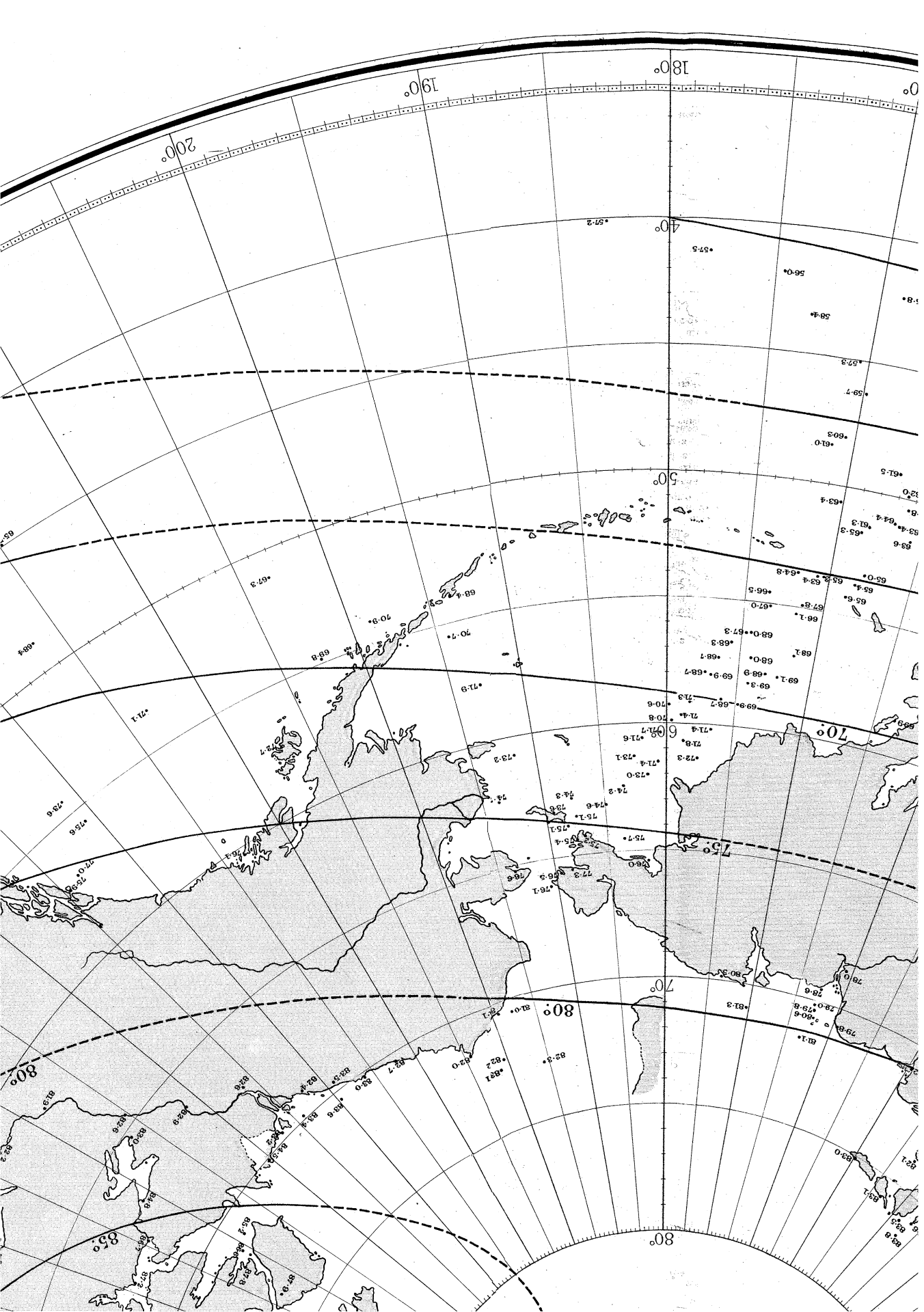
Epoch 1840-1845

Declination.

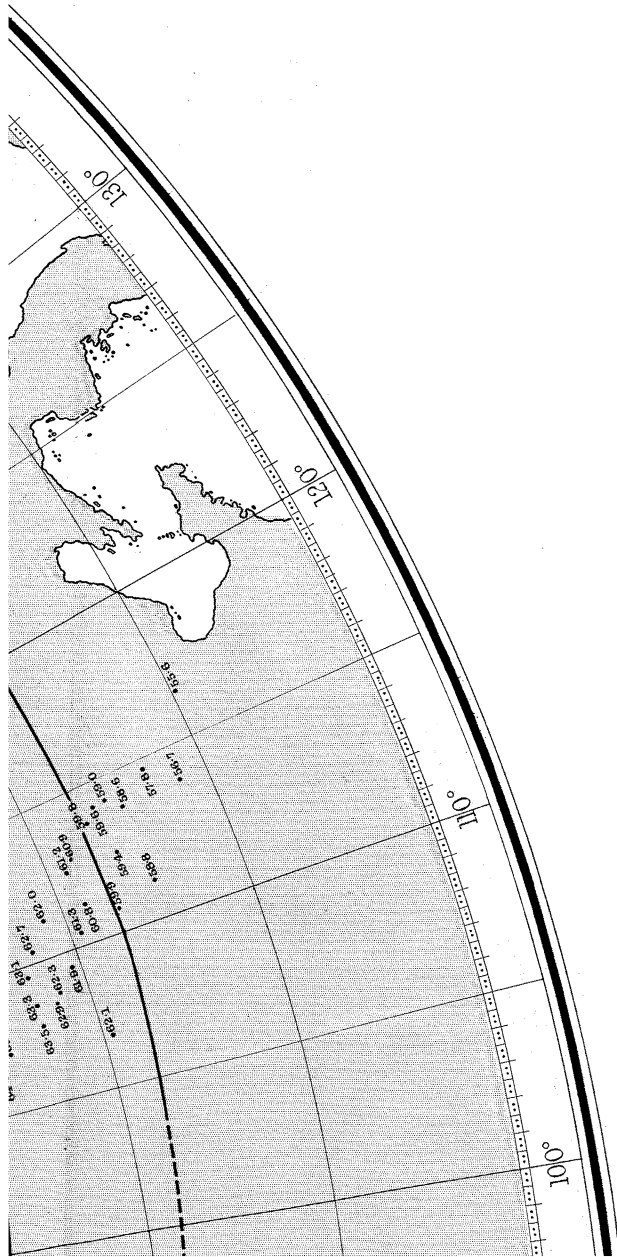
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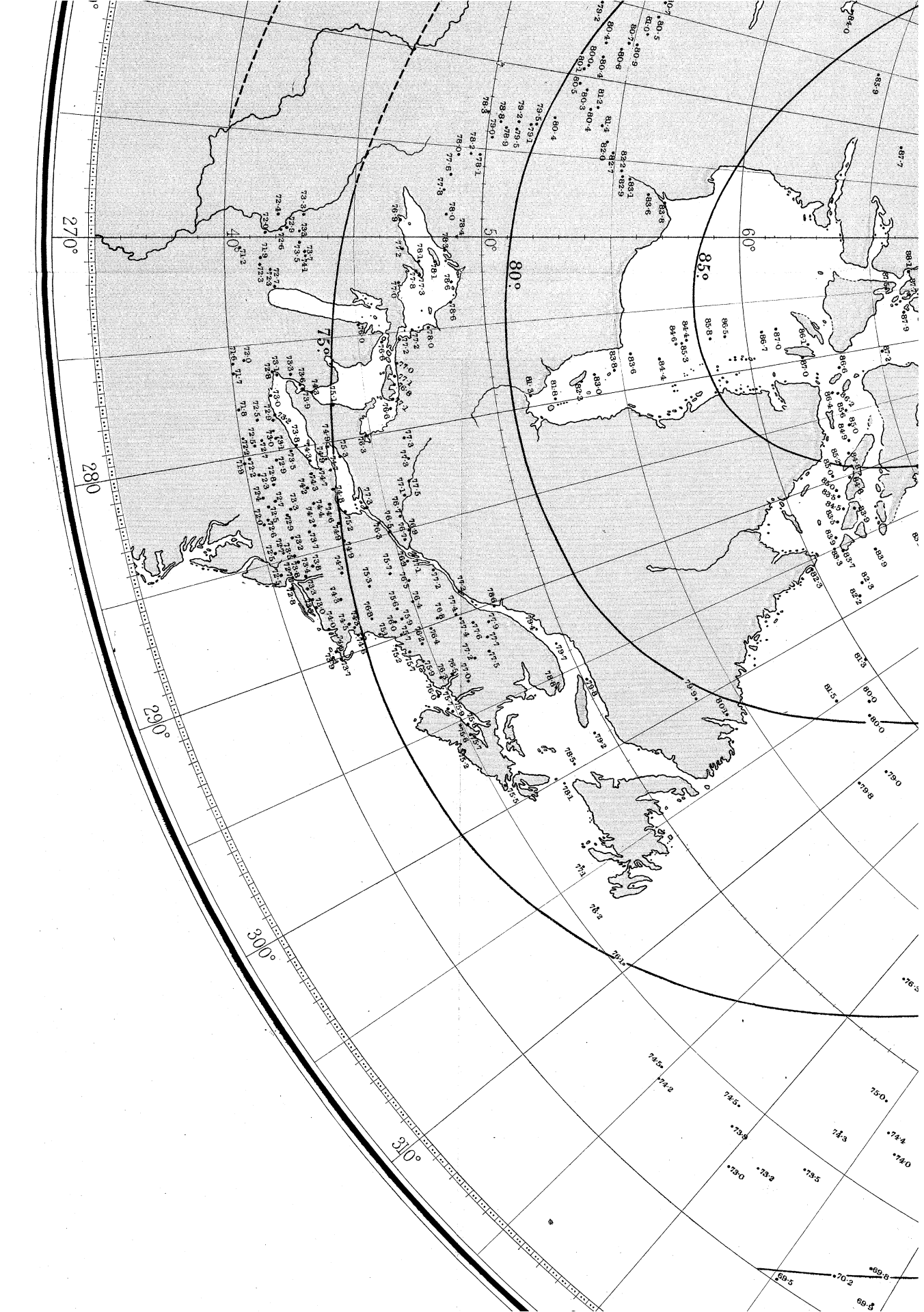
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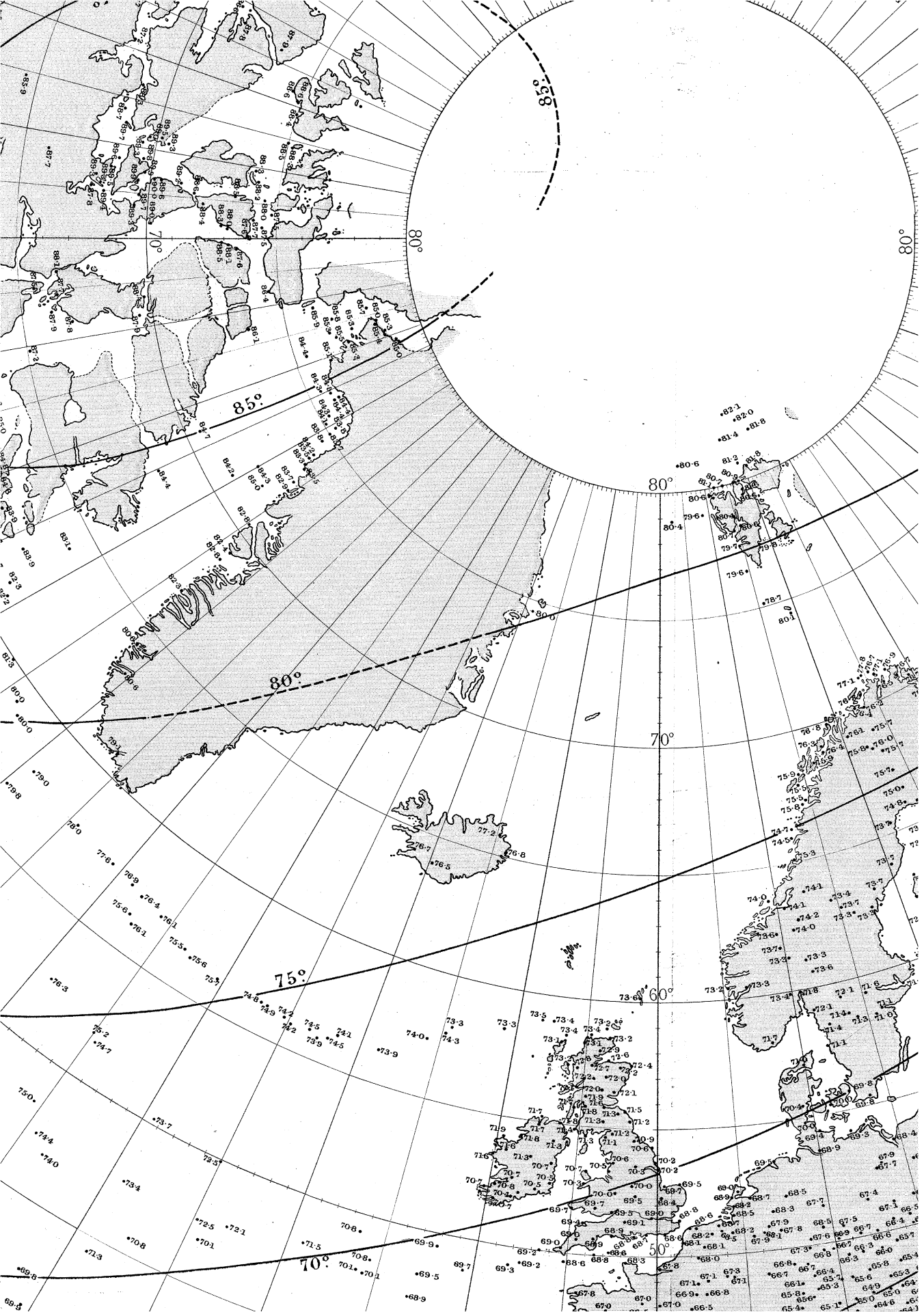


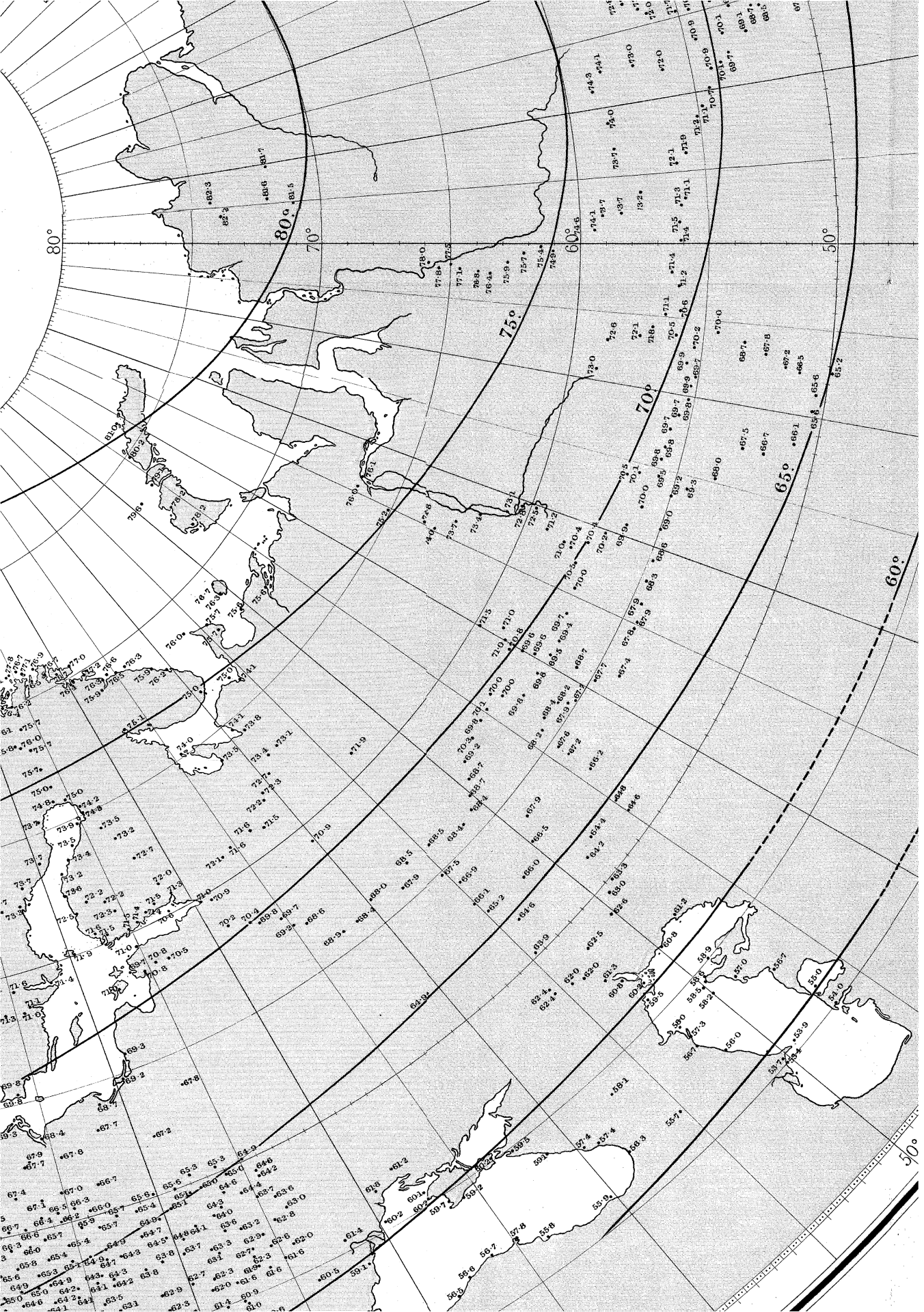


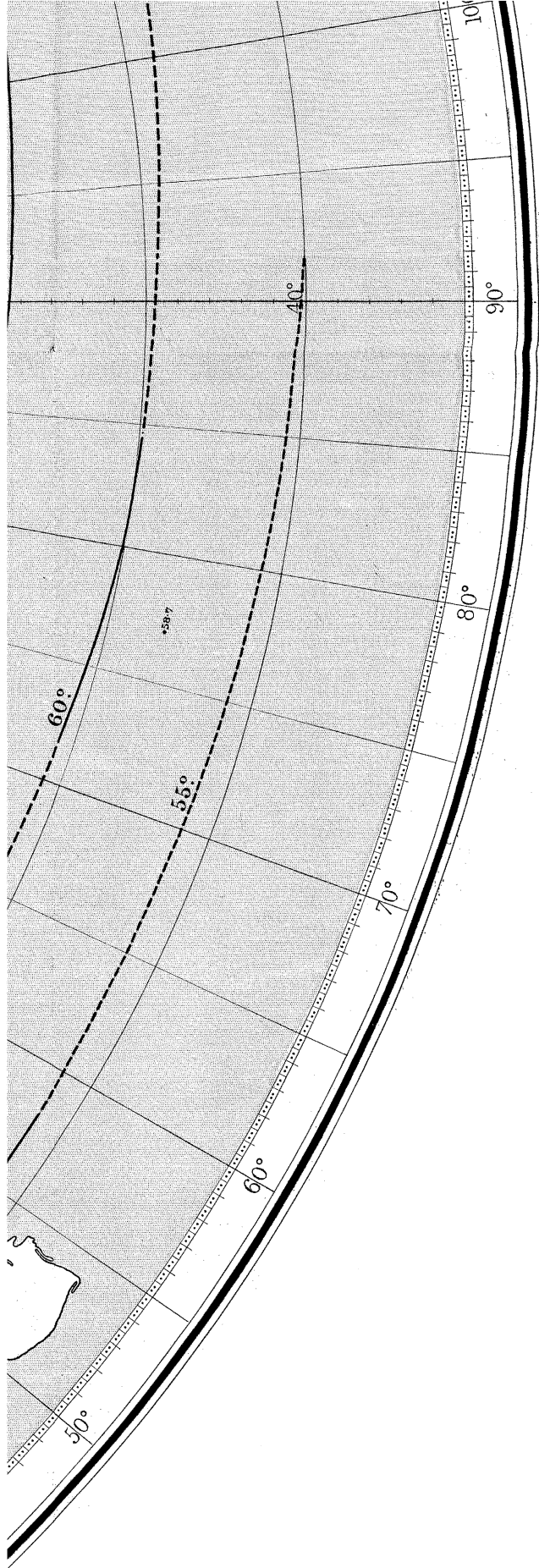


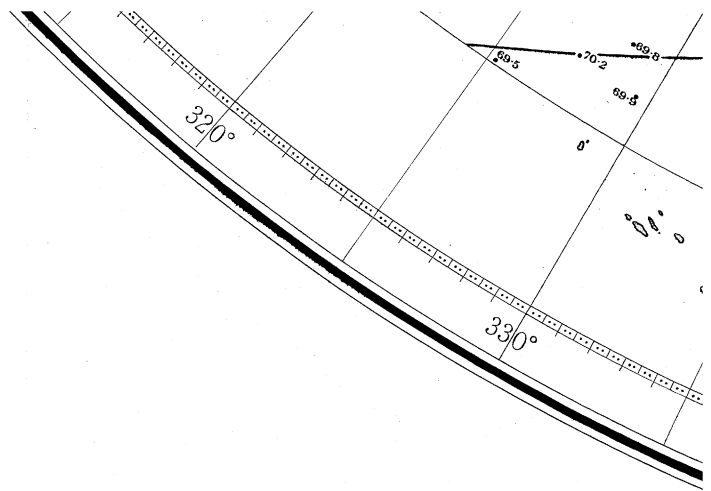


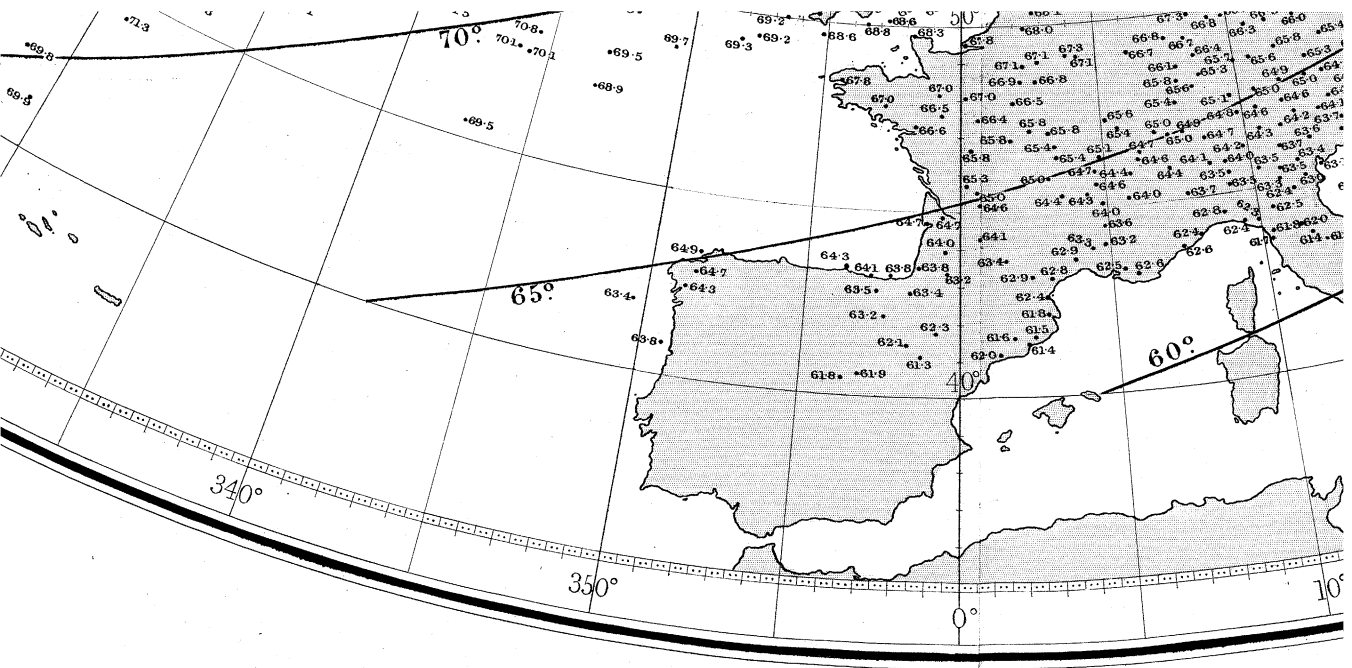


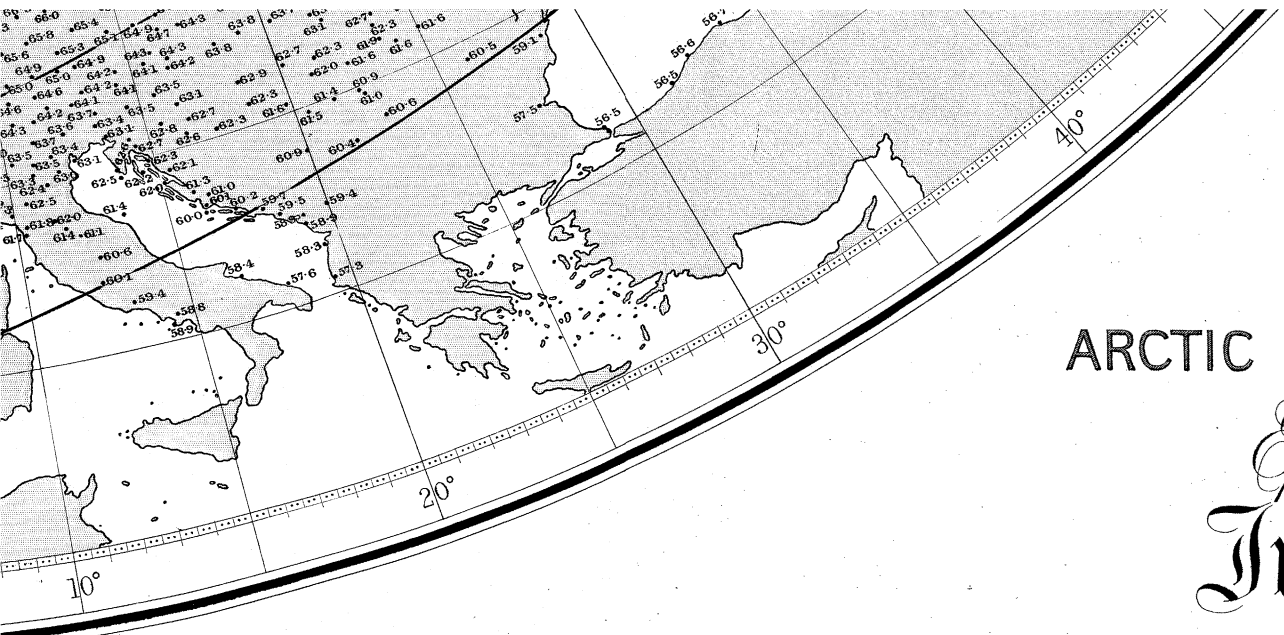












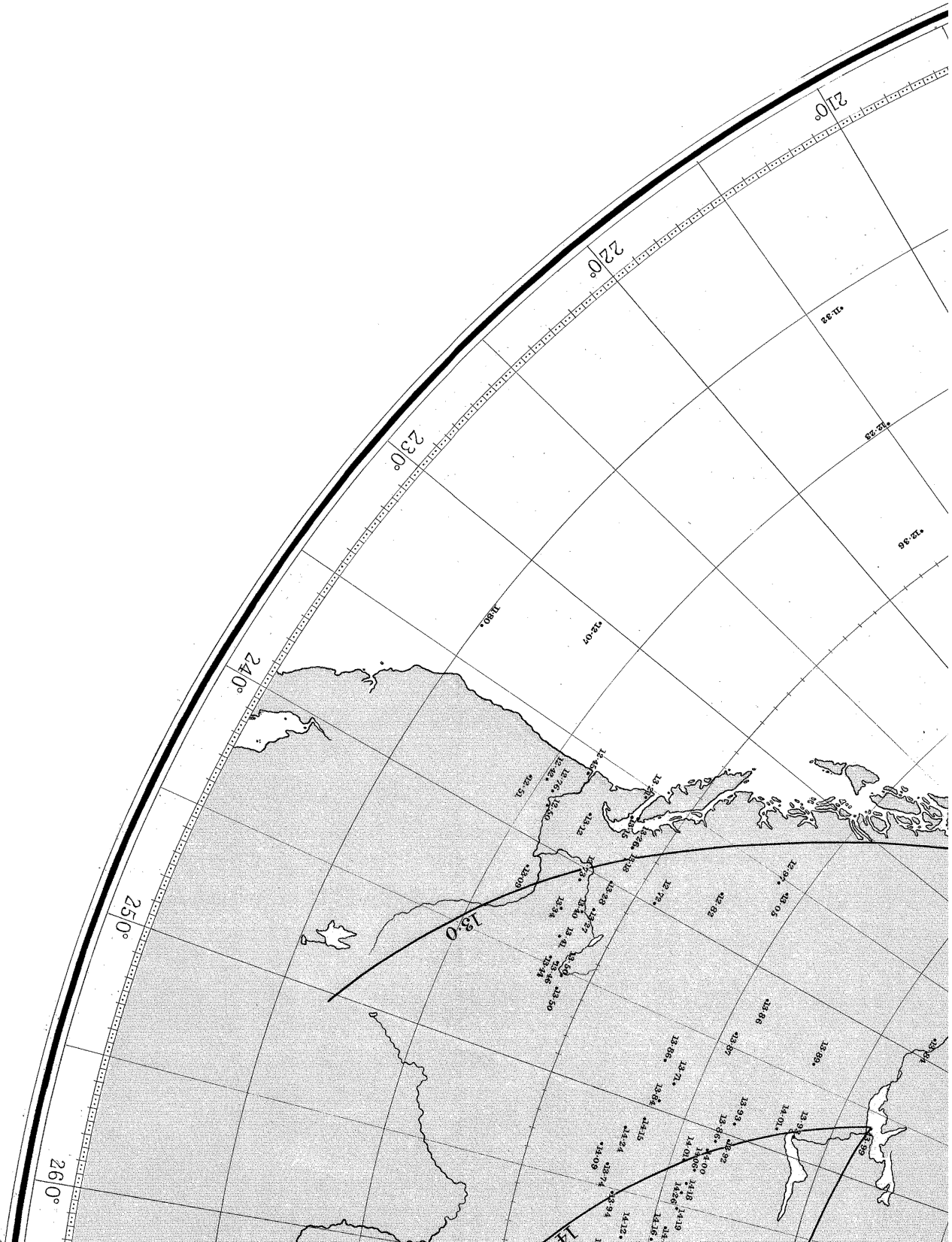
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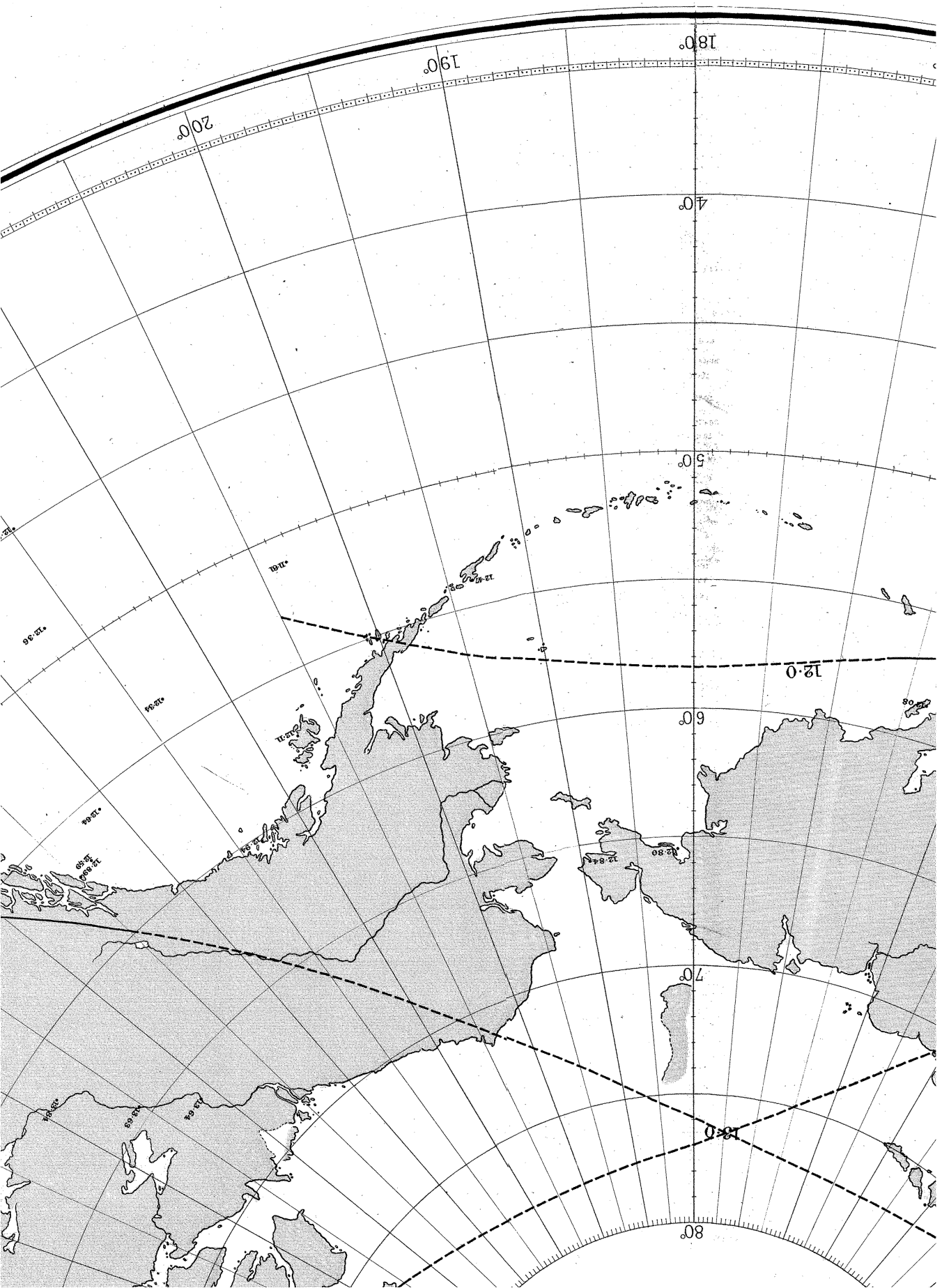
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; MAGNETIC SURVEY

Epoch 1840-1845
Inclination.

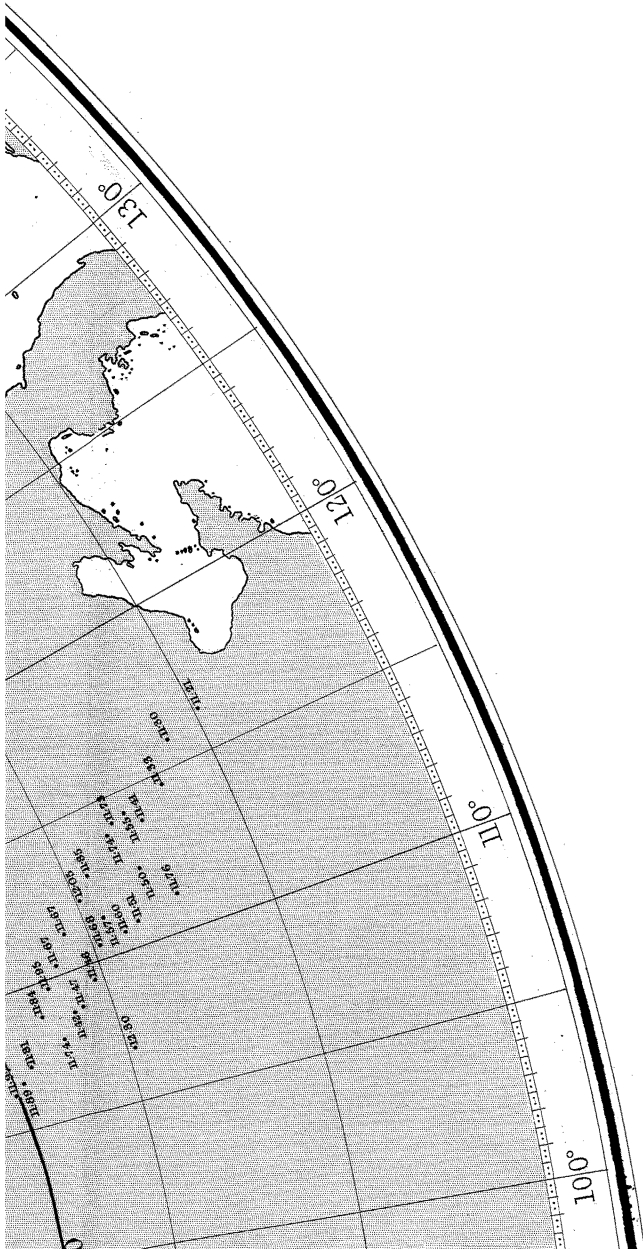
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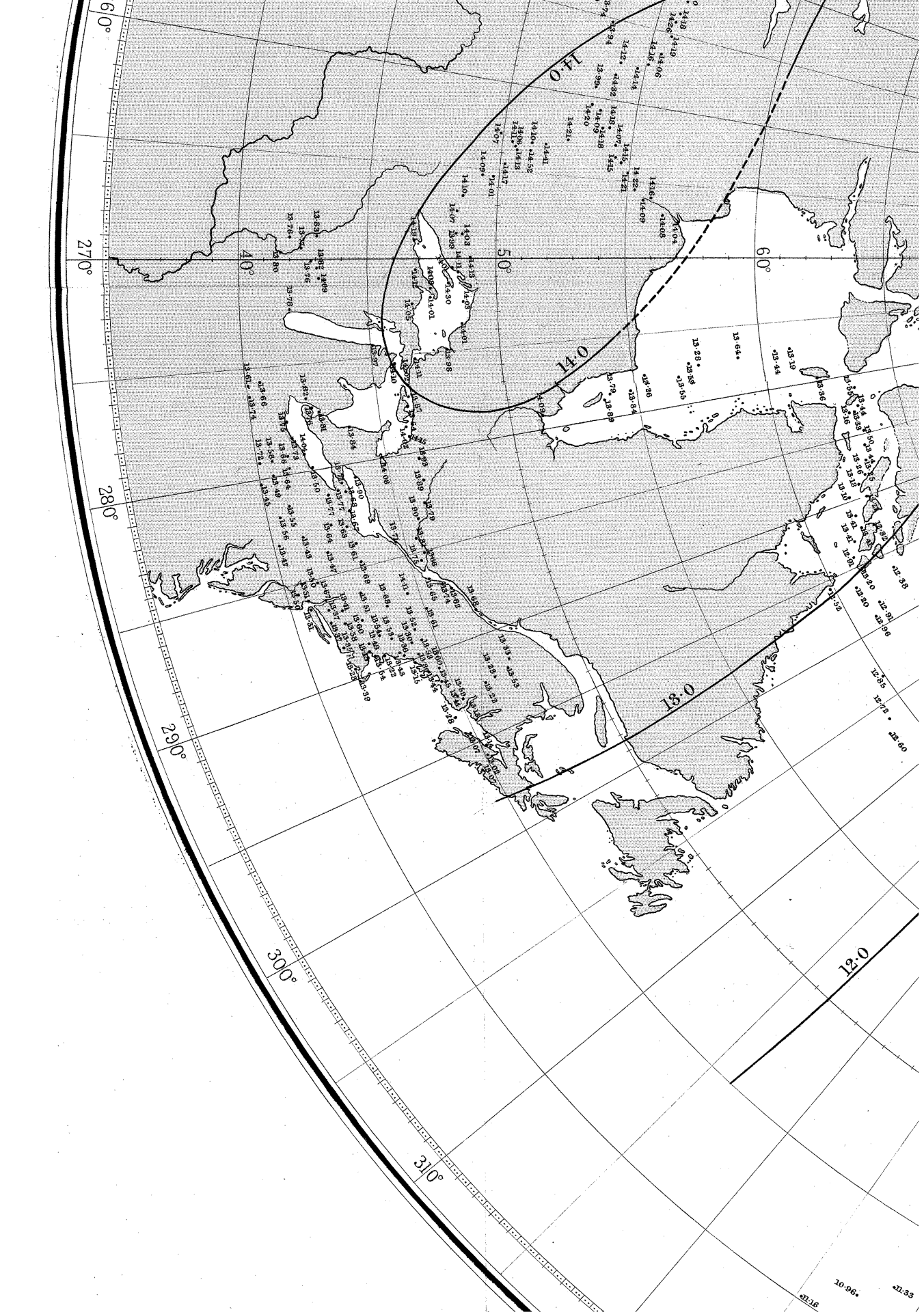
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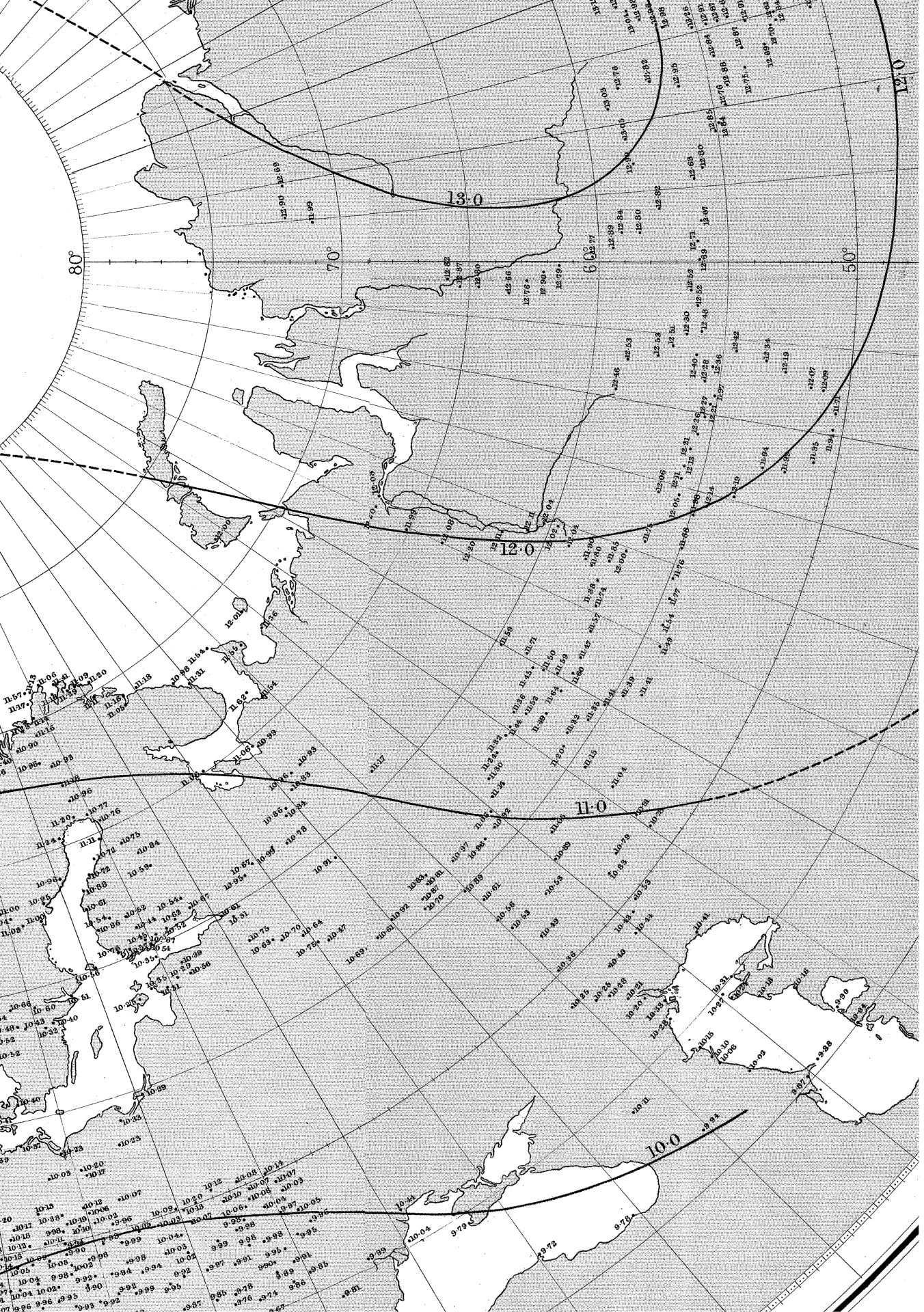


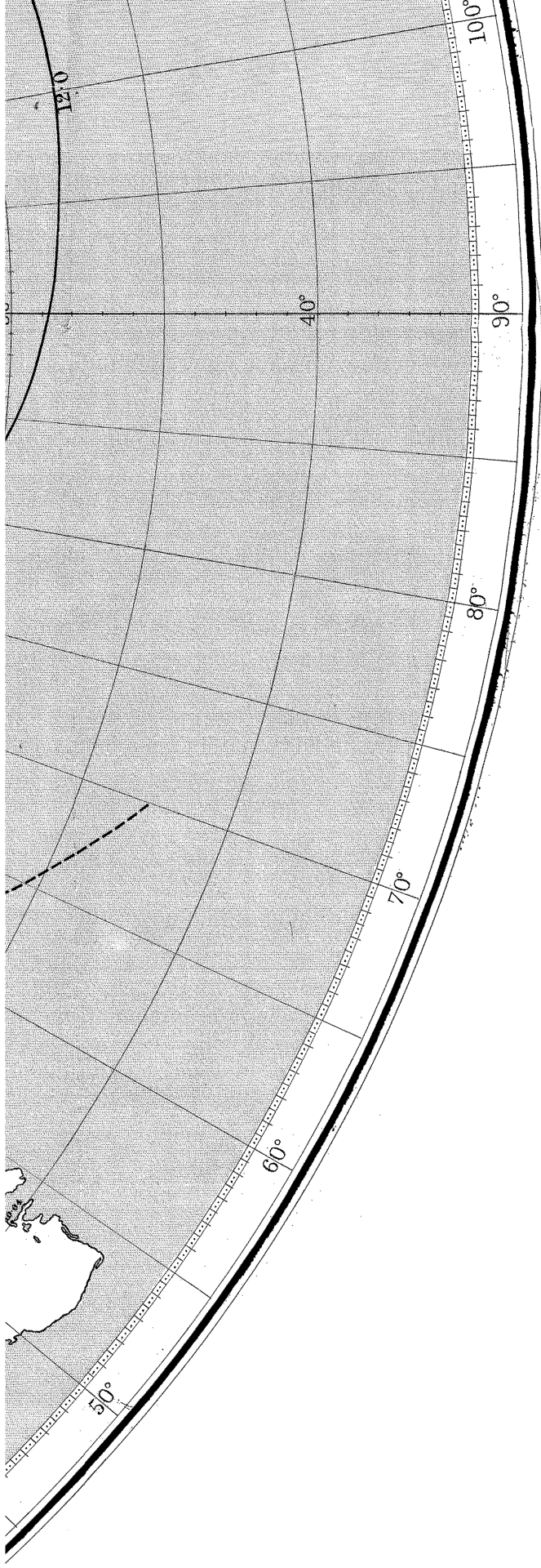


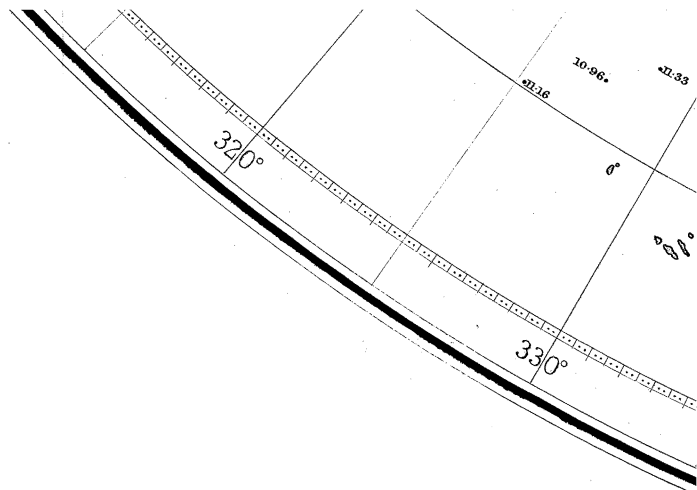


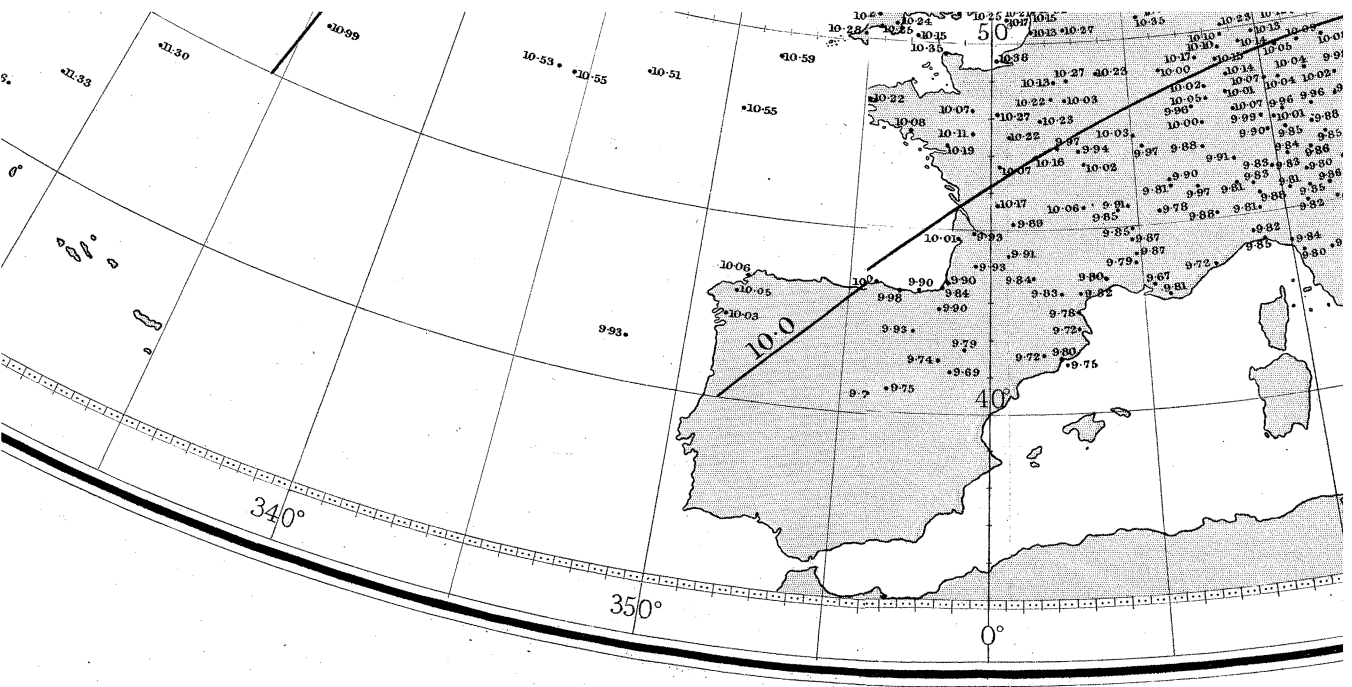


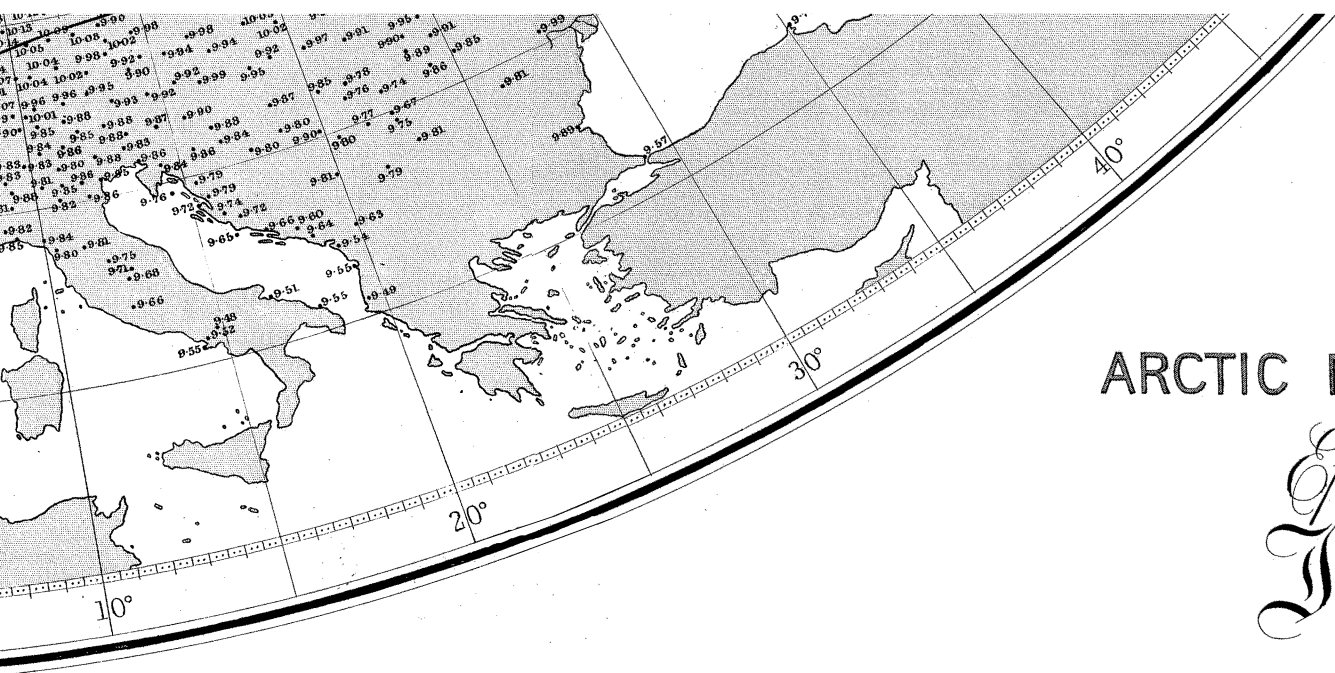












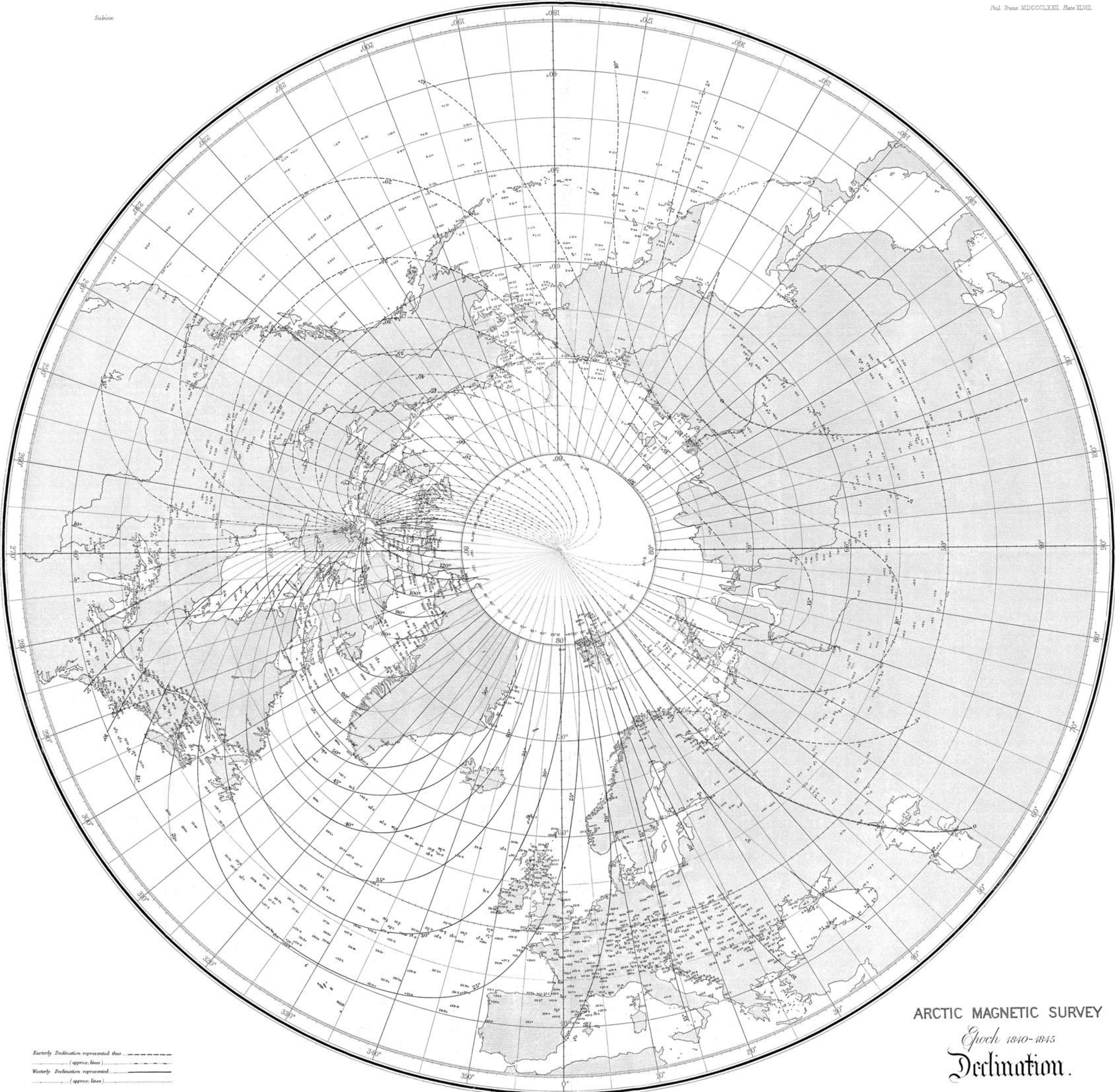
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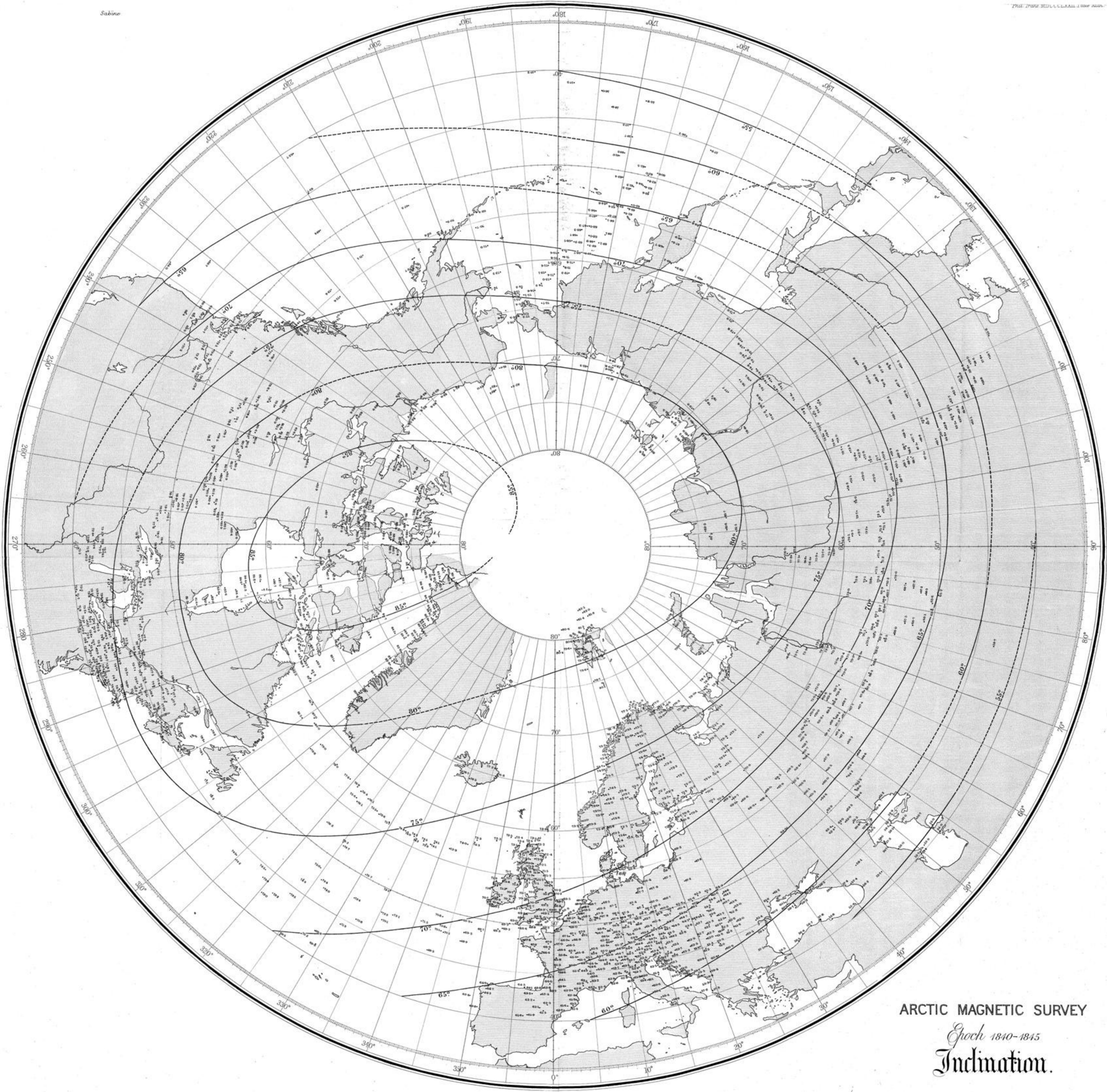
Epoch 1840-1845
Intensity.

Engraved by Malby & Sons.

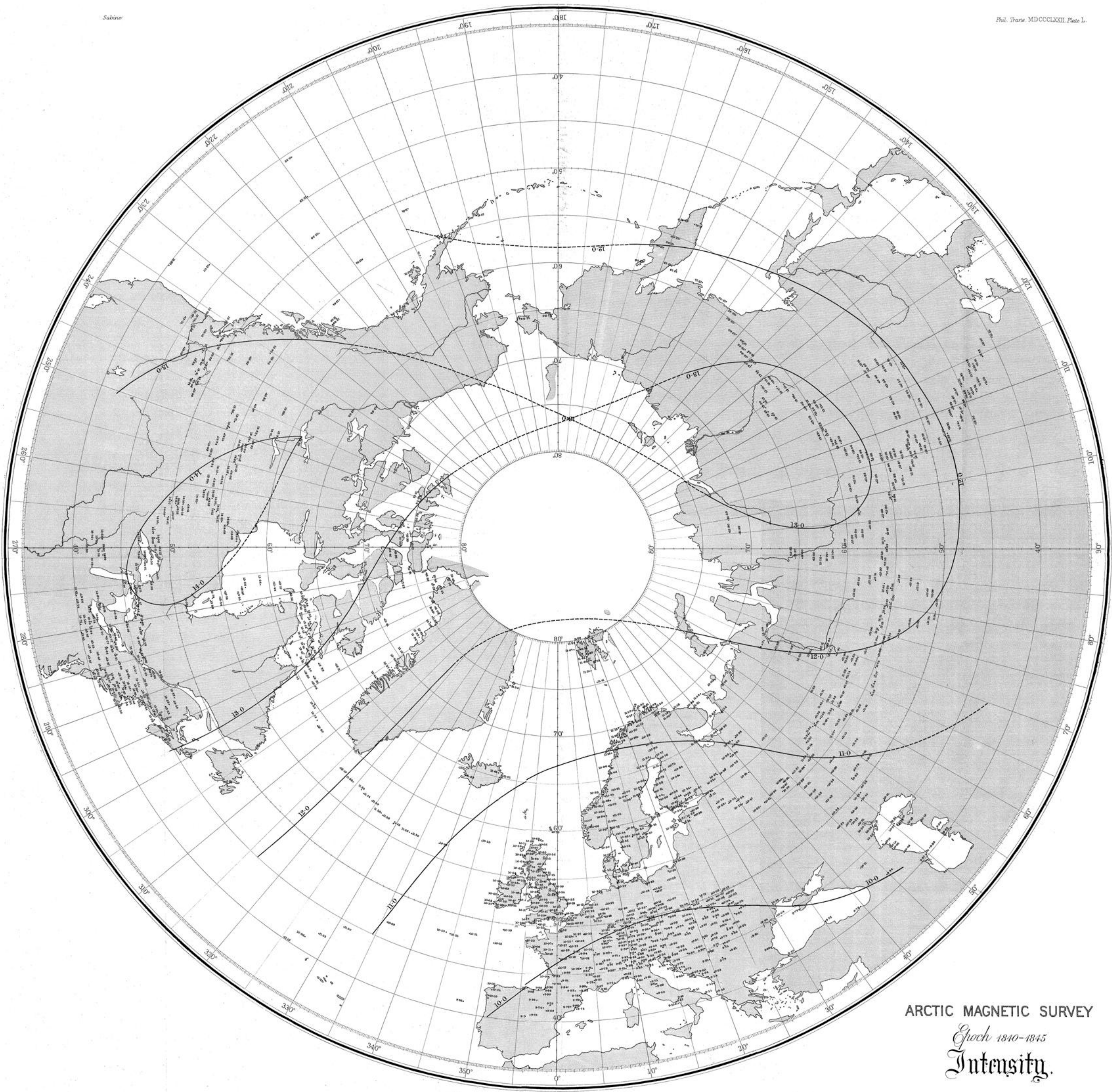


Easterly Declination represented thus
 (approx; lines)
 Westerly Declination represented
 (approx; lines)

ARCTIC MAGNETIC SURVEY
 Epoch 1840-1845
 Declination.



ARCTIC MAGNETIC SURVEY
Groch 1840-1845
Inclination.



ARCTIC MAGNETIC SURVEY
Epoch 1840-1845
Intensity.