XX. Contributions to Terrestrial Magnetism.—No. X.

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I RESUME in this Number of the Contributions the discussion and coordination of the observations of the Antarctic Magnetic Survey executed by Her Majesty's Ships 'Erebus' and 'Terror,' under the direction of Sir James Clark Ross, R.N., aided by Captain Francis Rawdon Crozier, R.N., between the years 1839 and 1843.

I purpose in the present communication to complete the detailed exposition of the Survey by the reduction of the observations of the three magnetic elements in its concluding year, on the same general plan on which similar accounts were given of those of the preceding years in earlier communications, viz., between the Cape of Good Hope and Hobarton in 1840, and between the departure from Hobarton in November 1840, and the return to the same station in April 1841, in No. V. (Philosophical Transactions, 1843, Art. X.); and between Hobarton in July 1841 and the Falkland Islands in April 1842 in No. VI. (Philosophical Transactions, 1844, Art. VII.). The observations discussed in the present memoir are those made from the departure from the Falkland Islands in September 1842 to the second arrival at the Cape of Good Hope in April 1843. In a subsequent and concluding memoir, which I hope to present to the Society early in the ensuing session, it will be my endeavour to connect and thoroughly coordinate the several portions of the Survey, comprising in its three portions the circumnavigation of the Southern Ocean from the departure from the Cape of Good Hope in March 1840, to the return of the ships to the same station in April 1843.

The great work of M. Gauss, the 'Allgemeine Theorie des Erdmagnetismus,' had been published in the 'Resultate des magnetischen Vereins' in 1839*. No more conclusive evidence could have been produced than was presented by that work, in support of the representations which had been made to Her Majesty's Government conjointly by the Royal Society and the British Association for the Advancement of Science, of the advisability of a southern magnetic Survey. The requisite numerical values, on which the practical application of the "Allgemeine Theorie" depended as a representation of the magnetic phenomena of the globe, and which were taken at equidistant meridional points on parallels of latitude, were necessarily limited, by the imperfection of our then knowledge, to seven such parallels, the most southern of which was the parallel of 40° south. The investigations and conclusions resulting from the Survey now under consideration, aided by the supplementary voyage of Her Majesty's Ship 'Pagoda,' under

* An English translation of this work was published in 1840 in the VI.th Part of Taylor's Scientific Memoirs.

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Lieuts. Moore, R.N, and Clerk, R.A. (Contribution No. VIII., Philosophical Transactions, 1846, Art. XVIII.), supply the means for a future revision of M. Gauss's work, by the extension of the numerical values of the three elements to equidistant meridional points on three additional southern parallels, viz., those of 50°, 60°, and 70° of South Latitude.

In resuming the reduction and coordination of the observations of the Antarctic Magnetic Survey, it may be permitted to recall to remembrance that the system, in accordance with which the surveying compasses both of the 'Erebus' and 'Terror' were employed, was the same which had been originally adopted by the writer of these Contributions, and its practical value exemplified, in H.M. Ship 'Isabella,' in the first of the voyages of Arctic discovery in 1818, as described in the Philosophical Transactions for 1819, The position of the standard compass, and the methods adopted to provide the data required for the investigation and eventual correction of the deviations occasioned by the disturbing influence of the ship's iron, were the same. In M. Poisson's 'Mémoire sur les déviations de la boussole produites par le fer des vaisseaux' (1838), the applications and verifications of the fundamental equations of his theory were exemplified and established by M. Poisson himself (pp. 47-49), by the accordance of their calculated results with the facts observed and recorded in the Arctic voyages of 1818, The convenient and practical formulæ for computing the corrections 1819, and 1820. of the three magnetic elements, which were subsequently derived from Poisson's fundamental Equations by Mr. Archibald Smith (Philosophical Transactions, 1843, Art. X.), have since furnished, and still continue to furnish, the means of surmounting, even in an extreme case, such as that of a survey executed in the high magnetic latitudes of the southern hemisphere, and in dips even exceeding -88°, the serious embarrassments which would otherwise have been occasioned by the iron which necessarily formed part of the equipment of the ships. Sir James Ross was one of the junior midshipmen of the 'Isabella' in the voyage of 1818; and thus early commenced that interest in the general subject of Terrestrial Magnetism, and that practical acquaintance with the resources which modern science has introduced, by which in his subsequent career he has earned for himself and for his country so distinguished a place in the history of that great branch of physical geography.

The disturbance of the needle by the influence of the ship's iron, which the term "Deviation" is now generally employed to designate, was found both in the 'Erebus' and 'Terror' to be occasioned chiefly, if not wholly, by the magnetism induced in the iron of their fittings and equipment by the vertical part of the earth's force; and to be distributed symmetrically on either side of the fore-and-aft vertical section passing through the compass. It manifested itself consequently in the *southern* magnetic hemisphere, and in the usual place of the Standard Compass, by a repulsion of the north end of the compass needle from the ship's head, increasing with the increase of the earth's vertical magnetic force, and producing a deviation proportional to the tangent of the Inclination. The compass-card being divided into 360°, and counted from 0° at north successively to

90° at west, 180° at south, and 270° at east, the true magnetic direction was, everywhere in the southern hemisphere, less on the points from 0° to 180° and more on the points from 180° to 360°, than the amount actually shown by the compass-card. It thus happened that, as a general practice in the 'Erebus' and 'Terror' whilst in the southern hemisphere, the deviations were recorded as negative, or —, on the western side of the compass-card, and positive, or +, on its eastern side, the signs so employed having no direct relation whatever to the distinct question whether the Declination itself were easterly or In these Contributions, and in conformity with general usage in treatises on Terrestrial Magnetism, the *Declination* is counted east when the north end of the magnet declines from the Geographical North towards the east, and west when the declination declines towards the west; and as both east and west declinations are found in different parts of the southern magnetic hemisphere, east declinations being characteristic by the — sign, and west declinations by the + sign, the effect of the deviations having a - sign, was to augment the apparent or observed declination on the eastern points, and diminish it on the western points, in those parts of the hemisphere where the declination itself was east; and, vice versa, to diminish the apparent or observed declination on the eastern points and augment it on the western points in those parts of the hemisphere where the declination itself was west.

Corrections applied to the Observations of the Declination for the Ship's Attraction.

1. In the 'Erebus.'—In the subjoined Table (No. I.), columns 2 and 3 exhibit the deviations observed in the 'Erebus' on the points specified in column 1, at Port Louis in the Falkland Islands, on August 19, 1842, recorded in the Philosophical Transactions for 1844, page 88, and at Simon's Bay at the Cape of Good Hope on the 20th of April, 1843, which are now printed for the first time. As the observations at Port Louis were at the commencement of the third year's survey, and those at Simon's Bay at its close, and as the dip at the two stations was very nearly the same in amount, a mean of the deviations of the declination at the commencement and close of the year's survey has been adopted, and placed in column 4, as the foundation of the calculated deviations to be ascribed to intermediate times and localities. With these values of the deviation on the several points, the constants B, C, D, and E in the equations by which the deviations in dips of other amounts may be computed have been obtained, employing for that purpose the method described in the Philosophical Transactions for 1846, Art. XVIII., pages 350–352. The constants thus derived are as follows:—

$$B = -2^{\circ} 32'^{*}; C = -0^{\circ} 08'; D = +0^{\circ} 22'; E = +05'.$$

* B supplies the well-known coefficient a so much used in the earlier Numbers of these Contributions (B= $a \tan \theta$). Comparing only those values of a which were obtained after the arrival of the 'Erebus' in the Southern Hemisphere, the mean of the observations at Hobarton in 1840 and 1841 gave a=.0272 (Philosophical Transactions, 1843, Art. X. p. 154); those at the Falkland Islands in August 1842, .0292 (Philosophical Transactions, 1844, Art. VII. p. 88); and by the observations now discussed a=.0331; the increased value being doubtless due to the magnetism acquired and temporarily retained in the high southern dips to which the 'Erebus' had been subject whilst in the Antarctic seas.

Column 5 contains the deviations computed with these constants, employing for that purpose the Table in pages 352, 353 of the same Number of the Contributions; and column 6 shows the differences between the deviations so computed for the dip of -53° , and the mean deviations observed at Port Louis, where the dip was -52° 20', and at Simon's Bay, where it was -53° 26'. The differences are all well within the limits of errors of observation, and may justly be deemed insignificant. Employing the same coefficients, the deviations were computed corresponding successively to dips of -56° , -59° , -62° , and -65° , comprehending the whole range encountered in the third year's survey; and a Table was formed by interpolation for the intermediate degrees, which has been employed in correcting the Table of the declinations observed on board the 'Erebus' between Port Louis in August 1842, and the Cape of Good Hope in April 1843.

1.	2.	3.	4.	5.	6.	1.	2.	3.	4.	5.	6.
Ship's Head	Deviations observed.		Devia-			Devis	Deviations observed.			Difference between the	
by compass.	Port Louis.	Simon's Bay.	Mean.	tion com- puted.	observed and computed.	Ship's Head by compass.	Port Louis.	Simon's Bay.	Mean.	tion com- puted.	observed and computed.
N. by W. N.N.W. N.W. by N. N.W. by N. W. by N. W. by S. W.S.W. S.W. by W. S.W. S.W. S.W. by W. S.W. by W.	$\begin{array}{c} +\mathring{0} \ 1\mathring{2} \\ -0 \ 04 \\ -0 \ 34 \\ -0 \ 50 \\ -1 \ 02 \\ -1 \ 01 \\ -1 \ 49 \\ -2 \ 10 \\ -2 \ 16 \\ -2 \ 21 \\ -2 \ 21 \\ -2 \ 21 \\ -1 \ 08 \\ -1 \ 03 \\ -1 \ 17 \\ -0 \ 39 \end{array}$	-0 20 -0 37 -1 04 -1 15 -1 42 -2 01 -2 35 -2 54 -3 17 -3 09 -2 54 -3 09 -2 54 -3 09 -3	-0 04 -0 20 -0 49 -1 02 -1 31 -2 12 -2 32 -2 43 -2 49 -2 45 -2 29 -1 47 -1 27 -1 14 -0 23	-0 03 -0 25 -0 46 -1 08 -1 31 -1 52 -2 12 -2 28 -2 37 -2 40 -2 38 -2 24 -2 03 -1 36 -1 02 -0 25	8 01 0 05 0 03 0 06 0 09 0 21 0 00 0 04 0 06 0 09 0 07 0 05 0 16 0 09 0 12 0 02	S. S.E. S.E. by S. S.E. S.E. by E. E.S.E. E. by S. E. E. by N. E.N.E. N.E. by E. N.E. N.E. by E. N.E. by E. N.E. by E. N.E. by N. N.N.E. by E. N. E. by E. N. by E.	0 00 +0 44 +1 13 +1 41 +1 55 +2 07 +2 19 +2 16 +2 07 +1 54 +1 44 +1 17 +0 51 +0 41 +0 28	+0 33 +1 07 +1 45 +2 08 +2 31 +2 51 +3 15 +3 10 +2 46 +2 30 +2 15 +1 59 +1 33 +1 15 +1 43 +0 15	$\begin{array}{c} +0.16 \\ +0.55 \\ +1.29 \\ +1.54 \\ +2.13 \\ +2.29 \\ +2.47 \\ +2.26 \\ +2.12 \\ +2.00 \\ +1.38 \\ +0.42 \\ +0.58 \\ +0.21 \end{array}$	+ 0 14 + 0 51 + 1 26 + 1 54 + 2 15 + 2 30 + 2 33 + 2 27 + 2 14 + 1 57 + 1 38 + 0 38 + 0 19	0 04 0 03 0 00 0 02 0 01 0 11 0 10 0 01 0 02 0 03 0 00 0 07 0 00 0 04

TABLE I.— 'Erebus.' Deviations of the Declination at Port Louis and Simon's Bay.

2. In the 'Terror.'—A precisely similar process has been pursued in computing the corrections to be applied for the influence of the ship's iron upon the observations of the declination in the 'Terror' in this portion of the survey, commencing at Port Louis in August 1842, and terminating at Simon's Bay, Cape of Good Hope, in April 1843.

The deviations on the thirty-two points observed at Port Louis in August 1843, have been already printed in a Table in No. VI. of these Contributions (Philosophical Transactions, 1844, Art. VII. p. 89); and those observed at Simon's Bay in April 1843 are now printed for the first time in page 457; their mean results are shown in the subjoined Table, No. II. The constants B, C, D, and E in the equations, by which the deviations in dips of other amounts may be derived, have been obtained in the manner already described in the case of the 'Erebus;' their values are

$$B = -2^{\circ} 37'$$
; $C = -0^{\circ} 20'$; $D = +0^{\circ} 17'$; $E = +0^{\circ} 04'$.

The deviations computed with these values for the dip of -53° are shown in column 5 of Table II., and column 6 of the same Table shows the differences between the observed and computed deviations in the dip of -53° . Employing the same constants, a Table of the deviations in dips of -56° , -59° , -62° , and -65° , with interpolated values at the intermediate degrees, has been computed, and has been employed in assigning the "corrections for deviation" in the Table of Declinations observed on board the 'Terror' between Port Louis in August 1842, and Simon's Bay in April 1843.

(Note.—It must be borne in mind that the "corrections for the ship's attraction," which appear in the Tables at the close of this and the earlier Numbers of these Contributions have, of course, the opposite signs to the "deviations" which they are designed to correct.)

					*						•
1.	2.	3.	4.	5.	6.	1.	2.	3.	4.	5.	6.
Ship's Head	Devi	ations obse	erved.		Difference Deviation between the		Deviations observed.		erved.	1	Difference between the
by compass.	Port Louis.	Simon's Bay.	Mean.	com- puted.	a- observed	by compass.	Port Louis.	Simon's Bay.	Mean.	com- puted.	observed and computed.
N. by W. N.N.W. N.W. by N. N.W. by W. W.N.W. W. by N. W. by S. W.S.W. S.W. by W. S.W. by S. S.S.W. S. by W.	+0 19 -0 02 -0 17 -0 48 -1 19 -1 47 -2 07 -2 30 -2 21 -2 12 -2 21 -1 33 -1 05 -0 47 -0 45	-0 58 -1 03 -1 06 -1 22 -2 20 -2 12 -3 14 -3 35 -3 36 -3 08 -2 35 -2 01 -1 33 -1 26 -1 22 -0 09	-0 20 -0 32 -0 42 -1 05 -1 48 -2 00 -2 30 -2 51 -3 03 -2 44 -2 23 -2 11 -1 33 -1 15 -1 04 -0 27	-0 16 -0 40 -1 03 -1 26 -1 48 -2 08 -2 23 -2 35 -2 41 -2 41 -2 33 -2 17 -1 56 -1 24 -0 52 -0 14	0 04 0 08 0 21 0 21 0 00 0 08 0 07 0 16 0 22 0 03 0 10 0 06 0 20 0 09 0 12 0 13	S. S. by E. S.S.E. by S. S.E. by S. S.E. by E. E. S.E. E. by N. E. N.E. by N. N.E. by N. N.N.E. N. by E.	-0 16 -0 08 0 00 +0 47 +1 35 +2 17 +3 04 +2 33 +2 46 +2 27 +1 58 +1 39 +1 11 +0 34 +0 27	+0 44 +1 56 +3 01 +3 02 +3 05 +3 03 +3 04 +3 22 +2 25 +2 27 +1 53 +1 08 +1 01 +0 30 -0 27	+0 14 +0 54 +1 30 +1 54 +2 20 +2 40 +3 04 +2 57 +2 35 +2 27 +1 55 +1 31 +1 106 +0 32 0 00	+0 24 +1 01 +1 34 +2 02 +2 22 +2 36 +2 44 +2 41 +2 31 +2 01 +1 40 +1 19 +0 56 +0 31 +0 08	0 10 0 09 0 04 0 08 0 02 0 04 0 20 0 16 0 01 0 08 0 09 0 09 0 10 0 01

TABLE II.—'Terror.' Deviations of the Declination at Port Louis and Simon's Bay.

INCLINATION and TOTAL FORCE.

In the third year of the Antarctic Survey, as in the two preceding years, by far the greater part of the determinations both of the Inclination and of the Total Force were made at sea with Mr. Fox's apparatus, which is fully described (as well as the modes of employing it) in the article on Terrestrial Magnetism in the 'Admiralty Manual of Scientific Enquiry,' third edition, 1859, Appendix, No. 3. This apparatus was always used in the one selected spot in each ship; the face of the circle always towards the east (unless expressly mentioned otherwise), and the marked side of the needle towards the observer. The poles of the needle were at no time reversed, and great care was taken in mounting and dismounting it to avoid injury either to the axle or to the pivots.

The index-error occasioned by the face of the needle being always directed towards the east, was examined by comparison with results obtained with needles whose poles

were reversed and the needle and circle used in the eight ordinary positions, whenever opportunities presented themselves for the comparison either on land or on ice. The needles were distinguished as R, F, 5 in the 'Erebus,' and F, C, B in the 'Terror.'

The dips were observed either "Direct" or by the aid of "Deflectors;" the intensities of the Force occasionally by weights and occasionally by deflectors; on land always by both methods, and at sea occasionally so. In the 'Erebus' and 'Terror,' in which the whole, or nearly the whole of the disturbance arising from the ship's iron was caused by induced magnetism, the deviation of the declination in the southern hemisphere was, as we have seen, a maximum to the East when the ship's head was to the West, and to the West when the head was to the East, passing through its zero when the ship's head was either north or south, or nearly so. In the *Inclination* and *Total Force*, on the other hand, the deviation (always speaking of the phenomena in the Southern Hemisphere) was a maximum when the ship's head was approximately either north or south, and passed through its zero as the ship's head was directed towards the east or towards the west. The dip of the south end of the magnet was least and the south polar force greatest when the ship's head was to the south, and the south dip greatest and the south polar force least when the head was to the north.

Corrections to be applied for the Deviations of the Inclination.

1. In the 'Erebus.'—The values of the constants c and d, employed in the correction of the deviations of the Inclination observed in this portion of the Survey, have been derived from the results obtained at the usual place of observation on board, with the ship's head on the different points of the compass, by the well-known process of "swinging the ship;" such results were obtained at Port Louis on the 17th of August, 1842, and at Simon's Bay on the 20th of April, 1843, the interval between those dates comprising the whole of the third year's survey. The observations made at Port Louis on the 17th of August, 1842, are printed in No. VI. of these Contributions (Philosophical Transactions, 1844, Art. VII., p. 168). Those at Simon's Bay on the 20th of April, 1843, will be found in page 459 of the present Number.

At Port Louis the mean of the results on the sixteen points was -52° 24'; and the Inclination observed on shore with the same instrument with the face of the circle also towards the east, and the needle observed "direct" and with "deflectors," was -52° 28'.

At Simon's Bay the mean on the sixteen points was -53° 42', and the Inclination observed on shore with the same instrument, face east and needle "direct" and with "deflector S," was -53° 37'.5. In both cases the mean of the results on the sixteen points has been taken as the standard of reference for assigning the deviation on the several points.

In the subjoined Table (Table III.), column 2 contains the dips observed at Port Louis on the different points of the compass specified in column 1; and column 3 the deviation on each point from the mean of the sixteen points stated at the foot of the column.

Columns 4 and 5 exhibit the same particulars at Simon's Bay. In column 6 is placed the mean deviation at the two stations, and in column 7 the mean deviation applied to -53° 0' taken as an approximate mean dip common to both stations. In columns 8 and 9 are shown the values of ζ' and ζ on each point of the compass, ζ' being the azimuth of the ship's head by the standard compass, and ζ tabular or calculated values derived from the observed deviations of the declination on the same points. Column 10 contains the dips on the different points computed by the several constants, which are as follows:—

B=
$$a \tan \theta$$
= $-.0441$ } derived from the deviations of the Declination.
 b = $1-2D$ = $+.9875$ } derived from the deviations of the Dip in column 7.
 c = $+0.0195$ } derived from the deviations of the Dip in column 7.

And, finally, in column 11 are shown the differences between the observed and the computed deviations.

The values of c and d have been computed by equation (9) (Philosophical Transactions, 1843, p. 148) on all points excepting north and south; and on those points by equation (10). The computed dips by equation (13) on all points excepting east and west, on which points equation (12) has been substituted.

The Table for the correction of the deviations of the dip in the third year's survey has been formed by computing, by means of the above constants, the deviations in dips successively of -53° , -59° , and -65° , and interpolating the intermediate values.

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	
Ship's head by the	Port August		Simon April	's Bay, 1843.	Mean	Mean deviation Values			Values	Computed	Observed dip
Standard Compass.	Dip on board.	Deviation from -52° 24′.	Dip on board.	Deviation from -53 42'.	deviation.	applied to dip -53°.	of ζ'.	of ζ.	dip. θ.	+ or - Computed.	
N. N.N.W. N.W. W.N.W. W.S.W. S.W. S.S.E. S.E. E.S.E. E.S.E. E.N.E. N.E.	-52 53 -52 50 -52 53 -52 53 -52 46 -52 17 -51 46 -51 29 -51 29 -52 04 -52 18 -52 25 -52 27 -52 43 -52 43	-29 -26 -29 -15 -22 + 7 +38 +55 +48 +20 + 6 - 1 - 3 -19 -19	-54 38 -54 31 -54 17 -54 02 -53 37 -53 16 -52 41 -52 26 -52 36 -53 13 -53 45 -54 21 -54 34	-56 -49 -35 -20 +5 +26 +61 +76 +78 +66 +29 -3 -39 -52 -39	- 42' -38 -32 -18 - 8 +16 +49 +65 +63 +18 - 2 -21 -36 -29	-53 42 -53 38 -53 38 -53 38 -53 38 -53 08 -52 11 -51 55 -51 57 -52 17 -52 42 -53 02 -53 29	0 0 0 22 30 45 00 67 30 90 00 112 30 135 00 157 30 202 30 225 00 247 30 270 00 315 00	0 00 21 44 43 29 65 18 87 23 109 52 132 57 156 25 180 00 203 56 227 15 250 06 272 27 294 27 316 19	- 53 41 - 53 40 - 53 35 - 53 20 - 53 03 - 52 55 - 52 27 - 52 10 - 52 06 - 52 15 - 52 32 - 52 35 - 53 03 - 53 38 - 53 41	- 1 + 2 + 3 + 2 - 5 + 11 + 16 + 15 + 9 - 2 - 10 - 7 - 18 + 2 + 12	
N.N.E.	$-52 41 \\ -52^{\circ} 24$	-17 '=Mean.	$-54 \ 32$ $-53^{\circ} \ 42$	-50 $=$ Mean.		-53 34 8'	337 30	338 08	- 53 42	+ 8	

TABLE III.

2. In the 'Terror.'—The constants c and d in this ship have been derived from the

deviations observed on the sixteen principal points of the compass at Port Louis on August 15th, 1842, and at Simon's Bay on April 20th, 1843. The observations at Port Louis have been already printed in the Philosophical Transactions for 1844, Part II. p. 195. Those at Simon's Bay are now given in page 461 of the present communication. The results obtained with Needle F.C.B. by the *direct* observation have been employed for this purpose in preference to a mean between them and those obtained by deflector N., in consequence of a small uncertainty in the index-correction of the results with the deflector (Philosophical Transactions, 1844, Part II. Art. VII. p. 106). At Port Louis the arithmetical mean of the Inclinations observed on the sixteen points (-51° 31') has been taken as the standard, by comparison with which the deviations on the several points have been assigned. The same needle, when observed on shore on the 25th of July, 1842, with the face of the circle towards the east, and the needle *direct*, gave

$$\begin{array}{c}
-5\mathring{1} & 3\cancel{4} \cdot 4 \\
-51 & 31 \cdot 6 \\
-51 & 31 \cdot 5 \\
-51 & 32 \cdot 2
\end{array}$$
Philosophical Transactions, 1844, Part II. p. 194.

Mean $-51 & 32 \cdot 4$

At Simon's Bay the arithmetical mean of the Inclinations observed with needle F.C.B. used "direct," and with the face of the circle towards the east, on the sixteen points, viz., -52° 40', has been in like manner taken as the standard of comparison for the results on the several points. The same needle when observed with on shore on the 6th of April, face east and needle "direct," gave

$$\begin{array}{c|c}
-52 & 49 \\
-52 & 45 \\
-52 & 47 \\
-52 & 47
\end{array}$$
page 531 of the present communication.

Mean $-52 & 47$

In the subjoined Table (Table IV.) column 2 contains the dips observed at Port Louis on the points of the compass specified in column 1, and column 3 the deviations on each point from the mean placed at the foot of column 2. Columns 4 and 5 exhibit the same particulars at Simon's Bay. In column 6 is placed the mean deviation at the two stations, and in column 7 the mean deviation applied to -53° , taken as an approximate mean dip at both stations. In columns 8 and 9 are shown the values of ζ' and ζ on each point, viz., ζ' , the azimuth of the ship's head shown by the standard compass and consequently affected by the deviation, and ζ the true direction computed from the observed declinations and shown in Table II. Column 10 exhibits the dips on the several points computed by the coefficients;

$$\begin{array}{l} \mathbf{B} = a \tan \theta = -0.0458 \\ b = 1 - 2\mathbf{D} = +0.0106 \\ d = +0.0106 \\ d = +0.9950 \end{array}$$
 derived from the deviations of the Dip in column 7.

And, finally, in column 11 are shown the differences between the observed and the computed dips. The values of c and d have been derived by equation (9) (Philosophical Transactions, 1843, p. 148) on all the points from N.N.W. to S.S.W. and from N.N.E. to S.S.E.; and on the north and south points by equation (10): the computed dips by equation (13) on all points excepting east and west, and on those points by equation (12).

The Table for the correction of the deviations of the dip in the third year's survey has been formed by computing, by means of the coefficients above stated, the deviations in dips successively of -53° , -59° , and -65° , and interpolating the intermediate values.

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.							
Ship's head by the	August 1	Louis, 9th, 1842.		's Bay, th, 1843.	Mean				Monn						Values	Computed dip θ. -53 55 -53 50 -53 39 -53 20 -53 10 -52 38 -52 09-5 -51 50 -52 02 -52 23 -52 23 -52 50 -53 10	Observed
Standard Compass.	Dip on board.	Deviation from -51° 31′.	Dip on board.	Deviation from -52° 40′.	deviation.	Mean deviation applied to dip -53° .		of ζ .		dip + or Computed.							
N. N.N.W. N.W. W.N.W. W.S.W. S.W. S.S.W. S.E. E.S.E. E.S.E. E.N.E. N.E.	-52 25 -52 14 -52 06 -51 59 -51 31 -51 11 -50 48 -50 43 -50 12 -50 29 -51 46 -52 16 -52 16 -52 13 -52 14	-54 -43 -35 -28 0 +20 +43 +48 +79 +62 +46 - 2 -15 -45 -42 -43	-53 35 -53 29 -53 23 -53 04 -52 52 -52 22 -51 48 -51 24 -51 22 -51 32 -52 02 -52 34 -53 01 -53 19 -53 26 -53 24	$ \begin{array}{r} -55 \\ -49 \\ -43 \\ -24 \\ -12 \\ +18 \\ +52 \\ +76 \\ +78 \\ +68 \\ +38 \\ +6 \\ -21 \\ -39 \\ -46 \\ -44 \end{array} $	$\begin{array}{c} -5\cancel{4}\cdot5 \\ -46 \\ -39 \\ -26 \\ -6 \\ +19 \\ +47\cdot5 \\ +62 \\ +78\cdot5 \\ +62 \\ +78\cdot5 \\ +42 \\ +2 \\ -18 \\ -42 \\ -44 \\ -43\cdot5 \end{array}$	-53 54·5 -53 46 -53 39 -53 26 -53 06 -52 41 -52 12·5 -51 58 -51 41·5 -51 55 -52 18 -53 58 -52 18 -53 42 -53 44 -53 43·5	0 0 0 22 30 45 0 67 30 90 0 112 30 135 0 157 30 180 0 202 30 225 0 247 30 270 0 292 30 315 0 337 30	0 0 0 21 27 43 12 65 07 87 19 57 133 07 156 38 180 0 204 05 227 22 250 13 272 33 294 31 316 20 338 01	-53 50 -53 39 -53 20 -53 10 -52 38 -52 09·5 -51 54 -51 50 -52 23 -52 50	+ 4·0 - 6·0 - 6·0 - 4·0 - 3·0 - 3·0 - 4·0 + 9·5 + 7·0 + 8·0 - 8·0 + 9·0 + 12·5							
	-51° 31′=	=Mean.	-52° 40′=	Mean.	4.	θ'	ζ′	ζ	. θ	$\theta' - \theta$							

TABLE IV.

Variation in the Intensity of the Magnetic Force.

The Magnetic Survey which is here discussed was carried on chiefly by observations made at sea, and (in reference to the variations of the Magnetic Force especially) by instruments and methods either wholly novel or very nearly so. Some little repetition of what may have been already said some years ago must therefore be hazarded (and it is hoped will be pardoned), in the endeavour to convey an intelligible description of the methods by which the objects of the Survey were sought to be accomplished, and of the

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precautions which were adopted to supply, as far as circumstances would permit, the means of checking every part of the various processes.

The difficulty which presented itself on the first aspect, and whilst the survey was as yet only in the preliminary stage of contemplation, was to procure a proper basis for the determinations of the magnetic force. As the survey was designed to furnish not merely a map of the Isodynamic lines corresponding to the present epoch, but also such determinations as, repeated after the lapse of a century or centuries, should enable physicists of future times to derive and place on a satisfactory foundation a general theory of the secular changes to which the phenomena of each of the elements of terrestrial magnetism are known to be subject, it was necessary that the values of the magnetic force should be determined in absolute measure, at certain points which should serve as a base for the whole operations of the survey, and should be so situated as to embrace them all.

The difficulty which has been thus stated was surmounted by combining in one and the same recommendation to Her Majesty's Government, the prosecution of the Southern Magnetic Survey, and the establishment of fixed magnetic observatories at certain localities in the British Colonies, two of which, the Cape of Good Hope and Hobarton, were convenient of access and would comprehend between them nearly the whole of the isodynamic lines which should be included in the survey.

The groundwork of the survey, as regards the variations of the magnetic force, is thus to be found in the determinations made at the magnetic observatories of Hobarton and the Cape of Good Hope, of the absolute values of the magnetic force at those stations in and about the years in which the survey was in progress. A summary of the investigations on which these values are founded forms, therefore, a subject of primary consideration in this section of the present Contribution: pages 463 and 464.

The instruments and methods by which the variations of the magnetic force at other land stations than Hobarton and the Cape of Good Hope, and in the almost daily observations on board each of the ships, were investigated, were devised by Mr. Robert WERE Fox, F.R.S., and were described in publications at the date of their invention, and more recently in the 'Admiralty Manual of Scientific Enquiry,' Ed. 1859, Appendix The mode of procedure for obtaining the ratios to an absolute value of the force determined at a base station has been explained in No. III. of these Contributions, Philosophical Transactions, 1842, Art. XI. page 9 et seq. In observations made at sea the ratios, whether obtained by constant weights or by deflectors, are liable to be affected by three sources of error, viz., (1) by the influence of the ship's iron, (2) by variations of temperature producing corresponding variations in the magnetism of the needle, and (3) by an alteration—progressive or sudden—which may possibly take place in the magnetism of the needle in the course of the survey, and which when it does occur is usually a loss of magnetism. Of these three sources of error the first is the most certain and important, and requires to be met by corrections investigated and applied in modes analogous to those already treated of in the cases of the Declination and of the Dip. The influence of variations of temperature on Mr. Fox's needles has always been found on investigation

to be extremely small, and unless in cases when a more than ordinary accuracy is desired, the correction on this account may be regarded as insignificant. The third correction, or that for any notable change in the magnetism of the needle which may take place from time to time, may present greater difficulties than either of the two others, inasmuch as when such change has been shown to have occurred in the interval (sometimes of considerable length) between the comparisons made and repeated at base stations, it may not be always possible to assign the precise date at which the change commenced or terminated, or the proportions in which it should be allotted to different portions of the interval. It is always therefore extremely satisfactory to find, as will be shown to have been the case in the 'Erebus' and 'Terror,' that the intensity-needles preserved their magnetism absolutely without sensible change throughout the interval, i. e. in the present case from the time of their departure from Hobarton in April 1841 until their arrival at the Cape of Good Hope in April 1843: the investigation by which this is shown is subjoined; pp. 464 and 465. The correction of the sea observations for the influence of the ship's iron is subsequently discussed; viz., in p. 474.

Absolute Value in British Units of the Total Magnetic Force at the Hobarton Magnetic Observatory.

The experiments which were made at the Hobarton Magnetic Observatory for the determination of the absolute value of the total magnetic force in British units in the years when the Southern Survey was in progress, were (1) those of the absolute horizontal force, of which a fully detailed account was published in the first volume of the "Magnetical and Meteorological Observations at the Hobarton Observatory," printed in 1850, pp. 381–393; and (2) those of the Inclination, of which an also fully detailed account may be referred to in pp. 332–349 of the same volume.

For the horizontal force we find, in the preliminary discussion prefixed to the observational details in that volume, at p. xxxix., a summary of 399 results obtained by Captain KAY, R.N., and his assistants, with seven magnets of different lengths, between August 1843 and December 1848, of which the arithmetical mean is 4.4895 in British units, corresponding to about the middle of the year 1846. The mean secular change derived from a consecutive series of thirty-six months with the magnet which appeared to be entitled to the most dependence, was an annual decrease of .0027: we have therefore 4.5000 as the absolute value of the horizontal force corresponding to the middle of the year 1842.

In the same preliminary discussion (p. lxxiii) the Inclination derived from eighty-seven monthly determinations between 1841 and 1848 is stated to be -70° 35'-6, corresponding in epoch to May 1845; and as the annual secular change of the Inclination at Hobarton at the period in question had been found not to exceed a small fraction of a minute, the same value may be taken approximately as applicable to the middle of the year 1842.

Hence we obtain $4.500 \times \text{sec.} 70^{\circ} 35' \cdot 6 = 13.540$ as (approximately) the total force in British units at the magnetic observatory at Hobarton in the middle of 1842.

Absolute Value in British Units of the Total Magnetic Force at the Cape of Good Hope Magnetic Observatory.

The experiments made at the Cape of Good Hope Observatory for the determination of the absolute value of the total force in British units at the time of the southern survey, were published in 1851 in vol. I. of the "Magnetical and Meteorological Observations at the Cape of Good Hope." Tables XXXV. and XXXVI. in pages lxiii to lxx of that volume, contain the details of thirty-five monthly determinations of the absolute horizontal force, extending, with occasional interruptions, from November 1846 to February 1850, giving as a mean result 4:4969 at the mean epoch of July 1848, and 0061 as the rate of annual secular decrease between March 1846 and February Hence we obtain 4.5335 as an approximate value for the middle of the year 1850. Table XIX. p. 1 of the same volume exhibits the mean results of fifty-eight monthly determinations of the Inclination, extending from June 1841 to March 1846, of which the full details are given in pages 394 to 407. The arithmetical mean is -53° 21'·1, corresponding to Nov. 1, 1843, with a mean secular increase of south dip in each year of 5'.45; whence the approximate inclination corresponding to the middle of 1842 is -53° 13'.85. We thus obtain $4.5335 \times \text{sec.}$ 53° 13'.85=7.5736 as the approximate value of the total force in British units at the Cape Observatory, corresponding to the middle of 1842.

Simon's Bay, the anchorage of the 'Erebus' and 'Terror' in 1843, is about fifteen geographical miles south of the Cape Observatory, a difference which, in conformity with the maps of the isodynamic lines in that vicinity, may be regarded as equivalent to a difference of +0.024 of the Force, which, applied to the result at the observatory, gives 7.598 as approximately the total force at Simon's Bay in the middle of 1842.

Comparison of the results given by the needles employed in determining the ratios of the force in the sea observations, with the absolute values at Hobarton and the Cape of Good Hope.

The ratios of the force shown by these needles are measured by the angles of deflection produced in different localities by a constant weight applied to a grooved wheel attached to the axle of the needle; the intensity of the magnetic force being inversely as the sines of the angle of deflection. If we express by φ the absolute value of the force at a base station, and by v the deflection caused by a constant weight at the base station, and by φ' and v' corresponding values at another station, we have $\varphi' = \varphi \frac{\sin v}{\sin v'}$; and taking

Hobarton as the base station, we have $\phi'=13.540 \frac{\sin v}{\sin v'}$. The weights employed were grains and half grains, several of each having been carefully prepared by Mr. Fox himself, and the same individual weights being, as far as possible, used throughout. The deflections caused by the different weights when the needles of the 'Erebus' and 'Terror' were observed at the magnetic observatory at Hobarton in April 1841, are shown in the

following Table, the face of the circle being directed towards the east, which was its customary position in observations at sea.

	Erebus.			Terror.			
Weights.	Deflections.	Log sin corresponding to 1 grain.	Weights.	Deflections.	$egin{array}{c} {f Log\ sin\ corresponding\ to} \ 1 { m\ grain.} \end{array}$		
grs. 1 2 3 4 5	6 23·2 13 02·8 19 37·3 26 47·7 34 23 5 42 55·8	1.04625 1.05259 1.04897 1.05192 1.05296 1.05506	grs. 1.0 1.5 2.0 2.5 3.0 3.5 4.0	12 11·9 18 29·4 25 13·7 31 43·0 39 02·3 46 51·3 56 10·9	-1·32489 -1·32516 -1·32861 -1·32281 -1·32211 -1·31902 -1·31744		
	Mean	-1·05139=NN ·11225		Mean	-1·32286=NN ·21031		

TABLE V.

The weights and deflections observed on shore at Simon's Bay, Cape of Good Hope, in April 1843, with the face of the circle towards the east, were as follows:—

		Erebus.	Terror.			
Weights.	Deflections.	$egin{aligned} extbf{Log sin corresponding to} \ & 1 \ ext{grain.} \end{aligned}$	Weights.	Deflections.	$egin{array}{c} { m Log \ sin \ corresponding \ to} \ 1 { m \ grain.} \end{array}$	
grs. 1·0 2·0 3·0 3·5 4·0	11 19·5 23 43·0 36 59·4 44 21·0 55 52·2	-1·29308 -1·30343 -1·30224 -1·30043 -1·31585	grs. 0·5 1·0 1·5 2·0 2·5	11° 21.7 22° 21.1 34° 09.1 48° 18.9 66° 40.8	-1.59550 -1.58011 -1.57317 -1.57218 -1.56505	
	Mean	-1·30301=NN·20091		Mean	-1.57720=NN ·37775	

TABLE VI.

Hence we have the magnetic force at Simon's Bay, as derived from the needle of the 'Erebus' at Hobarton $13.540 \times \frac{11255}{20091} = 7.585$; and from the needle of the 'Terror' at Hobarton $13.540 \times \frac{21031}{37775} = 7.539$. The mean between these values is 7.562. The force at the anchorage of the 'Erebus' and 'Terror' corresponding to the mean epoch of 1842.5, derived from the absolute determinations at the magnetic observatory at the Cape of Good Hope (page 458), is 7.574.

The small difference in amount between the values derived from the absolute determinations at the Cape Observatory (including the correction to Simon's Bay), and that assigned from the Hobarton Observatory by the needles of the 'Erebus' and 'Terror,' is well within the limits of the errors of observation and of deduction; and gives full reason to infer that the magnetism of the needles underwent no material alteration in the interval.

Deduction of the Magnetic Force at the land stations visited intermediately between Hobarton in April 1841 and Simon's Bay in April 1843.

In this deduction we have the advantage that the deflections by the weights were

observed with the face of the circle to the west as well as to the east at all the stations; (except in the case of the 'Terror' at St. Martin's Cove, when the deflections with the face of the circle to the west appear to have been accidentally omitted).

We have first to state the results at the base station at Hobarton with the face of the circle to the *West* in April 1842: those with the face of the circle to the East having been stated in page 465.

	Erebus, circle face West.			Terror, circle face West.			
Weights.	Deflections.	Log sin corresponding to 1 grain.	Weights.	Deflections.	$egin{array}{c} { m Log~sin~corresponding~to} \ { m 1~grain.} \end{array}$		
grs. 1 2 3 4 5	6 36·0 13 14·5 19 55·5 27 02·8 34 51·5 43 07·6	-1.06046 -1.05892 -1.05536 -1.05568 -1.05666	grs. 1·0 1·5 2·0 2·5 3·0 3·5 4·0	11 42.0 17 52.6 24 15.6 31 00.7 38 42.3 46 06.3 56 10.5	-1:30704 -1:31100 -1:31268 -1:31405 -1:31898 -1:31363 -1:31740		
	Mean	_1.05753-NN .11416		Moon	1.21254 - NN .20585		

TABLE VII.

TABLE VIII.

Observations at Garden Island, Sydney; Lat. -33° 51′, Long. 151° 17′; July 1841.

	Erebus,	circle face East.	Erebus, circle face West.			
Weights.	Deflections.	Log sin corresponding to 1 grain.	Weights.	Deflections.	Log sin corresponding to 1 grain.	
grs.	Ĝ 5 ś ⋅6	-1.08445	grs.	° 01⋅4	-1·08732	
2	13 57.5	-1.08137	2	14 32.7	-1.09889	
3	21 13.8	-1.08172	3	21 51.4	-1.09376	
4	29 09.2	-1.08560	4	29 32.1	-1.09075	
5	37 43.3	—1·0 8766	5	37 38.9	-1.08693	
6	46 51.8	-1.08501	6	47 32.5	-1.08977	
	Mean	-1.08430 = NN.12142		Mean	$-1.09124 = NN \cdot 12338$	

TABLE IX.

	Terror,	circle face East.	Terror, circle face West.			
Weights.	Deflections.	$egin{array}{c} { m Log \ sin \ corresponding \ to} \ 1 \ { m grain.} \end{array}$	Weights.	Deflections.	Log sin corresponding to 1 grain.	
grs. 1·0 1·5 2·0 2·5 3·0 3·5	13 08·8 20 02·0 27 00 7 34 35·2 42 06·9 51 13·5	-1:35687 -1:35866 -1:35619 -1:35615 -1:34936 -1:34781	grs. 1·0 1·5 2·0 2·5 3·0 3·5	12 44·1 19 03·3 26 01·2 33 17·7 41 35·2 51 02·1	-1·34330 -1·33776 -1·34112 -1·34156 -1·34489 -1·34665	
	Mean	-1·35417=NN·22603		Mean	-1·34255=NN·22006	

Summary at Garden Island, Sydney.

Erebus.	Terror.						
Face East $13.540 \times \frac{11255}{12142} = 12.551$	Face East 13.540 × \(\frac{121031}{22603} = 12.598\)						
Face West $13.540 \times \frac{11416}{12338} = 12.529$	Face West $13.540 \times \frac{20585}{22006} = 12.665$						
MeanEast and West=12.540	MeanEast and West=12.631						
Mean Erebus and Terror=12.586							

Table X. Observations at the Bay of Islands, New Zealand; Lat.— 35° 16′, Long. 174° 00′; August and October 1841.

	Erebus,	circle face East.	Erebus, circle face West.				
Weights.	Deflections.	Log sin corresponding to 1 grain.	Weights.	Deflections.	Log sin corresponding to 1 grain.		
grs. 1 2 3 4	7 30·7 14 59·3 22 47·5 30 55·1	-1·11637 -1·11163 -1·11095 -1·10875	grs. 1 2 3 4	7 43·1 15 23·3 23 17·9 31 26·9	-1·12808 -1·12281 -1·12005 -1·11539		
5 6 1 2	40 10·6 50 38·2 7 16·7 14 43·2 22 45·1	-1·11069 -1·11011 -1·10275 -1·10397	5 6 1 2 3	40 52·0 51 26·0 7 29·9 15 11·2	-1·11681 -1·11499 -1·11560 -1·11721		
3 4 5 6	30 30·6 39 59·4 50 35·0	-1·1030 -1·10354 -1·10901 -1·10978	3 4 5 6	23 17·2 31 49·2 40 51·0 51 38·8	-1·11984 -1·11996 -1·11666 -1·11628		
	Mean	-1·10899=NN·12853		Mean	-1·11864=NN·13136		

	Terror,	circle face East.	Terror, circle face West.			
Weights.	Deflections.	Log sin corresponding to 1 grain.	Weights.	Deflections.	$egin{array}{c} { m Log \ sin \ corresponding \ to} \ 1 { m \ grain}. \end{array}$	
grs. 1-0 1-5 2-0 2-5 3-0 3-5 1-0 1-5 2-0 2-5 3-0 3-5	14 03:2 21 17:9 28 22:1 36 50:7 44 58:3 55 09:9 13 51:7 20 53:0 28 22:4 37 05:6 45 02:2	-1:38529 -1:38409 -1:37579 -1:37990 -1:37215 -1:37945 -1:37593 -1:37586 -1:38246 -1:37264	grs. 1·0 1·5 2·0 2·5 3·0 1·5 2·0 2·5 3·0 3·5 1·0 1·5 2·0 2·5 3·0 3·5	13 24·3 20 30·5 27 46·9 35 43·0 44 38·7 55 23·7 13 26·8 20 16·4 27 38·8 35 45·1 44 47·7 55 26·4	-1·36518 -1·36840 -1·36746 -1 36831 -1·36966 -1·37137 -1·36650 -1·36362 -1·36550 -1·36868 -1·37080 -1·37162	
9.9	55 19·1 Mean	$\frac{-1.37098}{-1.37706 = \text{NN} \cdot 23827}$	3.3	Mean		

Summary at the Bay of Islands, New Zealand.

Erebus.	Terror.						
Face East 13.540 × 11.255 = 11.857	Face East 13.540 × 21031 = 11.951						
Face West $13.540 \times \frac{11416}{13136} = 11.767$	Face West $13.540 \times \frac{20585}{23340} = 11.942$						
MeanEast and West=11.812	MeanEast and West=11.946						
MeanErebus and Terror=11.879							

Table XI.—Observations at Port Louis, Falkland Islands; Lat.—51° 32′, Long. 301° 53′; April and August 1842.

	Erebus,	circle face East.	Erebus, circle face West.				
Weights.	Deflections.	${f Log~sin~corresponding~to} \ 1 \ {f grain.}$	Weights.	Deflections.	$egin{array}{c} { m Log \ sin \ corresponding \ to} \ 1 \ { m grain}. \end{array}$		
grs. 1 2 3 4 5 6 1 2 3 4 5 6	8 56·8 18 31·2 27 42·7 37 58·1 48 45·9 66 49·9 8 41·2 17 57·2 27 43·3 37 40·4 49 31·4 67 23·5	-1·19177 -1·20090 -1·19036 -1·18698 -1·17726 -1·18533 -1·17907 -1·18786 -1·19050 -1·18409 -1·18223 -1·18712	grs. 1 2 3 4 5 6 1 2 3 4 5 6	9 20.5 18 50.5 28 30.0 38 51.0 51 28.0 68 40.3 9 17.1 18 32.9 28 26.7 39 05.3 51 19.3 69 35.8	-1·21037 -1·20811 -1·20154 -1·19540 -1·19737 -1·19103 -1·20776 -1·20154 -1·20077 -1·19764 -1·19350 -1·19371		
	Mean	-1.18696 = NN.15379		Mean	-1.19990 = NN.15846		

	Erebus,	circle face East.	Erebus, circle face West.			
Weights.	Deflections.	ections. Log sin corresponding to 1 grain.		Deflections.	$egin{array}{c} { m Log~sin~corresponding~to} \ 1 { m grain.} \end{array}$	
grs. 1 2 3 4 5 6 1 2 3 4 5 6 6	38 00·8 49 58·1 69 24·7 8 17·7 17 27·1 28 52·7 37 37·5 49 10·1	1·19314 1·15918 1·17595	grs. 1 2 3 4 5 6 1 2 3 4 5 6 6	16 30·3 24 33·7	-1·21586 -1·20910 -1·20402 -1·20096 -1·19992 -1·19513 -1·14989 -1·15243 -1·14162 -1·14565 -1·14386 -1·14352	
Observa	tions in Ap	-1·18427=NN·15285 or. and Aug ·15379 ov. and Dec ·15285 Mean ·15332	Observat ",	tions in Ap	-1·17516=NN·14968 or. and Aug ·15846 ov. and Dec ·14957 Mean ·15401	

	Terror,	circle face East.	Terror, circle face West.				
Weights.	Deflections.	Log sin corresponding to 1 grain.	Weights.	Deflections.	$egin{array}{c} { m Log~sin~corresponding~to} \ { m 1~grain.} \end{array}$		
grs. 1•0	16 56·5	-1.46448	grs. 1.0	16 14.1	-1.44650		
1.5	25 36.6	-1.45964	1.5	24 36.9			
2.0	34 47.2	-1.45525	2.0	33 44.9	-1.44369		
2.5	45 34.1	—1·45581	2.5	44 31.3	-1.44789		
3.0	57 39·1 16 51·2	-1.44964 -1.46228	3·0 1·0	58 17·8 16 26·1	-1.45270 -1.45167		
1·0 1·5	25 34.3	-1.45903	1.5	24 27.9	-1·44105		
2.0	34 47.8	-1.45505	2.0	33 49.5			
2.5		-1.45525	2.5	44 17.1			
3.0	57 48.7	-1.45044	3.0	58 19.5	-1.45283		
	Mean	-1·45672=NN·28623		Mean	-1·44705=NN ·27993		

	Terror,	circle face East.	Terror, circle face West.				
Weights.	Deflections.	$egin{array}{c} { m Log \ sin \ corresponding \ to} \ 1 \ { m grain}. \end{array}$	Weights.	Deflections.	Log sin corresponding to 1 grain.		
grs. 1·0 1·5 2·0 2·5 3·0 1·0 1·5 2·0 2·5 3·0 1·0 1·5 2·0 2·5 3·0		-1·46610 -1·45982 -1·45107 -1·45407 -1·45000 -1·46324 -1·46032 -1·45716 -1·45684 -1·45255 -1·46886 -1·45956 -1·45639 -1·45709 -1·45112	grs. 1·0 1·5 2·0 2·5 3·0	16 15.4 24 30.1 33 57.8 44 32.3 57 35.7	-1·44167 -1·44612		
_	ions in and July . Nov., and l	-1·45761=NN·28682 ·28623 (weight 2) Dec. ·28682 (weight 3) ght ·28658	1	ions in and July .	-1·44645=NN ·27955 ·27993 (weight 2) ·27955 (weight 1) ght ·27980		

Summary at Port Louis, Falkland Islands.

Erebus.	Terror.						
Face East $13.540 \times \frac{11255}{15332} = 9.940$	Face East 13.540 × :21031 = 9.937						
Face West $13.540 \times \frac{11416}{15401} = 10.037$	Face West $13.540 \times \frac{20585}{27980} = 9.961$						
Mean, East and West = 9.988	Mean, East and West=9.949						
Mean, Erebus and Terror =9.969.							

Table XII.—Observations at St. Martin's Cove, Cape Horn, Lat. -55° 51′, Long. 292° 28′, September and October 1842.

	Erebus,	circle face East.	Erebus, circle face West.				
Weights.	Deflections.	Log sin corresponding to 1 grain.	Weights.	Deflections.	Log sin corresponding to 1 grain.		
grs. 1 2 3 4 5	7 43.6 16 02.6 24 32.0 33 03.3 43 08.9 54 55.3		grs. 1 2 3 4 5	24 33·7 34 00·8	-1.14989 -1.15329 -1.14163 -1.14565 -1.14386 -1.14352		
	Mean	-1·13595=NN·13676		Mean	-1·14631=NN·14006		

	Terror,	circle face East.	Terror, circle face West.				
Weights.	Deflections.	flections. Log sin corresponding to 1 grain.		Deflections.	Log sin corresponding to 1 grain.		
grs. 1·0 1·5 2·0 2·5 3·0 3·5	15 04·0 22 40·9 30 34·6 39 27·6 48 56·6 61 09·5	-1·41488 -1·41006 -1·40543 -1·40520 -1·40029 -1·39841		(Not	observed.)		
	Mean	-1·40571=NN ·25451		453 - 757			

Summary at St. Martin's Cove, Cape Horn.

Erebus.	Terror.
Face East $13.540 \times \frac{11255}{13676} = 11.143$ Face West $13.540 \times \frac{11416}{14006} = 11.036$ Mean East and West $= 11.090$	Face East $13.540 \times \frac{21031}{25451} = 11.189$
Mean, Erebus (weight 2) and	d Terror (weight 1) =11·123.

Land Stations at which the values of the magnetic elements have been determined with sufficient accuracy to justify their being regarded hereafter as PRIMARY STATIONS.

Note.—It is intended to continue this Table in subsequent numbers of the Contributions.

TABLE XIII.

No.	Station.	Lat.	Long.	Declination.	Inclination.	Force.
1	Hobarton (Observatory).	-4°_{2} $5^{'}_{2}$	147 24	$\begin{cases} -10^{\circ} 24 \\ \text{Contrib. VI. p. 127.} \end{cases}$	-70 36 Contrib. X. p. 463.	13·540 Contrib. X. p. 463.
2	Sydney, Garden Island	-33 51	151 17	- 9 51 Contrib. VI. p. 128.	-62 49 Contrib. VI. p. 100.	12·586 Contrib. X. p. 467.
3	Bay of Islands	_35 16	174 00	-13 36 Contrib. VI. p. 129.	-59 32 Contrib. VI. p. 100.	11.879 Contrib. X. p. 468.
4	Port Louis	-51 32	301 53	-17 36 Contrib. VI. p. 121.	-52 25 Contrib. VI. pp. 101–103*.	9·969 Contrib. X. p. 469.
5	St. Martin's Cove	-55 51	292 28	-22 56 Ross, Voy. vol. xi. p. 314.	-58 13 Contrib. X. p. 513.	11·123 Contrib. X. p. 470.
6	Cape of Good Hope	-33 56	18 29	-29 07 Cape Obs. vol. i. p. x.	-53 14 Contrib. X. p. 464.	7·574 Contrib. X. p. 464.

* The observations which were made at Port Louis between April 12th and August 23rd, 1842, to determine the Inclination with needles whose poles were reversed and the results obtained from the mean of the eight positions of the circle and needle, afford a favourable opportunity of judging of the accordance attainable in such results when the observations are made by skilled and careful observers, and when suitable instruments are employed. Sixty determinations were made with the Dip Circle of the 'Erebus' and its three needles R 4, R 6, and R 7, the observer being Lieut. A. J. Smith of the 'Erebus,' relieved occasionally by Mr. T. E. L. Moore of the 'Terror.' The results are detailed in the VI.th No. of these Contributions, pp. 101-103. The arithmetical mean of the sixty results is -52° 25'·06, and the probable error of a single result is ± 1 '·52. It will be remembered that at the time these observations were made, the instruments which were used had already been employed for more than three years on a service of no ordinary exposure, and had been frequently disembarked for observations on land or on ice. The general accordance of the results, and the very small amount of the probable error of a single result, bear strong testimony to the care and skill of the observers, as well as to the improvement which took place in the English Dip Circles and Needles, in consequence of the pains taken by the participators in the Magnetic Survey of the British Islands in 1837 and 1838, of whom Sir James Ross was one. [Dr. Lloyd in the VII.th Volume of the Reports of the British Association, page 99, note 1; and Table III. in the same volume, p. 57.] The detailed statement of the observations at the Falkland Islands was published in the VI.th No. of these Contributions almost immediately after its receipt in England (in 1844), and afforded to all who were desirous of profiting by the instruction it conveyed a knowledge of the degree of accuracy which might be expected by the employment of the English Dip Circles and Needles, when placed in the hands of properly trained and careful observers. Even the small probable error of $\pm 1'.52$ was doubtless due in great measure to "magnetic disturbances" and to the effects of "horary variation, solar and lunar," the influence of which can only be eliminated by corrections supplied by the continuous record of the magnetometers of an observatory. The probable error of the mean of the sixty observations with the circle and needles of the 'Erebus' at Port Louis is +0'·197.

Those who are interested in the accuracy with which observations of the Magnetic Dip may be made will recognize with interest and satisfaction that $\pm 1'.52$, the probable error of a single result derived from the 60 observations at Port Louis, is almost precisely the same as that $(\pm 1'.50)$ obtained by the mean of 282 independent results at the Kew Observatory (Proceedings of the Royal Society, March 1861) by several observers employing Dip Circles and Needles of the British pattern; in which results, as in those at Port Louis, no corrections for disturbing influences, derived from the continuous records of an observatory, were introduced.

Variation in the Intensity of the Magnetic Force observed by Deflectors.

1. In the 'Erebus.'—At sea, where manipulation of the weights causes exposure of the needle, which, in bad weather especially, is liable to occasion injury, the substitution of "deflecting magnets" for "weights" was frequently resorted to. In this case the ratios of intensity in different localities are inversely as the sines of the angles of deflection and directly as the weights equivalent to the deflecting force of the deflector on the needle at the respective angles; or $\phi' = \phi \cdot \frac{\sin v}{\sin v'} \cdot \frac{w'}{w}$, where ϕ , v, and w are the intensity, the angle of deflection, and the equivalent weight at a base station, and ϕ' , v', and w' corresponding values in another locality. The method of forming a table of the equivalent weights corresponding to the deflecting force of a deflecting magnet at different angles has been explained in No. III. of these Contributions (Philosophical Transactions, 1842, Art. II. pp. 9 to 13); and a Table of the equivalent weights for the magnet R. F. 4 (used in the 'Erebus' either as Deflector S. or Deflector N., according as the Deflector was applied to either pole of the needle) is reprinted here (for convenience) from Contribution VI., Philosophical Transactions, 1844, Part 2, Art. VII. p. 114.

Deflector S. Deflector N. v'. w'. v'. v'. w'. v'. w'. grs. **7·11** $5\mathring{2}$ $6\mathring{6}$ $7\mathring{3}$ 7.49 5<u>9</u> 5° 6.47 49 $6\ddot{3}$ 7.87 5.96 6.766.19 7.76 **53** 60 7.01 67 6.39 74 7.38 5.89 **50** 57 6.6764 6.13 7.65 6.91 **54** 61 68 6.31 5.82 7.27 6.57 6.06 75 65 51 58 7.54 62 6.82 69 6.2476 5.76 7.17 6.00 55 52 59 6.4866 56 7.43 63 6.7370 6.1777 5.70 **53** 7.07 60 6.40 67 5.94 64 6.646.10 6.97 57 7.3271 54 6.3378 5.64 61 685.88 6.03 7.21 6.555.58 6.86 6.265.82

TABLE XIV.

Regarding Hobarton as the base station of the whole of the Survey now under consideration, and 13.540 as the absolute value of the magnetic force in British units at Hobarton at the mean epoch of the Survey, the observations of the 'Erebus' at Hobarton in April 1841 supply the values $v=56^{\circ}$ 28'·7 and (from Table XIV.) w=7.38 grs., for Deflector S.; and $v=53^{\circ}$ 02'·7 and w=7.07 grs., for Deflector N; (for Hobarton). The angles of deflection in other localities furnish the respective values of v', and Table XIV. those of w' corresponding to the angles v'. Hence we have the values of the force in other localities; viz. $\phi' = \frac{\phi \sin v}{w} \cdot w'$ cosec v' = 1.53 w' cosec v'. The degree of accordance between the values of ϕ' obtained by weights in different localities and those obtained by the deflectors is shown in the following Table, in which are included all the stations on land or ice between Hobarton in April 1841 and Port Louis in December 1842.

Т	ΑR	т.	a 🕽	7	7

			R. F. 4. used as Deflector S.			R. F. 4 use	ed as Def	Mean by De-	Mean by	
Stations.	Lat.	Long.							flectors S. and N.	weights.
			v'	w'.	φ'.	v'.	w'.	φ'.	φ'.	φ'.
Sydney	1 -		59 09·0	grs. 7.09	12.63	55 35.9	grs. 6•77	12.55	12.59	12.59
Bay of Islands St. Martin's Cove	Į.		61 43·2 64 31·5	6.84	11.88 11.17	57 53·6 60 51·1	6.58	11·89 11·11	11.88 11.14	11.88 11.12
Falkland Islands	-51 32	301 53	71 13.0	6.08	9.83	67 05.1	5.93	9.85	9.84	9.97

2. In the 'Terror'.—A spare needle, C, was employed in the 'Terror' as Deflector S. and Deflector N. according as the Deflector was applied to either pole of the Intensity needle; and two smaller magnets were used conjointly as "N. and S." The equivalent weights were obtained, as shown in the following Table, from the comparison of the angles of deflection with deflectors and weights at Hobarton in April 1841, Sydney in July 1841, Bay of Islands, New Zealand, in August and October 1841; Port Louis in the Falkland Islands from April to December 1842; St. Martin's Cove (Cape Horn) in October 1842; and Simon's Bay (Cape of Good Hope) in April 1843.

TABLE XVI.

	Deflector S.				Deflector N.				Magnets N. and S.			
v'.	w'.	v'.	w'.	v'.	w'.	v'.	w'.	v'.	w'.	v'.	w'.	
33 34 35 36 37 38 39 40 41	grs. 2·625 2·591 2·557 2·523 2·489 2·455 2·421 2·388 2·355	42° 43° 44° 45° 46° 47° 48° 49° 50°	grs. 2·322 2·289 2·256 2·223 2·190 2·157 2·122 2·089 2·055	36 37 38 39 40 41 42 43 44	grs. 2·794 2·754 2·754 2·673 2·632 2·591 2·550 2·509 2·468	45 46 47 48 49 50 51 52 53	grs. 2·428 2·387 2·346 2·305 2·264 2·223 2·182 2·141 2·100	40° 41° 42° 43° 44° 45° 46° 47° 48°	grs. 3·175 3·097 2·918 2·839 2·761 2·683 2·605 2·527 2·449	49° 50° 51° 52° 53°	grs. 2·371 2·293 2·215 2·137 2·059	

From the observations at Hobarton in April 1841 (regarded as a base station), we have $\varphi=13.540$; v with Deflector S. 33° 23′, and w from Table XIV. 2.614; v with Deflector N. 36° 01′, and w 2.794; and v with Magnets N and S 40° 06′, and w 3.060. The angles of deflection in other localities furnish the several values of v′, and Table XIV. the corresponding values of w′. Hence we obtain φ ′ in other localities, corresponding to 13.540 at Hobarton as the base station, by $\varphi'=\frac{\varphi\sin v}{w}$. w′ cosec v′ = 2.85 w′ cosec v′.

The degree of accordance between the values of φ' as obtained by weights or by deflectors is shown in the following Table.

Stations.	Lat. Long.		C, as Deflector S.			C, as Deflector N.			Mean by De- flectors.	Mean by Weights.
			v'.	w'.	φ'.	v.	w'.	φ'.	φ'.	φ'.
Sydney	$-51 32 \\ -55 51$		35 16 36 59 41 59 38 23 50 14	2·489 2·322	9·893 11·218	38 06 39 14 44 31 40 47 52 36	2·663 2·448 2·601	12·52 11·999 9·951 11·348 7·595	12·55 11·89 9·92 11·28 7·59	12·59 11·88 9·97 11·12 7·60

TABLE XVII.

Corrections for the influence of the ship's iron on the observations of the Intensity of the Magnetic Force.

The corrections to be applied to the intensity observations of the third year of the Survey have been derived from observations which were made with great care at Simon's Bay (Cape of Good Hope) in the 'Terror' on the 7th of April 1843, and in the 'Erebus' on the 12th of the same month, with the ship's head placed successively on each of the sixteen principal points as indicated by the standard compass. The arithmetical mean of the sixteen determinations has been regarded as a result in which the disturbing influences on the several points may be considered to have balanced each other, and as a true measure of the Force at the locality. The correctness of this conclusion was further established by the removal of the instruments from the ships to the shore, where the results obtained accorded well with the mean of the observations on the sixteen points on board.

In the formation of tables for the correction of the individual observations made at sea in the course of the year's survey, the values of the coefficients a, b, c, and d, determined by the investigations in the preceding parts of this communication, have been employed, viz.

```
In the 'Erebus' . . a = -.0331; b = +.9875; c = +0.0195; d = +0.9936.
In the 'Terror' . . . a = -.0344; b = +.9901; c = +0.0106; d = +0.9950.
```

With these values tables of double entry were formed, having as arguments θ , and tabular values of ζ ; employing for the Dip Corrections equations (12) and (13) (Philosophical Transactions, 1843, Art. X. p. 148); and for the Intensity Corrections $A'c(\frac{d}{c}\tan\theta + \cos\zeta)\cos\theta$ cosec θ' (Philosophical Transactions, 1843, Art. X. p. 162); A' in the 'Erebus' being found =1.0051, and in the 'Terror' =1.0055.

The application of these corrections to the observations with the ship's head on the different points at Simon's Bay, in April 1843, is shown in the following Table.

Table XVIII.—Values of the Intensity of the Force, as observed and as corrected, on the sixteen principal points of the compass at Simon's Bay in April 1843.

	Erebus.		Terror.					
,	Observed.	Corrected.		Observed.	Corrected.			
÷ ; ; ; ;	. 172	1 1 1 1 1 1 1 1 1	\$1 83 E	Time on a				
N.	7.49	7.64	N.	7.44	7.59			
N.N.W.	7.52	7.66	N.N.W.	7.45	7.59			
N.W.	7.55	7.66	N.W.	7.45	7.56			
w.n.w.	7.56	7.62	w.n.w.	7.37	7.43			
w.	7.63	7.65	w.	7.58	7.60			
w.s.w.	7.63	7.60	w.s.w.	7.68	7.65			
s.w.	7.62	7.49	s.w.	7.72	7.59			
s.s.w.	7.71	7.54	s.s.w.	7.73	7.56			
s.	7.74	7.56	s.	7.79	7.61			
S.S.E.	7.71	7.55	S.S.E.	7.80	7.64			
S.E.	7.72	7.62	S.E.	7.72	7.62			
E.S.E.	7.63	7.60	E.S.E.	7.61	7.58			
E •	7.56	7.58	E.	7.56	7.58			
E.N.E.	7.54	7.64	E.N.E.	7.48	7:58			
N.E.	7.49	7.62	N.E.	7.41	7.54			
N.N.E.	7.48	7.63	N.N.E.	7.38	7.53			
	7.59	7.60		7.57	7.58			

Index-corrections.—The cards of the Standard Compasses, both of the 'Erebus' and 'Terror,' were unchanged during the whole of the third year's survey. The index-corrections appear to have been very carefully watched and frequently examined. In memoranda preserved in the handwriting of Sir James Ross and of Captain Crozier, the corrections are stated to have been constant from the departure of the ships from the Falkland Islands in September 1842 to their arrival at Simon's Bay in April 1843. The card of the 'Erebus' is stated by Sir James Ross to have had an index-correction of -1° 48'; those of the 'Terror,' as stated by Captain Crozier,

Card
$$P = -0^{\circ} 40'$$
, and Card $R = +1^{\circ} 13'$.

The index-corrections of the inclination-needles employed in the 'Fox' circles in the sea observations (R. F. 5 in the 'Erebus,' and F. C. B. in the 'Terror') have been examined by comparing their results with those of needles whose poles were reversed and the inclination observed in the eight usual positions of the circle and needle, on several occasions at the same identical spots either on land or on the ice. With the needles of the 'Erebus' six such occasions presented themselves in the course of the three years' survey (confining the comparison to land stations sufficiently free from station error). They are as follows:—

TABLE XIX.

Stations.	Date.	Complete observations with reversed poles.	R. F. 5. Face East.	Index- correction. R. F. 5.	References.
$\begin{array}{c} \text{Sydney} & \dots & \dots \\ \text{Bay of Islands} & \dots & \dots \\ \text{On Ice} & \left\{ \begin{array}{c} \text{Lat.} & -63^{\circ} \ 23' \\ \text{Long.} \ 210^{\circ} \ 02' \end{array} \right\} \\ \text{On Ice} & \left\{ \begin{array}{c} \text{Lat.} & -65^{\circ} \ 49' \\ \text{Long.} \ 202^{\circ} \ 02' \end{array} \right\} \\ \text{St. Martin's Cove, Cape} \\ \text{Horn} & \dots & \dots \\ \text{On Ice} & \left\{ \begin{array}{c} \text{Lat.} & -64^{\circ} \ 26' \\ \text{Long.} \ 303^{\circ} \ 52' \end{array} \right\} \end{array}$	Dec. 1841 Jan. 1842 Oct. 1842	-77 23·3 -79 39·5 -58 12·8 -63 17·2	-77 15·5 -79 35·8 -58 03·5 -63 10	- 7·8 - 3·7 - 9·3	Cont. VI. pp. 101 & 157. Cont. VI. pp. 101 & 160. Cont. X. pp. 479 & 513.

A similar comparison for F. C. B. (the 'Fox' needle of the 'Terror') at five stations where the requisite data exist, is shown in the following Table.

TABLE XX.

Stations.	Date.	Complete observations with reversed poles.	F. C. B. Face East.	Index- correction. F. C. B.	References.
Hobarton Sydney Bay of Islands St. Martin's Cove On ice $\left\{ \begin{array}{l} \text{Lat.} -64^{\circ} \ 26' \\ \text{Long.} \ 303^{\circ} \ 52' \end{array} \right\}$	July 1841 Aug. & Oct. 1841 Oct. 1842	-62 49.1 $-59 31.9$ $-58 12.8$	$ \begin{array}{r rrr} -62 & 22.4 \\ -58 & 50.6 \\ -57 & 28.0 \end{array} $	-26.7 -46.2 -44.8	Cont. V. pp. 165 & VI. 169. Cont. VI. pp. 100 & 170. Cont. VI. pp. 100 & 172. Cont. X. pp. 513 & 514. Cont. X. pp. 513 & 519.
	Mean index-corre	— 34·3	Taken as -35'.		

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

Lat.	Long.	Ship.	Declination.	Lat.	Long.	Ship.	Declination.
$-51^{\circ} 32^{\circ}$	301° 53	Erebus.	-1 [°] 7 3 ⁶ *	$-6\mathring{4} 1\mathring{4}$	303 56	Terror.	$-2\overset{\circ}{2}$ 11
-54 16	305 05	Terror.	-17 30 $-17 29$	-64 09	303 03	Erebus.	-21 32
-54 10	305 35	Terror.	-16 02	-64 12	303 04	Terror.	$-23 \ 33$
-53 55	304 19	Erebus.	-18 18	$-64 \ 30$	303 00	Erebus.	-23 00
-53 54	304 25	Terror.	-19 55	-64 28	303 20	Terror.	-24 23
-55 07	300 19	Terror.	-21 43	$-64 \ 37$	303 16	Terror.	-22 50
$-55 \ 41$	296 41	Terror.	-23 58	-64 44	303 12	Erebus.	-22 03
-56 00	292 44	Erebus.	$-23 \ 57$	$-64 \ 42$	303 20	Terror.	-24 08
-55 51	292 28	Erebus.	-22 56+	-64 44	303 10	Erebus.	-21 13§
-56 07	292 53	Terror:	-22 14	$-64 \ 41$	302 52	Terror.	-23 52§
-55 39	295 23	Erebus.	-24 03	-6442	303 10	Erebus.	-22 55
-55 42	295 20	Terror.	-24 50	-64 38	302 40	Terror.	$-24 \ 37$
-55 35	299 09	Erebus.	-20 53	$-64 \ 38$	302 40	Terror.	-24 07§
-55 29	299 03	Terror.	-24 06	-64 38	303 02	Erebus.	-23 57
-55 31	299 15	Erebus.	$-21 \ 51$	$-64 \ 40$	302 07	Terror.	$-24 \ 43$
-54 32	299 53	Terror.	-22 04	-64 39	302 36	Erebus.	-22 14
-5453	299 59	Erebus.	-21 10	-64 36	302 38	Erebus.	-23 11
-5254	301 05	Terror.	$-22 \ 32$	-6442	302 42	Terror.	-25 59
-5304	300 51	Erebus.	-19 48	$-64 \ 31$	302 36	Erebus.	-23 37
-5241	301 15	Terror.	-21 00	-64 32	302 55	Terror.	-23 34
-5204	302 47	Erebus.	-18 03	-63 58	304 46	Erebus.	-20 22
-5246	303 12	Terror.	-19 41	-64 04	305 05	Terror.	-22 42
-52 50	303 12	Erebus.	-18 29	-64 03	305 13	Terror.	-21 49
-53 50	303 49	Terror.	-20 22	-6428	304 46	Erebus.	-21 25
-53 56	303 52	Erebus.	-17 35	-64 20	306 00	Terror.	-21 32
$-55 \ 45$	305 17	Terror.	-20 12	-64 19	304 30	Erebus.	-22 03
$-55 ext{ } 46$	305 17	Erebus.	-1847	-64 18	304 10	Erebus.	-21 28
-56 36	306 38	Erebus.	-1747	$-64 \ 16$	304 42	Terror.	-22 04
-5648	306 41	Terror.	-21 09	-64 15	303 49	Erebus.	_21 03
-56 28	306 45	Erebus.	-17 59	-64 09	304 10	Terror.	$-22\ 16$
-58 29	308 13	Erebus.	-18 02	-64 12	303 53	Erebus.	-20 39
-58 25	308 00	Terror.	-20 06	-64 20	304 00	Terror.	-22 32
-59 28	308 20	Terror.	-21 29	-64 04	304 18	Erebus.	-20 50
-59 34	308 28	Erebus.	-17 56	-64 03	304 12	Terror.	-22 42
-62 00	307 52	Terror.	$-22\ 06$	-6404	304 18	Erebus.	-20 48
$-62\ 18$	308 03	Erebus.	-18 24	-64 05	303 55	Terror.	-22 28
-62 20	308 12	Terror.	$-22\ 43$	-64 08	304 14	Erebus.	-20 55
-6254	305 41	Erebus.	$-20 \ 16$	-64 08	304 03	Erebus.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	306 12	Terror.	$-21 \ 41$	-64 05	303 55	Terror.	-22 28 $-21 37$
$-63 \ 40$ $-63 \ 48$	304 45	Terror.	-21 15	-64 04	303 58	Erebus. Terror.	$-21 \ 37$ $-23 \ 02$
$-63 48 \\ -63 51$	304 52	Erebus.	-22 19	-64 00	304 22	Erebus.	-23 02 $-21 53$
	$\begin{vmatrix} 304 & 24 \\ 304 & 21 \end{vmatrix}$	Terror.	-23 04	-64 08	303 47 303 57	Terror.	-21 33 -22 13
$\begin{bmatrix} -64 & 14 \\ -64 & 10 \end{bmatrix}$		Erebus.	-20 56	$-64 09 \\ -63 56$		Terror.	$\begin{bmatrix} -22 & 15 \\ -21 & 10 \end{bmatrix}$
-64 26	304 40 303 52	Terror. Erebus.	$ \begin{array}{r rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	-63 50 $-63 53$	305 22 304 01	Erebus.	-20 36
-64.25	$\begin{vmatrix} 303 & 52 \\ 303 & 54 \end{vmatrix}$	Terror.	$-22 \ 31$ $-21 \ 30$	-64 25	305 30	Terror.	$-20 \ 30$ $-22 \ 17$
$-64 \ 26$	303 52	Erebus.	$-21 \ 50$ $-20 \ 50$ ‡	$-64 \ 16$	305 23	Erebus.	$-20 \ 37$
$-64 \ 35$	303 47	Erebus.	$-20 50 \pm \\ -23 51$	-64 10	309 30	Terror.	-20 05
$-64 \ 38$	304 20	Terror.	$-23 \ 51$ $-22 \ 50$	-64 44	315 41	Erebus.	-13 58
-64 36	304 21	Erebus.	-21 50	-64 48	315 57	Terror.	-16 04
$-64 \ 38$	304 26	Terror.	-21 30 $-22 44$	$-64 \ 13$	316 22	Erebus.	_13 43
-64 12	304 34	Erebus.	-20 01	-64 50	316 40	Terror.	-15 28
	501 01	AI COUS.	~0 01		0.0 10		

^{*} Magnetometers on shore at Port Louis.

[†] Magnetometers on shore at St. Martin's Cove, Cape Horn.

[§] On ice; Erebus, mean of 3 of Kater's compasses.

[‡] On ice.

^{||} On ice; mean of 3 compasses.

General Table of the Declinations (continued).

T.,	T	OI.	D. 11 //	т.	· -	OI.	Declination.
Lat.	Long.	Ship.	Declination.	Lat.	Long.	Ship.	Decimation.
-0 /	0 /		0 /	0 /	, ,		
$-6\mathring{4} \ 3\acute{8}$	316 47	Erebus.	$-\mathring{13} \ 4\acute{6}$	$-6\mathring{4} \ 2\acute{9}$	346 02	Erebus.	$+ \mathring{4} 25$
$-64 \ 48$	316 54	Erebus.	$-13 \ 49$	-64 06	346 15	Terror.	+ 529
-65 04	318 24	Terror.	-14 25	-61 16	348 56	Erebus.	+ 8 51
-65 06	318 57	Erebus.	-13 20	-61 16	349 00	Terror.	+ 7 16
$-65\ 13$	319 20	Erebus.	-12 47	$-57 ext{ } 46$	351 52	Erebus.	+11 17
-63 58	321 40	Terror.	-10 11	-57 28	351 40	Terror.	$+10 \ 35$
-63 56	321 43	Erebus.	-859	-57 22	352 12	Erebus.	+13 10
-63 56	322 14	Erebus.	-924	-57 16	352 54	Terror.	$+11 \ 33$
$-62 \ 38$	328 00	Terror.	- 7 37	57 10	352 53	Erebus.	+12 28
-62 50	328 20	Erebus.	-754	-57 04	352 52	Erebus.	+14 57
$-62 \ 37$	328 30	Erebus.	- 2 50	56 42	353 40	Terror.	+11 22
$-62 \ 16$	330 30	Terror.	-630	-56 34	353 46	Erebus.	$+13 \ 46$
-62 20	330 30	Erebus.	- 4 41	-55 58	355 32	Erebus.	+13 21
-62 06	333 43	Erebus.	- 3 53	-55 58	355 30	Terror.	+12 57
-62 02	333 40	${f Terror.}$	-250	-55 53	355 44	Erebus.	+13 14
-61 55	333 48	Erebus.	- 3 38	-54 30	357 50	Terror.	+13 52
-62 00	333 44	Terror.	- 2 35	-54 28	357 45	Erebus.	+16 48
$-61 \ 36$	336 20	Erebus.	- 0 44	54 06	359 38	Erebus.	+17 11
$-61 \ 33$	335 30	Terror.	- 0 44	-54 15	0 0	Terror.	+14 49
-62 24	343 58	Erebus.	+ 5 19	$-50\ 00$	9 35	Erebus.	+24 12
-62 20	344 00	Terror.	+ 3 29	-49 57	9 38	Terror.	+24 07
-6252	344 33	$\underline{\mathrm{Erebus}}$.	+ 440	-48 20	10 44	Erebus.	$+25 \ 35$
-64 04	345 07	Terror.	+ 4 17	-47 20	10 55	Terror.	$+24\ 30$
-64 04	345 16	Erebus.	+ 5 18	-47 20	11 04	Erebus.	+25 22
-64 24	347 27	Terror.	+ 4 39	-43 28	13 25	Terror.	$+26\ 46$
-65 08	349 50	Erebus.	+702	-43 49	13 38	Erebus.	+29 26
-65 01	349 04	Terror.	+ 5 58	$-43\ 17$	14 34	Erebus.	+28 13
$-66\ 00$	351 00	Terror.	+ 8 22	-43 08	14 40	Terror.	+27 33
-6601	353 00	Erebus.	+ 9 06	-43 03	14 50	Erebus.	+28 32
-67 12	350 36	Terror.	+ 7 08	$-41 \ 51$	15 03	Terror.	+27 29
$-66 \ 40$	350 39	Erebus.	+901	-41 56	15 07	Erebus.	+27 42
-6800	348 21	Erebus.	+634	$-41\ 30$	15 14	Erebus.	+30 01
-68 08	348 10	Terror.	+415	-40 22	16 00	Terror.	+2653
-68 18	347 20	Erebus.	+537	-39 23	16 08	Terror.	+27 53
-68 32 68 30	347 09	Erebus.	+443	-39 43	15 45	Erebus.	+28 29
-68 30 $-69 36$	346 50	Terror.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	-38 26	16 39	Terror.	+27 43
	345 18	Erebus.		-3750	16 35	Erebus.	+29 28
$-6942 \\ -7050$	$\begin{vmatrix} 345 & 20 \\ 343 & 21 \end{vmatrix}$	Terror.	, ,	$\begin{array}{r rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	16 31 16 36	Terror.	+28 43
$-70 \ 50 \ -70 \ 51$	$\begin{vmatrix} 343 & 21 \\ 343 & 33 \end{vmatrix}$	Erebus.		-35 50 $-35 50$	16 35	Erebus. Erebus.	
$-70 \ 31$ $-70 \ 44$	343 48	Terror.	1	-36 36	16 22		+30 15
-70 44 -70 24	341 56	Terror.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	-36 36 $-35 26$	16 22	Erebus. Terror.	$\begin{vmatrix} +28 & 49 \\ +28 & 00 \end{vmatrix}$
-70 24 $-71 14$	341 30	Terror. Erebus.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	-35 20 $-35 17$	16 14	Erebus.	$+28 00 \\ +30 44$
$-66 \ 10$	346 40	Terror.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$-35 17 \\ -35 03$	17 13	Erebus.	$+30 \ 44 \\ +30 \ 32$
	010 10	Terror.	+ 5 50	_55 55	1, 10	inebus.	T 50 52

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

Lat.	Long.	Ship.	Inclination.	Lat.	Long.	Ship.	Inclination.
z ° 00			0 (-° 01	208 26	D 1	$-56^{\circ} 14^{\circ}$
-51 32	301 53	Erebus.	$-52 \ 34$	-5634	306 39	Erebus.	- 50 14
-51 32	301 53	Terror.	$-51 \ 51$	-5655	306 40	Terror.	-5609
-5248	303 10	Terror.	-5352	-5750	307 58	Terror.	-57 17
-53 33	302 05	Erebus.	-53 34	-58 16	308 00	Erebus.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
-5402	305 30	Terror.	-53 39	-58 25	307 53	Terror.	
-54 03	305 26	Erebus.	-54 31	-5928	308 20	Erebus.	$-58 \ 46$
-5342	305 04	Terror.	-53 39	-5957	307 53	Terror.	-58 33
-5347	304 48	Erebus.	-54 25	$-61 23 \\ -61 20$	$\begin{vmatrix} 307 & 41 \\ 307 & 42 \end{vmatrix}$	Erebus. Terror.	-5951
$ \begin{array}{c cccc} -54 & 40 \\ -54 & 43 \end{array} $	304 35	Terror.	$ \begin{array}{r rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$-62 \ 12$	307 42	Terror.	$ \begin{array}{r rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$
-	304 30	Erebus.		-62 12	307 55	Erebus.	-61 03
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	305 30	Terror.	$-54 39 \\ -54 16$	-62 25	307 58	Terror.	$-60 \ 21$
-54 41 -55 10	304 48	Erebus.	$-54 16 \\ -56 06$	$-62 \ 31$	308 05	Erebus.	$-60 \ 34$
	301 00	Terror.		$-62 \ 18$	1	Terror.	$-60 \ 34$ $-61 \ 17$
$-55 08 \\ -55 30$	300 44	Erebus.	$\begin{bmatrix} -56 & 33 \\ -57 & 33 \end{bmatrix}$	$-62 \ 22$	$\begin{bmatrix} 308 & 17 \\ 308 & 00 \end{bmatrix}$	Erebus.	$-60 \ 36$
	297 00	Terror.		-62 22 $-62 18$	308 00	Erebus.	$-60 \ 36$ $-61 \ 04$
$-55 ext{ } 40 \ -56 ext{ } 25$	296 52	Erebus.	$ \begin{array}{r rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$-62 \ 30$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Terror.	-62 04
$-36 \ 25$	293 07	Erebus. Erebus	$-38 32 \\ -58 37$	$-62 \ 30$	306 32	Erebus.	$-62 04 \\ -61 18$
$-50 \ z_{5}$ $-55 \ 51$	293 07	Erebus.	$-58 37 \\ -58 12*$	$-62 \ 42$	305 27	Terror.	-61.47
-55.51	292 28 292 28	Terror.	-58 12*	$-63 \ 13$	305 33	Terror.	$-62 \ 17$
$-55^{\circ}51$		Erebus.	-58 12 -58 03+	$-63 \ 35$	305 47	Terror.	$-62 \ 31$
-56 02	292 28 292 57	Terror.	-59 08	$-63 \ 36$	305 00	Erebus.	$-62 \ 18$
-50 02 $-55 52$		Terror.	$-57 \ 18$	$-63 \ 39$	304 40	Erebus.	-62 29
$-35 \ 32 \ -55 \ 38$	$ \begin{array}{c cccc} 295 & 41 \\ 296 & 00 \end{array} $	Erebus.	-56 46	$-63 \ 57$	304 32	Terror.	$-62 \ 41$
$-55 \ 38$	295 54	Terror.	-57 08	$-63 \ 45$	304 40	Erebus.	$-61 \ 56$
-55 58	299 12	Erebus.	-56 53	$-64 \ 15$	304 25	Terror.	-63 28
-55 56	299 17	Terror.	-56 36	-64 23	304 00	Erebus.	$-63 \ 04$
-55 30	299 08	Erebus.	-56 21	$-64 \ 26$	303 52	Erebus.	-63 16
-55 28	298 35	Terror.	-57 00	$-64 \ 27$	303 54	Terror.	-63 21
-55 05	299 49	Terror.	$-56 \ 34$	$-64 \ 26$	303 54	Terror.	-6311
-54 24	300 08	Erebus.	-55 06	-64 29	304 18	Erebus.	-6248
$-54 \ 40$	301 32	Terror.	_56 15	-64 06	303 43	Terror.	-63 22
$-54 \ 36$	301 37	Terror.	-5609	-64 12	304 04	Erebus.	-63 01
$-52 \ 26$	301 16	Terror.	-53 39	$-64 \ 36$	304 26	Terror.	-6254
-52 52	301 05	Erebus.	$-53 \ 32$	_64 13	304 06	Terror.	$-63 \ 13$
$-52 \ 36$	301 16	Terror.	-53 26	-64 13	304 06	Terror.	-63 00
$-51 \ 32$	301 53	Terror.	$-52\ 13$ †	-64 12	303 04	Terror.	-63 24
$-51 \ 32$	301 53	Erebus.	-5249_{\pm}^{\dagger}	-64 34	302 50	Erebus.	$-63 \ 36$
$-51 \ 32$	301 53	Terror.	$-52 \ 181$	$-64 \ 36$	302 52	Terror.	$-63 \ 36$
$-51 \ 32$	301 53	Terror.	-52 00%	$-64 \ 36$	302 52	Terror.	$-63 \ 51$
-51 32	301 53	Erebus.	-52 42	-64 35	302 13	Erebus.	$-63 \ 30$
-51 32	301 53	Terror.	-51 56	-64 37	303 10	Terror.	$-63 \ 38$
-5250	303 07	Erebus.	-53 29	$-64 \ 37$	303 10	Terror.	$-63 \ 48$
-5246	303 18	Terror.	-52 49	_64 44	303 07	Erebus.	-63 21
-5252	303 20	Terror.	_52 43	_64 44	303 07	Terror.	-6344
-53 38	303 43	Terror.	-53 11	-64 40	302 40	Erbrus.	-63~30
-54 23	303 59	Erebus.	-54 43	-64 40	303 08	Terror.	-63 52
-55 26	305 20	Terror.	-54 32	-64 35	303 06	Terror.	-63 55
-5557	305 27	Terror.	-55 03	64_36	302 07	Terror.	-64 06
		-	1 0-	L C 4 OC	1 200 07	Tonnon	62 50
-55 51	$305 \ 18$	Erebus.	$-55 \ 35$	$-64 \ 36$ $-64 \ 42$	$\begin{vmatrix} 302 & 07 \\ 302 & 42 \end{vmatrix}$	Terror. Terror.	$ \begin{array}{r rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$

^{*} On shore, St. Martin's Cove, Cape Horn, with needles whose poles were reversed.

[†] On shore, St. Martin's Cove, Cape Horn, with needle R. F. 5.

[‡] On shore, Falkland Island, Port Louis. § On board with needle F.C.B.

 $[\]parallel$ On ice, true dip observed by needles whose poles were reversed $-63\ 17.2$.

General Table of Inclinations (continued).

Lat.	Long.	Ship.	Inclination.	Lat.	Long.	Ship.	Inclination.
$-6\mathring{4} \ 3\mathring{1}$	302 34	Erebus.	$-6\mathring{3}$ $3\acute{8}$	$-6\overset{\circ}{4}~4\overset{\prime}{3}$	312 06	Terror.	$-61^{\circ} 56^{\circ}$
$-64 \ 34$	302 43	Terror.	$-63 \ 49$	$-64 \ 36$	311 53	Erebus.	$-61 \ 41$
-6428	303 03	Erebus.	-63 06	$-64 \ 37$	314 21	Erebus.	-62 07
-64 26	303 05	Terror.	-63 04	$-64\ 38$	314 01	Terror.	-61 44
-64 28	303 03	Erebus.	$-63^{\circ}43*$	-64 39	316 04	Erebus.	$-61 \ 30$
-64 28	303 03	Terror.	$-63 \ 40*$	-64 49	315 07	Terror.	-61 34
-64 22	303 30	Terror.	-63 29	$-64 \ 38$	316 57	Erebus.	-61 57
-63 58	304 46	Erebus.	-62 54	-64 47	316 57	Terror.	-62 19
-64 56	305 25	Terror.	-62 28	-65 06	318 46	Erebus.	$-61 \ 35$
-64 00	305 24	Terror.	-62 50	-64 58	318 26	Terror.	-6148
-64 22	305 01	Erebus.	-63 08	-64 40	320 12	Erebus.	-61 08
-64 22	305 44	Terror.	-63 29	$-64 \ 37$	320 28	Terror.	-61 00
-64 18	304 18	Erebus.	-63 20	-63 54	321 36	Erebus.	-60 27
-64 16	304 26	Terror.	-63^{26}	-64 02	321 55	Terror.	$-60 \ 33$
-64 19	304 04	Erebus.	-63 00	-63 59	324 18	Terror.	$-60 \ 01$
$-64\ 18$	304 13	Terror.	$-63 \ 14$	$-63\ 36$	324 36	Erebus.	-5942
-64 12	303 50	Erebus.	-62 26	$-62 \ 37$	328 17	Terror.	-5852
-64 12	304 07	Terror.	$\begin{bmatrix} -63 & 04 \\ -62 & 47 \end{bmatrix}$	$-62\ 13$	330 38	Terror. Erebus.	$ \begin{array}{r rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$
-64 24	304 49	Erebus.	-62^{-47} -63^{-20}	-62 39	328 16	Erebus.	$-58 \ 36$
-64 20	304 08	Terror.	-63 26 $-62 26$	$-62 20 \\ -62 05$	330 00	Terror.	-57 57
-64 24	304 49	Erebus.	-62 55	$-62 05 \\ -61 59$	333 38	Erebus.	$-57 \ 57 \ -58 \ 13$
-64 16	304 44	Terror. Erebus.	-62 56	$-61 \ 37$	333 43 336 05	Erebus.	$-58 \ 18$
$ \begin{array}{r rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	304 00	Terror.	-63 20	$-61 \ 32$	336 10	Terror.	-58 01
-64 04 04	304 17	Erebus.	$-62^{\circ}57$	$-61 \ 30$	338 00	Erebus.	-57 50
-64 04 $-64 01$	305 19 304 20	Terror.	-63 03	-61 28	337 42	Terror.	-58 00
-64 01	304 20	Erebus.	$-62 \ 42$	$-61 \ 13$	340 00	Terror.	-57 57
-64 08	304 08	Erebus.	-62 38	$-61 \ 46$	341 02	Erebus.	-58 18
-64 14	304 04	Terror.	_63 09	$-62 \ 36$	344 08	Erebus.	-59 12
-64 09	304 06	Terror.	$-63 \ 13$	$-62 \ 41$	343 18	Terror.	-59 01
-64 05	304 00	Erebus.	-6246	-63 58	345 10	Erebus.	-60 42
-64 08	304 02	Terror.	_63 14	-64 14	345 30	Terror.	$-60 \ 45$
-64 09	303 57	Erebus.	_63 00	-64 38	348 00	Erebus.	-61 21
-64 07	303 58	Terror.	_63 07	-64 27	347 32	Terror.	-61 28
-64 00	304 42	Erebus.	-62 23	-65 12	350 05	Erebus.	$-61 ext{ } 49$
-64 01	304 42	Terror.	-6244	-6500	349 30	Terror.	-61 39
-63 53	304 51	Erebus.	-62 28	-6512	350 00	Terror.	-61 53
-64 00	304 47	Terror.	$-63 \ 01$	-6600	353 00	Terror.	-63 02
-64 16	304 38	Erebus.	$-62 \ 33$	-66 08	352 43	Erebus.	-63 14
-64 19	304 43	Terror.	$-63 \frac{12}{2}$	-6602	353 13	Terror.	-63 08
-64 17	305 20	Erebus.	-62 22	-6654	351 15	Terror.	$-63 \ 32$
-64 17	304 41	Terror.	-63 01	-6706	351 04	Erebus.	-63 19
-64 18	305 40	Terror.	-63 08	-67 05	351 00	Terror.	$-63 \ 37$
-64 16	304 47	Erebus.	-6244	-68 14	347 08	Erebus.	-64 24
-64 12	305 17	Terror.	-6249	-6808	348 10	Terror.	-64 14
-64 11	305 13	Terror.	-6258	-6832	347 09	Erebus.	-64 21
$-63 \ 34$	307 00	Erebus.	$-61 \ 35$	-6832	347 12	Terror.	-64 14
$-63 \ 34$	307 00	Terror.	$ \begin{array}{r rrrr} -61 & 53 \\ -61 & 37 \end{array} $	-69 26	345 31	Erebus. Terror.	$ \begin{array}{r rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$
$-63 \ 35$	307 33	Erebus.	-61 37 $-62 22$	-69 24	345 30	Erebus.	$-66 \ 13$
$ \begin{array}{r rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	307 35	Terror. Erebus.	-62 50	$-71 10 \\ -71 09$	344 13 344 10	Terror.	-66 44
-63 54 $-63 56$	308 00	Terror.	-62 12	$-71 09 \\ -71 08$	344 10	Terror.	-66 44
-64 05	308 00 308 03	Terror.	$-61 \ 31$	$-71 08 \\ -70 55$	343 14	Erebus.	$-65 \ 31$
$-63 \ 49$	308 52	Terror.	-62 03	$-70 \ 33$	343 23	Terror.	$-64 \ 51$
$-63 \ 49$	309 00	Erebus.	-62 08	$-70^{\circ}28$	342 39	Erebus.	-65 38
$-64 \ 18$	309 40	Terror.	-62 06	-70 28	342 26	Terror.	-6600
-64 19	309 36	Erebus.	$-62 \ 33$	$-69 \overset{56}{56}$	344 03	Erebus.	-64 04
1 3	1 330 33	1		1 3 33			<u> </u>

General Table of Inclinations (continued).

^{*} On shore at Simon's Bay.

TABLE XXIII.—General Table of the Intensity of the Magnetic Force from the Observations on board Her Majesty's Ships 'Erebus' and 'Terror,' between September 1842 and April 1843.

Lat.	Long.	Ship.	Intensity. British units.	Lat.	Long.	Ship.	Intensity. British units.
			dillos.				
$-5\mathring{1}$ $3\acute{2}$	301° 53′	Erebus.	9.82	$-62^{\circ}42^{\prime}$	305 27	Terror.	11.51
-53 03	302 05	Erebus.	9.92	$-62\ 36$	306 20	Erebus.	11.39
-5248	303 10	Terror.	10.29	$-63 \ 35$	305 47	Terror.	11.70
-54 03	305 26	Erebus.	9.92	$-63\ 36$	305 00	Erebus.	11.40
-53 47	304 48	Erebus.	9.93	-63 57	304 32	Terror.	11.69
-54 43	304 30	Erebus.	10.02	$-63\ 39$	304 40	Erebus.	11.56
-5442	304 46	Erebus.	10.06	-64 23	304 00	Erebus.	11.79
$-54\ 42$	305 30	Terror.	10.35	-64 27	303 54	Terror.	11.79‡
-55 30	297 00	Terror.	11.04	-64 26	303 52	Erebus.	11.69‡
-55 40	296 52	Erebus.	10.73	$-64 \ 30$	304 10	Terror.	11.76
-5547	293 00	Erebus.	10.71	$-64 \ 32$	304 20	Erebus.	11.69
-55 51	292 28	Erebus.	11.13*	$-64 \ 38$	304 20	Terror.	11.70
-55 51	292 28	Terror.	11.19*	$-64\ 18$	308 39	Erebus.	11.55
-5602	292 57	Erebus.	11.34	$-64\ 13$	304 06	Terror.	11.79
-5602	292 57	Terror.	11.40	$-64 \ 13$	304 06	Terror.	11.77
-5552	295 41	Terror.	10.90	-64 12	303 04	Terror.	11.88 11.75
-5539	296 00	Erebus.	10.87	$-64 34 \\ -64 28$	302 50	Erebus.	11.87
-54 24	300 08	Erebus.	10.36	-64 28 $-64 44$	303 20 303 07	Terror.	11.74
-55 05	299 49	Terror.	10.91	$-64 \ 44$	303 07	Erebus. Erebus.	11.76‡
$ \begin{array}{r rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Erebus. Terror.	10.11	$-64 \ 41$	302 52	Terror.	11.82
-52 20 $-51 32$	301 10	Erebus.	9.90+	$-64\ 48$	303 09	Erebus.	11.71
$-51 \ 32$	301 53	Terror.	9.92	$-64\ 48$	303 09	Terror.	11.85‡
$-51 \ 32$	301 53	Erebus.	9.99	-64 38	302 40	Terror.	11.81
$-51 \ 32$	301 53	Terror.	9.91+	$-64 \ 31$	302 34	Erebus.	11.69
$-51 \ 36$	301 45	Terror.	9.89	$-64 \ 30$	303 04	Terror.	11.92
-52 50	303 07	Erebus.	10.01	-64 40	302 07	Terror.	11.79
-5246	303 18	Terror.	10.03	-6448	303 09	Erebus.	12.03
-54 23	303 59	Erebus.	10.25	$-64 \ 48$	303 09	Erebus.	11.71‡
-53 38	303 43	Terror.	10.12	-6404	305 00	Terror.	11.66
-5551	305 18	Erebus.	10.25	-64 22	305 01	Erebus.	11.56
-55 26	305 20	Terror.	10.38	-64 16	304 42	Terror.	11.76
-5557	305 27	Terror.	10.42	$-64 \ 18$	304 18	Erebus.	11.55
-5600	305 30	Terror.	10.51	-64 20	304 40	Terror.	11.76
-5551	305 18	Erebus.	10.25	-64 12	303 50	Erebus.	11.97 11.74
-5655	306 40	Terror.	10.51	$ \begin{array}{r rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	304 07	Terror.	11.74
-5634	306 39	Erebus.	10.31	-64 08 $-64 16$	304 00	Terror.	11.84
$-57 50 \\ -58 16$	307 58 308 00	Terror.	10.86	-64 16 -64 04	304 47 304 10	Terror. Terror.	11.73
-58 10 $-58 25$	307 53	Erebus. Terror.	10.54 10.74	-64 04 -64 02	304 10	Terror.	11.68
-59 28	308 00	Erebus.	10.83	-64 05	304 00	Erebus.	11.60
-5957	307 53	Terror.	10.93	-63 56	305 22	Terror.	11.61
-61 23	307 41	Erebus.	10.88	-63 30	306 59	Erebus.	11.42
-61 20	307 42	Terror.	11.16	$-63\ 46$	307 23	Erebus.	11.46
-6212	307 47	Terror.	11.17	$-63 \ 47$	308 00	Terror.	11.50
$-63 \ 31$	308 05	Erebus.	11.13	-6342	308 45	Terror.	11.49
-62 25	307 58	Terror.	11.21	-6349	308 53	Erebus.	11.29
-62 18	308 17	Terror.	11.28	-64 19	309 40	Terror.	11.43
-62 22	308 00	Erebus.	11.15	-64 19	309 36	Erebus.	11.39
$-62 \ 30$	306 52	Terror.	11.21	$-64 \ 36$	311 53	Erebus.	11.36
$-62 \ 30$	306 30	Erebus.	11.22	$-64 \ 43$	312 06	Terror.	11.41

^{*} On shore at St. Martin's Cove. † On shore at Port Louis.

[‡] On ice.

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

Lat.	Long.	Ship.	Intensity. British units.	Lat.	Long.	Ship.	Intensity. British units.
$-6\overset{\circ}{4}3\overset{\prime}{7}$	314 21	Erebus.	11.00	-6806	344 40	T21	11.01
$-64 \ 38$	314 21		11.29			Erebus.	11.01
$-64 \ 39$		Terror. Erebus.	11.42 11.20	$-68 07 \\ -65 56$	346 23	Terror.	11.19
$-64 \ 49$	316 04			-65 57	346 24	Erebus.	10.67
$-64 ext{ } 49 \\ -64 ext{ } 56$	315 07	Terror. Erebus.	11.31	$-63 \ 37$ $-64 \ 31$	346 40 346 01	Terror.	10.73
$-64 ext{ } 47$	317 01		11.08	-63 58	1 1	Erebus.	10.26
$-65 ext{ } 66$	316 57	Terror.	11·17 11·08		346 25	Terror.	10.31
-64 58	318 46	Erebus.	11.08		348 39	Erebus.	9.71
	318 26	Terror.			349 00	Terror.	9.89
$-64 \ 40 \\ -64 \ 37$	320 12	Erebus.	11.02	-59 34	350 34	Erebus.	9.29
	320 28	Terror.	11.11	-5921	350 36	Terror.	9.62
-63 54	321 36	Erebus.	10.76	-57 27	352 08	Erebus.	9.18
-64 02	321 55	Terror.	11:30	-57 31	352 04	Terror.	9.08
$-63\ 36$	324 36	Erebus.	10.69	-5709	352 45	Erebus.	8.78
-63 59	324 18	Terror.	10.80	-5709	352 44	Terror.	9.35
$-62\ 39$	328 16	Erebus.	10.31	-5638	353 57	Erebus.	8.66
$-62 \ 37$	328 17	Terror.	10.41	-5644	353 45	Terror.	9.10
-62 20	330 00	Erebus.	10.21	-55 38	355 32	Erebus.	8.62
$-62\ 13$	330 28	Terror.	10.28	-54 32	357 26	Terror.	8.70
-61 59	333 43	Erebus.	10.00	-5407	359 56	Erebus.	8.31
-6205	333 38	Terror.	10.24	-54 05	359 33	Terror.	8.77
$-61 \ 37$	336 05	Erebus.	9.95	$-50 \ 37$	9 03	Erebus.	8.29
$-61 \ 32$	336 10	Terror.	10.27	-5052	8 47	Terror.	8.45
-61 30	338 00	Erebus.	9.82	$-50\ 19$	9 15	Terror.	8.52
-61 28	337 42	Terror.	10.06	-47 38	10 51	Erebus.	8.15
$-61\ 46$	341 02	Erebus.	9.80	-47 36	10 41	Terror.	8.35
$-62\ 36$	344 08	Erebus.	10.00	-45 32	11 54	Erebus.	7.96
-6241	343 18	Terror.	10.13	-45 38	11 52	Terror.	8.14
-6358	345 10	$\underline{\mathbf{E}}_{\mathbf{rebus.}}$	10.20	-43 57	13 16	Erebus.	7.96
-64 14	345 30	Terror.	10.42	 43 55	13 16	Terror.	7.96
$-64\ 38$	348 00	Erebus.	10.31	-43 10	14 44	Erebus.	7.83
-64 33	347 52	Terror.	10.60	-43 15	14 30	Terror.	7.96
-65 12	350 05	Erebus.	10.33	-43 11	14 43	Terror.	7.99
-6500	349 30	Terror.	10.58	-41 48	15 09	Erebus.	7.85
-6608	352 43	Erebus.	10.46	-41 58	15 11	Terror.	7.94
-6600	353 00	Terror.	10.87	-40 15	15 47	Erebus.	7.71
-67 06	351 04	Erebus.	10.68	-40 12	16 06	Terror.	7.82
-6654	351 15	Terror.	11.00	-37 40	16 40	Erebus.	7.67
-68 14	347 40	Erebus.	10.91	-38 00	16 45	Terror.	7.76
-68 08	348 10	Terror.	11.30	-3559	16 34	Erebus.	7.59
$-68 \ 32$	347 09	Erebus.	10.96	-3604	16 32	Terror.	7.64
-69 26	345 31	Erebus.	11.17	-35 26	16 22	$\mathbf{Erebus.}$	7.53
-6924	345 30	Terror.	11.44	-35 21	16 22	Terror.	7.56
$-71\ 10$	344 13	Erebus.	11.47	-35 03	17 06	Terror.	7.63
-71 09	344 10	Terror.	11.71	-34 11	18 26	Erebus.	7.59*
-7028	342 26	Terror.	11.70	$-34\ 11$	18 26	Terror.	7.56*

^{*} Simon's Bay, Cape of Good Hope.

Observations of the Magnetic Declination made on board Her Majesty's Ship 'Erebus' in 1842 and 1843, between the Falkland Islands and Cape Horn, and between Cape Horn and the Cape of Good Hope.

The Observers are distinguished as follows, viz. "R." Captain J. C. Ross; "W." Lieut. Wood; "S." Lieut. Smith; "O." Lieut. Oakely; "T." Mr. Tucker, Master; "Y." Mr. Yule, Second Master. East Declination and South Latitude are characterized by the — sign.

Date.	Lat.	Long.	Observers.	Declination observed.	Ship's head.	Approximate Incli-		ctions.	True Declination.	Remarks.
			0			nation.	Deviation.	Index.		14
1842.		. ,		9 /			0 /	0 /	0 /	
Sept. 14 г.м.	-53 55	304 19	T.	$-6\mathring{1}$ $4\acute{0}$	$\mathbf{S} \cdot \frac{1}{2} \mathbf{W}$.	$-5\mathring{4}$	+0 06	$-\mathring{1}$ 48	-18 22	
			T.	-16 01	s.	-54	-0.14	-148	$ -18 \ 03 \ -18 \ 18$	
10 - 24	FC 00	000 44	T.	-16 28	S.	-54	-0.14	-148	$\begin{bmatrix} -18 & 30 \end{bmatrix}$	
19 р.м. Nov. 8 а.м.	-5600		T. W.	-24 45	S.W. $\frac{1}{2}$ W.	-59	+2 36	-148	-23 57	
NOV. 8 A.M.	- 55 59	295 25	T.	$ \begin{array}{r rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	N.E. by E.	-57	$\begin{vmatrix} -1 & 58 \\ -1 & 58 \end{vmatrix}$	$ \begin{array}{c cccc} -1 & 48 \\ -1 & 48 \end{array} $	$\begin{bmatrix} -24 & 17 \\ -25 & 14 \end{bmatrix}$	
			s.	-21 28 $-18 42$	n.e. by e.	$-57 \\ -57$	-1 58	-148	$\begin{vmatrix} -23 & 14 \\ -22 & 28 \end{vmatrix} > -24 & 03 \end{vmatrix}$	
			T.	$-20 \ 27$	N.E. by E.	-57	-1 58	-1 48	$\begin{bmatrix} -22 & 26 \\ -24 & 13 \end{bmatrix}$	
10 а.м.	-55 35	299 09	T.	$-20 \ 50$	n.w. by n.	-56	+1 19	-1 48	$\begin{bmatrix} 21 & 19 \\ -21 & 19 \end{bmatrix}$	
20 111111	00 00		T.	-19 39	N. by W.	-56	+0.29	-1 48	$\begin{vmatrix} 21 & 13 \\ -20 & 58 \\ -20 & 53 \end{vmatrix}$	
			T.	-19 52	n.w. by n.	-56	+1 19	$-1 \frac{1}{48}$	$\begin{bmatrix} 20 & 21 \\ -20 & 21 \end{bmatrix}$	
10 р.м.	-55 31	299 15	Y.	-19 17	$N \cdot \frac{1}{2} E \cdot$	-56	-0 08	-148	$\begin{bmatrix} -21 & 13 \\ 13 \end{bmatrix}$	
			Т.	-18 52	N.E.	-56	$-1 \ 31$	-1 48	-22 11	
			т.	$-22\ 56$	$s.w. \frac{1}{2} s.$	-56	+2 00	-148	$ -22 \ 44 > -21 \ 51$	
			Т.	-22 03	s.w. by s.	-56	+145	-148	-22 06	
			T.	-21 11	$s.w. \frac{1}{2} s.$	_56	+200	-148	-20 59	
11 А.М.	-54 53	299 59	Υ.	-19 33	N.	-55	+0 03	-148	$ -21 \ 18$	
			W.	-19 17	N. 1/2 W.	55	+0.15	-148	-20 54	
			W.	-20 54	N.	-55	+0.03	-148	$ -22 \ 39 > -21 \ 10$	
			S.	-18 03	N.	55	+0 03	-1 48	-19 48	
10 1	70.04	200 51	T.	-19 27	N.	55	+0.03	-148	$\begin{bmatrix} -21 & 12 \end{bmatrix}$	
	-53 04		S.	-18 03	N.	-54	+0.03	-148	$\begin{bmatrix} -19 & 48 & -19 & 48 \end{bmatrix}$	
Dec. 17 P.M.	-52 04	302 47	R. R.	-14 09	s.E. by s.	-53	-1.54	-148	$\begin{bmatrix} -17 & 51 \\ 17 & 49 \end{bmatrix}$	
			T.	$ \begin{array}{c cccc} -14 & 06 \\ -14 & 50 \end{array} $	s.e. by s.	$-53 \\ -53$	-1 54 $-1 54$	-148	$\begin{vmatrix} -17 & 48 \\ -18 & 32 \\ -18 & 03 \end{vmatrix}$	
•		-	T.	-14 30 $-14 22$	s.E. by s.	-53	-1 54 $-1 54$	$-1 48 \\ -1 48$	$\begin{bmatrix} -18 & 92 \\ -18 & 04 \end{bmatrix}$	
			Ť.	$-14 \frac{22}{16}$	s.e. by s.	-53	-1 54 $-1 54$	-1 48	$\begin{bmatrix} -18 & 04 \\ -17 & 58 \end{bmatrix}$	
18 A.M.	-5250	303 12	$\hat{\mathbf{s}}$.	$-14 \ 51$	s.E. by s.	—54	-1 57	-1 48 $-1 48$	$\begin{bmatrix} -18 & 36 \end{bmatrix}$	
	-,,		T.	-14 37	s.E. by s.	54	_1 57	-148	18 22	
			T.	-14 10	s.E. by s.	_54	-1 57	-148	17 55	
			S.	-15 05	s.E. by s.	_54	-1 57	-148	$\begin{vmatrix} -17 & 65 \\ -18 & 50 \end{vmatrix} > -18 \ 29$	
			R.	$-18 \ 45$	N.W.	-54	+1 35	-1 48	_18 58	
			Т.	-14 29	s.E. by s.	-54	-1 57	-1 48	_18 14	
19 А.М.	-53 56	303 52	Т.	-13 48	S.S.E.	-55	-1 31	-148	-17 07	
			Ο.	-14 33	S.S.E.	-55	-1 31	-148	-17 52	1
			Y.	-13 53	S.S.E.	-55	$-1 \ 31$	—1 48	$\begin{vmatrix} -17 & 12 \\ 17 & 12 \end{vmatrix} > -17 & 35 \end{vmatrix}$	
			Т.	-1359	S.S.E.	-55	$-1 \ 31$	-1 48	17 18	
			T.	-1611	$S_{\bullet} \frac{1}{2} W_{\bullet}$	-55	+0.06	-148	-17 53	
00 A 34	EE 46	205 17	T.	-14 50	S.S.E.	-55	$-1 \ 31$	-148	$\begin{bmatrix} -18 & 09 \\ 10 & 21 \end{bmatrix}$	
zυ A.M.	$-55 ext{ } 46$	909 1/	R.	-14 42	s.e. by s.	-55	-201	-148	$\begin{bmatrix} -18 & 31 \\ 10 & 12 \end{bmatrix}$	l
			T. S.	-15 24 $-14 43$	S.E. by S.	-55 -55	-2 01	-148	-19 13	
		1	Y.	-14 45 $-14 35$	s.e. by s.	$ \begin{array}{r r} -55 \\ -55 \end{array} $	$\begin{bmatrix} -2 & 01 \\ -2 & 01 \end{bmatrix}$	$-1 48 \\ -1 48$	$\begin{vmatrix} -18 & 32 \\ -18 & 24 \end{vmatrix} $ $\rightarrow -18 & 47$	
			R.	-16 20	s.E. by s.	-55 -55	$\begin{bmatrix} -z & 01 \\ -2 & 01 \end{bmatrix}$	-1 48 $-1 48$	$\begin{vmatrix} -18 & 24 \\ -20 & 09 \end{vmatrix}$	
			S.	-19 54	s.w. by w.	-55	$\begin{vmatrix} -z & 01 \\ +2 & 33 \end{vmatrix}$	-1 48	-20 09 -19 09	1
			R.	-18 06	S.W. $\frac{1}{2}$ W.	-55	+2 33 + 2 22	-148	$\begin{bmatrix} -19 & 09 \\ -17 & 32 \end{bmatrix}$	1
21 а.м.	-56 36	306 38	S.	-14 56	S.S.E.	-56	$-1 \ 34$	-1 48	18 18	1
			T.	-14 22	S.S.E.	-56	-1 34	-1.48	17 44	
		1	Y.	-14 32	S.S.E.	-56	-1 34	-1 48	-17 54 > -17 47	
		}	T.	-13 52	S.S.E.	-56	_1 34	-148	_17 14	
		1	T.	-14 23	S.S.E.	-56	-1 34	-1 48	$ -17 \ 45$	l

Date.	Lat.	Long.	Observers.	Declination	Ship's head.	Approx- imate	Correc	etions.	True Declination.	Remarks.
			Obse	observed.		Incli- nation.	Deviation.	Index.		Ren
1842. Dec. 21 P.M.	_56 28	306 45	т. т.	-18 07 $-14 28$	s.s.w.	$-56 \\ -56$	$+\mathring{1} \ 08' \\ -0 \ 54$	$-\mathring{1}$ 48 -1 48	$\begin{bmatrix} -18 & 47 \\ -17 & 10 \end{bmatrix}$ $\begin{bmatrix} -17 & 59 \end{bmatrix}$	
22 г.м.	58 29	308 13	T. R.	-14 09 $-14 25$	s. by E. s. by E. ½ E. s.s.E.	-57 -57	$ \begin{array}{c cccc} -0 & 34 \\ -1 & 16 \\ -1 & 37 \end{array} $	$-1 48 \\ -1 48$	$\begin{bmatrix} -17 & 10 \\ -17 & 13 \\ -17 & 50 \end{bmatrix}$	
			Y. R.	$-15 17 \\ -14 03$	S.S.E. S.S.E.	$-57 \\ -57$	$ \begin{array}{c cccc} -1 & 37 \\ -1 & 37 \end{array} $	-1 48 -1 48	$\begin{vmatrix} -18 & 42 \\ -17 & 28 \end{vmatrix} - 18 & 02 \end{vmatrix}$	
			T. T.	-15 36 $-15 15$	S.S.E. S. ½ E.	$-57 \\ -57$	$ \begin{array}{c cccc} -1 & 37 \\ -0 & 35 \end{array} $	-1 48 $-1 48$	$\begin{bmatrix} -19 & 01 \\ -17 & 38 \end{bmatrix}$	
23 A.M	59 34	308 28	R. T.	-15 53 $-16 11$	s. $\frac{3}{4}$ E. s.	-57 -59	$\begin{vmatrix} -0 & 45 \\ -0 & 16 \end{vmatrix}$	$\begin{vmatrix} -1 & 48 \\ -1 & 48 \end{vmatrix}$	$\begin{bmatrix} -18 & 26 \\ -18 & 15 \end{bmatrix}$	
			Y. T. S.	$ \begin{array}{r rrrr} -15 & 00 \\ -15 & 31 \\ -17 & 27 \end{array} $	s. by E. s. \frac{1}{4} w.	-59 -59 -59	$ \begin{array}{r rrrr} -0 & 59 \\ -0 & 04 \\ +0 & 30 \end{array} $	$ \begin{array}{c cccc} -1 & 48 \\ -1 & 48 \\ -1 & 48 \end{array} $	$\begin{vmatrix} -17 & 47 \\ -17 & 23 \\ -18 & 45 \end{vmatrix} -17 & 56$	5
27 p.m	62 18	308 03	T.	$\begin{vmatrix} -17 & 27 \\ -16 & 11 \\ -18 & 44 \end{vmatrix}$	s. by w. s. by w. s.w. by w.	-59 -60	$\begin{vmatrix} +0 & 30 \\ +0 & 30 \\ +3 & 01 \end{vmatrix}$	$\begin{vmatrix} -1 & 48 \\ -1 & 48 \\ -1 & 48 \end{vmatrix}$	$\begin{bmatrix} -18 & 43 \\ -17 & 29 \end{bmatrix}$ $\begin{bmatrix} -17 & 31 \end{bmatrix}$	
			R. R.	$\begin{vmatrix} -21 & 38 \\ -18 & 17 \end{vmatrix}$	w.s.w. s.w. by s.	$-60 \\ -60$	$+3 19 \\ +2 00$	$\begin{vmatrix} -1 & 48 \\ -1 & 48 \end{vmatrix}$	$\begin{vmatrix} -20 & 07 \\ -18 & 05 \end{vmatrix}$ -18 24	L
			R. Y.	$ \begin{array}{c cccc} -18 & 40 \\ -20 & 05 \end{array} $	s.w. by w. s.w. by w.	$-60 \\ -60$	$\begin{vmatrix} +3 & 01 \\ +3 & 01 \end{vmatrix}$	$\begin{vmatrix} -1 & 48 \\ -1 & 48 \end{vmatrix}$	$\begin{bmatrix} -17 & 27 \\ -18 & 52 \end{bmatrix}$	
28 г.м	-62 54	305 41	R. R. R.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	s.w. ½ w.	$\begin{vmatrix} -61 \\ -61 \\ 61 \end{vmatrix}$	$\begin{array}{r rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$\begin{vmatrix} -1 & 48 \\ -1 & 48 \\ -1 & 48 \end{vmatrix}$	$egin{bmatrix} -22 & 27 \ -20 & 13 \ -19 & 23 \ \end{bmatrix}$	
			Y. O.	$\begin{array}{r rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	s.w.	$ \begin{array}{r r} -61 \\ -61 \\ -61 \end{array} $	$\begin{array}{ c c c c c } +2 & 40 \\ +2 & 40 \\ +2 & 40 \\ \end{array}$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{vmatrix} -19 & 23 \\ -19 & 47 \\ -20 & 45 \end{vmatrix} -20 \ 16$	5
			O. R.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	s.w.	-61 -61	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c cccc} -1 & 48 \\ -1 & 48 \end{array} $	$ \begin{array}{c cccc} & 10 & 10 \\ & -18 & 57 & \\ & -19 & 40 & \\ \end{array} $	
30 р.м	63 40	305 00	R. R.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	S.W. S.E. ½ S.	$-61 \\ -62$	$\begin{vmatrix} +2 & 40 \\ -2 & 47 \end{vmatrix}$	-1 48 $-1 48$	$\begin{bmatrix} -20 & 59 \\ -21 & 34 \\ 22 & 01 \end{bmatrix}$ $\begin{bmatrix} -22 & 12 \\ 22 & 01 \end{bmatrix}$	7
31 A.M	63 55	304 44	R. O. Y.	$\begin{array}{ c c c c c } -24 & 47 \\ -20 & 08 \\ -20 & 35 \end{array}$	w.s.w.	$-62 \\ -62 \\ 60$	$\begin{vmatrix} +3 & 34 \\ -0 & 17 \\ 0 & 17 \end{vmatrix}$	$\begin{vmatrix} -1 & 48 \\ -1 & 48 \\ 1 & 48 \end{vmatrix}$	$egin{bmatrix} -23 & 01 \ -22 & 13 \ -22 & 40 \ \end{bmatrix} -22 & 21$	
1843.			R.	-20 35 $-23 21$	s.w. ½ w.	$\begin{vmatrix} -62 \\ -62 \end{vmatrix}$	$\begin{vmatrix} -0 & 17 \\ +3 & 00 \end{vmatrix}$	$\begin{vmatrix} -1 & 48 \\ -1 & 48 \end{vmatrix}$	$\begin{bmatrix} -22 & 40 \\ -22 & 09 \end{bmatrix}$	1
Jan. 1 A.M	64 14	304 21	T. S.	$ \begin{array}{c cccc} -18 & 42 \\ -18 & 42 \end{array} $	S. ½ E. S. ½ E.	$ \begin{array}{r r} -63 \\ -63 \end{array} $	$ \begin{array}{c c} -0 & 42 \\ -0 & 42 \end{array} $	$ \begin{array}{c cccc} -1 & 48 \\ -1 & 48 \end{array} $		
			Y. O.	$ \begin{array}{r rrrr} -21 & 39 \\ -23 & 30 \\ \end{array} $	w. by N. $\frac{1}{2}$ N. w. $\frac{1}{2}$ N.	-63	$\begin{array}{r rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$\begin{vmatrix} -1 & 48 \\ -1 & 48 \end{vmatrix}$	$\begin{vmatrix} -19 & 58 \\ -21 & 35 \\ 0 & 45 \end{vmatrix}$	6
2 A.M	164 20	303 52	W. T. T.	$\begin{array}{ c c c c c } -22 & 47 \\ -16 & 53 \\ -17 & 51 \end{array}$	W. $\frac{1}{2}$ S. N.E. $\frac{1}{4}$ E. N.E. $\frac{1}{2}$ N.		$\begin{vmatrix} +3 & 50 \\ -2 & 15 \\ -1 & 51 \end{vmatrix}$	$ \begin{array}{c cccc} -1 & 48 \\ -1 & 48 \\ -1 & 48 \end{array} $		
			T. T.	-19 02 $-18 28$	N.E. $\frac{1}{4}$ E. N.E. by E. $\frac{1}{2}$ E	-63	$ \begin{array}{r rrrr} -2 & 15 \\ -2 & 50 \end{array} $	$\begin{vmatrix} -1 & 48 \\ -1 & 48 \end{vmatrix}$	$\begin{vmatrix} -23 & 05 \\ -23 & 06 \end{vmatrix}$ \rightarrow $-22 & 5$	1
2 P.M	ı. —64 3	303 47			E.N.E. E.N.E.	$-63 \\ -63$	$\begin{vmatrix} -3 & 03 \\ -3 & 03 \end{vmatrix}$	$\begin{vmatrix} -1 & 48 \\ -1 & 48 \end{vmatrix}$	$-25 \ 13$	
			R. R. R.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	E.N.E. E. by N.	$\begin{vmatrix} -63 \\ -63 \\ -63 \end{vmatrix}$	$ \begin{array}{r rrrr} -3 & 03 \\ -3 & 23 \\ +2 & 26 \end{array} $	-1 48 -1 48 -1 48	-24 49	1
			R. T.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	N.W. N.W. w. by N. $\frac{1}{4}$ N	-63	$\begin{vmatrix} +2 & 20 \\ +2 & 26 \\ +3 & 34 \end{vmatrix}$	$\begin{vmatrix} -1 & 48 \\ -1 & 48 \\ -1 & 48 \end{vmatrix}$	-22 24	
		6 303 52	T. T.	$ \begin{array}{r rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	On ice	$-63 \\ -63$	}		20 50	0
4 A.M	a64 3	4 304 20	Y.	-19 38 $-19 15$	s. s.	$\begin{vmatrix} -63 \\ -63 \\ 6 \end{vmatrix}$	$\begin{vmatrix} -0 & 17 \\ -0 & 17 \\ 0 & 17 \end{vmatrix}$	$\begin{vmatrix} -1 & 48 \\ -1 & 48 \end{vmatrix}$	-21 20	
			W. T. T.	$ \begin{array}{r rrrr} -19 & 52 \\ -17 & 38 \\ -17 & 51 \end{array} $	S. S.E. S.S.E.	$\begin{vmatrix} -63 \\ -63 \\ -63 \end{vmatrix}$	$ \begin{array}{c cccc} -0 & 17 \\ -1 & 57 \\ -1 & 57 \end{array} $	$\begin{vmatrix} -1 & 48 \\ -1 & 48 \\ -1 & 48 \end{vmatrix}$	$ -21 \ 23 > -21 \ 50$	0
4 P.M	164 3	7 304 21	S. R.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	s.s.e. s.s.e. e. by n. ¹ / ₄ n	-63	$\begin{vmatrix} -1 & 57 \\ -1 & 57 \\ -3 & 18 \end{vmatrix}$	$\begin{array}{c c} -1 & 48 \\ -1 & 48 \\ -1 & 48 \end{array}$	-22 09	
5 A.M		0 304 28	S. T.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c c} w. \frac{1}{2} s. \\ w. by s. \end{array}$	$\begin{vmatrix} -63 \\ -63 \end{vmatrix}$	$\begin{vmatrix} +3 & 50 \\ +3 & 51 \end{vmatrix}$	$\begin{vmatrix} -1 & 48 \\ -1 & 48 \end{vmatrix}$	$\begin{vmatrix} -19 & 16 \\ -19 & 41 \end{vmatrix}$ - 19 19	9
			О.	-20 50	w. by N.	-63	+3 38	-1 48	-19 00)	

Date.	Lat.	Long.	Observers.	Declination observed.	Ship's head.	Approx- imate Incli-	Correc	ctions.	True Declination.	Remarks.
			Ops	observed.		nation.	Deviation.	Index.		Rez
1843.	C° of	003 44	TX 7	-2i 26				9	- 8 - 4	
Jan. 5 р.м	-64 04	304 41	W. T.	-21 26 $-22 42$	s.w.byw.½w.	$-63^{\circ} -63^{\circ}$	$+3^{\circ} 33^{\circ} +3^{\circ} 33^{\circ}$	-148 -148	$\begin{bmatrix} -19 & 41 \\ -20 & 57 \end{bmatrix}$	
	2.00		T.	$-22 \ 16$	s.w.byw. $\frac{1}{2}$ w.s.w.by s.	-63	+2 13	$-1 \ 48$	$\begin{vmatrix} -20 & 57 \\ -21 & 51 \end{vmatrix}$ $-20 & 44$	
			W.	-20 06	s.s.w.	-63	+126	-148	$\begin{bmatrix} -20 & 28 \end{bmatrix}$	
6 а.м	-6409	303 03	0.	-1746	s.E. by s.	-63	-2 38	-148	$ -22 \ 12$	
			Т.	-17 05	s.E. by E.	-63	-3 32	-1 48	$\begin{vmatrix} -22 & 25 \\ -21 & 50 \end{vmatrix}$ -21 32	
			Т.	-18 02	s. by E.	-63	-1 08	-1 48	-20 38	
,,,,	C4 90	000 0	W.	-1804	S. ½ E.	-63	-0.42	-148	$\begin{bmatrix} -20 & 34 \end{bmatrix}$	
/ A.M	$-64 \ 30$	303 0	W. T.	-18 38 $-19 51$	S.S.E. ½ E.	$-63 \\ -63$	$ \begin{array}{r rrrr} -2 & 18 \\ -1 & 57 \end{array} $	$ \begin{array}{r rrrr} -1 & 48 \\ -1 & 48 \end{array} $	$\begin{vmatrix} -22 & 44 \\ -23 & 36 \end{vmatrix}$ -23 00	
			T.	-19 31 $-24 30$	s.s.e. w. by n.	-63	$\begin{array}{c c} -1 & 37 \\ +3 & 38 \end{array}$	-148	$\begin{bmatrix} -23 & 30 \\ -22 & 40 \end{bmatrix}$	
9 A.M	-64 44	303 10	w.	-21 58	$N.W. \frac{1}{2} N.$	-63	+2 13	-1 48	$\begin{bmatrix} -21 & 33 \\ -21 & 33 \end{bmatrix}$	
9 р.м	-64 44	303 15	R.	-20 52	S. $\frac{1}{2}$ W.	-63	+0 08	$-1 \frac{1}{48}$	$\begin{bmatrix} -22 & 32 \end{bmatrix}$	
			Т.	-19 15	S.S.E.	-63	-1 57	-148	-23 00	
			Т.	-19 10	S. $\frac{1}{4}$ E.	-63	-0 30	-148	$\begin{vmatrix} -21 & 28 \\ -22 & 00 \\ \end{vmatrix} -22 & 03$	
			W.	-19 04	s. by E.	-63	-1 08	-148	-22 00	
			T.	-18 21	s. by E. $\frac{1}{2}$ E.	-63	-1 32	-148	$\begin{bmatrix} -21 & 41 \\ 21 & 70 \end{bmatrix}$	
			R.	-1708	S.E. $\frac{1}{2}$ S.	-63	-254	-148	-21 50	
	-64 44	303 10	T. R.	-17 20 $-18 49$	S.E.	-63	-3 10	-1 48	$\begin{bmatrix} -22 & 18 \end{bmatrix}$	
	-04 44	505 10	R.	$-18 49 \\ -21 12$	On ice			-0 44	$\begin{vmatrix} -21 & 13 & -21 & 13 \end{vmatrix}$]] :
			R.	-21 26	on ice	••••	, , , , , , , , , , , , , , , , , , , ,		21 10 21 10	777
10 A.M	-6442	303 10	S.	-19 20	S.S.E. $\frac{1}{2}$ E.	-63	-2 18	-148	-23 26)	
10 р.м			W.	-1928	s. by E.	-63	-1 08	-148	$\begin{bmatrix} -26 & 20 \\ -22 & 24 \end{bmatrix}$ -22 55	11
11 A.M	$-64 \ 38$	303 02	Т.	-18 15	E.S.E.	-63	-3 44	-148	$ -23 \ 47$	
			Т.	-18 24	E.S.E.	-63	-3 44	-148	$ -23 \ 56 > -23 \ 57 $	
	C+ 00	000.00	O.	-18 36	E.S.E.	-63	-3 44	-1 48	$[-24 \ 08]$	
12 P.M	$-64 \ 39$	302 36	T.	-1958	S.S.E.	-63	-1.57	-148	$\begin{bmatrix} -23 & 43 \\ 22 & 27 \end{bmatrix}$	
			R. T.	-19 52 $-25 24$	S.S.E.	$-63 \\ -63$	$ \begin{array}{r r} -1 & 57 \\ +3 & 38 \end{array} $	$-1 48 \\ -1 48$	$\begin{vmatrix} -23 & 37 \\ -23 & 34 \end{vmatrix}$ -23 04	
1			T.	-23 24 $-18 18$	w. by N. s.s.e. ½ E.	-63	-2 18	-148	$\begin{bmatrix} -23 & 34 & -23 & 04 \\ -22 & 24 & & & \end{bmatrix}$	16
			T.	-24 01	w. by s. $\frac{1}{2}$ s.	-63	$+3 \ 47$	-1 48	$\begin{bmatrix} 22 & 21 \\ -22 & 02 \end{bmatrix}$	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
	-64 39	302 36	R.	-19 18	On ice			-256	$-22 \ 14 \ -22 \ 14$	
13 A.M		302 38	W.	-22 24	N.W. $\frac{1}{2}$ N.	63	+2 09	-148	-22 03	1) -
			W.	-19 13	S.S.E. 1/2 E.	_63	-2 18	-1 48	-23 19	
			Y.	-19 17	s.E. by E.	_63	-3 32	-1 48	$ -24 \ 37 $	(1)
			T.	-19 04	S.E. $\frac{1}{2}$ S.	-63	-254	-148	$\begin{bmatrix} -23 & 46 \\ -23 & 11 \end{bmatrix}$	
			S.	$-21 \ 15$	S. $\frac{1}{2}$ E.	-63	-0.42	-1 48	-23 45	
			S. T.	$ \begin{array}{r rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	n.w. by n.	$-63 \\ -63$	+152	$-1 48 \\ -1 48$	$egin{bmatrix} -22 & 11 \ -22 & 34 \ \end{pmatrix}$	
14 A.M	-64 31	302 36	Y.	-26 28	N.W. $\frac{1}{2}$ N. W. $\frac{1}{2}$ S.	-64	$\begin{vmatrix} +2 & 13 \\ +4 & 00 \end{vmatrix}$	-1 48	- 94 365	
1 1 A.M	01 01	802 80	T.	-26 09	w. <u>7</u> s. w.	-64	+3 59	-1 48	$\begin{bmatrix} -24 & 30 \\ -24 & 18 \end{bmatrix}$ -24 27	
15 A.M	$-64 \ 31$	302 36	o.	$-25 \ 42$	$w. \frac{1}{2} N.$	-63	$+3 \ 43$	-148	23 47	
			W.	-16 20	E. $\frac{1}{2}$ S.	_63	-3 42	-1 48	$\begin{bmatrix} 20 & 47 \\ -21 & 50 \end{bmatrix}$ -22 48	
18 A.M	-63.58	304 46	Y.	-17 32	N.N.E.	-63	-1 02	-1 48	$-20 22^{\circ} -20 22$	
19 P.M	-64 28	304 46	R.	$-22\ 58$	w.s w.	-63	$+3 \ 43$	-148	$-21 \ 03$	
			T.	-17 47	N.E. by E.	-63	$-2 \ 37$	-148	$ -22 \ 12 $	
			R.	-21 52	w.n.w.	-63	+3 20	-148	-20 20	
			T.	-22 34	N.W. by W.	-63	+2 54	-1 48	$\begin{vmatrix} -21 & 28 \\ 99 & 17 \end{vmatrix}$ -21 25	
			W. R.	$ \begin{array}{r rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	N.w. by w.	$-63 \\ -63$	$\begin{vmatrix} +2 & 54 \\ +3 & 38 \end{vmatrix}$	-148	$\begin{bmatrix} -22 & 17 \\ -21 & 01 \end{bmatrix}$	
			T.	$-23 \ 35$	w. by N. w. $\frac{1}{2}$ s.	-63	+350	$\begin{vmatrix} -1 & 48 \\ -1 & 48 \end{vmatrix}$	$\begin{bmatrix} -21 & 01 \\ -21 & 33 \end{bmatrix}$	
20 A.M	-64 19	304 30	T.	$-23 33 \\ -17 30$	E. by s. $\frac{1}{2}$ s.	-63	$-3 \ 44$	-148	$\begin{bmatrix} 21 & 33 \\ -23 & 02 \end{bmatrix}$	
			T.	-17 08	S.E.	-63	-3 10	-148	$\begin{bmatrix} -22 & 06 \\ \end{bmatrix}$	
			T.	-1648	s.E. by E. ½ E	-63	-3 38	_1 48	$\begin{vmatrix} -22 & 14 \\ -22 & 14 \end{vmatrix} > -22 & 03$	
			Т.	-23 26	w. by N.	-63	+3 38	-148	$ -21 \ 36 $	
	0.		O.	-23 18	$W. \frac{1}{2} S.$	-63	+350	-1 48	$\begin{bmatrix} -21 & 16 \end{bmatrix}$	
21 P.M	-64 18	304 10	T.	-16 32	s.E. by s.	-63	-2 38	-1 48	$ -20,58\rangle$	
1,			W.	-17 34	S.E.	-63	-3 10	-148	$\begin{vmatrix} -22 & 32 \\ 20 & 54 \end{vmatrix}$ \Rightarrow -21 28	
and the second	1	1	O.	-15 45	S.E. $\frac{1}{2}$ E.	-63	-321	-148	$[-20 \ 54]$	1 '

Date.	Lat.		Lor	ıg.	Observers.	Declination	Ship's head.	Approx- imate Incli-	Corre	ctions.	True Declination.
					Obs	observed.		nation.	Deviation.	Index.	Ren
1843. Jan. 22 а.м.	-64 I	15	30å	4 9	W. W.	$-2\overset{\circ}{2} \ 2\overset{\prime}{7}$ $-21 \ 18$	w. by n.	$-62 \\ -62$	$+\overset{\circ}{3} \overset{\circ}{30} \\ +2 \overset{\circ}{46}$	$-\mathring{1}$ 48 -1 48	-20°45 -20°20
					T. S.	$-17 02 \\ -15 46$	E.N.E. S.E. ½ S.	$-62 \\ -62$	$ \begin{array}{rrr} -2 & 54 \\ -2 & 47 \end{array} $	-1 48 $-1 48$	$\begin{vmatrix} -21 & 44 \\ -20 & 21 \\ -20 & 40 \end{vmatrix} $ $-2\mathring{1} 0\mathring{3}$
					S. Y. T.	$ \begin{array}{r rrrr} -15 & 40 \\ -16 & 20 \\ -16 & 34 \end{array} $	E. $\frac{1}{2}$ N. N.E. by E.	$-62 \\ -62 \\ -62$	$ \begin{array}{r rrrr} -3 & 21 \\ -2 & 29 \\ -3 & 30 \end{array} $	$ \begin{array}{rrr} -1 & 48 \\ -1 & 48 \\ -1 & 48 \end{array} $	$\begin{bmatrix} -20 & 49 \\ -20 & 37 \\ -21 & 52 \end{bmatrix}$
23 а.м.	-64]	12	303	53	S. T.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	E. E.N.E. W. by N.	$-62 \\ -63$	$ \begin{array}{r rrrr} -3 & 30 \\ -2 & 54 \\ +3 & 38 \end{array} $	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{bmatrix} -21 & 32 \\ -21 & 50 \end{bmatrix}$ $\begin{bmatrix} -20 & 47 \end{bmatrix}$
_					Y. T.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	N.W. $\frac{1}{2}$ W. N.W.byw. $\frac{1}{2}$ W.	$-63 \\ -63$	$+2 40 \\ +3 07$	$ \begin{array}{r rrrr} -1 & 48 \\ -1 & 48 \end{array} $	$\begin{bmatrix} -20 & 56 \\ -20 & 17 \end{bmatrix}$ $\begin{bmatrix} -20 & 39 \\ 1 & 17 \end{bmatrix}$
26 а.м.	-64 (04	304	18	T. T. O.	$ \begin{array}{c cccc} -22 & 48 \\ -22 & 03 \\ \end{array} $	W. 1/2 S. W.N.W.	$-63 \\ -63 \\ 63$	$+350 \\ +320 \\ +320$	-1 48 $-1 48$	$egin{bmatrix} -20 & 46 \ -20 & 31 \ -20 & 25 \ \end{pmatrix} -20 & 50 \ \end{bmatrix}$
26 р.м.	-64 (04	304	18	T. R.	$ \begin{array}{c cccc} & -21 & 57 \\ & -17 & 10 \\ & -15 & 25 \end{array} $	w.n.w. s.e. by s. s.e. ½ e.	$ \begin{array}{r} -63 \\ -63 \\ -63 \end{array} $	$\begin{vmatrix} +3 & 20 \\ -2 & 38 \\ -3 & 21 \end{vmatrix}$		$\begin{bmatrix} -20 & 25 \\ -21 & 36 \end{bmatrix}$ $\begin{bmatrix} -20 & 34 \end{bmatrix}$
					T. W.	$ \begin{array}{r rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	w. s.e. by e.	$-63 \\ -63$	$\begin{vmatrix} +3 & 49 \\ -3 & 32 \end{vmatrix}$	$-1 48 \\ -1 48$	_20 09 _21 24
					T. R.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	s.e. $\frac{1}{2}$ e. s.w.byw. $\frac{1}{2}$ w.	$-63 \\ -63$	$\begin{vmatrix} -3 & 21 \\ +3 & 33 \end{vmatrix}$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
27 p.m.	-64 (08	304	14	T. R. T.	$ \begin{array}{c cccc} & -22 & 22 \\ & -15 & 53 \\ & -19 & 00 \end{array} $	W.S.W. E.S.E. S.	$ \begin{array}{r r} -63 \\ -63 \\ -63 \end{array} $	$\begin{vmatrix} +3 & 43 \\ -3 & 44 \\ -0 & 17 \end{vmatrix}$	$ \begin{array}{ c c c c c } -1 & 48 \\ -1 & 48 \\ -1 & 48 \end{array} $	$ \begin{bmatrix} -20 & 27 \\ -21 & 25 \end{bmatrix} $ $ \begin{bmatrix} -21 & 05 \end{bmatrix} $
					Ř. T.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	N.E. $\frac{1}{2}$ N.S. $\frac{1}{2}$ W.	$-63 \\ -63$	$\begin{vmatrix} -1 & 50 \\ +0 & 08 \end{vmatrix}$	$\begin{vmatrix} -1 & 48 \\ -1 & 48 \end{vmatrix}$	$\begin{vmatrix} -20 & 11 \\ -21 & 30 \end{vmatrix} -20 & 55 \end{vmatrix}$
28 A.M. 29 A.M.					Y. T.	-16 09 $-16 59$	E.S.E. S.E. ½ E.	$-63 \\ -63$	$-3 \ 44 \ -3 \ 21$	$ \begin{array}{r rrrr} -1 & 48 \\ -1 & 48 \end{array} $	$\begin{bmatrix} -21 & 41 & -21 & 41 \\ -22 & 08 \end{pmatrix}$
	ž.				Т. Ү. Т.	$ \begin{array}{r rrrr} -16 & 48 \\ -16 & 58 \\ -22 & 08 \end{array} $	S.E. $\frac{1}{2}$ E.	-63 -63 -63	$\begin{vmatrix} -3 & 10 \\ -3 & 21 \\ +3 & 20 \end{vmatrix}$	$ \begin{array}{r rrrr} -1 & 48 \\ -1 & 48 \\ -1 & 48 \end{array} $	$ \begin{vmatrix} -21 & 46 \\ -22 & 07 \\ -20 & 36 \end{vmatrix} -21 & 37 $
					T. W.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	w.n.w. n. by w. n. by w.	$ \begin{array}{r} -63 \\ -63 \\ \end{array} $	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c cccc} -1 & 48 \\ -1 & 48 \\ -1 & 48 \end{array} $	$\begin{bmatrix} -20 & 30 \\ -21 & 41 \\ -21 & 20 \end{bmatrix}$
31 р.м.	-64 (80	303	47	R. R.	-22 29 $-17 59$	n.w. ¼ w. n.e. by e. ¾ e.	$-62 \\ -62$	+2.26 -2.36	$ \begin{array}{rrr} -1 & 48 \\ -1 & 48 \end{array} $	$egin{bmatrix} -21 & 51 \\ -22 & 23 \\ \end{matrix}$
					T. W.	-17 05 $-17 47$	N.E. ½ N. E.N.E.	$-62 \\ -62 \\ 62$	$\begin{vmatrix} -1 & 46 \\ -2 & 54 \\ + 2 & 10 \end{vmatrix}$	-1 48 $-1 48$	$egin{bmatrix} -20 & 39 \ -22 & 29 \ -22 & 55 \ \end{bmatrix}$
					R. T. T.	$\begin{array}{r rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	N.w. N.E. by N. s.w. by w.	$-62 \\ -62 \\ -62$	$\begin{vmatrix} +2 & 19 \\ -1 & 30 \\ +3 & 15 \end{vmatrix}$	$ \begin{array}{c cccc} -1 & 48 \\ -1 & 48 \\ -1 & 48 \end{array} $	$\begin{vmatrix} -22 & 35 \\ -21 & 36 \\ -20 & 16 \end{vmatrix} - 21 & 52$
					R. T.	$ \begin{array}{r rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	w. by $N \cdot \frac{1}{2} N$. N. by E.	$-62 \\ -62$	$\begin{vmatrix} +3 & 20 \\ -0 & 27 \end{vmatrix}$	-1 48 $-1 48$	$egin{bmatrix} -23 & 23 \ -22 & 16 \ \end{bmatrix}$
i					R. R. T.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	w. by N. E. \frac{1}{4} N.	$-62 \\ -62 \\ 60$	$\begin{vmatrix} +3 & 30 \\ -3 & 26 \\ 0 & 27 \end{vmatrix}$	-1 48 $-1 48$	$\begin{bmatrix} -21 & 05 \\ -21 & 52 \\ -21 & 36 \end{bmatrix}$
Feb. 1 A.M.	-63 E	53	304	01	T. S.	$ \begin{array}{r rrrr} -19 & 21 \\ -21 & 30 \\ -21 & 24 \end{array} $	N. by E. s.w. $\frac{1}{2}$ s. s.w. by s.	$-62 \\ -62 \\ -62$	$ \begin{array}{r r} -0 & 27 \\ +2 & 27 \\ +2 & 08 \end{array} $	$ \begin{array}{rrr} -1 & 48 \\ -1 & 48 \\ -1 & 48 \end{array} $	$egin{bmatrix} -21 & 36 \ -20 & 51 \ -21 & 04 \ \end{bmatrix}$
				:	Y. T.	$ \begin{array}{c cccc} -21 & 02 \\ -21 & 00 \end{array} $	S.S.W. $\frac{1}{2}$ W. N.N.W. $\frac{1}{2}$ W.	$-62 \\ -62$	$\begin{array}{r rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$-1 48 \\ -1 48$	$\begin{bmatrix} -21 & 03 \\ -21 & 18 \end{bmatrix}$
					Y. T. T.	-20 08 $-21 03$	N.W. by W.	$-62 \\ -62 \\ 69$	$\begin{array}{r} +1 & 30 \\ +2 & 46 \\ +3 & 41 \end{array}$	-1 48 $-1 48$	$\begin{bmatrix} -20 & 26 \\ -20 & 05 \\ -19 & 50 \end{bmatrix}$
3 А.М.	-64 1	16	305	23	W. T.	$ \begin{array}{rrr} -21 & 43 \\ -22 & 04 \\ -19 & 16 \end{array} $	$w. \frac{1}{2} s$ $w. by s.$ $N. \frac{1}{2} E.$	$-62 \\ -62 \\ -62$	$ \begin{array}{r} +3 & 41 \\ +3 & 42 \\ -0 & 10 \end{array} $	-1 48 $-1 48$ $-1 48$	$\begin{bmatrix} -19 & 50 \\ -20 & 10 \end{bmatrix}$ $\begin{bmatrix} -21 & 14 \end{bmatrix}$
-					T. T.	-17 53 $-18 22$	n. by е. n. by е. ½ е.	$-62 \\ -62$	$-0 27 \\ -0 35$	-1 48 $-1 48$	$egin{bmatrix} -20 & 08 \\ -20 & 45 \\ \end{bmatrix}$ $-20 & 37 \\ \end{bmatrix}$
12 а.м.	-64 4	14	315	41	T. Y. T.	-18 56 $-10 03$	N. $\frac{1}{2}$ W. S. by E. $\frac{1}{2}$ E.	-62 -61	+0 23 $-1 26$	-1 48 $-1 48$	$egin{bmatrix} -20 & 21 \ -13 & 17 \ -14 & 11 \ \end{bmatrix}$
					W. T.		s. by E. ½ E. s. by E. ½ E. N. ¾ E.	$-61 \\ -61 \\ -61$	$ \begin{array}{rrr} -1 & 26 \\ -1 & 26 \\ -0 & 21 \end{array} $	-1 48 $-1 48$ $-1 48$	$\begin{vmatrix} -14 & 11 \\ -14 & 19 \\ -14 & 04 \end{vmatrix} -13 & 58$

Date.	Lat.	Long.	Observers.	Declination observed.	Ship's head.	Approximate Inclination.	Correct Deviation.	etions. Index.	True Declination.	Remarks.
1843. Feb. 12 г.м.	$-6\mathring{4} \ 1\mathring{3}$	316° 22	R. R.	$-\ \overset{\circ}{9}\ 5\overset{\prime}{2} \\ -\ 8\ 34$	N.E. ½ E. E.N.E.	-61 -61	$-\mathring{2} \ 0\mathring{9} \ -2 \ 46$	$-\mathring{1}$ 48 -1 48	$ \begin{array}{c c} & & \\ & -1\mathring{3} & 4\mathring{9} \\ & -13 & 08 \\ & & -1\mathring{3} & 4\mathring{3} \end{array} $	
13 а.м.	-64 38	316 47	R. T. S.	-10 27 $-11 47$ $-12 43$	n.e. n. by e. n. by e.		$ \begin{vmatrix} -1 & 56 \\ -0 & 27 \\ -0 & 27 \end{vmatrix} $	$ \begin{array}{r rrrr} -1 & 48 \\ -1 & 48 \\ -1 & 48 \end{array} $	$ \begin{vmatrix} -14 & 11 \\ -14 & 02 \\ -14 & 58 \end{vmatrix} $	
·			T. T. S. T.	$ \begin{array}{rrrr} -10 & 12 \\ -10 & 30 \\ -10 & 48 \\ -9 & 11 \end{array} $	S.S.E. S.S.E. S.S.E.	$\begin{vmatrix} -62 \\ -62 \\ -62 \\ -62 \end{vmatrix}$	$ \begin{array}{c cccc} -1 & 53 \\ -1 & 53 \\ -1 & 53 \\ -1 & 53 \end{array} $	$ \begin{array}{c cccc} -1 & 48 \\ -1 & 48 \\ -1 & 48 \\ -1 & 48 \end{array} $	$ \begin{vmatrix} -13 & 53 \\ -14 & 11 \\ -14 & 29 \\ -12 & 52 \end{vmatrix} -13 & 46 $	
10	64.40	016 *4	O. Y. R.	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	s.s.e. s.s.e. s.e. by e.	$ \begin{array}{c c} -62 \\ -62 \\ -62 \end{array} $	$ \begin{array}{ c c c c c } -1 & 53 \\ -1 & 53 \\ -3 & 24 \end{array} $	$\begin{array}{c cccc} -1 & 48 \\ -1 & 48 \\ -1 & 48 \end{array}$	$ \begin{vmatrix} -12 & 40 \\ -13 & 12 \\ -13 & 33 \end{vmatrix} $	
	$\begin{vmatrix} -64 & 48 \\ -65 & 06 \end{vmatrix}$		R. R. T. O.	$ \begin{array}{rrrr} -12 & 39 \\ -11 & 51 \\ -8 & 54 \\ -9 & 04 \end{array} $	N. $\frac{1}{2}$ W. N. $\frac{1}{2}$ W. S.E. by E. E.	$\begin{vmatrix} -62 \\ -62 \\ -62 \\ -62 \end{vmatrix}$	$\begin{array}{ c c c c } +0 & 23 \\ +0 & 23 \\ -3 & 24 \\ -3 & 30 \end{array}$	$ \begin{array}{c cccc} -1 & 48 \\ -1 & 48 \\ -1 & 48 \\ -1 & 48 \end{array} $	$ \begin{vmatrix} -14 & 04 \\ -13 & 16 \\ -14 & 06 \\ -14 & 22 \end{vmatrix} -13 & 49$	
			Y. T. W. T.	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	E. E. by s. E. $\frac{1}{2}$ N. E. $\frac{1}{2}$ N.		$ \begin{vmatrix} -3 & 30 \\ -3 & 36 \\ -3 & 21 \\ -3 & 21 \end{vmatrix} $	$ \begin{array}{c cccc} -1 & 48 \\ -1 & 48 \\ -1 & 48 \\ -1 & 48 \end{array} $	$ \begin{vmatrix} -14 & 18 \\ -12 & 57 \\ -13 & 17 \\ -12 & 54 \end{vmatrix} $ -13 20	
14 P.M.	<u>-65 13</u>	319 20	T. R. R.	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	E. $\frac{1}{2}$ N. E. $\frac{3}{4}$ S. S.E. by E.		$ \begin{array}{r rrrr} -3 & 21 \\ -3 & 26 \\ -3 & 17 \end{array} $	$ \begin{array}{r rrrr} -1 & 48 \\ -1 & 48 \\ -1 & 48 \end{array} $	$ \begin{vmatrix} -12 & 36 \\ -12 & 37 \\ -12 & 44 \end{vmatrix} -12 & 47 $	
15 A.M. 16 A.M.	$-63 57 \\ -63 56$	321 37 321 43	R. T. Y. T.	$ \begin{array}{r} -10 & 45 \\ -7 & 06 \\ -6 & 50 \\ -5 & 42 \end{array} $	N. by E. N.E. N.E. N.E. ¹ / ₂ N.		$ \begin{array}{c cccc} -0 & 26 \\ -1 & 50 \\ -1 & 50 \\ -1 & 36 \end{array} $	$ \begin{array}{rrr} -1 & 48 \\ -1 & 48 \\ -1 & 48 \\ -1 & 48 \end{array} $	$ \begin{vmatrix} -12 & 59 \\ -10 & 44 \\ -10 & 28 \\ -9 & 06 \end{vmatrix} $	
16 p.v.	-63 56	200 14	T. R. R.	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	S. $\frac{3}{4}$ W. S. E. $\frac{1}{4}$ N.		$ \begin{array}{r rrr} +0 & 19 \\ -0 & 16 \\ -3 & 09 \\ -3 & 09 \end{array} $	$ \begin{array}{rrr} -1 & 48 \\ -1 & 48 \\ -1 & 48 \\ -1 & 48 \end{array} $	- 9 00 - 8 12 - 8 37 - 8 34 - 8 16	
			W. T. R.	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	E. ½ N. E. ½ S. E. ½ N. E.		$ \begin{array}{r rrrr} -3 & 17 \\ -3 & 05 \\ -3 & 13 \end{array} $	$ \begin{array}{rrr} -1 & 48 \\ -1 & 48 \\ -1 & 48 \end{array} $	$\begin{vmatrix} -9 & 13 \\ -9 & 27 \\ -10 & 39 \end{vmatrix} - 9 24$	
	-62 50 $-62 37$		R. T. S. T.	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	E. $\frac{1}{2}$ N. E. $\frac{1}{2}$ N. E. by N. E. $\frac{1}{4}$ S.	-59 -59 -59 -59	$egin{array}{c c} -2 & 57 \\ -2 & 57 \\ -2 & 50 \\ -3 & 07 \\ \end{array}$	$ \begin{array}{rrr} -1 & 48 \\ -1 & 48 \\ -1 & 48 \\ -1 & 48 \end{array} $	$ \begin{vmatrix} -7 & 59 \\ -7 & 45 \\ -7 & 59 \\ -5 & 18 \end{vmatrix} $	
			R. T. T.	+ 1 12 + 1 48 + 1 45	N.E. $\frac{1}{2}$ E. N.E. by E. $\frac{1}{2}$ E. N.E.	-59 -59 -59	$ \begin{array}{r r} -1 & 57 \\ -2 & 20 \\ -1 & 45 \end{array} $	$ \begin{array}{rrr} -1 & 48 \\ -1 & 48 \\ -1 & 48 \end{array} $	$ \begin{vmatrix} -2 & 33 \\ -2 & 20 \\ -1 & 48 \end{vmatrix} -2 & 50 $	
19 а.м.	-62 20	330 30	T. T. T. S.	+ 0 45 + 1 37 + 0 52 - 3 49	E. by N. $\frac{1}{2}$ N. E. by N. $\frac{1}{2}$ N. N.E. by E. $\frac{1}{2}$ E. N.E.	-59 -59 -59 -58		$ \begin{array}{rrr} -1 & 48 \\ -1 & 48 \\ -1 & 48 \\ -1 & 48 \end{array} $	$ \begin{vmatrix} -3 & 44 \\ -2 & 52 \\ -3 & 16 \\ -7 & 17 \end{vmatrix} $	
-		-	T. O. S. R.	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	E. E. E.	-58 -58 -58 -58	$ \begin{array}{r} -2 & 58 \\ -2 & 58 \\ -2 & 58 \\ -2 & 58 \end{array} $	$ \begin{array}{rrr} -1 & 48 \\ -1 & 48 \\ -1 & 48 \\ -1 & 48 \end{array} $	$ \begin{vmatrix} -5 & 11 \\ -4 & 57 \\ -3 & 26 \\ -2 & 01 \end{vmatrix} $ $ -4 & 41 $	
<i>0</i> 0	- 60. oc	999 46	T. R. T.	$ \begin{array}{r} 0 & 00 \\ - & 0 & 54 \\ + & 0 & 51 \end{array} $	E. ½ S. E. by S. E.S.E.	$-58 \\ -58 \\ -58$	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$ \begin{array}{rrr} -1 & 48 \\ -1 & 48 \\ -1 & 48 \end{array} $	$\begin{bmatrix} -4 & 49 \\ -5 & 47 \\ -4 & 02 \end{bmatrix}$	
zu A.M.	-62 06	000 43	T. O. T. O.	$\begin{array}{c} + & 0 & 35 \\ - & 0 & 58 \\ - & 2 & 14 \\ - & 1 & 53 \end{array}$	s.e. by $e. \frac{1}{2}e.$ N.N.E. $\frac{3}{4}e.$ N. N. N. by $e. \frac{1}{2}e.$	-58 -58 -58 -58	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$ \begin{array}{rrr} -1 & 48 \\ -1 & 48 \\ -1 & 48 \\ -1 & 48 \end{array} $	$ \begin{vmatrix} -4 & 13 \\ -3 & 53 \\ -3 & 56 \\ -4 & 16 \\ 2 & 20 \\ -3 & 41 \end{vmatrix} $	
			T. W. T. R.	$\begin{array}{rrrrr} - & 0 & 46 \\ - & 0 & 48 \\ - & 1 & 18 \\ + & 0 & 17 \end{array}$	N.N.E. N. by E. ½ E. N. N.E. by E.	-58 -58 -58 -58	$ \begin{array}{c cccc} -0 & 48 \\ -0 & 35 \\ +0 & 06 \\ -2 & 03 \end{array} $	$ \begin{array}{ccccc} -1 & 48 \\ -1 & 48 \\ -1 & 48 \\ -1 & 48 \end{array} $	- 3 22 - 3 11 - 3 00 - 3 34	

Date.	Lat.	Long.	Declination observed.	Ship's head.	Approx-	Corre	etions.	True Declination.	Remarks
			observed.		Incli- nation.	Deviation.	Index.		Pov
1843. Feb. 20 p.m.	_61°55	333 48	S 1 05 R 0 30 R 0 23 R 1 01 R 1 58 R 0 15 Y 1 00 T 0 26 T 0 16 O 0 32 R 0 41 T 0 28	N.N.E. N. by E. N. by E. $\frac{3}{4}$ E N. by E. $\frac{1}{2}$ E N.E. N.E. N.E. N.E. N.E.		-1 14 -0 48 -0 23 -0 42 -0 35 -1 40 -1 40 -1 40 -1 40 -1 40 -1 40 -1 40	-1 48 -1 48 -1 48 -1 48 -1 48 -1 48 -1 48 -1 48 -1 48 -1 48	- 4 07 - 3 06 - 2 34 - 3 31 - 4 21 - 3 43 - 4 28 - 3 54 - 3 44 - 4 00 - 4 09 - 3 56	
21 P.M.	-61 36	336 20	R 0 55 T 1 00 R 1 28 R 1 46 R. + 5 15 O. + 3 39 S. + 4 47 T. + 4 02 R. + 3 30 T. + 4 32 R. + 4 12 R. + 2 24	S. \frac{1}{2} E. S. \frac{1}{2} E. S. \frac{1}{2} E. S. \frac{1}{2} W. S. by W. \frac{1}{2} W. E. \frac{1}{4} S. E. \frac{1}{2} S. E. \frac{1}{2} S. E. \frac{1}{4} N.	-58 -58 -58 -58 -58 -58 -58 -58 -58 -58	-0 36 -0 36 +0 07 +0 51 -3 00 -2 58 -3 01 -3 01 -2 58 -2 58 -2 54 -2 51	-1 48 -1 48 -1 48 -1 48 -1 48 -1 48 -1 48 -1 48 -1 48 -1 48	- 3 19 - 3 24 - 3 09 - 2 43 + 0 27 - 1 07 - 0 02 - 0 47 - 1 16 - 0 14 - 0 30 - 2 15	
24 A.M.	-62 24	343 58	Y. + 0 52 R. + 0 59 W. + 5 21 T. + 6 01 T. + 7 37 S. + 7 36 T. + 7 00 Y + 6 40 T. + 7 57	S. ½ W. S. ½ W. S. S. S. by E. S. S. ½ W. S. ½ W. S. ½ W. S. ½ W.	-58 -59 -59 -59 -59 -59 -59 -59	+0 06 +0 06 -0 16 -0 16 -0 59 -0 16 +0 06 +0 06 -0 26	-1 48 -1 48 -1 48 -1 48 -1 48 -1 48 -1 48 -1 48	$ \begin{vmatrix} -0 & 50 \\ -0 & 43 \end{vmatrix} + 3 & 17 \\ + 3 & 37 \\ + 4 & 50 \\ + 5 & 32 \\ + 5 & 18 \\ + 4 & 58 \\ + 5 & 43 \end{vmatrix} + 4 & 40$	
24 P.M.	-62 52	344 33	S. + 7 51 T. + 6 48 T. + 7 31 T. + 7 14 Y. + 6 25 W. + 7 24 R. + 6 31 T. + 6 31	S. $\frac{1}{2}$ E. S. $\frac{1}{2}$ E. S. $\frac{1}{2}$ E.	$ \begin{array}{r} -59 \\ -59 \\ -59 \\ -59 \\ -59 \\ -59 \\ -59 \\ -59 \\ \end{array} $	$ \begin{array}{c cccc} -0 & 59 \\ -0 & 36 \\ -0 & 36 \\ -0 & 36 \\ -0 & 36 \\ +0 & 06 \\ -0 & 16 \end{array} $	$\begin{array}{c cccc} -1 & 48 \\ -1 & 48 \\ -1 & 48 \\ -1 & 48 \\ -1 & 48 \\ -1 & 48 \\ -1 & 48 \end{array}$	+ 5 04 + 4 24 + 5 07 + 4 50 + 4 01 + 5 00 + 4 49 + 4 27 + 4 40	-
	-64 04		T. + 8 07 Y. + 9 04 T. + 7 50 T. + 8 59	S.S.E. $\frac{1}{2}$ E. S. by E. $\frac{1}{2}$ E. S. by E. $\frac{1}{2}$ E.		$ \begin{array}{c cccc} -1 & 46 \\ -2 & 04 \\ -1 & 23 \\ -1 & 23 \end{array} $	$ \begin{array}{c cccc} -1 & 48 \\ -1 & 48 \\ -1 & 48 \\ -1 & 48 \end{array} $	$\begin{vmatrix} + & 4 & 33 \\ + & 5 & 12 \\ + & 4 & 39 \\ + & 5 & 48 \end{vmatrix} + 5 03$	
27 A.M.	-65 08	349 50	T. +11 13 W. +12 26 T. +11 21 R. +12 11 S. +12 03 T. +11 53	S.E. S.E. S.E.	$ \begin{array}{r} -62 \\ -62 \\ -62 \\ -62 \\ -62 \\ -62 \\ \end{array} $	$ \begin{array}{rrrrr} -3 & 03 \\ -3 & 03 \\ -3 & 03 \\ -3 & 03 \\ -3 & 03 \end{array} $	$\begin{array}{r rrrr} -1 & 48 \\ -1 & 48 \\ -1 & 48 \\ -1 & 48 \\ -1 & 48 \\ -1 & 48 \end{array}$	$\begin{vmatrix} + & 6 & 22 \\ + & 7 & 35 \\ + & 6 & 30 \\ + & 7 & 20 \\ + & 7 & 12 \\ + & 7 & 02 \end{vmatrix} + 7 02$	
28 A.M.	-66 01	353 00	R. +12 05 R. +14 43 T. +14 42 R. +13 53 O. +14 39 T. +15 07	S.E. E. by s. $\frac{1}{2}$ s. E. by s. $\frac{1}{2}$ s.	$ \begin{array}{r} -62 \\ -63 \\ -63 \\ -63 \\ -63 \\ -63 \\ \end{array} $	$ \begin{array}{rrrrr} -3 & 03 \\ -3 & 44 \\ -3 & 44 \\ -3 & 41 \\ -3 & 41 \end{array} $	$ \begin{array}{rrrr} -1 & 48 \\ -1 & 48 \\ -1 & 48 \\ -1 & 48 \\ -1 & 48 \end{array} $	+ 7 14 + 9 11 + 9 10 + 8 21 + 9 10 + 9 38 + 9 06	

Date.	Lat.	Long.	Observers.	Declination observed.	Ship's head.	Approx- imate Incli-		ctions.	True Declination.	Remarks.
			0			nation.	Deviation.	Index.		Ř
1843. Mar. 1 а.м.		350° 39	R.	$+ \ 6 \ 52$	s.w. ³ / ₄ w.	-63°	$+\mathring{2}$ 23	- i 48	+ 7 27	
1 P.M.	• • • • • • • • • • • • • • • • • • • •		Т.	+716	w.s.w.	-63	+3 43	-148	+ 9 11	
	ļ.		R. R.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	w.s.w.	-63 -63	$\begin{vmatrix} +3 & 43 \\ +3 & 43 \end{vmatrix}$	-1 48	$\begin{vmatrix} + & 9 & 02 \\ + & 9 & 53 \\ \end{pmatrix} + & 8 & 56 \end{vmatrix}$	
			Ϋ́.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	w.s.w.	-63	+3 43 + 3 43	$ \begin{array}{r r} -1 & 48 \\ -1 & 48 \end{array} $	$\begin{vmatrix} + & 9 & 53 \\ + & 8 & 37 \end{vmatrix}$	
			T.	+756	s.w.	-63	+252	-148	+ 9 00	
			0.	+ 8 18	s.w.	-63	+2 52	-1 48	[+922]	
2 А.М.	-68 00	348 21	T.	+441	s.w. by w.	-64	$+3 \ 31$	-148	+ 6 24	
	1.1		Y.	+ 501	s.w. by w.	-64	$+3 \ 31$	-148	+ 6 44	
·			T.	+ 459	s.w. by w.	-64	+3 31	-1 48	+ 6 42	
			Y.	+ 5 14	s.w.	-64	+2 58	-148	+624>+634	
			S. T.	+ 5 12	s.w.	$-64 \\ -64$	+2 58	-148	+ 6 22	
			T.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	S.W.	-64	$\begin{array}{r rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$-1 48 \\ -1 48$	$\begin{bmatrix} + & 6 & 01 \\ + & 6 & 44 \end{bmatrix}$	
2 P.M.	-68 18	347 20	T.	+ 4 10	S.W. $\frac{1}{2}$ W.	-64	$ +3 \ 14 $	-1 48	+ 5 36	
	00 10	01, 70	ō.	+404	s.w. by $w.\frac{1}{2}w$.		+3 41	-148	+ 5 57	
			Т.	+ 4 24	s.w. ½ w.	-64	+3 14	-148	+ 5 50	
			R.	+ 3 42	s.w. $\frac{1}{2}$ w.	-64	+3 14	-148	+ 508 > + 537	
			R.	+ 3 59	$s.w. \frac{1}{2} w.$	-64	+3 14	-1 48	+ 5 25	
			T.	+ 5 13	s.w.	-64	+258	-1 48	+ 6 23	
	00.00		R.	+347	s.w.	-64	+2 58	-148	+ 4 57	
3 A.M.	$-68 \ 32$	347 09	T.	+ 7 41	S.S.E.	-64	-202	-148	$\left + \frac{3}{5} \frac{51}{31} \right + 4 \frac{43}{5}$	
4 p.w	-69 36	245 10	Y. T.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	S. ½ E.	$-64 \\ -65$	$\begin{vmatrix} -0 & 45 \\ +2 & 24 \end{vmatrix}$	$ \begin{array}{r rrrr} -1 & 48 \\ -1 & 48 \end{array} $	$\begin{vmatrix} + & 5 & 34 \\ + & 3 & 36 \end{vmatrix}$	
₹ F• M.	-09 30	343 10	R.	+ 228	s.w. by s. s.w. by s.	-65	+2.24 + 2.24	-148	3 04	
			R.	+2.08	s.w. by s.	-65	+2.24	-1 48	$\begin{vmatrix} + & 3 & 04 \\ + & 2 & 44 \end{vmatrix} + 3 & 05$	1
			T.	+ 2 19	s.w. by s.	-65	+2 24	-148	$\begin{vmatrix} 1 & 2 & 55 \end{vmatrix}$	
5 А.М	-70.50	343 21	Y.	+ 1 25	s.w. by s.	_66	+2.30	-148	+ 2 07	
			<u>T</u> .	+ 1 55	s.w. by s.	-66	+230	-148	+ 2 37	
			T.	+ 4 18	s.	-66	-0.19	-148	$\begin{vmatrix} + & 2 & 11 \\ + & 2 & 25 \\ \end{vmatrix} + 2 18$	
			R. T.	+ 6 25	S.S.E.	_66 _66	$\begin{vmatrix} -2 & 12 \\ -2 & 12 \end{vmatrix}$	-1 48	+ 2 25	
5 р.м			R.	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	s.s.e. s.e. by e.	_66	$\begin{bmatrix} -z & 1z \\ -4 & 00 \end{bmatrix}$	$\begin{vmatrix} -1 & 48 \\ -1 & 48 \end{vmatrix}$	$\begin{bmatrix} + & 2 & 04 \\ + & 2 & 34 \end{bmatrix}$	
	-71 14	344 18	R.	+822 + 840	E.S.E.	-65	-404	-148	1 0 10	
			R.	+ 9 50	E.S.E.	-65	-4 04	-1 48	$\begin{bmatrix} 7 & 2 & 40 \\ + & 3 & 58 \end{bmatrix} + 3 23$	8
12 а.м	64 29	346 02	T.	+ 6 50	N.N.E.	_59	-0.51	-1 48	+ 4 11	
			S.	+ 7 04	N.N.E.	- 59	-0.51	-1 48	+ 4 25	
			T.	+ 7 33	N.N.E.	-59	-0.51	-148	+ 4 54	Ί
10 -	6	2 040 **	T.	+648	N.N.E.	-59	-0.51	-148	+ 4 09	
13 P.M	-01 10	348 56	R.	$+12\ 31$	N.N.E. $\frac{1}{2}$ E.	-58 -58	$\begin{vmatrix} -1 & 01 \\ -1 & 27 \end{vmatrix}$	$\begin{vmatrix} -1 & 48 \\ -1 & 48 \end{vmatrix}$	$\begin{vmatrix} + & 9 & 42 \\ + & 9 & 07 \end{vmatrix}$	
			T.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	N.E. $\frac{1}{2}$ N. N.E. by N.	-58	$\begin{vmatrix} -1 & 27 \\ -1 & 10 \end{vmatrix}$	$\begin{vmatrix} -1 & 48 \\ -1 & 48 \end{vmatrix}$	$\begin{vmatrix} + & 9 & 07 \\ + & 8 & 28 \end{vmatrix} + 8 59$	
			T.	+11 20 + 11 37	N.E. by N.	-58	-1 10	-148	+ 8 39	
15 A.M	-57.46	351 52	T.	+14 08	N.E. by N.	-57	-1 10	$-1 \ 48$	$ +11 \ 10 \rangle$	
		1	S.	+14 13	N.E. by N.	-57	-1 10	-148	+11 15	
	-		О.	+14 17	n.e. by n.	-57	-1.10	-1 48	+11 19 > +11 17	1
			T.	+13 46	N.E. by N.	-57	-1 10	-1 48	+10 48	
		0.00	S.	+14 49	N.E. by N.	-57	-1 10	-148	+11 51	
15 P.M	-57 29	352 12	R.	+15 39	N.E.	-57	-1 35	-148	$\begin{vmatrix} +12 & 16 \\ +12 & 12 \end{vmatrix}$	
			T. R.	+15 35 +16 46	N.E.	$-57 \\ -57$	$\begin{vmatrix} -1 & 35 \\ -1 & 35 \end{vmatrix}$	$\begin{vmatrix} -1 & 48 \\ -1 & 48 \end{vmatrix}$	$\begin{vmatrix} +12 & 12 \\ +13 & 23 \end{vmatrix}$	
			T.	+15 59	N.E.	-57	-1 35 $-1 35$	$\begin{vmatrix} -1 & 48 \\ -1 & 48 \end{vmatrix}$	$\begin{vmatrix} +13 & 23 & \\ +12 & 36 & > +13 & 10 \end{vmatrix}$	
1			R.	+17 05	N.E.	-57	-1 35	-148	+13 42	1
			Y.	+17 11	N.E.	-57	$-1 \ 35$	-148	+13 48	1
			T.	+17 34	N.E.	-57	-1 35	-148	+14 11	
I			<u> </u>		1	1	1	1	<u> </u>	

LIEUT.-GENERAL SABINE ON TERRESTRIAL MAGNETISM.

Date.		Lat	; ,	Lor	ng.	Observers.	Declination observed.	Ship's head.	Approx- imate Incli-	Corre	ctions.	True Declination.	Remarks.
						O	0.0002,104.		nation.	Deviation.	Index.		Rer
1843.	_	·	-										-
Mar. 16 A	м.	_ 57 [°]	1ó	$35\mathring{2}$	53	Т.	$+13^{\circ}13^{\circ}$	N.N.W.	- 5Ĝ	$+\mathring{0}$ 5 $\acute{4}$	$-\mathring{1}$ 48	$+12^{\circ}19$	
	- 1					O.	+1247	N.N.W.	-56	+0.54	-148	+11 53	
						Y.	+14 01	N.N.W.	-56	+0.54	-148	+13 07	
						T.	+13 50	N. by W. $\frac{1}{2}$ W.	-56	+0.41	-148	$\begin{vmatrix} +12 & 43 \\ +12 & 24 \end{vmatrix} + 12 & 28 \end{vmatrix}$	
	1					T.	$+13 \ 31$	N. by w. ½ w.	-56	+0.41	-148	+12 24	
						R.	+13 18	N. by w. $\frac{1}{2}$ w.	- 56	+0.41	-148	+12 11	
						R.	+13 35	N.N.W.	-56	+0.54	-148	+12 41	
16 P		57	04	250	50	R. R.	$\begin{vmatrix} +13 & 01 \\ +19 & 04 \end{vmatrix}$	n.w. by n.	$-56 \\ -56$	$\begin{vmatrix} +1 & 19 \\ -2 & 13 \end{vmatrix}$	$-1 48 \\ -1 48$	+12 32	
10 1	.WI .	- 57	UŦ	30%	02	Υ.	$+19 04 \\ +19 20$	E.N.E.	-56	-2 13	-148	$\begin{vmatrix} +15 & 03 \\ +15 & 19 \end{vmatrix}$	
						Ť.	+19 01	E.N.E.	- 56	-2 13	-1 48	$\begin{vmatrix} +15 & 19 \\ +15 & 00 \end{vmatrix} > +14 & 57$	
*						T.	+18 50	$E \cdot \frac{1}{2} N \cdot$	-56	$-2 \ 37$	-148	$+14 \ 25$	
17 P	M.	- 5 6	34	353	46	R.	+17 31	N.E. by E. $\frac{3}{4}$ E.	-56	-1 58	-148	+13 45	
					1	T.	+17 23	N.E. by E.	-56	-1 53	-148	$ +13 \ 42 > +13 \ 46$	
						R.	+17 32	N.E. by E.	-56	-153	-148	+13 51	
18 A	м.	-55	58	355	32	Т.	+17 35	E. by N.	-56	-230	-148	+13 17	
	.					R.	+17 26	E. $\frac{1}{2}$ N.	-56	$-2 \ 37$	-148	$ +13 \ 01 > +13 \ 21$	
• •			~ ~	n	ابر	O.	+18 11	E. $\frac{1}{2}$ N.	-56	-237	-148	$+13 \ 46$	
18 P						R.	+17 39	E. $\frac{1}{2}$ N.	-56	-237	-1 48	+13 14 +13 14	
19 A	·M·	- 04	28	00/	45	Т. Т.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	E. by N.	$-56 \\ -56$	$\begin{bmatrix} -2 & 30 \\ -2 & 30 \end{bmatrix}$	$\begin{vmatrix} -1 & 48 \\ -1 & 48 \end{vmatrix}$	$\begin{vmatrix} +16 & 31 \\ +17 & 06 \end{vmatrix} + 16 & 48$	
20 A	M	_ 54	06	350	38	T.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	s.e. by e.	-56	$-2 \ 45$	-148	$\begin{vmatrix} +17 & 00 \\ +16 & 50 \end{vmatrix}$	
₩ A	171	- 54	U	003	90	Ÿ.	$+21 & 35 \\ +22 & 16$	s.e. by E.	-56	-245	-148	$\begin{vmatrix} +10 & 30 \\ +17 & 43 \end{vmatrix}$	ľ
						Ť.	+22 00	s.E. by E.	- 56	-245	-148	117 97	
						R.	+22 21	s.E. by E.	-56	-245	-148	$\begin{vmatrix} +17 & 27 \\ +17 & 48 \end{vmatrix} + 17 11$	
						Т.	+21 15	s.E. by E.	- 56	-2 45	-148	+16 42	
					.	O.	+21 11	s.e. by E.	-56	-245	-1 48	$+16 \ 38$	
24 P	м.	 50	00	9	35	т.	+28 10	N.E.	-56	$-1 \ 31$	-148	+24 51	
					1	R.	+26 40	N.E.	-56	-1 31	-148	$\begin{vmatrix} +23 & 21 \\ +23 & 22 \end{vmatrix} + 24 & 12 \end{vmatrix}$	
						R.	+2652	N.E.	-56	$-1 \ 31$	-148	1+23 33	
0.5		40	20			T.	+28 22	N.E.	-56	$-1 \ 31$	-148	$\begin{bmatrix} +25 & 03 \end{bmatrix}$	
25 A	м.	- 48	20	10	44	T.	+29 33	N.E.	-56	-1 31	-148	$\left +26 \ \frac{14}{56} \right +25 \ 35$	
05 n		4.7	oΛ	11	04	O. R.	+28 15	N.E.	-56	-1 31 $-1 31$	-148	+24.56	
25 P	M	- 4·/	20	11	04	т.	$\begin{array}{r} +28 & 51 \\ +29 & 30 \end{array}$	N.E.	$-56 \\ -56$	$-1 31 \\ -1 31$	$\begin{vmatrix} -1 & 48 \\ -1 & 48 \end{vmatrix}$	$\ket{+25\ 32} \ \ket{+26\ 11} > +25\ 22$	
	l		.			Ŕ.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	N.E.	-56	-1 31	-148	$\begin{bmatrix} +20 & 11 \\ +24 & 24 \end{bmatrix}$	
27 P.	м.	-43	49	13	38	R.	$+33 \ 43$	E. by N. $\frac{1}{2}$ N.	-55	-2 15	-148	$\begin{bmatrix} +24 & 21 \\ +29 & 40 \end{bmatrix}$	
		_0	-0	-0		T.	+33 58	E. by N. $\frac{1}{2}$ N.	-55	-2 15	-148	$\begin{vmatrix} +29 & 55 \\ +29 & 55 \end{vmatrix} > +29 \ 28$	
					1	Т.	+3253	E. by N. $\frac{1}{2}$ N.	-54	-2 15	_1 48	+28 50	-
28 A	м.	- 43	17	14	34	Т.	$+32\ 36$	E. by N. $\frac{\tilde{1}}{2}$ N.	-55	-2 15	-148	+28 38	
						T.	+31 56	E. by $N \cdot \frac{1}{2} N$.	- 55	-2 15	-1 48	T ~ 1 00)	
28 P.	м.	- 43	03	14	50	R.	$+30 \ 45$	N.E.	- 54	-1 23	-148	+27 34	
						T.	$+30 \ 43$	N.E.	- 54	-1 23	-148	$+27 \ 32$	
						T. T.	$+31 \ 37$	N.E. $\frac{1}{2}$ E.	- 54 - 54	-1 33	-1.48	+28 16 + 28 13	
						T.	+31 44 +31 09	n.e. by e.	$-54 \\ -54$	$-1 \ 43$ $-1 \ 01$	$-1 48 \\ -1 48$	$oxed{ +28\ 13\ }{+28\ 20} > +28\ 32$	
					:	R.	$+31 09 \\ +31 22$	N.E. Dy N.	-54	-1 23	-148	$\begin{vmatrix} +28 & 20 & +28 & 32 \\ +28 & 11 & \end{vmatrix}$	
						R.	+32 06	N.E.	- 54	-1 23	-1 48	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
			1		1	R.	$+33\ 43$	N.E.	-54	-1 23	-1 48	$+30 \ 32$	
					- 1	R.	$+32\ 16$	N.E. $\frac{1}{2}$ N.	- 54	-1 12	-148	+29 16	
29 A	м.	-41	56	15	07	S.	+30 22	N.E. $\frac{7}{2}$ N.	-54	-1 12	-1.48	+27 22	
					1	Т.	+3058	N.E. $\frac{1}{2}$ N.	-54	-1 12	-1 48	+27 58 > +27 42	
				· -		R.	+30 35	N.E. by N.	-54	-1 01	-148	+27 46	
29 Р	м.	-41	30	15	14	R.	+32 09	$N.E. \frac{1}{2} N.$	-54	-1 12	-148	+29 09	
			.			T.	+33 07	N.E. ½ N.	-54	-1 12	-1 48	$\begin{vmatrix} +30 & 07 \\ +21 & 03 \end{vmatrix} > +30 & 01 \begin{vmatrix} +30 & 07 \\ +21 & 03 \end{vmatrix}$	
						R. R.	+34 23	N.E. $\frac{1}{2}$ N.	$-54 \\ -54$	-1 12	$ \begin{array}{cccc} -1 & 48 \\ -1 & 48 \end{array} $	+91 20	
			- 1		- 1	11.	+32 25	N.E. $\frac{1}{2}$ N.	54	-1 12	-1 40	+29 25 <i>]</i>	

LIEUT.-GENERAL SABINE ON TERRESTRIAL MAGNETISM.

Date.	Lat.	Long.	Observers.	Declination observed.	Ship's head.	Approx- imate Incli-	Correc	etions.	True Declination.	Remarks.
			Obs	observed.		nation.	Deviation.	Index.		Ren
1843.	$-3\overset{\circ}{9}4\overset{\prime}{3}$	1Š 45	m		-	- 9	$-\mathring{2}$ 4 $\acute{1}$	_ i 48	+28 01)	
Mar. 30 р.м.	- 39 43	15 45	T.	$+32\ 30$	E.S.E.	-54				
			T. R.	$+32\ 10$	N.E.	$-54 \\ -54$	$egin{array}{c c} -1 & 23 \\ -1 & 23 \\ \end{array}$	-148	$\begin{vmatrix} +28 & 59 \\ +28 & 42 \\ +28 & 29 \end{vmatrix}$	
		- 27	R.	+31 53	N.E. ½ E.	$-54 \\ -54$	$-1 \ 23 \ -1 \ 33$	-1 48 $-1 48$	$\begin{vmatrix} +28 & 42 \\ +28 & 42 \end{vmatrix}$	
			R.	$+32 03 \\ +31 34$	N.E. by E.	-54	$-1 \ 43$	-148	$\begin{bmatrix} +28 & 42 \\ +28 & 03 \end{bmatrix}$	
31 а.м.	-3750	16 35	T.	+32 00	N.E. $\frac{1}{2}$ E.	-54	-1 33	-148	1 00 20	
01 11.111	0, 00		Ť.	$+33\ 48$	N.E. by E.	-54	-1 43	-148	$\begin{vmatrix} +28 & 39 \\ +30 & 17 \end{vmatrix}$ +29 28	
April 1 а.м.	-36 36	16 36	T.	+31 48	E.N.E.	-54	-232	-1 48	+27 58	
-1			Т.	+31 40	N.E. by E.	-54	-1 43	-148	+28 09>+28 16	
			0.	$+32\ 31$	N.E. by $\tilde{\mathbf{E}}$.		-1 53	-148	+28 50	
1 р.м.	-35 50	16 35	R.	+33 26	N.E. by E.	-54	-1 43	-148	+29 55	
			R.	+34 23	N.E. by E.	-54	1 43	-148	+30 52 > +30 15	
			R.	+33 28	N.E. by E.	-54	-1 43	-148	+29 57	
2 A.M.	-36 36	16 22	T.	+29 15	N.W. $\frac{1}{2}$ W.	-53	+1 41	-148	$\begin{vmatrix} +29 & 08 \\ +29 & 21 \end{vmatrix} + 29 \ 49$	
			T.	+3249	s.E. by E.	-53	-2 30	-148	1+28 31)	
2 P.M.	-35 17	16 29	R.	+35 03	E. by $s, \frac{1}{2}s$.	-53	-234	-1.48	+30 41	
			R.	+35 20	E. by s. $\frac{1}{2}$ s.	-53	-234	-148	+30 58 > +30 44	
0	97 00	17 00	R.	+34 54	E. by s. 4 s.	-53	-234	-148	$+30 \ 32$	
	-35 00 $-35 03$		T. T.	$\begin{vmatrix} +34 & 02 \\ +34 & 20 \end{vmatrix}$	E. by S. ½ S.	$-53 \\ -53$	$ \begin{array}{r rrrr} -2 & 34 \\ -2 & 33 \end{array} $	-1 48 $-1 48$	$\begin{vmatrix} +29 & 40 \\ +29 & 59 \end{vmatrix}$	
3 P.M.	- 55 05	17 13	T.	$+34 20 \\ +34 33$	E. by s.	-53	-2 33	-148	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
			T.	$+35\ 18$	E. by s.	-53	-2 33	-1 48	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
			T.	+35 22	E. by s.	-53	-233	-148	+31 01	

Observations of the Declination made on board Her Majesty's Ship 'Terror' in 1842 and 1843, between the Falkland Islands and Cape Horn, and between Cape Horn and the Cape of Good Hope.

The Observers are distinguished in the column of initials as follow:—"C." Captain Crozier; "P." Lieut. Phillips; "Cr." Mr. Cotter, Master; East Declination and South Latitude are characterized by the — sign.

Date.			Posit	ion.		Initials.	Declination	Direction of ship's head.	Approx- imate Incli-	Corre	ctions.	Declination.
	1	Lat		Lor	ıg.	Ini	observed.	ship s head.	nation.	Deviation.	Index.	
1842.			,		,		0 /			0 /	。 ,	0 / 0
Sept. 19		$-5\mathring{4}$		$30\mathring{5}$		CR.	$-16\ 17$	S.E.	$-5\mathring{4}$	$-2^{\circ} 25^{\circ}$	$+\mathring{1}$ $1\mathring{3}$	$-1\mathring{7} 2\mathring{9} -1\mathring{7} 2$
13	3.	—54	10	305	35	C.	-18 13	w.	-54	72 41	$-0 \ 40$	$\begin{bmatrix} -16 & 06 \\ 15 & 50 \end{bmatrix} - 16 \ 0$
_	.1					C.	-18 05	w. by s.	-54	+2 47	-0.40	<u>- 15 58 j</u>
1.	4.	—53	54	304	25	C.	-16 49	s. by w.	-54	+0.15	-0.40	$\begin{bmatrix} -17 & 14 \\ 22 & 20 \end{bmatrix}$
	- [CR.	-22 05	s. by w.	-54	+0.15	-0.40	$ -22 \ 30 \ \rangle -19 \ 5$
			077	000	10	CR.	- 19 35	s. by w.	-54	+0.15	-0.40	$\begin{bmatrix} -20 & 00 \\ 21 & 47 \end{bmatrix}$
1.	7.	-55	07	300	19	C.	-23 12	S.W.	-55	+2.05	-0.40	$\begin{bmatrix} -21 & 47 \\ 21 & 40 \end{bmatrix}$ -21 4
			40	00/7	00	C.	-23 30	s.w. by w.	-55 5C	+230	-0.40	$\begin{bmatrix} -21 & 40 \\ 04 & 07 \end{bmatrix}$
13	8.	- 55	40	297	UU	C.	-2504	s.w. by s.	-56	+1 37	-0.40	$\begin{bmatrix} -24 & 07 \\ 04 & 22 \end{bmatrix}$
			40	006	00	C.	-26 15	s.w. ½ w.	- 56	+2 22	-0.40	$\begin{vmatrix} -24 & 33 \\ 92 & 14 \end{vmatrix} - 23 & 5$
NT /	-	-55		296		C.	-24 56	s.w. ½ w.	-56	+2 22	-0.40	$egin{array}{cccc} -23 & 14 \ -23 & 35 \ \end{array}$
Nov.	7.	-56	07	292	00	C. C.	-20 41	N.E. by E.	-58	$ \begin{array}{r rrrr} -2 & 14 \\ -2 & 14 \end{array} $	$-0 \ 40 \ -0 \ 40$	$\begin{bmatrix} -23 & 33 \\ -24 & 40 \end{bmatrix}$
						c.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	N.E. by E. N.E. by E. ½ E.	$-58 \\ -58$	$-2 14 \\ -2 25$	-0.40 -0.40	$\begin{vmatrix} -24 & 40 \\ -22 & 23 \end{vmatrix} $ \rightarrow 22 1
						C.	-19 18 $-15 12$	N.E. by E. 2 E.	-58	-2 25	-0.40	$\begin{bmatrix} -22 & 23 \\ -18 & 17 \end{bmatrix}$
	8.	- 55	40	295	20	C.	$-20 \ 10$	N.E. by E.	-57	-207	-0.40	-2257
44	0.	00	1,0	230	20	C.	-20 10 $-21 39$	N.E. by E.	-57	-207	-0.40	-24 26
	1					C.	$-21 \ 31$	N.E. by E.	-57	-207	-0.40	_94 18
	- 1					C.	$-22 \ 48$	N.E. by E.	-57	-207	-0.40	$\begin{vmatrix} 24 & 10 \\ -25 & 35 \end{vmatrix} > -24 & 5$
						C.	-22 02	N.E. by E.	-57	-2 07	-0.40	$\begin{bmatrix} -24 & 49 \end{bmatrix}$
	-					CR.	-24 10	N.E. by E.	-57	-207	-0.40	-26 57
10	0.	-55	29	299	03	C.	-25 24	N.W. $\frac{1}{2}$ N.	-56	+1 50	-0.40	-24 14
_	1		~3	~55		C.	-2348	N.W. $\frac{1}{4}$ N.	-56	+1 57	-0 40	$-22 \ 31$
	1					C.	-21 57	N.	-56	+0.16	-0.40	-22 21
	1					C.	-25 17	N.N.W.	-56	+1 12	-0.40	-24 45
	- 1					C.	-23 17	w.	-56	+3 05	-0 40	-20 52
	- 1					C.	-24 17	s.s.w.	-56	+1 00	-0.40	-23 57 > -24 0
	-					C.	-2658	w. by s.	-56	+3 05	0 40	$ -24 \ 33 $
						C.	-28 22	s.w. by w.	-56	+236	-0 40	-26 26
	1					C.	-2452	s.s.w.	-56	+1 00	-0.40	$ -24 \ 32 $
						C.	-2442	w.	-56	+305	-0 40	$ -22 \ 17 $
	-					CR.	-3001	s.w.	-56	+2 08	-0.40	$[-28 \ 33)$
1	1.	-54	43	299	44	C.	-22 09	N.	-55	+0.15	-0 40	$-22 \ 34)$
	1			1.5		C.	-22 08	n.w. by n.	-55	+1 34	-0.40	$ -21 \ 14 $
	- 1	-54	16	300	05	C.	-24 13	N.	-55	+0.13	-0 40	$ -24 \ 40 > -22 \ 0$
						C	$-22\ 31$	N.	-55	+0.13	-0 40	-22 58
		-54		299		CR.	-1946	N.W. by N.	-55	+1 34	-0 40	[-18 52]
1:	2.	-52	54	301	05	C.	-23 25	N. by w. $\frac{1}{2}$ w.	-53	+0.52	-0.40	$\begin{bmatrix} -23 & 13 \\ 21 & 51 \end{bmatrix}$ -22 3
				00.		C.	-22 03	N. by W. $\frac{1}{2}$ W.	-53	+0.52	-0.40	$-z_1$ or j
		-52	23	301	30	C.	-21 14	N. by E.	-53	-0 08	-0.40	$-22 \ 02$
						C.	-21 14	N. by E.	-53	-0.08	-0.40	-22 02
	- 1					C.	$-21 ext{ } 46$	N. by E.	-53	-0 08	-0.40	-22 34
	-					C.	-19 38	N. by E.	-53	-0.08	-0.40	-20 26
						C.	-20 29	N.N.E.	-53	-0.31	$-0 40 \\ -0 40$	$\begin{vmatrix} -21 & 40 \\ -19 & 25 \end{vmatrix}$ $-21 & 0$
						C.	-18 26	N. by E. $\frac{1}{2}$ E.	-53	$-0 19 \\ -0 19$	-0.40	-19 25 -19 26
	1					C.	-18 27	N. by E $\frac{1}{2}$ E.	$-53 \\ -53$	-0.19 -0.57	-0.40	$\begin{bmatrix} -19 & 20 \\ -21 & 00 \end{bmatrix}$
						C.	-19 23 $-19 27$	N.E. by N.	-53	-0.37 -0.31	-0.40	$-21 00 \\ -20 38$
		-52	50	301	ΛΛ	CR.	-19 27 $-21 10$	N.N.E. N.N.W.	$-53 \\ -53$	$-0.31 \\ +1.03$	-0.40	$\begin{bmatrix} -20 & 38 \\ -20 & 47 \end{bmatrix}$
Dec. 18	g.	-52		303		C.	-21 10 $-18 59$	S.S.E. ½ E.	-53	-149	+1.13	$-19 \ 35$
- LUC 10	•	0~	-0	200	12	C.	-18 39 $-19 25$	s.E. by s.	-53	-202	+1 13	-20 14
	-					CR.	$-19 \frac{23}{27}$	E. by N.	-53	-2 19	+1 13	$\begin{bmatrix} 20 & 11 \\ -20 & 33 \end{bmatrix} > -19 \ 4$
			- 1					, , -1.				

								7				
	TD.							Approx-	Common	diana.		
Date.	. P	ositi	on.		Initials.	Declination	Direction of	imate	Correc	tions.	Declination	1.
		1			iti	observed.	ship's head.	Incli-				
	Lat.		Lon	g.	1			nation.	Deviation.	Index.		
1842.		-										
Dec. 19.	$-5\overset{\circ}{3}$ 5	á	$30\mathring{3}$	46	c.	-21°11′	s. by E.	$-5\mathring{4}$	$-\mathring{1}$ $\mathring{03}$	$+\mathring{1}$ $\cancel{13}$	-21 01)	0 /
Dec. 13.	-000	0	505	49	c.	-21 11 -19 18	S. Dy E.	-54	$-1 05 \\ -1 38$	+1 13 + 113	$\begin{bmatrix} -21 & 01 \\ -19 & 43 \end{bmatrix}$	20 22
20	55 4	5	305	17	c.	$-19 18 \\ -17 30$	S.S.E. 3/4 E.	-55	-2 03	+1 13	-18 20	
~0.	- 50 1		000	-1	c.	-17 30 $-18 20$	s.E. by s.	-55	-2 10	+1 13	-19 17	
					c.	-19 50	s.E. by s.	-55	-2 10	$+1 \ 13$	_ 90 47	
					č.	-20 29	s.E. by s.	-55	-2 10	+1 13	-21 26 >-	20 12
					Cr.	$-20 \ 34$	S.S.E.	-55	-141	+1 13	21 02	
					CR.	-1924	s.E. by s.	-55	$-2^{\circ}10^{\circ}$	+1 13	$\begin{bmatrix} -20 & 21 \end{bmatrix}$	
21.	-563	4	306	39	C.	-19 10	s.s.e.	-56	_1 44	-0.40	-21 34	
	-571		306	44	Č.	-20 07	s. by E.	-56	_1 05	-0 40	01 50	
			000		Č.	-18 34	s. by E.	-56	_1 05	-0 40	$ -20 \ 30 \rangle -$	21 09
	-563	4	306	39	Čr.	-20 07	S.S.E.	-56	-144	+1 13	$-20 \ 38$	
22.	-582		308		Č.	$-20 \ 42$	s. by E. $\frac{1}{2}$ E.	-57	_1 28	-0.40	-22 50	
			0		č.	$-18 \ 44$	S. $\frac{1}{2}$ E.	-57	_0 45	-0 40	-20 09	
					č.	$-16\ 17$	S.S.E. $\frac{1}{2}$ E.	-57	-2 03	$-0 \ 40$	-19 02	-
	-	-1			C.	-1622	s. by E.	-57	_1 06	-040		20 06
					C.	-1552	s. by E.	-57	_1 06	-0 40	-17 38	
					C.	-18 41	S.S.E.	-57	-147	-040	-21 08	
					C.	-1923	S.S.E.	-57	_1 47	-040	-21 50	,
23.	-592	8	308	20	C.	$-20\ 05$	s.	-58	-0 24	-040	-21 09	
					Cr.	$-20 \ 38$	s.	-58	-0 24	-040		21 29
	5				CR.	-2114	s. by w.	-58	+0.19	-0 40	$-21 \ 35$	
24.	$-61 \ 3$	0	307	40	C.	-19 37	s.s.w.	-60	+1 12	-0 40	-1905	20 22
					C.	-22 12	s.s.w.	_60	+1 12	$-0 \ 40$	- 21 40 J	20 22
26.	$-62 \ 3$	1	308	05	CR.	-23 02	n. by w.	-60	+0.50	-040	$[-22 \ 52]$	23 50
	•				CR.	-2601	s.w. by s.	-60	+153	-0 40	-24 48)	-0 00
27.	-62 2	2	308	00	C.	$-30\ 38$	w. by s. $\frac{1}{2}$ s.		+3 30	-0 40	-27 48	
					C.	-24 32	s.w. by w.	-60	+3 04	-0.40	-22 08	
					C.	-24 22	w.s.w.	-60	+3 23	-040		2 2 43
	0.5				S.	-2108	s.w. by w.	-60	+3 04	-0.40	-18 44	
	-621		308		CR.	$-25\ 10$	s.w.	-60	+232	-0.40	$\begin{bmatrix} -23 & 18 \end{bmatrix}$	
28.	-623		306		C.	-29 23	s.w.	-61	+238	-0.40	$ -27 \ 25$	
	-624	1	306	09	C.	-24 54	s.w. $\frac{1}{4}$ w.	-61	+2 46	-0.40	-22 48	
			. :	į	C.	-2442	s.w. ¼ w.	-61	+2 46	+1 13	-20 43	
					C.	-25 07	s.w. $\frac{1}{2}$ w.	-61	+254	-0.40	-22 53	, ·
		1			C.	-24 31	s.w. ½ w.	-61	+2 54	-0 40	$\begin{bmatrix} -22 & 17 \\ 20 & 20 \end{bmatrix}$	
					С.	$-24 \ 37$	s.w. $\frac{1}{2}$ w. s.w. $\frac{1}{4}$ w.	-61	$\begin{vmatrix} +2 & 54 \\ +2 & 46 \end{vmatrix}$	+1 13	-20 30	
				-	C.	$-25 \ 40$		-61	+2 40	+1 13	$\begin{vmatrix} -21 & 41 \\ -20 & 58 \end{vmatrix}$	
					C.	$ \begin{array}{rrr} -24 & 49 \\ -25 & 24 \end{array} $	S.W.	$\begin{vmatrix} -61 \\ -61 \end{vmatrix}$	$\begin{vmatrix} +2 & 38 \\ +2 & 38 \end{vmatrix}$	$+1 13 \\ -0 40$	$\begin{bmatrix} -20 & 58 \\ -23 & 26 \end{bmatrix}$	
					C.	$ \begin{array}{r rrrr} -25 & 24 \\ -25 & 41 \end{array} $	S.W.	-61	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	-0.40 $+1.13$	$\begin{bmatrix} -23 & 20 \\ -21 & 42 \end{bmatrix}$	
	1.				C.	-25 41 -24 38	S.W. $\frac{1}{4}$ W.	-61	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$+1 \ 13$	- 20 30	
					C.	-24 38 $-24 10$	s.w. $\frac{1}{4}$ w. s.w. $\frac{1}{4}$ w.	-61	+240 + 246	+1 13	$\begin{vmatrix} -20 & 39 \\ -20 & 11 \end{vmatrix}$	21 41
		}			c.	-23 58	s.w. 4 w.	-61	$+2 & 40 \\ +1 & 58$	+1 13	$\begin{bmatrix} -20 & 11 \\ -20 & 47 \end{bmatrix}$	
					s.	-25 06	s.w. by s.	-61	+158	$+1 \ 13$	$\begin{bmatrix} 20 & 47 \\ -22 & 55 \end{bmatrix}$	
					s.	-25 48	s.w. by s. s.w. $\frac{1}{2}$ w.	-61	+254	+1 13	$\begin{bmatrix} 22 & 33 \\ -21 & 41 \end{bmatrix}$	
1					S.	$-23 48 \\ -22 08$	$s.w. \frac{2}{2} w.$	-61	+254	+1 13	-18 01	
					Š.	-21 42	s.w. $\frac{1}{2}$ w.	-61	+254	+1 13	17 35	
					š.	$-24 \ 38$	s.w. ½ s.	-61	+2 28	+1 13	-20 57	
	1				Cr.	$-25 \ 30$	s.w.	-61	+2 38	+1 13	-21 39	
					Cr.	-25 29	s.w.	-61	+2 38	$-0 \ 40$	-23 31	
					CR.	-24 38	s.w.	-61	+238	+1 13	-2047	
					CR.	-25 50	s.w.	-61	+238	-0 40	-23 52	
	-63 4		304	45	C.	-24 08	s.s.w. $\frac{1}{2}$ w.	-62	+1 40	+1 13	1	21 15
31.	$-63 \ 3$	9	304	40	C.	-2246	s.~	-62	-0 24	+1 13	-2157	
	_				C.	-24 20	s.	-62	-0.24	+1 13	-23 31	•
}	-640	5	304	00	C.	-20 52	E. by s.	-62	-353	+1 13		23 04
	Co		001		Ç.	-20 53	s.E. by E.	-62	-336	$+1 \ 13$	-23 16	
	-634	5	304	40	C.	-23 55	s.	-62	-0.24	+1 13	-23 06	
1						<u> </u>	<u> </u>		1	l .	1	

Date	е.	F	Posit	ion.		Initials.	Declination	Direction of	Approx- imate	Correc	etions.	Decli	nation.	
		Lat.		Lon	ıg.	Ini	observed.	ship's head.	Incli- nation.	Deviation.	Index.			
1843 Jan.	3. 1.	$-6\mathring{4}$	1ó	304°	40 [′]	C. Cr.	$-25^{\circ} 16^{\circ} \\ -23^{\circ} 58^{\circ}$	N. ½ E. W.N.W.	$-63 \\ -63$	$-{\stackrel{\circ}{0}}{\stackrel{\circ}{0}}{\stackrel{\circ}{3}}{}_{+3}{\stackrel{\circ}{3}}{}_{7}$	$ + \mathring{1} \ \mathring{1} \mathring{3} $ $ + \mathring{1} \ \mathring{1} \mathring{3} $	$-2\overset{\circ}{4} 0\overset{\circ}{6} \\ -19 08$	1	
						CR. CR. CR.	$ \begin{array}{rrr} -25 & 44 \\ -22 & 22 \\ -28 & 16 \end{array} $	s.w. n.n.w. w.n.w.	$ \begin{array}{r} -63 \\ -63 \\ -63 \end{array} $	$ \begin{array}{r} +2 & 50 \\ +1 & 33 \\ +3 & 37 \end{array} $	$+1 \ 13 \\ +1 \ 13$	$-21 \ 41 \ -19 \ 36$	$-2\mathring{1}$	35
	2.	-64 :		303	54	C. C.	-24 12 $-26 11$	N.N.W. N.W. 3/4 W.	$-63 \\ -63$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$+1 \ 13 \\ +1 \ 13 \\ +1 \ 13$	$\begin{bmatrix} -23 & 26 \\ -21 & 26 \\ -21 & 35 \end{bmatrix}$	$\left21 \right $	30
	4.	-64	38	304	20	C. C.	$ \begin{array}{rrrr} -21 & 06 \\ -21 & 23 \\ -22 & 05 \end{array} $	s.e. by s. s.e. s. by e.	$ \begin{array}{r} -63 \\ -63 \\ -63 \end{array} $	$ \begin{array}{rrrr} -2 & 46 \\ -3 & 19 \\ -1 & 17 \end{array} $	$+1 \ 13 \\ +1 \ 13 \\ +1 \ 13$	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	-22	5.0
						C. C.	$-24 38 \\ -23 19$	N.N.W. N.W. $\frac{3}{4}$ W.	$-63 \\ -63$	$^{+1}_{+3}$ $^{33}_{07}$	$^{+1}$ 13 $^{+1}$ 13	$\begin{bmatrix} -21 & 52 \\ -18 & 59 \end{bmatrix}$		
		-64		303 304		C. C. S.	$ \begin{array}{rrrr} -26 & 22 \\ -22 & 30 \\ -23 & 17 \end{array} $	w. ½ s. N.N.E. s. by E. ½ E.	$ \begin{array}{r} -63 \\ -63 \\ -63 \end{array} $	$\begin{vmatrix} +4 & 01 \\ -1 & 01 \\ -1 & 43 \end{vmatrix}$	$+1 \ 13 \\ +1 \ 13 \\ +1 \ 13$	$\begin{bmatrix} -21 & 08 \\ -22 & 18 \\ -23 & 47 \end{bmatrix}$		
						Р. Р.	-23 59 $-21 13$	s. by E. s.s.E.	$-63 \\ -63$	$\begin{vmatrix} -1 & 17 \\ -2 & 10 \end{vmatrix}$	$+1 \ 13 \\ +1 \ 13$	$\begin{bmatrix} -24 & 03 \\ -22 & 10 \end{bmatrix}$	-zz	44
		-64	29	303	55	CR. CR.	$ \begin{array}{rrr} -22 & 03 \\ -23 & 05 \\ -27 & 27 \end{array} $	s.s.e. s. by e. w.	$ \begin{array}{r} -63 \\ -63 \\ -63 \end{array} $	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$+1 \ 13 \\ +1 \ 13 \\ +1 \ 13$	$\begin{bmatrix} -23 & 00 \\ -23 & 09 \\ -22 & 13 \end{bmatrix}$		
	5.		18	304 303	04	C. C.	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	w. by n. w. by n. s.s.w. ½ w.		$\begin{vmatrix} +3 & 52 \\ +3 & 52 \\ +1 & 45 \end{vmatrix}$	$\begin{vmatrix} +1 & 13 \\ +1 & 13 \\ +1 & 13 \\ +1 & 13 \end{vmatrix}$	$ \begin{bmatrix} -22 & 10 \\ -20 & 32 \\ -23 & 30 \\ -25 & 10 \end{bmatrix} $		
						C. C. S.	-26 01 $-20 12$	s.s.w. $\frac{1}{2}$ w. E. by N. $\frac{1}{2}$ N.	$ \begin{array}{r r} -63 \\ -63 \end{array} $	$\begin{vmatrix} +1 & 45 \\ -3 & 27 \\ +3 & 44 \end{vmatrix}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{bmatrix} -23 & 03 \\ -22 & 26 \end{bmatrix}$	>-22	1
						S. Cr.	$ \begin{array}{rrr} -26 & 21 \\ -26 & 20 \\ -25 & 11 \end{array} $	w. by n. $\frac{1}{2}$ n. w. by n. w.n.w.		$\begin{vmatrix} +3 & 55 \\ +3 & 37 \end{vmatrix}$	$\begin{vmatrix} +1 & 13 \\ +1 & 13 \\ +1 & 13 \end{vmatrix}$	$ \begin{vmatrix} -21 & 24 \\ -21 & 12 \\ -20 & 21 \end{vmatrix} $		
	6.	-64	12	303	04	Сп. С. С.	$ \begin{array}{rrr} -26 & 53 \\ -24 & 03 \\ -27 & 30 \end{array} $	w.n.w. s. by e. s.w. by w.		$\begin{vmatrix} +3 & 37 \\ -1 & 17 \\ +3 & 25 \end{vmatrix}$	$\begin{vmatrix} +1 & 13 \\ +1 & 13 \\ +1 & 13 \end{vmatrix}$	$\begin{bmatrix} -22 & 03 \\ -24 & 07 \\ -22 & 52 \end{bmatrix}$).	33
	7.	-64	28	303	20	C. C.	-20 55 $-23 48$	E. by s. $\frac{3}{4}$ s. s.s.E.	$-62 \\ -63$	$ \begin{array}{r rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{bmatrix} -23 & 39 \\ -24 & 45 \end{bmatrix}$	$\begin{cases} 1 & 1 \\ 1 & 1 \end{cases}$	
						C. S. Cr.	$ \begin{array}{r} -28 & 04 \\ -24 & 13 \\ -24 & 13 \end{array} $	s. by E. $\frac{1}{2}$ E. s.s.E.	$ \begin{array}{r r} -63 \\ -63 \\ -63 \end{array} $	$\begin{vmatrix} +3 & 57 \\ -1 & 43 \\ -2 & 10 \end{vmatrix}$	$\begin{vmatrix} +1 & 13 \\ +1 & 13 \\ +1 & 13 \end{vmatrix}$	$ \begin{vmatrix} -22 & 54 \\ -24 & 43 \\ -25 & 10 \end{vmatrix} $	>-24	2
	8.	-64	36	303	10	C. S.	$ \begin{array}{rrr} -25 & 15 \\ -24 & 51 \\ -25 & 46 \end{array} $	s. by w. n. by w. s. by w.		$\begin{vmatrix} +0 & 29 \\ +0 & 55 \\ +0 & 29 \end{vmatrix}$	$\begin{vmatrix} +1 & 13 \\ +1 & 13 \\ +1 & 13 \end{vmatrix}$			5 6
	9.	$\begin{bmatrix} -64 \\ -64 \end{bmatrix}$		303 303		P. Cr. C.	$ \begin{array}{r} -25 & 19 \\ -23 & 51 \\ -21 & 10 \end{array} $	s.s.w. n.n.w. E.s.E.	$ \begin{array}{r r} -63 \\ -63 \\ -63 \end{array} $	$\begin{array}{ c c c c } +1 & 22 \\ +1 & 33 \\ -3 & 57 \end{array}$	+1 13 +1 13 +1 13	1		
	J.	-64		302		P. C.	$-21 ext{ } 49 \\ -23 ext{ } 40$	E.S.E. Observed	-63	-3 57	+1 13	- 24 33	{ -24	
	10.	-64	38	302	40	C. C. S.	$ \begin{array}{rrrr} -24 & 04 \\ -23 & 53 \\ -28 & 00 \end{array} $	on ice.	-63	+3 25	-0 40	$\begin{bmatrix} -23 & 52 \\ -25 & 15 \end{bmatrix}$	}	
						P. Cr.	-26 44 -23 14	s.w. by w.	-63 	+3 25	$-0 \ 40$ $\{$	$\begin{bmatrix} -23 & 59 \\ -24 & 07 \end{bmatrix}$		·
	12. 13.	_		302 302		Cr. C. C.	$ \begin{array}{r} -25 & 00 \\ -29 & 57 \\ -22 & 15 \end{array} $	on ice. w. s.e.	$ \begin{array}{r} -63 \\ -63 \end{array} $	$\begin{vmatrix} +4 & 01 \\ -3 & 19 \end{vmatrix}$	$+1 \ 13 \ +1 \ 13$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	-24	
						C. S. P.	$ \begin{array}{rrr} -26 & 15 \\ -26 & 22 \\ -24 & 08 \end{array} $	s. by E. w. by N. $\frac{1}{2}$ N. s. by E. $\frac{1}{2}$ E.	$ \begin{array}{r} -63 \\ -63 \\ -63 \end{array} $	$ \begin{array}{r rrrr} -1 & 17 \\ -3 & 46 \\ -1 & 43 \end{array} $	$+1 \ 13 \\ +1 \ 13 \\ +1 \ 13$	$ \begin{array}{rrr} -26 & 19 \\ -28 & 55 \\ -24 & 38 \end{array} $	-25	59
	14.	-64	35	302	45	CR. S.	$-24 44 \\ -27 13$	s.s.e. w. ½ s.	$-63 \\ -63$	$ \begin{array}{r} -2 & 10 \\ +4 & 01 \end{array} $	$+1 \ 13 \\ +1 \ 13$	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$		
	15.	-64 3	30	303	04	P. Cr. C.	$ \begin{array}{rrr} -27 & 29 \\ -24 & 27 \\ -22 & 23 \end{array} $	W. ½ N. S.E. S.S.E.	$-63 \\ -63 \\ -63$	$ \begin{array}{r} +3 & 57 \\ -3 & 19 \\ -2 & 10 \end{array} $	$+1 13 \\ +1 13 \\ +1 13$	$ \begin{array}{rrr} -22 & 19 \\ -26 & 33 \\ -23 & 20 \end{array} $	-23	34

Date	.		Posit	tion.		Initials.	Declination	Direction of	Approx- imate	Correc	etions.	Declination.
		Lat		Lor	ıg.	Init	observed.	ship's head.	Incli- nation.	Deviation.	Index.	
1843.		· · ·	· (- 0		<u> </u>	2° 22		$-6\mathring{3}$	9 . /		08 0 is
Jan.	18.	$-6\mathring{4}$	02	305°		C.	-2302	s. by E.		-115	$+\mathring{1}$ $\cancel{13}$	-23 04
		-64	04	305	00	C.	-25 44	s.s.w. $\frac{1}{2}$ w.	-63	+1 45	$+1\ 13$	$egin{array}{c ccccccccccccccccccccccccccccccccccc$
						C.	$-22\ 18$	N.E. by N.	-63	-140	+1 13	
						С.	-25 59	s.w. by s.	-63	+208	+1 13	-22 38
		64	00	905	'αΛ-	C.	-19 34	E. by s. $\frac{1}{2}$ s.	-63	-3 57	+1 13	- 22 18)
		- 64		305		S.	$-21 \ 43$	N.E. $\frac{1}{2}$ N.	-63	-1.58	+1 13	$egin{pmatrix} -22 & 28 \ -22 & 00 \ \end{pmatrix} -21 \ 4$
	1	-64		305		S. P.	-19 16	E.S.E.	$-63 \\ -63$	$\begin{vmatrix} -3 & 57 \\ -1 & 40 \end{vmatrix}$	$+1 \ 13 \\ +1 \ 13$	$igg -22 & 00 \ -21 & 4 \ -21 & 00 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $
	19.	$-64 \\ -64$		305 306		C.	$-20 \ 33$	N.E. by N.	-63	$\begin{bmatrix} -1 & 40 \\ -3 & 49 \end{bmatrix}$	+1 13 + 113	$\begin{bmatrix} -21 & 00 \end{bmatrix}$
	19.	-04	20	300	vv	C.	-19 53 $-25 57$	s.E. by E. w. by N.	-63	$\begin{vmatrix} -3 & 49 \\ +3 & 52 \end{vmatrix}$	$+1 \ 13$	$\begin{bmatrix} -22 & 29 \\ -20 & 52 \end{bmatrix}$
	1					s.	$-20 \ 18$	s.E. by E.	-63	$\begin{bmatrix} +3 & 32 \\ -3 & 43 \end{bmatrix}$	$+1 \ 13 +1 \ 13$	$\begin{vmatrix} -20 & 32 \\ -22 & 48 \\ -21 & 3 \end{vmatrix}$
	.		1			$ \tilde{\mathbf{s}} $	-25 26	W.N.W.	-63	$\begin{vmatrix} -3 & 13 \\ +3 & 37 \end{vmatrix}$	$^{+1}_{+1}$ 13	$\begin{bmatrix} -20 & 36 \\ -20 & 36 \end{bmatrix}$
						S.	-26 06	w.	-63	+4 00	+1 13	$\begin{bmatrix} -20 & 53 \end{bmatrix}$
	20.	-64	16	304	49	$\hat{\mathbf{S}}$.	$-20 \ 47$	E.	-63	$\begin{bmatrix} -3 & 39 \\ -3 & 39 \end{bmatrix}$	$^{+1}_{+1}$ 13	-23 13
		o r	-0	504	120	S.	$-24 \ 46$	w.	-63	+4 00	$+1 \ 13$	$\begin{vmatrix} -26 & 16 \\ -19 & 33 \end{vmatrix} > -22 & 0$
						P.	-28 25	w.s.w.	-63	$+3 \ 47$	+1.13	$\begin{bmatrix} -23 & 25 \end{bmatrix}$
	21.	-64	20	304	42	s.	-1858	S.E.	-63	-3 23	+1 13	-21 08
	22.	-64		304		č.	$-20 \ 15$	E. $\frac{1}{2}$ S.	-63	+250	+1 13	-22 52
				001	- 0	C.	$-25\ 36$	N.W. $\frac{1}{4}$ N.	-63	$+2 \ 37$	+1 13	01 44
	l					S.	-20 24	E. $\frac{3}{4}$ N.	-63	-3 39	+1 13	$\begin{vmatrix} -21 & 44 \\ -22 & 50 \end{vmatrix} - 22 \ 1$
						S.	-21 22	E.N.E.	-63	-3 15	+1 13	-23 24
						Р.	-26 52	$w. \frac{1}{2} s.$	-63	+4 00	+1 13	$ -21 \ 39 $
	23.	-64	20	304	00	C.	-27 17	w. by $\tilde{n} \cdot \frac{3}{4} \tilde{n}$.		+3 49	+1 13	$-22 \ 15$
	- 1					C.	-21 54	E. $\frac{1}{4}$ N.	-63	-3 39	+1 13	-24 20
	. [S.	$-25\ 54$	N.W. by W.	-63	+3 25	+1 13	$\begin{vmatrix} -21 & 20 \\ -21 & 16 \end{vmatrix} - 22 \ 3$
	- 1		.			·S.	$-26\ 17$	N.W.	-63	+246	+1 13	$ -22 \ 18 $
	26.	-64	04	304	10	C.	-28 20	$w_{\cdot} \frac{1}{2} s_{\cdot}$	-63	+4 00	+1 13	$ -23 07^{4}$
			1			C.	-22.24	s.E.	-63	-3 23	+1 13	$ -24 \ 34 $
	- 1					S.	-25 20	W.N.W.	-63	$+3 \ 37$	$+1 \ 13$	-20 30
	- 1					S.	-22 19	S.E.	-63	-3 23	+1 13	$ -24 \ 29 \ \rangle -22 \ 4$
			.			S.	-21 28	S.E. ½ E.	-63	$-3 \ 31$	+1 13	$ -23 \ 46 $
	1		1			Ρ.	-26 50	w. by N.	-63	+355	+1 13	-21 42
	28.	-64		304		Р.	-18 22	E. $\frac{1}{2}$ N.	-63	-3 39	+1 13	$[-20 \ 48]$
	29.	-64	05	303	55	C.	-21 26	S.E.	-63	_3 23	+1 13	$ -23 \ 36)$
	I		1			C.	-1949	E. by s.	-63	-358	+1 13	-22 34
						C.	-27 30	s.w. $\frac{1}{2}$ w.	-63	+3 08	+1 13	$\begin{vmatrix} -23 & 09 \\ -22 & 15 \end{vmatrix}$
	.		-			C.	-24 32	N. by W. $\frac{1}{4}$ W.	-63	+104	+1 13	-22 15
						S.	-2457	W.N.W.	-63	$+3 \ 37$	+1 13	$\begin{bmatrix} -20 & 07 \\ 02 & 05 \end{bmatrix}$
	20	GA	00	000	r- ==	S.	-20 55	S.E.	-63	-3 23	+1 13	$\begin{bmatrix} -23 & 05 \end{bmatrix}$
	ن 00.	-64	09	303	57	P.	-25 28	N.W.	-63	+2 46	+1 13	$\begin{bmatrix} -21 & 29 \\ 21 & 06 \end{bmatrix}$
						P.	-24 47	N.W. $\frac{1}{2}$ N.	-63	+2 28	+1 13	$\begin{bmatrix} -21 & 06 \\ 23 & 40 \end{bmatrix}$
						CR.	-21 22	$E. \frac{1}{2} N.$	-63	-3 40 9 46	+1 13	-23 49
						CR.	-25 20	N.W.	-63	+246	+1 13	$\begin{vmatrix} -21 & 21 \\ -22 & 51 \end{vmatrix}$ $\begin{vmatrix} -22 & 1 \\ -2 & 51 \end{vmatrix}$
						CR.	-20 07	E.S.E.	-63	-357	+1 13	$\begin{bmatrix} -22 & 51 \\ -22 & 42 \end{bmatrix}$
	.					CR.	-25 28	N.N.W.	-63	+133	+1 13	$\begin{bmatrix} -22 & 42 \\ -22 & 16 \end{bmatrix}$
	31.	-64	nn	304	90	CR. S.	-19 50	E. by N.	$\begin{vmatrix} -63 \\ -63 \end{vmatrix}$	$\begin{bmatrix} -3 & 39 \\ -1 & 40 \end{bmatrix}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{bmatrix} -22 & 10 \\ -23 & 07 \end{bmatrix}$
	٠1.	0-1	00	504	NN	P.	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	N.E. by N.	-63	-1 58	+1 13 + 1 13	$\begin{bmatrix}25 & 07 \\24 & 32 \end{bmatrix}$
						Cr.	$-23 \ 47$ $-22 \ 54$	N.E. ½ N.	-63	-0.23	+1 13 + 1 13	$\begin{vmatrix} -24 & 32 \\ -22 & 04 \end{vmatrix} > -23 $
						CR.	$-22 54 \\ -21 56$	n. by E.	-63	-0.25 -1.40	$+1 \ 13$	$\begin{bmatrix} -22 & 23 \\ -22 & 23 \end{bmatrix}$
	-					CR.	-21 36 $-22 36$		-63	-1 40	+1 13	$\begin{bmatrix} -23 & 03 \\ -23 & 03 \end{bmatrix}$
eb.	1.	-63	56	305	22	S.	-25 19	N.E. by N.	-63	+246	+1 13	$\begin{bmatrix} 20 & 00 \\ -21 & 20 \end{bmatrix}$
	- 1			000	~~	P.	$-24 \ 41$	W.	-63	+4 00	+1 13	-19 28
						CR.	-2349	N.	-63	+0.15	+1 13	$\begin{vmatrix} -22 & 21 \\ -22 & 21 \end{vmatrix} > -21$
	-											$\begin{bmatrix} -21 & 34 \end{bmatrix}$
	- 1					CR.	-26 12	s.w. by w.	-63	+3 25	+1 13	- 21 34 I

Date.		Posi	tion.	Initials.	Declination	Direction of	Approx- imate	Corre	ctions.	Declination.
		Lat.	Long.	Init	observed.	ship's head.	Incli- nation.	Deviation.	Index.	
1843. Feb.	3.	$-6\mathring{4}$ 25	305° 30	S. P.	$-22^{\circ}05^{\circ}$ $-20^{\circ}59$	S.S.E. N.N.E.	$-62 \\ -62$	$-\overset{\circ}{2} \overset{\circ}{0}\overset{\circ}{8}$	$+\mathring{1}\overset{\circ}{1}\mathring{3}$	-24 00 20 47
. :	4	GA 16	204 47	P. Cr.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	s.e. by s.	$-62 \\ -62$	$ \begin{array}{r rrrr} -2 & 45 \\ -1 & 01 \end{array} $	$+1 \ 13$ $+1 \ 13$ $+1 \ 13$	$ \begin{vmatrix} -20 & 47 \\ -22 & 32 \\ -21 & 50 \end{vmatrix} -22 & 17$
	4. 9.	-64 16 $-64 10$	304 47 309 30	CR. C. C.	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	s. by w. E.S.E. E. by s. ½ s.		$\begin{vmatrix} +0 & 29 \\ -3 & 57 \\ -3 & 59 \end{vmatrix}$	$+1 \ 13 \\ +1 \ 13 \\ +1 \ 13$	$ \begin{vmatrix} -23 & 39 & -23 & 39 \\ -20 & 08 & \\ -18 & 57 & \\ 18 & 57 & \\ \end{bmatrix} $
				S. P. P.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	S.E. $\frac{1}{2}$ S. S.E. $\frac{1}{4}$ S.	$-62 \\ -62 \\ -62$	$\begin{bmatrix} -3 & 00 \\ -3 & 19 \\ -3 & 11 \end{bmatrix}$	$+1 \ 13 $ $+1 \ 13 $ $+1 \ 13$	$\begin{vmatrix} -19 & 42 \\ -19 & 19 \\ -19 & 06 \\ 20 & 28 \end{vmatrix} -20 & 05$
				CR. CR. CR.	$ \begin{array}{rrrr} -17 & 58 \\ -19 & 48 \\ -17 & 46 \\ -16 & 00 \end{array} $	s.E. by E. E.S.E. E.S.E.	$ \begin{array}{r} -62 \\ -62 \\ -62 \\ -62 \end{array} $	-3 43 -3 57 -3 57 -3 57	$ \begin{array}{r} +1 & 13 \\ +1 & 13 \\ +1 & 13 \\ +1 & 13 \end{array} $	$ \begin{vmatrix} -20 & 28 \\ -22 & 32 \\ -20 & 30 \\ -18 & 44 \end{vmatrix} $
19	2.	-64 36	315 40	CR. C.	$ \begin{array}{r rrrr} -18 & 42 \\ -14 & 10 \\ -14 & 42 \end{array} $	E.S.E. N.E. by E. N.E. by E. ½ E.	$ \begin{array}{r r} -62 \\ -61 \\ -61 \end{array} $	$ \begin{array}{r rrrr} -3 & 57 \\ -2 & 34 \\ -2 & 47 \end{array} $	$ \begin{array}{c} +1 & 13 \\ +1 & 13 \\ +1 & 13 \end{array} $	$\begin{bmatrix} -21 & 26 \\ -15 & 31 \\ -16 & 16 \end{bmatrix}$
		-6450	316 40	C. C. S. P.	$ \begin{array}{r rrrr} -13 & 43 \\ -14 & 18 \\ -14 & 24 \\ -16 & 36 \end{array} $	E. by N. N.E. ½ N. E.N.E. S.S.E.	$ \begin{array}{r} -61 \\ -61 \\ -61 \\ -61 \end{array} $	$ \begin{array}{c cccc} -3 & 23 \\ -1 & 48 \\ -3 & 00 \\ -2 & 03 \end{array} $	+1 13 $+1 13$ $+1 13$ $+1 13$	$ \begin{vmatrix} -15 & 53 \\ -14 & 53 \\ -16 & 11 \\ -17 & 26 \end{vmatrix} -16 & 04$
		-64 41	315 55	P. Cr. Cr.	$ \begin{array}{r rrrr} -15 & 28 \\ -12 & 56 \\ -16 & 46 \end{array} $	s. by E. ½ E. N.E. by E. E.N.E.		$ \begin{array}{c cccc} -1 & 41 \\ -2 & 34 \\ -3 & 00 \end{array} $	$\begin{vmatrix} +1 & 13 \\ +1 & 13 \\ +1 & 13 \\ +1 & 13 \end{vmatrix}$	$ \begin{vmatrix} -15 & 56 \\ -14 & 17 \\ -18 & 33 \end{vmatrix} $
1:	3.	-64 50	316 40	C. C. S.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	S.E. $\frac{1}{2}$ S. S.E. $\frac{1}{2}$ E. S. by E. $\frac{1}{2}$ E.	$ \begin{array}{r r} -61 \\ -61 \\ -61 \end{array} $	$ \begin{array}{c cccc} -3 & 53 \\ -3 & 18 \\ -1 & 37 \end{array} $	$\begin{vmatrix} +1 & 13 \\ +1 & 13 \\ +1 & 13 \\ +1 & 13 \end{vmatrix}$	-16 54 -16 46 -13 56
				CR. CR.	$ \begin{array}{rrrr} & 13 & 36 \\ & -14 & 36 \\ & -13 & 50 \\ & -13 & 02 \end{array} $	N. by E. s. by E. s.s.E.	$ \begin{array}{r} -61 \\ -61 \\ -61 \end{array} $	$ \begin{array}{c cccc} -0 & 19 \\ -1 & 13 \\ -2 & 03 \end{array} $	$ \begin{array}{ccccccccccccccccccccccccccccccccccc$	$ \begin{vmatrix} -13 & 42 \\ -13 & 50 \\ -13 & 52 \end{vmatrix} -15 & 28$
				CR. CR. CR.	$ \begin{array}{r rrrr} -15 & 08 \\ -14 & 20 \\ -15 & 25 \end{array} $	s.s.e. e.s.e. s.e. by s.	$ \begin{array}{r} -61 \\ -61 \\ -61 \end{array} $	$ \begin{array}{r rrrr} -2 & 03 \\ -3 & 42 \\ -2 & 36 \end{array} $	$ \begin{array}{r} +1 & 13 \\ +1 & 13 \\ +1 & 13 \end{array} $	$\begin{vmatrix} -15 & 58 \\ -16 & 49 \\ -16 & 48 \end{vmatrix}$
1	4.	-65 04	318 20	CR. C. C. S.	$ \begin{array}{rrrrr} -13 & 39 \\ -12 & 47 \\ -12 & 47 \\ -13 & 00 \end{array} $	E.S.E. E. by N. E.	$ \begin{array}{r} -61 \\ -61 \\ -61 \\ -61 \end{array} $	$ \begin{array}{r rrrr} -3 & 42 \\ -3 & 14 \\ -3 & 23 \\ -3 & 14 \end{array} $	$ \begin{array}{r} +1 & 13 \\ +1 & 13 \\ +1 & 13 \\ +1 & 13 \end{array} $	$ \begin{vmatrix} -16 & 08 \\ -14 & 48 \\ -14 & 57 \\ -14 & 48 \end{vmatrix} $
				S. P. P.	$ \begin{array}{r rrrr} -13 & 18 \\ -13 & 14 \\ -10 & 52 \end{array} $	E. by N. E. ½ N. E. ½ N.		$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{vmatrix} +1 & 13 \\ +1 & 13 \\ +1 & 13 \end{vmatrix}$	$\begin{vmatrix} -15 & 28 \\ -15 & 19 \\ -12 & 57 \end{vmatrix} -14 & 25$
10	6.	-65 04 $-64 00$	318 38 321 50	CR. CR.	$\begin{array}{r rrrr} -10 & 10 \\ -11 & 52 \\ -7 & 06 \end{array}$	E.S.E. E. by s. E.		$\begin{vmatrix} -3 & 42 \\ -3 & 45 \\ -3 & 04 \end{vmatrix}$	$ \begin{array}{c} +1 & 13 \\ +1 & 13 \\ +1 & 13 \end{array} $	$ \begin{vmatrix} -12 & 39 \\ -14 & 24 \\ -8 & 57 \end{vmatrix} $
		-63 56	321 36	C. S. S.	$ \begin{array}{r rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	N.E. ¹ / ₄ N. N.E. by E. N.E.	$ \begin{array}{r} -60 \\ -60 \\ -60 \\ \end{array} $	$ \begin{array}{r rrrr} -1 & 53 \\ -2 & 28 \\ -1 & 59 \\ 3 & 29 \end{array} $	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{vmatrix} -9 & 04 \\ -11 & 31 \\ -9 & 24 \\ -10 & 11 \end{vmatrix}$
:	3.	-62 38	328 00	CR. CR. CR.	$ \begin{array}{c cccc} -10 & 32 \\ -9 & 18 \\ -12 & 10 \\ -6 & 21 \end{array} $	N.E. by E. N.E. by E.	$ \begin{array}{r} -60 \\ -60 \\ -60 \\ -50 \\ \end{array} $	$ \begin{array}{rrrrr} -2 & 28 \\ -2 & 28 \\ +0 & 16 \\ -3 & 29 \end{array} $	$\begin{array}{c} +1 & 13 \\ +1 & 13 \\ +1 & 13 \\ +1 & 13 \end{array}$	$ \begin{vmatrix} -11 & 47 \\ -10 & 33 \\ -10 & 41 \end{vmatrix} $
		- UN UO	920 00	C. C. S.	$ \begin{array}{c cccc} & - & 0 & 21 \\ & - & 5 & 53 \\ & - & 5 & 44 \\ & - & 5 & 13 \end{array} $	E. by s. E. 3 N. E. 1/2 S.	-59 -59 -59 -59	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	+1 13 $+1 13$ $+1 13$ $+1 13$	- 8 37 - 7 38 - 7 36 - 7 13
				S. Cr. Cr.	$ \begin{array}{rrrrr} & 5 & 21 \\ & - & 6 & 26 \\ & - & 3 & 57 \end{array} $	E. 2 S. E. ½ S. E. ½ N.	-59 -59 -59	$ \begin{array}{c cccc} -2 & 58 \\ -3 & 13 \\ -3 & 02 \end{array} $	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{bmatrix} -7 & 06 \\ -8 & 26 \end{bmatrix}$
**********				Cr.	- 6 47	Ē.	-59	-2 58	+1 13	$\begin{bmatrix} - & 5 & 46 \\ - & 8 & 32 \end{bmatrix}$

Observations of Declination, Her Majesty's Ship 'Terror' (continued).

Posit	ion.	als.	Declination	Direction of	Approx- imate	Corre	ctions.	Declination.
Lat.	Long.	Initi	observed.	ship's head.	Incli- nation.	Deviation.	Index.	
-62° 16	330° 30	C. S.	$-\begin{array}{cccccccccccccccccccccccccccccccccccc$	е. ½ s. е. by n.	$-59 \\ -59$	$-3 \ 13$ $-3 \ 07$	$+\mathring{1} \ 1\mathring{3} \\ +1 \ 13$	$\begin{bmatrix} - & 6 & 30 \\ - & 7 & 24 \\ - & 7 & 25 \end{bmatrix} - & 6 & 30 \end{bmatrix}$
-62 02	333 40	C. C.	$-342 \\ -325$	n. by E. n. by E. ½ E.	$-58 \\ -58$	$-0 13 \\ -0 30$	$+1 \ 13 \\ +1 \ 13$	$ \begin{vmatrix} & 5 & 35 \\ & 2 & 42 \\ & 2 & 42 \\ & 3 & 13 \end{vmatrix} $ $ - 2 50$
-61 58	333 44	C. C.	-148 -359 -318	N.E. $\frac{3}{4}$ E. N. $\frac{3}{4}$ E. N. $\frac{1}{4}$ E.	$-58 \\ -58 \\ -58$	$\begin{array}{c cccc} -2 & 07 \\ -0 & 06 \\ +0 & 10 \end{array}$	$+1 \ 13 \\ +1 \ 13 \\ +1 \ 13$	$ \begin{vmatrix} 2 & 42 \\ 2 & 52 \\ 2 & 05 \end{vmatrix} $
-62 02	333 40	C. S. S. S.	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	s. ½ E. s. ¾ W. e.s.e. n. by e.	-58 -58 -58 -58	$ \begin{array}{c cccc} -0 & 45 \\ +0 & 08 \\ -3 & 19 \\ -0 & 13 \end{array} $	$+1 13 \\ +1 13 \\ +1 13$	$\begin{vmatrix} & 2 & 20 \\ & 2 & 35 \\ & 3 & 12 \\ & 1 & 57 \end{vmatrix} - 2 35$
-61 58	333 48	S. S. C.	- 2 44	s. $\frac{3}{4}$ w.	-58 -58 -58 -58	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$+1 \ 13$ $+1 \ 13$ $+1 \ 13$ $+1 \ 13$	\[\begin{array}{cccc} & 4 & 00 & \\ & 4 & 02 & \\ & 1 & 23 & \\ & 2 & 04 & \end{array} \]
-61 30	335 20	CR.	- 3 19	N.	$-58 \\ -58$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	+1 13	$\begin{bmatrix} -1 & 50 \\ -0 & 48 \end{bmatrix}$
$\begin{vmatrix} -61 & 36 \\ -61 & 30 \end{vmatrix}$	336 00 335 20	C. C. S.	$\begin{array}{c} + & 1 & 41 \\ + & 0 & 52 \\ + & 0 & 50 \end{array}$	E. $\frac{1}{2}$ S. E. $\frac{1}{2}$ N. E. by N.		$ \begin{array}{r rrrr} -3 & 09 \\ -2 & 57 \\ -2 & 59 \end{array} $	$\begin{vmatrix} +1 & 13 \\ +1 & 13 \\ +1 & 13 \end{vmatrix}$	$ \begin{vmatrix} & 0 & 15 \\ & 0 & 52 \\ & 0 & 56 \end{vmatrix} - 0 44$
-62 20	344 00	CR.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	E. by N. E.S.E. S. ½ E.	$-58 \\ -59$	$ \begin{array}{r rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$\begin{vmatrix} +1 & 13 \\ +1 & 13 \end{vmatrix}$	$ \begin{vmatrix} & 0 & 57 \\ & 0 & 37 \\ & 2 & 37 \\ & 3 & 24 \end{vmatrix} $
		C. S. S.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	s. $\frac{1}{2}$ E. s. by E.	$-59 \\ -59$	$ \begin{array}{r rrrr} -0 & 47 \\ -1 & 09 \end{array} $	$\begin{vmatrix} +1 & 13 \\ +1 & 13 \end{vmatrix}$	$ \begin{vmatrix} + & 3 & 24 \\ + & 2 & 54 \\ + & 2 & 14 \\ + & 5 & 28 \end{vmatrix} $
	-	S. P. P.	$\begin{array}{ c c c c c } + & 3 & 42 \\ + & 3 & 51 \\ + & 2 & 32 \end{array}$	s. by E. s. s.		$ \begin{array}{c cccc} -1 & 09 \\ -0 & 24 \\ -0 & 24 \end{array} $	$\begin{vmatrix} +1 & 13 \\ +1 & 13 \\ +1 & 13 \end{vmatrix}$	$\begin{vmatrix} + & 3 & 46 \\ + & 4 & 40 \\ + & 3 & 21 \end{vmatrix}$ + 3 29
-62 14	343 37	CR.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	s. by E. s. by E.	$ \begin{vmatrix} -59 \\ -59 \end{vmatrix} $	$ \begin{array}{c cccc} -1 & 09 \\ -1 & 09 \end{array} $	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{vmatrix} + & 4 & 03 \\ + & 2 & 30 \\ + & 2 & 58 \\ + & 3 & 52 \end{vmatrix} $
64 04	345 16 345 04	S. Cr. Cr.	$\begin{array}{ c c c c c } + & 3 & 49 \\ + & 6 & 07 \\ + & 5 & 19 \end{array}$	s. by E. s. by E. s.s.E.	$ \begin{array}{r r} -60 \\ -60 \\ -60 \end{array} $	$ \begin{array}{c cccc} -1 & 11 \\ -1 & 11 \\ -1 & 59 \end{array} $	$\begin{vmatrix} +1 & 13 \\ +1 & 13 \\ +1 & 13 \end{vmatrix}$	$\begin{vmatrix} + & 3 & 51 \\ + & 6 & 09 \\ + & 4 & 33 \end{vmatrix} + 4 1$
6 -64 24	347 27	C. S. P.	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	S.E. 1/2 E.	$\begin{vmatrix} -62 \\ -62 \end{vmatrix}$	$ \begin{array}{r rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$\begin{vmatrix} +1 & 13 \\ +1 & 13 \end{vmatrix}$	$\begin{vmatrix} + & 4 & 37 \\ + & 5 & 11 \end{vmatrix}$
-65 00		Cr. C.	$ \begin{array}{ c c c c c c } + 7 & 59 \\ + 8 & 07 \\ + 6 & 56 \end{array} $	s.e. by e. s.e. s.e.		$\begin{vmatrix} -3 & 36 \\ -3 & 15 \\ -3 & 15 \end{vmatrix}$	$\begin{vmatrix} +1 & 13 \\ +1 & 13 \\ +1 & 13 \end{vmatrix}$	$\begin{vmatrix} + & 5 & 36 \\ + & 6 & 05 \\ + & 4 & 54 \end{vmatrix}$
-65 02		S. P. Cr.	$\begin{array}{ c c c c c } + & 8 & 23 \\ + & 9 & 33 \\ + & 7 & 35 \end{array}$	S.E. S.E. S.E.	$\begin{vmatrix} -62 \\ -62 \\ -62 \end{vmatrix}$	$ \begin{array}{r rrrr} -3 & 15 \\ -3 & 15 \\ -3 & 15 \end{array} $	$\begin{vmatrix} +1 & 13 \\ +1 & 13 \\ +1 & 13 \\ +1 & 13 \end{vmatrix}$	$\begin{vmatrix} + & 6 & 21 \\ + & 7 & 31 \\ + & 5 & 33 \end{vmatrix} + 5 = 5$
8 -66 00	351 00	CR. CR. C.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	s.e. s.e. s.e. ³ / ₄ e.		$ \begin{array}{r rrrr} -3 & 15 \\ -3 & 15 \\ -3 & 35 \\ 4 & 00 \end{array} $	$\begin{vmatrix} +1 & 13 \\ +1 & 13 \\ +1 & 13 \end{vmatrix}$	$ \begin{vmatrix} + & 6 & 46 \\ + & 5 & 10 \\ + & 7 & 53 \end{vmatrix} $
		S. S. P.	$\begin{vmatrix} +11 & 17 \\ +9 & 54 \\ +4 & 55 \\ +4 & 29 \end{vmatrix}$			$\begin{vmatrix} +3 & 50 \\ +2 & 50 \end{vmatrix}$	$\begin{vmatrix} +1 & 13 \\ +1 & 13 \end{vmatrix}$	$\begin{vmatrix} + & 7 & 17 \\ + & 8 & 58 \end{vmatrix}$ + 8 2
	Lat. -62 16 -62 02 -61 58 -62 02 -61 58 -61 30 -61 36 -61 30 -62 20 -62 14 -62 20 -63 04 -64 04 -65 00 -65 02	-62 14 343 37 -62 14 343 37 -62 14 343 37 -62 14 343 37 -64 04 345 16 345 04 -65 02 349 42	Lat. Long.	Lat. Long. Fig. Declination observed.	Lat. Long. Decimaton observed. Direction of ship's head.	Declination Observed. Direction of ship's head. Inclination. Inclination. -62 16 330 30 C. - 4 30 E. \frac{1}{2} S. -59 CR. - 4 04 E.N.E. -59 CR. - 4 04 E.N.E. -58 C. - 7 41 V. by N. -58 N. by E. -59 N. by E. -58 N. by E. -58 N. by E. -59 N. by E. -5	Lat. Long. \$\frac{2}{15} \text{Declination observed.} Ship's head. Ship's head. Inchination. Deviation. Deviation. Deviation.	Lat. Long. 2

Date.	Posi	tion.	Initials.	Declination observed.	Direction of ship's head.	Approx- imate Incli-	Corre	ctions.	Declination.
	Lat.	Long.	Init	Observed.	snip's nead.	nation.	Deviation.	Index.	
1843. Mar. 1	$-6\mathring{7}$ 1 $\acute{2}$	350° 36′	C. C. S. Cr. Cr.	$ \begin{array}{r} + & 3 & 28 \\ + & 2 & 47 \\ + & 3 & 34 \\ + & 0 & 57 \\ + & 1 & 46 \\ + & 2 & 39 \end{array} $	s.w. by w. s.w. by w. s.w. by w. s.w. by w. s.w. w.s.w.	$ \begin{array}{r} -63 \\ -63 \\ -63 \\ -63 \\ -63 \\ -63 \end{array} $	+3 25 +3 25 +3 25 +3 25 +3 25 +2 50 +3 47	+1 13 +1 13 +1 13 +1 13 +1 13 +1 13	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
2	-68 08	348 10	C. C. C. S. S. S.	$\begin{array}{c} + & 0 & 42 \\ + & 0 & 42 \\ + & 0 & 27 \\ + & 0 & 55 \\ + & 1 & 43 \\ + & 0 & 29 \\ + & 1 & 34 \\ - & 0 & 21 \end{array}$	s.w. s.w. ½ s. s.w. ½ w. s.w. ½ w. s.w. s.w. s.w. by w. s.w. ½ s. s.w. by w.	$ \begin{array}{r} -64 \\ -64 \\ -64 \\ -64 \\ -64 \\ -64 \\ -64 \\ \end{array} $	+2 56 +2 34 +3 14 +3 14 +2 56 +3 32 +2 34 +3 32	+1 13 +1 13 +1 13 +1 13 +1 13 +1 13 +1 13	+ 4 51 + 4 29 + 4 54 + 5 22 + 5 52 + 5 14 + 5 21 + 4 24
3	-68 30	346 50	P. P. Cr. Cr. Cr. C.	$\begin{array}{r} -4 & 15 \\ -4 & 05 \\ +1 & 01 \\ +1 & 26 \\ -0 & 34 \\ +5 & 16 \\ +3 & 32 \end{array}$	s.w. ½ w. s.w. ½ w. s.w. by s. s.w. by s. s.w. by w. s.s.e. s. ¼ E.	$ \begin{array}{r} -64 \\ -64 \\ -64 \\ -64 \\ -64 \\ -64 \\ -64 \\ \end{array} $	+3 14 +3 14 +2 56 +2 13 +3 32 -2 14 -0 37	+1 13 +1 13 +1 13 +1 13 +1 13 +1 13 +1 13	+ 0 12 + 0 22 + 5 10 + 4 52 + 4 11 + 4 15 + 4 08
4	-69 42	345 20	S. CR. CR. CR. C. C.	$\begin{array}{r} + & 4 & 47 \\ + & 5 & 07 \\ + & 5 & 35 \\ + & 2 & 53 \\ - & 2 & 10 \\ - & 1 & 44 \\ - & 0 & 25 \end{array}$	s. by E. s.s.E. s.s.E. s. s.s.w. ½ w. s.w.	$ \begin{array}{r} -64 \\ -64 \\ -64 \\ -64 \\ -65 \\ -65 \\ -65 \\ \end{array} $	$ \begin{array}{r} -1 & 19 \\ -2 & 14 \\ -2 & 14 \\ -0 & 24 \\ +1 & 54 \\ +3 & 02 \\ +1 & 54 \end{array} $	+1 13 +1 13 +1 13 +1 13 +1 13 +1 13 +1 13	+ 4 41 + 4 06 + 4 34 + 3 42 + 0 57 + 2 31 + 2 42
5	—70 50	343 32	S. CR. CR. C. C.	$\begin{array}{rrrrr} - & 0 & 36 \\ - & 0 & 25 \\ - & 2 & 02 \\ - & 3 & 15 \\ + & 3 & 00 \\ + & 4 & 40 \end{array}$	s.s.w. ½ w. s.s.w. ½ w. s.s.w. ½ w. s.w. by s. s.w. by s. s.e. by s.	-65 -65 -65 -66 -66	$\begin{array}{r} +1 & 54 \\ +1 & 54 \\ +2 & 18 \\ +2 & 18 \\ -3 & 01 \\ -3 & 38 \end{array}$	+1 13 +1 13 +1 13 +1 13 +1 13 +1 13	$ \begin{vmatrix} + & 2 & 31 \\ + & 2 & 42 \\ + & 1 & 29 \\ + & 0 & 16 \\ + & 1 & 12 \\ + & 2 & 15 \end{vmatrix} $
	-70 57 -70 44	343 34 343 48	S. S. S. P. Cr.	$\begin{array}{c} + & 0 & 32 \\ + & 1 & 06 \\ + & 0 & 25 \\ + & 3 & 27 \\ + & 3 & 12 \\ - & 1 & 52 \\ + & 2 & 12 \end{array}$	s.s.w. $\frac{1}{2}$ w. s.s.w. $\frac{1}{2}$ w. s. by w. s.e. by s. s.e. by s. s.w. by s. s.s.w.	66 66 66 66 66	$\begin{array}{c} +1 & 58 \\ +1 & 58 \\ +0 & 35 \\ -3 & 01 \\ -3 & 01 \\ +2 & 23 \\ +1 & 33 \end{array}$	+1 13 +1 13 +1 13 +1 13 +1 13 +1 13 +1 13	$\begin{vmatrix} + & 3 & 43 \\ + & 4 & 17 \\ + & 2 & 13 \\ + & 1 & 39 \\ + & 1 & 24 \\ + & 1 & 44 \\ + & 4 & 58 \end{vmatrix}$
8		341 56 346 40	CR. C. S. CR. CR.	$ \begin{array}{r} + 3 & 33 \\ + 3 & 57 \\ + 0 & 53 \\ + 1 & 06 \\ + 1 & 11 \\ + 5 & 41 \end{array} $	s.e. s.e. e. by s. e. by s. ½ s. e. by s. ½ s. n. by e. ½ e.	-66 -65 -65 -65 -62	$ \begin{array}{rrrr} -3 & 37 \\ -3 & 37 \\ -4 & 17 \\ -4 & 15 \\ -4 & 15 \\ -0 & 39 \end{array} $	+1 13 +1 13 +1 13 +1 13 +1 13 +1 13	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
12		346 15	S. Cr. C. S. S.	$\begin{array}{r} + \ 4 \ 55 \\ + \ 4 \ 10 \\ + \ 4 \ 51 \\ + \ 5 \ 27 \\ + \ 6 \ 30 \end{array}$	N. by E. $\frac{1}{4}$ E. N. by E. $\frac{1}{4}$ E. N.N.E. $\frac{1}{2}$ E. N.E. by N. N.N.E.	$ \begin{array}{r} -62 \\ -62 \\ -60 \\ -60 \\ -60 \end{array} $	$ \begin{array}{rrrr} -0 & 30 \\ -0 & 30 \\ -1 & 08 \\ -1 & 25 \\ -0 & 52 \end{array} $	+1 13 +1 13 +1 13 +1 13 +1 13	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
			CR. CR. CR. CR.	$+525 \\ +338$	N. by E. $\frac{1}{2}$ E. N. by E. $\frac{1}{2}$ E. N. N. by E. $\frac{1}{2}$ E.	$ \begin{array}{r} -60 \\ -60 \\ -60 \\ -60 \end{array} $	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	+1 13 +1 13 +1 13 +1 13	+ 5 09 + 6 04 + 5 06 + 5 05

Date.	Posi	ition.	Initials.	Declination	Direction of	Approx- imate	Corre	ctions.	Declination.
	Lat.	Long.	Ini	observed.	ship's head.	Incli- nation.	Deviation.	Index.	
1843. Mar. 13.	-61° 16	349° 00	C. S. S.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	N.N.E. $\frac{1}{2}$ E. N.E. by N. N.E. $\frac{3}{4}$ N.	-59 -59 -59	$ \begin{array}{c cccc} -\mathring{1} & 04 \\ -1 & 20 \\ -1 & 28 \end{array} $	$ + \mathring{1} \ 1\mathring{3} $ $ + 1 \ 13 $ $ + 1 \ 13 $	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
15.	-57 36	352 00	P. C. C.	$\begin{array}{c} + 555 \\ +1055 \\ + 952 \end{array}$	N.E. by N. N.E. $\frac{1}{2}$ N. N.N.E. $\frac{1}{2}$ E.		$ \begin{array}{c cccc} -1 & 20 \\ -1 & 27 \\ -0 & 58 \end{array} $	+1 13 +1 13 +1 13	$\begin{vmatrix} + & 5 & 48 \\ + & 10 & 41 \\ + & 10 & 07 \end{vmatrix}$
	-57 22	351 20	C.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	N.N.E. $\frac{1}{2}$ E. N.E. $\frac{1}{2}$ N.	$ \begin{array}{r r} -57 \\ -57 \end{array} $	$-0 58 \\ -1 26$	$+1 \ 13 \\ +1 \ 13$	$\begin{vmatrix} + & 9 & 52 \\ + & 9 & 45 \\ + & 10 & 47 \end{vmatrix} + 10 & 35$
	-57 36 $-57 22$	352 00 351 20	S. S. P.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	n.e. by n. n.e. by n. n.e. by n.		$ \begin{array}{cccc} -1 & 12 \\ -1 & 12 \\ -1 & 12 \end{array} $	$+1 \ 13 \\ +1 \ 13 \\ +1 \ 13$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
15. 16.	$ \begin{array}{r} -57 & 37 \\ -57 & 22 \\ -57 & 16 \end{array} $	352 00 351 20 352 54	CR. CR.	$\begin{array}{c} +10 & 30 \\ +12 & 06 \\ +9 & 58 \\ \end{array}$	n.e. by n. n.e. by n. n. by w. ½ w.	$ \begin{array}{r} -57 \\ -56 \\ -56 \\ \end{array} $	$ \begin{array}{cccc} -1 & 12 \\ -1 & 08 \\ +0 & 52 \\ +1 & 10 \end{array} $	$+1 \ 13$ $+1 \ 13$ $+1 \ 13$	$egin{pmatrix} +10 & 31 \ +12 & 11 \ +12 & 03 \ \end{bmatrix}$
			C. C. C.	$ \begin{array}{r} + 9 & 28 \\ + 8 & 03 \\ + 12 & 07 \\ + 11 & 34 \end{array} $	n.n.w. n.w. by n. n.e. by e. n.e. by e.	-56 -56 -56 -56	$ \begin{array}{ccccc} +1 & 12 \\ +1 & 39 \\ -2 & 00 \\ -2 & 00 \end{array} $	+1 13 $+1 13$ $+1 13$ $+1 13$	$egin{array}{cccccccccccccccccccccccccccccccccccc$
			S. S. P.	$+10 \ 31 \\ +7 \ 33 \\ +9 \ 42$	N. by W. N.W. by W. N. by W.	-56 -56 -56	$ \begin{array}{r} $	$+1 \ 13$ $+1 \ 13$ $+1 \ 13$	$\begin{vmatrix} +12 & 17 \\ +12 & 30 \\ +11 & 11 \\ +11 & 41 \end{vmatrix}$
			P. Cr. Cr.	+912 +748 +1110	n.n.w. n.w. by w. E. by n.	-56 -56 -56 -56	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	+1 13 $+1 13$ $+1 13$ $+1 13$	$egin{array}{cccccccccccccccccccccccccccccccccccc$
17.	-5642	353 40	C. S.	+12 12 +13 15 +11 25	E.N.E. N.E. by E. E.N.E.	$-56 \\ -56$	$ \begin{array}{c cccc} -2 & 22 \\ -2 & 22 \end{array} $	$+1 \ 13 \\ +1 \ 13 \\ +1 \ 13$	$ \begin{vmatrix} +12 & 28 \\ +10 & 16 \end{vmatrix} $ + 11 22
18.	-5558	355 30	C. S.	$+14 32 \\ +14 57$	E. E.	-56 -56	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$+1 \ 13 \\ +1 \ 13$	$\left. \begin{array}{c} +13 & 01 \\ +13 & 26 \end{array} \right\} +12 & 57$
	-54 30	357 50	CR. S.	$+14 00 \\ +15 14$	E. by N.	$-56 \\ -55$	$ \begin{array}{c cccc} -2 & 44 \\ -2 & 35 \end{array} $	$^{+1}$ 13 $^{+1}$ 13	$\begin{bmatrix} +12 & 25 \\ +13 & 52 \end{bmatrix} +13 & 52$
20.	—54 06	359 30	C. C. C.	+17 05 +17 31 +17 21 +18 26	E.S.E. E.S.E. S.E. by E. S.E. $\frac{1}{2}$ E.	$-55 \\ -55 \\ -55 \\ -55$	$ \begin{array}{c cccc} -2 & 58 \\ -2 & 58 \\ -2 & 47 \\ -2 & 40 \end{array} $	+1 13 +1 13 +1 13 +1 13	$\begin{array}{c} +15 & 20 \\ +15 & 46 \\ +15 & 47 \\ +16 & 59 \end{array}$
	-54 26	0 26	S. Cr. Cr.	+15 50 $+18 17$ $+13 04$ $+13 40$	s.e. by s. E.s.e. E.s.e. E.s.e.	$-55 \\ -55 \\ -55 \\ -55$	$ \begin{array}{c cccc} -2 & 10 \\ -2 & 58 \\ -2 & 58 \\ -2 & 58 \end{array} $	+1 13 $+1 13$ $+1 13$ $+1 13$	$\begin{vmatrix} +14 & 53 \\ +16 & 32 \\ +11 & 19 \\ +11 & 55 \end{vmatrix} + 14 & 49$
24.	-49 57	9 38	C. S.	$\begin{array}{c} +23 & 59 \\ +24 & 51 \end{array}$	N.E. N.E.	$-56 \\ -56$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$+1 \ 13 +1 \ 13$	$\left(\begin{array}{ccc} +21 & 33 \\ +23 & 41 \\ +24 & 33 \end{array} \right) +24 \ 07$
25.	-47 20	10 55	C. C. S. S.	$+25 ext{ } 14 $ $+24 ext{ } 54 $ $+24 ext{ } 17 $ $+24 ext{ } 03 $	n.e. n.e. by n. n.e. n.e.	$-55 \\ -55 \\ -55 \\ -55$	$ \begin{array}{cccc} -1 & 27 \\ -1 & 04 \\ -1 & 27 \\ -1 & 27 \end{array} $	$ \begin{array}{c} +1 & 13 \\ +1 & 13 \\ +1 & 13 \\ +1 & 13 \end{array} $	$ \begin{vmatrix} +25 & 00 \\ +25 & 03 \\ +24 & 03 \\ +23 & 49 \end{vmatrix} +24 29$
27.	-43 53 $-43 57$ $-43 10$	13 20 13 50 13 20	C. C. S.	+27 11 $+28 09$ $+27 51$	E.N.E. E. 1/4 N. E.N.E.	$-55 \\ -55 \\ -55$	$ \begin{array}{c cccc} -2 & 15 \\ -2 & 39 \\ -2 & 15 \end{array} $	+1 13 +1 13 +1 13	$\begin{vmatrix} +26 & 09 \\ +26 & 43 \\ +26 & 49 \end{vmatrix}$
28.	-43 08	14 40	S. Cr. S. S.	$ \begin{array}{r} +28 & 43 \\ +28 & 08 \\ +27 & 47 \\ +27 & 54 \end{array} $	E. by N. E. by N. N.E. N.E.	$-55 \\ -55 \\ -55 \\ -55$	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	+1 13 $+1 13$ $+1 13$ $+1 13$	$ \begin{array}{c} +27 & 21 \\ +26 & 46 \end{array} $ $ \begin{array}{c} +27 & 30 \\ +27 & 37 \end{array} $ $ +27 & 33 $
2 9.	-42 06 $-41 36$ $-40 22$	14 57 15 10 16 00	CR. S. C.	$ \begin{array}{r} +28 & 02 \\ +27 & 30 \\ +26 & 36 \end{array} $	N.E. N.E.	$ \begin{array}{r} -54 \\ -54 \\ -54 \end{array} $	$ \begin{array}{c cccc} -1 & 30 \\ -1 & 30 \\ -1 & 30 \end{array} $	$ \begin{array}{c} +1 & 13 \\ +1 & 13 \\ +1 & 13 \\ +1 & 13 \end{array} $	$ \begin{array}{cccc} & +27 & 45 \\ & +27 & 13 \\ & +26 & 19 \end{array} +27 & 29$
			C. S. S. Cr.	$+27 ext{ 07} +27 ext{ 29} +27 ext{ 04} +27 ext{ 35}$	N.E. N.E. N.E. N.E.	-54 -54 -54 -54	$ \begin{array}{cccc} -1 & 30 \\ -1 & 30 \\ -1 & 30 \\ -1 & 30 \end{array} $	+1 13 +1 13 +1 13 +1 13	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

LIEUT.-GENERAL SABINE ON TERRESTRIAL MAGNETISM.

Date.	Posit	ion.	Initials.	Declination	Direction of	Approx- imate	Corre	ctions.	Declination.
	Lat.	Long.	Ini	observed.	ship's head.	Incli- nation.	Deviation.	Index.	
31. April 1.	-39 23 -38 26 -36 15 -35 26	16 08 16 39 16 31 16 14	CR. S. CR. C. S. CR. C. C.	+28 25 +29 08 +28 36 +26 50 +29 08 +28 43 +29 53 +27 49 +29 42 +27 50	N.E. by E. N.E. by E. N.E. ½ E. N.E. by E.	-54 -54 -54 -54 -53 -53 -53 -53 -53	-1 45 -1 45 -1 34 -1 45 -1 45 -1 45 -1 11 -2 06 -1 45	+1 13 +1 13 +1 13 +1 13 +1 13 +1 13 +1 13 +1 13 +1 13	+27 53 +28 36 +28 15 +26 18 +28 36 +28 11 +29 21 +27 51 +28 52 +27 18 +28 00

Observations of the Inclination made on board Her Majesty's Ship 'Erebus' with Needle R. F. 5, between September 1842 and April 1843 (being a continuation from Contributions No. VI., Philosophical Transactions, 1844, pp. 151 to 168).

Observers Captain Sir James Clark Ross and Lieut. Alexander John Smith, R.N.

				Observed		Corre	ctions.		
Date.	Lat.	Long.	Method employed.	Inclination. Face East.	Ship's head.	Ship's attraction.	Index.	Corrected Inclination.	Remarks.
1842.	n° /	g out of	Direct.	$-5\mathring{2} \ 3\acute{8}$					
Sept. 8.		y Sound.	S.	$\begin{bmatrix} -52 & 58 \\ -52 & 58 \end{bmatrix}$,		
		301 53	N.	$\begin{vmatrix} -52 & 58 \\ -52 & 44 \end{vmatrix}$	E. $\frac{1}{2}$ N.	+0.17	-6	$-52^{\circ}34$	
	- 51 32	901 99	N.S.	$\begin{bmatrix} -52 & 44 \\ -52 & 41 \end{bmatrix}$	_				
9.	$-53 \ 33$	302 05	Direct.	$\begin{bmatrix} -52 & 41 \\ -52 & 26 \end{bmatrix}$		1			
0.	00 00	00%	S.	-52 19					
			Ň.	$ -52\ 45>$	s.s.w.	-0.54	-6	-53 34	
			N.S.	-5245	5.5	001		00 01	
			Direct.	$-52 \ 33$					
13.	-5403	305 26	Direct.	$-54 \ 38$					
			\mathbf{S}_{ullet}	-54 08	٠				
			N.	$ -54 \ 10 >$	w.s.w.	-0 10	-6	-54 31	
			N.S.	$-53 \ 51$					
	¥0.5		Direct.	$ -54 \ 27$					
14.	-5347	304 48	Direct.	-53 11					
			S.	$-53\ 10$,		C		
			N. N.S.	$ -53 \ 39 >$	s. by w.	-0 59	-6	-54 25	
			Direct.	$\begin{bmatrix} -53 & 21 \\ -53 & 18 \end{bmatrix}$					
3.5	-5443	304 30	Direct.	$\begin{vmatrix} -55 & 18 \\ -54 & 00 \end{vmatrix}$					
a o.	- 54 45	304 30	N.	-54 24			· ·		
			N.S.	$\begin{vmatrix} 54 & 61 \\ -54 & 03 \end{vmatrix}$	S.E.	-0 33	-6	-54 44	
			Direct.	$ -53 \ 54 $					
16.	-5441	304 48	Direct.	-54 29	E.	+0 11	-6	-54 24)	
			Direct.	-54 06				>-5\d{4} 16	
		1	S.	$ -53 \ 49 \ $				>-54 16	
			N.	$ -54 \ 03 >$	w.s.w.	-0 10	-6	-54 14	
			$_{ m N.S.}$	$ -53 \ 47 $					
			Direct.	-54 03			_		
	-5508		Direct.	-5559	s.w. by w.	-0 28	-6	-56 33	
18.	-55 40	296 52	Direct.	$ -57 \ 10$					
		1	S. N.	-5702					
			N.S.	$\begin{bmatrix} -57 & 00 \\ -57 & 01 \end{bmatrix}$					
			wt. 1 gr.	$\begin{vmatrix} -57 & 01 \\ -56 & 18 \end{vmatrix}$	s.w. ½ w.	-0.38	-6	-57 33	
		ĺ	wt. 2 grs.	$\begin{bmatrix} -56 & 18 \\ -57 & 06 \end{bmatrix}$					
			wt. 3 grs.	-56 44					
			wt. 4 grs.	-5611					
19.	Standing	g towards	Direct.	$ -58 \ 34 $	w.s.w.	-0.17	6	-58 57	
- 0		n's Cove,	Direct.	-59 11			. •	20 0,	
		ear Point,	S.	-59 51			c	50.03	
	N.W., c	listant 6	. N.	$ -59 \ 14 $	w.n.w.	+0 25	-6	$ -59 \ 01 > -58 \ 52$	1
	mi	les.	Direct.	-59 05					
			Direct.	-5848	w.	+0.11		-58 43	
			Direct.	-5900	N.E.	+0.49	-6	-58 17	

				01 1		Corre	ctions.		
Date.	Lat.	Long.	Method employed.	Observed Inclination. Face East.	Ship's head.	Ship's attraction.	Index.	Corrected Inclination	Remarks.
1842.	/	0 /		0 /	-			2	
Nov. 7.		g out of	Direct.	$-57^{\circ}45$					
		in's Cove. 293-07	S. N.	$\begin{vmatrix} -57 & 47 \\ -57 & 51 \end{vmatrix}$		$-\mathring{0}$ 41	ć	-5837	ŀ
	- 30 23	293 07	N.S.	$\begin{vmatrix} -57 & 51 \\ -57 & 56 \end{vmatrix}$	S.E.	-0 41	-0	- 30 3/	
			Direct.	-57 52					
8.	-5538	296 00	Direct.	-57 17					
			S.	-5708	1				
			N.	$ -57 \ 45 \rangle$	N.E. by E.	+0.44	-6	$-56 \ 46$	-
			N.S. Direct.	$\begin{bmatrix} -57 & 29 \\ -57 & 21 \end{bmatrix}$					
Q.	-5558	299 12	Direct.	$\begin{bmatrix} -57 & 21 \\ -57 & 05 \end{bmatrix}$	E. $\frac{1}{2}$ N.	+0 18	-6	-56 53	
	-55 32		Direct.	-55 50	s.w. by w.				
			Direct.	-5621	w.	+0 11	-6	-56 21a	
11.	-5424	300 08	Direct.	-5602			1		
			S.	$-56\ 18$					
			N. N.S.	$\begin{bmatrix} -56 & 06 \\ -56 & 25 \end{bmatrix}$					
			wt. 1 gr.	$-55 \ 21$	N.	+0 44	_6	-55 06	
			wt. 2 grs.	$-55\ 26$	210	1 0 22			
			wt. 3 grs.	-55 05					
			wt. 4 grs.	-5454					
		207 07	Direct.	-56 03					
12.	-5252	301 05	Direct.	$-54\ 38$					
			S. N.	$\begin{bmatrix} -54 & 39 \\ -54 & 42 \end{bmatrix}$					
			N.S.	-54 27					
			wt. 1 gr.	$-53 \ 33$	N.	+0 40	-6	-53 32	
,			wt. 2 grs.	-53 50					
			wt. 3 grs.	-53 27					
			wt. 4 grs. Direct.	$\begin{bmatrix} -53 & 07 \\ -54 & 28 \end{bmatrix}$					ļ
Dec. 13.	-51 32	301 53	Direct.	$\begin{bmatrix} -34 & 28 \\ -52 & 12 \end{bmatrix}$	-				
200, 201		shore)	S.	-53 20	4 1				(c.
	Port	Louis,	N.	-52 18					use
	Falklan	d Islands.	N.S.	-52 26					Upper Dip House.
			wt. 1 gr.	$\begin{vmatrix} -52 & 43 \\ 50 & 46 \end{vmatrix}$	Observed		-6	-5249	Κä
			wt. 2 grs. wt. 3 grs.	$\begin{bmatrix} -52 & 46 \\ -53 & 05 \end{bmatrix}$	on shore.				1 1 2
			wt. 4 grs.	-5255					, a
			wt. 5 grs.	-53 16					
			Direct.	-52 11					
17.		g out of	Direct.	-52 29					
		Louis, ey Sound.	S. N.	$-53 \ 15$					-
		301 53	N.S.	$\begin{vmatrix} -52 & 40 \\ -52 & 49 \end{vmatrix}$					
	01 02		wt. 1 gr.	-51 27		0.40	G	50.40	
			wt. 2 grs.	$ -50 \ 47 $	s.E. by s.	-0.40	-0	-52 42	
			wt. 3 grs.	-51 22					
			wt. 4 grs.	$-51 \ 11$					
			wt. 5 grs. wt. 6 grs.	$\begin{bmatrix} -51 & 36 \\ -51 & 49 \end{bmatrix}$					
18.	-52 50	303 07	Direct.	$\begin{bmatrix} -51 & 49 \\ -52 & 42 \end{bmatrix}$					
201	50		S.	-52 30		1			
			N.	-52 44	s.E. by s.	-0 40	-6	-53 29	
	. :		N.S.	-53 04		1			
			Direct.	$-52 \ 37$					

	٠.			Oh		Correc	ctions.		
Date.	Lat.	Long.	Method employed.	Observed Inclination. Face East.	Ship's head.	Ship's attraction.	Index.	Corrected Inclination.	Remarks
1842.	0 /	0 /		0 /					
Dec. 19.	$-54^{\circ}23^{\circ}$	303 59	Direct.	$-53^{\circ}58^{\circ}$					
			S.	-53 20		$-\mathring{0}$ 52	d	$-5\mathring{4}$ 4 $\mathring{3}$	
			N. N.S.	$ullet -53 \ 40 \ -53 \ 25 \ ullet$	S.S.E.	-0 32	-0	- 34 43	
			Direct.	$\begin{bmatrix} -53 & 25 \\ -54 & 06 \end{bmatrix}$					
20.	-5551	305 18	Direct.	-54 48					
	-00 01	000 10	S.	-5457		'			Ì
			N.	$ -54 \ 18 $	s.e. by s.	-0.45	-6	-55 35	
			N.S.	-54 45					
	_		Direct.	-54 52	-				
21.	-56 34	306 39	Direct.	-55 12					
	1		S.	-55 13		0.50	C	TC 14	
			N. N.S.	$\begin{vmatrix} -54 & 57 \\ -54 & 51 \end{vmatrix}$	S.S.E.	-0.58	-0	-56 14	
			Direct.	$\begin{bmatrix} -54 & 51 \\ -55 & 38 \end{bmatrix}$					
99	-58 16	308 00	Direct.	$ -56 \ 13 $					
~~.	-00 10	000 00	S.	-5606					
·			$\tilde{\mathbf{N}}$.		s. by E. ½ E.	-1 03	-6	- 57 21	
			N.S.	-56 12					
			Direct.	-56 17					
23.	-5928	308 20	Direct.	-57 21					
			S.	-57 14					
			N.	-57 05					
			N.S.	-57 15	s. by w.	-1 10	-6	-58 46	
			Direct.	-57 25			-		
			wt. 1 gr.	-57 35					
		· .	wt. 2 grs. wt. 3 grs.	$\begin{bmatrix} -58 & 16 \\ -57 & 56 \end{bmatrix}$				·	
01	-61 23	307 41	Direct.	$\begin{bmatrix} -57 & 30 \\ -58 & 30 \end{bmatrix}$					
24.	-01 20	307 11	N.	$-58 \ 39$	s. by w.	-1 16	-6	-59 51	
			N.S.	-58 17	20.05		_		
25.	-6214	307 55	Direct.	-59 48	S.S.E.	-109	-6	-61 03	
	-6231	308 05	Direct.	-61 20			. •		Ì
			S.	$ -61 \ 33 \ $	N. by w.	+1 00	6	-60 34	
			N.	-61 29	N. by W.	1 2 00	0	00 01	
			N.S.	$\begin{bmatrix} -61 & 31 \end{bmatrix}$,		
27.	-6222	308 00	Direct.	-59 56)		
			S.	-59 22	s.w.	-0.51	-6	-60 36	
			N. N.S.	$\begin{bmatrix} -59 & 26 \\ -59 & 48 \end{bmatrix}$	-			-00 30	
			Direct.	$\begin{bmatrix} -59 & 48 \\ -59 & 14 \end{bmatrix}$	s.	-1 20	-6		
	-62 18	308 24	Direct.	-60 04	5.	1 20			
	0.0	000 71	wt. 1 gr.	-60 21					1
			wt. 2 grs.	-60 55	4 (<u>1</u>)	0.10	c	-61 04	
			wt. 3 grs.	$-61 \ 32$	w.s.w.	-0.19	-0	-01 04	
	,		wt. 4 grs.	$-60 \ 15$					l
	_		wt. 5 grs.	$-60^{\circ}46$					
28.	$-62\ 30$	306 30	Direct.	$-60\ 16$	-				
			S.	$-60\ 26$		-0.52	c	-61 18	
	1		N. N.S.	$\begin{vmatrix} -60 & 13 \\ -60 & 33 \end{vmatrix}$	s.w.	-0.52	-0	-01 10	
	-		Direct.	$\begin{bmatrix} -60 & 33 \\ -60 & 13 \end{bmatrix}$					
29.	_62 36	306 20	Direct.	$\begin{bmatrix} -60 & 13 \\ -60 & 54 \end{bmatrix}$	s.	_1 23	-6	- 62 23)	
29.	- 02 00	500 20	Direct.	$-62 \ 33$		~~		70	
			S.	-6247				$\begin{vmatrix} -61 & 41 \\ -61 & 45 \end{vmatrix}$	1
			N.	$ -62\ 45 $	N.N.E.	+1 06	_ 0	$-61 \ 41 > -61 \ 45$	1
			N.S.	$-62 \ 25$					
	1	1	Direct.	$-62 \ 10^{\circ}$	N.E. by E.	+0.51	-6	$ -61 \ 25 $	1

			The state of the s			Corre	etions.	
Date.	Lat.	Long.	$\begin{array}{c} \textbf{Method} \\ \textbf{employed.} \end{array}$	Observed Inclination. Face East.	Ship's head.	Ship's attraction.	Index.	Corrected Inclination.
1842.								
Dec. 30.	-6336	305 0Ó	Direct.	$-6\mathring{2} 1\acute{2})$	*			
			S.	-6214	n he a	$-\mathring{0}$ 0 $\mathring{3}$	- 6	$-6\hat{2} 2\hat{0}$
			N.	-61 57	E. by s.	-0 03	_0	1 1
	-		N.S.	-62 22	And the second			$\left \begin{array}{c} c_{2,00} \\ \end{array}\right = 62^{\circ} 18^{\circ}$
0.1	Co. 00	004.40	Direct.	-62 14	w.	+0 11	-6	$\begin{bmatrix} -62 & 09 \\ -62 & 45 \end{bmatrix}$
31.	-63 39	304 40	Direct. S.	$\begin{vmatrix} -61 & 22 \\ -61 & 40 \ \end{vmatrix}$	s. by E.	-1 17	-6	-02 45
			N.	-61 21				
			N.S.	-61 29		, ,,	c	60.00
			wt. 1 gr.	$-60 \ 36$	S.S.E.	-1 11	-6	$-62 \ 28 > -62 \ 29$
			wt. 2 grs.	-61 08				
]	wt. 3 grs.	-60 52				CO OC
			Direct.	$ \begin{array}{r rrrr} -61 & 55 \\ -61 & 09 \end{array} $	w. by s.	-0 05		$egin{bmatrix} -62 & 06 \ -62 & 20 \ \end{pmatrix}$
	69.45	304 40	Direct.	$\begin{bmatrix} -61 & 09 \\ -61 & 12 \end{bmatrix}$	s.w. by s.	-1 05	-0	-02 20)
	-05 40	004 40	wt. 4 grs.	$\begin{bmatrix} -61 & 12 \\ -61 & 02 \end{bmatrix}$				00
			wt. 5 grs.	-5952	s. by w.	-1 19	-6	-61 56
			wt. 6 grs.	-60 03				
1843.								
Jan. 1.	-64 23	304 00	Direct.	$-62 \ 23$		1.4		
			wt. 1 gr. wt. 2 grs.	$\begin{vmatrix} -62 & 34 \\ -63 & 08 \end{vmatrix}$				
	-		wt. 3 grs.	$\begin{vmatrix} -63 & 68 \\ -62 & 52 \end{vmatrix}$	w. by s.	-0 05	-6	-63 04
	*.		wt. 4 grs.	-63 06				
			wt. 5 grs.	$-63 \ 18$				
2.	-64 26	303 52	Direct.	-63 10				
			S.	-63 19	Observed or	,		00
	i i		N.	$ -62 59\rangle$	ice.	1	-6	-63 16
			N.S.	$-63 \ 11$				
9	64 10	304 11	Direct.	$\begin{bmatrix} -63 & 09 \ -63 & 30 \end{bmatrix}$	$N.E. \frac{1}{2} N.$	+1 01	-6	$-62 \ 35$
		304 11	Direct.	$\begin{bmatrix} -63 & 34 \\ -63 & 34 \end{bmatrix}$	N.E. 2 N.	7.0.		02 00
, · ·	0 - 0 .	001 20	S.	-63 55	, ,	1	C	$-62 \ 45 > -62 \ 48$
			N.	$ -63 \ 39 $	N. by $w \cdot \frac{1}{2} w$	+1 0/	-6	-02 45 >-02 48
		· -	_N.S.	$[-63 \ 44]$				Co . C
_			Direct.	-62 03	s. by E. $\frac{1}{2}$ E			$\begin{bmatrix} -63 & 16 \\ 62 & 42 \end{bmatrix}$
5	-04 12	304 04	Direct.	-6257	w. by N.	$\begin{vmatrix} +0 & 20 \\ -0 & 47 \end{vmatrix}$		$\begin{vmatrix} -62 & 43 \\ -63 & 28 \end{vmatrix} - 63 & 01 \end{vmatrix}$
			Direct.	$-62 35 \\ -62 56$	S.W. $\frac{1}{2}$ W.	+0.11		$\begin{bmatrix} -63 & 28 \\ -62 & 51 \end{bmatrix}$
7	-64 34	302 50	Direct.	$\begin{bmatrix} -62 & 50 \\ -63 & 53 \end{bmatrix}$	E.	' ' '		/
•			S.	-6349		LAGO		63 045
			N.	$-63 \ 44$	w.n.w.	+0 29	-6	-63 24
			N.S.	$-63 \ 41$				Co. 24 >-63 36
		-	Direct.	-62 15	S.S.E.	-1 13		$\begin{bmatrix} -63 & 34 \\ 64 & 65 \end{bmatrix}$
	64 0	200 10	Direct.	-63 00	s. by E.	$\begin{vmatrix} -1 & 19 \\ -1 & 19 \end{vmatrix}$		$\begin{bmatrix} -64 & 25 \\ -63 & 34 \end{bmatrix}$
8	$-64 \ 38$	302 13	Direct.	$\begin{vmatrix} -62 & 09 \\ -62 & 24 \end{vmatrix}$	s. by E.	-1 13		_63 43
			Direct.	$\begin{bmatrix} -63 & 24 \\ -63 & 66 \end{bmatrix}$	s.E. by E.	-0.35		$\begin{bmatrix} -63 & 47 \\ -63 & 47 \end{bmatrix}$ -63 30
		-	Direct.	-64 00	N. by $w.\frac{1}{2}w$			-62 58
9	-6444	4 303 07	Direct.	$-63 \ 13$				
			S.	-63 50				
			N.	-63 22				
			N.S.	-63 29	Observed			
			wt. 1 gr. wt. 2 grs.	$\begin{vmatrix} -64 & 04 \\ -64 & 12 \end{vmatrix}$	Observed on ice.		-6	-63 21
			wt. 2 grs.	$\begin{bmatrix} -64 & 12 \\ -62 & 41 \end{bmatrix}$	on ices			
			wt. 4 grs.	-62 12				
			wt. 6 grs.	-62 14				
	1		Direct.	$-63 \ 15$		1	1	

						Correc	ctions.		_
Date.	Lat.	Long.	Method employed.	Observed Inclination. Face East.	Ship's head.	Ship's attraction.	Index.	Corrected Inclination.	Remarks.
1843.	64 49	'202 16	Dinast	$-6\mathring{2} \ 3\acute{0}$. 1	_ i 24	-6	$-6\mathring{4} 00)$	
Jan. 10.	-04 43	303 10	Direct. Direct.	-62 22	S. $\frac{1}{2}$ W.	$\begin{bmatrix} -1 & 24 \\ -1 & 09 \end{bmatrix}$	-6	$\begin{bmatrix} -64 & 00 \\ -63 & 37 \end{bmatrix}$	
11	-64 42	302 54	Direct.	$-63 \ 30$	s.w. by s. $w \cdot \frac{1}{2} N$.	+0.16		$\begin{bmatrix} -63 & 37 \\ -63 & 20 \end{bmatrix}$	
12.			Direct.	-62 03	S.S.E.	$-1 \ 13$		$-63\ 22 > -63\ 30$	
12.	-04 09	002 01	Direct.	$-63 \ 40$	W.N.W.	+0.30		$\begin{bmatrix} -63 & 15 \\ 15 \end{bmatrix}$	
13.	$-64 \ 35$	302 37	Direct.	-62 07	s.	-1 27	-6	$-63 \ 40$	
			Direct.	$-63 \ 48$	N.W. by w.			$[-63 \ 12]$	
14.	-64 31	302 34	Direct.	$-63\ 19$,	•			
			S.	$-64 \ 41$		11	-6	-63 38	
			N.	-63 28	w.	+0 11	. – 0	-05 55	
			N.S.	$-63 \ 23$					
16.	-64 28	303 03	Direct.	-63 53					
			S.	-64 15	N.N.W. $\frac{1}{2}$ W.	+1 04	-6	-63 06	
			N.	-64 06	2 W.	- 0,1		55 55	
			N.S.	$\begin{bmatrix} -64 & 04 \end{bmatrix}$					
	-64 28	303 03	Direct.	$\begin{bmatrix} -63 & 11 \\ 64 & 27 \end{bmatrix}$	Observed			Co. 10	
			S.	$-64 \ 27$	on ice.	•••••	-6	$-63 \ 43$	
			N.	$\begin{bmatrix} -63 & 29 \\ -63 & 19 \end{bmatrix}$		-			
10	69 50	204 46	N.S. Direct.	$\begin{bmatrix} -63 & 19 \\ -63 & 08 \end{bmatrix}$	- 1 -	+0 20	-6	-62 54	
18.	_	304 46 305 01	Direct.	$\begin{bmatrix} -62 & 55 \\ -62 & 55 \end{bmatrix}$	E. ½ N.	+0 20	-0	-02 34	
19.	-04 22	909 01	S.	$-63 \ 42$					
			N.	$\begin{vmatrix} -63 & 21 \\ -63 & 21 \end{vmatrix}$	E.	+0 11	-6	-63 08	
			N.S.	$\begin{bmatrix} -63 & 09 \\ -63 & 09 \end{bmatrix}$	E.	1 0 11		00 00	
			Direct.	-62 59					
20.	-64 18	304 18	Direct.	$-62 \ 33$					
			S.	-63 56					
			N.	$-62 \ 36$	w.s.w.	-0 21	-6	-63 20	
			N.S.	$-62 \ 35$					
			Direct.	$ -62 \ 43 $					
21.	-64 19	304 04	Direct.	-63 04	E.	+0 11	-6	$\begin{bmatrix} -62 & 59 \\ -63 & 01 \end{bmatrix}$ -63 00	
			Direct.	-62 34	w.s.w.	-0.21	-6	$[-63 \ 01]$	
22.	-64 12	303 50	Direct.	$-63\ 10$					
			S.	-61 47	E.N.E.	+0 47	-6	$-62\ 21$	
			N.	$-63 \ 33$	2020020	, , ,		-62 26	:
			N.S.	$-63 \ 36$			C	1	
99	64 04	304 49	Direct. Direct.	$-63 \ 33$	N.W.	+0 51		$\begin{bmatrix} -62 & 48 \\ -62 & 49 \end{bmatrix}$	
23.	- 04 24	304 49	Direct.	$\begin{bmatrix} -63 & 12 \\ -63 & 12 \end{bmatrix}$	E. by N. N.w.byw. 1 2w	+0.29			
Q1	-64 94	304 49	Direct.	$-63 \ 26$	N.W. Oy W. $\frac{1}{2}$ W. N.N.E. $\frac{1}{2}$ E.	+1 06		$\begin{bmatrix} -62 & 44 \\ -62 & 26 \end{bmatrix}$	
	$-64 \ 24$		Direct.	-62 22	S.E.	$\begin{bmatrix} -1 & 00 \\ -0 & 51 \end{bmatrix}$		69.105	
20.	01 10	001 00	Direct.	$-62 \ 38$	w.	+0.11		$\begin{bmatrix} -63 & 19 \\ -62 & 33 \end{bmatrix}$ -62 56	
26	$-64^{\circ}04$	305 19	Direct.	-62 59	w. by N.	+0 20	1	60 45)	
			Direct.	-62 11	S.E.	-0 52		$\begin{bmatrix} -63 & 49 \\ -63 & 09 \end{bmatrix}$ -62 57	
27	-6408	304 09	Direct.	-63 25	N.E.	+0.59		$-62 \ 32$	
•	-	1.	Direct.	-63 28	$N \cdot \frac{1}{2} W \cdot$	+1 08		$ -62 \ 26 \ -62 \ 42$,
			Direct.	-61 37	s.	-1 25	-6	$[-63 \ 08]$	
28	-64 08	304 08	Direct.	-62 55	E.	+0 11	-6	$\begin{bmatrix} -62 & 50 \\ 60 & 96 \end{bmatrix}$ -62 38	
			Direct.	-63 13	n.e. by E.	+0.53	-6	$ -62 \ 26 \int -62 \ 38$	1
29	-64 05	304 0	Direct.	$-62 \ 43$					
			S.	-6252	w.	+0 11	-6	-6241)	
			N.	$-62 \ 40$	"'	3 11		-62 46	
			N.S.	$\begin{bmatrix} -62 & 51 \end{bmatrix}$		0 "0		1	
. 00	64 00	202 57	Direct.	-62 18	S.E. $\frac{1}{2}$ E.	-0 43	1	$\begin{bmatrix} -63 & 07 \\ -63 & 00 \end{bmatrix}$ $\begin{bmatrix} -63 & 00 \end{bmatrix}$	
30	04 US	303 57	Direct.	-63 05	Е.	+0.11	-6	-63 00 -63 00	'

			25	Observed		Corre	ctions.		
Date.	Lat.	Long.	$\begin{array}{c} {\rm Method} \\ {\rm employed.} \end{array}$	Inclination. Face East.	Ship's head.	Ship's attraction.	Index.	Corrected Inclination.	Remarks.
1843.	0 /	0 /	THE PARTY OF THE P	0 /		0 /	,	0 /	
Jan. 31.	$-6\mathring{4}$ 00	304 42	Direct.	$-62^{\circ} 54$	E.N.E.	+0.47	-6	-62 13	
			Direct.	-6254	E.	+0 11	-6	-6249 -6223	
			Direct.	-63 05	N.E. by N.	+1 05	-6	-62 06 J	
eb. 1.	-63 53	304 51	Direct.	-61 53	s.w. by w.	-0.37	-6	$-62 \ 36$	
		1	Direct.	-6247	N,N,W.	+1 03	-6	$ -61 \ 50 > -62 \ 28 $	
			Direct.	-61 53	s.E. by s.	-1 00		-6259	
2.	-64 16	304 38	Direct.	-63 01	E. by N.	+0.28	-6	$\begin{bmatrix} -62 & 39 \\ 69 & 97 \end{bmatrix}$ -62 33	
_			Direct.	-63 13	N.E. by E.	+0.52	-6	-02 2/	
3.	-64 17	305 20	Direct.	-63 06	N.N.E.	+1 06		-62 06	
			Direct.	-63 12	n. by E.	+1 06	-6	-62 12 > -62 22	
	0		Direct.	-61 24	s.	-1 23		$-62 \ 47$	
4.	-64.16	304 47	Direct.	-63 14	N.E. $\frac{1}{2}$ N.	+1 02	-6	$-62 \ 18$	
			Direct.	$-63 \ 16$	N.E. by E.	+0.52	-6	$\begin{bmatrix} -62 & 30 \\ 62 & 11 \end{bmatrix}$ -62 45	
		- :	Direct.	-6148	s.s.w.	-1 17		-03 11	
_	Co. 0.1	00 - 00	Direct.	$-61 \ 31$	$s.\frac{1}{2}w.$	-1 23	-6	−63 00 J	
5.	-63 34	307 00	Direct.	$-62 \ 23$	N.E.	+0.57	-6	-61 42	
			S. N.	$\begin{bmatrix} -62 & 44 \\ -62 & 31 \end{bmatrix}$				$-61 \ 34$	
			N.S.	$\begin{bmatrix} -62 & 31 \\ -62 & 11 \end{bmatrix}$	N.E. $\frac{1}{2}$ N.	+0 59	-6	-61 29	
			Direct.	$\begin{bmatrix} -62 & 11 \\ -62 & 23 \end{bmatrix}$	N.E. 2 N.	+9 59	- 0	-01 29	
6	-63 35	207 22	Direct.	$\begin{bmatrix} -62 & 2.3 \\ -62 & 21 \end{bmatrix}$					
0.	- 05 .55	507 55		$-63 \ 26$					
			S. N.	$\begin{vmatrix} -63 & 20 \\ -62 & 20 \end{vmatrix}$	N. 1/2 E.	+1 06	6	-61 37	
			N.S.	$\begin{bmatrix} -62 & 20 \\ -62 & 36 \end{bmatrix}$	N. 2 E.	+1 00	-0	-01 3/	
			Direct.	$\begin{bmatrix} -62 & 30 \\ -62 & 21 \end{bmatrix}$					
7	-63 54	308 00	Direct.	$\begin{bmatrix} -62 & 21 \\ -62 & 13 \end{bmatrix}$	N hw m 1 m	1.1 00	6	61 17)	
1.	-03 34	308 00	Direct.	-61 12	S.S.E. $\frac{1}{2}$ E.	1 02	-6	$\begin{bmatrix} -61 & 17 \\ -62 & 21 \end{bmatrix}$ -61 50	
0	69.40	200 00		$-61 \ 49$	S.S.E. 2 E.	-1 05	-0	-02 ZI)	
8.	$-63 \ 49$	309 00	Direct. S.	$\begin{bmatrix} -61 & 49 \\ -62 & 46 \end{bmatrix}$		-			
			N.	$\begin{vmatrix} -62 & 40 \\ -61 & 54 \end{vmatrix}$	E. $\frac{1}{2}$ S.	+0 04	- 6	-62 06	
			N.S.	-62 00	E. 2 .	T U 91	0	-02 00	
			Direct.	$\begin{bmatrix} -61 & 51 \end{bmatrix}$					
Q.	-64 19	309 36	Direct.	-61 29					
. 3•	-01 13	003 00	S.	$-61 \ 56$			ľ		
			Ñ.	$-61 \ 36$					
			N.S.	-61 50					
			wt. 1 gr.	$-62 \ 41$		1 4 40		Co. 00	
			wt. 2 grs.	$-62 \ 32$	E.S.E.	-0 18	-6	$-62 \ 33$	
			wt. 3 grs.	-6246					
			wt. 4 grs.	$-62 \ 37$					
			wt. 5 grs.	$-62 \ 37$					
			wt. 6 grs.	$-61 \ 31$			1	,	
10.	-64 36	311 53	Direct.	$-62 \ 13$					
			S.	$-62 \ 37$					
			N.	$-62 \ 35 >$	N.E. by E.	+0.51	-6	$-61 \ 41$	
			N.S.	$-62 \ 36$					l
	0		Direct.	-62 11	1				
11.	$-64 \ 37$	314 21	Direct.	-61 05					
			S.	-61 45 		0.54	_	(a 1*)	
			N.	$\begin{vmatrix} -61 & 03 \\ 61 & 00 \end{vmatrix}$	S.E. 1/2 S.	- U 54	_ - θ		
			N.S.	-61 22				-62 07	
			Direct.	$\begin{bmatrix} -61 & 02 \\ 60 & 02 \end{bmatrix}$	N.N.E. 1 E.	11 04	c	1 1	
-10	64 90	916 04	Direct.	-62 23	N.N.E. 2 E.	+1 04	ο	-01 zə J	
12.	-64 39	510 U4	Direct.	$\begin{bmatrix} -62 & 13 \\ -63 & 04 \end{bmatrix}$		1		ŀ	1
			S. N.		N.E.	上0 57	C	-61 30	
			N.S.	$\begin{vmatrix} -62 & 12 \\ -62 & 10 \end{vmatrix}$	N,E.	T.9 0./	-0	-01 30	
			Direct.	$\begin{bmatrix} -62 & 10 \\ -62 & 08 \end{bmatrix}$	1				
	1		Directo	-UN UO)	1	1	1		1

					Corre	ctions.		
Lat.	Long.	Method employed.	Observed Inclination. Face East.	Ship's head.	Ship's attrac- tion.	Index.	Corrected Inclination.	Remarks
. 0 /	9 /		0 / 1					
-64 38	316 57	S. N.	$\begin{bmatrix} -61 & 44 \\ -60 & 24 \end{bmatrix}$	s. by E.	_î 18	-6	1 0 1	
-65 06	318 46	Direct.	-62 05	n. by E.	+1 06	-6	$\begin{bmatrix} -61 & 05 \end{bmatrix}$	
		S. N.	$\begin{vmatrix} -62 & 38 \\ -62 & 31 \end{vmatrix}$	E. N. E.	+0 46	6	-61 35	
-64 40	320 12	Direct. S. N. N.S.	$ \begin{vmatrix} -62 & 01 \\ -62 & 54 \\ -62 & 08 \\ -61 & 45 \end{vmatrix} $	n.e. by n.	+1 00	-6	_61 08	
-63 54	321 36	Direct. Direct. Direct.	$\begin{bmatrix} -61 & 40 \\ -61 & 05 \end{bmatrix}$	·				
		N. N.S.	$\begin{vmatrix} -61 & 04 \\ -60 & 36 \end{vmatrix}$	n.e. by e.½ e.	+0 46	-6	-60 27	
—63 36	324 36	Direct. Direct.	$ \begin{array}{c cccc} -60 & 14 \\ -60 & 05 \end{array} $	и. by w. n. by e.			$\begin{bmatrix} -59 & 22 \\ -59 & 14 \end{bmatrix}$	
		S. N.	$\begin{bmatrix} -60 & 57 \\ -60 & 13 \end{bmatrix}$	N.N.E.	+0 57	-6	-59 25	
		wt. 1 gr. wt. 2 grs.	$\begin{bmatrix} -60 & 54 \\ -60 & 53 \end{bmatrix}$	· · · · · · · · · · · · · · · · · · ·			-59 43	
		wt. 4 grs. wt. 5 grs.	$\begin{vmatrix} -60 & 47 \\ -60 & 59 \end{vmatrix}$	E.N.E.	+0 44	-6	-60 05	
_62 30	308 16	Direct. Direct.	$\begin{bmatrix} -60 & 03 \ -59 & 59 \end{bmatrix}$	N.E.	+0 53	-6	-59 12	
	0.00 10	S. N.	$\begin{vmatrix} -59 & 42 \\ -59 & 30 \end{vmatrix}$	n.e. by e.	+0 47	-6	-58 18	
		Direct. wt. 2 grs.	$\begin{bmatrix} -59 & 28 \ -59 & 40 \ \end{bmatrix}$	E.N.E.	+0 44	-6	$\begin{bmatrix} -59 & 21 \end{bmatrix}$ $\begin{bmatrix} -58 & 42 \end{bmatrix}$	
-62 20	330 00	wt. 4 grs. Direct.	$\begin{bmatrix} -60 & 30 \ \end{bmatrix}$ $\begin{bmatrix} -59 & 07 \ \end{bmatrix}$				- - -	
-61 59	333 43	N. N.S.	$\begin{bmatrix} -59 & 18 \\ -59 & 16 \end{bmatrix}$	n.e. by e. ½ e.	+0 46	-6	58 30	
		s. N.	$\begin{vmatrix} -59 & 32 \\ -59 & 00 \end{vmatrix}$	N.E.	+0 50	-6	-58 13	
-61 37	336 05	Direct. Direct.	$\begin{vmatrix} -58 & 41 \\ -58 & 07 \end{vmatrix}$	_ 1	0.00	٠.	EQ 04.	
		N. N.S. Direct.	$ \begin{vmatrix} -58 & 13 \\ -58 & 22 \\ -58 & 15 \end{vmatrix} $		$-0 02 \\ +0 27$			
	$-6\overset{\circ}{4}$ 3 $\overset{\circ}{8}$ $-6\overset{\circ}{5}$ 06 $-6\overset{\circ}{4}$ 40 $-6\overset{\circ}{3}$ 36 $-6\overset{\circ}{2}$ 39 $-6\overset{\circ}{2}$ 20 $-6\overset{\circ}{1}$ 59	-64 38 316 57 -65 06 318 46 -64 40 320 12 -63 54 321 36 -63 36 324 36	Lat. Long. employed. -64 38 316 57 Direct. S. N. N.S. Direct. S. N. N.S. Direct. S. N. N.S. Direct. S. N. N.S. Direct. S. N. N.S. Wt. 1 gr. Wt. 2 grs. Wt. 3 grs. Wt. 4 grs. Direct. Direct. Direct. S. N. N.S. Direct. Direct. S. N. N.S. Direct. Direct. S. N. N.S. Direct. S. N. N.S. Direct. S. N. N.S. Direct. S. N. N.S. Direct. Direct. S. N. N.S. Direct. S. N. N.S. Direct. Direct. S. N. N.S. Direct. Direct. S. N. N.S. Direct. Direct	Lat. Long. employed. Face East. -64 38 316 57 Direct. -60 27 S. -61 44 N. -60 24 N.S. -60 28 Direct. -62 05 Direct. -62 02 S. -62 38 N. -62 31 N.S. -62 31 N.S. -62 31 N.S. -62 11 Direct. -62 01 S. -62 54 N. -62 08 N.S. -61 45 Direct. -61 41 Direct. -61 40 Direct. -61 41 Direct. -61 40 Direct. -61 40 Direct. -61 41 Direct. -61 05 S. -61 57 N. -61 04 N.S. -60 36 Direct. -60 05 Direct. -60 13 N.S. -60 11 N.S. -60 59 N.S. -60 59 N.S. -60 59 N.S. -60 59 N.S. -59 30 N.S. -59 3	Lat. Long.	Lat. Long.	Lat. Long. Inclination Face East. Ship's head. Ship's attraction. Index.	Lat. Long. employed. Inclination. Face East. Ship's head.

1843. Feb. 22. -61 36 338 06 Direct. -57 55 S. -58 30 N. -58 80 N. -58 80 N. -58 80 N. -57 55 Direct. -57 43 S. -58 30 N. -57 58 Direct. -57 43 S. -58 30 N. -57 58 Direct. -57 43 S. -58 30 N. -57 58 Direct. -57 47 S. -58 30 N. -57 58 Direct. -57 47 S. -58 04 N. -57 48 Direct. -57 45 Direct. -59 10 N. -60 60 Direct. -60 22 N. -60 60 Direct. -60 22 N. -60 60 Direct. -60 22 N. -60 60 Direct. -60 20 Direct. -60 20 Direct. -60 20 Direct. -60 20 N. -60 60 Direct. -60 20 Direct.							Corre	ctions.		
Feb. 2261 30 338 06 Direct.	Date.	Lat.	Long.			Ship's head.	attrac-	Index.	Corrected Inclination.	Remarks.
S.		cî nó	200 06	D: /	20 21					
N. -58 02 N. -57 55 N. -57 55 N. -57 55 N. -57 55 N. -57 58 N. -57 58 N. -57 58 N. -57 58 N. -57 68 N. -57 40 N. -59 10 N. -60 60	reo. zz.	-01 30	338 00							
23. -61 46 341 02 25 55 55 10 25 25 25 25 25 25 25 2				Ñ.		E. by N.	+0 27	- 6	-5750	
2361 46 341 02 Direct. -57 43 S. -58 30 N. -57 58 Direct. -57 47 Direct. -57 47 Direct. -57 47 Direct. -57 45 Direct. -59 18 S. -59 10 N. S. -59 10 N. S. -59 29 N. -59 10 N. S. -59 29 Direct. -60 26 S. -60 38 N. -60 60 6 N. S. -60 47 Direct. -60 28 Direct. -60 48 S. -60 47 Direct. -60 50 S. -60 50 Direct. -60 50 N. S. -60 30 N. S. -60 30 N. S. -60 30 N. S. -60 50 Direct. -60 50 Direct. -60 50 Direct. -60 50 N. S. -60 50 N. S. -60 50 N. S. -60 50 N. S. -60 50 Direct. -60 50										
S.	92	61 46	241 00			1.7	1 1 1 1			
N. N. S. -57 54 Direct. -57 47 Direct. -57 47 S. -58 04 N. S. -59 18 S. -59 29 N. -59 18 S. -59 29 N. -59 18 S. -59 29 N. -59 18 S. -60 04 Direct. -60 26 S. -60 04 Direct. -60 04 S. S. -60 04 S.	20.	-01 40	341 0%							
N.S.						E.S.E.	-0 14	-6	-58 18	
2462 36 344 08 Direct.										
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	04	60 26	244.00							
N.	24.	-02 30	344 08							
N.S. -58 14 -57 45 -59 18 -59 18						s.	-1 16	-6	-59 12	
2563 58 345 10 Direct.					-58 14	-				
S.	0.5	Co. FO	045 10			100				
No. 1. 1. 1. 1. 1. 1. 1.	25.	-03 58	345 10						_	
N.S. -59 29 Direct. -59 27 Direct. -60 26 S. -60 38 N. -60 06 S. -60 38 N. -60 06 S. -60 47 Direct. -60 22 Direct. -60 48 S. -60 04 N. -60 47 N.S. -60 59 Direct. -60 48 N. -60 47 N.S. -60 59 Direct. -62 13 S. -62 25 N. -62 05 Direct. -62 13 S. -62 25 N. -62 05 Direct. -62 13 N. -62 31 N.S. -62 25 Direct. -62 13 N. -62 31 N.S. -62 25 Direct. -62 13 N. -62 31 N.S. -62 23 Direct. -62 13 N. -62 31 N.S. -62 23 Direct. -62 13 N. -62 31 N.S. -62 23 Direct. -62 13 N.S. -63 23 Direct. -62 56 S. -62 53 N. -63 23 Direct. -63 01 wt. 2 grs. -63 01 N.S. -63 03 N.S. -63 04 N.S. -63 04 N.S. -64 04 N.S. -63 04 N.S. -64 04				N.		s. by E.	-1 14	-6		
2664 38 348 00 Direct. S60 26 26 860 38 N60 06 N.S60 047 Direct60 22 Direct60 48 N60 47 N.S60 59 Direct60 59 Direct60 59 Direct62 25 N62 05 Direct62 13 N62 31 N.S62 22 Direct62 13 N62 31 N.S62 22 Direct62 13 Direct62 13 Direct62 13 N62 31 N.S62 22 Direct62 13 Direct62 13 Direct62 13 N63 31 N.S63 31 N.S63 32 N63 31 N.S63 31					-59 29				1 . 1	
S.	00	C4 00	040.00			S.S.E.	-1 09	-6	-60 42J	
N.S. -60 06 47 N.S. -60 06 48 N.S. -60 06 48 N.S. -60 08 N.S. -60 08 N.S. -60 08 N.S. -60 08 N.S. -60 59 Direct. -62 13 N.S. -62 25 N. -62 00 N.S. -62 43 N.S. -62 22 Direct. -62 31 N.S. -62 31 N.S. -62 22 Direct. -62 31 N.S. -62 31 N.S. -62 53 N. -63 02 N.S. -63 23 Wt. 1 gr. -63 21 wt. 2 grs. wt. 4 grs. -63 47 N.S. -63 03 N.	20.	-04 38	348 00				4.4			
2765 12 350 05						S.E.	-0 47	-6	-61 21	
2765 12 350 05 S61 04 S61 04 S. N60 47 N.S60 59 Direct62 13 S62 25 N62 23 N63 02 N.S63 02 N.S63 02 N.S63 02 N.S63 03 N63 03 N63 03 N63 03 N.S63 31 N.S63 31 N.S63 32 N63 31 N.S63 31 N.S63 32 N63 31 N.S63 31 N.S63 32 N63 31 N.S63 31 N.S.				N.S.	-60 47					
S. -61 04 N. -60 47 N.S. -60 59 Direct. -60 50 Direct. -62 13 S. -62 25 N. -62 00 N.S. -62 05 Direct. -62 13 S. -62 43 N.S. -62 43 N.S. -62 43 N.S. -62 43 N.S. -62 22 Direct. -62 13 Direct. -62 13 Direct. -62 13 Direct. -62 22 Direct. -62 13 Direct. -62 33 N.S. -63 02 N.S. -63 03 N.S. -63 41 wt. 4 grs. -63 41 wt. 4 grs. -63 03 N.S. -63 03 N		0					i.			
28. $-66\ 08$ 352 43 $\begin{vmatrix} N. & -60\ 47 \\ N.S. & -60\ 59 \\ Direct. & -62\ 13 \\ S. & -62\ 25 \\ N. & -62\ 05 \\ Direct. & -62\ 19 \\ S. & -62\ 22 \\ Direct. & -62\ 13 \\ N.S. & -62\ 22 \\ Direct. & -62\ 13 \\ N.S. & -62\ 22 \\ Direct. & -62\ 13 \\ Direct. & -62\ 13 \\ Direct. & -62\ 56 \\ S. & -62\ 53 \\ N. & -63\ 02 \\ N.S. & -63\ 23 \\ Direct. & -63\ 21 \\ wt.\ 1\ gr. & -63\ 21 \\ wt.\ 2\ grs. & -63\ 41 \\ wt.\ 4\ grs. & -63\ 47 \\ Direct. & -62\ 53 \\ S. & -62\ 53 \\ S. & -63\ 30 \\ N.S. & -63\ 03 \\ N.S. & -63\ 03 \\ N.S. & -63\ 10 \end{vmatrix}$ s.E. by s. $-1\ 02\ -6\ -63\ 14$	27.	65 12	350 05							
28. $-66 ext{ 08}$ 352 43 $\begin{vmatrix} N.S. & -60 ext{ 59} \\ Direct. & -62 ext{ 13} \\ S. & -62 ext{ 25} \\ N. & -62 ext{ 00} \\ N.S. & -61 ext{ 45} \\ Direct. & -62 ext{ 05} \\ S. & -62 ext{ 25} \\ N. & -62 ext{ 05} \\ S. & -62 ext{ 25} \\ N. & -62 ext{ 13} \\ N.S. & -62 ext{ 22} \\ Direct. & -62 ext{ 13} \\ N.S. & -62 ext{ 22} \\ Direct. & -62 ext{ 13} \\ N.S. & -62 ext{ 22} \\ Direct. & -62 ext{ 13} \\ N.S. & -63 ext{ 22} \\ Direct. & -62 ext{ 13} \\ N.S. & -63 ext{ 22} \\ N.S. & -63 ext{ 23} \\ Direct. & -63 ext{ 17} \\ wt. 2 ext{ grs.} & -64 ext{ 00} \\ wt. 3 ext{ grs.} & -64 ext{ 00} \\ wt. 4 ext{ grs.} & -63 ext{ 41} \\ wt. 4 ext{ grs.} & -63 ext{ 41} \\ wt. 4 ext{ grs.} & -63 ext{ 41} \\ wt. 4 ext{ grs.} & -63 ext{ 47} \\ Direct. & -62 ext{ 53} \\ S. & -62 ext{ 58} \\ N. & -63 ext{ 03} \\ N.S. & -63 ext{ 03}$						S.E.	-0.49	-6	-61 49	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$					-60 59					
Mar. 1. $-67 ext{ 06}$ $351 ext{ 04}$ 06 06 06 06 06 06 06 06	20	00.00	0 0 0							
Mar. 1. $-67 ext{ 06}$ 351 04 $\begin{array}{ c c c c c c c c c c c c c c c c c c c$	28.	-66 08	352 43							
Mar. 1. $-67 ext{ 06}$ $351 ext{ 04}$ 06 06 06 06 06 06 06 06						s.e. by s.	_1 02	-6	-63 14	
Mar. 1. $-67 \ 06$ 351 04 Direct. $-62 \ 19$ S. $-62 \ 43$ N. $-62 \ 31$ N.S. $-62 \ 22$ Direct. $-62 \ 53$ Direct. $-63 \ 23$ N. $-63 \ 02$ N.S. $-63 \ 23$ Direct. $-63 \ 21$ wt. 1 gr. $-63 \ 21$ wt. 2 grs. $-63 \ 41$ wt. 4 grs. $-63 \ 47$ Direct. $-62 \ 58$ N. $-63 \ 03$ N. -63	1				$-61 \ 45$					
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3.5	0- 00								
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Mar. 1.	-67 06	351 04		-62 19			-		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				N.		s.w. ½ w.	-0 47	-6	-63 19	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$										
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		0		Direct.						
$\begin{array}{ c c c c c c c c c }\hline N. & -63 & 02 \\ N.S. & -63 & 23 \\ Direct. & -63 & 01 \\ wt. 1 & gr. & -63 & 21 \\ wt. 2 & grs. & -64 & 00 \\ wt. 3 & grs. & -63 & 41 \\ wt. 4 & grs. & -63 & 47 \\ Direct. & -62 & 53 \\ S. & -62 & 58 \\ N. & -63 & 03 \\ N.S. & -63 & 10 \\ \end{array} \begin{array}{ c c c c c }\hline S.w. & -0 & 58 & -6 & -64 & 24 \\ \hline & & & & & & & & & & & & & & & & & &$	2.	-68 14	347 08							
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$						l var e				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$				N.S.	$ -63 \ 23 \ $					
3. -68 32 347 09 $\left \begin{array}{c} \text{wt. 2 grs.} \\ \text{wt. 3 grs.} \\ \text{wt. 4 grs.} \\ \text{Direct.} \\ \text{S.} \\ \text{N.S.} \\ \text{N.S.} \\ -63$ 33 $\left \begin{array}{c} \text{wt. 2 grs.} \\ -63$ 41 $\\ -63$ 47 $\\ -62$ 53 $\\ -62$ 58 $\\ \text{N.} \\ -63$ 03 $\\ -63$ 10 $\left \begin{array}{c} \text{s.s.e.} \\ -1$ 15 $\\ -6$ -64 21						s.w.	-0.58	-6	-64 24	
3. -68 32 347 09 $\left \begin{array}{c} \text{wt. 3 grs.} \\ \text{wt. 4 grs.} \\ \text{Direct.} \\ \text{S.} \\ \text{N. S.} \\ \text{N.S.} \\ -63$ 33 $\left \begin{array}{c} -63 & 41 \\ -63 & 47 \\ -62 & 53 \\ -62 & 58 \\ -63 & 03 \\ -63 & 10 \end{array} \right \right $ s.s.e. $\left -1 \right 15 = -6 = -64$ 21										
3. $\begin{bmatrix} -68 & 32 \end{bmatrix}$ 347 09 $\begin{bmatrix} & \text{wt. 4 grs.} & -63 & 47 \\ & Direct. & -62 & 53 \\ & S. & -62 & 58 \\ & N. & -63 & 03 \\ & N.S. & -63 & 10 \end{bmatrix}$ s.s.e. $\begin{bmatrix} -1 & 15 \\ -64 & 21 \end{bmatrix}$										
$ \begin{vmatrix} S. & -62 & 58 \\ N. & -63 & 03 \\ N.S. & -63 & 10 \end{vmatrix} $ s.s.e. $\begin{vmatrix} -1 & 15 \end{vmatrix}$ $= 6$ $\begin{vmatrix} -64 & 21 \end{vmatrix}$				wt. 4 grs.	$ -63 \ 47 \ $					
$egin{array}{ c c c c c c c c c c c c c c c c c c c$	3.	-68 32	347 09				1 × 11 × 1			
N.S. -63 10			: 1			0.079	1 15	_6	_64 21	
						3.5.E.	-1 10		- J. W.	
					$\begin{bmatrix} -62 & 54 \end{bmatrix}$					

				01 1		Corre	ctions.		
Date.	Lat.	Long.	Method employed.	Observed Inclination. Face East.	Ship's head.	Ship's attraction.	Index.	Corrected Inclination.	Remarks.
1843. Mar. 4.	-69° 26	345° 31	Direct. S. N.	$ \begin{vmatrix} -63 & 27 \\ -63 & 36 \\ -63 & 30 \end{vmatrix} $	s.w. by s.	î 1ó	-6	$-6\mathring{4}$ 4 $\acute{8}$	
5.	—71 10	344 13	N.S. Direct. Direct. S. N.	$ \begin{bmatrix} -63 & 35 \\ -63 & 25 \end{bmatrix} $ $ \begin{bmatrix} -65 & 08 \\ -65 & 16 \\ -65 & 12 \end{bmatrix} $	S.E.	_0 53	_6	-66 13	
	-70 55		N.S. Direct. Direct.	$ \begin{array}{c c} -65 & 23 \\ -65 & 13 \\ -65 & 48 \end{array} $	E. 1 N.	+0 23		-65 31 67 80	
	-70 28 $-69 56$ $-68 06$	344 03	Direct. Direct. Direct. N.	$ \begin{vmatrix} -65 & 10 \\ -65 & 10 \\ -64 & 12 \\ -63 & 45 \end{vmatrix} $	E.S.E. N.N.E.	$\begin{bmatrix} -0 & 22 \\ +1 & 12 \end{bmatrix}$	-6	-65 38 -64 04	
11.	65 56	346 24	S. Direct. Direct.	$ \begin{vmatrix} -63 & 47 \\ -64 & 12 \\ -62 & 36 \end{vmatrix} $	n.e. by n.	+1 04	-6	63 01 	-
			S. N. N.S.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	n. by E.	+1 06	-6	-61 47	
12.	-64 3 1	346 01	Direct. Direct. N. S.	$ \begin{vmatrix} -62 & 40 \\ -60 & 39 \\ -60 & 27 \\ -61 & 03 \end{vmatrix} $	N.N.E.	+1 00	-6	-59 50	
13.	-61 34	348 37	Direct. Direct. S.	$ \begin{vmatrix} -60 & 45 \\ -59 & 36 \\ -60 & 03 \end{vmatrix} $				F0. F0	-
14.	_59 34	350 34	N. N.S. Direct. Direct.	$ \begin{vmatrix} -59 & 32 \\ -59 & 24 \\ -59 & 30 \\ -57 & 57 \end{vmatrix} $	n.e. by n.	+0 53	-6	-58 50	
•		000 01	S. N. N.S.	$ \begin{vmatrix} -58 & 58 \\ -58 & 13 \\ -57 & 52 \end{vmatrix} $	n.e. by n.	+0 50	-6	-57 27	
15.	-57 27	352 08	Direct. Direct. S. N.	$ \begin{array}{c c} -57 & 54 \\ -57 & 02 \\ -58 & 30 \\ -57 & 06 \end{array} $					
			N.S. Direct. wt. 2 grs. wt. 3 grs.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	n.e. by n.	+0 49	-6	-56 37	
16.	-57 09	352 45	wt. 4 grs. Direct. S.	$\begin{vmatrix} -56 & 01 \\ -56 & 48 \\ -57 & 55 \end{vmatrix}$					
17	_56 38	353 57	N. N.S. Direct. Direct.	$ \begin{vmatrix} -57 & 27 \\ -56 & 32 \\ -56 & 40 \\ -56 & 36 \end{vmatrix} $	N.W. ½ N.	+0 42	-6	-56 28	
			S. N. N.S. Direct.	$ \begin{vmatrix} -57 & 38 \\ -56 & 36 \\ -56 & 32 \\ -56 & 34 \end{vmatrix} $	N.N.W.	+0 47	-6	_56 06	

	A Ministration of the Control of the			Observed	The state of the s	Corre	ctions.	The control of the co	l si
Date.	Lat.	Long.	Method employed.	Inclination. Face East.	Ship's head.	Ship's attraction.	Index.	Corrected Inclination	Remarks.
1843.	0	, , ,		0 !			1.0%	S PERSONAL PROPERTY PROPERTY AND ADMINISTRATION OF THE PROPERTY ADMINISTRATION OF THE PROPERTY AND ADMINISTRATION OF THE PROPERTY AND ADMINISTRATION OF THE PROPERTY AND ADMINISTRATION OF THE	
Mar. 18.	-55 3	8 355 32	Direct. S.	$\begin{bmatrix} -56 & 34 \\ -58 & 48 \end{bmatrix}$. ,			
	* *		N. N.S.	$\begin{vmatrix} -57 & 45 \\ -57 & 07 \end{vmatrix}$	E,N,E.	+ 0 41	-6	-56 45	
19.	-54 3	1 357 35	Direct. Direct.	$\begin{bmatrix} -56 & 28 \\ -55 & 56 \end{bmatrix}$	E. by N.	+0 26	-6	-55 36	
	-540		Direct.	$\begin{bmatrix} -55 & 17 \\ -55 & 28 \end{bmatrix}$					
			N.	_55 29					
			N.S. Direct.	$\begin{vmatrix} -55 & 49 \\ -55 & 17 \end{vmatrix}$	E.S.E.	-0 12	-6	-55 37	
			S. N.	_54 18 _55 35					
24.	-50 3	9 03	Direct.	_56 45					
			S. N.	$\begin{bmatrix} -56 & 28 \\ -57 & 02 \end{bmatrix}$	N.E.	+0 46	-6	-56 09	
25.	-47 3	8 10 51	N.S. Direct.	$\begin{bmatrix} -57 & 03 \\ -56 & 10 \end{bmatrix}$					
			S. N.	$\begin{bmatrix} -56 & 16 \\ -56 & 22 \end{bmatrix}$	N.E.	+0 45	-6	-55 39	
			N.S.	_56 37	14.072.	70 40	-0		
26.	—45 3	2 11 54	Direct. Direct.	$\begin{bmatrix} -56 & 17 \\ -56 & 03 \end{bmatrix}$	3 1 N				
			S. N.	$\begin{bmatrix} -56 & 07 \\ -55 & 44 \end{bmatrix}$	N.E.	+0 44	_6	-55 19	
			N.S.	_ 55 57					
27.	-43 5	7 13 16	Direct. Direct.	$\begin{vmatrix} -55 & 55 \\ -55 & 36 \end{vmatrix}$					
	-		S. N.	$ \begin{array}{r rrrr} -55 & 24 \\ -55 & 20 \end{array} $					r.
			N.S. Direct.	$\begin{bmatrix} -55 & 51 \\ -55 & 35 \end{bmatrix}$	N.E. by E.	+0 39	-6	-54 28	
			wt. 2 grs.	_54 35					
			wt. 3 grs. wt. 4 grs.	$\begin{bmatrix} -54 & 10 \\ -53 & 39 \end{bmatrix}$					
28	-43]	0 14 44	Direct. S.	$\begin{bmatrix} -55 & 33 \\ -55 & 43 \end{bmatrix}$					
I			N. N.S.	_55 49 _55 52			1	***	
			Direct.	_55 25	N.E.	+0 42	-6	-54 40	
		,	wt. 2 grs. wt. 3 grs.	$\begin{bmatrix} -55 & 03 \\ -54 & 16 \end{bmatrix}$					
29	41 4	10 15 09	wt. 4 grs. Direct.	$\begin{bmatrix} -54 & 31 \\ -55 & 14 \end{bmatrix}$					
,			S. N.	_55 22 _55 31	$N.E. \frac{1}{2} N.$	+0 43	-6	-54 43	
			N.S.	_55 21	N.E. 2 N.	70 10		-01 10	
30	40	15 47		$\begin{bmatrix} -55 & 14 \ -55 & 24 \end{bmatrix}$					
5-			S. N.	$\begin{bmatrix} -55 & 31 \\ -55 & 11 \end{bmatrix}$	N.E.	+0 49	-6	-54 50	
			N.S. Direct.	$\begin{bmatrix} -55 & 31 \\ -55 & 31 \end{bmatrix}$					
31	37	16 40	Direct.	_55 05					
			S. N.	$\begin{bmatrix} -55 & 09 \\ -54 & 40 \end{bmatrix}$	E.	+0 40	-6	_54 32	
			N.S. Direct.	$\begin{bmatrix} -55 & 33 \\ -55 & 05 \end{bmatrix}$					
				1 20 00)	1		1		

				Observed		Corre	ctions.		zi.
Date.	Lat.	Long.	Method employed.	Inclination. Face East.	Ship's head.	Ship's attrac- tion.	Index.	Corrected Inclination.	Remarks.
1843. April 1.	—35 59́	16 34	Direct. S. N.	$ \begin{array}{c c} -54 & 45 \\ -54 & 48 \\ -54 & 13 \end{array} $	n.e. by e.	+ 0 40	_6	-5 4 06	-
2.	_35 26	16 22	N.S. Direct. Direct. S.	$ \begin{bmatrix} -54 & 55 \\ -54 & 39 \\ -53 & 51 \\ -54 & 03 \end{bmatrix} $			C	50.45	
3.	-35 04	17 08	N.S. Direct. Direct. Direct.	$ \begin{vmatrix} -53 & 08 \\ -54 & 21 \\ -53 & 47 \\ -53 & 12 \\ -53 & 06 \end{vmatrix} $	E. by s. s.e. by e.	+0 11 +0 02 -0 19		$ \begin{vmatrix} -53 & 45 \\ -53 & 16 \\ -53 & 31 \end{vmatrix} -53 & 24$	
4.	by E. d	oint N.E.	Direct. S. N.	$igg egin{array}{c} -53 & 55 \ -53 & 57 \ \end{array} igg angle$	и.е. by е. <u>1</u> е.	+0 36	-6	-53 07)	
		iles.	N.S. Direct.	$ \begin{array}{c c} -52 & 59 \\ -54 & 17 \\ -54 & 02 \\ \hline 50 & 22 \end{array} $	N.E. by E. N.E. $\frac{1}{2}$ E.	$\begin{array}{c c} +0 & 37 \\ +0 & 38 \end{array}$	$-6 \\ -6$	$ \begin{vmatrix} -53 & 46 \\ -53 & 30 \end{vmatrix} - 53 & 20 $	
6.		House mon's Bay.	Direct. S. N. N.S. wt. 1 gr.	$egin{array}{c c} -53 & 32 \\ -53 & 43 \\ -53 & 33 \\ -53 & 42 \\ -54 & 25 \\ \hline \end{array}$					
			wt. 2 grs. wt. 3 grs. wt. 4 grs. S.	$ \begin{array}{c c} -53 & 47 \\ -53 & 26 \\ -52 & 50 \\ -53 & 19 \end{array} $	Observed on shore.	•••••	-6	-53 40	
	-		N. N.S.	$\begin{bmatrix} -53 & 10 \\ -53 & 43 \end{bmatrix}$					

Observations of the Inclination, with Needles whose Poles were reversed, made on land or on the ice; in continuation of those recorded in Contribution VI., Philosophical Transactions, 1844, Art. VII., pp. 100-103.

Station, St. Martin's Cove, near Cape Horn.

Date.	Needles.	Poles. "a" direct. "b" reversed.	Mean.	Remarks.
1842. Sept. 23.	R. 6 R. 4 R. 7	$\begin{array}{c} a-5\$ & 0\$\cdot4 \\ b-5\$ & 15\cdot5 \\ a-5\$ & 19\cdot8 \\ b-5\$ & 04\cdot7 \\ a-5\$ & 11\cdot4 \\ b-5\$ & 12\cdot4 \\ \end{array}$	$-5\overset{\circ}{8} \ 1\overset{\circ}{1} \cdot 9$ $-58 \ 12 \cdot 2$ $-58 \ 11 \cdot 9$	
27. 30.	R. 4 R. 4	$\begin{vmatrix} a-58 & 18.9 \\ b-58 & 05.5 \\ a-58 & 17.3 \\ \end{vmatrix}$	-58 12·2 -58 11·8	
Oct. 4.		$ \begin{vmatrix} b-58 & 06.3 \\ a-58 & 19.3 \\ b-58 & 05.7 \\ a-58 & 18.2 \end{vmatrix} $	-58 12·5	
11.	R. 4	$ \begin{vmatrix} b-58 & 05.3 \\ a-58 & 23.2 \\ b-58 & 05.3 \end{vmatrix} $	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Needles belonging to Her Majesty's Ship 'Erebus.'
15.		$ \begin{vmatrix} a-58 & 20.9 \\ b-58 & 05.8 \\ a-58 & 22.3 \\ b-58 & 05.3 \end{vmatrix} $	-58 13.4 $-58 13.8$	
21. 25.		a-58 20.6 $b-58 07.6$ $a-58 19.3$	-58 14·1 -58 12·3	
28.		$ \begin{vmatrix} b-58 & 05.2 \\ a-58 & 22.1 \\ b-58 & 07.0 \end{vmatrix} $	-58 12·6	
Nov. 1.		$ \begin{vmatrix} a-58 & 19\cdot1 \\ b-58 & 08\cdot0 \end{vmatrix} $ $ \begin{vmatrix} a-58 & 21\cdot5 \\ b-58 & 04\cdot1 \end{vmatrix} $	-58 13·5 -58 12·8	
Oct. 10.	C. 1 C. 2	$a-58 \ 18.7$ $b-58 \ 07.2$ $a-58 \ 14.0$	-58 13·0 -58 11·2	Needles belonging to Her Majesty's Ship 'Terror.'
	Genera	$ b-58 08\cdot4 $	-58 12·8) - - -

Observations of the Inclination, with Needles whose Poles were reversed, upon an Ice floe on January 2nd, 1843. Lat. -64° 26'. Long. 303° 52'.

Date.	Needles.	Poles. "a" direct. "b" reversed.	Mean.	Remarks.
1843. Jan. 2.	R. 4 R. 6 R. 7	$\begin{bmatrix} a-63 & 17 \cdot 3 \\ b-63 & 07 \cdot 3 \\ a-63 & 17 \cdot 1 \\ b-63 & 23 \cdot 2 \\ a-63 & 18 \cdot 2 \\ b-63 & 20 \cdot 0 \end{bmatrix}$ Mean	$ \begin{array}{r} -62 & 12 \cdot 3 \\ -63 & 20 \cdot 2 \\ -63 & 19 \cdot 1 \\ \hline -63 & 17 \cdot 2 \end{array} $	Needles belonging to Her Majesty's Ship 'Erebus.'

Observations of the Inclination made in Her Majesty's Ship 'Terror' with Needle F. C. B., between September 1842 and April 1843.

Observers Captain Francis Rawdon Crozier and Mr. Thomas E. L. Moore, Mate, R.N.

Date.	Lat.	Long.	Method employed.	Observed Inclination. Face East.	Direction of ship's head.	Correction for Deviation.	Corrected Inclination.	Index Correc- tion.	True Incli- nation,	Remarks.
1842. Sept. 8.	Berkele East Fa - 52 32	g out of y Sound, alklands. 301 53 303 10	Direct. Direct. Direct. Direct. Direct. Needle N.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	E. E.S.E. E. by N. S.E. by E.	$ \begin{array}{ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	– 3 5	-51° 51	Very steady. Strong breeze, steering tolerably.
			Needle S. Mag. N. Mag. N.S.	$ \begin{vmatrix} -52 & 19 \\ -52 & 15 \\ -52 & 19 \end{vmatrix} $	s.s.w.	-1 08	-53 17	-35	-53 52	
13. 14. 15. 16.	-54 40	305 04 304 35	Mag. S. Direct. Direct. Direct. Direct. Direct. Direct.	$ \begin{bmatrix} -52 & 13 \\ -52 & 10 \\ -53 & 19 \\ -52 & 06 \\ -52 & 06 \\ -53 & 39 \\ -54 & 05 \end{bmatrix} $	w. by n. s.w. by s. s.e. ½ s. n.e. w. by s.	+0 15 -0 58 -0 43 +0 54 -0 07	$ \begin{array}{r} -53 & 04 \\ -53 & 04 \\ -52 & 49 \\ -52 & 45 \\ -54 & 12 \end{array} $	-35 -35 -35	-53 39	Wind increasing, steering badly. Very unsteady. Very unsteady. Much motion.
		,	Direct. Needle N. Needle S. Direct. Direct.	-54 09 $-54 18$ $-54 31$ $-54 06$ $-53 40$	w.s.w. w.s.w. w.s.w. w.s.w. w.s.w.	$ \begin{vmatrix} -0 & 23 \\ -0 & 08 \end{vmatrix} $	-54 32 -54 41 -54 54 -54 29 -53 48	- 35	-54 39	Very unsteady. Observations unsatisfactory.
17. 18.	-55 10 -55 30	301 00 297 00	Direct. Direct. Direct. Needle N. Needle S. Mag. N. Mag. N.S.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	s.w. by w.	+0 01 -0 36 -0 56	-53 14 J -55 31 - -56 58	- 35 - 35	-56 06 -57 33	Heavy sea.
Oct. 3.	Cape	in's Cove, Horn. 292 28	Mag. N.S. Direct. Direct. Needle N. Needle S. Mag. N. Mag. N.S. Mag. S. wt. 1 gr. wt. 1·5 gr.	$\begin{bmatrix} -55 & 49 \\ -55 & 50 \\ -56 & 00 \end{bmatrix}$ $\begin{bmatrix} -57 & 31 \\ -56 & 42 \\ -57 & 37 \\ -57 & 21 \\ -57 & 13 \\ -57 & 22 \\ -57 & 25 \\ -57 & 23 \end{bmatrix}$	On shore		- 57 28	- 35	58 03	
4. Nov. 7.	Runnin St. Fra	 ng out of ncis Bay. 292 57	wt. 2 grs. wt. 2·5 grs. wt. 3 grs. wt. 3·5 grs. Direct. Direct. Direct. Direct. Needle N.	$\begin{bmatrix} -57 & 27 \\ -57 & 49 \\ -57 & 34 \\ -58 & 05 \\ -57 & 35 \\ -57 & 31 \\ -57 & 34 \\ -57 & 24 \\ -59 & 43 \\ -58 & 55 \\ \end{bmatrix}$	S.E. S.E. ½ S.	-0 44 -0 51	-58 18 -58 15 -58 41	- 35	-59 08	Steering well, slight motion.
8.	-55 52	295 41	Needle S. Direct. Direct. Needle N. Needle S. Mag. N. Mag. N.S.	$ \begin{vmatrix} -59 & 29 \\ -59 & 46 \end{vmatrix} $ $ -57 & 48 $ $ -57 & 03 $ $ -58 & 12 $ $ -57 & 40 $ $ -57 & 35 $	E.N.E.	+0 47	-56 43	-35	-57 18	Much motion.
			Mag. S. Direct.	$\begin{bmatrix} -57 & 29 \\ -57 & 43 \end{bmatrix}$,					

Date.	Lat.	Long.	Method employed.	Observed Inclination. Face East.	Direction of ship's head.	Correction for Deviation.	Corrected Inclination.	Index Correc- tion.	True Incli- nation.	Remarks.
9.	-55 38 -55 56	299 17	Direct.	-57° 27 -56 30	n.e. by e. e. by n.	$+0.54 \\ +0.29$	-56 33 -56 01	$-35^{'} \\ -35$	$-57^{\circ}08^{\circ}$ $-56^{\circ}36^{\circ}$	
	-55 28		Direct. Direct.	-55 49 -55 24 -56 20	s.w. $\frac{1}{2}$ s. s.w. $\frac{1}{2}$ w. w.	$ \begin{array}{rrr} -0 & 60 \\ -0 & 50 \\ +0 & 08 \end{array} $	$ \begin{bmatrix} -56 & 49 \\ -56 & 14 \\ -56 & 12 \end{bmatrix} $ $ \begin{bmatrix} -56 & 25 \\ 25 \end{bmatrix} $	-35	-57 00	Much motion, steering well.
11.	-55 0 5	299 49	Direct. Needle N. Needle S.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		1.6.67	55 59	-35	56 34	•
			Mag. N. Mag. N.S. Mag. S. Direct.	$ \begin{array}{c c} -57 & 08 \\ -57 & 32 \\ -56 & 55 \\ -56 & 51 \end{array} $	N.	+0 67	55 59	- 33	00 04	
12.	$-54 ext{ } 40 \ -54 ext{ } 36 \ -52 ext{ } 26$	301 32 301 37 301 16	Direct. Direct. Direct. Direct.	-56 44 $+56$ 38 -54 07	N. N.	$+1 04 \\ +1 04$	-55 40 -55 34	$-35 \\ -35$	$-56 15 \\ -56 09$	
	5.2 .20		Needle N. Needle S. Mag. N.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		10.50		6.5	F0 00	
			Mag. N.S. Mag. S. Direct.	-54 16 $-54 00$ $-54 04$	n. by E.	+0 56	-53 04	- 35	-53 39	
16.	Port	301 16 Louis,	Direct. Direct. Direct.	$ \begin{array}{c c} -53 & 53 \\ -53 & 47 \\ -51 & 27 \end{array} $	n. by E.	+0 56	-52 51	-35	-53 26	
	Falkland	l Islands.	Needle N. Needle S. Mag. N.	-50 55 -51 39 -51 16						
			Mag. N.S. Mag. S. wt. 1 gr.	-51 39	On shore	•••••	-51 38	- 35	-52 13	
			wt. 1.5 gr. wt. 2 grs. wt. 2.5 grs.	$ \begin{array}{c cccc} -51 & 36 \\ -52 & 00 \\ -52 & 20 \\ \end{array} $						
Dec. 3.	Port	Louis.	wt. 3 grs. Direct. Needle N.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						
			Needle S. Mag. N. Mag. N.S. Mag. S.	$ \begin{array}{c cccc} -51 & 45 \\ -51 & 17 \\ -51 & 17 \\ -51 & 27 \end{array} $	On ahaas		→51 43•5	-35	-52 18	•
			wt. 1 gr. wt. 1.5 gr. wt. 2 grs.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	On shore	•••••	-01 400	_ 55	-02 10	
4.			wt. 2.5 grs. wt. 3 grs. Direct.	$ \begin{array}{c cccc} -52 & 29 \\ -52 & 56 \\ -50 & 10 \end{array} $	s. by E.	_1 03	-51 13)			
7. 8.	•••••	•••••	Direct. Direct. Direct.	-50 08 $-52 08$ $-50 49$	s. by E. s. N.W. by W. s.W.	$ \begin{array}{rrr} -1 & 09 \\ +0 & 29 \\ -0 & 49 \end{array} $	-51 17 -51 39 -51 38			
9.	•••••	•••••	Direct. Direct. Direct.	-51 13 -51 33 -51 18	W.s.w. W. W.n.w.	$ \begin{array}{cccc} -0 & 22 \\ +0 & 10 \\ +0 & 19 \\ +0 & 20 \\ \end{array} $	-51 35 -51 23 -50 59			
,			Direct. Direct. Direct.	$ \begin{array}{c cccc} -52 & 07 \\ -50 & 59 \\ -51 & 29 \\ \hline 51 & 05 \end{array} $	n.w. s.e. by e. e. by s.	$ \begin{array}{r} +0 & 38 \\ -0 & 22 \\ 0 & 00 \\ -0 & 00 \end{array} $	-51 29 -51 21 -51 29 -51 14			
10.	*****	••••	Direct. Direct. Direct. Direct.	-51 05 -50 18 -50 15 -50 35	s.s.w. s. by w. s.w. by s.	$ \begin{array}{rrr} -0 & 09 \\ -1 & 05 \\ -1 & 06 \\ -0 & 57 \end{array} $	-51 14 -51 23 -51 21 -51 32			
11.		•••••	Direct. Direct. Direct.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	n.n.w. n.w. by n. n. by w.	+0 49 +0 43 +0 54	-51 20 -51 31 -51 16 >-51 25	-35	-52 00	

Date.	Lat.	Long.	Method employed.	Observed Inclination. Face East.	Direction of ship's head.	Correction for Deviation.	Corrected Inclination.	Index Correc- tion.	True Incli- nation.	Remarks. *
1842. Dec. 11.	••••		Direct. Direct. Direct.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	N. by E.	+0 54 +0 55	$ \begin{vmatrix} -51 & 21 \\ -51 & 07 \\ -51 & 33 \end{vmatrix} $	-35	$-\overset{\circ}{52}$ 00	
14.	*****	•••••	Direct. Direct. Direct.	$ \begin{array}{r rrrr} -51 & 48 \\ -51 & 42 \\ -50 & 18 \\ -50 & 36 \\ \end{array} $	w. by N. w. by s. s. by w. s.w. by s.	$\begin{vmatrix} +0 & 15 \\ -0 & 06 \\ -1 & 06 \\ -0 & 57 \end{vmatrix}$	$egin{bmatrix} -51 & 48 \ -51 & 24 \ -51 & 33 \ \end{bmatrix}$			
17.	Runnin	g out of	Direct. Direct.	-51 33 $-51 44$	w. by s.	$\begin{vmatrix} -0 & 06 \\ +0 & 47 \end{vmatrix}$	$\begin{bmatrix} -51 & 39 \\ -50 & 57 \end{bmatrix}$			
	Berkele	y Sound.	Direct.	-51 49	E.N.E.	+044	-51 05			
	-51 32	301 53	Direct. Direct.	$-51 50 \\ -51 31$	E. by N.	+0 27	$\begin{bmatrix} -51 & 23 \\ 51 & 21 \end{bmatrix}$			·
			Direct.	$-51 \ 51$	e. e. by n.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$egin{bmatrix} -51 & 21 \ -51 & 23 \ \end{bmatrix}$			
			wt. 1 gr.	-51 18		[_51 08			
			wt. 1.5 gr. wt. 2 grs.	$\begin{bmatrix} -51 & 27 \\ -51 & 45 \end{bmatrix}$			$\begin{bmatrix} -51 & 17 \\ -51 & 35 \end{bmatrix}$			
			wt. 2.5 grs.	-52 02		l '	$\begin{bmatrix} -51 & 53 \\ -51 & 52 \end{bmatrix}$			
			wt. 3 grs.	-5209			-51 59	25	E1 = C	
			Direct. Needle N.	$\begin{vmatrix} -51 & 29 \\ -50 & 49 \end{vmatrix}$	E •	+0 10	$\begin{vmatrix} -51 & 19 \\ -50 & 39 \end{vmatrix}$	-35	-51 56	
			Needle S.	-51 31			-51 21			
			Mag. N. Mag. N.S.	$\begin{bmatrix} -51 & 16 \\ -51 & 22 \end{bmatrix}$			$\begin{bmatrix} -51 & 06 \\ -51 & 12 \end{bmatrix}$			
			Mag. S.	$-51 22 \\ -51 24$			$\begin{bmatrix} -51 & 12 \\ -51 & 14 \end{bmatrix}$			
			Direct.	-51 28	· _	(-51 18			
			Direct. Direct.	-51 25 $-51 07$	E. by s. E.S.E.	0 00	$\begin{bmatrix} -51 & 25 \\ -51 & 16 \end{bmatrix}$			
			Direct.	-51 06	s.e. by e.	-0 22	-51 28			
18.	- 52 46	303 18	Direct. Direct.	$-50 44 \\ -51 24$	S.E.	-0 25	-51 09			
10.	- 32 40	909.10	Needle N.	-50 54						
			Needle S.	$-51 \ 37$						Steering badly; table very un-
			Mag. N. Mag. N.S.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						steady.
			Mag. S.	-51 22	s.e. by s.	-0 45	-52 14	-35	- 52 49	
			wt. 1 gr. wt. 1.5 gr.	$ \begin{array}{c cccc} -51 & 14 \\ -51 & 52 \end{array} $	5.2. by 5.	0 10				
			wt. 2 grs.	$-51 \ 44$						
			wt. 2.5 grs.	-51 48						
			wt. 3 grs. Direct.	$\begin{bmatrix} -51 & 39 \\ -51 & 48 \end{bmatrix}$						
	-5252		Direct.	-51 59	E.S.E.	-0 09	-5208	—35	-5243	
19.	-53 38	303 43	Direct. Needle N.	$\begin{bmatrix} -5.1 & 44 \\ -51 & 04 \end{bmatrix}$						
			Needle S.	$-51 \ 38$						
			Mag. N.	$-51 \ 36 \ \rangle$	s. by E.	-1 04	$-52\ 36$	-35	-53 11	Steering badly.
			Mag. N.S. Mag. S.	$ \begin{array}{c cccc} -51 & 37 \\ -51 & 34 \end{array} $						
20			Direct.	-51 32						
20.	-55 26	305 20	Direct. Needle N.	$\begin{bmatrix} -52 & 59 \\ -52 & 11 \end{bmatrix}$						
			Needle S.	-53 04						
			Mag. N.	-5258	S.S.E.	-0.59	-53 57	-35	54 32	Table unsteady.
			Mag. N.S. Mag. S.	$ \begin{array}{r rrr} -53 & 14 \\ -53 & 07 \end{array} $			**			
		202 22	Direct.	-53 16						
	-5557	305 27	Direct. wt. 1 gr.	$\begin{bmatrix} -53 & 40 \\ -53 & 58 \end{bmatrix}$			٠.			
			wt. 1.5 gr.	-53 12 (s.E. by s.	-0 50	-54 28	-35	-55 03	Steering very well.
			wt. 2 grs.	-5358	o.E. Dy S.	-0 00	UI AU	00	00 00	
			wt. 2·5 grs. wt. 3 grs.	$\begin{bmatrix} -53 & 25 \\ -53 & 37 \end{bmatrix}$						
	-5600	305 30	Direct.	-54 03	s.e. by s.	-0 50				

Date.	Lat.	Long.	Method employed.	Observed Inclination. Face East.	Direction of ship's head.	Correction for Deviation.	Corrected Inclination.	Index Correc- tion.	True Incli- nation.	Remarks.
1842. Dec. 20.	_56° 00°	305 3 ó	Direct. Needle N. Needle S. Mag. N. Mag. S. Direct.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	S.S.E.	_î 0ź	$-5\mathring{4}$ $4\acute{0}$	-35	-55° 15	Very steady.
21.	— 56 ° 55	306 40	Direct. Needle N. Needle S. Mag. N. Mag. N.S. Mag. S. wt. 1 gr. wt. 1.5 gr.	-54 38 -53 38 -54 20 -54 24 -54 25 -54 26 -54 49 -54 31	S.S.E.	-1 04	55 34	- 35	-56 09	Steering badly,
22.	-57 00 -57 50	306 42 307 58	wt. 2 grs. wt. 2·5 grs. Direct. Direct. Needle N. Needle S. Direct.	-54 53 -54 29 -54 41 -54 49 -55 48 -55 29 -55 47 -55 35 -55 27	s.s.e.	-1 05	56 46	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	-57 19	Heavy sea; much motion.
	-58 25	307 53	Mag. N. Mag. N.S. Mag. S. Direct. Direct. wt. 1 gr. wt. 1 5 gr. wt. 2 grs. wt. 2 5 grs.	$ \begin{array}{c c} -55 & 22 \\ -55 & 37 \\ -55 & 30 \end{array} $	s. by E. s. by E. ½ E. s. by E.	1 /	$ \begin{array}{c cccc} -56 & 42 \\ -56 & 47 \\ -56 & 26 \\ -56 & 41 \\ -56 & 35 \\ -56 & 58 \end{array} $			
			wt. 3 grs. Direct. Needle N. Needle S. Mag. N. Mag. N.S. Mag. S. Direct.		s. by E. ½ E. s. by E.		$ \begin{vmatrix} -56 & 15 \\ -56 & 57 \\ -56 & 01 \\ -56 & 34 \end{vmatrix} $	-35	-57 14	Motion slight; steering well.
23.	59 44 59 57	308 02 307 53	Direct. Direct. Needle N. Needle S. Mag. N. Mag. N.S. Mag. S. Direct.	-57 07 -56 52 -56 19 -56 33 -56 28 -56 35 -56 31 -56 .53	s.s.w.	$\begin{bmatrix} -1 & 18 \\ -1 & 18 \end{bmatrix}$	-58 25 -58 10 -57 37 -57 51 -57 46 -57 53 -57 49 -58 11	3 — 35	-58 33	
24.		307 42	Direct. Needle N. Needle S. Mag. N. Mag. N.S. Mag. S.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	s. by w.	-1 22	-59 12	-35	-59 47	Table very unstead
25.	-61 22 -62 12		Direct. Direct. Needle N. Needle S. Mag. N. Mag. N.S. Mag. S. Direct.	-58 13 -59 04 -58 22 -59 03 -59 01 -58 56 -58 59 -59 05	S.S.E.	-1 14	-60 10	-35	-60 45	

Date.	Lat.	Long.	Method employed.	Observed Inclination. Face East.	Direction of ship's head.	Correction for Deviation.	Corrected Inclination.	Index Correc- tion.	True Incli- nation.	Remarks.
1842. Dec. 26.	_62° 25	307 58	Direct. Direct. Needle N. Needle S. Mag. N. Mag. N.S. Mag. S Direct. wt. 1 gr. vt. 1.5 gr.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	N.N.W.	+1 06	-61 21 -60 23 -59 26 -60 18 -60 08 -60 17 -60 21 -60 39 -60 11	-35	-60° 21	Very steady ; steering badly.
27.	-62 1 8	308 17	wt. 2 grs. wt. 2·5 grs. wt. 3 grs. Direct. Direct. Direct. Needle N.	$ \begin{array}{c cccc} -61 & 15 \\ -61 & 13 \\ -61 & 39 \\ -61 & 27 \\ -60 & 02 \\ -59 & 37 \\ -60 & 20 \\ -59 & 38 \\ \end{array} $	N.N.W. ½ W. W.S.W. S.W.	+1 02 -0 27 -1 05	-60 13 -60 11 -60 37 -60 25 -60 29 -60 42 -60 47 -60 05	j		
			Needle S. Mag. N. Mag. N.S. Mag. S. wt. 1 gr. wt. 1.5 gr. wt. 2 grs. wt. 2.5 grs. wt. 3 grs.	$ \begin{vmatrix} -60 & 27 \\ -60 & 08 \\ -60 & 04 \\ -60 & 21 \\ -60 & 33 \\ -60 & 12 \\ -60 & 14 \\ -60 & 23 \\ -60 & 27 \end{vmatrix} $	w.s.w.	-0 27≺	$ \begin{vmatrix} -60 & 54 \\ -60 & 35 \\ -60 & 31 \\ -60 & 48 \\ -61 & 00 \\ -60 & 39 \\ -60 & 41 \\ -60 & 50 \\ -60 & 54 \end{vmatrix} $	2 —35	-61 17	Table steady.
28.	-62 30	306 52	Direct. Direct. Needle N. Needle S. Mag. N. Mag. N.S. Mag. S. Direct.	$ \begin{vmatrix} -60 & 16 \\ -61 & 18 \\ -60 & 13 \\ -61 & 18 \\ -60 & 57 \\ -61 & 04 \\ -60 & 59 \\ -61 & 21 \end{vmatrix} $	w.s.w.	0 27	$ \begin{bmatrix} -60 & 43 \\ -61 & 45 \\ -60 & 40 \\ -61 & 45 \\ -61 & 24 \\ -61 & 31 \\ -61 & 26 \\ -61 & 48 \end{bmatrix} $ $ -61 & 29$) —35	-62 04	Ship steady.
	-62 42	305 27	Direct. Direct. Needle N. Needle S. Mag. N. Mag. N.S. Mag. S. wt. 1 gr. wt. 1.5 gr.	$ \begin{vmatrix} -60 & 29 \\ -60 & 11 \\ -60 & 12 \\ -59 & 27 \\ -60 & 19 \\ -60 & 04 \\ -60 & 06 \\ -60 & 14 \\ -60 & 31 \\ -60 & 22 \end{vmatrix} $	s.w. s.w.	$\begin{bmatrix} -1 & 01 \\ -1 & 05 \end{bmatrix}$ $\begin{bmatrix} -0 & 57 \\ 4 \end{bmatrix}$	$ \begin{bmatrix} -61 & 34 \\ -61 & 16 \\ -61 & 09 \\ -60 & 24 \\ -61 & 16 \\ -61 & 01 \\ -61 & 03 \\ -61 & 11 \\ -61 & 28 \\ -61 & 19 \end{bmatrix} $ $ -61 & 19$	2 —35	61 47	Motion slight.
29.		305 33	wt. 2 grs. wt. 2·5 grs. Direct. Direct. Direct. Direct. Direct. Direct. Direct. Direct.	$ \begin{vmatrix} -60 & 10 \\ -60 & 53 \\ -60 & 21 \end{vmatrix} $ $ \begin{vmatrix} -61 & 02 \\ -60 & 58 \\ -62 & 23 \\ -62 & 42 \\ -62 & 21 \\ -61 & 54 \end{vmatrix} $	s.e. by e. s.e. n.e. by e. ½ e n.e. e.s.e. w. by s. ½ s	$\begin{array}{r r} +1 & 09 \\ -0 & 20 \end{array}$	$ \begin{vmatrix} -61 & 07 \\ -61 & 50 \\ -61 & 18 \\ -61 & 37 \\ -61 & 48 \\ -61 & 31 \\ -61 & 33 \\ -62 & 41 \\ -62 & 18 \end{vmatrix} $ -61 49	2 -38	62 17	Steady; sailing among loose ice.
			Direct. Needle N. Needle S. Mag. N. Mag. N.S. Mag. S. Direct.	$\begin{bmatrix} -61 & 16 \\ -60 & 27 \\ -61 & 17 \\ -60 & 58 \\ -61 & 06 \\ -61 & 15 \\ -61 & 16 \end{bmatrix}$	s.w. by w.		$ \begin{bmatrix} -62 & 04 \\ -61 & 15 \\ -62 & 05 \\ -61 & 46 \\ -61 & 54 \\ -62 & 03 \\ -62 & 04 \end{bmatrix} $ $ -61 56$	6 -38	5 -62 31	Fresh breeze; unsteady.

Date.	Lat.	Long.	Method employed.	Observed Inclination. Face East.	Direction of ship's head.	Correction for Deviation.	Corrected Inclination.	Index Correc- tion.	True Incli- nation.	Remarks.
1842. Dec. 31.	_ 63° 57	30 4 3 2	Direct. Direct. Needle N. Needle S. Mag. N. Mag. N.S. Mag. S. wt. 1 gr. wt. 1.5 gr. wt. 2 grs. wt. 2.5 grs.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	S.E. ½ E.	-ů 4ź	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	— 35	-62° 41	Steady; sea very smooth.
	64 15 64 27		wt. 3 grs. Direct. Direct. Direct. Direct. Direct. Direct. Direct. Direct. Needle N.	-60 24 -63 02 -63 49 -63 29 -63 53 -61 31 -61 58 -61 46 -63 01 -62 06	w. n.w. by w. w.n.w. n.w. by n. s.s.e. s.e. s.e. by s.	+0 07 +0 46 +0 32 +1 05 -1 17 -0 50 -1 03	-61 54 -62 55 -63 03 -62 57 -62 48 -62 48 -62 48 -62 49	-35	–63 28	Very steady.
			Needle S. Mag. N. Mag. N.S. Mag. S. wt. 1 gr. wt. 1.5 gr. wt. 2 grs. wt. 2.5 grs.	$\begin{array}{c c} -63 & 05 \\ -62 & 45 \\ -62 & 48 \\ -62 & 38 \\ -62 & 45 \\ -62 & 44 \\ -62 & 48 \\ -62 & 52 \end{array}$	On ice	•••••	-62 46	-35	-63 21	Dip on the ice with needles whose poles were re- versed, - 63° 17'.
3.	-64 26	303 54	wt. 3 grs. Direct. Direct. Direct. Needle N. Needle S. Mag. N. Mag. N.S. Mag. S. Direct.	$ \begin{vmatrix} -62 & 52 \\ -64 & 02 \\ -63 & 31 \\ -63 & 28 \\ -62 & 21 \\ -63 & 32 \\ -63 & 18 \\ -63 & 06 \\ -63 & 18 \\ -63 & 34 $	N.w. by N. E. by N. N.w. ½ w.	+0 29	$ \begin{vmatrix} -62 & 55 \\ -63 & 02 \\ -62 & 41 \end{vmatrix} $ $ -61 & 34 \\ -62 & 45 \\ -62 & 31 \\ -62 & 19 \\ -62 & 31 \\ -62 & 47 \end{vmatrix} $	-35	-63 11	Steady; sailing amongst loose ice
4.	-64 06	303 43	Direct. Direct. Direct. Direct. Needle N. Needle S. Mag. N. Mag. N.S.	$\begin{vmatrix} -63 & 44 \\ -63 & 34 \end{vmatrix}$	N.W. by W. N.E. N.W. by W. \(\frac{1}{2} \) W. N.W. \(\frac{1}{2} \) W. N.W. by W. \(\frac{1}{2} \) W.	+1 10 +0 40 +0 53	$ \begin{vmatrix} -62 & 47 \\ -62 & 58 \\ -62 & 24 \\ -63 & 04 \\ -62 & 49 \\ -62 & 17 \\ -62 & 39 \\ -62 & 45 \\ -62 & 38 \\ -62 & 55 \end{vmatrix} -62 \ 47 $	- 35	-63 22	
	_ 64 36	304 26	Direct. Direct. Direct. Direct. wt. 1 gr. wt. 1 5 gr. wt. 2 grs. wt. 2 grs. wt. 3 grs. wt. 3 grs. wt. 3 grs.	$\begin{bmatrix} -63 & 44 \\ -63 & 42 \\ -63 & 56 \\ -63 & 46 \\ -63 & 41 \\ -63 & 37 \\ -63 & 23 \\ -63 & 23 \\ -63 & 36 \end{bmatrix}$	w.n.w. n. by w. n. by E. n.n.e. ½ E. n.n.e.	$\begin{vmatrix} +0 & 33 \\ +1 & 18 \\ +1 & 20 \\ +1 & 18 \\ +1 & 20 \end{vmatrix}$		-35	-62 54	

Date.	Lat.	Long.	Method employed.	Observed Inclination. Face East.	Direction of ship's head.	Correction for Deviation.	Corrected Inclination.	Index Correc- tion.	True Incli- nation.	Remarks.
1843. Jan. 5.	$-6\mathring{4} \ 1\mathring{3}$	304° 06	Direct. Direct.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	w. by n. ½ n.	+0.26	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			
			Needle N. Needle S. Mag. N. Mag. N.S. Mag. S.	$ \begin{vmatrix} -62 & 00 \\ -63 & 00 \\ -62 & 54 \\ -62 & 59 \\ -62 & 45 \end{vmatrix} $	w.	+0 07	$\begin{vmatrix} -62 & 53 \\ -62 & 47 \\ -62 & 52 \\ -62 & 38 \end{vmatrix} -62 & 38$	- 35	$-6\mathring{3}$ $\cancel{13}$	
	-64 13	304 06	Direct. Direct. Direct.	$\left[egin{array}{ccc} -63 & 17 \ -63 & 06 \ -63 & 06 \ \end{array} ight]$	w.n.w.	$+0$ 33 $\left\{$	$\begin{bmatrix} -62 & 44 \\ -62 & 33 \\ -62 & 37 \end{bmatrix}$			
	04 10	304,00	wt. 1 gr. wt. 1 5 gr.	$\begin{bmatrix} -62 & 34 \\ -63 & 22 \end{bmatrix}$	E. by N.	$+0 29 \{ +1 12$	$\begin{bmatrix} -62 & 05 \\ -62 & 10 \end{bmatrix}$			
,			wt. 2 grs. wt. 2.5 grs. wt. 3 grs. wt. 3.5 grs.	$ \begin{vmatrix} -63 & 37 \\ -63 & 59 \\ -63 & 46 \\ -63 & 55 \end{vmatrix} $	N.	+1 22	$\begin{vmatrix} -62 & 15 \\ -62 & 37 \\ -62 & 24 \\ -62 & 33 \end{vmatrix} -62 & 25$	- 35	-63 00	
6.	-64 12	303 04	Direct. Direct. Direct. Needle N.	$ \begin{vmatrix} -63 & 44 \\ -62 & 36 \\ -63 & 17 \\ -62 & 06 \end{vmatrix} $	E. by s.	-0.06	$ \begin{vmatrix} -62 & 22 \\ -62 & 42 \end{vmatrix} $ $ \begin{vmatrix} -63 & 10 \\ -61 & 59 \end{vmatrix} $	editive the radial description of the control of th	• • •	
			Needle S. Mag. N. Mag. N.S. Mag. S. Direct.	$ \begin{vmatrix} -63 & 08 \\ -62 & 58 \\ -62 & 58 \\ -62 & 55 \\ -63 & 02 \end{vmatrix} $	w.	+0 07	$ \begin{vmatrix} -63 & 01 \\ -62 & 51 \\ -62 & 51 \\ -62 & 48 \\ -62 & 55 \end{vmatrix} $	- 35	-63 24	
7.	-64 36	302 52	Direct. Direct. Needle N. Needle S.	$ \begin{vmatrix} -61 & 31 \\ -61 & 51 \\ -60 & 45 \\ -61 & 45 \end{vmatrix} $	s. by E.	-1 23	$ \begin{bmatrix} -62 & 54 \\ -63 & 21 \\ -62 & 15 \\ -63 & 15 \end{bmatrix} $			
	-64 36	200 20	Mag. N. Mag. N.S. Mag. S. Direct.	$ \begin{vmatrix} -61 & 29 \\ -61 & 26 \\ -61 & 29 \\ -61 & 50 \end{vmatrix} $	S. ½ W.	-1 30	$ \begin{vmatrix} -62 & 59 \\ -62 & 56 \\ -62 & 59 \\ -63 & 20 \end{vmatrix} $ $ \begin{vmatrix} -62 & 59 \\ -63 & 20 \end{vmatrix} $	-35	-63 36	
	-04 30	302 32	Direct. Direct. wt. 1 gr. wt. 1.5 gr. wt. 2 grs.	$ \begin{vmatrix} -61 & 35 \\ -63 & 43 \\ -64 & 03 \\ -61 & 53 \\ -61 & 31 \end{vmatrix} $	s.s.e. n.w.byw.½w. w.n.w.	$ \begin{vmatrix} -1 & 18 \\ +0 & 40 \\ +0 & 34 \end{vmatrix} $	$ \begin{vmatrix} -62 & 33 \\ -63 & 03 \\ -63 & 29 \\ -63 & 25 \\ -63 & 03 \end{vmatrix} $ $ \begin{vmatrix} -63 & 16 \\ -63 & 03 \end{vmatrix} $	-35	-63 51	Sailing amongst
			wt. 2.5 grs. wt. 3 grs. wt. 3.5 grs.	$\begin{vmatrix} -61 & 40 \\ -61 & 53 \\ -62 & 06 \end{vmatrix}$	S. ½ W.	$\begin{bmatrix} -1 & 32 \end{bmatrix}$	$egin{bmatrix} -63 & 12 \ -63 & 25 \ -63 & 38 \ \end{bmatrix}$		i.	loose ice.
8.	-64 37	303 10	Direct. Direct. Direct. Needle N. Needle S.	$ \begin{vmatrix} -61 & 50 \\ -62 & 24 \\ -62 & 30 \\ -61 & 33 \\ -62 & 23 \end{vmatrix} $	s. by E.	-1 26 {	$ \begin{vmatrix} -63 & 16 \\ -63 & 50 \\ -63 & 08 \\ -62 & 11 \\ -63 & 01 \end{vmatrix} $	25	62.20	
			Mag. N.S. Mag. S. Direct.	$ \begin{vmatrix} -62 & 18 \\ -62 & 19 \\ -62 & 23 \\ -62 & 33 \end{vmatrix} $	s.e. by e.	0 38	$\begin{bmatrix} -62 & 56 \\ -62 & 57 \\ -63 & 01 \\ -63 & 11 \end{bmatrix}$	_ 33	-03 38	Very steady.
	-64 37	303 10	wt. 1 gr. wt. 1·5 gr. wt. 2 grs. wt. 2·5 grs. wt. 3 grs.	$ \begin{vmatrix} -62 & 47 \\ -62 & 48 \\ -62 & 58 \\ -62 & 50 \\ -62 & 52 \end{vmatrix} $	E.S.E.	-0 21	$ \begin{vmatrix} -63 & 08 \\ -63 & 09 \\ -63 & 19 \\ -63 & 11 \end{vmatrix} $ $ \begin{vmatrix} -63 & 13 \\ -63 & 13 \end{vmatrix} $	-35	-63 4 8	
	-64 44	303 07	wt. 3·5 grs. Direct. Direct. Needle N. Needle S.	$ \begin{bmatrix} -63 & 00 \\ -62 & 47 \end{bmatrix} $ $ \begin{bmatrix} -63 & 15 \\ -62 & 19 \\ -63 & 12 \end{bmatrix} $	-		-63 21 -63 08			
			Mag. N. Mag. N.S. Mag. S.	$\begin{bmatrix} -63 & 31 \\ -63 & 01 \end{bmatrix}$	On ice	•••••	-63 09	-35	-63 44	

					-,	, jewy 2 10	mp remor (co		<i>)</i> -	
Date.	Lat.	Long.	Method employed.	Observed Inclination, Face East.	Direction of ship's head.	Correction for Deviation.	Corrected Inclination.	Index Correc- tion.	True Incli- nation.	Remarks.
1843.	09.4	°′		C		0 /	C8 06	2.5	$-6\mathring{3}$ $4\acute{4}$	
Jan. 8.	$-6\mathring{4} \ 4\mathring{4}$	303°07	wt. 1 gr. wt. 1.5 gr.	$\begin{vmatrix} -63 & 11 \\ -63 & 08 \end{vmatrix}$	On ice	•••••	$-6\mathring{3}$ 0 $\acute{9}$	-35	-03 44	
			wt. 2 grs.	-62 57						
			wt. 2.5 grs.	$-63 \ 11$			4.24			
			wt. 3 grs.	$-63 \ 21$, , ,			
			wt. 3.5 grs. Direct.	$\begin{bmatrix} -63 & 31 \\ -63 & 18 \end{bmatrix}$						
10.	-64 40	303 08	Direct.	$-62 \ 32$	s.w. by w.	-0 49	-63 21)			
			Direct.	-62 22	s.w.	-1 08	-63 30			
			Direct.	$\begin{bmatrix} -62 & 16 \\ -61 & 23 \end{bmatrix}$			-63 32			
			Needle N. Needle S.	$\begin{vmatrix} -61 & 23 \\ -62 & 11 \end{vmatrix}$			$\begin{vmatrix} -62 & 39 \\ -63 & 27 \end{vmatrix}$ $-63 & 17$	-35	-6352	
			Mag. N.	$ -62 \ 03 \ \rangle$	s.w. by s.	$-1 \ 16 <$	-63 19			
			Mag. N.S.	-62 01			-63 17			
	CASE	200.06	Mag. S.	-61 56		000	$\begin{bmatrix} -63 & 12 \\ 62 & 20 \end{bmatrix}$	-35	-63 55	
	-64 35 $-64 36$		Direct. Direct.	$-62 \ 42$ $-62 \ 16$	s.e. by e. s. ½ w.	$\begin{bmatrix} -0 & 38 \\ -1 & 30 \end{bmatrix}$	$\begin{bmatrix} -63 & 20 \\ -63 & 46 \end{bmatrix}$	- 33	-03 33	
1.40	0.00	002 07	Direct.	-62 10	s. by w.	-1 31	-63 41			
			Direct.	-6348	w. by N. $\frac{1}{2}$ N.	+0.26	-63 22	- 35	-64 06	
			Direct.	-64 09	N.W.	+1 00	-63 09	00	0.00	
			Direct. Direct.	$-62 23 \\ -64 02$	S.S.E. W.N.W.	$-1 18 \\ +0 34$	$\begin{bmatrix} -63 & 41 \\ -63 & 28 \end{bmatrix}$			
	-64 36	302 07	Mag. N.	-6342	W.N.W.	+0.34	-63 08			
,			Direct.	$-63 \ 45$	w.	+0 07 {	-63 38			
			Mag. N.S.	$\begin{bmatrix} -63 & 17 \end{bmatrix}$		1	$-63 \ 10$			-
			Direct. Direct.	$-62 \ 31 \\ -63 \ 06$	S.E. E.S.E.	$\begin{bmatrix} -0 & 54 \\ -0 & 22 \end{bmatrix}$	$\begin{vmatrix} -63 & 25 \\ -63 & 28 \end{vmatrix}$ $-63 & 23$	-35	-6358	Sailing amongst loose ice.
			Direct.	-64 04	W.N.W.	+0.34	$\begin{bmatrix} -63 & 26 \\ -63 & 30 \end{bmatrix}$			loose ice.
			Direct.	-63 40	w.	+0.07	$-63 \ 33$			
	C. 10		Direct.	-62 53	E.S.E.	-0.22	$-63 \ 15$:	
13.	-6442	302 42	Direct. Direct.	$-62 03 \\ -64 05$	s. by w.	-1 31 +1 00	$egin{array}{c} -63 & 34 \ -63 & 05 \ \end{array} iggr\} -63 \ \ 20$	-35	-63 55	
14.	-64 34	302 43	Direct.	-63 24	N.W. W.	+0.07	$-63 \ 17$		'	
7.7			Direct.	$-62 \ 16$	S.E.	-0.54	-63 10	-	_	
			Direct.	-6151	S.S.E.	-1 19	$-63 \ 10 > -63 \ 14$	-35	$-63 \ 49$	
			Direct. Direct.	$-63 ext{ } 46 \ -62 ext{ } 35$	w. by n. s.e. by e. ½ e.	+0.20	$ \begin{array}{c c} -63 & 26 \\ -63 & 05 \end{array} $			
16.	-6426	303 05	Direct.	$\begin{bmatrix} -62 & 56 \\ -63 & 56 \end{bmatrix}$	S.E. Dy E. 7 E.	-0 30	$-62 \ 39$			
			Needle N.	-63 02			$-61 \ 45$			
			Needle S.	-63 54			$-62 \ 37$			
			Mag. N.	$\begin{vmatrix} -63 & 43 \\ 63 & 40 \end{vmatrix}$	N.N.W.	+1 177	$ \begin{array}{c c} -62 & 26 \\ -62 & 23 \end{array} $	-35	-6304	Fast to a floe.
			Mag. N.S. Mag. S.	$\begin{bmatrix} -63 & 40 \\ -63 & 44 \end{bmatrix}$			$-62 \ 27$			1.
			Direct.	-64 00			$-62 \ 43$	-		
	C	000 00	Direct.	-63 21	E. by N.	+0 28	-62 53		Co. 40	8
17	-64 28 $-64 22$	303 03 303 30	Direct. Direct.	$-63 05 \\ -63 59$	On ice N.E. $\frac{1}{2}$ E.	+1 05	-63 05 $-62 54$	$-35 \\ -35$	$-63 \ 40$ $-63 \ 29$	100 H
	-64 56	305 25	Direct.	-63 06	д.п. 2 г.	· · · · · ·	-62 05	55	00 20	T PAGE
		- /	Needle N.	-62 14			$-61 \ 13$			
			Needle S.	-63 00	n.e. by e.	 +1 01 	-6159			
			Mag. N. Mag. N.S.	$\begin{bmatrix} -62 & 51 \\ -62 & 48 \end{bmatrix}$	- J		$ \begin{array}{c cccc} -61 & 50 \\ -61 & 47 \end{array} $	1		
			Mag. S.	$\begin{bmatrix} -62 & 48 \\ -62 & 54 \end{bmatrix}$		i	-61 53		70 g	
			Direct.	$-63 \ 13$	N.E.	+1 10	$-62 \ 03 > -61 \ 53$	-35	-6228	Amongst loose ice.
			wt. 1 gr.	-6252			$-61 \ 47$			
			wt. 1·5 gr. wt. 2 grs.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			-0148 -6147			
			wt. 2 grs. wt. 2.5 grs.	$-63 \ 01$	N.E. $\frac{1}{2}$ E.	$+1 05 \langle $	-61 56			
			wt. 3 grs.	$-63 \ 15$	1		-62 10	1		
. 1	64 00	205 04	wt. 3.5 grs.	$ \begin{array}{c c} -63 & 17 \\ -62 & 35 \end{array} $	N.E. $\frac{1}{2}$ E. E. $\frac{1}{2}$ N. E. by s.	1000	$ \begin{array}{c cccc} -61 & 47 \\ -61 & 56 \\ -62 & 10 \\ -62 & 12 \\ -62 & 15 \\ -62 & 51 \\ -62 & 58 \end{array} $		60 -0	·
19.	-64 00 $-64 22$		Direct. Direct.	$-62 \ 45 \]$	E. 2 N.	TU 20	-6251	-35	-0z,50	
-3.			Direct.	$-62 \ 52$	E. by s.	-0 06	$-62 \ 58$ $\}$ $-62 \ 54$	-35	-63 29	
				_		`		1		

Date.	Lat.	Long.	Method employed.	Observed Inclination. Face East.	Direction of ship's head.	Correction for Deviation.	Corrected Inclination.	Index Correc- tion.	True Incli- nation.	Remarks.
1843. Jan. 20.	-64° 16	304 26	Direct. Needle N.	$-62\ 39$ $-61\ 50$			$-63^{\circ} 03^{\circ}$ $-62^{\circ} 14$			
-			Mag. N.S. Mag. S.	$ \begin{vmatrix} -62 & 33 \\ -62 & 27 \\ -62 & 26 \end{vmatrix} $	w. by s. ½ s.	$-\mathring{0}$ 24	$ \begin{array}{c cccc} -62 & 57 \\ -62 & 51 \\ -62 & 50 \\ \end{array} $	-35́	$-63^{\circ} 26$	
			Direct. Direct. Direct.	$\begin{bmatrix} -62 & 39 \ -62 & 08 \ -62 & 54 \end{bmatrix}$	s.e. by e.	-0 38 -0 03	$ \begin{array}{r rrr} -63 & 03 \\ -62 & 46 \\ -62 & 57 \end{array} $			
21.	-64 18	304 13	Direct. Direct.	$\begin{bmatrix} -62 & 30 \\ -62 & 24 \end{bmatrix}$	W. ½ S. W.S.W.	-0 30	$-63 \ 00$ $]$ $-62 \ 45$			
			Needle N. Needle S. Mag. N.	$\begin{vmatrix} -61 & 22 \\ -62 & 13 \\ -62 & 10 \end{vmatrix}$	E.S.E.	-0 21				
			Mag. N.S. Direct. Mag. S.	$\begin{bmatrix} -62 & 03 \ -62 & 55 \ -62 & 57 \end{bmatrix}$	w.	+0 07	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	-35	$\begin{bmatrix} -63 & 14 \end{bmatrix}$	
			Direct. Direct. Direct.	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	w. by s. E. s.e. by e.	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$				
22.	-64 12	304 07	Direct. Direct.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	w.s.w.	-0 30 + 0 59	$ \begin{array}{cccc} -62 & 47 \\ -62 & 23 \end{array} $		2	
			Direct. Direct. wt. 1 gr.	$\begin{bmatrix} -62 & 45 \\ -63 & 07 \\ -63 & 14 \end{bmatrix}$	E. by N.	+0 28				
			wt. 1.5 gr. wt. 2 grs, wt. 2.5 grs.	$\begin{bmatrix} -62 & 55 \\ -63 & 08 \\ -63 & 23 \end{bmatrix}$	E.N.E.	+0 51	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	-35	-63 04	
			wt. 3 grs. wt. 3·5 grs.	$\begin{bmatrix} -63 & 33 \\ -63 & 37 \end{bmatrix}$	N.W.	+0 59	$ \begin{array}{c cccc} -62 & 34 \\ -62 & 38 \end{array} $, ;	
23.	-64 20	304 08	Direct. Direct. Direct.	$ \begin{bmatrix} -63 & 31 \\ -62 & 47 \\ -63 & 25 \end{bmatrix} $	E. W.N.W.	+0 09 +0 33	$ \begin{bmatrix} -62 & 30 \\ -62 & 38 \end{bmatrix} $ $ -62 & 52 \end{bmatrix} $			
			Direct. Direct. Direct.	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	n.w. by n. E.S.E.	$ \begin{array}{c cccc} +1 & 07 \\ -0 & 21 \\ +0 & 09 \end{array} $	$\begin{vmatrix} -62 & 37 \\ -62 & 45 \\ -62 & 43 \end{vmatrix}$ $-62 \ 45$	-35	-63 20	
0.4	C4 16	504.44	Direct. Direct.	$ \begin{array}{r rrrr} -62 & 42 \\ -63 & 32 \end{array} $	E. by s. N.w. by w.	$-0 06 \\ +0 46$	$ \begin{bmatrix} -62 & 48 \\ -62 & 46 \end{bmatrix} $ $ \begin{bmatrix} -62 & 50 \end{bmatrix} $			
24.	-64 16	304 44	Direct. Direct. Direct.	$ \begin{array}{rrrr} -62 & 15 \\ -63 & 42 \\ -63 & 44 \end{array} $	s.e. by e. n. n. by w.	$\begin{bmatrix} -0 & 35 \\ +1 & 22 \\ +1 & 18 \end{bmatrix}$	$ \begin{array}{c cccc} -62 & 20 \\ -62 & 26 \end{array} $			
			Direct. Needle N. Needle S.	$\begin{bmatrix} -63 & 42 \\ -62 & 52 \\ -63 & 47 \end{bmatrix}$	v 1 m	+1 21	$\begin{vmatrix} -62 & 21 \\ -61 & 31 \\ -62 & 26 \end{vmatrix}$ \rightarrow $-62 & 20$	-35	-62 55	Amongst loose ice.
			Mag. N. Mag. N.S. Mag. S.	$ \begin{vmatrix} -63 & 31 \\ -63 & 29 \\ -63 & 33 \end{vmatrix} $	N. ½ E.	+1 21	$\begin{bmatrix} -62 & 10 \\ -62 & 08 \\ -62 & 12 \end{bmatrix}$			
or.	C4 3 C	904 77	Direct. Direct.	$\begin{bmatrix} -63 & 44 \\ -61 & 53 \end{bmatrix}$	s.e. by s.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{bmatrix} -62 & 22 \\ -62 & 58 \end{bmatrix}$			
	-64 16 $-64 01$		Direct. Direct. Direct.	$ \begin{array}{c cccc} -61 & 25 \\ -63 & 02 \\ -61 & 43 \end{array} $	S.S.E. ½ E. W.	+0 07	$\begin{bmatrix} -62 & 55 \end{bmatrix}$ $\begin{bmatrix} -62 & 46 \\ -62 & 35 \end{bmatrix}$	-35	-63 20	
			Needle N. Needle S. Mag. N.	$ \begin{vmatrix} -60 & 54 \\ -61 & 30 \\ -61 & 17 \end{vmatrix} $	S.E.	$\begin{bmatrix} -0 & 52 \end{bmatrix}$	$ \begin{vmatrix} -61 & 46 \\ -62 & 22 \\ -62 & 09 \end{vmatrix} $ -62 28	3 —35	-63 03	
			Direct. Mag. N.S. Mag. S.	$ \begin{vmatrix} -62 & 54 \\ -62 & 41 \\ -62 & 44 \end{vmatrix} $	W•	+0 07	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			
28	64 14	304 04	Direct. Direct.	$\begin{bmatrix} -62 & 58 \\ -62 & 28 \end{bmatrix}$	E. by s.	-0 06	$\begin{bmatrix} -62 & 51 \\ -62 & 34 \end{bmatrix}$	-35	-63 09	

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Date.	Lat.	Long.	Method employed.	Observed Inclination. Face East.	Direction of ship's head.	Correction for Deviation.	Corrected Inclination.	Index Correc- tion.	True Incli- nation.	Remarks.
1843. Jan. 28.	-64° 09	304 06	Direct. Direct. Needle N. Needle S. Mag. N.	$ \begin{array}{c c} -63 & 15 \\ -61 & 50 \\ -60 & 56 \\ -61 & 48 \\ -61 & 44 \end{array} $	n.e. by e.	+ î 0ó	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	_35 [']	-63 13	
29.	-64 0 8	304 02	Mag. N.S. Direct. Direct. Direct. Direct.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	s. by E. E. by s. N. by w.	$ \begin{array}{c cccc} -1 & 29 \\ -0 & 08 \\ +1 & 18 \\ +1 & 15 \end{array} $	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	-35	-63 14	
30.	-64 07	303 58	Direct. Direct. Direct. Direct.	-62 25 -62 18 -63 35 -63 23	N.N.W. E. by s. E.S.E. N.W. by N. N.W. by W.	$ \begin{array}{rrrr} -0 & 06 \\ -0 & 21 \\ +1 & 07 \end{array} $	$\begin{bmatrix} -62 & 31 \\ -62 & 39 \\ 62 & 69 \end{bmatrix}$	-35	-63 07	
		304 42	Direct. Direct. Direct. Direct.	-63 29 $-62 45$ $-62 35$ $-62 52$ $-62 32$	N.W. E. $\frac{1}{4}$ N. E. N.E. by E.	+0 59 +0 19 +0 09 +1 00	$ \begin{vmatrix} -62 & 30 \\ -62 & 26 \end{vmatrix} $ $ \begin{vmatrix} -62 & 26 \\ -61 & 52 \end{vmatrix} $ $ \begin{vmatrix} -62 & 09 \end{vmatrix} $	-35	-62 44	
reb. 1.	-04 00	304 47	Direct. Needle N. Needle S. Mag. N. Mag. N.S.	$ \begin{array}{c cccc} -61 & 34 \\ -62 & 26 \\ -62 & 12 \\ -62 & 17 \end{array} $	w. ½ S.	-0 02	$ \begin{vmatrix} -61 & 36 \\ -62 & 28 \\ -62 & 14 \\ -62 & 19 \end{vmatrix} -62 & 26$	—35	-63 01	Sailing amongst
2.	_64 19	304 43	Mag. S. Direct. Direct. Direct. Direct.	$ \begin{array}{c c} -62 & 20 \\ -63 & 01 \\ -61 & 08 \\ -61 & 18 \\ -62 & 29 \end{array} $	w.n.w. s. by E. ½ E s.E. by s. E. ½ s.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{vmatrix} -62 & 22 \\ -62 & 28 \\ -62 & 29 \\ -62 & 22 \\ -62 & 27 \end{vmatrix} $			loose icc.
			Direct. wt. 1 gr. wt. 1·5 gr. wt. 2 grs. wt. 2·5 grs. wt. 3 grs.	$\begin{vmatrix} -62 & 34 \\ -62 & 18 \\ -62 & 29 \\ -62 & 11 \\ -62 & 24 \\ -62 & 25 \end{vmatrix}$	w. by s.	-0 11	$\begin{vmatrix} -62 & 45 \\ -62 & 29 \\ -62 & 40 \\ -62 & 22 \\ -62 & 35 \\ -62 & 36 \end{vmatrix} -62 & 37$	7 —35	-63 12	
	-64 17	304 41	wt. 3·5 grs. Direct. Direct. Direct. Direct.	$ \begin{bmatrix} -62 & 45 \\ -62 & 33 \\ -62 & 13 \\ -62 & 33 \\ -62 & 42 \end{bmatrix} $	w.s.w. E. E. by N.	-0 29 +0 09 +0 29	$ \begin{bmatrix} -62 & 56 \\ -62 & 44 \end{bmatrix} $ $ \begin{bmatrix} -62 & 42 \\ -62 & 24 \end{bmatrix} $ $ \begin{bmatrix} -62 & 24 \\ -62 & 13 \end{bmatrix} $	6 -35	-63 01	
	64 18	305 40	Direct. Direct. Direct. Direct.	$ \begin{array}{r} -61 & 32 \\ -63 & 32 \\ -61 & 18 \\ -61 & 23 \\ -61 & 28 \end{array} $	s.e. n.e. by n. s. s.s.e.	-0.51	$ \begin{vmatrix} -62 & 23 \\ -62 & 17 \\ -62 & 50 \\ -62 & 40 \\ -62 & 54 \end{vmatrix} $	3 -35	-63 08	
*	04 12	5 505 17	Direct. Direct. Needle N. Needle S. Direct. Direct.	$ \begin{vmatrix} -63 & 18 \\ -62 & 12 \\ -63 & 03 \end{vmatrix} $ $ \begin{vmatrix} -63 & 13 \\ -63 & 04 \end{vmatrix}$	s.s.w. E.N.E. N.E. E. by N.	$\begin{vmatrix} +0 & 50 \\ +1 & 10 \\ +0 & 29 \end{vmatrix}$	$ \begin{vmatrix} -62 & 28 \\ -61 & 22 \\ -62 & 13 \\ -62 & 03 \\ -62 & 35 \end{vmatrix} $ -62 1	4 —35	-62 49	Table steady; swell
5	-64 11 -63 39 -63 29	306 51	Direct. Direct. Direct. Direct. Direct.	$ \begin{vmatrix} -63 & 23 \\ -61 & 55 \\ -63 & 03 \\ -62 & 27 \\ -62 & 18 \end{vmatrix} $	N.N.E. ½ E. S.W. N.N.E. N.E. by E.	+1 18 -1 07 +1 20 +1 00	$ \begin{vmatrix} -62 & 05 \\ -63 & 02 \\ -61 & 43 \\ -61 & 27 \\ -61 & 08 \end{vmatrix} -62 2$			
6	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	307 23	Direct. Direct. Needle N. Needle S. Mag. N.	$ \begin{vmatrix} -62 & 38 \\ -60 & 34 \\ -59 & 37 \\ -60 & 19 \\ -60 & 19 \end{vmatrix} $	N.E. N. by E.	$\begin{vmatrix} +1 & 10 \\ +1 & 18 \\ \\ -1 & 30 \end{vmatrix}$	$ \begin{bmatrix} -61 & 20 \\ -62 & 04 \\ -61 & 07 \\ -61 & 49 \\ -61 & 49 \end{bmatrix} $ $ -61 & 49$	7 —35	-62 22	Heavy head sca; very unsteady.
p. 244			Mag. N.S. Mag. S. Direct.	$ \begin{bmatrix} -60 & 28 \\ -60 & 19 \\ -60 & 47 \end{bmatrix} $			$ \begin{vmatrix} -61 & 58 \\ -61 & 49 \\ -62 & 17 \end{vmatrix} $	-		

Needle N. S. S. S. S. S. S. S.	Date.	Lat.	Long.	Method employed.	Observed Inclination. Face East.	Direction of ship's head.	Correction for Deviation.	Corrected	Inclination.	Index Correc- tion.	True Incli- nation.	Remarks.
Needle N. Seedle N. Seed	1843. eb. 7.	$-6\mathring{3} \ 5\acute{6}$	308 00	Direct.	$-60^{\circ}57$			_61° 59)			
Mag. N. -60 38 Mag. N. -60 38 Mag. N. -60 38 Mag. S. -60 60 31 Direct. -60 63 Direct. -62 60 Mag. N. -62 10 Mag. N. -61 10 Mag. N. -62 10 Mag. N. -63 10 Mag. N.				Needle N.	-59 58			-61 00				
Nag. S. -60 31 Direct. -60 53 Direct. -60 53 Direct. -62 21 Note of the state							0 /	-6142	00 04	- 4	09 1	
Nag. S. -60 31 Direct. -60 53 Direct. -60 53 Direct. -62 21 Note of the state						s.E. by s.	-1 02 \langle	-61 40	}−61 37	-35	-62 12	
Direct								-61 28				
-64 05 308 03 03 03 04 05 05 05 05 05 05 05								-61 55				
Direct. — 62 30 N. by E. \frac{1}{2} \) E. \fr	- 1-	-64 05	308 03		$-60 \ 46$	S.S.E.	-1 15					
Needle N. -66 10 Needle S. -69 07 Mag. N. -62 10 Mag		ľ				N. by E. $\frac{1}{2}$ E.	+1 18	-61 12				·
Needle S. -62 07 Mag. N. -65 10 Mag. N.	1	1										
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$								- 59 52	-60 56	-35	-61 31	Heavy head sea;
Mag. N.S. -62 02 Mag. S. -62 15 Direct. -61 14 Online -61 18 Online -62 18 Onlin						N. $\frac{1}{2}$ E.	+1 18	-60 52				very unsteady.
Mag. S. —62 15 Direct. —61 17 Direct. —61 18 Direct. —61 19 wt. 1·5 gr. —61 14 wt. 2 grs. —61 52 wt. 3 grs. —61 56 Direct. —61 33 Needle S. —61 33 Needle S. —61 33 Needle S. —61 33 Needle S. —61 13 Direct. —61 33 Needle S. —61 14 Direct. —61 33 Needle S. —61 14 Direct. —61 33 Needle S. —62 27 Needle N. —60 31 Needle S. —62 20 Direct. —62 21 Direct. —62 20 Direct. —62 21 Direct. —62 20	1		*		-62 02			-60 44				
964 18 309 40 Direct61 34 birect61 34 wt. 1 gr. wt. 1.5 gr. wt. 1.5 gr. wt. 1.5 gr. wt. 2.5 grs61 42 wt. 3 grs61 52 wt. 3.5 grs61 56 Direct61 33 Needle N60 33 Needle S61 33 Needle S62 27 Needle N63 17 Mag. N.S61 51 Mag. S62 20 Direct62 29 Direct62 29 Direct62 29 Needle N60 31 Needle S62 30 Needle S63 30 N					$-62 \ 15$			-60 57	.}			
Direct. wt. 1 gr. do 1 9 wt. 1 * gr. do 1 9 wt. 2 grs. do 1 4 do 1 do 1							+0 19	-61 28	_	-35	-62 03	
wt. 1·5 grs.	9.	-64 18	309 40			E.S.E.	-0 18	-61 36	}			
Wt. 1.5 grs. -61 41 wt. 2 grs. wt. 2.5 grs. -61 44 wt. 3 grs. -61 52 wt. 2.5 grs. wt. 3.5 grs. -61 52 wt. 3.5 grs. wt. 3.5 grs. -61 52 wt. 3.5 grs. wt. 3.5 grs. -61 52 wt. 2.5 grs. wt. 3.5 grs. -61 33 wt. 2.5 grs. -61 38 -61 38 wt. 2.5 grs. -61 39 wt. 2.5 grs. -61 39 wt. 2.5 grs. -61 30 wt. 2.5 grs. -61 40 wt. 2.5		4			-61 34		[-61 04				^
wt. 2 grs. wt. 35 grs. wt. 35 grs. being spread wt. 3 grs. wt. 35 grs. being spread wt. 3 grs. being s				wt. 1.5 gr.				$-61 \ 46$	ļ			
wt. 3 grs. wt. 3 fs. wt. 3 fs. wt. 3 fs. srs. srs. sed. 61 52 breet. Seedle N. Needle N. Needle N. Needle N. Seedle				wt. 2 grs.	-61 22			-61 27	ĺ			
wt. 3·5 grs. -61 56 Direct. -61 33 Needle N. -60 33 Needle N. -61 33 Needle N. -61 24 Mag. N. -61 24 Direct. -62 18 Direct. -62 27 Needle N. -62 29 Direct. -62 29 Direct. -62 29 Direct. -62 29 Needle N. -62 29 No. -62 29 No. -62 20 No.				wt. 2.5 grs.				-6149	- [
Direct. Needle N. Mag. N.S. All Direct. Needle N. Needle								-61 57	C1 00		Co. 60	
Needle N60 33 Needle S61 34 Mag. N. S61 14 Direct62 13 Direct62 27 Needle N61 51 Mag. N. S62 20 Direct62 28 Needle N61 40 Neecle S62 29 Direct62 20 Nag. N. S62 20 Nag. Nag. N. S62 20 Nag. Nag. Nag. Nag. Nag. Nag. Nag. Nag.						E. by s.	-0 05₹	61 28	}−61 33	35	-62 08	Slight motion.
Needle S. -61 33 -61 9 -61 33 -61 9 -61 34 -61 38 -61 9 -61 34 -61 39 -61 30 -61	1							-60.38				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	ļ											
10. -64 43 312 06 $\begin{vmatrix} Mag. S. & -61 & 14 \\ Direct. & -62 & 18 \\ Direct. & -62 & 27 \\ Needle N. & -61 & 43 \\ Needle S. & -62 & 30 \\ Mag. N.S. & -61 & 51 \\ Mag. S. & -62 & 20 \\ Direct. & -62 & 29 \\ Direct. & -62 & 29 \\ Direct. & -62 & 29 \\ Needle N. & -61 & 40 \\ Needle N. & -61 & 40 \\ Needle N. & -62 & 19 \\ Mag. N.S. & -62 & 29 \\ N. by E. & +1 & 19 \\ -61 & 37 \\ -60 & 53 \\ -61 & 40 \\ -61 & 07 \\ -60 & 21 \\ N. by E. & +1 & 19 \\ -61 & 30 \\ -61 & 37 \\ -61 & 37 \\ -61 & 40 \\ -61 & 00 \\ -61 & 40 \\ -61 & 00 \\ -61 & 40 \\ -61 & 04 \\ $		į			-61 24			-6129	[
10. -64 43 312 06 $\begin{array}{ c c c c c c c c c c c c c c c c c c c$												
10. -64 43 312 06 Direct. -62 18 Direct. -62 27 Needle N. -61 43 Needle S. -62 30 Mag. N. -62 17 Mag. N.S. -61 51 Mag. S. -62 20 Direct. -62 29 Direct. -62 19 Mag. N. -62 29 Direct. -62 19 Mag. S. -62 19 Direct. -62 15 Direct. -62 15 Direct. -62 15 Direct. -62 15 Direct. -62 14 Direct. -62 03 N.E. $\frac{1}{2}$ S. -0 56 -62 20 N.E. $\frac{1}{2}$ S. -0 56 -62 20 N.E. $\frac{1}{2}$ S. -0 56 -62 20 N.E. $\frac{1}{2}$ S. -0 50 -61 00 -61 40 N.E. $\frac{1}{2}$ E. N.E. $\frac{1}{2}$ S. -0 50 -61 00 -61 40 N.E. $\frac{1}{2}$ E. N.E. $\frac{1}{2}$ S. $$								-61 19				
11. -64 38 -62 30 Needle N. Nee	10	64 43	210 06		-69 18	N 15	1 00	-61.38	₹			
Needle N. Needle S. -62 30 Needle S. -62 30 Needle S. -62 30 Needle S. -62 20 Nag. N. -61 51 Nag. S. -62 20 Direct. -62 29 Direct. -62 29 Direct. -62 29 Needle N. Needle N. Needle S. -63 15 Nag. N. -63 17 Needle S. -63 18 No. by E. -63 20 Direct. -62 29 No. by E. -63 20 No. by E. No. by E. No. by E. -63 20 No. by E. No. by E. No. by E. -63 20 No. by E. No. by E. No. by E. -63 20 No. by E. No. by E. No. by E. -63 20 No. by E. No. by E. No. by E. No. by E. -63 20 No. by E. No	10.	-04 40	312 00			N.E.	71 09	$-61 03 \\ -61 37$				
Needle S. Mag. N.S. Ala 01 Needle S. Mag. N.S. Ala 01 Direct. $-62 \ 29$ N. by E. $+1 \ 20$ $-61 \ 09$ $-61 $								-60 53				
11. -64 38 14 01 11 11 11 11 11 11 11					$-62\ 30$	F.N.F.	+0 50	-61 40	61 91	-35	-61 56	A little medien
11. -64 38 314 01 $\begin{array}{c ccccccccccccccccccccccccccccccccccc$	i i					E.N.E.	(دور م	-61 27	j		01 00	A little motion.
11. -64 38 314 01 Direct. -62 02 Direct. -62 29 Direct. -62 29 Direct. -62 29 Direct. -62 26 Needle N. -61 40 Neecle S. -62 15 Mag. N.S. -62 15 Direct. -62 15 N.E. $+1$ 09 -61 06 Direct. -62 03 Direct. -62 03 Direct. -62 03 Direct. -62 03 Direct. -62 15 N.E. by E. $+1$ 04 -61 10 -61 04 N.E. by E. $+1$ 04 -61 10 -61 04 N.E. by E. $+1$ 04 -61 04 -60 01 -61 04 N.E. by E. $+1$ 05 -61 04 -60 01 -61 00								61 20				
11. -64 38 314 01 Direct. -62 29 Direct. -62 26 Needle N. -61 40 Neecle S. -62 15 Mag. N.S. -62 19 Mag. N.S. -62 19 Direct. -61 06 -61 07 -60 21 -60 56 -61 03 -61 00 -61 40 Niect. -62 15 Direct. -62 15 Direct. -62 15 Direct. -62 15 Direct. -62 14 Direct. -62 03 Direct. -62 03 Direct. -62 03 Direct. -61 54 Needle N. Ne						E. by N.	+0 29	-61 30				
Direct. $-62 \ 26$ Needle N. $-61 \ 40$ Neecle S. $-62 \ 15$ Mag. N.S. $-62 \ 22$ Mag. N.S. $-62 \ 19$ Mag. S. $-62 \ 59$ Direct. $-61 \ 06$ Direct. $-62 \ 15$ Direct. $-62 \ 15$ Direct. $-62 \ 15$ Direct. $-62 \ 14$ Direct. $-62 \ 14$ Direct. $-62 \ 03$ Direct. $-61 \ 54$ N.E. by E. $-61 \ 04$ N.E. by E.	11.	-6438	314 01									
Neecle S. -62 15 Mag. N.S. -62 22 Mag. N.S. -62 19 Mag. S. -62 59 Direct. -61 06 Direct. -62 15 Direct. -62 15 Direct. -62 15 Direct. -62 14 Direct. -62 03 Direct. -62 03 Direct. -61 54 Needle N. Needl		•			$-62 \ 26$			-61 07				
Mag. N. $\begin{array}{c ccccccccccccccccccccccccccccccccccc$								-60 21				1
Mag. N.S. -62 19 Mag. N.S. -62 19 Direct. -61 06 Direct. -62 05 Direct. -62 05 Direct. -62 05 Direct. -62 14 Direct. -62 03 Direct. -63 15 Needle N. Needle N. Needle N. Needle S. -61 51 Needle S. -61 51 Direct. -61 51 Needle N. Needle Needle N. Needle	1					n. by E.	+1 19 \	- 61 A2	-61 00	_35	-61 44	Fresh breeze; much
12. -64 49 315 07 $\begin{vmatrix} \text{Mag. S.} & -62 & 59 \\ \text{Direct.} & -61 & 06 \\ \text{Direct.} & -62 & 15 \\ \text{Direct.} & -62 & 05 \\ \text{Direct.} & -62 & 14 \\ \text{Direct.} & -62 & 03 \\ \text{Direct.} & -62 & 51 \\ \text{Direct.} & -62 & 03 \\ \text{Direct.} & -61 & 54 \\ \text{Needle N.} & -60 & 51 \\ \text{Needle S.} & -61 & 59 \\ \text{Direct.} & -61 & 59 \\ \text{Needle S.} & -61 & 60 & 01 \\ \text{Needle S.} & -61 & 59 \\ \text{Needle S.} & -61 & 60 & 01 \\ \text{Needle S.} & -61 & 59 \\ \text{Needle S.} & -61 & 59 \\ \text{Needle S.} & -61 & 60 & 01 \\ \text{Needle S.} & -61$							1			100	V. 11	motion.
12. -64 49 315 07 Direct. -61 06 Direct. -62 15 Direct. -62 05 Direct. -62 05 Direct. -62 05 Direct. -62 14 Direct. -62 03 Direct. -61 54 Needle N. Needle N. Needle N. Needle S. -61 51 Direct. -61 51 Direct. -61 51 Direct. -61 59 -61 00 -60 01 -61 00 -60 01 -61 00 -60 01 -61 00 -60 01 -61 00 -60 01 -61 00 -60 01 -61 00 -60 01 -61 00 -60 01 01 -60 01 01 -60 01 0	1				$-62\ 59$			-6140				
12. -64 49 315 07 Direct. -62 05 Direct. -62 14 Direct. -62 03 Direct. -62 03 Direct. -61 54 Needle N. Needle N. Needle S. Direct. -61 59 Direct. -61 50 Direct	1	·	,	Direct.				-6202	1			
Direct. $-62 ext{ 14} \\ -62 ext{ 03} \\ Direct. \\ -61 ext{ 54} \\ Needle ext{ N. e.dle S.} \\ Needle ext{ S.} \\ -61 ext{ 51} \\ Needle ext{ N. e.dle S.} \\ -61 ext{ 59} \\ -61 ext{ 59} \\ -61 ext{ 59} \\ -61 ext{ 50} \\ -61 ext{ 61} ext{ 04} \\ -60 ext{ 01} \\ -61 ext{ 04} \\ -60 ext{ 05} \\ -60 ext{ 04} \\ -60 $		C4 40	015 05									
Direct. $-62 ext{ 03} \\ Direct. \\ Needle N. \\ Needle S. \\ Needle S. \\ -61 ext{ 51} \\ Direct. \\ -61 ext{ 59} \\ -61 ext{ 40} \\ -60 ext{ 01} \\ -61 ext{ 00} \\ -60 ext{ 01} \\ -61 ext{ 00} \\ -60 ext{ 04} \\ -60 ext{ 05} \\ -61 ext{ 05} \\ -61 ext{ 05} \\ -61 ext{ 06} \\ -61 ext{ 06} \\ -61 ext{ 07} \\ -61 ext{ 07} \\ -61 ext{ 08} \\ -61 ext{ 07} \\ -61 ext{ 08} \\ -61 ext{ 08$	12.	- 64 49	315 07									
$ \begin{bmatrix} \text{Direct.} & -61 & 54 \\ \text{Needle N.} & -60 & 51 \\ \text{Needle S.} & -61 & 51 \\ \text{Direct.} & -61 & 59 \\ \text{Mor. N.} & -61 & 40 \end{bmatrix} $ E.N.E. $ \begin{vmatrix} +0 & 50 \\ -61 & 01 \\ -61 & 01 \\ -61 & 00 \\ -60 & 41 \end{vmatrix} $ $ \begin{vmatrix} -61 & 04 \\ -60 & 01 \\ -61 & 00 \\ -60 & 41 \end{vmatrix} $								-61 04			1	
Needle S. $\begin{vmatrix} -61 & 51 \\ -61 & 59 \\ Mor. N & -61 & 40 \end{vmatrix}$				Direct.	-61 54			-6104		-		
Needle S. $\begin{bmatrix} -61 & 51 \\ -61 & 59 \end{bmatrix}$ $\begin{bmatrix} -61 & 01 \\ -61 & 00 \end{bmatrix}$ $\begin{bmatrix} -61 & 01 \\ -60 & 41 \end{bmatrix}$						E.N.E.	+0 50≺	$ -60 \ 01$	} −60 59	-35	-61 34	Little motion.
Mag N 1-61 40 1 1-60 41 1							}	-61 01	1		1	
				Mag. N.	$\begin{bmatrix} -61 & 39 \\ -61 & 40 \end{bmatrix}$	'		-6041	1			
$ \left \begin{array}{c} \text{Mag. N.S.} \\ \text{Mag. N.S.} \\ \text{Mag. S.} \\ \left \begin{array}{c} -61 & 39 \\ -61 & 44 \end{array} \right \right \text{N.E. by E.} \\ \left \begin{array}{c} +0 & 59 \\ -60 & 40 \\ -60 & 45 \end{array} \right $						N.E. by E.	+0 59	$-60 \ 40$		1		
				Mag. S.	$-61 \ 44 \ $		1	$ -60 \ 45$	Į	1		
$1364 \ 47 \ 316 \ 57 \ $ Direct. $ -60 \ 14 \ \rangle$	13.	-6447	316 57)	-61 34	7			
$egin{array}{ c c c c c c c c c c c c c c c c c c c$								-61 10	. 1	1		
Mag. N. $\begin{vmatrix} -39 & 32 \\ -59 & 55 \end{vmatrix}$ s. by E. $\frac{1}{2}$ E. $\begin{vmatrix} -1 & 20 \\ -61 & 15 \end{vmatrix}$ -61 44 $\begin{vmatrix} -35 \\ -62 & 1 \end{vmatrix}$			·			s. by E. 1 E	-1 20	-61 15	-61 44	-35	-62 19	Slight motion.

Date.	Lat.	Long.	Method employed.	Observed Inclination. Face East.	Direction of ship's head.	Correction for Deviation.	Corrected Inclination.	Index Correc- tion.	True Incli- nation.	Remarks.
1843. Feb. 13.	$-6\mathring{4}$ 47	316 57	Direct.	$-61\ 25$	s. by E. ½ E.	レーノ	$ -62 \ 45 $	-35	$-62^{\circ}19$	Slight motion.
14.	-64 58	318 26	Direct. Direct. Direct. Direct.		E.S.E. S.E. N.	$ \begin{vmatrix} -0 & 20 \\ -0 & 50 \\ +1 & 20 \end{vmatrix} $	$ \begin{vmatrix} -61 & 51 \\ -62 & 50 \\ -61 & 12 \end{vmatrix} $ $ -61 & 32 $			
-			wt. 1 gr. wt. 1·5 gr. wt. 2 grs. wt. 2·5 grs.	$egin{array}{c c} -61 & 46 \\ -61 & 22 \\ -61 & 23 \\ -61 & 15 \\ \hline \end{array}$			$ \begin{vmatrix} -61 & 37 \\ -61 & 13 \\ -61 & 14 \\ -61 & 06 \end{vmatrix} $			
			wt. 3 grs. wt. 3·5 grs. Direct.	$egin{array}{c c} -61 & 35 \\ -61 & 49 \\ -61 & 31 \end{array}$	E.	+0 09	$\begin{vmatrix} -61 & 26 \\ -61 & 40 \\ -61 & 22 \\ 60 & 07 \end{vmatrix} $ \rightarrow $-61 \ 13$	-35	-61 48	Steering well.
			Needle N. Needle S. Mag. N. Mag. N.S.				$ \begin{vmatrix} -60 & 05 \\ -61 & 09 \\ -61 & 05 \\ -61 & 05 \end{vmatrix} $		٠.	0
			Needle S. Direct. Direct.	$\begin{bmatrix} -61 & 15 \\ -61 & 38 \\ -61 & 51 \end{bmatrix}$	e. by n.	+0 30	$egin{bmatrix} -61 & 06 \ -61 & 29 \ -61 & 21 \ \end{bmatrix}$			
15.	-64 37	320 28	Direct. Direct. Direct. Direct.	$ \begin{array}{r rrrr} -61 & 59 \\ -61 & 55 \\ -62 & 04 \\ -62 & 08 \end{array} $	e.n.e. n.e. by n. n.n.e.	$\begin{vmatrix} +0 & 50 \\ +1 & 09 \\ +1 & 12 \\ +1 & 18 \end{vmatrix}$	$ \begin{vmatrix} -61 & 09 \\ -60 & 46 \\ -60 & 52 \\ -60 & 50 \end{vmatrix} $			
,	: -		Direct. Needle N. Needle S.	$ \begin{vmatrix} -61 & 50 \\ -60 & 37 \\ -61 & 26 \end{vmatrix} $	N.E.	+1 09	$\begin{vmatrix} -60 & 41 \\ -59 & 28 \\ -60 & 17 \end{vmatrix} -60 & 25$	-35	—61 00	Strong breeze; un- steady; steering badly.
16.	-64 02	321 55	Mag. N. Mag. N.S. Direct. Direct.	$ \begin{bmatrix} -61 & 17 \\ -61 & 27 \\ -60 & 50 \\ -59 & 08 \end{bmatrix} $	n.e. by e.	+0 58	$ \begin{vmatrix} -60 & 08 \\ -60 & 18 \end{vmatrix} $ $ \begin{vmatrix} -59 & 52 \\ -60 & 12 \end{vmatrix} $			
	·		Needle N. Needle S. Mag. N.	$ \begin{vmatrix} -58 & 03 \\ -58 & 59 \\ -58 & 51 \end{vmatrix} $	s.w.	$\begin{bmatrix} -1 & 04 \end{bmatrix}$	$\begin{bmatrix} -59 & 07 \\ -60 & 03 \\ -59 & 55 \end{bmatrix}$	-35	-60 33	Strong breeze; head
			Mag. N.S. Direct. Mag. S. Direct.	$ \begin{array}{c cccc} -58 & 52 \\ -59 & 15 \\ -59 & 00 \\ -59 & 20 \end{array} $	s.w.byw.½w. s.s.w.	$ \begin{vmatrix} -0 & 37 \\ -1 & 22 \end{vmatrix} $	$ \begin{vmatrix} -59 & 56 \\ -59 & 52 \\ -59 & 37 \\ -60 & 42 \end{vmatrix} $			sea; very un- steady.
17.	-63 59	324 18	Direct. Direct. Needle N.	$ \begin{vmatrix} -60 & 35 \\ -60 & 02 \\ -59 & 00 \end{vmatrix} $	E.	+0 09	$\begin{bmatrix} -60 & 26 \\ -59 & 53 \\ -58 & 51 \end{bmatrix}$			
			Needle S. Mag. N. Mag. N.S.	$ \begin{vmatrix} -59 & 59 \\ -60 & 00 \\ -60 & 08 \end{vmatrix} $	Е.	+0 09	$\begin{bmatrix} -59 & 51 \\ -59 & 59 \end{bmatrix}$	-35	-60 01	Moderate breeze; ship unsteady.
8.	-62 37	328 17	Direct. Direct. Direct. Direct.		n. n.n.w. E.n.E.	+1 15 +1 08 +0 48	$ \begin{vmatrix} -59 & 33 \\ -59 & 21 \end{vmatrix} $ $ -58 & 24 \\ -58 & 19 \end{vmatrix} $			
		:	Needle N. Needle S. Direct.	$ \begin{vmatrix} -58 & 23 \\ -59 & 29 \\ -59 & 05 \end{vmatrix} $	N.E. ½ E.	+1 02 {	$egin{array}{c c} -57 & 21 \\ -58 & 27 \\ -58 & 36 \end{array} > -58 & 17 \end{array}$	-35	-58 52	Moderate breeze;
	The continues of the co		Mag. N. Mag. N.S. Mag. S. Direct.	$ \begin{vmatrix} -58 & 43 \\ -58 & 45 \\ -58 & 49 \\ -59 & 05 \end{vmatrix} $	E. by N.	+0 29	-58 14 -58 16 -58 20 -58 36 -57 44			
19.	-62 13	330 38	Direct. Direct. wt. 1 gr.	$ \begin{array}{c c} -58 & 31 \\ -58 & 23 \\ -58 & 32 \end{array} $	E.N.E. E. by N.	+0 47 +0 29 {	$\begin{bmatrix} -57 & 44 \\ -57 & 54 \\ -58 & 03 \end{bmatrix}$			

Date.	Lat.	Long.	Method employed.	Observed Inclination. Face East.	Direction of ship's head.	Correction for Deviation.	Corrected Inclination.	Index Correc- tion.	True Incli- nation.	Remarks.
1843. Feb. 19.	$-6\mathring{2}$ 1 $\mathring{3}$	330 38	wt. 1.5 gr. wt. 2 grs. wt. 2.5 grs.	$\begin{bmatrix} -58 & 14 \\ -57 & 48 \\ -58 & 05 \end{bmatrix}$			$ \begin{array}{c c} -58 & 04 \\ -57 & 38 \\ -57 & 55 \end{array} $			
	1		Direct. Needle N. Mag. N.S.	$egin{pmatrix} -58 & 23 \ -57 & 23 \ -58 & 14 \ \end{pmatrix}$	E.	+ŏ 10\	$\begin{vmatrix} -58 & 13 \\ -57 & 13 \\ -58 & 04 \end{vmatrix} -57 & 55$	-35	-58 30	Table unsteady.
20	Co. or	999 90	Mag. S. Direct. Direct.	$\begin{bmatrix} -58 & 20 \\ -57 & 43 \\ -58 & 02 \end{bmatrix}$	E.S.E. E. by s.	$\begin{bmatrix} -0 & 17 \\ -0 & 03 \end{bmatrix}$	$ \begin{bmatrix} -58 & 10 \\ -58 & 00 \\ -58 & 05 \\ -57 & 30 \end{bmatrix} $			·
20.	-62 05	333 38	Direct. Needle N. Needle S. Mag. N.	$egin{array}{c} -58 & 40 \ -57 & 46 \ -58 & 55 \ \end{array} angle$	n. by E.	+1 10	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	-		:
			Mag. N.S. Direct. Direct.	$\begin{bmatrix} -58 & 36 \\ -58 & 27 \end{bmatrix}$ $\begin{bmatrix} -58 & 33 \\ 58 & 97 \end{bmatrix}$	N.N.E.	+1 09	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	—35	-57 57	Table unsteady.
	-		Mag. N.S. Direct. Direct.	$ \left. \begin{array}{c} -58 & 27 \\ -58 & 17 \\ -58 & 29 \\ -56 & 18 \end{array} \right\} $	N.E.	$\begin{bmatrix} +1 & 0.2 \\ -1 & 2.1 \end{bmatrix}$	$ \begin{array}{c cccc} -57 & 25 \\ -57 & 15 \\ -57 & 18 \\ -57 & 39 \end{array} $			
21.	-61 32	336 10	Direct. Needle N. Needle S.	$ \begin{array}{c c} -50 & 18 \\ -57 & 44 \\ -57 & 05 \\ -58 & 06 \end{array} $	₽•	-1 21	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			
			Mag. N. Mag. N.S. Mag. S.	$ \begin{array}{c c} -57 & 31 \\ -57 & 35 \\ -57 & 31 \end{array} $	Е.	+0 10	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	-35	-58 01	Strong breeze; ship unsteady.
22.	-61 28	337 42	Direct. Direct. Needle N.	$ \begin{array}{c c} -57 & 38 \\ -56 & 44 \\ -55 & 27 \end{array} $	s.w. ½ w.	$\begin{bmatrix} -0 & 52 \end{bmatrix}$	$ \begin{array}{c c} -57 & 28 \\ -57 & 36 \\ -56 & 19 \end{array} $			
		,	Needle S. Mag. N. Direct.	$ \begin{array}{c c} -56 & 37 \\ -56 & 32 \\ -57 & 03 \end{array} $	w.s.w.	-0.26	-57 29 -57 24 -57 29			,
			Direct. Mag. N.S. wt. 1 gr.	-56 53	s.e. by e. ½ e.	}	$ \begin{vmatrix} -57 & 17 \\ -56 & 59 \\ -57 & 09 \end{vmatrix} $ $ \begin{vmatrix} -57 & 25 \end{vmatrix} $	-35	—58 00	Motion slight.
		,	wt. 1.5 gr. wt. 2 grs. wt. 2.5 grs.	$ \begin{array}{c c} -56 & 53 \\ -57 & 08 \\ -57 & 10 \end{array} $	E.S.E.	-0.16	-57 09 -57 24 -57 40			
			wt. 3 grs. wt. 3·5 grs. Direct. Direct.	$ \begin{array}{c c} -56 & 58 \\ -58 & 25 \\ -56 & 44 \\ -56 & 52 \end{array} $	s.e. ½ s.	$ \begin{array}{c c} -0 & 30 \\ -0 & 48 \\ -0 & 43 \end{array} $	$ \begin{array}{c cccc} -57 & 28 \\ -58 & 55 \\ -57 & 32 \\ -57 & 35 \end{array} $			
23. 24.	$-61 \ 13$ $-62 \ 41$	ľ	Direct. Direct. Direct.	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	s.e. e. s.e.by e. ½ e. s.	+0 10	$ \begin{bmatrix} -57 & 17 \\ -57 & 28 \\ -58 & 22 \end{bmatrix} \begin{bmatrix} -57 & 22 \\ -58 & 22 \end{bmatrix} $	-35	-57 57	Strong breeze; much motion.
~ 1.	,		Direct. Needle N. Needle S.	$ \begin{array}{c c} -57 & 17 \\ -56 & 24 \\ -57 & 16 \end{array} $	• • • • • • • • • • • • • • • • • • •		-58 37 -57 44 -58 36			
			Mag. N. Mag. N.S. Mag. S.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	g 1	_1 20 √	-58 26 -58 34 -58 31	-35	—59 01	Light breeze; little
			wt. 1 gr. wt. 1.5 gr. wt. 2 grs.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	S. ½ E.	-1 204	-58 35 -58 20 -58 39		0,5 0,1	motion.
. 05	64 14	945 90	wt. 2.5 grs. wt. 3 grs. Direct.	$ \begin{array}{c c} -56 & 47 \\ -57 & 01 \\ -57 & 23 \end{array} $			-58 07 -58 21 -58 43		, , , ,	- : :
zo.	U# 14	345 30	Direct. Needle N. Needle S. Mag. N.	$ \begin{array}{c cccc} -61 & 06 \\ -60 & 15 \\ -61 & 06 \\ -60 & 58 \end{array} $	E.N.E.	+0 48	$ \begin{array}{c c} -60 & 18 \\ -59 & 27 \\ -60 & 18 \\ -60 & 10 \end{array} $	-35	-60 45	Strong breeze; very
			Mag. N.S. Mag. S. Direct.	$ \begin{array}{c cccc} -61 & 01 \\ -61 & 03 \\ -60 & 56 \end{array} $	E. by N.	+0 29	$ \begin{array}{c c} -60 & 13 \\ -60 & 15 \\ -60 & 27 \end{array} $			unsteady.

LIEUT.-GENERAL SABINE ON TERRESTRIAL MAGNETISM.

Date.	Lat.	Long.	Method employed.	Observed Inclination. Face East.	Direction of ship's head.	Correction for Deviation.	Corrected Inclination.	Index Correc- tion.	True Incli- nation.	Remarks:
1843. Feb. 26.	$-6\mathring{4} \ 3\mathring{3}$	34°7 52́	Direct. Direct.	$-60^{\circ} 51^{\circ} \\ -60^{\circ} 13^{\circ}$	Е.	+ 0 10	$ \begin{array}{c c} -60 & 41 \\ -60 & 59 \\ 60 & 59 \end{array} $		N.	
			Needle N. Needle S. Mag. N. Mag. N.S.	$egin{array}{c c} -59 & 31 \\ -59 & 57 \\ -60 & 29 \\ -60 & 25 \end{array}$	S.E.	$\begin{bmatrix} -0 & 46 \end{bmatrix}$	-61 11	—35	-61° 28	Much swell; un- steady.
27.	-65 00	349 30	Mag. S. Direct. Direct. Needle N.	$ \begin{vmatrix} -60 & 10 \\ -60 & 18 \\ -59 & 46 \\ -59 & 19 \end{vmatrix} $			$ \begin{vmatrix} -60 & 56 \\ -61 & 04 \\ -61 & 01 \\ -60 & 34 \end{vmatrix} $			
·			Needle S. Mag. N. Mag. N.S. Mag. S.	$ \begin{vmatrix} -60 & 00 \\ -59 & 56 \\ -59 & 51 \\ -59 & 58 \end{vmatrix} $	s.s.e.	-1 15	$ \begin{vmatrix} -61 & 15 \\ -61 & 11 \\ -61 & 06 \\ -61 & 13 \end{vmatrix} -61 & 04$	-35	-61 39	Steering well.
	-65 12	350 00	Direct. Direct. Direct. Direct.	$ \begin{vmatrix} -59 & 51 \\ -60 & 28 \\ -60 & 20 \end{vmatrix} $	S.E. $\frac{1}{2}$ E. S.E. by S.	$\begin{bmatrix} -0 & 43 \\ -1 & 03 \\ 1 & 00 \end{bmatrix}$	$\begin{bmatrix} -61 & 06 \\ -61 & 11 \\ -61 & 23 \end{bmatrix}$ -61 18	-35	-61 53	
28.	-66 00	353 00	Direct. Needle N. Needle S.	$ \begin{vmatrix} -60 & 11 \\ -61 & 42 \\ -61 & 44 \\ -61 & 35 \end{vmatrix} $	s.s.e. $\frac{1}{2}$ e. s.e. by s. s.e. y e.	$\begin{bmatrix} -1 & 09 \\ -1 & 04 \\ -0 & 36 \end{bmatrix}$	$ \begin{vmatrix} -61 & 20 \\ -62 & 46 \\ -62 & 20 \\ -62 & 11 \end{vmatrix} $			
8			Direct. Mag. N. Mag. N.S. Mag. S.	$ \begin{vmatrix} -62 & 12 \\ -61 & 49 \\ -62 & 04 \\ -62 & 15 \end{vmatrix} $	E.S.E.	-0 21	$\begin{vmatrix} -62 & 33 \\ -62 & 10 \\ -62 & 25 \\ -62 & 36 \end{vmatrix} -62 \ 27$	_35	-63 02	Very unsteady.
Mar. 1.	$\begin{bmatrix} -66 & 02 \\ -66 & 54 \end{bmatrix}$		Direct. Direct. Direct. Direct.	$ \begin{array}{c cccc} -62 & 29 \\ -62 & 12 \\ -62 & 04 \\ -61 & 48 \end{array} $	E. by s. E.s.E. S.E. by E. $\frac{1}{2}$ E.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{vmatrix} -62 & 35 \\ -62 & 33 \\ -62 & 33 \\ -63 & 04 \end{vmatrix} -62 & 33$	-35	-63 08	
			Needle N. Needle S. Mag. N. Mag. N.S.	$ \begin{vmatrix} -61 & 38 \\ -61 & 41 \\ -61 & 34 \\ -61 & 37 \end{vmatrix} $	s.w. by s.	-1 16	$\begin{vmatrix} -62 & 54 \\ -62 & 57 \\ -62 & 50 \\ -62 & 53 \end{vmatrix} -62 & 57$	-35	-63 32	Motion slight; steer- ing well.
*	-67 05	351 00	Mag. S. Direct. Direct.	$ \begin{bmatrix} -61 & 48 \\ -61 & 54 \\ -62 & 04 \end{bmatrix} $ $ -62 & 07 $	s.w.	$\begin{bmatrix} -1 & 07 \\ -0 & 47 \end{bmatrix}$	$ \begin{vmatrix} -63 & 00 \\ -63 & 04 \end{vmatrix} $ $ \begin{vmatrix} -63 & 11 \\ -62 & 54 \end{vmatrix} $ $ \begin{vmatrix} -63 & 02 \end{vmatrix} $	-35	-63 37	
2.	-68 08	348 10	Direct. Needle N. Needle S.	$ \begin{vmatrix} -62 & 28 \\ -62 & 16 \\ -62 & 25 \end{vmatrix} $			$\begin{bmatrix} -63 & 35 \\ -63 & 23 \\ -63 & 32 \end{bmatrix}$	92	64.00	
			Mag. N. Mag. N.S. Mag. S. Direct.	$ \begin{vmatrix} -62 & 34 \\ -62 & 14 \\ -62 & 35 \\ -62 & 28 \end{vmatrix} $	s.w.	-1 07	$ \begin{vmatrix} -63 & 21 \\ -63 & 42 \\ -63 & 35 \end{vmatrix} $	33	-04 09	Steering well; table not very steady.
	$\begin{bmatrix} -68 & 32 \\ -69 & 24 \end{bmatrix}$	347 12 345 30	Direct. Direct. Direct. Direct.	$egin{array}{c c} -62 & 54 \\ -63 & 09 \\ -63 & 22 \\ -62 & 56 \\ \end{array}$	s.w. by w. E.S.E. E. by s.	$\begin{bmatrix} -0 & 49 \\ -0 & 22 \\ -0 & 06 \end{bmatrix}$	$ \begin{vmatrix} -63 & 43 \\ -63 & 31 \\ -63 & 28 \\ -64 & 05 \end{vmatrix} -63 \ 29$	-35	-64 14	
	-		Direct. Needle N. Needle S. Mag. N.	$ \begin{vmatrix} -63 & 52 \\ -63 & 37 \\ -63 & 45 \\ -63 & 50 \end{vmatrix} $	s.w.	-1 09	$ \begin{vmatrix} -65 & 01 \\ -64 & 46 \\ -64 & 54 \\ -64 & 59 \end{vmatrix} -64 & 49$	— 35	-65 24	Table very steady;
			Mag. N.S. Mag. S. Direct.	$\begin{bmatrix} -63 & 43 \\ -63 & 38 \\ -63 & 56 \end{bmatrix}$		1	$ \begin{vmatrix} -64 & 52 \\ -64 & 47 \\ -65 & 05 \end{vmatrix} $			
			Direct. Direct.	$ \begin{array}{r rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	s.s.w. s.w. by s.	$\begin{bmatrix} -1 & 29 \\ -1 & 19 \end{bmatrix}$	$\begin{bmatrix} -64 & 52 \\ -64 & 47 \end{bmatrix}$			

Date.	Lat.	Long.	Method employed.	Observed Inclination. Face East.	Direction of ship's head.	Correction for Deviation.	Corrected Inclination.	Index Correc- tion.	True Incli- nation.	Remarks.
1843. Mar. 5.	-71°09	344 10	Direct. Needle N. Needle S. Mag. N. Mag. N.S. Mag. S.	$ \begin{array}{c cccc} -6\mathring{5} & 1\mathring{3} \\ -64 & 55 \\ -65 & 09 \\ -65 & 10 \\ -65 & 16 \end{array} $	S.E.	$\begin{bmatrix} -\mathring{0} & 58 & 4 \end{bmatrix}$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	-35	$-6\hat{6}$ 4 $\acute{4}$	Table steady.
7.	-71 08 -70 33 -70 28	343 23	Direct. Direct. Direct. Direct. Needle N.	$ \begin{vmatrix} -65 & 13 \\ -65 & 22 \\ -66 & 01 \\ -65 & 41 \\ -65 & 15 \\ -64 & 49 \end{vmatrix} $	E. by s. N. by E.	$\begin{vmatrix} -0 & 08 \\ +1 & 25 \\ -0 & 22 \end{vmatrix}$	$ \begin{vmatrix} -66 & 11 \\ -66 & 20 \end{vmatrix} $ $ \begin{vmatrix} -66 & 09 \\ -64 & 16 \\ -65 & 37 \\ -65 & 11 \end{vmatrix} $ $ \begin{vmatrix} -65 & 11 \\ -65 & 25 \end{vmatrix} $	$-35 \\ -35 \\ -35$		Very unsteady. Ship rolling and pitching much.
	-69 36 -68 07		Needle S. Direct. Direct. Direct. Needle N.	$ \begin{bmatrix} -64 & 57 \\ -65 & 12 \\ -65 & 19 \\ -63 & 54 \\ -63 & 44 \end{bmatrix} $	n.e. by n.	+1 19	$ \begin{vmatrix} -65 & 19 \\ -65 & 34 \\ -64 & 00 \\ -62 & 44 \\ -62 & 34 \end{vmatrix} $	- 35		pitching much. Steering pretty well
			Needle S. Mag. N. Mag. N.S. Mag. S. Direct.	$ \begin{array}{c cccc} -63 & 46 \\ -63 & 43 \\ -63 & 52 \\ -63 & 56 \\ -63 & 50 \end{array} $	N.E.	+1 10	$ \begin{vmatrix} -62 & 36 \\ -62 & 33 \\ -62 & 42 \\ -62 & 46 \\ -62 & 40 \end{vmatrix} $	-35	-63 14	Strong wind; heavy sea; unsteady.
11.	-65 57	346 40	Direct. Needle N. Needle S. Mag. N. Direct. Mag. N.S.	$ \begin{vmatrix} -63 & 02 \\ -62 & 01 \\ -62 & 56 \\ -62 & 51 \\ -62 & 56 \\ -63 & 04 \end{vmatrix} $	N. by E. ½ E. N. by E.		$ \begin{vmatrix} -61 & 44 \\ -60 & 43 \\ -61 & 38 \\ -61 & 38 \\ -61 & 46 \end{vmatrix} $ $ -61 & 32$	-35	-62 07	Fresh breeze; head sea.
12.	-63 58	346 25	Mag. S. Direct. Direct. Needle N. Needle S. Direct.	$ \begin{vmatrix} -63 & 01 \\ -62 & 50 \end{vmatrix} $ $ \begin{vmatrix} -61 & 21 \\ -60 & 34 \\ -60 & 56 \end{vmatrix} $	n.e. by n.	+1 12	$ \begin{vmatrix} -61 & 43 \\ -61 & 32 \\ -60 & 09 \\ -59 & 22 \\ -59 & 44 \\ -60 & 03 \end{vmatrix} $	- 35	-60 24	Heavy sea; steering badly.
13.	-61 35	349 00	Direct. Direct. Needle N. Needle S. Mag. N. Mag. N.S.	$ \begin{vmatrix} -61 & 15 \\ -59 & 32 \\ -58 & 50 \\ -59 & 34 \\ -59 & 29 \end{vmatrix} $	n.e. by n.	+1 08	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	-35	-58 52	Heavy sea; steering wildly.
14.	-59 21	350 36	Mag. N.S. Mag. S. Direct. Direct. Needle N. Needle S. Mag. N.	$ \begin{vmatrix} -59 & 35 \\ -59 & 24 \\ -59 & 28 \\ -58 & 07 \\ -57 & 29 \\ -58 & 22 \\ -58 & 11 \end{vmatrix} $	n.e. by n.	+1 08	$ \begin{vmatrix} -58 & 16 \\ -58 & 20 \end{vmatrix} $ $ \begin{vmatrix} -56 & 59 \\ -56 & 21 \\ -57 & 14 \\ -57 & 03 \end{vmatrix} $ $ \begin{vmatrix} -56 & 54 \end{vmatrix} $	_ 35	-57 29	Strong wind;
15.	-57 35	352 00	Mag. N.S. Mag. S. Direct. Direct. Needle N. Needle S.	$ \begin{vmatrix} -58 & 18 \\ -57 & 47 \\ -57 & 57 \end{vmatrix} $ $ -57 & 03 \\ -56 & 12 \\ -57 & 05 \end{vmatrix} $			-57 10 -56 39 -56 49 -56 02 -55 11 -56 04		rc oc	steering wildly.
	-57 27	352 08	Mag. N. Mag. N.S. Mag. S. Direct. wt. 1 gr. wt. 1 5 gr. wt. 2 grs. wt. 2 5 grs.	$\begin{bmatrix} -57 & 02 \\ -56 & 53 \\ -56 & 50 \\ -57 & 00 \\ -56 & 45 \\ -56 & 56 \\ -56 & 56 \end{bmatrix}$	N.E. $\frac{1}{2}$ N.	+1 01	$ \begin{vmatrix} -56 & 01 \\ -55 & 52 \\ -55 & 49 \\ -55 & 59 \end{vmatrix} $ $ \begin{vmatrix} -55 & 44 \\ -55 & 49 \\ -55 & 55 \\ -55 & 55 \end{vmatrix} $ $ \begin{vmatrix} -55 & 49 \\ -55 & 55 \end{vmatrix} $			Light breeze.

Date.	Lat.	Long.	Method employed.	Observed Inclination. Face East.	Direction of ship's head.	Correction for Deviation.	Corrected Inclination.	Index Correc- tion.	True Incli- nation.	Remarks.
1843. Mar. 16.	- 57 09	352° 44	Direct. Needle N. Needle S. Mag. N. Mag. N.S. Mag. S.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	N.N.W. ½ W.		$\begin{bmatrix} -55 & 48 \\ -55 & 31 \end{bmatrix}$	_35	-5 ⁶ 1 ⁵	Table steady; steering well.
17.	-56 44	353 45	Direct. Direct. Needle N. Needle S. Direct.	$ \begin{vmatrix} -56 & 52 \\ -56 & 38 \\ -55 & 52 \\ -56 & 38 \\ -56 & 40 \end{vmatrix} $	N.W. ½ W.	$\begin{vmatrix} +0 & 40 \\ +0 & 58 \end{vmatrix}$	$ \begin{vmatrix} -56 & 12 \\ -55 & 40 \\ -54 & 54 \\ -55 & 40 \\ -55 & 42 \end{vmatrix} -55 & 29$	35	-56 04	Table steady.
		355 39	Direct. Direct. Direct.	$ \begin{vmatrix} -53 & 43 \\ -55 & 27 \\ -55 & 36 \end{vmatrix} $	s.e. by s. n. by w. n. by e.	$ \begin{array}{c cccc} -0 & 50 \\ +0 & 57 \\ +1 & 01 \end{array} $	$ \begin{vmatrix} -54 & 33 \\ -54 & 30 \\ -54 & 35 \end{vmatrix} -54 & 33$	$\begin{vmatrix} -35 \end{vmatrix}$	-55 08	Steering badly.
	-54 32		Direct. Needle N. Needle S. Direct.	$ \begin{vmatrix} -54 & 38 \\ -54 & 10 \\ -54 & 51 \\ -54 & 37 \end{vmatrix} $	E. ½ N.	$+0$ 19 $\left\{$	$\begin{bmatrix} -54 & 32 \\ -54 & 18 \end{bmatrix}$	5 -35	-54 50	Heavy head sea. Steering well.
20.	-54 05	359 43	Direct. Needle N. Direct. Needle N.	$\left[egin{array}{c} -54 & 21 \\ -54 & 33 \\ -54 & 29 \\ -54 & 29 \\ \end{array} ight]$	s.e. by e. ½ e.	$ \begin{vmatrix} -0 & 20 \\ -0 & 13 \end{vmatrix} $	$\begin{vmatrix} -54 & 43 \\ -54 & 42 \\ -54 & 42 \end{vmatrix} -54 = 4.$	5 -35	-55 20	Steering well.
	-54 07	359 58	Needle S. Mag. N. Mag. N.S. Mag. S. Direct. Direct.	$ \begin{array}{c cccc} -54 & 33 \\ -54 & 51 \\ -54 & 38 \\ -54 & 36 \\ -54 & 44 \\ -54 & 47 \end{array} $	E.S.E.		$ \begin{vmatrix} -54 & 46 \\ -55 & 04 \\ -54 & 51 \\ -54 & 49 \\ -54 & 57 \\ -55 & 00 \end{vmatrix} $	6 - 35	-55 31	Not very steady.
24.	-50 52	8 47	Direct. Needle N. Needle S. Mag. N.S. Direct.	$ \begin{vmatrix} -56 & 46 \\ -56 & 01 \\ -56 & 25 \\ -56 & 31 \\ -56 & 43 \end{vmatrix} $	N.E. ½ N.	+1 00	$\begin{bmatrix} -55 & 46 \\ -55 & 01 \end{bmatrix}$	$\begin{vmatrix} -35 \end{vmatrix}$	-56 04	Table steady; ship steering with diffi- culty.
o E	-50 19		Direct. Needle N.	$\begin{bmatrix} -56 & 18 \\ -56 & 16 \end{bmatrix}$	N.E.	$+0$ 58 $\left\{$	7 55 00 2	9 - 35	-55 54	
20.	47 36	10 41	Direct. Needle N. Needle S. Mag. N.S. Direct.	$ \begin{vmatrix} -56 & 18 \\ -55 & 40 \\ -56 & 19 \\ -56 & 11 \\ -56 & 18 \end{vmatrix} $	N.E.	+0 58	$ \begin{vmatrix} -53 & 20 \\ -54 & 42 \\ -55 & 21 \\ -55 & 13 \\ -55 & 20 \end{vmatrix} $	1 - 35	-55 46	Table steady; each entry is a mean of many readings.
26.	45 38	11 52	Direct. Needle N. Needle S. Mag. N. Mag. N.S.	$ \begin{vmatrix} -55 & 47 \\ -55 & 23 \\ -55 & 55 \\ -55 & 40 \\ -55 & 49 \end{vmatrix} $	N.E.	+0 55	$\begin{bmatrix} -54 & 52 \\ -54 & 28 \\ -55 & 00 \\ -54 & 45 \\ -54 & 54 \end{bmatrix} - 54 \ 4$	6 -35	-55 21	Table steady; each entry is a mean of many readings.
27	43 55	13 16	Mag. S. Direct. Direct. Needle N. Needle S.	$ \begin{bmatrix} -55 & 30 \\ -55 & 45 \end{bmatrix} $ $ -55 & 15 \\ -54 & 33 \\ -55 & 20 $		ı	$ \begin{vmatrix} -54 & 35 \\ -54 & 50 \end{vmatrix} $ $ \begin{vmatrix} -54 & 28 \\ -53 & 46 \\ -54 & 33 \end{vmatrix} $			
			Mag. N. Mag. N.S. Mag. S. Direct.	$ \begin{vmatrix} -55 & 14 \\ -55 & 20 \\ -55 & 41 \\ -55 & 17 \end{vmatrix} $	E.N.E.	+0 47	$ \begin{vmatrix} -54 & 33 \\ -54 & 27 \\ -54 & 33 \\ -54 & 54 \\ -54 & 30 \end{vmatrix} $ $ \begin{vmatrix} -54 & 54 \\ -53 & 51 \\ -54 & 53 \\ -54 & 24 \\ -54 & 09 \end{vmatrix} $ $ \begin{vmatrix} -54 & 33 \\ -54 & 24 \\ -54 & 09 \end{vmatrix} $ $ \begin{vmatrix} -54 & 33 \\ -54 & 24 \\ -54 & 09 \end{vmatrix} $	7 -35	-55 02	Table steady.
28	43 15	14 30	Direct. Needle N. Needle S.	$\left[egin{array}{c} -55 & 06 \ -54 & 38 \ -55 & 40 \ \end{array} ight]$	E.N.E.	$+0$ 47 $\left\{$	$\begin{bmatrix} -54 & 19 \\ -53 & 51 \\ -54 & 53 \end{bmatrix}$			
			Direct. wt. 1 gr.	$\left[egin{array}{c} -55 & 16 \ -55 & 01 \end{array} ight]$	N.E. by E.	$\left +0 \right $ 52 $\left \left +0 \right \right $	$\begin{bmatrix} -54 & 24 \\ -54 & 09 \\ -54 & 3 \end{bmatrix}$	8 -35	-55 13	Very steady; steering well.

Date.	Lat.	Long.	Method employed.	Observed Inclination. Face East.	Direction of ship's head.	Correction for Deviation.	Corrected Inclination.	Index Correc- tion.	True Incli- nation.	Remarks.
1843.	.8 .4	2 9 0 6		28 265			-9 -1, -9 -6	٠.	$-5\overset{\circ}{5}$ 13	V
Mar. 28.	$-43^{\circ} 15^{\circ}$	14 36	wt. 1·5 gr. wt. 2 grs.	$-5\overset{\circ}{5} \ 2\overset{\circ}{8} \ -55 \ 55$			$\begin{vmatrix} -5\mathring{4} & 3\mathring{4} \\ -55 & 01 \end{vmatrix} -5\mathring{4} & 3\mathring{8}$	35	-55 13	Very steady; steering well.
			wt. 2 grs. wt. 2.5 grs.	-56 29			$\begin{bmatrix} -55 & 01 \\ -55 & 35 \end{bmatrix}$			
			Direct.	$-55 \ 41$			-54 47			
		,	Needle N.	-54 56 >	N.E. $\frac{1}{2}$ E.	$+\mathring{0}$ 54 \checkmark	-54 02			
			Needle S.	-5555	~		-55 01			
			Mag. N.	-5528			-54 34			
			Mag. N.S. Mag. S.	$\begin{bmatrix} -55 & 43 \\ -55 & 35 \end{bmatrix}$			$\begin{vmatrix} -54 & 49 \\ -54 & 41 \end{vmatrix}$			
	<u>-43 11</u>	14 43	Direct.	-55 29	N.E. 1 E.	+0 54	$-54 \ 35$	-35	-55 10	
29.	1		Direct.	$-55\ 05$	11.1.2 11	' ' ' (-54 097		00.20	
_		·	Needle N.	-5549			$ -54 \ 53 $			
			Needle S.	$-55\ 31$			-54 35			
			Mag. N.	-54.56	N.E.	+0 56≺		-35	-5452	Slight motion; steering well.
			Mag. N.S. Mag. S.	$ \begin{array}{c cccc} -55 & 06 \\ -54 & 59 \end{array} $	·		$\begin{bmatrix} -54 & 10 \\ -54 & 03 \end{bmatrix}$	-		
			Direct.	-55 06			-54 10			
30.	-40 12	16 06	Direct.	-54 59	-	}	-54 03	-		
			Needle N.	-54 17			-53 21			
			Needle S.	-5501	N.E.	+0 56	$\begin{vmatrix} -54 & 05 \\ -54 & 08 \end{vmatrix}$ -53 58	-35	-54 33	Cross motion;
			Mag. N.	-5504	11122	1,000	$\begin{bmatrix} -54 & 08 \\ -54 & 05 \end{bmatrix}$			not steering well.
			Mag. N.S. Mag. S.	$ \begin{array}{c c} -55 & 01 \\ -55 & 02 \end{array} $			$\begin{bmatrix} -34 & 05 \\ -54 & 06 \end{bmatrix}$			
	-40 03	16 10	Direct.	-55 0z $-54 57$		}	E4 013			
	10 00	10 10	Direct.	$\begin{bmatrix} -54 & 53 \\ \end{bmatrix}$	N.E.	+0 56	$\begin{bmatrix} -53 & 57 \\ -53 & 57 \end{bmatrix}$	-35	-54 34	
31.	-38 00	16 45	Direct.	-5428		}	_53 38↑			
			Needle N.	-5347	N.E. by E.	+0 50 {	-52 57			4
			Needle S.	$-54 \ 44$	-		-53 54	0.5	54.04	Head sea; very
			Mag. N. Mag. N.S.	$\begin{bmatrix} -54 & 11 \\ -54 & 17 \end{bmatrix}$			$\begin{vmatrix} -53 & 25 \\ -53 & 31 \end{vmatrix}$ $\begin{vmatrix} -53 & 29 \\ -53 & 31 \end{vmatrix}$	-35	- 34 04	unsteady.
			Mag. S.	$\begin{bmatrix} -54 & 17 \\ -54 & 16 \end{bmatrix}$	E.N.E.	+0 46	-53 30			
			Direct.	-54 19			_53 33			* * *
April 1.	-3604	16 32	Direct.	-53 56			-53 10			
			Needle N.	-5258			-52 12 52 12			
			Needle S.	-53 58			$\begin{bmatrix} -53 & 12 \\ -53 & 05 \end{bmatrix}$			
			Mag. N. Mag. N.	$\begin{bmatrix} -53 & 51 \\ -53 & 53 \end{bmatrix}$	N.E. by E. $\frac{1}{2}$ E.	+0.46	$\begin{vmatrix} -33 & 03 \\ -53 & 07 \end{vmatrix}$ -52 52	-35	-53 27	Head sea; pitching
			Mag. S.	-53 00			-52 14			
	,		Direct.	-5348			-53 02	-		2
	-3600		Direct.	$-53 \ 38$			$[-52 \ 52]$			
2.	-35 21	16 22	Direct.	-5241	E.	+0 10	$\begin{bmatrix} -52 & 31 \\ 52 & 24 \end{bmatrix}$			
			Direct. Needle N.	$\begin{bmatrix} -52 & 29 \\ -51 & 36 \end{bmatrix}$			$\begin{bmatrix} -52 & 24 \\ -51 & 31 \end{bmatrix}$			
			Needle S.	$\begin{bmatrix} -51 & 50 \\ -52 & 59 \end{bmatrix}$			-52 54			
			Mag. N.	-52 19			-52 14			
			Mag. N.S.	-5234			-52 29			
			Mag. S.	-5239	E. ½ S.	+0 05	$\begin{vmatrix} -52 & 34 \\ 52 & 41 \end{vmatrix} - 52 & 30$	-35	-53 05	Little motion.
			Direct.	$-52\ 46$		' ' ')	-52 41			
			wt. 0.5 gr. wt. 1 gr.	$egin{bmatrix} -52 & 28 \ -52 & 15 \ \end{bmatrix}$			$\begin{bmatrix} -52 & 23 \\ -52 & 10 \end{bmatrix}$			
			wt. 1.5 gr.	$-53 \ 01$			$\begin{bmatrix} -52 & 16 \\ -52 & 56 \end{bmatrix}$			
			wt. 2 grs.	$-52 \ 43$			-52 38		-	
			wt. 2.5 grs.	-53 12			-53 07			
_	0.5.00	15.00	Direct.	$-52 \ 37$	E.	+0 10	$\begin{bmatrix} -52 & 27 \\ 52 & 29 \end{bmatrix}$			
3	-35 03	17 06	Direct.	$\begin{bmatrix} -52 & 18 \\ -59 & 16 \end{bmatrix}$		($\begin{bmatrix} -52 & 28 \\ -52 & 26 \end{bmatrix}$		1	
			wt. 0.5 gr.	$\begin{bmatrix} -52 & 16 \\ -52 & 10 \end{bmatrix}$			$\begin{bmatrix} -52 & 20 \\ -52 & 20 \end{bmatrix}$			
L. Carlotte and Ca			wt. 1 gr.	-52 07			-52 17			
			wt. 1.5 gr.	$ -52 \ 19 >$	E.S.E.	-0 10√	-52 29 > -52 35	-35	-53 10	Table steady.
	1	1	1	/	1 .	1 '	1	1	<u></u>	<u> </u>

LIEUT.-GENERAL SABINE ON TERRESTRIAL MAGNETISM.

Date.	Lat.	Long.	Method employed.	Observed Inclination. Face East.	Direction of ship's head.	Correction for Deviation.	Corrected Inclination.	Index Correc- tion.	True Incli- nation.	Remarks.
		Bay, Cape d Hope.	Direct. Direct. Direct. Direct.	$ \begin{array}{c cccc} -53 & 02 \\ -53 & 53 \\ -52 & 49 \\ -53 & 19 \\ -52 & 49 \\ -52 & 54 \\ -52 & 55 \end{array} $	E.S.E. E. by N. ½ N. W.N.W. N.E. by E.	+0 30 +0 20 +0 49	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	- 35 - 35	-53 10	Table steady.

Observations of the Intensity of the Magnetic Force made in Her Majesty's Ship 'Erebus' with Needle R. F. 5, and Deflector R. F. 4, between September 1842 at Port Louis, and April 1843 at Simon's Bay, Cape of Good Hope.

Observers Captain Sir James Clark Ross and Lieut. Alexander John Smith, R.N.

Date.	Lat.	Long.	Method employed.	Angle of Deflection. Face East.	Direction of ship's head.	Intensity.	Correction for Deviation.	Corrected Intensity.	Remarks.
13. 14.	Harb -53 03 -54 03 -53 47	our.	S. N. S. N. S. N. S.	$\begin{array}{c} 71\ 38\\ 67\ 46\\ 69\ 38\\ 66\ 01\\ 69\ 56\\ 66\ 51\\ 69\ 16\\ 66\ 19\\ \end{array}$	E. ½ N. E. ½ N. S.S.W. W.S.W.	$ \begin{array}{c} 9.75 \\ 9.83 \\ 10.10 \\ 10.05 \\ 10.03 \\ 9.90 \\ 10.17 \\ 9.99 \end{array} \right\} \begin{array}{c} 9.79 \\ 10.07 \\ 9.96 \\ 10.17 \\ 9.99 \end{array} $	+·03 -·15 -·04 -·15	9·82 9·92 9·92 9·93	Unsteady. Much motion. A great deal of motion.
16.	-54 42 -55 40	304 30 304 46 296 52	N. S. N. S. N. wt. 2 grs. wt. 3 grs. wt. 4 grs.	65 35 69 35 65 48 66 02 62 08 16 02 25 36 33 58	s.e. W.s.w. s.w. ½ w.	$ \begin{cases} 10 \cdot 12 \\ 10 \cdot 13 \\ 10 \cdot 08 \\ 10 \cdot 82 \\ 10 \cdot 82 \\ 11 \cdot 03 \\ 10 \cdot 58 \\ 10 \cdot 91 \end{cases} $ $ \begin{cases} 10 \cdot 12 \\ 10 \cdot 10 \\ $	10 04 10	10·02 10·06	Blowing hard, with much motion.
	Standing St. Martin St. Martin —55 51	n's Cove. n's Cove.	S. N. S. N. Wt. 1 gr. wt. 2 grs. wt. 3 grs. wt. 4 grs. wt. 5 grs.	65 04 \ 60 53 \ 64 32 \ 60 51 \ 7 44 \ 16 03 \ 24 32 \ 33 03 \ 43 09	w.n.w. Observed on shore.	\begin{cases} \b	+•05	10·71 11·13	Calm and clear.
	St. Martin	n's Cove.	wt. 6 grs. S. N. S. N. S. N. S. N. s. vt. 2 grs.	54 55 63 21 59 30 66 10 62 35 69 21 65 11 17 21	s.e.	$ \begin{cases} 11 \cdot 17 \\ 11 \cdot 47 \\ 11 \cdot 44 \end{cases} $ $ \begin{cases} 10 \cdot 81 \\ 10 \cdot 70 \end{cases} $ $ \begin{cases} 10 \cdot 17 \\ 10 \cdot 20 \end{cases} $ $ \begin{cases} 10 \cdot 22 \end{cases} $ $ \begin{cases} 10 \cdot 22 \end{cases} $	-·11 +·11 +·16	11·34 10·87	Moderate and fine.
	.—52 52 .—51 32 Port I	301 53	wt. 3 grs. wt. 4 grs. S. N. wt. 2 grs. wt. 3 grs. wt. 4 grs. S. N. wt. 1 gr. wt. 2 grs.	27 00 36 08 70 28 66 35 17 47 27 35 37 33 71 18 67 05 8 29 18 22	N.	$ \begin{bmatrix} 10.07 \\ 10.34 \\ 9.95 \\ 9.94 \\ 9.98 \\ 9.87 \\ 10.00 \end{bmatrix} $ $ \begin{bmatrix} 9.82 \\ 9.85 \\ 10.33 \\ 9.67 \end{bmatrix} $	+•16	10-11	
Sept. 22	2 St. Marti - 55 51		wt. 3 grs. wt. 4 grs. S. N. wt. 1 gr. wt. 2 grs. wt. 3 grs. wt. 4 grs. wt. 5 grs. wt. 6 grs. wt. 6 grs.	27 07 38 01 > 64 34 61 08 8 07 16 30 24 34 34 01 44 08 56 37	Observed on shore. Observed on shore. Face West	$ \begin{array}{c c} & 10.03 \\ & 9.90 \\ \hline & 9.90 \\ \hline & 11.17 \\ & 11.04 \\ & 10.79 \\ & 10.73 \\ & 11.00 \\ \hline & 10.94 \\ \hline \end{array} $		9.90	Upper Dip House.

Date.	Lat.	Long.	Method employed.	Angle of Deflection. Face East.	Direction of ship's head.	Intensity.	Correction for Deviation.	Corrected Intensity.	Remarks.
1842. Nov.16.	– 51° 32′ Port	301° 53́ Louis.	wt. 5 grs. wt. 6 grs.	69 25	Observed on shore.			9.90	Upper Dip House.
Dec. 13.		301 53 Louis.	S. N. S. N.	71 18 66 58 71 10 66 54	,	9.82 9.86 9.84 9.86		}	Lower Dip House.
			wt. 1 gr. wt. 2 grs. wt. 3 grs.	$\left \begin{array}{c} 8 & 18 \\ 17 & 27 \\ 28 & 13 \end{array}\right $	Observed on shore.	$ \left\{ \begin{array}{c} 10.56 \\ 10.16 \\ 9.67 \\ 9.98 \end{array} \right\} 9.99 $		9.99	Upper Dip House.
			wt. 4 grs. wt. 5 grs. wt. 6 grs.	37 38 49 10 69 17		$ \left[\begin{array}{c} 10.07 \\ 9.77 \end{array}\right] $			
	-5250		S. N.	$69 \ 33 \ $ $65 \ 33 \ $	s.e. by s.	$\left\{ \begin{array}{c} 10.15 \\ 10.13 \end{array} \right\} 10.14$	13	10.01	
	-/54 23		S. N.	$\begin{array}{c} 68 & 08 \\ 64 & 06 \end{array} \}$	S.S.E.	$\left\{ \frac{10.39}{10.41} \right\} 10.40$	15	10.25	Unsteady.
	-55 51		S. N.	$egin{array}{c} 67 & 59 \ 64 & 25 \ \end{array} \}$	s.e. by s.	$\left\{ \frac{10.41}{10.35} \right\} 10.38$	13	10.25	
21.	-56 34	306 39	S. N.	$egin{array}{ccc} 68 & 01 \\ 63 & 35 \end{array} \}$	S.S.E.	$\left\{ \frac{10.41}{10.52} \right\} 10.46$	15	10.31	
22.	-58 16	308 00	S. N.	$66 \ 34 \ 62 \ 41$	s. by E. ½ E.	$\left\{\frac{10.72}{10.68}\right\}10.70$	16	10.54	
23.	-59 28	308 00	S. N.	$\begin{array}{c} 65 & 21 \\ 61 & 47 \\ 15 & 26 \end{array}$	s. by w.	$ \begin{cases} 10.96 \\ 10.92 \\ 11.45 \end{cases} $ 11.01	18	10.83	
2.1	C1 00	005 41	wt. 2 grs. wt. 3 grs.	25 17		(10.70)	18	10.88	Very unsteady.
24. 26.	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	307 41 308 05	N. S.	$\begin{array}{ccc} 61 & 07 \\ 65 & 27 \\ \end{array}$	s. by w.	$ \begin{cases} 11.06 & 11.06 \\ 10.95 \\ 10.98 \end{cases} 10.97 $	+.16		Very steady.
27.	-62 22	308 00	N. S.	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	s.w.	11.30	13)		
			N. wt. 2 grs.	$\begin{array}{c c} 60 & 21 \\ 15 & 32 \\ \end{array}$		$\begin{pmatrix} 11.38 \end{pmatrix}$		11.15	Very steady.
			wt. 3 grs. wt. 4 grs. wt. 5 grs.	24 09 32 20 43 08	w.s.w.	11·17 11·40 11·15	07		
28.	-62 30	306 30	wt. 6 grs. S. N.	$\begin{bmatrix} 55 & 41 \\ 63 & 37 \\ 60 & 01 \end{bmatrix}$	s.w.	$ \left\{ \begin{array}{c} 11.07 \\ 11.41 \\ 11.31 \end{array} \right\} 11.36 $	14	11.22	
29.	-62 36	306 20	S. N.	$\left\{ \begin{array}{c} 64 \ 16 \\ 60 \ 22 \end{array} \right\}$	N.N.E.	$\left\{ \frac{11.24}{11.23} \right\} 11.23$	+.16	11.39	
30.	-63 36	305 00	S. N.	$egin{array}{c} 63 & 20 \\ 59 & 50 \end{array} \}$	E. by s.	$\left\{ \frac{11.47}{11.34} \right\} 11.40$	•00	11.40	
31.	-63 39	304 40	S. N.	62 46 59 03		$\begin{bmatrix} 11.67 \\ 11.56 \end{bmatrix}$			
			wt. 2 grs. wt. 3 grs.	$\begin{vmatrix} 14.41 \\ 23.17 \end{vmatrix}$	S.S.E.	$\left\{\begin{array}{c} 12.02 \\ 11.57 \end{array}\right\}^{11.70}$	-•17	11.56	Perfectly steady.
1 0.40	1		wt. 4 grs. wt. 5 grs.	$\left[\begin{array}{c} 30 & 59 \\ 40 & 11 \\ 51 & 10 \end{array}\right]$	s. by w.	$ \left\{ \begin{array}{c} 11.84 \\ 11.81 \\ 11.74 \end{array} \right\} 11.80 $	20		
1843. Jan. 1,	-64 23	304 00	wt. 6 grs. wt. 2 grs. wt. 3 grs.	14 37 22 49	w. by s.	$ \left\{\begin{array}{c} 12.08 \\ 11.79 \end{array}\right\}_{11.01} $	02	11.79	
			wt. 4 grs. wt. 5 grs.	31 02 41 12		11.82 11.57			
			S. N.	71 48 67 41		$\begin{pmatrix} 9.79 \\ 9.76 \end{pmatrix}$			
			wt. 1 gr.	9 28 18 53	Observed	9.26		- 0-	
Nov.	-51 32	301 54	wt. 2 grs. wt. 3 grs. wt. 4 grs.	28 41 39 27 50 54	on shore. Face West.	$ \begin{array}{c c} & 9.42 \\ 9.52 \\ 9.59 \\ 9.82 \end{array} $ $ \begin{array}{c c} 9.61 \\ 9.82 \end{array} $	******	9.61	
		,	wt. 5 grs. wt. 6 grs.	70 06		$\begin{bmatrix} 9.82 \\ 9.72 \end{bmatrix}$			

Date.	Lat.	Long.	Method employed.	Angle of Deflection. Face East.	Direction of ship's head.	Intensity.	Correction for Deviation.	Corrected Intensity.	Remarks.
1843.						\$ 100 miles			
Jan. 2.	$-6\mathring{4}$ 26	303 52	s. N.	$egin{array}{ccc} 6\mathring{2} & 16 \ 58 & 43 \end{array} \}$	Observed on ice.	$\left\{ egin{array}{l} 11.74 \ 11.64 \end{array} ight\}$ 11.69		11.69	
4.	$-64 \ 32$	304 20	S.	63 01 59 34	N. by W. $\frac{1}{2}$ W.	$\left\{ \begin{array}{c} 11.56 \\ 11.43 \end{array} ight\}$ 11.50	+.19	11.69	
	-64 18		N. S. N.	62 56 59 25	w. by n.	$\left\{ \frac{11.56}{11.44} \right\} 11.50$	+.05	11.55	
	-64 34		S. N.	$egin{array}{c c} 62 & 13 \\ 59 & 04 \\ \end{array} \}$	W.N.W.	$\left\{ \begin{array}{c} 11.78 \\ 14.56 \end{array} \right\}$ 11.67	+.08	11.75	
9.	-64 44		s. N.	$\left[\begin{array}{cc} 62 & 30 \\ 59 & 03 \end{array}\right]$	N.W. ½ W.	$\left\{ rac{11.68}{11.56} ight\}$ 11.62	+.12	11.74	
	-64 44	303 07	s. N.	62 01 58 29		$\begin{bmatrix} 11.82 \\ 11.72 \end{bmatrix} 11.77$	1		
			wt. 2 grs. wt. 3 grs. wt. 4 grs. wt. 5 grs.	$\left \begin{array}{c} 14 & 28 \\ 23 & 21 \\ 31 & 41 \\ 40 & 54 \end{array}\right $	Observed on an ice-floe.	$ \left\{ \begin{array}{c} 12.19 \\ 11.53 \\ 11.61 \\ 11.64 \end{array} \right\} $ 11.76	}	11•76	
14.	-64 31	302 34	wt. 6 grs. S.	$\begin{array}{c c} 50 & 36 \\ 62 & 27 \end{array}$	w.	$\left\{ \begin{array}{c} 11.83 \\ 11.70 \\ 11.66 \end{array} \right\} 11.68$	+•01	11.69	
16.	-64 48	303 09	N. S.	$egin{array}{cccccccccccccccccccccccccccccccccccc$	N.N.W. $\frac{1}{2}$ W.	11.66	+.16	12.03	
			N. S.	57 17 }	Observed on	$ \left\{ \begin{array}{c} 12.09 \\ 11.79 \\ 11.63 \end{array} \right\} \begin{array}{c} 11.71 \\ 11.71 \end{array} $		11.71	
19.	-64 22	305 01	N. S. N.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	an ice-floe.	$\left\{ \begin{array}{c} 11.63 \\ 11.64 \\ 11.49 \end{array} \right\} 11.57$	01	11.56	
20.	-64 18	304 18	S. N. S.	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	w.s.w.	$\left\{ \begin{array}{c} 11.67 \\ 11.57 \\ 11.57 \end{array} \right\} 11.62$	07	11.55	
22.	-64 12	303 50	S. N.	$ \begin{array}{c c} 60 & 16 \\ 59 & 23 \end{array} $	E.N.E.	$\left\{ \begin{array}{c} 12.32 \\ 11.45 \end{array} \right\} 11.88$	+.09	11.97	
29.	-64 05	304 00	S. N.	$ \begin{array}{c c} 62 & 36 \\ 59 & 16 \end{array} $	w.	$\left\{ \begin{array}{l} 11.67 \\ 11.50 \end{array} \right\} 11.59$	+.01	11.60	
Feb. 5.	$-63 \ 30$	306 59	S. N.	63 52 60 16	N.E. ½ N.	$\left\{ \frac{11.33}{11.24} \right\} 11.29$	+.13	11.42	
	-63 46		S. N.	$\left[\begin{array}{c} 63 \ 43 \\ 60 \ 27 \end{array}\right]$	N. ½ E.	$\left\{ rac{11.36}{11.20} ight\}$ 11.28	+.18	11.46	
	-63 49		s. N.	$\left[\begin{array}{c}63 & 51\\60 & 02\end{array}\right]$	E. ½ S.	$\left\{ rac{11.35}{11.30} ight. \left\{ rac{11.32}{11.32} ight.$	03	11.29	
9.	-64 19	309 36	S. N.	63 05 59 47		11.37			
			wt. 2 grs. wt. 3 grs. wt. 4 grs.	15 42 23 03 32 00	E.S.E.	11.66	05	11.39	
10.	$-64 \ 36$	311 53	wt. 5 grs. S.	$ \begin{array}{c c} 42 & 31 \\ 64 & 08 \\ 60 & 22 \end{array} $	n.e. by e.	$\left\{ egin{array}{c} 11.28 \ 11.27 \ 11.18 \ \end{array} ight\}$	+.12	11.36	
11.	$-64 \ 37$	314 21	N. S. N.	$ \begin{array}{c c} 60 & 32 \\ 63 & 28 \\ 59 & 48 \end{array} $	S.E. ½ S.	$\left\{\begin{array}{c} 11.18 \\ 11.44 \\ 11.37 \end{array}\right\} 11.41$	12	11.29	
12.	-64 39	316 04	S. N.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	N.E.	$\left\{\begin{array}{c} 11.37 \\ 11.12 \\ 11.01 \end{array}\right\} 11.07$	+.13	11:20	
13.	-64 56	317 01	S. N.		s. by E.	$\left\{\begin{array}{c} 11.30 \\ 11.21 \\ \end{array}\right\} 11.26$	18	11.08	
	-65 06		S. N.	$\left\{ \begin{array}{c} 64 & 54 \\ 61 & 49 \end{array} \right\}$	E.N.E.	$\left\{ \begin{array}{c} 11.08 \\ 10.90 \end{array} \right\} 10.99$	+.09	11.08	
	-64 40		S. N.	$ \begin{array}{c c} 65 & 38 \\ 62 & 01 \end{array} $	n.e. by n.	$\left\{ \begin{array}{c} 10.92 \\ 10.85 \end{array} \right\} 10.88$	+.14	11.02	
	-63 54		S. N.	$66\ 41\ 62\ 59$	N.E. by E. $\frac{1}{2}$ E.	1 1 20 00 1	+.09	10.76	
17.	$-63 \ 36$	324 36	S. N.	$68\ 10\ 63\ 53$	N.N.E.	$\left \left\{ \begin{array}{c} 10.39 \\ 10.46 \end{array} \right\} 10.43$	+.14	10.67	

Date.	Lat.	Long.	Method employed.	Angle of Deflection. Face East.	Direction of ship's head.	Intensity.	Correction for Deviation.	Corrected Intensity.	Remarks.
1843.		0 ,					-		
Feb. 17.	-6336	324 36	wt. 2 grs.	16 26		(10.78)	12		
			wt. 3 grs.	25 25	,	10.66			
	,		wt. 4 grs.	35 20 >	E.N.E.	$\langle 10.55 \rangle 10.63$	+.08	10.71	
			wt. 5 grs.	46 08		10.58			
	00.00	000 -0	wt. 6 grs.	59 56		10.55			
18.	-62 39	328 16	S.	6931	N.E. by E.	$\left\{ \begin{array}{c} 10.13 \\ 10.29 \end{array} \right\} 10.18$			
			N.	65 02 }		(10.23)	1.10	10.01	
			wt. 2 grs.	17 10		$\begin{cases} 10.33 \\ 10.11 \end{cases}$	+.10	10.31	
			wt. 3 grs. wt. 4 grs.	26 55 36 15	E.N.E.	$\left\{\begin{array}{c} 10.11 \\ 10.25 \end{array}\right\}$			
10	-6220	330 00	S.	69 46		$\begin{bmatrix} 10.32 \end{bmatrix}$			
19.	-02 20	330 00	Ň.	$65\ 30$	N.E. by E. 1/2 E	$\left\{ \begin{array}{c} 10.09 \\ 10.14 \end{array} \right\} 10.12$	+.09	10.21	
20.	-6159	333 43	Š.	71 12		(0.94)			
~00	01 03	000 10	S. N.	66 41	N.E.	$\left\{\begin{array}{c} 9.93 \\ 9.93 \end{array}\right\} \left.\begin{array}{c} 9.88 \\ \end{array}\right.$	+.12	10.00	
21.	$-61 \ 37$	336 05	S.	70 16		(10.00.)	00	0.05	
	- •		N.	66 39	E. by s.	$\left\{ \begin{array}{c} 10.00 \\ 9.93 \end{array} \right\} \ \ 9.97$	02	9.95	
22.	-61 30	338 00	S.	71 40 7	h	9.77) 0.70	1.04	0.00	
			N.	67 28	E. by N.	$\left\{\begin{array}{c} 9.77 \\ 9.79 \end{array}\right\}. \ 9.78$	+.04	9.82	
23.	-6146	341 02	S.	71 14 j	E.S.E.	$\left\{\begin{array}{c} 9.83 \\ 0.05 \end{array}\right\} 9.84$	04	9.80	
			N.	67 08	E.S.E.	(9.89)	- 01	9 00	
24.	$-62\ 36$	344 08	S.	69 29 {	S.	$\left\{ \begin{array}{c} 10.19 \\ 10.14 \end{array} \right\} 10.17$	17	10.00	
	00 75		N.	$65 \ 32$	~•	10.14			
25.	-63 58	345 10	S.	68 16 5	s. by E.	$\left\{\begin{array}{c} 10.36 \\ 10.39 \end{array}\right\}$ 10.37	17	10.20	
00	C4 90	040 00	N.	64 14		10.99			
20.	$-64 \ 38$	348 00	S. N.	$\left.\begin{array}{c}68\ 13\\64\ 01\end{array}\right\}$	S.E.	$\left\{\begin{array}{c} 10.39 \\ 10.42 \end{array}\right\}$ 10.41	10	10.31	
07	-6512	350 05	S.	68 09		10.43	1		
21.	-05 12	330 03	N.	63 50	S.E.	$\left\{\begin{array}{c} 10.38 \\ 10.47 \end{array}\right\} 10.43$	10	10.33	
28.	-6608	352 43	S.	67 13		10.57			
20.	00 00	002 10	Ñ.	63 05	s.E. by s.	$\left\{\begin{array}{c} 10.57 \\ 10.60 \end{array}\right\} 10.59$	13	10.46	
Mar. 1.	-67.06	351 04	S.	65 55		े 210.96 ₹			
	, ,	001 01	N.	62 37	s.w. $\frac{1}{2}$ w.	$\left\{\begin{array}{c} 10.72 \\ 10.72 \end{array}\right\} 10.79$	11	10.68	
2.	-6814	347 40	S.	65 03		11.05 →			
			N.	61 17		11.01			
			wt. 2 grs.	15 55	s.w.	11.12 >11.04	13	10.91	
`		,	wt. 3 grs.	24 33		11.01			
	_		wt. 4 grs.	33 42	r e	11.01			
3.	-68 32	347 09	S.	64 41 7	S.S.E.	$\{11.14\}$	15	10.96	
	00		N.	60 54	Size E	11.09	10	10 00	
4.	-69 26	345 31	S.	$\begin{array}{c c} 63 & 38 \\ 60 & 12 \\ \end{array}$	s.w. by s.	11.39	15	11.17	
_	71 10	344 13	N. S.	$60 \ 13 \ 62 \ 34 \)$		11.29		•	,
ა.	-/1 10	344 13	». N.	59 07	S.E.	$ \left\{ \begin{array}{c} 11.67 \\ 11.53 \end{array} \right\} 11.60 $	- 13	11.47	
10	-68 06	344 40	N.	62 03	n.e. by n.	10.84 10.84	+.17	11.01	
11.		346 24	S.	67 42		(10.48)	1		
	30 00	010 201	Ň.	$63\ 32$	n. by E.	$\left\{\begin{array}{c} 10.73 \\ 10.53 \end{array}\right\} 10.51$	+.16	10.67	
12.	$-64 \ 31$	346 01	N.	65 36	N.N.E.	10.12 10.12	+.14	10.26	Very unsteady.
	$-61 \ 34$	348 39	S.	73 07]		C 9.51)			
	,		N	68 21	n.e. by n.	$\left\{\begin{array}{c} 9.65 \\ 9.58 \end{array}\right\}$	+.13	9.71	
14.	-59 34	350 34	S.	75 54 ĺ	N. W. hre ar	9.09	1.19	0.00	
			N.	70 55 }	n.e. by n.	$9.23 \mid 9.16$	+.13	9.29	
15.	-57 27	352 08	S.	79 14		8.60			
			N.	73 00	1	8.93			:
			wt. 2 grs.	18 46	n.e. by n.	$\frac{9.48}{9.00} > 9.06$	+.12	9.18	
			wt. 3 grs.	29 49		9.20			
16	57 00	250 45	wt. 4 grs.	42 09 J 80 12 1		9.09			
10.	-5709	352 45	S. N.	$\begin{bmatrix} 80 & 12 \\ 73 & 36 \end{bmatrix}$	N.W. $\frac{1}{2}$ N.	$\left\{\begin{array}{c} 8.48 \\ 8.85 \end{array}\right\} 8.67$	+•11	8.78	
17	-56 38	353 57	S.	80 54	_	8.37			
14.	-00 00	000 07	N.	74 49	N.N.W.	8.67 8.52	+.14	$8 \cdot 66$	
			1			()			

Date.	Lat.	Long.	Method employed.	Angle of Deflection. Face East.	Direction of ship's head.	Intensity.	Correction for Deviation.	Corrected Intensity.	Remarks.
1843. · Mar. 18.	$-55^{\circ}38^{\circ}$	355° 32′	S. N.	$\left\{ egin{array}{cccccccccccccccccccccccccccccccccccc$	E.NE.	$\left\{\begin{array}{c} 8.36 \\ 8.72 \end{array}\right\} 8.54$	+.08	8.62	
20.	-54 07	359 56	S. N.	84 03 76 38		$\left\{\begin{array}{c} 8.73 \ 8.00 \ 8.43 \end{array}\right\}$	04	8.28	Deflector R. F. 4.
			S. N.	54 50 55 14	E.S.E.	8·37 8·40 8·38	04	8.34	Deflector R. F. 3.
24.	$-50 \ 37$	9 03	S. N.	55 44 57 45	N.E.	$ \left\{ \begin{array}{c} 8.26 \\ 8.09 \\ 8.09 \end{array} \right\} 8.17 $	+.12	8.29	·
25.	-47 38	10 51	S. N.	$\begin{bmatrix} 56 & 34 \\ 58 & 32 \end{bmatrix}$	N.E.	$\left\{ \begin{array}{c} 8.10 \\ 7.96 \end{array} \right\} 8.03$	+•12	8.15	
26.	-45 32	11 54	s. N.	57 51 59 33	N.E.	\ \begin{pmatrix} 7.86 \ 7.83 \ \end{pmatrix} 7.84	+.12	7.96	
27.	- 43 57	13 16	s. N.	58 22 59 57		7.82			'
		1	wt. 2 grs. wt. 3 grs. wt. 4 grs.	22 21 35 32 51 11	n.e. by e.	$ \left\{ \begin{array}{c} 7.76 \\ 8.02 \\ 7.87 \\ 7.83 \end{array} \right\} $ 7.86	+.10	7· 96	
28.	-43 10	14 44	S. N. wt. 2 grs. wt. 3 grs.	58 08 60 07 23 26 36 05	N.E.	$ \left\{ \begin{array}{c} 7.84 \\ 7.75 \\ 7.67 \\ 7.77 \end{array} \right\} $ $ 7.70 $	+:13	7.83	
29.	-41 48	15 09	wt. 4 grs. S. N.	50 03 54 31 58 42 60 36	N.E. 1/2 N.	$ \left\{ \begin{array}{c} 7.49 \\ 7.75 \\ 7.70 \end{array} \right\} \left\{ \begin{array}{c} 7.72 \end{array} \right. $	+•13	7.85	
30.	-40 15	15 47	S. N.	$\begin{bmatrix} 59 & 45 \\ 61 & 30 \end{bmatrix}$	N.E.	$\left\{ \begin{array}{c} 7.60 \\ 7.57 \end{array} \right\} \ 7.58$	+.13	7.71	
31.	-37 40	16 40	S. N.	59 56 61 41	n.e. by e.	$\left\{ \begin{array}{c} 7.57 \\ 7.56 \end{array} \right\} \ 7.56$	+•11	7.67	
April 1.	-35 5 9	16 34	s. N.	$egin{bmatrix} 60 & 32 \\ 62 & 19 \end{bmatrix}$	n.e. by e.	$\left\{ \begin{array}{c} 7.49 \\ 7.48 \end{array} \right\} \ 7.48$	+.11	7.59	
2.	-35 26	16 22	S. N.	$egin{bmatrix} 60 & 07 \\ 62 & 14 \end{bmatrix}$	E.	$\left\{ \begin{array}{c} 7.55 \\ 7.47 \end{array} \right\} \ 7.51$	+.02	7.53	
	-35 00	17 00 ouse Point,	S. N. S.	$\begin{bmatrix} 60 & 22 & \\ 63 & 01 & \\ 59 & 45 & \\ \end{bmatrix}$	N.E. by E. ½ E.	$ \left\{ \begin{array}{c} 7.52 \\ 7.40 \\ 7.60 \end{array} \right\} $	+.10	7· 56	
0.		i's Bay.	N. wt. 1 gr. wt. 2 grs. wt. 3 grs. wt. 3 5 grs.	61 43 11 19·5 23 43·0 36 59·4 44 21	Observed on shore.	7.56 7.76 7.76 7.58 7.60 7.63	•••••	7.59	
19.	Swingin devi	g Ship for ation.	wt. 4 grs.	55 52 59 33 59 37 59 41 58 58 58 52 59 00 58 57 59 31 59 58 60 06 60 28 60 35 60 41 60 19 59 55 59 50	W. W.S.W. S.W. S.SW. S. S.S.E. E.S.E. E.N.E. N.E. N.N.E. N.N.W. N.W.	7·36 7·63 7·63 7·62 7·71 7·74 7·71 7·72 7·63 7·56 7·54 7·49 7·49 7·49 7·49 7·52 7·55 7·56 7·56	+·02 -·03 -·13 -·17 -·18 -·16 -·10 -·03 +·02 +·10 +·13 +·15 +·14 +·11 +·06	7·65 7·60 7·49 7·54 7·55 7·62 7·63 7·64 7·66 7·66 7·66	
							Mean	7.60	

Observations of the Intensity of the Magnetic Force made in Her Majesty's Ship 'Terror' with Needle F. C. B., between September 9, 1842, and April 20, 1843.

Observers Captain Francis Rawdon Crozier and Mr. Thomas E. L. Moore, Mate, R.N.

Date.	Lat.	Long.	Method employed.	Angle of Deflection. Face East.	Direction of ship's head.		Intensity.	Correction for Deviation.	Corrected Intensity.	Remarks.
1842.					···					
1842. Sent 0	-52 48	303 10	N.	42 50		10.54	1		:	
Behr. 3.	- 02 40	303 10	s.	42 50 40 42	s.s.w.	10·54 10·34	10.44	15	10.29	Steering tolerably.
16.	-54 42	305 30	N.	42 37	-	10.63				
- 1,7	01 12	505 50	S.	41 15	w.s.w.	10.03	10.39	04	10.35	Steering badly;
18.	- 55 30	297 00	Ñ.	41 11		11.18	{ ' _			very unsteady.
			S.	38 38	s.w.	11.11	11.15	11	11.04	Steady; steering well.
Oct. 3.	St. Mart	in's Cove,	N.	40 47			,	-		
		Horn.	S.	38 23						
	-5551	292 28	wt. 1 gr.	15 04						
			wt. 1.5 gr.	22 41	Observeden	ahana	• • • • • • • • • • • • • • • • • • • •		11.19	
			wt. 2 grs.	30 35	Conservedon	snore	• • • • • • • • • • • • • • • • • • • •	*****	1119	
			wt. 2·5 grs.	39 28						
			wt. 3 grs.	48 57						
37 #	70.00	200 25	wt. 3.5 grs.	61 10						1.
Nov. 7.	-5602	292 57	N.	40 12	E.N.E.	11.59	11.32	+.08	11.40	Steering well; slight motion.
0		005 43	S.	38 43 ∫		11.06	₹ = = = = = = = = = = = = = = = = = = =			slight motion.
8.	-55 52	295 41	N.	41 58	N.E. by E.	10.87	10.80	+.10	10.90	Much motion.
11	EE 0E	900 40	S. N.	39 36 ∫		10.74	{			
,11.	-55 05	299 49	S.	41 50	N.	11.01	10.75	+.16	10.91	Steering steady.
12.	-52 26	301 16	N.	40 17 { 44 27 }		10.49	{			
1 ~.	- 32 20	301 10	S.	42 13	N.E. by E.	9·97 9·82	9.90	+.10	10.00	Steering well.
16.	Port	Louis.	N.	44 12		9.02)			
20.		301 53	s.	42 03						
	0.00	001 00	wt. 1 gr.	16 54		· .				
,			wt. 1.5 gr.	25 39	Observed on	shore			9.92	
			wt. 2 grs.	34 58	o boer ved on	511010	•		0.0	
			wt. 2.5 grs.	45 42						
			wt. 3 grs.	58 16						
Dec. 3.		Louis.	N.	44 31						
	-51 32	301 53	S.	42 01						.,
			wt. 1 gr.	17 07						
			wt. 1.5 gr.	25 36	Observed on	shore			9.91	
			wt. 2 grs.	34.54						
			wt. 2.5 grs.	45 45						
17.	D	on out of	wt. 3 grs.	57 58						
17.	Bowkole	ng out of by Sound.	wt. 1 gr. wt. 1·5 gr.	17 11 25 49						
	Derveig	y Sound.	wt. 2 grs.	35 13	Е.		9.88			Steady: steering
			wt. 2 grs. wt. 2.5 grs.	45 03	E.		9 00			Steady; steering well.
	-		wt. 3 grs.	58 21	-	1	9.89	•00	9.89	
			N.	44 25		9.98	1	1		
			S.	42 12	E.	9.82	9.90		-	
18.	-5246	303 18	N.	43 40		10.24	1,0.15			
			S.	41 06		10.05	10.15			
			wt. 1 gr.	16 13			10.15	12	10.03	Steering badly,
			wt. 1.5 gr.	24 28	s.E. by s.			-		
			wt. 2 grs.	34 20			>10.16			Table unsteady.
			wt. 2.5 grs.	44 17						
10	59 00	202 40	wt. 3 grs.	58 52		10.00	∤			
19.	-53 38	303 43	N. S.	43 26	s. by E.	10.32	10.28	16	10.12	Very unsteady.
90	55 26	305 20	S. N.	40 57 (1	10·25 10·74	}			
	-00 20	000 20	S.	42 18 } 40 44 }	S.S.E.	10.74	10.53	15	10.38	Steering well.
	i	1	~•	-v -x -		1002	J			

Date.	Lat.	Long.	Method employed.	Angle of Deflection. Face East.	Direction of ship's head.	Intensity.	Correction for Deviation.	Corrected Intensity.	Remarks.
1842. Dec. 20.	$-5\overset{\circ}{5}$ $5\overset{\circ}{7}$	30Š 27	wt. 1 gr. wt. 1·5 gr. wt. 2 grs. wt. 2·5 grs.	$ \begin{array}{c c} 15 & 29 \\ 23 & 51 \\ 33 & 33 \\ 42 & 54 \end{array} $	s.E. by s.	10.54	12	10•42	Table steady.
		305 30	wt. 3 grs. N. S.	$\begin{array}{c c} 53 & 06 \\ 42 & 19 \\ 40 & 09 \end{array}$	s.E. by s.	$10.74 \atop 10.53$ 10.63	12	10.51	Table steady.
21.	 56 55	306 40	N. S. wt. 1 gr.	42 36 40 11 14 47	s.s.e.	$ \begin{array}{c c} 10.64 \\ 10.53 \end{array} $ $ \begin{array}{c} 10.58 \\ 10.66 \end{array} $	15	10.51	Unsteady; steering
			wt. 1.5 gr. wt. 2 grs. wt. 2.5 grs.	$\left[\begin{array}{cc} 24 & 23 \\ 32 & 13 \\ 42 & 01 \end{array}\right]$	S.S.E.	} 10·70 ∫			badly.
22.	-57 50 $-58 25$		N. S. wt. 1 gr.	$ \begin{array}{c cccc} & 41 & 26 \\ & 39 & 05 \\ & 14 & 48 \end{array} $	S.S.E.	11.08 11.01	- 15	10.86	Much motion; steering badly.
e mindado e e e e e e e e e e e e e e e e e e e		,	wt. 1.5 gr. wt. 2 grs. wt. 2.5 grs.	$\left[\begin{array}{c} 23 & 06 \\ 32 & 05 \\ 41 & 19 \end{array}\right]$	s. by E.	10.90	-15	10-74	The state of the s
	÷		wt. 3 grs. N. S.	$\left[\begin{array}{c} 51 & 04 \\ 41 & 52 \\ 38 & 55 \end{array}\right]$	s. by E. ½ E. s. by E.	$ \begin{array}{c} 10.90 \\ 10.99 \\ 10.95 \end{array} $	17	10.74	
23.			N. S.	$\left[\begin{array}{c} 41 & 02 \\ 38 & 58 \end{array} \right]$	s. by w.	$\left. \begin{array}{c} 11.25 \\ 10.97 \end{array} \right\}$ 11.11	18	10.93	
24.			N. S.	$\left[egin{array}{c} 40.53 \ 38.00 \end{array} ight]$	s, by w.	$\left. \begin{array}{c} 11.32 \\ 11.37 \end{array} ight\} 11.34$	18	11.16	
25.			N. S.	$\left[\begin{array}{c} 39 \ 48 \ 37 \ 51 \end{array} \right]$	S.S.E.	$egin{array}{c} 11.21 \ 11.43 \end{array} iggr\} 11.32$	-•15	11.17	Unsteady.
26.	-62 25	307 58	N. S. wt. 1 gr.	$ \begin{array}{c c} 40 & 42 \\ 38 & 52 \\ 15 & 15 \end{array} $	N.N.W.	$\begin{array}{c} 11.38 \\ 11.01 \end{array} \} 11.20 \\ \begin{array}{c} \\ \\ \\ \end{array} \} 11.06$	1.15	11.21	Table *teady;
			wt. 1.5 gr. wt. 2 grs. wt. 2.5 grs.	23 31 31 09 39 30	N.N.W. ½ W.	11.01 11.01	+.15	11-21	steering badly.
27.	-62 18	308 17	wt. 3 grs. N. S.	$\begin{vmatrix} 49 & 41 \\ 40 & 54 \end{vmatrix}$		$\left. \begin{array}{c} 11.32 \\ 11.20 \end{array} \right\}$ $\left. 11.26 \end{array} \right)$	-		
			wt. 1 gr. wt. 1·5 gr.	38 29 14 16 21 55 30 48	w. by s.	11.32 11.32 11.30	02	11.28	Steady.
			wt. 2 grs. wt. 2.5 grs. wt. 3 grs.	39 35 49 09					
28		306 52 305 27	wt. 3 grs. N. S. N.	40 33 3 38 12 3 40 01	s.w.	$egin{array}{c} 11.44 \\ 11.26 \\ 11.66 \\ \end{array}$	14	11.21	
		200 27	S. wt. 1 gr.	37 40 13 56	s.w.	11.51	14	11.51	
			wt. 1.5 gr. wt. 2 grs. wt. 2.5 grs.	21 13 29 53 37 38		11.68			
	$-63 \ 35$ $-63 \ 57$		N. S. N.	$egin{array}{c} 39 & 26 \\ 37 & 14 \\ 39 & 38 \\ \end{array}$	s.w. by w.	11.91 \ 11.80 \ 11.84 \ 11.83 \	10	11.70	Slight motion.
		-	S. wt. 1 gr. wt. 1.5 gr.	36 56 13 46 20 20	s.	11.82	20	11.69	Very steady.
			wt. 2 grs. wt. 2.5 grs.	29 0 8 37 22		\\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			,
			wt. 2 grs.	29 08	3.	\right\{\right\}			,

Date.	Lat.	Long.	Method employed.	Angle of Deflection. Face East.	Direction of ship's head.	Intensity.	Correction for Deviation.	Corrected Intensity.	Remarks.
1843.		0 /		0: 4		and the state of t			
Jan. 2.	$-6\mathring{4}$ 2 $\acute{7}$	$30\mathring{3}$ $5\acute{4}$	N.	38 53		$\{12.16\}$			
			S.	37 01	-	11.78			
			wt. 1 gr.	14 03		11.73	•79	11.79	600 yards from the ship.
			wt. 1.5 gr. wt. 2 grs.	$egin{pmatrix} 21 & 31 \ 29 & 15 \ \end{bmatrix}$	On ice.	11.65			smp.
			wt. 2 grs. wt. 2.5 grs.	37 20		11.74			
			wt. 3 grs.	46 11		11.84			
3.	-64 30	304 10	N.	40 08		11.60			
	02.00	332 23	S.	37 20	N.W. $\frac{1}{2}$ W.	11.65 11.64	+•12	11.76	
4.	-64 38	304 20	N.	40 37		11.42	1.000		g. 'V
			S.	37 34	$N.w.byw.\frac{1}{2}w.$	11.42 11.49	+.08		Sailing amongst loose ice.
			wt. 1 gr.	14 26)		11.70	
			wt. 1.5 gr.	21 58	n. by E.			1170	
			wt. 2 grs.	29 52	n. by E.	>11.58	+.16		
			wt. 2.5 grs.	37 37	,		1,,		
			wt. 3 grs.	46 51 58 15	N.N.E. \(\frac{1}{2}\) E.				
5	-64 13	304 06	wt. 3.5 grs. N.	39 31]	N.N.E.	11.90	1.9		
٥.	-04 18	304 00	s.	37 19	w.	11.65 11.77	+.02	11.79	
			wt. 1 gr.	14 18	E. by N.	11.53			
			wt. 1.5 gr.	21 52	$N.E. \frac{1}{4} N.$	11.47			
			wt. 2 grs.	29 35	, ,	11.54	1.017	11.77	
			wt. 2.5 grs.	37 30	-	11.70	+.17	11.77	Sailing amongst loose ice.
		-	wt. 3 grs.	47 16	N.	11.63		1	
			wt. 3.5 grs.	58 24		11.70			
6.	-64 12	303 04		39 06	w.	$\frac{12.06}{11.60}$ 11.87	+.01	11.88	
			S.	37 16 ∫		11.08	,		
7.	-64 28	303 20	N.	39 17	s. ½ w.	$\frac{11.98}{11.00}$ $\frac{11.98}{11.98}$	17		
			S.	36 33 \\ 14 01		11-99	+.06		
			wt. 1 gr. wt. 1.5 gr.	20 36	w.n.w.	11·76 11·76 12·14	+:00	11.87	
			wt. 2 grs.	28 20		12.00			
			wt. 2.5 grs.	36 27	s. ½ w.	11.98 >12.07	17		
		-	wt. 3 grs.	44 51		12.11			
			wt. 3.5 grs.	55 12		12.14			
9.	-6441	302 52	N.	39 24	s.E. by E.	11.94 \ 11.95			
			S.	36 37 ∫	S.E. Uy E.	11.95			
			wt. 1 gr.	14 06		11.69			
			wt. 1.5 gr.	21 19		11.75	1.8806	11.82	
			wt. 2 grs.	28 33 36 38	E.S.E.	11.92		1	
			wt. 2.5 grs. wt. 3 grs.	45 40		11.04 1			
			wt. 3.5 grs.	56 31		11.94 \ 11.94			
	- 64 49	303 09		39 27		11.0ก วั			
	01 10	000 0.	S.	36 57		11.82 \ 11.86			
			wt. 1 gr.	13 34		10.14	1.85	11.85	800 yards from the
		1	wt. 1.5 gr.	21 23	Observed	11.72	1.85	11.00	ship.
			wt. 2 grs.	29 42	on ice.	11.50			
			wt. 2.5 grs.	36 59		11.99			
			wt. 3 grs.	45 49		11.91			
	C	1 200 4	wt. 3.5 grs.	56 16		11.99			
10	$-64 \ 38$	302 40	N. S.	39 07 } 36 45 }	s.w. by s.	$12.06 \\ 11.88$ 11.97	16	11.81	
10	_64 40	302 0		39 34 }		11.00 1	·		Sailing amongst
12	-04 4	002 07	S.	37 35	w.n.w.	11.56 11.72	+.07	11.79	loose ice; very
16	$-64 \ 30$	303 04		39 47		10.00 1		11.00	steady.
10	1,	1	S.	37 32	N.N.W.	11.56 } 11.78	+.14	11.92	Fast to a floe.

Observations of the Magnetic Force, Her Majesty's Ship 'Terror' (continued).

Date.	Lat.	Long.	Method employed.	Angle of Deflection. Face East.	Direction of ship's head.	Intensity.	Correction for Deviation.	Corrected Intensity.	Remarks.
1843. Jan. 18.	-64° 04	305° 00	N. S. wt. 1 gr. wt. 1 · 5 gr. wt. 2 grs. wt. 2 · 5 grs.	$ \begin{array}{c} 39 & 56 \\ 37 & 31 \\ 14 & 19 \\ 22 & 09 \\ 29 & 50 \\ 38 & 00 \end{array} $	N.E. by E.	$ \begin{array}{c} 11.71 \\ 11.56 \end{array} \right\} 11.63 \\ 11.50 $	+.13	11.66	
	-64 16 -64 20	304 42 304 40	wt. 3 grs. wt. 3·5 grs. N. N. S.	47 19 58 45 39 41 39 33 37 01	w. by s. ½ s.	11.81 11.86 11.78 } 11.82	-·05 -·06	11•76 11•76	
22.	-64 12	304 07	wt. 1 gr. wt. 1.5 gr. wt. 2 grs. wt. 2.5 grs.	$ \begin{array}{c c} 37 & 01 \\ 13 & 59 \\ 21 & 28 \\ 29 & 56 \\ 37 & 52 \end{array} $	E.N.E.	11-63	+.10	11.74	Sailing amongst loose ice.
24.	64 0 8	304 00	wt. 3 grs. wt. 3.5 grs. N. S.	$egin{array}{c} 47 & 42 \\ 58 & 05 \\ 39 & 31 \\ 37 & 43 \\ \end{array}$	N.W. N. ½ E.	11.63	+.11	11.84	
26.	-64 04	304 10	N. S.	$ \begin{array}{c} 39 & 27 \\ 37 & 01 \end{array} $	S.E.	11.48 11.91 11.05	13	11.72	
28.	-64 02	304 15	N. S.	39 28 } 37 04 }	s.w.	11.78 } 11.83 11.90 11.76 } 11.83	15	11.68	
	-63 56		N. S.	39 54 } 37 28 }	w. ½ s.	11.68 11.59 11.63	02	11.61	
	-64 24		wt. 1 gr. wt. 1·5 gr. wt. 2 grs. wt. 2·5 grs. wt. 3 grs. wt. 3·5 grs.	14 16 21 46 29 33 37 40 46 41 57 57	w. by s.	11•63	-∙03	11.60	
4.	-6 4 16	304 47	N. S. N. S.	40 04 } 37 31 } 39 59 } 37 14 }	E.N.E.	$ \begin{array}{c} 11.66 \\ 11.57 \\ 11.67 \\ 11.69 \end{array} \} 11.61 $	+·10 -·17	11.61	Steady. Sailing amongst loose ice.
7.	-63 47	308 00	N. S.	$\begin{array}{cc} 40 & 02 \\ 37 & 24 \end{array}$	s.e. by e. s.e. by s.	$11.66 \\ 11.61 $ 11.63	13	11.50	Sailing amongst loose ice.
8.	$-63 \ 42$	308 45	N. S.	$egin{array}{c} 40 & 40 \ 38 & 23 \end{array} \}$	N. ½ E.	$egin{array}{c} 11.39 \ 11.21 \ \end{array} iggr\} 11.30$	+.19	11•49	Unsteady.
9.	-64 19	309 40	wt. 1 gr. wt. 1·5 gr. wt. 2 grs. wt. 2·5 grs. wt. 3 grs. wt. 3·5 grs.	14 35 21 49 29 57 38 22 47 50 59 08	E. by s.	11.48	-•04	11•43	
			N. S.	40 18 37 59		$11.54 \ 11.37 \ 11.46$			
		312 06	N. S.	40 46 38 13	E.N.E.	$11.35 \ 11.29$ } 11.32	+.09	11.41	
		314 01	N. S.	40 50 38 33 34 54 54 54	N.	$11.32 \\ 11.15 \\ 11.20 \\ 11.24$	+.18	11.42	
	-64 49		N. S.	40 54 38 38 3	E.N.E.	$11.30 \\ 11.11 \\ 11.21$	+.10	11:31	
13.	-04 47	316 57	N. S.	$\left\{ \begin{array}{c} 41 & 00 \\ 37 & 50 \end{array} \right\}$	s. by E. ½ E.	$11.26 \\ 11.42$ } 11.34	17	11.17	

LIEUT.-GENERAL SABINE ON TERRESTRIAL MAGNETISM.

Date.	Lat.	Long.	Method employed.	Angle of Deflection. Face East.	Direction of ship's head.	Intensity.	Correction for Deviation.	Corrected Intensity.	Remarks.
1843.	0 (0		0 /					
Feb. 14.	-64 58	318 26	wt. 1 gr.	14 47	•)			
			wt. 1.5 gr.	22 20			-		
			wt. 2 grs.	30 41		>11.26			
*			wt. 2.5 grs.	38 59	E.		1 .		
			wt. 3 grs. wt. 3.5 grs.	49 09 61 05		>11.27	01	11.26	Little motion; steering well.
			N.	40 43		11.36			steering went
. '			S.	38 15		11.26 11.31			
15.	-64 37	320 28	N.	41 24		11014	1.10	,,,,	
			S.	39 19	N.E.	$10.84 \} 10.99$	+.12	11.11	Steering badly.
16.	-64 02	321 55	N.	41 08 (N.E. by E.	11.21 } 11.19	+.11	11.30	Unsteady.
			S.	38 29 }	N.E. Dy E.	11.10	'	11.00	C nateauy.
17.	-6359	324 18	N.	42 02	E.	$\frac{10.85}{10.77}$ } 10.81	01	10.80	Little motion.
10	-62 37	328 17	S. N.	39 31 } 43 09 }		10.77			
1.0•	-02 37	320 17	s.	41 00	E.N.E.	10.43	+.08	10.41	Little motion.
19.	-62 13	330 28		16 30		10 23 }	-		
	4.0 -0		wt. 1.5 gr.	24 31		1.00.			
			wt. 2 grs.	33 46		10.24			
			wt. 2.5 grs.	43 08	E.	10.29	01	10.28	
			N.	43 10		10.44			
20	CO OF	200 00	S.	40 39		10.90			
20.	-62 05	333 38	N. S.	43 54	N. by E.	10.16 10.09	+.15	10.24	
21.	-61 32	336 10		41 31 43 53		10.03 } 10.09	1		1
21.	-01 32	330 10	S.	40 36	E.	10.17	01	10.27	
22.	-61 28	337 49		43 52		10.16 \	1		
			S.	41 08	s.w. $\frac{1}{2}$ w.	10.19 10.18	11		
			wt. 1 gr.	16 40		,	1		
			wt. 1.5 gr.	25 38	E.S.E.	9.98	03	10.06	Slight motion.
			wt. 2 grs.	34 20					
			wt. 2.5 grs.	44 15		•••	-07		
			wt. 3 grs. wt. 3.5 grs.	56 33 75 39	s.e. by e.	10.24	07		
24.	-6241	343 18		43 06		· ·			
~	02 11	010 10	S.	40 48	S. ½ E.	10.40			
			wt. 1 gr.	16 29		<u> </u>	16	10.13	Slight motion.
			wt. 1.5 gr.	24 30		√			
			wt. 2 grs.	33 16	S. $\frac{1}{2}$ E.	10.25			
			wt. 2.5 grs.	43 42				A	
25.	-64 14	345 30	wt. 3 grs.	56 30 J 43 14]		10.41			
zə.	-04 14	343 30	N. S.	43 14 40 55	E.N.E.	10.41 10.27 10.34	+.08	10.42	Very unsteady.
26.	-64 33	347 59	N.	42 28		10.74			
~0.			S.	39 45	S.E.	10.69 10.71	11	10.60	
27.	-65 00	349 30	N.	41 57		10.00	.12	10.50	Much motion; very
		L. John K.	S.	39 59	S.S.E.	10.59 } 10.73	15	10.58	unsteady.
28.	-66 00	353 00		41 01	s.e. by E.	11.25 1 10.04	07	10.87	
B.T -	00 -	05.	S.	39 53	E.S.E.	10.09		2007	
Mar. 1.	- 00 54	351 1		40 42	s.w. by s.	$\frac{11.38}{10.01}$ 11.15	15	11.00	Steering very well.
0	-68 08	349 14	S. N.	39 08 } 39 59 }		11.67	**		
z.	-00 00	040 1	S.	38 27	s.w.	11.07	15	11.30	Table unsteady.
4.	-6924	345 30	N.	39 36		11.04			
			S.	38 04	s.w.	11.34 11.59	-15	11.44	Table very steady.
5.	-71 09	344 10	N.	38 52	g TW	12.12	16	11.71	Steering well.
	-	1	S.	37 22	s.w.	11.63 11.87	- 10	17.11	precing Acii.

Date.	Lat.	Long.	Method employed.	Angle of Deflection. Face East.	Direction of ship's head.	:	Intensity.	Correction for Deviation.	Corrected Intensity.	Remarks.
1843.			1							
Mar. 8.	$-7\mathring{0}$ 28		N. S.	39 27 } 37 30 }	E.S.E.	11.90 11.58	} 11•74	04	11.70	Short sea.
10.	-68 07	346 23	N. S.	- 41 15 39 05	N.E.	11·15 10·94	11.04	+.15	11.19	Pretty steady.
11.	-65 57	346 40	N. S.	42 21 { 40 30 }	n. by E. ½ E.	10·73 10·41	10.57	+.16	10.73	-
12.	-6358	346 25	N. S.	$egin{array}{ccc} 43 & 32 \ 41 & 32 \end{array} \Big\}$	n.e. by n.	10·30 10·05	10.18	+.13	10.31	
13.	-61 35	349 00	N. S.	44 38 \ 42 50 \	n.e. by n.	9·90 9·62	9.76	+.13	9.89	Heavy sea; steering wildly.
14.	-59 21	350 36	Ň. S.	$\begin{array}{c c} 45 & 49 \\ 43 & 18 \end{array}$	n.e. by n.	9·51 9·47	9.49	+.13	9.62	Smooth water; table steady.
15.	-57 35	352 00	N. S.	46 35 \\ 45 01 \}	N.E. 1/2 N.	9·27 8·96	9.12			***
	-57 27	352 08	wt. 1 gr. wt. 1.5 gr. wt. 2 grs.	$\begin{array}{c} 19 & 01 \\ 29 & 48 \\ 39 & 15 \end{array}$	N.E. 1/2 N.		8.88	+•12	9.08	Steering well; table steady.
16.	-57 09	352 44	wt. 2·5 grs. N.	50 48 \\ 46 10 \\	N.N.W. ½ W.	9.42	} } 9 ·23	+.12	9.35	Smooth water;
17.	-56 44	353 45	S. N.	$\begin{array}{c} 44 & 41 \\ 47 & 30 \\ 47 & 04 \end{array}$	N.N.W.	9·05 8·99	} 8·97	+.13	9.10	steering steady.
19.	-54 32	357 26	S. N.	45 04 }	E. 1/2 N.	8.95 8.71 8.64	} } 8•67	+.03	8.70	Table very unsteady
20.	-5405	359 33	S. N. N.	46 09 } 47 29	s.e. by e. ½ e.	9.02	$\{8.99\}$	05	8•77	Steering well; table
. 04	EA E0	0 17	S. N.	$egin{array}{c} 47 & 25 \\ 46 & 53 \\ 40 & 24 \\ \end{array}$	E.S.E.	8·43 8·39	8.73			unsteady.
24.	-50 52 50 10	8 47	S. N.	$\left\{ \begin{array}{c} 49 & 34 \\ 47 & 29 \\ \end{array} \right\}$	N.E. ½ N.	8·27 8·41	8.33	+.12	8·45 8·52	Table unsteady.
25.	$-50 19 \\ -47 36$	$\begin{array}{c c} 9 & 15 \\ 10 & 41 \end{array}$	N.	49 29 50 01]	N.E.	8.27	0.04		8.35	Table steady.
	-45 3 8	11 52	S. N.	47 44 } 50 37 }	N.E.	8·21 8·10	} 8.24 } 8.03	+.11	8.14	Much difficulty in keeping the ship's
27.	-43 55	13 16	s. N.	$\begin{array}{c} 48 & 40 \\ 51 & 40 \end{array}$	N.E.	7·97 7·82	} 7·86	+.10	7.96	head in one direc- tion. Table steady.
28.	-43 15	14 30	s. N.	$\begin{array}{c} 48 & 59 \ 51 & 12 \ \end{array}$	E.N.E.	7·89 7·95	7·89 }	+10	7 30	,
		`	S. N. S.	49 17 } 51 29 \ 49 30 }	E.N.E. N.E. 1/2 E.	7·82 7·88 7·77	$\left\{\begin{array}{c}7.83\\7.82\end{array}\right\}7.85$	+.11	7.96	Very steady.
To you are a second or a secon	-43 11	14 43	wt. 1 gr. wt. 1·5 gr. wt. 2 grs.	$egin{array}{cccc} 21 & 33 \ 33 & 14 \ 45 & 21 \ \end{array}$	N.E. ½ E.	7.87	,	+.12	7.99	
29.	-41 5 8	15 11	wt. 2.5 grs. N.	$\begin{bmatrix} 63 & 40 \\ 51 & 21 \\ 40 & 42 \end{bmatrix}$	N.E.	7·92 7·71	} 7.81	+•13	7.94	Table steady.
30.	-40 12	16 06	s. N. s.	$egin{array}{c} 49 & 43 \ 52 & 04 \ 49 & 59 \ \end{array}$	N.E.	7.71 7.73 7.65	} 7·69	+•13	7.82	Unsteady.
31.	-38 00	16 45	N. S.	$ \begin{array}{c c} & 19 & 39 \\ & 52 & 04 \\ & 50 & 17 \end{array} $	n.e. by e.	7·73 7·58	} 7·65	+-11	7.76	Head sea; unsteady
April 1.	-36 04	16 32	N. S.	$52\ 30\ 50\ 50\ $	N.E. by E. ½ E.	7·62 7·45	} } 7·53	+•11	7.64	Quick motion.
2.	-35 21	16 22	N. S.	52 43 50 46		7·56 7·47	7:52			
	:		wt. 1 gr. wt. 1.5 gr.	22 42 34 29	E. ½ S.	- · ·	7.56	+.01	7.56	Table steady.
,			wt. 2 grs. wt. 2.5 grs.	$\begin{bmatrix} 48 & 30 \\ 67 & 17 \end{bmatrix}$			} 1-30)			

LIEUT.-GENERAL SABINE ON TERRESTRIAL MAGNETISM.

Date.	Lat.	Long.	Method employed.	Angle of Deflection. Face East.	Direction of ship's head.	Intensity.	Correction for Deviation.	Corrected Intensity.	Remarks.
1843. April 3	-35° 03	17 06	wt. 1 gr. wt. 1·5 gr. wt. 2 grs. wt. 2·5 grs.	$ \begin{array}{c} 2\mathring{1} & 3\mathring{1} \\ 34 & 06 \\ 48 & 06 \\ 68 & 18 \\ 52 & 36 \end{array} \right\} $	E.S.E.	7·66	03	7.63	Table steady.
0.		Bay, Cape d Hope. 18 26	N. S. wt. 0·5 gr. wt. 1 gr. wt. 1·5 gr. wt. 2 grs. wt. 2·5 grs.	50 14	Observed on shore.	$\left.\begin{array}{c} 7.60 \\ 7.59 \\ \\ \\ 7.54 \end{array}\right\} \begin{array}{c} 7.60 \\ \\ 7.54 \end{array}\right\}$	•••••	7.56	
20.		d for the	N.	52 41	w.	7·58	+.02	7.60	
		ons of the	N.	53 31	w.n w.	7.37	+.06	7.43	
	Devi	ation.	N.	53 12	N.W.	7.45	+•11	7.56	
			N.	53 12	N.N.W.	7.45	+.14	7.59	
			N.	53 14	N.	7.44	+.15	7.59	
		1	N.	53 29	N.N.E.	7.38	+.15	7.53	
			N.	53 20	N.E.	7.41	+.13	7.54	
			N.	53 05	E.N.E.	7.48	+.10	7.58	
			N.	52 43	E.	7· 56	+.02	7.58	
			N.	52 32	E.S.E.	7· 61	03	7.58	
			N.	52 06	S.E.	7·7 2	-10	7.62	
			N.	51 47	S.S.E.	7.80	16	7.64	
			N.	51 49	s.	7:79	18	7.61	
			N.	52 04	s.s.w.	7.73	16	7.56	
			N.	52 06	s.w.	7.72	13	7.59	
			N.	52 15	w.s.w.	7.68	03	7.65	
					Mean	7.57	•••••	7:58	