# IV. *Contributions to Terrestrial Magnetism.*—No. XIV.

*By General Sir* Edward Sabine, *R.A., K.C.B., F.R.S.*

Received June 18,—Read June 18, 1874.

In this paper (*i.e.* the XIV.th Number of the "Contributions to Terrestrial Magnetism") I have the pleasure of presenting to the Royal Society the second half of the Magnetic Survey of the Northern Hemisphere, of which the first half was presented by me last year and is printed as No. XIII. of my "Contributions to Terrestrial Magnetism." These two papers, taken together with No. XI. (appertaining to the Southern Hemisphere), embrace fully three quarters of the entire globe.

The form in which the observations are collected in the two latest papers (No. XIII. and the present, No. XIV.) is the same, viz. arranged in zones of latitude, each zone beginning with the meridian of Greenwich, and passing eastward round the globe until the same meridian is again reached. In No. XIII. these zones were eight in number, being each 5° of latitude in breadth (excepting the last, which comprised also the few observations north of the 80th parallel). In the present paper the zones are four in number, each being 10° in breadth.

| | | | | | | |
|---|---|---|---|---|---|---|
| Zone 1, | comprehending | from | the | equator | to | 10° N. |
| Zone 2, | „ | „ | lat. | 10° N. | „ | 20° N. |
| Zone 3, | „ | „ | „ | 20° N. | „ | 30° N. |
| Zone 4, | „ | „ | „ | 30° N. | „ | 40° N. |

The statements in the introduction to No. XIII. regarding the different Magnetic Elements apply equally to the present paper; it may, however, be remarked in addition, that while the observations of Force are fewer, a larger proportion of them were made by the observers *in absolute measure*, and have therefore not needed conversion; the remainder have been converted by the same method of proceeding as that described in No. XIII.

In the present paper corrections for "secular change" have been much more sparingly introduced. For this three reasons may be assigned:—the first being the very satisfactory one that a larger proportion of the observations are at dates differing by so few years from the Mean Epoch (1840–45) that any corrections on this account may well be dispensed with; another being, that in this part of the globe more of the earth's surface is covered by the ocean, and it has not been thought advisable in either paper to correct "Sea Observations" for differences of epoch (regarding these generally as less influential than differences of "Ship's Attraction"); the third reason being of a

less satisfactory character, viz. that there are generally fewer available grounds for assigning "secular change" on tolerably sufficient and accordant evidence.

I have now to offer again, and in increased measure, my most grateful acknowledgments to Captain FREDERICK JOHN EVANS, R.N., the present Hydrographer of the Admiralty, for his most valuable assistance in many ways, but preeminently in the superintendence of the formation and execution of the Maps (Plates 26–28) embodying the results.

---

ZONE I.—LATITUDES, EQUATOR TO 10° N.

*Authorities.*

| | |
|---|---|
| Denham | MSS. in the Magnetic Office, received from the Hydrographic Office. |
| Sabine | Pendulum and other Experiments (1825). |
| Allen | MSS. in the Magnetic Office, received from the Author. |
| Owen | L. S. Kämtz; MSS. in the Magnetic Office, Kew Observatory. |
| De Clerval | L. S. Kämtz; MSS. in the Magnetic Office. |
| Baikie | MSS. in the Magnetic Office, received from the Observer. |
| Vidal | Sabine in Philosophical Transactions, 1849. |
| Basevi | Reports of the Great Trigonometrical Survey of India. |
| Laplace | L. S. Kämtz; MSS. in the Magnetic Office. |
| Taylor & Caldecott | Schlagintweit; Scientific Mission to India and High Asia (Leipzig and London, 1861). |
| Powell | Schlagintweit; Scientific Mission to India and High Asia. |
| Franklin | Schlagintweit; Scientific Mission to India and High Asia. |
| Ludlow | MSS. in the Magnetic Office. |
| Novara | (Austrian Frigate) Reise um die Erde (Wien, 1862–65). |
| Blosseville | Schlagintweit; Scientific Mission to India and High Asia (Leipzig, 1861). |
| Belcher | MSS. in the Magnetic Office, received from Admiral Sir Edward Belcher. |
| Schlagintweit | Scientific Mission to India and High Asia (Leipzig and London, 1861). |
| Elliot | Magnetic Survey of the Indian Archipelago, Philosophical Transactions, 1851. |
| Bonite | Voyage de la Bonite (Paris, 1842). |
| Bougainville | L. S. Kämtz; MSS. in the Magnetic Office, Kew. |
| Stanley | Contributions to Terrestrial Magnetism, Sabine in Philosophical Transactions, 1849. |
| Prussian Ships | L. S. Kämtz; MSS. in the Magnetic Office, Kew. |
| Lütke | Mem. by Lenz in the Sci. Mem. of the Acad. of St. Petersburg; and L. S. Kämtz, MSS. in the Magnetic Office, Kew. |
| D'Urville | L. S. Kämtz; MSS. in the Magnetic Office, Kew. |
| Duperrey | L. S. Kämtz; MSS. in the Magnetic Office, Kew. |
| Erman | Reise um die Erde (Berlin, 1841). |
| FitzRoy | Voyage of the 'Beagle,' 1849. |
| Barnett | L. S. Kämtz; MSS.; and MSS. received from the Observer (Capt. Barnett). |
| Austin | L. S. Kämtz; MSS. in the Magnetic Office, Kew. |
| Horne | L. S. Kämtz; MSS. in the Magnetic Office, Kew. |

| | |
|---|---|
| Emory | U. S. Coast-Survey Reports; and Memoirs of American Academy, vols. v. & vi. 1857. |
| Kellett | MSS. in the Magnetic Office, received from Admiral Kellett. |
| Foster | Kämtz; MSS. in the Magnetic Office, Kew. |
| Haig | Phil. Trans. 1862. |
| Friesach | Memoirs of the Imperial Academy of Sciences, Vienna, vols. 29–44. |
| Harkness | Smithsonian Contributions, vol. xviii. |
| Boussingault | L. S. Kämtz; MSS. |
| Schomburgk | MSS. received from the Observer. |
| Hudson | L. S. Kämtz; MSS. |
| Sulivan | Sabine in Phil. Trans. 1840. |
| Rumker, Young, Smith | L. S. Kämtz; MSS. in the Magnetic Office, Kew. |
| Du Petit Thouars | Sabine in Philosophical Transactions, 1849. |
| James Ross | MSS. in the Magnetic Office, received from Admiral Sir James Ross. |
| Collinson | MSS. received from the Hydrographic Office. |
| Bérard | MSS. in the Magnetic Office, received from Admiral Duperrey. |
| Stanley | Sabine in Philosophical Transactions, 1849. |
| Dunlop | L. S. Kamtz, MSS.; and Sabine in Phil. Trans. 1840. |
| Lefroy, Dayman, H.M.S. 'Fly', The 'John Fleming' | MSS. in the Magnetic Office, Kew. |

## NORTH EQUATORIAL ZONE I.—Lat. Equator to 10° N.

| Stations. | Lat. N. | Long. E. | Date. | Declination. | | | Inclination. | | | Force in British units. | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Observed. | Correction to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | | |
| | ° ′ | ° ′ | | ° ′ | ° ′ | ° | ° ′ | ° ′ | ° | | |
| Quitta | 5 55 | 1 00 | 1846 | 19 55 W. | ..... | 19·9 W. | ..... | ..... | ..... | ..... | Denham. |
| At sea (5 observations) | 5 50 | 1 29 | 1846 | 20 39 W. | ..... | 20·7 W. | ..... | ..... | ..... | ..... | Denham. |
| Little Popoe | 6 13 | 1 36 | 1846 | 20 21 W. | ..... | 20·4 W. | ..... | ..... | ..... | ..... | Denham. |
| Whydah | 6 19 | 2 05 | 1846 | 20 08 W. | ..... | 20·1 W. | ..... | ..... | ..... | ..... | Denham. |
| At sea (6 observations) | 6 12 | 2 05 | 1846 | 19 19 W. | ..... | 19·3 W. | ..... | ..... | ..... | ..... | Denham. |
| Badagry | 6 24 | 2 53 | 1846 | 20 30 W. | ..... | 20·5 W. | ..... | ..... | ..... | ..... | Denham. |
| At sea (3 observations) | 6 21 | 2 53 | 1846 | 19 51 W. | ..... | 19·9 W. | ..... | ..... | ..... | ..... | Denham. |
| At sea | 6 24 | 3 27 | 1846 | 19 36 W. | ..... | 19·6 W. | ..... | ..... | ..... | ..... | Denham. |
| At sea (2 observations) | 5 39 | 4 09 | 1846 | 20 47 W. | ..... | 20·8 W. | ..... | ..... | ..... | ..... | Denham. |
| At sea (4 observations) | 5 19 | 5 03 | 1846 | 19 55 W. | ..... | 19·9 W. | ..... | ..... | ..... | ..... | Denham. |
| At sea (5 observations) | 4 56 | 5 23 | 1846 | 20 25 W. | ..... | 20·4 W. | ..... | ..... | ..... | ..... | Denham. |
| At sea (5 observations) | 4 48 | 5 32 | 1846 | 19 21 W. | ..... | 19·4 W. | ..... | ..... | ..... | ..... | Denham. |
| Middleton River | 4 32 | 5 41 | 1846 | 19 50 W. | ..... | 19·8 W. | ..... | ..... | ..... | ..... | Denham. |
| At sea (6 observations) | 4 06 | 5 55 | 1846 | 19 39 W. | ..... | 19·7 W. | ..... | ..... | ..... | ..... | Denham. |
| At sea (2 observations) | 4 10 | 6 00 | 1846 | 19 23 W. | ..... | 19·4 W. | ..... | ..... | ..... | ..... | Denham. |
| St. Thomas | 0 25 | 6 45 | 1822 | ..... | ..... | ..... | 0 04 S. | ..... | 0·1 S. | 7·19 | Sabine. |
| | | | 1826 | 22 47 W. | ..... | 22·8 W. | ..... | ..... | ..... | ..... | Owen. |
| Opposite Kende, on the Tshadda | 8 01 | 7 16 | 1854 | ..... | ..... | ..... | 6 07 N. | ..... | 6·1 N. | ..... | Baikie. |
| Princes Island | 1 41 | 7 27 | 1827 | 18 56 W. | ..... | 18·8 W. | ..... | ..... | ..... | ..... | De Clerval. |
| | | | 1842 | ..... | ..... | ..... | 3 33 S. | ..... | 3·6 S. | ..... | Allen. |
| Stirling | 7 07 | 7 49 | 1835 | 19 51 W. | ..... | 19·9 W. | ..... | ..... | ..... | ..... | Allen. |
| Ojogo | 7 45 | 8 29 | 1854 | ..... | ..... | ..... | 4 38 N. | ..... | 4·6 N. | ..... | Baikie. |
| | | | 1826 | 22 00 W. | ..... | ..... | ..... | ..... | ..... | ..... | Owen. |
| Fernando Po | 3 45 | 8 45 | 1836 | 19 50 W. | ..... | 19·8 W. | ..... | ..... | ..... | ..... | Vidal. |
| | | | 1842 | ..... | ..... | ..... | 2 13 S. | ..... | 2·2 S. | ..... | Allen. |
| | | | 1846 | 19 04 W. | ..... | 19·1 W. | ..... | ..... | ..... | ..... | Denham. |
| | | | | | | ° 19·5 W. | | | | | |
| Rabba | 6 27 | 9 13 | 1835 | 20 36 W. | ..... | 20·6 W. | ..... | ..... | ..... | ..... | Allen. |
| Corisco Bay | 0 55 | 9 20 | 1836 | 20 04 W. | ..... | 20·1 W. | ..... | ..... | ..... | ..... | Vidal. |
| Cameroon's River | 3 55 | 9 30 | 1836 | 19 46 W. | ..... | 19·8 W. | ..... | ..... | ..... | ..... | Vidal. |
| Magadoxa | 2 02 | 43 20 | 1825 | 9 00 W. | ..... | 9·0 W. | ..... | ..... | ..... | ..... | Owen. |
| Bhava | 1 07 | 43 58 | 1825 | 10 00 W. | ..... | 10·0 W. | ..... | ..... | ..... | ..... | Owen. |
| Minicoy | 8 17 | 73 02 | 1870 | 0 16 E. | 0 28 E. | 0·7 E. | 3 48 S. | 0 28 N. | 3·3 S. | 7·97 | Basevi. |
| Andomnatis Island | 1 26 | 73 26 | 1830 | 0 15 W. | ..... | 0·3 W. | ..... | ..... | ..... | ..... | Laplace. |
| Balghatty | 9 59 | 76 14 | 1838 | ..... | ..... | ..... | 0 19 N. | 0 04 S. | 0·3 N. | ..... | Taylor and Caldecott. |
| Aleppy | 9 30 | 76 20 | 1870 | 0 36 E. | 0 28 E. | 1·1 E. | 1 41 S. | 0 28 N. | 1·2 S. | 7·99 | Basevi. |
| Quilon | 8 54 | 76 40 | 1838 | ..... | ..... | ..... | 2 22 S. | 0 04 S. | 2·4 S. | ..... | Taylor and Caldecott. |
| Trevandrum | 8 29 | 76 56 | 1838 | ..... | ..... | ..... | 3 15 S. | 0 04 S. | 3·3 S. | ..... | Taylor and Caldecott. |
| | | | 1841 | 0 40 E. | ..... | 0·7 E. | ..... | ..... | ..... | ..... | Caldecott. |
| | | | 1855 | 0 27 E. | 0 13 E. | 0·7 E. | ..... | ..... | ..... | ..... | Broun. |
| | | | | | | 0·7 E. | | | | | |
| Nagracoil | 8 11 | 77 25 | 1838 | ..... | ..... | ..... | 3 53 S. | 0 04 S. | 3·9 S. | ..... | Taylor and Caldecott. |
| Near Cape Comorin | 8 03 | 77 35 | 1843 | 1 10 E. | ..... | 1·2 E. | ..... | ..... | ..... | ..... | Powell. |
| Punnae | 8 10 | 77 41 | 1869 | 0 45 E. | 0 27 E. | 1·2 E. | 3 21 S. | 0 27 N. | 2·9 S. | 8·07 | Basevi. |
| Kudankolam | 8 11 | 77 45 | 1869 | 0 44 E. | 0 27 E. | 1·2 E. | 3 34 S. | 0 27 N. | 3·1 S. | 8·08 | Basevi. |
| Palamcottah | 8 44 | 77 45 | 1838 | ..... | ..... | ..... | 2 46 S. | 0 04 S. | 2·8 S. | ..... | Taylor and Caldecott. |
| Tinnevelly Coast | 8 00 | 77 50 | 1846 | 0 10 E. | ..... | 0·2 E. | ..... | ..... | ..... | ..... | Franklin. |
| Powani | 8 49 | 77 54 | 1838 | ..... | ..... | ..... | 2 46 S. | 0 04 S. | 2·8 S. | ..... | Taylor and Caldecott. |
| Mallapatti | 9 29 | 78 04 | 1869 | 0 52 E. | 0 27 E. | 1·3 E. | 0 37 S. | 0 27 N. | 0·2 S. | 8·03 | Basevi. |
| Vadinatrum | 8 57 | 78 07 | 1838 | ..... | ..... | ..... | 1 34 S. | ..... | 1·6 S. | ..... | Taylor and Caldecott. |
| Trichendor | 8 30 | 78 08 | 1842 | 1 58 E. | ..... | 2·0 E. | ..... | ..... | ..... | ..... | Franklin. |
| Tutocorin | 8 48 | 78 10 | 1838 | ..... | ..... | ..... | 2 38 S. | ..... | 2·6 S. | ..... | Taylor and Caldecott. |
| | | | 1842 | 0 51 E. | ..... | 0·9 E. | ..... | ..... | ..... | ..... | Franklin. |
| Carryshandy | 9 11 | 78 24 | 1838 | ..... | ..... | ..... | 1 52 S. | ..... | 1·9 S. | ..... | Taylor and Caldecott. |
| Tinnevelly Coast | 8 25 | 78 25 | 1846 | 1 58 E. | ..... | 2·0 E. | ..... | ..... | ..... | ..... | Franklin. |
| Tinnevelly Coast | 8 40 | 78 30 | 1846 | 0 51 E. | ..... | 0·9 E. | ..... | ..... | ..... | ..... | Franklin. |
| Palk Strait | 9 03 | 78 35 | 1838 | 0 51 E. | ..... | 0·9 E. | ..... | ..... | ..... | ..... | Powell. |
| Ramnad | 9 22 | 78 51 | 1838 | ..... | ..... | ..... | 1 25 S. | ..... | 1·4 S. | ..... | Taylor and Caldecott. |
| Kalehennary | 9 40 | 78 57 | 1838 | ..... | ..... | ..... | 0 06 N. | ..... | 0·1 N. | ..... | Taylor and Caldecott. |
| Devaputnum | 9 29 | 78 58 | 1844 | ..... | ..... | ..... | 0 35 S. | ..... | 0·6 S. | ..... | Ludlow. |
| Tonday | 9 45 | 79 05 | 1844 | ..... | ..... | ..... | 0 08 N. | ..... | 0·1 N. | ..... | Ludlow. |
| Paumben | 9 17 | 79 16 | 1837 | 0 35 W. | ..... | 0·6 W. | ..... | ..... | ..... | ..... | Powell. |
| | | | 1838 | ..... | ..... | ..... | 1 36 S. | ..... | 1·6 S. | ° 1·2 S. | Taylor and Caldecott. |
| | | | 1844 | ..... | ..... | ..... | 0 45 S. | ..... | 0·8 S. | ..... | Ludlow. |

## NORTH EQUATORIAL ZONE I.—Lat. Equator to 10° N. (continued).

| Stations. | Lat. N. | Long. E. | Date. | Declination. | | | Inclination. | | | Force in British units. | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Observed. | Correction to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | | |
| | ° ′ | ° ′ | | ° ′ | | ° | ° ′ | | ° | | |
| Palk Strait | 9 30 | 79 18 | 1838 | 0 30 E. | ..... | 0·5 E. | ..... | ..... | ..... | ..... | Powell. |
| Palvarayan Kattoo | 9 17 | 79 36 | 1844 | ..... | ..... | ..... | 0 45 S. | ..... | 0·8 S. | ..... | Ludlow. |
| Poonaryn | 9 28 | 79 38 | 1844 | ..... | ..... | ..... | 0 12 S. | ..... | 0·2 S. | ..... | Ludlow. |
| Delft | 9 32 | 79 42 | 1838 | 1 40 E. | ..... | 1·7 E. | ..... | ..... | ..... | ..... | Powell. |
| | | | 1844 | ..... | ..... | ..... | 0 31 S. | ..... | 0·5 S. | ..... | Ludlow. |
| Mutokbăndi | 7 41 | 79 44 | 1844 | 0 13 E. | ..... | 0·2 E. | ..... | ..... | ..... | ..... | Powell. |
| At sea (6 observations) | 5 24 | 79 47 | 1858 | 0 37 E. | ..... | 0·6 E. | ..... | ..... | ..... | ..... | Novara. |
| Karativo | 9 46 | 79 49 | 1844 | ..... | ..... | ..... | 0 20 N. | ..... | 0·3 N. | ..... | Ludlow. |
| Koelramalai | 8 32 | 79 50 | 1845 | 1 15 E. | ..... | 1·3 E. | ..... | ..... | ..... | ..... | Franklin. |
| Manaar | 8 59 | 79 54 | 1844 | ..... | ..... | ..... | 1 16 S. | ..... | 1·3 S. | ..... | Ludlow. |
| | | | 1845 | 1 04 E. | ..... | 1·1 E. | ..... | ..... | ..... | ..... | Franklin. |
| Changani | 9 47 | 79 56 | 1828 | 1 16 E. | ..... | 1·3 E. | 0 37 S. | ..... | 0·6 S. | ..... | Blosseville. |
| Aripo | 8 27 | 80 01 | 1833 | ..... | ..... | ..... | 2 18 S. | ..... | 2·3 S. | ..... | Blosseville. |
| Jaffna | 9 40 | 80 01 | 1833 | 1 16 E. | ..... | 1·3 E. | 0 40 S. | ..... | 0·7 S. | 0·3 S. | Blosseville. |
| | | | 1844 | ..... | ..... | ..... | 0 02 S. | ..... | 0·0 S. | ..... | Ludlow. |
| Ilpekaddaway | 9 06 | 80 09 | 1844 | ..... | ..... | ..... | 1 13 S. | ..... | 1·2 S. | ..... | Ludlow. |
| W. Coast of Ceylon | 6 15 | 80 10 | 1839 | 1 15 E. | ..... | 1·3 E. | ..... | ..... | ..... | ..... | Powell. |
| Galle | 6 03 | 80 11 | 1842 | 0 41 E. | ..... | 0·7 E. | 8 07 S. | ..... | 8·1 S. | 7·9 S. | 8·02 | 8·05 | Belcher. |
| | | | 1856 | 0 41 E. | ..... | 0·7 E. | 0·7 E. | 7 41 S. | ..... | 7·7 S. | 8·08 | Schlagintweit. |
| Chavachemy | 9 40 | 80 12 | 1844 | ..... | ..... | ..... | 0 04 S. | ..... | 0·1 S. | ..... | Ludlow. |
| Point Pedro | 9 50 | 80 15 | 1844 | ..... | ..... | ..... | 0 42 N. | ..... | 0·7 N. | ..... | Ludlow. |
| Trincomalee | 8 34 | 81 18 | 1833 | 1 08 E. | ..... | 1·1 E. | ..... | ..... | ..... | ..... | Blosseville. |
| | | | 1837 | ..... | ..... | ..... | 2 37 S. | ..... | 2·6 S. | ..... | Anon. (Hydr. Office). |
| At sea (2 observations) | 0 42 | 82 02 | 1858 | 0 32 E. | ..... | 0·5 E. | ..... | ..... | ..... | ..... | Novara. |
| At sea (2 observations) | 8 22 | 82 42 | 1858 | 0 44 E. | ..... | 0·7 E. | ..... | ..... | ..... | ..... | Novara. |
| At sea (2 observations) | 6 44 | 84 08 | 1858 | 0 56 E. | ..... | 0·9 E. | ..... | ..... | ..... | ..... | Novara. |
| At sea (6 observations) | 4 02 | 85 48 | 1858 | 0 55 E. | ..... | 0·9 E. | ..... | ..... | ..... | ..... | Novara. |
| At sea (3 observations) | 9 10 | 92 15 | 1858 | 1 46 E. | ..... | 1·8 E. | ..... | ..... | ..... | ..... | Novara. |
| Saoni Carnicobar | 9 14 | 92 45 | 1858 | 2 00 E. | ..... | 2·0 E. | 1 19 N. | ..... | 1·3 N. | 8·19 | Novara. |
| Nicobar | 9 10 | 92 48 | 1848 | 1 53 E. | ..... | 1·9 E. | 1 15 N. | ..... | 1·3 N. | 8·16 | Elliot. |
| Bompoko | 8 14 | 93 19 | 1848 | ..... | ..... | ..... | 0 23 S. | ..... | 0·4 S. | ..... | Elliot. |
| Nancovri Harbour | 8 02 | 93 35 | 1848 | ..... | ..... | ..... | 0 54 S. | ..... | 0·9 S. | ..... | Elliot. |
| | | | 1858 | 2 00 E. | ..... | 2·0 E. | ..... | ..... | ..... | ..... | Novara. |
| Condul Island | 7 12 | 93 40 | 1857 | ..... | ..... | ..... | 3 00 S. | ..... | 3·0 S. | ..... | Novara. |
| Galathea Bay | 6 48 | 93 50 | 1858 | 1 55 E. | ..... | 1·9 E. | ..... | ..... | ..... | ..... | Novara. |
| At sea (2 observations) | 9 05 | 94 05 | 1837 | 2 35 E. | ..... | 2·6 E. | ..... | ..... | ..... | ..... | Bonite. |
| At sea (2 observations) | 7 17 | 94 30 | 1858 | 2 09 E. | ..... | 2·2 E. | ..... | ..... | ..... | ..... | Novara. |
| Malora Island | 5 41 | 95 24 | 1842 | 2 22 E. | ..... | 2·4 E. | 5 29 S. | ..... | 5·5 S. | 8·07 | Belcher. |
| Acheen | 5 36 | 95 25 | 1842 | 2 22 E. | ..... | 2·4 E. | 5 58 S. | ..... | 6·0 S. | 8·06 | Belcher. |
| At sea (3 observations) | 7 18 | 96 40 | 1837 | 2 27 E. | ..... | 2·5 E. | ..... | ..... | ..... | ..... | Bonite. |
| At sea (2 observations) | 6 48 | 97 20 | 1858 | 1 53 E. | ..... | 1·9 E. | ..... | ..... | ..... | ..... | Novara. |
| Goonong Satoolie | 1 18 | 97 41 | 1848 | 1 44 E. | ..... | 1·7 E. | 14 06 S. | ..... | 14·1 S. | ..... | Elliot. |
| Sinkel | 2 17 | 97 52 | 1848 | 1 34 E. | ..... | 1·6 E. | 12 24 S. | ..... | 12·4 S. | ..... | Elliot. |
| At sea (2 observations) | 7 18 | 97 56 | 1837 | 2 34 E. | ..... | 2·6 E. | ..... | ..... | ..... | ..... | Bonite. |
| Bāros | 2 01 | 98 32 | 1848 | 1 17 E. | ..... | 1·3 E. | 12 58 S. | ..... | 13·0 S. | ..... | Elliot. |
| Sibogha | 1 45 | 98 56 | 1848 | 1 41 E. | ..... | 1·7 E. | 13 03 S. | ..... | 13·1 S. | ..... | Elliot. |
| Natal | 0 34 | 99 20 | 1848 | 1 28 E. | ..... | 1·5 E. | 15 32 S. | ..... | 15·5 S. | ..... | Elliot. |
| Padang Sidompang | 1 23 | 99 23 | 1848 | ..... | ..... | ..... | 13 47 S. | ..... | 13·8 S. | ..... | Elliot. |
| Tana Bātoo | 0 44 | 99 31 | 1848 | ..... | ..... | ..... | 15 03 S. | ..... | 15·1 S. | ..... | Elliot. |
| Fort Elout | 0 51 | 99 32 | 1848 | 1 44 E. | ..... | 1·7 E. | 14 48 S. | ..... | 14·8 S. | ..... | Elliot. |
| Kotanopan | 0 42 | 99 43 | 1848 | 1 35 E. | ..... | 1·6 E. | 15 20 S. | ..... | 15·3 S. | ..... | Elliot. |
| Batong | 0 39 | 99 47 | 1848 | ..... | ..... | ..... | 15 42 S. | ..... | 15·7 S. | ..... | Elliot. |
| Pionghay | 0 36 | 99 52 | 1848 | 1 39 E. | ..... | 1·7 E. | 15 50 S. | ..... | 15·8 S. | ..... | Elliot. |
| Rau | 0 33 | 99 57 | 1848 | 1 37 E. | ..... | 1·6 E. | 15 37 S. | ..... | 15·6 S. | ..... | Elliot. |
| Lender | 0 24 | 100 04 | 1848 | ..... | ..... | ..... | 15 35 S. | ..... | 15·6 S. | ..... | Elliot. |
| Pulo Penang | 5 26 | 100 25 | 1837 | 1 34 E. | ..... | 1·6 E. | 4 25 S. | ..... | 4·4 S. | ..... | Bonite. |
| | | | 1841 | 1 30 E. | ..... | 1·5 E. | 1·6 E. | 4 40 S. | ..... | 4·7 S. | 4·7 S. | 8·20 | 8·20 | Belcher. |
| | | | 1848 | 1 49 E. | ..... | 1·8 E. | 4 53 S. | ..... | 4·9 S. | 8·19 | Elliot. |
| Pulo Dinding | 4 13 | 100 33 | 1848 | 1 49 E. | ..... | 1·8 E. | 7 31 S. | ..... | 7·5 S. | 8·19 | Elliot. |
| Dinding Point | 4 20 | 100 40 | 1824 | 2 26 E. | ..... | 2·4 E. | ..... | ..... | ..... | ..... | Bougainville. |
| Mount Parcellus | 2 50 | 101 20 | 1824 | 1 30 E. | ..... | 1·5 E. | ..... | ..... | ..... | ..... | Bougainville. |

## NORTH EQUATORIAL ZONE I.—Lat. Equator to 10° N. (continued).

| Stations. | Lat. N. | Long. E. | Date. | Declination. | | | Inclination. | | | Force in British units. | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Observed. | Correction to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | | |
| | ° ′ | ° ′ | | ° ′ | | ° | ° ′ | | ° | | |
| Malacca | 2 10 | 102 19 | 1837 | ..... | ..... | ..... ° | 10 48 s. | ..... | 10·8 s. ° | ..... | Bonite. |
| | | | 1841 | 1 36 E. | ..... | 1·6 E. 1·7 E. | 11 02 s. | ..... | 11·0 s. 11·1 s. | 8·28 8·28 | Belcher. |
| | | | 1848 | 1 50 E. | ..... | 1·8 E. | 11 25 s. | ..... | 11·4 s. | 8·28 | Elliot. |
| Mount Ophir | 2 22 | 102 38 | 1848 | ..... | ..... | ..... | 9 55 s. | ..... | 9·9 s. | 8·26 | Elliot. |
| Pulo Peesang | 1 28 | 103 19 | 1846 | 1 31 E. | ..... | 1·5 E. | ..... | ..... | ..... | ..... | Elliot. |
| Carimons | 0 59 | 103 27 | 1846 | 1 23 E. | ..... | 1·4 E. | ..... | ..... | ..... | ..... | Elliot. |
| Singapore | 1 19 | 103 57 | 1837 | ..... | ..... | ..... | 12 29 s. | ..... | 12·5 s. | ..... | Bonite. |
| | | | 1843 | 1 43 E. | ..... | 1·7 E. 1·7 E. | 12 27 s. | ..... | 12·5 s. 12·6 s. | ..... 8·32 | Belcher. |
| | | | 1846 | 1 36 E. | ..... | 1·6 E. | 12 55 s. | ..... | 12·9 s. | 8·32 | Elliot. |
| Pulo Booaya | 0 09 | 104 21 | 1846 | 1 29 E. | ..... | 1·5 E. | ..... | ..... | ..... | ..... | Elliot. |
| At sea (4 observations) | 4 40 | 104 50 | 1837 | 2 21 E. | ..... | 2·4 E. | ..... | ..... | ..... | ..... | Bonite. |
| At sea (3 observations) | 0 38 | 105 14 | 1858 | 1 21 E. | ..... | 1·4 E. | ..... | ..... | ..... | ..... | Novara. |
| At sea | 0 22 | 106 06 | 1843 | ..... | ..... | ..... | 13 08 s. | ..... | 13·1 s. | ..... | Belcher. |
| Anambas Island | 3 10 | 106 19 | 1825 | 1 07 E. | ..... | 1·1 E. | ..... | ..... | ..... | ..... | Bougainville. |
| Victory Island | 1 19 | 106 32 | 1825 | 1 12 E. | ..... | 1·2 E. | ..... | ..... | ..... | ..... | Bougainville. |
| At sea | 1 48 | 106 40 | 1858 | 2 00 E. | ..... | 2·0 E. | ..... | ..... | ..... | ..... | Novara. |
| At sea | 1 31 | 107 10 | 1843 | ..... | ..... | ..... | 10 29 s. | ..... | 10·5 s. | ..... | Belcher. |
| At sea (3 observations) | 8 33 | 107 29 | 1837 | 2 10 E. | ..... | 2·2 E. | ..... | ..... | ..... | ..... | Bonite. |
| At sea (2 observations) | 5 30 | 107 35 | 1858 | 2 06 E. | ..... | 2·1 E. | ..... | ..... | ..... | ..... | Novara. |
| Nantumas | 4 39 | 107 51 | 1831 | 1 30 E. | ..... | 1·5 E. | ..... | ..... | ..... | ..... | Laplace. |
| At sea (4 observations) | 8 40 | 108 02 | 1828 | 0 37 E. | ..... | 0·6 E. | ..... | ..... | ..... | ..... | Prussian ships. |
| At sea (2 observations) | 1 06 | 108 05 | 1829 | 0 10 E. | ..... | 0·2 E. | ..... | ..... | ..... | ..... | Lütke. |
| Pigeon Island | 2 37 | 108 12 | 1846 | 1 32 E. | ..... | 1·5 E. | 19 40 s. | ..... | 19·7 s. | ..... | Belcher. |
| Permanket | 1 10 | 109 04 | 1848 | 1 10 E. | ..... | 1·2 E. | 12 36 s. | ..... | 12·6 s. | 8·38 | Elliot. |
| Tanjong Api | 1 56 | 109 20 | 1844 | 0 09 E. | ..... | 0·2 E. | 11 05 s. | ..... | 11·1 s. | ..... | Belcher. |
| At sea | 1 51 | 109 25 | 1843 | ..... | ..... | ..... | 9 22 s. | ..... | 9·4 s. | ..... | Belcher. |
| Sambas | 1 22 | 109 28 | 1848 | 1 16 E. | ..... | 1·3 E. | 11 31 s. | ..... | 11·5 s. | 8·33 | Elliot. |
| Mth of Sundu (Borneo) | 1 42 | 109 51 | 1843 | 1 29 E. | ..... | 1·5 E. | 10 27 s. | ..... | 10·5 s. | ..... | Belcher. |
| Santubon | 1 43 | 110 20 | 1843 | 1 30 E. | ..... | 1·5 E. | 10 36 s. | ..... | 10·6 s. | ..... | Belcher. |
| Kuching | 1 33 | 110 22 | 1843 | 1 28 E. | ..... | 1·5 E. | 10 46 s. | ..... | 10·8 s. | ..... | Belcher. |
| Sarawak | 1 34 | 110 29 | 1848 | 1 10 E. | ..... | 1·2 E. | 11 15 s. | ..... | 11·3 s. | 8·35 | Elliot. |
| At sea (2 observations) | 9 23 | 111 12 | 1858 | 2 00 E. | ..... | 2·0 E. | ..... | ..... | ..... | ..... | Novara. |
| Moarroo Island | 5 00 | 115 08 | 1843 | 1 17 E. | ..... | 1·3 E. | 3 10 s. | ..... | 3·2 s. | ..... | Belcher. |
| At sea | 7 22 | 115 08 | 1843 | ..... | ..... | ..... | 2 15 N. | ..... | 2·3 N. | ..... | Belcher. |
| Pulo Labuan | 5 17 | 115 18 | 1848 | 1 36 E. | ..... | 1·6 E. | 2 52 s. | ..... | 2·9 s. | 8·25 | Elliot. |
| Pulo Teega | 5 43 | 115 35 | 1845 | 1 16 E. | ..... | 1·3 E. | 1 48 s. | ..... | 1·8 s. | ..... | Belcher. |
| Amboong | 6 18 | 116 19 | 1844 | 1 20 E. | ..... | 1·3 E. | 0 35 s. | ..... | 0·6 s. | ..... | Belcher. |
| Mantanini | 6 40 | 116 22 | 1844 | 1 38 E. | ..... | 1·6 E. | 0 16 s. | ..... | 0·3 s. | ..... | Belcher. |
| Batemande Rock | 6 50 | 116 32 | 1845 | 0 46 E. | ..... | 1·8 E. | 0 41 s. | ..... | 0·7 s. | ..... | Belcher. |
| At sea | 8 24 | 116 35 | 1844 | ..... | ..... | ..... | 3 32 N. | ..... | 3·5 N. | ..... | Belcher. |
| Balambangan | 7 12 | 116 49 | 1845 | 0 50 E. | ..... | 0·8 E. | 1 20 s. | ..... | 1·3 s. | ..... | Belcher. |
| At sea | 9 56 | 117 09 | 1844 | ..... | ..... | ..... | 7 20 N. | ..... | 7·3 N. | ..... | Belcher. |
| Gunung Tabor | 2 10 | 117 30 | 1845 | 0 30 E. | ..... | 0·5 E. | 9 04 s. | ..... | 9·1 s. | ..... | Belcher. |
| Cagayan (Sooloo) | 6 58 | 118 24 | 1845 | 0 12 E. | ..... | 0·2 E. | 0 56 N. | ..... | 0·9 N. | ..... | Belcher. |
| Legeetan Islands | 4 19 | 118 31 | 1845 | 0 45 E. | ..... | 0·8 E. | 4 49 s. | ..... | 4·8 s. | ..... | Belcher. |
| Unsang | 5 17 | 119 16 | 1845 | 1 02 E. | ..... | 1·0 E. | 2 34 s. | ..... | 2·6 s. | ..... | Belcher. |
| Samarang Island | 5 28 | 120 15 | 1845 | 0 40 E. | ..... | 0·7 E. | 1 53 N. | ..... | 1·9 N. | ..... | Belcher. |
| Koolassian Island | 6 25 | 120 25 | 1845 | 0 46 E. | ..... | 0·8 E. | ..... | ..... | ..... | ..... | Belcher. |
| Islet off C. Rivers (Celebes) | 1 20 | 120 45 | 1844 | 1 01 E. | ..... | 1·0 E. | 10 40 s. | ..... | 10·7 s. | ..... | Belcher. |
| At sea | 1 34 | 120 57 | 1844 | ..... | ..... | ..... | 9 48 s. | ..... | 9·8 s. | ..... | Belcher. |
| Solo Bay (Sooloo) | 6 03 | 121 00 | 1844 | 0 34 E. | ..... | 0·6 E. | 1 44 N. | ..... | 1·7 N. | ..... | Belcher. |
| Cagayan Island | 9 36 | 121 15 | 1844 | 0 12 E. | ..... | 0·2 E. | 7 38 N. | ..... | 7·6 N. | ..... | Belcher. |
| Salliolookit Rock | 6 49 | 121 24 | 1844 | 0 17 E. | ..... | 0·3 E. | 0 20 N. | ..... | 0·3 N. | ..... | Belcher. |
| Samboangan | 6 55 | 122 05 | 1844 | 1 12 E. | ..... | 1·2 E. | 1 29 N. | ..... | 1·5 N. | ..... | Belcher. |
| Samboanga | 6 54 | 122 14 | 1848 | 1 15 E. | ..... | 1·3 E. | 1 18 N. | ..... | 1·3 N. | 8·16 | Elliot. |
| At sea | 1 11 | 122 21 | 1844 | ..... | ..... | ..... | 11 00 s. | ..... | 11·0 s. | ..... | Belcher. |
| Tondāno | 1 18 | 124 50 | 1848 | 1 08 E. | ..... | 1·1 E. | 10 54 s. | ..... | 10·9 s. | ..... | Elliot. |
| Manado Bay | 1 30 | 124 50 | 1828 | 1 06 E. | ..... | 1·1 E. | ..... | ..... | ..... | ..... | D'Urville. |
| | | | 1845 | 1 37 E. | ..... | 1·6 E. 1·4 E. | 10 22 s. | ..... | 10·4 s. 10·5 s. | ..... | Belcher. |
| | | | 1848 | 1 26 E. | ..... | 1·4 E. | 10 44 s. | ..... | 10·7 s. | ..... | Elliot. |
| Keemah | 1 22 | 125 08 | 1848 | 1 40 E. | ..... | 1·7 E. | 11 01 s. | ..... | 11·0 s. | 8·41 | Elliot. |

## NORTH EQUATORIAL ZONE I.—Lat. Equator to 10° N. (continued).

| Stations. | Lat. N. | Long. E. | Date. | Declination. | | | Inclination. | | | Force in British units. | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Observed. | Correction to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | | |
| | ° ′ | ° ′ | | ° ′ | | ° | ° ′ | | ° | | |
| Ternate | 0 44 | 127 15 | 1845 | 0 40 E. | ..... | 0·7 E. | 11 37 S. | ..... | 11·6 S. | ..... | Belcher. |
| Syang Island | 0 18 | 129 50 | 1823 | 0 21 E. | ..... | 0·4 E. | ..... | ..... | ..... | ..... | Duperrey. |
| At sea (2 observations) | 0 03 | 134 47 | 1823 | 1 55 E. | ..... | 1·9 E. | 13 05 S. | ..... | 13·1 S. | ..... | Duperrey. |
| At sea (2 observations) | 8 03 | 136 10 | 1828 | 1 37 E. | ..... | 1·6 E. | ..... | ..... | ..... | ..... | D'Urville. |
| At sea | 0 41 | 143 56 | 1824 | 0 53 E. | ..... | 0·9 E. | 12 14 S. | ..... | 12·2 S. | ..... | Duperrey. |
| Ulean | 7 22 | 143 57 | 1828 | 3 07 E. | ..... | 3·1 E. | 0 39 N. | ..... | 0·7 N. | 7·81 | Lütke. |
| At sea (28 observations) | 8 10 | 145 47 | 1828 | 3 20 E. | ..... | 3·3 E. | ..... | ..... | ..... | ..... | Lütke. |
| At sea (3 observations) | 6 40 | 147 03 | 1824 | 3 20 E. | ..... | 3·3 E. | 0 33 S. | ..... | 0·6 S. | ..... | Duperrey. |
| At sea | 7 13 | 151 33 | 1824 | 5 42 E. | ..... | 5·7 E. | 1 11 N. | ..... | 1·2 N. | ..... | Duperrey. |
| At sea | 7 02 | 152 00 | 1828 | 5 40 E. | ..... | 5·7 E. | ..... | ..... | ..... | ..... | D'Urville. |
| At sea (4 observations) | 7 29 | 152 38 | 1824 | 4 03 E. | ..... | 4·1 E. | ..... | ..... | ..... | ..... | Duperrey. |
| Lugunor | 5 29 | 153 58 | 1828 | 6 29 E. | ..... | 6·5 E. | 0 46 S. | ..... | 0·8 S. | 7·76 | Lütke. |
| At sea (2 observations) | 8 28 | 155 25 | 1824 | 6 34 E. | ..... | 6·6 E. | 4 36 N. | ..... | 4·6 N. | ..... | Duperrey. |
| At sea (22 observations) | 6 17 | 156 20 | 1828 | 7 26 E. | ..... | 7·4 E. | ..... | ..... | ..... | ..... | Lütke. |
| Los Valientes | 5 46 | 157 05 | 1828 | 7 00 E. | ..... | 7·0 E. | 1 38 N. | ..... | 1·6 N. | 7·72 | Lütke. |
| At sea (5 observations) | 8 14 | 157 45 | 1858 | 7 38 E. | ..... | 7·6 E. | ..... | ..... | ..... | ..... | Novara. |
| At sea | 6 55 | 158 02 | 1827 | 8 00 E. | ..... | 8·0 E. | 5 16 N. | ..... | 5·3 N. | 7·70 | Lütke. |
| At sea (4 observations) | 5 23 | 159 41 | 1858 | 8 33 E. | ..... | 8·6 E. | ..... | ..... | ..... | ..... | Novara. |
| At sea (7 observations) | 3 25 | 161 06 | 1858 | 8 29 E. | ..... | 8·5 E. | ..... | ..... | ..... | ..... | Novara. |
| At sea (5 observations) | 0 58 | 161 26 | 1858 | 8 34 E. | ..... | 8·6 E. | ..... | ..... | ..... | ..... | Novara. |
| At sea (8 observations) | 6 35 | 162 03 | 1828 | 8 47 E. | ..... | 8·8 E. | ..... | ..... | ..... | ..... | Lütke. |
| At sea (2 observations) | 3 31 | 162 26 | 1827 | 8 45 E. | ..... | 8·8 E. | ..... | ..... | ..... | ..... | Lütke. |
| At sea | 2 56 | 162 50 | 1827 | 8 58 E. | ..... | 9·0 E. | 1 39 S. | ..... | 1·7 S. | 7·92 | Lütke. |
| At sea | 4 17 | 162 54 | 1827 | 9 00 E. | ..... | 9·0 E. | 0 37 N. | ..... | 0·6 N. | 7·78 | Lütke. |
| At sea | 3 47 | 162 59 | 1827 | ..... | ..... | ..... | 0 30 S. | ..... | 0·5 S. | 7·85 | Lütke. |
| Ualan | 5 21 | 163 23 | 1824 | 9 20 E. | ..... | 9·3 E. } 9·1 E. | 3 11 N. | ..... | 3·2 N. } 3·0 N. | ..... } 7·79 | Duperrey. |
| | | | 1828 | 8 51 E. | ..... | 8·9 E. | 2 55 N. | ..... | 2·9 N. | | Lütke. |
| At sea (2 observations) | 5 50 | 167 32 | 1824 | 9 07 E. | ..... | 9·1 E. | 4 48 N. | ..... | 4·8 N. | ..... | Duperrey. |
| At sea (2 observations) | 2 46 | 172 23 | 1824 | 9 08 E. | ..... | 9·1 E. | 2 58 N. | ..... | 3·0 N. | ..... | Duperrey. |
| At sea (2 observations) | 0 32 | 173 11 | 1824 | 8 21 E. | ..... | 8·4 E. | 1 25 N. | ..... | 1·4 N. | ..... | Duperrey. |
| At sea (2 observations) | 7 20 | 229 32 | 1834 | 4 13 E. | ..... | 4·2 E. | ..... | ..... | ..... | ..... | Prussian ships. |
| At sea (2 observations) | 0 05 | 229 54 | 1830 | 4 04 E. | ..... | 4·1 E. | ..... | ..... | ..... | ..... | Erman. |
| At sea (4 observations) | 0 10 | 229 55 | 1830 | ..... | ..... | ..... | 4 06 N. | ..... | 4·1 N. | 7·34 | Erman. |
| At sea (2 observations) | 0 04 | 230 44 | 1830 | ..... | ..... | ..... | 3 34 N. | ..... | 3·6 N. | 7·53 | Erman. |
| At sea (4 observations) | 3 33 | 231 33 | 1827 | 5 00 E. | ..... | 5·0 E. | ..... | ..... | ..... | ..... | Lütke. |
| At sea (3 observations) | 6 24 | 231 33 | 1827 | 5 05 E. | ..... | 5·1 E. | ..... | ..... | ..... | ..... | Lütke. |
| At sea | 2 24 | 232 08 | 1827 | 4 42 E. | ..... | 4·7 E. | 8 46 N. | ..... | 8·8 N. | ..... | Lütke. |
| At sea | 0 09 | 232 15 | 1830 | ..... | ..... | ..... | 3 28 N. | ..... | 3·5 N. | ..... | Erman. |
| At sea (2 observations) | 0 26 | 232 26 | 1830 | 4 17 E. | ..... | 4·3 E. | ..... | ..... | ..... | ..... | Erman. |
| At sea | 0 46 | 232 43 | 1830 | ..... | ..... | ..... | 5 14 N. | ..... | 5·2 N. | 7·37 | Erman. |
| At sea | 1 33 | 233 17 | 1830 | ..... | ..... | ..... | 7 21 N. | ..... | 7·4 N. | 7·56 | Erman. |
| At sea (3 observations) | 7 51 | 233 26 | 1829 | 5 19 E. | ..... | 5·3 E. | ..... | ..... | ..... | ..... | Prussian ships. |
| At sea (2 observations) | 2 15 | 233 40 | 1830 | 4 07 E. | ..... | 4·1 E. | ..... | ..... | ..... | ..... | Erman. |
| At sea | 2 42 | 234 06 | 1830 | ..... | ..... | ..... | 9 19 N. | ..... | 9·3 N. | 7·61 | Erman. |
| At sea (12 observations) | 2 15 | 234 45 | 1831 | 4 43 E. | ..... | 4·7 E. | ..... | ..... | ..... | ..... | Prussian ships. |
| At sea | 4 35 | 235 37 | 1830 | ..... | ..... | ..... | 13 03 N. | ..... | 13·1 N. | 7·72 | Erman. |
| At sea (4 observations) | 4 49 | 235 45 | 1830 | 4 31 E. | ..... | 4·5 E. | ..... | ..... | ..... | ..... | Erman. |
| At sea | 9 43 | 235 49 | 1830 | ..... | ..... | ..... | 23 06 N. | ..... | 23·1 N. | 8·23 | Erman. |
| At sea (2 observations) | 8 33 | 235 51 | 1830 | ..... | ..... | ..... | 20 15 N. | ..... | 20·3 N. | 7·99 | Erman. |
| At sea | 0 35 | 235 56 | 1827 | 4 46 E. | ..... | 4·8 E. | 5 43 N. | ..... | 5·7 N. | ..... | Lütke. |
| At sea (2 observations) | 7 53 | 236 14 | 1830 | 5 12 E. | ..... | 5·2 E. | ..... | ..... | ..... | ..... | Erman. |
| At sea (2 observations) | 6 51 | 236 25 | 1830 | ..... | ..... | ..... | 17 29 N. | ..... | 17·5 N. | 7·85 | Erman. |
| At sea | 5 49 | 236 28 | 1830 | ..... | ..... | ..... | 15 32 N. | ..... | 15·5 N. | 7·83 | Erman. |
| At sea (2 observations) | 6 12 | 236 30 | 1830 | 4 06 E. | ..... | 4·1 E. | ..... | ..... | ..... | ..... | Erman. |
| At sea | 9 33 | 254 31 | 1836 | 8 19 E. | ..... | 8·3 E. | ..... | ..... | ..... | ..... | Bonite. |
| At sea | 7 46 | 256 22 | 1836 | 6 43 E. | ..... | 6·7 E. | ..... | ..... | ..... | ..... | Bonite. |
| At sea | 6 57 | 256 54 | 1836 | 7 10 E. | ..... | 7·2 E. | ..... | ..... | ..... | ..... | Bonite. |
| At sea | 0 22 | 258 31 | 1836 | 7 28 E. | ..... | 7·5 E. | ..... | ..... | ..... | ..... | Bonite. |
| At sea | 0 10 | 262 33 | 1834 | 8 43 E. | ..... | 8·7 E. | ..... | ..... | ..... | ..... | FitzRoy. |
| At sea | 4 55 | 263 06 | 1836 | 7 32 E. | ..... | 7·5 E. | ..... | ..... | ..... | ..... | Bonite. |
| At sea | 4 05 | 265 31 | 1836 | 8 21 E. | ..... | 8·4 E. | ..... | ..... | ..... | ..... | Bonite. |
| Islets (5 observations) | 0 51 | 268 55 | 1834 | 9 35 E. | ..... | 9·6 E. | ..... | ..... | ..... | ..... | FitzRoy. |

## NORTH EQUATORIAL ZONE I.—Lat. Equator to 10° N. (continued).

| Stations. | Lat. N. | Long. E. | Date. | Declination. Observed. | Declination. Correction to Epoch 1842·5. | Declination. Corrected. | Inclination. Observed. | Inclination. Cor. to Epoch 1842·5. | Inclination. Corrected. | Force in British units. | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | ° ′ | ° ′ | | ° ′ | | ° | ° ′ | | ° | | |
| Cocos Island | 5 34 | 272 58 | 1838 | 8 24 E. | ..... | 8·4 E. | 23 14 N. | ..... | 23·2 N. | 8·81 | Belcher. |
| Chiriqui | 9 00 | 278 05 | 1839 | 7 28 E. | ..... | 7·5 E. | 31 11 N. | ..... | 31·2 N. | ..... | Barnett. |
| Chagres | 9 20 | 280 00 | 1831 | 6 28 E. | ..... | 6·5 E. | ..... | ..... | ..... | ..... | Austin. |
| | | | 1834 | ..... | ..... | ..... | 32 30 N. | ..... | 32·5 N. | ..... | Horne. |
| | | | 1840 | 6 46 E. | ..... | 6·8 E. | ..... | ..... | ..... | ..... | Barnett. |
| | | | 1849 | 6 55 E. | ..... | 6·9 E. | 32 11 N. | ..... | 32·2 N. | 8·75 | Emory. |
| | | | | | | 6·7 E. | | | 32·3 N. | 8·75 | |
| Atacames Bay | 0 52 | 280 06 | 1846 | 8 49 E. | ..... | 8·8 E. | ..... | ..... | ..... | ..... | Kellett. |
| Porto Bello | 9 32 | 280 22 | 1830 | ..... | ..... | ..... | 32 42 N. | ..... | 32·7 N. | ..... | Foster. |
| Tobago | 8 48 | 280 28 | 1846 | 6 34 E. | ..... | 6·6 E. | ..... | ..... | ..... | ..... | Kellett. |
| | | | 1858 | ..... | ..... | ..... | ..... | ..... | ..... | 9·08 | Haig. |
| | | | | | | 6·6 E. | | | | | |
| Panama | 8 57 | 280 29 | 1837 | 7 02 E. | ..... | 7·0 E. | 31 52 N. | ..... | 31·9 N. | 9·03 | Belcher. |
| | | | 1849 | 6 55 E. | ..... | 6·9 E. | 32 00 N. | ..... | 32·0 N. | 8·75 | Emory. |
| | | | 1858 | ..... | ..... | ..... | 32 21 N. | ..... | 32·4 N. | 9·07 | Haig. |
| | | | 1858 | 6 17 E. | ..... | 6·3 E. | 31 12 N. | ..... | 31·2 N. | ..... | Friesach. |
| | | | 1866 | 5 36 E. | ..... | 5·6 E. | 31 56 N. | ..... | 31·9 N. | 8·97 | Harkness. |
| | | | | | | 6·5 E. | | | 31·9 N. | 8·96 | |
| Cumbal | 0 30 | 281 45 | 1831 | ..... | ..... | ..... | 18 25 N. | ..... | 18·4 N. | ..... | Boussingault. |
| Gorgona | 3 00 | 281 50 | 1846 | 7 24 E. | ..... | 7·4 E. | ..... | ..... | ..... | ..... | Kellett. |
| | | | 1849 | ..... | ..... | ..... | 31 47 N. | ..... | 31·8 N. | 8·72 | Emory. |
| | | | | | | 7·4 E. | | | 31·8 N. | | |
| Tulcan | 0 48 | 282 22 | 1857 | 7 08 E. | ..... | 7·1 E. | ..... | ..... | ..... | ..... | Friesach. |
| Pasto | 1 12 | 282 38 | 1857 | 7 09 E. | ..... | 7·2 E. | ..... | ..... | ..... | ..... | Friesach. |
| Buen Ventura | 3 49 | 282 44 | 1846 | 7 08 E. | ..... | 7·1 E. | ..... | ..... | ..... | ..... | Kellett. |
| Titeribi | 6 06 | 283 09 | 1825 | ..... | ..... | ..... | 28 10 N. | ..... | 28·2 N. | ..... | Boussingault. |
| Popayan | 2 38 | 283 20 | 1831 | ..... | ..... | ..... | 20 47 N. | ..... | 20·8 N. | ..... | Boussingault. |
| | | | 1857 | 6 58 E. | ..... | 7·0 E. | 21 00 N. | ..... | 21·0 N. | 8·05 | Friesach. |
| | | | | | | | | | 20·9 N. | 8·05 | |
| Carthago | 4 45 | 283 54 | 1830 | ..... | ..... | ..... | 25 52 N. | ..... | 25·9 N. | ..... | Boussingault. |
| Rio Suno | 5 26 | 284 29 | 1825 | ..... | ..... | ..... | 27 20 N. | ..... | 27·3 N. | ..... | Boussingault. |
| Rio Negro | 6 18 | 284 30 | 1825 | ..... | ..... | ..... | 28 12 N. | ..... | 28·2 N. | ..... | Boussingault. |
| Vega de Sapia | 5 28 | 284 33 | 1825 | ..... | ..... | ..... | 27 14 N. | ..... | 27·2 N. | ..... | Boussingault. |
| | | | 1830 | ..... | ..... | ..... | 27 40 N. | ..... | 27·7 N. | ..... | Boussingault. |
| | | | | | | | | | 27·5 N. | | |
| Paraneo | 5 24 | 284 46 | 1829 | ..... | ..... | ..... | 26 37 N. | ..... | 26·6 N. | ..... | Boussingault. |
| Mariquita | 5 13 | 284 58 | 1825 | ..... | ..... | ..... | 26 50 N. | ..... | 26·8 N. | ..... | Boussingault. |
| Santa Fé de Bogotá | 4 36 | 285 46 | 1825 | ..... | ..... | ..... | 25 51 N. | ..... | 25·9 N. | ..... | Boussingault. |
| | | | 1829 | ..... | ..... | ..... | 25 59 N. | ..... | 26·0 N. | ..... | Boussingault. |
| | | | 1857 | 6 10 E. | ..... | 6·2 E. | 24 54 N. | ..... | 24·9 N. | 8·28 | Friesach. |
| | | | | | | | | | 25·6 N. | 8·28 | |
| Serinza | 5 46 | 286 32 | 1829 | ..... | ..... | ..... | 28 30 N. | ..... | 28·5 N. | ..... | Boussingault. |
| Socorro | 6 41 | 286 44 | 1829 | ..... | ..... | ..... | 29 54 N. | ..... | 29·9 N. | ..... | Boussingault. |
| Esmeralda | 3 11 | 289 17 | 1846 | 7 59 E. | ..... | 8·0 E. | ..... | ..... | ..... | ..... | Kellett. |
| Junction of Wenamu and Cuyuni | 6 44 | 298 45 | 1843 | 3 53 E. | ..... | 3·9 E. | 33 33 N. | ..... | 33·6 N. | 8·73 | Schomburgk. |
| Mean of Roraima and "Our Village" | 5 03 | 299 01 | 1842 | 4 07 E. | ..... | 4·1 E. | 31 00 N. | ..... | 31·0 N. | 8·40 | Schomburgk. |
| Torong Yauwise | 4 17 | 299 42 | 1842 | 3 56 E. | ..... | 3·9 E. | 30 06 N. | ..... | 30·1 N. | 8·46 | Schomburgk. |
| Mouth of Cotinga | 3 22 | 299 48 | 1842 | 4 32 E. | ..... | 4·5 E. | 28 25 N. | ..... | 28·4 N. | 8·52 | Schomburgk. |
| Tenette | 2 50 | 300 12 | 1842 | 4 03 E. | ..... | 4·1 E. | ..... | ..... | ..... | ..... | Schomburgk. |
| Guainia River | 8 25 | 300 24 | 1841 | 2 47 E. | ..... | 2·8 E. | ..... | ..... | ..... | ..... | Schomburgk. |
| Pirara | 3 39 | 300 40 | 1842 | 4 00 E. | ..... | 4·0 E. | 28 46 N. | ..... | 28·8 N. | 8·48 | Schomburgk. |
| Penal Settlement | 6 24 | 301 18 | 1843 | 3 58 E. | ..... | 4·0 E. | ..... | ..... | ..... | ..... | Schomburgk. |
| George Town Observatory | 6 49 | 301 49 | 1841 | 2 41 E. | ..... | 2·7 E. | 34 07 N. | ..... | 34·1 N. | 8·68 | Schomburgk. |
| Maspityan Village | 1 25 | 301 54 | 1843 | 3 50 E. | ..... | 3·8 E. | ..... | ..... | ..... | ..... | Schomburgk. |
| Demerara | 6 50 | 302 00 | 1837 | ..... | ..... | ..... | 33 57 N. | ..... | 34·0 N. | ..... | Home. |
| Pianoghotto | 2 02 | 303 32 | 1843 | 3 33 E. | ..... | 3·6 E. | ..... | ..... | ..... | ..... | Schomburgk. |
| Salute Islands | 5 17 | 307 27 | 1865 | 0 04 W. | ..... | 0·1 W. | 34 35 N. | ..... | 34·6 N. | 8·19 | Harkness. |
| At sea (4 observations) | 9 39 | 313 30 | 1849 | 0 48 W. | ..... | 0·8 W. | ..... | ..... | ..... | ..... | Hudson. |
| At sea | 7 22 | 320 53 | 1839 | ..... | ..... | ..... | 39 32 N. | ..... | 39·5 N. | 8·78 | Sulivan. |
| At sea (3 observations) | 7 28 | 322 32 | 1829 | 4 18 W. | ..... | 4·3 W. | ..... | ..... | ..... | ..... | Rumker. |
| At sea | 5 10 | 322 53 | 1839 | ..... | ..... | ..... | 36 22 N. | ..... | 36·4 N. | 8·36 | Sulivan. |
| At sea | 2 07 | 324 19 | 1839 | ..... | ..... | ..... | 32 02 N. | ..... | 32·0 N. | 7·87 | Sulivan. |
| At sea | 1 10 | 324 39 | 1839 | ..... | ..... | ..... | 30 32 N. | ..... | 30·5 N. | 7·87 | Sulivan. |
| At sea (3 observations) | 2 13 | 326 31 | 1829 | 6 38 W. | ..... | 6·6 W. | ..... | ..... | ..... | ..... | Rumker. |
| At sea (12 observations) | 3 44 | 326 35 | 1849 | 8 23 W. | ..... | 8·4 W. | ..... | ..... | ..... | ..... | Hudson. |
| At sea (2 observations) | 7 35 | 327 58 | 1846 | 13 22 W. | ..... | 13·4 W. | ..... | ..... | ..... | ..... | Sulivan. |

## NORTH EQUATORIAL ZONE I.—Lat. Equator to 10° N. (continued).

| Stations. | Lat. N. | Long. E. | Date. | Declination. | | | Inclination. | | | Force in British units. | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Observed. | Correction to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | | |
| | ° ′ | ° ′ | | ° ′ | | ° | ° ′ | | ° | | |
| At sea | 2 30 | 329 21 | 1830 | ..... | ..... | ..... | 30 47 N. | ..... | 30·8 N. | 7·81 | Erman. |
| At sea | 1 40 | 329 24 | 1830 | 10 28 w. | ..... | 10·5 w. | ..... | ..... | ..... | ..... | Erman. |
| At sea | 9 49 | 329 36 | 1830 | 10 00 w. | ..... | 10·0 w. | ..... | ..... | ..... | ..... | Young. |
| At sea | 0 26 | 329 35 | 1830 | ..... | ..... | ..... | 27 16 N. | ..... | 27·3 N. | 7·55 | Erman. |
| At sea | 4 01 | 329 42 | 1830 | 11 08 w. | ..... | 11·1 w. | ..... | ..... | ..... | ..... | Erman. |
| At sea | 4 26 | 329 45 | 1830 | ..... | ..... | ..... | 34 30 N. | ..... | 34·5 N. | 7·87 | Erman. |
| At sea | 5 30 | 329 48 | 1846 | 13 57 w. | ..... | 14·0 w. | ..... | ..... | ..... | ..... | Sulivan. |
| At sea | 2 48 | 329 49 | 1830 | 9 57 w. | ..... | 10·0 w. | ..... | ..... | ..... | ..... | Erman. |
| At sea (2 observations) | 0 41 | 329 56 | 1852 | 13 23 w. | ..... | 13·4 w. | ..... | ..... | ..... | ..... | Denham. |
| At sea (2 observations) | 3 25 | 330 10 | 1846 | 12 49 w. | ..... | 12·8 w. | ..... | ..... | ..... | ..... | Sulivan. |
| At sea | 8 23 | 330 14 | 1851 | 9 30 w. | ..... | 9·5 w. | ..... | ..... | ..... | ..... | Smith. |
| At sea | 0 24 | 330 19 | 1840 | ..... | ..... | ..... | ..... | ..... | ..... | 7·32 | Ross. |
| At sea | 0 51 | 330 35 | 1832 | 7 20 w. | ..... | 7·3 w. | ..... | ..... | ..... | ..... | FitzRoy. |
| At sea (4 observations) | 3 22 | 330 36 | 1846 | 12 55 w. | ..... | 12·9 w. | ..... | ..... | ..... | ..... | Sulivan. |
| At sea | 1 00 | 330 37 | 1832 | 9 23 w. | ..... | 9·4 w. | ..... | ..... | ..... | ..... | FitzRoy. |
| St. Paul's rocks | 0 56 | 330 40 | 1840 | 11 50 w. | ..... | 11·8 w. | 27 08 N. | ..... | 27·1 N. | 7·46 | Ross. |
| At sea | 3 39 | 330 49 | 1836 | 10 27 w. | ..... | 10·5 w. | ..... | ..... | ..... | ..... | FitzRoy. |
| At sea | 2 32 | 330 53 | 1836 | 10 23 w. | ..... | 10·4 w. | ..... | ..... | ..... | ..... | FitzRoy. |
| At sea | 1 20 | 330 55 | 1832 | 10 39 w. | ..... | 10·7 w. | ..... | ..... | ..... | ..... | FitzRoy. |
| At sea (2 observations) | 5 18 | 331 03 | 1852 | 13 43 w. | ..... | 13·7 w. | ..... | ..... | ..... | ..... | Denham. |
| At sea | 2 49 | 331 06 | 1846 | 12 58 w. | ..... | 13·0 w. | ..... | ..... | ..... | ..... | Sulivan. |
| At sea | 5 45 | 331 10 | 1830 | ..... | ..... | ..... | 35 25 N. | ..... | 35·4 N. | 7·68 | Erman. |
| At sea | 1 12 | 331 16 | 1838 | ..... | ..... | ..... | 26 27 N. | ..... | 26·5 N. | 7·48 | Sulivan. |
| At sea | 2 06 | 331 25 | 1839 | ..... | ..... | ..... | ..... | ..... | ..... | 7·47 | Ross. |
| At sea (2 observations) | 3 02 | 331 33 | 1852 | 14 11 w. | ..... | 14·2 w. | ..... | ..... | ..... | ..... | Denham. |
| At sea | 1 57 | 331 38 | 1839 | 13 16 w. | ..... | 13·3 w. | ..... | ..... | ..... | ..... | Ross. |
| At sea | 2 10 | 332 10 | 1832 | 11 08 w. | ..... | 11·1 w. | ..... | ..... | ..... | ..... | FitzRoy. |
| At sea | 7 26 | 332 36 | 1830 | ..... | ..... | ..... | 36 51 N. | ..... | 36·8 N. | 8·19 | Erman. |
| At sea | 3 18 | 332 46 | 1839 | 12 18 w. | ..... | 12·3 w. | 29 52 N. | ..... | 29·9 N. | 7·52 | Ross. |
| At sea (4 observations) | 5 12 | 332 48 | 1852 | 14 44 w. | ..... | 14·7 w. | ..... | ..... | ..... | ..... | Denham. |
| At sea | 8 50 | 332 58 | 1832 | 12 44 w. | ..... | 12·7 w. | ..... | ..... | ..... | ..... | FitzRoy. |
| At sea | 8 33 | 333 16 | 1830 | 11 42 w. | ..... | 11·7 w. | ..... | ..... | ..... | ..... | Erman. |
| At sea (2 observations) | 9 39 | 333 24 | 1830 | 13 00 w. | ..... | 13·0 w. | 39 12 N. | ..... | 39·2 N. | 8·19 | Erman. |
| At sea (4 observations) | 6 36 | 333 26 | 1836 | 14 43 w. | ..... | 14·7 w. | ..... | ..... | ..... | ..... | Du Petit Thouars. |
| At sea | 5 13 | 333 35 | 1839 | ..... | ..... | ..... | ..... | ..... | ..... | 7·73 | Ross. |
| At sea (4 observations) | 7 58 | 333 41 | 1852 | 15 51 w. | ..... | 15·9 w. | ..... | ..... | ..... | ..... | Denham. |
| At sea | 3 33 | 333 49 | 1842 | ..... | ..... | ..... | ..... | ..... | ..... | 8·02 | Lefroy. |
| At sea | 6 46 | 333 54 | 1839 | 14 58 w. | ..... | 15·0 w. | ..... | ..... | ..... | 7·83 | Ross. |
| At sea (3 observations) | 4 45 | 333 59 | 1839 | 14 21 w. | ..... | 14·4 w. | ..... | ..... | ..... | ..... | Du Petit Thouars. |
| At sea (2 observations) | 2 10 | 333 59 | 1843 | 13 15 w. | ..... | 13·3 w. | 26 11 N. | ..... | 26·2 N. | ..... | Ross. |
| At sea (4 observations) | 6 42 | 334 04 | 1846 | 14 45 w. | ..... | 14·8 w. | ..... | ..... | ..... | ..... | H.M.S. 'Fly.' |
| At sea | 8 39 | 334 25 | 1850 | 15 50 w. | ..... | 15·8 w. | ..... | ..... | ..... | ..... | Collinson. |
| At sea (4 observations) | 7 58 | 334 31 | 1852 | 15 51 w. | ..... | 15·9 w. | ..... | ..... | ..... | ..... | Denham. |
| At sea | 8 48 | 334 32 | 1838 | ..... | ..... | ..... | 37 07 N. | ..... | 37·1 N. | 8·19 | Sulivan. |
| At sea | 2 51 | 334 38 | 1839 | 14 10 w. | ..... | 14·2 w. | ..... | ..... | ..... | ..... | Ross. |
| At sea | 9 48 | 334 41 | 1839 | ..... | ..... | ..... | 39 12 N. | ..... | 39·2 N. | 8·15 | Ross. |
| At sea (2 observations) | 1 30 | 335 07 | 1839 | 14 31 w. | ..... | 14·5 w. | ..... | ..... | ..... | ..... | Du Petit Thouars. |
| At sea (2 observations) | 5 53 | 335 15 | 1843 | 14 44 w. | ..... | 14·7 w. | 31 21 N. | ..... | 31·4 N. | ..... | Ross. |
| At sea | 5 25 | 335 15 | 1850 | 16 17 w. | ..... | 16·3 w. | ..... | ..... | ..... | ..... | Collinson. |
| At sea (9 observations) | 6 32 | 335 19 | 1832 | 14 23 w. | ..... | 14·4 w. | ..... | ..... | ..... | ..... | Prussian ships. |
| At sea | 2 38 | 335 27 | 1850 | 16 07 w. | ..... | 16·1 w. | ..... | ..... | ..... | ..... | Collinson. |
| At sea | 4 12 | 335 30 | 1838 | ..... | ..... | ..... | 30 35 N. | ..... | 30·6 N. | 7·41 | Sulivan. |
| At sea (2 observations) | 8 58 | 335 34 | 1842 | 15 15 w. | ..... | 15·3 w. | ..... | ..... | ..... | ..... | Bérard. |
| At sea | 0 09 | 335 35 | 1839 | 14 53 w. | ..... | 14·9 w. | ..... | ..... | ..... | ..... | Du Petit Thouars. |
| At sea | 2 40 | 335 47 | 1842 | ..... | ..... | ..... | ..... | ..... | ..... | 7·67 | Lefroy. |
| At sea | 4 10 | 335 49 | 1850 | 18 16 w. | ..... | 18·3 w. | ..... | ..... | ..... | ..... | Collinson. |
| At sea | 0 50 | 335 50 | 1841 | ..... | ..... | ..... | 19 05 N. | ..... | 19·1 N. | ..... | In the 'John Fleming.' |
| At sea (3 observations) | 7 58 | 335 51 | 1852 | 16 40 w. | ..... | 16·7 w. | ..... | ..... | ..... | ..... | Denham. |
| At sea | 1 43 | 336 07 | 1842 | ..... | ..... | ..... | ..... | ..... | ..... | 7·71 | Lefroy. |
| At sea (2 observations) | 8 16 | 336 07 | 1843 | 14 23 w. | ..... | 14·4 w. | 34 14 N. | ..... | 34·2 N. | ..... | Ross. |
| At sea (3 observations) | 2 34 | 336 20 | 1829 | 14 08 w. | ..... | 14·1 w. | ..... | ..... | ..... | ..... | Lütke. |
| At sea (2 observations) | 0 44 | 336 22 | 1850 | 15 51 w. | ..... | 15·9 w. | ..... | ..... | ..... | ..... | Dayman. |

## NORTH EQUATORIAL ZONE I.—Lat. Equator to 10° N. (continued).

| Stations. | Lat. N. | Long. E. | Date. | Declination. | | | Inclination. | | | Force in British units. | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Observed. | Correction to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | | |
| | ° ′ | ° ′ | | ° ′ | | ° | ° ′ | | ° | | |
| At sea (3 observations) | 6 32 | 336 23 | 1838 | ..... | ..... | ..... | 33 45 N. | ..... | 33·8 N. | 7·67 | Sulivan. |
| At sea | 3 37 | 336 24 | 1850 | 17 10 w. | ..... | 17·2 w. | ..... | ..... | ..... | ..... | Collinson. |
| At sea (2 observations) | 1 50 | 336 34 | 1850 | ..... | ..... | ..... | 23 50 N. | ..... | 23·8 N. | ..... | Dayman. |
| At sea (2 observations) | 6 59 | 336 50 | 1842 | 14 45 w. | ..... | 14·8 w. | ..... | ..... | ..... | ..... | Bérard. |
| At sea (10 observations) | 2 56 | 337 00 | 1830 | 13 51 w. | ..... | 13·9 w. | ..... | ..... | ..... | ..... | Prussian ships. |
| At sea (2 observations) | 6 47 | 337 13 | 1841 | ..... | ..... | ..... | 29 36 N. | ..... | 29·6 N. | ..... | In the 'John Fleming.' |
| At sea | 1 18 | 337 18 | 1822 | 12 57 w. | ..... | 13·0 w. | 23 49 N. | ..... | 23·8 N. | ..... | Duperrey. |
| At sea (2 observations) | 3 41 | 337 19 | 1841 | ..... | ..... | ..... | 25 09 N. | ..... | 25·2 N. | ..... | In the 'John Fleming.' |
| At sea (8 observations) | 9 24 | 337 21 | 1847 | 15 07 w. | ..... | 15·1 w. | ..... | ..... | ..... | ..... | Stanley. |
| At sea (8 observations) | 6 40 | 337 22 | 1847 | 15 54 w. | ..... | 15·9 w. | ..... | ..... | ..... | ..... | Stanley. |
| At sea | 5 50 | 337 24 | 1846 | 15 11 w. | ..... | 15·2 w. | ..... | ..... | ..... | ..... | Bérard. |
| At sea (13 observations) | 5 25 | 337 34 | 1847 | 15 54 w. | ..... | 15·9 w. | ..... | ..... | ..... | ..... | Stanley. |
| At sea (6 observations) | 1 11 | 337 36 | 1847 | 14 51 w. | ..... | 14·9 w. | ..... | ..... | ..... | ..... | Stanley. |
| At sea | 5 39 | 337 38 | 1850 | 13 57 w. | ..... | 14·0 w. | ..... | ..... | ..... | ..... | Dayman. |
| At sea (11 observations) | 6 52 | 337 56 | 1828 | 16 02 w. | ..... | 16·0 w. | ..... | ..... | ..... | ..... | Lütke. |
| At sea (2 observations) | 5 38 | 338 00 | 1842 | 15 00 w. | ..... | 15·0 w. | ..... | ..... | ..... | ..... | Bérard. |
| At sea (2 observations) | 9 25 | 338 01 | 1850 | ..... | ..... | ..... | 34 29 N. | ..... | 34·5 N. | ..... | Dayman. |
| At sea (16 observations) | 4 28 | 338 07 | 1847 | 15 42 w. | ..... | 15·7 w. | ..... | ..... | ..... | ..... | Stanley. |
| At sea (9 observations) | 2 08 | 338 09 | 1847 | 14 49 w. | ..... | 14·8 w. | ..... | ..... | ..... | ..... | Stanley. |
| At sea | 2 50 | 338 19 | 1822 | 12 51 w. | ..... | 12·9 w. | 26 37 N. | ..... | 26·6 N. | ..... | Duperrey. |
| At sea (3 observations) | 4 57 | 338 38 | 1842 | 14 47 w. | ..... | 14·8 w. | ..... | ..... | ..... | ..... | Bérard. |
| At sea (3 observations) | 6 44 | 338 43 | 1852 | 17 42 w. | ..... | 17·7 w. | ..... | ..... | ..... | ..... | Denham. |
| At sea (2 observations) | 7 33 | 339 06 | 1836 | 16 56 w. | ..... | 16·9 w. | ..... | ..... | ..... | ..... | Bonite. |
| At sea (3 observations) | 2 28 | 339 17 | 1842 | 15 50 w. | ..... | 15·8 w. | ..... | ..... | ..... | ..... | Bérard. |
| At sea (3 observations) | 9 03 | 339 21 | 1837 | 16 41 w. | ..... | 16·7 w. | ..... | ..... | ..... | ..... | Bonite. |
| At sea | 7 00 | 339 37 | 1822 | 12 00 w. | ..... | 12·0 w. | 33 11 N. | ..... | 33·2 N. | ..... | Duperrey. |
| At sea (2 observations) | 0 03 | 339 47 | 1842 | 17 01 w. | ..... | 17·0 w. | ..... | ..... | ..... | ..... | Bérard. |
| At sea (2 observations) | 1 47 | 340 13 | 1836 | 17 30 w. | ..... | 17·5 w. | ..... | ..... | ..... | ..... | Bonite. |
| At sea (3 observations) | 6 42 | 340 55 | 1852 | 17 45 w. | ..... | 17·8 w. | ..... | ..... | ..... | ..... | Denham. |
| At sea (2 observations) | 8 21 | 340 55 | 1837 | 17 22 w. | ..... | 17·4 w. | ..... | ..... | ..... | ..... | Bonite. |
| At sea | 9 43 | 341 00 | 1843 | ..... | ..... | ..... | 35 11 N. | ..... | 35·2 N. | ..... | Belcher. |
| At sea | 5 37 | 341 03 | 1831 | ..... | ..... | ..... | 28 57 N. | ..... | 29·0 N. | 7·56 | Dunlop. |
| At sea (3 observations) | 4 34 | 341 17 | 1826 | 16 47 w. | ..... | 16·8 w. | ..... | ..... | ..... | ..... | Lütke. |
| At sea | 5 24 | 341 57 | 1837 | 16 30 w. | ..... | 16·5 w. | ..... | ..... | ..... | ..... | Bonite. |
| At sea | 8 27 | 342 00 | 1843 | ..... | ..... | ..... | 31 44 N. | ..... | 31·7 N. | ..... | Belcher. |
| At sea (2 observations) | 4 30 | 342 06 | 1837 | 16 42 w. | ..... | 16·7 w. | ..... | ..... | ..... | ..... | Bonite. |
| At sea (2 observations) | 6 05 | 342 11 | 1852 | 18 42 w. | ..... | 18·7 w. | ..... | ..... | ..... | ..... | Denham. |
| At sea | 5 23 | 342 35 | 1831 | ..... | ..... | ..... | 26 13 N. | ..... | 26·2 N. | 7·56 | Dunlop. |
| At sea | 7 10 | 342 49 | 1843 | ..... | ..... | ..... | 29 24 N. | ..... | 29·4 N. | ..... | Belcher. |
| At sea | 0 34 | 343 21 | 1837 | 17 15 w. | ..... | 17·3 w. | ..... | ..... | ..... | ..... | Bonite. |
| At sea | 3 16 | 343 30 | 1829 | 16 10 w. | ..... | 16·2 w. | ..... | ..... | ..... | ..... | D'Urville. |
| At sea | 5 50 | 343 39 | 1843 | ..... | ..... | ..... | 25 45 N. | ..... | 25·8 N. | ..... | Belcher. |
| Isles de Los | 9 27 | 346 12 | 1826 | 18 00 w. | ..... | 18·0 w. | ..... | ..... | ..... | ..... | Owen. |
| | | | 1836 | 17 43 w. | ..... | 17·7 w. | ..... | ..... | ..... | ..... | Vidal. |
| | | | | | | 17·8 w. | | | | | |
| At sea | 1 53 | 346 20 | 1831 | ..... | ..... | ..... | 18 35 N. | ..... | 18·6 N. | ..... | Dunlop. |
| At sea | 3 27 | 346 28 | 1843 | ..... | ..... | ..... | 19 29 N. | ..... | 19·5 N. | ..... | Belcher. |
| Sierra Leone | 8 30 | 346 44 | 1826 | 18 48 w. | ..... | 18·8 w. | ..... | ..... | ..... | ..... | Owen. |
| | | | 1836 | 19 23 w. | ..... | 19·4 w. | ..... | ..... | ..... | ..... | Vidal. |
| | | | 1836 | 19 36 w. | ..... | 19·6 w. | ..... | ..... | ..... | ..... | Denham. |
| | | | 1842 | ..... | ..... | ..... | 27 18 N. | ..... | 27·3 N. | ..... | Allen. |
| | | | | | | 19·3 w. | | | | | |
| At sea | 2 15 | 346 48 | 1843 | ..... | ..... | ..... | 15 53 N. | ..... | 15·9 N. | ..... | Belcher. |
| Moot Island | 7 39 | 346 56 | 1836 | 19 17 w. | ..... | 19·3 w. | ..... | ..... | ..... | ..... | Vidal. |
| At sea | 2 37 | 347 40 | 1831 | ..... | ..... | ..... | 19 44 N. | ..... | 19·7 N. | 7·20 | Dunlop. |
| At sea | 3 36 | 347 53 | 1831 | ..... | ..... | ..... | 20 05 N. | ..... | 20·1 N. | 7·20 | Dunlop. |
| Gallinas | 7 00 | 348 21 | 1837 | 18 53 w. | ..... | 18·9 w. | ..... | ..... | ..... | ..... | Vidal. |
| At sea | 0 28 | 349 09 | 1843 | ..... | ..... | ..... | 11 28 N. | ..... | 11·5 N. | ..... | Belcher. |
| Monrovia | 6 09 | 349 11 | 1837 | 20 07 w. | ..... | 20·1 w. | ..... | ..... | ..... | ..... | Vidal. |
| Cape Mesurada | 6 19 | 349 11 | 1837 | 19 29 w. | ..... | 19·5 w. | ..... | ..... | ..... | ..... | Vidal. |
| At sea | 3 18 | 349 16 | 1839 | ..... | ..... | ..... | 19 37 N. | ..... | 19·6 N. | 7·20 | Dunlop. |
| Cape Palmas | 4 22 | 352 16 | 1831 | 19 00 w. | ..... | 19·0 w. | ..... | ..... | ..... | ..... | Richardson. |
| | | | 1836 | 20 00 w. | ..... | 20·0 w. | ..... | ..... | ..... | ..... | Vidal. |
| | | | 1845 | 19 05 w. | ..... | 19·1 w. | ..... | ..... | ..... | ..... | Denham. |
| | | | | | | 19·4 w. | | | | | |

## NORTH EQUATORIAL ZONE I.—Lat. Equator to 10° N. (continued).

| Stations. | Lat. N. | Long. E. | Date. | Declination. | | | Inclination. | | | Force in British units. | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Observed. | Correction to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | | |
| | ° ′ | ° ′ | | ° ′ | | ° | ° ′ | | ° | | |
| Cape Three Points ... | 4 45 | 357 54 | 1837 | 20 03 w. | ..... | 20·1 w. | ..... | ..... | ..... | ..... | Vidal. |
| Dix Cove ..... | 4 48 | 358 03 | 1838 | 20 37 w. | ..... | 20·6 w. | ..... | ..... | ..... | ..... | Vidal. |
| Cape Coast Castle..... | 5 06 | 358 46 | 1838 | 20 11 w. | ..... | 20·2 w. | ..... | ..... | ..... | ..... | Vidal. |
| | | | 1841 | ..... | ..... | ..... | 11 32 N. | ..... | 11·5 N. | ..... | Allen. |
| Annamaboe ..... | 5 10 | 358 54 | 1838 | 20 13 w. | ..... | 20·2 w. | ..... | ..... | ..... | ..... | Vidal. |
| Accra ..... | 5 32 | 359 49 | 1838 | 20 18 w. | ..... | 20·3 w. } 20·5 w. | ..... | ..... | ..... | ..... | Vidal. |
| | | | 1846 | 20 39 w. | ..... | 20·7 w. } | ..... | ..... | ..... | ..... | Denham. |

## NORTH EQUATORIAL ZONE II.—LATITUDE 10° TO 20° N.

*Authorities.*

Vogel ..... Royal Geographical Society's Journal, vol. xxv.; and MSS. of the Observer in the Magnetic Office.

D'Hericourt ..... L. S. Kämtz, MSS.
Lefebore ..... L. S. Kämtz, MSS.
Haines ..... L. S. Kämtz, MSS.

Moyes ..... MSS. in the Magnetic Office.

Schlagintweit ..... Scientific Mission to India and High Asia.

Wellsted ..... L. S. Kämtz, MSS.
Orlebar ..... L. S. Kämtz, MSS.

Montrion ..... Schlagintweit's Scientific Mission to India and High Asia.

Chambers ..... Reports of the Colaba Observatory.

Basevi ..... Reports of the Great Trigonometrical Survey of India.

Caldecott & Taylor .. Schlagintweit's Scientific Mission to India and High Asia.

Koppe ..... Mem. by Erman in the Astr. Nachrichten.

Ludlow ..... MSS. in the Magnetic Office.

Powell ..... Schlagintweit's Scientific Mission to India and High Asia.

Bonite (La) ..... Voyage (Paris, 1842).

Blosseville ..... L. S. Kämtz, MSS.; and Schlagintweit's Scientific Mission to India and High Asia.

Elliot ..... Phil. Trans. (1851) Art. XII.

Novara ..... (Austrian Frigate) Reise um die Erde (Wien, 1862-65).

Laplace ..... L. S. Kämtz, MSS.

Fell ..... Schlagintweit's Scientific Mission to India and High Asia.

Laws ..... L. S. Kämtz, MSS.
Crawford ..... L. S. Kämtz, MSS.
Bougainville ..... L. S. Kämtz, MSS.

Lütke ..... Mem. by Lenz in the Sci. Memoirs of the Acad. of St. Petersburg; and L. S. Kämtz, MSS.

Belcher ..... MSS. in the Magnetic Office, received from the Author.

Prussian Ships ..... L. S. Kämtz, MSS.

Collinson ..... MSS. in the Hydrographic Office.

| | |
|---|---|
| Dumont D'Urville, Freycinet, Beechey, Kotzebue, Byron | L. S. Kämtz, MSS. |
| Douglas (David) | Report on the Variations of the Earth's Magnetic Force (Brit. Assoc. Report, 1838). |
| Erman | Reise um die Erde (Berlin, 1841). |
| Vénus (La) | Voyage (Paris, 1841). |
| Harkness | Smithsonian Contributions, vol. xviii. |
| Müller and Sonntag | Smithsonian Contributions, vol. xi. |
| Behard | MSS. in the Magnetic Office, received from Admiral Duperrey. |
| Home | Kämtz, MSS. |
| Barnett | MSS. in the Magnetic Office; and L. S. Kämtz, MSS. |
| Sabine | Report on Pendulum Experiments, 1825. |
| Owen, Milne, Austin | Kämtz, MSS. |
| Friesach | Mem. Imp. Acad. of Sciences, Vienna, vol. xxix. (*et seq.*) to xliv. |
| Zahrtmann | Kämtz, MSS. |
| Norwegian Officers | Hansteen, Mag. Beob. (Christiania, 1863). |
| Schomburgk | MSS. in the Magnetic Office, received from the Observer. |
| Bérard | MSS. received from Admiral Duperrey. |
| Foster | MSS. in the Hydrographic Office. |
| Du Petit Thouars | Sabine, Mag. Contrib. in Phil. Trans. |
| Hudson and Rumker | L. S. Kämtz, MSS. |
| Lefroy | MSS. in the Magnetic Office, received from the Observer. |
| Young | Kämtz, MSS. |
| Sulivan | Sabine, Mag. Contrib. in Phil. Trans.; and L. S. Kämtz, MSS. |
| Denham, Trollope | MSS. in the Magnetic Office. |
| FitzRoy | Voyage of the 'Beagle.' |
| Ross (James) and Crozier | MSS. received from the Observers. |
| Duperrey | L. S. Kämtz, MSS. |
| Pasley | MSS. in the Magnetic Office. |
| Stanley | MSS. in the Magnetic Office. |
| King | Kämtz, MSS. |

## NORTH EQUATORIAL ZONE II.—Lat. 10° N. to 20° N.

| Stations. | Lat. N. | Long. E. | Date. | Declination. Observed. | Declination. Correction to Epoch 1842·5. | Declination. Corrected. | Inclination. Observed. | Inclination. Cor. to Epoch 1842·5. | Inclination. Corrected. | Force in British units. Observed. | Force in British units. Cor. to Epoch 1842·5. | Force in British units. Corrected. | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ° ′ | ° ′ | | ° ′ | ° ′ | ° | ° ′ | ′ | ° | | | | |
| Yacoba (Bautchi) | 10 10 | 9 36 | 1855 | 16 13 w. | ..... | 16·2 w. | ..... | ..... | ..... | ..... | ..... | ..... | Vogel. |
| Aghadem | 16 52 | 13 17 | 1854 | 13 48 w. | ..... | 13·8 w. | ..... | ..... | ..... | ..... | ..... | ..... | Vogel. |
| Shimotirru | 18 57 | 13 17 | 1854 | 13 48 w. | ..... | 13·8 w. | 26 03 | ..... | 26·1 N. | ..... | ..... | ..... | Vogel. |
| Kuka | 12 55 | 13 20 | 1854 | 14 03 w. | ..... | 14·1 w. | 13 09 | ..... | 13·2 N. | ..... | ..... | ..... | Vogel. |
| Gondar | 12 36 | 37 31 | 1848 | ..... | ..... | ..... | 5 46 | ..... | 5·8 N. | ..... | ..... | ..... | D'Hericourt. |
| Andowa | 14 18 | 39 00 | 1839 | ..... | ..... | ..... | 8 50 | ..... | 8·8 } 8·9 N. | ..... | ..... | ..... | Lefebore. |
| | | | 1849 | ..... | ..... | ..... | 9 01 | ..... | 9·0 } | ..... | ..... | ..... | D'Hericourt. |
| Massowa | 15 36 | 39 32 | 1839 | ..... | ..... | ..... | 10 43 | ..... | 10·7 } 11·5 N. | ..... | ..... | ..... | Lefebore. |
| | | | 1849 | ..... | ..... | ..... | 12 19 | ..... | 12·3 } | ..... | ..... | ..... | D'Hericourt. |
| Aden | 12 46 | 45 10 | 1834 | 5 02 w. | ..... | 5·0 w. } 4·7 w. | ..... | ..... | ..... } 5·1 N. | ..... | ..... | ..... | Haines. |
| | | | 1850 | ..... | ..... | ..... } | 4 34 | ..... | 4·6 } | ..... | ..... | ..... | Moyes. |
| | | | 1857 | 4 15 w. | ..... | 4·3 w. } | 5 38 | ..... | 5·6 } | ..... | ..... | ..... | Schlagintweit. |
| Socotra | 13 16 | 52 55 | 1835 | 4 30 w. | ..... | 4·5 w. | ..... | ..... | ..... | ..... | ..... | ..... | Wellsted. |
| Bombay | 18 56 | 72 54 | 1845 | 0 13 w. | 0 03 w. | 0·3 w. } 0·0 | 17 59 | −03 | 17·9 } 18·4 N. | 8·20 | ..... | } 8·40 | Orlebar. |
| | | | 1847 | 0 14 E. | 0 05 w. | 0·2 w. } | 18 18 | −05 | 18·2 } | 8·37 | ..... | } | Montrion. |
| | | | 1856 | 0 19 E. | 0 14 w. | 0·1 E. } | 19 06 | −14 | 18·9 } | 8·48 | ..... | } | Schlagintweit. |
| | | | 1867 | 0 42 E. | 0 25 w. | 0·3 E. } | 19 02 | −25 | 18·6 } | 8·53 | ..... | } | Chambers. |
| Mahabaléshvar | 17 55 | 73 38 | 1856 | ..... | ..... | ..... | 16 26 | −14 | 16·2 N. | ..... | ..... | ..... | Schlagintweit. |
| Poona | 18 30 | 73 52 | 1856 | ..... | ..... | ..... | 19 02 | −14 | 18·8 N. | ..... | ..... | ..... | Schlagintweit. |
| Mangalore | 12 52 | 74 49 | 1870 | 1 06 E. | 0 28 w. | 0·6 E. | 7 24 | −28 | 6·9 N. | 8·13 | ..... | 8·13 | Basevi. |
| Kaladghi | 16 13 | 75 30 | 1856 | 0 30 E. | 0 14 w. | 0·3 E. | 14 27 | −14 | 14·2 N. | ..... | ..... | ..... | Schlagintweit. |
| Kalikát | 11 15 | 75 45 | 1838 | ..... | ..... | ..... | 2 43 | +04 | 2·8 N. | ..... | ..... | ..... | Caldecott. |
| | | | 1846 | 0 25 E. | 0 04 w. | 0·4 E. | ..... | ..... | ..... | ..... | ..... | ..... | Montrion. |
| Penang | 10 47 | 75 55 | 1838 | ..... | ..... | ..... | 1 11 | +04 | 1·3 N. | ..... | ..... | ..... | Caldecott. |
| Chetwaye | 10 32 | 76 01 | 1838 | ..... | ..... | ..... | 1 13 | +04 | 1·3 N. | ..... | ..... | ..... | Caldecott. |
| Utakamand | 11 24 | 76 43 | 1856 | 0 57 E. | 0 14 w. | 0·7 E. | 4 27 | −14 | 4·2 N. | 8·86 | ..... | 8·86 | Schlagintweit. |
| Moolwar | 16 35 | 76 45 | 1868 | 1 05 E. | 0 26 w. | 0·7 E. | 14 14 | −26 | 13·8 N. | ..... | ..... | ..... | Koppe. |
| Beejapore | 16 50 | 76 47 | 1868 | 1 52 E. | 0 26 w. | 1·4 E. | 15 29 | −26 | 15·1 N. | ..... | ..... | ..... | Koppe. |
| Bellari | 15 09 | 76 54 | 1856 | 0 21 E. | 0 14 w. | 0·1 E. | 12 00 | −14 | 11·8 N. | 8·83 | ..... | 8·83 | Schlagintweit. |
| Station | 10 02 | 77 04 | 1838 | ..... | ..... | ..... | 0 00 | ..... | 0·0 | ..... | ..... | ..... | Caldecott and Taylor. |
| Namthabad | 15 06 | 77 36 | 1868 | 1 11 E. | 0 26 w. | 0·8 E. | 11 41 | −26 | 11·3 N. | 8·28 | ..... | 8·28 | Basevi. |
| Bangalore Base | 13 03 | 77 40 | 1868 | 0 58 E. | 0 26 w. | 0·6 E. | 7 17 | −26 | 6·9 N. | 8·17 | ..... | 8·17 | Basevi. |
| Bangalore | 12 59 | 77 41 | 1869 | 1 12 E. | 0 27 w. | 0·8 E. | 7 12 | −27 | 6·8 N. | 8·19 | ..... | 8·19 | Basevi. |
| Pachapolliam | 11 00 | 77 41 | 1868 | 1 04 E. | 0 26 w. | 0·6 E. | 2 48 | −26 | 2·4 N. | 8·05 | ..... | 8·05 | Basevi. |
| Kodungul | 17 08 | 77 41 | 1868 | 1 29 E. | 0 26 w. | 1·1 E. | 16 37 | −26 | 16·2 N. | 8·41 | ..... | 8·41 | Basevi. |
| Somtana | 19 05 | 77 42 | 1868 | 0 28 E. | 0 26 w. | 0·0 | 23 43 | −26 | 23·3 N. | 9·16 | ..... | 9·16 | Basevi. |
| Damergidda | 18 03 | 77 43 | 1868 | 1 29 E. | 0 26 w. | 1·1 E. | 19 33 | −26 | 19·1 N. | 8·48 | ..... | 8·48 | Basevi. |
| Kurnool | 15 50 | 78 06 | 1868 | 1 21 E. | 0 26 w. | 0·9 E. | 13 43 | −26 | 13·3 N. | 8·31 | ..... | 8·31 | Basevi. |
| Secunderabad | 17 27 | 78 32 | 1868 | 1 34 E. | 0 26 w. | 1·8 E. | 17 17 | −26 | 16·9 N. | 8·51 | ..... | 8·51 | Basevi. |
| Trichinopoly | 10 48 | 78 43 | 1844 | ..... | ..... | ..... | 2 28 | ..... | 2·5 N. | ..... | ..... | ..... | Ludlow. |
| Utatur | 11 05 | 78 52 | 1856 | ..... | ..... | ..... | 2 50 | −14 | 2·6 N. | ..... | ..... | ..... | Schlagintweit. |
| Poothocottah | 10 23 | 78 52 | 1838 | ..... | ..... | ..... | 0 55 | ..... | 0·9 } 1·0 N. | ..... | ..... | ..... | Taylor and Caldecott. |
| | | | 1843 | ..... | ..... | ..... | 0 57 | ..... | 1·0 } | ..... | ..... | ..... | Ludlow. |
| | | | 1844 | ..... | ..... | ..... | 1 03 | ..... | 1·1 } | ..... | ..... | ..... | Ludlow. |
| Trivady | 10 53 | 79 09 | 1844 | ..... | ..... | ..... | 2 01 | ..... | 2·0 N. | ..... | ..... | ..... | Ludlow. |
| Munanamelegoody | 10 03 | 79 12 | 1838 | ..... | ..... | ..... | 0 11 | ..... | 0·2 N. | ..... | ..... | ..... | Taylor and Caldecott. |
| Tanjore | 10 46 | 79 14 | 1844 | ..... | ..... | ..... | 2 01 | ..... | 2·0 N. | ..... | ..... | ..... | Ludlow. |
| Auredearputtanum | 10 01 | 79 18 | 1844 | ..... | ..... | ..... | 0 39 | ..... | 0·7 N. | ..... | ..... | ..... | Ludlow. |
| Adrampatám | 10 17 | 79 22 | 1838 | 1 20 E. | 0 04 E. | 1·4 E. | ..... | ..... | ..... | ..... | ..... | ..... | Powell. |
| Combaconum | 10 58 | 79 27 | 1844 | ..... | ..... | ..... | 2 20 | ..... | 2·3 N. | ..... | ..... | ..... | Ludlow. |
| Manargoody | 10 40 | 79 29 | 1838 | ..... | ..... | ..... | 0 52 | ..... | 0·9 N. | ..... | ..... | ..... | Taylor and Caldecott. |
| Palk's Strait | 10 05 | 79 35 | 1838 | 1 20 E. | 0 04 E. | 1·4 E. | ..... | ..... | ..... | ..... | ..... | ..... | Powell. |
| Sheally | 11 16 | 79 47 | 1838 | ..... | ..... | ..... | 2 28 | ..... | 2·5 N. | ..... | ..... | ..... | Taylor and Caldecott. |
| Porto Novo | 11 29 | 79 48 | 1844 | ..... | ..... | ..... | 3 41 | ..... | 3·7 N. | ..... | ..... | ..... | Ludlow. |
| Point Calymere | 10 16 | 79 49 | 1844 | ..... | ..... | ..... | 1 13 | ..... | 1·2 N. | ..... | ..... | ..... | Ludlow. |

## NORTH EQUATORIAL ZONE II.—Lat. 10° N. to 20° N. (continued).

| Stations. | Lat. N. | Long. E. | Date. | Declination. | | | Inclination. | | | Force in British units. | | | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Observed. | Correction to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | |
| | ° ′ | ° ′ | | ° ′ | ° ′ | ° | ° ′ | ′ | ° | | | | |
| Pondicherry | 11 54 | 79 50 | 1837 | 0 52 E. | 0 05 E. | 1·0 E. | 4 31 | ..... | 4·5 | ..... | ..... | ..... | Bonite. |
| | | | 1838 | ..... | ..... | ..... | 4 27 | ..... | 4·5 | ..... | ..... | ..... | Taylor and Caldecott. |
| | | | 1844 | ..... | ..... | ..... | 5 05 | ..... | 5·1 | ..... | ..... | ..... | Ludlow. |
| Negapatam | 10 47 | 79 51 | 1838 | ..... | ..... | ..... | 1 42 | ..... | 1·7 | ..... | ..... | ..... | Taylor and Caldecott. |
| | | | 1844 | ..... | ..... | ..... | 2 20 | ..... | 2·3 | ..... | ..... | ..... | Ludlow. |
| Karikal | 10 55 | 79 53 | 1828 | 1 14 E. | 0 14 E. | 1·5 E. | 1 51 | +14 | 2·1 N. | ..... | ..... | ..... | Blosseville. |
| | | | 1833 | 1 02 E. | 0 09 E. | 1·2 E. | ..... | ..... | ..... | ..... | ..... | ..... | Blosseville. |
| Tranquebar | 11 01 | 79 55 | 1838 | ..... | ..... | ..... | 2 05 | ..... | 2·1 | ..... | ..... | ..... | Taylor and Caldecott. |
| | | | 1843 | ..... | ..... | ..... | 2 40 | ..... | 2·7 | ..... | ..... | ..... | Ludlow. |
| Goodoor | 14 09 | 79 55 | 1843 | ..... | ..... | ..... | 9 36 | ..... | 9·6 N. | ..... | ..... | ..... | Ludlow. |
| Wogelly | 14 00 | 79 58 | 1838 | ..... | ..... | ..... | 8 49 | ..... | 8·8 | ..... | ..... | ..... | Taylor and Caldecott. |
| | | | 1843 | ..... | ..... | ..... | 9 23 | ..... | 9·4 | ..... | ..... | ..... | Ludlow. |
| Allumparva | 12 14 | 79 59 | 1838 | ..... | ..... | ..... | 4 50 | ..... | 4·8 N. | ..... | ..... | ..... | Taylor and Caldecott. |
| Nellúr | 14 28 | 79 59 | 1838 | ..... | ..... | ..... | 9 41 | ..... | 9·7 N. | ..... | ..... | ..... | Taylor and Caldecott. |
| Nailapully | 13 52 | 80 00 | 1843 | ..... | ..... | ..... | 9 07 | ..... | 9·1 N. | ..... | ..... | ..... | Ludlow. |
| Soolcorpet | 13 41 | 80 02 | 1838 | ..... | ..... | ..... | 8 11 | ..... | 8·2 | ..... | ..... | ..... | Taylor and Caldecott. |
| | | | 1843 | ..... | ..... | ..... | 8 40 | ..... | 8·7 | ..... | ..... | ..... | Ludlow. |
| Ongole | 15 30 | 80 02 | 1838 | ..... | ..... | ..... | 11 37 | ..... | 11·6 N. | ..... | ..... | ..... | Taylor and Caldecott. |
| Rampatan | 15 03 | 80 03 | 1838 | ..... | ..... | ..... | 10 44 | ..... | 10·7 N. | ..... | ..... | ..... | Taylor and Caldecott. |
| Allúr | 14 41 | 80 04 | 1838 | ..... | ..... | ..... | 10 19 | ..... | 10·3 N. | ..... | ..... | ..... | Taylor and Caldecott. |
| Poodway | 13 21 | 80 08 | 1838 | ..... | ..... | ..... | 7 17 | ..... | 7·3 N. | ..... | ..... | ..... | Taylor and Caldecott. |
| Goomerapoondy | 13 24 | 80 11 | 1843 | ..... | ..... | ..... | 8 09 | ..... | 8·2 N. | ..... | ..... | ..... | Ludlow. |
| Sadras | 12 32 | 80 12 | 1838 | ..... | ..... | ..... | 5 31 | ..... | 5·5 | ..... | ..... | ..... | Taylor and Caldecott. |
| | | | 1843 | ..... | ..... | ..... | 6 08 | ..... | 6·1 | ..... | ..... | ..... | Ludlow. |
| Red Hills | 13 10 | 80 15 | 1843 | ..... | ..... | ..... | 7 59 | ..... | 8·0 N. | ..... | ..... | ..... | Ludlow. |
| Poonairy | 13 20 | 80 16 | 1843 | ..... | ..... | ..... | 7 54 | ..... | 7·9 N. | ..... | ..... | ..... | Ludlow. |
| Madras | 13 05 | 80 17 | 1838 | ..... | ..... | ..... | 6 50 | ..... | 6·8 | ..... | ..... | | Taylor and Caldecott. |
| | | | 1843 | ..... | ..... | ..... | 7 30 | ..... | 7·5 | ..... | ..... | | Ludlow. |
| | | | 1846 | 0 56 E. | 0 04 W. | 0·9 E. | ..... | ..... | ... | ..... | ..... | 8·16 | Elliot. |
| | | | 1848 | ..... | ..... | ..... | 7 34 | − 6 | 7·5 | 8·15 | ..... | | Elliot. |
| | | | 1856 | 0 59 E. | 0 14 W. | 0·8 E. | 7 52 | −14 | 7·7 | 8·10 | ..... | | Schlagintweit. |
| | | | 1870 | 1 20 E. | 0 28 W. | 0·9 E. | 7 48 | −28 | 7·3 | 8·22 | ..... | | Basevi. |
| | | | | | | 0·9 E. | | | 7·4 N. | | | | |
| At sea (3 observations) | 12 56 | 80 29 | 1858 | 0 52 E. | ..... | 0·9 E. | ..... | ..... | ..... | ..... | ..... | ..... | Novara. |
| At sea (2 observations) | 10 48 | 81 25 | 1858 | 0 58 E. | ..... | 1·0 E. | ..... | ..... | ..... | ..... | ..... | ..... | Novara. |
| At sea (2 observations) | 13 44 | 81 29 | 1858 | 0 51 E. | ..... | 0·9 E. | ..... | ..... | ..... | ..... | ..... | ..... | Novara. |
| Rajahmandri | 17 11 | 81 47 | 1856 | 1 25 E. | 0 14 W. | 1·2 E. | 16 24 | −14 | 16·2 N. | 9·20 | ..... | 9·20 | Schlagintweit. |
| Koringa Bay | 16 45 | 82 15 | 1848 | 0 50 E. | 0 06 W. | 0·7 E. | ..... | ..... | ..... | ..... | ..... | ..... | Fell. |
| Coconada | 16 56 | 82 18 | 1870 | 1 51 E. | 0 28 W. | 1·4 E. | ..... | ..... | ..... | ..... | ..... | ..... | Basevi. |
| At sea (3 observations) | 13 51 | 82 44 | 1858 | 1 14 E. | ..... | 1·2 E. | ..... | ..... | ..... | ..... | ..... | ..... | Novara. |
| At sea (2 observations) | 13 28 | 83 52 | 1858 | 1 16 E. | ..... | 1·3 E. | ..... | ..... | ..... | ..... | ..... | ..... | Novara. |
| At sea | 12 12 | 85 57 | 1858 | 1 12 E. | ..... | 1·2 E. | ..... | ..... | ..... | ..... | ..... | ..... | Novara. |
| At sea (4 observations) | 14 32 | 86 27 | 1837 | 2 58 E. | ..... | 3·0 E. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea (2 observations) | 17 45 | 86 32 | 1837 | 2 03 E. | ..... | 2·1 E. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea (2 observations) | 15 32 | 87 00 | 1837 | 2 07 E. | ..... | 2·1 E. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea (3 observations) | 17 06 | 87 39 | 1837 | 2 41 E. | ..... | 2·7 E. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea (2 observations) | 14 28 | 88 05 | 1837 | 2 36 E. | ..... | 2·6 E. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea (2 observations) | 10 36 | 88 13 | 1858 | 1 40 E. | ..... | 1·7 E. | ..... | ..... | ..... | ..... | ..... | ..... | Novara. |
| At sea (2 observations) | 13 03 | 88 33 | 1837 | 2 36 E. | ..... | 2·6 E. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea (3 observations) | 19 10 | 89 03 | 1837 | 2 23 E. | ..... | 2·4 E. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| Port Owen | 13 05 | 90 20 | 1830 | 2 25 E. | ..... | 2·4 E. | ..... | ..... | ..... | ..... | ..... | ..... | Laws. |

## NORTH EQUATORIAL ZONE II.—Lat. 10° N. to 20° N. (continued).

| Stations. | Lat. N. | Long. E. | Date. | Declination. | | | Inclination. | | | Force in British units. | | | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Observed. | Correction to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | |
| | ° ′ | ° ′ | | ° ′ | | ° | ° ′ | | ° | | | | |
| At sea | 10 05 | 92 31 | 1837 | 1 54 E. | ..... | 1·9 E. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| Cheduba Island | 19 00 | 93 00 | 1830 | 2 30 E. | ..... | 2·5 E. | ..... | ..... | ..... | ..... | ..... | ..... | Laws. |
| Kyonk Phyon | 19 29 | 93 29 | 1830 | 2 06 E. | ..... | 2·1 E. | ..... | ..... | ..... | ..... | ..... | ..... | Laws. |
| Cheduba Straits | 18 30 | 93 45 | 1830 | 2 45 E. | ..... | 2·8 E. | ..... | ..... | ..... | ..... | ..... | ..... | Laws. |
| Diamond Island | 15 51 | 94 18 | 1826 | 3 00 E. | ..... | 3·0 E. | ..... | ..... | ..... | ..... | ..... | ..... | Crawford. |
| Rangoon | 16 46 | 96 17 | 1833 | 0 50 E. | ..... | 0·8 E. | 17 52 | ..... | 17·9 | ..... | ..... | ..... | Blosseville. |
| | | | 1837 | ..... | ..... | ..... | 17 53 | ..... | 17·9 | ..... | ..... | ..... | Taylor. |
| | | | 1837 | ..... | ..... | ..... | 17 57 | ..... | 18·0 | ..... | ..... | ..... | Pelly. |
| | | | | | | 0·8 E. | | | 17·9 N. | | | | |
| Tores Island | 12 00 | 97 00 | 1835 | 3 00 E. | ..... | 3·0 E. | ..... | ..... | ..... | ..... | ..... | ..... | Laws. |
| Moulmein | 16 30 | 97 46 | 1846 | 2 20 E. | ..... | 2·3 E. | 17 46 | ..... | 17·8 N. | 8·52 | ..... | 8·52 | Elliot. |
| Bentink | 15 33 | 97 51 | 1830 | 2 25 E. | ..... | 2·4 E. | ..... | ..... | ..... | ..... | ..... | ..... | Laws. |
| Hastings Island | 10 07 | 98 21 | 1846 | 2 13 E. | ..... | 2·2 E. | 4 19 | ..... | 4·3 N. | 8·20 | ..... | 8·20 | Elliot. |
| Touranne | 16 07 | 108 17 | 1837 | 1 54 E. | ..... | 1·9 E. | 19 01 | ..... | 19·0 N. | ..... | ..... | ..... | Bonite. |
| At sea (2 observations) | 16 45 | 109 04 | 1837 | 0 38 E. | ..... | 0·6 E. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea | 14 26 | 109 16 | 1837 | 0 30 W. | ..... | 0·5 W. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| Turtle Island | 14 20 | 109 20 | 1825 | 1 00 E. | ..... | 1·0 E. | ..... | ..... | ..... | ..... | ..... | ..... | Bougainville. |
| At sea (2 observations) | 10 50 | 112 54 | 1858 | 1 58 E. | ..... | 2·0 E. | ..... | ..... | ..... | ..... | ..... | ..... | Novara. |
| At sea (4 observations) | 12 30 | 114 10 | 1829 | 0 04 E. | ..... | 0·1 E. | ..... | ..... | ..... | ..... | ..... | ..... | Lütke. |
| At sea | 19 42 | 114 14 | 1843 | ..... | ..... | ..... | 22 30 | ..... | 22·5 N. | ..... | ..... | ..... | Belcher. |
| At sea | 12 26 | 115 13 | 1858 | 1 28 E. | ..... | 1·5 E. | ..... | ..... | ..... | ..... | ..... | ..... | Novara. |
| At sea (8 observations) | 17 36 | 115 53 | 1830 | 0 17 E. | ..... | 0·3 E. | ..... | ..... | ..... | ..... | ..... | ..... | Prussian ships. |
| At sea (2 observations) | 19 25 | 116 09 | 1858 | 0 53 E. | ..... | 0·9 E. | ..... | ..... | ..... | ..... | ..... | ..... | Novara. |
| At sea | 16 12 | 116 35 | 1843 | ..... | ..... | ..... | 19 13 | ..... | 19·2 N. | ..... | ..... | ..... | Belcher. |
| At sea (3 observations) | 17 06 | 116 48 | 1858 | 1 03 E. | ..... | 1·1 E. | ..... | ..... | ..... | ..... | ..... | ..... | Novara. |
| At sea (2 observations) | 13 45 | 117 02 | 1829 | 1 47 E. | ..... | 1·8 E. | ..... | ..... | ..... | ..... | ..... | ..... | Prussian ships. |
| At sea (2 observations) | 13 14 | 117 33 | 1858 | 0 42 E. | ..... | 0·7 E. | ..... | ..... | ..... | ..... | ..... | ..... | Novara. |
| At sea | 15 23 | 118 05 | 1858 | 1 16 E. | ..... | 1·3 E. | ..... | ..... | ..... | ..... | ..... | ..... | Novara. |
| At sea | 13 49 | 118 21 | 1843 | ..... | ..... | ..... | 14 18 | ..... | 14·3 N. | ..... | ..... | ..... | Belcher. |
| At sea (2 observations) | 19 22 | 119 04 | 1851 | 0 03 W. | ..... | 0·1 W. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| At sea | 11 28 | 119 06 | 1843 | ..... | ..... | ..... | 10 10 | ..... | 10·2 N. | ..... | ..... | ..... | Belcher. |
| At sea (2 observations) | 14 27 | 119 25 | 1858 | 0 33 E. | ..... | 0·6 E. | ..... | ..... | ..... | ..... | ..... | ..... | Novara. |
| At sea (3 observations) | 15 41 | 119 34 | 1837 | 0 00 | ..... | 0·0 | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea (3 observations) | 16 58 | 119 47 | 1837 | 0 16 E. | ..... | 0·3 E. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| Cabras Island | 13 52 | 119 53 | 1843 | ..... | ..... | ..... | 15 11 | ..... | 15·2 N. | ..... | ..... | ..... | Belcher. |
| Damaran Island | 10 59 | 119 56 | 1843 | ..... | ..... | ..... | 8 05 | ..... | 8·1 N. | ..... | ..... | ..... | Belcher. |
| At sea (2 observations) | 17 20 | 120 02 | 1833 | 1 00 E. | ..... | 1·0 E. | ..... | ..... | ..... | ..... | ..... | ..... | Prussian ships. |
| At sea (2 observations) | 18 24 | 120 07 | 1837 | 0 26 W. | ..... | 0·4 W. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea | 13 11 | 120 16 | 1844 | 0 56 E. | ..... | 0·9 E. | 13 21 | ..... | 13·4 N. | ..... | ..... | ..... | Belcher. |
| Apo Island | 12 40 | 120 24 | 1846 | 0 09 E. | ..... | 0·2 E. | 12 30 | ..... | 12·5 N. | ..... | ..... | ..... | Belcher. |
| Calamiane | 12 13 | 120 25 | 1844 | 0 38 E. | ..... | 0·6 E. | 12 08 | ..... | 12·1 N. | ..... | ..... | ..... | Belcher. |
| At sea | 12 38 | 120 42 | 1844 | ..... | ..... | ..... | 13 21 | ..... | 13·4 N. | ..... | ..... | ..... | Belcher. |
| Cavite | 14 27 | 120 55 | 1846 | 0 48 E. | ..... | 0 8 E. | 16 05 | ..... | 16·1 N. | ..... | ..... | ..... | Belcher. |
| Manilla | 14 36 | 120 58 | 1829 | 0 10 E. | ..... | 0·2 E. | 16 16 | ..... | 16·3 | ..... | ..... | | Lütke. |
| | | | 1830 | 1 00 E. | ..... | 1·0 E. | ..... | ..... | ..... | ..... | ..... | | Laplace. |
| | | | 1836 | 0 30 E. | ..... | 0·5 E. | 16 30 | ..... | 16·5 | ..... | ..... | 8·40 | Bonite. |
| | | | 1844 | 0 18 E. | ..... | 0·3 E. | 16 26 | ..... | 16·4 | 8·40 | ..... | | Belcher. |
| | | | | | | 0·5 E. | | | 16·4 N. | | | | |
| Garsa Island | 12 13 | 121 09 | 1846 | 0 38 E. | ..... | 0·6 | 11 30 | ..... | 11·5 N. | ..... | ..... | ..... | Belcher. |
| Panagatan | 11 51 | 121 19 | 1844 | 0 15 E. | ..... | 0·3 | 10 58 | ..... | 11·0 N. | ..... | ..... | ..... | Belcher. |
| Marcignin Island | 11 36 | 121 37 | 1846 | 0 45 E. | ..... | 0·8 | 10 27 | ..... | 10·5 N. | ..... | ..... | ..... | Belcher. |
| At sea (8 observations) | 18 56 | 123 13 | 1828 | 0 44 W. | ..... | 0·7 W. | ..... | ..... | ..... | ..... | ..... | ..... | Lütke. |
| At sea (2 observations) | 18 45 | 129 50 | 1837 | 0 12 W. | ..... | 0·2 W. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea (3 observations) | 18 28 | 134 50 | 1837 | 0 21 E. | ..... | 0·4 E. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea (6 observations) | 17 25 | 135 25 | 1828 | 0 03 E. | ..... | 0·1 E. | ..... | ..... | ..... | ..... | ..... | ..... | Lütke. |
| At sea (3 observations) | 18 08 | 135 54 | 1833 | 0 36 E. | ..... | 0·6 E. | ..... | ..... | ..... | ..... | ..... | ..... | Prussian ships. |
| At sea (2 observations) | 12 48 | 137 24 | 1831 | 1 12 E. | ..... | 1·2 E. | ..... | ..... | ..... | ..... | ..... | ..... | Prussian ships. |
| At sea (3 observations) | 12 09 | 137 45 | 1828 | 1 34 E. | ..... | 1·6 E. | ..... | ..... | ..... | ..... | ..... | ..... | Lütke. |
| At sea (2 observations) | 19 36 | 140 28 | 1851 | 1 10 W. | ..... | 1·2 W. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| At sea (2 observations) | 18 32 | 140 35 | 1837 | 0 57 E. | ..... | 1·0 E. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea | 16 05 | 140 58 | 1858 | 2 16 E. | ..... | 2·3 E. | ..... | ..... | ..... | ..... | ..... | ..... | Novara. |
| At sea (2 observations) | 12 18 | 140 58 | 1831 | 2 15 E. | ..... | 2·3 E. | ..... | ..... | ..... | ..... | ..... | ..... | Prussian ships. |
| At sea (8 observations) | 12 25 | 143 20 | 1828 | 2 35 E. | ..... | 2·6 E. | ..... | ..... | ..... | ..... | ..... | ..... | Lütke. |
| At sea (8 observations) | 18 18 | 144 25 | 1830 | 3 27 E. | ..... | 3·5 E. | ..... | ..... | ..... | ..... | ..... | ..... | Prussian ships. |

## NORTH EQUATORIAL ZONE II.—Lat. 10° N. to 20° N. (continued).

| Stations. | Lat. N. | Long. E. | Date. | Declination. Observed. | Declination. Correction to Epoch 1842·5. | Declination. Corrected. | Inclination. Observed. | Inclination. Cor. to Epoch 1842·5. | Inclination. Corrected. | Force in British units. Observed. | Force in British units. Cor. to Epoch 1842·5. | Force in British units. Corrected. | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ° ′ | ° ′ | | ° ′ | ..... | ° | ° ′ | | ° | | | | |
| Guahan Island ..... | 13 26 | 144 44 | 1828 | 1 36 E. | ..... | 1·6 E. } 2·3 E. | ..... | ..... | ..... | ..... | ..... | ..... | Dumont d'Urville. |
| | | | 1829 | 2 57 E. | ..... | 3·0 E. } | 12 52 | ..... | 12 9 N. | ..... | ..... | ..... | Lütke. |
| At sea (2 observations) | 13 18 | 144 46 | 1858 | 3 51 E. | ..... | 3·9 E. | ..... | ..... | ..... | ..... | ..... | ..... | Novara. |
| Agagna or Guahan ... | 13 28 | 144 50 | 1819 | 4 39 E. | ..... | ..... | 12 47 | ..... | 12 8 N. | ..... | ..... | ... .. | Freycinet. |
| At sea (2 observations) | 18 42 | 145 09 | 1851 | 0 35 W. | ..... | 0·6 W. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| Assumption Island ... | 19 48 | 145 24 | 1827 | 5 42 E. | ..... | 5·7 E. | ..... | ..... | ..... | ..... | ..... | ..... | Beechey. |
| Gugnan Island ..... | 17 35 | 145 54 | 1819 | 3 30 E. | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | Freycinet. |
| At sea (2 observations) | 18 51 | 146 10 | 1837 | 3 34 E. | ..... | 3·6 E. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea..... | 17 40 | 146 15 | 1819 | 3 50 E. | ..... | ..... | 21 43 | ..... | 21 7 N. | ..... | ..... | ..... | Freycinet. |
| At sea..... | 19 48 | 147 11 | 1819 | 3 50 E. | ..... | ..... | 24 47 | ..... | 24 8 N. | ..... | ..... | ..... | Freycinet. |
| At sea (3 observations) | 12 01 | 149 03 | 1858 | 5 28 E. | ..... | 5·5 E. | ..... | ..... | ..... | ..... | ..... | ..... | Novara. |
| At sea..... | 16 05 | 149 58 | 1858 | 2 16 E. | ..... | 2·3 E. | ..... | ..... | ..... | ..... | ..... | ..... | Novara. |
| At sea (2 observations) | 18 50 | 151 23 | 1837 | 5 34 E. | ..... | 5·6 E. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea (2 observations) | 14 29 | 152 54 | 1831 | 6 45 E. | ..... | 6·8 E. | ..... | ..... | ..... | ..... | ..... | ..... | Prussian ships. |
| At sea (4 observations) | 11 50 | 153 23 | 1858 | 6 09 E. | ..... | 6·2 E. | ..... | ..... | ..... | ..... | ..... | ..... | Novara. |
| At sea (5 observations) | 11 03 | 154 42 | 1858 | 6 40 E. | ..... | 6·7 E. | ..... | ..... | ..... | ..... | ..... | ..... | Novara. |
| At sea (8 observations) | 17 17 | 155 13 | 1830 | 6 55 E. | ..... | 6·9 E. | ..... | ..... | ..... | ..... | ..... | ..... | Prussian ships. |
| At sea (2 observations) | 18 40 | 157 07 | 1836 | 7 15 E. | ..... | 7·3 E. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea (2 observations) | 17 23 | 157 40 | 1851 | 4 52 E. | ..... | 4·9 E. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| At sea (3 observations) | 12 13 | 157 58 | 1828 | 7 46 E. | ..... | 7·8 E. | ..... | ..... | ..... | ..... | ..... | ..... | Lütke. |
| At sea..... | 18 26 | 161 43 | 1836 | 9 24 E. | ..... | 9·4 E. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea..... | 11 27 | 161 52 | 1828 | 8 24 E. | ..... | 8·4 E. | 14 17 | ..... | 14 3 N. | 7·54 | ..... | 7·54 | Lütke. |
| At sea (4 observations) | 17 27 | 162 30 | 1828 | 8 45 E. | ..... | 8·8 E. | ..... | ..... | ..... | ..... | ..... | ..... | Lütke. |
| At sea (2 observations) | 17 38 | 163 42 | 1851 | 6 19 E. | ..... | 6·3 E. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| At sea..... | 18 44 | 163 55 | 1827 | 8 45 E. | ..... | 8·8 E. | 27 55 | ..... | 27 9 N. | 7·69 | ..... | 7·69 | Lütke. |
| Escholtz Island..... | 11 30 | 165 30 | 1825 | 10 52 E. | ..... | 10·9 E. | ..... | ..... | ..... | ..... | ..... | ..... | Kotzebue. |
| At sea (12 observations) | 16 02 | 166 22 | 1830 | 10 08 E. | ..... | 10·1 E. | ..... | ..... | ..... | ..... | ..... | ..... | Prussian ships. |
| At sea (2 observations) | 18 11 | 166 30 | 1836 | 9 28 E. | ..... | 9·5 E. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| Button Island ..... | 11 20 | 169 51 | 1825 | 11 18 E. | ..... | 11·3 E. | ..... | ..... | ..... | ..... | ..... | ..... | Kotzebue. |
| Ailu Island ..... | 10 15 | 170 00 | 1825 | 10 54 E. | ..... | 10·9 E. | ..... | ..... | ..... | ..... | ..... | ..... | Kotzebue. |
| At sea (2 observations) | 17 43 | 171 11 | 1851 | 8 50 E. | ..... | 8·8 E. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| At sea (2 observations) | 19 30 | 172 02 | 1836 | 11 23 E. | ..... | 11·4 E. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea (11 observations) | 10 28 | 174 40 | 1830 | 11 19 E. | ..... | 11·3 E. | ..... | ..... | ..... | ..... | ..... | ..... | Prussian ships. |
| At sea..... | 19 31 | 177 57 | 1836 | 10 21 E. | ..... | 10·4 E. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea (3 observations) | 18 00 | 180 38 | 1851 | 7 25 E. | ..... | 7·4 E. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| At sea (11 observations) | 17 17 | 184 55 | 1831 | 11 03 E. | ..... | 11·1 E. | ..... | ..... | ..... | ..... | ..... | ..... | Prussian ships. |
| At sea (3 observations) | 19 06 | 191 06 | 1851 | 6 40 E. | ..... | 6·7 E. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| At sea..... | 18 32 | 191 09 | 1836 | 12 04 E. | ..... | 12·1 E. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea (10 observations) | 18 16 | 193 47 | 1831 | 9 40 E. | ..... | 9·7 E. | ..... | ..... | ..... | ..... | ..... | ..... | Prussian ships. |
| | | | 1819 | 9 50 E. | ..... | 9·8 E. } | ..... | ..... | ..... | ..... | ..... | ..... | Freycinet. |
| Owyhee ..... | 19 43 | 203 50 | 1824 | 10 14 E. | ..... | 10·2 E. } 10·0 E. | ..... | ..... | ..... | ..... | ..... | ..... | Byron. |
| | | | 1830 | ..... | ..... | ..... | 37 58 | ..... | 38 0 N. | 8·21 | ..... | 8·21 | Douglas. |
| Kowroa ..... | 19 37 | 203 59 | 1836 | 7 43 E. | ..... | 7·7 E. | 39 18 | ..... | 39 3 N. | ..... | ..... | ..... | Bonite. |
| At sea (3 observations) | 19 14 | 204 45 | 1836 | 8 33 E. | ..... | 8·6 E. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea (2 observations) | 19 13 | 209 43 | 1836 | 8 03 E. | ..... | 8·1 E. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea (2 observations) | 18 59 | 214 25 | 1836 | 7 31 E. | ..... | 7·5 E. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea (10 observations) | 17 35 | 215 52 | 1831 | 6 44 E. | ..... | 6·7 E. | ..... | ..... | ..... | ..... | ..... | ..... | Prussian ships. |
| At sea (2 observations) | 18 46 | 218 33 | 1836 | 7 09 E. | ..... | 7·2 E. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea..... | 15 44 | 221 27 | 1828 | 6 53 E. | ..... | 6·9 E. | ..... | ..... | ..... | ..... | ..... | ..... | Prussian ships. |
| At sea (4 observations) | 17 30 | 222 44 | 1827 | 7 18 E. | ..... | 7·3 E. | ..... | ..... | ..... | ..... | ..... | ..... | Lütke. |
| At sea (12 observations) | 18 49 | 223 21 | 1853 | ..... | ..... | ..... | 33 40 | ..... | 33 7 N. | ..... | ..... | ..... | Trollope. |
| At sea (2 observations) | 18 00 | 224 24 | 1836 | 5 50 E. | ..... | 5·8 E. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea..... | 13 13 | 227 00 | 1827 | 5 49 E. | ..... | 5·8 E. | 30 05 | ..... | 30 1 N. | 8·65 | ..... | 8·65 | Lütke. |
| At sea (3 observations) | 11 42 | 228 34 | 1827 | 6 04 E. | ..... | 6·1 E. | ..... | ..... | ..... | ..... | ..... | ..... | Lütke. |
| At sea (12 observations) | 12 05 | 228 50 | 1831 | 5 53 E. | ..... | 5·9 E. | ..... | ..... | ..... | ..... | ..... | ..... | Prussian ships. |
| At sea (2 observations) | 17 02 | 232 19 | 1836 | 7 17 E. | ..... | 7·3 E. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea..... | 11 28 | 236 06 | 1830 | 5 08 E. | ..... | 5·1 E | ..... | ..... | ..... | ..... | ..... | ..... | Erman. |
| At sea..... | 11 18 | 236 14 | 1830 | ..... | ..... | ..... | 25 45 | ..... | 25 8 N. | 8·42 | ..... | 8·42 | Erman. |
| At sea..... | 12 18 | 236 20 | 1830 | ..... | ..... | ..... | 27 15 | ..... | 27 3 N. | 8·35 | ..... | 8·35 | Erman. |
| At sea..... | 13 37 | 236 28 | 1830 | 5 30 E. | ..... | 5·5 E. | 29 45 | ..... | 29 8 N. | 8·55 | ..... | 8·55 | Erman. |
| At sea..... | 15 15 | 236 47 | 1830 | 5 30 E. | ..... | 5·5 E. | 32 28 | ..... | 32 5 N. | 8·77 | ..... | 8·77 | Erman. |

## NORTH EQUATORIAL ZONE II.—Lat. 10° N. to 20° N. (continued).

| Stations. | Lat. N. | Long. E. | Date. | Declination. Observed. | Declination. Correction to Epoch 1842·5. | Declination. Corrected. | Inclination. Observed. | Inclination. Cor. to Epoch 1842·5. | Inclination. Corrected. | Force in British units. Observed. | Force in British units. Cor. to Epoch 1842·5. | Force in British units. Corrected. | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ° ′ | ° ′ | | ° ′ | | ° | ° ′ | | ° | | | | |
| At sea | 16 58 | 237 04 | 1836 | 6 21 E. | ..... | 6·4 E. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea | 16 56 | 237 06 | 1830 | ..... | ..... | ..... | 35 34 | ..... | 35·6 N. | 8·86 | ..... | 8·86 | Erman. |
| At sea | 18 36 | 237 27 | 1830 | ..... | ..... | ..... | 39 03 | ..... | 39·1 N. | 9·06 | ..... | 9·06 | Erman. |
| At sea | 19 40 | 237 38 | 1830 | ..... | ..... | ..... | 40 15 | ..... | 40·3 N. | 9·22 | ..... | 9·22 | Erman. |
| At sea (2 observations) | 16 53 | 241 33 | 1836 | 6 26 E. | ..... | 6·4 E. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea (3 observations) | 16 17 | 244 45 | 1836 | 5 50 E. | ..... | 5·8 E. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| Clarion Island | 18 21 | 245 19 | 1839 | 8 05 E. | ..... | 8·1 E. | 37 03 | ..... | 37·1 N. | 9·52 | ..... | 9·52 | Belcher. |
| At sea (2 observations) | 12 35 | 246 41 | 1836 | 5 49 E. | ..... | 5·8 E. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea (2 observations) | 11 19 | 248 45 | 1836 | 6 40 E. | ..... | 6·7 E. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| Socorro Island | 18 43 | 249 06 | 1839 | 6 56 E. | ..... | 6·9 E. | 40 44 | ..... | 40·7 N. | 9·87 | ..... | 9·87 | Belcher. |
| At sea (2 observations) | 10 38 | 253 42 | 1836 | 7 22 E. | ..... | 7·4 E. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| Acapulco | 16 50 | 260 10 | 1828 | 9 07 E. | ..... | 9·1 E. | ..... | ..... | ..... | ..... | ..... | | Beechey. |
| | | | 1838 | 8 13 E. | ..... | 8·2 E. | 37 57 | ..... | 38·0 | 10·03 | ..... | | Belcher. |
| | | | 1838 | 8 17 E. | ..... | 8·3 E. | 39 05 | ..... | 39·1 | ..... | ..... | 10·06 | La Vénus. |
| | | | 1866 | 8 22 E. | ..... | 8·4 E. | 39 54 | ..... | 39·9 | 10·09 | ..... | | Harkness. |
| | | | | | | 8 5 E. | | | 39·0 N. | | | | |
| Mexico | 19 26 | 260 55 | 1856 | 8 46 E. | ..... | 8·8 E. | 41 26 | ..... | 41·4 N. | 10·11 | ..... | 10·11 | Müller & Sonntag. |
| Chalco | 19 18 | 261 09 | 1856 | 9 03 E. | ..... | 9·1 E. | 43 12 | ..... | 43·2 N. | 10·35 | ..... | 10·35 | Müller & Sonntag. |
| Hamacas | 19 03 | 261 21 | 1856 | 8 28 E. | ..... | 8·5 E. | 42 34 | ..... | 42·6 N. | 10·28 | ..... | 10·28 | Müller & Sonntag. |
| San Andres | 18 59 | 262 45 | 1856 | 8 13 E. | ..... | 8·2 E. | 42 38 | ..... | 42·6 N. | 10·31 | ..... | 10·31 | Müller & Sonntag. |
| Near Orizaba | 18 53 | 262 56 | 1856 | 8 28 E. | ..... | 8·5 E. | 42 51 | ..... | 42·9 N. | 10·34 | ..... | 10·34 | Müller & Sonntag. |
| Potrero | 18 56 | 263 12 | 1856 | 8 39 E. | ..... | 8·7 E. | 42 51 | ..... | 42·9 N. | 10·33 | ..... | 10·33 | Müller & Sonntag. |
| Mirador | 19 13 | 263 23 | 1856 | 8 02 E. | ..... | 8·0 E. | 43 50 | ..... | 43·8 N. | 10·43 | ..... | 10·43 | Müller & Sonntag. |
| Vera Cruz | 19 12 | 263 51 | 1839 | 8 22 E. | ..... | 8·4 E. | ..... | ..... | ..... | ..... | ..... | ..... | Behard. |
| | | | 1856 | 8 17 E. | ..... | 8·3 E. | 43 58 | ..... | 44·0 N. | 10·45 | ..... | 10·45 | Müller & Sonntag. |
| | | | | | | 8·3 E. | | | | | | | |
| At sea (2 observations) | 19 33 | 266 20 | 1838 | 9 32 E. | ..... | 9·5 E. | ..... | ..... | ..... | ..... | ..... | ..... | Behard. |
| At sea (4 observations) | 19 57 | 266 46 | 1839 | 9 39 E. | ..... | 9·7 E. | ..... | ..... | ..... | ..... | ..... | ..... | Behard. |
| Lerma | 19 49 | 269 26 | 1847 | 8 02 E. | ..... | 8·0 E. | ..... | ..... | ..... | ..... | ..... | ..... | Barnett. |
| Campeche | 19 51 | 269 29 | 1839 | 9 27 E. | ..... | 9·5 E. | ..... | ..... | ..... | ..... | ..... | ..... | Behard. |
| Realejo | 12 28 | 272 52 | 1838 | 7 53 E. | ..... | 7·9 E. | 34 37 | ..... | ..... | ..... | ..... | ..... | Belcher. |
| South Key | 16 03 | 273 01 | 1844 | 7 45 E. | ..... | 7·8 E. | ..... | ..... | ..... | ..... | ..... | ..... | Lawrence. |
| Nicaragua | 10 56 | 276 18 | 1834 | ..... | ..... | ..... | 34 05 | ..... | 34·1 | ..... | ..... | ..... | Home. |
| | | | 1839 | 7 00 E. | ..... | 7·0 E. | 34 43 | ..... | 34·7 | ..... | ..... | ..... | Barnett. |
| | | | | | | 7·0 E. | | | 34·4 N. | | | | |
| Cape Gracias a Dios | 15 00 | 276 42 | 1833 | ..... | ..... | ..... | 41 04 | ..... | 41·1 N. | ..... | ..... | ..... | Barnett. |
| The Hobbies | 16 04 | 276 49 | 1833 | 6 00 E. | ..... | 6·0 E. | ..... | ..... | ..... | ..... | ..... | ..... | Barnett. |
| Cayman Island | 19 14 | 278 55 | 1822 | ..... | ..... | ..... | 48 48 | ..... | 48·8 N. | 10·90 | ..... | 10·90 | Sabine. |
| At sea (3 observations) | 19 40 | 279 03 | 1838 | 4 37 E. | ..... | 4·6 E. | ..... | ..... | ..... | ..... | ..... | ..... | Behard. |
| Beacon Key | 15 48 | 280 09 | 1844 | 6 00 E. | ..... | 6·0 E. | ..... | ..... | ..... | ..... | ..... | ..... | Lawrence. |
| Port Royal and Kingston | 17 56 | 283 09 | 1822 | ..... | ..... | ..... | 46 55 | ..... | 46·9 | 10·90 | ..... | | Sabine. |
| | | | 1822 | 4 54 E. | 0 20 W. | 4·6 E. | ..... | ..... | ..... | ..... | ..... | | Owen. |
| | | | 1832 | 5 13 E. | 0 10 W. | 5·1 E. | ..... | ..... | ..... | ..... | ..... | | Foster. |
| | | | 1834 | ..... | ..... | ..... | 47 19 | ..... | 47·3 | ..... | ..... | | Barnett. |
| | | | 1834 | ..... | ..... | ..... | 47 04 | ..... | 47·1 | ..... | ..... | 10·67 | Home. |
| | | | | | | 4·3 E. | | | 47·0 N. | | | | |
| | | | 1837 | 4 18 E. | 0 05 W. | 4·2 E. | ..... | ..... | ..... | ..... | ..... | | Milne. |
| | | | 1847 | 3 40 E. | 0 05 E. | 3·8 E. | ..... | ..... | ..... | ..... | ..... | | Barnett. |
| | | | 1857 | 3 43 E. | 0 15 E. | 4·0 E. | 46 32 | ..... | 46·5 | 10 44 | ..... | | Friesach. |
| Point Morant | 17 55 | 283 44 | 1831 | 5 13 E. | 0 11 W. | 5·0 E. | ..... | ..... | ..... | ..... | ..... | ..... | Austin. |
| Cartagena | 10 25 | 284 25 | 1837 | 5 41 E. | 0 05 W. | 5·6 E. | ..... | ..... | ..... | ..... | ..... | ..... | Milne. |
| Cumberland Harbour | 19 55 | 284 45 | 1837 | 3 31 E. | 0 05 W. | 3·4 E. | ..... | ..... | ..... | ..... | ..... | ..... | Milne. |
| Barranguilla | 10 59 | 284 54 | 1857 | 5 24 E. | 0 15 E. | 5·7 E. | ..... | ..... | ..... | ..... | ..... | ..... | Friesach. |
| Santa Marta | 11 15 | 285 45 | 1837 | 5 29 E. | 0 05 W. | 5·4 E. | ..... | ..... | ..... | ..... | ..... | | Milne. |
| | | | 1857 | 5 04 E. | 0 15 E. | 5·3 E. | 36 34 | ..... | 36·6 | 9·52 | ..... | 9·52 | Friesach. |
| | | | | | | 5·4 E. | | | 36·6 N. | | | | |
| Alta Vela | 17 28 | 288 21 | 1835 | ..... | ..... | ..... | 47 39 | ..... | 47·7 N. | ..... | ..... | ..... | Home. |
| At sea (2 observations) | 19 43 | 290 50 | 1838 | 0 21 W. | 0 04 W. | 0·4 W. | ..... | ..... | ..... | ..... | ..... | ..... | Behard. |
| Curaçoa | 12 06 | 291 04 | 1833 | ..... | ..... | ..... | 38 39 | ..... | 38·7 N. | ..... | ..... | ..... | Zahrtmann. |
| Caracas | 10 31 | 293 03 | 1836 | ..... | ..... | ..... | 37 16 | ..... | 37·3 N. | ..... | ..... | ..... | Home. |
| Porto Rico | 18 29 | 293 46 | 1852 | ..... | ..... | ..... | 50 15 | ..... | 50·3 N. | ..... | ..... | ..... | Norwegian Officers. |
| At sea (2 observations) | 19 39 | 294 06 | 1838 | 1 09 W. | 0 04 W. | 1·2 W. | ..... | ..... | ..... | ..... | ..... | ..... | Behard. |
| St. Thomas | 18 20 | 295 04 | 1834 | ..... | ..... | ..... | 49 29 | ..... | 49·5 | ..... | ..... | | Zahrtmann. |
| | | | 1846 | ..... | ..... | ..... | 49 40 | ..... | 49·7 | ..... | ..... | 10·43 | Schomburgk. |
| | | | 1865 | 0 40 E. | ..... | ..... | 49 38 | ..... | 49·6 | 10·43 | ..... | | Harkness. |
| | | | | | | | | | 49·6 N. | | | | |
| Sainte Croix | 17 45 | 295 16 | 1853 | 1 32 E. | ..... | 1·5 E. | ..... | ..... | ..... | ..... | ..... | ..... | Lang. |
| Dominica | 15 18 | 295 27 | 1826 | 1 15 E. | ..... | 1·3 E. | ..... | ..... | ..... | ..... | ..... | ..... | Zahrtmann. |

## NORTH EQUATORIAL ZONE II.—Lat. 10° N. to 20° N. (continued).

| Stations. | Lat. N. | Long. E. | Date. | Declination. | | | Inclination. | | | Force in British units. | | | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Observed. | Correction to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | |
| | ° ′ | ° ′ | | ° ′ | | ° | ° ′ | | ° | | | | |
| At sea | 19 39 | 295 51 | 1838 | 0 01 E. | ..... | 0·0 | ..... | ..... | ..... | ..... | ..... | ..... | Bérard. |
| Anguilla Island | 18 14 | 296 51 | 1846 | 0 56 E. | ..... | 0·9 E. | 50 15 | ..... | 50·3 N. | ..... | ..... | ..... | Barnett. |
| At sea (2 observations) | 19 53 | 297 17 | 1838 | 0 39 E. | ..... | 0·7 E. | ..... | ..... | ..... | ..... | ..... | ..... | Behard. |
| Antigua | 17 08 | 298 08 | 1840 | 0 42 E. | ..... | 0·7 E. | ..... | ..... | ..... | ..... | ..... | ..... | Milne. |
| | | | 1848 | 0 46 E. | ..... | 0·8 E. | 49 11 | ..... | 49·2 | ..... | ..... | ..... | Barnett. |
| | | | | | | 0·8 E. | | | 49·2 N. | | | | |
| Trinidad (Port Spain) | 10 39 | 298 25 | 1822 | ..... | ..... | ..... | 39 02 | ..... | 39·0 | 8·98 | ..... | 8·98 | Sabine. |
| | | | 1822 | 4 00 E. | ..... | 4·0 E. | ..... | ..... | ..... | ..... | ..... | | Owen. |
| | | | 1830 | ..... | ..... | ..... | 39 00 | ..... | 39·0 | ..... | ..... | | Foster. |
| | | | | | | | | | 39·0 N. | | | | |
| At sea | 19 48 | 299 17 | 1838 | 2 30 E. | ..... | 2·5 E. | ..... | ..... | ..... | ..... | ..... | ..... | Behard. |
| Barbadoes | 13 05 | 300 23 | 1833 | 1 29 E. | ..... | 1·5 E. | ..... | ..... | ..... | ..... | ..... | ..... | Phillips. |
| | | | 1839 | 1 13 E. | ..... | 1·2 E. | ..... | ..... | ..... | ..... | ..... | ..... | Milne. |
| | | | 1846 | 1 27 E. | ..... | 1·5 E. | 43 57 | ..... | 44·0 | ..... | ..... | ..... | Schomburgk. |
| | | | | | | 1·4 E. | | | 44·0 N. | | | | |
| At sea (3 observations) | 11 47 | 311 23 | 1849 | 2 00 W. | ..... | 2·0 W. | ..... | ..... | ..... | ..... | ..... | ..... | Hudson. |
| At sea | 18 28 | 317 07 | 1839 | ..... | ..... | ..... | 52 57 | ..... | 53·0 N. | 9·84 | ..... | 9·84 | Sulivan. |
| At sea | 15 40 | 317 36 | 1839 | ..... | ..... | ..... | 50 07 | ..... | 50·1 N. | 9·73 | ..... | 9·73 | Sulivan. |
| At sea | 12 50 | 318 28 | 1839 | ..... | ..... | ..... | 47 05 | ..... | 47·1 N. | 9·35 | ..... | 9·35 | Sulivan. |
| At sea (5 observations) | 17 35 | 318 38 | 1829 | 3 47 W. | ..... | 3·8 W. | ..... | ..... | ..... | ..... | ..... | ..... | Rumker. |
| At sea (3 observations) | 14 08 | 318 45 | 1829 | 4 09 W. | ..... | 4·2 W. | ..... | ..... | ..... | ..... | ..... | ..... | Rumker. |
| At sea | 10 07 | 319 51 | 1839 | ..... | ..... | ..... | 42 27 | ..... | 42·5 N. | 9·09 | ..... | 9·09 | Sulivan. |
| At sea | 18 18 | 321 24 | 1846 | 11 24 W. | ..... | 11·4 W. | ..... | ..... | ..... | ..... | ..... | ..... | Sulivan. |
| At sea | 17 02 | 321 51 | 1846 | 9 38 W. | ..... | 9·6 W. | ..... | ..... | ..... | ..... | ..... | ..... | Sulivan. |
| At sea | 19 19 | 321 51 | 1839 | 11 56 W. | ..... | 11·9 W. | ..... | ..... | ..... | ..... | ..... | ..... | Du Petit Thouars. |
| At sea | 15 21 | 322 28 | 1846 | 10 49 W. | ..... | 10·8 W. | ..... | ..... | ..... | ..... | ..... | ..... | Sulivan. |
| At sea | 16 36 | 323 27 | 1839 | 11 13 W. | ..... | 11·2 W. | ..... | ..... | ..... | ..... | ..... | ..... | Du Petit Thouars. |
| At sea | 13 55 | 325 01 | 1839 | 11 34 W. | ..... | 11·6 W. | ..... | ..... | ..... | ..... | ..... | ..... | Du Petit Thouars. |
| At sea | 17 40 | 325 36 | 1829 | 12 29 W. | ..... | 12·5 W. | ..... | ..... | ..... | ..... | ..... | ..... | Lütke. |
| At sea | 10 20 | 325 50 | 1842 | ..... | ..... | ..... | ..... | ..... | ..... | 9·02 | ..... | 9·02 | Lefroy. |
| At sea | 19 05 | 326 25 | 1830 | ..... | ..... | ..... | 52 42 | ..... | 52·7 N. | 9·58 | ..... | 9·58 | Erman. |
| At sea (3 observations) | 17 36 | 326 36 | 1829 | 12 39 W. | ..... | 12·7 W. | ..... | ..... | ..... | ..... | ..... | ..... | Prussian ships. |
| At sea | 11 58 | 327 30 | 1839 | 11 42 W. | ..... | 11·7 W. | ..... | ..... | ..... | ..... | ..... | ..... | Du Petit Thouars. |
| At sea | 14 32 | 327 40 | 1850 | 11 15 W. | ..... | 11·3 W. | ..... | ..... | ..... | ..... | ..... | ..... | Young. |
| At sea (2 observations) | 16 18 | 328 52 | 1830 | 12 36 W. | ..... | 12·6 W. | 49 03 | ..... | 49·1 N. | 9·17 | ..... | 9·17 | Erman. |
| At sea (3 observations) | 19 22 | 329 33 | 1846 | 16 22 W. | ..... | 16·4 W. | ..... | ..... | ..... | ..... | ..... | ..... | Bérard. |
| At sea | 18 47 | 329 36 | 1830 | 13 02 W. | ..... | 13·0 W. | ..... | ..... | ..... | ..... | ..... | ..... | Erman. |
| At sea (3 observations) | 18 05 | 329 58 | 1850 | 17 12 W. | ..... | 17·2 W. | ..... | ..... | ..... | ..... | ..... | ..... | Dayman. |
| At sea (3 observations) | 18 11 | 330 00 | 1843 | 13 52 W. | ..... | 13·9 W. | 49 35 | ..... | 49·6 N. | ..... | ..... | ..... | Ross. |
| At sea (2 observations) | 14 53 | 330 21 | 1830 | 12 58 W. | ..... | 13·0 W. | ..... | ..... | ..... | ..... | ..... | ..... | Erman. |
| At sea | 14 03 | 330 30 | 1838 | ..... | ..... | ..... | 45 26 | ..... | 45·4 N. | ..... | ..... | ..... | Sulivan. |
| At sea | 14 36 | 330 43 | 1830 | ..... | ..... | ..... | 46 31 | ..... | 46·5 N. | 9·58 | ..... | 9·58 | Erman. |
| At sea (2 observations) | 11 32 | 330 43 | 1858 | 16 04 W. | ..... | 16·1 W. | ..... | ..... | ..... | ..... | ..... | ..... | Novara. |
| At sea | 12 36 | 331 29 | 1830 | 12 23 W. | ..... | 12·4 W. | 44 03 | ..... | 44·1 N. | ..... | ..... | ..... | Erman. |
| At sea (2 observations) | 17 35 | 331 32 | 1837 | 14 12 W. | ..... | 14·2 W. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea (2 observations) | 13 18 | 331 34 | 1830 | 13 01 W. | ..... | 13·0 W. | ..... | ..... | ..... | ..... | ..... | ..... | Erman. |
| At sea (2 observations) | 16 47 | 331 34 | 1850 | ..... | ..... | ..... | 47 28 | ..... | 47·5 N. | ..... | ..... | ..... | Dayman. |
| At sea (3 observations) | 11 15 | 332 17 | 1830 | 13 39 W. | ..... | 13·7 W. | ..... | ..... | ..... | ..... | ..... | ..... | Erman. |
| At sea (2 observations) | 14 55 | 332 19 | 1843 | 13 49 W. | ..... | 13·8 W. | 45 12 | ..... | 45·2 N. | ..... | ..... | ..... | Ross. |
| At sea (2 observations) | 14 38 | 332 22 | 1850 | 16 34 W. | ..... | 16·6 W. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| At sea | 11 03 | 332 25 | 1830 | ..... | ..... | ..... | 41 54 | ..... | 41·9 N. | 8·64 | ..... | 8·64 | Erman. |
| At sea (3 observations) | 15 36 | 332 48 | 1850 | 17 17 W. | ..... | 17·3 W. | ..... | ..... | ..... | ..... | ..... | ..... | Dayman. |
| At sea (2 observations) | 18 13 | 333 16 | 1833 | 16 38 W. | ..... | 16·6 W. | ..... | ..... | ..... | ..... | ..... | ..... | Prussian ships. |
| At sea (2 observations) | 10 20 | 333 25 | 1830 | 13 06 W. | ..... | 13·1 W. | 40 49 | ..... | 40·8 N. | 8·10 | ..... | 8·10 | Erman. |
| At sea | 14 03 | 333 30 | 1838 | ..... | ..... | ..... | 45 26 | ..... | 45·4 N. | 8·65 | ..... | 8·65 | Sulivan. |
| At sea | 10 08 | 333 32 | 1830 | 13 10 W. | ..... | 13·2 W. | ..... | ..... | ..... | ..... | ..... | ..... | Erman. |
| At sea (2 observations) | 11 34 | 333 35 | 1850 | 16 36 W. | ..... | 16·6 W. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| At sea | 12 17 | 333 35 | 1832 | 13 43 W. | ..... | 13·7 W. | ..... | ..... | ..... | ..... | ..... | ..... | FitzRoy. |
| At sea (3 observations) | 12 50 | 333 38 | 1852 | 16 38 W. | ..... | 16·6 W. | ..... | ..... | ..... | ..... | ..... | ..... | Denham. |
| At sea (7 observations) | 11 48 | 333 38 | 1829 | 14 23 W. | ..... | 14·4 W. | ..... | ..... | ..... | ..... | ..... | ..... | Prussian ships. |
| At sea | 12 05 | 333 40 | 1838 | ..... | ..... | ..... | 42 45 | ..... | 42·8 N. | 8·46 | ..... | 8·46 | Sulivan. |
| At sea | 10 24 | 333 47 | 1852 | 16 49 W. | ..... | 16·8 W. | ..... | ..... | ..... | ..... | ..... | ..... | Denham. |
| At sea (2 observations) | 14 22 | 334 10 | 1837 | 14 49 W. | ..... | 14·8 W. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea (2 observations) | 12 53 | 334 16 | 1843 | 14 19 W. | ..... | 14·3 W. | 42 02 | ..... | 42·0 N. | ..... | ..... | ..... | Ross. |

## NORTH EQUATORIAL ZONE II.—Lat. 10° N. to 20° N. (continued).

| Stations. | Lat. N. | Long. E. | Date. | Declination. | | | Inclination. | | | Force in British units. | | | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Observed. | Correction to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | |
| | ° ′ | ° ′ | | ° ′ | | ° | ° ′ | | ° | | | | |
| At sea (2 observations) | 13 20 | 334 17 | 1842 | 13 25 w. | ..... | 13·4 w. | ..... | ..... | ..... | ..... | ..... | ..... | Bérard. |
| At sea (2 observations) | 14 57 | 334 18 | 1843 | 16 00 w. | ..... | 16·0 w. | ..... | ..... | ..... | ..... | ..... | ..... | Pasley. |
| At sea (3 observations) | 11 53 | 334 29 | 1843 | 13 41 w. | ..... | 13·7 w. | 40 41 | ..... | 40·7 N. | ..... | ..... | ..... | Ross. |
| At sea (3 observations) | 15 44 | 334 30 | 1852 | 17 50 w. | ..... | 17·8 w. | ..... | ..... | ..... | ..... | ..... | ..... | Denham. |
| At sea (4 observations) | 14 18 | 334 30 | 1850 | 17 07 w. | ..... | 17·1 w. | ..... | ..... | ..... | ..... | ..... | ..... | Dayman. |
| At sea | 13 45 | 334 34 | 1822 | 15 15 w. | ..... | 15·3 w. | 45 06 | ..... | 45·1 N. | ..... | ..... | ..... | Duperrey. |
| At sea | 15 49 | 334 35 | 1822 | 15 15 w. | ..... | 15·3 w. | 47 21 | ..... | 47·4 N. | ..... | ..... | ..... | Duperrey. |
| At sea (2 observations) | 11 13 | 334 35 | 1842 | 15 00 w. | ..... | 15·0 w. | ..... | ..... | ..... | ..... | ..... | ..... | Bérard. |
| At sea | 15 10 | 334 39 | 1853 | ..... | ..... | ..... | 43 20 | ..... | 43·3 N. | ..... | ..... | ..... | Trollope. |
| At sea | 13 20 | 334 40 | 1832 | 14 49 w. | ..... | 14·8 w. | ..... | ..... | ..... | ..... | ..... | ..... | FitzRoy. |
| At sea | 16 35 | 334 42 | 1842 | 17 00 w. | ..... | 17·0 w. | ..... | ..... | ..... | ..... | ..... | ..... | Bérard. |
| At sea | 10 00 | 334 44 | 1840 | 15 47 w. | ..... | 15·8 w. | ..... | ..... | ..... | ..... | ..... | ..... | Ross. |
| At sea | 16 42 | 334 46 | 1852 | 18 23 w. | ..... | 18·4 w. | ..... | ..... | ..... | ..... | ..... | ..... | Denham. |
| At sea (3 observations) | 14 16 | 334 50 | 1853 | ..... | ..... | ..... | 42 20 | ..... | 42·3 N. | ..... | ..... | ..... | Trollope. |
| At sea (2 observations) | 17 32 | 334 55 | 1841 | ..... | ..... | ..... | 45 42 | ..... | 45·7 N. | ..... | ..... | ..... | The John Fleming. |
| Antonio | 17 10 | 334 57 | 1822 | 15 03 w. | ..... | 15·1 w. | ..... | ..... | ..... | ..... | ..... | ..... | Duperrey. |
| Porto Grande | 16 53 | 334 57 | 1841 | ..... | ..... | ..... | 48 44 | ..... | 48·7 | ..... | ..... | ..... | Fishbourne. |
| | | | 1841 | ..... | ..... | ..... | 48 56 | ..... | 48·9 | ..... | ..... | ..... | Trollope. |
| | | | 1842 | ..... | ..... | ..... | 45 35 | ..... | 45·6 | ..... | ..... | ..... | Allen. |
| | | | 1853 | ..... | ..... | ..... | 48 33 | ..... | 48·6 | ..... | ..... | ..... | Trollope. |
| | | | | | | | | | 47·9 N. | | | | |
| At sea (3 observations) | 11 58 | 335 02 | 1828 | 13 51 w. | ..... | 13·9 w. | ..... | ..... | ..... | ..... | ..... | ..... | Lütke. |
| At sea | 11 19 | 335 07 | 1840 | ..... | ..... | ..... | 41 01 | ..... | 41·0 N. | 8·35 | ..... | 8·35 | Ross. |
| At sea | 13 14 | 335 20 | 1843 | 15 15 w. | ..... | 15·3 w. | ..... | ..... | ..... | ..... | ..... | ..... | Pasley. |
| At sea | 18 20 | 335 30 | 1838 | ..... | ..... | ..... | 50 45 | ..... | 50·8 N. | 8·84 | ..... | 8·84 | Sulivan. |
| At sea | 12 12 | 335 30 | 1840 | 16 26 w. | ..... | 16·4 w. | ..... | ..... | ..... | ..... | ..... | ..... | Ross. |
| At sea | 18 38 | 335 30 | 1853 | ..... | ..... | ..... | 45 13 | ..... | 45·2 N. | ..... | ..... | ..... | Trollope. |
| At sea (4 observations) | 13 04 | 335 31 | 1850 | 17 55 w. | ..... | 17·9 w. | ..... | ..... | ..... | ..... | ..... | ..... | Dayman. |
| At sea | 12 39 | 335 35 | 1840 | ..... | ..... | ..... | 43 17 | ..... | 43·3 N. | 8·54 | ..... | 8·54 | Ross. |
| At sea (2 observations) | 12 22 | 335 50 | 1837 | 16 02 w. | ..... | 16·0 w. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea | 11 42 | 336 00 | 1838 | ..... | ..... | ..... | 39 14 | ..... | 39·2 N. | ..... | ..... | ..... | Stanley. |
| At sea (2 observations) | 10 42 | 336 02 | 1843 | 12 49 w. | ..... | 12·8 w. | 38 02 | ..... | 38·0 N. | ..... | ..... | ..... | Ross. |
| At sea (2 observations) | 13 00 | 336 12 | 1850 | ..... | ..... | ..... | 41 10 | ..... | 41·2 N. | ..... | ..... | ..... | Dayman. |
| At sea (3 observations) | 15 13 | 336 21 | 1832 | 15 43 w. | ..... | 15·7 w. | ..... | ..... | ..... | ..... | ..... | ..... | FitzRoy. |
| At sea | 14 43 | 336 21 | 1836 | 17 02 w. | ..... | 17·0 w. | ..... | ..... | ..... | ..... | ..... | ..... | FitzRoy. |
| At sea | 10 13 | 336 28 | 1837 | 16 59 w. | ..... | 17·0 w. | ..... | ..... | ..... | ..... | ..... | ..... | Du Petit Thouars. |
| At sea | 14 56 | 336 28 | 1840 | 16 26 w. | ..... | 16·4 w. | ..... | ..... | ..... | ..... | ..... | ..... | Ross. |
| Porto Praya | 14 54 | 336 30 | 1822 | 15 00 w. | ..... | 15·0 w. | ..... | ..... | ..... | ..... | ..... | | Owen. |
| | | | 1822 | ..... | ..... | ..... | 45 26 | ..... | 45·4 | 8·93 | ..... | | Sabine. |
| | | | 1826 | 18 30 w. | ..... | 18·5 w. | 45 45 | ..... | 45·8 | ..... | ..... | | Dumont d'Urville. |
| | | | 1826 | ..... | ..... | ..... | ..... | ..... | ..... | 8·82 | ..... | | King. |
| | | | 1836 | 16 30 w. | ..... | 16 5 w. | 45 46 | ..... | 45·8 | 8·66 | ..... | 8·76 | FitzRoy. |
| | | | 1840 | 16 26 w. | ..... | 16·4 w. | 45 25 | ..... | 45·4 | 8·65 | ..... | | Ross. |
| | | | 1840 | ..... | ..... | ..... | 45 19 | ..... | 45·3 | ..... | ..... | | Crozier. |
| | | | 1843 | 18 12 w. | ..... | 18·2 w. | 44 52 | ..... | 44·9 | ..... | ..... | | Belcher. |
| | | | | | | 16·9 w. | | | 45·4 N. | | | | |
| At sea | 13 36 | 336 36 | 1846 | 17 04 w. | ..... | 17·1 w. | ..... | ..... | ..... | ..... | ..... | ..... | Bérard. |
| At sea (10 observations) | 17 45 | 336 47 | 1847 | 18 16 w. | ..... | 18·3 w. | ..... | ..... | ..... | ..... | ..... | ..... | Stanley. |
| At sea (8 observations) | 12 17 | 336 48 | 1847 | 14 58 w. | ..... | 15·0 w. | ..... | ..... | ..... | ..... | ..... | ..... | Stanley. |
| At sea | 17 50 | 336 50 | 1832 | 17 06 w. | ..... | 17·1 w. | ..... | ..... | ..... | ..... | ..... | ..... | FitzRoy. |
| At sea | 17 10 | 336 55 | 1840 | ..... | ..... | ..... | 47 52 | ..... | 47·9 N. | 8·72 | ..... | 8·72 | Ross. |
| At sea | 19 50 | 336 56 | 1826 | 18 30 w. | ..... | 18·5 w. | ..... | ..... | ..... | ..... | ..... | ..... | Lütke. |
| At sea (2 observations) | 11 44 | 336 58 | 1837 | 17 16 w. | ..... | 17·3 w. | ..... | ..... | ..... | ..... | ..... | ..... | Du Petit Thouars. |
| At sea | 12 37 | 337 11 | 1826 | 14 15 w. | ..... | 14·3 w. | ..... | ..... | ..... | ..... | ..... | ..... | D'Urville. |
| At sea (4 observations) | 12 42 | 337 13 | 1846 | 17 07 w. | ..... | 17·1 w. | ..... | ..... | ..... | ..... | ..... | ..... | Bérard. |
| At sea | 16 01 | 337 26 | 1838 | ..... | ..... | ..... | 44 33 | ..... | 44·6 N. | ..... | ..... | ..... | Stanley. |
| At sea | 19 06 | 337 43 | 1832 | 17 39 w. | ..... | 17·7 w. | ..... | ..... | ..... | ..... | ..... | ..... | FitzRoy. |
| At sea (4 observations) | 12 38 | 337 44 | 1850 | 18 08 w. | ..... | 18·1 w. | ..... | ..... | ..... | ..... | ..... | ..... | Dayman. |
| At sea | 18 42 | 337 50 | 1839 | 17 58 w. | ..... | 18·0 w. | ..... | ..... | ..... | ..... | ..... | ..... | Ross. |
| At sea | 19 31 | 338 03 | 1832 | 18 06 w. | ..... | 18·1 w. | ..... | ..... | ..... | ..... | ..... | ..... | FitzRoy. |
| At sea | 10 24 | 338 06 | 1850 | 16 03 w. | ..... | 16·1 w. | ..... | ..... | ..... | ..... | ..... | ..... | Dayman. |
| At sea | 19 08 | 338 07 | 1840 | ..... | ..... | ..... | 49 47 | ..... | 49·8 N. | 8·77 | ..... | 8·77 | Ross. |
| At sea | 13 43 | 338 18 | 1843 | ..... | ..... | ..... | 41 51 | ..... | 41·9 N. | ..... | ..... | ..... | Belcher. |
| At sea (3 observations) | 10 41 | 338 32 | 1837 | 16 15 w. | ..... | 16·3 w. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |

## NORTH EQUATORIAL ZONE II.—Lat. 10° N. to 20° N. (continued).

| Stations. | Lat. N. | Long. E. | Date. | Declination. | | | Inclination. | | | Force in British units. | | | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Observed. | Correction to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | |
| | ° ′ | ° ′ | | ° ′ | | ° | ° ′ | | ° | | | | |
| At sea (2 observations) | 12 23 | 339 10 | 1836 | 16 54 w. | ..... | 16·9 w. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea | 11 53 | 339 37 | 1843 | ..... | ..... | ..... | 39 27 | ..... | 39·5 N. | ..... | ..... | ..... | Belcher. |
| At sea (2 observations) | 18 16 | 339 54 | 1836 | 19 48 w. | ..... | 19·8 w. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea | 10 35 | 340 26 | 1843 | 15 35 w. | ..... | 15·6 w. | ..... | ..... | ..... | ..... | ..... | ..... | Belcher. |
| At sea | 10 55 | 340 28 | 1845 | ..... | ..... | ..... | 35 23 | ..... | 35·4 N. | ..... | ..... | ..... | Belcher. |
| At sea | 12 52 | 340 50 | 1846 | 19 04 w. | ..... | 19·1 w. | ..... | ..... | ..... | ..... | ..... | ..... | Denham. |
| Gambia River | 13 08 | 343 27 | 1822 | ..... | ..... | ..... } 17·9 w. | 40 23 | ..... | 40·4 } 40·4 N. | 8·55 | ..... | } 8·55 | Sabine. |
| | | | 1826 | 17 54 w. | ..... | 17·9 w. } | ..... | ..... | ..... } | ..... | ..... | } | Owen. |
| Guancho | 11 40 | 344 15 | 1846 | 19 12 w. | ..... | 19·2 w. | ..... | ..... | ..... | ..... | ..... | ..... | Denham. |
| Bulama | 11 33 | 344 21 | 1846 | 19 10 w. | ..... | 19·2 w. | ..... | ..... | ..... | ..... | ..... | ..... | Denham. |
| Bissao | 11 52 | 344 23 | 1826 | 18 11 w. | ..... | 18·2 w. } 19·2 w. | ..... | ..... | ..... | ..... | ..... | ..... | Owen. |
| | | | 1846 | 20 13 w. | ..... | 20·2 w. } | ..... | ..... | ..... | ..... | ..... | ..... | Denham. |

## NORTH EQUATORIAL ZONE III.—LATITUDE 20° TO 30° N.

*Authorities.*

Vogel ..... { Royal Geographical Society's Journal, vol. xxv.; and MSS. of the Observer in the Magnetic Office.

D'Hericourt ..... }
Laplace ..... }
Becquerel ..... } MSS. in Magnetic Office, received from L. S. Kämtz.
Haines ..... }
Brown ..... }
Blosseville ..... }

Schlagintweit ..... Scientific Mission to India and High Asia (Leipzig and London, 1861).

Fenner ..... }
Grieve ..... }
Campbell ..... }
Fisher ..... }
Boileau ..... } Schlagintweit's Scientific Mission as above cited.
Broun ..... }
Hodgson ..... }
Gerard ..... }
Blosseville ..... }

Basevi ..... } Reports of the Great Trigonometrical Survey of India (Dehra Doon).
Montgomerie .... }

Bonite ..... } Voyage de la Bonite (Paris, 1842).
Darondeau ..... }

Belcher ..... { MSS. in the Magnetic Office; and Contributions to Terrestrial Magnetism (Sabine in Philosophical Transactions).

| | |
|---|---|
| Novara (Austrian Frigate) | Reise um die Erde (Wien, 1862–65). |
| Collinson | MSS. in British Hydrographic Office. |
| Blackwood | |
| Richards | |
| Lawrence | |
| Crane | |
| American Expedit$^{n}$ | |
| Lütke | Mem. by Lenz in the Sci. Mem. Acad. St. Petersburg; and L. S. Kämtz, MSS. |
| Duperrey | L. S. Kämtz, MSS. |
| D'Urville | |
| Du Petit Thouars | |
| Jehenne, Freycinet | |
| Beechey | |
| Barnett | |
| Berghaus | |
| Milne | |
| Austin | |
| Smith | |
| Foster | |
| Byron | |
| Hudson | |
| Young | |
| Rumker | |
| Sulivan | |
| Prussian ships | |
| Douglas | Report on the Variations of the Earth's Magnetic Force (Brit. Assoc. Reports, 1837). |
| Friesach | Memoirs of the Imperial Academy of Sciences, Vienna, vols. xxix. to xliv. |
| La Vénus | Voyage de la Vénus (Paris, 1841). |
| Harkness | Smithsonian Contributions, vol. xviii. |
| United States Coast Survey | United States Coast-Survey Reports. |
| Emory | |
| Graham | |
| Nicollet | |
| Bérard | MSS. in the Magnetic Office, received from Admiral Duperrey. |
| Behard | |
| Dumoulin | |
| Deville | |
| FitzRoy | Surveying Voyage of the 'Beagle' (London, 1839). |
| Ross | Contributions to Terrestrial Magnetism (Sabine in Phil. Trans.) and MSS. in the Magnetic Office. |
| Crozier | |
| Vidal | |
| Bethune | |
| Sulivan | |
| Stanley | |
| Sabine | Pendulum and other Experiments (London, 1825). |

## NORTH EQUATORIAL ZONE III.—Lat. 20° N. to 30° N.

| Stations. | Lat. N. | Long. E. | Date. | Declination. | | | Inclination. | | | Force in British units. | | | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Observed. | Correction to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | |
| | ° ′ | ° ′ | | ° ′ | ° ′ | ° | ° ′ | | ° | | | | |
| Mourzouk | 25 52 | 14 12 | 1853 | 13 05 W. | ..... | 13·1 W. | 38 38 | ..... | 38·6 N. | ..... | ..... | ..... | Vogel. |
| Tejeri | 24 19 | 14 52 | 1854 | 13 09 W. | ..... | 13·2 W. | ..... | ..... | ..... | ..... | ..... | ..... | Vogel. |
| Gastrone | 24 53 | 15 10 | 1854 | 13 13 W. | ..... | 13·2 W. | ..... | ..... | ..... | ..... | ..... | ..... | Vogel. |
| Sokna | 29 15 | 15 30 | 1853 | ..... | ..... | ..... | 43 22 | ..... | 43·4 N. | ..... | ..... | ..... | Vogel. |
| Sinai | 28 33 | 34 10 | 1847 | ..... | ..... | ..... | 36 41 | ..... | 36·7 N. | ..... | ..... | ..... | D'Hericourt. |
| Ras Mahomet | 27 43 | 34 22 | 1832 | 9 48 W. | ..... | 9·8 W. | ..... | ..... | ..... | ..... | ..... | ..... | Becquerel. |
| Kassance Island | 24 58 | 37 12 | 1832 | 7 51 W. | ..... | 7·9 W. | ..... | ..... | ..... | ..... | ..... | ..... | Becquerel. |
| Grane | 29 23 | 47 58 | 1825 | 6 00 W. | ..... | 6·0 W. | ..... | ..... | ..... | ..... | ..... | ..... | Haines. |
| Telodji Island | 29 27 | 48 16 | 1824 | 5 22 W. | ..... | 5·4 W. | ..... | ..... | ..... | ..... | ..... | ..... | Haines. |
| Manamah | 29 58 | 48 25 | 1827 | 4 50 W. | ..... | 4·8 W. | ..... | ..... | ..... | ..... | ..... | ..... | Haines. |
| Karnak | 29 10 | 50 15 | 1824 | 4 35 W. | ..... | 4·6 W. | ..... | ..... | ..... | ..... | ..... | ..... | Haines. |
| Jask Bay | 25 48 | 57 45 | 1829 | 3 20 W. | ..... | 3·3 W. | ..... | ..... | ..... | ..... | ..... | ..... | Haines. |
| Gutter Bay | 25 10 | 62 02 | 1829 | 1 20 W. | ..... | 1·3 W. | ..... | ..... | ..... | ..... | ..... | ..... | Haines. |
| Karráchee | 24 46 | 67 01 | 1848 | 0 17 E. | ..... | 0·3 E. } 0·2 E. | ..... | ..... | ..... | ..... | ..... | ..... | Fenner. |
| | | | 1856 | 0 06 E. | ..... | 0·1 E. | ..... | ..... | ..... | ..... | ..... | ..... | Schlagintweit. |
| Vari Creek | 23 52 | 67 49 | 1848 | 0 12 E. | ..... | 0·2 E. | ..... | ..... | ..... | ..... | ..... | ..... | Grieve. |
| Sevan | 26 25 | 67 57 | 1856 | 0 35 E. | ..... | 0·6 E. | ..... | ..... | ..... | ..... | ..... | ..... | Schlagintweit. |
| Mouth of the Tir River | 23 38 | 68 05 | 1848 | 0 24 E. | ..... | 0·4 E. | ..... | ..... | ..... | ..... | ..... | ..... | Grieve. |
| Near Moinda Point | 23 36 | 68 22 | 1848 | 0 51 E. | ..... | 0·9 E. | ..... | ..... | ..... | ..... | ..... | ..... | Grieve. |
| Neráni Creek | 23 23 | 68 25 | 1848 | 0 18 E. | ..... | 0·3 E. | ..... | ..... | ..... | ..... | ..... | ..... | Grieve. |
| Lalchatta Tomb | 28 47 | 68 36 | 1848 | 1 12 E. | ..... | 1·2 E. | ..... | ..... | ..... | ..... | ..... | ..... | Grieve. |
| Yáku Swamp | 23 07 | 68 37 | 1848 | 0 29 E. | ..... | 0 5 E. | ..... | ..... | ..... | ..... | ..... | ..... | Grieve. |
| Shikarpur | 27 55 | 68 52 | 1856 | ..... | ..... | ..... | 36 02 | ..... | 36·0 N. | 9·89 | ..... | 9·89 | Schlagintweit. |
| Abdullah Shah | 22 25 | 69 00 | 1848 | 0 43 E. | ..... | 0·7 E. | ..... | ..... | ..... | ..... | ..... | ..... | Campbell. |
| Bhuj | 23 17 | 69 40 | 1856 | 0 12 E. | ..... | 0·2 E. | 28 25 | ..... | 28·4 N. | 9·11 | ..... | 9·11 | Schlagintweit. |
| Tomb | 22 58 | 70 01 | 1848 | 1 27 E. | ..... | 1·5 E. | ..... | ..... | ..... | ..... | ..... | ..... | Campbell. |
| Rajkot | 22 13 | 71 07 | 1856 | 0 13 E. | ..... | 0·2 E. | ..... | ..... | ..... | ..... | ..... | ..... | Schlagintweit. |
| Surat | 21 06 | 72 57 | 1848 | 1 00 E. | ..... | 1·0 E. | ..... | ..... | ..... | ..... | ..... | ..... | Grieve. |
| Mean of 8 stations in Rajvara | 27 00 | 75 00 | 1835 | 0 52 E. | ..... | 0·9 E. | ..... | ..... | ..... | ..... | ..... | ..... | Boileau. |
| Chickuldah | 21 24 | 75 56 | 1867 | 1 54 E. | ..... | 1·9 E. | 25 42 | ..... | 25·7 N. | 8·86 | ..... | 8·86 | Basevi. |
| Kurnal | 29 38 | 76 46 | 1828 | 1 31 E. | ..... | 1·5 E. | ..... | ..... | ..... | ..... | ..... | ..... | Broun. |
| Bhopal | 23 16 | 77 22 | 1828 | 0 39 E. | ..... | 0·7 E. | ..... | ..... | ..... | ..... | ..... | ..... | Hodgson. |
| Sironi | 24 09 | 77 39 | 1828 | 0 57 E. | ..... | 1·0 E. | ..... | ..... | ..... | ..... | ..... | ..... | Hodgson. |
| Badgaon | 20 44 | 77 39 | 1868 | 0 55 E. | ..... | 0·9 E. | 22 41 | ..... | 22·7 N. | 8·64 | ..... | 8·64 | Basevi. |
| Kalianpur | 24 07 | 77 42 | 1867 | 1 49 E. | ..... | 1·8 E. | 30 18 | ..... | 30·3 N. | 9·09 | ..... | 9·09 | Basevi. |
| Ehmadpur | 23 36 | 77 43 | 1867 | 2 06 E. | ..... | 2·1 E. | 29 54 | ..... | 29·9 N. | 8·95 | ..... | 8·95 | Basevi. |
| Meerut | 29 00 | 77 44 | 1856 | 1 48 E. | 0 14 W. | 1·6 E. } 2·0 E. | ..... | ..... | ..... | ..... | ..... | ..... | Schlagintweit. |
| | | | 1867 | 2 46 E. | 0 25 W. | 2·4 E. | 39 07 | −0 25 | 38·7 N. | 9·55 | ..... | 9·55 | Basevi. |
| Pahargurk | 24 56 | 77 44 | 1867 | 2 10 E. | 0 25 W. | 1·8 E. | 31 59 | ..... | 32·0 N. | 9·09 | ..... | 9·09 | Basevi. |
| Dholpur | 26 45 | 77 55 | 1823 | 1 25 E. | 0 19 E. | 1·7 E. | ..... | ..... | ..... | ..... | ..... | ..... | Hodgson. |
| Agra | 27 09 | 78 02 | 1823 | 1 25 E. | 0 19 E. | 1·7 E. | ..... | ..... | ..... | ..... | ..... | | Gerard. |
| | | | 1823 | 1 23 E. | 0 19 E. | 1·7 E. | ..... | ..... | ..... | ..... | ..... | | Hodgson. |
| | | | 1856 | 1 20 E. | 0 14 W. | 1·1 E. 1·7 E. | ..... | ..... | 36·0 N. | ..... | ..... | 9·34 | Schlagintweit. |
| | | | 1867 | 2 46 E. | 0 25 W. | 2·4 E. | 36 01 | ..... | 36·0 | 9·34 | ..... | | Basevi. |
| Aligárh | 27 54 | 78 04 | 1856 | 1 37 E. | 0 14 W. | 1·4 E. | 36 59 | ..... | 37·0 N. | ..... | ..... | ..... | Schlagintweit. |
| Sagér | 23 50 | 78 43 | 1856 | ..... | ..... | ..... | 29 59 | ..... | 30·0 N. | ..... | ..... | ..... | Schlagintweit. |
| Nágri | 20 25 | 78 53 | 1856 | ..... | ..... | ..... | 22 50 | ..... | 22·8 N. | 9·37 | ..... | 9·37 | Schlagintweit. |
| Ramnugger | 29 24 | 79 10 | 1869 | ..... | ..... | ..... | 40 06 | −0 27 | 39·7 N. | 9·60 | ..... | 9·60 | Montgomerie. |
| Nynee Tal | 29 23 | 79 30 | 1856 | 2 28 E. | 0 14 W. | 2 2 E. | 38 34 | −0 14 | 38·3 } 38·8 N. | 9·86 | ..... | 9·72 | Schlagintweit. |
| | | | 1869 | ..... | ..... | ..... | 39 50 | −0 27 | 39·4 | 9·58 | ..... | | Montgomerie. |
| Nauagau | 25 56 | 79 32 | 1823 | 1 19 E. | 0 19 E. | 1·6 E. | ..... | ..... | ..... | ..... | ..... | ..... | Hodgson. |
| Bheem Tal | 29 21 | 79 35 | 1869 | ..... | ..... | ..... | 40 08 | −0 27 | 39·7 N. | ..... | ..... | ..... | Montgomerie. |
| Bagesir | 29 50 | 79 48 | 1869 | ..... | ..... | ..... | 40 53 | −0 27 | 40·4 N. | 9·72 | ..... | 9·72 | Montgomerie. |
| Jáblpur | 23 10 | 79 56 | 1856 | 1 11 E. | 0 14 W. | 1·0 E. | 28 31 | ..... | 28·5 N. | 9·86 | ..... | 9·86 | Schlagintweit. |
| Lukhnow | 26 51 | 80 56 | 1856 | 2 37 E. | 0 14 W. | 2·4 E. | 35 19 | ..... | 35·3 N. | 10·02 | ..... | 10·02 | Schlagintweit. |
| Benáres | 25 18 | 83 00 | 1856 | 1 50 E. | 0 14 W. | 1·6 E. | 32 41 | ..... | 32·7 N. | 9·29 | ..... | 9·29 | Schlagintweit. |
| Sigauli | 26 47 | 84 44 | 1856 | ..... | ..... | ..... | 35 40 | ..... | 35·7 N. | ..... | ..... | ..... | Schlagintweit. |
| Patna | 25 37 | 85 08 | 1856 | 1 54 E. | 0 14 W. | 1·7 E. | 33 33 | ..... | 33·6 N. | 9·22 | ..... | 9·22 | Schlagintweit. |
| Kathmándu | 27 42 | 85 12 | 1856 | 2 36 E. | 0 14 W. | 2·4 E. | 37 34 | ..... | 37·6 N. | 8·73 | ..... | 8·73 | Schlagintweit. |
| Kissengâni | 26 06 | 87 56 | 1856 | 2 20 E. | ..... | 2·3 E. | 35 12 | ..... | 35·2 N. | 8·19 | ..... | 8·19 | Schlagintweit. |
| Falut | 27 06 | 87 59 | 1856 | 2 25 E. | ..... | 2·4 E. | 36 55 | ..... | 36·9 N. | 8·32 | ..... | 8 32 | Schlagintweit. |

## NORTH EQUATORIAL ZONE III.—Lat. 20° N. to 30° N. (continued).

| Stations. | Lat. N. | Long. E. | Date. | Declination. Observed. | Declination. Correction to Epoch 1842·5. | Declination. Corrected. | Inclination. Observed. | Inclination. Cor. to Epoch 1842·5. | Inclination. Corrected. | Force in British units. Observed. | Force in British units. Cor. to Epoch 1842·5. | Force in British units. Corrected. | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ° ′ | ° ′ | | ° ′ | ° ′ | ° | ° ′ | ′ | ° | | | | |
| Tonglo | 27 02 | 88 04 | 1856 | 2 31 E. | ..... | 2·5 E. | 36 25 | ..... | 36·4 N. | 8·54 | ..... | 8·54 | Schlagintweit. |
| Darjeeling | 27 03 | 88 15 | 1856 | 2 48 E. | ..... | 2·8 E. | 36 33 | ..... | 36·6 N. | 8·15 | ..... | 8·15 | Schlagintweit. |
| Diamond Harbour | 22 11 | 88 11 | 1837 | 3 06 E. | ..... | 3·1 E. | 26 38 | ..... | 26·6 N. | ..... | ..... | ..... | Bonite. |
| Calcutta | 22 33 | 88 20 | 1827 | 2 38 E. | ..... | 2·6 E. | ..... | ..... | ..... | ..... | ..... | | Blosseville. |
| | | | 1828 | 2 41 E. | ..... | 2·7 E. | ..... | ..... | ..... | ..... | ..... | | Hodgson. |
| | | | 1829 | 2 24 E. | ..... | 2·4 E. | ..... | ..... | ..... | ..... | ..... | 9·11 | Hodgson. |
| | | | 1829 | 2 32 E. | ..... | 2·5 E. | ..... | ..... | ..... | ..... | ..... | | Hodgson. |
| | | | 1833 | 2 38 E. | ..... | 2·6 E. | 26 33 | ..... | 26·6 | ..... | ..... | | Blosseville. |
| | | | 1856 | 2 25 E. | ..... | 2·4 E. | 28 15 | ..... | 28·3 | 9·11 | ..... | | Schlagintweit. |
| | | | | | | 2·5 E. | | | 27·4 N. | | | | |
| Chandernagore | 22 50 | 88 23 | 1833 | 2 40 E. | ..... | 2·7 E. | 26 47 | ..... | 26·8 N. | ..... | ..... | ..... | Blosseville. |
| Rampur Bolea | 24 22 | 88 34 | 1856 | ..... | ..... | ..... | 32 01 | ..... | 32·0 N. | 7·90 | ..... | 7·90 | Schlagintweit. |
| Kúlna | 22 46 | 89 37 | 1856 | 2 30 E. | ..... | 2·5 E. | 29 20 | ..... | 29·3 N. | ..... | ..... | ..... | Schlagintweit. |
| Surajganj | 24 23 | 89 43 | 1856 | ..... | ..... | ..... | 32 04 | ..... | 32·1 N. | ..... | ..... | ..... | Schlagintweit. |
| Dháka | 23 43 | 90 20 | 1856 | 2 21 E. | ..... | 2·4 E. | 31 01 | ..... | 31·0 N. | ..... | ..... | ..... | Schlagintweit. |
| Chérra Púnji | 25 14 | 91 41 | 1856 | 2 20 E. | ..... | 2·3 E. | 33 37 | ..... | 33·6 N. | 9·45 | ..... | 9·45 | Schlagintweit. |
| Gohatti | 26 06 | 91 44 | 1856 | 2 00 E. | ..... | 2·0 E. | 35 19 | ..... | 35·3 N. | 9·54 | ..... | 9·54 | Schlagintweit. |
| Silhét | 24 53 | 91 47 | 1825 | 2 29 E. | ..... | 2·5 E. | ..... | ..... | ..... | ..... | ..... | ..... | Fisher. |
| Udelguri | 26 46 | 91 57 | 1856 | 2 36 E. | ..... | 2·6 E. | 36 28 | ..... | 36·5 N. | 9·62 | ..... | 9·62 | Schlagintweit. |
| Narigún | 26 54 | 92 06 | 1856 | 4 43 E. | ..... | 4·7 E. | 37 08 | ..... | 37·1 N. | 9·11 | ..... | 9·11 | Schlagintweit. |
| Tezpur | 26 35 | 92 47 | 1856 | 0 23 E. | ..... | 0·4 E. | 37 15 | ..... | 37·3 N. | 9·75 | ..... | 9·75 | Schlagintweit. |
| Dibrugarh | 27 32 | 94 58 | 1856 | 0 46 E. | ..... | 0·8 E. | 38 30 | ..... | 38·5 N. | 9·88 | ..... | 9·88 | Schlagintweit. |
| Macao | 22 11 | 113 30 | 1827 | 1 58 E. | 0 15 W. | 1·7 E. | 29 57 | ..... | 30·0 | ..... | ..... | | Beechey. |
| | | | 1830 | 1 30 E. | 0 12 W. | 1·3 E. | ..... | ..... | ..... | ..... | ..... | 8·98 | Laplace. |
| | | | 1837 | 1 00 E. | 0 05 W. | 0·9 E. | 30 32 | ..... | 30·5 | ..... | ..... | | Darondeau. |
| | | | 1843 | 0 35 E. | ..... | 0·6 E. | 30 01 | ..... | 30·0 | 8·98 | ..... | | Belcher. |
| | | | | | | 1·1 E. | | | 30·2 N. | | | | |
| Sampanchow | 22 43 | 113 40 | 1841 | 0 22 E. | ..... | 0·4 E. | 30 26 | ..... | 30·4 N. | 9·03 | ..... | 9·03 | Belcher. |
| At sea | 21 57 | 114 08 | 1836 | 1 04 E. | ..... | 1·1 E. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| Hong Kong | 22 16 | 114 10 | 1843 | 0 37 E. | ..... | 0·6 E. | 30 03 | ..... | 30·1 | 8·95 | ..... | | Belcher. |
| | | | 1851 | ..... | ..... | ..... | 29 40 | ..... | 29·7 | ..... | ..... | 8·95 | Collinson. |
| | | | 1858 | ..... | ..... | ..... | 31 08 | ..... | 31·1 | 8·95 | ..... | | Novara. |
| | | | | | | 0·6 E. | | | 30·3 N. | | | | |
| Kooloon Point | 22 17 | 114 10 | 1855 | 0 30 E. | ..... | 0·6 E. | ..... | ..... | ..... | ..... | ..... | ..... | Richards. |
| At sea | 20 14 | 114 46 | 1843 | ..... | ..... | ..... | 26 38 | ..... | 26·6 N. | ..... | ..... | ..... | Belcher. |
| Harlem Bay | 22 34 | 114 52 | 1845 | 0 25 E. | ..... | 0·4 E. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| Heichichin | 22 50 | 115 45 | 1845 | 1 32 E. | ..... | 1·5 E. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| Capchi | 22 50 | 116 04 | 1844 | 0 36 E. | ..... | 0·6 E. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| Chinhae | 23 00 | 116 31 | 1844 | 0 01 E. | ..... | 0·0 | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| Namoce | 23 26 | 116 54 | 1844 | 0 47 E. | ..... | 0·8 E. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| Tongahan | 23 43 | 117 22 | 1844 | 0 38 E. | ..... | 0·6 E. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| Red Bay | 24 02 | 117 54 | 1844 | 0 31 E. | ..... | 0·5 E. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| Amoy | 24 27 | 118 03 | 1841 | 0 45 E. | ..... | 0·8 E. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| Horton Bay | 24 32 | 118 32 | 1844 | 1 30 E. | ..... | 1·5 E. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| Chinchui | 24 49 | 118 41 | 1844 | 0 25 E. | ..... | 0·4 E. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| At sea (4 observations) | 24 07 | 118 51 | 1858 | 0 12 W. | 0 16 E. | 0·1 E. | ..... | ..... | ..... | ..... | ..... | ..... | Novara. |
| Pescadores | 23 30 | 119 30 | 1843 | 0 29 E. | ..... | 0·5 E. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| At sea (2 observations) | 24 11 | 119 37 | 1828 | 1 18 E. | 0 14 W. | 1·1 E. | ..... | ..... | ..... | ..... | ..... | ..... | Lütke. |
| Temple Point, R. Mina | 26 08 | 119 38 | 1855 | 1 08 W. | 0 13 E. | 0·9 W. | ..... | ..... | ..... | ..... | ..... | ..... | Richards. |
| River Mina | 26 09 | 119 40 | 1843 | 0 30 W. | ..... | 0·5 W. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| Haitan Strait | 25 22 | 119 45 | 1843 | 0 16 E. | ..... | 0·3 E. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| Samsah | 26 26 | 119 55 | 1844 | 1 10 E. | ..... | 1·2 E. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| Whitedogs | 25 58 | 119 57 | 1843 | 0 58 E. | ..... | 1·0 E. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| Port in Formosa | 23 06 | 120 05 | 1855 | 0 34 W. | 0 13 E. | 0·4 W. | ..... | ..... | ..... | ..... | ..... | ..... | Richards. |
| Saracen Point | 22 36 | 120 17 | 1855 | 0 34 W. | 0 13 E. | 0·4 W. | ..... | ..... | ..... | ..... | ..... | ..... | Richards. |
| Pehseangshan | 26 42 | 120 23 | 1843 | 2 01 E. | ..... | 2·0 E. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| Pehquan | 27 10 | 120 32 | 1844 | 1 03 E. | ..... | 1·1 E. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| Torshan | 26 59 | 120 44 | 1842 | 2 26 E. | ..... | 2·4 E. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| Namki | 27 26 | 121 06 | 1842 | 0 55 E. | ..... | 0·9 E. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| Tongtashan | 27 48 | 121 07 | 1842 | 1 54 E. | ..... | 1·9 E. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| Samasama | 22 38 | 121 26 | 1845 | 0 19 E. | ..... | 0·3 E. | 30 45 | ..... | 30·8 N. | ..... | ..... | ..... | Belcher. |
| Ningpo | 29 53 | 121 33 | 1842 | 2 55 E. | ..... | 2·9 E. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| Killon Harbour | 25 09 | 121 47 | 1845 | 0 40 W. | ..... | 0·7 W. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| St. George | 29 06 | 121 54 | 1842 | 1 00 E. | ..... | 1·0 E. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| Taichow Isles | 28 26 | 121 54 | 1842 | 1 24 E. | ..... | 1·4 E. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |

## NORTH EQUATORIAL ZONE III.—Lat. 20° N. to 30° N. (continued).

| Stations. | Lat. N. | Long. E. | Date. | Declination. | | | Inclination. | | | Force in British units. | | | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Observed. | Correction to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | |
| | ° ′ | ° ′ | | ° ′ | | ° | ° ′ | | ° | | | | |
| San Miguel, Batan ... | 20 28 | 121 56 | 1844 | 0 30 W. | ..... | 0·5 W. | 27 23 | ..... | 27·4 N. | ..... | ..... | ..... | Belcher. |
| Sherpoo ..... | 29 13 | 121 57 | 1842 | 1 17 E. | ..... | 1·3 E. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| Tree a top ..... | 29 42 | 122 01 | 1840 | 1 40 E. | ..... | 1·7 E. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| Kevesan Isles..... | 29 57 | 122 11 | 1840 | 1 56 E. | ..... | 1·9 E. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| Hayes..... | 29 52 | 122 14 | 1840 | 1 21 E. | ..... | 1·4 E. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| Heishai Isles ..... | 28 51 | 122 14 | 1842 | 1 52 E. | ..... | 1·9 E. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| Keechee ..... | 24 25 | 124 02 | 1843 | 1 03 W. | ..... | 1·1 W. | 33 40 | ..... | 33·7 N. | ..... | ..... | ..... | Belcher. |
| At sea..... | 29 34 | 124 09 | 1858 | 1 40 W. | ..... | 1·7 W. | ..... | ..... | ..... | ..... | ..... | ..... | Novara. |
| Patchung-san ..... | 24 21 | 124 12 | 1843 | 1 25 W. | ..... | 1·4 W. | 33 43 | ..... | 33·7 N. | ..... | ..... | ..... | Belcher. |
| At sea (5 observations) | 22 15 | 124 24 | 1851 | 2 20 W. | ..... | 2·3 W. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| Typinsan ..... | 24 44 | 125 15 | 1844 | 1 23 W. | ..... | 1·4 W. | 34 04 | ..... | 34·1 N. | ..... | ..... | ..... | Belcher. |
| Loo Choo Islands..... | 26 13 | 127 39 | 1827 | 0 41 E. | ..... | 0·7 E. | ..... | ..... | ..... | ..... | ..... | ..... | Beechey. |
| | | | 1845 | 1 35 W. | ..... | 1·6 W. | 36 13 | ..... | 36·2 N. | ..... | ..... | ..... | Belcher. [tion. |
| | | | 1853 | 1 00 W. | ..... | 1·0 W. | ..... | ..... | ..... | ..... | ..... | ..... | American Expedi- |
| | | | | | | 0·6 W. | | | | | | | |
| Water Islands ..... | 29 52 | 129 48 | 1845 | 0 36 W. | ..... | 0·6 W. | 44 52 | ..... | 44·9 N. | ..... | ..... | ..... | Belcher. |
| At sea (5 observations) | 22 23 | 132 25 | 1851 | 3 24 W. | ..... | 3·4 W. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| At sea..... | 20 47 | 133 25 | 1858 | 0 03 W. | ..... | 0·1 W. | ..... | ..... | ..... | ..... | ..... | ..... | Novara. |
| At sea (6 observations) | 26 29 | 138 52 | 1851 | 2 00 W. | ..... | 2·0 W. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| At sea (3 observations) | 22 08 | 139 16 | 1828 | 0 25 E. | ..... | 0·4 E. | ..... | ..... | ..... | ..... | ..... | ..... | Lütke. |
| Port Lloyd ..... | 27 05 | 139 54 | 1827 | 1 09 E. | ..... | 1·2 E. | ..... | ..... | ..... | ..... | ..... | ..... | Beechey. |
| At sea (3 observations) | 27 04 | 141 22 | 1828 | 0 01 W. | ..... | 0·0 | ..... | ..... | ..... | ..... | ..... | ..... | Lütke. |
| Parry Island..... | 27 43 | 142 08 | 1827 | 2 37 E. | ..... | 2·6 E. | ..... | ..... | ..... | ..... | ..... | ..... | Beechey. |
| Bonin Island..... | 27 07 | 142 24 | 1828 | 0 06 W. | ..... | 0·1 W. | 36 48 | ..... | 36·8 | 8·64 | ..... | 8·64 | Lütke. |
| | | | 1851 | 0 15 W. | ..... | 0·3 W. | 37 35 | ..... | 37·6 | ..... | ..... | | Collinson. |
| | | | | | | 0·2 W. | | | 37·2 N. | | | | |
| At sea (3 observations) | 22 00 | 161 06 | 1827 | 8 40 E. | ..... | 8·7 E. | ..... | ..... | ..... | ..... | ..... | ..... | Lütke. |
| At sea (7 observations) | 27 37 | 161 29 | 1827 | 7 06 E. | ..... | 7·1 E. | ..... | ..... | ..... | ..... | ..... | ..... | Lütke. |
| At sea..... | 20 10 | 173 19 | 1836 | 11 42 E. | ..... | 11·7 E. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea..... | 29 54 | 183 06 | 1851 | ..... | ..... | ..... | 47 04 | ..... | 47·1 N. | ..... | ..... | ..... | Collinson. |
| At sea (4 observations) | 28 35 | 187 41 | 1851 | 13 42 E. | ..... | 13·7 E. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| At sea..... | 29 40 | 191 49 | 1848 | ..... | ..... | ..... | 52 28 | ..... | 52·5 N. | ..... | ..... | ..... | Moore. |
| At sea..... | 27 44 | 193 41 | 1848 | ..... | ..... | ..... | 51 45 | ..... | 51·8 N. | ..... | ..... | ..... | Moore. |
| At sea..... | 26 17 | 195 12 | 1848 | ..... | ..... | ..... | 50 43 | ..... | 50·7 N. | ..... | ..... | ..... | Moore. |
| At sea (2 observations) | 24 42 | 195 41 | 1851 | 11 55 E. | ..... | 11·9 E. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| At sea (5 observations) | 24 25 | 197 34 | 1848 | ..... | ..... | ..... | 48 46 | ..... | 48·8 N. | ..... | ..... | ..... | Moore. |
| At sea (2 observations) | 27 58 | 198 09 | 1853 | 10 25 E. | ..... | 10·4 E. | ..... | ..... | ..... | ..... | ..... | ..... | Trollope. |
| At sea..... | 27 36 | 198 20 | 1852 | 11 09 E. | ..... | 11·2 E. | ..... | ..... | ..... | ..... | ..... | ..... | Crane. |
| At sea (2 observations) | 25 48 | 199 10 | 1853 | 9 44 E. | ..... | 9·7 E. | ..... | ..... | ..... | ..... | ..... | ..... | Trollope. |
| At sea (2 observations) | 22 23 | 199 19 | 1851 | 6 20 E. | ..... | 6·3 E. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| At sea (2 observations) | 24 21 | 200 12 | 1852 | 10 11 E. | ..... | 10·2 E. | ..... | ..... | ..... | ..... | ..... | ..... | Crane. |
| At sea (3 observations) | 23 58 | 200 23 | 1853 | ..... | ..... | ..... | 41 16 | ..... | 41·3 N. | ..... | ..... | ..... | Trollope. |
| At sea (2 observations) | 23 36 | 200 25 | 1853 | 9 24 E. | ..... | 9·4 E. | ..... | ..... | ..... | ..... | ..... | ..... | Trollope. |
| Oahu ..... | 21 17 | 202 00 | 1824 | 9 52 E. | ..... | 9·9 E. | ..... | ..... | ..... | ..... | ..... | | Byron. |
| | | | 1827 | 10 26 E. | ..... | 10·4 E. | ..... | ..... | ..... | ..... | ..... | | Beechey. |
| | | | 1830 | ..... | ..... | ..... | 41 39 | ..... | 41·7 | ..... | ..... | 8·66 | Douglas. |
| | | | 1837 | 10 39 E. | ..... | 10·7 E. | 41 35 | ..... | 41·6 | ..... | ..... | | Beechey. |
| | | | 1838 | 10 39 E. | ..... | 10·7 E. | 41 17 | ..... | 41·3 | 8·66 | ..... | | Belcher. |
| | | | | | | 10·4 E. | | | 41·5 N. | | | | |
| Honolulu ..... | 21 19 | 202 18 | 1836 | 10 11 E. | ..... | 10 2 E. | 42 04 | ..... | 42·1 | ..... | ..... | ..... | Bonite. |
| | | | 1837 | 10 00 E. | ..... | 10·0 E. | ..... | ..... | ..... | ..... | ..... | ..... | Venus. |
| | | | 1840 | 9 17 E. | ..... | 9·3 E. | ..... | ..... | ..... | ..... | ..... | ..... | Berghaus. |
| | | | 1852 | 9 10 E. | ..... | 9·2 E. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| | | | 1859 | 9 42 E. | ..... | 9·7 E. | ..... | ..... | ..... | ..... | ..... | ..... | Friesach. |
| | | | | | | 9·7 E. | | | 42·1 N. | | | | |
| Mowi ..... | 20 52 | 203 19 | 1817 | 8 49 E. | ..... | 8·8 E. | 41 39 | ..... | 41·6 N. | ..... | ..... | ..... | Freycinet. |
| At sea (3 observations) | 21 06 | 203 39 | 1838 | 8 46 E. | ..... | 8·8 E. | ..... | ..... | ..... | ..... | ..... | ..... | Prussian ships. |
| At anchor at sea ..... | 21 20 | 203 49 | 1848 | ..... | ..... | ..... | 42 36 | ..... | 42·6 N. | ..... | ..... | ..... | Moore. |
| At sea (3 observations) | 20 48 | 205 42 | 1831 | 8 28 E. | ..... | 8·5 E. | ..... | ..... | ..... | ..... | ..... | ..... | Prussian ships. |
| At sea..... | 20 21 | 211 34 | 1828 | 7 50 E. | ..... | 7·8 E. | ..... | ..... | ..... | ..... | ..... | ..... | Prussian ships. |
| At sea..... | 25 21 | 213 56 | 1827 | 13 00 E. | ..... | 13·0 E. | 47 38 | ..... | 47·6 N. | 10·70 | ..... | 10·70 | Lütke. |
| At sea (2 observations) | 26 58 | 216 42 | 1827 | 11 47 E. | ..... | 11·8 E. | ..... | ..... | ..... | ..... | ..... | ..... | Lütke. |
| At sea..... | 23 26 | 218 02 | 1827 | 11 06 E. | ..... | 11·1 E. | 46 03 | ..... | 46·1 N. | 9·43 | ..... | 9·43 | Lütke. |
| At sea (2 observations) | 22 33 | 218 20 | 1827 | 11 06 E. | ..... | 11·1 E. | ..... | ..... | ..... | ..... | ..... | ..... | Lütke. |
| At sea..... | 21 19 | 218 57 | 1827 | 10 00 E. | ..... | 10·0 E. | 43 08 | ..... | 43·1 N. | ..... | ..... | ..... | Lütke. |
| At sea (2 observations) | 21 10 | 237 50 | 1830 | 7 34 E. | ..... | 7·6 E. | 42 15 | ..... | 42·3 N. | 9·42 | ..... | 9·42 | Erman. |

## NORTH EQUATORIAL ZONE III.—Lat. 20° N. to 30° N. (continued).

| Stations. | Lat. N. | Long. E. | Date. | Declination. | | | Inclination. | | | Force in British units. | | | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Observed. | Correction to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | |
| | ° ′ | ° ′ | | ° ′ | | ° | ° ′ | | ° | | | | |
| At sea (2 observations) | 23 06 | 238 07 | 1830 | 8 10 E. | ..... | 8·2 E. | 44 48 | ..... | 44·8 N. | 9·62 | ..... | 9·62 | Erman. |
| At sea (3 observations) | 28 53 | 238 32 | 1830 | 9 00 E. | ..... | 9 0 E. | 53 14 | ..... | 53·2 N. | 10·50 | ..... | 10·50 | Erman. |
| At sea (2 observations) | 25 40 | 238 40 | 1830 | ..... | ..... | ..... | 48 50 | ..... | 48·8 N. | 10·07 | ..... | 10·07 | Erman. |
| At sea | 26 36 | 239 02 | 1830 | ..... | ..... | ..... | 50 14 | ..... | 50·2 N. | 10·23 | ..... | 10·23 | Erman. |
| At sea (3 observations) | 27 24 | 239 02 | 1830 | 11 50 E. | ..... | 11·8 E. | ..... | ..... | ..... | ..... | ..... | ..... | Erman. |
| At sea (3 observations) | 28 09 | 239 04 | 1830 | 10 04 E. | ..... | 10·1 E. | 52 09 | ..... | 52·2 N. | 10·37 | ..... | 10·37 | Erman. |
| St. Bartholomew | 27 40 | 245 07 | 1839 | 10 46 E. | ..... | 10·8 E. | 51 41 | ..... | 51·7 N. | 11·20 | ..... | 11·20 | Belcher. |
| Magdalena Bay | 24 38 | 247 53 | 1837 | 8 17 E. | ..... | 8·3 E. | 50 43 | ..... | 50·7 | ..... | ..... | | Vénus. |
| | | | 1839 | 9 15 E. | ..... | 9·3 E. | 46 34 | ..... | 46·6 | 10·66 | ..... | 10·75 | Belcher. |
| | | | 1866 | 10 41 E. | ..... | 10·7 E. | 48 32 | ..... | 48·5 | 10·84 | ..... | | Harkness. |
| | | | | | | 9·4 E. | | | 48·6 N. | | | | |
| St. Luke's Bay | 22 52 | 250 07 | 1839 | 8 38 E. | ..... | 8·6 E. | 45 39 | ..... | 45·7 N. | 10·63 | ..... | 10·63 | Belcher. |
| Mazatlan | 23 11 | 253 36 | 1828 | 9 48 E. | ..... | 9·8 E. | ..... | ..... | ..... | ..... | ..... | | Beechey. |
| | | | 1837 | 8 33 E. | ..... | 8·6 E. | 47 45 | ..... | 47·7 | ..... | ..... | 10·75 | Vénus. |
| | | | 1839 | 9 24 E. | ..... | 9·4 E. | 46 39 | ..... | 46 7 | 10·75 | ..... | | Belcher. |
| | | | | | | 9·3 E. | | | 47·2 N. | | | | |
| San Blas | 21 32 | 254 44 | 1837 | 9 09 E. | ..... | 9·2 E. | 46 09 | ..... | 46·2 | ..... | ..... | 10·66 | Vénus. |
| | | | 1838 | 8 47 E. | ..... | 8·8 E. | 44 36 | ..... | 44·6 | 10·66 | ..... | | Belcher. |
| | | | | | | 9·0 E. | | | 45·4 N. | | | | |
| Presidio del Norte | 29 34 | 255 35 | 1852 | 10 16 E. | ..... | 10·3 E. | 55 41 | ..... | 55·7 N. | ..... | ..... | ..... | Emory. |
| Eagle Pass | 28 42 | 259 30 | 1852 | 10 01 E. | ..... | 10 0 E. | 55 31 | ..... | 55·5 N. | ..... | ..... | ..... | Emory. |
| Fort M'Intosh | 27 30 | 259 55 | 1852 | 10 00 E. | ..... | 10·0 E. | 54 07 | ..... | 54·1 N. | ..... | ..... | ..... | Emory. |
| Ringgold's Barracks | 26 23 | 261 17 | 1853 | 9 15 E. | ..... | 9·3 E. | 52 27 | ..... | 52·5 N. | ..... | ..... | ..... | Emory & U. S. C. S. |
| Rio Grande | 25 57 | 262 52 | 1853 | 9 01 E. | ..... | 9·0 E. | 52 24 | ..... | 52·4 N. | ..... | ..... | ..... | U. S. Coast Survey. |
| Jupiter | 28 55 | 264 40 | 1853 | 9 09 E. | ..... | 9 2 E. | 57 12 | ..... | 57·2 N. | 12·15 | ..... | 12·15 | U. S. Coast Survey. |
| East Base | 29 13 | 265 05 | 1853 | 9 05 E. | ..... | 9·1 E. | 57 42 | ..... | 57·7 N. | 12·15 | ..... | 12·15 | U. S. Coast Survey. |
| Dollar Point | 29 26 | 265 07 | 1848 | 8 57 E. | ..... | 9·0 E. | 57 55 | ..... | 57·9 N. | 12·31 | ..... | 12·31 | U. S. Coast Survey. |
| At sea (2 observations) | 21 08 | 265 13 | 1839 | 11 11 E. | ..... | 11·2 E. | ..... | ..... | ..... | ..... | ..... | ..... | Behard. |
| Mouth of Sabine River | 29 44 | 266 08 | 1840 | 8 40 E. | ..... | 8·7 E. | 58 33 | ..... | 58·6 N. | ..... | ..... | ..... | Graham. |
| Sabine River | 29 44 | 266 08 | 1840 | 8 40 E. | ..... | 8·7 E. | ..... | ..... | ..... | ..... | ..... | ..... | U. S. Coast Survey. |
| Côte Blanche | 29 44 | 268 18 | 1860 | 8 22 E. | ..... | 8·4 E. | 59 09 | ..... | 59·2 N. | 12·42 | ..... | 12·42 | U. S. Coast Survey. |
| Arenas | 22 07 | 268 36 | ..... | ..... | ..... | ..... | 49 32 | ..... | 49·5 N. | ..... | ..... | ..... | Barnett. |
| Isle Dernière | 29 02 | 269 04 | 1853 | 8 19 E. | ..... | 8·3 E. | ..... | ..... | ..... | ..... | ..... | ..... | U. S. Coast Survey. |
| New Orleans | 29 57 | 269 56 | 1834 | ..... | ..... | ..... | 60 15 | ..... | 60·3 | ..... | ..... | | Nicollet. |
| | | | 1857 | 8 00 E. | ..... | 8·0 E. | 59 30 | ..... | 59·5 | 12·52 | ..... | 12·50 | Friesach. |
| | | | 1858 | 7 52 E. | ..... | 7·9 E. | 59 47 | ..... | 59·8 | 12·49 | ..... | | U. S. Coast Survey. |
| | | | | | | 7·9 E. | | | 59·9 N. | | | | |
| Fort Livingstone | 29 17 | 270 11 | 1853 | 7 38 E. | ..... | 7·6 E. | ..... | ..... | ..... | ..... | ..... | ..... | U. S. Coast Survey. |
| Light House | 28 59 | 270 39 | 1840 | ..... | ..... | ..... | 58 46 | ..... | 58·8 N. | ..... | ..... | ..... | Graham. |
| Cubitt | 29 10 | 270 46 | 1859 | 7 32 E. | ..... | 7·5 E. | 58 54 | ..... | 58·9 N. | 12·35 | ..... | 12·35 | U. S. Coast Survey. |
| Barrel Key | 29 54 | 270 53 | 1858 | ..... | ..... | ..... | 59 48 | ..... | 59·8 N. | 12·37 | ..... | 12·37 | U. S. Coast Survey. |
| S. E. Pass | 29 05 | 270 58 | 1859 | ..... | ..... | ..... | 58 45 | ..... | 58·8 N. | 12·35 | ..... | 12·35 | U. S. Coast Survey. |
| Passe à l'outre | 29 11 | 270 59 | 1860 | 7 30 E. | ..... | 7·5 E. | 58 47 | ..... | 58·8 N. | 12·33 | ..... | 12·33 | U. S. Coast Survey. |
| At sea (4 observations) | 21 42 | 271 26 | 1839 | 9 52 E. | ..... | 9·9 E. | ..... | ..... | ..... | ..... | ..... | ..... | Behard. |
| At sea (4 observations) | 21 50 | 271 30 | 1838 | 9 19 E. | ..... | 9·3 E. | ..... | ..... | ..... | ..... | ..... | ..... | Behard. |
| Contoy Island | 21 32 | 273 11 | 1838 | ..... | ..... | ..... | 49 48 | ..... | 49·8 | ..... | ..... | ..... | Barnett. |
| Women's Islands | 21 12 | 273 20 | 1831 | 6 10 E. | ..... | 6·2 E. | ..... | ..... | ..... | ..... | ..... | ..... | Lawrence. |
| | | | 1844 | 6 40 E. | ..... | 6·7 E. | ..... | ..... | ..... | ..... | ..... | ..... | Lawrence. |
| | | | | | | 6·5 E. | | | | | | | |
| St. Joseph | 29 52 | 274 37 | 1843 | 6 24 E. | ..... | 6·4 E. | ..... | ..... | ..... | ..... | ..... | ..... | U. S. Coast Survey. |
| Cape San Blas | 29 40 | 274 38 | 1854 | 6 07 E. | ..... | 6·1 E. | ..... | ..... | ..... | ..... | ..... | ..... | U. S. Coast Survey. |
| St. George's Island | 29 37 | 274 57 | 1853 | 6 02 E. | ..... | 6·0 E. | ..... | ..... | ..... | ..... | ..... | ..... | U. S. Coast Survey. |
| Apalichola | 29 43 | 275 01 | 1860 | 6 12 E. | ..... | 6·2 E. | 60 19 | ..... | 60·3 N. | 12·45 | ..... | 12·45 | U. S. Coast Survey. |
| C. San Antonio | 21 52 | 275 02 | 1847 | 6 00 E. | ..... | 6·0 E. | ..... | ..... | ..... | ..... | ..... | ..... | Barnett. |
| Dog Island | 29 47 | 275 24 | 1853 | 5 51 E. | ..... | 5·9 E. | ..... | ..... | ..... | ..... | ..... | ..... | U. S. Coast Survey. |
| Depôt Key | 29 07 | 276 57 | 1852 | 5 20 E. | ..... | 5·3 E. | 59 55 | ..... | 59·9 N. | 12·25 | ..... | 12·25 | U. S. Coast Survey. |
| Tortugas | 24 28 | 277 07 | 1843 | 6 15 E. | ..... | 6·3 E. | ..... | ..... | ..... | ..... | ..... | ..... | U. S. Coast Survey. |
| Egmont Key | 27 36 | 277 15 | 1843 | 5 25 E. | ..... | 5·4 E. | ..... | ..... | ..... | ..... | ..... | ..... | U. S. Coast Survey. |
| At sea (3 observations) | 23 47 | 277 30 | 1839 | 7 38 E. | ..... | 7·6 E. | ..... | ..... | ..... | ..... | ..... | ..... | Behard. |
| Havannah | 23 09 | 277 38 | 1822 | ..... | ..... | ..... | 51 55 | ..... | 51·9 | 11·25 | ..... | | Sabine. |
| | | | 1857 | 5 15 E. | ..... | 5·3 E. | ..... | ..... | ..... | ..... | ..... | 11·25 | U. S. Coast Survey. |
| | | | 1857 | 5 18 E. | ..... | 5·3 E. | 52 00 | ..... | 52·0 | 11·25 | ..... | | Friesach. |
| | | | | | | 5·3 E. | | | 52·0 N. | | | | |
| Sand Key | 24 27 | 278 07 | 1849 | 5 29 E. | ..... | 5·5 E. | 54 26 | ..... | 54·4 N. | 11·62 | ..... | 11·62 | U. S. Coast Survey. |
| Key West | 24 33 | 278 12 | 1850 | 4 46 E. | ..... | 4·8 E. | ..... | ..... | ..... | ..... | ..... | ..... | U. S. Coast Survey. |
| | | | 1860 | 4 51 E. | ..... | 4·9 E. | 54 39 | ..... | 54·7 N. | 11·66 | ..... | 11·66 | U. S. Coast Survey. |
| | | | | | | 5·1 E. | | | | | | | |
| At sea | 28 22 | 279 35 | 1841 | 4 57 E. | ..... | 5·0 E. | ..... | ..... | ..... | ..... | ..... | ..... | Barnett. |
| Cape Florida | 25 40 | 279 51 | 1850 | 4 25 E. | ..... | 4·4 E. | 56 13 | ..... | 56·2 N. | 11·90 | ..... | 11·90 | U. S. Coast Survey. |

## NORTH EQUATORIAL ZONE III.—Lat. 20° N. to 30° N. (continued).

| Stations. | Lat. N. | Long. E. | Date. | Declination. | | | Inclination. | | | Force in British units. | | | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Observed. | Correction to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | |
| | ° ′ | ° ′ | | ° ′ | | ° | ° ′ | | ° | | | | |
| At sea | 29 17 | 280 24 | 1841 | 4 52 E. | ..... | 4·9 E. | ..... | ..... | ..... | ..... | ..... | ..... | Barnett. |
| Nassau | 25 05 | 282 39 | 1839 | 3 07 E. | ..... | 3·1 E. | ..... | ..... | ..... | ..... | ..... | ..... | Milne. |
| | | | 1841 | ..... | ..... | ..... | 56 13 | ..... | 56·2 } 56·3 N. | ..... | ..... | ..... | Barnett. |
| | | | 1843 | ..... | ..... | ..... | 56 23 | ..... | 56·4 } | ..... | ..... | ..... | Barnett. |
| St. Jago (Cuba) | 20 00 | 283 57 | 1837 | 3 39 E. | ..... | 3·7 E. | ..... | ..... | ..... | ..... | ..... | ..... | Milne. |
| San Domingo | 21 33 | 284 15 | 1837 | 4 02 E. | ..... | 4·0 E. | ..... | ..... | ..... | ..... | ..... | ..... | Milne. |
| At sea | 27 55 | 285 24 | 1842 | 2 07 E. | ..... | 2·1 E. | ..... | ..... | ..... | ..... | ..... | ..... | Jehenne. |
| Barracon, Cuba | 20 22 | 285 26 | 1831 | 3 17 E. | ..... | 3·3 E. | 50 07 | ..... | 50·1 N. | ..... | ..... | ..... | Austin and Foster. |
| Watlingo Island | 23 57 | 285 35 | 1831 | 2 31 E. | ..... | 2·5 E. | ..... | ..... | ..... | ..... | ..... | ..... | Smith. |
| Crooked Island | 22 07 | 285 36 | 1831 | 4 27 E. | ..... | 4·5 E. } 4·9 E. | ..... | ..... | ..... | ..... | ..... | ..... | Austin. |
| | | | 1835 | 5 13 E. | ..... | 5·2 E. } | ..... | ..... | ..... | ..... | ..... | ..... | Foster. |
| Crooked Island | 22 47 | 285 39 | 1837 | 2 34 E. | ..... | 2·6 E. | ..... | ..... | ..... | ..... | ..... | ..... | Milne. |
| Cape Maize | 20 14 | 285 48 | 1831 | 2 27 E. | ..... | 2·5 E. | ..... | ..... | ..... | ..... | ..... | ..... | Austin. |
| At sea (3 observations) | 28 06 | 307 46 | 1849 | 8 00 W. | ..... | 8·0 W. | ..... | ..... | ..... | ..... | ..... | ..... | Hudson. |
| At sea (2 observations) | 22 16 | 309 10 | 1849 | 9 30 W. | ..... | 9·5 W. | ..... | ..... | ..... | ..... | ..... | ..... | Hudson. |
| At sea (2 observations) | 21 27 | 310 50 | 1838 | 5 45 W. | ..... | 5·8 W. | ..... | ..... | ..... | ..... | ..... | ..... | Behard. |
| At sea (2 observations) | 21 26 | 316 20 | 1838 | 8 20 W. | ..... | 8·3 W. | ..... | ..... | ..... | ..... | ..... | ..... | Behard. |
| At sea (3 observations) | 28 26 | 316 26 | 1839 | 13 44 W. | ..... | 13·7 W. | ..... | ..... | ..... | ..... | ..... | ..... | Du Petit Thouars. |
| At sea (5 observations) | 27 19 | 316 32 | 1829 | 8 49 W. | ..... | 8 8 W. | ..... | ..... | ..... | ..... | ..... | ..... | Rumker. |
| At sea | 23 49 | 316 40 | 1839 | ..... | ..... | ..... | 58 47 | ..... | 58·8 N. | 10·51 | ..... | 10·51 | Sulivan. |
| At sea | 21 32 | 316 43 | 1839 | ..... | ..... | ..... | 56 50 | ..... | 56·8 N. | 10·23 | ..... | 10·23 | Sulivan. |
| At sea | 24 43 | 316 55 | 1839 | ..... | ..... | ..... | 59 47 | ..... | 59·8 N. | 10·56 | ..... | 10·56 | Sulivan. |
| At sea | 25 48 | 317 19 | 1839 | ..... | ..... | ..... | 60 50 | ..... | 60·8 N. | 10·70 | ..... | 10·70 | Sulivan. |
| At sea | 28 36 | 317 30 | 1839 | ..... | ..... | ..... | 62 52 | ..... | 62·9 N. | 10·89 | ..... | 10·89 | Sulivan. |
| At sea | 27 10 | 317 49 | 1839 | ..... | ..... | ..... | 62 02 | ..... | 62·0 N. | 10·75 | ..... | 10·75 | Sulivan. |
| At sea | 27 51 | 318 27 | 1839 | ..... | ..... | ..... | 62 27 | ..... | 62·5 N. | 10·85 | ..... | 10·85 | Sulivan. |
| At sea (2 observations) | 26 05 | 318 39 | 1839 | 12 34 W. | ..... | 12·6 W. | ..... | ..... | ..... | ..... | ..... | ..... | Du Petit Thouars. |
| At sea (2 observations) | 29 56 | 318 45 | 1858 | 17 06 W. | ..... | 17·1 W. | ..... | ..... | ..... | ..... | ..... | ..... | Novara. |
| At sea (4 observations) | 27 43 | 319 02 | 1851 | 15 16 W. | ..... | 15·3 W. | ..... | ..... | ..... | ..... | ..... | ..... | Smith. |
| At sea | 26 32 | 319 46 | 1846 | 13 17 W. | ..... | 13·3 W. | ..... | ..... | ..... | ..... | ..... | ..... | Sulivan. |
| At sea | 29 27 | 319 50 | 1846 | 14 24 W. | ..... | 14·4 W. | ..... | ..... | ..... | ..... | ..... | ..... | Sulivan. |
| At sea | 24 00 | 320 08 | 1839 | 11 30 W. | ..... | 11·5 W. | ..... | ..... | ..... | ..... | ..... | ..... | Du Petit Thouars. |
| At sea | 29 34 | 320 11 | 1830 | ..... | ..... | .. ... | 63 11 | ..... | 63·2 N. | 10·61 | ..... | 10·61 | Erman. |
| At sea (2 observations) | 20 57 | 320 31 | 1846 | 11 56 W. | ..... | 11·9 W. | ..... | ..... | ..... | ..... | ..... | ..... | Sulivan. |
| At sea | 22 34 | 320 56 | 1839 | 11 20 W. | ..... | 11·3 W. | ..... | ..... | ..... | ..... | ..... | ..... | Du Petit Thouars. |
| At sea (2 observations) | 28 07 | 321 13 | 1830 | 14 36 W. | ..... | 14·6 W. | 61 52 | ..... | 61·9 N. | 10·45 | ..... | 10·45 | Erman. |
| At sea (6 observations) | 27 46 | 321 26 | 1829 | 14 03 W. | ..... | 14·1 W. | ..... | ..... | ..... | ..... | ..... | ..... | Prussian ships. |
| At sea | 24 32 | 321 40 | 1859 | 14 59 W. | ..... | 15·0 W. | ..... | ..... | ..... | ..... | ..... | ..... | Novara. |
| At sea | 22 52 | 321 51 | 1830 | 12 12 W. | ..... | 12·2 W. | ..... | ..... | ..... | ..... | ..... | ..... | Erman. |
| At sea | 26 25 | 321 51 | 1830 | 13 05 W. | ..... | 13·1 W. | 60 49 | ..... | 60·8 N. | 10·58 | ..... | 10·58 | Erman. |
| At sea (2 observations) | 29 42 | 322 12 | 1850 | 15 40 W. | ..... | 15·7 W. | 62 24 | ..... | 62·4 N. | ..... | ..... | ..... | Dayman. |
| At sea (3 observations) | 22 25 | 322 22 | 1834 | 12 08 W. | ..... | 12·1 W. | ..... | ..... | ..... | ..... | ..... | ..... | Prussian ships. |
| At sea (2 observations) | 24 15 | 322 44 | 1830 | 11 26 W. | ..... | 11·4 W. | 58 22 | ..... | 58·4 N. | 10·13 | ..... | 10·13 | Erman. |
| At sea (4 observations) | 27 00 | 323 05 | 1850 | 16 50 W. | ..... | 16·8 W. | ..... | ..... | ..... | ..... | ..... | ..... | Dayman. |
| At sea (4 observations) | 27 25 | 323 21 | 1829 | 15 40 W. | ..... | 15·7 W. | ..... | ..... | ..... | ..... | ..... | ..... | Lütke. |
| At sea | 23 00 | 323 23 | 1850 | 12 56 W. | ..... | 12·9 W. | ..... | ..... | ..... | ..... | ..... | ..... | Smith. |
| At sea | 21 04 | 323 25 | 1829 | 12 50 W. | ..... | 12·8 W. | ..... | ..... | ..... | ..... | ..... | ..... | Lütke. |
| At sea | 25 34 | 323 29 | 1850 | 11 00 W. | ..... | 11·0 W. | ..... | ..... | ..... | ..... | ..... | ..... | Young. |
| At sea | 29 15 | 323 40 | 1836 | 17 10 W. | ..... | 17·2 W. | ..... | ..... | ..... | ..... | ..... | ..... | FitzRoy. |
| At sea | 22 48 | 323 54 | 1838 | 9 40 W. | ..... | 9·7 W. | ..... | ..... | ..... | ..... | ..... | ..... | Behard. |
| At sea | 28 07 | 324 00 | 1836 | 17 06 W. | ..... | 17·1 W. | ..... | ..... | ..... | ..... | ..... | ..... | FitzRoy. |
| At sea | 22 06 | 324 20 | 1830 | 11 30 W. | ..... | 11·5 W. | ..... | ..... | ..... | ..... | ..... | ..... | Erman. |
| At sea (4 observations) | 24 27 | 324 30 | 1850 | 16 11 W. | ..... | 16·2 W. | ..... | ..... | ..... | ..... | ..... | ..... | Dayman. |
| At sea (2 observations) | 29 02 | 324 37 | 1846 | 17 43 W. | ..... | 17·7 W. | ..... | ..... | ..... | ..... | ..... | ..... | Bérard. |
| At sea (2 observations) | 24 10 | 324 40 | 1850 | ..... | ..... | ..... | 57 33 | ..... | 57·6 N. | ..... | ..... | ..... | Dayman. |
| At sea (2 observations) | 21 08 | 324 47 | 1830 | 12 25 W. | ..... | 12·4 W. | 54 44 | ..... | 54·7 N. | 9·68 | ..... | 9·68 | Erman. |
| At sea | 29 53 | 324 52 | 1843 | 16 12 W. | ..... | 16·2 W. | 62 04 | ..... | 62·1 N. | ..... | ..... | ..... | Ross. |
| At sea | 26 19 | 325 00 | 1843 | 14 01 W. | ..... | 14·0 W. | 59 10 | ..... | 59·2 N. | ..... | ..... | ..... | Ross |
| At sea | 28 12 | 325 11 | 1843 | 16 30 W. | ..... | 16·5 W. | 60 45 | ..... | 60·8 N. | ..... | ..... | ..... | Ross. |
| At sea | 24 53 | 325 27 | 1843 | 15 17 W. | ..... | 15·3 W. | 57 43 | ..... | 57·7 N. | ..... | ..... | ..... | Ross. |
| At sea (2 observations) | 29 17 | 325 31 | 1837 | 17 30 W. | ..... | 17·5 W. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea | 25 00 | 325 41 | 1836 | 16 05 W. | ..... | 16·1 W. | ..... | ..... | ..... | ..... | ..... | ..... | FitzRoy. |

## NORTH EQUATORIAL ZONE III.—Lat. 20° to 30° N. (continued).

| Stations. | Lat. N. | Long. E. | Date. | Declination. | | | Inclination. | | | Force in British units. | | | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Observed. | Correction to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | |
| | ° ′ | ° ′ | | ° ′ | | ° | ° ′ | | ° | | | | |
| At sea (2 observations) | 22 55 | 325 42 | 1838 | 10 05 w. | ..... | 10·1 w. | ..... | ..... | ..... | ..... | ..... | ..... | Behard. |
| At sea (3 observations) | 28 27 | 325 53 | 1846 | 17 47 w. | ..... | 17·8 w. | ..... | ..... | ..... | ..... | ..... | ..... | Bérard. |
| At sea | 21 49 | 326 00 | 1850 | 13 20 w. | ..... | 13·3 w. | ..... | ..... | ..... | ..... | ..... | ..... | Young. |
| At sea | 23 41 | 326 11 | 1836 | 15 20 w. | ..... | 15·3 w. | ..... | ..... | ..... | ..... | ..... | ..... | FitzRoy. |
| At sea | 25 23 | 326 35 | 1846 | 17 05 w. | ..... | 17·1 w. | ..... | ..... | ..... | ..... | ..... | ..... | Bérard. |
| At sea | 23 36 | 326 37 | 1843 | 13 46 w. | ..... | 13·8 w. | 56 15 | ..... | 56·3 N. | ..... | ..... | ..... | Ross. |
| At sea (2 observations) | 25 57 | 327 11 | 1837 | 16 36 w. | ..... | 16·6 w. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea | 22 10 | 327 24 | 1843 | 14 53 w. | ..... | 14·9 w. | 54 26 | ..... | 54·4 N. | ..... | ..... | ..... | Ross. |
| At sea | 20 40 | 327 29 | 1850 | 16 11 w. | ..... | 16·2 w. | ..... | ..... | ..... | ..... | ..... | ..... | Dayman. |
| At sea | 23 02 | 327 30 | 1838 | 10 30 w. | ..... | 10·5 w. | ..... | ..... | ..... | ..... | ..... | ..... | Bérard. |
| At sea | 20 50 | 327 51 | 1843 | 14 37 w. | ..... | 14·6 w. | ..... | ..... | ..... | ..... | ..... | ..... | Ross. |
| At sea | 21 32 | 329 31 | 1837 | 14 38 w. | ..... | 14·6 w. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea (2 observations) | 25 39 | 331 58 | 1838 | 17 02 w. | ..... | 17·0 w. | ..... | ..... | ..... | ..... | ..... | ..... | Bérard. |
| At sea (2 observations) | 22 51 | 334 00 | 1851 | 19 08 w. | ..... | 19·1 w. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| At sea (5 observations) | 22 35 | 334 38 | 1830 | 19 06 w. | ..... | 19·1 w. | ..... | ..... | ..... | ..... | ..... | ..... | Prussian ships. |
| At sea | 28 34 | 336 24 | 1851 | 21 25 w. | ..... | 21·4 w. | ..... | ..... | ..... | ..... | ..... | ..... | Collinson. |
| At sea (2 observations) | 21 29 | 336 28 | ..... | ..... | ..... | ..... | 47 49 | ..... | 47·8 N. | ..... | ..... | ..... | Trollope. |
| At sea | 29 54 | 336 46 | 1850 | ..... | ..... | ..... | 59 44 | ..... | 59·7 N. | ..... | ..... | ..... | Collinson. |
| At sea (2 observations) | 21 33 | 337 20 | 1841 | ..... | ..... | ..... | 49 41 | ..... | 49·7 N. | ..... | ..... | ..... | The John Fleming. |
| At sea (7 observations) | 27 42 | 337 22 | 1830 | 20 16 w. | ..... | 20·3 w. | ..... | ..... | ..... | ..... | ..... | ..... | Prussian ships. |
| At sea (2 observations) | 23 42 | 337 44 | 1841 | ..... | ..... | ..... | 51 47 | ..... | 51·8 N. | ..... | ..... | ..... | The John Fleming. |
| At sea (3 observations) | 21 58 | 337 46 | 1826 | 17 52 w. | ..... | 17·9 w. | ..... | ..... | ..... | ..... | ..... | ..... | Dumont d'Urville. |
| At sea (3 observations) | 21 44 | 337 48 | 1826 | 19 52 w. | ..... | 19·9 w. | ..... | ..... | ..... | ..... | ..... | ..... | Lütke. |
| At sea (2 observations) | 21 24 | 337 52 | 1842 | 19 45 w. | ..... | 19·8 w. | ..... | ..... | ..... | ..... | ..... | ..... | Bérard. |
| At sea | 24 41 | 337 52 | ..... | ..... | ..... | ..... | 51 02 | ..... | 51·0 N. | ..... | ..... | ..... | Trollope. |
| At sea | 22 24 | 338 29 | 1842 | 20 00 w. | ..... | 20·0 w. | ..... | ..... | ..... | ..... | ..... | ..... | Bérard. |
| At sea | 20 22 | 338 29 | 1846 | 19 40 w. | ..... | 19·7 w. | ..... | ..... | ..... | ..... | ..... | ..... | Denham. |
| At sea (2 observations) | 20 30 | 338 35 | 1832 | 18 22 w. | ..... | 18·4 w. | ..... | ..... | ..... | ..... | ..... | ..... | FitzRoy. |
| At sea (2 observations) | 22 23 | 338 36 | 1846 | 18 58 w. | ..... | 19·0 w. | ..... | ..... | ..... | ..... | ..... | ..... | Stanley. |
| At sea | 26 31 | 338 56 | ... .. | ..... | ..... | ..... | 52 07 | ..... | 52·1 N. | ..... | ..... | ..... | Trollope. |
| At sea | 23 10 | 339 15 | 1838 | ..... | ..... | ..... | 53 26 | ..... | 53·4 N. | 9·01 | ..... | 9·01 | Sulivan. |
| At sea | 20 54 | 339 18 | 1840 | ..... | ..... | ..... | ..... | ..... | ..... | 8·91 | ..... | 8·91 | Ross. |
| At sea | 21 41 | 339 20 | 1832 | 18 30 w. | ..... | 18·5 w. | ..... | ..... | ..... | ..... | ..... | ..... | FitzRoy. |
| At sea | 21 10 | 339 35 | 1837 | 18 42 w. | ..... | 18·7 w. | ..... | ..... | ..... | ..... | ..... | ..... | Du Petit Thouars. |
| At sea (2 observations) | 22 20 | 339 40 | 1832 | 18 28 w. | ..... | 18·5 w. | ..... | ..... | ..... | ..... | ..... | ..... | FitzRoy. |
| At sea | 24 26 | 339 52 | 1822 | 16 33 w. | ..... | 16·6 w. | 55 22 | ..... | 55·4 N. | ..... | ..... | ..... | Duperrey. |
| At sea | 22 20 | 340 04 | 1840 | 19 25 w. | ..... | 19·4 w. | ..... | ..... | ..... | 8·98 | ..... | 8·98 | Ross. |
| At sea | 23 09 | 340 13 | 1832 | 18 47 w. | ..... | 18·8 w. | ..... | ..... | ..... | ..... | ..... | ..... | FitzRoy. |
| At sea | 21 50 | 340 28 | 1837 | 20 03 w. | ..... | 20·1 w. | ..... | ..... | ..... | ..... | ..... | ..... | Du Petit Thouars. |
| At sea | 23 38 | 340 43 | 1840 | 19 30 w. | ..... | 19·5 w. | ..... | ..... | ..... | ..... | ..... | ..... | Ross. |
| At sea | 23 40 | 340 45 | 1840 | ..... | ..... | ..... | 52 54 | ..... | 52·9 N. | 9·08 | ..... | 9·08 | Ross. |
| At sea | 23 50 | 340 51 | 1840 | 19 12 w. | ..... | 19·2 w. | ..... | ..... | ..... | ..... | ..... | ..... | Ross. |
| At sea (2 observations) | 26 58 | 340 52 | 1846 | 20 28 w. | ..... | 20·5 w. | ..... | ..... | ..... | ..... | ..... | ..... | Denham. |
| At sea (2 observations) | 22 49 | 340 52 | 1836 | 20 35 w. | ..... | 20·6 w. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea | 29 12 | 340 56 | 1846 | 20 26 w. | ..... | 20·4 w. | ..... | ..... | ..... | ..... | ..... | ..... | Denham. |
| At sea | 24 57 | 340 57 | 1838 | ..... | ..... | ..... | 55 00 | ..... | 55·0 N. | 9·09 | ..... | 9·09 | Sulivan. |
| At sea | 23 31 | 341 10 | 1837 | 19 55 w. | ..... | 19·9 w. | ..... | ..... | ..... | ..... | ..... | ..... | Du Petit Thouars. |
| At sea | 24 31 | 341 17 | 1840 | 20 15 w. | ..... | 20·3 w. | ..... | ..... | ..... | ..... | ..... | ..... | Ross. |
| At sea | 24 40 | 341 18 | 1832 | 19 53 w. | ..... | 19·9 w. | ..... | ..... | ..... | ..... | ..... | ..... | FitzRoy. |
| At sea | 24 51 | 341 18 | 1840 | ..... | ..... | ..... | 53 43 | ..... | 53·7 N. | 9·11 | ..... | 9·11 | Ross and Crozier. |
| At sea (5 observations) | 26 38 | 341 23 | 1826 | 21 19 w. | ..... | 21·3 w. | ..... | ..... | ..... | ..... | ..... | ..... | Lütke. |
| At sea | 25 33 | 341 55 | 1840 | 21 33 w. | ..... | 21·6 w. | ..... | ..... | ..... | ..... | ..... | ..... | Ross. |
| At sea | 25 26 | 341 58 | 1832 | 19 59 w. | ..... | 20·0 w. | ..... | ..... | ..... | ..... | ..... | ..... | FitzRoy. |
| At sea (2 observations) | 27 08 | 341 59 | 1842 | 21 00 w. | ..... | 21·0 w. | ..... | ..... | ..... | ..... | ..... | ..... | Bérard. |
| At sea | 26 01 | 342 25 | 1840 | ..... | ..... | ..... | 54 03 | ..... | 54·1 N. | 9·30 | ..... | 9·30 | Ross. |
| At sea (2 observations) | 27 39 | 342 36 | 1822 | 18 45 w. | ..... | 18·8 w. | ..... | ..... | ..... | ..... | ..... | ..... | Duperrey. |
| At sea | 27 59 | 343 00 | 1842 | 21 00 w. | ..... | 21·0 w. | ..... | ..... | ..... | ..... | ..... | ..... | Bérard. |
| At sea | 26 48 | 343 04 | 1837 | 21 54 w. | ..... | 21·9 w. | ..... | ..... | ..... | ..... | ..... | ..... | Dumoulin. |
| At sea | 26 59 | 343 12 | 1832 | 20 04 w. | ..... | 20·1 w. | ..... | ..... | .. ... | ..... | ..... | ..... | FitzRoy. |
| At sea | 27 30 | 343 14 | 1826 | 22 04 w. | ..... | 22·1 w. | ..... | ..... | ..... | ..... | ..... | ..... | Lütke. |
| Peak of Teneriffe * ... | 28 16 | 343 21 | 1842 | 23 40 w. | ..... | 23·7 w. | ..... | ..... | ..... | ..... | ..... | ..... | Deville. |
| At sea (2 observations) | 25 36 | 343 30 | 1836 | 21 25 w. | ..... | 21·4 w. | ..... | ..... | ... .. | ..... | ..... | ..... | Bonite. |

* Not used in the Map.

## NORTH EQUATORIAL ZONE III.—Lat. 20 N. to 30° N. (conti

| Stations. | Lat. N. | Long. E. | Date. | Declination. Observed. | Declination. Correction to Epoch 1842·5. | Declination. Corrected. | Inclination. Observed | Inclination. Cor. to Epoch 1842·5. | Inclination. Corrected. | Force Observed. |
|---|---|---|---|---|---|---|---|---|---|---|
| | ° ′ | ° ′ | | ° ′ | | ° | ° ′ | | ° | |
| At sea (2 observations) | 29 31 | 343 39 | 1832 | 20 44 w. | ..... | 20·7 w. | ..... | ..... | ..... | ..... |
| At sea (2 observations) | 28 16 | 343 42 | 1832 | 20 22 w. | ..... | 20·4 w. | ..... | ..... | ..... | ..... |
| Santa Cruz | 28 28 | 343 45 | 1822 | 21 00 w. | ..... | 21·0 w. | 57 06 | ..... | 57·1 | 9·46 |
| | | | 1826 | 22 37 w. | ..... | 22·6 w. | ..... | ..... | ..... | ..... |
| | | | 1836 | ..... | ..... | ..... | 57 28 | ..... | 57·5 | ..... |
| | | | 1837 | 22 50 w. | ..... | 22·8 w. | ..... | ..... | ..... | ..... |
| | | | 1837 | ..... | ..... | ..... | 57 47 | ..... | 57·8 | 9·56 |
| | | | 1838 | ..... | ..... | ..... | 57 21 | ..... | 57·4 | ..... |
| | | | 1838 | ..... | ..... | ..... | 57 40 | ..... | 57·7 | 9·39 |
| | | | 1840 | 20 31 w. | ..... | 20·5 w. | 57 05 | ..... | 57·1 | 9·41 |
| | | | 1842 | ..... | ..... | ..... | 57 17 | ..... | 57·3 | ..... |
| | | | | | | 21·7 w. | | | 57·4 N. | |
| At sea | 28 43 | 344 38 | 1837 | 20 38 w. | ..... | 20·6 w. | ..... | ..... | ..... | ..... |
| At sea | 29 15 | 345 15 | 1842 | 22 00 w. | ..... | 22·0 w. | ..... | ..... | ..... | ..... |
| At sea (2 observations) | 28 17 | 345 20 | 1836 | 21 53 w. | ..... | 21·9 w. | ..... | ..... | ..... | ..... |
| At sea | 29 53 | 345 30 | 1822 | 21 00 w. | ..... | 21·0 w. | 57 40 | ..... | 57·7 N. | ..... |

## NORTH EQUATORIAL ZONE IV.—LATITUDE 30° TO 40° N.

*Authorities.*

Bérard ..... { MSS. in the Magnetic Office, communicated by Admiral Duperrey land stations, MSS. in the Magnetic Office, communicated by Profe

Aimé ..... Exploration Scientifique de l'Algérie (Paris, 1845).

Norwegian Officers ..... Hansteen, Mag. Beob. (Christiania, 1863).

Novara (Austrian Frigate) Reise um die Erde (Wien, 1862–65).

Beechey, Fisher, Smith, and Caligny ..... } L. S. Kämtz, MSS.

Shadwell ..... MSS. in the British Hydrographic Office.

Schaub ..... Mag. Beob. von Dr. F. Schaub (Triest, 1858).

D'Abbadie, D'Hericourt, Estcourt, Rawlinson, Parrot, and Freycinet . } L. S. Kämtz, MSS.

Ivatinsk ..... Survey of the Caspian Sea, St. Petersburg, 1870 (in the Russian La

Lenz ..... Petermann, Mittheilungen, 1870 (Gotha).

Schlagintweit ..... Scientific Mission to India and High Asia (Leipzig and London).

Cunningham ..... In Schlagintweit's Scientific Mission.

Walker and Basevi ..... Reports of the Great Trigonometrical Survey of India.

Fuss, G. von Kowanko, and Schatskoff ..... } Mem. by Fritsche in Wild's Repertorium for 1870, Band I. Heft 2.

Basil Hall ..... In Kämtz MSS., above cited.

Collinson, Richards, Crane, and Kellett .. } MSS. in the British Hydrographic Office.

Erman ..... Reise um die Erde (Berlin, 1841).

NETISM.

(continued).

| Force in British units. | | | Observers. |
|---|---|---|---|
| Observed. | Cor. to Epoch 1842·5. | Corrected. | |
| ..... | ..... | ..... | FitzRoy. |
| ..... | ..... | ..... | FitzRoy. |
| 9·46 | ..... | | Duperrey. |
| ..... | ..... | | Dumont d'Urville. |
| ..... | ..... | | Bethune. |
| ..... | ..... | | Vidal. |
| 9·56 | ..... | 9·45 | Wickham. |
| ..... | ..... | | Stanley. |
| 9·39 | ..... | | Sulivan. |
| 9·41 | ..... | | Ross. |
| ..... | ..... | | Blackwood. |
| ..... | ..... | ..... | Dumoulin. |
| ..... | ..... | ..... | Bérard. |
| ..... | ..... | ..... | Bonite. |
| ..... | ..... | ..... | Duperrey. |

° N.

)uperrey; and for a few
by Professor L. S. Kämtz.

ıssian Language).

ıdon).

Heft 2.

Collinson, Richards, Crane, and Kellett .. } MSS. in the British Hydrographic Office.

Erman ..... Reise um die Erde (Berlin, 1841).

| | |
|---|---|
| Douglas (David) | Report on the Variations of the Earth's Magnetic Force (Brit. Assoc. Report, 1837). |
| Belcher (Sir Edward) | MSS. in the Magnetic Office. |
| American Expedition | MSS. in the British Hydrographic Office. |
| Lütke | Mem. by Lenz in the Sci. Mem. of the Acad of St. Petersburg, 1838; and L. S. Kämtz, MSS. |
| Moore | (Sea observations) MSS. in the Magnetic Office, received from Admiral Moore. |
| United States Coast Survey | Annual Reports, 1856 to 1863. |
| Harkness | Smithsonian Contributions, vol. xviii. |
| La Vénus | Voy. autour du Monde (Paris 1841). |
| Perry, Emory, and other United States Officers | United States Coast Survey Reports; Smithsonian Contributions; and Memoirs of the American Academy, vol. vi. part 1. |
| Graham, Nicollet, Loomis, Schott, and Locke | Annual Reports, United States Coast Survey. |
| Friesach | Memoirs of the Imperial Academy of Sciences, Vienna, vols. xxix. to xliv. |
| Barnett | MSS. in the Magnetic Office, and L. S. Kämtz, MSS. |
| Lefroy | Contribution to Terrestrial Magnetism, No. VII. Philosophical Transactions, 1846, and in U. S. Coast Survey. |
| Behard | MS. in the Magnetic Office, received from Admiral Duperrey. |
| Hudson, Austen, Foster, Milne, Gaint, Jehenne, Lunt, Young, Rumker, Smith, Prussian Ships, Sulivan, and Du Petit Thouars | L. S. Kämtz, MSS. in the Magnetic Office. |
| Bonite | Voyage (Paris, 1842). |
| FitzRoy | Surveying Voyage (London, 1839). |
| Vidal | Contribution to Terrestrial Magnetism, No. IX., Philosophical Transactions, 1849, Art. XII. |
| Rattlesnake | H.M.S. 'Rattlesnake,' MSS. in the Hydrographic Office. |
| Lamont | Erdmag. S.W. Europa's (München, 1858). |
| Ross (James) | MSS. in the Magnetic Office. |
| Sabine | Pendulum and other Experiments (London, 1825). |

## NORTH EQUATORIAL ZONE IV.—Lat. 30° N. to 40° N.

| Stations. | Lat. N. | Long. E. | Date. | Declination. | | | Inclination. | | | Force in British units. | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Observed. | Correction to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | | |
| | ° ′ | ° ′ | | ° ′ | ° ′ | ° | ° ′ | ° ′ | ° | | |
| At sea | 38 58 | 0 58 | 1846 | 19 48 W. | ..... | 19·8 W. | ..... | ..... | ..... | ..... | Bérard. |
| At sea (3 observations) | 37 04 | 1 03 | 1842 | 17 40 W. | ..... | 17·7 W. | ..... | ..... | ..... | ..... | Bérard. |
| At sea (2 observations) | 38 49 | 1 05 | 1842 | 17 30 W. | ..... | 17·5 W. | ..... | ..... | ..... | ..... | Bérard. |
| Algiers | 36 47 | 3 04 | 1842 | 18 35 W. | ..... | 18·6 W. | 57 21 | ..... | 57·4 | 9·54 | Aimé. |
| | | | 1843 | ..... | ..... | ..... | 57 08 | + 3 | 57·2 } 57·3 N. | 9·60 } 9·57 | Norwegian Officers. |
| Port Mahon | 39 52 | 4 20 | 1842 | ..... | ..... | ..... | 59 59 | ..... | 60·0 N. | 9·68 | Norwegian Officers. |
| Bougia | 36 50 | 5 00 | 1832 | 18 24 W. | 0 50 E. | 17·6 W. | ..... | ..... | ..... | ..... | Bérard. |
| At sea (3 observations) | 38 09 | 5 31 | 1859 | 16 17 W. | 1 25 W. | 17·7 W. | ..... | ..... | ..... | ..... | Novara. |
| Djegelli | 36 50 | 5 45 | 1832 | 18 16 W. | 0 50 E. | 17·4 W. | ..... | ..... | ..... | ..... | Bérard. |
| Cap de Fer | 37 05 | 7 09 | 1832 | 17 33 W. | 0 50 E. | 16·7 W. | ..... | ..... | ..... | ..... | Bérard. |
| Bona | 36 54 | 7 46 | 1832 | 17 39 W. | 0 50 E. | 16·8 W. | ..... | ..... | ..... | ..... | Bérard. |
| Galita Island | 37 31 | 8 56 | 1833 | 17 07 W. | 0 45 E. | 16·4 W. | ..... | ..... | ..... | ..... | Bérard. |
| At sea (2 observations) | 38 20 | 11 32 | 1859 | 14 21 W. | 1 25 W. | 15·8 W. | ..... | ..... | ..... | ..... | Novara. |
| Tripoli | 32 54 | 13 14 | 1821 | 16 35 W. | 1 45 E. | 14·8 W. } 15·4 W. | ..... | ..... | ..... | ..... | Smith. |
| | | | 1828 | 17 08 W. | 1 10 E. | 16·0 W. | ..... | ..... | ..... | ..... | Beechey. |
| | | | 1853 | 14 20 W. | 0 55 W. | 15·3 W. | 49 21 | + 38 | 50·0 N. | ..... | Vogel. |
| At sea (2 observations) | 38 25 | 14 00 | 1859 | 13 16 W. | 1 25 W. | 14·7 W. | ..... | ..... | ..... | ..... | Novara. |
| Valetta | 35 54 | 14 31 | 1829 | 15 15 W. | 1 05 E. | 14·2 W. | 54 18 | − 45 | 53·5 | | Fisher. |
| | | | 1839 | 15 25 W. | 0 15 E. | 15·2 W. | ..... | ..... | ..... } 53·5 N. | 9·27 | Caligny. |
| | | | 1843 | ..... | ..... | ..... } 14·7 W. | 53 28 | + 3 | 53·5 | | Norwegian Officers. |
| | | | 1862 | ..... | ..... | ..... | 52 17 | +1 10 | 53·5 | | Shadwell. |
| Catania | 37 30 | 15 05 | 1830 | 16 28 W. | 1 00 E. | 15·5 W. | ..... | ..... | ..... | ..... | Fisher. |
| Cape Mesurata | 32 23 | 15 17 | 1828 | 17 05 W. | 1 10 E. | 15·9 W. | ..... | ..... | ..... | ..... | Beechey. |
| Messina | 38 11 | 15 34 | 1830 | 17 12 W. | 1 00 E. | 16·2 W. | 56 29 | − 36 | 55·9 } 55·9 N. | 9·34 | Fisher. |
| | | | 1841 | ... .. | ..... | ..... | 55 49 | − 3 | 55·8 | | Norwegian Officers. |
| At sea | 39 38 | 18 31 | 1859 | 10 46 W. | 1 25 W. | 12·2 W. | ..... | ..... | ..... | ..... | Novara. |
| Corfu | 39 38 | 19 55 | 1857 | 10 48 W. | 1 15 W. | 12·1 W. | 55 42 | + 45 | 56·5 N. | 9·40 | Schaub. |
| Bengazi | 32 07 | 20 03 | 1828 | 15 00 W. | 1 10 E. | 13·8 W. | ..... | ..... | ..... | ..... | Beechey. |
| Zante | 37 48 | 20 55 | 1857 | 10 23 W. | 1 15 W. | 11·6 W. | 53 30 | + 45 | 54·3 N. | 9·25 | Schaub. |
| Marza Suza | 32 55 | 21 20 | 1828 | 14 29 W. | 1 10 E. | 13·3 W. | ..... | ..... | ..... | ..... | Beechey. |
| Cape Matapan | 36 21 | 22 25 | 1839 | 12 00 W. | 0 15 E. | 11·8 W. | ..... | ..... | ..... | ..... | Caligny. |
| Cerigo | 36 07 | 23 02 | 1857 | 9 32 W. | 1 15 W. | 10·8 W. | 51 14 | + 37 | 51·9 N. | 9·14 | Schaub. |
| Bombah | 32 23 | 23 12 | 1857 | 9 29 W. | 1 15 W. | 10·7 W. | 46 04 | + 37 | 46·7 N. | 8·84 | Schaub. |
| Athens | 37 58 | 23 46 | 1843 | ..... | ..... | ..... | 53 53 | + 3 | 53·9 N. | 9·31 | Norwegian Officers. |
| Tenedos | 39 51 | 23 45 | 1839 | 11 36 W. | 0 17 E. | 11·3 W. | ..... | ..... | ..... | ..... | Caligny. |
| Milo | 36 43 | 24 27 | 1843·0 | ..... | ..... | ..... | 52 13 | + 3 | 52·3 N. | 9·25 | Norwegian Officers. |
| Candia | 35 25 | 25 11 | 1823 | 12 00 W. | 1 37 E. | 10·4 W. } 10·2 W. | ..... | ..... | ..... | ..... | Smith. |
| | | | 1857 | 8 44 W. | 1 15 W. | 10·0 W. | 49 54 | + 37 | 50·5 N. | 9·07 | Schaub. |
| Smyrna | 38 26 | 27 07 | 1830 | 10 36 W. | 1 02 E. | 9·6 W. | 54 34 | − 30 | 54·1 } 54·0 N. | ..... | Fisher. |
| | | | 1843 | ..... | ..... | ..... | 53 48 | + 3 | 53·9 | 9·38 | Norwegian Officers. |
| Rhodes | 36 26 | 28 17 | 1857 | 7 30 W. | 1 15 W. | 8·8 W. | 50 50 | + 30 | 51·3 N. | 9·15 | Schaub. |
| Alexandria | 31 11 | 29 54 | 1839 | ..... | ..... | ..... | 43 48 | − 6 | 43·7 | 8·05 | D'Abbadie. |
| | | | 1847 | ..... | ..... | ..... | 43 47 | + 10 | 44·0 } 43·8 N. | ..... } 8·40 | D'Hericourt. |
| | | | 1857 | 7 10 W. | 1 15 W. | 8·4 W. | 43 19 | + 30 | 43·8 | 8·74 | Schaub. |
| Adalia | 36 52 | 30 45 | 1857 | 6 20 W. | 1 15 W. | 7·6 W. | 51 32 | + 30 | 52·0 N. | 9·19 | Schaub. |
| Cairo | 30 03 | 31 15 | 1857 | 7 08 W. | 1 15 W. | 8·4 W. | 41 24 | + 30 | 49·1 N. | ..... | Schlagintweit. |
| Tineh | 31 04 | 32 32 | 1848 | ..... | ..... | ..... | 43 19 | + 9 | 43·5 N. | ..... | D'Hericourt. |
| Suez | 30 00 | 32 36 | 1848 | ..... | ..... | ..... | 41 37 | + 12 | 41·8 | ..... | D'Hericourt. |
| | | | 1856 | 5 23 W. | 1 10 W. | 6 6 W. | 41 11 | + 28 | 41·7 } 41·7 N. | ..... | Schlagintweit. |
| Limassol | 34 40 | 33 06 | 1857 | 6 03 W. | 1 15 W. | 7·3 W. | 47 59 | + 21 | 48·3 N. | 9·04 | Schaub. |
| Jaffa | 32 03 | 34 48 | 1857 | 5 18 W. | 1 15 W. | 6·6 W. | 44 15 | + 15 | 44·5 N. | 8·84 | Schaub. |
| Beyrout | 33 52 | 35 33 | 1857 | 5 19 W. | 1 15 W. | 6·6 W. | 46 42 | + 15 | 47·0 N. | 9·01 | Schaub. |
| Latakia | 35 31 | 35 50 | 1857 | 4 59 W. | 1 15 W. | 6·2 W. | 48 43 | + 15 | 49·0 N. | 9·12 | Schaub. |
| Port William | 37 00 | 38 00 | 1836 | ..... | ..... | ..... | 50 35 | − 4 | 50·5 N. | 8·77 | Estcourt. |
| Babylon | 32 30 | 44 15 | 1853 | 4 00 W. | 0 44 W. | 4·7 W. | ..... | ..... | .. ... | ..... | Rawlinson. |
| Ararat | 39 42 | 44 15 | 1829 | 4 29 W. | 0 52 E. | 3·6 W. | 53 07 | − 6 | 53·0 N. | ..... | Parrot. |
| Bassora | 30 30 | 47 53 | 1836 | 4 05 W. | 0 24 E. | 3·7 W. | 40 25 | − 2 | 40·4 N. | 8·60 | Estcourt. |
| Sara Island | 38 53 | 49 00 | 1862 | 0 03 E. | 1 20 W. | 1·3 W. | 52 15 | ..... | 52·3 N. | 9·71 | Ivatinsk. |
| Kuriskchi Kaman | 39 01 | 49 23 | 1862 | 0 25 E. | 1 20 W. | 0·9 W. | 52 19 | ..... | 52·3 N. | 9·70 | Ivatinsk. |
| Enzili | 37 29 | 49 36 | 1862 | 0 15 E. | 1 20 W. | 1·1 W. | ..... | ..... | ..... | ..... | Ivatinsk. |
| Lefil-rud | 37 24 | 50 20 | 1862 | 0 34 E. | 1 20 W. | 0·8 W. | 50 24 | ..... | 50·4 N. | 9·63 | Ivatinsk. |
| Tchaabi-djet | 37 11 | 50 25 | 1862 | 0 25 E. | 1 20 W. | 0·9 W. | 50 06 | ..... | 50·1 N. | 9·59 | Ivatinsk. |

## NORTH EQUATORIAL ZONE IV.—Lat. 30° N. to 40° N. (continued).

| Stations. | Lat. N. | Long. E. | Date. | Declination. | | | Inclination. | | | Force in British units. | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Observed. | Correction to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | | |
| | ° ′ | ° ′ | | ° ′ | ° ′ | ° | ° ′ | ′ | ° | | |
| Fin | 33 57 | 51 15 | 1859 | 0 08 W. | 1 06 W. | 1·2 W. | 45 59 | ..... | 46·0 N. | 9·40 | Lenz. |
| Sergende | 35 48 | 51 30 | 1859 | 0 10 W. | 1 06 W. | 1·3 W. | 48 03 | ..... | 48·1 N. | ..... | Lenz. |
| Sardobe-nud | 36 41 | 51 34 | 1862 | 0 27 E. | 1 20 W. | 0·9 W. | 49 33 | ..... | 49·6 N. | 9·59 | Ivatinsk. |
| Ispahan | 32 40 | 51 45 | 1859 | 0 00 | 1 20 W. | 1·3 W. | 44 15 | ..... | 44·3 N. | 9·35 | Lenz. |
| Meledisir | 36 43 | 52 47 | 1862 | 0 49 E. | 1 20 W. | 0·5 W. | 49 35 | ..... | 49·6 N. | 9·61 | Ivatinsk. |
| Agurkinshi Island | 39 05 | 53 11 | 1862 | 2 07 E. | 1 20 W. | 0·8 E. | 52 30 | ..... | 52·5 N. | 9·88 | Ivatinsk. |
| Tchesekin | 39 33 | 53 13 | 1862 | 1 55 E. | 1 20 W. | 0·6 E. | 52 57 | ..... | 53·0 N. | 9·96 | Ivatinsk. |
| Boltshi Island | 36 54 | 54 04 | 1862 | 1 12 E. | 1 20 W. | 0·1 W. | 49 51 | ..... | 49 9 N. | 9·66 | Ivatinsk. |
| Jesd | 31 54 | 54 30 | 1859 | 0 01 E. | 1 06 W. | 1·1 W. | 42 42 | ..... | 42 7 N. | 9·31 | Lenz. |
| Astrabad | 36 51 | 54 30 | 1859 | 1 04 E. | 1 06 W. | 0·0 | 49 53 | ..... | 49·9 N. | 9·48 | Lenz. |
| Siared | 36 42 | 54 30 | 1859 | ..... | ..... | ..... | 49 51 | ..... | 49·9 N. | ..... | Lenz. |
| Strachrud | 36 25 | 55 00 | 1859 | 0 52 E. | 1 06 W. | 0·2 W. | 48 38 | ..... | 48·6 N. | 9·58 | Lenz. |
| Tebbes | 33 36 | 56 52 | 1859 | 0 58 E. | 1 06 W. | 0·1 W. | 45 32 | ..... | 45·5 N. | 9·49 | Lenz. |
| Kirman | 30 18 | 57 15 | 1859 | 0 21 E. | 1 06 W. | 0·8 W. | 41 02 | ..... | 41·0 N. | 9·74 | Lenz. |
| Chubbis | 30 25 | 57 45 | 1859 | 0 35 E. | 1 06 W. | 0·5 W. | 40 56 | ..... | 40·9 N. | 9·38 | Lenz. |
| Ssabsewar | 36 12 | 57 45 | 1859 | ..... | ..... | ..... | 49 31 | ..... | 49·5 N. | ..... | Lenz. |
| Tun | 34 00 | 58 07 | 1859 | 1 15 E. | 1 06 W. | 0·2 E. | 45 57 | ..... | 46·0 N. | 9·66 | Lenz. |
| Madan | 36 28 | 58 22 | 1859 | 1 26 E. | 1 06 W. | 0·3 E. | 48 59 | ..... | 49·0 N. | 9·94 | Lenz. |
| Djumea | 34 21 | 58 37 | 1859 | 1 26 E. | 1 06 W. | 0·3 E. | 46 36 | ..... | 46·6 N. | 9·69 | Lenz. |
| Tschach | 32 16 | 58 46 | 1859 | 1 11 E. | 1 06 W. | 0·1 E. | ..... | ..... | ..... | ..... | Lenz. |
| Bassiran | 31 57 | 59 00 | 1859 | 1 20 E. | 1 06 W. | 0·2 E. | 43 46 | ..... | 43·8 N. | 9·45 | Lenz. |
| Birdjand | 32 53 | 59 15 | 1859 | ..... | ..... | ..... | 41 34 | ..... | 41·6 N. | ..... | Lenz. |
| Meshed | 36 18 | 59 37 | 1859 | 2 00 E. | 1 06 W. | 0·9 E. | 49 16 | ..... | 49·3 N. | 9·95 | Lenz. |
| Nech Village | 31 32 | 60 00 | 1859 | 1 13 E. | 1 06 W. | 0·1 E. | 43 00 | ..... | 43·0 N. | ..... | Lenz. |
| Turbet | 35 15 | 60 37 | 1859 | 1 58 E. | 1 06 W. | 0·9 E. | 48 20 | ..... | 48·3 N. | 9·90 | Lenz. |
| Lasch | 31 43 | 61 30 | 1859 | ..... | ..... | ..... | 43 16 | ..... | 43·3 N. | ..... | Lenz. |
| Gurian | 34 21 | 61 30 | 1859 | 1 58 E. | 1 06 W. | 0·9 E. | 47 25 | ..... | 47·4 N. | 9·95 | Lenz. |
| Anar Dörre | 32 46 | 61 37 | 1859 | ..... | ..... | ..... | 44 42 | ..... | 44·7 N. | 9·70 | Lenz. |
| Sabsor | 33 18 | 62 00 | 1859 | ..... | ..... | ..... | 45 21 | ..... | 45·4 N. | 9·76 | Lenz. |
| Herat | 34 21 | 62 07 | 1859 | 1 55 E. | 1 06 W. | 0·8 E. | 46 38 | ..... | 46·6 N. | 9·87 | Lenz. |
| Déra Ismáel Khan | 31 40 | 70 56 | 1856 | 0 58 E. | 0 40 W. | 0·3 E. | 44 23 | −14 | 44·2 N. | 10·70 | Schlagintweit. |
| Peshawur | 34 03 | 71 33 | 1856 | 2 28 E. | 0 40 W. | 1·8 E. | 46 26 | −14 | 46·2 N. | 10·89 | Schlagintweit. |
| Moultan | 30 10 | 71 35 | 1856 | 0 54 E. | 0 40 W. | 0·2 E. | ..... | ..... | ..... | ..... | Schlagintweit. |
| Spáhpur | 32 14 | 72 33 | 1856 | 1 20 E. | 0 40 W. | 0·7 E. | ..... | ..... | ..... | ..... | Schlagintweit. |
| Raulpíndi | 33 37 | 73 00 | 1856 | 3 06 E. | 0 40 W. | 2·4 E. | 45 56 | −14 | 45·7 N. | 9·90 | Schlagintweit. |
| Márri | 33 51 | 73 23 | 1856 | 3 21 E. | 0 40 W. | 2·7 E. | 46 03 | −14 | 45·8 N. | 9·63 | Schlagintweit. |
| Mozaferabad | 34 22 | 73 31 | 1856 | 3 24 E. | 0 40 W. | 2·7 E. | 47 20 | −14 | 47·1 N. | 9·83 | Schlagintweit. |
| Lahore | 31 34 | 74 15 | 1856 | 2 02 E. | 0 40 W. | 1·4 E. | 43 17 | −14 | 43·1 N. | 9·86 | Schlagintweit. |
| Táshing | 35 16 | 74 41 | 1856 | 4 18 E. | 0 40 W. | 3·6 E. | 48 24 | −14 | 48·2 N. | 10·75 | Schlagintweit. |
| Dáver | 34 34 | 74 46 | 1856 | ..... | ..... | ..... | 47 42 | −14 | 47·5 N. | ..... | Schlagintweit. |
| Srinagger | 34 05 | 74 49 | 1847 | 2 45 E. | 0 10 W. | 2·6 E. | 46 40 | − 5 | 46·6 N. | ..... | Cunningham. |
| | | | 1856 | 3 00 E. | 0 28 W. | 2·5 E. | 46 58 | −14 | 46·7 N. | 9·99 | Schlagintweit. |
| | | | | | | 2·6 E. | | | 46·6 N. | | |
| Dras | 34 28 | 75 43 | 1856 | ..... | ..... | ..... | 46 51 | −14 | 46 6 N. | 10·12 | Schlagintweit. |
| Skardo | 35 20 | 75 44 | 1856 | 4 05 E. | 0 28 W. | 3·6 E. | 48 21 | −14 | 48·1 N. | 10·94 | Schlagintweit. |
| Chorkonda | 35 33 | 75 56 | 1856 | 2 53 E. | 0 28 W. | 2·4 E. | 48 43 | −14 | 48·5 N. | ..... | Schlagintweit. |
| Tso-Ka | 35 58 | 76 03 | 1856 | ..... | ..... | ..... | 49 19 | −14 | 49·1 N. | ..... | Schlagintweit. |
| Kargil | 34 30 | 76 04 | 1856 | 3 10 E. | 0 28 W. | 2·7 E. | 47 57 | −14 | 47·7 N. | 10·20 | Schlagintweit. |
| Mulbe | 34 20 | 76 07 | 1847 | 2 44 E. | 0 10 W. | 2·6 E. | 46 56 | − 5 | 46·9 N. | ..... | Cunningham. |
| Ambála | 30 21 | 76 49 | 1856 | 2 26 E. | 0 28 W. | 2·0 E. | 40 48 | −14 | 40·6 N. | ..... | Schlagintweit. |
| Pádum | 33 28 | 76 54 | 1856 | 3 41 E. | 0 28 W. | 3·2 E. | 45 52 | −14 | 45·6 N. | ..... | Schlagintweit. |
| Kárdong | 32 34 | 77 01 | 1856 | 3 23 E. | 0 28 W. | 2·9 E. | 44 28 | −14 | 44·2 N. | 10·96 | Schlagintweit. |
| Sultanpur | 31 58 | 77 06 | 1856 | 3 03 E. | 0 28 W. | 2·6 E. | 43 52 | −14 | 43·6 N. | ..... | Schlagintweit. |
| Simla | 31 06 | 77 08 | 1856 | 2 56 E. | 0 28 W. | 2 5 E. | 42 30 | −14 | 42·3 N. | 9·71 | Schlagintweit. |
| Leh | 34 08 | 77 15 | 1847 | 2 47 E. | 0 10 W. | 2·6 E. | 46 43 | − 5 | 46·6 N. | ..... | Cunningham. |
| | | | 1856 | 3 23 E. | 0 28 W. | 2·9 E. | 46 53 | −14 | 46·7 N. | 10·11 | Schlagintweit. |
| | | | | | | 2·7 E. | | | 46·6 N. | | |
| Sasser Pass | 35 06 | 77 28 | 1856 | 3 32 E. | 0 28 W. | 3·1 E. | 48 18 | −14 | 48·1 N. | ..... | Schlagintweit. |
| Karakorum Pass | 35 47 | 77 30 | 1856 | 3 34 E. | 0 28 W. | 3·1 E. | 49 14 | −14 | 49·0 N. | 10·93 | Schlagintweit. |
| Rámpur | 31 31 | 77 37 | 1856 | ..... | ..... | ..... | 42 46 | −14 | 42·5 N. | ..... | Schlagintweit. |
| Súget | 36 10 | 77 50 | 1856 | 4 22 E. | 0 28 W. | 3·9 E. | 50 12 | −14 | 50·0 N. | ..... | Schlagintweit. |
| Vangtu Bridge | 31 37 | 77 54 | 1856 | ..... | ..... | ..... | 43 23 | −14 | 43·2 N. | ..... | Schlagintweit. |
| Massuri | 30 29 | 78 00 | 1856 | ..... | ..... | ..... | 41 15 | −14 | 41·0 N. | 10·81 | Schlagintweit. |

## NORTH EQUATORIAL ZONE IV.—Lat. 30° N. to 40° N. (continued).

| Stations. | Lat. N. | Long. E. | Date. | Declination. | | | Inclination. | | | Force in British units. | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Observed. | Correction to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | | |
| | ° ′ | ° ′ | | ° ′ | ° ′ | ° | ° ′ | ′ | ° | | |
| Mŭd | 31 56 | 78 01 | 1856 | 3 44 E. | 0 14 W. | 3·5 E. | 44 18 | −14 | 44·1 N. | ..... | Schlagintweit. |
| Súmgal | 36 08 | 78 05 | 1856 | ..... | ..... | ..... | 50 05 | −14 | 49·9 N. | 10·88 | Schlagintweit. |
| Dehra Doon | 30 20 | 78 06 | 1869 | 3 06 E. | 0 27 W. | 2·7 E. | 41 31 | −27 | 41·1 N. | 9·74 | Walker. |
| Măssoori | 30 27 | 78 10 | 1867 | 2 37 E. | 0 25 W. | 2·2 E. | 41 41 | −25 | 41·3 N. | 9·75 | Walker and Basevi. |
| Tsomoriri | 32 45 | 78 17 | 1856 | 3 10 E. | 0 14 W. | 2·9 E. | 45 20 | −14 | 45·1 N. | ..... | Schlagintweit. |
| Ussilla | 31 08 | 78 18 | 1856 | ..... | ..... | ..... | 42 13 | −14 | 42·0 N. | 10·96 | Schlagintweit. |
| 2 Stations in Rukchu | 33 13 | 78 26 | 1847 | ..... | ..... | ..... | 45 01 | − 5 | 44·9 N. | ..... | Cunningham. |
| Tsomognalari | 33 40 | 78 39 | 1856 | 3 22 E. | 0 14 W. | 3·1 E. | 46 34 | −14 | 46·3 N. | 9·97 | Schlagintweit. |
| Hánle | 32 48 | 78 56 | 1847 | ..... | ..... | ..... | 44 23 | − 5 | 44·3 N. | ..... | Cunningham. |
| Lara | 32 09 | 79 09 | 1847 | ..... | ..... | ..... | 43 37 | − 5 | 43·5 N. | ..... | Cunningham. |
| Mána | 30 47 | 79 21 | 1856 | 2 45 E. | 0 14 W. | 2·5 E. | 41 25 | −14 | 41·2 N. | 10·53 | Schlagintweit. |
| Milum | 30 35 | 79 55 | 1856 | 2 40 E. | 0 14 W. | 2·4 E. | 40 32 | −14 | 40·3 N. | 10·49 | Schlagintweit. |
| Pekin | 39 57 | 116 28 | 1831 | 1 48 W. | 0 11 W. | 2·0 W. | 54 50 | +38 | 55·5 N. | 11·01 | Fuss. |
| | | | 1835 | 2 10 W. | 0 7 W. | 2·3 W. | ..... | ..... | ..... | ..... | Kowanko. |
| | | | 1842 | ..... | ..... | ..... | 55 42 | ..... | 55·7 N. | 11·13 | Repertorium, Bd. VII. |
| | | | 1852 | ..... | ..... | ..... | 56 02 | −35 | 55·5 N. | ..... | Schatskoff. |
| | | | 1868 | 2 25 W. | 0 26 E. | 2·0 W. | 57 00 | −94 | 55·4 N. | 11·42 | Fritsche. |
| | | | | | | 2·1 W. | | | 55·5 N. | 11·18 | |
| Pehio | 38 57 | 117 50 | 1816 | 2 16 W. | ? | ..... | ..... | ..... | ..... | ..... | Basil Hall. |
| Illon Lake | 38 00 | 120 00 | 1816 | 2 16 W. | ? | ..... | ..... | ..... | ..... | ..... | Basil Hall. |
| Shanghai | 31 15 | 121 29 | 1858 | 1 50 W. | 0 08 E. | 1·7 W. | 45 21 | −32 | 44·8 N. | ..... | Novara. |
| Woosung | 31 24 | 121 30 | 1841 | 1 37 W. | ..... | 1·6 W. | ..... | ..... | ..... | ..... | Collinson. |
| At sea (2 observations) | 31 25 | 121 32 | 1858 | 1 24 W. | ..... | 1·4 W. | ..... | ..... | ..... | ..... | Novara. |
| Cheaton Bay | 37 36 | 121 34 | 1816 | 2 16 W. | ? | ..... | ..... | ..... | ..... | ..... | Basil Hall. |
| Reef Island | 30 14 | 121 36 | 1842 | 2 00 W. | ..... | 2·0 W. | ..... | ..... | ..... | ..... | Collinson. |
| Just in the Way | 30 00 | 121 54 | 1840 | 0 10 W. | ..... | 0·2 W. | ..... | ..... | ..... | ..... | Collinson. |
| Stewart | 30 00 | 121 56 | 1840 | 0 08 W. | ..... | 0·2 W. | ..... | ..... | ..... | ..... | Collinson. |
| Fishers Peak | 30 12 | 122 03 | 1841 | 2 22 W. | ..... | 2·4 W. | ..... | ..... | ..... | ..... | Collinson. |
| Chusan | 30 03 | 122 07 | 1840 | 2 18 W. | ..... | 2·3 W. | ..... | ..... | ..... | ..... | Collinson. |
| At sea (3 observations) | 31 15 | 122 09 | 1858 | 1 47 W. | ..... | 1·8 W. | ..... | ..... | ..... | ..... | Novara. |
| Sheppey Island | 30 10 | 122 10 | 1841 | 2 31 W. | ..... | 2·5 W. | ..... | ..... | ..... | ..... | Collinson. |
| Gutzlaff Island | 31 10 | 122 11 | 1842 | 1 25 W. | ..... | 1·4 W. | ..... | ..... | ..... | ..... | Collinson. |
| Shaweishan | 31 25 | 122 14 | 1840 | 0 30 W. | ..... | 0·5 W. | ..... | ..... | ..... | ..... | Collinson. |
| At sea (4 observations) | 30 51 | 122 36 | 1858 | 1 37 W. | ..... | 1·6 W. | ..... | ..... | ..... | ..... | Novara. |
| At sea (4 observations) | 31 10 | 122 47 | 1858 | 1 30 W. | ..... | 1·5 W. | ..... | ..... | ..... | ..... | Novara. |
| Saddle Group | 30 42 | 122 47 | 1841 | 0 20 W. | ..... | 0·3 W. | ..... | ..... | ..... | ..... | Collinson. |
| At sea (2 observations) | 31 15 | 122 47 | 1858 | 1 30 W. | ..... | 1·5 W. | ..... | ..... | ..... | ..... | Novara. |
| Alceste Island | 34 00 | 124 45 | 1816 | 2 03 W. | ? | ..... | ..... | ..... | ..... | ..... | Basil Hall. |
| At sea | 30 44 | 125 46 | 1855 | 2 17 W. | ..... | 2·3 W. | ..... | ..... | ..... | ..... | Richards. |
| Amherst Island | 34 22 | 126 05 | 1816 | 2 30 W. | ? | ..... | ..... | ..... | ..... | ..... | Basil Hall. |
| At sea | 31 14 | 126 34 | 1855 | 1 56 W. | ..... | 1·9 W. | ..... | ..... | ..... | ..... | Richards. |
| Quelpart Island | 33 30 | 126 53 | 1845 | 2 30 W. | ..... | 2·5 W. | 46 54 | ..... | 46·9 N. | ..... | Belcher. |
| Black Island | 34 16 | 127 13 | 1845 | 2 24 W. | ..... | 2·4 W. | 48 23 | ..... | 48·4 N. | ..... | Belcher. |
| Nangasaki Bay | 32 43 | 129 44 | 1845 | 2 35 W. | ..... | 2·6 W. | 45 00 | ..... | 45·0 N. | ..... | Belcher. |
| At sea (3 observations) | 35 45 | 132 10 | 1855 | 3 02 W. | ..... | 3·0 W. | ..... | ..... | ..... | ..... | Richards. |
| At sea (2 observations) | 37 24 | 134 51 | 1855 | 3 56 W. | ..... | 3·9 W. | ..... | ..... | ..... | ..... | Richards. |
| At sea | 39 28 | 137 39 | 1855 | 3 32 W. | ..... | 3·5 W. | ..... | ..... | ..... | ..... | Richards. |
| Simoda Harb. (Japan) | 34 39 | 138 58 | 1854 | 0 52 W. | ..... | 0·9 W. | ..... | ..... | ..... | ..... | American Expedition. |
| Sagonin | 35 27 | 139 40 | 1854 | 0 25 W. | ..... | 0·4 W. | ..... | ..... | ..... | ..... | American Expedition. |
| At sea (2 observations) | 32 30 | 141 20 | 1854 | ..... | ..... | ..... | 43 30 | ..... | 43·5 N. | ..... | Collinson. |
| At sea (2 observations) | 33 16 | 144 55 | 1854 | ..... | ..... | ..... | 44 44 | ..... | 44·7 N. | ..... | Collinson. |
| At sea (2 observations) | 31 16 | 145 23 | 1854 | ..... | ..... | ..... | 42 25 | ..... | 42·4 N. | ..... | Collinson. |
| At sea | 33 41 | 146 00 | 1828 | 1 14 E. | ..... | 1·2 E. | ..... | ..... | ..... | ..... | Lütke. |
| At sea (2 observations) | 36 36 | 148 11 | 1854 | ..... | ..... | ..... | 48 06 | ..... | 48·1 N. | ..... | Collinson. |
| At sea (4 observations) | 37 44 | 149 21 | 1828 | 1 42 E. | ..... | 1·7 E. | ..... | ..... | ..... | ..... | Lütke. |
| At sea (3 observations) | 37 40 | 152 51 | 1853 | ..... | ..... | ..... | 48 57 | ..... | 49·0 N. | ..... | Collinson. |
| At sea | 39 07 | 159 03 | 1827 | 4 38 E. | ..... | 4·6 E. | 51 32 | ..... | 51·5 N. | 8·87 | Lütke. |
| At sea | 32 59 | 161 49 | 1827 | 5 21 E. | ..... | 5·4 E. | 40 40 | ..... | 40·7 N. | 8·65 | Lütke. |
| At sea (4 observations) | 32 02 | 162 52 | 1819 | 7 37 E. | ..... | 7·6 E. | ..... | ..... | ..... | ..... | Freycinet. |
| At sea (2 observations) | 38 35 | 171 20 | 1850 | ..... | ..... | ..... | 52 57 | ..... | 53·0 N. | ..... | Collinson. |
| At sea | 35 54 | 173 50 | 1850 | ..... | ..... | ..... | 51 04 | ..... | 51·1 N. | ..... | Collinson. |
| At sea (2 observations) | 33 16 | 177 05 | 1850 | ..... | ..... | ..... | 49 26 | ..... | 49·4 N. | ..... | Collinson. |
| At sea | 39 19 | 179 03 | 1848 | ..... | ..... | ..... | 55 33 | ..... | 55·6 N. | ..... | Moore. |

## NORTH EQUATORIAL ZONE IV.—Lat. 30° N. to 40° N. (continued).

| Stations. | Lat. N. | Long. E. | Date. | Declination. Observed. | Declination. Correction to Epoch 1842·5. | Declination. Corrected. | Inclination. Observed. | Inclination. Cor. to Epoch. 1842·5. | Inclination. Corrected. | Force in British units. | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | ° ′ | ° ′ | | ° ′ | ° ′ | ° | ° ′ | | ° | | |
| At sea | 30 19 | 181 20 | 1850 | ..... | ..... | ..... | 47 46 | ..... | 47·8 N. | ..... | Collinson. |
| At sea | 39 56 | 184 43 | 1848 | ..... | ..... | ..... | 58 30 | ..... | 58·5 N. | ..... | Moore. |
| At sea | 38 50 | 185 43 | 1848 | ..... | ..... | ..... | 57 27 | ..... | 57·5 N. | ..... | Moore. |
| At sea | 38 22 | 186 34 | 1848 | ..... | ..... | ..... | 54 44 | ..... | 54·7 N. | ..... | Moore. |
| At sea | 37 13 | 188 14 | 1848 | ..... | ..... | ..... | 57 25 | ..... | 57·4 N. | ..... | Moore. |
| At sea | 35 03 | 188 54 | 1848 | ..... | ..... | ..... | 56 40 | ..... | 56·7 N. | ..... | Moore. |
| At sea | 33 27 | 189 21 | 1848 | ..... | ..... | ..... | 55 06 | ..... | 55·1 N. | ..... | Moore. |
| At sea | 31 43 | 190 00 | 1848 | ..... | ..... | ..... | 54 05 | ..... | 53·8 N. | ..... | Moore. |
| At sea (3 observations) | 37 27 | 193 26 | 1852 | 15 15 E. | ..... | 15·3 E. | ..... | ..... | ..... | ..... | Crane. |
| At sea (2 observations) | 35 19 | 194 03 | 1852 | 12 50 E. | ..... | 12·8 E. | ..... | ..... | ..... | ..... | Crane. |
| At sea (2 observations) | 33 16 | 194 37 | 1852 | 13 04 E. | ..... | 13·1 E. | ..... | ..... | ..... | ..... | Crane. |
| At sea (2 observations) | 31 30 | 195 24 | 1852 | 12 51 E. | ..... | 12·9 E. | ..... | ..... | ..... | ..... | Crane. |
| At sea (3 observations) | 30 51 | 197 21 | 1852 | 13 09 E. | ..... | 13·2 E. | ..... | ..... | ..... | ..... | Crane. |
| At sea | 38 21 | 213 30 | 1827 | 17 18 E. | ..... | 17·3 E. | ..... | ..... | ..... | ..... | Lütke. |
| At sea | 30 19 | 215 30 | 1827 | 13 28 E. | ..... | 13·5 E. | ..... | ..... | ..... | ..... | Lütke. |
| At sea | 39 47 | 219 12 | 1846 | 17 07 E. | ..... | 17·1 E. | ..... | ..... | ..... | ..... | Kellett. |
| At sea | 38 15 | 226 00 | 1846 | 15 52 E. | ..... | 15·9 E. | ..... | ..... | ..... | ..... | Kellett. |
| At sea | 37 50 | 230 00 | 1846 | 15 50 E. | ..... | 15·8 E. | ..... | ..... | ..... | ..... | Kellett. |
| At sea | 37 23 | 232 10 | 1846 | 15 34 E. | ..... | 15·6 E. | ..... | ..... | ..... | ..... | Kellett. |
| At sea | 35 31 | 233 12 | 1830 | 11 55 E. | ..... | 11·9 E. | ..... | ..... | ..... | ..... | Erman. |
| At sea | 34 50 | 233 28 | 1830 | 12 10 E. | ..... | 12·2 E. | ..... | ..... | ..... | ..... | Erman. |
| At sea | 31 51 | 234 15 | 1830 | 11 40 E. | ..... | 11·7 E. | 56 15 | ..... | 56·3 N. | 10·83 | Erman. |
| At sea | 31 25 | 234 31 | 1830 | 11 53 E. | ..... | 11·9 E. | ..... | ..... | ..... | ..... | Erman. |
| At sea | 39 12 | 235 09 | 1830 | ..... | ..... | ..... | 63 47 | ..... | 63·8 N. | 11·61 | Erman. |
| At sea | 30 31 | 235 38 | 1830 | 10 26 E. | ..... | 10·4 E. | 55 03 | ..... | 55·1 N. | 10·52 | Erman. |
| At sea | 35 25 | 235 42 | 1846 | 15 40 E. | ..... | 15·7 E. | ..... | ..... | ..... | ..... | Kellett. |
| At sea | 38 16 | 235 47 | 1830 | 13 08 E. | ..... | 13·1 E. | ..... | ..... | ..... | ..... | Erman. |
| Mendocino Bay | 39 18 | 236 13 | 1857 | 16 35 E. | 0 15 W. | 16·3 E. | ..... | ..... | ..... | ..... | U. S. Coast Survey. |
| At sea | 37 05 | 236 15 | 1830 | 14 53 E. | ..... | 14·9 E. | ..... | ..... | ..... | ..... | Erman. |
| Ross Mountain | 38 30 | 236 54 | 1860 | 16 23 E. | 0 18 W. | 16·1 E. | ..... | ..... | ..... | ..... | U. S. Coast Survey. |
| Port Bodega | 38 18 | 236 58 | 1839 | 15 20 E. | 0 03 E. | 15·4 E. } 15·7 E. | 62 53 | ..... | 62·9 N. | 12·22 | Belcher. |
| | | | 1842 | 16 00 E. | ..... | 16·0 E. | ..... | ..... | ..... | ..... | Duflot de Mofras. |
| Punta de los Reyes | 38 00 | 237 00 | 1857 | 15 45 E. | 0 15 W. | 15·5 E. | ..... | ..... | ..... | ..... | U. S. Coast Survey. |
| Bodega Camp | 38 18 | 237 00 | 1860 | 16 19 E. | 0 18 W. | 16·0 E. | ..... | ..... | ..... | ..... | U. S. Coast Survey. |
| South Farallone Light | 37 42 | 237 01 | 1857 | 15 40 E. | 0 15 W. | 15·4 E. | ..... | ..... | ..... | ..... | U. S. Coast Survey. |
| At sea | 37 42 | 237 15 | 1830 | 14 49 E. | ..... | 14·8 E. | ..... | ..... | ..... | ..... | Erman. |
| Point Boneta | 37 49 | 237 29 | 1852 | 15 27 E. | 0 10 W. | 15·3 E. | ..... | ..... | ..... | ..... | U. S. Coast Survey. |
| San Francisco | 37 46 | 237 33 | 1827 | 15 27 E. | 0 25 E. | 15·9 E. | 62 35 | ..... | 62·6 N. | ..... | Beechey. |
| | | | 1830 | 14 51 E. | 0 12 E. | 15·1 E. | 62 38 | ..... | 62·6 N. | 12·01 | Erman. |
| | | | 1831 | ..... | ..... | ..... | 62 58 | ..... | 63·0 N. } 62·5 N. | 11·95 } 12·05 | Douglas. |
| | | | 1838 | 15 20 E. | 0 04 E. | 15·4 E. } 15·5 E. | 62 00 | ..... | 62·0 N. | 12·08 | Belcher. |
| | | | 1852 | 15 30 E. | 0 10 W. | 15·3 E. | 62 32 | ..... | 62·5 N. | ..... | Emory and U. S. C. S. |
| | | | 1866 | 16 26 E. | 0 24 W. | 16·0 E. | 62 22 | ..... | 62·4 N. | 12·17 | Harkness. |
| San Francisco Soleno | 38 17 | 237 36 | 1831 | ..... | ..... | ..... | 63 24 | ..... | 63·4 N. | 12·07 | Douglas. |
| San Jose | 37 32 | 238 00 | 1831 | ..... | ..... | ..... | 62 52 | ..... | 62·9 N. | 12·02 | Douglas. |
| Monterey | 36 38 | 238 06 | 1827 | 15 38 E. | 0 23 E. | 16·0 E. | ..... | ..... | ..... | 11·95 | Beechey. |
| | | | 1831 | ..... | ..... | ..... | 62 08 | ..... | 62·1 N. | 11·90 | Douglas. |
| | | | 1837 | 14 30 E. | 0 08 E. | 14·6 E. | 61 15 | ..... | 61·3 N. } 61·6 N. | ..... } 11·94 | La Vénus. |
| | | | 1839 | 14 13 E. | 0 05 E. | 14·3 E. } 14·9 E. | 61 04 | ..... | 61·1 N. | 11·98 | Belcher. |
| | | | 1843 | ..... | ..... | ..... | 61 59 | ..... | 62·0 N. | ..... | Perry. |
| | | | 1851 | 14 58 E. | 0 10 W. | 14·8 E. | ..... | ..... | ..... | ..... | U. S. Coast Survey. |
| La Soledad | 36 24 | 238 36 | 1831 | ..... | ..... | ..... | 62 04 | ..... | 62·1 N. | 11·94 | Douglas. |
| San Antonio | 36 01 | 238 42 | 1831 | ..... | ..... | ..... | 61 46 | ..... | 61·8 N. | 11·85 | Douglas. |
| Sacramento | 38 34 | 238 43 | 1852 | ..... | ..... | ..... | 64 03 | ..... | 64·1 N. | ..... | Emory. |
| San Miguel | 35 45 | 239 00 | 1831 | ..... | ..... | ..... | 61 40 | +11 | 61·9 N. | 11·82 | Douglas. |
| San Luis Obispo | 35 11 | 239 16 | 1831 | ..... | ..... | ..... | 61 17 | +11 | 61·5 N. } 60·5 N. | 11·83 } 11·86 | Douglas. |
| | | | 1854 | 14 17 E. | 0 12 W. | 14·1 E. | 59 42 | −12 | 59·5 N. | 11·90 | U. S. Coast Survey. |
| La Purissima | 34 40 | 239 33 | 1831 | ..... | ..... | ..... | 60 53 | +11 | 61·1 N. | 11·75 | Douglas. |
| Point Conception | 34 27 | 239 33 | 1850 | 13 50 E. | 0 08 W. | 13·7 E. | ..... | ..... | ..... | ..... | U. S. Coast Survey. |
| Santa Inez | 34 36 | 239 49 | 1831 | ..... | ..... | ..... | 60 53 | +11 | 61·1 N. | 11·81 | Douglas. |
| Santa Barbara | 34 24 | 240 18 | 1831 | ..... | ..... | ..... | 60 48 | +11 | 61·0 N. | 11·87 | Douglas. |
| | | | 1839 | 13 28 E. | 0 03 E. | 13·5 E. } 13·6 E. | 58 54 | + 3 | 59·0 N. } 60·0 N. | 11·74 } 11·81 | Belcher. |
| | | | 1854 | 13 30 E. | 0 08 E. | 13·6 E. | ..... | ..... | ..... | ..... | U. S. Coast Survey. |

## NORTH EQUATORIAL ZONE IV.—Lat. 30° N. to 40° N. (continued).

| Station. | Lat. N. | Long. E. | Date. | Declination. | | | | Inclination. | | | Force in British units. | | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Observed. | Correction to Epoch 1842·5. | Corrected. | | Observed. | Cor. to Epoch. 1842·5. | Corrected. | | | |
| | ° ′ | ° ′ | | ° ′ | ° ′ | ° | ° | ° ′ | | ° | ° | | |
| San Pedro | 33 43 | 241 45 | 1839 | 13 08 E. | 0 03 W. | 13·1 E. | 13·2 E. | 58 21 | + 6 | 58·5 N. | 58·8 N. | 11·54 | Belcher. |
| | | | 1853 | 13 30 E. | 0 08 W. | 13·4 E. | | 59 32 | −24 | 59·1 N. | | 12·12 11·83 | U. S. Coast Survey. |
| San Diego | 3 40 | 242 50 | 1839 | 12 21 E. | 0 03 E. | 12·4 E. | | 57 06 | + 6 | 57·2 N. | | 11·58 | Belcher. |
| | | | 1851 | 12 29 E. | 0 08 W. | 12·4 E. | 12·4 E. | 57 35 | −16 | 57·3 N. | 57·3 N. | ..... 11·65 | U. S. Coast Survey. |
| | | | 1853 | 12 32 E. | 0 11 W. | 12·4 E. | | 57 39 | −22 | 57·3 N. | | 11·72 | U. S. Coast Survey. |
| Mean of Santa Maria and Santa Isabel.. | 33 05 | 243 14 | 1849 | 12 55 E. | 0 07 W. | 12·8 E. | | 58 45 | −14 | 58·5 N. | | ..... | Emory. |
| San Quintin | 30 22 | 244 01 | 1839 | 12 06 E. | 0 02 E. | 12·1 E. | | 54 30 | + 6 | 54·6 N. | | 11·41 | Belcher. |
| Soda Lake | 35 03 | 244 01 | 1854 | 13 51 E. | 0 06 W. | 13·8 E. | | 61 07 | −24 | 60·7 N. | | 12·25 | U. S. Officers. |
| Sand Camp | 35 06 | 244 14 | 1854 | ..... | ..... | ..... | | 60 49 | −24 | 60·4 N. | | 12·24 | U. S. Officers. |
| Marl Spring | 35 11 | 244 27 | 1854 | 13 59 E. | 0 06 W. | 13·9 E. | | 60 56 | −24 | 60·5 N. | | 12·20 | U. S. Officers. |
| New River | 32 42 | 244 35 | 1849 | ..... | ..... | ..... | | 58 19 | −14 | 58·1 N. | | ..... | U. S. Officers. |
| Paiute Creek | 35 06 | 245 06 | 1854 | 14 17 E. | 0 06 W. | 14·2 E. | | 61 10 | −24 | 60·8 N. | | 12·26 | U. S. Officers. |
| Gila Junction | 32 43 | 245 07 | 1851 | 12 50 E. | 0 05 W. | 12·8 E. | | 58 30 | −18 | 58·2 N. | | ..... | Emory. |
| Colorado R., 3 Stations | 34 45 | 245 36 | 1854 | 13 48 E. | 0 06 W. | 13·7 E. | | 60 45 | −24 | 60·4 N. | | 12·22 | U. S. Officers. |
| Colorado R., 2 Statious | 34 23 | 245 54 | 1854 | 14 08 E. | 0 06 W. | 14·0 E. | | 60 34 | −24 | 60·2 N. | | 12·26 | U. S. Officers. |
| 3 Stations (Mean) | 32 45 | 246 11 | 1851 | ..... | ..... | ..... | | 58 33 | −18 | 58·3 N. | | ..... | U. S. Officers. |
| Big Horn Springs | 35 01 | 246 24 | 1854 | 14 18 E. | 0 06 W. | 14·2 E. | | 61 02 | −24 | 61·6 N. | | 12·23 | U. S. Officers. |
| Williams R., 6 Stations | 34 21 | 246 25 | 1854 | ..... | ..... | ..... | | 60 20 | −24 | 59·9 N. | | 12·19 | U. S. Officers. |
| White Cliff Creek | 35 08 | 246 29 | 1854 | 14 42 E. | 0 06 W. | 14·6 E. | | 60 48 | −24 | 60·4 N. | | 12·36 | U. S. Officers. |
| Williams R., 4 Stations | 34 25 | 246 31 | 1854 | 13 46 E. | 0 06 W. | 13·7 E. | | ..... | ..... | ..... | | ..... | U. S. Officers. |
| White Cliff Creek | 35 12 | 246 39 | 1854 | ..... | ..... | ..... | | 61 14 | −24 | 60·8 N. | | 12·42 | U. S. Officers. |
| 7 Stations | 32 51 | 246 43 | 1851 | ..... | ..... | ..... | | 58 50 | −18 | 58·5 N. | | ..... | U. S. Officers. |
| Williams River | 35 07 | 246 47 | 1854 | 13 40 E. | 0 06 W. | 13·6 E. | | 61 17 | −24 | 60·9 N. | | 12·14 | U. S. Officers. |
| Pueblo Creek | 34 57 | 247 14 | 1854 | 13 59 E. | 0 06 W. | 13·9 E. | | 61 13 | −24 | 60·8 N. | | 12·39 | U. S. Officers. |
| Cedar Creek | 35 21 | 247 40 | 1854 | 13 49 E. | 0 06 W. | 13·7 E. | | 62 06 | −24 | 61·7 N. | | 12·55 | U. S. Officers. |
| Le Roux Spring | 35 17 | 248 20 | 1854 | 13 52 E. | 0 06 W. | 13·8 E. | | 61 33 | −24 | 61·2 N. | | 12·44 | U. S. Officers. |
| 7 Stations | 33 08 | 248 26 | 1851 | ..... | ..... | ..... | | 59 18 | −18 | 59·0 N. | | ..... | U. S. Officers. |
| 10 Stations (Mean) | 33 06 | 249 19 | 1851 | ..... | ..... | ..... | | 59 16 | −18 | 59·0 N. | | ..... | U. S. Officers. |
| Nogales and Santa Cruz R. (Mean) | 31 20 | 249 19 | 1855 | 11 59 E. | 0 07 W. | 11·9 E. | | 57 20 | −26 | 56·9 N. | | 11·51 | U. S. Officers. |
| San Pedro | 32 59 | 249 20 | 1851 | 12 25 E. | 0 04 W. | 12·4 E. | | ..... | ..... | ..... | | ..... | U. S. Officers. |
| Colorado, Chiquito R., 6 Stations | 35 09 | 249 21 | 1854 | ..... | ..... | ..... | | 61 50 | −24 | 61·4 N. | | 12·50 | U. S. Officers. |
| Colorado, Chiquito R., 4 Stations | 35 08 | 249 24 | 1854 | 13 35 E. | 0 06 W. | 13·5 E. | | ..... | ..... | ..... | | ..... | U. S. Officers. |
| Colorado, Chiquito | 34 53 | 249 56 | 1851 | 13 42 E. | 0 04 W. | 13·6 E. | | 62 15 | −18 | 62·0 N. | | 12·53 | U. S. Officers. |
| 10 Stations | 33 03 | 250 03 | 1851 | ..... | ..... | ..... | | 59 29 | −18 | 59·2 N. | | ..... | U. S. Officers. |
| Rio Puerco | 34 58 | 250 08 | 1851 | 14 00 E. | 0 04 W. | 13·9 E. | | 61 46 | −18 | 61·5 N. | | 12·51 | U. S. Officers. |
| Lithodendron Creek | 35 02 | 250 19 | 1851 | 13 33 E. | 0 04 W. | 13·5 E. | | 61 57 | −18 | 61·7 N. | | 12·50 | U. S. Officers. |
| Carriso Creek | 35 07 | 250 28 | 1854 | 13 54 E. | 0 06 W. | 13·8 E. | | 62 05 | −24 | 61·7 N. | | 12·54 | U. S. Officers. |
| Navajo Spring | 35 06 | 250 40 | 1854 | 13 23 E. | 0 06 W. | 13·3 E. | | 61 58 | −24 | 61·6 N. | | 12·56 | U. S. Officers. |
| Jacobs Well | 35 04 | 250 46 | 1854 | 13 44 E. | 0 06 W. | 13·6 E. | | 62 00 | −24 | 61·6 N. | | 12·55 | U. S. Officers. |
| San Bernardino | 31 20 | 250 46 | 1855 | 11 45 E. | 0 07 W. | 11·6 E. | | 57 19 | −26 | 56·9 N. | | 11·58 | U. S. Officers. |
| Cedar Forest | 35 01 | 251 05 | 1854 | 13 01 E. | 0 06 W. | 12·9 E. | | 61 40 | −24 | 61·3 N. | | 12·59 | U. S. Officers. |
| Arch Spring | 35 05 | 251 12 | 1854 | ..... | ..... | ..... | | 61 55 | −24 | 61·5 N. | | 12·62 | U. S. Officers. |
| San Luis Springs | 31 20 | 251 12 | 1855 | 11 45 E. | 0 06 W. | 11·7 E. | | 57 37 | −26 | 57·2 N. | | 11·70 | U. S. Officers. |
| Zuñi River | 35 06 | 251 21 | 1854 | 13 24 E. | 0 06 W. | 13·3 E. | | 62 02 | −24 | 61·6 N. | | 12·63 | U. S. Officers. |
| Aqua del Perro | 31 21 | 251 40 | 1855 | 11 59 E. | 0 06 W. | 11·9 E. | | 57 28 | −26 | 57·0 N. | | 11·45 | U. S. Officers. |
| Ojo de Inez | 32 45 | 251 46 | 1851 | ..... | ..... | ..... | | 59 18 | −18 | 59·0 N. | | ..... | U. S. Officers. |
| Inscription Rock | 35 03 | 251 46 | 1854 | 12 57 E. | 0 06 W. | 12·9 E. | | 62 03 | −24 | 61·7 N. | | 12·59 | U. S. Officers. |
| Copper Mines | 32 47 | 251 56 | 1851 | 11 22 E. | 0 04 W. | 11·3 E. | | 59 17 | −18 | 59·0 N. | | ..... | U. S. Officers. |
| Agua Fria | 35 02 | 252 02 | 1854 | 13 26 E. | 0 06 W. | 13·3 E. | | 62 05 | −24 | 61·7 N. | | 12·66 | U. S. Officers. |
| Carrizallilo | 31 51 | 252 04 | 1855 | 12 02 E. | 0 06 W. | 11·9 E. | | 58 31 | −26 | 58·1 N. | | 11·73 | U. S. Officers. |
| Espia | 31 21 | 252 04 | 1855 | 12 05 E. | 0 06 W. | 12·0 E. | | 57 59 | −26 | 57·6 N. | | 11·77 | U. S. Officers. |
| Covèra | 35 05 | 252 34 | 1854 | 13 49 E. | 0 06 W. | 13·7 E. | | 62 26 | −24 | 62·0 N. | | 12·67 | U. S. Officers. |
| Rio San Jose | 35 01 | 252 46 | 1854 | 13 46 E. | 0 06 W. | 13·7 E. | | 63 18 | −24 | 62·9 N. | | 12·67 | U. S. Officers. |
| Doña Ana | 32 22 | 253 13 | 1851 | 12 07 E. | 0 04 W. | 12·1 E. | | 59 06 | −18 | 58·8 N. | | ..... | U. S. Officers. |
| Isleta | 34 54 | 253 20 | 1854 | 13 13 E. | 0 06 W. | 13·1 E. | | 62 24 | −12 | 62·2 N. | | 12·65 | U. S. Officers. |
| Albuquerque | 35 06 | 253 22 | 1854 | 13 25 E. | 0 06 W. | 13·3 E. | | 62 28 | −12 | 62·3 N. | | 12·67 | U. S. Officers. |
| Frontera | 31 48 | 253 27 | 1852 | 12 24 E. | 0 05 W. | 12·3 E. | | 59 05 | −10 | 58·9 N. | | ..... | U. S. Officers. |
| Emory's Initial Point, | 31 47 | 253 32 | 1855 | 11 55 E. | 0 06 W. | 11·8 E. | | 58 39 | −13 | 58·4 N. | | 11·92 | U. S. Officers. |

## NORTH EQUATORIAL ZONE IV.—Lat. 30° N. to 40° N. (continued).

| Stations. | Lat. N. | Long. E. | Date. | Declination. | | | Inclination. | | | Force in British units. | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Observed. | Correction to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | | |
| | ° ′ | ° ′ | | ° ′ | ° ′ | ° | ° ′ | ′ | ° | | |
| San Elcearis | 31 35 | 253 44 | 1852 | ..... | ..... | ..... | 58 57 | −10 | 58·8 N. | ..... | U. S. Officers. |
| Mouth of Canon | 31 02 | 254 23 | 1852 | 12 01 E. | 0 05 W. | 11·9 E. | 57 38 | −10 | 57·5 N. | 11·28 | Emory. |
| Fort of Brazos River | 33 00 | 260 43 | 1854 | 11 12 E. | ..... | 11·2 E. | ..... | ..... | ..... | ..... | U. S. Officers. |
| On Trinity Waters, 3 Stations | 33 34 | 261 45 | 1854 | 10 27 E. | ..... | 10·5 E. | ..... | ..... | ..... | ..... | U. S. Officers. |
| Near Sabine River | 32 01 | 266 00 | 1840 | ..... | ..... | ..... | 61 37 | ..... | 61·6 N. | ..... | Graham. |
| Gaines Ferry | 31 28 | 266 15 | 1840 | 8 41 E. | ..... | 8·7 E. | 60 57 | ..... | 61·0 N. | ..... | Graham. |
| Natchitoches | 31 44 | 266 55 | 1834 | ..... | ..... | ..... | 62 11 | ..... | 62·2 N. | ..... | Nicollet. |
| Natchez | 31 34 | 268 35 | 1834 | ..... | ..... | ..... | 62 11 | ..... | 62·2 N. | ..... | Nicollet. |
| Newport | 38 34 | 268 54 | 1839 | 9 21 E. | ..... | 9·4 E. | ..... | ..... | ..... | ..... | Goebel. |
| Monticello | 38 57 | 269 55 | 1841 | ..... | ..... | ..... | 69 39 | ..... | 69·7 N. | ..... | Loomis. |
| St. Louis | 38 38 | 269 56 | 1835 | 8 49 E. | ..... | 8·8 E. | ..... | ..... | ..... | ..... | |
| | | | 1839 | ..... | ..... | ..... | 69 31 | ..... | 69·5 N. | 13·45 | Locke. |
| | | | 1841 | ..... | ..... | ..... | 69 24 | ..... | 69·4 N. } 69·5 N. | ..... | Loomis. |
| | | | 1841 | ..... | ..... | ..... | 69 27 | ..... | 69·5 N. | ..... | Nicollet. |
| | | | 1857 | ..... | ..... | ..... | ..... | ..... | ..... | 13·15 | Friesach. |
| Alton | 38 54 | 269 56 | 1841 | ..... | ..... | ..... | 69 25 | ..... | 69·4 N. | ..... | Loomis. |
| Upper Alton | 38 55 | 269 57 | 1841 | ..... | ..... | ..... | 69 46 | ..... | 69·8 N. | ..... | Loomis. |
| Edwardsville | 38 50 | 270 07 | 1841 | ..... | ..... | ..... | 69 58 | ..... | 70·0 N. | ..... | Loomis. |
| Bunker's Hill | 39 04 | 270 07 | 1841 | ..... | ..... | ..... | 69 49 | ..... | 69·8 N. | ..... | Loomis. |
| Cat Island | 30 15 | 270 54 | 1847 | 7 12 E. | 0 05 E. | 7·3 E. | ..... | ..... | ..... | ..... | Barnett. |
| Mississippi City | 30 23 | 270 59 | 1855 | 7 22 E. | 0 13 E. | 7·6 E. | ..... | ..... | ..... | ..... | U. S. Coast Survey. |
| East Pascagoula | 30 21 | 271 28 | 1847 | 7 13 E. | 0 05 E. | 7·3 E. } 7·3 E. | 60 27 | −01 | 60·4 N. | 12·61 | U. S. Coast Survey. |
| | | | 1855 | 7 09 E. | 0 13 E. | 7·4 E. | ..... | ..... | ..... | ..... | U. S. Coast Survey. |
| Mobile | 30 42 | 271 58 | 1835 | 7 12 E. | 0 07 W. | 7·1 E. } 7·1 E. | 61 38 | ..... | 61·6 N. } 61·2 N. | ..... | U. S. Coast Survey. |
| | | | 1847 | 7 04 E. | 0 05 E. | 7·2 E. | ..... | ..... | ..... | ..... | U. S. Coast Survey. |
| | | | 1857 | 6 52 E. | 0 15 E. | 7·1 E. | 60 51 | −03 | 60·8 N. | 12·61 | U. S. Coast Survey. |
| Fort Morgan | 30 14 | 272 00 | 1847 | 7 04 E. | 0 05 E. | 7·2 E. | ..... | ..... | ..... | ..... | U. S. Coast Survey. |
| New Harmony | 38 11 | 272 12 | 1840 | ..... | ..... | ..... | 69 04 | ..... | 69·1 N. | 13·46 | Locke. |
| Mount Vernon | 37 59 | 272 13 | 1840 | ..... | ..... | ..... | 68 56 | ..... | 68·9 N. | 13·47 | Locke. |
| Tuscaloosa | 33 12 | 272 18 | 1835 | ..... | ..... | ..... | 64 22 | ..... | 64·4 N. | ..... | U. S. Coast Survey. |
| Lower Peach Tree | 31 50 | 272 27 | 1857 | 6 02 E. | 0 15 E. | 6·3 E. | 62 17 | −03 | 62·2 N. | 12·83 | U. S. Coast Survey. |
| Princeton | 38 23 | 272 30 | 1840 | ..... | ..... | ..... | 69 23 | ..... | 69·4 N. | 13·48 | Locke. |
| Vincennes | 38 43 | 272 35 | 1840 | ..... | ..... | ..... | 69 51 | ..... | 69·9 N. } 69·9 N. | 13·56 | Locke. |
| | | | 1841 | ..... | ..... | ..... | 69 53 | ..... | 69·9 N. | ..... | Loomis. |
| Barkly Pensacola | 30 25 | 272 48 | 1858 | 6 47 E. | 0 16 E. | 7·1 E. } 7·0 E. | 61 06 | −03 | 61·1 N. } 60·8 N. | 12·68 } 13·09 | U. S. Coast Survey. |
| | | | 1861 | 6 42 E. | 0 19 E. | 7·0 E. | 60 39 | −04 | 60·6 N. | 13·50 | U. S. Coast Survey. |
| Nashville | 36 10 | 273 11 | 1834 | 6 51 E. | 0 08 W. | 6·7 E. | 67 05 | ..... | 67·1 N. | ..... | Nicollet. |
| Paoli | 38 35 | 273 25 | 1840 | ..... | ..... | ..... | 69 34 | ..... | 69·6 N. | 13·44 | Locke. |
| Montgomery | 32 22 | 273 42 | 1855 | 5 18 E. | 0 13 E. | 5·5 E. | 63 05 | −02 | 63·1 N. | 12·93 | U. S. Coast Survey. |
| Hurricane Island | 30 04 | 274 21 | 1854 | 6 12 E. | 0 12 E. | 6·4 E. | ..... | ..... | ..... | ..... | U. S. Coast Survey. |
| Louisville | 38 03 | 274 30 | 1840 | ..... | ..... | ..... | 69 54 | ..... | 69·9 N. | 13·53 | Locke. |
| Eufala | 31 54 | 274 52 | 1860 | 5 12 E. | 0 18 E. | 5·5 E. | 63 06 | −03 | 63·1 N. | 12·68 | U. S. Coast Survey. |
| Richmond | 39 49 | 275 13 | 1845 | 4 52 E. | 0 03 E. | 4·9 E. | 71 20 | ..... | 71·3 N. | 13·61 | Locke. |
| Frankfort | 38 14 | 275 20 | 1840 | ..... | ..... | ..... | 69 55 | ..... | 69·9 N. | 13·43 | Locke. |
| Oxford | 39 30 | 275 22 | 1845 | 4 50 E. | 0 03 E. | 4·9 E. | 71 10 | ..... | 71·2 N. | 13·66 | Locke. |
| Tallahassee | 30 28 | 275 24 | 1835 | ..... | ..... | ..... | 61 23 | ..... | 61·4 N. | ..... | U. S. Coast Survey. |
| Hamilton | 39 23 | 275 28 | 1840 | ..... | ..... | ..... | 70 58 | ..... | 71·0 N. | 13·63 | Locke. |
| Cincinnati | 39 00 | 275 35 | 1840 | ..... | ..... | ..... | 70 27 | ..... | 70·5 N. | 13·59 | Locke. |
| | | | 1841 | ..... | ..... | ..... | 70 28 | ..... | 70·5 N. } 70·5 N. | ..... | Loomis. |
| | | | 1845 | 4 04 E. | 0 03 E. | 4·1 E. | 70 29 | ..... | 70·5 N. | ..... | Locke. |
| Wiliamstown | 38 36 | 275 38 | 1840 | ..... | ..... | ..... | 70 04 | ..... | 70·1 N. | 13·50 | Locke. |
| Lexington | 38 06 | 275 42 | 1840 | ..... | ..... | ..... | 69 55 | ..... | 69·9 N. | 13·38 | Locke. |
| Clay's Ferry | 37 54 | 275 42 | 1840 | ..... | ..... | ..... | 69 49 | ..... | 69·8 N. | 13·43 | Locke. |
| Dayton | 39 44 | 275 43 | 1840 | ..... | ..... | ..... | 71 22 | ..... | 71·4 N. | 13·60 | Locke. |
| Mason | 39 22 | 275 47 | 1840 | ..... | ..... | ..... | 70 54 | ..... | 70·9 N. | 13·57 | Locke. |
| St. Mark's Light | 30 04 | 275 48 | 1852 | 5 29 E. | 0 10 E. | 5·7 E. | ..... | ..... | ..... | ..... | U. S. Coast Survey. |
| Carrolton | 39 38 | 275 51 | 1845 | 4 45 E. | 0 03 E. | 4·8 E. | 71 10 | ..... | 71·2 N. | 13·62 | Locke. |
| Lebanon | 39 26 | 275 54 | 1840 | ..... | ..... | ..... | 71 03 | ..... | 71·1 N. | 13·60 | Locke. |
| Knoxville | 35 59 | 276 06 | 1833 | ..... | ..... | ..... | 67 06 | ..... | 67·1 N. | ..... | Nicollet. |
| Springfield | 39 54 | 276 09 | 1840 | 4 30 E. | 0 02 W. | 4·5 E. | 71 27 | ..... | 71·5 N. | 13·55 | Locke. |
| Macon | 32 50 | 276 22 | 1855 | 4 37 E. | 0 13 E. | 4·8 E. | 63 51 | −03 | 63·8 N. | 12·79 | U. S. Coast Survey. |

## NORTH EQUATORIAL ZONE IV.—Lat. 30° N. to 40° N. (continued).

| Stations. | Lat. N. | Long. E. | Date. | Declination. | | | Inclination. | | | Force in British units. | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Observed. | Correction to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | | |
| | ° ′ | ° ′ | | ° ′ | ° ′ | ° | ° ′ | ′ | ° | | |
| Athens | 33 57 | 276 35 | 1834 | ..... | ..... | ..... | 65 40 | ..... | 65·7 N. | ..... | U. S. Coast Survey. |
| Columbus | 39 57 | 276 58 | 1840 | ..... | ..... | ..... | 71 05 | ..... | 71·1 N. | 13·53 | Locke. |
| | | | 1841 | ..... | ..... | ..... | 71 04 | ..... | 71·1 N. | ..... | Loomis. |
| | | | 1845 | 2 29 E. | 0 03 E. | 2·5 E. | 71 04 | ..... | 71·1 N. | ..... | Locke. |
| Warm Spring | 35 50 | 277 12 | 1833 | ..... | ..... | ..... | 67 39 | ..... | 67·7 N. | ..... | Nicollet. |
| Ashville | 35 36 | 277 30 | 1833 | ..... | ..... | ..... | 67 25 | ..... | 67·4 N. | ..... | Nicollet. |
| Hebron | 39 59 | 277 31 | 1841 | ..... | ..... | ..... | 71 10 | ..... | 71·2 N. | ..... | Loomis. |
| Marietta Island | 39 25 | 278 32 | 1845 | 2 25 E. | 0 09 E. | 2·6 E. | 71 22 | ..... | 71·4 N. | 13·62 | Locke. |
| Fernandina | 30 41 | 278 32 | 1857 | 4 02 E. | ..... | 4·0 E. | 62 07 | −03 | 62·1 N. | 12·59 | U. S. Coast Survey. |
| Savannah | 32 05 | 278 55 | 1852 | 3 40 E. | 0 30 E. | 4·2 E. } 4·2 E. | 63 40 | −02 | 63·6 N. } 63·7 N. | 12·62 | U. S. Coast Survey. |
| | | | 1857 | 3 28 E. | 0 45 E. | 4·2 E. | 63 44 | −03 | 63·7 N. | ..... | U. S. Coast Survey. |
| Columbia | 34 00 | 278 58 | 1854 | 3 02 E. | 0 36 E. | 3·6 E. | 66 08 | −02 | 66·1 N. | 13·04 | U. S. Coast Survey. |
| Tybee Island | 32 02 | 279 09 | 1852 | 3 32 E. | 0 30 E. | 4·0 E. | 63 38 | −04 | 63·6 N. | 12·57 | U. S. Coast Survey. |
| Port Royal | 32 18 | 279 22 | 1859 | 3 04 E. | 0 51 E. | 3·9 E. | 64 08 | −03 | 64·1 N. | ..... | U. S. Coast Survey. |
| Edisto Island | 32 33 | 279 50 | 1850 | 2 54 E. | 0 24 E. | 3·3 E. | 64 04 | −01 | 64·1 N. | 12·65 | U. S. Coast Survey. |
| Charlestown | 32 41 | 280 07 | 1841 | 2 24 E. | ..... | 2·4 E. | 64 37 | ..... | 64·6 N. | ..... | Barnett. |
| Breach Inlet | 32 46 | 280 11 | 1849 | 2 17 E. | 0 21 E. | 2·6 E. | 64 32 | −01 | 64·5 N. | 12·69 | U. S. Coast Survey. |
| At sea | 30 54 | 280 15 | 1841 | 3 04 E. | ..... | 3·1 E. | ..... | ..... | ..... | ..... | Barnett. |
| At sea | 31 54 | 280 29 | 1841 | 2 33 E. | ..... | 2·6 E. | ..... | ..... | ..... | ..... | Barnett. |
| Allston | 33 22 | 280 48 | 1853 | 2 07 E. | 0 33 E. | 2·7 E. | 65 30 | −02 | 65·5 N. | 13·03 | U. S. Coast Survey. |
| Frostburg | 39 41 | 281 04 | 1840 | ..... | ..... | ..... | 71 31 | ..... | 71·5 N. | ..... | Bache. |
| Cumberland | 39 56 | 281 13 | 1844 | ..... | ..... | ..... | 71 36 | ..... | 71·6 N. | ..... | Locke. |
| Raleigh | 35 47 | 281 22 | 1854 | 0 45 E. | 0 36 E. | 1·4 E. | 68 12 | −02 | 68·2 N. | 13·31 | U. S. Coast Survey. |
| At sea (3 observations) | 32 14 | 281 34 | 1841 | 2 26 E. | ..... | 2·4 E. | ..... | ..... | ..... | ..... | Barnett. |
| Smithville | 33 55 | 281 59 | 1859 | 0 38 E. | 0 51 E. | 1·5 E. | 66 17 | −03 | 66·2 N. | 13·01 | U. S. Coast Survey. |
| Irwin's Mill | 39 47 | 282 04 | 1840 | 0 58 W. | ..... | 1·0 W. | 71 47 | ..... | 71·8 N. | ..... | Bache. |
| Mercersburg | | | 1842 | ..... | ..... | ..... | ..... | ..... | ..... | 13·40 | Bache. |
| Wilmington | 34 14 | 282 04 | 1854 | 1 14 E. | 0 36 E. | 1·8 E. | 66 47 | −02 | 66·8 N. | 13·13 | U. S. Coast Survey. |
| Chambersburg | 39 55 | 282 20 | 1842 | ..... | ..... | ..... | 71 57 | ..... | 72·0 N. | 13·53 | Locke. |
| Brown's Island | 38 18 | 282 33 | 1856 | 1 02 W. | 0 42 E. | 0·3 W. | 70 38 | −03 | 70·6 N. | 13·42 | Schott. |
| Mayo Isl., Richmond | 37 32 | 282 34 | 1856 | 0 15 W. | 0 52 E. | 0·6 E. | 69 48 | −03 | 69·8 N. | 13·35 | Schott. |
| Roslyn | 37 14 | 282 36 | 1852 | 0 27 W. | 0 30 E. | 0·1 W. | 69 17 | −02 | 69·3 N. | 13·04 | U. S. Coast Survey. |
| Mount Saint Mary's | 39 41 | 282 42 | 1842 | ..... | ..... | ..... | 71 46 | ..... | 71·8 N. | 13·55 | Locke. |
| Mount Vernon | 38 41 | 282 53 | 1844 | ..... | ..... | ..... | 70 56 | ..... | 70·9 N. | 13·49 | Locke. |
| Washington | 38 53 | 283 00 | 1842 | 1 37 W. | ..... | 1·6 W. | 71 18 | ..... | 71·3 N. | 13·51 | Gillis, U. S. C. S. and Lefroy. |
| At sea | 32 55 | 283 03 | 1839 | 0 15 E. | ..... | 0·3 E. | ..... | ..... | ..... | ..... | Bérard. |
| Soper's Hill | 39 05 | 283 03 | 1850 | 2 07 W. | 0 24 E. | 1·7 W. | 71 57 | −02 | 71·9 N. | 13·37 | U. S. Coast Survey. |
| Hill's Hill | 38 54 | 283 07 | 1850 | 2 19 W. | 0 24 E. | 1·9 W. | 71 12 | −02 | 71·2 N. | 13·39 | U. S. Coast Survey. |
| At sea | 34 20 | 283 10 | 1839 | 1 05 E. | ..... | 1·1 E. | ..... | ..... | ..... | ..... | Bérard. |
| Rosanne | 39 18 | 283 17 | 1845 | 2 11 W. | 0 09 E. | 2·0 W. | 72 07 | ..... | 72·1 N. | 13·20 | U. S. Coast Survey. |
| Webb's Hill | 39 05 | 283 20 | 1850 | 2 08 W. | 0 24 E. | 1·7 W. | 71 24 | −02 | 71·4 N. | 13·42 | U. S. Coast Survey. |
| Baltimore | 39 18 | 283 22 | 1842 | 2 03 W. | ..... | 2·1 W. | 71 41 | ..... | 71·7 N. | 13·49 | U. S. C. S. and Lefroy. |
| Marriott | 38 52 | 283 24 | 1846 | 2 09 W. | 0 16 E. | 1·9 W. | 71 11 | ..... | 71·2 N. | 13·17 | U. S. Coast Survey. |
| Annapolis | 38 56 | 283 25 | 1845 | 2 14 W. | 0 12 E. | 2·0 W. | ..... | ..... | ..... | ..... | U. S. Coast Survey. |
| Fort M'Henry | 39 16 | 283 25 | 1847 | 2 19 W. | 0 15 E. | 2·1 W. } 1·9 W. | ..... | ..... | ..... | ..... | U. S. Coast Survey. |
| | | | 1856 | 2 29 W. | 0 42 E. | 1·8 W. | 71 46 | −03 | 71·7 N. | 13·43 | U. S. Coast Survey. |
| Finlay | 39 24 | 283 29 | 1846 | 2 17 W. | 0 12 E. | 2·1 W. | 71 49 | ..... | 71·8 N. | 13·18 | U. S. Coast Survey. |
| Taylor | 39 00 | 283 32 | 1846 | 2 16 W. | 0 12 E. | 2·1 W. | 71 30 | ..... | 71·5 N. | 13·32 | U. S. Coast Survey. |
| North Point | 39 12 | 283 34 | 1846 | 1 37 W. | 0 12 E. | 1·4 W. | 71 30 | ..... | 71·5 N. | 13·18 | U. S. Coast Survey. |
| Bodkin Light | 39 08 | 283 35 | 1847 | 2 02 W. | 0 15 E. | 1·8 W. | 71 43 | −01 | 71·7 N. | 13·35 | U. S. Coast Survey. |
| South Base Point | 38 54 | 283 38 | 1845 | 2 24 W. | 0 09 E. | 2·3 W. | 71 37 | ..... | 71·6 N. | 13·34 | U. S. Coast Survey. |
| Kent Island | 39 02 | 283 41 | 1849 | 2 30 W. | 0 21 E. | 2·2 W. | 71 17 | −01 | 71·3 N. | 13·11 | U. S. Coast Survey. |
| Old Point Comfort | 37 00 | 283 42 | 1856 | 1 15 W. | 0 42 E. | 0·6 W. | 69 32 | −03 | 69·5 N. | 13·32 | U. S. Coast Survey. |
| Norfolk | 36 51 | 283 43 | 1856 | 1 36 W. | 0 42 E. | 0·9 W. | 69 29 | −03 | 69·4 N. | 13·31 | U. S. Coast Survey. |
| Gosport | 36 49 | 283 43 | 1865 | 2 38 W. | 1 15 E. | 1·4 W. | 69 38 | −06 | 69·5 N. | 13·54 | Harkness. |
| Osborne's Ruin | 39 28 | 283 43 | 1845 | 2 32 W. | 0 09 E. | 2·4 W. | 71 48 | ..... | 71·8 N. | 13·26 | U. S. Coast Survey. |
| Pool's Island | 39 17 | 283 44 | 1847 | 2 29 W. | 0 15 E. | 2·2 W. | 71 50 | ..... | 71·8 N. | 13·21 | U. S. Coast Survey. |
| Stevenson's Point | 36 06 | 283 49 | 1847 | 1 40 W. | 0 15 E. | 2·4 W. | 68 55 | ..... | 68·9 N. | 12·95 | U. S. Coast Survey. |
| Oxford | 38 41 | 283 50 | 1856 | 2 41 W. | 0 42 E. | 2·0 W. | 70 58 | −03 | 70·9 N. | 13·44 | U. S. Coast Survey. |
| Susquehanna Light | 39 32 | 283 55 | 1847 | 2 14 W. | 0 15 E. | 2·0 W. | 71 52 | ..... | 71·9 N. | 13·13 | U. S. Coast Survey. |
| At sea | 33 55 | 283 57 | 1841 | 0 52 E. | ..... | ..... | ..... | ..... | ..... | ..... | Barnett. |

## NORTH EQUATORIAL ZONE IV.—Lat. 30° N. to 40° N. (continued).

| Stations. | Lat. N. | Long. E. | Date. | Declination. | | | Inclination. | | | Force in British units. | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Observed. | Correction to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | | |
| | ° ′ | ° ′ | | ° ′ | ° ′ | ° | ° ′ | ′ | ° | | |
| Cape Henry | 36 56 | 284 00 | 1841 | 0 45 W. | 0 03 W. | 0·8 W. | ..... | ..... | ..... | ..... | Nicollet. |
| | | | 1856 | 1 28 W. | 0 42 E. | 0·8 W. } 0·8 W. | 69 39 | −03 | 69·6 N. | 13·29 | U. S. Coast Survey. |
| Cape Charles | 37 07 | 284 02 | 1856 | 1 35 W. | 0 42 E. | 0·9 W. | 69 43 | −03 | 69·7 N. | 13·34 | U. S. Coast Survey. |
| Scott | 37 21 | 284 06 | 1856 | 1 38 W. | 0 42 E. | 0·9 W. | 70 02 | −03 | 70·0 N. | 13·38 | U. S. Coast Survey. |
| Frenchtown | 39 35 | 284 09 | 1840 | ..... | ..... | ..... | 71 40 | ..... | 71·7 N. | ..... | Bache. |
| Shellbank | 36 03 | 284 16 | 1847 | 1 45 W. | 0 15 E. | 1·5 W. | 68 38 | −01 | 68·6 N. | 12·94 | U. S. Coast Survey. |
| Joynes | 37 42 | 284 23 | 1856 | 2 03 W. | 0 42 E. | 1·4 W. | 70 21 | −03 | 70·3 N. | 13·35 | U. S. Coast Survey. |
| Willmington | 39 45 | 284 26 | 1846 | 2 31 W. | 0 12 E. | 2·3 W. | 71 25 | ..... | 71·4 N. | 13·38 | Locke. |
| Sawyer | 39 43 | 284 26 | 1846 | 2 48 W. | 0 12 E. | 2·6 W. | 71 58 | ..... | 72·0 N. | 13·49 | Locke. |
| Fort Delaware | 39 35 | 284 26 | 1846 | 3 17 W. | 0 12 E. | 3·1 W. | 71 35 | ..... | 71·6 N. | 13·38 | Locke. |
| Bodie's Island | 35 48 | 284 28 | 1847 | 1 13 W. | 0 15 E. | 1·0 W. | 68 18 | −01 | 68 3 N. | 12·86 | U. S. Coast Survey. |
| Bombay Hook | 39 22 | 284 30 | 1846 | 3 18 W. | 0 12 E. | 3·1 W. | 71 38 | ..... | 71·6 N. | 13·36 | Locke. |
| Snead | 37 58 | 284 34 | 1856 | 2 18 W. | 0 42 E. | 1·6 W. | 70 31 | −03 | 70·5 N. | 13·34 | U. S. Coast Survey. |
| Delaware City | 39 35 | 284 39 | 1842 | 3 30 W. | ..... | 3·5 W. | 71 46 | ..... | 71·8 N. | ..... | Barnett. |
| Pine Mount | 39 25 | 284 40 | 1846 | 3 14 W. | 0 12 E. | 3·0 W. | 71 41 | ..... | 71·7 N. | 13·48 | Locke. |
| Hawkins | 39 26 | 284 42 | 1846 | 2 56 W. | 0 12 E. | 2·7 W. | 71 44 | ..... | 71·7 N. | 13·45 | Locke. |
| Mason's Landing | 38 14 | 284 45 | 1856 | 2 23 W. | 0 42 E. | 1·7 W. | 70 45 | −03 | 70·7 N. | 13·36 | U. S. Coast Survey. |
| Dagsborough | 38 36 | 284 45 | 1856 | 2 41 W. | 0 42 E. | 2·0 W. | 71 03 | −03 | 71·0 N. | 13·39 | U. S. Coast Survey. |
| Lewes's Landing | 38 49 | 284 48 | 1846 | 2 45 W. | 0 12 E. | 2·6 W. | ..... | ..... | ..... | ..... | U. S. Coast Survey. |
| Chew | 39 48 | 284 50 | 1846 | 3 20 W. | 0 12 E. | 3·1 W. } 3·4 W. | 72 15 | ..... | 72·3 N. } 72·2 N. | ..... | Locke. |
| | | | 1846 | 3 45 W. | 0 12 E. | 3·6 W. | 72 14 | ..... | 72·2 N. | 13·45 | U. S. Coast Survey. |
| Girard College | 39 58 | 284 50 | 1842 | 3 30 W. | ..... | 3·5 W. | 71 59 | ..... | 72·0 N. | 13·50 | Observatory. |
| Pilot Town | 38 47 | 284 50 | 1846 | 2 43 W. | 0 12 E. | 2·5 W. | 71 19 | ..... | 71·3 N. | 13·40 | U. S. C. S. and Locke. |
| Egg Island Light | 39 11 | 284 52 | 1846 | 3 03 W. | 0 12 E. | 2·9 W. | 71 45 | ..... | 71·8 N. | 13·43 | U. S. C. S. and Locke. |
| Davis | 38 20 | 284 54 | 1853 | 2 33 W. | 0 33 E. | 2·0 W. | 70 58 | −02 | 70·9 N. | 13·28 | U. S. Coast Survey. |
| Cape Henlopen | 38 47 | 284 55 | 1856 | 3 04 W. | 0 42 E. | 2·4 W. | 71 22 | −03 | 71·3 N. | 13·41 | U. S. Coast Survey. |
| Port Norris | 39 15 | 284 59 | 1846 | 3 04 W. | 0 12 E. | 2·9 W. | 71 40 | ..... | 71·7 N. | 13·39 | U. S. C. S. and Locke. |
| At sea | 34 33 | 285 00 | 1841 | 0 34 W. | ..... | 0·6 W. | ..... | ..... | ..... | ..... | Barnett. |
| Cape May | 38 56 | 285 01 | 1846 | 3 05 W. | 0 12 E. | 2·9 W. } 3·0 W. | 71 26 | ..... | 71·4 N. } 71·5 N. | 13·36 } 13·29 | Locke. |
| | | | 1855 | 3 45 W. | 0 39 E. | 3·1 W. | 71 34 | −03 | 71·5 N. | 13·23 | Schott. |
| Town Bank | 38 59 | 285 03 | 1846 | 3 00 W. | 0 12 E. | 2·8 W. | 71 24 | ..... | 71·4 N. | 13·39 | Locke. |
| At sea | 35 08 | 285 28 | 1841 | 1 57 W. | ..... | 2·0 W. | ..... | ..... | ..... | ..... | Barnett. |
| At sea | 34 20 | 285 30 | 1839 | 1 05 E. | ..... | 1·1 E. | ..... | ..... | ..... | ..... | Bérard. |
| Absecum Light | 39 22 | 285 35 | 1860 | 4 54 W. | 0 54 E. | 4·0 W. | 71 47 | −04 | 71·7 N. | 13·45 | U. S. Coast Survey. |
| At sea (2 observations) | 37 35 | 285 36 | 1841 | 0 23 W. | ..... | 0·4 W. | ..... | ..... | ..... | ..... | Barnett. |
| Tuckerton | 39 36 | 285 40 | 1846 | ..... | ..... | ..... | 72 12 | ..... | 72·2 N. | 13·29 | U. S. Coast Survey. |
| At sea | 35 29 | 285 40 | 1841 | 2 29 W. | ..... | 2·5 W. | ..... | ..... | ..... | ..... | Barnett. |
| Tucker's Island | 39 31 | 285 44 | 1846 | 4 28 W. | 0 12 E. | 4·3 W. | ..... | ..... | ..... | ..... | U. S. Coast Survey. |
| Long Beach | 39 30 | 285 45 | 1860 | 5 19 W. | 0 54 E. | 4·4 W. | 71 59 | −04 | 71·9 N. | 13·43 | U. S. Coast Survey. |
| Barnegat Light | 39 46 | 285 54 | 1860 | 5 24 W. | 0 54 E. | 4·5 W. | 72 05 | −04 | 72·0 N. | 13·36 | U. S. Coast Survey. |
| At sea | 35 59 | 286 14 | 1841 | 2 00 W. | ..... | 2·0 W. | ..... | ..... | ..... | ..... | Barnett. |
| At sea | 39 55 | 288 50 | 1839 | 2 14 W. | ..... | 2·2 W. | ..... | ..... | ..... | ..... | Bérard. |
| At sea | 38 45 | 289 09 | 1841 | 6 44 W. | ..... | 6·7 W. | ..... | ..... | ..... | ..... | Barnett. |
| At sea (2 observations) | 39 28 | 290 25 | 1841 | 6 06 W. | ..... | 6·1 W. | ..... | ..... | ..... | ..... | Barnett. |
| At sea (2 observations) | 38 46 | 291 00 | 1839 | 8 15 W. | ..... | 8·3 W. | ..... | ..... | ..... | ..... | Bérard. |
| At sea | 39 52 | 291 20 | 1841 | 6 37 W. | ..... | 6·6 W. | ..... | ..... | ..... | ..... | Barnett. |
| At sea | 37 06 | 291 28 | 1849 | 6 45 W. | ..... | 6·8 W. | ..... | ..... | ..... | ..... | Hudson. |
| Bermuda | 32 23 | 295 13 | 1831 | 6 59 W. | ..... | 7·0 W. } 6·9 W. | 65 18 | ..... | 65·3 N. } 65·4 N. | ..... | Austin and Foster. |
| | | | 1837 | 6 40 W. | ..... | 6·7 W. | ..... | ..... | ..... | ..... | Milne. |
| | | | 1846 | 6 53 W. | ..... | 6·9 W. | 65 24 | ..... | 65·4 N. | ..... | Barnett. |
| At sea | 37 10 | 300 23 | 1850 | 11 16 W. | ..... | 11·3 W. | ..... | ..... | ..... | ..... | Gaint. |
| At sea (2 observations) | 38 48 | 300 25 | 1839 | 9 33 W. | ..... | 9·6 W. | ..... | ..... | ..... | ..... | Bérard. |
| At sea (2 observations) | 33 10 | 300 27 | 1849 | 8 15 W. | ..... | 8·3 W. | ..... | ..... | ..... | ..... | Hudson. |
| At sea | 32 18 | 300 42 | 1842 | 8 46 W. | ..... | 8·8 W. | ..... | ..... | ..... | ..... | Jehenne. |
| At sea | 39 50 | 301 20 | 1839 | 10 11 W. | ..... | 10·2 W. | ..... | ..... | ..... | ..... | Bérard. |
| At sea | 37 42 | 306 12 | 1850 | 13 15 W. | ..... | 13·3 W. | ..... | ..... | ..... | ..... | Lunt. |
| At sea | 34 59 | 310 59 | 1850 | 9 40 W. | ..... | 9·7 W. | ..... | ..... | ..... | ..... | Young. |
| At sea | 32 02 | 314 50 | 1829 | 12 53 W. | ..... | 12·9 W. | ..... | ..... | ..... | ..... | Rumker. |
| At sea | 31 24 | 315 04 | 1851 | 14 02 W. | ..... | 14·0 W. | ..... | ..... | ..... | ..... | Smith. |

## NORTH EQUATORIAL ZONE IV.—Lat. 30° N. to 40° N. (continued).

| Stations. | Lat. N. | Long. E. | Date. | Declination. | | | Inclination. | | | Force in British units. | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Observed. | Correction to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | | |
| | ° ′ | ° ′ | | ° ′ | | ° | ° ′ | | ° | | |
| At sea (4 observations) | 32 21 | 317 17 | 1830 | 14 52 w. | ..... | 14·9 w. | ..... | ..... | ..... | ..... | Prussian ships. |
| At sea | 30 00 | 318 05 | 1839 | ..... | ..... | ..... | 64 05 | ..... | 64·1 N. | ..... | Sulivan. |
| At sea (2 observations) | 34 30 | 318 12 | 1830 | 16 47 w. | ..... | 16·8 w. | 67 27 | ..... | 67·5 N. | 11·16 | Erman. |
| At sea (2 observations) | 34 58 | 318 20 | 1830 | 17 16 w. | ..... | 17·3 w. | 67 30 | ..... | 67·5 N. | 11·07 | Erman. |
| At sea (2 observations) | 33 39 | 318 32 | 1830 | 17 02 w. | ..... | 17·0 w. | 66 06 | ..... | 66·1 N. | 11·12 | Erman. |
| At sea (2 observations) | 32 51 | 318 57 | 1830 | 16 54 w. | ..... | 16·9 w. | 65 21 | ..... | 65·4 N. | 10·94 | Erman. |
| At sea | 31 57 | 319 00 | 1839 | ..... | ..... | ..... | 64 55 | ..... | 64·9 N. | 11·01 | Sulivan. |
| At sea (2 observations) | 32 45 | 319 01 | 1830 | 15 46 w. | ..... | 15·8 w. | ..... | ..... | ..... | ..... | Erman. |
| At sea (2 observations) | 31 46 | 319 09 | 1839 | 15 56 w. | ..... | 15·9 w. | ..... | ..... | ..... | ..... | Du Petit Thouars. |
| At sea (2 observations) | 30 25 | 319 28 | 1830 | 14 59 w. | ..... | 15·0 w. | 64 16 | ..... | 64·3 N. | 11·01 | Erman. |
| At sea (2 observations) | 32 13 | 319 39 | 1859 | 19 48 w. | ..... | 19·8 w. | ..... | ..... | ..... | ..... | Novara. |
| At sea (3 observations) | 33 52 | 319 46 | 1850 | 17 37 w. | ..... | 17·6 w. | ..... | ..... | ..... | ..... | Lunt. |
| At sea (2 observations) | 36 16 | 319 52 | 1830 | 18 35 w. | ..... | 18·6 w. | 68 17 | ..... | 68·3 N. | 11·23 | Erman. |
| At sea | 30 44 | 319 58 | 1830 | 15 14 w. | ..... | 15·2 w. | ..... | ..... | ..... | ..... | Erman. |
| At sea (2 observations) | 31 08 | 320 07 | 1830 | 15 54 w. | ..... | 15·9 w. | 64 39 | ..... | 64·5 N. | 10·87 | Erman. |
| At sea | 34 04 | 320 12 | 1839 | 17 22 w. | ..... | 17·4 w. | ..... | ..... | ..... | ..... | Du Petit Thouars. |
| At sea | 30 48 | 320 16 | 1846 | 17 47 w. | ..... | 17·8 w. | ..... | ..... | ..... | ..... | Sulivan. |
| At sea | 34 27 | 320 54 | 1839 | ..... | ..... | ..... | 67 50 | ..... | 67·8 N. | 11·16 | Sulivan. |
| At sea (ship's head on 16 points) | 37 55 | 320 58 | 1859 | 23 52 w. | ..... | 23·9 w. | ..... | ..... | ..... | ..... | Novara. |
| At sea (3 observations) | 36 21 | 321 02 | 1859 | 22 37 w. | ..... | 22·6 w. | ..... | ..... | ..... | ..... | Novara. |
| At sea (2 observations) | 32 12 | 321 07 | 1840 | 18 21 w. | ..... | 18·4 w. | ..... | ..... | ..... | ..... | Sulivan. |
| At sea (2 observations) | 37 19 | 321 10 | 1830 | 18 30 w. | ..... | 18·5 w. | 68 24 | ..... | 68·4 N. | 11·40 | Erman. |
| At sea (2 observations) | 36 47 | 321 20 | 1829 | 17 10 w. | ..... | 17·2 w. | ..... | ..... | ..... | ..... | Rumker. |
| At sea (5 observations) | 32 52 | 321 33 | 1830 | 16 10 w. | ..... | 16·2 w. | ..... | ..... | ..... | ..... | Prussian ships. |
| At sea | 37 05 | 321 35 | 1842 | 21 02 w. | ..... | 21·0 w. | ..... | ..... | ..... | ..... | Jehenne. |
| At sea | 37 39 | 321 45 | 1830 | 19 43 w. | ..... | 19·7 w. | ..... | ..... | ..... | ..... | Erman. |
| At sea | 35 09 | 321 58 | 1839 | ..... | ..... | ..... | 67 35 | ..... | 67·6 N. | 11·23 | Sulivan. |
| At sea | 33 46 | 322 10 | 1846 | 19 15 w. | ..... | 19·3 w. | ..... | ..... | ..... | ..... | Sulivan. |
| At sea (2 observations) | 35 48 | 322 30 | 1837 | 18 05 w. | ..... | 18·1 w. | ..... | ..... | ..... | ..... | Bonite. |
| At sea | 36 53 | 322 30 | 1839 | ..... | ..... | ..... | 68 15 | ..... | 68·3 N. | 11·22 | Sulivan. |
| At sea | 38 25 | 322 50 | 1830 | 21 25 w. | ..... | 21·4 w. | 69 08 | ..... | 69·1 N. | 11·21 | Erman. |
| At sea (7 observations) | 37 39 | 322 51 | 1830 | 21 50 w. | ..... | 21·8 w. | ..... | ..... | ..... | ..... | Prussian ships. |
| At sea | 37 48 | 323 07 | 1839 | 19 57 w. | ..... | 20·0 w. | ..... | ..... | ..... | ..... | Du Petit Thouars. |
| At sea (5 observations) | 32 34 | 323 10 | 1829 | 18 28 w. | ..... | 18·5 w. | ..... | ..... | ..... | ..... | Lütke. |
| At sea | 33 54 | 323 13 | 1837 | 18 02 w. | ..... | 18·0 w. | ..... | ..... | ..... | ..... | Bonite. |
| At sea (3 observations) | 32 15 | 323 13 | 1846 | 18 43 w. | ..... | 18·7 w. | ..... | ..... | ..... | ..... | Bérard. |
| At sea (4 observations) | 39 17 | 323 32 | 1859 | 27 47 w. | ..... | 27·8 w. | ..... | ..... | ..... | ..... | Novara. |
| At sea (2 observations) | 34 15 | 323 32 | 1846 | 18 32 w. | ..... | 18·5 w. | ..... | ..... | ..... | ..... | Bérard. |
| At sea (2 observations) | 31 28 | 323 33 | 1843 | 18 08 w. | ..... | 18·1 w. | 63 27 | ..... | 63·5 N. | ..... | Ross. |
| At sea | 38 21 | 323 40 | 1839 | ..... | ..... | ..... | 69 42 | ..... | 69·7 N. | 11·16 | Sulivan. |
| At sea | 39 07 | 323 41 | 1830 | 22 06 w. | ..... | 22·1 w. | ..... | ..... | ..... | ..... | Erman. |
| At sea | 31 04 | 324 03 | 1836 | 18 28 w. | ..... | 18·5 w. | ..... | ..... | ..... | ..... | FitzRoy. |
| At sea (2 observations) | 33 40 | 324 05 | 1843 | 20 45 w. | ..... | 20·8 w. | 65 01 | ..... | 65·0 N. | ..... | Ross. |
| At sea | 39 15 | 324 36 | 1830 | 23 11 w. | ..... | 23·2 w. | ..... | ..... | ..... | ..... | Erman. |
| At sea | 37 09 | 324 36 | 1846 | 23 37 w. | ..... | 23·6 w. | ..... | ..... | ..... | ..... | Sulivan. |
| At sea | 32 03 | 324 55 | 1836 | 18 22 w. | ..... | 18·4 w. | ..... | ..... | ..... | ..... | FitzRoy. |
| At sea (3 observations) | 36 01 | 325 07 | 1843 | 20 28 w. | ..... | 20·5 w. | 66 57 | ..... | 67·0 N. | ..... | Ross. |
| At sea (2 observations) | 30 31 | 325 09 | 1837 | 18 25 w. | ..... | 18·4 w. | ..... | ..... | ..... | ..... | Bonite. |
| At sea (2 observations) | 36 37 | 325 14 | 1850 | ..... | ..... | ..... | 67 16 | ..... | 67·3 N. | ..... | Rattlesnake. |
| At sea (3 observations) | 37 36 | 325 16 | 1843 | 23 39 w. | ..... | 23·7 w. | 68 43 | ..... | 68·7 N. | ..... | Ross. |
| At sea (2 observations) | 38 51 | 325 25 | 1843 | 25 23 w. | ..... | 25·4 w. | 69 12 | ..... | 69·2 N. | ..... | Ross. |
| At sea | 37 55 | 325 35 | 1846 | 23 35 w. | ..... | 23·6 w. | ..... | ..... | ..... | ..... | Sulivan. |
| At sea | 39 32 | 325 54 | 1839 | 20 55 w. | ..... | 20·9 w. | ..... | ..... | ..... | ..... | Du Petit Thouars |
| At sea (3 observations) | 34 50 | 325 56 | 1846 | 19 03 w. | ..... | 19·1 w. | ..... | ..... | ..... | ..... | Bérard. |
| At sea (2 observations) | 39 51 | 326 50 | 1843 | 26 55 w. | ..... | 26·9 w. | 69 34 | ..... | 69·6 N. | ..... | Ross. |
| At sea (3 observations) | 36 38 | 328 14 | 1846 | 20 53 w. | ..... | 20·9 w. | ..... | ..... | ..... | ..... | Bérard. |
| At sea | 35 38 | 328 28 | 1836 | 21 34 w. | ..... | 21·6 w. | ..... | ..... | ..... | ..... | Fitz Roy. |
| Flores | 39 24 | 328 48 | 1844 | 27 30 w. | ..... | 27·5 w. | ..... | ..... | ..... | ..... | Vidal. |
| Corvo | 39 41 | 328 53 | 1842 | 27 30 w. | ..... | 27·5 w. | ..... | ..... | ..... | ..... | Vidal. |

## NORTH EQUATORIAL ZONE IV.—Lat. 30° N. to 40° N. (continued).

| Stations. | Lat. N. | Long. E. | Date. | Declination. | | | Inclination. | | | Force in British units. | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Observed. | Correction to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | | |
| | ° ′ | ° ′ | | ° ′ | ° ′ | ° | ° ′ | ° ′ | ° | | |
| Fayal | 38 32 | 331 22 | 1829 | 25 55 w. | ..... | 25·9 w. | ..... | ..... | ..... | ..... | Lütke. |
| | | | 1850 | ..... | ..... | ..... | 65 53 | ..... | 65·9 N. | ..... | Rattlesnake. |
| At sea (2 observations) | 37 32 | 331 33 | 1836 | 23 05 w. | ..... | 23·1 w. | ..... | ..... | ..... | ..... | FitzRoy. |
| Pico | 38 28 | 331 36 | 1842 | 27 00 w. | ..... | 27·0 w. | ..... | ..... | ..... | ..... | Vidal. |
| Graciosa | 39 05 | 331 56 | 1844 | 26 46 w. | ..... | 26·8 w. | ..... | ..... | ..... | ..... | Vidal. |
| Terceira | 38 39 | 332 47 | 1836 | 24 19 w. | ..... | 24·3 w. | 68 06 | ..... | 68·1 N. | ..... | FitzRoy. |
| At sea | 38 45 | 332 52 | 1836 | 24 21 w. | ..... | 24·4 w. | ..... | ..... | ..... | ..... | FitzRoy. |
| | | | 1831 | 24 31 w. | ..... | 24·5 w. | 67 34 | ..... | 67·6 N. | ..... | Austin and Foster. |
| St. Michaels | 37 46 | 334 19 | 1836 | 24 15 w. | ..... | 24·3 w. | ..... | ..... | ..... | ..... | FitzRoy. |
| | | | 1844 | 25 45 w. | ..... | 25·7 w. | ..... | ..... | ..... | ..... | Vidal. |
| | | | | | | ° 24·8 w. | | | | | |
| Santa Maria | 36 57 | 334 55 | 1844 | 25 17 w. | ..... | 25·3 w. | ..... | ..... | ..... | ..... | Vidal. |
| At sea (2 observations) | 38 39 | 334 58 | 1859 | 26 42 w. | ..... | 26·7 w. | ..... | ..... | ..... | ..... | Novara. |
| At sea (2 observations) | 36 34 | 337 01 | 1846 | 20 49 w. | ..... | 20·8 w. | ..... | ..... | ..... | ..... | Bérard. |
| At sea (2 observations) | 38 11 | 338 09 | 1859 | 26 15 w. | ..... | 26·3 w. | ..... | ..... | ..... | ..... | Novara. |
| At sea (7 observations) | 38 10 | 341 22 | 1830 | 25 31 w. | ..... | 25·5 w. | ..... | ..... | ..... | ..... | Prussian ships. |
| At sea | 37 05 | 341 35 | 1842 | 21 02 w. | ..... | 21·0 w. | ..... | ..... | ..... | ..... | Jehenne. |
| At sea (mean of 2 observations) | 36 06 | 342 20 | 1846 | 21 00 w. | ..... | 21·0 w. | ..... | ..... | ..... | ..... | Bérard. |
| | | | 1822 | ..... | ..... | ..... | 62 12 | −2 20 | 59·9 | 9·81 | Sabine. |
| | | | 1826 | ..... | ..... | ..... | 62 00 | −1 52 | 60·1 ° | ..... | King. |
| Funchal | 32 38 | 343 05 | 1839 | ..... | ..... | ..... | 60 16 | −0 21 | 59·9 60·0 N. | 9·88 9·80 | Norwegian Officers. |
| | | | 1840 | ..... | ..... | ..... | 60 23 | −0 14 | 60·2 | 9·71 | Ross. |
| | | | 1841 | ..... | ..... | ..... | 59 50 | −0 07 | 59·7 | ..... | Fishbourne. |
| At sea | 30 47 | 343 10 | 1840 | ..... | ..... | ..... | ..... | ..... | ..... | 9·56 | Ross. |
| At sea | 33 00 | 343 50 | 1832 | 23 00 w. | ..... | 23·0 w. | ..... | ..... | ..... | ..... | FitzRoy. |
| At sea (2 observations) | 36 34 | 344 08 | 1826 | 22 00 w. | ..... | 22·0 w. | ..... | ..... | ..... | ..... | Lütke. |
| At sea (2 observations) | 31 24 | 344 13 | 1826 | 23 45 w. | ..... | 23·8 w. | ..... | ..... | ..... | ..... | Lütke. |
| At sea | 37 20 | 344 30 | 1836 | 23 54 w. | ..... | 23·9 w. | ..... | ..... | ..... | ..... | FitzRoy. |
| At sea | 34 35 | 344 48 | 1838 | ..... | ..... | ..... | 61 07 | ..... | 61·1 N. | 9·47 | Sulivan. |
| At sea | 38 41 | 345 00 | 1836 | 23 35 w. | ..... | 23·6 w. | ..... | ..... | ..... | ..... | FitzRoy. |
| At sea | 37 28 | 346 04 | 1838 | ..... | ..... | ..... | 63 02 | ..... | 63·0 N. | 9·56 | Sulivan. |
| At sea | 35 07 | 346 10 | 1843 | 23 34 w. | ..... | 23·6 w. | ..... | ..... | ..... | ..... | Pasley. |
| At sea | 30 02 | 346 18 | 1836 | 22 24 w. | ..... | 22·4 w. | ..... | ..... | ..... | ..... | Bonite. |
| At sea (2 observations) | 36 42 | 347 05 | 1859 | 23 10 w. | ..... | 23·2 w. | ..... | ..... | ..... | ..... | Novara. |
| At sea (2 observations) | 30 59 | 347 08 | 1842 | 22 30 w. | ..... | 22·5 w. | ..... | ..... | ..... | ..... | Bérard. |
| At sea | 39 30 | 347 51 | 1840 | ..... | ..... | ..... | ..... | ..... | ..... | 10·46 | Ross. |
| At sea | 33 16 | 348 08 | 1838 | 20 01 w. | ..... | 20·0 w. | ..... | ..... | ..... | ..... | Bérard. |
| At sea (2 observations) | 33 34 | 349 05 | 1836 | 24 32 w. | ..... | 24·5 | ..... | ..... | ..... | ..... | Bonite. |
| At sea (2 observations) | 32 40 | 349 24 | 1842 | 22 22 w. | ..... | 22·4 | ..... | ..... | ..... | ..... | Bérard. |
| At sea (2 observations) | 35 53 | 350 20 | 1859 | 21 32 w. | ..... | 21·5 | ..... | ..... | ..... | ..... | Novara. |
| Lisbon | 38 43 | 350 51 | 1842 | 23 33 w. | ..... | 23·6 w. | 61 19 | ..... | 61·3 N. | 9·79 | Lamont. |
| At sea | 36 00 | 352 13 | 1836 | 22 20 w. | ..... | 22·3 w. | ..... | ..... | ..... | ..... | Bonite. |
| At sea | 35 25 | 352 15 | 1846 | 21 05 w. | ..... | 21·1 w. | ..... | ..... | ..... | ..... | Bérard. |
| At sea (2 observations) | 34 49 | 352 17 | 1842 | 22 00 w. | ..... | 22·0 w. | ..... | ..... | ..... | ..... | Bérard. |
| At sea (2 observations) | 35 11 | 352 30 | 1838 | 21 09 w. | ..... | 21·2 w. | ..... | ..... | ..... | ..... | Bérard. |
| At sea (3 observations) | 35 57 | 353 37 | 1846 | 20 29 w. | ..... | 20·5 w. | ..... | ..... | ..... | ..... | Bérard. |
| At sea (mean of 2 observations) | 35 43 | 353 45 | 1846 | 20 27 w. | ..... | 20·5 w. | ..... | ..... | ..... | ..... | Bérard. |
| Cadiz | 36 28 | 353 48 | 1842 | 22 05 w. | ..... | 22·1 w. | 58 44 | ..... | 58·7 N. | 9·55 | Lamont. |
| | | | 1845 | ..... | ..... | ..... | 59 27 | ..... | 59·5 N. | ..... | Norwegian Officers. |
| Seville | 37 23 | 353 59 | 1842 | 22 10 w. | ..... | 22·2 w. | 59 33 | ..... | 59·6 N. | 9·59 | Lamont. |
| Tangiers | 35 47 | 354 12 | 1845 | ..... | ..... | ..... | 58 47 | ..... | 58·8 N. | 9·55 | Norwegian Officers. |
| Gibraltar* | 36 10 | 354 40 | 1844 | ..... | ..... | ..... | 59 15 | ..... | 59·3 | 9·72 | Norwegian Officers. |
| | | | 1857 | 19 13 w. | 1 53 w. | 21·1 w. | 57 39 | +0 40 | 58·3 58·8 N. | ..... | Novara. |
| At sea | 36 03 | 355 20 | 1854 | 19 51 w. | ..... | 19·9 w. | ..... | ..... | ..... | ..... | Novara. |
| Malaga* | 36 43 | 355 32 | 1842 | 21 36 w. | ..... | 21·6 w. | 58 29 | ..... | 58·5 N. | 9·93 | Lamont. |
| At sea | 36 26 | 356 02 | 1846 | 19 15 w. | ..... | 19·3 w. | ..... | ..... | ..... | ..... | Bérard. |

* The 'Novara' entries in this portion of the Zone are those most distant from the Mean Epoch. The only land station of the 'Novara' is Gibraltar. The latitude and longitude of Gibraltar are so near to those of Malaga that it seems quite justifiable to apply to the 'Novara' result, at the first-named station, the secular change corrections employed at the last-named station by so high an authority as Lamont, viz. 7′·5 Declination and 2′·7 Inclination annually. These rates have been employed by Dr. Lamont's own directions, in reducing his observations to the epoch of 1842, in the preceding and present Papers (Nos. XIII. and XIV.).

## NORTH EQUATORIAL ZONE IV.—Lat. 30° N. to 40° N. (continued).

| Stations. | Lat. N. | Long. E. | Date. | Declination. | | | Inclination. | | | Force in British units. | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Observed. | Correction to Epoch 1842·5. | Corrected. | Observed | Cor. to Epoch 1842·5. | Corrected. | | |
| | ° ′ | ° ′ | | ° ′ | | ° | ° ′ | | ° | | |
| Tembleque | 39 42 | 356 30 | 1842 | 21 46 w. | ..... | 21·8 w. | 61 01 | ..... | 61·0 N. | 9 67 | Lamont. |
| Granada | 37 10 | 356 33 | 1842 | 21 26 w. | ..... | 21·4 w. | 58 40 | ..... | 58·7 N. | 9·50 | Lamont. |
| At sea | 35 48 | 357 00 | 1842 | 18 30 w. | ..... | 18·5 w. | ..... | ..... | ..... | ..... | Bérard. |
| Almeria | 36 52 | 357 29 | 1842 | 20 57 w. | ..... | 21·0 w. | 58 07 | ..... | 58·1 N. | 9·46 | Lamont. |
| At sea | 36 15 | 357 34 | 1858 | 19 23 w. | ..... | 19·4 w. | ..... | ..... | ..... | ..... | Novara. |
| At sea (2 observations) | 35 52 | 357 41 | 1842 | 18 40 w. | ..... | 18·7 w. | ..... | ..... | ..... | ..... | Bérard. |
| At sea (2 observations) | 37 43 | 358 06 | 1846 | 19 41 w. | ..... | 19·7 w. | ..... | ..... | ..... | ..... | Bérard. |
| At sea | 36 46 | 358 52 | 1838 | 19 47 w. | ..... | 19·8 w. | ..... | ..... | ..... | ..... | Bérard. |
| Cartagena | 37 36 | 358 58 | 1842 | 20 29 w. | ..... | 20·5 w. | 58 22 | ..... | 58·4 N. | 9·44 | Lamont. |
| At sea (3 observations) | 36 21 | 359 06 | 1846 | 18 58 w. | ..... | 19·0 w. | ..... | ..... | ..... | ..... | Bérard. |
| Valencia | 39 29 | 359 35 | 1842 | 20 32 w. | ..... | 20·5 w. | 60 08 | ..... | 60·1 N. | 9·60 | Lamont. |
| At sea (2 observations) | 36 10 | 359 42 | 1846 | 19 18 w. | ..... | 19·3 w. | ..... | ..... | ..... | ..... | Bérard. |

A few observations are subjoined which should have been included in Zone I.

| Stations. | Lat. N. | Long. E. | Date. | Declination. | | | Inclination. | | | Force in British units. | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Observed. | Correction to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | | |
| | ° ′ | ° ′ | | | | | ° ′ | | ° | | |
| Mean Point | 4 18 | 6 05 | 1841 | ..... | ..... | ..... | 2 33 N. | ..... | 2·6 N. | ..... | Fishbourne. |
| | | | 1841 | ..... | ..... | ..... | 2 29 N. | ..... | 2·5 N. | ..... | Fishbourne. |
| | | | 1841 | ..... | ..... | ..... | 2 30 N. | ..... | 2·5 N. | ..... | Fishbourne. |
| | | | | | | | | | ° 2·5 N. | | |
| Eboe | 5 40 | 6 27 | 1841 | ..... | ..... | ..... | 4 46 N. | ..... | 4·8 N. | ..... | Fishbourne. |
| Cliff of Idda | 7 04 | 7 00 | 1841 | ..... | ..... | ..... | 7 45 N. | ..... | 7·8 N. | ..... | Fishbourne. |
| Fernando Po | 3 45 | 8 45 | 1841 | ..... | ..... | ..... | 2 14 S. | ..... | 2·2 S. | ..... | Fishbourne. |
| Sierra Leone | 8 30 | 346 44 | 1841 | ..... | ..... | ..... | 26 30 N. | ..... | 26·5 N. | ..... | Fishbourne. |
| Liberia | 6 25 | 349 30 | 1841 | ..... | ..... | ..... | 22 57 N. | ..... | 23·0 N. | ..... | Fishbourne. |
| Grunville | ..... | ..... | 1841 | ..... | ..... | ..... | 19 02 N. | ..... | 19·0 N. | ..... | Fishbourne. |
| Sinou | 5 00 | 351 00 | 1841 | ..... | ..... | ..... | 18 58 N. | ..... | 19·0 N. | ..... | Fishbourne. |
| Cape Coast Castle | 5 06 | 358 46 | 1841 | ..... | ..... | ..... | 11 26 N. | ..... | 11·4 N. | ..... | Fishbourne. |
| Accra | 5 32 | 359 49 | 1841 | ..... | ..... | ..... | 11 24 N. | ..... | 11·4 N. | ..... | Fishbourne. |

In the following Tables I have placed in comparison with each other, the values of the magnetic Elements at every fifth degree of latitude between 40° N. and the Equator, and at every tenth degree of longitude between 0° and 360°, as shown (1) in the Table published by MM. GAUSS and WEBER, in the 'Atlas des Erdmagnetismus' (Leipsic, 1840), and (2) in the Tables and Maps of the present paper. For the values of the Magnetic Force, which in the Atlas of MM. GAUSS and WEBER are expressed in the Arbitrary Scale, of which the fundamental value is 1·372, or (as written by M. GAUSS) 1372=the Force in London in 1836, I have substituted the Absolute Values corresponding to 10·28 as the Absolute Force in London at the same Epoch, in the scale which was originally adopted in conformity with the Report of the Committee of Physics of the Royal Society, 1840, page 21. In all the three Elements there are some blanks in the columns derived from the data in the present paper, owing to observations being either wanting or insufficient in those localities.

## Declination.

| Latitudes. | Gauss. | Sabine. | Gauss. | Sabine. | Gauss. | Sabine. | Gauss. | Sabine. | Gauss. | Sabine. | Gauss. | Sabine. | Latitudes. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Long. 0° E. | | Long. 10° E. | | Long. 20° E. | | Long. 30° E. | | Long. 40° E. | | Long. 50° E. | | |
| ° | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° |
| 40 N. | 24 20 W. | 20 35 W. | 20 48 W. | 16 54 W. | 16 13 W. | 12 41 W. | 11 03 W. | 8 58 W. | 5 49 W. | 4 23 W. | 1 04 W. | 0 55 W. | 40 N. |
| 35 N. | 23 48 W. | ..... | 20 57 W. | 16 37 W. | 16 49 W. | 12 39 W. | 11 52 W. | 8 38 W. | 6 40 W. | 5 06 W. | 1 50 W. | 1 53 W. | 35 N. |
| 30 N. | 23 17 W. | ..... | 21 06 W. | ..... | 17 25 W. | 12 40 W. | 12 43 W. | 9 06 W. | 7 32 W. | 5 49 W. | 2 36 W. | 2 57 W. | 30 N. |
| 25 N. | 22 50 W. | ..... | 21 16 W. | ..... | 18 03 W. | 12 53 W. | 13 35 W. | 9 37 W. | 8 26 W. | 6 26 W. | 3 02 W. | 3 42 W. | 25 N. |
| 20 N. | 22 25 W. | ..... | 21 29 W. | ..... | 18 44 W. | 13 13 W. | 14 30 W. | 10 15 W. | 9 22 W. | 7 09 W. | 4 11 W. | 4 19 W. | 20 N. |
| 15 N. | 22 10 W. | ..... | 21 46 W. | ..... | 19 28 W. | 13 40 W. | 15 30 W. | 10 54 W. | 10 25 W. | 7 52 W. | 5 04 W. | 4 50 W. | 15 N. |
| 10 N. | 21 58 W. | ..... | 22 08 W. | ..... | 20 18 W. | 14 17 W. | 16 36 W. | 11 36 W. | 11 34 W. | 8 45 W. | 6 01 W. | 5 38 W. | 10 N. |
| 05 N. | 21 51 W. | ..... | 22 34 W. | 18 20 W. | 21 13 W. | 15 20 W. | 17 50 W. | 12 27 W. | 12 53 W. | 9 43 W. | 7 17 W. | 6 35 W. | 05 N. |
| 00 N. | 21 49 W. | ..... | 23 04 W. | 19 32 W. | 22 14 W. | 16 31 W. | 19 14 W. | 13 39 W. | 14 26 W. | 10 54 W. | 8 45 W. | 7 50 W. | 00 N. |
| | Long. 60° E. | | Long. 70° E. | | Long. 80° E. | | Long. 90° E. | | Long. 100° E. | | Long. 110° E. | | |
| 40 N. | 2 42 E. | 1 18 E. | 4 56 E. | 3 05 E. | 5 47 E. | ..... | 4 55 E. | ..... | 2 52 E. | ..... | 0 24 E. | 0 22 W. | 40 N. |
| 35 N. | 2 03 E. | 0 34 E. | 4 33 E. | 1 55 E. | 5 25 E. | 3 07 E. | 4 41 E. | ..... | 2 48 E. | ..... | 0 30 E. | 0 00 | 35 N. |
| 30 N. | 1 27 E. | 0 08 W. | 4 06 E. | 1 05 E. | 5 07 E. | 2 12 E. | 4 32 E. | ..... | 2 48 E. | ..... | 0 40 E. | ..... | 30 N. |
| 25 N. | 0 52 E. | 1 19 W. | 3 41 E. | 0 23 E. | 4 49 E. | 1 18 E. | 4 23 E. | ..... | 2 49 E. | ..... | 0 53 E. | ..... | 25 N. |
| 20 N. | 0 14 E. | 2 08 W. | 3 14 E. | 0 01 E. | 4 31 E. | 0 58 E. | 4 13 E. | 1 54 E. | 2 49 E. | ..... | 1 05 E. | 1 08 E. | 20 N. |
| 15 N. | 0 27 W. | 2 38 W. | 2 44 E. | 0 25 W. | 4 10 E. | 0 47 E. | 4 00 E. | 1 44 E. | 2 47 E. | ..... | 1 15 E. | 1 22 E. | 15 N. |
| 10 N. | 1 15 W. | 3 04 W. | 2 07 E. | 0 40 W. | 3 42 E. | 0 40 E. | 3 41 E. | 1 35 E. | 2 39 E. | ..... | 1 22 E. | 1 11 E. | 10 N. |
| 05 N. | 2 14 W. | 3 42 W. | 1 20 E. | 1 06 W. | 3 04 E. | 0 28 E. | 3 12 E. | 1 17 E. | 2 22 E. | 2 00 E. | 1 21 E. | 1 23 E. | 05 N. |
| 00 N. | 3 29 W. | 4 42 W. | 0 17 E. | 2 01 W. | 2 11 E. | ..... | 2 30 E. | ..... | 1 54 E. | ..... | 1 12 E. | ..... | 00 N. |
| | Long. 120° E. | | Long. 130° E. | | Long. 140° E. | | Long. 150° E. | | Long. 160° E. | | Long. 170° E. | | |
| 40 N. | 1 34 W. | 1 54 W. | 2 21 W. | ..... | 1 39 W. | 2 00 W. | 0 27 E. | 1 04 E. | 3 35 E. | 4 24 E. | 7 15 E. | 9 02 E. | 40 N. |
| 35 N. | 1 20 W | 1 28 W. | 2 02 W. | ..... | 1 18 W. | 1 13 W. | 0 47 E. | 1 37 E. | 3 51 E. | 4 51 E. | 7 20 E. | 9 23 E. | 35 N. |
| 30 N. | 1 00 W. | 1 03 W. | 1 35 W. | 1 53 W. | 0 47 W. | 0 34 W. | 1 18 E. | 2 17 E. | 4 17 E. | 5 33 E. | 7 33 E. | 9 43 E. | 30 N. |
| 25 N. | 0 37 W. | 0 34 W. | 1 03 W. | 1 12 W. | 0 09 W. | 0 00 | 1 57 E. | 2 58 E. | 4 50 E. | 6 02 E. | 7 53 E. | 10 02 E. | 25 N. |
| 20 N. | 0 12 W. | 0 06 W. | 0 27 W. | 0 31 W. | 0 34 E. | 1 07 E. | 2 43 E. | 3 44 E. | 5 30 E. | 6 48 E. | 8 16 E. | 10 18 E. | 20 N. |
| 15 N. | 0 12 E. | 0 18 E. | 0 10 E. | 0 10 E. | 1 21 E. | 1 48 E. | 3 32 E. | 4 12 E. | 6 12 E. | 7 17 E. | 8 42 E. | 10 32 E. | 15 N. |
| 10 N. | 0 34 E. | 0 41 E. | 0 47 E. | ..... | 2 13 E. | 2 27 E. | 4 23 E. | 4 40 E. | 6 56 E. | 7 35 E. | 9 07 E. | 11 00 E. | 10 N. |
| 05 N. | 0 52 E. | 0 53 E. | 1 22 E. | ..... | 2 55 E. | ..... | 5 13 E. | 5 08 E. | 7 38 E. | ..... | 9 30 E. | ..... | 05 N. |
| 00 N. | 1 04 E. | 1 09 E. | 1 51 E. | ..... | 3 37 E. | ..... | 5 58 E. | ..... | 8 16 E. | ..... | 9 49 E. | ..... | 00 N. |
| | Long. 180° E. | | Long. 190° E. | | Long. 200° E. | | Long. 210° E. | | Long. 220° E. | | Long. 230° E. | | |
| 40 N. | 10 55 E. | ..... | 14 05 E. | ..... | 16 28 E. | ..... | 17 56 E. | ..... | 18 28 E. | ..... | 18 08 E. | ..... | 40 N. |
| 35 N. | 10 41 E. | ..... | 13 25 E. | ..... | 15 17 E. | 14 21 E. | 16 16 E. | 15 23 E. | 16 27 E. | 15 24 E. | 15 59 E. | 14 40 E. | 35 N. |
| 30 N. | 10 33 E. | ..... | 12 49 E. | ..... | 14 10 E. | 12 32 E. | 14 42 E. | 12 56 E. | 14 37 E. | 12 56 E. | 14 05 E. | 12 26 E. | 30 N. |
| 25 N. | 10 29 E. | ..... | 12 15 E. | ..... | 13 06 E. | 10 47 E. | 13 14 E. | 10 35 E. | 12 55 E. | 10 35 E. | 12 25 E. | 10 16 E. | 25 N. |
| 20 N. | 10 27 E. | ..... | 11 42 E. | ..... | 12 03 E. | ..... | 11 49 E. | 8 57 E. | 11 22 E. | 8 20 E. | 10 56 E. | 8 05 E. | 20 N. |
| 15 N. | 10 26 E. | ..... | 11 09 E. | ..... | 11 02 E. | ..... | 10 29 E. | ..... | 9 56 E. | ..... | 9 36 E. | 6 37 E. | 15 N. |
| 10 N. | 10 23 E. | ..... | 10 36 E. | ..... | 10 03 E. | ..... | 9 14 E. | ..... | 8 38 E. | ..... | 8 31 E. | 5 11 E. | 10 N. |
| 05 N. | 10 20 E. | ..... | 10 05 E. | ..... | 9 09 E. | ..... | 8 07 E. | ..... | 7 29 E. | ..... | 7 27 E. | ..... | 05 N. |
| 00 N. | 10 15 E. | ..... | 9 36 E. | ..... | 8 22 E. | ..... | 7 10 E. | ..... | 6 32 E. | ..... | 6 39 E. | ..... | 00 N. |
| | Long. 240° E. | | Long. 250° E. | | Long. 260° E. | | Long. 270° E. | | Long. 280° E. | | Long. 290° E. | | |
| 40 N. | 16 57 E. | ..... | 14 52 E. | 14 45 E. | 11 45 E. | 11 56 E. | 7 29 E. | 7 37 E. | 2 03 E. | 0 00 | 4 20 W. | 8 00 W. | 40 N. |
| 35 N. | 14 56 E. | 13 51 E. | 13 16 E. | 12 44 E. | 10 52 E. | 11 18 E. | 7 36 E. | 7 40 E. | 3 21 E. | 2 14 E. | 1 47 W. | 4 12 W. | 35 N. |
| 30 N. | 13 13 E. | 11 51 E. | 11 58 E. | 11 17 E. | 10 10 E. | 10 18 E. | 7 40 E. | 7 33 E. | 4 18 E. | 3 32 E. | 0 04 E. | 1 28 W. | 30 N. |
| 25 N. | 11 47 E. | 9 56 E. | 10 55 E. | 9 41 E. | 9 39 E. | 9 29 E. | 7 45 E. | 7 27 E. | 5 03 E. | 4 31 E. | 1 31 E. | 0 37 E. | 25 N. |
| 20 N. | 10 32 E. | 8 14 E. | 10 03 E. | 8 35 E. | 9 14 E. | 8 49 E. | 7 51 E. | 7 23 E. | 5 41 E. | 5 12 E. | 2 39 E. | 2 04 E. | 20 N. |
| 15 N. | 9 29 E. | 6 48 E. | 9 22 E. | 7 25 E. | 8 58 E. | 8 10 E. | 8 00 E. | 7 18 E. | 6 15 E. | 5 38 E. | 3 38 E. | 3 15 E. | 15 N. |
| 10 N. | 8 36 E. | 5 23 E. | 8 50 E. | 6 26 E. | 8 49 E. | 7 24 E. | 8 12 E. | 7 39 E. | 6 49 E. | 6 25 E. | 4 30 E. | 4 30 E. | 10 N. |
| 05 N. | 7 53 E. | ..... | 8 28 E. | 6 07 E. | 8 47 E. | 7 25 E. | 8 30 E. | ..... | 7 23 E. | 7 14 E. | 5 19 E. | 5 29 E. | 05 N. |
| 00 N. | 7 21 E. | ..... | 8 14 E. | ..... | 8 52 E. | ..... | 8 53 E. | ..... | 8 00 E. | ..... | 6 08 E. | 6 19 E. | 00 N. |
| | Long. 300° E. | | Long. 310° E. | | Long. 320° E. | | Long. 330° E. | | Long. 340° E. | | Long. 350° E. | | |
| 40 N. | 11 03 W. | 14 08 W. | 17 17 W. | 19 15 W. | 22 17 W. | ..... | 25 34 W. | ..... | 26 57 W. | ..... | 26 29 W. | ..... | 40 N. |
| 35 N. | 7 31 W. | 9 16 W. | 13 17 W. | 14 00 W. | 18 24 W. | 18 13 W. | 22 18 W. | ..... | 24 35 W. | ..... | 25 04 W. | ..... | 35 N. |
| 30 N. | 4 52 W. | 6 31 W. | 10 09 W. | 10 52 W. | 15 13 W. | 15 24 W. | 19 30 W. | 19 04 W. | 22 27 W. | ..... | 23 42 W. | ..... | 30 N. |
| 25 N. | 2 49 W. | 4 01 W. | 7 40 W. | 8 28 W. | 12 37 W. | 12 51 W. | 17 07 W. | 16 36 W. | 20 36 W. | 19 42 W. | 22 35 W. | ..... | 25 N. |
| 20 N. | 1 12 W. | 1 34 W. | 5 42 W. | 6 10 W. | 10 31 W. | 10 48 W. | 15 08 W. | 15 13 W. | 19 00 W. | 18 01 W. | 21 34 W. | ..... | 20 N. |
| 15 N. | 0 08 E. | 0 31 E. | 4 06 W. | 3 52 W. | 8 47 W. | 8 55 W. | 13 29 W. | 13 31 W. | 17 38 W. | ..... | 20 41 W. | ..... | 15 N. |
| 10 N. | 1 16 E. | 1 44 E. | 2 46 W. | 1 59 W. | 7 16 W. | 7 17 W. | 12 06 W. | 12 16 W. | 16 30 W. | ..... | 19 58 W. | ..... | 10 N. |
| 05 N. | 2 17 E. | 2 48 E. | 1 36 W. | 0 22 W. | 6 08 W. | 6 00 W. | 10 56 W. | 11 23 W. | 15 32 W. | ..... | 19 22 W. | ..... | 05 N. |
| 00 N. | 3 14 E. | 3 44 E. | 0 33 W. | 0 34 E. | 5 02 W. | 4 53 W. | 9 54 W. | 10 43 W. | 14 42 W. | 15 39 W. | 18 52 W. | 19 26 W. | 00 N. |

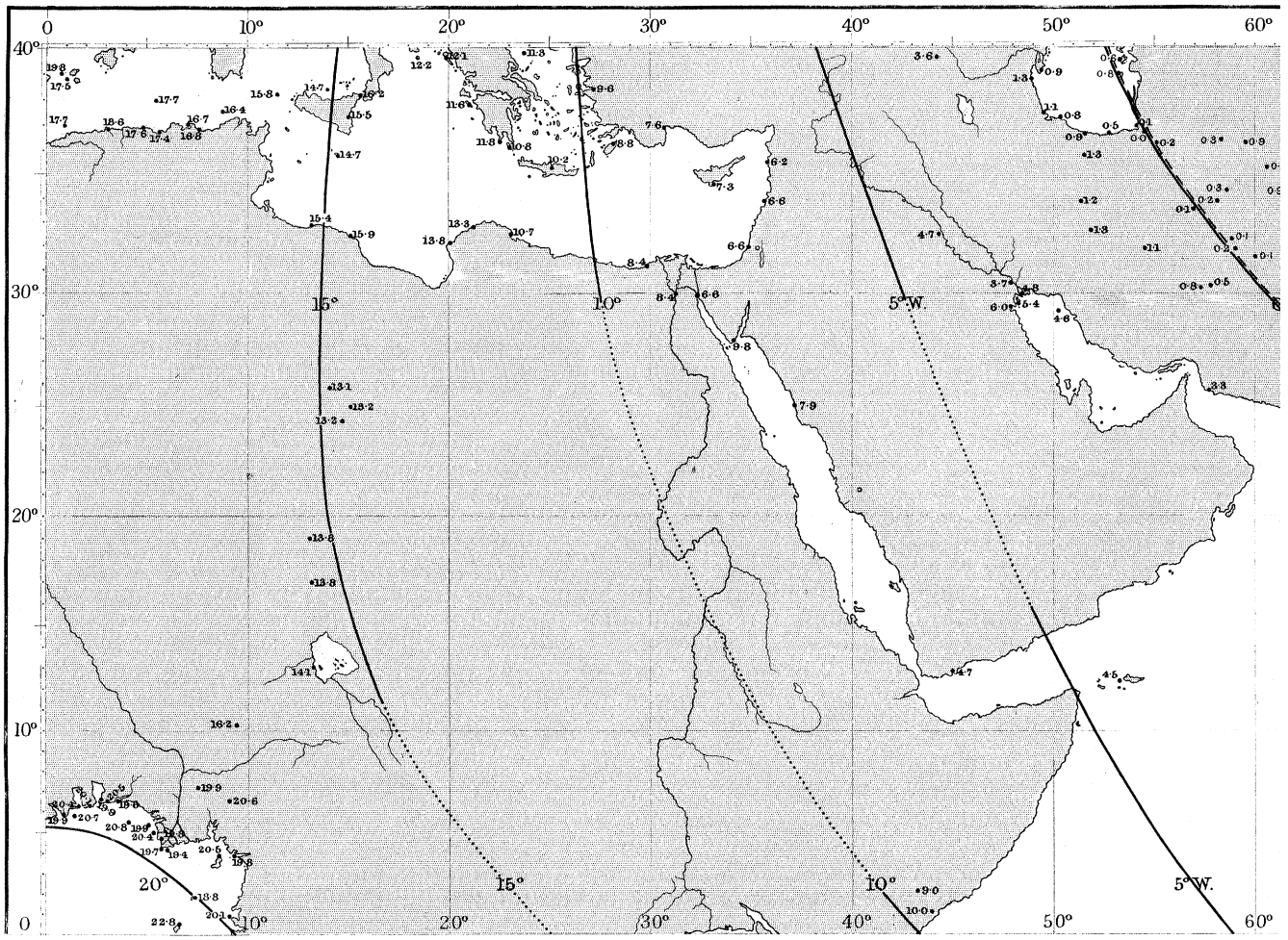
## Inclination.

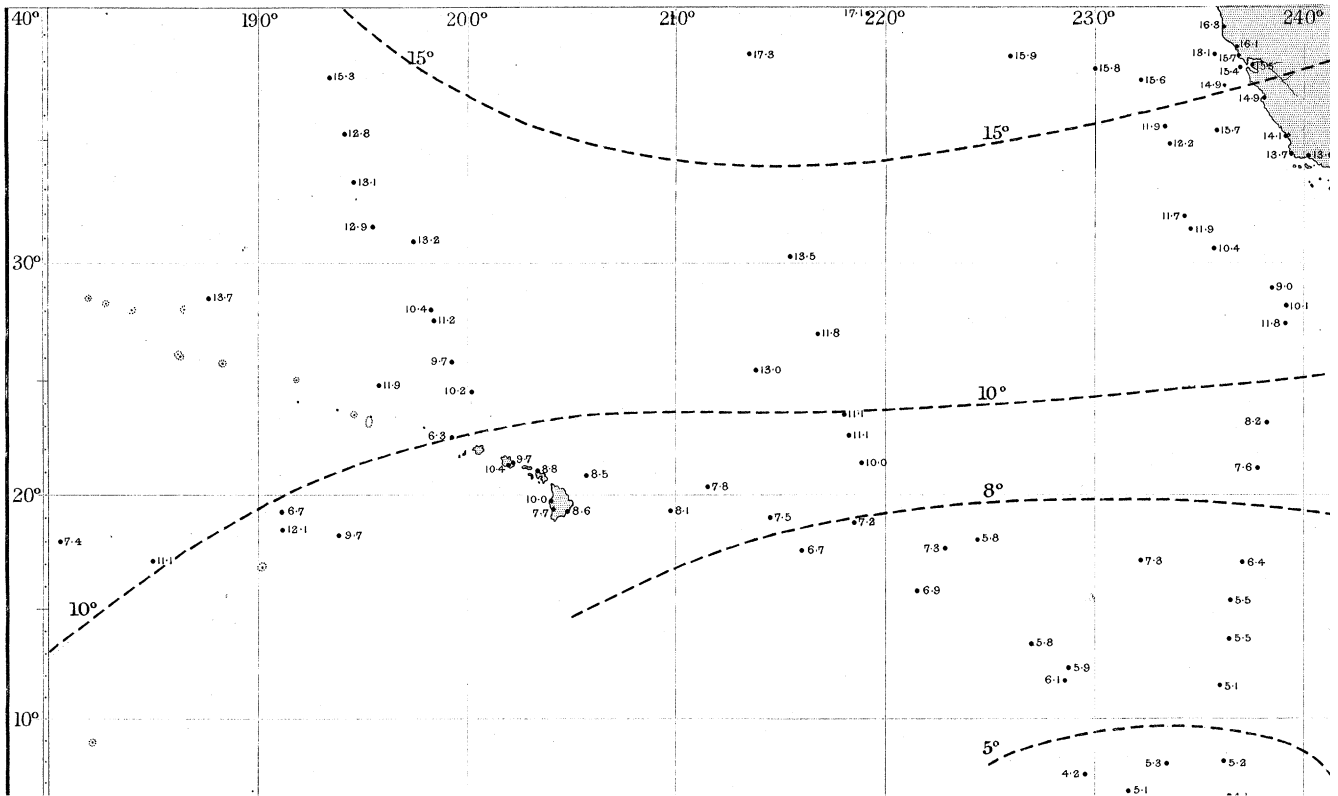
| Latitudes. | Gauss. | Sabine. | Gauss. | Sabine. | Gauss. | Sabine. | Gauss. | Sabine. | Gauss. | Sabine. | Gauss. | Sabine. | Latitudes. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Long. 0° E. | | Long. 10° E. | | Long. 20° E. | | Long. 30° E. | | Long. 40° E. | | Long. 50° E. | | |
| ° | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° |
| 40 N. | 60 44 N. | 61 00 N. | 57 04 N. | 58 55 N. | 53 38 N. | 57 25 N. | 50 53 N. | 55 40 N. | 49 12 N. | 54 55 N. | 48 47 N. | 54 10 N. | 40 N. |
| 35 N. | 56 22 N. | ..... | 51 56 N. | 54 07 N. | 47 37 N. | 51 25 N. | 44 03 N. | 49 11 N. | 41 47 N. | 47 41 N. | 41 07 N. | 47 16 N. | 35 N. |
| 30 N. | 51 25 N. | 50 05 N. | 46 05 N. | 46 30 N. | 40 47 N. | 43 06 N. | 36 17 N. | 40 56 N. | 33 20 N. | 40 15 N. | 32 21 N. | 40 00 N. | 30 N. |
| 25 N. | 45 49 N. | 44 18 N. | 39 31 N. | 39 25 N. | 33 17 N. | 34 06 N. | 27 34 N. | 31 21 N. | 23 52 N. | 30 20 N. | 22 31 N. | 30 00 N. | 25 N. |
| 20 N. | 39 31 N. | 37 53 N. | 32 12 N. | 29 42 N. | 24 38 N. | 23 53 N. | 18 01 N. | 21 05 N. | 13 32 N. | 20 00 N. | 11 48 N. | 19 38 N. | 20 N. |
| 15 N. | 32 28 N. | 27 56 N. | 24 09 N′ | 19 31 N. | 15 29 N. | 13 58 N. | 7 53 N. | 11 29 N. | 2 42 N. | 10 00 N. | 0 36 N. | 9 08 N. | 15 N. |
| 10 N. | 24 44 N. | 18 37 N. | 15 30 N. | 9 04 N. | 5 54 N. | 4 52 N. | 2 26 S. | 2 23 N. | 8 08 S. | 0 25 N. | 10 32 S. | 1 04 S. | 10 N. |
| 05 N. | 16 22 N. | 9 31 N. | 6 28 N. | 1 34 N. | 3 46 S. | 3 22 S. | 12 27 S. | ..... | 18 24 S. | ..... | 20 58 S. | ..... | 05 N. |
| 00 N. | 7 36 N. | ..... | 2 38 S. | ..... | 12 58 S. | ..... | 21 44 S. | ..... | 27 42 S. | ..... | 30 24 S. | ..... | 00 N. |
| | Long. 60° E. | | Long. 70° E. | | Long. 80° E. | | Long. 90° E. | | Long. 100° E. | | Long. 110° E. | | |
| 40 N. | 49 32 N. | ..... | 51 08 N. | ..... | 53 02 N. | ..... | 54 45 N. | ..... | 55 50 N. | ..... | 56 06 N. | ..... | 40 N. |
| 35 N. | 41 56 N. | 47 15 N. | 43 49 N. | 47 35 N. | 46 06 N. | 48 24 N. | 48 10 N. | 49 40 N. | 49 32 N. | 50 41 N. | 49 55 N. | 51 06 N. | 35 N. |
| 30 N. | 33 14 N. | 40 00 N. | 35 26 N. | 40 08 N. | 38 10 N. | 40 34 N. | 40 39 N. | 41 17 N. | 42 18 N. | 42 22 N. | 42 51 N. | 42 40 N. | 30 N. |
| 25 N. | 23 27 N. | 30 15 N. | 25 59 N. | 30 56 N. | 29 08 N. | 31 52 N. | 32 06 N. | 32 51 N. | 34 06 N. | 34 02 N. | 34 49 N. | 34 42 N. | 25 N. |
| 20 N. | 12 44 N. | 20 00 N. | 15 33 N. | 20 50 N. | 19 11 N. | 21 53 N. | 22 32 N. | 23 10 N. | 24 51 N. | 24 47 N. | 25 47 N. | 25 54 N. | 20 N. |
| 15 N. | 1 28 N. | 9 17 N. | 4 28 N. | 9 27 N. | 8 24 N. | 10 59 N. | 12 06 N. | 13 13 N. | 14 42 N. | 15 00 N. | 15 49 N. | 16 03 N. | 15 N. |
| 10 N. | 9 48 S. | 1 28 S. | 6 47 S. | 0 51 S. | 2 43 S. | 0 22 N. | 1 09 N. | 2 32 N. | 3 56 N. | 4 46 N. | 5 12 N. | 6 00 N. | 10 N. |
| 05 N. | 20 27 S. | ..... | 17 36 S. | 11 41 S. | 13 37 S. | 10 19 S. | 9 47 S. | 7 49 S. | 6 58 S. | 5 34 S. | 5 33 S. | 4 00 S. | 05 N. |
| 00 N. | 30 04 S. | ..... | 27 29 S. | ..... | 23 47 S. | ..... | 20 09 S. | ..... | 17 27 S. | ..... | 16 03 S. | ..... | 00 N. |
| | Long. 120° E. | | Long. 130° E. | | Long. 140° E. | | Long. 150° E. | | Long. 160° E. | | Long. 170° E. | | |
| 40 N. | 55 33 N. | ..... | 54 28 N. | ..... | 53 15 N. | ..... | 52 21 N. | ..... | 52 05 N. | 53 40 N. | 52 38 N. | 54 20 N. | 40 N. |
| 35 N. | 49 23 N. | 50 54 N. | 48 15 N. | 49 29 N. | 46 59 N. | 47 30 N. | 46 06 N. | 46 12 N. | 46 00 N. | 46 28 N. | 46 48 N. | 48 38 N. | 35 N. |
| 30 N. | 42 22 N. | 42 38 N. | 41 12 N. | 42 01 N. | 39 56 N. | 40 32 N. | 39 09 N. | 40 00 N. | 39 16 N. | 40 45 N. | 40 27 N. | 42 58 N. | 30 N. |
| 25 N. | 34 24 N. | 34 56 N. | 33 16 N. | 34 37 N. | 32 03 N. | 33 41 N. | 31 27 N. | 33 23 N. | 31 55 N. | 34 15 N. | 33 32 N. | 37 00 N. | 25 N. |
| 20 N. | 25 27 N. | 26 09 N. | 24 24 N. | 25 44 N. | 23 20 N. | 25 17 N. | 23 00 N. | 25 22 N. | 23 52 N. | 27 00 N. | 26 02 N. | 30 00 N. | 20 N. |
| 15 N. | 15 38 N. | 16 09 N. | 14 43 N. | 15 55 N. | 13 54 N. | 15 33 N. | 13 55 N. | 15 50 N. | 15 18 N. | 18 24 N. | 18 01 N. | 22 09 N. | 15 N. |
| 10 N. | 5 11 N. | 6 23 N. | 4 31 N. | 6 13 N. | 4 01 N. | 5 40 N. | 4 29 N. | 6 23 N. | 6 22 N. | 9 38 N. | 9 35 N. | 14 08 N. | 10 N. |
| 05 N. | 5 25 S. | 3 05 S. | 5 49 S. | 3 16 S. | 5 55 S. | 3 52 S. | 4 59 S. | 3 00 S. | 2 38 S. | 0 31 N. | 0 58 N. | 5 37 N. | 05 N. |
| 00 N. | 15 41 S. | 13 34 S. | 15 45 S. | 13 15 S. | 15 27 S. | 13 25 S. | 14 07 S. | ..... | 11 25 S. | ..... | 7 35 S. | ..... | 00 N. |
| | Long. 180° E. | | Long. 190° E. | | Long. 200° E. | | Long. 210° E. | | Long. 220° E. | | Long. 230° E. | | |
| 40 N. | 53 55 N. | 55 00 N. | 55 47 N. | 56 00 N. | 57 59 N. | 57 35 N. | 60 16 N. | 59 40 N. | 62 32 N. | 61 45 N. | 64 42 N. | ..... | 40 N. |
| 35 N. | 48 27 N. | 52 00 N. | 50 39 N. | ..... | 53 05 N. | ..... | 55 30 N. | 55 41 N. | 57 47 N. | 57 14 N. | 59 55 N. | 58 55 N. | 35 N. |
| 30 N. | 42 31 N. | 46 08 N. | 45 04 N. | 49 23 N. | 47 43 N. | 51 35 N. | 50 13 N. | 51 38 N. | 52 28 N. | 52 28 N. | 54 31 N. | 53 15 N. | 30 N. |
| 25 N. | 36 04 N. | 40 42 N. | 38 59 N. | 43 21 N. | 41 50 N. | 45 18 N. | 44 20 N. | 46 28 N. | 46 29 N. | 47 11 N. | 48 25 N. | 47 30 N. | 25 N. |
| 20 N. | 29 04 N. | 33 17 N. | 32 21 N. | 37 16 N. | 35 20 N. | 38 53 N. | 37 46 N. | 40 11 N. | 39 44 N. | 40 35 N. | 41 30 N. | 40 37 N. | 20 N. |
| 15 N. | 21 32 N. | 26 09 N. | 25 07 N. | ..... | 28 10 N. | 31 39 N. | 30 27 N. | 32 24 N. | 32 09 N. | 32 41 N. | 33 40 N. | 32 38 N. | 15 N. |
| 10 N. | 13 31 N. | 19 03 N. | 17 18 N. | ..... | 20 18 N. | ..... | 22 21 N. | ..... | 23 43 N. | 23 37 N. | 24 55 N. | 23 16 N. | 10 N. |
| 05 N. | 5 09 N. | 11 20 N. | 9 00 N. | ..... | 11 50 N. | ..... | 13 32 N. | ..... | 14 30 N. | 14 33 N. | 15 19 N. | 13 55 N. | 05 N. |
| 00 N. | 3 21 S. | ..... | 0 22 N. | ..... | 2 55 N. | ..... | 4 14 N. | ..... | 4 45 N. | ..... | 5 12 N. | ..... | 00 N. |
| | Long. 240° E. | | Long. 250° E. | | Long. 260° E. | | Long. 270° E. | | Long. 280° E. | | Long. 290° E. | | |
| 40 N. | 66 44 N. | 65 00 N. | 68 39 N. | 67 10 N. | 70 24 N. | 69 10 N. | 71 54 N. | 70 37 N. | 73 02 N. | 72 00 N. | 73 40 N. | ..... | 40 N. |
| 35 N. | 61 56 N. | 60 35 N. | 63 52 N. | 62 01 N. | 65 42 N. | 63 41 N. | 67 22 N. | 65 20 N. | 68 44 N. | 66 53 N. | 69 40 N. | 68 07 N. | 35 N. |
| 30 N. | 56 30 N. | 54 22 N. | 58 27 N. | 55 54 N. | 60 24 N. | 57 46 N. | 62 15 N. | 59 46 N. | 63 53 N. | 61 21 N. | 65 07 N. | 62 53 N. | 30 N. |
| 25 N. | 50 19 N. | 48 05 N. | 52 19 N. | 49 28 N. | 54 24 N. | 51 14 N. | 56 29 N. | 53 11 N. | 58 24 N. | 55 17 N. | 59 58 N. | 57 19 N. | 25 N. |
| 20 N. | 43 18 N. | 41 02 N. | 45 20 N. | 42 14 N. | 47 35 N. | 44 03 N. | 49 57 N. | 46 16 N. | 52 13 N. | 48 37 N. | 54 08 N. | 57 53 N. | 20 N. |
| 15 N. | 35 22 N. | 32 59 N. | 37 25 N. | 34 20 N. | 39 53 N. | 36 21 N. | 42 35 N. | 38 48 N. | 45 15 N. | 41 30 N. | 47 35 N. | 43 59 N. | 15 N. |
| 10 N. | 26 27 N. | 23 36 N. | 28 32 N. | 25 08 N. | 31 13 N. | 27 41 N. | 34 17 N. | 30 44 N. | 37 23 N. | 33 29 N. | 40 07 N. | 36 32 N. | 10 N. |
| 05 N. | 16 38 N. | 14 03 N. | 18 43 N. | 15 15 N. | 21 36 N. | 17 56 N. | 25 02 N. | 20 47 N. | 28 37 N. | 24 35 N. | 31 54 N. | 28 17 N. | 05 N. |
| 00 N. | 6 15 N. | ..... | 8 15 N. | ..... | 11 15 N. | ..... | 14 59 N. | ..... | 19 00 N. | ..... | 22 46 N. | ..... | 00 N. |
| | Long. 300° E. | | Long. 310° E. | | Long. 320° E. | | Long. 330° E. | | Long. 340° E. | | Long. 350° E. | | |
| 40 N. | 73 43 N. | ..... | 73 07 N. | ..... | 71 50 N. | 70 55 N. | 69 54 N. | 68 20 N. | 67 21 N. | 65 30 N. | 64 14 N. | 63 00 N. | 40 N. |
| 35 N. | 70 01 N. | 68 27 N. | 69 42 N. | 68 12 N. | 68 37 N. | 66 57 N. | 66 43 N. | 64 39 N. | 63 59 N. | 62 06 N. | 60 30 N. | 59 25 N. | 35 N. |
| 30 N. | 65 47 N. | 63 50 N. | 65 44 N. | 64 08 N. | 64 50 N. | 63 07 N. | 62 58 N. | 61 07 N. | 60 06 N. | 58 12 N. | 56 13 N. | 54 25 N. | 30 N. |
| 25 N. | 60 57 N. | 59 19 N. | 61 10 N. | 60 21 N. | 60 28 N. | 59 28 N. | 58 39 N. | 56 51 N. | 55 37 N. | 53 41 N. | 51 19 N. | 50 00 N. | 25 N. |
| 20 N. | 55 28 N. | 52 43 N. | 55 59 N. | 54 02 N. | 55 28 N. | 53 50 N. | 53 42 N. | 52 03 N | 50 29 N. | 48 47 N. | 45 44 N. | 44 09 N. | 20 N. |
| 15 N. | 49 17 N. | 46 01 N. | 50 06 N. | 47 36 N. | 49 46 N. | 48 13 N. | 48 02 N. | 46 26 N. | 44 39 N. | 42 53 N. | 39 27 N. | 37 36 N. | 15 N. |
| 10 N. | 42 19 N. | 39 10 N. | 43 28 N. | 41 08 N. | 43 20 N. | 41 42 N. | 41 38 N. | 40 13 N. | 38 04 N. | 36 01 N. | 32 25 N. | 28 10 N. | 10 N. |
| 05 N. | 34 29 N. | 31 02 N. | 35 59 N. | 33 32 N. | 36 08 N. | 35 04 N. | 34 26 N. | 33 13 N. | 30 42 N. | 27 49 N. | 24 40 N. | 18 48 N. | 05 N. |
| 00 N. | 25 49 N. | ..... | 27 41 N. | ..... | 28 00 N. | ..... | 26 25 N. | ..... | 22 35 N. | ..... | 16 16 N. | 9 47 N. | 00 N. |

## Force in British Units.

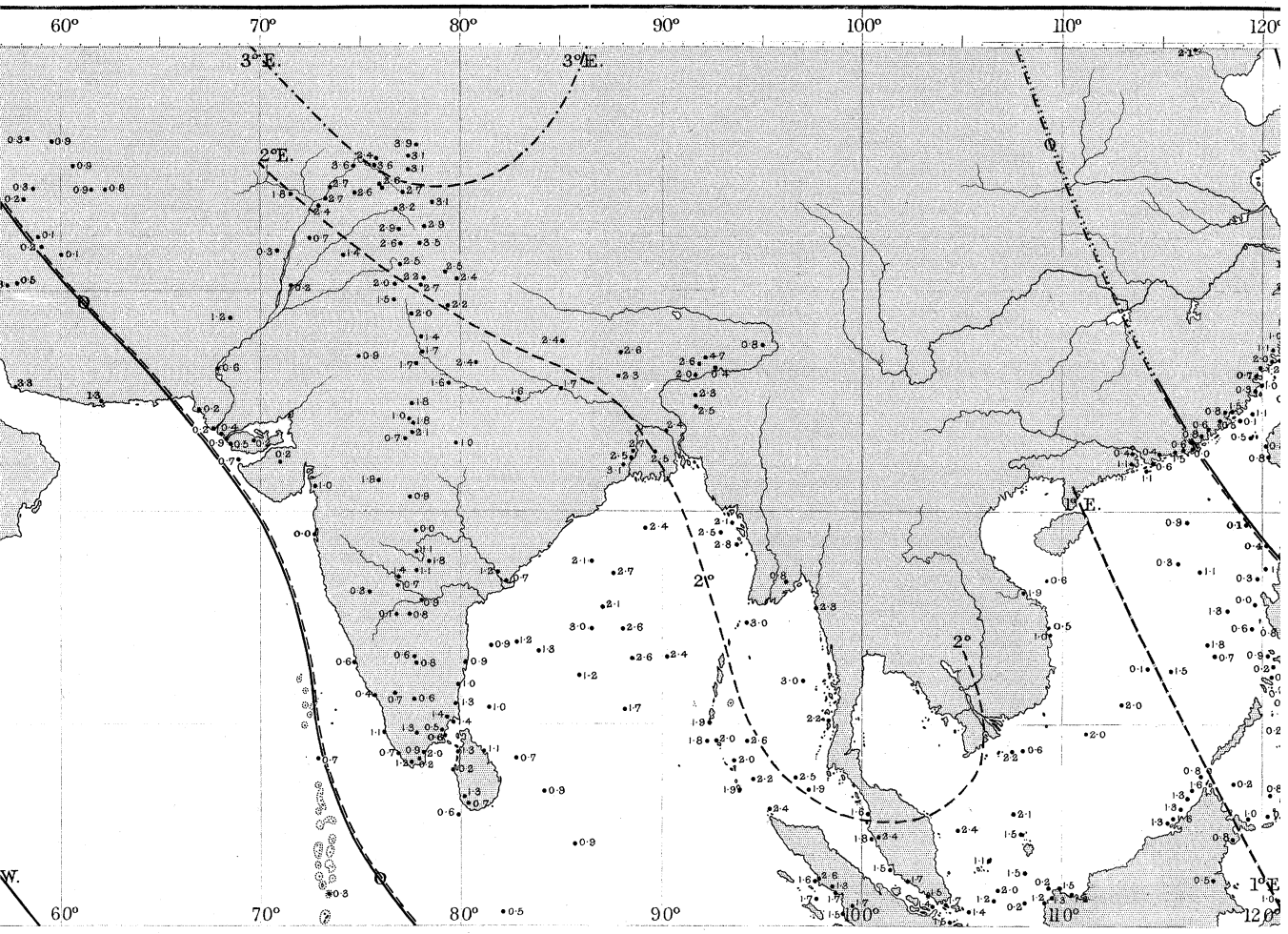
| Latitudes. | Gauss. | Sabine. | Gauss. | Sabine. | Gauss. | Sabine. | Gauss. | Sabine. | Gauss. | Sabine. | Gauss. | Sabine. | Latitudes. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Long. 0° E. | | Long. 10° E. | | Long. 20° E. | | Long. 30° E. | | Long. 40° E. | | Long. 50° E. | | |
| ° | | | | | | | | | | | | | ° |
| 40 N. | 9·85 | ..... | 9·53 | ..... | 9·33 | ..... | 9·28 | ..... | 9·36 | ..... | 9·57 | ..... | 40 N. |
| 35 N. | 9·49 | ..... | 9·12 | ..... | 8·88 | ..... | 8·77 | 9·1 | 8·82 | 9·4 | 9·01 | ..... | 35 N. |
| 30 N. | 9·08 | 8·9 | 8·67 | ..... | 8·39 | ..... | 8·26 | 8·4 | 8·29 | 8·6 | 8·45 | 9·0 | 30 N. |
| 25 N. | 8·61 | 8·6 | 8·21 | ..... | 7·92 | ..... | 7·78 | 7·7 | 7·81 | 7·9 | 7·96 | 8·3 | 25 N. |
| 20 N. | 8·16 | 8·3 | 7·76 | ..... | 7·49 | ..... | 7·38 | ..... | 7·42 | ..... | 7·57 | ..... | 20 N. |
| 15 N. | 7·70 | 8·1 | 7·33 | ..... | 7·12 | ..... | 7·07 | ..... | 7·16 | ..... | 7·32 | ..... | 15 N. |
| 10 N. | 7·26 | 7·6 | 6·97 | ..... | 6·84 | ..... | 6·88 | ..... | 7·02 | ..... | 7·20 | ..... | 10 N. |
| 05 N. | 6·87 | 7·0 | 6·68 | ..... | 6·66 | ..... | 6·79 | ..... | 7·01 | ..... | 7·23 | ..... | 05 N. |
| 00 N. | 6·55 | ..... | 6·47 | ..... | 6·56 | ..... | 6·79 | ..... | 7·07 | ..... | 7·32 | ..... | 00 N. |
| | Long. 60° E. | | Long. 70° E. | | Long. 80° E. | | Long. 90° E. | | Long. 100° E. | | Long. 110° E. | | |
| 40 N. | 9·88 | ..... | 10·23 | ..... | 10·56 | ..... | 10·80 | 11·3 | 10·94 | ..... | 10·93 | ..... | 40 N. |
| 35 N. | 9·30 | 9·7 | 9·64 | 10·0 | 9·97 | 10·4 | 10·23 | 10·7 | 10·36 | 10·7 | 10·36 | 10·6 | 35 N. |
| 30 N. | 8·72 | 9·3 | 9·04 | 9·5 | 9·35 | 9·8 | 9·60 | 9·9 | 9·73 | 9·9 | 9·72 | 9·9 | 30 N. |
| 25 N. | 8·19 | 8·8 | 8·48 | 9·1 | 8·75 | 9·3 | 8·98 | 9·4 | 9·11 | 9·4 | 9·11 | 9·4 | 25 N. |
| 20 N. | 7·78 | 8·1 | 8·01 | 8·6 | 8·25 | 8·8 | 8·45 | 8·9 | 8·56 | 8·9 | 8·57 | 8·9 | 20 N. |
| 15 N. | 7·50 | ..... | 7·69 | 8·1 | 7·87 | ..... | 8·03 | 8·4 | 8·14 | 8·6 | 8·15 | 8·6 | 15 N. |
| 10 N. | 7·37 | ..... | 7·53 | ..... | 7·66 | ..... | 7·78 | ..... | 7·87 | 8·2 | 7·90 | 8·4 | 10 N. |
| 05 N. | 7·39 | ..... | 7·51 | ..... | 7·61 | ..... | 7·71 | ..... | 7·79 | ..... | 7·83 | ..... | 05 N. |
| 00 N. | 7·51 | ..... | 7·62 | ..... | 7·72 | ..... | 7·80 | ..... | 7·89 | ..... | 7·96 | ..... | 00 N. |
| | Long. 120° E. | | Long. 130° E. | | Long. 140° E. | | Long. 150° E. | | Long. 160° E. | | Long. 170° E. | | |
| 40 N. | 10·78 | ..... | 10·53 | ..... | 10·25 | ..... | 9·98 | ..... | 9·82 | ..... | 9·79 | ..... | 40 N. |
| 35 N. | 10·19 | 10·5 | 9·93 | ..... | 9·64 | ..... | 9·37 | 9·1 | 9·20 | 8·9 | 9·17 | 8·9 | 35 N. |
| 30 N. | 9·57 | 9·8 | 9·31 | ..... | 9·02 | 8·9 | 8·76 | 8·7 | 8·59 | 8·5 | 8·56 | 8·5 | 30 N. |
| 25 N. | 8·97 | 9·2 | 8·73 | 8·9 | 8·46 | 8·7 | 8·21 | 8·4 | 8·05 | 8·2 | 8·01 | 8·1 | 25 N. |
| 20 N. | 8·45 | 8·8 | 8·24 | 8·5 | 7·99 | 8·4 | 7·76 | 8·1 | 7·60 | 7·9 | 7·56 | 7·8 | 20 N. |
| 15 N. | 8·06 | 8·5 | 7·89 | 8·2 | 7·67 | 8·1 | 7·45 | 7·8 | 7·29 | ..... | 7·22 | ..... | 15 N. |
| 10 N. | 7·84 | 8·2 | 7·70 | ..... | 7·51 | ..... | 7·30 | ..... | 7·13 | ..... | 7·03 | ..... | 10 N. |
| 04 N. | 7·81 | ..... | 7·67 | ..... | 7·53 | ..... | 7·34 | ..... | 7·14 | ..... | 7·01 | ..... | 05 N. |
| 00 N. | 7·97 | ..... | 7·90 | ..... | 7·76 | ..... | 7·55 | ..... | 7·33 | ..... | 7·15 | ..... | 00 N. |
| | Long. 180° E. | | Long. 190° E. | | Long. 200° E. | | Long. 210° E. | | Long. 220° E. | | Long. 230° E. | | |
| 40 N. | 9·89 | ..... | 10·14 | ..... | 10·50 | ..... | 10·93 | ..... | 11·39 | ..... | 11·82 | 12·0 | 40 N. |
| 35 N. | 9·29 | ..... | 9·55 | ..... | 9·93 | ..... | 10·39 | ..... | 10·87 | ..... | 11·33 | 11·1 | 35 N. |
| 30 N. | 8·68 | ..... | 8·95 | ..... | 9·34 | ..... | 9·79 | ..... | 10·27 | ..... | 10·74 | 10·4 | 30 N. |
| 25 N. | 8·13 | ..... | 8·39 | ..... | 8·75 | 8·8 | 9·19 | 9·2 | 9·65 | ..... | 10·10 | 9·8 | 25 N. |
| 20 N. | 7·65 | ..... | 7·89 | ..... | 8·22 | 8·3 | 8·62 | 8·6 | 9·05 | 8·9 | 9·46 | 9·2 | 20 N. |
| 15 N. | 7·29 | ..... | 7·48 | ..... | 7·76 | 7·8 | 8·11 | 8·1 | 8·49 | 8·4 | 8·86 | 8·7 | 15 N. |
| 10 N. | 7·05 | ..... | 7·19 | ..... | 7·42 | ..... | 7·69 | ..... | 8·03 | 7·9 | 8·35 | 8·2 | 10 N. |
| 05 N. | 6·97 | ..... | 7·04 | ..... | 7·20 | ..... | 7·43 | ..... | 7·69 | ..... | 7·97 | ..... | 05 N. |
| 00 N. | 7·04 | ..... | 7·05 | ..... | 7·15 | ..... | 7·32 | ..... | 7·53 | ..... | 7·74 | ..... | 00 N. |
| | Long. 240° E. | | Long. 250° E. | | Long. 260° E. | | Long. 270° E. | | Long. 280° E. | | Long. 290° E. | | |
| 40 N. | 12·20 | ..... | 12·50 | ..... | 12·68 | ..... | 12·75 | ..... | 12·70 | 13·6 | 12·53 | ..... | 40 N. |
| 35 N. | 11·74 | 11·7 | 12·06 | 12·4 | 12·28 | 12·8 | 12·39 | 13·1 | 12·37 | 13·1 | 12·24 | 12·7 | 35 N. |
| 30 N. | 11·16 | 10·9 | 11·50 | 11·5 | 11·75 | 12·0 | 11·89 | 12·4 | 11·91 | 12·4 | 11·81 | 12·2 | 30 N. |
| 25 N. | 10·51 | 10·2 | 10·86 | 10·7 | 11·12 | 11·2 | 11·29 | 11·6 | 11·34 | 11·7 | 11·28 | 11·5 | 25 N. |
| 20 N. | 9·85 | 9·6 | 10·18 | 10·1 | 10·44 | 10·5 | 10·62 | 10·8 | 10·69 | 10·9 | 10·67 | 10·8 | 20 N. |
| 15 N. | 9·21 | 9·0 | 9·51 | 9·4 | 9·75 | 9·8 | 9·92 | 10·0 | 10·01 | 10·1 | 10·00 | 10·0 | 15 N. |
| 10 N. | 8·64 | 8·5 | 8·90 | 8·8 | 9·11 | 9·0 | 9·25 | 9·2 | 9·33 | 9·2 | 9·34 | 9·2 | 10 N. |
| 05 N. | 8·20 | 8·0 | 8·40 | 8·2 | 8·56 | 8·4 | 8·66 | 8·5 | 8·70 | 8·5 | 8·69 | 8·5 | 05 N. |
| 00 N. | 7·92 | ..... | 8·07 | ..... | 8·15 | 7·8 | 8·19 | 7·8 | 8·19 | 7·8 | 8·13 | 7·8 | 00 N. |
| | Long. 300° E. | | Long. 310° E. | | Long. 320° E. | | Long. 330° E. | | Long. 340° E. | | Long. 350° E. | | |
| 40 N. | 12·27 | ..... | 11·93 | ..... | 11·54 | ..... | 11·11 | ..... | 10·67 | ..... | 10·23 | 10·0 | 40 N. |
| 35 N. | 12·00 | ..... | 11·68 | 11·8 | 11·30 | ..... | 10·86 | 10·7 | 10·40 | 10·2 | 9·93 | 9·5 | 35 N. |
| 30 N. | 11·61 | 11·8 | 11·32 | 11·3 | 10·95 | 10·8 | 10·52 | 10·3 | 10·04 | 9·7 | 9·55 | 9·1 | 30 N. |
| 25 N. | 11·12 | 11·2 | 10·85 | 10·8 | 10·51 | 10·4 | 10·09 | 9·8 | 9·62 | 9·2 | 9·12 | 8·8 | 25 N. |
| 20 N. | 10·54 | 10·6 | 10·31 | 10·2 | 9·99 | 9·8 | 9·60 | 9·3 | 9·14 | 8·8 | 8·64 | 8·5 | 20 N. |
| 15 N. | 9·90 | 9·8 | 9·70 | 9·6 | 9·42 | 9·2 | 9·05 | 8·8 | 8·51 | 8·4 | 8·14 | 8·2 | 15 N. |
| 10 N. | 9·24 | 9·1 | 9·07 | 8·9 | 8·81 | 8·7 | 8·47 | 8·3 | 8·07 | 8·0 | 7·65 | 7·8 | 10 N. |
| 05 N. | 8·60 | 8·4 | 8·45 | 8·3 | 8·20 | 8·1 | 7·89 | 7·8 | 7·55 | ..... | 7·18 | 7·3 | 05 N. |
| 00 N. | 8·03 | 7·8 | 7·87 | 7·7 | 7·65 | ..... | 7·38 | ..... | 7·07 | ..... | 6·77 | 6·9 | 00 N. |

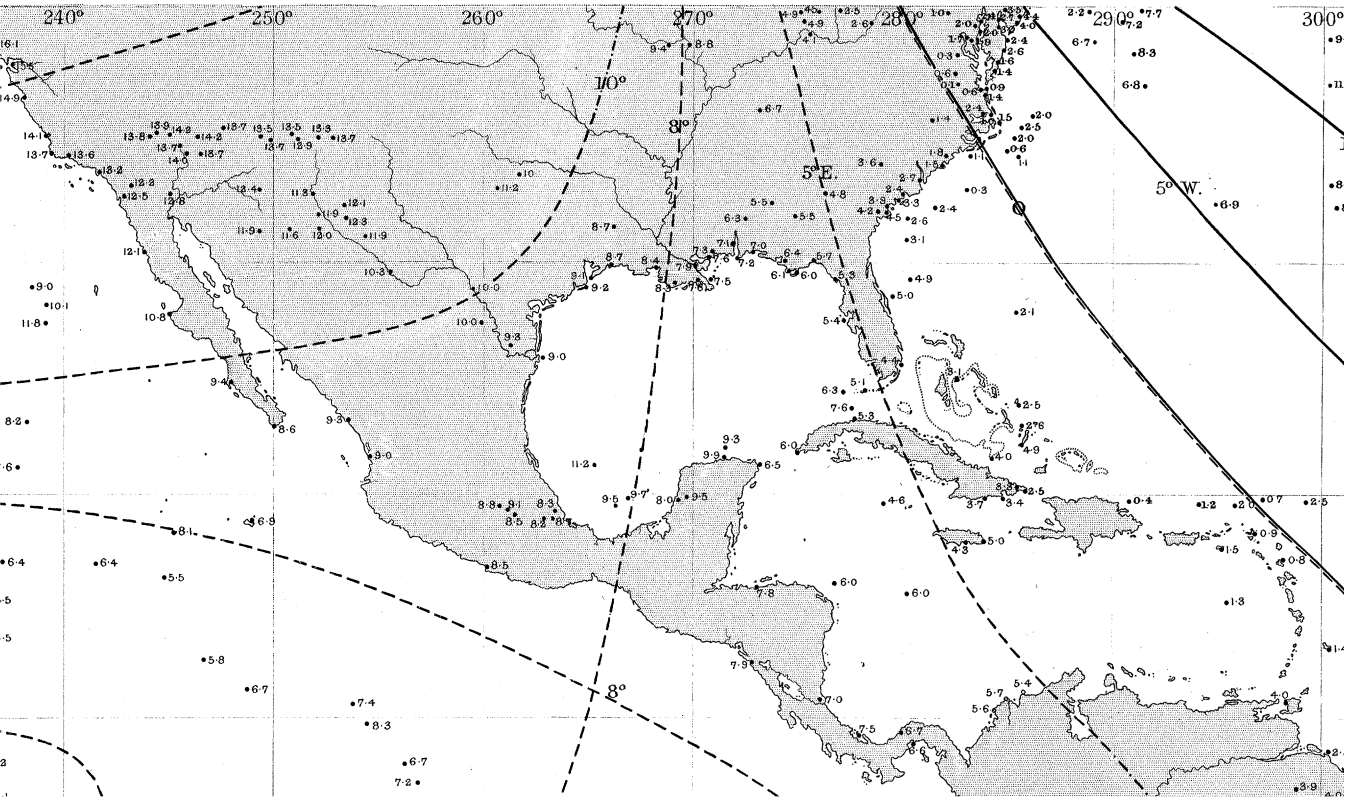
*(Sabine)*


0
10°
20°
30°
40°
50°
60°
40°
30°
20°
10°
0
15°
10°
5° W.


40°
190°
200°
210°
220°
230°
240°
30°
20°
10°
15°
10°
8°
5°

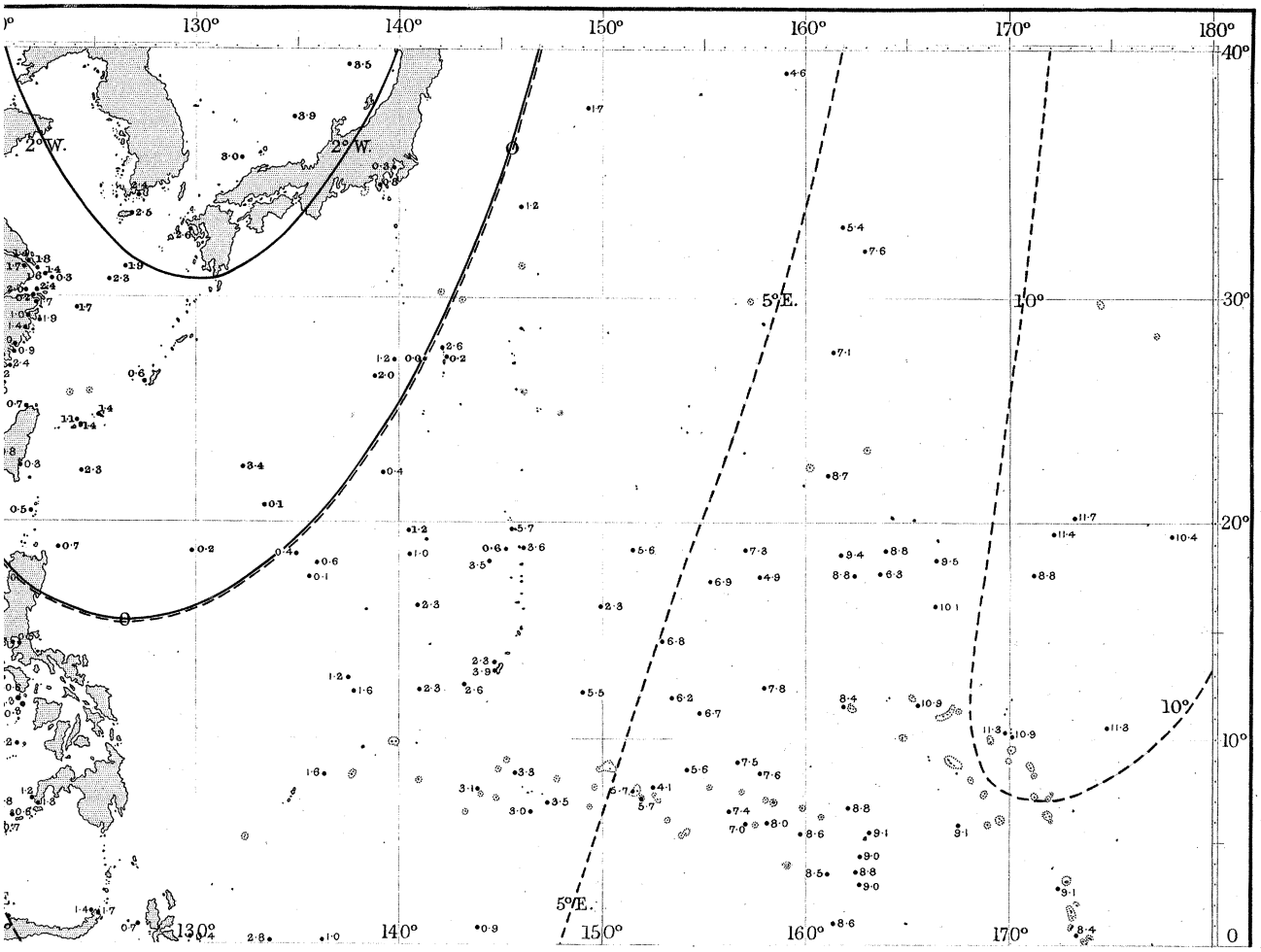
VEY_between the parallel of 10°N. and the Equator_Epoch 184

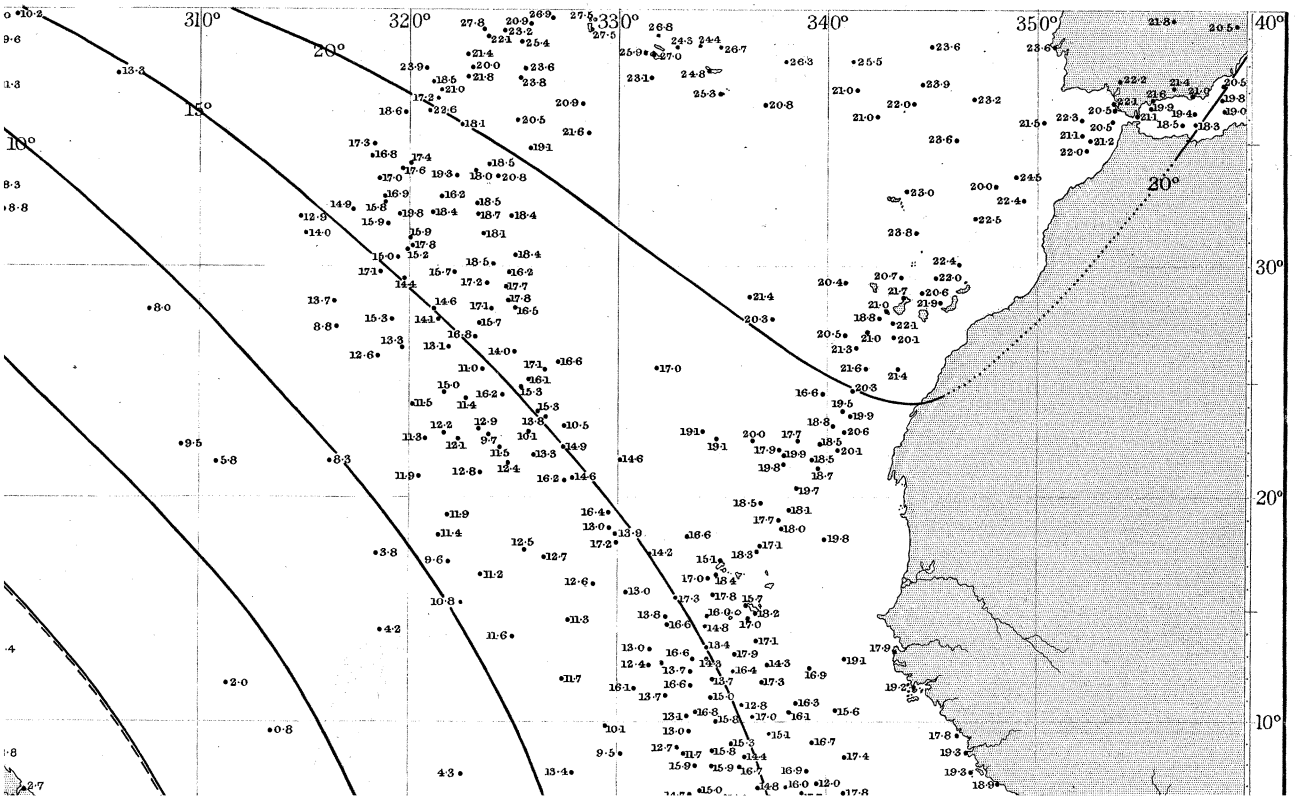


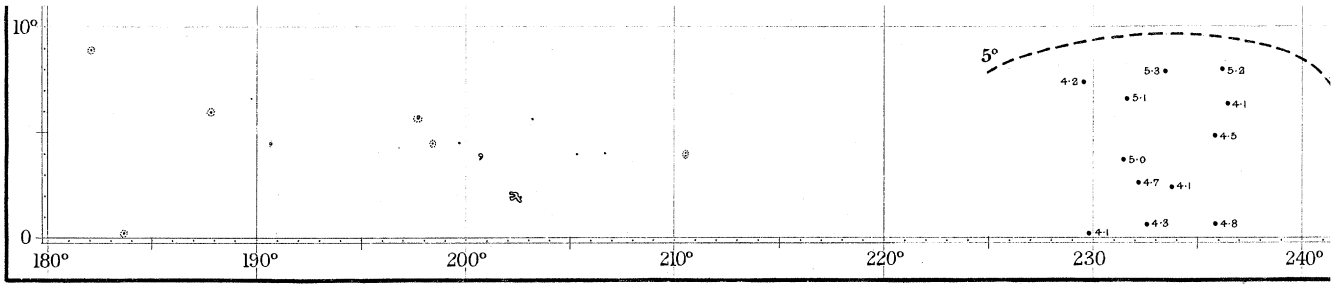



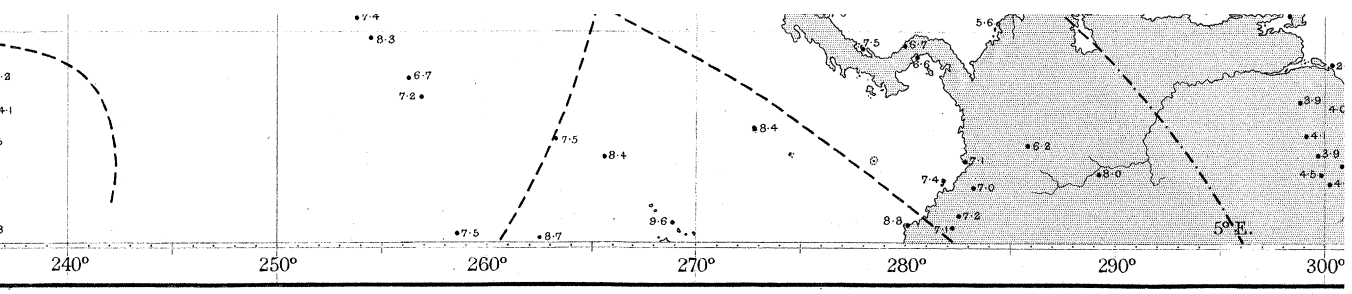
# Declination.

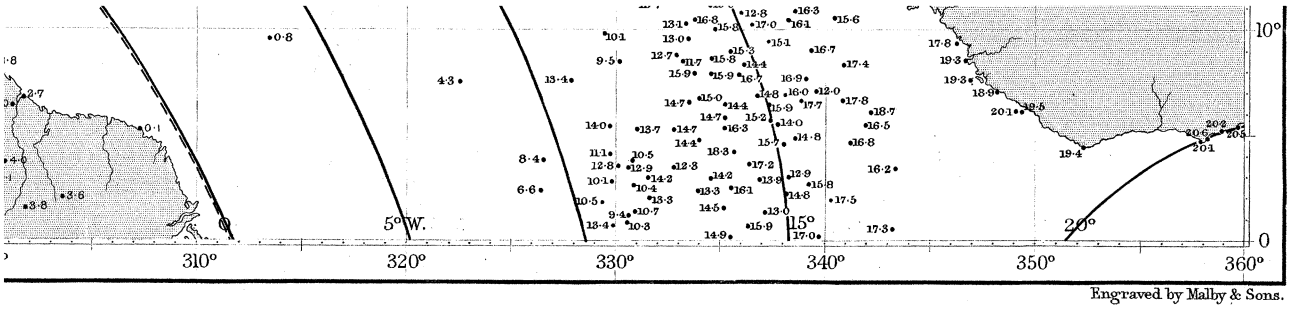
*Phil. Trans.* 1875. *Plate* 26.



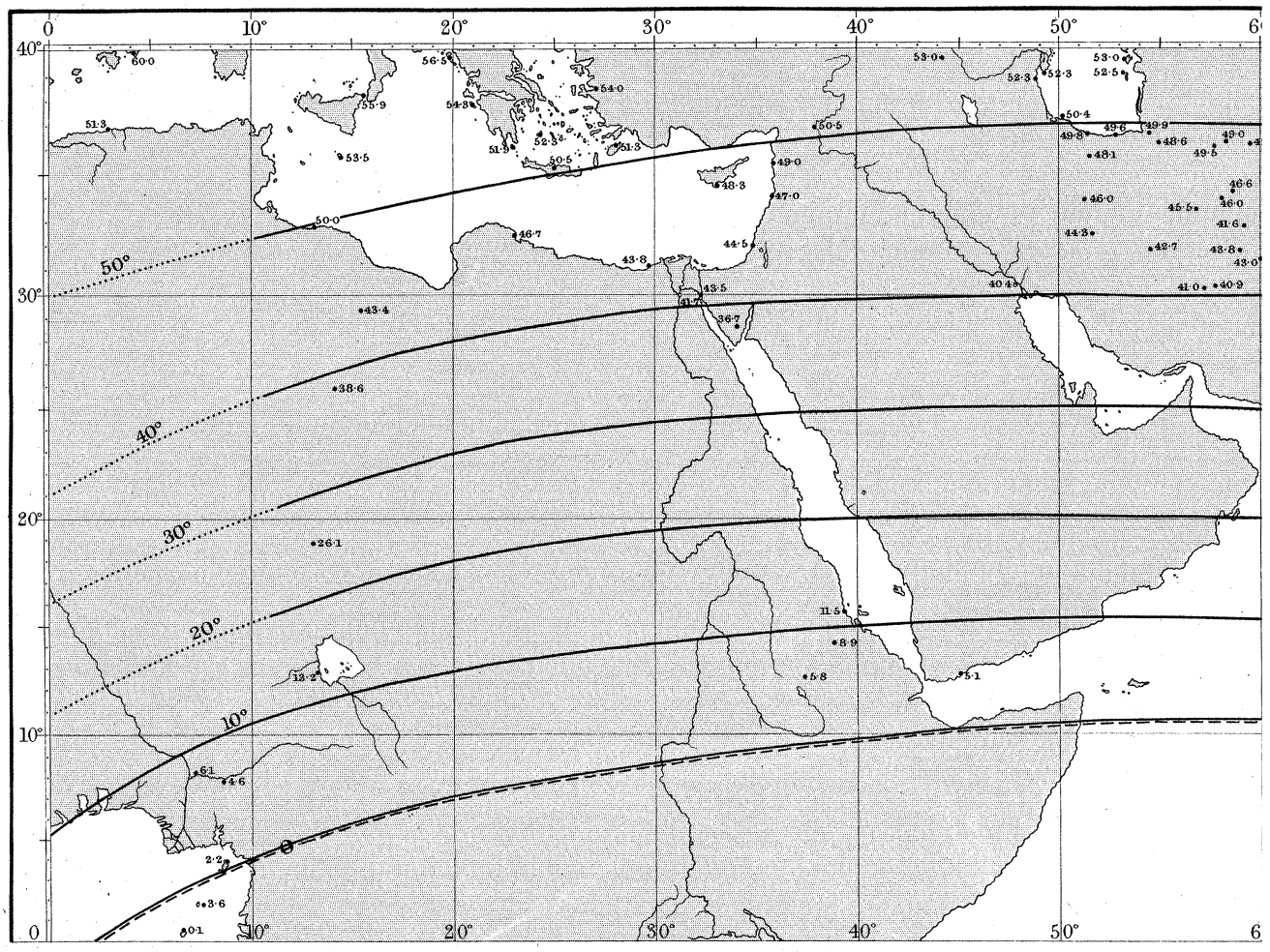

10°
0
5°
4·2
5·3
5·2
5·1
4·1
4·5
5·0
4·7
4·1
4·1
4·3
4·8
180°
190°
200°
210°
220°
230
240°

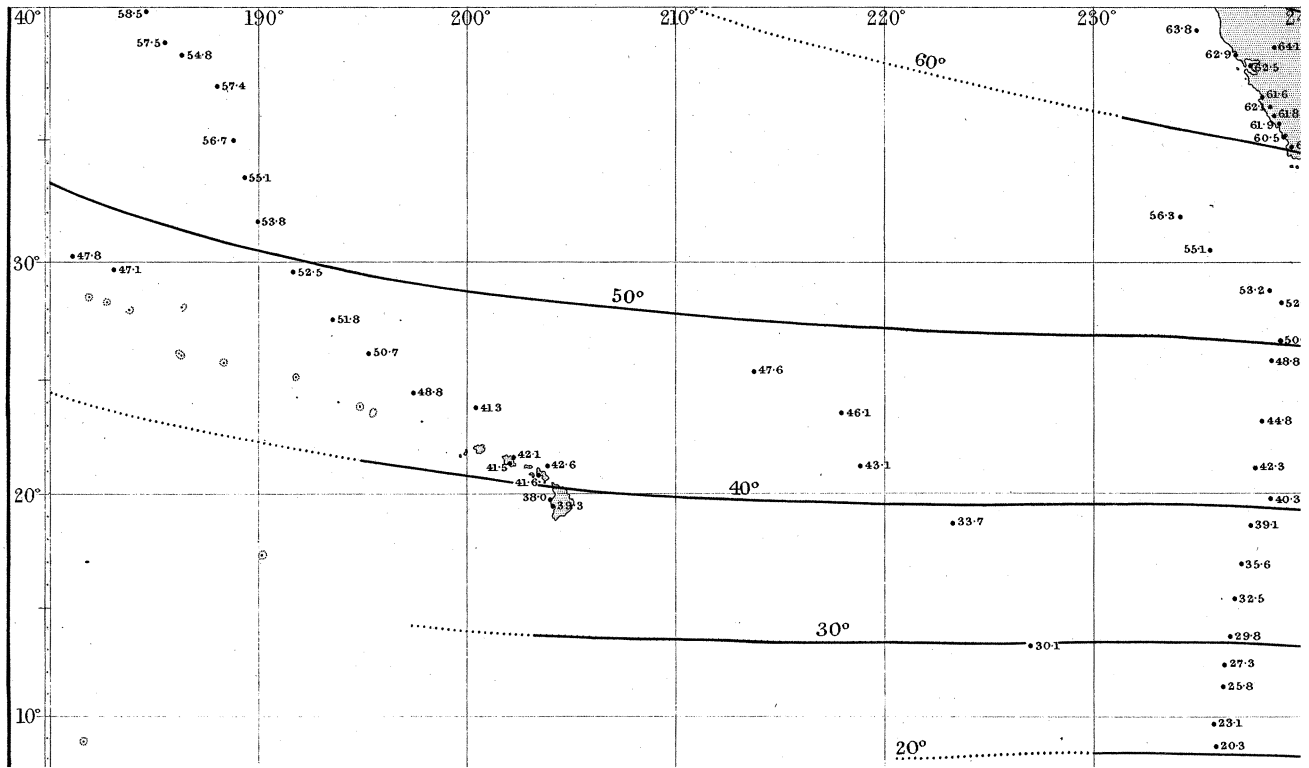

240°
250°
260°
270°
280°
290°
300°
5°E.



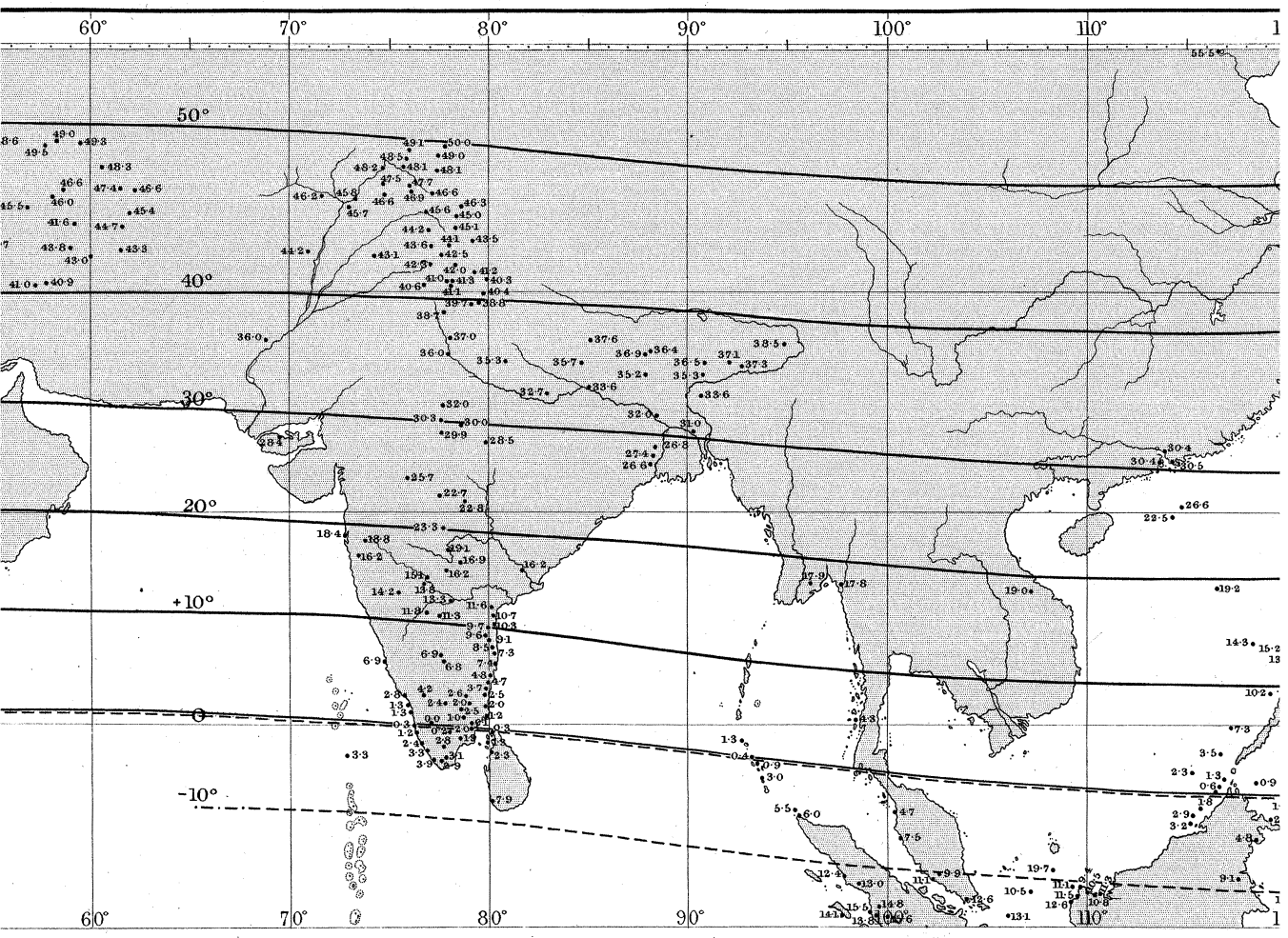

Engraved by Malby & Sons.

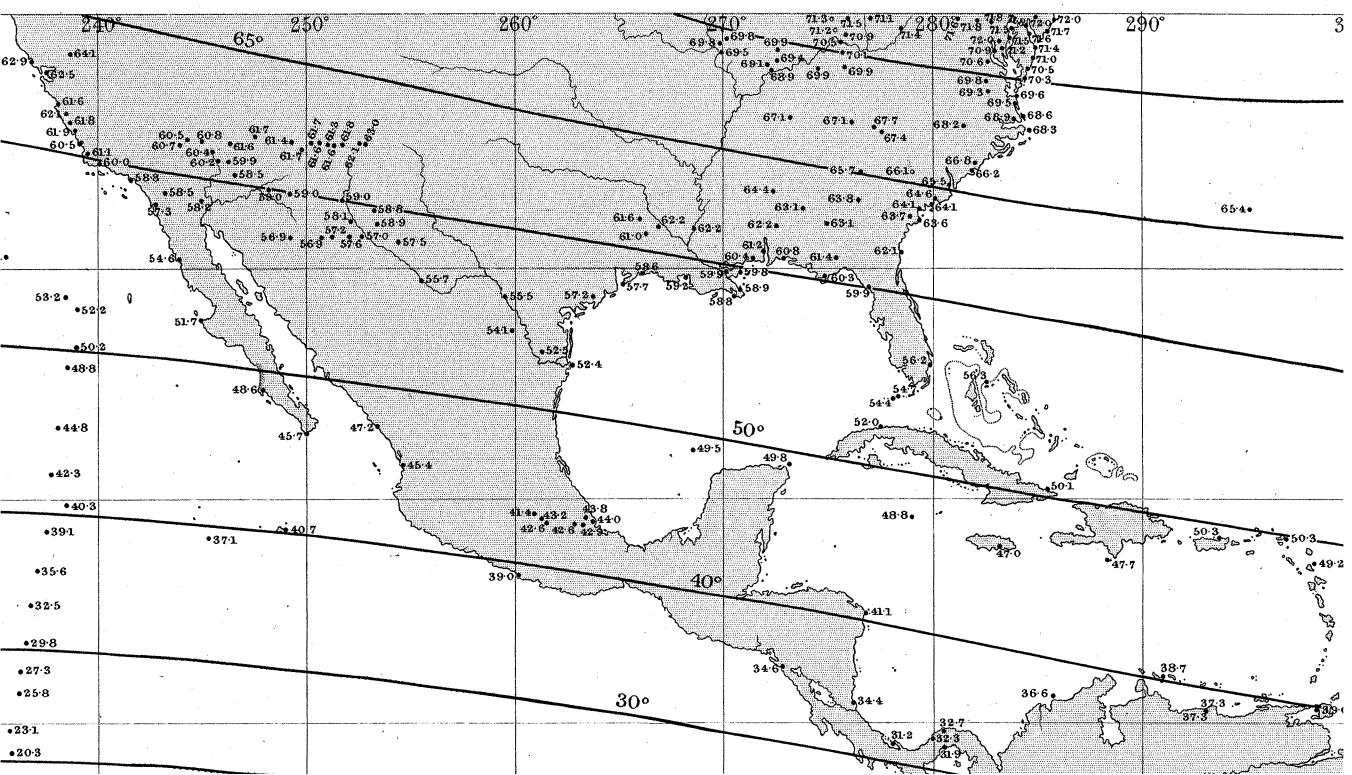
*(Sabine)*

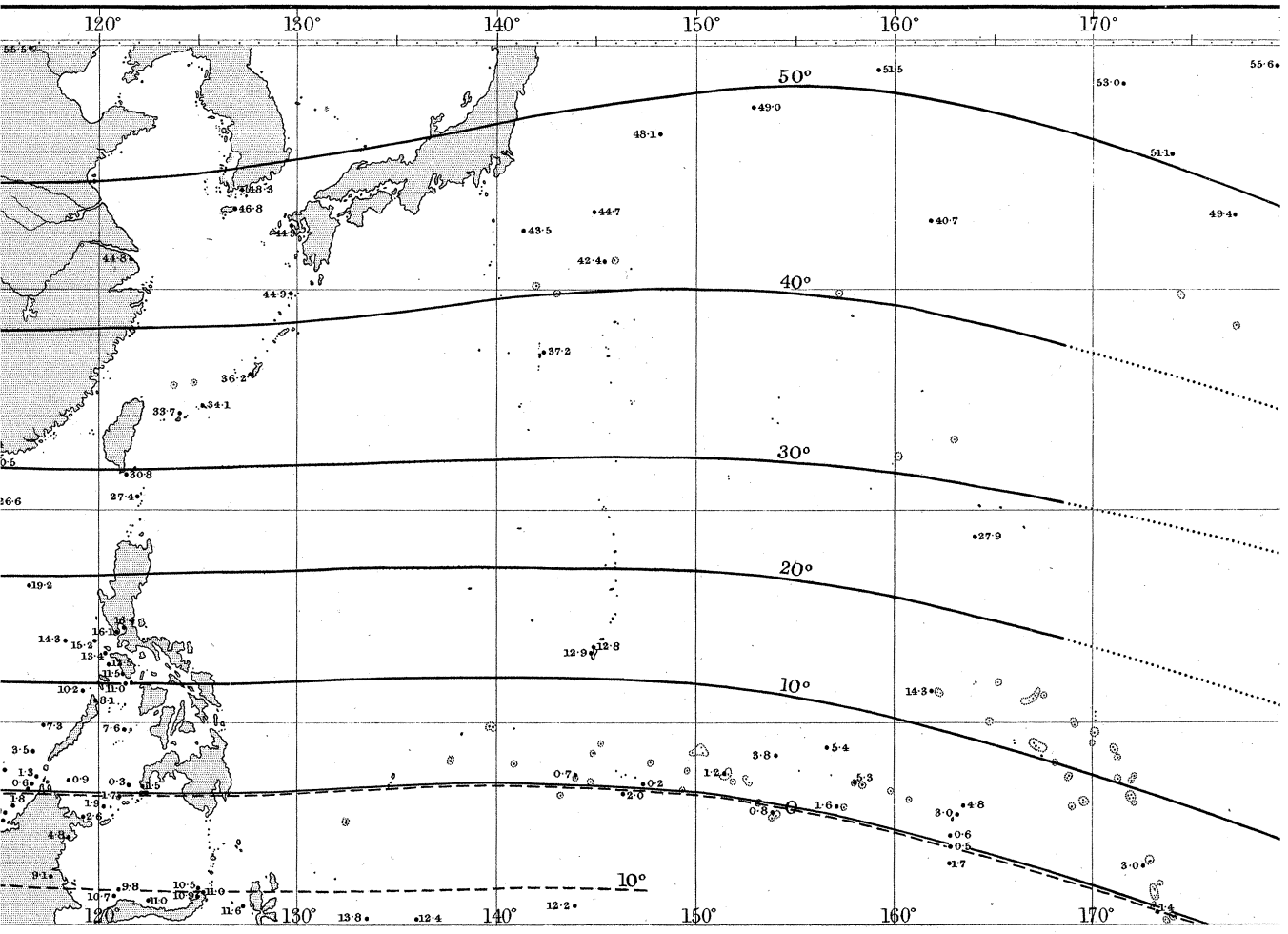

0
10°
20°
30°
40°
50°
40°
30°
20°
10°
0
50°
40°
30°
20°
10°

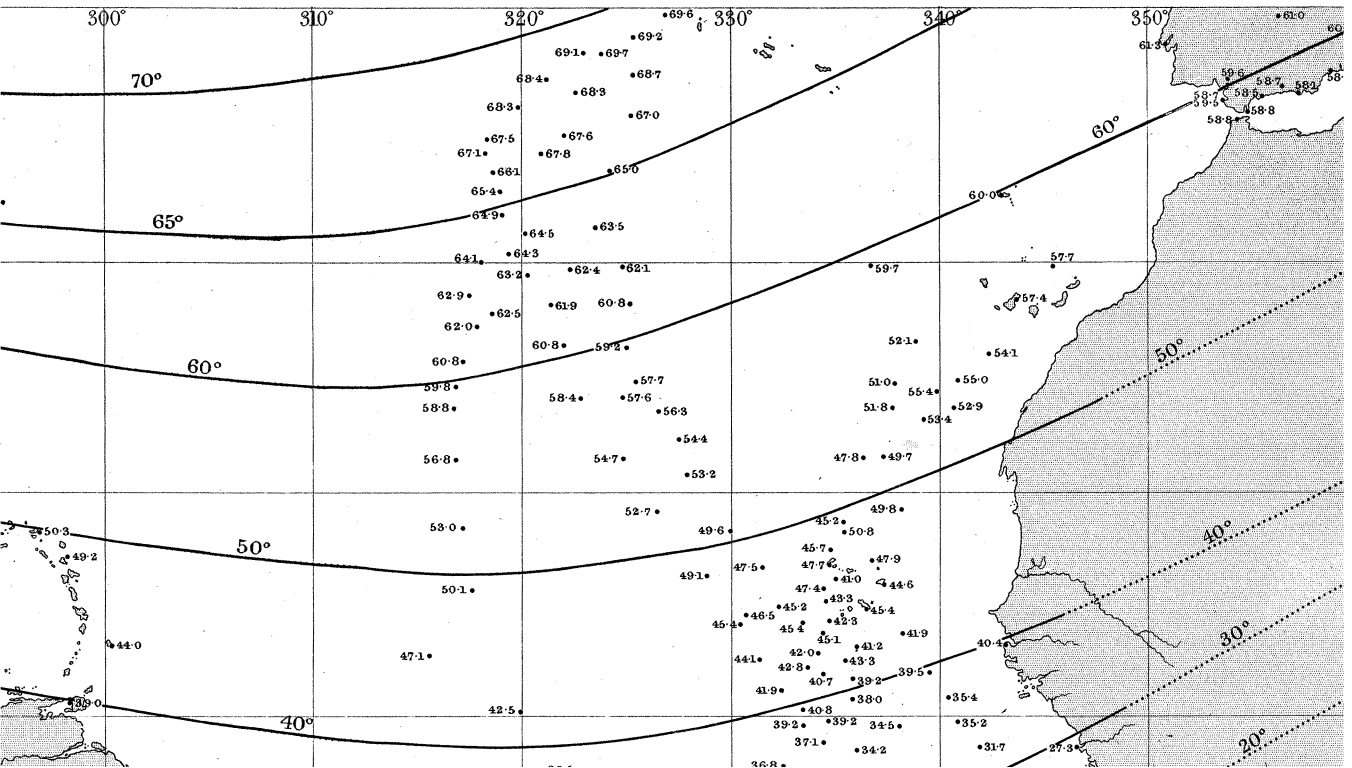

190°
200°
210°
220°
230°
40°
30°
20°
10°
60°
50°
40°
30°
20°

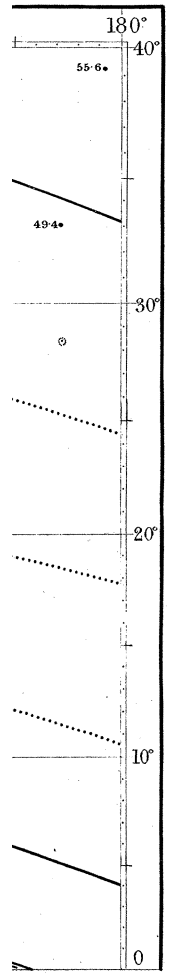
RVEY_ *between the parallel of 40° N. and the Equator_ Epoch 18*

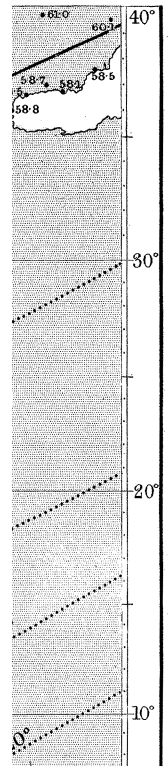


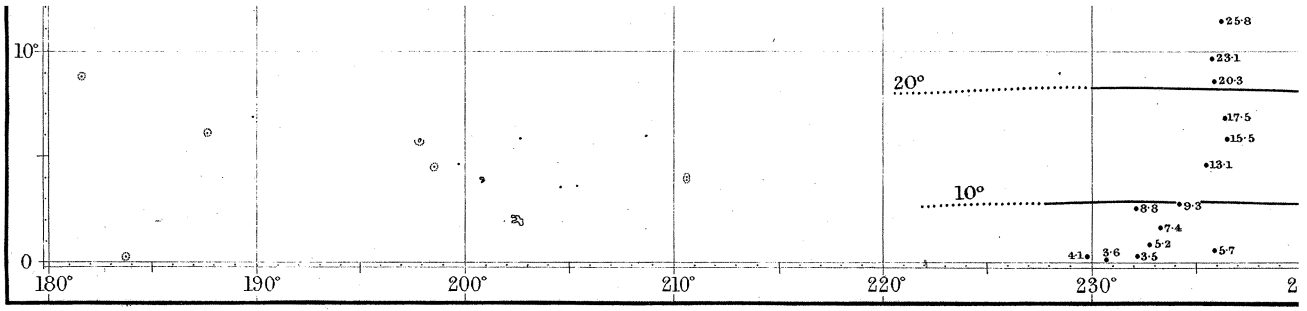



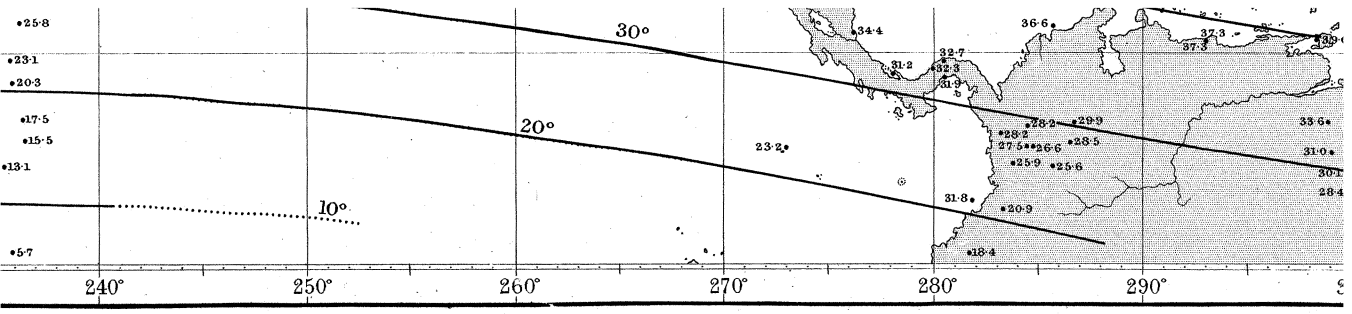

120°
130°
140°
150°
160°
170°
50°
40°
30°
20°
10°
0
10°

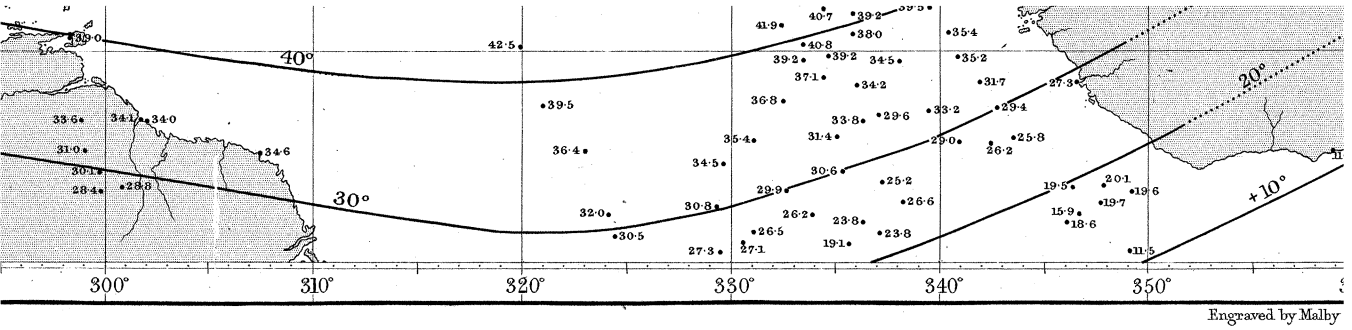

300°
310°
320°
330°
340°
350°
70°
65°
60°
50°
40°
60°
50°
40°
30°
20°


180°
40°
55·6
49·4
30°
20°
10°
0

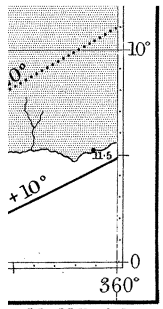

61·0
60·1
58·7
58·3
58·6
58·8
40°
30°
20°
10°
0°


10°
0
20°
10°
25·8
23·1
20·3
17·5
15·5
13·1
9·3
8·8
7·4
5·2
5·7
4·1
3·6
3·5
180°
190°
200°
210°
220°
230°


30°
20°
10°
•25·8
•23·1
•20·3
•17·5
•15·5
•13·1
•5·7
•34·4
•31·2
32·7
•32·3
31·9
36·6•
37·3
37·3
23·2•
•28·2
•29·9
•28·2
27·5
•26·6
•28·5
•25·9
•25·6
31·8•
•20·9
•18·4
33·6•
31·0•
28·4
240°
250°
260°
270°
280°
290°



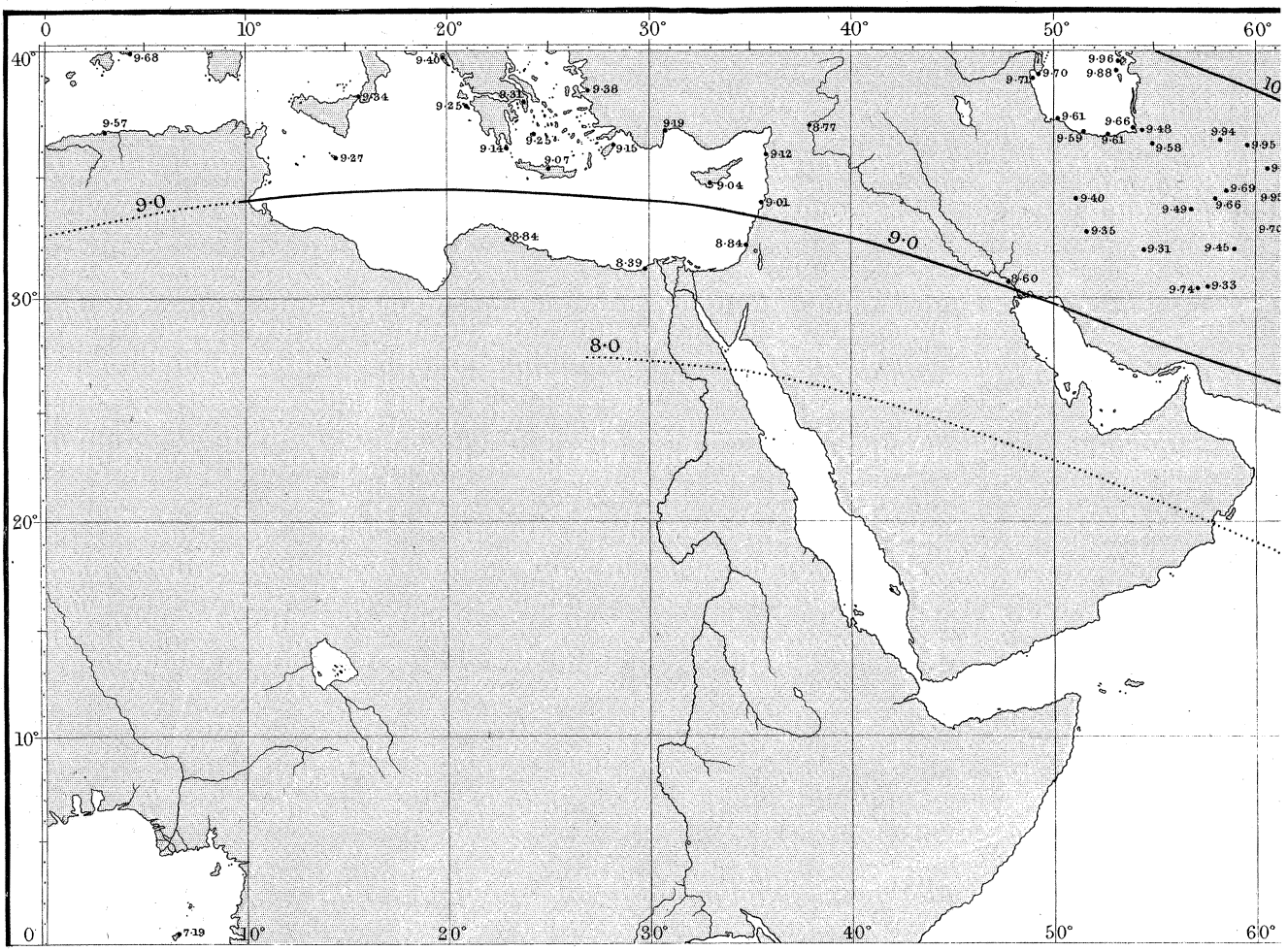

Engraved by Malby

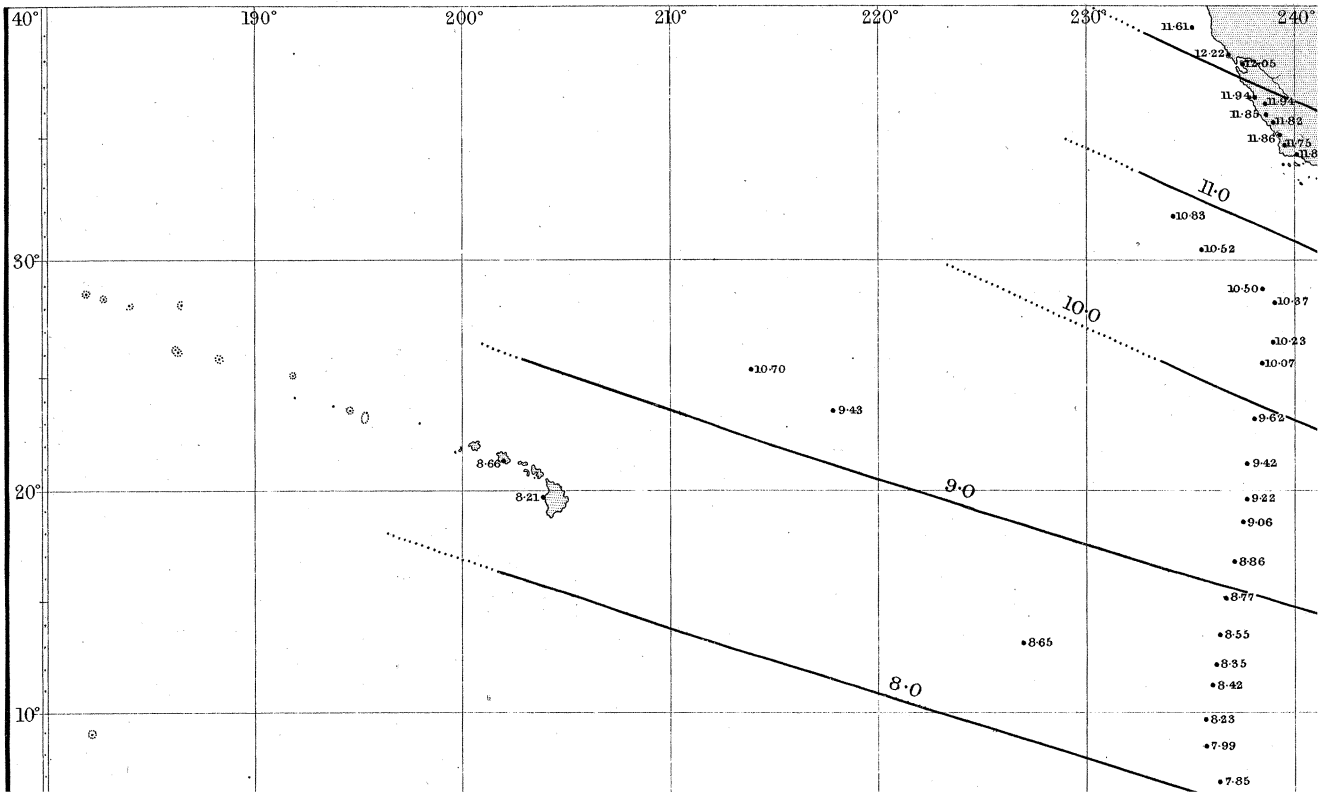


aved by Malby & Sons.

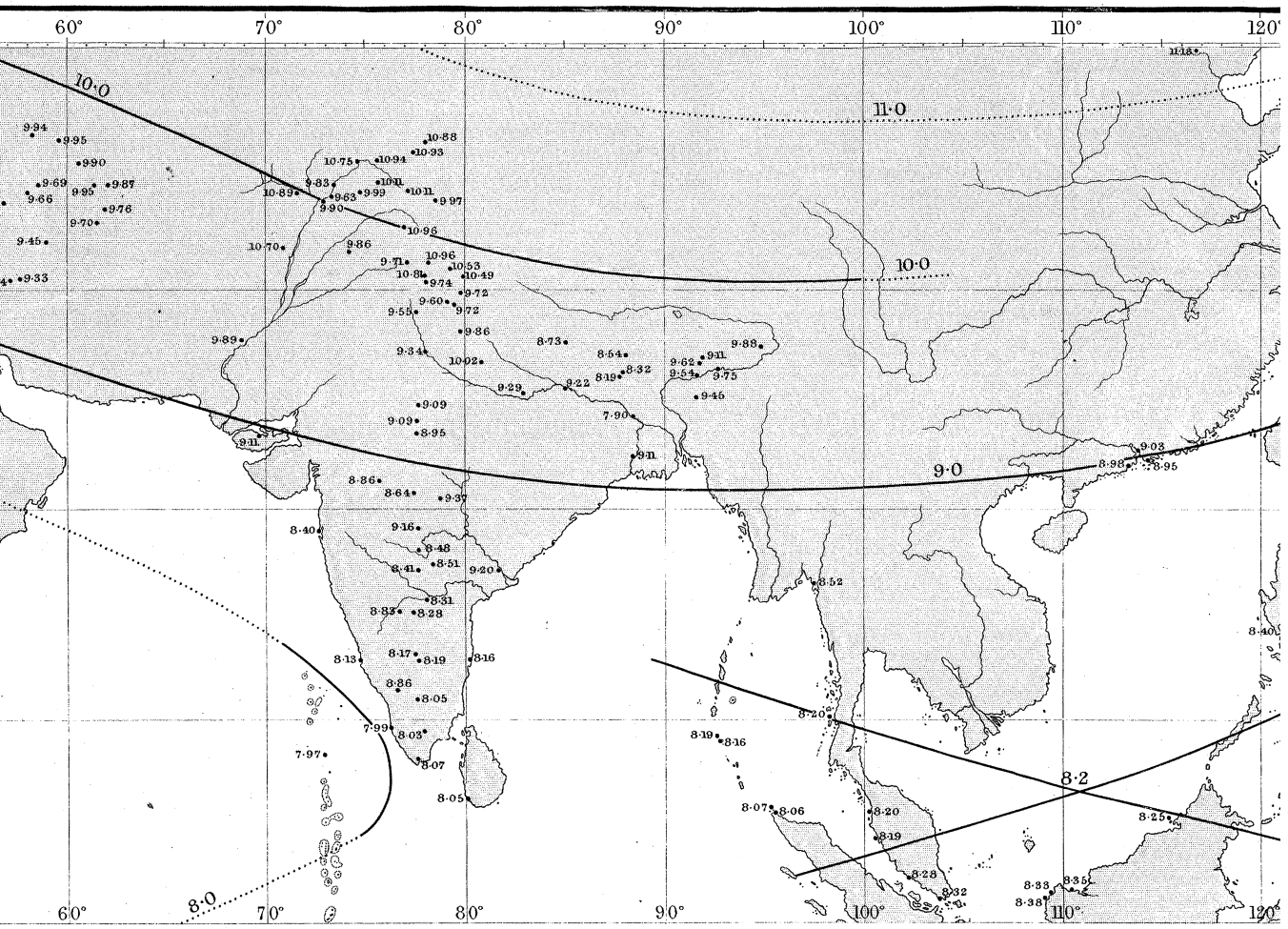
# MAGNETIC SURVE

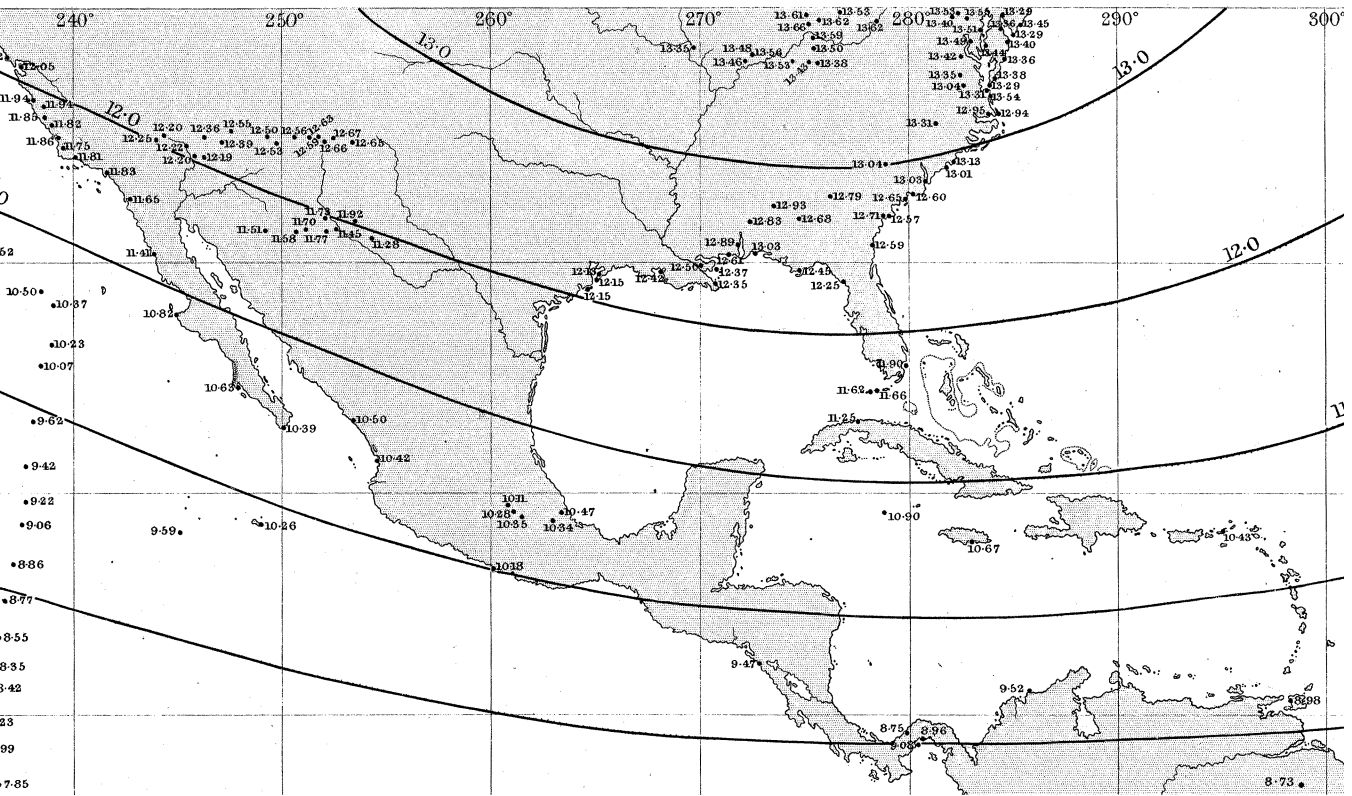
*(Sabine)*

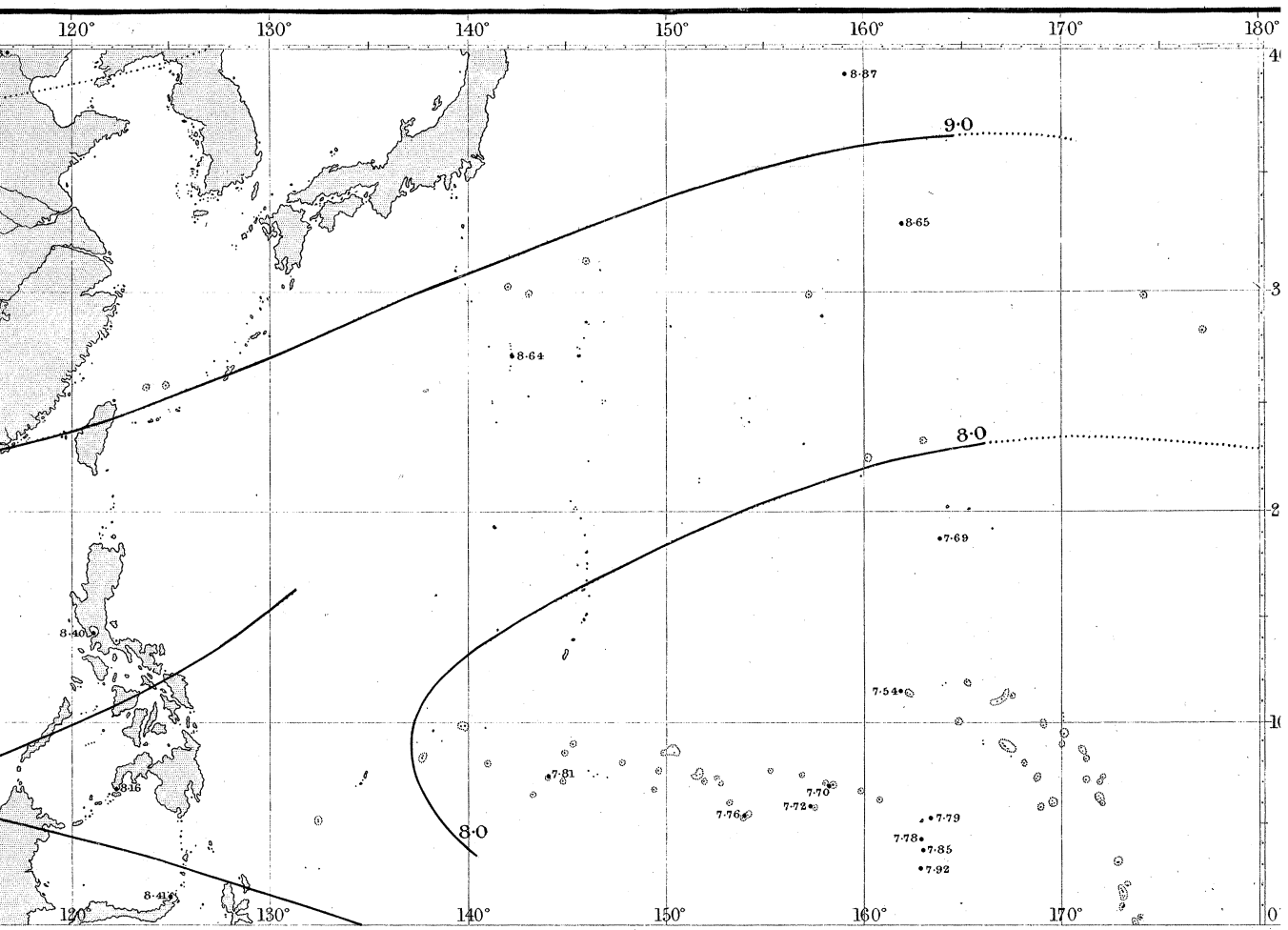


RVEY _ between the parallel of 40° N. and the Equator _ Epoch 18




120°
130°
140°
150°
160°
170°
180°
8·87
9·0
8·65
8·64
8·0
7·69
8·40
7·54
7·81
7·70
7·72
7·76
7·79
7·78
7·85
7·92
8·0
8·41
8·16

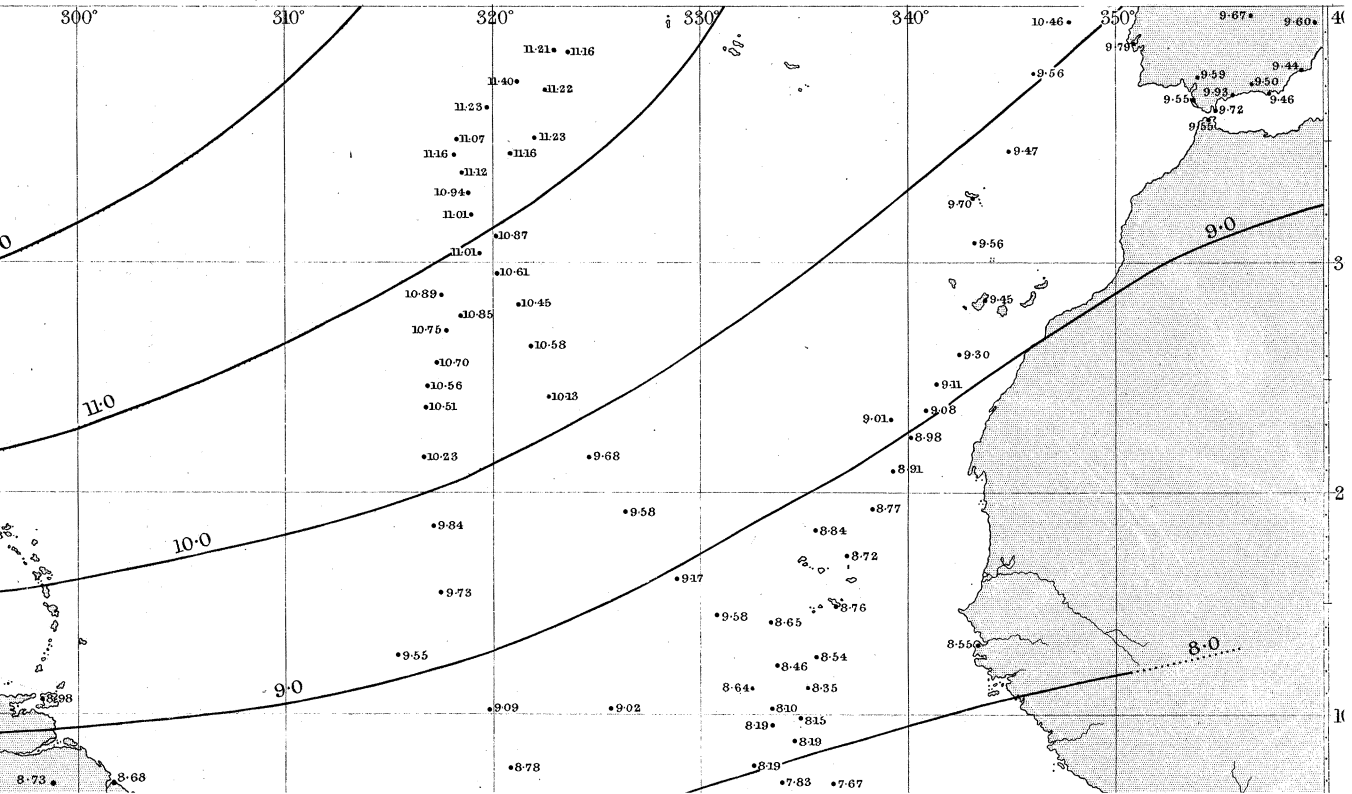
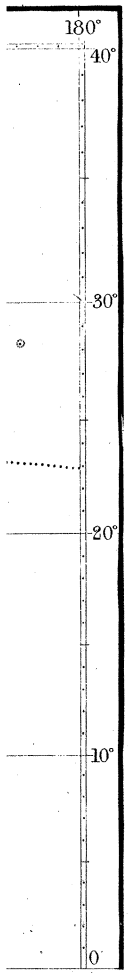
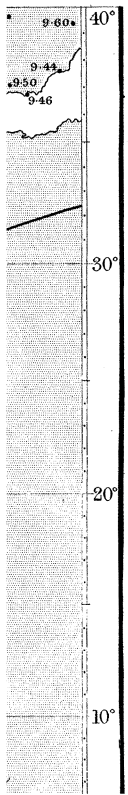
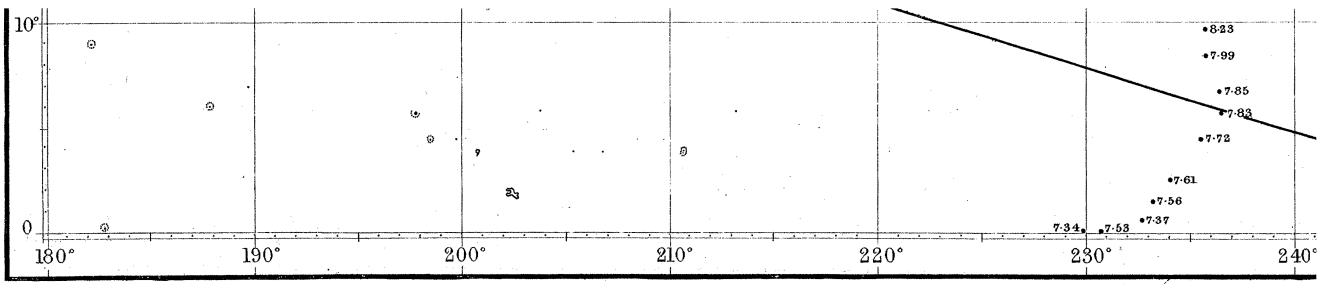
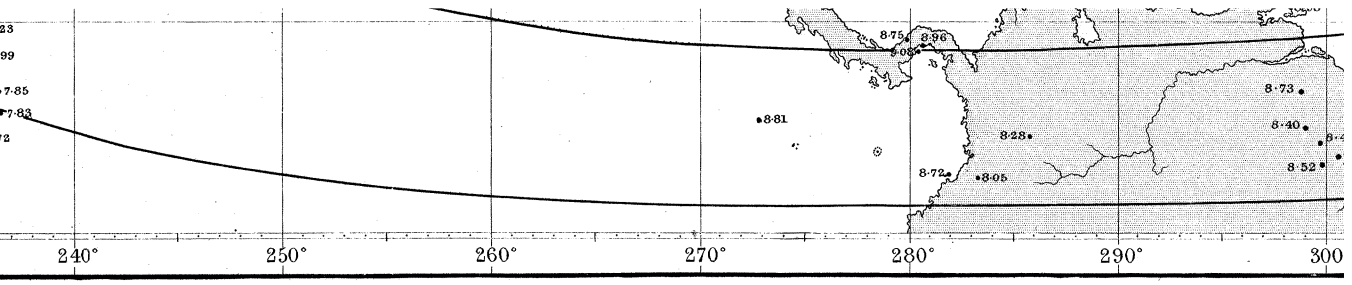

300°
310°
320°
330°
340°
350°
11·21
11·16
11·40
11·22
11·23
11·07
11·23
11·16
11·16
11·12
10·94
11·01
10·87
11·01
10·61
10·89
10·45
10·85
10·75
10·58
10·70
10·56
10·51
10·13
10·23
9·68
11·0
9·84
10·0
9·73
9·55
9·0
9·09
9·02
8·98
8·73
8·68
8·78
9·58
9·17
9·58
8·65
8·76
8·84
8·72
8·77
8·91
8·98
9·01
9·08
9·11
9·30
9·45
9·56
9·70
9·47
9·56
10·46
9·78
9·67
9·60
9·44
9·59
9·50
9·55
9·93
9·46
9·72
9·55
9·0
8·0
8·55
8·46
8·54
8·64
8·35
8·10
8·15
8·19
8·19
8·19
7·83
7·67

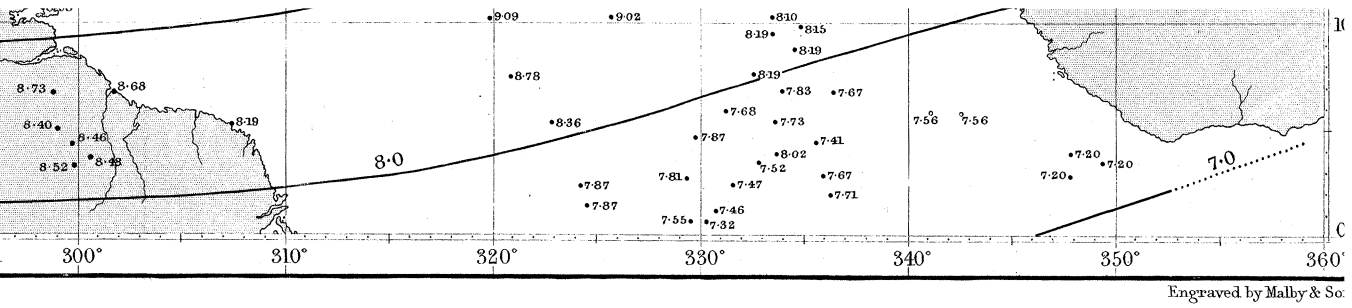
*Plate* 28.



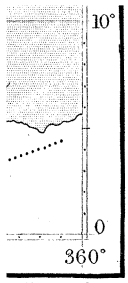




10°
0
180°
190°
200°
210°
220°
230°
240°
8·23
7·99
7·85
7·83
7·72
7·61
7·56
7·37
7·53
7·34


8·75
8·96
8·81
8·28
8·73
8·40
8·52
8·72
8·05
240°
250°
260°
270°
280°
290°
300




Engraved by Malby & So



by Malby & Sons.

## NORTH EQUATORIAL ZONE III.—Lat. 20 N. to 30° N. (continued).

| Stations. | Lat. N. | Long. E. | Date. | Declination. | | | Inclination. | | | Force in British units. | | | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Observed. | Correction to Epoch 1842·5. | Corrected. | Observed | Cor. to Epoch 1842·5. | Corrected. | Observed. | Cor. to Epoch 1842·5. | Corrected. | |
| | ° ′ | ° ′ | | ° ′ | | ° | ° ′ | | ° | | | | |
| At sea (2 observations) | 29 31 | 343 39 | 1832 | 20 44 w. | ..... | 20·7 w. | ..... | ..... | ..... | ..... | ..... | ..... | FitzRoy. |
| At sea (2 observations) | 28 16 | 343 42 | 1832 | 20 22 w. | ..... | 20·4 w. | ..... | ..... | ..... | ..... | ..... | ..... | FitzRoy. |
| Santa Cruz | 28 28 | 343 45 | 1822 | 21 00 w. | ..... | 21·0 w. | 57 06 | ..... | 57·1 | 9·46 | ..... | | Duperrey. |
| | | | 1826 | 22 37 w. | ..... | 22·6 w. | ..... | ..... | ..... | ..... | ..... | | Dumont d'Urville. |
| | | | 1836 | ..... | ..... | ..... | 57 28 | ..... | 57·5 | ..... | ..... | | Bethune. |
| | | | 1837 | 22 50 w. | ..... | 22·8 w. | ..... | ..... | ..... | ..... | ..... | | Vidal. |
| | | | 1837 | ..... | ..... | ..... | 57 47 | ..... | 57·8 | 9·56 | ..... | 9·45 | Wickham. |
| | | | 1838 | ..... | ..... | ..... | 57 21 | ..... | 57·4 | ..... | ..... | | Stanley. |
| | | | 1838 | ..... | ..... | ..... | 57 40 | ..... | 57·7 | 9·39 | ..... | | Sulivan. |
| | | | 1840 | 20 31 w. | ..... | 20·5 w. | 57 05 | ..... | 57·1 | 9·41 | ..... | | Ross. |
| | | | 1842 | ..... | ..... | ..... | 57 17 | ..... | 57·3 | ..... | ..... | | Blackwood. |
| | | | | | | 21·7 w. | | | 57·4 N. | | | | |
| At sea | 28 43 | 344 38 | 1837 | 20 38 w. | ..... | 20·6 w. | ..... | ..... | ..... | ..... | ..... | ..... | Dumoulin. |
| At sea | 29 15 | 345 15 | 1842 | 22 00 w. | ..... | 22·0 w. | ..... | ..... | ..... | ..... | ..... | ..... | Bérard. |
| At sea (2 observations) | 28 17 | 345 20 | 1836 | 21 53 w. | ..... | 21·9 w. | ..... | ..... | ..... | ..... | ..... | ..... | Bonite. |
| At sea | 29 53 | 345 30 | 1822 | 21 00 w. | ..... | 21·0 w. | 57 40 | ..... | 57·7 N. | ..... | ..... | ..... | Duperrey. |

## NORTH EQUATORIAL ZONE IV.—LATITUDE 30° TO 40° N.

*Authorities.*

Bérard ..... MSS. in the Magnetic Office, communicated by Admiral Duperrey; and for a few land stations, MSS. in the Magnetic Office, communicated by Professor L. S. Kämtz.

Aimé ..... Exploration Scientifique de l'Algérie (Paris, 1845).

Norwegian Officers ..... Hansteen, Mag. Beob. (Christiania, 1863).

Novara (Austrian Frigate) Reise um die Erde (Wien, 1862–65).

Beechey, Fisher, Smith, and Caligny ..... L. S. Kämtz, MSS.

Shadwell ..... MSS. in the British Hydrographic Office.

Schaub ..... Mag. Beob. von Dr. F. Schaub (Triest, 1858).

D'Abbadie, D'Hericourt, Estcourt, Rawlinson, Parrot, and Freycinet ..... L. S. Kämtz, MSS.

Ivatinsk ..... Survey of the Caspian Sea, St. Petersburg, 1870 (in the Russian Language).

Lenz ..... Petermann, Mittheilungen, 1870 (Gotha).

Schlagintweit ..... Scientific Mission to India and High Asia (Leipzig and London).

Cunningham ..... In Schlagintweit's Scientific Mission.

Walker and Basevi ..... Reports of the Great Trigonometrical Survey of India.

Fuss, G. von Kowanko, and Schatskoff ..... Mem. by Fritsche in Wild's Repertorium for 1870, Band I. Heft 2.

Basil Hall ..... In Kämtz MSS., above cited.

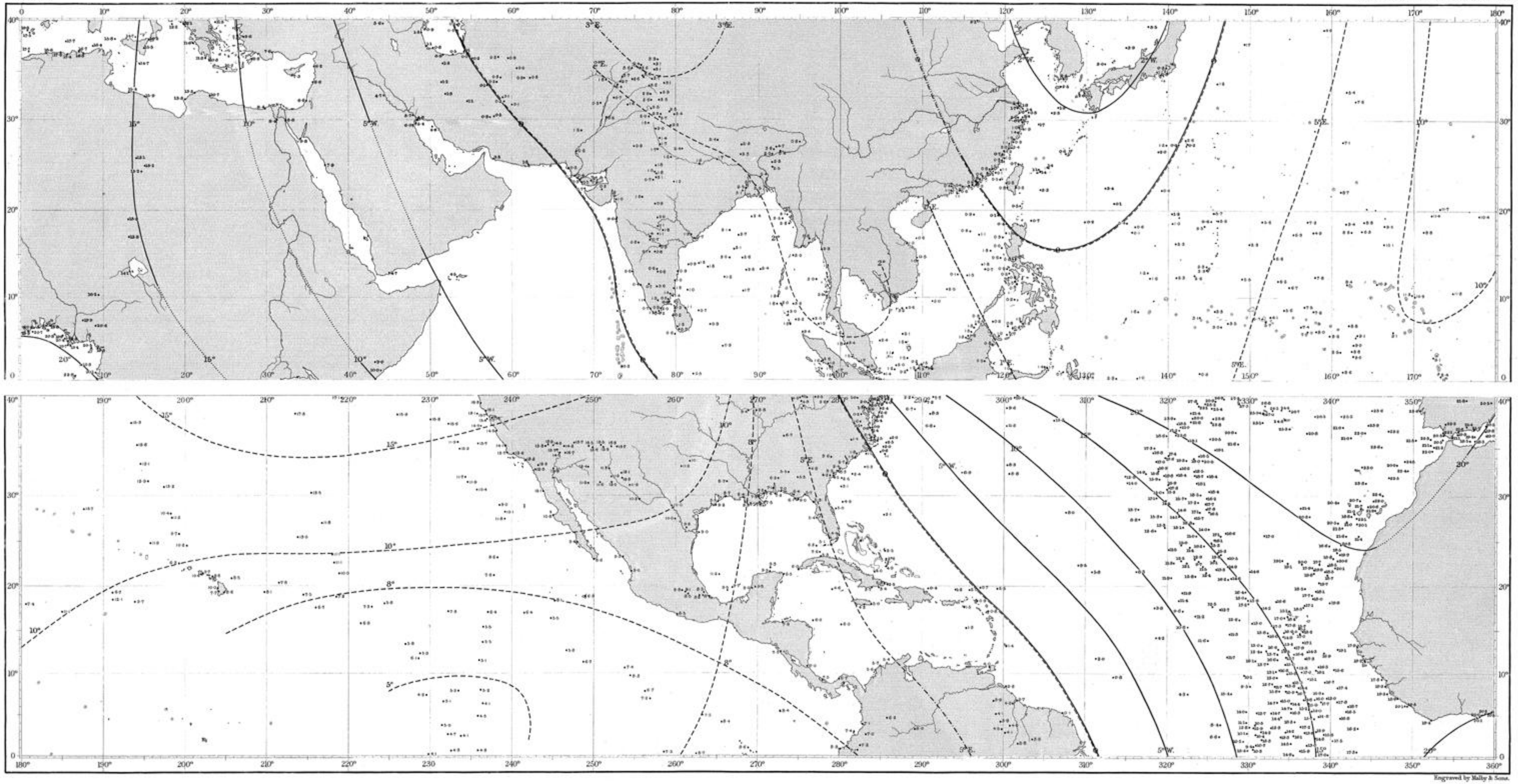
Collinson, Richards, Crane, and Kellett ..... MSS. in the British Hydrographic Office.

Erman ..... Reise um die Erde (Berlin, 1841).

# MAGNETIC SURVEY — *between the parallel of 40° N. and the Equator — Epoch 1840-45.* Declination.

*(Sabine)*



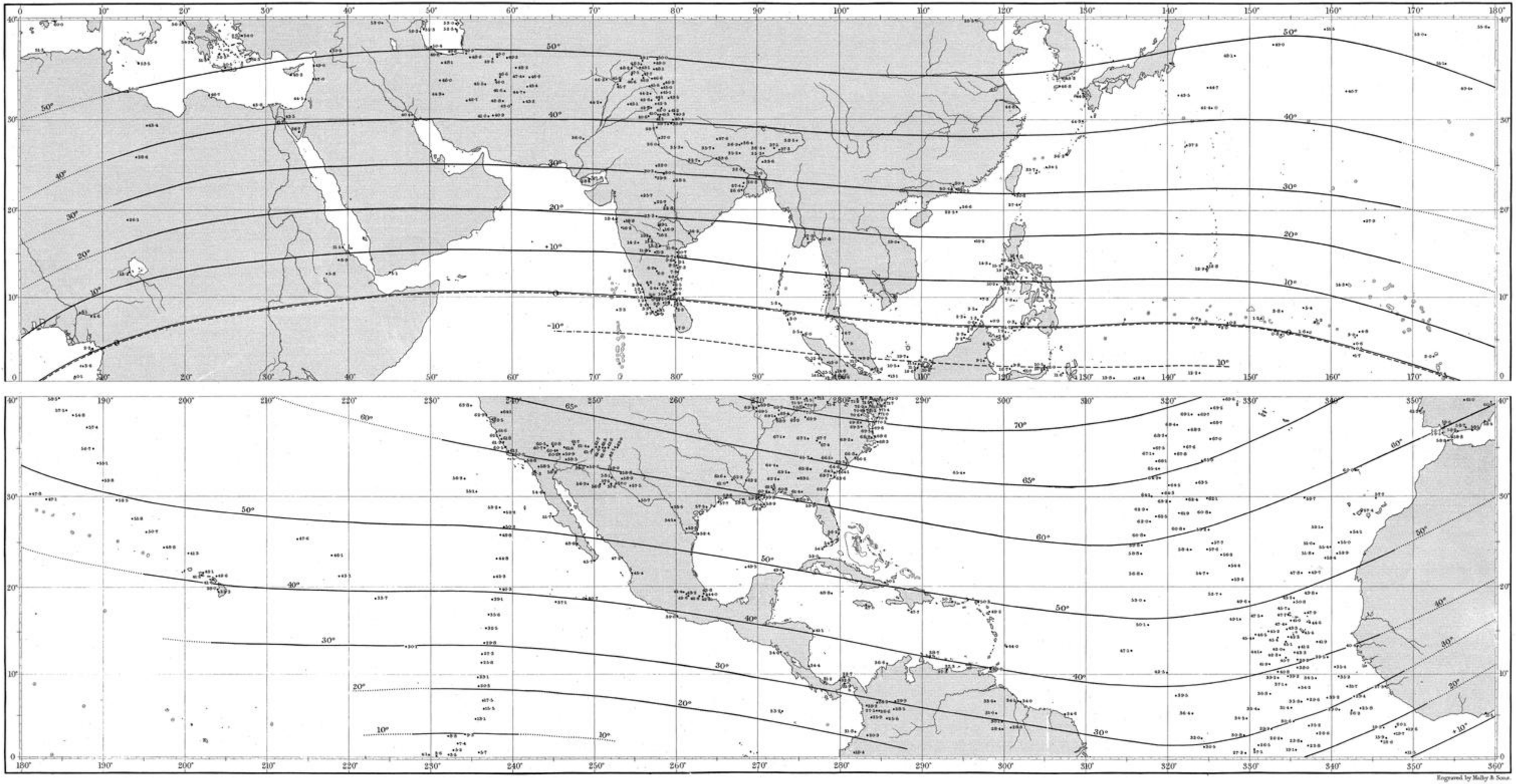


Engraved by Malby & Sons.

# MAGNETIC SURVEY between the parallel of 40° N. and the Equator. Epoch 1840-45. Inclination.

(Sabine)

Phil. Trans. 1875. Plate 27.

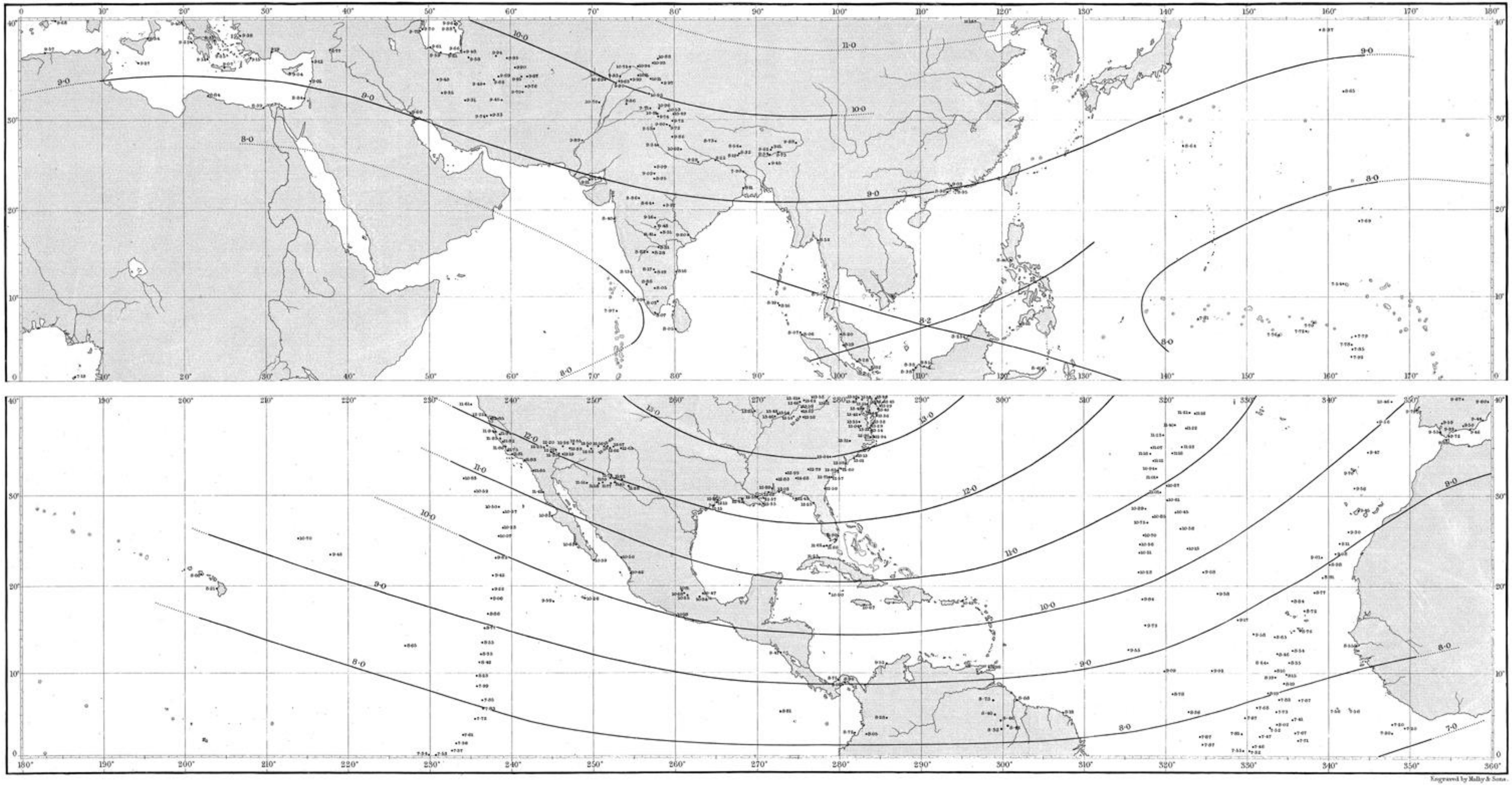



Engraved by Malby & Sons.

# MAGNETIC SURVEY — *between the parallel of 40° N. and the Equator — Epoch 1840-45.* Intensity.

(Sabine)






Engraved by Malby & Sons.