

XIII. *Contributions to Terrestrial Magnetism.*—No. XI.*By Lieut.-General EDWARD SABINE, R.A., President of the Royal Society.*

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THE object of the present (*i. e.* the Eleventh) Number of the Contributions to Terrestrial Magnetism is the completion of the great national undertaking, the Magnetic Survey of the South Polar Regions of the Globe, corresponding to the Epoch 1840–1845.

The Survey originated in a Report presented to the British Association for the Advancement of Science at the Liverpool Meeting in 1837, entitled “On the Variations of the Intensity of the Earth’s Magnetic Force observed at different points of the Earth’s Surface:” copies of this Report were widely circulated amongst the Members of the Association previously to the Meeting at Newcastle in the following year, 1838; and having received a favourable notice in the opening address of the then Secretaries of the Association, Dr. GEORGE PEACOCK and Sir RODERICK MURCHISON, resolutions were passed by the General Committee, which are printed in pages xxi and xxii of the “Annual Report of the Proceedings at Newcastle in August 1838.” These resolutions having been formally communicated to the Royal Society, a joint committee of the two scientific institutions was appointed to bring the subject of the equipment of a naval expedition for magnetic observations in the Arctic Seas under the consideration of Her Majesty’s Government. A single sentence from the address of this Committee may be cited as evidencing the spirit in which the joint application of the Royal Society and of the British Association was made to Her Majesty’s Government.

“The Committee consider the subject of Terrestrial Magnetism to have now attained a degree of theoretical as well as of practical importance, and to afford a scope for the application of exact inquiry, which it has never before enjoyed, and which are such as fully to justify its recommendation to the revival of that national support to which we are indebted for the first Chart of the Declinations, constructed by our illustrious countryman HALLEY in 1701, on the basis of observations collected in a voyage expressly equipped for that purpose by the British Government”\*.

The Report of the Committee thus prepared and presented to Her Majesty’s Government (of which Lord MELBOURNE was at the time the Prime Minister) dwelt in some detail on the principal objects to be accomplished by the expedition recommended. The following passage may be especially cited as evidencing the early and just appreciation of the leading desiderata in magnetical science, and as furnishing to the readers of this paper the opportunity of judging of the degree in which the anticipations therein expressed have been realized.

\* Proceedings of the Royal Society, December 22, 1838.

“The intensity lines in the southern regions rest on observations far too few to justify any sure reliance on their courses over a large part of their extent, and over the rest are altogether conjectural. Nevertheless there is good reason to believe in the existence and accessibility of two points of maximum intensity in the southern as in the northern hemisphere, the attainment of which would be highly interesting and important. A correct knowledge of the courses of these lines, especially when they approach their respective poles, is to be regarded as a first, and indeed indispensable preliminary step to the construction of a rigorous and complete theory of terrestrial magnetism.”

Two ships, the ‘Erebus’ and ‘Terror,’ commanded respectively by Sir JAMES CLARK ROSS and Captain FRANCIS RAWDON CROZIER, who, besides their other qualifications, were already favourably known for their magnetic observations in the course of several north polar voyages, were selected for this service. The magnetical instruments to be employed were prepared under my own direction, at an establishment then existing at Woolwich, but since transferred in part to the Physical Observatory at Kew. It was a most fortunate incident that instruments specially designed for the observation of the Dip and Intensity *at sea* had been devised a few years previously by Mr. ROBERT WERE FOX, F.R.S., as with the instruments previously employed for these purposes the results would scarcely have been such as to have justified the undertaking.

The ‘Erebus’ and ‘Terror’ sailed from the Thames in September 1839, arrived at the Cape of Good Hope in March 1840, and, after a sojourn of some days in Kerguelen Island, anchored at Hobarton in Tasmania, which was selected as one of the base-stations of the Survey, and where a Magnetic Observatory was established. Quitting Hobarton in November 1840, the two ships made good a nearly south course, surmounting the difficulties occasioned by the ice, and carefully observing the Magnetic Declination, Dip, and Force in every twenty-four hours with very few exceptions, until, in the latitude of  $70^{\circ}$ , the discovery was made of the great Southern Continent of South Victoria; and its coast was followed and examined until further progress towards the south was arrested, in a latitude little short of  $80^{\circ}$ , by a vast glacier extending in an east and west direction for about  $30^{\circ}$  of longitude. In returning to Hobarton on the approach of the southern winter, a route was chosen which led to the vicinity which had been named to Sir JAMES ROSS as the probable locality of a higher intensity than would be found in the region of the higher dips, and as the approximate locality of the second southern magnetic pole. The expedition arrived at Hobarton in April 1841, having completed the first year of the Survey, and having sustained no injury either to the ships or to the instruments.

Quitting Hobarton in the following month (May 1841), it was Sir JAMES ROSS’s purpose to penetrate a second time to the southward in the large interval of longitude comprised between the great glacier which had arrested their southern progress in the preceding year and the land named South Shetland, to the south of Cape Horn. This endeavour was frustrated by the ice, which admitted a progress through it between the

latitudes of  $60^{\circ}$  and  $70^{\circ}$  only by a continual inclination towards the west, which at length conducted them in  $70^{\circ}$  of latitude to the vicinity of their previous explorations and of the great glacier which had barred their southerly progress in the preceding year. After revisiting some of the geographical positions in which the magnetic observations of the preceding year had been made, and thus verifying their earlier results, the ships returned to the more navigable parallels of  $59^{\circ}$  and  $60^{\circ}$ , and, traversing the South Pacific in about the latitude of  $60^{\circ}$ , rounded Cape Horn and arrived at Port Louis in the Falkland Islands in August 1842. Here the ships were refitted, and, sailing thence in September 1842, passed some days at St. Martin's Cove near Cape Horn, where very careful examinations and comparisons of the magnetic instruments were made. Returning to Port Louis, and sailing thence on the 17th of December 1842, the ships resumed their eastern progress, continuing the habit of daily observation of the three magnetic elements, and availing themselves of every occasion which presented itself of attaining a higher south latitude. One notable opportunity occurred towards the end of February and beginning of March, when the 71st parallel was reached, but with great difficulty and considerable peril.

On the 4th of April 1843 the ships arrived at Simon's Bay in the vicinity of the Cape of Good Hope, thus completing the third year of the Survey, as well as the circumnavigation of the globe.

It was the practice of Sir JAMES ROSS and Captain CROZIER on all convenient occasions during the Survey to transmit the successive records of their observations to the Admiralty, by whom on their arrival they were sent to me for examination and reduction, pursuant to an arrangement between the Departments of the Admiralty and of the Ordnance, in which provision had been made for those purposes in an office under my superintendence at Woolwich. These original records have been carefully preserved, and will be deposited for all future reference (if required) in the Archives of the Royal Society. No time was lost, on the reception of these documents, in making such a provisional calculation of the results as circumstances would then permit, and in communicating both the observations themselves and the results to the Royal Society. The instruments employed being for the most part of novel design, and the conduct and execution of a magnetic survey *at sea* being scarcely less so (especially of a survey which should include the *three* magnetic elements), the provisional character of these communications was from the first distinctly recognized, and a final publication, such as the present purports to be, was throughout contemplated. With this understanding the observations of the first year of the Antarctic Survey, with their results provisionally computed, were communicated to the Royal Society in 1843, and printed in the Philosophical Transactions for that year, forming the V.th Number of these Contributions; those of the second year in 1844, forming the VI.th Number; and those of the third year in 1846, forming the X.th Number of the Contributions to Terrestrial Magnetism.

The success with which such Surveys could be prosecuted at sea having been shown by the first two of the publications thus referred to, the Royal Society was emboldened to

propose to Her Majesty's Government, in 1844, the employment of a third ship, supplied with instruments of a similar construction, in a portion of the high southern latitudes comprised between the meridians of  $0^{\circ}$  and  $125^{\circ}$  E., which was not comprehended in the voyages of the 'Erebus' and 'Terror.' The Admiralty having acceded to this proposition, the 'Pagoda,' a barque of 300 tons, was hired for the purpose by the Admiral Commanding at the Cape of Good Hope, and, having been duly strengthened for ice-navigation, was fitted for a voyage of some months' duration. Two officers were employed conjointly in the direction of this portion of the Survey, Lieut. (since Rear-Admiral) J. E. L. MOORE and Lieut. (since Colonel) HENRY CLERK of the Royal Artillery. Lieut. MOORE had been one of the officers of the 'Terror' in Sir JAMES ROSS's expedition, and was consequently accustomed to the navigation of the high latitudes, as well as practised in magnetic observations, having taken a very prominent share in those of the 'Terror.' Lieut. CLERK had been attached by Lord VIVIAN, Master-General of the Ordnance, to the Magnetic Observatory at the Cape of Good Hope, with the express view of being employed in a Magnetic Survey, either of the Colony itself, or of such part of the globe as might be conveniently accessible from it, and, in the passage from England to the Cape, had had an opportunity of practising with the instruments employed in a magnetic survey conducted on the ocean. The 'Pagoda' completed her survey between the 60th and 70th parallels, and between the 4th and 96th meridians of East longitude, returning to the Cape by South Australia and Mauritius. The results were communicated to the Royal Society in the same provisional form with those of the 'Erebus' and 'Terror' in the VIII.th Number of these Contributions, in which Number were also included the determinations of the Inclination and Intensity made at sea by Lieut. ALEXANDER SMITH, R.N., and by Lieut. JOSEPH DAYMAN, R.N. (officers employed at the Magnetic Observatory at Hobarton), on passages from Hobarton to the Cape of Good Hope, in which they were provided with instruments similar to those employed by Sir JAMES ROSS.

One of the chief difficulties anticipated in these undertakings arose from the circumstance that magnetic determinations made at sea are necessarily subject to the disturbing influence of the iron which cannot be wholly dispensed with in the equipment of a ship fitted for general navigation, and which, even when reduced to its smallest practicable amount, and kept as far as may be possible at a distance from the magnetic instruments, still exercises a disturbing influence which in the high latitudes becomes excessive, and requires to be met by appropriate corrections. The disturbing influence of the ship's iron on the pointing of the compasses had attracted the notice of some of the most careful marine surveyors towards the close of the last century, and had been met by empirical rules of inconsiderable extent and partial application—when in 1818 the 'Isabella' and 'Alexander,' ships of a class corresponding in many respects to the 'Erebus' and 'Terror,' were employed in the first expedition to the Arctic Polar Regions, and were led by the objects of the expedition into localities where the navigation had to be conducted in magnetic Inclinations exceeding  $85^{\circ}$ , when the superior influence of



the ship's iron so far prevailed over the directive influence of the earth (upon the horizontal needles), that it was obvious that we had nearly attained the limit within which the compass, as it had been previously employed, could be available in navigation. In a paper presented to the Royal Society on the return of the expedition to England, and printed in the Philosophical Transactions for 1819, Art. XVI., I have related these particulars, together with the partial remedies which suggested themselves at the time and on the spot, and which were so far practically successful that, both in that voyage and in the next (viz. in 1819 and 1820, when Barrow's Straits were passed and still higher magnetic inclinations were encountered), we were still enabled to use the ship's compasses in navigation, and in some degree also as aids in fixing geographical positions by compass bearings, until the inclination became so great that the directive force of the earth on the horizontal needle ceased to be appreciable, and the compass pointed uniformly to the general resultant of the ship's attraction, whatever might be the direction of the ship's head at the time.

In 1824 M. POISSON communicated two Memoirs to the French Institute, in the first of which he propounded a mathematical theory of transient induced magnetism founded on the physical theory of COULOMB, that by induction each particle of soft iron becomes a magnet, having an intensity proportional to that of all the forces which act on it, including the force of the magnetism developed by induction in all the other particles of the mass. In a subsequent Memoir, published in 1839, "*Sur les Déviations de la Boussole produites par le fer des vaisseaux*," M. POISSON adapted his formulæ to observations made on shipboard in the particular case of the soft iron being symmetrically distributed on either side of the principal section of the ship. The memoir was accompanied by a practical application and verification of the theory, showing the accordance of the calculated results with the facts recorded in the Arctic voyages of 1818, 1819, and 1820, spoken of above. A careful examination of the disturbances of the needle in the 'Erebus' and 'Terror' in their passage from England to the Cape of Good Hope in 1839, showed that in both ships they were occasioned chiefly, if not wholly, by the magnetism induced in the iron of the fittings and equipment by the vertical part of the earth's force, and which was distributed symmetrically on either side of the fore-and-aft vertical section passing through the compass. In the case of these ships, therefore, M. POISSON's method of analysis was strictly applicable; and its practical application was greatly facilitated by a memorandum drawn up by Mr. ARCHIBALD SMITH, F.R.S., with which he obligingly supplied me, and which was printed in the provisional discussion of the observations of Sir JAMES ROSS's expedition in the first year of the Survey, in the V.th Number of these Contributions (Philosophical Transactions, 1843, Art. VIII.),—and by a supplementary memorandum, printed in the VIII.th Number of the Contributions (Philosophical Transactions, 1846, Art. XVIII.). Mr. SMITH has now furnished me with a third memorandum, which I subjoin.

*Formulae for the correction of observations of Dip and Total Intensity made in  
Wood-built Ships.*

In the Memorandum printed in the Contributions to Terrestrial Magnetism, No. V., Philosophical Transactions, 1843, p. 147, the following expressions will be found which are immediately derived from the formulæ given by POISSON in the Memoirs of the Institute, vol. v. p. 533.

$$\frac{\phi'}{A'\phi} \cos \theta' \cos \zeta' = \cos \theta \cos \zeta + a \sin \theta, \quad . \quad . \quad . \quad . \quad . \quad . \quad . \quad . \quad (1)$$

$$\frac{\phi'}{A'\phi} \cos \theta' \sin \zeta' = b \cos \theta \sin \zeta, \quad . \quad . \quad . \quad . \quad . \quad . \quad . \quad . \quad (2)$$

$$\frac{\phi'}{A'\phi} \sin \theta' = c \cos \theta \cos \zeta + d \sin \theta. \quad . \quad . \quad . \quad . \quad . \quad . \quad . \quad . \quad (3)$$

In these expressions

$\phi$  is the total Magnetic Intensity expressed in any unit.

$\theta$  is the Dip.

$\zeta$  is the magnetic azimuth of the ship's head.

$\phi'$ ,  $\theta'$ ,  $\zeta'$  are the same quantities affected by the induced magnetism of the soft iron in the ship.

$A'$ ,  $a$ ,  $b$ ,  $c$ ,  $d$  are coefficients depending on the amount and distribution of the soft iron.

These expressions are based on the assumptions that all the iron of the ship is (magnetically) *soft*, and that it is symmetrically arranged on each side of the fore-and-aft section. These assumptions are nearly true in ships such as the 'Erebus' and 'Terror.'

In the same memorandum, p. 148, expressions are given for  $\theta'$  and  $\phi'$  in terms of  $\theta$ ,  $\phi$ ,  $\zeta$ ,  $\zeta'$ , from which the coefficients may be determined if we have a sufficient number of corresponding observations; and from them Tables of double entry may then be constructed, giving the corrections to be applied to the observed values  $\theta'$  and  $\phi'$  in any required dip. These formulæ are *exact*, and may be used whatever be the amount of disturbing force, but are not very conveniently adapted for calculation.

When, as in the 'Erebus' and 'Terror,' the disturbing force is small, we may treat the errors of Dip and Force as small quantities of which the squares and products may be neglected, and we may then obtain the errors of dip and force by simple expressions of the form

$$\delta\theta = L + M \cos \zeta + N \cos 2\zeta,$$

$$\frac{\delta\phi}{\phi} = P + Q \cos \zeta + R \sin 2\zeta.$$

If the observations of  $\delta\theta$  and  $\frac{\delta\phi}{\phi}$  are made on any number of equidistant magnetic points exceeding two, the coefficients  $L$ ,  $M$ ,  $N$ ,  $P$ ,  $Q$ ,  $R$  may be obtained with great facility

by applying the method of least squares, as in the Memorandum in Contribution No. VIII., Philosophical Transactions, 1846, p. 346, and as in the 'Admiralty Manual for the Deviation of the Compass.'

In this way, from observations made on sixteen points in the 'Erebus' at Hobarton in 1840-1841, we obtain

$$\delta\theta = -2' - 66' \cos \zeta + 6' \cos 2\zeta,$$

$$\frac{\delta\phi}{\phi} = +.0053 - .0146 \cos \zeta + .0009 \cos 2\zeta.$$

These formulæ give the error, and therefore, changing the sign, the correction of the Dip and Total Intensity on any magnetic azimuth at the place of observation.

If we wish to know how the coefficients L, M, N, P, Q, R are affected by a change of dip, we may proceed as follows.

From equations (1), (2), (3) we obtain

$$\frac{\phi' \cos \theta' \cos \zeta' - \phi \cos \theta \cos \zeta}{\phi \cos \theta} = A'a \tan \theta + (A' - 1) \cos \zeta, \quad . \quad . \quad . \quad (4)$$

$$\frac{\phi' \cos \theta' \sin \zeta' - \phi \cos \theta \sin \zeta}{\phi \cos \theta} = (A'b - 1) \sin \zeta, \quad . \quad . \quad . \quad . \quad (5)$$

$$\frac{\phi' \sin \theta' - \phi \sin \theta}{\phi \sin \theta} = A'd - 1 + A'c \cot \theta \cos \zeta. \quad . \quad . \quad . \quad . \quad (6)$$

Let  $x, y, z$  be the components of  $\phi$  in the three rectangular directions, to head, to star-board, and to nadir, so that  $x = \phi \cos \theta \cos \zeta$ ,  $y = \phi \cos \theta \sin \zeta$ ,  $z = \phi \sin \theta$ , and let  $x', y', z'$  be the same quantities affected by the magnetism of the ship, and let  $h$  be the horizontal force  $= \sqrt{x^2 + y^2} = \phi \cos \theta$ , and let  $x' - x = \delta x$ ,  $y' - y = \delta y$ ,  $z' - z = \delta z$ , then equations (4), (5), (6) become

$$\frac{\delta x}{h} = A'a \tan \theta + (A' - 1) \cos \zeta,$$

$$\frac{\delta y}{h} = (A'b - 1) \sin \zeta,$$

$$\frac{\delta z}{z} = A'd - 1 + A'c \cot \theta \cos \zeta;$$

and as  $\tan \theta = \frac{z}{h}$ ,

$$\begin{aligned} \delta\theta &= \frac{h\delta z - z\delta h}{\phi^2} \\ &= \frac{hz}{\phi^2} \left\{ \frac{\delta z}{z} - \frac{\delta h}{h} \right\}, \\ &= \sin \theta \cos \theta \left\{ \frac{\delta z}{z} - \frac{\delta x}{h} \cos \zeta - \frac{\delta y}{h} \sin \zeta \right\} \\ &= L + M \cos \zeta + N \cos 2\zeta, \end{aligned}$$

where

$$L = +\frac{1}{2}A' \left( d - \frac{1+b}{2} \right) \sin 2\theta,$$

$$M = +\frac{1}{2}A'\{c - a + (c + a) \cos 2\theta\},$$

$$N = -\frac{1}{2}A' \frac{1-b}{2} \sin 2\theta.$$

Also

$$\phi^2 = x^2 + y^2 + z^2,$$

$$\phi \delta \phi = x \delta x + y \delta y + z \delta z,$$

$$\frac{\delta \phi}{\phi} = \cos^2 \theta \left\{ \frac{\delta x}{h} \cos \zeta + \frac{\delta y}{h} \sin \zeta \right\} + \sin^2 \theta \frac{\delta z}{z}$$

$$= P + Q \cos \zeta + R \cos 2\zeta,$$

where

$$P = +\frac{1}{2}A' \left( d + \frac{1+b}{2} \right) - 1 - \frac{1}{2}A' \left( d - \frac{1+b}{2} \right) \cos 2\theta,$$

$$Q = +\frac{1}{2}A' (c + a) \sin 2\theta,$$

$$R = +\frac{1}{2}A' \frac{1-b}{2} (1 + \cos 2\theta).$$

If we suppose  $\theta_1, \phi_1, L_1, M_1, P_1, Q_1, R_1$  to be values of  $\theta, \phi, L$ , &c. at a base-station, then at any other station at which the dip is  $\theta$ , we have

$$L = \frac{L_1}{\sin 2\theta_1} \sin 2\theta,$$

$$M = M_1 - Q_1 \cot 2\theta_1 + \frac{Q_1}{\sin 2\theta_1} \cos 2\theta,$$

$$N = \frac{N_1}{\sin 2\theta_1} \sin 2\theta,$$

$$P = P_1 + L_1 \cot \theta_1 - \frac{L_1}{\sin 2\theta_1} \cos 2\theta,$$

$$Q = \frac{Q_1}{\sin 2\theta_1},$$

$$R = \frac{R_1}{1 + \cos 2\theta_1} (1 + \cos 2\theta).$$

It will be observed that  $P, Q, R$  are abstract numbers, while  $L, M, N$  are angles the numerical values of which depend on the assumed unit of angle. The values just given may be used without modification if the angular unit be the angle subtended by the arc=radius, or  $57^\circ.3$ . If the unit of angle be, say  $1'$ , then in the expression for  $M$  we must divide  $Q_1$  by  $\sin 1'$ , and in the expression for  $P$  we must multiply  $L_1$  by  $\sin 1'$ .

As a check on the values of  $N$  and  $R$ , we may observe that we ought to have

$$\begin{aligned} -\frac{N_1}{\sin 2\theta_1} &= +\frac{R_1}{1 + \cos 2\theta_1} = +\frac{1}{2}A'\frac{1}{2}(1-b) \\ &= \frac{1}{2}\lambda \mathfrak{D} \end{aligned}$$

in the notation of the Admiralty Manual;

And that if we have the value of  $\frac{1}{2}A'\frac{1}{2}(1-b)$ , or  $\frac{1}{2}\lambda \mathfrak{D}$ , determined independently from

the observation of deviation and horizontal intensity, it will in general be better to use it than the value of  $-\frac{N_1}{\sin 2\theta_1}$  and  $\frac{R_1}{1 + \sin 2\theta_1}$  obtained from the observations of dip and total intensity.

The observations for the 'Erebus' at Hobarton treated in this way give

$$\begin{aligned}\delta\theta &= 3' \sin 2\theta + \{-3' + 81' \cos 2\theta\} \cos \zeta - 14' \sin 2\theta \cos 2\zeta, \\ \frac{\delta\phi}{\phi} &= .0045 - .001 \cos 2\theta + .0234 \sin 2\theta \cos \zeta + .004(1 + \cos 2\theta) \cos 2\zeta.\end{aligned}$$

This is the formula from which the Tables used for correcting the dips and intensities observed in the 'Erebus' have been computed.

P.S. It may be convenient for persons who make use of the Admiralty Manual to have the expressions for L, M, N, P, Q, R, A', a, b, c, d in the notation of that work.

$$\begin{aligned}L &= +\frac{1}{2}(k+1-\lambda) \sin 2\theta, \\ M &= +\frac{1}{2}(g-c) + \frac{1}{2}(g+c) \cos 2\theta, \\ N &= -\frac{1}{2}\lambda \mathfrak{D} \sin 2\theta, \\ P &= \frac{1}{2}(k-1+\lambda) - \frac{1}{2}(k+1-\lambda) \cos 2\theta, \\ Q &= +\frac{1}{2}(g+c) \sin 2\theta, \\ R &= +\frac{1}{2}\lambda \mathfrak{D}(1 + \cos 2\theta).\end{aligned}$$

This Memorandum.

Admiralty Manual.

A'	=	$1+a=\lambda(1+\mathfrak{D}),$
a	=	$\frac{c}{1+a} = \frac{\mathfrak{B}}{1+\mathfrak{D}} \cot \theta,$
b	=	$\frac{1+c}{1+a} = \frac{1-\mathfrak{D}}{1+\mathfrak{D}},$
c	=	$\frac{g}{1+a},$
d	=	$\frac{1+k}{1+a}.$

Before the 'Erebus' and 'Terror' sailed from Hobarton in November 1840 to commence the first year of the Survey, the deviations of the Declination, as shown by the Standard Compass in each ship, were very carefully observed; and the observations were repeated on the return to Hobarton at the conclusion of the first year's Survey, in June 1841. The results are printed in Contributions No. V., those of the 'Erebus' in page 154, and those of the 'Terror' in page 159. Tables for the correction of the Deviation in the different values of the Inclination, in the first and second years of the Survey, were computed from these observations, employing Mr. ARCHIBALD SMITH'S

Table in Contribution No. VIII. pp. 352, 353; and the same was done for the third year of the Survey from a mean of similar observations at Port Louis in the Falkland Islands in August 1842, and at the Cape of Good Hope in April 1843, as stated in Contribution No. X. pp. 455–457. The corrections for the Deviation in the observations of the Inclination and of the Intensity were computed in all cases by the method described in Mr. SMITH'S Memorandum in the present Number, page 379,—employing for the first and second year's Surveys the mean of the observations of the 'Erebus' at Hobarton in October 1840, before her departure for the south, and at the same place, in June 1841, on her return\*, and for the third year from the 'Erebus' Table in Contribution X. p. 459, and the 'Terror' Table in Contribution X. p. 461.

The Deviations of the Declination became very large when the Inclination approached  $90^\circ$ ; in  $88^\circ$  of Inclination, for example, the influence of the ship's iron occasioned a deviation amounting to the excessive value of  $50^\circ$  and upwards at the extreme points; so that an observation with the ship's head *East* would in consequence differ  $100^\circ$  or even more from an observation taken at the same place with the ship's head *West*. It was doubtless the experience of such extreme differences which led to what might almost appear an excessive multiplication of observations, as well as to the constant endeavour to diversify the circumstances of the direction of the ship's head, both which precautions have contributed in no small degree to reduce within such comparatively small limits the differences which are seen in the Tables between the *mean* values of the Declination on the same or on successive days. Even the remaining minor differences which appear might probably have been still further reduced by another precaution, the desirability of which may not have been so clearly apprehended at the time, namely, the recording the direction of the ship's head at the *precise instant* when the pointing of the compass is read. Unless the two observed facts strictly synchronize, the very slight and almost momentary change in the direction of the ship's head will occasion an apparent discordance in successive results when the ship's head is near the extreme points of East or West, though it may have little ultimate influence on the position or the direction of the isogonic lines in the final result of a great body of observations. This remark applies in a far minor degree to the differences of successive or of nearly adjacent results of the Inclination or Intensity, where no such excessive increase in the amount of the deviation-corrections takes place when approaching the point of  $90^\circ$  of Inclination. A critical eye may well regard the general

\* Mr. Fox's apparatus, designed for the use of the 'Terror' in the Antarctic Survey, not having been quite ready when the 'Erebus' and 'Terror' sailed from England in 1839, a smaller apparatus was supplied for immediate use; and the apparatus actually employed (in the 'Terror') in the Survey did not reach that ship until she was on the point of sailing from Hobarton in 1840. It was found, however, on careful subsequent examination that in the two ships the corrections for the deviations of the Inclination and of the Force were so nearly the same in the course of the first two years of the Survey, that the Table computed from the observations of the 'Erebus' referred to in the text might safely be employed for the correction of the observations of these elements in the 'Terror.'

accordance of the results of the Declination on successive days, or on the return in successive years to the same localities, as satisfactory to a degree which might scarcely have been anticipated, supposing the existence of the above-noticed fact to have been known and duly borne in mind, viz. that the observed Declinations were subject to variations extending to 100 degrees and upwards, according to the direction of the ship's head at the moment when the compass was observed\*.

Tables in which all the required corrections have been applied to the individual observations have been prepared, and will accompany this paper with a view to their being deposited in the Archives of the Royal Society, in case a reference to them should be hereafter desired: and from these, *General Tables* have been prepared showing the mean Geographical Positions and the mean Magnetical Values after the application of the Corrections (including the latest of these), together with the number of observations from which each result has been obtained. These *General Tables* are subjoined at the close of the paper.

The intensities of the magnetic Force are expressed in Absolute Value, in British units, depending upon the determinations of these values at the Magnetic Observatories of Hobarton and the Cape of Good Hope, regarded as the base-stations of the Survey (Contribution X., Philosophical Transactions, 1866, Art. XX. pp. 463, 464).

The mean results have been inserted in the Maps of Declination, Inclination, and Intensity of the Force, respectively, and constitute the authorities upon which the endeavour has been made to trace the general course of the isogonic, isoclinal, and isodynamic lines, in conformity with the observations of the Survey. The maps with the lines thus traced upon them have supplied the groundwork for the next step, viz. the assignment, as far as could safely be done, of the approximate values of each of the three elements at the intersections of every fifth degree of latitude between  $-40^{\circ}$  and  $-90^{\circ}$ , and of every 10th degree of longitude from  $0^{\circ}$  to  $360^{\circ}$ , thus supplying the numerical coefficients which may be required, in whole or in part, in a revision of GAUSS'S 'Allgemeine Theorie des Erdmagnetismus.'

We learn from the original publication of that important work, in the 'Resultate aus den Beobachtungen des Magnetischen Vereins,' im Jahre 1838, and the 'Atlas des Erdmagnetismus,' 1840, that the numerical data employed in the calculations were for "twelve meridional points on each of seven parallels of latitude"—the greater part of the parallels being taken north of the equator, and none south of  $-20^{\circ}$ . To those who duly considered the possible influence of this incompleteness of the numerical coefficients, it will not have been matter of surprise that where these were wanting the result of the calculations should have been found to differ widely from the facts made known by

\* No record appears to have been made of the amount of the ship's "heeling" at the times of observation; in reference to this Mr. ARCHIBALD SMITH remarks in a note to myself, that in the 'Erebus,' on North and South courses, when the effect produced is a maximum, it would only be  $30'' \tan \theta$  for every degree of heel; which at a dip of  $88^{\circ}$  (nearly the highest observed) would give a correction of only about 15' for each degree of heel, and may therefore be neglected.



the Survey. The application of the theory professed, indeed, to be simply a first attempt from which we were entitled to expect little more than a rough approximation. Viewed in this light (and it must be remembered that this was all that the author himself claimed for it), its publication could only be regarded as strengthening the grounds on which the desire was felt for more complete and trustworthy data than were possessed by M. GAUSS in 1839. The failure of the theory, as provisionally applied, to reproduce in the Southern Hemisphere the peculiar and characteristic features of the Terrestrial Magnetism which were so well established by observation and represented by the theory in the Northern Hemisphere, and the strong objection to receiving on less than conclusive evidence so improbable an anomaly as this diversity in the two hemispheres, tended, without doubt, greatly to stimulate the endeavours of those who desired to render the facts of observation in the Southern Hemisphere more commensurate with the theory in which they were to be employed. Accordingly in the VI.th Number of the Contributions (Philosophical Transactions, 1844, Art. VII.) I exhibited in Plate XIII. the lines of equal intensity deduced from the observations in the first two years of Sir JAMES ROSS's Survey, in comparison with GAUSS's theoretical lines taken from Plates XVIII. and XIX. of the 'Atlas des Erdmagnetismus,' showing the difference between the two. The immediate object of this comparison was to strengthen the application which was then being made for the additional employment of the 'Pagoda;' whilst the two following sentences which I venture to extract from the paper accompanying the Plate, are sufficient to manifest that a full respect for the theory itself and for its illustrious author was not wanting.

"The very imperfect resemblance between the two systems of lines in the southern hemisphere is of course no impeachment of the sufficiency of the theory, *with corrected numerical elements*, to represent the natural phenomena in parts of the globe which observation may not have reached. The degree of approximation to which it will do this must depend upon the extent and correctness of the observation-basis from whence the numerical elements are derived, and upon the order of the magnitudes comprehended in the calculation.

"The evidence which the Plate affords that the calculation in the elaborate work referred to differs so widely from the facts in the southern latitudes, shows how much observations were wanting in those latitudes for the purpose of perfecting the theory, and is an ample justification (if indeed any justification were necessary) of the exertions which the last few years have witnessed to obtain them."

I am greatly indebted to the Hydrographer, Captain RICHARDS, R.N., F.R.S., for his kind permission to have the maps which accompany this Number of the Contributions prepared at the Hydrographic Office, and am particularly obliged 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.

It may be desirable that I should add a few words in explanation of the sense in which, in the present and in earlier papers, I have employed certain of the technical ex-

pressions appertaining to this branch of the physical sciences. Thus:—I have used the terms magnetic *pole* and *poles* in their original and natural sense, as designating those points on the surface of the globe where the intensity of the magnetic force is a maximum in comparison with adjacent localities—in other words, the centres of the lemniscates into which, at our present epoch in the magnetic cycle, the isodynamic lines of highest intensity resolve themselves.

In one of the earliest systematic treatises on the phenomena of terrestrial magnetism as derived from and resting on observation, (that of HALLEY in the Philosophical Transactions for 1683,) it is unhesitatingly affirmed, on the evidence of well-assured facts, 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 globe which lie near any of those magnetical poles, the needle is chiefly governed thereby, the nearest pole being always predominant over the more remote.” It is in this, its original signification, bearing date so early as 1683, that I have employed the term “magnetic pole.” The magnetic surveys which have been so carefully and systematically made in the course of the present century over almost all the accessible parts of the globe, may now be considered to have fully confirmed the truth of HALLEY’S remarkable anticipation, and may be claimed in full justification by those who, following in the steps of our sagacious and illustrious countryman, employ the terms which he was amongst the first to use (and the first to assign to them their true significancy), in the same sense in which he himself employed them. The Halleian hypothesis, and the incontrovertible facts on which it rested, were for a time obscured by the prevalence of a uniaxial hypothesis, in which the points of maximum force were assumed to be identical with the points where the inclination is  $90^\circ$ ; around which, as their centre, the isodynamic and isoclinical lines were supposed to be arranged symmetrically in parallel lines; hence the term magnetic pole came, in the uniaxial hypothesis, to be attached to the points where the inclination is  $90^\circ$ , that element being the easier of determination, and consequently the one most popularly regarded. But the acceptance of the uniaxial hypothesis has gradually yielded to the progressive advance of observational knowledge; and one of its ablest expositors (BIOT), as far back as the commencement of the present century, was constrained to admit that, even in the case of apparently the most simple of the three elements (viz. the Inclination), a single magnetic axis would afford no sufficient explanation of the phenomena, unless it were supplemented by the supposition of subordinate centres; whilst as regarded the known facts of the Declination and Intensity, they must be held to be wholly inexplicable on the supposition of a single magnetic axis (Report of the British Association, 1837, p. 64).

Preserving, therefore, the sense in which HALLEY employed the term magnetic pole, and in accordance with the evidence, now fully established by observation, of the existence of four such points on the surface of the globe, the *magnetic equator* is most properly defined as the line connecting those points in each geographical meridian where the intensity of the earth’s magnetism is less than in any other point situated in the

same geographical meridian. This line, at the present magnetic epoch, has a double curvature. I was myself the first, I believe, to trace (*Philosophical Magazine* for February 1829, Art. XV.) the position on the globe of the magnetic equator as thus defined, and to exhibit it in comparison with the line of no dip, from which it differs very considerably in geographical position\*.

In concluding this paper, I should be unjust to the memory of Sir JAMES ROSS and to my own high regard to his memory, if I failed to record my conviction that, by the remarkable character of his geographical discoveries, by the perseverance and indomitable resolution which he displayed on so many occasions, and by that which we of the Royal Society are peculiarly able to appreciate and peculiarly bound to honour and applaud, *i. e.* the large extent and high character of his contributions to the advancement of the sciences connected with physical geography in the polar regions of *both* hemispheres, he has established a claim to be regarded as the first scientific navigator of his country and of his age.

\* In an earlier paper (*Philosophical Transactions*, 1864, Art. VI.) I availed myself of what appeared to me a suitable occasion to express the conjectural belief, which I have long entertained, that of the two magnetic systems which are distinctly recognizable in the phenomena of the magnetism of the globe, one has a terrestrial and the other a cosmical source. It is, I believe, the latter of these two systems which, by its progressive translation, gives rise to the phenomena of secular change, and to those magnetical cycles which owe their origin to the operation of the secular change. I have naturally seen with great pleasure that this conjectural anticipation is received, and is viewed in the same light, by the author of the able Essay which obtained the Adams Prize at Cambridge in 1865, and which has been since published under the title of "*Terrestrial and Cosmical Magnetism*, by EDWARD WALKER, M.A., late Fellow of Trinity College, Cambridge, &c." I may add my entire concurrence with the following statement of that gentleman in § 185, p. 293, of the work referred to.

"Our final conclusion, therefore, upon the whole subject seems to be, that the magnetic influence at any point of the globe is the result of two distinct magnetic systems, the principal of which is the magnetism proper of the globe, having its [northern] point of greatest attraction in the north of the American Continent, whilst the weaker system is that which results from the magnetism induced in the earth by cosmical action, and of which the [northern] point of greatest attraction is at present in the north of the Asiatic Continent. Thus the direction of the magnet at any point results from the superposition of the two systems,—'the nearest pole being always predominant over the more remote.'"

## TABLES.

- I. Numerical Coefficients, for a revision of GAUSS's *Allgemeine Theorie*, pp. 386 & 387.
- II. General Tables of the Values entered in the Maps (Plates XXII. to XXIV.), pages 388–416.

NOTE.—In the vicinity of the Great Glacier, where the Southerly progress of the Ships was arrested, and many days were passed in the endeavour to discover some channel by which a further advance might be made, the rapid convergence both of the geographical meridians and of the lines which represent every 10th degree of Declination has made it desirable to depart, in the Map of the Declination, from the practice which has been generally followed elsewhere in the Map, of inserting the mean of each day's observations in the geographical position to which it corresponds. In the "General Tables" the daily means in this part of the voyage are inserted as usual; but in the Map the number of entries in latitudes exceeding  $75^{\circ}$  S. has been reduced by combining the observations in larger groups. The manner in which this has been done is shown in a small subsidiary Table in page 391, where the small letters *a*, *b*, *c*, &c., referring to the results characterized by the same letters in pp. 389 and 391 of the General Tables, supply the requisite connexion between the Tables and the Map.

Approximate Numerical Coefficients of the Magnetism of the Earth, Epoch 1840–1845, prepared  
for a revision of GAUSS'S 'Allgemeine Theorie des Erdmagnetismus.'

Lat.	Longitudes....	0°.	10°.	20°.	30°.	40°.	50°.	60°.	70°.	80°.	90°.	100°.	110°.	120°.	130°.	140°.	150°.	160°.	170°.
-40°	Declination...	21·2 w.	25·6 w.	30·0 w.	31·1 w.	30·0 w.	27·0 w.	24·4 w.	22·2 w.	20·9 w.	20·0 w.	16·8 w.	11·9 w.	6·1 w.	0·4 w.	5·9 E.	10·5 E.	13·3 E.	14·9 E.
	Inclination ...	47·5	52·8	56·9	60·2	62·7	64·8	66·1	66·8	67·4	68·0	68·7	69·5	70·0	69·9	69·7	68·4	66·2	64·1
	Intensity .....	7·0	7·4	7·9	8·5	9·0	9·6	10·2	10·8	11·5	12·1	12·5	13·0	13·5	13·75	13·6	13·3	12·95	12·6
-45°	Declination...	20·0 w.	25·4 w.	30·0 w.	32·5 w.	32·3 w.	31·1 w.	29·0 w.	27·0 w.	26·0 w.	24·7 w.	21·0 w.	15·0 w.	8·2 w.	0·9 w.	6·0 E.	11·4 E.	14·5 E.	16·4 E.
	Inclination ...	51·0	55·7	58·6	61·7	64·2	66·2	67·7	68·9	69·8	71·2	72·2	73·1	73·9	73·9	73·1	71·7	70·0	68·0
	Intensity .....	7·55	7·9	8·35	8·85	9·4	10·0	10·6	11·2	11·8	12·4	12·9	13·4	14·1	14·6	14·2	13·8	13·5	13·1
-50°	Declination...	18·6 w.	23·8 w.	29·6 w.	33·5 w.	34·6 w.	34·3 w.	33·4 w.	32·5 w.	32·0 w.	31·0 w.	26·5 w.	19·5 w.	10·7 w.	1·8 w.	6·4 E.	12·4 E.	16·1 E.	18·0 E.
	Inclination ...	54·2	57·5	60·5	63·0	65·5	67·4	69·0	70·6	72·0	73·6	75·1	76·5	77·2	77·2	76·4	75·0	73·5	71·9
	Intensity .....	8·1	8·4	8·8	9·2	9·8	10·35	10·95	11·5	12·1	12·7	13·2	13·75	14·5	15·4	14·5	14·25	13·95	13·6
-55°	Declination...	17·4 w.	22·9 w.	29·0 w.	33·5 w.	36·3 w.	37·3 w.	37·7 w.	38·7 w.	39·0 w.	38·5 w.	33·3 w.	24·0 w.	14·0 w.	3·5 w.	6·6 E.	13·8 E.	18·0 E.	19·7 E.
	Inclination ...	57·0	59·6	62·0	64·4	66·6	68·7	70·3	72·0	73·7	75·7	77·7	79·4	80·3	80·3	79·7	78·4	77·0	75·5
	Intensity .....	8·7	8·9	9·3	9·8	10·25	10·75	11·25	11·8	12·4	13·0	13·5	13·95	14·5	15·0	14·8	14·6	14·3	14·1
-60°	Declination...	15·5 w.	21·5 w.	28·0 w.	33·5 w.	37·2 w.	39·4 w.	42·0 w.	45·2 w.	47·0 w.	46·4 w.	41·0 w.	30·5 w.	19·5 w.	7·4 w.	6·1 E.	15·8 E.	21·0 E.	22·6 E.
	Inclination ...	59·6	61·7	63·9	65·9	68·0	69·8	71·7	73·4	75·0	77·4	79·6	81·8	83·3	83·5	83·0	81·7	80·3	78·8
	Intensity .....	9·4	9·6	9·95	10·3	10·7	11·1	11·6	12·1	12·6	13·2	13·7	14·2	14·7	15·3	15·2	14·95	14·7	14·25
-65°	Declination...	14·0 w.	20·0 w.	27·0 w.	33·0 w.	37·3 w.	41·4 w.	46·2 w.	51·8 w.	55·6 w.	55·0 w.	49·0 w.	41·0 w.	29·0 w.	15·0 w.	4·2 E.	17·5 E.	25·0 E.	27·4 E.
	Inclination ...	62·5	64·2	65·9	67·8	69·7	71·5	73·1	74·6	76·5	78·6	80·9	83·4	85·4	86·1	86·0	85·0	83·5	82·2
	Intensity .....	10·25	10·35	10·55	10·85	11·15	11·5	11·9	12·4	12·9	13·35	13·85	14·35	14·9	15·25	15·35	15·2	15·05	14·8
-70°	Declination...	13·0 w.	19·5 w.	26·3 w.	31·9 w.	37·0 w.	41·5 w.	47·5 w.	55·0 w.	62·0 w.	64·2 w.	60·5 w.	55·0 w.	47·5 w.	35·0 w.	9·5 w.	22·5 E.	35·5 E.	38·8 E.
	Inclination ...	65·7	66·9	68·5	70·0	71·6	73·2	74·6	76·1	77·8	79·5	81·6	84·0	86·0	87·7	88·3	87·6	86·5	85·4
	Intensity .....	11·0	11·05	11·15	11·4	11·65	11·9	12·3	12·7	13·1	13·65	14·0	14·5	15·0	15·2	15·4	15·4	15·25	15·05
-75°	Declination...	12·4 w.	18·8 w.	25·0 w.	30·8 w.	36·0 w.	41·3 w.	47·5 w.	55·0 w.	64·5 w.	72·8 w.	77·0 w.	78·0 w.	78·0 w.	80·0 w.	105·0 w.	150·0 E.	91·0 E.	80·0 E.
	Inclination ...	69·3	70·0	71·0	72·1	73·5	74·7	76·1	77·4	78·8	80·2	82·0	83·9	85·6	87·0	88·5	89·0	88·5	87·5
	Intensity .....	11·8	11·8	11·85	12·0	12·15	12·4	12·7	13·0	13·5	13·75	14·15	14·55	14·95	15·2	15·25	15·35	15·25	15·15
-80°	Declination...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Inclination ...	72·6	73·2	73·8	74·6	75·5	76·6	77·4	78·4	79·5	80·6	81·9	83·1	84·3	85·2	86·0	86·4	86·5	86·3
	Intensity .....	12·5	12·5	12·5	12·6	12·8	12·9	13·1	13·4	13·65	13·95	14·2	14·5	14·8	15·0	15·1	15·15	15·15	15·1
-85°	Declination...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Inclination ...	76·4	76·7	76·9	77·0	77·7	78·2	78·8	79·5	80·0	80·7	81·2	81·7	82·5	82·7	83·0	83·3	83·3	83·3
	Intensity .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Note.—All the Inclinations are South.

Approximate Numerical Coefficients of the Magnetism of the Earth, Epoch 1840–1845, prepared  
for a revision of GAUSS'S 'Allgemeine Theorie des Erdmagnetismus.'

180°.	190°.	200°.	210°.	220°.	230°.	240°.	250°.	260°.	270°.	280°.	290°.	300°.	310°.	320°.	330°.	340°.	350°.	360°.	} Longitudes.	Lat.
14.5 E.	13.2 E.	11.5 E.	10.0 E.	9.3 E.	9.3 E.	10.6 E.	12.7 E.	15.1 E.	18.3 E.	19.2 E.	17.6 E.	14.5 E.	9.4 E.	3.1 E.	3.1 W.	9.4 W.	15.5 W.	21.2 W.	Declination	-40°
62.6	61.3	60.0	58.5	57.8	57.4	56.6	55.0	53.3	51.0	48.8	45.1	41.7	39.5	38.0	38.0	39.7	42.9	47.5	Inclination	
12.2	12.0	11.8	11.6	11.55	11.45	11.25	11.0	10.7	10.4	9.8	9.2	8.6	8.1	7.7	7.2	6.9	6.8	7.0	Intensity	
15.8 E.	14.4 E.	12.8 E.	11.7 E.	11.0 E.	11.0 E.	12.3 E.	14.3 E.	17.4 E.	20.5 E.	21.2 E.	19.4 E.	16.0 E.	10.7 E.	4.7 E.	1.7 W.	7.7 W.	14.0 W.	20.0 W.	Declination	-45
66.6	65.6	64.7	63.5	62.5	62.0	61.2	60.2	58.4	56.2	53.7	50.5	47.0	44.2	42.6	42.6	44.1	46.9	51.0	Inclination	
12.8	12.5	12.3	12.2	12.15	12.1	11.9	11.75	11.5	11.1	10.5	9.9	9.3	8.75	8.3	7.9	7.6	7.45	7.55	Intensity	
17.5 E.	15.9 E.	14.2 E.	13.1 E.	12.7 E.	12.8 E.	13.8 E.	16.3 E.	19.6 E.	22.6 E.	23.6 E.	21.6 E.	17.6 E.	12.4 E.	6.3 E.	0.2 W.	6.2 W.	12.5 W.	18.0 W.	Declination	-50
70.4	69.5	68.6	67.6	66.7	66.0	65.1	64.3	62.7	60.8	58.0	55.0	51.8	49.0	47.4	47.2	48.4	50.8	54.2	Inclination	
13.3	13.05	12.85	12.8	12.75	12.7	12.6	12.4	12.15	11.8	11.25	10.55	9.9	9.4	8.95	8.6	8.25	8.1	8.1	Intensity	
19.1 E.	17.6 E.	16.0 E.	14.7 E.	14.3 E.	14.5 E.	16.1 E.	19.3 E.	22.5 E.	24.8 E.	25.8 E.	24.0 E.	19.2 E.	14.3 E.	8.2 E.	1.8 E.	4.3 W.	11.0 W.	17.4 W.	Declination	-55
74.2	73.0	72.3	71.3	70.4	69.7	69.0	68.1	66.7	64.5	62.0	59.2	56.3	53.7	52.0	51.9	52.6	54.4	57.0	Inclination	
13.85	13.6	13.5	13.4	13.4	13.35	13.25	13.1	12.8	12.5	11.9	11.2	10.65	10.1	9.7	9.3	8.95	8.7	8.75	Intensity	
21.8 E.	19.6 E.	18.6 E.	17.8 E.	17.5 E.	18.4 E.	20.6 E.	23.6 E.	25.9 E.	27.4 E.	27.9 E.	25.5 E.	21.1 E.	16.0 E.	9.9 E.	3.8 E.	2.5 W.	9.5 W.	15.5 W.	Declination	-60
77.6	76.6	75.6	74.7	73.8	72.8	72.0	71.2	69.7	67.5	65.4	62.9	60.5	58.3	56.9	56.4	56.7	57.8	59.6	Inclination	
14.2	14.1	14.05	14.0	14.0	14.0	13.9	13.65	13.4	13.1	12.5	11.9	11.3	10.8	10.4	10.0	9.7	9.5	9.15	Intensity	
27.0 E.	25.5 E.	24.0 E.	23.2 E.	23.0 E.	24.2 E.	26.0 E.	27.5 E.	28.6 E.	29.7 E.	29.7 E.	26.7 E.	22.5 E.	17.2 E.	11.0 E.	4.6 E.	1.4 W.	8.0 W.	14.0 W.	Declination	-65
81.0	80.0	79.0	78.0	76.9	75.7	74.7	73.6	71.9	70.0	68.0	66.0	64.2	62.5	61.2	60.8	60.9	61.4	62.5	Inclination	
14.6	14.45	14.35	14.3	14.25	14.2	14.15	14.05	13.85	13.45	13.0	12.4	11.9	11.45	11.05	10.7	10.45	10.25	10.25	Intensity	
38.0 E.	36.6 E.	34.8 E.	33.1 E.	32.0 E.	32.0 E.	32.0 E.	32.7 E.	34.2 E.	34.7 E.	32.0 E.	28.0 E.	23.4 E.	17.8 E.	11.6 E.	5.0 E.	0.8 W.	7.0 W.	13.0 W.	Declination	-70
84.2	83.2	82.2	81.0	79.6	78.3	77.0	75.5	73.9	72.1	70.5	68.8	67.3	66.1	65.2	64.7	64.6	65.0	65.7	Inclination	
14.9	14.75	14.6	14.55	14.45	14.4	14.35	14.2	14.05	13.7	13.3	12.8	12.4	12.0	11.7	11.4	11.2	11.1	11.0	Intensity	
73.0 E.	66.0 E.	60.0 E.	56.6 E.	53.0 E.	49.5 E.	47.5 E.	45.5 E.	43.4 E.	40.0 E.	34.8 E.	28.5 E.	23.6 E.	17.8 E.	12.0 E.	5.0 E.	0.8 W.	6.7 W.	12.4 W.	Declination	-75
86.5	85.6	84.6	83.2	81.7	80.2	78.8	77.2	75.7	74.3	72.8	71.5	70.4	69.5	68.9	68.6	68.5	68.6	69.0	Inclination	
15.0	14.9	14.8	14.7	14.65	14.55	14.4	14.25	14.1	13.9	13.5	13.2	12.85	12.55	12.3	12.1	11.9	11.8	11.8	Intensity	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Declination	-80
86.0	85.3	84.6	83.6	82.3	81.2	80.0	78.7	77.5	76.4	75.5	74.5	73.8	73.1	72.7	72.4	72.3	72.5	72.6	Inclination	
15.05	14.95	14.8	14.7	14.6	14.5 E.	14.35	14.25	14.1	13.95	13.7	13.5	13.2	13.1	12.9	12.8	12.6	12.55	12.5	Intensity	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Declination	-85
83.2	83.0	82.6	82.2	81.6	81.0	80.5	79.8	79.3	78.6	78.0	77.5	77.0	76.6	76.4	76.3	76.1	76.1	76.4	Inclination	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Intensity	

The South Pole of the Earth { Declination 180.0  
Inclination 80.0  
Intensity 14.0

General Table of the Declinations observed on board Her Majesty's Ship 'Erebus,' by Captain Sir JAMES CLARK ROSS, between the Cape of Good Hope and Van Diemen Island in 1840, April to August.

Date.	Position.		No. of observations.	Declination.		Date.	Position.		No. of observations.	Declination.	
	Lat. S.	Long. E.		In degrees and minutes.	In degrees and decimals.		Lat. S.	Long. E.		In degrees and minutes.	In degrees and decimals.
1840. April 8.	36 01	18 38	6	+30 08	+30.1	1840. April 30	°	°		°	°
10.	36 16	20 41	2	+30 15	+30.3	and May 1.	46 32	52 01	2	+33 16	+33.3
11.	36 24	21 14	14	+30 40	+30.7						
12.	37 18	21 25	8	+30 51	+30.9	2.	47 03	56 22	3	+31 32	+31.5
13.	38 15	21 19	4	+32 10	+32.2	4.	47 45	62 27	2	+29 00	+29.0
14.	39 55	20 35	1	+31 09	+31.1	July 27.	47 18	93 36	5	+25 38	+25.6
15.	41 07	22 11	2	+29 51	+29.9	31.	47 34	105 47	1	+18 59	+19.0
16.	41 28	25 14	6	+30 25	+30.4	Aug. 2.	47 45	113 49	2	+11 29	+11.5
17.	41 50	26 24	2	+31 49	+31.8	4.	47 40	121 50	3	+9 34	+9.6
18.	43 09	28 46	5	+33 15	+33.3	7.	46 18	132 00	13	— 0 50	— 0.8
25.	46 31	48 03	1	+32 41	+32.7	10.	44 23	141 11	7	— 7 52	— 7.9
28.	46 34	52 43	2	+33 28	+33.5						

General Table of the Declinations observed on board Her Majesty's Ships 'Erebus' and 'Terror,' between November 1840 and April 1841.

Position.		Ship.	No. of observations.	Declination.		Position.		Ship.	No. of observations.	Declination.	
Lat. S.	Long. E.			In degrees and minutes.	In degrees and decimals.	Lat. S.	Long. E.			In degrees and minutes.	In degrees and decimals.
45 36	152 53	Erebus.	8	—13 05	—13.1	65 32	172 40	Terror.	7	—28 15	—28.3
46 08	154 15	Erebus.	8	—13 26	—13.4	65 27	172 23	Erebus.	11	—27 22	—27.4
46 30	154 55	Erebus.	7	—14 04	—14.1	65 32	173 44	Terror.	8	—29 35	—29.6
49 47	161 00	Erebus.	8	—16 49	—16.8	65 30	173 43	Erebus.	10	—28 11	—28.2
50 32	166 12	Erebus.	8	—17 44	—17.7*	65 35	173 33	Terror.	9	—29 01	—29.0
50 54	166 35	Erebus.	7	—15 34	—15.6	67 16	174 41	Erebus.	16	—31 22	—31.4
52 33	169 50	Terror.	10	—16 03	—16.1	68 00	175 05	Erebus.	13	—33 42	—33.7
52 33	169 09	Erebus.	2	—17 40	—17.7†	68 24	175 45	Terror.	10	—33 36	—33.6
54 14	169 06	Erebus.	5	—18 17	—18.3	68 31	176 05	Erebus.	12	—33 37	—33.6
57 33	170 30	Terror.	4	—21 58	—22.0	68 55	176 22	Erebus.	5	—34 52	—34.9
57 25	170 20	Erebus.	14	—21 19	—21.3	70 33	172 57	Erebus.	6	—38 22	—38.4
58 59	170 59	Terror.	7	—21 45	—21.7	70 53	173 00	Terror.	5	—42 49	—42.8
59 32	169 59	Erebus.	8	—21 11	—21.2	71 00	172 25	Erebus.	9	—43 43	—43.7
59 32	170 05	Terror.	13	—20 45	—20.7	71 21	171 14	Terror.	13	—47 01	—47.0
59 33	169 55	Terror.	10	—20 06	—20.1	71 22	170 55	Erebus.	10	—43 47	—43.8
60 13	170 25	Erebus.	10	—22 32	—22.5	71 51	171 19	Terror.	12	—45 59	—46.0
60 47	170 51	Erebus.	11	—22 10	—22.2	71 51	171 53	Erebus.	9	—45 06	—45.1
60 26	170 23	Terror.	10	—24 06	—24.1	71 55	172 00	Erebus.	9	—49 47	—49.8
64 16	172 31	Erebus.	9	—25 26	—25.4	72 16	174 09	Erebus.	6	—52 43	—52.7
64 26	173 00	Terror.	9	—25 44	—25.7	72 40	175 17	Terror.	11	—51 03	—51.1
64 40	172 44	Erebus.	8	—25 42	—25.7	73 01	175 55	Erebus.	12	—52 21	—52.3
65 26	172 20	Erebus.	8	—24 53	—24.9	72 36	173 40	Erebus.	5	—48 08	—48.1
65 57	171 45	Erebus.	7	—26 58	—27.0	72 33	172 51	Terror.	8	—48 41	—48.7
65 42	172 13	Terror.	7	—25 31	—25.5	72 36	173 39	Erebus.	8	—51 49	—51.8
66 23	169 51	Erebus.	17	—28 07	—28.1	72 34	172 44	Terror.	8	—53 16	—53.3

\* On shore at Auckland Island.

† Campbell Island.



General Table of the Declinations (continued).

Position.		Ship.	No. of observations.	Declination.		Position.		Ship.	No. of observations.	Declination.	
Lat. S.	Long. E.			In degrees and minutes.	In degrees and decimals.	Lat. S.	Long. E.			In degrees and minutes.	In degrees and decimals.
73° 37'	171° 13'	Erebus.	12	— 65° 05'	— 65° 1'	70° 11'	167° 27'	Erebus.	17	— 39° 12'	— 39° 2'
73° 47'	171° 23'	Terror.	10	— 62° 45'	— 62° 7'	70° 15'	166° 38'	Terror.	10	— 37° 50'	— 37° 8'
74° 01'	171° 42'	Erebus.	10	— 65° 14'	— 65° 2'	69° 19'	167° 46'	Terror.	4	— 34° 09'	— 34° 1'
73° 53'	171° 37'	Terror.	8	— 63° 37'	— 63° 6'	69° 33'	167° 31'	Erebus.	11	— 38° 34'	— 38° 6'
74° 01'	172° 35'	Terror.	5	— 66° 57'	— 66° 9'	67° 27'	167° 43'	Terror.	3	— 42° 08'	— 42° 1'
74° 39'	169° 00'	Erebus.	7	— 71° 04'	— 71° 1'	68° 59'	167° 46'	Erebus.	12	— 36° 00'	— 36° 0'
74° 26'	168° 37'	Terror.	6	— 68° 27'	— 68° 5'	67° 56'	167° 31'	Erebus.	8	— 31° 55'	— 31° 9'
74° 46'	168° 42'	Erebus.	10	— 68° 54'	— 68° 9'	68° 12'	167° 40'	Terror.	4	— 30° 32'	— 30° 5'
75° 04'	168° 40'	Terror.	3	— 84° 03'	— 84° 1'	65° 43'	165° 10'	Erebus.	13	— 28° 44'	— 28° 7'
75° 39'	168° 33'	Erebus.	9	— 85° 32'	— 85° 5'	65° 32'	167° 30'	Terror.	4	— 24° 53'	— 24° 9'
75° 40'	168° 28'	Terror.	6	— 100° 47'	— 100° 8'	65° 50'	164° 39'	Terror.	9	— 28° 04'	— 28° 1'
75° 58'	168° 50'	Terror.	2	— 107° 40'	— 107° 7'	64° 59'	162° 42'	Erebus.	9	— 26° 09'	— 26° 1'
76° 47'	169° 26'	Terror.	2	— 112° 22'	— 112° 4'	65° 34'	162° 08'	Terror.	6	— 24° 15'	— 24° 3'
77° 21'	172° 04'	Terror.	4	— 115° 44'	— 115° 7'	64° 33'	163° 23'	Terror.	10	— 26° 22'	— 26° 4'
77° 41'	175° 57'	Erebus.	7	— 104° 43'	— 104° 7'	64° 10'	163° 14'	Erebus.	11	— 25° 50'	— 25° 8'
77° 47'	176° 20'	Terror.	5	— 102° 44'	— 102° 7'	64° 08'	163° 04'	Terror.	7	— 24° 57'	— 24° 9'
77° 49'	178° 31'	Erebus.	5	— 103° 28'	— 103° 5'	64° 05'	161° 13'	Erebus.	9	— 24° 37'	— 24° 6'
77° 22'	188° 43'	Erebus.	12	— 82° 37'	— 82° 6'	64° 05'	161° 47'	Terror.	7	— 23° 53'	— 23° 9'
77° 04'	188° 28'	Terror.	5	— 83° 12'	— 83° 2'	63° 10'	156° 25'	Erebus.	9	— 23° 48'	— 23° 8'
77° 09'	188° 22'	Erebus.	9	— 91° 28'	— 91° 5'	62° 51'	157° 02'	Terror.	7	— 25° 24'	— 25° 4'
77° 43'	187° 05'	Terror.	8	— 93° 23'	— 93° 4'	63° 51'	151° 49'	Erebus.	12	— 18° 44'	— 18° 7'
77° 35'	186° 40'	Erebus.	9	— 93° 46'	— 93° 8'	63° 50'	151° 35'	Terror.	10	— 17° 59'	— 18° 0'
77° 45'	189° 00'	Terror.	6	— 94° 32'	— 94° 5'	64° 18'	149° 03'	Erebus.	5	— 17° 31'	— 17° 5'
77° 46'	186° 54'	Erebus.	8	— 93° 15'	— 93° 3'	64° 17'	148° 53'	Terror.	7	— 14° 08'	— 14° 1'
77° 51'	186° 38'	Erebus.	10	— 96° 40'	— 96° 7'	65° 03'	142° 47'	Erebus.	2	— 13° 48'	— 13° 8'
77° 44'	186° 06'	Terror.	5	— 97° 00'	— 97° 0'	64° 20'	140° 40'	Erebus.	6	— 6° 25'	— 6° 4'
77° 18'	192° 38'	Erebus.	13	— 82° 06'	— 82° 1'	64° 05'	140° 00'	Terror.	2	— 3° 32'	— 3° 5'
77° 06'	192° 22'	Terror.	13	— 81° 46'	— 81° 8'	63° 13'	139° 50'	Erebus.	12	— 5° 04'	— 5° 1'
77° 11'	192° 59'	Erebus.	6	— 82° 21'	— 82° 3'	63° 08'	139° 35'	Terror.	6	— 3° 42'	— 3° 7'
77° 16'	191° 45'	Erebus.	6	— 83° 57'	— 83° 9'	62° 37'	138° 04'	Erebus.	6	— 3° 47'	— 3° 8'
77° 08'	189° 02'	Erebus.	6	— 82° 02'	— 82° 0'	62° 15'	136° 22'	Erebus.	7	— 0° 23'	— 0° 4'
76° 57'	188° 30'	Terror.	9	— 82° 30'	— 82° 5'	62° 13'	136° 12'	Terror.	5	+ 0° 49'	+ 0° 8'
76° 57'	186° 39'	Erebus.	9	— 83° 15'	— 83° 3'	62° 06'	136° 07'	Erebus.	6	+ 0° 54'	+ 0° 9'
77° 03'	186° 40'	Terror.	10	— 88° 26'	— 88° 4'	60° 22'	131° 28'	Erebus.	25	+ 7° 45'	+ 7° 7'
77° 12'	187° 01'	Erebus.	10	— 88° 20'	— 88° 3'	60° 22'	131° 34'	Terror.	21	— 1° 01'	— 1° 0'
77° 25'	186° 27'	Erebus.	12	— 91° 32'	— 91° 5'	58° 54'	129° 38'	Erebus.	11	+ 8° 14'	+ 8° 2'
77° 36'	186° 42'	Terror.	9	— 92° 04'	— 92° 1'	59° 03'	129° 42'	Terror.	7	+ 9° 08'	+ 9° 1'
77° 49'	187° 32'	Erebus.	12	— 97° 11'	— 97° 2'	57° 21'	127° 46'	Erebus.	10	+ 8° 35'	+ 8° 6'
77° 52'	189° 27'	Erebus.	13	— 93° 38'	— 93° 6'	57° 22'	127° 40'	Terror.	8	— 2° 01'	— 2° 0'
77° 51'	189° 42'	Terror.	7	— 95° 08'	— 95° 1'	56° 14'	130° 44'	Erebus.	8	+ 5° 17'	+ 5° 3'
77° 44'	187° 59'	Erebus.	8	— 93° 31'	— 93° 5'	56° 39'	129° 45'	Terror.	7	+ 6° 13'	+ 6° 2'
76° 39'	188° 27'	Erebus.	5	— 77° 44'	— 77° 7'	55° 11'	131° 21'	Erebus.	14	+ 0° 35'	+ 0° 6'
76° 23'	177° 25'	Erebus.	2	— 84° 55'	— 84° 9'	55° 05'	132° 07'	Terror.	18	+ 0° 59'	+ 1° 0'
76° 25'	177° 34'	Terror.	2	— 88° 44'	— 88° 7'	55° 04'	132° 34'	Erebus.	9	+ 0° 34'	+ 0° 6'
76° 07'	168° 45'	Erebus.	4	— 99° 28'	— 99° 5'	54° 05'	134° 44'	Terror.	11	— 3° 01'	— 3° 0'
76° 31'	166° 31'	Terror.	9	— 122° 41'	— 122° 7'	54° 04'	134° 38'	Erebus.	13	— 2° 04'	— 2° 1'
76° 22'	165° 44'	Erebus.	6	— 119° 17'	— 119° 3'	52° 52'	135° 25'	Erebus.	7	— 1° 33'	— 1° 5'
76° 36'	166° 18'	Erebus.	14	— 113° 24'	— 113° 4'	52° 56'	135° 05'	Terror.	8	— 3° 34'	— 3° 6'
76° 33'	164° 45'	Erebus.	8	— 115° 06'	— 115° 1'	51° 10'	136° 54'	Erebus.	5	— 5° 05'	— 5° 1'
76° 03'	166° 26'	Terror.	6	— 96° 30'	— 96° 5'	51° 15'	136° 49'	Terror.	3	— 5° 29'	— 5° 5'
76° 11'	166° 02'	Erebus.	4	— 99° 05'	— 99° 1'	44° 52'	143° 31'	Erebus.	3	— 6° 02'	— 6° 0'
75° 52'	167° 07'	Erebus.	8	— 95° 32'	— 95° 5'	44° 38'	143° 57'	Terror.	11	— 8° 11'	— 8° 2'
74° 46'	167° 53'	Erebus.	2	— 79° 14'	— 79° 2'	44° 02'	145° 51'	Erebus.	6	— 10° 32'	— 10° 5'
74° 55'	168° 14'	Terror.	5	— 82° 05'	— 82° 1'						

The small letters *a*, *b*, *c*, *d*, and *e* refer to the Subsidiary Table in page 391.

General Table of the Declinations observed on board Her Majesty's Ships 'Erebus' and 'Terror,' between May 1841 and August 1842.

Position.		Ship.	No. of observations.	Declination.		Position.		Ship.	No. of observations.	Declination.	
Lat. S.	Long. E.			In degrees and minutes.	In degrees and decimals.	Lat. S.	Long. E.			In degrees and minutes.	In degrees and decimals.
42° 52'	147° 24'	Erebus.	2	-10° 24'	-10.4	56° 15'	211° 47'	Erebus.	9	-15° 40'	-15.7
43 30	147 20	Terror.	4	-11 59	-12.0	56 20	211 40	Terror.	14	-14 51	-14.9
42 40	148 45	Erebus.	2	- 9 54	- 9.9	56 23	211 58	Erebus.	9	-13 45	-13.7
42 17	149 31	Terror.	5	-12 25	-12.4	56 54	212 23	Erebus.	8	-13 08	-13.1
40 40	149 23	Erebus.	2	-10 17	-10.3	57 03	212 16	Terror.	10	-14 42	-14.7
40 51	149 21	Terror.	5	-11 39	-11.7	57 15	212 45	Erebus.	13	-13 41	-14.7
37 48	150 21	Erebus.	10	-11 27	-11.5	58 25	213 13	Erebus.	12	-14 11	-14.2
37 54	150 20	Terror.	8	-11 13	-11.2	59 25	213 20	Terror.	10	-16 52	-16.9
37 18	151 34	Erebus.	12	- 9 52	- 9.9	62 49	212 00	Erebus.	12	-20 15	-20.3
37 10	151 32	Terror.	10	-11 44	-11.7	62 56	212 07	Terror.	14	-19 55	-19.9
33 51	151 17	Erebus.	1	- 9 52†	- 9.9	63 20	210 22	Erebus.	6	-20 47	-20.8
33 54	153 50	Erebus.	2	- 9 56	- 9.9	63 23	210 05	Erebus.	5	-19 69	-20.0§
33 56	151 00	Terror.	4	-11 29	-11.5	63 23	210 03	Erebus.	19	-20 38	-20.6
33 33	162 01	Erebus.	8	-11 52	-11.9	63 21	209 48	Terror.	17	-20 42	-20.7
33 35	162 47	Terror.	10	-14 24	-14.4	64 29	206 55	Erebus.	11	-21 49	-21.8
33 41	166 26	Erebus.	8	-13 22	-13.4	64 54	206 04	Erebus.	8	-22 39	-22.7
33 48	166 29	Terror.	16	-13 33	-13.5	64 48	206 10	Terror.	9	-22 15	-22.3
33 32	167 35	Erebus.	7	-13 16	-13.3	65 13	205 54	Erebus.	8	-21 48	-21.8
33 22	168 04	Terror.	12	-14 58	-15.0	65 29	205 55	Erebus.	8	-22 35	-22.6
33 42	169 44	Erebus.	11	-12 45	-12.7	65 32	204 57	Terror.	7	-23 51	-23.9
34 15	172 33	Terror.	9	-13 52	-13.9	66 04	203 51	Erebus.	4	-24 06	-24.1
34 31	173 28	Erebus.	11	-13 48	-13.8	66 22	203 40	Erebus.	11	-25 34	-25.6
34 32	173 47	Terror.	5	-13 39	-13.7	66 04	203 16	Erebus.	8	-27 08	-27.1
35 16	174 00	Erebus.	1	-13 36‡	-13.6	66 10	203 37	Terror.	7	-26 40	-26.7
36 40	177 58	Erebus.	11	-14 07	-14.1	66 16	204 39	Erebus.	6	-26 37	-26.6
38 03	179 32	Terror.	10	-14 46	-14.8	66 08	204 20	Erebus.	26	-25 43	-25.7
38 12	179 51	Erebus.	13	-14 23	-14.4	66 02	204 00	Terror.	18	-26 39	-26.7
39 10	182 43	Erebus.	13	-14 31	-14.5	65 58	204 13	Erebus.	24	-25 24	-25.4
39 29	182 42	Terror.	11	-15 44	-15.7	65 58	203 54	Terror.	11	-25 04	-25.1
40 53	183 17	Erebus.	11	-12 36	-12.6	65 58	203 49	Terror.	17	-25 18	-25.3
41 33	183 30	Terror.	15	-14 37	-14.6	65 58	203 28	Erebus.	17	-24 49	-24.8
42 02	183 31	Erebus.	11	-14 09	-14.1	66 00	202 45	Terror.	9	-26 11	-26.2
43 37	183 05	Terror.	4	-14 46	-14.8	65 47	202 13	Erebus.	6	-25 15§	-25.3
46 09	183 43	Erebus.	13	-16 13	-16.2	67 38	204 20	Erebus.	9	-27 47	-27.8
45 29	183 10	Terror.	2	-17 17	-17.3	67 39	204 08	Terror.	11	-28 18	-28.3
47 32	184 52	Erebus.	11	-15 21	-15.3	67 20	202 03	Erebus.	8	-27 13	-27.2
47 27	184 48	Terror.	9	-14 49	-14.8	67 15	202 16	Terror.	9	-27 51	-27.9
48 52	186 47	Erebus.	15	-16 02	-16.0	67 19	201 56	Erebus.	8	-28 53	-28.9
49 23	188 32	Terror.	7	-16 41	-16.7	67 20	201 40	Terror.	11	-28 34	-28.6
49 29	189 00	Erebus.	8	-17 27	-17.5	68 28	200 16	Erebus.	14	-30 09	-30.1
50 02	191 28	Erebus.	12	-18 10	-18.2	68 31	199 59	Terror.	10	-33 08	-33.1
49 57	191 10	Terror.	7	-16 24	-16.4	68 46	199 47	Erebus.	13	-31 40	-31.7
50 51	192 32	Erebus.	6	-17 54	-17.9	68 36	199 43	Terror.	10	-30 59	-31.0
50 53	192 30	Terror.	8	-16 20	-16.3	70 13	186 20	Erebus.	9	-35 23	-35.4
51 39	194 50	Erebus.	18	-15 33	-15.5	70 30	185 25	Terror.	23	-38 13	-38.2
51 55	195 28	Terror.	9	-15 25	-15.4	70 33	185 21	Erebus.	11	-38 40	-38.7
52 43	202 14	Erebus.	10	-13 40	-13.7	70 22	184 32	Erebus.	10	-37 34	-37.6
53 07	205 21	Erebus.	12	-12 44	-12.7	70 13	183 52	Erebus.	11	-35 52	-35.9
53 08	205 11	Terror.	10	-14 20	-14.3	70 14	184 00	Terror.	17	-36 54	-36.9
54 54	209 24	Erebus.	8	-14 09	-14.1	71 04	180 46	Terror.	5	-40 46	-40.8

\* Declinometers at the Observatory.

‡ Bay of Islands.

† Magnetometers on shore.

§ Observed on ice.

General Table of Declinations (continued).

Position.		Ship.	No. of observations.	Declination.		Position.		Ship.	No. of observations.	Declination.	
Lat. S.	Long. E.			In degrees and minutes.	In degrees and decimals.	Lat. S.	Long. E.			In degrees and minutes.	In degrees and decimals.
72° 10'	180° 58'	Erebus.	1	—45° 43'	—45·7	60° 20'	205° 12'	Terror.	4	—18° 02'	—18·0
73 14	181 08	Terror.	2	—50 11	—50·2	60 16	212 59	Erebus.	4	—17 03	—17·1
75 06	173 14	Erebus.	3	—77 41	—77·7	60 05	213 52	Terror.	6	—17 05	—17·1
75 40	174 56	Terror.	5	—79 09	—79·1	58 59	220 29	Erebus.	6	—15 16	—15·3
76 48	182 33	Erebus.	6	—86 51	—86·9	58 50	222 00	Terror.	4	—15 34	—15·6
76 54	182 17	Terror.	4	—79 15	—79·3	59 04	229 00	Erebus.	4	—17 23	—17·4
76 39	194 04	Terror.	10	—79 22	—79·4	58 58	227 00	Terror.	1	—16 31	—16·5
76 40	194 37	Erebus.	10	—79 34	—79·6	60 14	236 32	Erebus.	3	—20 34	—20·6
77 44	198 07	Erebus.	10	—87 15	—87·3	60 14	237 30	Terror.	4	—20 44	—20·7
78 03	197 31	Erebus.	10	—88 40	—88·7	59 17	245 40	Erebus.	1	—20 11	—20·2
77 54	198 08	Terror.	9	—87 04	—87·1	58 40	251 52	Erebus.	3	—21 30	—21·5
74 45	193 57	Erebus.	6	—60 03	—60·1	58 28	251 40	Terror.	4	—22 28	—22·5
74 44	193 52	Terror.	4	—59 14	—59·2	58 41	254 59	Erebus.	4	—23 14	—23·2
71 56	186 36	Erebus.	2	—44 47	—44·8	58 36	255 20	Terror.	7	—24 27	—24·5
71 08	184 54	Erebus.	5	—38 20	—38·3	58 46	258 07	Erebus.	3	—25 11	—25·2
70 58	184 03	Terror.	3	—37 29	—37·5	58 48	259 04	Terror.	4	—27 04	—27·1
69 50	180 16	Erebus.	12	—31 04	—31·1	59 01	268 34	Erebus.	9	—26 19	—26·3
70 10	180 20	Terror.	3	—30 53	—30·9	59 03	270 00	Terror.	11	—26 11	—26·2
68 07	183 42	Erebus.	12	—27 41	—27·7	59 02	272 04	Erebus.	1	—26 57	—26·9
68 01	183 35	Terror.	4	—28 45	—28·7	58 51	276 04	Erebus.	5	—26 24	—26·4
67 25	186 42	Erebus.	4	—27 08	—27·1	58 55	276 26	Terror.	7	—28 46	—28·8
67 30	185 00	Terror.	7	—29 24	—29·4	58 20	280 27	Erebus.	5	—25 17	—25·3
67 19	187 25	Terror.	2	—23 47	—23·8	58 21	279 48	Terror.	10	—27 30	—27·5
65 07	192 24	Erebus.	7	—24 04	—24·1	58 30	282 05	Erebus.	8	—26 17	—26·3
65 06	191 55	Terror.	4	—25 54	—25·9	58 30	282 00	Terror.	10	—27 22	—27·4
63 33	194 53	Erebus.	1	—21 06	—21·1	58 30	282 30	Terror.	5	—27 18	—27·3
62 20	196 15	Erebus.	5	—19 54	—19·9	58 32	283 40	Erebus.	7	—26 46	—26·8
62 26	195 40	Terror.	4	—19 55	—19·9	58 14	286 11	Terror.	4	—25 52	—25·9
60 57	199 31	Erebus.	8	—18 43	—18·7	56 46	294 30	Terror.	2	—20 50	—20·8
61 00	199 00	Terror.	4	—19 34	—19·6	52 16	301 06	Erebus.	6	—16 41	—16·7
60 29	203 40	Erebus.	4	—17 13	—17·2	52 14	301 09	Terror.	4	—18 12	—18·2

The small letter, *f*, refers to the Subsidiary Table which follows.

Subsidiary Table ; comprising “Groups” in Latitudes exceeding 75° S.

Group.	Lat. S.	Long. E.	Ship.	No. of observations.	Declination.	Group.	Lat. S.	Long. E.	Ship.	No. of observations.	Declination.
<i>a</i>	76° 50'	173° 22'	Erebus.	21	96·2	<i>d</i>	77° 51'	188° 59'	Erebus.	25	95·3
<i>a</i>	76 30	171 03	Terror.	22	103·3	<i>d</i>	77 39	187 00	Terror.	9	93·7
<i>b</i>	77 16	188 34	Erebus.	21	86·4	<i>d</i>	77 11	186 44	Erebus.	15	87·1
<i>b</i>	77 36	187 40	Terror.	24	92·3	<i>e</i>	76 32	165 44	Erebus.	28	115·2
<i>b</i>	77 44	186 43	Erebus.	27	94·7	<i>e</i>	76 20	166 29	Terror.	15	112·2
<i>c</i>	77 16	192 45	Erebus.	19	82·1	<i>e</i>	76 00	167 15	Erebus.	16	97·6
<i>c</i>	77 02	190 47	Terror.	22	82·1	<i>f</i>	76 13	178 12	Terror.	9	79·2
<i>c</i>	77 06	188 47	Erebus.	21	83·1	<i>f</i>	76 28	187 26	Erebus.	19	81·6
<i>d</i>	77 19	186 41	Terror.	19	90·1	<i>f</i>	77 15	196 00	Terror.	19	83·0
<i>d</i>	77 19	186 44	Erebus.	22	90·0	<i>f</i>	77 53	197 49	Erebus.	20	88·0

General Table of the Declinations observed on board Her Majesty's Ships 'Erebus' and 'Terror,' between September 1842 and April 1843.

Position.		Ship.	No. of observations.	Declination.		Position.		Ship.	No. of observations.	Declination.	
Lat. S.	Long. E.			In degrees and minutes.	In degrees and decimals.	Lat. S.	Long. E.			In degrees and minutes.	In degrees and decimals.
51° 32'	301° 53'	Erebus.	1	-17° 36'	-17°·6*	64° 09'	303° 03'	Erebus.	4	-21° 32'	-21°·5
54 10	305 35	Terror.	2	-16 02	-16·0	64 38	303 30	Terror.	5	-22 50	-22·8
53 55	304 19	Erebus.	3	-18 18	-18·3	64 42	303 20	Terror.	2	-24 08	-24·1
53 54	304 25	Terror.	3	-19 55	-19·9	64 30	303 00	Erebus.	3	-23 00	-23·0
55 07	300 19	Terror.	2	-21 39	-21·7	64 44	303 12	Erebus.	8	-22 03	-22·1
55 41	296 41	Terror.	3	-23 54	-23·9	64 44	303 10	Erebus.	3	-21 13	-21·2†
56 07	292 53	Terror.	4	-22 21	-22·3	64 41	302 52	Terror.	3	-23 52	-23·9§
55 39	295 23	Erebus.	4	-24 03	-24·1	64 40	303 06	Erebus.	5	-23 32	-23·5
55 42	295 20	Terror.	6	-24 50	-24·8	64 40	302 07	Terror.	2	-24 37	-24·6
55 33	299 12	Erebus.	8	-21 29	-21·5	64 38	302 40	Terror.	2	-24 07	-24·1†
55 29	299 03	Terror.	11	-24 06	-24·1	64 39	302 36	Erebus.	5	-23 04	-23·1
54 32	299 53	Terror.	5	-22 04	-22·1	64 41	302 36	Terror.	6	-24 30	-24·5
54 53	299 59	Erebus.	5	-21 10	-21·2	64 39	302 36	Erebus.	1	-22 14	-22·2†
52 43	301 12	Terror.	12	-21 15	-21·3	64 36	302 38	Erebus.	7	-23 11	-23·2
53 04	300 51	Erebus.	1	-19 48	-19·8	64 31	302 36	Erebus.	4	-23 37	-23·6
52 04	302 47	Erebus.	5	-18 03	-18·1	64 32	302 55	Terror.	4	-23 31	-23·5
52 46	303 12	Terror.	4	-19 41	-19·7	64 25	304 46	Erebus.	8	-21 17	-21·3
52 50	303 12	Erebus.	6	-18 29	-18·5	64 03	305 10	Terror.	8	-22 23	-22·4
53 50	303 49	Terror.	2	-20 22	-20·4	64 20	306 00	Terror.	5	-21 30	-21·5
53 56	303 52	Erebus.	6	-17 35	-17·6	64 19	304 20	Erebus.	8	-21 49	-21·8
55 45	305 17	Terror.	6	-20 12	-20·2	64 17	304 42	Terror.	4	-21 49	-21·8
55 46	305 17	Erebus.	7	-18 47	-18·8	64 14	303 50	Erebus.	11	-20 56	-20·9
56 36	306 38	Erebus.	5	-17 47	-17·8	64 09	304 10	Terror.	5	-22 30	-22·5
56 54	306 41	Terror.	4	-21 09	-21·1	64 04	304 18	Erebus.	11	-20 49	-20·8
56 28	306 45	Erebus.	2	-17 59	-18·0	64 05	303 55	Terror.	6	-22 27	-22·5
58 29	308 13	Erebus.	7	-18 03	-18·1	64 08	304 12	Erebus.	4	-21 07	-21·1
58 25	308 00	Terror.	7	-20 06	-20·1	64 04	303 58	Erebus.	6	-21 37	-21·6
59 28	308 20	Terror.	3	-21 29	-21·5	64 00	304 22	Terror.	5	-23 02	-23·0
59 34	308 28	Erebus.	5	-17 56	-17·9	64 08	303 47	Erebus.	12	-21 53	-21·9
62 00	307 52	Terror.	2	-20 22	-20·4	64 09	303 57	Terror.	7	-22 13	-22·2
62 18	308 03	Erebus.	5	-18 24	-18·4	63 53	304 51	Erebus.	8	-20 36	-20·6
62 31	308 05	Terror.	2	-23 50	-23·8	64 12	305 20	Terror.	10	-21 56	-21·9
62 20	308 12	Terror.	5	-22 43	-22·7	64 16	305 23	Erebus.	4	-20 37	-20·6
62 54	305 41	Erebus.	8	-20 16	-20·3	64 10	309 30	Terror.	10	-19 58	-20·0
62 39	306 12	Terror.	22	-21 41	-21·7	64 44	315 41	Erebus.	4	-14 00	-14·0
63 47	304 52	Erebus.	5	-22 19	-22·3	64 37	315 51	Erebus.	7	-13 51	-13·9
63 40	304 45	Terror.	1	-21 15	-21·3	64 31	316 22	Erebus.	3	-13 49	-13·8
63 51	304 24	Terror.	5	-23 04	-23·1	64 41	316 00	Terror.	9	-16 25	-16·4
64 14	304 21	Erebus.	5	-20 56	-20·9	64 50	316 41	Terror.	10	-15 32	-15·5
64 17	304 17	Terror.	7	-21 34	-21·6	64 40	316 50	Erebus.	12	-13 46	-13·8
64 26	303 52	Erebus.	5	-22 51	-22·9	65 04	318 29	Terror.	8	-14 27	-14·5
64 26	304 20	Erebus.	2	-20 50	-20·8†	65 06	318 20	Erebus.	6	-13 20	-13·3
64 35	303 47	Erebus.	6	-23 51	-23·9	65 13	319 20	Erebus.	3	-12 47	-12·8
64 33	304 05	Terror.	13	-22 23	-22·4	63 58	321 43	Terror.	7	-10 25	-10·4
64 31	304 28	Erebus.	7	-21 50	-21·8	63 56	321 58	Erebus.	10	-9 20	-9·3
64 11	303 50	Terror.	9	-22 11	-22·2	62 38	328 00	Terror.	8	-7 37	-7·6
64 20	304 34	Erebus.	7	-20 08	-20·1	62 50	328 20	Erebus.	3	-7 54	-7·9
64 04	304 41	Erebus.	4	-20 44	-20·7	62 37	328 30	Erebus.	7	-2 50	-2·8
64 20	303 12	Terror.	7	-24 02	-24·0	62 16	330 30	Terror.	3	-6 30	-6·5
64 20	304 28	Erebus.	3	-19 19	-19·3	62 20	330 30	Erebus.	8	-4 41	-4·7

\* Magnetometers on shore at Port Louis.

† On ice: mean of 3 of KATER's compasses.

† On ice.

§ On ice: mean of 3 compasses.

General Table of the Declinations (continued).

Position.		Ship.	No. of observations.	Declination.		Position.		Ship.	No. of observations.	Declination.	
Lat. S.	Long. E.			In degrees and minutes.	In degrees and decimals.	Lat. S.	Long. E.			In degrees and minutes.	In degrees and decimals.
62° 06'	333° 43'	Erebus.	8	— 3° 41'	— 3° 7'	61° 16'	349° 00'	Terror.	4	+ 7° 16'	+ 7° 3'
62° 09'	332° 58'	Terror.	15	— 2° 38'	— 2° 6'	57° 46'	351° 52'	Erebus.	5	+ 11° 17'	+ 11° 3'
61° 55'	333° 48'	Erebus.	16	— 3° 38'	— 3° 6'	57° 30'	351° 40'	Terror.	9	+ 10° 36'	+ 10° 6'
61° 36'	336° 20'	Erebus.	10	— 0° 44'	— 0° 7'	57° 22'	352° 12'	Erebus.	7	+ 13° 10'	+ 13° 2'
61° 32'	335° 33'	Terror.	6	— 0° 44'	— 0° 7'	57° 16'	352° 54'	Terror.	12	+ 11° 24'	+ 11° 4'
62° 24'	343° 58'	Erebus.	8	+ 4° 40'	+ 4° 7'	57° 10'	352° 53'	Erebus.	8	+ 12° 28'	+ 12° 5'
62° 18'	343° 44'	Erebus.	12	+ 3° 39'	+ 3° 7'	57° 04'	352° 52'	Erebus.	4	+ 14° 57'	+ 14° 9'
62° 52'	344° 33'	Erebus.	7	+ 4° 40'	+ 4° 7'	56° 42'	353° 40'	Terror.	2	+ 11° 22'	+ 11° 4'
64° 04'	345° 07'	Terror.	4	+ 4° 17'	+ 4° 3'	56° 34'	353° 50'	Erebus.	3	+ 13° 46'	+ 13° 8'
64° 04'	345° 16'	Erebus.	4	+ 5° 07'	+ 5° 1'	55° 56'	355° 38'	Erebus.	4	+ 13° 19'	+ 13° 3'
64° 24'	349° 04'	Terror.	4	+ 4° 46'	+ 4° 8'	55° 58'	355° 30'	Terror.	3	+ 12° 59'	+ 13° 0'
65° 08'	349° 50'	Erebus.	7	+ 7° 02'	+ 7° 0'	54° 28'	357° 45'	Erebus.	2	+ 16° 48'	+ 16° 8'
65° 01'	349° 04'	Terror.	8	+ 5° 58'	+ 6° 0'	54° 30'	357° 50'	Terror.	1	+ 13° 52'	+ 13° 9'
66° 00'	351° 00'	Terror.	6	+ 8° 12'	+ 8° 2'	54° 06'	359° 38'	Erebus.	6	+ 17° 11'	+ 17° 2'
66° 01'	353° 00'	Erebus.	5	+ 9° 06'	+ 9° 1'	54° 18'	359° 38'	Terror.	8	+ 14° 49'	+ 14° 8'
67° 12'	350° 36'	Terror.	6	+ 7° 08'	+ 7° 1'	50° 00'	9° 35'	Erebus.	4	+ 24° 12'	+ 24° 2'
67° 04'	350° 39'	Erebus.	7	+ 8° 56'	+ 8° 9'	48° 12'	10° 29'	Terror.	6	+ 24° 15'	+ 24° 3'
68° 00'	348° 21'	Erebus.	7	+ 6° 34'	+ 6° 6'	47° 50'	10° 54'	Erebus.	5	+ 25° 27'	+ 25° 5'
68° 08'	348° 10'	Terror.	13	+ 4° 15'	+ 4° 3'	43° 36'	13° 47'	Terror.	7	+ 26° 59'	+ 27° 0'
68° 18'	347° 20'	Erebus.	7	+ 5° 37'	+ 5° 6'	43° 49'	13° 38'	Erebus.	3	+ 29° 28'	+ 29° 5'
68° 32'	347° 09'	Erebus.	2	+ 4° 43'	+ 4° 7'	43° 15'	14° 40'	Erebus.	11	+ 28° 25'	+ 28° 4'
68° 30'	346° 50'	Terror.	6	+ 4° 15'	+ 4° 3'	41° 51'	15° 03'	Terror.	2	+ 27° 29'	+ 27° 5'
69° 36'	345° 18'	Erebus.	4	+ 3° 05'	+ 3° 1'	41° 43'	15° 10'	Erebus.	7	+ 29° 01'	+ 29° 0'
69° 42'	345° 20'	Terror.	7	+ 1° 53'	+ 1° 9'	39° 52'	16° 04'	Terror.	5	+ 26° 53'	+ 26° 9'
70° 55'	343° 30'	Erebus.	6	+ 2° 24'	+ 2° 4'	39° 43'	15° 45'	Erebus.	5	+ 28° 29'	+ 28° 5'
70° 43'	343° 12'	Terror.	11	+ 2° 23'	+ 2° 4'	38° 26'	16° 39'	Terror.	4	+ 27° 44'	+ 27° 7'
70° 24'	341° 56'	Terror.	3	— 2° 06'	— 2° 1'	37° 50'	16° 35'	Erebus.	2	+ 29° 28'	+ 29° 5'
70° 33'	343° 18'	Erebus.	2	+ 3° 23'	+ 3° 4'	36° 15'	16° 31'	Terror.	3	+ 28° 48'	+ 28° 8'
56° 10'	346° 40'	Terror.	3	+ 5° 35'	+ 5° 6'	35° 50'	16° 29'	Erebus.	11	+ 30° 02'	+ 30° 0'
64° 29'	346° 02'	Erebus.	4	+ 4° 25'	+ 4° 4'	35° 26'	16° 14'	Terror.	3	+ 28° 04'	+ 28° 1'
64° 06'	346° 15'	Terror.	7	+ 5° 29'	+ 5° 5'	35° 01'	17° 08'	Erebus.	5	+ 30° 32'	+ 30° 5'
61° 16'	348° 56'	Erebus.	4	+ 8° 59'	+ 9° 0'						

General Table of the Declinations observed on board Her Majesty's hired Bark 'Pagoda.'

Lat. S.	Long. E.	No. of observations.	Declination.		Lat. S.	Long. E.	No. of observations.	Declination.	
			In degrees and minutes.	In degrees and decimals.				In degrees and minutes.	In degrees and decimals.
34 42	17 36	4	+29 51	+29.9	38 40	116 17	4	+6 56	+6.9
35 26	15 08	4	+28 39	-28.7	36 51	116 36	3	+4 31	+4.5
35 17	14 00	3	+27 15	+27.3	36 10	116 43	8	+4 52	+4.9
35 10	13 25	3	+25 40	+25.7	35 12	117 41	5	+6 20	+6.3
38 43	14 25	1	+25 09	+25.1	35 28	117 04	1	+6 55	+6.9
39 18	14 28	11	+28 20	+28.3	35 02	117 56	3	+5 33*	+5.5
40 15	14 35	11	+27 40	+27.7	35 10	118 06	1	+5 57	+5.9
44 45	13 19	4	+26 34	+26.6	35 42	115 40	1	+5 59	+6.0
46 24	13 34	3	+25 54	+25.9	35 33	114 42	3	+5 41	+5.7
48 27	10 51	4	+24 50	-24.8	34 18	113 12	4	+6 37	+6.6
50 45	10 18	8	+23 55	+23.9	32 42	111 43	5	+6 36	+6.6
51 47	9 34	17	+23 37	+23.6	30 25	109 07	4	+7 20	+7.3
52 56	7 53	4	+23 46	+23.8	29 20	106 55	2	+6 30	+6.5
53 52	6 12	12	+21 34	+21.6	27 41	106 35	2	+6 33	+6.5
55 29	5 54	3	+21 23	+21.4	26 10	105 16	3	+5 30	+5.5
59 02	4 09	4	+17 30	+17.5	24 07	102 28	2	+5 32	+5.5
61 12	9 30	10	+20 29	+20.5	23 58	99 21	4	+5 14	+5.2
62 03	12 45	4	+22 07	+22.1	24 01	97 34	4	+7 08	+7.1
61 54	16 40	8	+23 11	+23.2	23 56	95 46	6	+6 10	+6.2
61 49	19 13	27	+26 16	+26.3	24 17	94 06	4	+5 31	+5.5
62 05	20 58	9	+28 05	+28.1	24 05	92 11	1	+6 34	+6.6
63 18	21 10	6	+28 56	+28.9	22 46	90 40	9	+5 56	+5.9
64 25	25 05	9	+30 24	+30.4	21 53	89 42	2	+4 23	+4.4
65 43	28 33	11	+31 37	+31.6	20 46	88 06	5	+4 45	+4.7
66 26	37 25	3	+35 39	+35.7	20 37	85 32	3	+5 20	+5.3
66 55	38 32	5	+37 43	+37.7	20 25	82 32	5	+5 08	+5.1
67 34	39 41	7	+38 13	+38.2	20 36	79 20	7	+4 43	+4.7
66 41	39 22	3	+37 18	+37.3	20 44	78 34	21	+5 29	+5.5
67 06	40 03	5	+36 59	+37.0	20 39	77 45	3	+5 22	+5.4
67 01	40 30	2	+37 12	+37.2	20 28	76 23	3	+6 01	+6.0
64 52	38 37	5	+36 38	+36.6	20 45	73 20	1	+5 54	+5.9
64 52	40 12	6	+36 54	+36.9	20 27	70 49	2	+6 35	+6.6
64 22	40 49	2	+36 32	+36.5	20 34	69 37	2	+6 07	+6.1
63 57	41 37	3	+37 34	+37.6	20 58	68 12	5	+8 00	+8.0
63 22	45 31	6	+39 39	+39.7	21 11	67 54	3	+6 34	+6.6
63 37	47 01	7	+40 03	+40.1	21 12	67 29	2	+7 37	+7.6
63 43	49 29	2	+39 21	+39.3	21 01	66 24	3	+7 46	+7.8
61 33	53 40	6	+40 30	+40.5	20 39	63 01	2	+8 27	+8.5
61 18	57 41	6	+41 57	+41.9	20 30	59 42	3	+9 44	+9.7
61 04	63 45	4	+45 17	+45.3	19 54	57 55	1	+9 27	+9.5
61 43	69 36	1	+45 51	+45.9	20 09	57 31	2	+9 44†	+9.7
62 10	72 25	7	+46 01	+46.0	20 50	55 32	2	+11 15	+11.3
62 46	76 30	11	+50 35	+50.6	21 54	53 00	4	+13 44	+13.7
63 05	80 20	1	+52 17	+52.3	23 44	51 48	3	+14 22	+14.4
61 41	85 20	7	+47 19	+47.3	25 47	49 40	2	+15 09	+15.1
60 50	87 41	3	+47 47	+47.8	26 30	49 20	3	+16 23	+16.4
61 23	91 26	10	+49 28	+49.5	27 12	46 02	5	+20 25	+20.4
61 16	91 43	7	+49 02	+49.0	28 19	43 07	3	+21 19	+21.3
60 46	92 20	6	+48 01	+48.0	28 49	42 07	4	+21 57	+21.9
60 03	95 15	4	+44 53	+44.9	28 36	40 14	5	+22 34	+22.6
59 22	100 31	7	+41 02	+41.0	28 57	37 49	7	+23 37	+23.6
58 31	98 59	1	+39 50	+39.8	30 18	35 55	2	+26 29	+26.5
58 30	98 32	3	+40 37	+40.6	30 30	33 42	6	+27 28	+27.5
56 53	101 15	2	+37 37	+37.6	30 35	33 13	1	+25 09	+25.1
55 42	103 15	3	+32 54	+32.9	31 09	31 31	9	+26 46	+26.8
54 45	106 17	6	+29 24	+29.4	32 54	29 49	4	+28 44	+28.7
54 05	108 15	2	+26 34	+26.6	34 44	26 50	9	+28 41	+28.7
53 12	110 24	6	+21 52	+21.9	35 39	23 35	5	+29 26	+29.4
49 05	112 47	10	+17 09	+17.1	35 40	21 37	2	+29 16	+29.3
46 32	115 54	1	+12 02	+12.0	35 06	20 46	1	+27 56	+27.9
44 59	116 53	2	+9 43	+9.7	35 08	20 24	2	+28 47	+28.8
43 41	116 57	6	+7 04	+7.1	34 55	19 33	3	+28 57	+28.9
41 02	116 42	3	+4 10	+4.2	34 12	18 27	16	+29 15	+29.3

\* On shore at King George's Sound.

† On shore at Port Louis, Mauritius.

General Table of the Inclinations observed in Her Majesty's Ship 'Erebus' with Needle F 1, from the Cape of Good Hope to Kerguelen Island, and from Kerguelen Island to Hobarton, between April 1840 and August of the same year.

Position.		No. of observations.	Inclination.		Position.		No. of observations.	Inclination.	
Lat. S.	Long. E.		In degrees and minutes.	In degrees and decimals.	Lat. S.	Long. E.		In degrees and minutes.	In degrees and decimals.
35 14	18 27	2	-54 32	-54.5	47 40	62 25	2	-69 37	-69.6
35 48	18 47	4	-54 18	-54.3	48 32	69 24	6	-70 59	-71.0
36 00	19 00	2	-55 24	-55.4	48 41	68 54	9	-70 00	-70.0*
36 07	20 55	2	-55 50	-55.8	48 29	76 55	2	-71 08	-71.1
36 29	21 16	4	-55 38	-55.6	48 17	80 15	2	-72 09	-72.1
37 19	21 37	5	-56 03	-56.1	47 55	83 00	2	-72 49	-72.8
38 11	22 00	2	-55 35	-55.6	47 46	86 18	2	-73 48	-73.8
40 05	20 38	2	-56 33	-56.5	47 12	89 45	2	-73 51	-73.9
40 29	22 22	2	-57 28	-57.5	47 03	93 00	2	-74 53	-74.9
41 24	25 00	4	-58 21	-58.3	47 39	102 42	2	-74 46	-74.8
41 47	26 38	2	-58 43	-58.7	47 35	106 26	2	-74 48	-74.8
43 04	28 40	5	-59 34	-59.6	47 45	110 39	2	-75 25	-75.4
44 19	31 06	2	-60 52	-60.9	47 34	114 15	2	-75 33	-75.5
45 40	34 08	2	-62 23	-62.4	47 41	121 30	2	-76 22	-76.4
46 59	37 14	2	-64 00	-64.0	47 34	124 43	2	-76 58	-77.0
47 00	38 14	2	-64 30	-64.5	46 44	128 26	2	-75 58	-76.0
46 46	42 23	3	-65 47	-65.8	46 13	132 00	2	-75 35	-75.6
47 01	46 10	2	-66 36	-66.6	45 59	135 38	2	-74 05	-74.1
46 41	50 52	2	-67 41	-67.7	45 17	139 19	2	-73 38	-73.6
46 17	52 04	2	-67 10	-67.2	44 24	141 39	2	-72 55	-72.9
46 25	52 01	4	-67 30	-67.5	44 16	142 38	2	-73 19	-73.3
46 57	55 34	2	-68 12	-68.2	42 52	147 24	12	-70 38	-70.6†
47 19	59 10	4	-68 42	-68.7					

\* On shore at Kerguelen Island.

† On shore at Van Diemen Island.

General Table of the Observations of the Inclination between the Cape of Good Hope and Van Diemen Island, by Lieut. ALEXANDER SMITH, R.N., 1844.

Lat. S.	Long. E.	Inclination, in degrees and minutes.	In degrees, and decimals of a degree.	Lat. S.	Long. E.	Inclination, in degrees and minutes.	In degrees, and decimals of a degree.
38 00	4 20	-52 00	-52.0	38 48	77 50	-67 14	-67.2
38 28	7 45	-53 03	-53.1	39 04	79 45	-67 17	-67.3
39 06	12 00	-55 42	-55.7	39 58	84 00	-67 43	-67.7
39 42	15 44	-57 06	-57.1	40 06	87 00	-68 13	-68.2
39 33	23 05	-59 32	-59.5	40 06	90 52	-68 41	-68.7
39 33	26 52	-61 47	-61.8	40 02	95 10	-69 08	-69.1
39 50	28 36	-62 08	-62.1	39 52	99 22	-69 00	-69.0
40 01	32 22	-62 56	-62.9	39 54	102 00	-69 00	-69.0
40 32	36 40	-64 09	-64.1	40 08	105 55	-69 22	-69.4
41 06	41 40	-64 42	-64.7	40 31	109 06	-70 02	-70.0
41 00	46 13	-65 19	-65.3	41 16	113 25	-70 30	-70.5
40 43	49 12	-66 08	-66.1	41 54	117 40	-71 20	-71.3
40 56	53 30	-66 25	-66.4	41 58	119 00	-71 33	-71.5
39 34	60 55	-67 27	-67.5	42 17	122 30	-71 45	-71.7
39 00	65 44	-67 19	-67.3	42 35	125 40	-72 08	-72.1
38 31	68 45	-66 45	-66.7	43 00	129 36	-72 08	-72.1
38 22	70 10	-67 06	-67.1	43 16	133 44	-72 13	-72.2
38 08	73 35	-66 45	-66.7	43 28	137 10	-71 55	-71.9
38 10	75 22	-66 42	-66.7	44 06	141 37	-72 14	-72.2
38 25	76 44	-66 54	-66.9				



General Table of the Observations of the Inclination between Van Diemen Island and the Cape of Good Hope, by Lieut. JOSEPH DAYMAN, R.N., 1844 and 1845.

Lat. S.	Long. E.	Inclination, in degrees and minutes.	In degrees, and decimals of a degree.	Lat. S.	Long. E.	Inclination, in degrees and minutes.	In degrees, and decimals of a degree.
Hobarton Observatory.		-70° 40'	-70°·7	23° 11'	95° 40'	-53° 44'	-53°·7
44 48	144 51	-71 36	-71°·6	22 54	93 48	-53 26	-53°·4
44 30	143 56	-70 50	-70°·8	22 19	91 16	-53 11	-53°·2
44 34	142 51	-71 31	-71°·5	22 17	89 57	-53 11	-53°·2
44 34	139 37	-73 11	-73°·2	22 11	86 30	-53 20	-53°·3
43 21	138 37	-70 33	-70°·5	22 08	84 17	-53 52	-53°·9
42 24	137 18	-70 42	-70°·7	22 34	80 10	-54 23	-54°·4
41 46	133 26	-70 40	-70°·7	22 35	78 08	-54 26	-54°·4
41 24	129 30	-70 22	-70°·4	22 38	76 10	-54 45	-54°·7
42 08	128 45	-71 11	-71°·2	22 28	74 18	-54 41	-54°·7
40 05	128 23	-70 08	-70°·1	22 33	72 00	-55 04	-55°·1
39 25	124 04	-69 40	-69°·7	22 41	69 54	-55 54	-55°·9
38 00	123 38	-68 21	-68°·3	23 52	64 59	-56 52	-56°·9
38 21	122 46	-67 27	-67°·5	24 23	62 54	-57 57	-57°·9
37 52	122 29	-67 39	-67°·7	24 50	61 11	-58 15	-58°·3
37 14	121 58	-67 07	-67°·1	24 43	59 46	-57 59	-58°·0
37 13	120 40	-68 06	-68°·1	24 36	58 37	-58 17	-58°·3
36 28	118 57	-67 08	-67°·1	24 45	57 03	-59 13	-59°·2
35 22	117 46	-65 53	-65°·9	25 13	51 29	-58 34	-58°·6
36 42	118 35	-67 03	-67°·1	25 42	49 06	-58 43	-58°·7
36 58	117 38	-67 19	-67°·3	26 54	45 47	-58 41	-58°·7
36 06	116 42	-66 27	-66°·5	28 15	42 18	-59 37	-59°·6
36 24	115 33	-66 44	-66°·7	29 21	39 06	-60 01	-60°·0
37 00	115 10	-66 35	-66°·6	30 10	36 17	-59 08	-59°·1
35 46	114 14	-65 48	-65°·8	31 19	32 21	-58 32	-58°·5
34 58	112 59	-65 16	-65°·3	32 17	29 34	-58 16	-58°·3
33 47	111 04	-63 23	-63°·4	34 02	26 53	-57 23	-57°·4
32 37	108 24	-62 18	-62°·3	34 35	25 31	-56 45	-56°·7
29 40	105 28	-59 37	-59°·6	34 36	25 23	-56 35	-56°·6
28 04	105 06	-58 33	-58°·5	34 40	24 16	-56 32	-56°·5
26 44	104 26	-56 54	-56°·9	34 04	22 45	-56 43	-56°·7
25 52	102 58	-55 50	-55°·8	34 29	21 44	-55 36	-55°·6
24 50	101 31	-54 44	-54°·7	34 48	19 33	-54 50	-54°·8
24 00	99 33	-54 20	-54°·3				

General Table of the Magnetic Inclinations observed in Her Majesty's Ships 'Erebus' and 'Terror,' between November 13, 1840 and April 6, 1841.

Ship.	Lat. S.	Long. E.	No. of observations.	Inclination.	In degrees, and decimals of a degree.	Ship.	Lat. S.	Long. E.	No. of observations.	Inclination.	In degrees, and decimals of a degree.
Erebus.	44° 16'	149° 29'	3	-70° 56'	-70.9	Erebus.	70° 23'	174° 50'	4	-85° 02'	-85.0
Erebus.	45 13	151 57	3	-72 03	-72.1	Terror.	71 15	171 38	1	-85 52	-85.9
Erebus.	45 33	152 45	3	-71 53	-71.9	Erebus.	71 20	171 00	8	-85 52	-85.9
Erebus.	46 18	154 30	3	-72 19	-72.3	Erebus.	71 47	170 52	3	-86 43	-86.7
Erebus.	47 46	157 40	3	-73 29	-73.5	Terror.	71 54	171 00	1	-85 26	-85.4
Erebus.	49 20	160 13	3	-74 32	-74.5	Erebus.	72 07	172 19	4	-86 43	-86.7
Erebus.	50 28	164 09	3	-74 40	-74.7	Terror.	72 12	171 47	1	-86 12	-86.2
Erebus.	50 33	166 19	3	-73 24*	-73.4	Erebus.	71 53	172 00	6	-86 26	-86.4
Erebus.	52 34	169 10	8	-74 20†	-74.3	Terror.	71 54	172 56	1	-86 19	-86.3
Erebus.	54 06	169 09	4	-74 57	-74.9	Terror.	71 52	171 20	1	-86 42	-86.7
Terror.	55 40	169 38	1	-76 23	-76.4	Erebus.	72 10	172 54	7	-86 42	-86.7
Erebus.	55 50	170 06	3	-76 23	-76.4	Terror.	72 12	171 49	1	-86 47	-86.8
Erebus.	57 35	170 32	6	-77 55	-77.9	Terror.	72 08	173 39	1	-86 15	-86.3
Terror.	58 54	170 50	1	-78 25	-78.4	Erebus.	72 57	176 06	5	-86 40	-86.7
Erebus.	58 57	170 57	4	-78 09	-78.1	Terror.	72 54	176 27	1	-86 21	-86.3
Terror.	59 38	169 51	1	-78 56	-78.9	Erebus.	72 33	173 36	8	-87 00	-87.0
Erebus.	59 44	169 40	6	-78 47	-78.8	Terror.	72 32	173 10	1	-87 18	-87.3
Erebus.	60 14	170 15	3	-78 59	-79.0	Erebus.	73 58	171 11	15	-87 30	-87.5
Erebus.	60 38	170 38	8	-79 09	-79.1	Terror.	73 45	171 41	2	-87 22	-87.4
Erebus.	61 34	170 40	3	-79 36	-79.6	Erebus.	73 56	171 35	8	-87 14	-87.2
Erebus.	62 07	172 54	4	-79 49	-79.8	Terror.	74 15	171 20	2	-87 27	-87.5
Terror.	62 35	174 54	1	-80 02	-80.0	Terror.	74 05	174 48	1	-86 11	-86.2
Erebus.	62 40	173 40	1	-80 17	-80.3	Erebus.	74 34	173 23	7	-87 36	-87.6
Erebus.	62 46	174 34	6	-80 15	-80.3	Terror.	74 29	173 30	1	-86 58	-87.0
Terror.	62 57	174 42	1	-80 26	-80.4	Erebus.	74 43	169 09	9	-88 13	-88.2
Erebus.	64 04	172 41	9	-81 10	-81.2	Terror.	75 03	169 01	2	-88 02	-88.0
Terror.	64 05	172 52	1	-81 36	-81.6	Erebus.	74 55	169 01	3	-88 40	-88.7
Terror.	64 18	172 29	1	-81 35	-81.6	Terror.	74 56	168 55	2	-87 58	-88.0
Terror.	64 28	173 22	1	-81 20	-81.3	Erebus.	75 22	168 48	4	-88 40	-88.7
Erebus.	64 30	172 56	6	-81 19	-81.3	Terror.	75 36	168 27	3	-88 09	-88.1
Terror.	65 44	171 59	1	-82 26	-82.4	Erebus.	76 06	168 11	4	-88 50	-88.8
Erebus.	66 07	171 22	8	-82 27	-82.5	Terror.	77 09	170 57	2	-87 52	-87.9
Terror.	66 23	170 23	2	-83 30	-83.5	Erebus.	77 07	169 56	2	-88 29	-88.5
Erebus.	66 31	169 29	8	-82 41	-82.7	Terror.	77 54	176 28	2	-87 13	-87.2
Erebus.	66 01	170 28	8	-82 30	-82.5	Erebus.	77 44	178 18	6	-86 37	-86.6
Terror.	66 18	170 11	1	-82 50	-82.8	Terror.	77 45	178 21	2	-86 47	-86.8
Terror.	65 40	171 17	1	-81 34	-81.6	Terror.	76 56	188 35	3	-87 02	-87.0
Terror.	65 19	172 24	1	-82 00	-82.0	Erebus.	77 08	189 01	14	-86 28	-86.5
Erebus.	65 22	172 40	4	-82 06	-82.1	Terror.	77 33	186 10	2	-86 53	-86.9
Terror.	65 35	173 18	1	-83 32	-83.5	Erebus.	77 50	186 47	5	-86 28	-86.5
Erebus.	65 55	174 31	3	-82 33	-82.5	Erebus.	77 07	190 14	13	-86 22	-86.4
Terror.	67 22	174 42	1	-83 31	-83.5	Terror.	77 10	190 18	2	-86 25	-86.4
Erebus.	67 27	174 51	4	-83 24	-83.4	Erebus.	77 17	192 52	9	-86 15	-86.3
Terror.	68 08	175 18	1	-83 28	-83.5	Terror.	76 56	186 05	2	-86 25	-86.4
Erebus.	68 17	175 00	5	-83 29	-83.5	Erebus.	77 10	188 43	6	-86 12	-86.2
Terror.	68 29	175 30	2	-84 09	-84.1	Terror.	77 37	186 43	3	-86 25	-86.4
Erebus.	68 32	175 49	6	-83 56	-83.9	Erebus.	77 00	186 37	5	-86 32	-86.5
Terror.	68 25	176 25	1	-83 56	-83.9	Terror.	77 54	190 34	1	-86 27	-86.5
Erebus.	68 28	176 31	10	-83 39	-83.7	Erebus.	77 55	189 05	2	-86 06	-86.1
Erebus.	69 02	176 20	5	-83 48	-83.8	Terror.	77 42	188 10	1	-86 24	-86.4
Terror.	69 23	176 17	1	-84 38	-84.6	Erebus.	77 43	187 10	5	-86 16	-86.3
Terror.	70 10	174 33	1	-85 07	-85.1	Erebus.	77 35	186 52	5	-86 28	-86.5

\* Auckland Island : observed on shore with needles whose poles were inverted.

† Campbell Island : observed on shore.

General Table of the Magnetic Inclinations, 'Erebus' and 'Terror,' 1840 and 1841 (continued).

Ship.	Lat. S.	Long. E.	No. of observations.	Inclination.	In degrees, and decimals of a degree.	Ship.	Lat. S.	Long. E.	No. of observations.	Inclination.	In degrees, and decimals of a degree.
Terror.	76° 27'	183° 03'	1	-86° 52'	-86.9	Terror.	64° 21'	148° 43'	1	-84° 22'	-84.4
Erebus.	76 22	188 05	4	-86 22	-86.4	Erebus.	64 33	148 03	4	-85 15	-85.3
Terror.	76 49	184 06	2	-87 14	-87.2	Terror.	65 19	144 14	7	-85 41	-85.7
Erebus.	76 50	183 26	3	-86 50	-86.8	Erebus.	65 12	143 45	12	-85 40	-85.7
Terror.	76 24	177 36	1	-87 12	-87.2	Erebus.	64 20	140 40	5	-84 58	-85.0
Erebus.	76 16	175 11	7	-87 25	-87.4	Terror.	64 32	140 46	1	-85 34	-85.6
Terror.	76 31	170 51	2	-87 47	-87.8	Erebus.	63 09	139 28	7	-85 06	-85.1
Erebus.	76 06	168 07	7	-88 25	-88.4	Terror.	62 54	139 10	1	-84 59	-85.0
Terror.	76 30	166 00	6	-88 56	-88.9	Erebus.	62 30	137 21	6	-84 40	-84.7
Erebus.	76 28	165 02	9	-88 39	-88.7	Terror.	62 11	135 52	1	-84 28	-84.5
Terror.	76 35	165 09	4	-88 33	-88.5	Erebus.	61 18	134 02	5	-84 14	-84.2
Erebus.	75 30	167 47	6	-88 26	-88.4	Terror.	61 40	133 26	1	-83 59	-84.0
Terror.	76 03	166 05	1	-88 25	-88.4	Erebus.	60 20	131 23	5	-83 43	-83.7
Terror.	75 03	168 27	2	-88 20	-88.3	Terror.	60 25	131 26	1	-83 22	-83.4
Erebus.	73 09	171 26	1	-87 48	-87.8	Erebus.	59 25	130 14	5	-83 04	-83.1
Terror.	71 10	172 08	1	-86 42	-86.7	Terror.	59 22	130 12	1	-83 10	-83.2
Erebus.	71 10	170 25	4	-86 27	-86.4	Terror.	58 02	128 40	1	-82 22	-82.4
Terror.	70 20	167 50	2	-86 18	-86.3	Erebus.	58 06	128 43	1	-82 18	-82.3
Erebus.	70 42	167 26	7	-86 12	-86.2	Terror.	57 25	127 35	1	-82 09	-82.1
Terror.	70 09	167 50	2	-86 10	-86.2	Erebus.	57 22	127 37	2	-82 02	-82.0
Erebus.	70 13	167 27	9	-86 24	-86.4	Terror.	56 20	129 50	1	-80 35	-80.6
Terror.	69 30	167 16	3	-85 43	-85.7	Erebus.	55 16	131 30	6	-80 32	-80.5
Erebus.	69 37	167 51	11	-85 57	-85.9	Erebus.	54 55	132 50	6	-80 17	-80.3
Terror.	68 55	168 07	2	-85 16	-85.3	Terror.	55 11	132 10	2	-79 27	-79.5
Erebus.	68 27	167 45	15	-85 28	-85.4	Erebus.	54 01	134 59	8	-79 52	-79.9
Terror.	66 01	165 51	3	-83 21	-83.3	Terror.	53 49	134 54	2	-79 56	-79.9
Erebus.	65 48	167 14	4	-83 22	-83.4	Erebus.	53 13	135 18	5	-79 15	-79.3
Terror.	65 32	162 07	3	-83 48	-83.8	Terror.	53 10	134 37	1	-79 47	-79.8
Erebus.	65 51	163 31	6	-84 15	-84.3	Erebus.	51 16	136 50	4	-78 08	-78.1
Terror.	64 37	162 46	6	-82 55	-82.9	Terror.	51 10	136 56	4	-77 44	-77.7
Erebus.	64 30	163 02	8	-83 06	-83.1	Erebus.	48 40	138 33	4	-77 04	-77.1
Terror.	64 17	163 22	3	-83 19	-83.3	Erebus.	49 14	139 05	1	-77 31	-77.5
Erebus.	63 52	160 55	6	-83 41	-83.7	Terror.	46 55	139 55	3	-75 57	-75.9
Terror.	63 43	160 15	2	-82 32	-82.5	Erebus.	46 29	140 40	4	-75 34	-75.6
Erebus.	62 41	156 59	5	-82 54	-82.9	Terror.	44 59	143 12	1	-73 30	-73.5
Terror.	62 42	157 05	1	-82 15	-82.3	Erebus.	46 22	141 06	4	-75 24	-75.4
Erebus.	64 10	154 23	15	-84 15	-84.3	Erebus.	44 57	144 19	8	-74 11	-74.2
Terror.	63 54	155 19	1	-82 12	-82.2	Terror.	44 11	145 51	1	-72 36	-72.6
Erebus.	64 06	150 32	6	-84 47	-84.8	Erebus.	43 49	146 00	5	-72 30	-72.5
Terror.	64 25	152 55	2	-83 25	-83.4	Terror.	42 52	147 24	3	-70 40	-70.7
Terror.	63 50	156 21	2	-84 11	-84.2						

General Table of the Inclinations observed on board Her Majesty's Ships 'Erebus' and 'Terror,' between July 1841 and July 1842.

Position.		Ship.	No. of observations.	Inclination.		Position.		Ship.	No. of observations.	Inclination.	
Lat. S.	Long. E.			In degrees and minutes.	In degrees and decimals.	Lat. S.	Long. E.			In degrees and minutes.	In degrees and decimals.
43° 00'	148° 28'	Erebus.	5	-70° 44'	-70.7	39° 20'	182° 59'	Terror.	14	-61° 02'	-61.0
43 03	148 20	Terror.	3	-71 25	-71.4	40 47	183 03	Erebus.	5	-62 29	-62.5
42 13	149 25	Erebus.	5	-69 57	-69.9	40 42	183 05	Terror.	13	-61 49	-61.8
42 24	149 30	Terror.	3	-70 24	-70.4	41 49	183 41	Erebus.	5	-63 30	-63.5
40 55	149 12	Erebus.	4	-69 01	-69.0	42 07	183 43	Terror.	12	-63 13	-63.2
40 51	149 28	Terror.	3	-69 25	-69.4	43 32	183 03	Erebus.	5	-64 48	-64.8
37 50	150 22	Erebus.	4	-67 00	-67.0	43 52	183 05	Terror.	13	-65 16	-65.3
38 17	150 22	Terror.	3	-67 19	-67.3	45 40	183 20	Erebus.	5	-66 47	-66.8
37 21	151 33	Erebus.	5	-66 24	-66.4	45 39	183 18	Terror.	12	-66 45	-66.7
37 28	151 30	Terror.	3	-66 36	-66.6	47 19	184 40	Erebus.	5	-68 06	-68.1
36 01	151 48	Erebus.	4	-65 29	-65.5	47 26	184 42	Terror.	12	-67 38	-67.6
36 21	151 39	Terror.	2	-66 21	-66.3	48 43	186 30	Erebus.	6	-69 16	-69.3
33 52	151 21	Erebus.	5	-63 47	-63.8	48 44	186 29	Terror.	13	-68 48	-68.8
34 06	151 19	Terror.	3	-63 24	-63.4	49 20	187 41	Erebus.	5	-69 55	-69.9
33 51	151 17	Erebus*.	8	-62 52	-62.9	49 24	187 23	Terror.	13	-69 14	-69.2
33 51	151 17	Terror.	6	-62 57	-62.9	49 27	189 13	Erebus.	4	-69 46	-69.8
33 52	154 07	Erebus.	5	-63 05	-63.1	49 30	189 19	Terror.	12	-69 08	-69.1
33 57	153 35	Terror.	6	-62 43	-62.7	50 00	191 00	Erebus.	4	-69 46	-69.8
33 51	157 18	Erebus.	5	-62 26	-62.4	49 58	191 11	Terror.	12	-68 55	-68.9
33 56	156 38	Terror.	3	-62 03	-62.1	50 48	192 20	Erebus.	6	-69 57	-69.9
33 27	160 43	Erebus.	5	-61 50	-61.8	50 38	192 05	Terror.	12	-69 30	-69.5
33 31	160 20	Terror.	3	-61 18	-61.3	51 34	194 29	Erebus.	5	-70 20	-70.3
33 38	163 42	Erebus.	5	-61 05	-61.1	51 48	194 26	Terror.	13	-70 05	-70.1
33 42	164 05	Terror.	3	-61 01	-61.0	52 21	197 53	Erebus.	6	-70 35	-70.6
33 38	166 28	Erebus.	5	-60 38	-60.6	52 17	198 55	Terror.	7	-70 24	-70.4
33 44	166 37	Terror.	8	-60 08	-60.1	53 01	202 11	Erebus.	5	-71 04	-71.1
33 32	167 40	Erebus.	5	-60 00	-60.0	53 01	202 16	Terror.	3	-70 24	-70.4
33 32	167 39	Terror.	7	-60 15	-60.3	52 48	203 50	Erebus.	5	-70 47	-70.8
32 58	169 20	Erebus.	5	-59 28	-59.5	52 51	203 56	Terror.	7	-70 18	-70.3
33 00	169 20	Terror.	8	-59 06	-59.1	53 01	205 08	Erebus.	6	-70 21	-70.3
32 12	170 27	Erebus.	4	-58 36	-58.6	53 13	205 43	Terror.	13	-70 03	-70.1
32 12	170 27	Terror.	3	-57 04	-57.1	55 08	210 01	Erebus.	15	-71 14	-71.2
33 27	171 21	Erebus.	1	-57 45	-57.7	54 42	209 04	Terror.	19	-70 19	-70.3
32 11	171 20	Terror.	6	-57 33	-57.5	56 07	211 45	Erebus.	10	-72 04	-72.1
33 55	171 54	Erebus.	5	-58 55	-58.9	56 22	211 46	Terror.	18	-71 46	-71.8
33 56	172 02	Terror.	10	-58 20	-58.3	56 22	212 25	Erebus.	11	-72 29	-72.5
34 10	172 54	Erebus.	2	-58 26	-58.4	57 04	212 11	Terror.	15	-72 15	-72.3
34 15	172 50	Terror.	9	-59 03	-59.1	58 41	213 17	Erebus.	11	-73 54	-73.9
34 29	173 36	Erebus.	6	-58 38	-58.6	58 19	213 06	Terror.	18	-73 28	-73.5
34 24	173 43	Terror.	6	-59 01	-59.0	61 20	213 57	Erebus.	11	-75 37	-75.6
35 16	174 00	Terror.	12	-59 26†	-59.4	61 12	213 52	Terror.	12	-75 33	-75.5
35 16	174 00	Erebus.	10	-59 36†	-59.6	62 40	212 53	Erebus.	7	-76 41	-76.7
35 15	174 39	Erebus.	6	-59 21	-59.3	62 42	212 42	Terror.	7	-76 39	-76.7
36 27	177 34	Erebus.	5	-59 59	-60.0	63 23	210 02	Erebus.	12	-77 33	-77.5
36 20	177 27	Terror.	6	-59 32	-59.5	63 13	210 25	Terror.	11	-77 42	-77.7
38 35	180 31	Erebus.	7	-60 41	-60.7	63 47	208 26	Erebus.	5	-78 02	-78.0
38 13	179 46	Terror.	12	-60 31	-60.5	63 42	208 24	Terror.	18	-78 00	-78.0
39 01	182 12	Erebus.	5	-61 28	-61.5	64 47	206 40	Erebus.	13	-78 39	-78.7
38 55	182 17	Terror.	15	-61 13	-61.2	64 31	206 27	Terror.	12	-78 34	-78.6
39 18	182 58	Erebus.	5	-61 58	-62.0	65 30	205 41	Erebus.	6	-79 12	-79.2

\* Observed on shore, Garden Island, Sydney.

† Observed on shore, Bay of Islands.

General Table of the Inclinations (continued).

Position.		Ship.	No. of observations.	Inclination.		Position.		Ship.	No. of observations.	Inclination.	
Lat. S.	Long. E.			In degrees and minutes.	In degrees and decimals.	Lat. S.	Long. E.			In degrees and minutes.	In degrees and decimals.
65° 26'	205° 04'	Terror.	13	-79° 20'	-79° 3	67° 32'	203° 59'	Erebus.	4	-80° 29'	-80° 5
65 59	204 16	Erebus.	9	-79 53	-79·9	67 24	204 05	Terror.	5	-80 49	-80·8
65 47	204 19	Terror.	23	-79 36	-79·6	67 18	203 39	Erebus.	5	-81 05	-81·1
65 57	203 52	Erebus.	13	-79 24	-79·4	67 21	202 14	Erebus.	6	-80 18	-80·3
65 50	204 08	Terror.	10	-79 40	-79·7	67 12	202 24	Terror.	8	-80 47	-80·8
66 00	203 46	Erebus.	6	-79 56	-79·9	67 14	201 34	Terror.	13	-80 50	-80·8
66 01	204 00	Terror.	4	-79 47	-79·8	67 57	200 00	Erebus.	7	-80 56	-80·9
66 11	203 36	Erebus.	6	-80 04	-80·1	67 56	199 48	Terror.	6	-81 18	-81·3
65 57	204 27	Terror.	4	-80 02	-80·0	68 21	200 03	Erebus.	5	-81 14	-81·2
66 16	203 31	Erebus.	2	-79 52	-79·9	68 21	200 06	Terror.	6	-81 27	-81·5
66 08	203 50	Terror.	9	-79 53	-79·9	68 43	199 43	Erebus.	6	-81 15	-81·3
66 20	203 22	Erebus.	2	-79 52	-79·9	68 46	199 39	Terror.	8	-81 34	-81·6
66 11	202 54	Terror.	3	-80 15	-80·3	68 59	196 00	Erebus.	6	-82 05	-82·1
66 24	203 51	Erebus.	3	-80 07	-80·1	68 52	198 24	Terror.	7	-82 48	-82·8
66 20	203 20	Terror.	4	-80 13	-80·2	69 48	192 25	Erebus.	5	-82 41	-82·7
66 31	203 07	Erebus.	4	-79 51	-79·9	69 55	192 17	Terror.	8	-83 06	-83·1
66 25	203 12	Terror.	6	-80 22	-80·4	70 16	190 06	Erebus.	11	-83 10	-83·2
66 32	203 33	Erebus.	2	-80 04	-80·1	70 05	191 03	Terror.	8	-83 28	-83·5
66 30	203 08	Terror.	6	-80 34	-80·6	70 18	186 01	Erebus.	5	-83 25	-83·4
66 32	203 32	Erebus.	5	-80 00	-80·0	70 12	186 21	Terror.	14	-83 33	-83·5
66 36	203 29	Terror.	6	-80 50	-80·8	70 39	185 31	Erebus.	6	-83 47	-83·8
66 35	203 29	Erebus.	5	-79 58	-80·0	70 32	185 38	Terror.	8	-83 51	-83·9
66 33	203 21	Terror.	4	-80 27	-80·5	70 11	183 50	Erebus.	5	-83 52	-83·9
66 34	203 51	Erebus.	2	-79 56	-79·9	69 56	184 43	Terror.	7	-84 30	-84·5
66 14	203 17	Terror.	1	-80 22	-80·4	70 08	181 42	Erebus.	4	-84 05	-84·1
66 06	204 24	Erebus.	5	-79 48	-79·8	69 53	182 49	Terror.	6	-84 33	-84·5
66 11	203 48	Terror.	3	-79 54	-79·8	71 00	180 44	Erebus.	5	-84 30	-84·5
66 13	204 22	Erebus.	7	-79 44	-79·7	71 03	180 56	Terror.	7	-84 33	-84·5
66 20	203 39	Terror.	8	-80 02	-80·0	72 46	181 46	Erebus.	6	-85 14	-85·2
66 13	204 33	Erebus.	14	-79 38	-79·6	72 07	181 50	Terror.	8	-85 12	-85·2
66 05	204 02	Terror.	13	-79 57	-79·9	73 23	183 04	Erebus.	1	-85 57	-85·9
66 04	204 19	Erebus.	3	-79 48	-79·8	72 59	181 30	Terror.	7	-85 34	-85·6
66 01	204 04	Terror.	11	-80 05	-80·1	74 24	177 09	Erebus.	1	-86 35	-86·6
65 59	204 12	Erebus.	6	-79 51	-79·9	74 20	177 55	Terror.	1	-86 47	-86·8
65 57	203 46	Terror.	13	-80 05	-80·1	75 03	173 22	Erebus.	11	-87 12	-87·2
65 56	203 38	Erebus.	5	-79 46	-79·8	75 00	173 38	Terror.	11	-87 27	-87·5
65 56	203 31	Terror.	6	-79 51	-79·9	75 57	175 10	Erebus.	6	-86 52	-86·9
65 45	203 23	Terror.	3	-80 08	-80·1	76 05	174 59	Terror.	7	-87 39	-87·7
66 12	203 04	Erebus.	11	-79 38	-79·6	76 58	181 03	Erebus.	5	-86 54	-86·9
66 09	202 11	Terror.	12	-79 54	-79·9	77 03	181 35	Terror.	7	-87 32	-87·5
66 14	203 09	Erebus.	4	-79 39	-79·7	76 44	185 12	Erebus.	6	-85 52	-85·9
66 08	201 46	Terror.	10	-79 46	-79·8	76 48	185 00	Terror.	7	-86 33	-86·5
66 02	202 30	Erebus.	1	-79 35	-79·6	76 14	192 35	Erebus.	1	-85 16	-85·3
65 58	202 21	Terror.	4	-80 01	-80·0	76 19	190 44	Terror.	7	-86 18	-86·3
65 49	202 02	Erebus.*	5	-79 39	-79·7	75 53	194 52	Erebus.	1	-85 40	-85·7
65 47	202 08	Terror.	7	-79 53	-79·9	75 45	195 02	Terror.	1	-86 01	-86·0
65 47	201 56	Terror.	1	-79 44	-79·7	76 42	194 39	Erebus.	11	-85 42	-85·7
66 18	201 22	Erebus.	2	-79 57	-79·9	76 46	189 22	Terror.	13	-85 32	-85·5
66 11	200 45	Terror.	3	-80 20	-80·3	77 58	197 34	Erebus.	4	-85 01	-85·0
67 37	200 12	Terror.	6	-80 31	-80·5	77 47	197 25	Terror.	8	-85 09	-85·1
66 49	202 40	Erebus.	4	-80 12	-80·2	76 55	198 40	Erebus.	1	-85 28	-85·5
66 43	202 50	Terror.	3	-80 40	-80·7	77 12	199 23	Terror.	7	-85 51	-85·9
67 12	203 12	Terror.	9	-80 23	-80·4	74 50	193 45	Erebus.	6	-85 06	-85·1
67 38	204 01	Erebus.	5	-80 22	-80·4	75 20	194 36	Terror.	8	-86 17	-86·3
67 47	204 17	Terror.	26	-80 55	-80·9	72 46	189 59	Erebus.	5	-84 45	-84·7

\* Observed on ice.

General Table of the Inclinations (continued).

Position.		Ship.	No. of observations.	Inclination.		Position.		Ship.	No. of observations.	Inclination.	
Lat. S.	Long. E.			In degrees and minutes.	In degrees and decimals.	Lat. S.	Long. E.			In degrees and minutes.	In degrees and decimals.
73° 10'	189° 21'	Terror.	6	—85° 30'	—85° 5	60° 01'	241° 31'	Erebus.	5	—72° 45'	—72° 7
72° 01'	187° 35'	Erebus.	5	—84° 33'	—84° 5	59° 39'	243° 13'	Terror.	2	—71° 48'	—71° 8
72° 00'	187° 37'	Terror.	8	—85° 19'	—85° 3	59° 17'	245° 40'	Erebus.	5	—71° 35'	—71° 6
71° 08'	184° 59'	Erebus.	6	—84° 22'	—84° 4	59° 07'	248° 39'	Erebus.	11	—71° 23'	—71° 4
71° 06'	184° 11'	Terror.	9	—85° 04'	—85° 1	59° 04'	247° 30'	Terror.	7	—71° 37'	—71° 6
69° 48'	179° 58'	Erebus.	10	—83° 42'	—83° 7	58° 29'	252° 18'	Erebus.	5	—71° 01'	—71° 0
69° 54'	179° 55'	Terror.	7	—84° 58'	—85° 0	58° 26'	251° 42'	Terror.	6	—71° 13'	—71° 2
68° 04'	183° 25'	Erebus.	10	—82° 19'	—82° 3	58° 35'	255° 10'	Erebus.	5	—70° 23'	—70° 4
68° 09'	183° 10'	Terror.	6	—82° 50'	—82° 8	58° 33'	254° 45'	Terror.	6	—70° 40'	—70° 7
67° 30'	185° 21'	Erebus.	6	—82° 01'	—82° 0	58° 47'	258° 12'	Erebus.	5	—69° 59'	—70° 0
67° 34'	185° 20'	Terror.	9	—82° 14'	—82° 2	58° 42'	257° 46'	Terror.	9	—70° 07'	—70° 1
67° 22'	188° 10'	Erebus.	5	—81° 08'	—81° 1	58° 54'	263° 35'	Terror.	1	—69° 14'	—69° 2
67° 40'	187° 40'	Terror.	4	—81° 34'	—81° 6	58° 59'	265° 55'	Erebus.	6	—67° 49'	—67° 8
67° 09'	188° 02'	Terror.	6	—81° 21'	—81° 3	58° 59'	267° 50'	Terror.	6	—68° 08'	—68° 1
65° 15'	192° 04'	Erebus.	5	—79° 24'	—79° 4	59° 02'	271° 58'	Erebus.	5	—67° 09'	—67° 1
65° 07'	191° 55'	Terror.	9	—80° 06'	—80° 1	59° 01'	272° 06'	Terror.	7	—67° 04'	—67° 1
63° 30'	194° 22'	Erebus.	6	—78° 18'	—78° 3	58° 52'	276° 51'	Erebus.	6	—65° 34'	—65° 6
63° 30'	194° 15'	Terror.	6	—78° 58'	—79° 0	58° 54'	276° 18'	Terror.	6	—66° 24'	—66° 4
62° 16'	196° 10'	Erebus.	5	—77° 26'	—77° 4	58° 23'	280° 03'	Erebus.	5	—64° 54'	—64° 9
62° 17'	195° 55'	Terror.	6	—77° 56'	—77° 9	58° 25'	279° 44'	Terror.	7	—64° 58'	—65° 0
60° 58'	199° 32'	Erebus.	10	—76° 12'	—76° 2	58° 29'	282° 10'	Erebus.	5	—63° 50'	—63° 8
61° 06'	198° 08'	Terror.	8	—77° 00'	—77° 0	58° 31'	281° 37'	Terror.	8	—64° 04'	—64° 1
60° 18'	204° 03'	Erebus.	6	—75° 31'	—75° 5	58° 31'	285° 54'	Erebus.	5	—63° 07'	—63° 1
60° 57'	199° 03'	Terror.	6	—75° 30'	—75° 5	58° 36'	285° 33'	Terror.	6	—63° 08'	—63° 1
60° 18'	208° 29'	Erebus.	1	—74° 14'	—74° 2	57° 22'	289° 50'	Erebus.	5	—61° 19'	—61° 3
60° 15'	208° 06'	Terror.	6	—74° 41'	—74° 7	57° 21'	289° 36'	Terror.	6	—61° 42'	—61° 7
60° 12'	212° 03'	Erebus.	6	—74° 14'	—74° 2	57° 11'	292° 15'	Erebus.	6	—59° 07'	—59° 1
60° 17'	211° 53'	Terror.	7	—74° 35'	—74° 6	57° 26'	291° 36'	Terror.	7	—60° 14'	—60° 2
60° 00'	216° 12'	Erebus.	1	—73° 10'	—73° 2	56° 40'	294° 46'	Erebus.	5	—59° 13'	—59° 2
59° 53'	216° 28'	Terror.	6	—74° 04'	—74° 1	56° 37'	294° 34'	Terror.	6	—59° 15'	—59° 3
59° 20'	219° 14'	Erebus.	10	—73° 47'	—73° 8	54° 50'	298° 08'	Erebus.	4	—56° 33'	—56° 5
59° 22'	218° 14'	Terror.	8	—74° 57'	—74° 9	54° 48'	297° 21'	Terror.	6	—56° 49'	—56° 8
58° 52'	222° 44'	Erebus.	7	—73° 51'	—73° 9	52° 54'	300° 27'	Erebus.	5	—54° 09'	—54° 1
58° 49'	221° 33'	Terror.	7	—73° 17'	—73° 3	52° 33'	300° 20'	Terror.	13	—53° 30'	—53° 5
59° 22'	230° 47'	Erebus.	16	—73° 06'	—73° 1	52° 11'	301° 46'	Erebus.	3	—52° 54'	—52° 9
59° 01'	227° 41'	Terror.	7	—73° 50'	—73° 8	51° 42'	301° 36'	Terror.	6	—52° 13'	—52° 2
59° 32'	231° 46'	Terror.	1	—73° 16'	—73° 3	51° 32'	301° 53'	Erebus.	8	—52° 39*	—52° 7
60° 19'	237° 03'	Erebus.	19	—73° 01'	—73° 0	51° 32'	301° 53'	Terror.	21	—52° 15*	—52° 3
60° 15'	236° 41'	Terror.	18	—73° 26'	—73° 4						

\* Observed on shore, Port Louis, Falkland Islands.

General Table of the Inclinations observed on board Her Majesty's Ships 'Erebus' and 'Terror,' between September 1842 and April 1843.

Position.		Ship.	No. of observations.	Inclination.		Position.		Ship.	No. of observations.	Inclination.	
Lat. S.	Long. E.			In degrees and minutes.	In degrees and decimals.	Lat. S.	Long. E.			In degrees and minutes.	In degrees and decimals.
51° 32'	301° 53'	Erebus.	4	-52° 34'	-52° 6'	62° 25'	307° 58'	Terror.	15	-60° 52'	-60° 9'
52° 32'	301° 53'	Terror.	4	-52° 02'	-52° 0'	62° 20'	308° 12'	Erebus.	11	-60° 44'	-60° 7'
53° 33'	302° 05'	Erebus.	5	-53° 18'	-53° 3'	62° 18'	308° 17'	Terror.	13	-61° 17'	-61° 3'
52° 48'	303° 10'	Terror.	7	-53° 46'	-53° 8'	62° 30'	306° 30'	Erebus.	5	-61° 07'	-61° 1'
54° 03'	305° 26'	Erebus.	5	-54° 27'	-54° 5'	62° 36'	306° 09'	Terror.	20	-61° 52'	-61° 9'
54° 02'	305° 30'	Terror.	1	-53° 36'	-53° 6'	62° 36'	306° 20'	Erebus.	6	-61° 45'	-61° 7'
53° 47'	304° 48'	Erebus.	5	-54° 08'	-54° 1'	63° 24'	305° 40'	Terror.	13	-62° 30'	-62° 5'
53° 42'	305° 04'	Terror.	1	-53° 34'	-53° 6'	63° 36'	305° 00'	Erebus.	5	-62° 18'	-62° 3'
54° 42'	304° 39'	Erebus.	10	-54° 22'	-54° 4'	63° 42'	304° 40'	Erebus.	13	-62° 09'	-62° 1'
54° 40'	304° 35'	Terror.	1	-53° 29'	-53° 5'	63° 57'	304° 32'	Terror.	12	-62° 42'	-62° 7'
54° 42'	305° 30'	Terror.	8	-54° 39'	-54° 7'	64° 23'	304° 00'	Erebus.	6	-63° 04'	-63° 1'
55° 08'	300° 44'	Erebus.	1	-56° 24'	-56° 4'	64° 15'	304° 25'	Terror.	7	-63° 31'	-63° 5'
55° 10'	301° 00'	Terror.	1	-56° 05'	-56° 1'	64° 26'	303° 52'	Erebus.	5	-63° 16 <sup>†</sup>	-63° 3'
55° 40'	296° 52'	Erebus.	8	-57° 21'	-57° 3'	64° 27'	303° 54'	Terror.	11	-63° 21 <sup>§</sup>	-63° 3'
55° 30'	297° 00'	Terror.	7	-57° 29'	-57° 5'	64° 12'	304° 11'	Erebus.	1	-62° 37'	-62° 6'
55° 51'	292° 28'	Erebus.	7	-58° 12*	-58° 2'	64° 26'	303° 54'	Terror.	10	-63° 07'	-63° 1'
55° 51'	292° 28'	Terror.	14	-58° 03 <sup>†</sup>	-58° 1'	64° 32'	304° 20'	Erebus.	5	-62° 50'	-62° 8'
56° 25'	293° 07'	Erebus.	5	-58° 29'	-58° 5'	64° 21'	304° 04'	Terror.	19	-63° 09'	-63° 1'
56° 02'	292° 57'	Terror.	6	-59° 20'	-59° 3'	64° 12'	304° 04'	Erebus.	3	-62° 58'	-63° 0'
55° 38'	296° 00'	Erebus.	5	-56° 53'	-56° 9'	64° 13'	304° 06'	Terror.	18	-63° 10'	-63° 2'
55° 45'	295° 47'	Terror.	8	-57° 31'	-57° 5'	64° 12'	303° 04'	Terror.	8	-63° 27'	-63° 5'
55° 58'	299° 12'	Erebus.	1	-56° 54'	-56° 9'	64° 34'	302° 50'	Erebus.	6	-63° 29'	-63° 5'
55° 56'	299° 17'	Terror.	1	-56° 46'	-56° 8'	64° 36'	302° 42'	Terror.	15	-63° 44'	-63° 7'
55° 32'	299° 08'	Erebus.	2	-56° 14'	-56° 2'	64° 35'	302° 13'	Erebus.	4	-63° 27'	-63° 5'
55° 28'	298° 35'	Terror.	3	-56° 57'	-56° 9'	64° 40'	303° 08'	Terror.	29	-63° 48'	-63° 8'
54° 24'	300° 08'	Erebus.	9	-55° 07'	-55° 1'	64° 44'	303° 07'	Erebus.	10	-63° 21 <sup>†</sup>	-63° 3'
54° 59'	300° 12'	Terror.	9	-56° 31'	-56° 5'	64° 43'	303° 10'	Erebus.	2	-63° 37'	-63° 6'
52° 52'	301° 05'	Erebus.	9	-53° 34'	-53° 6'	64° 40'	303° 08'	Terror.	8	-63° 49'	-63° 8'
52° 31'	301° 16'	Terror.	9	-53° 40'	-53° 7'	64° 42'	302° 54'	Erebus.	1	-63° 19'	-63° 3'
51° 32'	301° 53'	Terror.	11	-52° 13 <sup>†</sup>	-52° 2'	64° 35'	303° 06'	Terror.	1	-64° 04'	-64° 1'
51° 32'	301° 53'	Terror.	11	-52° 18 <sup>†</sup>	-52° 3'	64° 39'	302° 04'	Erebus.	2	-63° 12'	-63° 2'
51° 32'	301° 53'	Erebus.	10	-52° 49 <sup>†</sup>	-52° 8'	64° 36'	302° 07'	Terror.	14	-64° 04'	-64° 1'
51° 32'	301° 53'	Erebus.	10	-52° 30'	-52° 5'	64° 35'	302° 37'	Erebus.	2	-63° 17'	-63° 3'
52° 50'	303° 07'	Erebus.	5	-53° 20'	-53° 3'	64° 38'	302° 42'	Terror.	7	-63° 53'	-63° 9'
52° 49'	303° 19'	Terror.	13	-52° 57'	-52° 9'	64° 31'	302° 34'	Erebus.	4	-63° 39'	-63° 7'
54° 23'	303° 59'	Erebus.	5	-54° 29'	-54° 5'	64° 28'	303° 03'	Erebus.	8	-63° 25'	-63° 4'
53° 38'	303° 43'	Terror.	7	-53° 11'	-53° 2'	64° 26'	303° 05'	Terror.	8	-63° 07'	-63° 1'
55° 51'	305° 18'	Erebus.	5	-55° 25'	-55° 4'	64° 25'	304° 27'	Terror.	15	-62° 45'	-62° 7'
55° 48'	305° 26'	Terror.	21	-55° 03'	-55° 1'	63° 58'	304° 46'	Erebus.	1	-62° 57'	-62° 9'
56° 34'	306° 39'	Erebus.	5	-56° 02'	-56° 0'	64° 22'	305° 01'	Erebus.	5	-63° 09'	-63° 1'
56° 57'	306° 41'	Terror.	12	-56° 13'	-56° 2'	64° 22'	305° 44'	Terror.	2	-63° 36'	-63° 6'
58° 16'	308° 00'	Erebus.	5	-57° 08'	-57° 1'	64° 18'	304° 18'	Erebus.	5	-63° 19'	-63° 3'
58° 07'	307° 55'	Terror.	21	-57° 19'	-57° 3'	64° 17'	304° 20'	Terror.	20	-63° 22'	-63° 4'
59° 28'	308° 20'	Erebus.	8	-58° 33'	-58° 5'	64° 19'	304° 04'	Erebus.	2	-63° 00'	-63° 0'
59° 50'	307° 57'	Terror.	8	-58° 33'	-58° 5'	64° 12'	303° 50'	Erebus.	5	-62° 34'	-62° 6'
61° 23'	307° 41'	Erebus.	3	-59° 35'	-59° 6'	64° 12'	304° 07'	Terror.	11	-63° 05'	-63° 1'
61° 21'	307° 41'	Terror.	7	-59° 55'	-59° 9'	64° 24'	304° 49'	Erebus.	3	-62° 41'	-62° 7'
62° 14'	307° 55'	Erebus.	1	-60° 55'	-60° 9'	64° 20'	304° 08'	Terror.	6	-63° 23'	-63° 4'
62° 12'	307° 47'	Terror.	7	-60° 50'	-60° 8'	64° 16'	304° 40'	Terror.	13	-63° 03'	-63° 1'
62° 31'	308° 05'	Erebus.	4	-60° 34'	-60° 6'	64° 15'	304° 00'	Erebus.	2	-62° 54'	-62° 9'

\* Observed on shore, St. Martin's Cove, with needles whose poles were reversed.

† Observed on shore, St. Martin's Cove.

‡ Observed on ice.

§ Dip on ice with needle whose poles were reversed.



General Table of the Inclinations (continued).

Position.		Ship.	No. of observations.	Inclination.		Position.		Ship.	No. of observations.	Inclination.	
Lat. S.	Long. E.			In degrees and minutes.	In degrees and decimals.	Lat. S.	Long. E.			In degrees and minutes.	In degrees and decimals.
64° 04'	305° 19'	Erebus.	2	-62° 53'	-62.9	63° 58'	345° 10'	Erebus.	5	-60° 30'	-60.5
64° 01'	304° 20'	Terror.	8	-63° 09'	-63.1	64° 14'	345° 30'	Terror.	7	-60° 57'	-60.9
64° 08'	304° 09'	Erebus.	3	-62° 39'	-62.7	64° 38'	348° 00'	Erebus.	5	-61° 16'	-61.3
64° 08'	304° 08'	Erebus.	2	-62° 42'	-62.7	64° 33'	347° 52'	Terror.	8	-61° 39'	-61.7
64° 10'	304° 04'	Terror.	11	-63° 12'	-63.2	65° 12'	350° 05'	Erebus.	5	-61° 43'	-61.7
64° 05'	304° 00'	Erebus.	5	-62° 47'	-62.8	65° 06'	349° 45'	Terror.	10	-61° 49'	-61.8
64° 09'	303° 57'	Erebus.	1	-63° 01'	-63.0	66° 08'	352° 43'	Erebus.	5	-63° 08'	-63.1
64° 07'	303° 58'	Terror.	6	-63° 11'	-63.2	66° 01'	353° 06'	Terror.	10	-63° 12'	-63.2
64° 00'	304° 42'	Erebus.	3	-62° 29'	-62.5	67° 06'	351° 04'	Erebus.	5	-63° 12'	-63.2
64° 00'	304° 46'	Terror.	11	-62° 55'	-62.9	67° 00'	351° 07'	Terror.	9	-63° 30'	-63.5
63° 53'	304° 51'	Erebus.	3	-62° 25'	-62.4	68° 14'	347° 08'	Erebus.	9	-64° 17'	-64.3
64° 16'	304° 38'	Erebus.	2	-62° 38'	-62.6	68° 20'	347° 41'	Terror.	10	-64° 07'	-64.1
64° 19'	304° 43'	Terror.	9	-63° 14'	-63.2	68° 32'	347° 09'	Erebus.	5	-64° 14'	-64.2
64° 18'	305° 11'	Terror.	7	-63° 10'	-63.2	69° 26'	345° 31'	Erebus.	5	-64° 37'	-64.6
64° 17'	305° 20'	Erebus.	3	-62° 21'	-62.3	69° 24'	345° 30'	Terror.	10	-65° 20'	-65.3
64° 16'	304° 47'	Erebus.	4	-62° 42'	-62.7	71° 10'	344° 13'	Erebus.	5	-66° 13'	-66.2
64° 11'	305° 15'	Terror.	9	-62° 58'	-63.0	71° 09'	344° 10'	Terror.	8	-66° 54'	-66.9
63° 34'	307° 00'	Erebus.	5	-61° 38'	-61.6	70° 55'	343° 14'	Erebus.	1	-65° 38'	-65.6
63° 34'	306° 59'	Terror.	2	-62° 05'	-62.1	71° 08'	344° 18'	Terror.	1	-66° 52'	-66.9
63° 35'	307° 33'	Erebus.	5	-61° 38'	-61.6	70° 33'	343° 23'	Terror.	1	-64° 54'	-64.9
63° 36'	307° 35'	Terror.	8	-62° 18'	-62.3	70° 28'	342° 39'	Erebus.	1	-65° 39'	-65.7
63° 54'	308° 00'	Erebus.	2	-61° 47'	-61.8	70° 28'	342° 26'	Terror.	4	-66° 12'	-66.2
64° 00'	303° 01'	Terror.	15	-61° 56'	-61.9	69° 56'	344° 03'	Erebus.	1	-64° 07'	-64.1
63° 49'	309° 00'	Erebus.	5	-62° 06'	-62.1	69° 36'	344° 15'	Terror.	1	-64° 43'	-64.7
64° 03'	309° 16'	Terror.	16	-62° 15'	-62.3	68° 06'	344° 40'	Erebus.	4	-63° 04'	-63.1
64° 19'	309° 36'	Erebus.	10	-62° 34'	-62.6	68° 07'	346° 13'	Terror.	7	-63° 23'	-63.4
64° 36'	311° 53'	Erebus.	5	-61° 47'	-61.8	65° 56'	346° 24'	Erebus.	5	-61° 48'	-61.8
64° 43'	312° 06'	Terror.	8	-62° 09'	-62.1	65° 57'	346° 40'	Terror.	8	-62° 10'	-62.2
64° 37'	314° 21'	Erebus.	6	-62° 03'	-62.1	64° 31'	346° 01'	Erebus.	4	-59° 53'	-59.9
64° 38'	314° 01'	Terror.	9	-61° 50'	-61.8	63° 58'	346° 25'	Terror.	4	-60° 33'	-60.5
64° 39'	316° 04'	Erebus.	5	-61° 34'	-61.6	61° 34'	348° 37'	Erebus.	5	-58° 52'	-58.9
64° 49'	315° 07'	Terror.	10	-61° 47'	-61.8	61° 35'	349° 00'	Terror.	7	-58° 59'	-59.0
64° 38'	316° 57'	Erebus.	5	-61° 49'	-61.8	59° 34'	350° 34'	Erebus.	5	-57° 31'	-57.5
64° 47'	316° 57'	Terror.	9	-62° 23'	-62.4	59° 21'	350° 36'	Terror.	7	-57° 40'	-57.7
65° 06'	318° 46'	Erebus.	5	-61° 47'	-61.8	57° 27'	352° 08'	Erebus.	8	-56° 43'	-56.7
64° 58'	318° 26'	Terror.	16	-61° 54'	-61.9	57° 31'	352° 04'	Terror.	12	-56° 33'	-56.5
64° 40'	320° 12'	Erebus.	5	-61° 12'	-61.2	57° 09'	352° 45'	Erebus.	5	-56° 27'	-56.5
64° 37'	320° 28'	Terror.	8	-61° 10'	-61.2	57° 09'	352° 44'	Terror.	7	-56° 13'	-56.2
63° 54'	321° 36'	Erebus.	5	-60° 34'	-60.6	56° 38'	353° 57'	Erebus.	5	-56° 09'	-56.1
64° 02'	321° 55'	Terror.	10	-60° 30'	-60.5	56° 44'	353° 45'	Terror.	4	-56° 02'	-56.0
63° 36'	324° 36'	Erebus.	14	-59° 50'	-59.8	55° 38'	355° 32'	Erebus.	5	-56° 55'	-56.9
63° 59'	324° 18'	Terror.	7	-60° 15'	-60.3	55° 56'	355° 39'	Terror.	3	-55° 10'	-55.2
62° 39'	328° 16'	Erebus.	8	-59° 11'	-59.2	54° 31'	357° 35'	Erebus.	1	-55° 41'	-55.7
62° 37'	328° 17'	Terror.	9	-59° 03'	-59.1	54° 32'	357° 26'	Terror.	4	-54° 56'	-54.9
62° 20'	330° 00'	Erebus.	4	-58° 45'	-58.7	54° 07'	359° 56'	Erebus.	7	-55° 33'	-55.5
62° 13'	330° 38'	Terror.	12	-58° 37'	-58.6	54° 06'	359° 50'	Terror.	10	-55° 33'	-55.5
61° 59'	333° 43'	Erebus.	5	-58° 17'	-58.3	50° 37'	9° 03'	Erebus.	4	-56° 14'	-56.2
62° 05'	333° 38'	Terror.	10	-58° 02'	-58.0	50° 35'	9° 01'	Terror.	7	-56° 19'	-56.3
61° 37'	336° 05'	Erebus.	5	-58° 17'	-58.3	47° 38'	10° 51'	Erebus.	5	-55° 46'	-55.8
61° 32'	336° 10'	Terror.	7	-58° 06'	-58.1	47° 36'	10° 41'	Terror.	5	-55° 55'	-55.9
61° 30'	338° 00'	Erebus.	5	-57° 55'	-57.9	45° 32'	11° 54'	Erebus.	5	-55° 24'	-55.4
61° 28'	337° 42'	Terror.	15	-58° 05'	-58.1	45° 38'	11° 52'	Terror.	7	-55° 28'	-55.5
61° 46'	341° 02'	Erebus.	5	-58° 17'	-58.3	43° 57'	13° 16'	Erebus.	8	-54° 35'	-54.6
61° 13'	340° 00'	Terror.	2	-58° 04'	-58.1	43° 55'	13° 16'	Terror.	7	-55° 19'	-55.3
62° 36'	344° 08'	Erebus.	5	-58° 57'	-58.9	43° 10'	14° 44'	Erebus.	8	-54° 45'	-54.7
62° 41'	343° 18'	Terror.	13	-59° 02'	-59.0	43° 13'	14° 36'	Terror.	15	-55° 24'	-55.4

General Table of the Inclinations (continued).

Position.		Ship.	No. of observations.	Inclination.		Position.		Ship.	No. of observations.	Inclination.	
Lat. S.	Long. E.			In degrees and minutes.	In degrees and decimals.	Lat. S.	Long. E.			In degrees and minutes.	In degrees and decimals.
41° 40'	15° 09'	Erebus.	5	— 54° 48'	— 54°·8	36° 02'	16° 32'	Terror.	8	— 53° 41'	— 53°·7
41 58	15 11	Terror.	7	— 55 01	— 55°·0	35 26	16 22	Erebus.	5	— 53 42	— 53°·7
40 15	15 47	Erebus.	5	— 54 54	— 54°·9	35 21	16 22	Terror.	14	— 53 10	— 53°·2
40 07	16 08	Terror.	8	— 54 43	— 54°·7	35 04	17 08	Erebus.	2	— 53 19	— 53°·3
37 40	16 40	Erebus.	5	— 54 40	— 54°·7	35 03	17 06	Terror.	15	— 53 18	— 53°·3
38 00	16 45	Terror.	7	— 54 20	— 54°·3	34 11	18 26	Erebus.	11	— 53 40*	— 53°·7
35 59	16 34	Erebus.	5	— 54 15	— 54°·3	34 11	18 26	Terror.	12	— 53 35*	— 53°·6

\* Observed on shore, Simon's Bay.

General Table of the Inclinations observed on board Her Majesty's hired Bark  
'Pagoda' in 1844 and 1845.

Position.		Observer.	No. of observations.	Inclination.		Position.		Observer.	No. of observations.	Inclination.	
Lat. S.	Long. E.			In degrees and minutes.	In degrees and decimals.	Lat. S.	Long. E.			In degrees and minutes.	In degrees and decimals.
34 44	17 50	Clerk.	3	-52 56	-52.9	67 00	40 07	Clerk.	4	-69 39	-69.7
34 46	17 46	Moore.	7	-53 34	-53.6	66 55	40 16	Moore.	7	-69 30	-69.5
35 29	15 09	Moore.	6	-51 27	-51.5	66 24	40 01	Moore.	4	-69 15	-69.3
35 17	14 00	Moore.	7	-51 16	-51.3	64 52	38 37	Clerk.	3	-68 40	-68.7
35 12	13 28	Clerk.	3	-51 35	-51.6	64 52	38 37	Moore.	6	-68 53	-68.9
35 24	13 23	Moore.	6	-51 19	-51.3	64 52	40 12	Clerk.	4	-68 44	-68.7
37 25	13 24	Clerk.	4	-51 44	-51.7	64 43	40 12	Moore.	7	-68 18	-68.3
38 42	14 27	Moore.	7	-53 31	-53.5	64 22	40 49	Clerk.	3	-68 40	-68.7
38 37	14 27	Clerk.	4	-52 39	-52.7	64 05	41 09	Moore.	2	-70 02	-70.0
39 10	14 38	Moore.	7	-54 12	-54.2	63 49	42 00	Clerk.	4	-69 36	-69.6
39 10	14 41	Clerk.	4	-54 14	-54.2	63 19	45 52	Moore.	4	-70 14	-70.2
40 41	14 16	Moore.	4	-54 59	-55.0	63 22	45 35	Clerk.	3	-70 03	-70.1
40 21	14 29	Clerk.	4	-55 10	-55.2	63 22	45 58	Moore.	4	-70 15	-70.3
42 50	13 00	Clerk.	4	-55 34	-55.6	63 36	46 41	Clerk.	4	-70 02	-70.0
44 50	13 19	Clerk.	4	-56 14	-56.2	63 36	46 48	Moore.	11	-70 13	-70.2
50 21	10 31	Moore.	6	-55 34	-55.6	62 36	51 40	Clerk.	5	-69 13	-69.2
47 40	12 25	Clerk.	2	-56 29	-56.5	61 34	53 49	Moore.	7	-70 49	-70.8
48 35	10 51	Clerk.	4	-56 44	-56.7	61 25	53 38	Clerk.	4	-70 46	-70.8
50 48	10 18	Moore.	7	-57 19	-57.3	61 17	57 28	Clerk.	4	-72 01	-72.0
50 30	10 25	Clerk.	4	-57 02	-57.0	61 19	57 33	Moore.	4	-71 26	-71.4
51 44	9 36	Moore.	2	-57 28	-57.5	61 22	57 41	Moore.	6	-71 27	-71.5
51 48	9 33	Clerk.	4	-57 13	-57.2	61 00	64 03	Clerk.	4	-73 27	-73.5
51 56	9 30	Moore.	3	-57 42	-57.7	61 10	64 20	Moore.	3	-72 18	-72.3
52 53	7 53	Clerk.	4	-57 03	-57.1	61 36	70 46	Clerk.	4	-74 02	-74.0
53 21	7 32	Moore.	7	-57 24	-57.4	61 49	71 30	Moore.	10	-73 38	-73.6
53 52	6 07	Clerk.	4	-57 01	-57.0	62 10	72 25	Clerk.	4	-74 35	-74.6
54 02	6 02	Moore.	7	-56 58	-57.0	62 10	72 25	Moore.	6	-74 33	-74.5
55 08	5 50	Clerk.	4	-57 26	-57.4	62 40	76 09	Clerk.	4	-74 50	-74.8
55 18	5 55	Moore.	3	-58 12	-58.2	62 48	76 15	Moore.	11	-75 05	-75.1
60 43	4 00	Clerk.	6	-59 58	-60.0	64 20	79 38	Clerk.	4	-76 34	-76.6
61 14	9 07	Moore.	7	-61 43	-61.7	64 20	79 38	Moore.	5	-75 57	-75.9
61 05	9 03	Clerk.	4	-61 01	-61.0	61 38	84 40	Clerk.	4	-76 27	-76.5
62 06	12 52	Moore.	4	-63 17	-63.3	61 42	85 07	Moore.	5	-76 58	-77.0
61 54	16 23	Clerk.	4	-63 00	-63.0	60 42	88 12	Clerk.	4	-75 43	-75.7
61 56	16 36	Moore.	7	-63 55	-63.9	60 48	88 33	Moore.	7	-77 04	-77.1
61 50	19 13	Clerk.	4	-63 55	-63.9	61 23	91 15	Clerk.	8	-77 35	-77.6
61 50	19 14	Moore.	5	-64 44	-64.7	61 23	91 15	Moore.	7	-77 41	-77.7
62 00	20 25	Clerk.	4	-64 55	-64.9	61 07	92 10	Moore.	5	-77 57	-77.9
63 00	20 40	Moore.	6	-64 25	-64.4	61 14	92 03	Clerk.	4	-78 26	-78.4
63 19	21 48	Moore.	7	-65 35	-65.6	60 30	92 34	Moore.	5	-77 33	-77.5
64 20	24 05	Clerk.	4	-66 37	-66.6	60 35	92 25	Clerk.	4	-77 30	-77.5
64 25	24 18	Moore.	5	-66 41	-66.7	60 03	96 03	Moore.	4	-77 38	-77.6
65 34	28 30	Clerk.	4	-66 59	-67.0	60 03	95 36	Clerk.	3	-77 35	-77.6
65 39	28 48	Moore.	6	-67 56	-67.9	59 45	99 50	Moore.	7	-79 23	-79.4
66 27	30 45	Moore.	7	-68 31	-68.5	59 55	99 35	Clerk.	8	-79 36	-79.6
66 30	36 46	Clerk.	4	-68 16	-68.3	57 46	99 17	Moore.	4	-77 43	-77.7
66 36	36 50	Moore.	7	-69 22	-69.4	57 35	99 28	Clerk.	2	-78 36	-78.6
66 43	38 49	Clerk.	4	-69 22	-69.4	56 56	101 36	Moore.	5	-78 11	-78.2
67 10	38 51	Moore.	7	-71 07	-71.1	56 53	101 24	Clerk.	4	-78 40	-78.7
67 35	39 31	Clerk.	3	-69 49	-69.8	55 40	103 18	Moore.	5	-78 09	-78.1
67 39	40 28	Moore.	2	-69 27	-69.5	55 52	103 06	Clerk.	4	-78 56	-78.9
66 45	39 23	Clerk.	4	-70 12	-70.2	54 38	106 15	Moore.	5	-79 13	-79.2
67 18	40 22	Moore.	7	-70 20	-70.3	54 48	106 04	Clerk.	4	-78 09	-78.1

General Table of the Inclinations observed in the 'Pagoda' (continued).

Position.		Observer.	No. of observations.	Inclination.		Position.		Observer.	No. of observations.	Inclination.	
Lat. S.	Long. E.			In degrees and minutes.	In degrees and decimals.	Lat. S.	Long. E.			In degrees and minutes.	In degrees and decimals.
54 10	108 15	Moore.	5	-79 19	-79.3	20 38	85 26	Clerk.	4	-51 14	-51.2
54 17	108 05	Clerk.	6	-78 49	-78.8	20 25	82 00	Moore.	7	-51 05	-51.1
53 00	110 35	Moore.	7	-77 39	-77.7	20 26	82 22	Clerk.	8	-51 39	-51.7
53 00	110 08	Clerk.	4	-77 28	-77.5	20 36	79 10	Moore.	5	-51 46	-51.8
51 00	111 29	Moore.	1	-77 36	-77.6	20 36	79 22	Clerk.	8	-51 50	-51.8
51 20	111 23	Clerk.	3	-76 41	-76.7	20 44	78 31	Moore.	18	-52 00	-52.0
48 57	112 56	Moore.	6	-76 04	-76.1	20 44	78 31	Clerk.	19	-52 03	-52.1
49 01	111 47	Clerk.	4	-76 30	-76.5	20 39	77 43	Moore.	12	-51 58	-52.0
47 21	115 15	Moore.	7	-75 32	-75.5	20 39	77 43	Clerk.	12	-51 59	-52.0
47 21	115 15	Clerk.	4	-75 31	-75.5	20 29	76 22	Clerk.	8	-52 20	-52.3
45 08	116 50	Moore.	4	-73 27	-73.5	20 26	69 19	Moore.	5	-52 19	-52.3
43 20	116 52	Clerk.	4	-72 45	-72.7	20 28	70 46	Clerk.	4	-52 51	-52.9
43 22	116 49	Moore.	6	-72 10	-72.2	20 34	69 24	Moore.	12	-53 01	-53.0
41 18	116 09	Clerk.	4	-70 11	-70.2	21 06	68 12	Clerk.	4	-53 10	-53.2
41 00	116 42	Moore.	7	-71 14	-71.2	21 08	68 04	Moore.	1	-53 01	-53.0
38 52	116 15	Clerk.	4	-68 49	-68.8	21 11	67 54	Clerk.	8	-53 02	-53.0
38 40	116 15	Moore.	5	-68 04	-68.1	21 11	67 54	Moore.	5	-53 46	-53.8
37 03	116 57	Clerk.	4	-66 46	-66.8	21 12	67 29	Clerk.	8	-53 39	-53.7
37 00	116 57	Moore.	6	-66 21	-66.3	21 12	67 29	Moore.	5	-53 59	-54.0
36 12	116 50	Clerk.	4	-65 28	-65.5	21 02	66 02	Clerk.	4	-54 03	-54.1
36 11	116 48	Moore.	4	-66 00	-66.0	21 01	66 50	Moore.	7	-53 49	-53.8
35 18	117 07	Clerk.	4	-65 48	-65.8	20 40	62 58	Moore.	6	-53 53	-53.9
35 07	117 28	Moore.	4	-65 24	-65.4	20 31	59 42	Clerk.	4	-53 59	-54.0
35 02	117 56	Clerk.	8	-65 11*	-65.2	20 09	57 31	Moore.	10	-53 52†	-53.9
35 02	117 56	Moore.	12	-64 54*	-64.9	21 44	53 34	Clerk.	4	-54 38	-54.6
35 36	114 44	Clerk.	4	-65 28	-65.5	21 50	53 25	Moore.	4	-54 51	-54.9
35 30	114 35	Moore.	5	-64 54	-64.9	26 25	49 12	Clerk.	4	-58 36	-58.6
34 16	113 01	Clerk.	4	-64 44	-64.7	26 26	48 20	Moore.	4	-58 46	-58.8
32 24	111 26	Moore.	7	-62 22	-62.4	27 12	46 09	Clerk.	4	-58 44	-58.7
32 32	111 36	Clerk.	4	-62 14	-62.2	27 14	45 50	Moore.	4	-58 32	-58.5
29 16	106 49	Moore.	5	-59 30	-59.5	28 02	42 40	Moore.	1	-58 10	-58.2
29 20	106 55	Clerk.	4	-59 19	-59.3	28 24	43 00	Clerk.	4	-58 52	-58.9
27 35	106 32	Moore.	7	-57 26	-57.4	28 44	42 01	Clerk.	4	-59 01	-59.0
27 47	106 36	Clerk.	4	-57 17	-57.3	28 35	40 24	Clerk.	4	-58 54	-58.9
25 46	104 55	Moore.	4	-55 05	-55.1	28 57	37 52	Clerk.	4	-59 08	-59.1
26 00	105 11	Clerk.	4	-55 09	-55.1	28 57	37 45	Moore.	6	-59 14	-59.2
23 58	99 06	Moore.	4	-53 46	-53.8	30 27	33 41	Moore.	2	-56 37	-56.6
24 00	99 23	Clerk.	4	-54 28	-54.5	30 33	33 19	Clerk.	4	-57 19	-57.3
24 01	97 25	Moore.	4	-54 18	-54.3	31 06	31 26	Moore.	5	-57 24	-57.4
24 01	97 30	Clerk.	4	-54 03	-54.1	31 06	31 34	Clerk.	4	-57 28	-57.5
23 50	95 56	Moore.	5	-54 26	-54.4	33 01	29 36	Clerk.	4	-57 34	-57.6
24 00	96 06	Clerk.	4	-54 16	-54.3	34 31	27 04	Clerk.	4	-57 06	-57.1
24 17	93 50	Moore.	5	-54 07	-54.1	35 46	23 35	Clerk.	4	-56 08	-56.1
24 02	92 07	Moore.	3	-52 44	-52.7	35 40	21 40	Moore.	4	-55 31	-55.5
22 47	91 00	Clerk.	4	-52 49	-52.8	35 36	21 40	Clerk.	4	-55 18	-55.3
21 44	89 38	Moore.	4	-51 45	-51.7	35 07	20 46	Clerk.	4	-55 08	-55.1
21 50	89 44	Clerk.	4	-52 17	-52.3	34 12	18 26	Clerk.	2	-53 37‡	-53.6
20 38	87 50	Moore.	5	-51 33	-51.5	34 12	18 26	Moore.	4	-53 37‡	-53.6
20 46	87 59	Clerk.	8	-50 57	-50.9	33 56	18 29	Clerk.	8	-53 31§	-53.5
20 37	85 02	Moore.	5	-51 21	-51.3	33 56	18 29	Moore.	18	-53 29§	-53.5

\* On shore, King George's Sound.

‡ Observed on shore, Simon's Bay.

† Observed on shore, Port Louis, Mauritius.

§ Magnetic Observatory, Cape of Good Hope.

The — sign prefixed to the values of the Magnetic Force indicates that they belong to that portion of the values of the Force which is on the South side of the Magnetic Equator.

General Table of the Observations of the Intensity made by Her Majesty's Ships 'Erebus' and 'Terror,' on the passage from the Cape of Good Hope to Kerguelen Island in 1840, previous to the commencement of the regular Survey.

Lat. S.	Long. E.	Ship.	Intensity.	Lat. S.	Long. E.	Ship.	Intensity.
34° 11'	18° 26'	Erebus.	7·60*	46° 41'	29° 00'	Terror.	8·73
34 11	18 26	Terror.	7·60*	45 44	34 16	Erebus.	9·08
35 14	18 27	Erebus.	7·65	47 00	37 14	Erebus.	9·18
35 48	18 47	Erebus.	7·70	46 45	40 05	Terror.	9·27
36 04	19 19	Erebus.	7·62	47 00	38 48	Erebus.	9·04
36 16	20 04	Terror.	7·76	47 00	43 48	Terror.	9·51
36 11	20 42	Erebus.	7·76	46 46	42 41	Erebus.	9·55
36 52	18 25	Terror.	7·67	47 50	45 20	Terror.	9·82
36 35	21 20	Erebus.	7·89	47 01	46 10	Erebus.	9·82
37 44	16 36	Terror.	7·65	46 41	50 52	Erebus.	9·91
38 47	17 00	Terror.	7·81	46 28	52 43	Erebus.	9·95
38 58	17 26	Terror.	7·94	46 29	52 26	Erebus.	10·17
40 45	19 20	Terror.	7·94	46 18	52 04	Erebus.	10·30
38 13	21 30	Erebus.	8·08	46 25	52 01	Erebus.	10·26
40 05	20 38	Erebus.	7·94	46 57	55 39	Erebus.	10·28
42 40	22 02	Terror.	8·25	47 19	59 10	Erebus.	10·66
40 29	22 22	Erebus.	8·38	47 41	62 59	Erebus.	11·28
42 56	23 12	Terror.	8·31	48 36	69 21	Erebus.	11·43
41 24	25 00	Erebus.	8·24	48 36	69 07	Erebus.	11·55
44 28	24 55	Terror.	8·57	48 30	69 52	Erebus.	11·60
41 58	26 38	Erebus.	8·45	48 39	68 57	Erebus.	11·48
46 00	26 12	Terror.	8·76	48 41	68 54	Erebus.	11·32†
43 07	28 43	Erebus.	8·56	48 41	68 54	Erebus.	11·31†
44 19	31 06	Erebus.	8·77	48 41	68 54	Terror.	11·34†

\* Simon's Bay.

† On shore at Kerguelen Island.

General Table of the Intensities of the Magnetic Force observed on board Her Majesty's Ship 'Erebus,' between September 1840 and April 1841.

Lat. S.	Long. E.	No. of observations.	Intensity.	Lat. S.	Long. E.	No. of observations.	Intensity.	Lat. S.	Long. E.	No. of observations.	Intensity.
42° 52'	147° 24'	6	13·54*	72° 03'	172° 00'	4	15·07	68° 28'	168° 10'	2	15·17
44° 10'	149° 29'	2	13·69	72° 09'	173° 35'	1	15·03	67° 52'	167° 28'	2	15·13
45° 13'	151° 57'	2	13·62	72° 57'	176° 06'	2	15·14	65° 31'	167° 42'	1	15·13
45° 33'	152° 45'	2	13·51	72° 33'	173° 37'	4	15·15	65° 33'	162° 14'	1	14·84
46° 18'	154° 30'	2	13·53	73° 47'	171° 50'	2	15·24	64° 41'	162° 34'	2	15·05
47° 46'	157° 40'	2	13·52	74° 08'	170° 54'	4	15·23	64° 13'	163° 18'	2	14·95
49° 20'	160° 13'	2	13·72	73° 56'	172° 20'	2	15·11	63° 57'	161° 11'	2	14·95
50° 28'	164° 09'	2	13·76	74° 36'	173° 01'	3	15·16	62° 41'	156° 59'	2	15·01
50° 33'	166° 19'	20	13·79†	74° 44'	169° 43'	2	15·16	63° 50'	156° 06'	2	14·98
52° 42'	169° 10'	10	14·08‡	75° 22'	168° 48'	2	15·25	64° 13'	154° 03'	2	14·95
54° 06'	169° 09'	2	13·85	76° 26'	168° 46'	4	15·12	64° 20'	153° 02'	2	15·11
55° 50'	170° 06'	1	14·22	77° 47'	175° 43'	2	14·99	63° 54'	151° 56'	1	15·02
57° 35'	170° 32'	2	14·26	77° 04'	188° 24'	4	14·97	64° 26'	148° 20'	2	15·34
58° 57'	170° 57'	2	14·36	77° 09'	188° 15'	2	15·12	65° 10'	143° 21'	2	15·20
59° 41'	169° 38'	2	14·42	77° 17'	185° 26'	2	15·11	64° 20'	140° 40'	2	15·44
60° 34'	170° 33'	5	14·50	77° 00'	192° 18'	4	15·13	63° 09'	139° 28'	7	15·15
61° 49'	171° 44'	2	14·72	77° 12'	192° 25'	4	15·07	62° 13'	136° 20'	2	15·05
62° 40'	174° 40'	2	14·78	77° 09'	188° 50'	2	15·09	61° 20'	134° 05'	2	15·25
64° 03'	172° 41'	4	14·71	76° 58'	180° 40'	2	15·13	60° 19'	131° 20'	2	15·36
64° 31'	172° 55'	2	14·81	77° 47'	187° 18'	4	15·11	58° 00'	128° 40'	2	15·25
66° 08'	171° 22'	4	14·83	77° 39'	187° 06'	5	15·03	55° 00'	131° 43'	2	15·00
66° 31'	169° 24'	3	14·95	76° 55'	188° 40'	1	15·18	54° 58'	132° 50'	4	14·95
66° 23'	170° 12'	2	14·94	76° 50'	183° 26'	1	15·11	54° 00'	132° 02'	2	15·19
65° 30'	170° 42'	4	15·11	76° 16'	175° 50'	2	15·00	53° 13'	135° 18'	5	15·01
66° 55'	174° 31'	2	14·93	76° 03'	169° 30'	1	15·15	51° 16'	136° 50'	2	15·12
68° 17'	175° 00'	1	14·91	76° 20'	165° 32'	2	15·13	48° 24'	138° 32'	1	14·88
68° 32'	175° 49'	4	14·98	75° 03'	168° 44'	2	15·15	46° 29'	140° 40'	2	14·40
68° 28'	176° 31'	4	15·07	71° 25'	174° 25'	4	15·06	46° 22'	141° 06'	2	14·45
68° 28'	176° 32'	4	15·06§	70° 41'	167° 26'	2	15·22	45° 02'	143° 10'	4	14·21
69° 35'	175° 47'	4	15·05	70° 14'	167° 25'	3	15·03	43° 41'	146° 03'	8	13·98
71° 20'	171° 00'	4	15·10	69° 32'	167° 51'	2	15·05				
71° 57'	171° 36'	4	15·20	69° 08'	167° 44'	1	15·03				

\* On shore at the Observatory, Hobarton.

† On shore at Auckland Island.

‡ On shore at Campbell Island.

§ Observed on ice.

General Table of the Intensity of the Magnetic Force observed in Her Majesty's Ship 'Terror,' between January 7 and April 16, 1841.

Position.		No. of observations.	Intensity.	Position.		No. of observations.	Intensity.	Position.		No. of observations.	Intensity.
Lat. S.	Long. E.			Lat. S.	Long. E.			Lat. S.	Long. E.		
72° 54'	176° 27'	1	15·03	77° 40'	186° 40'	2	15·02	64° 06'	152° 30'	2	15·01
73° 07'	172° 17'	2	15·05	77° 48'	189° 23'	2	15·01	64° 53'	142° 29'	2	15·02
74° 15'	171° 20'	2	15·00	76° 40'	186° 25'	2	15·02	61° 55'	134° 36'	2	15·02
74° 17'	174° 09'	2	14·80	76° 27'	174° 14'	2	15·19	59° 54'	130° 50'	2	15·01
75° 03'	169° 01'	2	14·71	76° 19'	165° 36'	2	15·23	57° 43'	128° 07'	2	14·90
74° 56'	168° 55'	2	14·93	75° 03'	168° 27'	2	15·06	56° 20'	129° 50'	1	14·99
75° 33'	168° 27'	2	15·05	71° 10'	172° 08'	1	15·03	55° 11'	132° 10'	2	15·01
76° 13'	168° 56'	2	15·05	70° 21'	167° 43'	1	15·02	53° 50'	134° 53'	2	15·01
77° 43'	174° 29'	2	15·00	70° 09'	167° 50'	2	15·02	53° 10'	134° 37'	1	14·98
77° 45'	179° 30'	2	14·95	69° 28'	167° 35'	3	15·02	51° 10'	136° 56'	3	14·66
77° 21'	186° 58'	3	15·00	65° 00'	164° 50'	4	15·19	49° 14'	139° 05'	1	14·66
77° 06'	192° 25'	2	15·00	64° 18'	163° 37'	2	15·38	44° 59'	143° 12'	2	14·03
77° 01'	187° 07'	2	15·04	63° 25'	159° 12'	2	15·00	44° 52'	147° 24'	2	15·54*

\* Hobarton Observatory.

General Table of the Intensities of the Magnetic Force observed on board Her Majesty's Ships 'Erebus' and 'Terror,' between July 1841 and August 1842.

Position.		Ship.	No. of observations.	Corrected Intensity.	Position.		Ship.	No. of observations.	Corrected Intensity.
Lat. S.	Long. E.				Lat. S.	Long. E.			
42° 52'	147° 24'	Erebus.	12	-13.54*	45° 39'	183° 18'	Terror.	8	-12.77
42° 52'	147° 24'	Terror.	20	-13.54*	46° 29'	184° 00'	Erebus.	4	-12.76
43° 00'	148° 28'	Erebus.	2	-13.62	47° 26'	184° 42'	Terror.	8	-12.91
43° 03'	148° 20'	Terror.	2	-13.67	48° 18'	185° 54'	Terror.	10	-13.06
42° 13'	149° 25'	Erebus.	2	-13.43	48° 43'	186° 30'	Erebus.	3	-12.96
42° 24'	149° 30'	Terror.	2	-13.49	49° 05'	186° 54'	Terror.	10	-13.07
40° 54'	149° 13'	Erebus.	2	-13.38	49° 20'	187° 41'	Erebus.	4	-12.97
40° 51'	149° 28'	Terror.	2	-13.41	49° 24'	187° 23'	Terror.	11	-13.10
38° 17'	150° 22'	Terror.	2	-13.20	49° 27'	189° 13'	Erebus.	5	-12.89
37° 31'	151° 09'	Erebus.	3	-12.99	49° 23'	188° 54'	Terror.	10	-13.12
37° 28'	151° 30'	Terror.	2	-13.00	49° 38'	189° 44'	Terror.	4	-13.06
36° 21'	151° 39'	Terror.	1	-13.12	50° 00'	191° 00'	Erebus.	5	-13.03
34° 35'	151° 30'	Erebus.	3	-12.72	49° 50'	190° 46'	Terror.	10	-13.15
34° 06'	151° 19'	Terror.	2	-12.72	50° 08'	191° 39'	Terror.	6	-13.09
33° 51'	151° 17'	Erebus.	12	-12.60†	50° 48'	192° 20'	Erebus.	2	-13.10
33° 51'	151° 17'	Terror.	12	-12.65†	50° 32'	191° 52'	Terror.	4	-13.18
32° 52'	154° 07'	Erebus.	2	-12.52	50° 45'	192° 19'	Terror.	10	-13.03
33° 57'	153° 35'	Terror.	4	-12.59	51° 34'	194° 29'	Erebus.	5	-13.24
33° 51'	157° 18'	Erebus.	2	-12.32	51° 37'	194° 00'	Terror.	10	-13.24
33° 43'	158° 29'	Terror.	4	-12.38	52° 00'	195° 00'	Terror.	4	-13.25
33° 27'	160° 43'	Erebus.	2	-12.24	52° 21'	197° 53'	Erebus.	2	-13.31
33° 42'	163° 50'	Terror.	4	-12.25	52° 14'	197° 49'	Terror.	4	-13.32
33° 38'	163° 42'	Erebus.	2	-12.13	53° 01'	202° 16'	Terror.	1	-13.22
33° 44'	166° 37'	Terror.	5	-12.02	52° 53'	203° 10'	Erebus.	5	-13.37
33° 41'	166° 23'	Erebus.	2	-12.02	52° 51'	203° 56'	Terror.	10	-13.53
33° 34'	167° 37'	Terror.	5	-11.82	52° 53'	205° 07'	Terror.	10	-13.30
33° 22'	167° 40'	Erebus.	2	-11.95	53° 01'	205° 08'	Erebus.	5	-13.42
32° 58'	169° 20'	Terror.	4	-11.87	53° 31'	206° 14'	Terror.	10	-13.53
32° 12'	170° 53'	Terror.	6	-11.72	54° 37'	208° 57'	Terror.	9	-13.39
32° 35'	169° 53'	Erebus.	4	-11.70	55° 08'	210° 01'	Erebus.	6	-13.52
33° 57'	172° 04'	Terror.	6	-12.01	55° 04'	209° 58'	Terror.	4	-13.35
34° 12'	172° 45'	Erebus.	4	-11.76	56° 20'	211° 52'	Erebus.	6	-13.53
34° 15'	172° 50'	Terror.	5	-11.80	56° 14'	211° 43'	Terror.	8	-13.54
34° 24'	173° 43'	Terror.	4	-11.98	56° 55'	212° 06'	Erebus.	4	-13.64
35° 16'	174° 00'	Erebus.	24	-11.81‡	56° 30'	211° 50'	Terror.	10	-13.58
35° 16'	174° 00'	Terror.	24	-11.98‡	57° 21'	212° 46'	Erebus.	2	-13.74
35° 15'	174° 39'	Erebus.	2	-11.90	57° 05'	212° 12'	Terror.	8	-13.60
36° 20'	177° 27'	Terror.	4	-11.88	57° 44'	212° 59'	Terror.	8	-13.75
36° 27'	177° 34'	Erebus.	2	-11.89	58° 45'	213° 19'	Erebus.	7	-13.85
38° 00'	179° 34'	Terror.	4	-11.95	58° 36'	213° 10'	Terror.	14	-13.92
38° 17'	179° 31'	Erebus.	2	-11.90	60° 48'	213° 51'	Terror.	10	-14.07
38° 27'	179° 59'	Terror.	4	-12.08	61° 20'	213° 57'	Erebus.	4	-14.10
39° 10'	182° 35'	Erebus.	4	-11.93	61° 37'	213° 54'	Terror.	4	-14.00
38° 54'	182° 20'	Terror.	10	-12.05	62° 34'	212° 34'	Terror.	10	-14.15
40° 47'	183° 03'	Erebus.	2	-12.25	62° 40'	212° 53'	Erebus.	2	-14.24
39° 22'	182° 57'	Terror.	8	-12.04	63° 32'	209° 16'	Terror.	12	-14.14
40° 42'	183° 05'	Terror.	8	-12.29	63° 23'	210° 02'	Erebus.	2	-14.36
41° 49'	183° 41'	Erebus.	2	-12.32	63° 23'	210° 02'	Erebus.	2	-14.30§
41° 34'	183° 40'	Terror.	10	-12.26	63° 47'	208° 26'	Erebus.	6	-14.20
42° 40'	183° 46'	Terror.	4	-12.38	64° 38'	206° 53'	Erebus.	2	-14.26
43° 32'	183° 03'	Erebus.	2	-12.55	64° 38'	206° 24'	Terror.	12	-14.31
43° 54'	183° 06'	Terror.	8	-12.56	64° 53'	206° 30'	Erebus.	6	-14.38

\* Hobarton.

† Garden Island, Sydney.

‡ Bay of Islands.

§ Observed on ice.

General Table of the Intensities of the Magnetic Force (continued).

Position.		Ship.	No. of observations.	Corrected Intensity.	Position.		Ship.	No. of observations.	Corrected Intensity.
Lat. S.	Long. E.				Lat. S.	Long. E.			
65° 27'	205° 04'	Terror.	8	-14.25	76° 42'	194° 48'	Erebus.	2	-14.83
65 36	205 32	Erebus.	2	-14.47	76 20	191 26	Terror.	4	-14.97
65 47	204 19	Terror.	4	-14.46	76 24	184 54	Terror.	4	-14.83
65 59	204 08	Erebus.	7	-14.49	77 05	194 38	Erebus.	6	-14.78
65 54	204 08	Terror.	4	-14.43	77 13	193 52	Terror.	10	-14.88
66 10	203 42	Erebus.	6	-14.47	77 47	197 25	Terror.	4	-14.80
66 08	203 39	Terror.	5	-14.42	77 14	199 29	Terror.	10	-14.74
66 33	203 28	Erebus.	4	-14.57	74 50	193 45	Erebus.	2	-14.69
66 36	203 29	Terror.	10	-14.50	75 20	194 36	Terror.	4	-14.81
66 09	204 27	Erebus.	11	-14.49	72 46	189 59	Erebus.	2	-14.64
66 20	203 39	Terror.	4	-14.40	73 10	189 21	Terror.	4	-14.78
65 58	204 07	Erebus.	8	-14.53	72 01	187 35	Erebus.	2	-14.64
66 05	204 02	Terror.	10	-14.43	72 03	187 40	Terror.	10	-14.80
66 12	203 05	Erebus.	4	-14.42	71 43	187 15	Terror.	6	-14.86
66 01	204 04	Terror.	4	-14.33	71 08	184 59	Erebus.	4	-14.77
65 57	203 56	Terror.	14	-14.41	71 20	184 30	Terror.	4	-14.68
65 56	203 31	Terror.	4	-14.31	69 48	179 57	Erebus.	4	-14.68
65 49	202 02	Erebus.	7	-14.45*	69 54	179 55	Terror.	4	-14.78
65 47	202 08	Terror.	10	-14.49*	68 04	183 25	Erebus.	4	-14.59
66 49	202 40	Erebus.	2	-14.52	68 09	183 10	Terror.	4	-14.68
66 07	201 58	Terror.	8	-14.43	67 32	185 09	Erebus.	2	-14.65
67 12	203 12	Terror.	5	-14.59	67 35	185 18	Terror.	10	-14.66
67 32	204 00	Erebus.	3	-14.52	67 24	187 51	Terror.	8	-14.67
67 46	204 17	Terror.	16	-14.57	66 20	189 59	Erebus.	2	-14.47
67 18	203 39	Erebus.	3	-14.51	65 05	191 58	Terror.	10	-14.48
67 24	204 05	Terror.	4	-14.35	63 30	194 52	Erebus.	4	-14.42
67 21	202 15	Erebus.	6	-14.46	63 30	194 15	Terror.	4	-14.39
67 12	202 24	Terror.	6	-14.38	62 17	195 55	Terror.	10	-14.17
68 14	200 09	Erebus.	4	-14.64	62 16	196 10	Erebus.	2	-14.17
67 15	201 34	Terror.	8	-14.31	61 06	198 08	Terror.	4	-14.25
68 42	199 44	Erebus.	5	-14.66	61 07	199 05	Erebus.	7	-14.17
68 08	199 57	Terror.	8	-14.45	60 19	203 42	Terror.	4	-14.20
68 45	199 40	Terror.	13	-14.50	60 18	204 11	Erebus.	2	-13.80
68 52	198 24	Terror.	10	-14.53	60 15	209 55	Terror.	8	-14.09
69 24	194 08	Erebus.	4	-14.66	60 13	211 34	Erebus.	2	-13.91
70 00	191 44	Terror.	9	-14.53	59 53	216 28	Terror.	4	-14.13
70 05	191 10	Erebus.	4	-14.73	59 20	219 14	Erebus.	4	-13.82
70 14	186 16	Terror.	15	-14.62	59 22	218 14	Terror.	4	-14.06
70 18	186 01	Erebus.	6	-14.67	58 04	222 04	Erebus.	3	-13.83
70 32	185 38	Terror.	6	-14.69	58 49	221 25	Terror.	4	-14.15
70 39	185 31	Erebus.	2	-14.72	59 04	228 57	Erebus.	2	-13.85
69 54	183 52	Terror.	8	-14.68	59 01	227 43	Terror.	4	-14.02
70 07	181 45	Erebus.	3	-14.65	59 42	233 20	Erebus.	4	-13.91
71 03	180 56	Terror.	4	-14.66	60 05	235 56	Terror.	4	-13.91
71 00	180 44	Erebus.	2	-14.74	60 19	237 07	Erebus.	9	-14.01
72 07	181 50	Terror.	4	-14.79	60 17	236 38	Terror.	4	-13.99
72 46	181 46	Erebus.	4	-14.62	60 24	237 29	Terror.	4	-14.11
72 55	181 33	Terror.	4	-14.83	60 01	241 38	Erebus.	4	-13.71
75 05	173 17	Erebus.	9	-14.87	59 05	247 27	Terror.	4	-13.87
74 51	174 02	Terror.	4	-14.90	59 07	248 48	Erebus.	4	-13.62
75 09	173 16	Terror.	9	-14.86	58 26	251 42	Terror.	4	-13.94
76 29	178 09	Erebus.	4	-14.87	58 29	252 22	Erebus.	2	-13.42
76 06	174 57	Terror.	4	-14.80	58 33	254 45	Terror.	10	-13.49
77 02	181 37	Terror.	4	-14.82	58 46	258 13	Terror.	8	-13.54
76 42	184 09	Erebus.	2	-14.85	58 35	255 10	Erebus.	2	-13.42
76 48	184 46	Terror.	4	-14.86	58 44	257 49	Erebus.	2	-13.56

\* Observed on ice.



General Table of the Intensities of the Magnetic Force (continued).

Position.		Ship.	No. of observations.	Corrected Intensity.	Position.		Ship.	No. of observations.	Corrected Intensity.
Lat. S.	Long. E.				Lat. S.	Long. E.			
58° 59'	267° 50'	Terror.	4	-13.35	57° 22'	289° 50'	Terror.	2	-11.62
59 02	268 30	Erebus.	2	-13.33	57 26	291 32	Erebus.	4	-11.60
59 01	272 06	Terror.	4	-13.10	57 10	292 11	Terror.	2	-11.20
59 02	272 02	Erebus.	2	-12.88	56 37	294 34	Erebus.	4	-11.51
58 24	276 18	Terror.	4	-12.92	56 40	294 46	Terror.	2	-11.14
58 50	277 12	Erebus.	2	-12.68	54 48	297 21	Erebus.	4	-10.86
58 25	279 44	Terror.	8	-12.44	54 50	298 10	Terror.	1	-10.58
58 23	280 03	Erebus.	2	-12.37	52 40	299 52	Erebus.	4	-10.04
58 31	281 33	Terror.	4	-12.66	52 40	299 52	Terror.	5	-10.17
58 29	282 04	Erebus.	2	-12.36	52 28	301 42	Terror.	4	-9.99
58 36	285 33	Terror.	4	-12.35	52 54	300 57	Terror.	5	-10.11
58 29	286 04	Erebus.	1	-11.94	51 42	301 36	Erebus.	4	-10.00
57 21	289 36	Terror.	4	-12.13	51 32	301 53	Terror.	12	-9.91*

\* Observed on shore, Falkland Islands.

General Table of the Intensities of the Magnetic Force observed on board Her Majesty's Ships 'Erebus' and 'Terror,' between September 1842 and April 1843.

Lat. S.	Long. E.	Ship.	No. of observations.	Corrected Intensity.	Lat. S.	Long. E.	Ship.	No. of observations.	Corrected Intensity.
53° 03'	302° 05'	Erebus.	2	— 9·89	64° 13'	304° 06'	Terror.	8	— 11·87
52 48	303 10	Terror.	2	— 10·18	64 12	303 04	Terror.	2	— 11·95
54 03	305 26	Erebus.	2	— 9·89	64 34	302 50	Erebus.	2	— 11·69
53 47	304 48	Erebus.	2	— 9·89	64 28	303 20	Terror.	8	— 11·86
54 43	304 30	Erebus.	1	— 9·99	64 44	303 07	Erebus.	7	— 11·76§
54 42	304 46	Erebus.	2	— 10·03	64 41	302 52	Terror.	8	— 11·86
54 42	305 30	Terror.	2	— 10·32	64 48	303 09	Terror.	8	— 11·85†
55 40	296 52	Erebus.	5	— 10·71	64 38	302 40	Terror.	2	— 11·82
55 30	297 00	Terror.	2	— 10·99	64 40	302 07	Terror.	2	— 11·89
55 51	292 28	Erebus.	8	— 11·13*	64 31	302 34	Erebus.	2	— 11·65
55 51	292 28	Terror.	8	— 11·19*	64 48	303 09	Erebus.	2	— 11·95
56 02	292 57	Terror.	2	— 11·48	64 48	303 09	Erebus.	2	— 11·71§
55 39	296 00	Erebus.	2	— 10·82	64 30	303 04	Terror.	2	— 12·06
55 52	295 41	Terror.	2	— 10·99	64 04	305 00	Terror.	8	— 11·75
54 24	300 08	Erebus.	5	— 10·29	64 22	305 01	Erebus.	2	— 11·54
55 05	299 49	Terror.	2	— 11·01	64 18	304 18	Erebus.	2	— 11·53
52 52	301 05	Erebus.	5	— 10·05	64 16	304 42	Terror.	1	— 11·81
52 26	301 16	Terror.	2	— 10·05	64 20	304 40	Terror.	2	— 11·80
51 32	301 53	Erebus.	18	— 9·95†	64 12	303 50	Erebus.	2	— 11·91
51 32	301 53	Terror.	14	— 9·92†	64 12	304 07	Terror.	6	— 11·84
52 50	303 07	Erebus.	2	— 9·98	64 05	304 08	Terror.	6	— 11·82
52 46	303 18	Terror.	7	— 9·92	64 05	304 00	Erebus.	2	— 11·56
54 23	303 59	Erebus.	2	— 10·22	63 56	305 22	Terror.	2	— 11·68
53 38	303 43	Terror.	2	— 10·00	64 24	305 30	Terror.	6	— 11·66
55 51	305 18	Erebus.	2	— 10·22	64 16	304 47	Terror.	4	— 11·63
55 51	305 26	Terror.	9	— 10·34	63 30	306 59	Erebus.	2	— 11·36
56 34	306 39	Erebus.	2	— 10·28	63 46	307 23	Erebus.	2	— 11·37
56 55	306 40	Terror.	6	— 10·42	63 47	308 00	Terror.	2	— 11·51
58 16	308 00	Erebus.	2	— 10·51	63 49	308 53	Erebus.	2	— 11·28
58 17	307 54	Terror.	9	— 10·68	63 42	308 45	Terror.	2	— 11·58
59 28	308 00	Erebus.	4	— 10·81	64 19	309 36	Erebus.	6	— 11·35
59 57	307 53	Terror.	2	— 10·86	64 19	309 40	Terror.	8	— 11·49
61 23	307 41	Erebus.	1	— 10·86	64 36	311 53	Erebus.	2	— 11·28
61 20	307 42	Terror.	2	— 11·10	64 43	312 06	Terror.	2	— 11·48
62 12	307 47	Terror.	2	— 11·10	64 37	314 21	Erebus.	2	— 11·26
63 31	308 05	Erebus.	2	— 11·06	64 38	314 01	Terror.	2	— 11·53
62 25	307 58	Terror.	7	— 11·32	64 39	316 04	Erebus.	2	— 11·13
62 22	308 00	Erebus.	7	— 11·14	64 49	315 07	Terror.	2	— 11·37
62 18	308 17	Terror.	7	— 11·32	64 56	317 01	Erebus.	2	— 11·07
62 39	305 48	Terror.	8	— 11·45	64 47	316 57	Terror.	2	— 11·13
62 30	306 30	Erebus.	2	— 11·22	65 06	318 46	Erebus.	2	— 11·02
62 36	306 20	Erebus.	2	— 11·32	64 58	318 26	Terror.	8	— 11·34
63 35	305 47	Terror.	2	— 11·73	64 40	320 12	Erebus.	2	— 10·95
62 36	305 00	Erebus.	2	— 11·34	64 37	320 28	Terror.	2	— 11·22
62 39	304 40	Erebus.	7	— 11·54	63 54	321 36	Erebus.	2	— 10·71
63 57	304 32	Terror.	7	— 11·67	64 02	321 55	Terror.	2	— 11·38
64 23	304 00	Erebus.	4	— 11·76	63 36	324 36	Erebus.	7	— 10·62
64 26	303 52	Erebus.	2	— 11·69‡	63 59	324 18	Terror.	2	— 10·88
64 27	303 54	Terror.	7	— 11·79‡	62 39	328 16	Erebus.	5	— 10·26
64 30	304 10	Terror.	2	— 11·86	62 37	328 17	Terror.	2	— 10·19
64 32	304 20	Erebus.	2	— 11·59	62 20	330 00	Erebus.	2	— 10·16
64 38	304 20	Terror.	8	— 11·81	62 13	330 28	Terror.	6	— 10·35
64 18	308 39	Erebus.	2	— 11·50	61 59	333 43	Erebus.	2	— 9·94

\* On shore at St. Martin's Cove.

† On shore at Port Louis.

‡ On ice.

§ On an ice-floe.

General Table of the Intensities of the Magnetic Force (continued).

Lat. S.	Long. E.	Ship.	No. of observations.	Corrected Intensity.	Lat. S.	Long. E.	Ship.	No. of observations.	Corrected Intensity.
62° 05'	333° 38'	Terror.	2	-10.33	59° 21'	350° 36'	Terror.	2	-9.69
61 37	336 05	Erebus.	2	- 9.93	57 27	352 08	Erebus.	5	-9.13
61 32	336 10	Terror.	2	-10.33	57 30	352 05	Terror.	6	-9.14
61 30	338 00	Erebus.	2	- 9.78	57 09	352 45	Erebus.	2	-8.73
61 28	337 42	Terror.	8	-10.05	57 09	352 44	Terror.	2	-9.42
61 46	341 02	Erebus.	2	- 9.77	56 38	353 57	Erebus.	2	-8.59
62 36	344 08	Erebus.	2	- 9.98	56 44	353 45	Terror.	2	-9.17
62 41	343 18	Terror.	7	-10.06	55 38	355 32	Erebus.	2	-8.57
63 58	345 10	Erebus.	2	-10.19	54 32	357 26	Terror.	2	-8.73
64 14	345 30	Terror.	2	-10.49	54 07	359 56	Erebus.	4	-8.24
64 38	348 00	Erebus.	2	-10.27	54 05	359 33	Terror.	3	-8.76
64 33	347 52	Terror.	2	-10.60	50 37	9 03	Erebus.	2	-8.22
65 12	350 05	Erebus.	2	-10.30	50 41	8 56	Terror.	3	-8.52
65 00	349 30	Terror.	2	-10.54	47 38	10 51	Erebus.	2	-8.08
66 08	352 43	Erebus.	2	-10.44	47 36	10 41	Terror.	2	-8.40
66 00	353 00	Terror.	2	-10.90	45 32	11 54	Erebus.	2	-7.89
67 06	351 04	Erebus.	2	-10.68	45 38	11 52	Terror.	2	-8.19
66 54	351 15	Terror.	2	-11.01	43 57	13 16	Erebus.	5	-7.90
68 14	347 40	Erebus.	5	-10.91	43 55	13 16	Terror.	2	-7.96
68 08	348 10	Terror.	2	-11.34	43 10	14 44	Erebus.	5	-7.75
68 32	347 09	Erebus.	2	-10.94	43 13	14 36	Terror.	8	-7.99
69 26	345 31	Erebus.	2	-11.17	41 48	15 09	Erebus.	2	-7.78
69 24	345 30	Terror.	2	-11.51	41 58	15 11	Terror.	2	-7.96
71 10	344 13	Erebus.	2	-11.47	40 15	15 47	Erebus.	2	-7.63
71 09	344 10	Terror.	2	-11.80	40 12	16 06	Terror.	2	-7.83
70 28	342 26	Terror.	2	-11.74	37 40	16 40	Erebus.	2	-7.60
68 06	344 40	Erebus.	1	-10.91	38 00	16 45	Terror.	2	-7.77
68 07	346 23	Terror.	2	-11.27	35 59	16 34	Erebus.	2	-7.52
65 56	346 24	Erebus.	2	-10.59	36 04	16 32	Terror.	2	-7.63
65 57	346 40	Terror.	2	-10.83	35 26	16 22	Erebus.	2	-7.50
64 31	346 01	Erebus.	1	-10.20	35 21	16 22	Terror.	6	-7.56
63 58	346 25	Terror.	2	-10.39	35 03	17 06	Terror.	4	-7.60
61 34	348 39	Erebus.	2	- 9.65	35 00	17 00	Erebus.	2	-7.50
61 35	349 00	Terror.	2	- 9.98	34 11	18 26	Erebus.	7	-7.59*
59 34	350 34	Erebus.	2	- 9.23	34 11	18 26	Terror.	7	-7.56*

\* On shore at Simon's Bay, Cape of Good Hope.

General Table of the Intensities of the Magnetic Force observed in Her Majesty's Ship  
'Pagoda' in 1845.

Lat. S.	Long. E.	Observer.	No. of observations.	Intensity of the Force, in British units.	Lat. S.	Long. E.	Observer.	No. of observations.	Intensity of the Force, in British units.
33 56	18 29	Clerk.	12	- 7.57	66 55	40 16	Moore.	5	- 11.29
34 12	18 26	Clerk.	6	- 7.62	66 24	40 01	Moore.	2	- 11.32
34 44	17 50	Clerk.	3	- 7.43	66 43	40 12	Moore.	5	- 11.22
34 46	17 46	Moore.	5	- 7.46	64 52	38 37	Moore.	5	- 10.98
35 12	13 28	Clerk.	6	- 7.20	64 52	39 24	Clerk.	5	- 11.10
35 09	15 09	Moore.	6	- 7.33	64 22	40 49	Clerk.	2	- 11.06
35 17	14 00	Moore.	5	- 6.99	64 05	41 09	Moore.	1	- 11.00
35 24	13 23	Moore.	7	- 7.07	63 49	42 00	Clerk.	3	- 10.72
37 25	13 24	Clerk.	3	- 7.31	63 21	45 55	Moore.	6	- 11.07
38 37	14 27	Clerk.	3	- 7.63	63 22	45 35	Clerk.	2	- 10.88
38 42	14 27	Moore.	5	- 7.41	63 36	46 41	Clerk.	3	- 11.04
39 10	14 38	Moore.	5	- 7.30	63 36	46 48	Moore.	8	- 11.13
39 10	14 21	Clerk.	6	- 7.49	62 36	51 40	Clerk.	3	- 11.10
40 21	14 29	Clerk.	3	- 7.53	61 34	53 49	Moore.	5	- 11.35
40 41	14 16	Moore.	3	- 7.45	61 25	53 38	Clerk.	3	- 11.58
42 50	13 00	Clerk.	3	- 7.55	61 26	57 37	Moore.	9	- 11.41
44 50	13 19	Clerk.	3	- 7.63	61 17	57 28	Clerk.	3	- 11.63
47 40	12 25	Clerk.	1	- 7.96	61 00	64 03	Clerk.	3	- 11.76
50 21	10 31	Moore.	5	- 7.96	61 10	64 20	Moore.	2	- 11.82
48 35	10 51	Clerk.	3	- 8.03	61 36	70 46	Clerk.	3	- 12.15
50 30	10 25	Clerk.	3	- 8.29	61 49	71 31	Moore.	8	- 12.16
50 48	10 18	Moore.	5	- 8.28	62 10	72 25	Clerk.	5	- 12.55
51 48	9 33	Clerk.	3	- 8.48	62 10	72 25	Moore.	6	- 12.44
51 50	9 33	Moore.	3	- 8.40	62 40	76 09	Clerk.	5	- 12.54
52 53	7 53	Clerk.	3	- 8.50	62 48	76 15	Moore.	9	- 12.52
53 21	7 52	Moore.	5	- 8.59	64 20	79 38	Clerk.	3	- 12.92
53 52	6 07	Clerk.	6	- 8.66	64 20	79 38	Moore.	3	- 12.71
54 02	6 02	Moore.	6	- 8.64	61 38	84 40	Clerk.	3	- 12.79
55 08	5 50	Clerk.	3	- 8.79	61 42	85 07	Moore.	3	- 13.10
55 18	5 55	Moore.	1	- 8.66	60 42	88 12	Clerk.	3	- 13.10
60 43	4 00	Clerk.	3	- 9.39	60 48	88 33	Moore.	5	- 13.23
61 05	9 03	Clerk.	6	- 9.73	61 23	91 15	Clerk.	6	- 13.31
61 14	9 07	Moore.	5	- 9.76	61 23	91 15	Moore.	5	- 13.25
62 06	12 52	Moore.	2	- 10.22	61 14	92 03	Clerk.	3	- 13.35
61 54	16 23	Clerk.	3	- 10.08	61 07	92 10	Moore.	3	- 13.31
61 56	16 36	Moore.	5	- 10.01	60 35	92 25	Clerk.	3	- 13.22
61 50	19 13	Clerk.	6	- 10.10	60 30	92 34	Moore.	3	- 13.25
62 00	20 25	Clerk.	3	- 10.25	60 03	95 36	Clerk.	2	- 13.62
63 00	20 40	Moore.	6	- 10.20	60 03	96 03	Moore.	2	- 13.41
63 19	21 48	Moore.	6	- 10.32	59 55	99 35	Clerk.	5	- 13.42
64 20	24 05	Clerk.	6	- 10.61	59 45	99 50	Moore.	5	- 13.91
64 25	24 18	Moore.	3	- 10.59	57 46	99 17	Moore.	2	- 13.73
65 34	28 30	Clerk.	3	- 10.85	56 53	101 24	Clerk.	3	- 13.53
65 39	28 48	Moore.	6	- 10.85	56 56	101 36	Moore.	3	- 13.65
66 27	30 45	Moore.	5	- 10.97	55 52	103 06	Clerk.	3	- 13.75
66 30	36 46	Clerk.	3	- 11.22	55 40	103 18	Moore.	3	- 13.75
66 36	36 50	Moore.	5	- 11.13	54 48	106 04	Clerk.	3	- 13.64
66 43	38 39	Clerk.	3	- 11.29	54 38	106 15	Moore.	3	- 13.76
67 11	38 51	Moore.	5	- 11.23	54 17	108 05	Clerk.	4	- 13.75
67 35	39 31	Clerk.	3	- 11.50	54 10	108 15	Moore.	3	- 13.79
67 39	40 28	Moore.	1	- 11.33	53 00	110 08	Clerk.	3	- 13.74
66 45	39 23	Clerk.	3	- 11.32	53 00	110 30	Moore.	5	- 13.82
67 00	40 07	Clerk.	6	- 11.35	51 20	111 23	Clerk.	2	- 13.53
67 18	40 22	Moore.	5	- 11.33	48 57	112 56	Moore.	7	- 13.79

General Table of Intensities observed in the 'Pagoda' (continued).

Lat. S.	Long. E.	Observer.	No. of observations.	Intensity of the Force, in British units.	Lat. S.	Long. E.	Observer.	No. of observations.	Intensity of the Force, in British units.
49 01	111 47	Clerk.	5	-13.62	20 36	79 10	Moore.	4	-9.19
47 21	115 15	Moore.	5	-13.95	20 36	79 22	Clerk.	6	-9.44
47 21	115 15	Clerk.	3	-13.82	20 44	78 31	Moore.	12	-9.35
45 08	116 50	Moore.	2	-13.78	20 44	78 31	Clerk.	9	-9.38
43 20	116 52	Clerk.	5	-13.33	20 39	77 43	Moore.	6	-9.34
43 22	116 49	Moore.	6	-13.66	20 34	77 02	Clerk.	12	-9.31
41 18	116 09	Clerk.	3	-13.22	20 26	70 36	Moore.	3	-9.13
41 00	116 42	Moore.	5	-13.31	20 28	70 46	Clerk.	3	-9.08
38 52	116 15	Clerk.	3	-13.16	20 34	69 24	Moore.	8	-9.16
38 40	116 15	Moore.	3	-13.04	21 06	68 12	Clerk.	3	-9.02
37 03	116 57	Clerk.	6	-12.84	21 11	67 54	Clerk.	9	-9.11
37 00	116 57	Moore.	7	-12.70	21 11	67 42	Moore.	10	-9.10
36 12	116 50	Clerk.	3	-12.67	21 12	67 29	Clerk.	6	-9.10
36 11	116 48	Moore.	3	-12.65	21 02	66 02	Clerk.	6	-8.94
35 18	117 07	Clerk.	3	-12.89	21 01	66 10	Moore.	5	-8.92
35 07	117 38	Moore.	3	-12.83	20 40	62 58	Moore.	4	-8.88
35 02	117 56	Clerk.	11	-12.78*	20 31	59 42	Clerk.	3	-8.87
35 02	117 56	Moore.	10	-12.78*	20 09	57 31	Moore.	7	-8.75‡
35 30	114 35	Moore.	3	-12.66	21 44	53 34	Clerk.	3	-8.93
35 36	114 44	Clerk.	3	-12.78	21 50	53 25	Moore.	3	-8.79
34 16	113 01	Clerk.	3	-12.43	26 25	49 12	Clerk.	3	-8.79
32 32	111 36	Clerk.	3	-12.22	26 26	48 20	Moore.	3	-8.82
32 24	111 26	Moore.	5	-11.91	27 12	46 09	Clerk.	3	-8.55
29 20	106 55	Clerk.	3	-11.76	27 14	45 50	Moore.	3	-8.78
29 16	106 49	Moore.	3	-11.35	28 24	43 00	Clerk.	3	-8.52
27 47	106 36	Clerk.	3	-11.29	28 44	42 01	Clerk.	3	-8.46
26 41	105 43	Moore.	7	-11.13	28 35	40 24	Clerk.	3	-8.54
26 00	105 11	Clerk.	3	-11.13	28 57	37 55	Moore.	5	-8.41
24 00	98 15	Moore.	6	-10.46	28 57	37 52	Clerk.	6	-8.29
24 00	97 40	Clerk.	12	-10.37	30 33	33 19	Clerk.	3	-8.22
24 03	94 52	Moore.	9	-10.37	30 27	33 41	Moore.	1	-8.37
24 02	92 07	Moore.	2	-10.35	31 06	31 34	Clerk.	3	-8.04
22 47	91 00	Clerk.	3	-10.03	31 06	31 26	Moore.	3	-8.05
21 44	89 38	Moore.	3	-9.95	33 01	29 36	Clerk.	3	-7.92
21 50	89 44	Clerk.	3	-10.04	34 31	27 04	Clerk.	5	-8.02
20 46	87 59	Clerk.	6	-9.80	35 46	23 35	Clerk.	3	-7.82
20 37	86 26	Moore.	6	-9.70	35 40	21 40	Moore.	2	-7.82
20 38	85 26	Clerk.	3	-9.58	35 36	21 40	Clerk.	3	-7.76
20 25	82 10	Moore.	5	-9.45	35 07	20 46	Clerk.	3	-7.67
20 26	82 22	Clerk.	6	-9.52	33 56	18 29	Clerk.	12	-7.58†

\* King George's Sound, West Australia.

† Magnetic Observatory, Cape of Good Hope.

‡ On shore, Port Louis, Mauritius.

Intensities of the Force observed by Lieut. ALEXANDER JOHN SMITH, R.N., between Hobarton and the Cape of Good Hope, in July to September 1844.

Lat. S.	Long. E.	No. of observations.	Intensity, in British units.	Lat. S.	Long. E.	No. of observations.	Intensity, in British units.
42° 52'	147° 24'	2	-13.54	40° 06'	87° 00'	2	-12.01
43° 28'	137° 10'	2	-14.04	38° 10'	75° 22'	2	-10.79
43° 14'	133° 22'	2	-14.06	38° 08'	73° 35'	2	-10.94
42° 35'	125° 40'	2	-14.25	39° 00'	65° 44'	2	-10.40
40° 31'	109° 06'	2	-13.17	41° 00'	46° 13'	2	-9.69
39° 54'	102° 00'	2	-12.97	39° 50'	28° 36'	2	-8.40

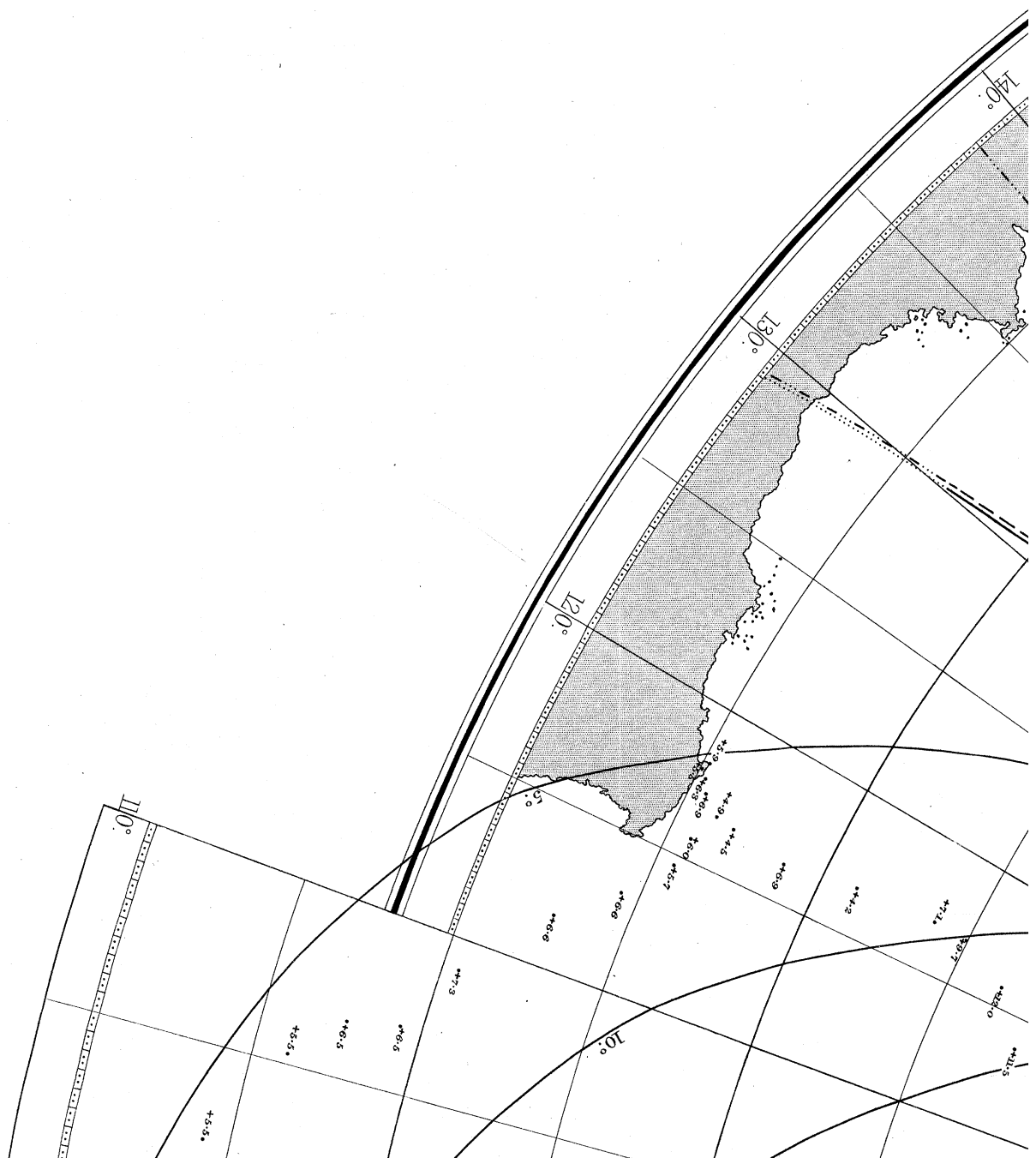
Intensities of the Force observed by Lieut. JOSEPH DAYMAN, R.N., between Hobarton and the Cape of Good Hope, between December 1844 and March 1845.

Lat. S.	Long. E.	No. of observations.	Intensity, in British units.	Lat. S.	Long. E.	No. of observations.	Intensity, in British units.
44° 39'	144° 23'	4	-13.70	22° 34'	80° 10'	2	-9.49
44° 34'	141° 46'	3	-13.75	22° 35'	78° 08'	2	-9.31
42° 24'	137° 18'	2	-13.75	22° 38'	76° 10'	2	-9.30
41° 46'	133° 26'	2	-13.89	22° 28'	74° 18'	2	-9.15
40° 05'	128° 23'	2	-13.96	22° 33'	72° 20'	2	-9.11
38° 42'	123° 51'	4	-13.51	22° 41'	69° 54'	2	-9.14
37° 47'	123° 52'	4	-13.34	23° 52'	64° 59'	2	-9.00
35° 55'	118° 22'	4	-12.93	24° 36'	62° 02'	4	-8.93
36° 06'	116° 42'	2	-12.90	24° 43'	59° 46'	2	-8.91
34° 58'	112° 59'	2	-12.68	24° 36'	58° 37'	2	-8.86
33° 47'	111° 04'	2	-12.10	25° 13'	51° 29'	2	-8.57
33° 37'	108° 24'	2	-12.06	25° 42'	49° 06'	2	-8.38
29° 40'	105° 28'	2	-11.56	28° 15'	42° 18'	2	-8.17
28° 04'	105° 06'	2	-11.23	29° 21'	39° 06'	2	-8.13
26° 44'	104° 26'	2	-11.03	30° 10'	36° 17'	2	-8.09
25° 52'	102° 58'	2	-10.69	31° 19'	32° 21'	2	-7.87
24° 50'	101° 31'	2	-10.64	32° 17'	29° 34'	2	-7.72
24° 00'	99° 33'	2	-10.58	34° 02'	26° 53'	2	-7.61
23° 02'	94° 44'	4	-10.05	34° 36'	25° 23'	2	-7.68
22° 18'	90° 36'	4	-9.65	34° 40'	24° 16'	2	-7.55
22° 11'	86° 30'	2	-9.58	34° 48'	19° 33'	2	-7.40
22° 08'	84° 17'	2	-9.41				

## ERRATUM.

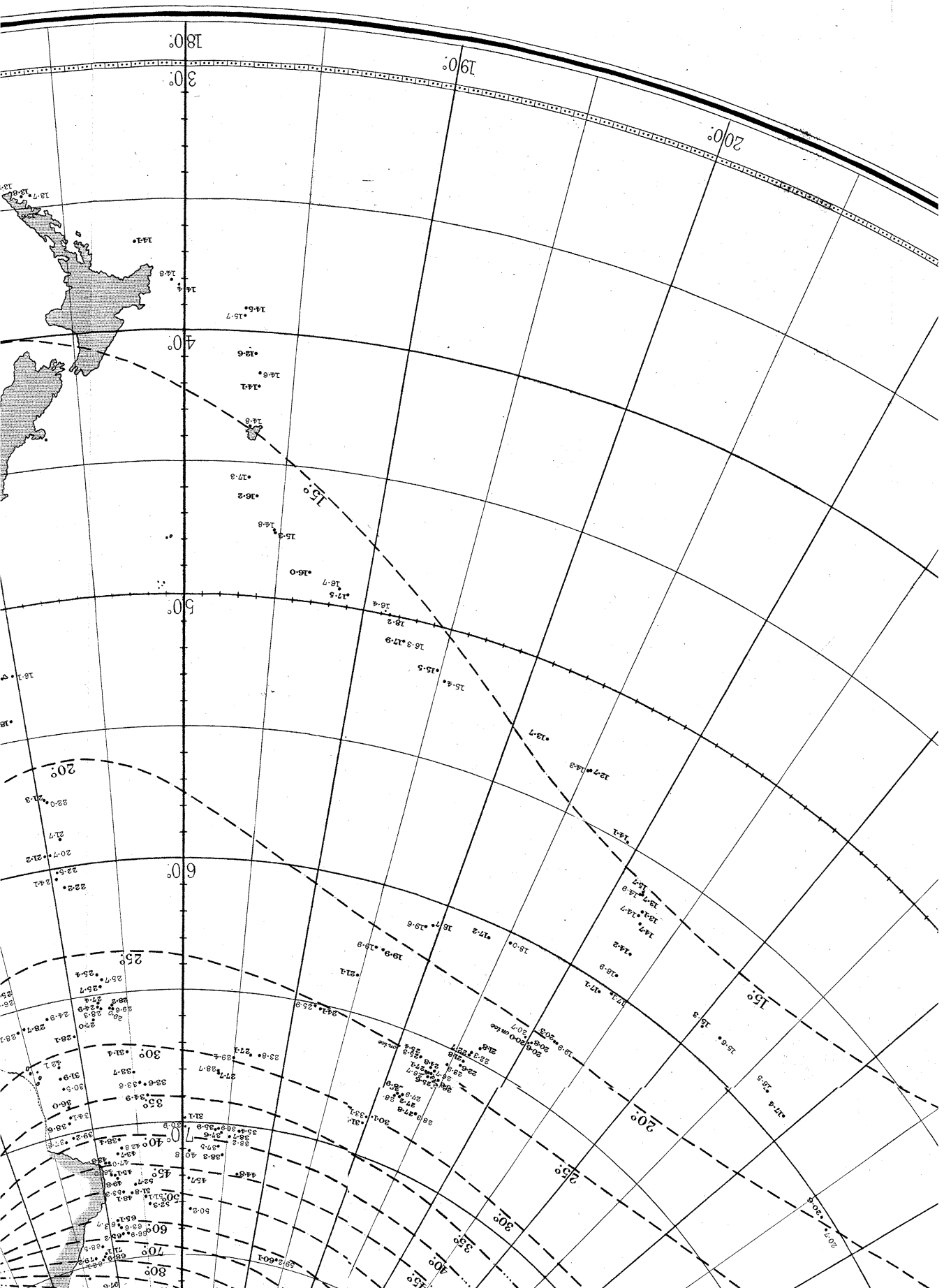
Page 392, third line from bottom,

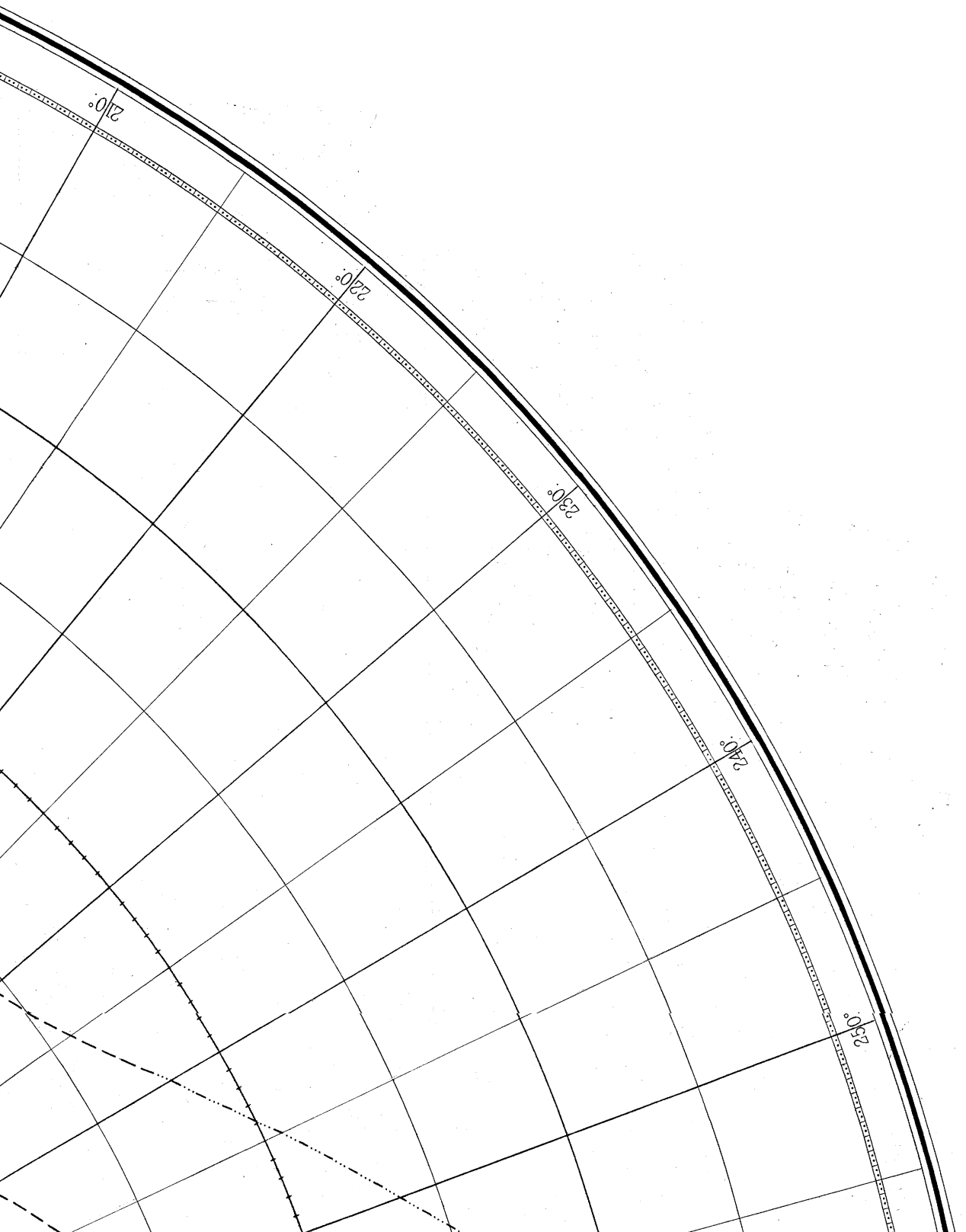
for 62° 37' 328° 30' Erebus. 7 -2° 50' -2.8  
 read 62° 37' 328° 30' Erebus. 7 -5° 46' -5.8

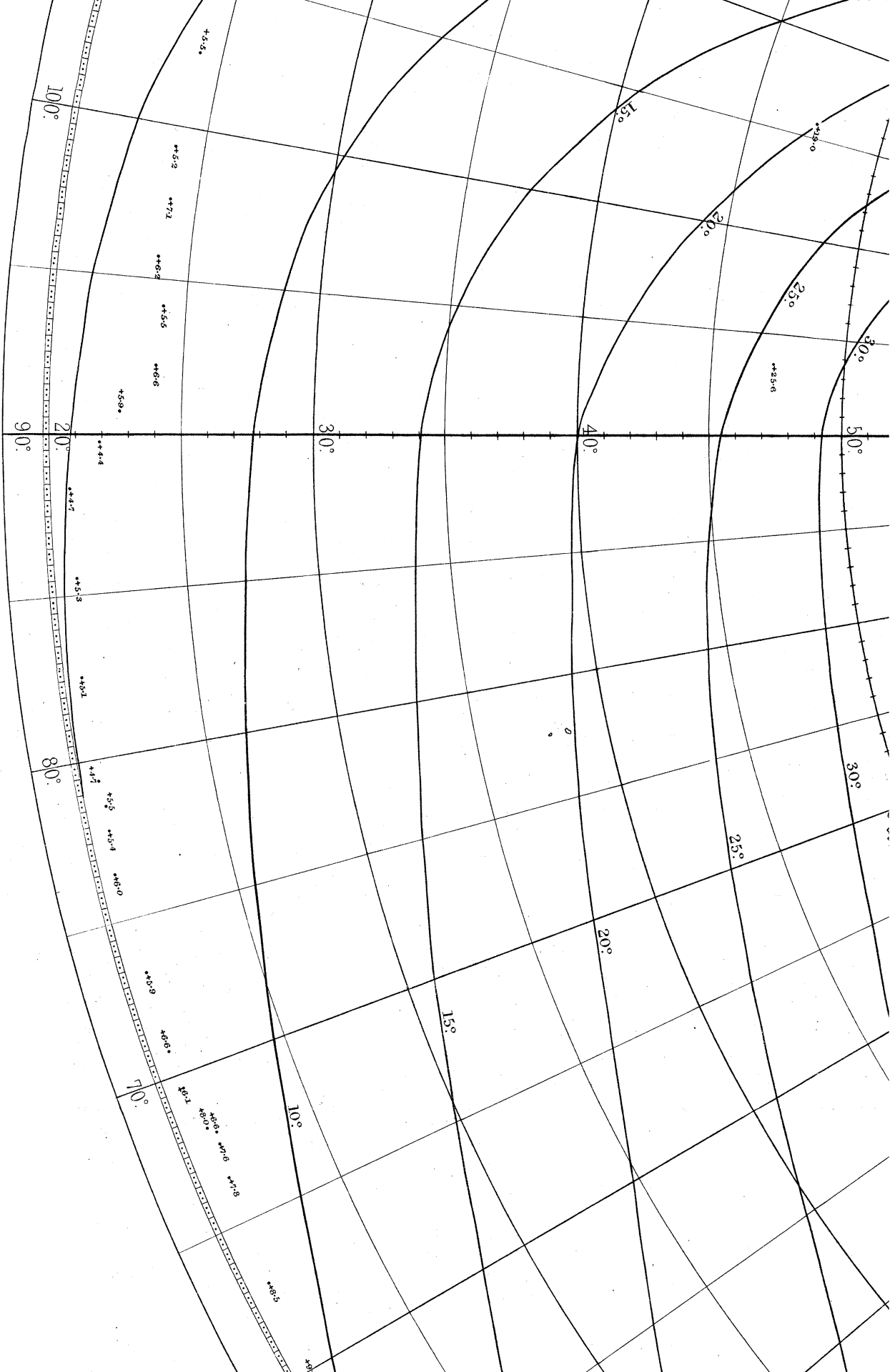


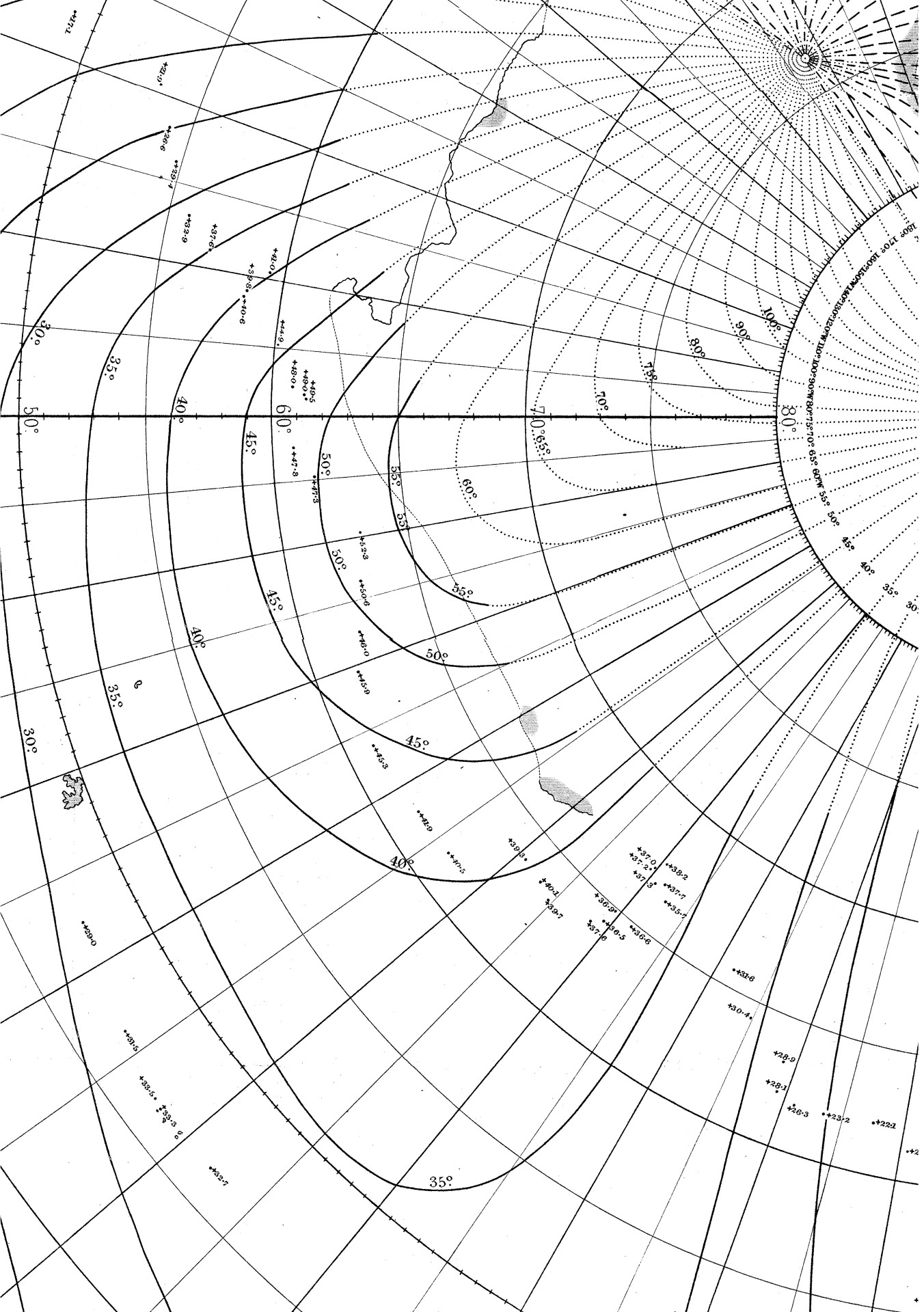


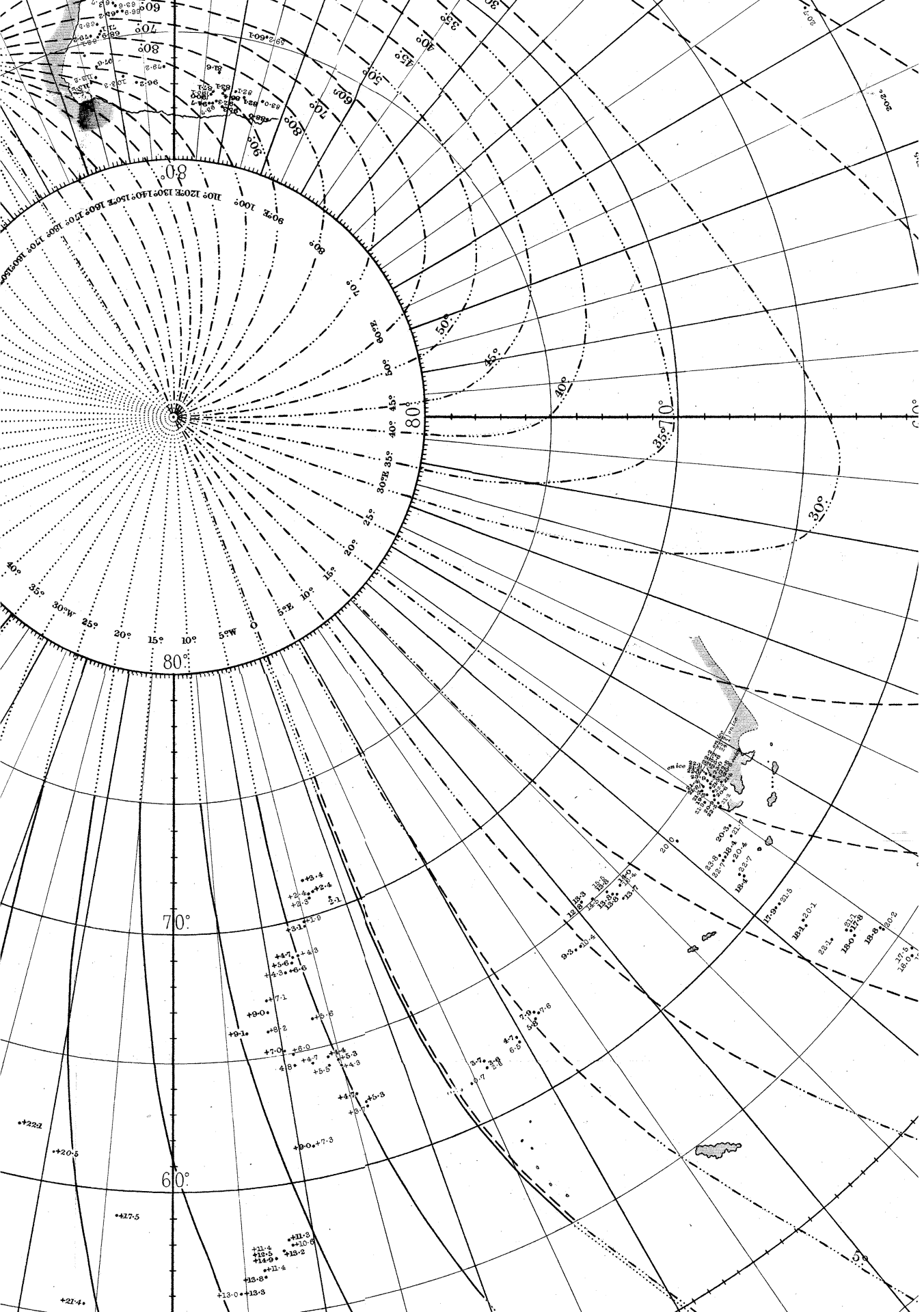


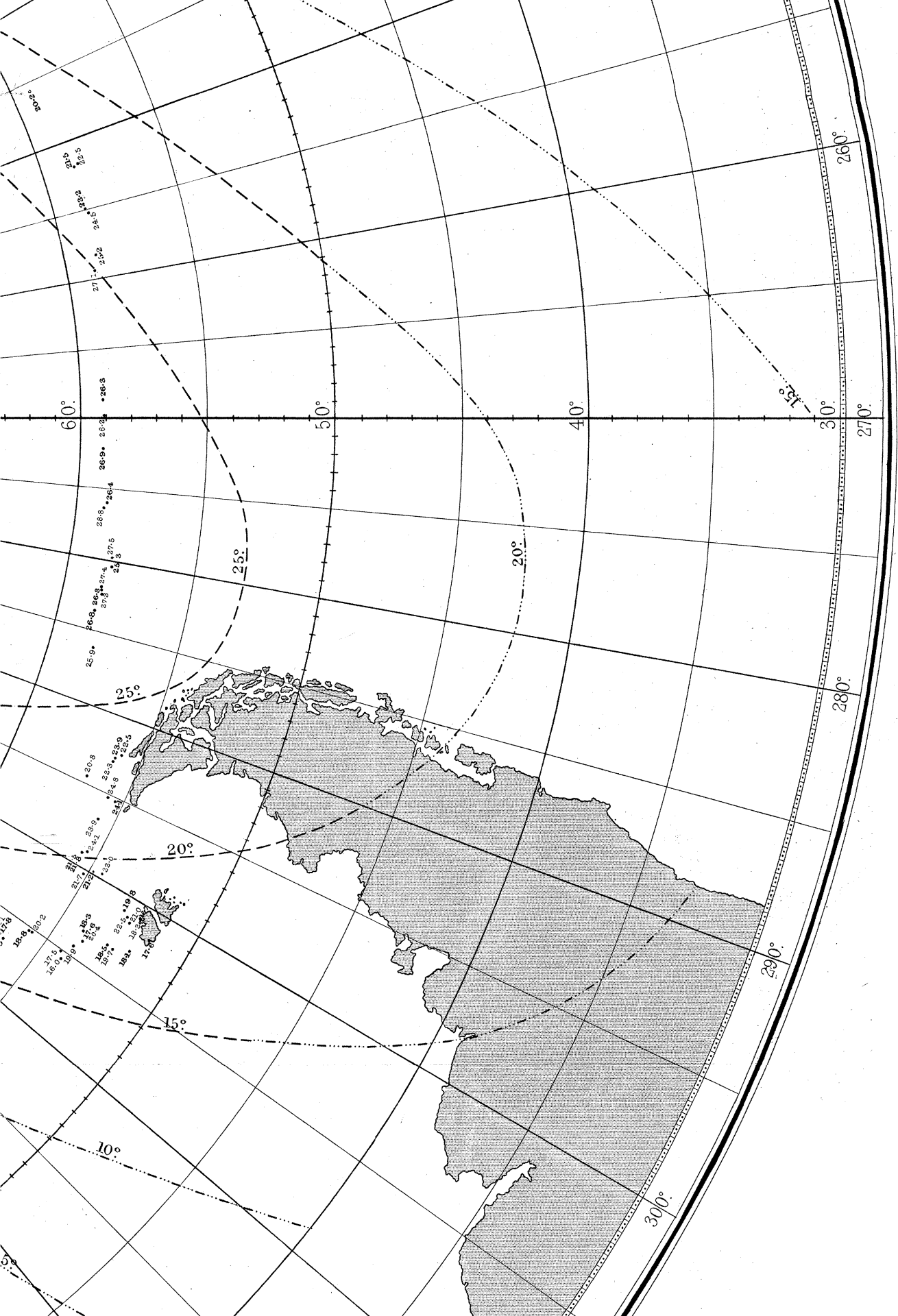




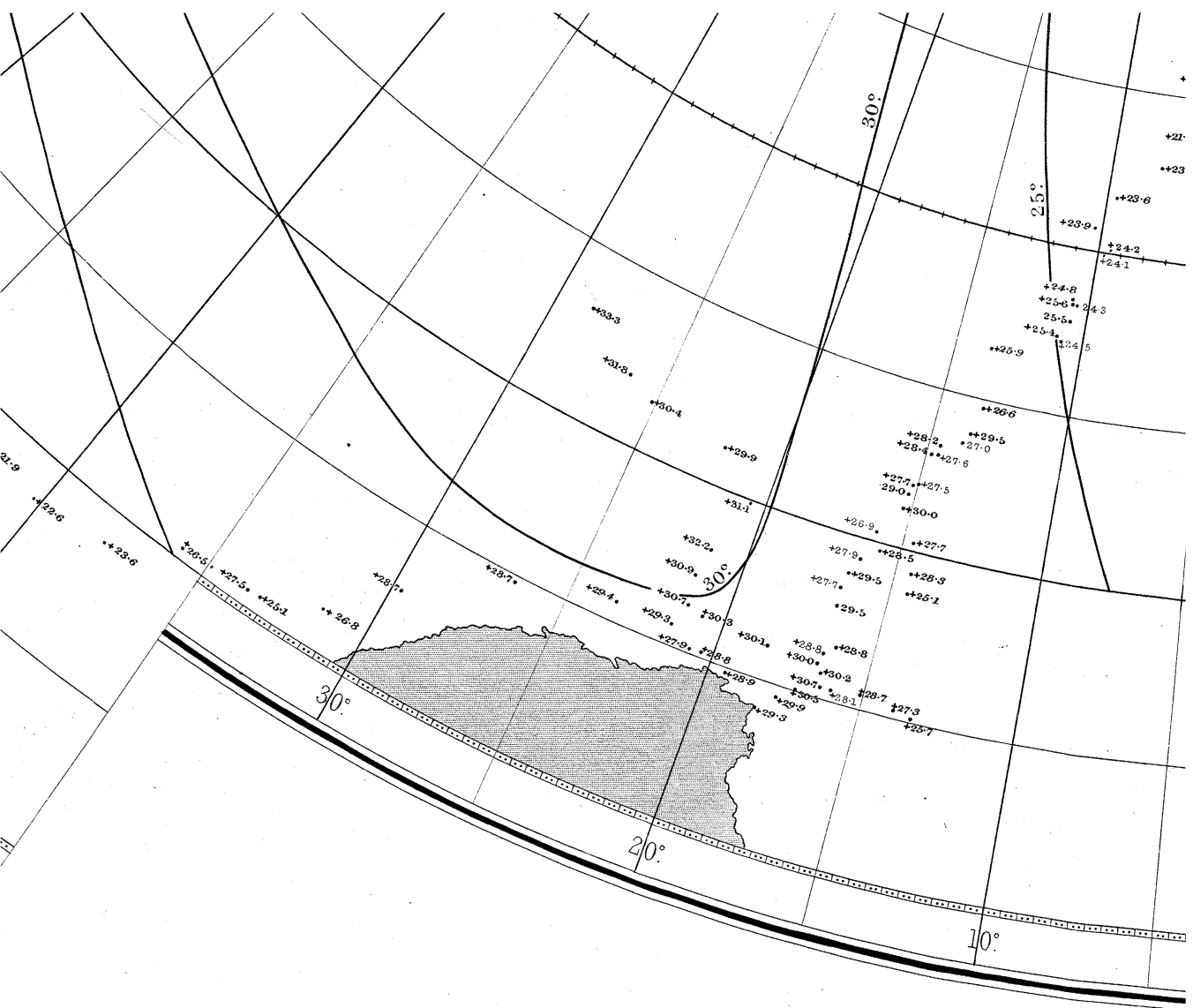




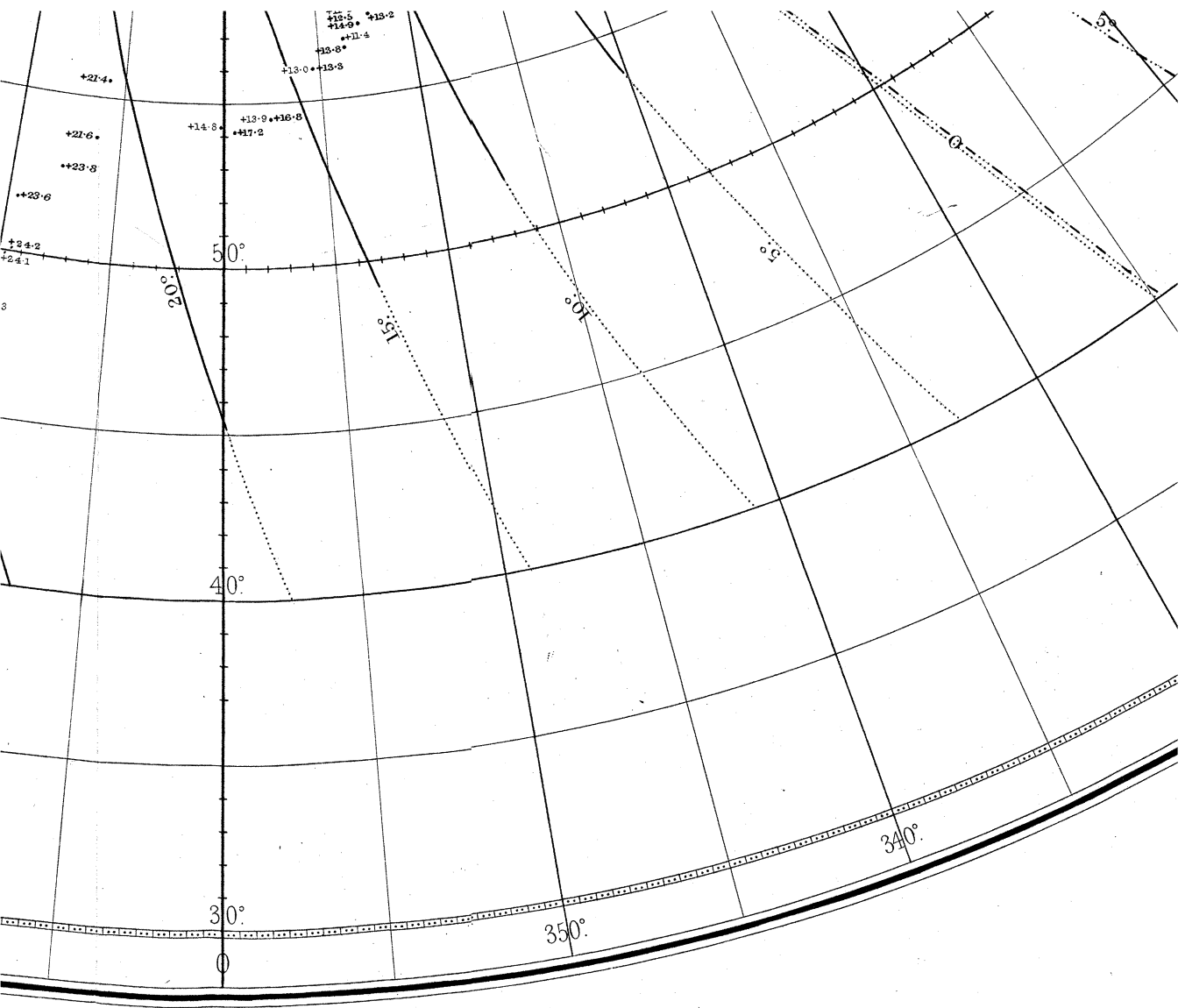


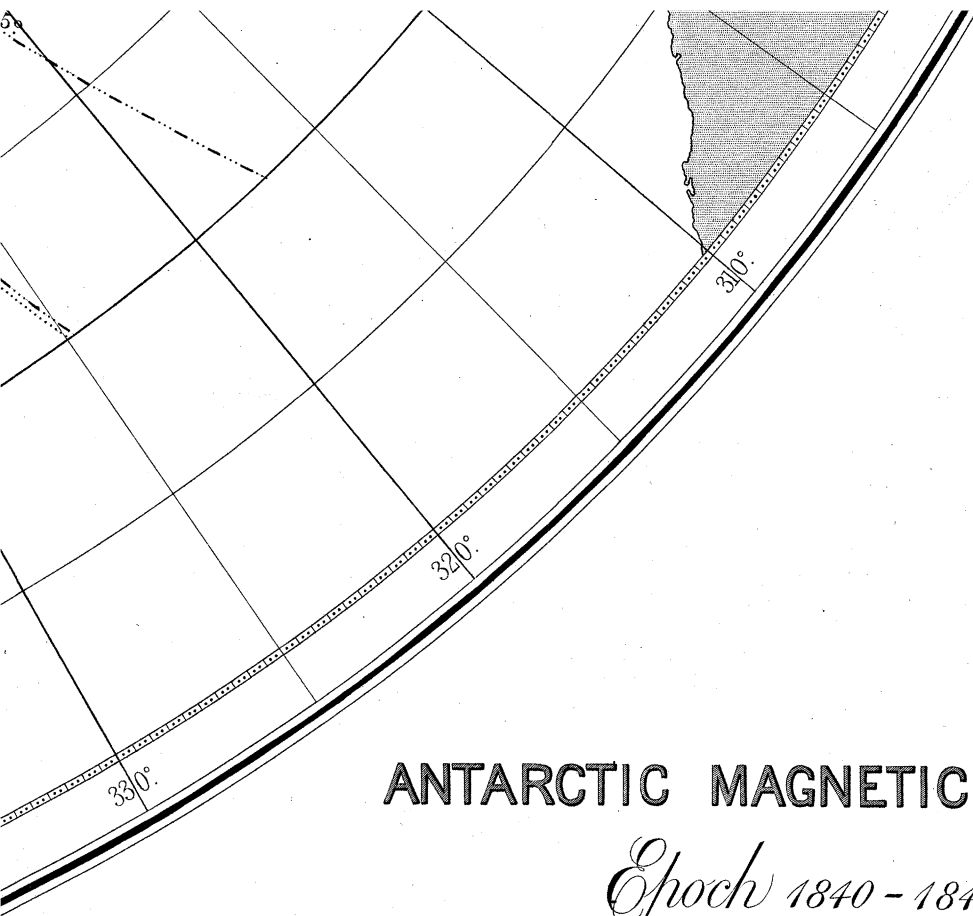








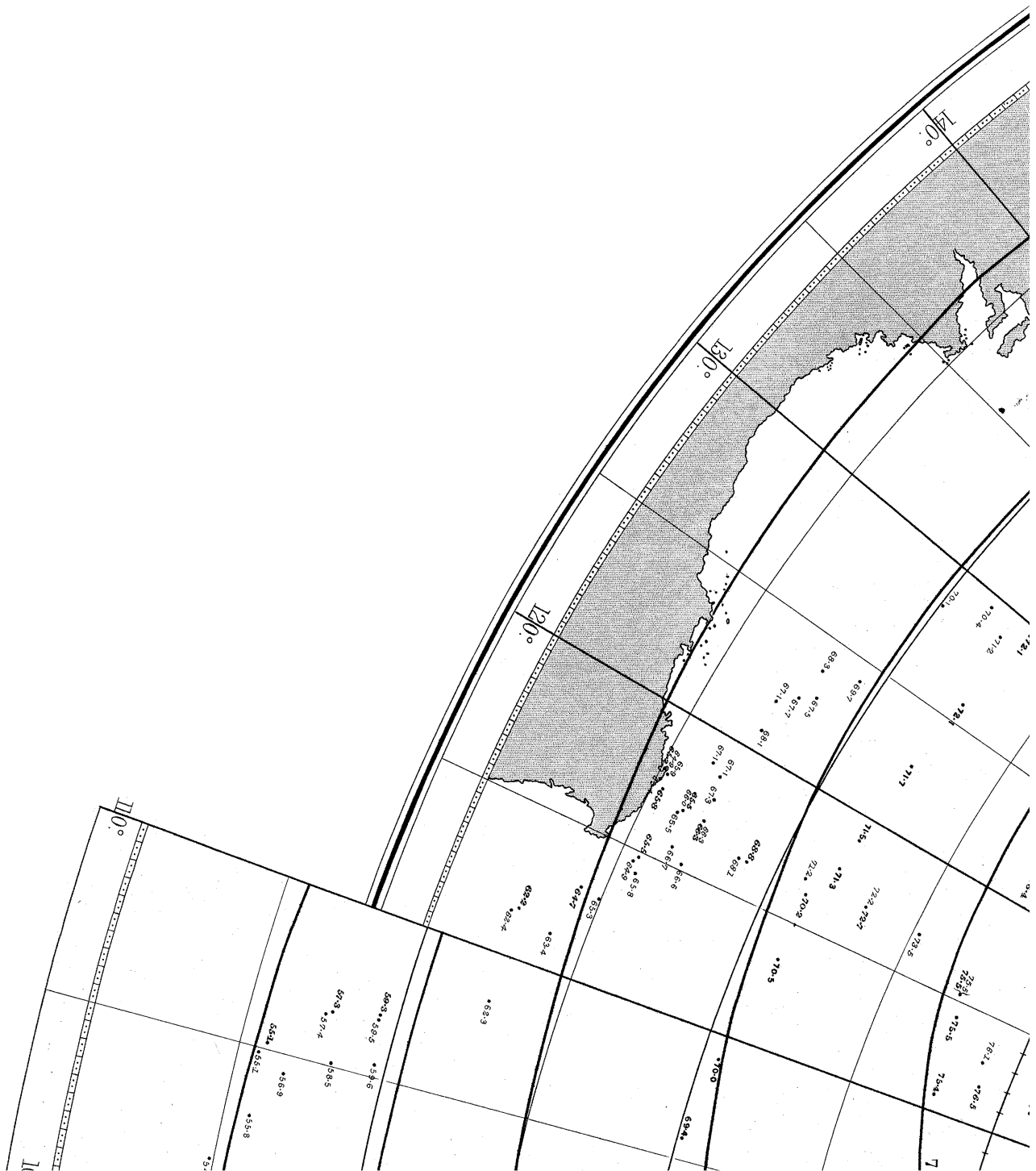


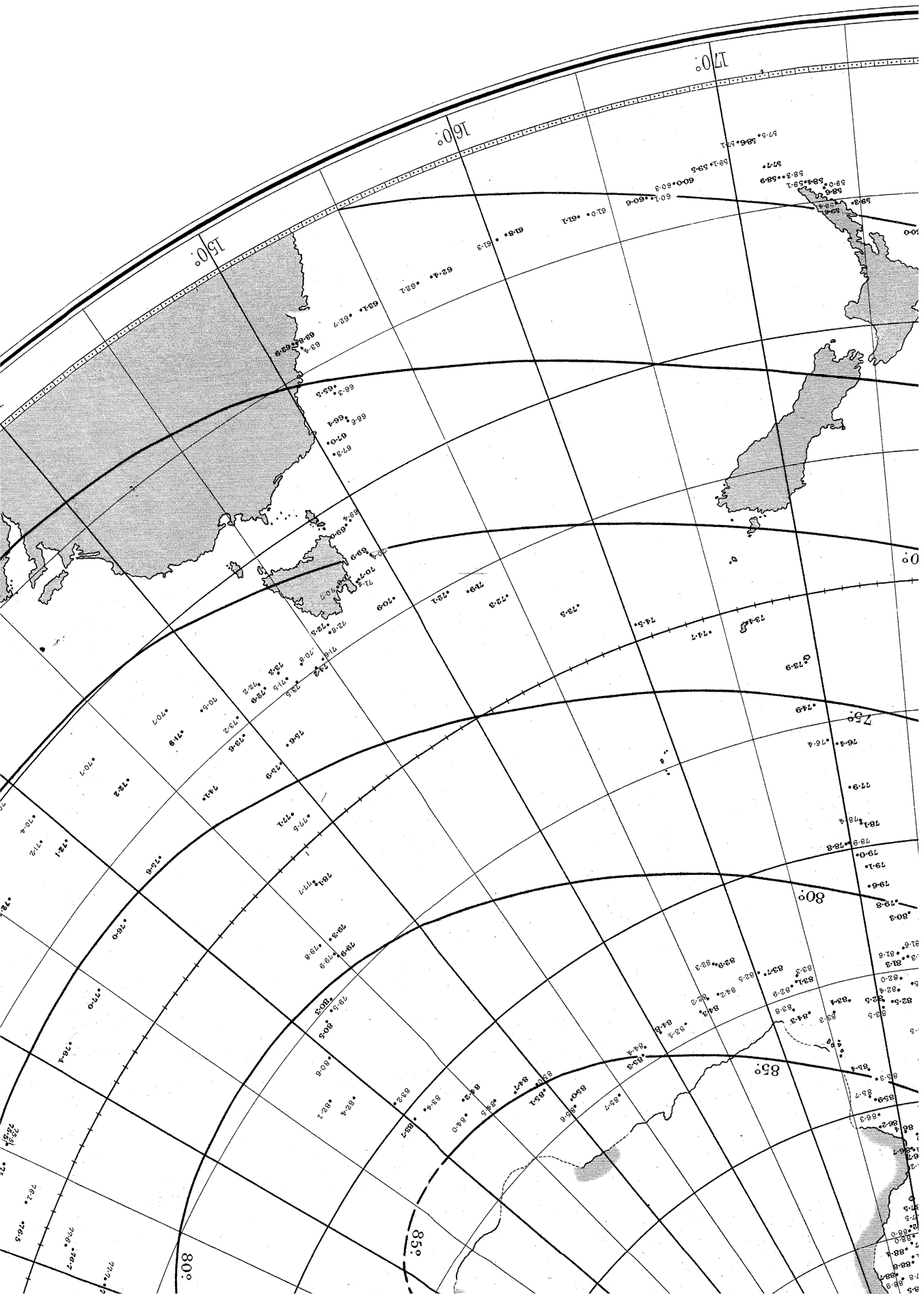


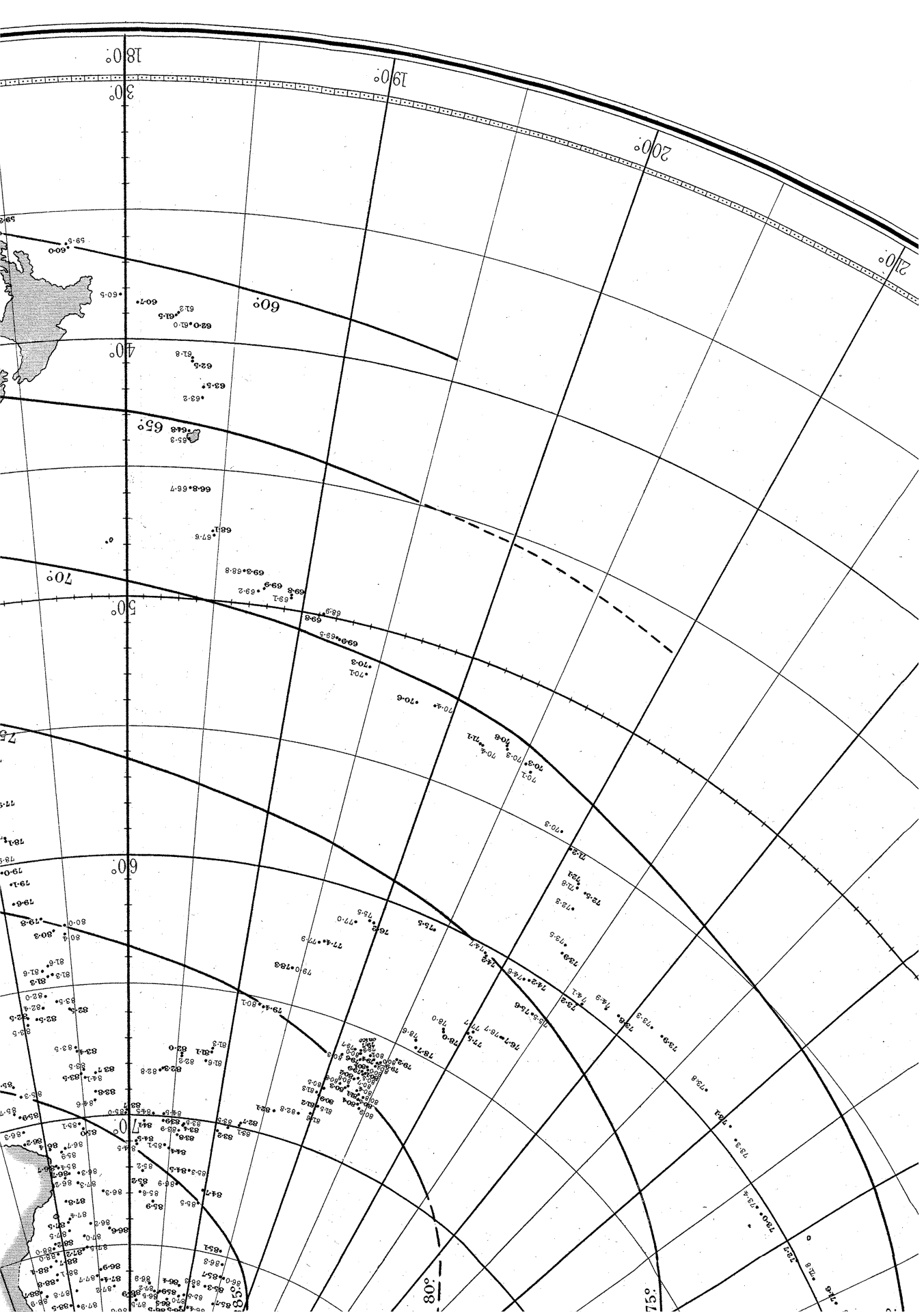
# ANTARCTIC MAGNETIC SURVEY

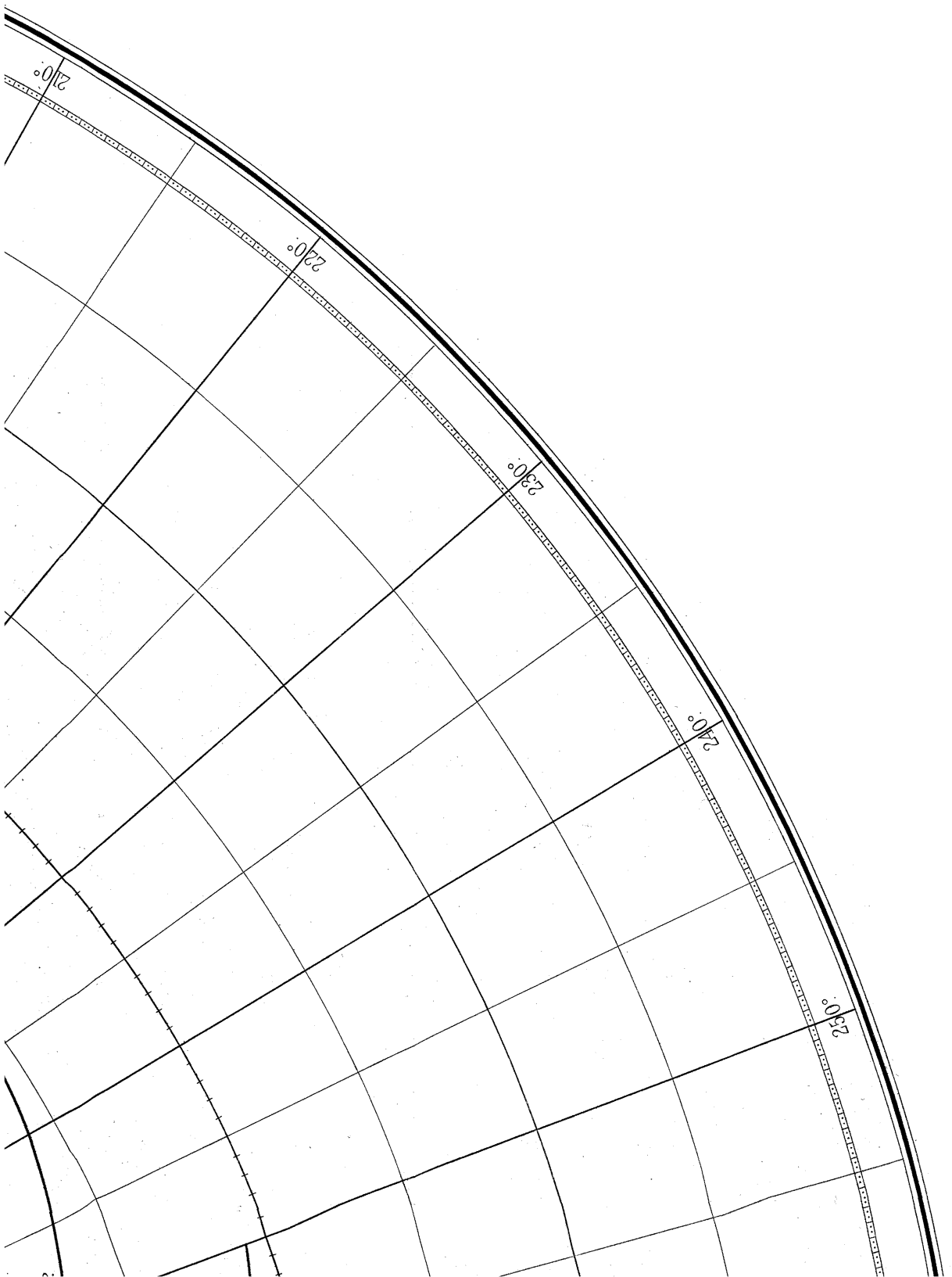
*Epoch 1840 - 1845*  
**Declination.**

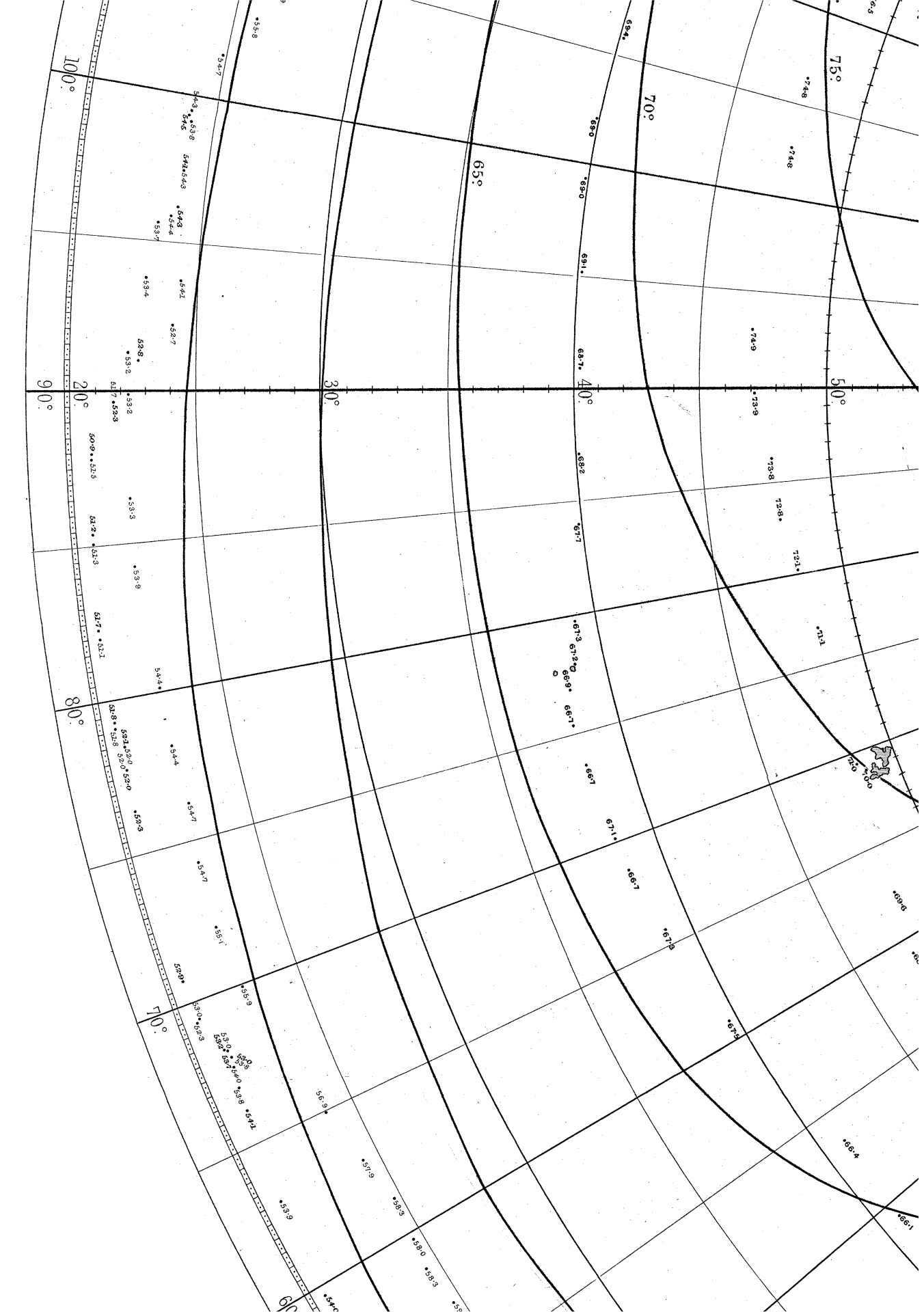
Engraved by Malby & Sons.

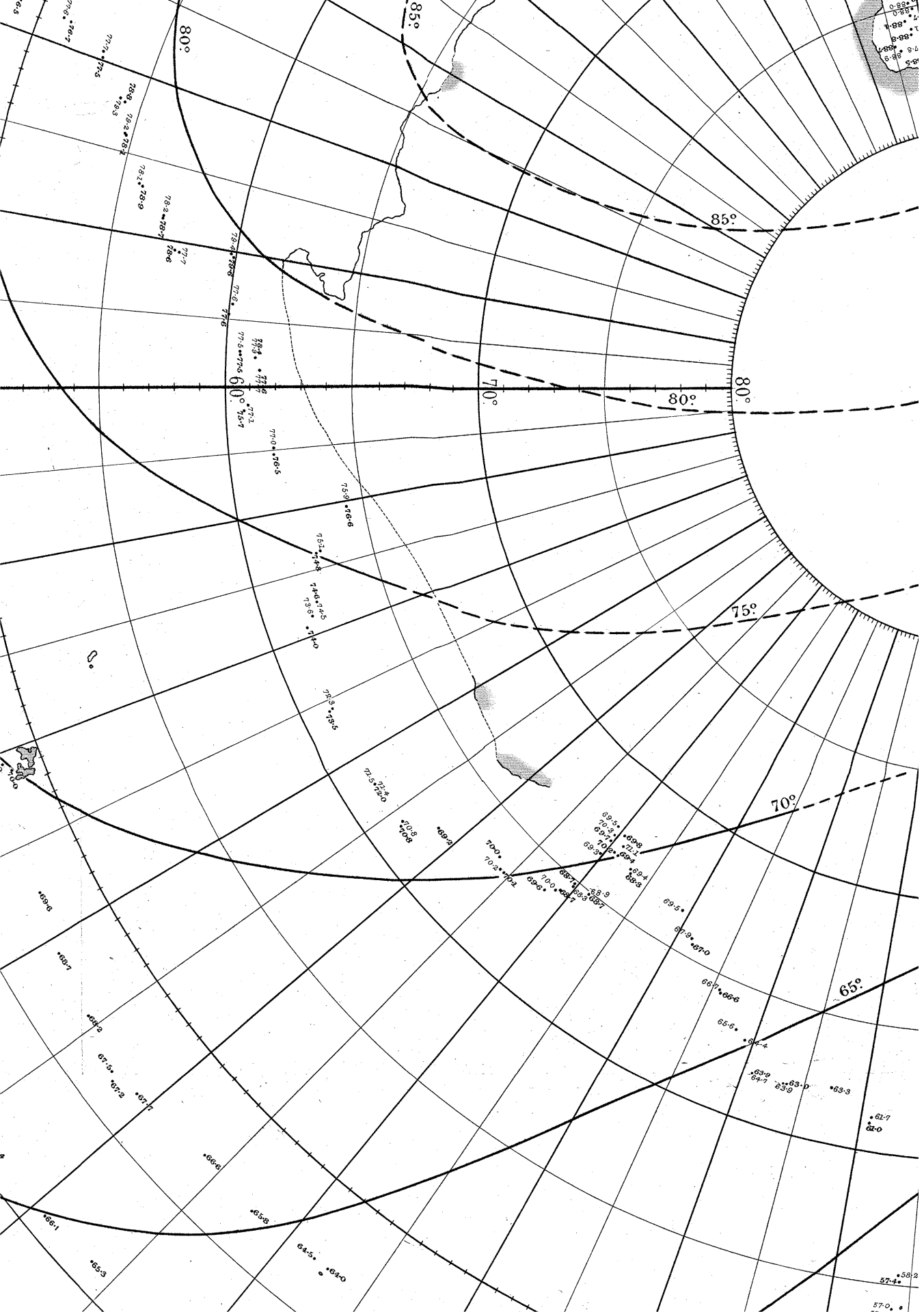




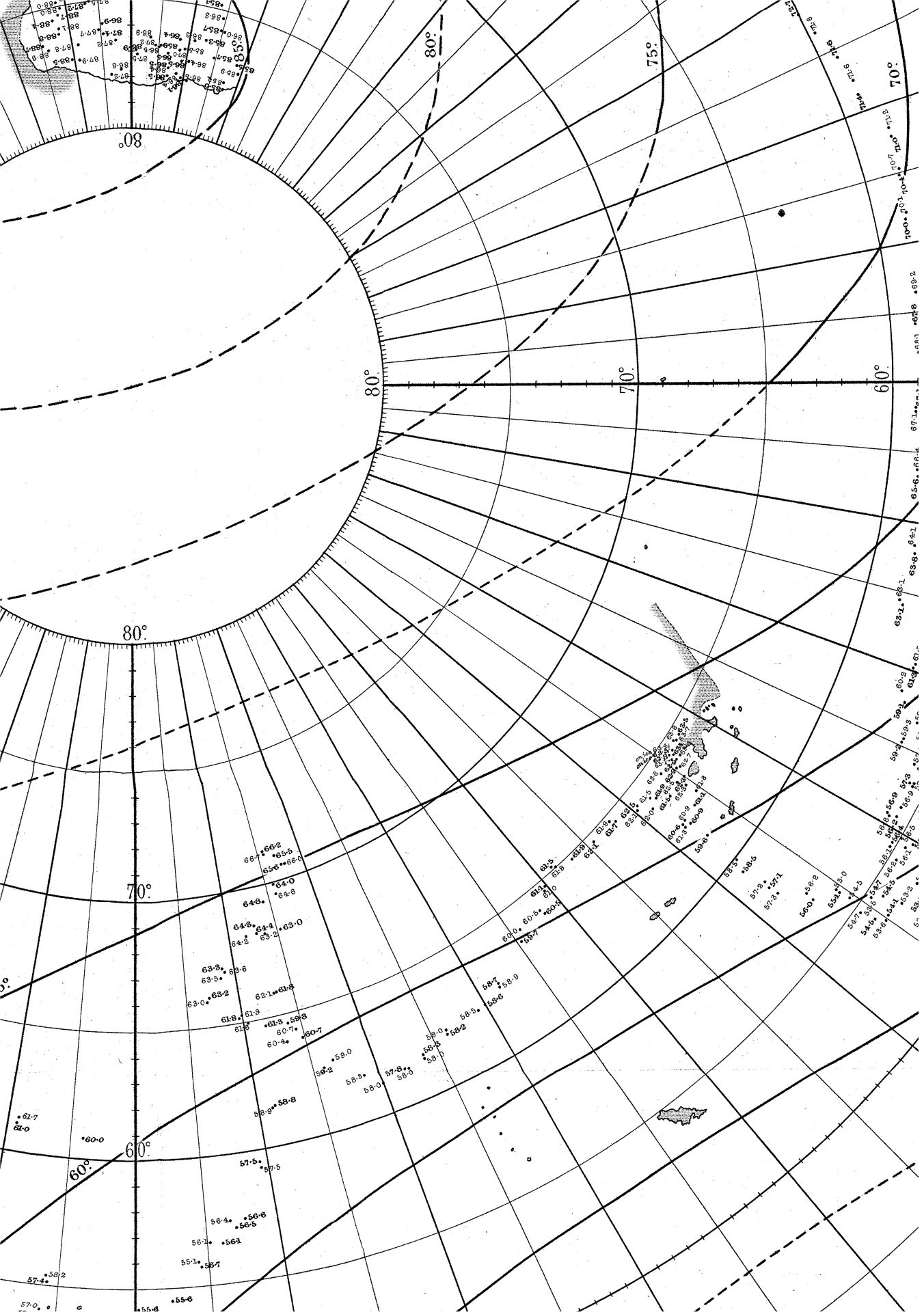


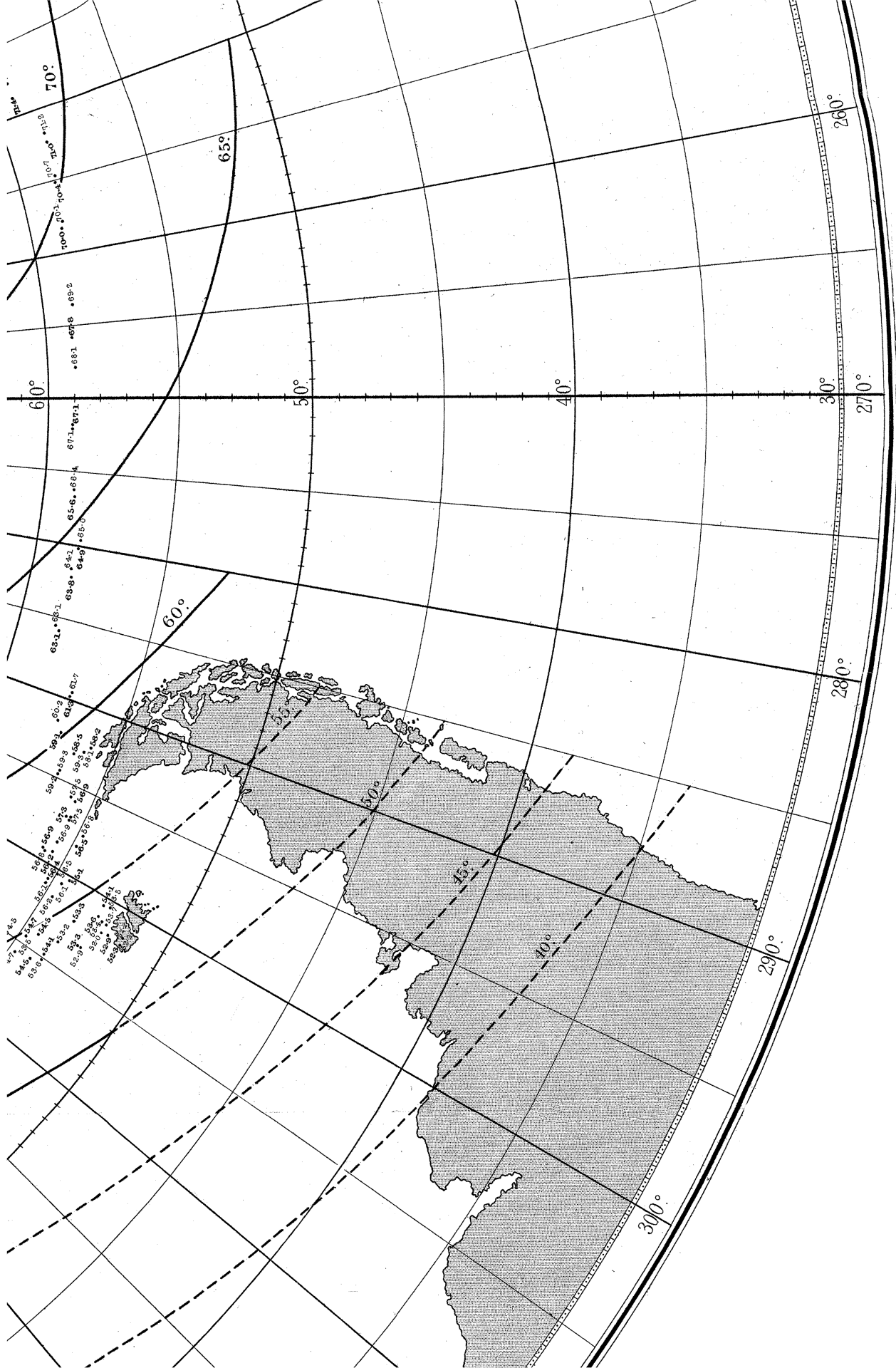


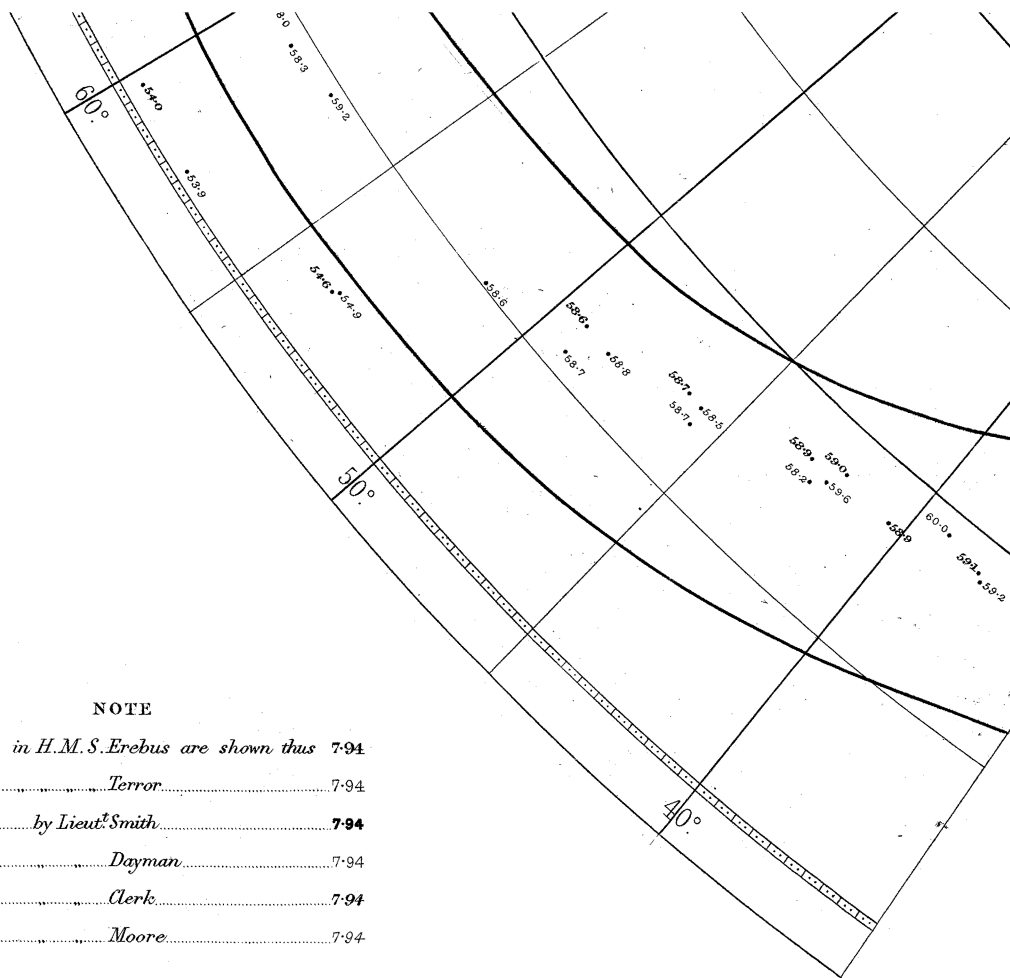












## NOTE

Observations in H.M.S. Erebus are shown thus 7.94

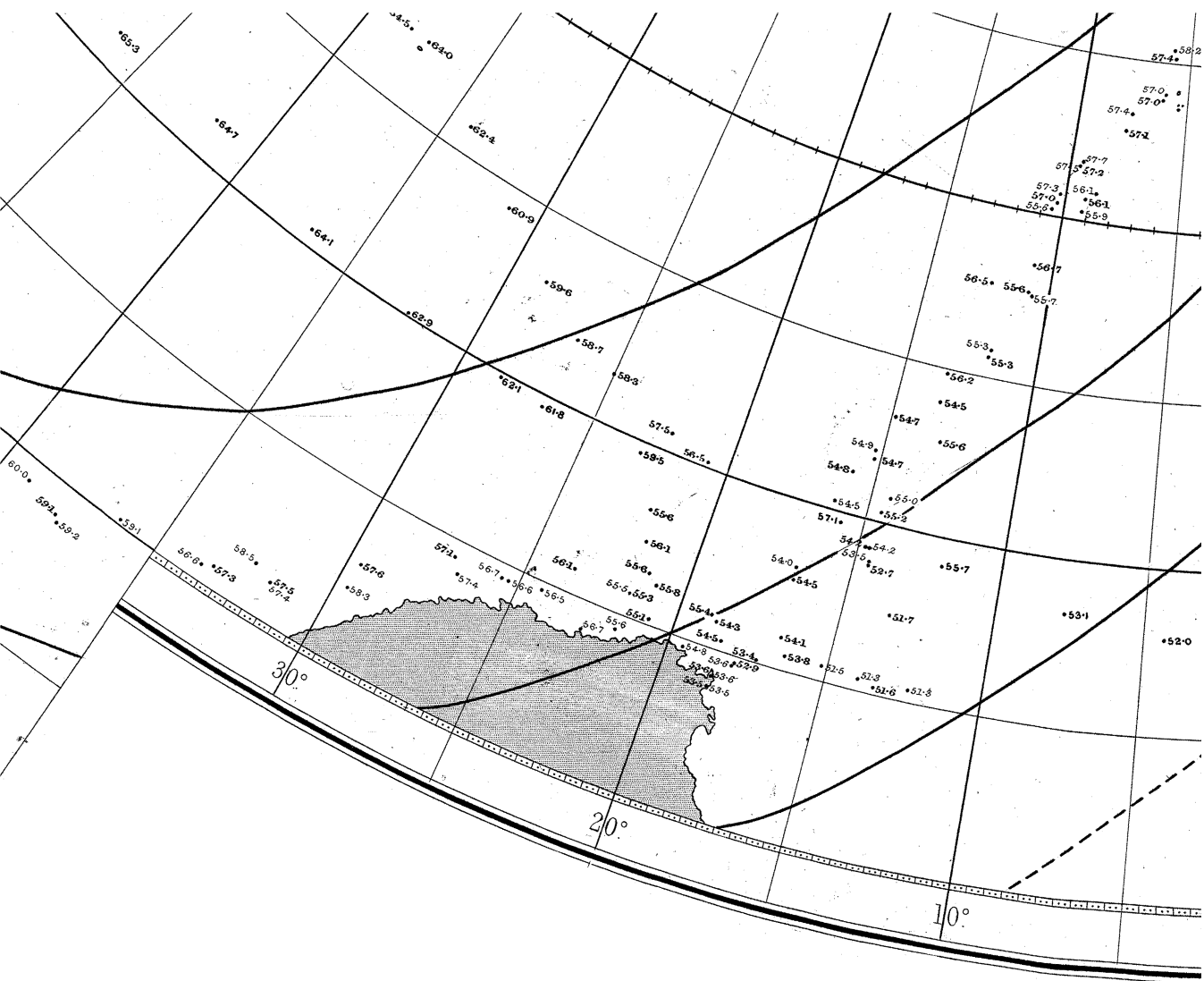
*Terror* 7-94

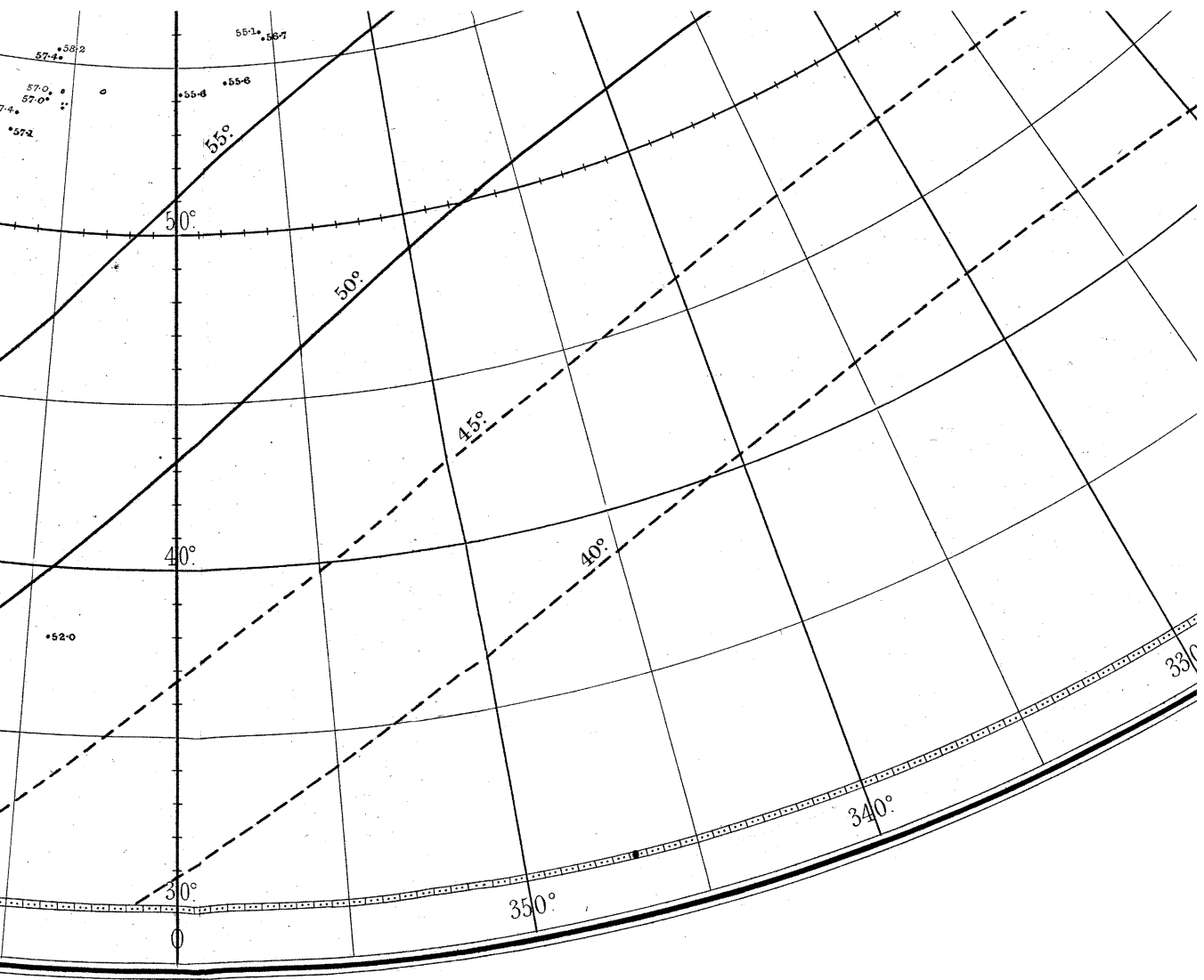
.....by Lieut.<sup>t</sup> Smith.....7-94

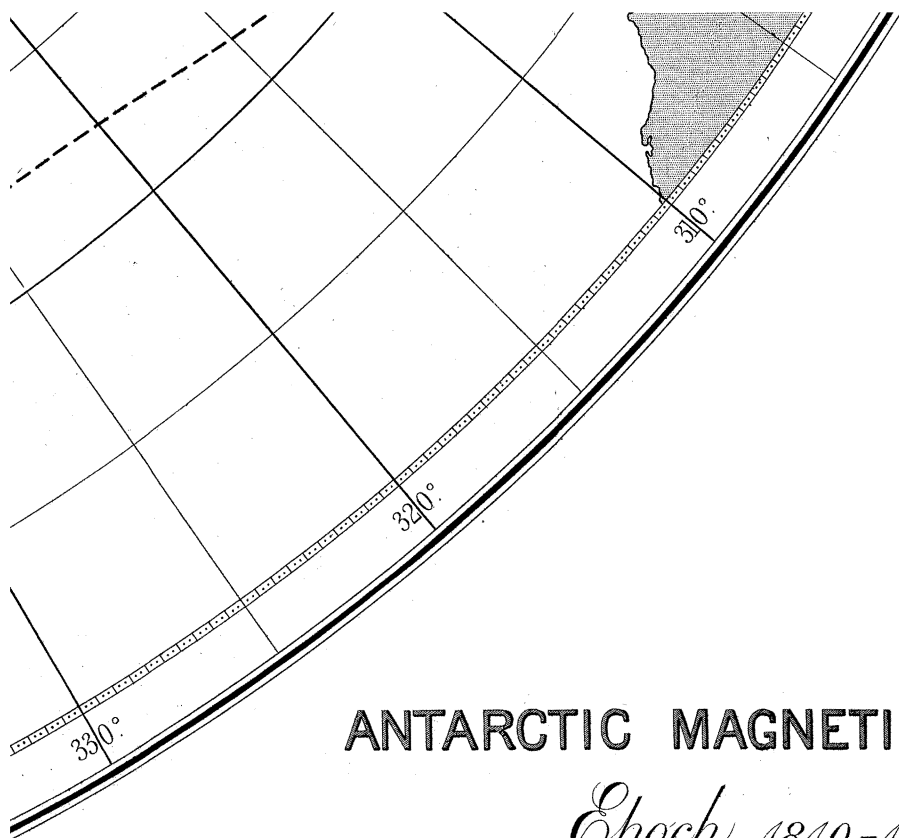
..... Dayman ..... 7-94

.....Clerk.....7-94

.....*Moore*.....794





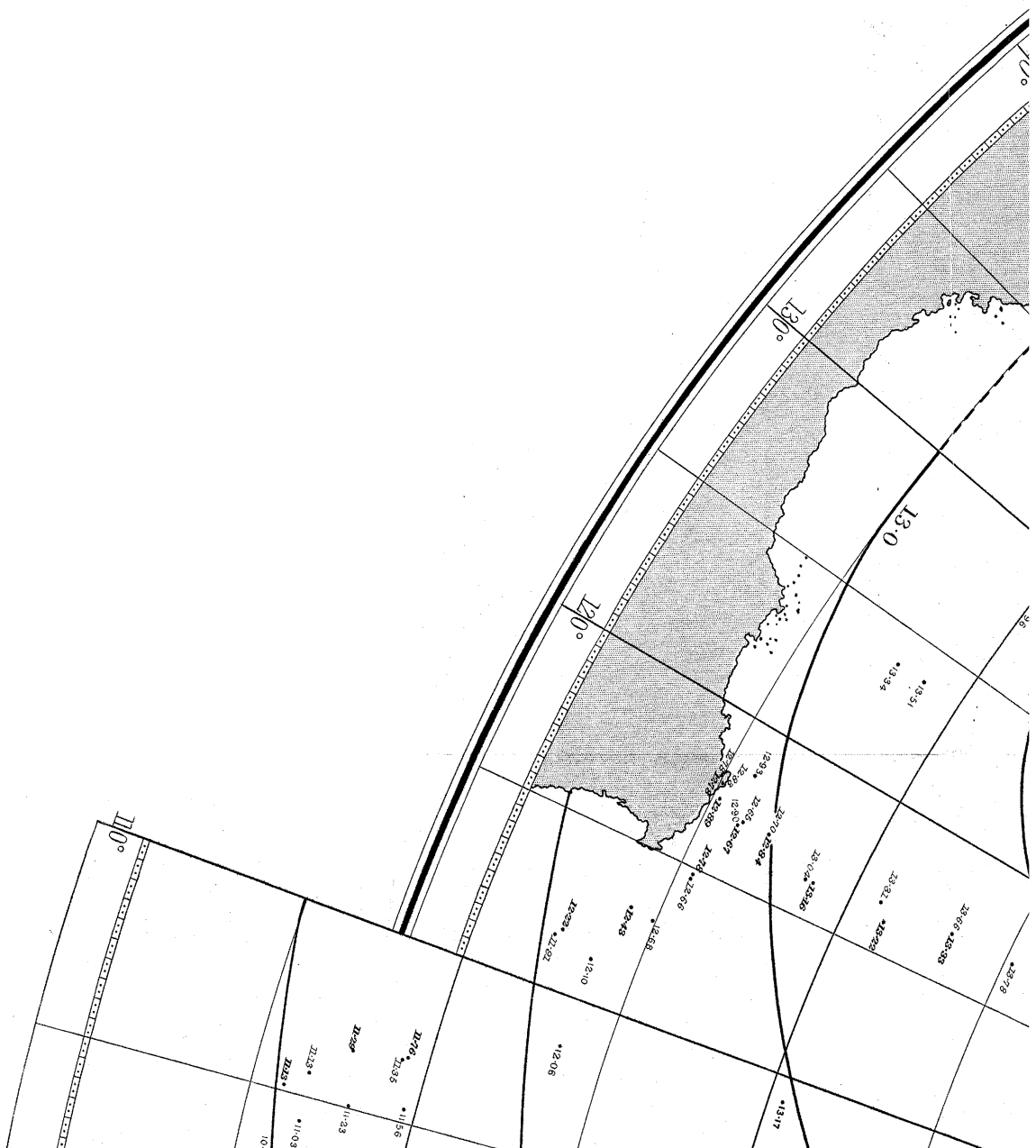


# ANTARCTIC MAGNETIC SURVEY

*Epoch 1840-1845*

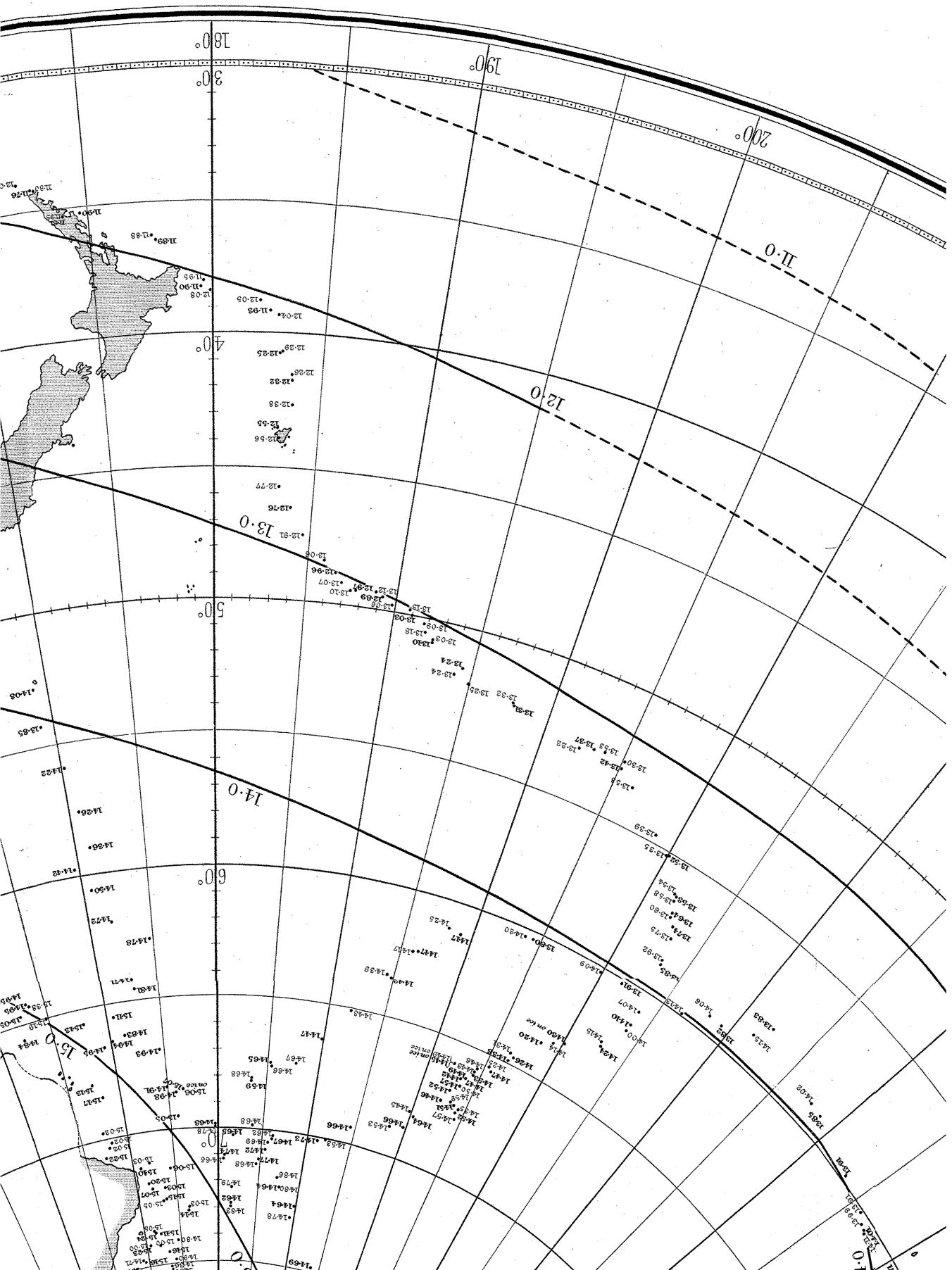
*Inclination.*

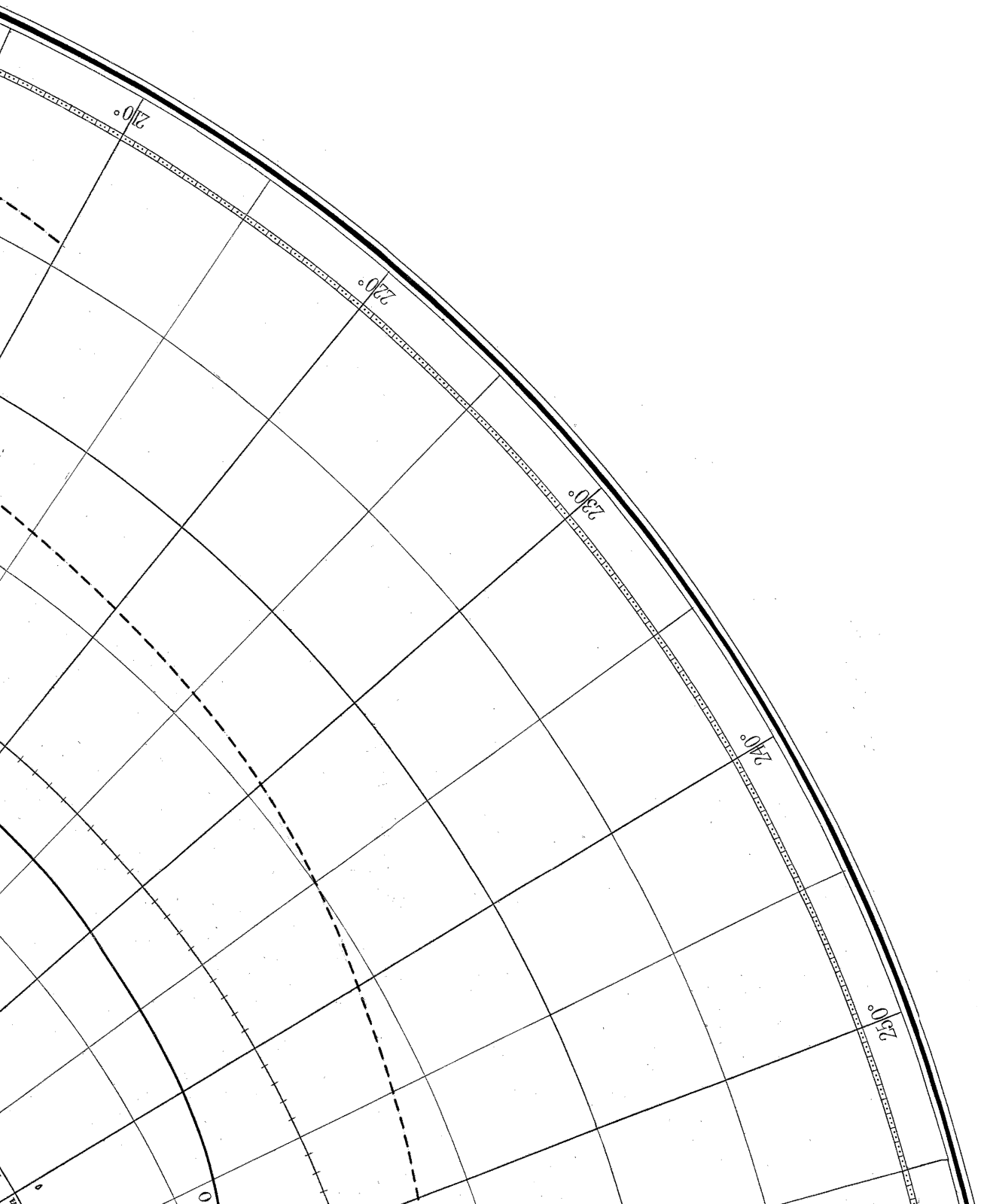
Engraved by Malby & Sons.



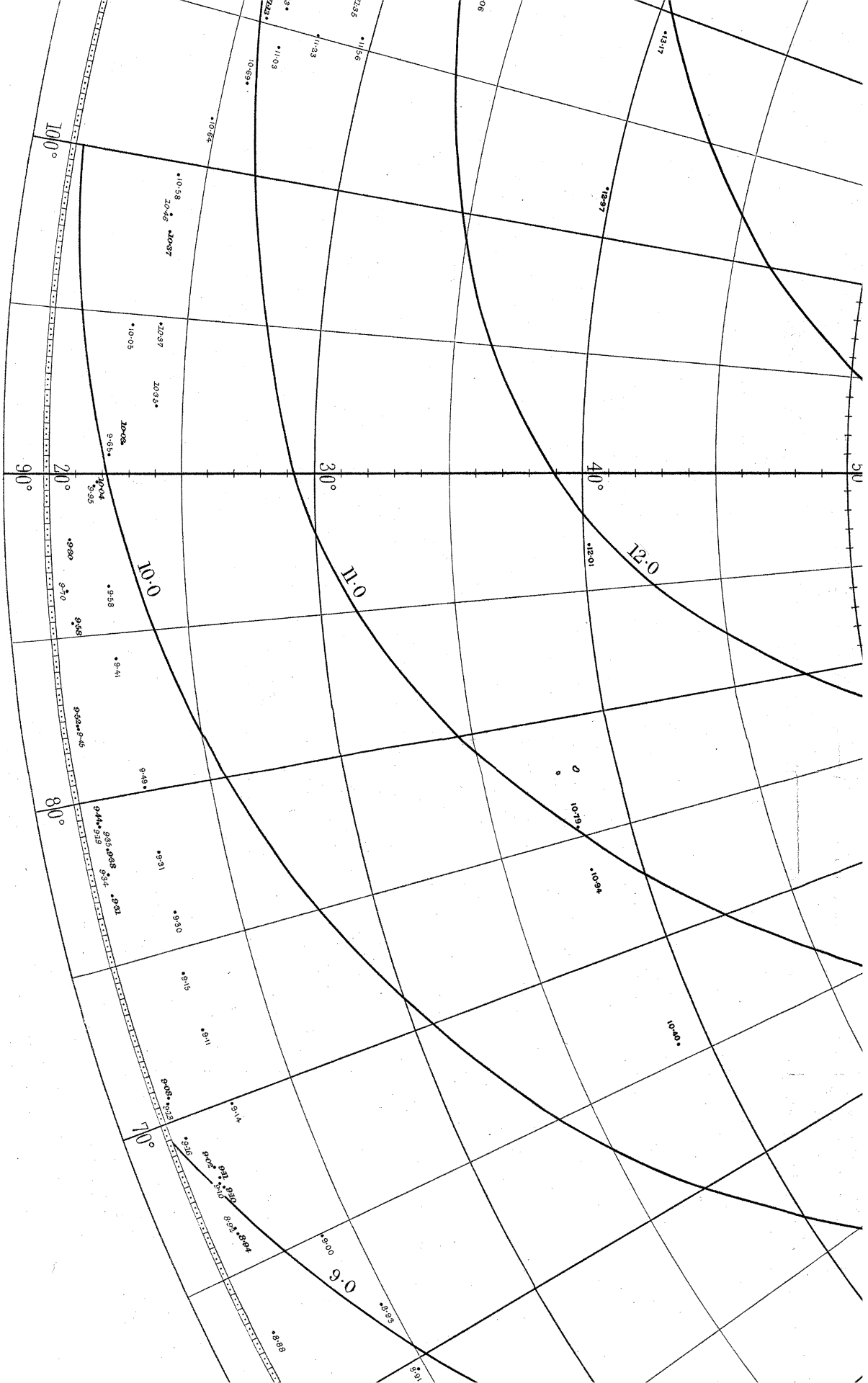


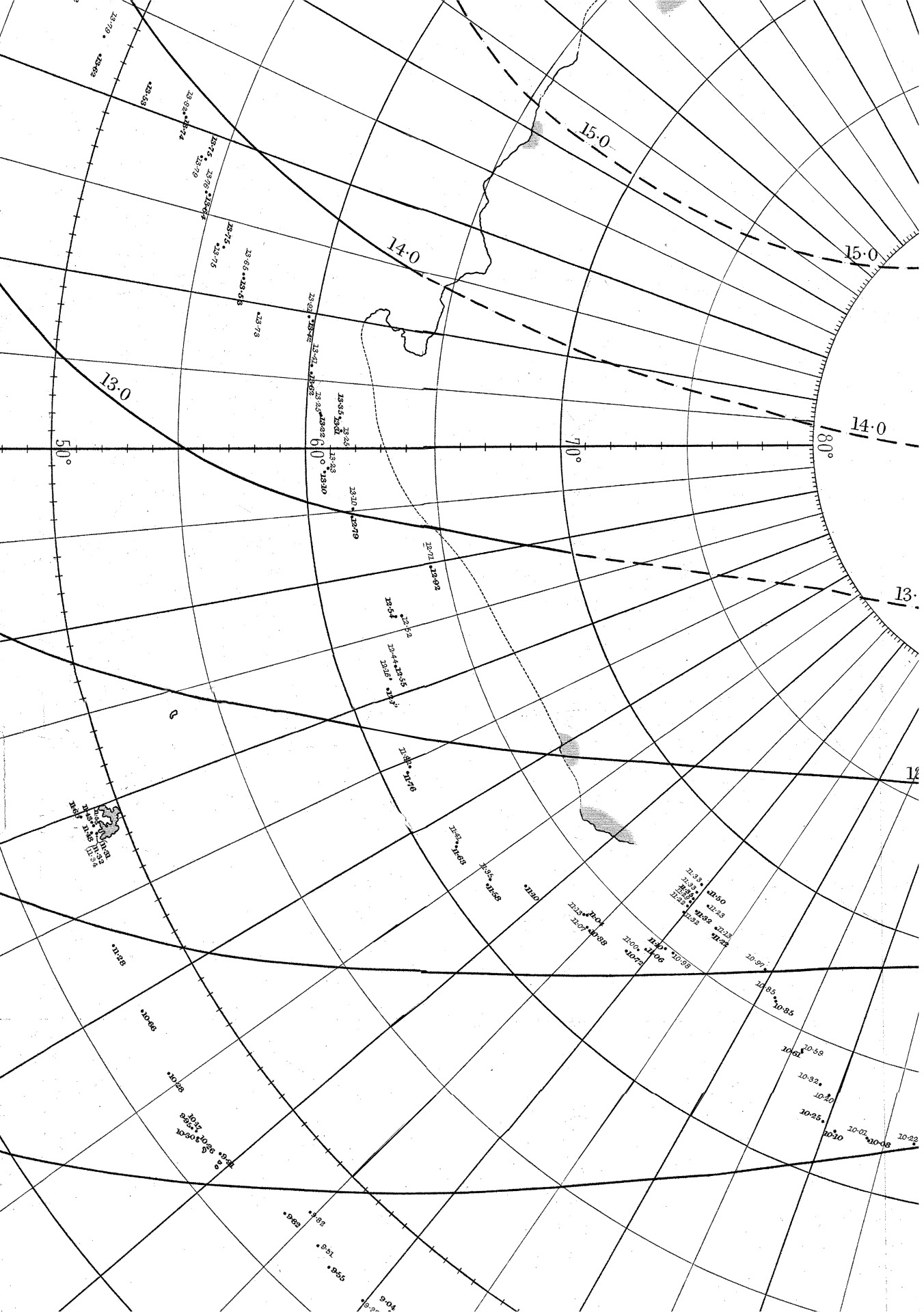


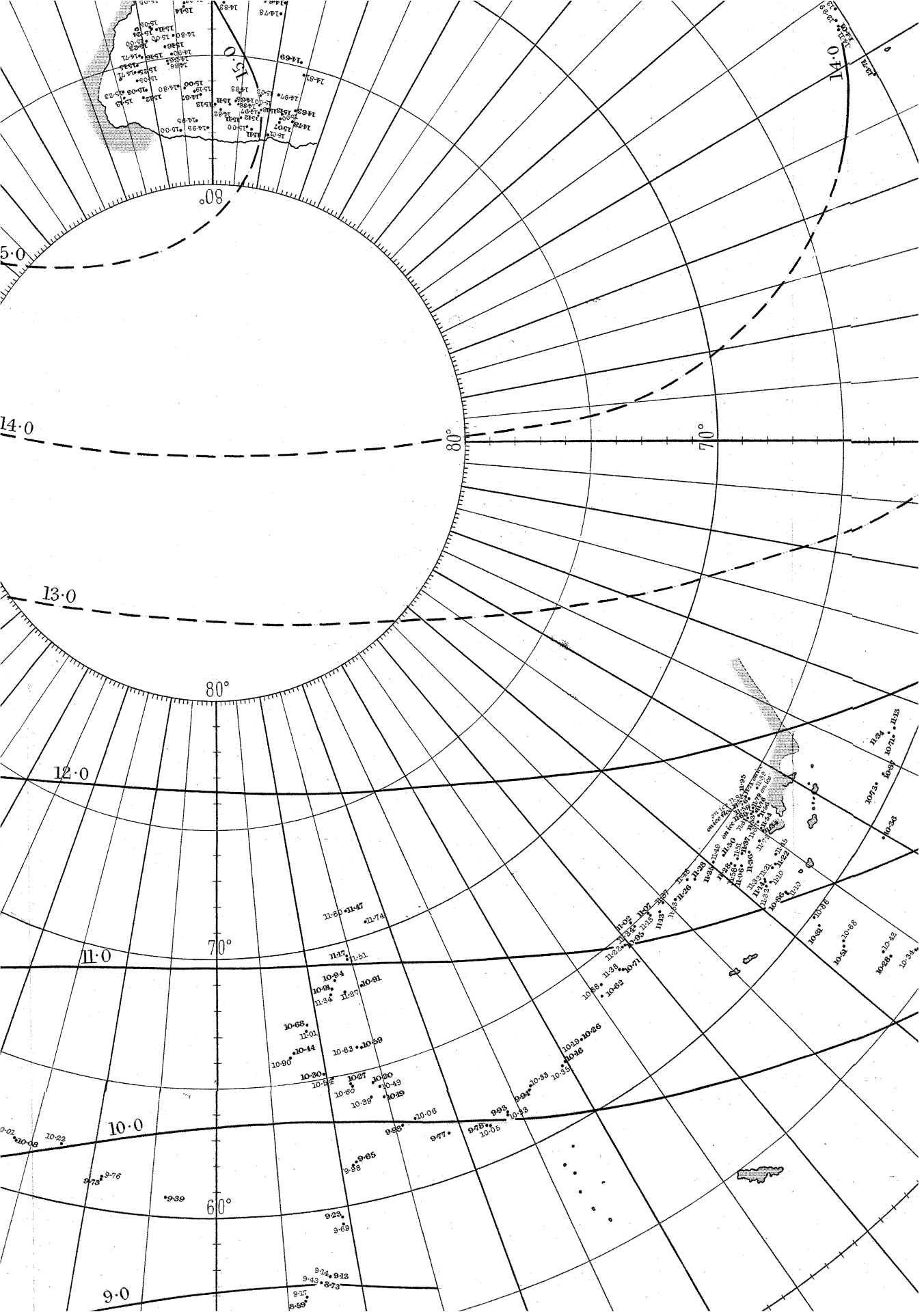




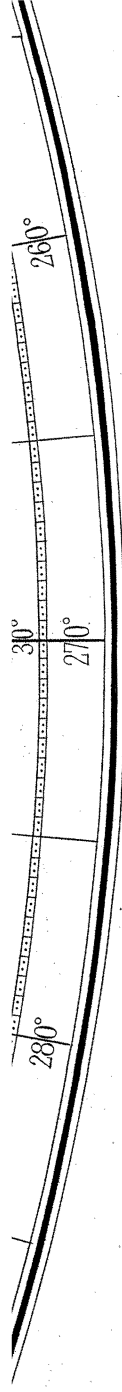




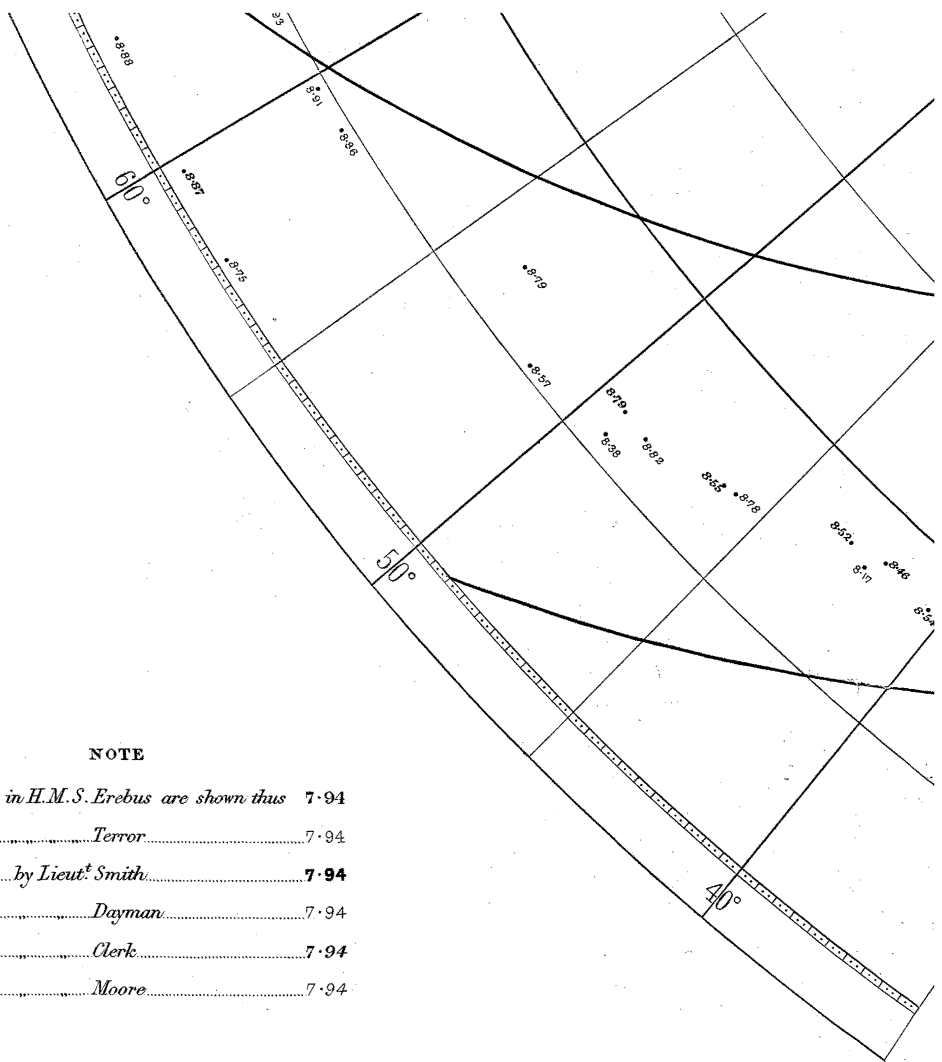


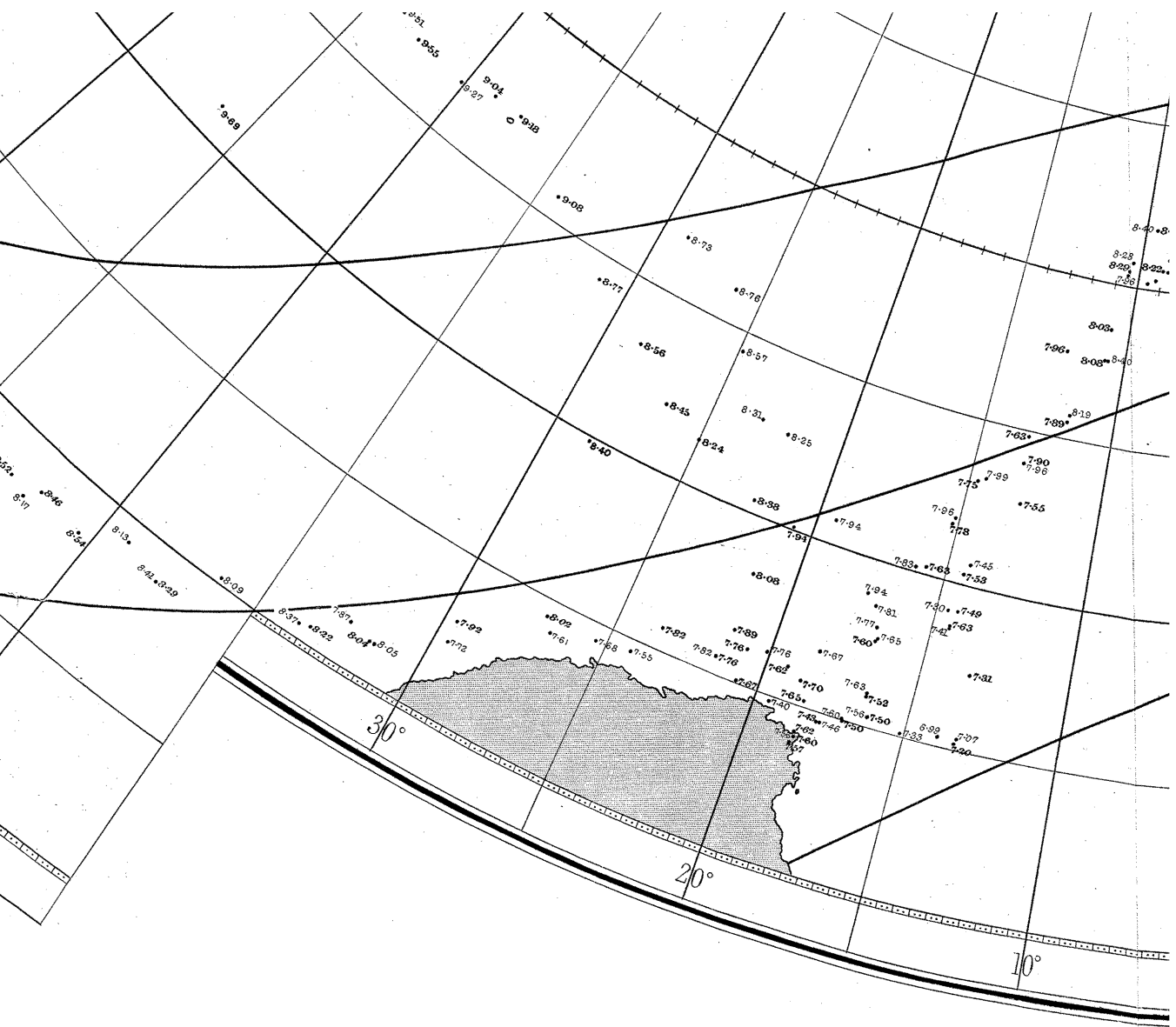


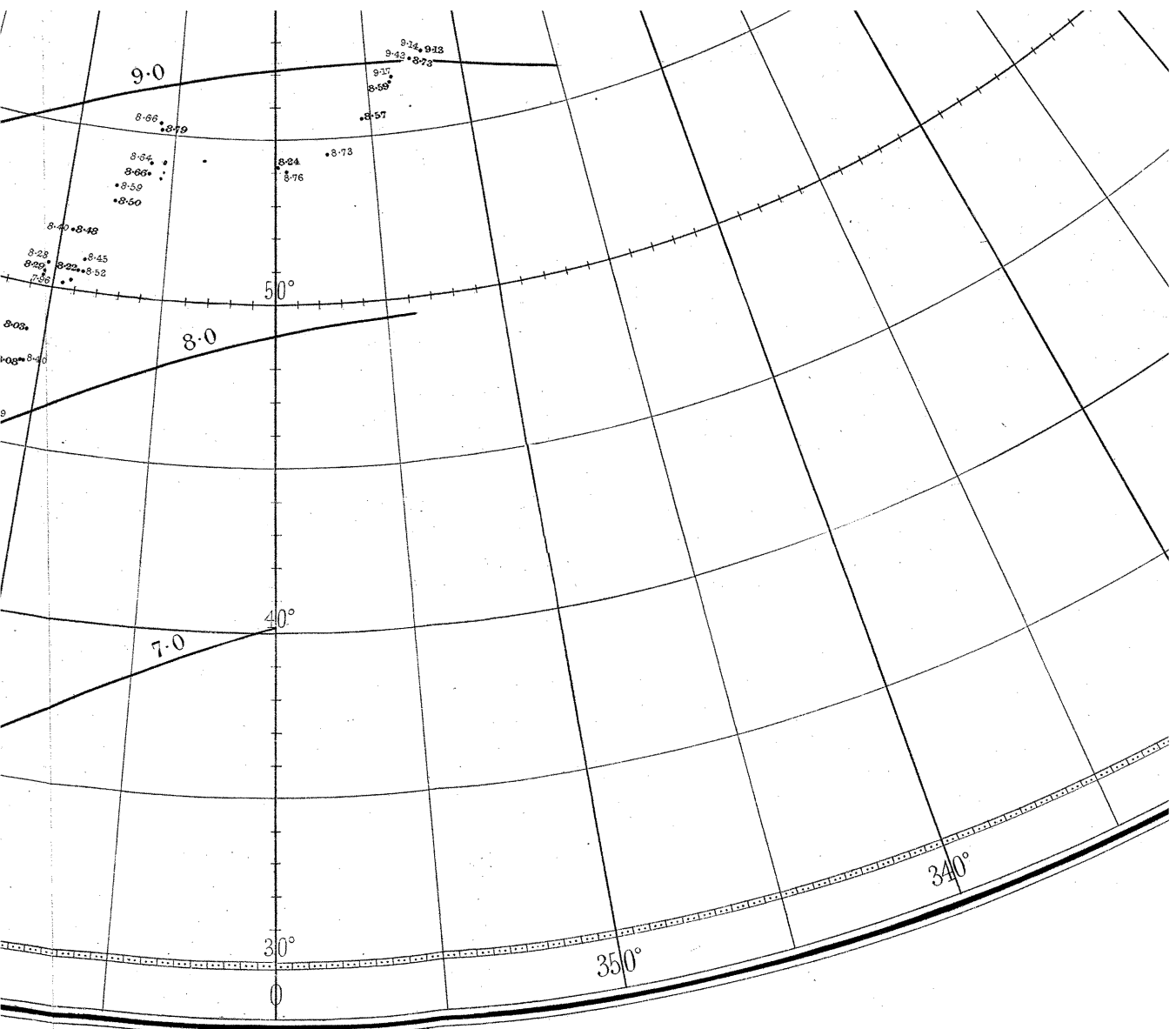


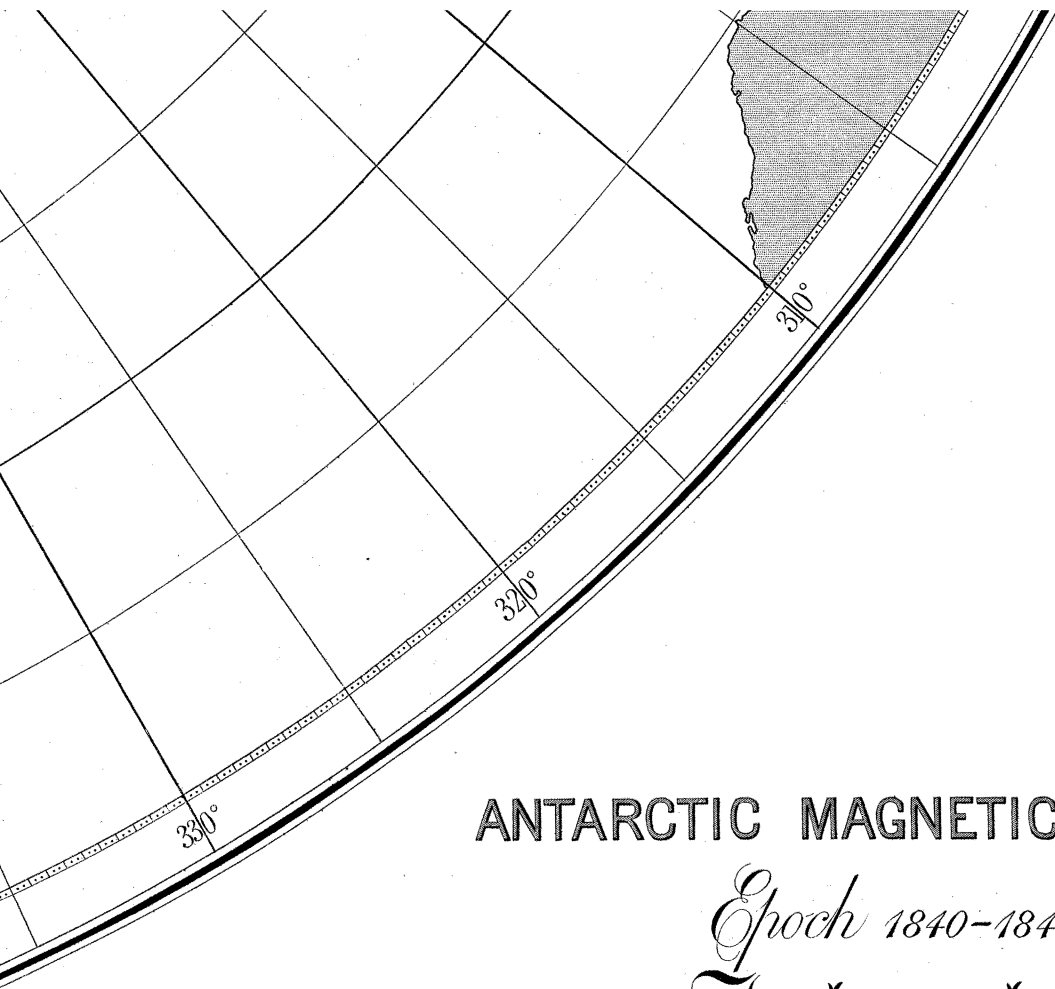












# ANTARCTIC MAGNETIC SURVEY

*Epoch 1840-1845*

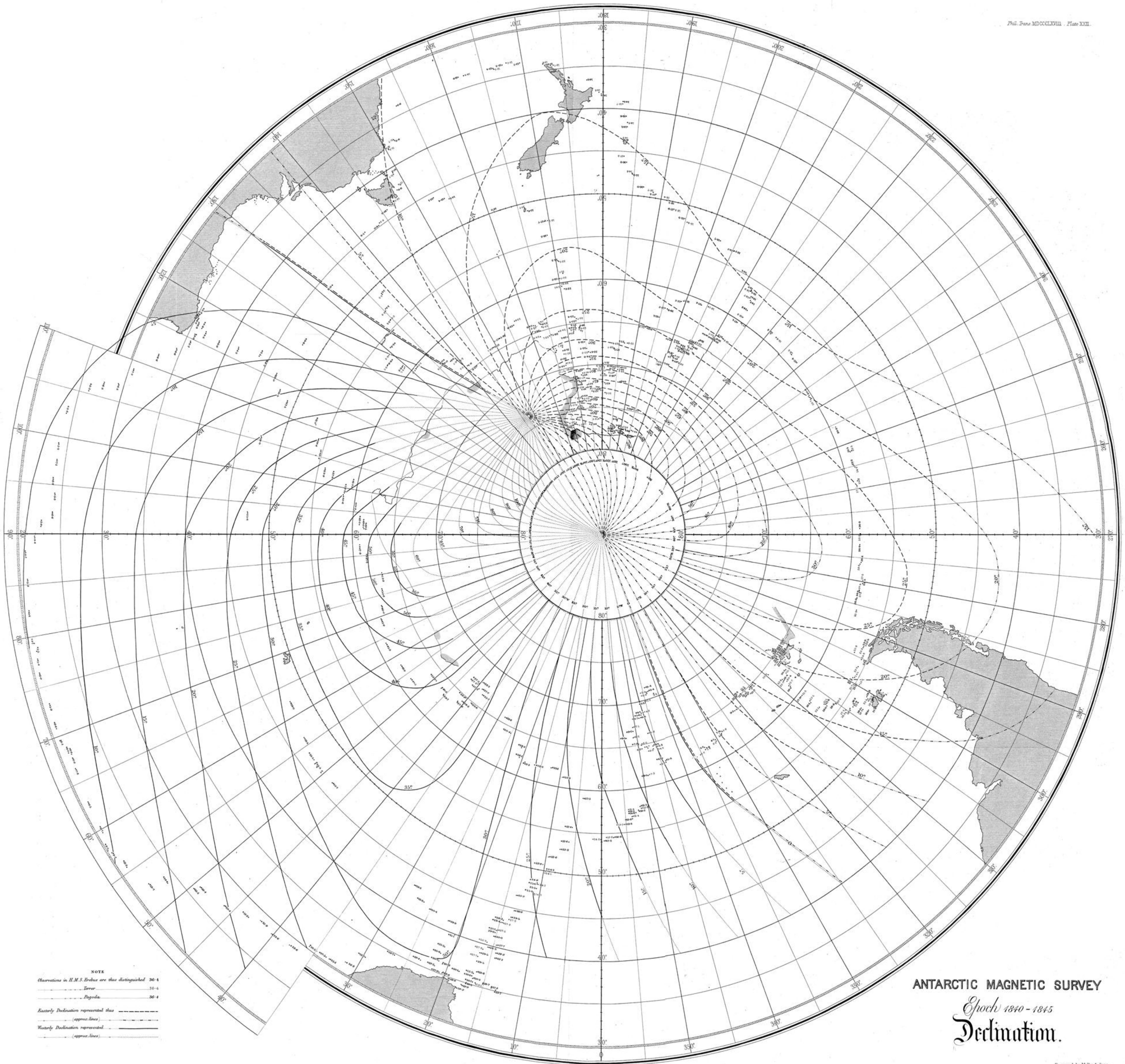
*Intensity.*

Engraved by Malby & Sons.

EY

Alby & Sons.

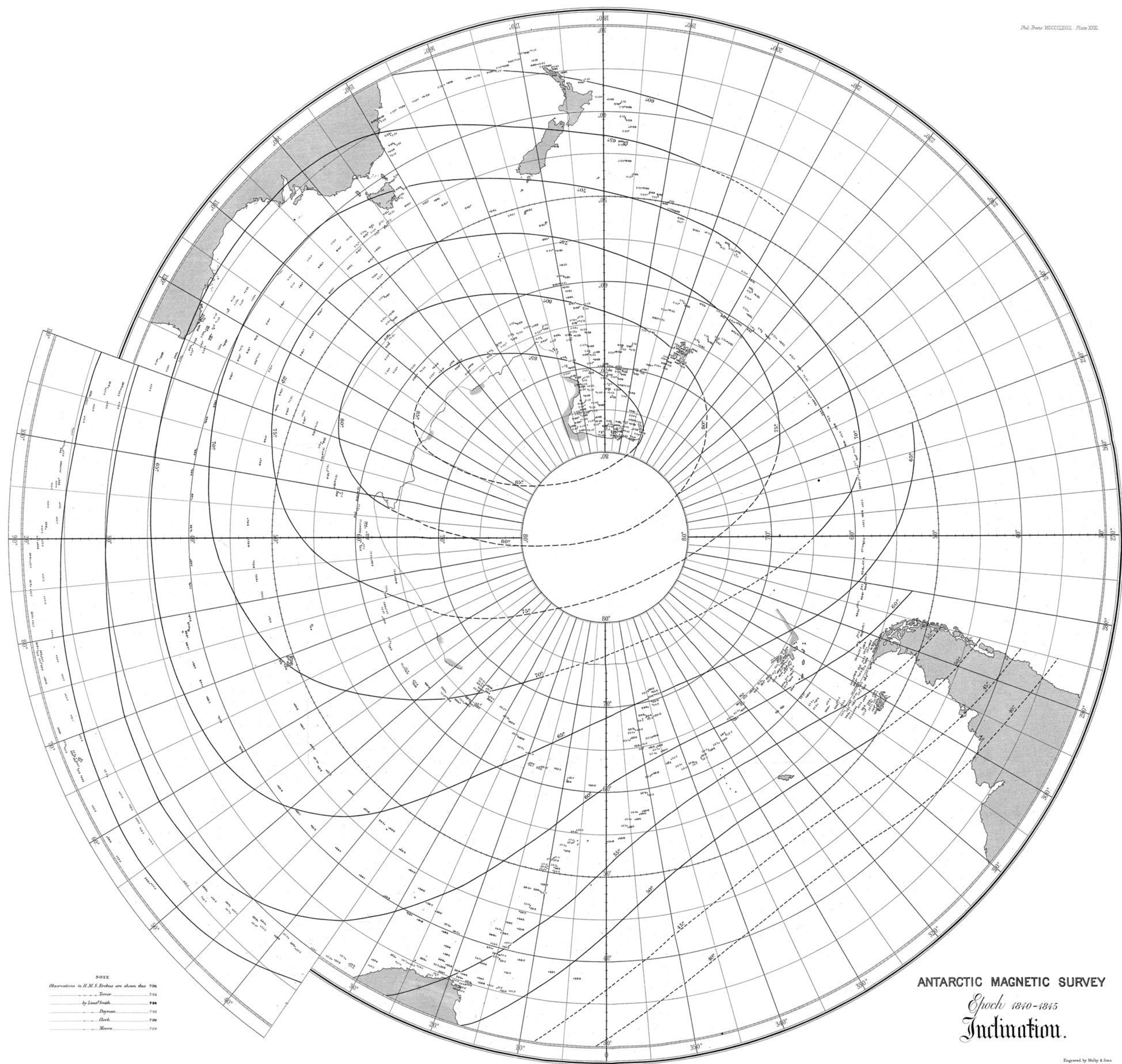




NOTE  
 Observations in H.M.S. Erebus are thus distinguished 36-A  
 Error 36-B  
 Pogoda 36-C  
 Easterly Declination represented thus -----  
 (approx. lines)  
 Westerly Declination represented -----  
 (approx. lines)

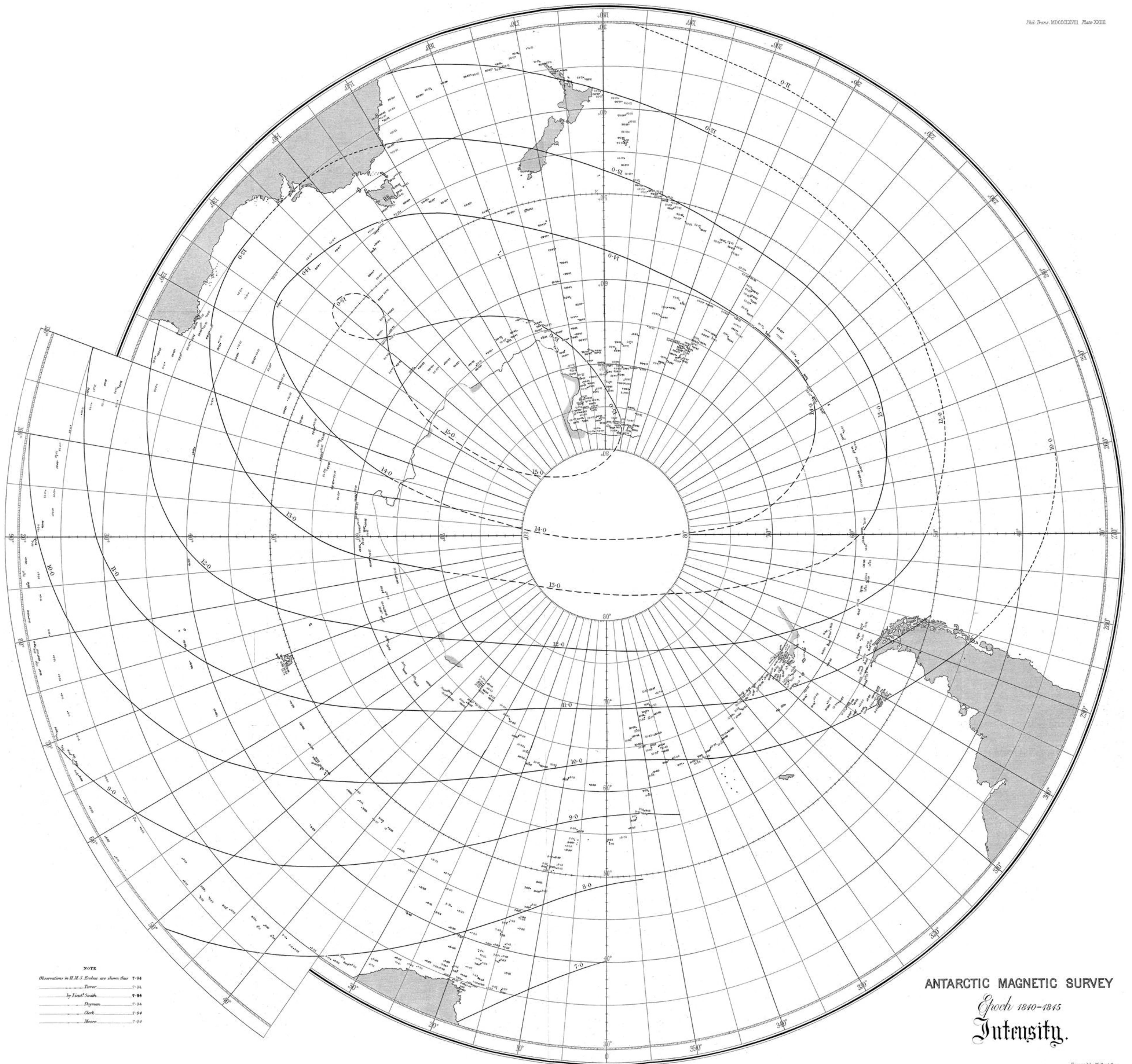
ANTARCTIC MAGNETIC SURVEY  
 Epoch 1840-1845  
 Declination.





ANTARCTIC MAGNETIC SURVEY  
*Epoch 1840-1845*  
*Inclination.*





NOTE  
Observations in H.M.S. Erebus are shown thus 7-94  
— Terror — 7-94  
— by Lieut Smith — 7-94  
— Dayman — 7-94  
— Clerk — 7-94  
— Moore — 7-94

ANTARCTIC MAGNETIC SURVEY  
*Epoch 1840-1845*  
*Intensity.*