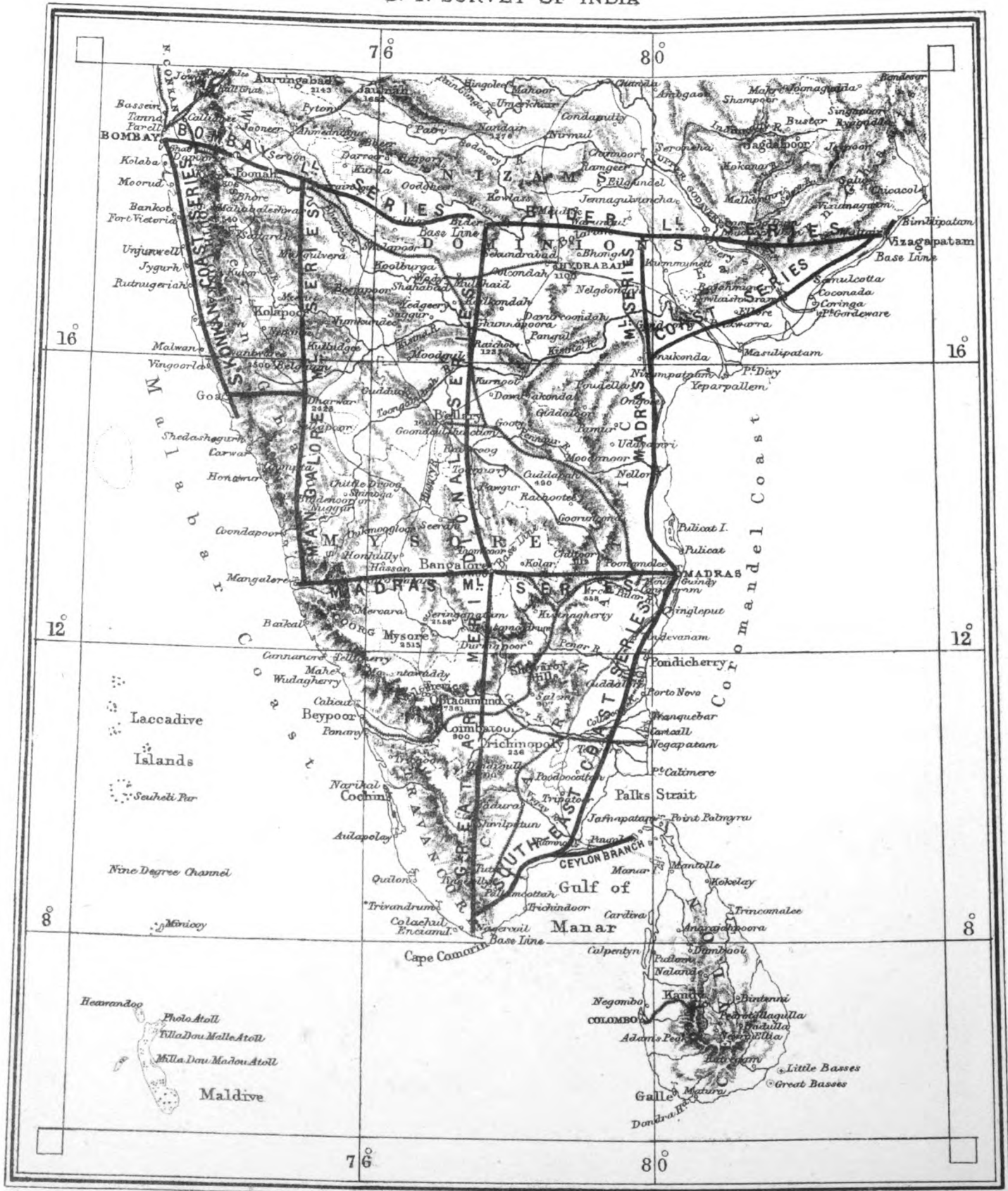


**DIAGRAM**  
 OF  
**THE SOUTHERN TRIGON**  
 OF THE  
**G. T. SURVEY OF INDIA**



Photoreproduced at the Office of the Trigonometrical Branch, Survey of India, Dehra Dun, January 1891.

SYNOPSIS OF THE RESULTS OF THE OPERATIONS OF  
**THE GREAT TRIGONOMETRICAL SURVEY OF INDIA**  
VOLUME XXVII.

---

DESCRIPTIONS AND CO-ORDINATES  
OF THE  
PRINCIPAL AND SECONDARY STATIONS AND OTHER FIXED POINTS OF  
**THE MADRAS LONGITUDINAL SERIES**  
*OR SERIES G*  
OF THE  
**SOUTHERN TRIGON.**

---

PREPARED IN THE OFFICE OF THE TRIGONOMETRICAL BRANCH, SURVEY OF INDIA,  
COLONEL G. STRAHAN, R.E., DEPUTY SURVEYOR GENERAL, IN CHARGE.

PUBLISHED UNDER THE ORDERS OF  
COLONEL H. R. THUILLIER, R.E., SURVEYOR GENERAL OF INDIA.



**Dehra Dun:**

PRINTED AT THE OFFICE OF THE TRIGONOMETRICAL BRANCH, SURVEY OF INDIA.

B. V. HUGHES.

**1892.**

*Price Two Rupees.*



## CONTENTS.



DIAGRAM OF THE SOUTHERN TRIGON .. .. .	Facing title page.
ERRATA, ADDENDA ET CORRIGENDA .. .. .	iv
REFERENCES .. .. .	v
PREFACE .. .. .	vii
Introduction .. .. .	iii— <i>G.</i>
Alphabetical List of Principal Stations .. .. .	1— <i>G.</i>
Numerical do. do. .. .. .	3— <i>G.</i>
Description of Principal Stations .. .. .	5— <i>G.</i>
Principal Triangles .. .. .	21— <i>G.</i>
Secondary Triangles connecting Principal-Auxiliary and Secondary Stations, and Intersected Points	27— <i>G.</i>
Do. Malabar Coast Series .. .. .	49— <i>G.</i>
Do. Mysore Series No. 1 .. .. .	50— <i>G.</i>
Do. Mysore Series No. 2 .. .. .	52— <i>G.</i>
Do. Mysore Series No. 3 .. .. .	54— <i>G.</i>
Do. Arúr Series No. 1 .. .. .	<i>ib.</i>
Do. Arúr Series No. 2 .. .. .	56— <i>G.</i>
Do. Ęnnúr Series No. 1 .. .. .	57— <i>G.</i>
Do. Ęnnúr Series No. 2 .. .. .	58— <i>G.</i>
Azimuths of Surrounding Stations and Points at Principal, Principal-Auxiliary and Secondary Stations .. .. .	59— <i>G.</i>
Co-ordinates and Descriptions of all Stations and Points .. .. .	88— <i>G.</i>
CHARTS Nos. 1 and 2.	

## ERRATA, ADDENDA ET CORRIGENDA.



PAGE			
81— <i>g.</i>	in col. 5, triangle No. 180	<i>for</i> 147866	<i>read</i> 147865
59— <i>g.</i>	„ 1, at Adavi Ávalpalli h.s.	„ 277° 26' 29"	„ 293° 42' 21"
„	„ 1 „ „	„ 293 42 21	„ 277 26 29
77— <i>g.</i>	„ 3 „ Nagari, XXXIII	„ 287 9 9	„ 288 9 9
81— <i>g.</i>	„ 3 „ Ráyakota h.s.	„ Virabadondrug Hill h.s.	„ Virabadondrug Hill
104— <i>g.</i>	The height (11 feet) of Énnúr No. 2 s. refers to ground level.		
112— <i>g.</i>	„ (17 „ ) of Karimmod s.	„ „	

*November, 1892.*

J. ECCLES,  
*In charge of Computing Office.*



## REFERENCES.



The abbreviations employed in the text are as follows:—

- h.s. denotes hill station (secondary)
- s.     "     station             "
- t.s.   "     tower station    "

These abbreviations are only placed after stations where a theodolite has been set up and observations taken to surrounding points.

The latitudes and longitudes of all points shown on the Charts at the end of the volume will be found in the text. The latter exhibits numerical values of triangles only to points of a superior class, to which alone, if exhibited on the Charts, lines are drawn: the lines are either continuous throughout, or dotted for half the length and continuous for the other half: the dots indicate that the bearing was not observed. For other points difficult to identify or of comparatively less accuracy, numerical values of triangles and azimuths are not given.

*November, 1892.*

**J. ECCLES,**  
*In charge of Computing Office.*





## P R E F A C E .

The Madras Longitudinal Series, the details of which are given in this volume, is one of the component series of the Southern Trigon, which is that section of the triangulation of India embracing the portion of the peninsula lying south of the line joining Bombay and Vizagapatam. The general principles of the simultaneous reduction, and the procedure followed in carrying it out, are explained in Volume II of the *Account of the Operations, &c.*; and full details of the whole of the triangulation appertaining to the Trigon will be found in Volumes XII and XIII of the *Account of the Operations, &c.*

As however the entire contents of the volumes of the principal triangulation are not needed by geographers and surveyors, and moreover as these volumes give no details of the secondary triangulation—which is of considerable value for local requirements—it is obviously desirable that synopses of the final results of the whole of the operations, including the secondary as well as the principal triangulation, should be published for general use in such a form as to be most suitable for convenience of reference. This has already been done as follows:—

For the several Series forming the North-West Quadrilateral,

- I. Great Indus Series.
- II. Great Arc, Section  $24^{\circ}$  to  $30^{\circ}$ .
- III. Karáchi Longitudinal Series.
- IV. Gurhagarh Meridional Series.
- V. Bahún Meridional Series.
- VI. Jogí-Tíla and Sutej Series.
- VII. North-West Himalaya Series.
- VII A. Jodhpore and Eastern Sind Meridional Series.

For those forming the South-East Quadrilateral,

- VIII. Great Arc, Section  $18^{\circ}$  to  $24^{\circ}$ .
- IX. Jabalpur Meridional Series.
- X. Bider Longitudinal Series.
- XI. Biláspur Meridional Series.
- XII. Calcutta Longitudinal Series.
- XIII. East Coast Series.
- XIII A. South Párasnáth and South Malúncha Series.

} Already published.



For those forming the North-East Quadrilateral,

- XIV. Budhon Meridional Series.
- XV. Rangir Meridional Series.
- XVI. Amua and Karára Meridional Series.
- XVII. Gurwáni and Gora Meridional Series.
- XVIII. Huriláong and Chendwár Meridional Series.
- XIX. North Párasnáth and North Malúncha Meridional Series.
- XX. Calcutta and Brahmaputra Meridional Series.
- XXI. East Calcutta Longitudinal and Eastern Frontier Series, Section 23° to 26°.
- XXII. \*Assam Valley Triangulation, E. of Meridian 92°.

} Already published.

And for the following Series of the Southern Trigon, *viz.*,

- XXIII. South Konkan Coast Series.
- XXIV. Mangalore Meridional Series.
- XXV. South-East Coast Series.
- XXVI. Bombay Longitudinal Series.

The present is the 29th Synoptical Volume in order of publication, and the fifth of those appertaining to the Southern Trigon; it gives the results both of the principal triangulation executed exclusively with theodolites having azimuthal circles of 24 inches in diameter, read by five micrometer microscopes, and of the secondary triangulation in which other instruments besides these were used.

By the process of reduction which has been followed, the principal triangulation has been rendered perfectly consistent both internally and externally; internally, so that if in any one of the several polygonal figures of which the chains may be composed, calculations are carried from one station to another in every possible direction, the same results will be inevitably deduced; and externally, so that the values of the co-ordinates of any station, when computed from the given co-ordinates of any other station, with the final linear and angular data, will be the same, whether the calculation is carried directly through the series, or circuitously through any of the other chains of triangles comprising the Southern Trigon. All secondary triangulation emanating from one side of the principal Series and closing on another side thereof, or on a contiguous Series, have also been made consistent throughout.

As regards the general arrangement of this volume, it may be pointed out that the Introduction, was originally prepared for Volume XIII of the *Account of the Operations, &c.*, and when a sufficient number of copies had been printed for that work, additional copies were struck off for this volume. The Introduction was printed in the year 1887; it gives a historical and descriptive sketch of the progress of the whole operations in the field—both principal and secondary—from year to year, mentions the Officers by whom they were conducted, the theodolites with which principal angles were measured, and indicates the work done by each of the Assistants. The adjustment of the secondary triangulation was taken in hand in the year 1885, it was put aside for about 4 years, and was completed in 1890-91 when the printing of the volume was resumed.

The data given in this volume are the following:—

*First* (page 1—*G.*), an alphabetical list of the names of the principal stations, showing the numbers assigned to them.

*Second* (page 3—*G.*), a numerical list giving the names corresponding to the numbers.

*Third* (page 5—*G.*), descriptions of the structure and positions of the principal stations as taken from the original records of the observations.

*Fourth* (page 21—*G.*), the angles and sides of the principal triangles, numbered and arranged in order from west to east.

\* This is an offshoot of the Assam Longitudinal Series, and falls entirely outside of the limits of the North-East Quadrilateral. The volume is issued in a preliminary form, and therefore only a limited number of copies are available to meet any immediate demand for data: the final publication will be hereafter made on the completion of the triangulation in Burma, into the general reduction of which this Series will enter.

*Fifth* (page 27—*a.*), the angles and sides of certain secondary triangles. The numbering is here made consecutive to that of the principal triangles, in order to facilitate references which are made in other sections to the place where the length of a side is to be found.

*Sixth* (page 59—*a.*), the azimuths of surrounding stations and points at principal, principal-auxiliary and secondary stations, the latter arranged in alphabetical order.

*Seventh* (page 88—*a.*), the co-ordinates and descriptions of all stations and points arranged in alphabetical order.

It has not been considered necessary to publish the whole of the details of the secondary triangulation; the sides and angles of 743 triangles, which were selected as most likely to be of future use, and the azimuths of all these sides, have been given; but for a number of other points the co-ordinates only have been given. With the aid of Tables Nos. XXVI, XXVII, XXVIII, XXIX and XXX of the *Auxiliary Tables to facilitate the calculations of the Survey of India*, Dehra Dún, 1887, local surveyors, working on a system of rectangular co-ordinates, can readily transform the spheroidal co-ordinates here given to suit their own requirements.

The heights above mean sea level of the stations determined trigonometrically are controlled by a line of spirit-levelling extending along the entire length of the series: all particulars regarding them will be found detailed on page 88—*a.* and in the footnotes to the subsequent pages.

The longitudes depend on an astronomically determined value of the longitude of the Madras Observatory, deduced about the year 1815. The longitude of the Madras Observatory has however been re-determined by the Electro-Telegraphic method, from observations made at Greenwich, Mokattam (in Egypt), Suez, Aden, Bombay and at certain stations of the triangulation in India.

This value of the longitude of the Madras Observatory is equivalent to  $80^{\circ} 14' 51''$  E.; and as the originally adopted value, on which the longitudes of the whole of the stations of this Survey are based, is  $80^{\circ} 17' 21''$  E.—see page 135 of Volume II of the *Account of the Operations, &c.*—the following precept may be accepted with considerable confidence:—

**All the values of longitude in this volume require a constant correction,  
probably of  $-2' 30''$ .**

The orthography of Indian names in the present volume is in accordance with the provincial lists of spellings constructed under the immediate orders of the Government of India. The newly authorised spellings were adopted for all names and other words contained in these lists; but for words for which there was no specific authority, the spellings have been framed in accordance with the methods followed in the preparation of the published lists, reference being made in the present instance more particularly to the Gazetted Lists for the Madras and Bombay Presidencies. As a general rule the pronunciations of the vowels are as follows:—*a* has a variable sound as in woman, rural, paltry; *á* as in tartan; *i* as in bit; *í* as in ravine; *u* as in bull; *ú* as in rural; *o* as in note; *ó* as in cot; *e* as *a* in say; *é* as in bet; *au* as *ou* in cloud; *ai* as *i* in ride. Final vowels and those in well-known terminals are unaccented. When the popular spelling of a name has been accepted by Government, its correct orthography is generally given in parenthesis where the name occurs for the first time.

The charts accompanying this volume show all the principal stations and triangulation, the positions of all secondary points, and portions of the secondary triangulations of which full details of the angles, sides and azimuths are given. With the aid of the charts it is hoped that little difficulty will be met with in finding out any of the data which may be required. The descriptions of the secondary stations are in some cases not as full and clear as might be desired: this arises from the inadequacy of the information entered on the spot by the

## PREFACE.

surveyors in their field books; every effort has been made to supplement the field books, whenever it was found practicable to do so, in order to facilitate the future identification of the stations, and all the information which is forthcoming has now been given.

The general arrangement of the volume is in accordance with that adopted in previous Synoptical Volumes. The data which it contains have been prepared chiefly under the superintendence of Mr. J. Eccles, M.A., Deputy Superintendent, the Officer in charge of the Computing Office. The Introduction to this Series was written by Captain S. G. Burrard, Deputy Superintendent. The volume like its predecessors has been printed at the Trigonometrical Branch Office at Dehra; Mr. Peychers and Mr. H. G. Shaw have rendered valuable service in the examination of the press proofs generally, and Mr. Peychers more particularly in regard to the numerical details which require the utmost care in supervision through the press, and in this respect from his natural aptitude and experience his assistance has been most valuable.

DEHRA DUN, }

April, 1892. }

G. STRAHAN, COLONEL, R.E.,

*Dy. Surveyor General,*

*In charge Trigonometrical Surveys.*

**MADRAS LONGITUDINAL SERIES.**



## MADRAS LONGITUDINAL SERIES.

## INTRODUCTION.

This Series, as first executed, originated from the westernmost side (Pullúr H.S.—Anandalamalai H.S.) of the Kurumkota polygon of the Madras Meridional Series and extended to Mangalore on the West Coast. But in the final arrangement of the triangulation the Kurumkota polygon and the triangulation to the east connecting it with Madras, have been transferred to the longitudinal series, and the triangulation about Bangalore (Bēngalúr) has been considered as appertaining to the Great Arc Series; so that the Madras Longitudinal Series now consists of two nearly equal portions separated by the Great Arc. In the following historical account it will however be convenient to describe the whole of the work as it was executed.

The portion of the triangulation which has been transferred from the meridional series,

*Season 1864-65.*

## PERSONNEL.

Captain B. R. Branfill, Bengal Cavalry, 1st Asst.	
Mr. F. Ryall, Sub-Assistant, 1st Class.	
" J. W. Mitchell, " 2nd "	
" J. R. L. O'Neill, " 3rd "	

was executed by Captain Branfill in 1864-65 while conducting the operations of that series. It was then a matter of considerable importance to connect the modern triangulation with the Madras Observatory, the primary origin of all longitudes in India. This observatory had

been adopted by Colonel Lambton as his origin, and although Colonel Everest had selected, as more convenient, a second origin at Kaliánpur, its longitude was obtained from Madras through the triangulation then existing. As will be seen on reference to the Note at the end of this Introduction, that triangulation was inferior to the more modern; and by connecting Kaliánpur with the Madras Observatory by the modern triangulation, a more accurate determination of the difference of longitude of the two origins was to be obtained. It was not then in contemplation to determine longitudes by help of the Electric Telegraph, and it was therefore the more necessary that the triangulation should be connected with the Madras Observatory. There is no other observatory in India in which systematic observations for determining the longitude have been taken over a series of years; consequently the same necessity existed for the accurate connection of the Indian triangulation with the Madras Observatory, as for that of the British triangulation with the Greenwich Observatory, the origin of all English longitudes.

So soon therefore as the modern triangulation approached Madras, arrangements were made for the erection of a pillar at the Madras Observatory, of sufficient height to overcome the obstructions offered by the surrounding houses and gardens, from which to connect the observatory with the principal triangulation. This proceeding was readily agreed to by the Government Astronomer and sanctioned by the Madras Government; and as no Officer of the Survey Department could be spared to superintend the work, it was undertaken by the Public Works Department; but through sundry misunderstandings and unforeseen delays it was not completed until the 6th of June.

It unfortunately happened that several trees intervened between the nearest stations of the triangulation and the Madras Observatory, and on attempting to clear a line through them such extravagant compensation was demanded—*e. g.*, Rs. 300 for a single branch of a casuarina tree—that it was necessary to suspend the triangulation until the theodolite could be raised to a sufficient height on the observatory to overlook the intervening trees. “Here again”, writes Lieut.-Colonel. Walker, the Superintendent of the Great Trigonometrical Survey, “the want of legal powers for our officers was productive of much embarrassment and delay; and it is worthy of notice, that the operations of this Department are carried on with far greater rapidity and economy in the wildest regions, where the physical obstacles are greatest, than in the vicinity of the Presidency towns, where they are least; in these towns, the head-quarters of the lawyers, a few cantankerous individuals are always to be met with, whom it is more difficult to manage than to combat any physical obstacle.”

An observatory in which was an equatorial instrument occupied the roof of the Government Astronomer's house, the instrument stood on a granite slab fixed on cross walls 33 feet from the ground. It was removed and a hollow pillar of masonry was raised 30 feet in height above the slab to receive the stand of Captain Branfill's theodolite, which was thus mounted 63 feet above the ground level. A scaffolding was raised round the pillar for the observer and his assistants to stand on, and to carry the observatory tent: it had to be constructed of the lightest possible materials, and was therefore somewhat fragile and dangerous; fortunately the weather was favorable, and the observations were completed in two days without misadventure.

The Madras party arrived in Madras on the 29th of May and in the first week of June work was commenced at the observatory; the pillar station was connected with the Meridian Circle, and the difference of height between the pillar station and the Public Works Department Bench-mark below was determined.

Messrs. Ryall and O'Neill had continued at their work until the Chēmbedu tower was finished and the ray thence to the Madras Observatory cleared of obstructions, but they were then both attacked with fever and went into hospital.

On the 9th of June the 24-inch theodolite was hoisted in its case, on to the roof of the Astronomer's dwelling, and on the 10th by means of a second hoist, it was raised to the top of the pillar and scaffold. Final observations were concluded on the 12th of June, and with them was completed the triangulation along the coast, connecting Vizagapatam and Madras. The instrument was lowered to the roof the same evening, and next day to the ground

without accident. In spite of unusual annoyances and difficulties to which he had been exposed, and very bad health, Captain Branfill's out-turn of work during this field season was considerable. During the season 7 triangles were completed, extending a direct distance of 58 miles, besides 17 triangles extending a distance of 78 miles on the meridional series.

In 1865 Colonel Walker decided to continue the triangulation westwards to connect the Madras Observatory and the Bangalore Base-

Season 1865-66.

## PERSONNEL.

Captain B. R. Branfill, Bengal Cavalry, 1st Asst.	
Mr. A. W. Donnelly, Civil Assistant, 4th Grade.	
" F. Ryall, Sub-Assistant, 1st Class.	
" J. W. Mitchell, " 2nd "	
" J. R. L. O'Neill, " 3rd "	

line. He assigned the work to Captain Branfill's party, which was recessing at Bangalore at the time. The party took the field on the 26th of December 1865, and commenced the triangulation proper. The work originated from the side Anandalamalai H.S.—Pullúr H.S., the western side of the Kurumkota polygon, the value of which had been brought down and fixed by the Madras Meridional and Coast Series in the previous season.

Colonel Lambton had executed a net-work of triangulation which covered the whole country round as far as Bangalore to the west; he had also joined Bangalore to Mangalore (Mangalúr) by a longitudinal series. Although this had been done at the beginning of the century, the information derived from his results, was very valuable, and greatly facilitated the selection of the stations for the Madras Longitudinal Series. Mr. Donnelly proceeded in advance of the party to examine and prove the provisional series, with orders to build the stations, as soon as fixed, with the least possible delay. The first polygon, Batinkönda, extended to the Páyanghát, or foot of the Eastern Gháts, skirting the Mysore (Maisúr) plateau, and dividing Mysore from the Carnatic (Karnatik). The country then became difficult, and rendered it necessary to adopt a somewhat small and unsymmetrical pentagon, that of Devarakönda, and in the first figure on the plateau, the Bandapalle hexagon, to use longer rays than desirable. After having visited and built 5 stations of the Bandapalle hexagon, Mr. Donnelly discovered that he had admitted an angle of about  $27^\circ$ , which necessitated some sort of a change in the figure. Without the use of short sides or tower stations, this difficulty could only be solved by the rejection of Kurudamale H.S., and the adoption of Rájugundlapalle H.S., 18 miles to the north, a change which was immediately carried out. Advantage was taken of the delay, ensuing on this change, to complete the secondary triangulation for determining the position of the Pulicat (Paraverkádu) Light-house.

On resumption of the observations of the Bandapalle polygon, the haziness of the weather gave great trouble, particularly at the new station of Rájugundlapalle. On this account, although the observations at the latter station were very fairly accordant *inter se*, there were found to exist the large resulting triangular errors of  $-4''\cdot3$  and  $+3''\cdot4$  in the two triangles adjoining the ray Rájugundlapalle and Bandapalle, which grazes, but not very closely, over the rocky ridge of the rejected hill Kurudamale. These triangles were therefore not accepted, and in the following season, the angles to and from Kurudamale, which were not liable to be affected by the troublesome phenomenon of lateral refraction, were observed.

In this season, 1865-66, almost the whole of the Series was completed as far as Bangalore by a chain of 23 principal triangles, forming 3 hexagons and a pentagon, covering an



area of about 2650 square miles, and extending a direct distance of 118 miles. All the members of the party suffered more or less from illness, resulting from exposure and malaria, and Captain Branfill was obliged to proceed to Europe on sick leave; his place in charge of the party was taken by Lieutenant W. M. Campbell, R.E.

It had originally been the intention of Colonel Walker, only to carry this Series

*Season 1866-67.*

PERSONNEL.

Lieut. W. M. Campbell, R.E.,	Asst. Surveyor,
1st Grade.	
Mr. A. W. Donnelly,	Civil Assistant, 4th Grade.
" F. W. Ryall,	Sub-Assistant 1st Grade.
" J. W. Mitchell,	" 2nd "
" O. V. Norris,	" 4th "
" C. D. Potter,	" " "

as far as the meridian of Bangalore, to meet it there by a series of triangles from Mangalore which were to be executed by another party, and to employ Captain Branfill's party on its arrival at Bangalore on the revision of the Southern Section of the Great Arc. Owing however to some misunderstanding, Captain Branfill believed that his party were intended to work westward to the

Coast; accordingly, at the close of the field season of 1865-66, he had one polygon prepared for observation to the west, but no arrangements made to the south for work on the Great Arc. On being informed of this, Colonel Walker sanctioned the completion of this polygon, before commencing operations to the south on the Great Arc. He directed that arrangements should be made for the re-measurement of the old base-line measured by Colonel Lambton in 1804 in the neighbourhood of Bangalore.

Messrs. Donnelly and Mitchell took the field in November, the former to make the required arrangements for the base-line and the latter to carry on preliminary operations to the south along the meridian of the Great Arc. Lieutenant Campbell himself was detained in Madras till January owing to some alterations which were required in the 24-inch theodolite. He commenced work on the 2nd of that month at Halasúrbëttá H.S., and continued it without intermission till the 10th May, carrying the series under review to the side Hemagiri H.S.—Rangaswámibëttá H.S. and also executing a portion of the Great Arc Series. The triangulation of the Series was thus only extended in 1866-67 to a point 40 miles west of Bangalore.

Lieutenant Campbell found the difficulties in the way of re-measuring Colonel Lambton's base so great that he was compelled to advise its abandonment, and he was accordingly directed to select another site: this he did, and at the same time made arrangements to connect Colonel Lambton's base by triangulation.

In 1867-68 little progress was made, because Lieutenant Campbell and his assistants

*Season 1867-68.*

PERSONNEL.

Lieut. W. M. Campbell, R. E.,	Surveyor, 3rd Grade.
Mr. A. W. Donnelly,	Civil Assistant, 4th Grade.
" J. W. Mitchell,	Sub-Assistant, 2nd "
" O. V. Norris,	" 4th "
" C. D. Potter,	" " "

were employed for the greater portion of the field season in the operations connected with the measurement of the Bangalore Base-line, which have been described in the Introduction to the Great Arc Series, Section 8° to 18°.

As soon as these were completed, Lieutenant Campbell took up the triangulation at the point west of Bangalore, where it had stopped the year before, Mr. Mitchell having been sent to carry on the approximate work of the longitudinal series to the west while the party was engaged on the Bangalore Base-line. An approximate series had been executed some years pre-

viously by an assistant of the Bombay party, who selected stations of the Mangalore Meridional Series, down to the latitude of Mangalore, where he converted it into a longitudinal series, and carried his triangles eastwards as far as Bangalore. Unfortunately, however, it was now found that the series so selected did not admit of symmetrical connection with that already finally brought up from Madras, (as far as Hemagiri H.S.—Rangaswámibëtta H.S.) without further complicating the compound figure surrounding the Base-line, already so extensive as to involve great labor in reduction.

Mr. Mitchell, disregarding therefore the existing approximate series, succeeded in selecting two new polygons. The first of these gave a good deal of trouble, owing to the nature of the ground. The second was a large figure covering upwards of 2000 square miles of country. A third polygon was partially chosen, which was intended to close on the approximate triangulation of the Mangalore Meridional Series: the two flank stations of this polygon could not be definitely fixed, but it was seen that no difficulty would be experienced in finding appropriate points.

The measurement of the Bangalore Base-line was completed on the 12th of March, and on the 24th Lieutenant Campbell's party moved westwards to take up the principal triangulation. One hexagonal figure, covering an area of 925 miles, and extending the series 33 miles in length, was completed on the 3rd of May, when the party commenced its return march to Bangalore. Whilst making this march, Lieutenant Campbell had an opportunity for visiting one of the most interesting features of Mysore, *viz.*, the gigantic Jain statue of "Shravan Bellagula," cut out of the living rock (gneiss) on the summit of a hill, some 800 feet above the surrounding country, from which it is visible for miles in every direction. It is the figure of a man, standing up clear of the summit of the rock from a little above the middle of his thighs, while from that point downwards the legs are shewn in strong relief, about half their thickness being sculptured on the face of the rock. Lieutenant Campbell writes:—"For native sculpture, the proportions are not very "bad, but all horizontal dimensions are exaggerated, and the legs are dwarfed in height, as "compared with the upper part of the body. The arms hang clear of the body from the "shoulder to the wrist. The stone is cut smooth and partially polished, and the color is so "white a grey, as to give the appearance of whitewash at a distance of 3 or 4 miles. With a "small theodolite, I took the following dimensions of the figure, as accurately as the situation "admitted:—

					<i>Feet</i>	<i>Inches</i>
Height of upper part, entire form cut out	...	...	...	...	39	0
"    lower part, only half moulded	...	...	...	...	21	6
					<hr/>	
Entire height of figure	...	...	...	...	60	6
					<hr/>	
Width of shoulder	...	...	...	...	27	0
"    head	...	...	...	...	10	0
"    waist	...	...	...	...	10	4
between armpits	...	...	...	...	14	2

“An inscription on the foot of the statue states that it was erected by Chamunda Raya, whom tradition places about 60 B. C. According to the most reasonable hypothesis, the statue must have been cut out of a rock which projected above the hill. The workmanship is still as sharp as if the stone had been newly cut.”

After the field season of 1867-68, the Madras Longitudinal Series remained in abeyance for three years, the party being first engaged in the measurement of the Cape Comorin Baseline and afterwards being employed for two field seasons on the southernmost section of the Great Arc Series. In 1871-72 it resumed work on the Longitudinal Series.

On November 10th 1871, the party left Bangalore and reached Nughallibëtta H.S.

*Season 1871-72.*

PERSONNEL.

Major B. R. Branfill, Dy. Supt., 2nd Grade.	
Lt. J. R. McCullagh, B.E., Asst. Supt., 1st Grade.	
Mr. J. W. Mitchell, Asst. Surveyor, 1st	”
” O. V. Norris, ” 2nd	”
” C. D. Potter, ” 3rd	”
” E. W. Lasseron, ” 4th	”

on the 17th and 18th, marching in two parties for the sake of observing a Barometric Levelling traverse, by means of corresponding simultaneous observations with two pairs of aneroids—the result of which, notwithstanding the unfavorable state of the weather, proved highly satisfactory, the closing error being only about 7 feet.

At Nughallibëtta H.S. Major Branfill commenced operations by observing an azimuth to  $\delta$  Ursæ Minoris at Western Elongation and 51 Cephei at Eastern Elongation. A serious delay was met with at Sátanhalli H.S., the central station of the first polygon, where, after some days of fruitless efforts to obtain a signal from Desáni H.S., the north flank station, the ray proved impracticable, being obstructed by a large portion of the top of an intervening hill. A new point on the Desáni group of hills was selected, but this failure of the approximate series cost no less than ten days of the best weather for observing. The principal observations were then carried on without further hindrance than that caused by the forests and mountainous country of the Malnád and Western Gháts, in which clouds and heavy mists frequently obscured the signals; moreover the distances traversed between each station were very great, occupying eight days on the average, and as many as twelve in two cases. About the end of January, whilst observations were in progress at Pushpagiri H.S., Mr. Potter discovered that the approximate series had again failed, the hill station of Kudurëmukha proving invisible. This caused a delay of three weeks.

Leaving Lieutenant McCullagh to take the principal observations, Major Branfill in the middle of February set out to recast the approximate series, which had been selected by Mr. John McGill, who had been working southwards on the Mangalore Meridional Series. The figures provided were somewhat small and ill-conditioned, and the number of stations had to be reduced to ensure the completion of this triangulation in the following field season. Major Branfill determined to remodel the Series in advance, by throwing back (eastward) the side of junction, and selecting a figure to the north-east of Kudurëmukha above the Gháts, that would, as it were “cut off the corner.” Mangalore was fixed by two single triangles, which during the next season were converted into a quadrilateral figure by the observation of the diagonal ray.

Meanwhile and till the end of the season, Lieutenant McCullagh with the main party had been greatly impeded in his observations by the hazy weather setting in. At Ballamale, the south-western flank station, he was detained 15 days, at Ammédikal 18 days, and at Kudurēmukha 25 days, until the 10th of May when, as there was no hope of completing the observations before the beginning of the monsoon, he closed the season's observing and marched to Bangalore, where the party arrived on the 28th of May, having suffered much latterly from fever.

During this season the Madras Longitudinal Series was extended 110 miles to the west, and carried over the Western Gháts. The principal triangulation that was executed covered an area of 3240 square miles.

Major Branfill was occupied during a part of the field season in the attempt to set up a self-registering tide gauge at Mangalore. The river Nētrávati which runs northwards past the town of Mangalore, is separated from the open sea for several miles by a spit of sand, varying in width from 100 to 400 yards, and 10 or 12 feet above sea level in the highest parts. It appeared that this spit had been extending northwards for several years, driving the river mouth and bar continually before it. The older parts of the sand spit were covered with a growth of sea pink and many other plants, and were apparently very firm and not liable to shift. Some years before, a breach had been cut in the spit to allow the river to enter the sea direct and a little south of the town instead of flowing round the spit which extended a mile from the cut; but a very few tides sufficed to fill up the gap. From this and other local information there seemed good reason to suppose that the sand spit might be considered more than sufficiently permanent for a year's tidal observations. Major Branfill therefore had a masonry well sunk in the highest part of the spit, where it was 12 feet above sea level and 30 yards away from high water mark on the beach, about a mile south of the river mouth and nearly opposite the town of Mangalore. The sand was very firm at a small depth below the surface but very "quick" at the permanent water level below, which appeared, however, to be considerably higher than mean sea level. The well was sunk until there was always a depth of 6 feet or more of water in it and 10 feet of masonry above high water mark.

Communication was next established with the open sea by means of wrought iron gas piping; but owing to the persistent high level of the water in the well, a watertight cistern had to be introduced which should only admit or deliver the sea water by means of the pipe. This was effected with much difficulty; but bad weather set in almost immediately and the water shoaled and covered the sea end of the pipe with about a foot of sand.

Meanwhile the self-registering tide gauge had been set up. A severe gale now occurred which considerably altered the shore line, washing away much of the sand spit almost up to the observatory and well and shoaling the water for some distance out to sea. A continuance of bad weather rendered it necessary to dismantle the observatory, but not before damage and loss had occurred from the violence of the waves.

Major Branfill, after his experience, came to the conclusion that to set up a tidal observatory and maintain it in operation for a twelvemonth on the sandy shore of the open coast, is an affair of such difficulty and expense and at best so uncertain of success that it can hardly be recommended. Mangalore was accordingly abandoned as a tidal station.

MADRAS LONGITUDINAL SERIES.

In November and December 1869, Captain J. P. Basevi, R.E., who was then conducting Pendulum Observations determined the sea level at Mangalore by a month's observations of high and low water, and referred it by levelling to some permanent masonry buildings. Mr. Norris was directed to connect these with the Principal Station of Mangalore, and found its height thereby to be 186 feet above mean sea level: the trigonometrical value derived from Madras is 196 feet, and therefore a closing error of 10 feet has been generated in the heights of the Series.

Only a few angles now remained to be observed on the Madras Longitudinal Series; and the party was directed in 1872-73 to resume the Mangalore Meridional Series, to carry it south to its junction with the Madras Longitudinal Series and to complete the latter. This involved a large amount of work; but by entering the field early and pushing on with rapidity, both Series were brought to a successful conclusion. Further Major Branfill took a complete set of circumpolar

Season 1872-73.

PERSONNEL.

Major B. R. Branfill, Deputy Supt., 2nd Grade.  
 Lt. J. R. McCullagh, R.E., Asst. Supt., 1st "  
 Mr. J. W. Mitchell, Asst. Surveyor, 1st Grade.  
 " O. V. Norris, " 2nd "  
 " C. D. Potter, " "  
 " E. W. Lasseron, " 3rd "

star observations for azimuth at Mangalore to  $\alpha$  Ursæ Minoris at Western Elongation, a second 24-inch theodolite having been sent round by steamer from Calcutta for the purpose, which was returned on conclusion of the observations.

On the completion of the South-East Coast Series in 1879-80 in the vicinity of Madras, Colonel Branfill added two pentagons to the Madras Longitudinal Series, in order to provide stations, as near as practicable to the Madras Observatory, at which astronomical observations for azimuth might be taken, partly for the verification of the azimuth and partly to throw light on the probable amount of the local attraction in the direction of the prime vertical on the coast line. Azimuths were observed at St. Thomas's Mount and at Injambákam Stations.

On the completion of the Simultaneous Reduction of the Southern Trigon it was found that the undermentioned errors had been actually dispersed over the two sections of the Madras Longitudinal Series:—

Section W. of the Great Arc Meridional Series.

In Latitude	...	...	...	+ 0"·080
„ Longitude	...	...	...	— 0·010
„ Azimuth	...	...	...	+ 0·141
„ Side		Log feet		— 0·000, 0014,7 = 0·22 of an inch per mile.

Section E. of the Great Arc Meridional Series.

In Latitude	...	...	...	— 0"·051
„ Longitude	...	...	...	— 0·019
„ Azimuth	...	...	...	+ 1·341
„ Side		Log feet		— 0·000, 0006,4 = 0·09 of an inch per mile.

*Secondary Triangulation.*

During seasons 1865-66 and 1866-67 scarcely any secondary work was executed beyond the fixing the positions of a few points from principal stations.

In April and May 1868 a first class Secondary Series, starting from the side Adhibëtta-Náráyandurga and fixing the positions of points in and about Sëringapatam and Mysore, was executed by Mr. A. Christie, Sub-Assistant Surveyor 3rd grade, with a 12-inch theodolite and luminous signals. Horizontal and vertical angles were taken at 10 stations fixing the positions of 30 stations and points and the heights of 13 of them.

In 1871-73, a considerable amount of secondary triangulation was thrown off from the principal sides, by which the positions of about 130 conspicuous points were determined. And between the years 1871-74, a first class Secondary Series of 13 triangles was carried southwards by Mr. Mitchell from the side Muchil H.S.—Pushpagiri H.S., along the coast for a distance of 140 miles to Kurnád h.s.—Anangamalai h.s. (near Pönáni) the northernmost side of Colonel Lambton's minor triangulation from Cape Comorin along the Malabar Coast. As however there was some doubt of the identity of Kurnád with that of Colonel Lambton, the tract was revisited early in 1880 by Colonel Branfill who effected a satisfactory junction by actually finding and connecting by triangulation the station marks at Pönmalai and Álatúr, both of which he believed to be identical with Colonel Lambton's stations.

*Prepared for Press, September 1885.*

*Passed through Press, April 1887.*

}

S. C. BURRARD.

*Note on the connection of the Madras Observatory with the Principal Triangulation.*

The origin to which Colonel Lambton referred the Longitudes of all stations of the triangulation of Southern India was the centre of the Meridian Circle of the Madras Astronomical Observatory; and its longitude as determined by observations taken in 1815, was accepted as 80° 17' 21" East of Greenwich. But about the year 1840 Colonel Everest adopted a point in his observatory at Kaliánpur in Central India as a second origin of Longitude, its value 77° 41' 44"·75 East of Greenwich being obtained as follows:—

The Longitude of Madras Observatory ... ..	80° 17' 21"
Dámargída West of the Madras Observatory by Colonel Lambton's Operations ... ..	— 2 34 49·64
Kaliánpur West of Dámargída by Colonel Everest's Operations ... ..	— 0 0 46·61
The Longitude of Kaliánpur Observatory ... ..	77 41 44·75*

Much of the triangulation employed in the deduction of this value of longitude had been executed with inferior instruments, and was based on the primary chain-measured base-lines of this Survey: all this has since been revised, and also computed in terms of the modern base-lines, measured with the Colby apparatus of compensation bars and microscopes. But prior to the completion of this revision, the final reduction of the principal triangulation was undertaken; and it was found necessary to commence with that of the North-West Quadrilateral for reasons which are stated in Sections 2 and 7 of Chapter I of Vol. II of the *Account of the Operations &c.* This led to the retention of Colonel Everest's adopted origin of Kaliánpur as the origin of Longitudes.

The final reduction of all the principal triangulation between Kaliánpur and Madras has now been effected, and it is desirable to shew the steps that were taken to re-connect the Madras Observatory by modern triangulation and to ascertain its longitude relatively to Kaliánpur as adopted by Colonel Everest.

In the first place it is desirable to make certain as far as possible that there is no mistake about the position, as at present assumed, of Lambton's origin of longitude. The evidence

---

\* See Section 3, Chapter XI, Volume II of the *Account of the Operations of the Great Trigonometrical Survey of India.*

is unfortunately very meagre, but such as exists is here given. Major (now Colonel) B. R. Branfill—who effected the modern connection—writes to the Superintendent G. T. Survey under date 12th September 1871 :—“ As I could obtain no documentary evidence on the “ subject, I accepted Mr. Pogson’s (the Government Astronomer’s) assurance that the centre “ of the Meridian Circle was the point to connect, as the origin of the Astronomical Longitude ; “ and it was in all probability the same point that had previously been used for the same “ purpose, and therefore most likely the point referred to by Colonel Lambton.”

In 1873 Captain (now Major General) W. M. Campbell, R.E., being at Madras, was requested by the Superintendent G. T. Survey to make further enquiries, and he replied as follows :—“ The present Meridional Circle is *probably* on the same meridian as the old one, “ which was the origin of Lambton’s longitudes, and cannot be more than 6 or 7 inches to “ one side or the other. It is erected in the same building and the old meridional “ aperture is used, but widened from 12 to 24 inches. The only doubt is whether this “ widening is all to one side or on both equally, on which point there is no documentary “ evidence forthcoming ; but it is reasonable to suppose, and moreover the walls shew some “ evidence, that the latter was the course adopted. In any case the error can only amount “ to about 6 inches.” This evidence, for want of better, has been accepted as decisive.

In order to re-establish the connection between the Meridian Circle and the modern triangulation, the station named Madras Dome Observatory Station, or xxxvii, was first established on the roof of the Government Astronomer’s dwelling house, which is within the same enclosure as the observatory containing the Meridian Circle, and was connected with the Principal Triangulation of the Madras Longitudinal Series.

On the 2nd June 1865, with the assistance of Mr. Pogson, Government Astronomer, who set the Meridian Circle to the nadir point by intersecting the reflection of the wires in mercury, Major Branfill established a point plumb over the centre of the eye-piece of the instrument duly collimated, and transferred it to the shutter of the meridian aperture in the roof when shut, the shutter being rigid and not likely to warp or alter its position at rest. The operation when complete was repeated and the position of the mark cut into the surface of the shutter was found satisfactorily correct.

From this point a base-line was measured in the observatory compound in a direction S. by E. closing on a very large register peg. Two 2-foot Gunter’s scales were first laid in the line (at 86° F.) and then the rest was measured with three 10-foot teak-wood bars, using plummet and hair line to lay the bars exactly. Eight sets of bars were laid making a distance of  $8 \times 3 \times 10 + 4$  feet from the centre of the Meridian Circle.

The teak-wood bars were compared with a standard 10-foot bar and their mean length found to be 10·0018 feet. Hence the length of the base was

$$244 + \cdot 0018 \times 24 + \cdot 0011 \text{ (the correction to brass scales at } 86^\circ \text{ to reduce to } 62^\circ \text{ Fah.)} \\ = 244\cdot 0443 \text{ feet.}$$

Angular observations were then taken at the three stations, Madras Dome Observatory with Troughton and Simms’ 24-inch Theodolite No. 1, the Register Peg with a 14-inch



theodolite, and the Meridian Circle Nadir Point with a 7-inch. The observations with the 7-inch were afterwards rejected and a supplemental angle used.

The angular measurements and their particulars are as follows:—

At the Dome Observatory Station (xxxvii), the angle between the Meridian Circle Nadir Point and the Register Peg Station, was  $47^{\circ} 12' 22''\cdot 0$ , being the mean of two measures, one on face left and one on face right. At the Register Peg Station the angle between the Dome Observatory Station (xxxvii) and the Meridian Circle Nadir Point, was  $55^{\circ} 50' 16''\cdot 7$ , being the mean of six measures, three on face left and three on face right. These angles together with the measured base furnished the data for the following calculation:—

STATION.	Observed Angles.	Angles for Computation.	DISTANCE.		
			Log. feet.	Feet.	Miles.
Meridian Circle Nadir Point	° ' "	° ' "			
Register Peg S.	55 50 16·7	55 50 16·7	2·4396252	275·19	·052
Madras Dome Obsy. (xxxvii)	47 12 22·0	47 12 22·0	2·3874610	244·04	·046

The two following angles were also measured at the Dome Observatory Station, (1) between Malaipedu (xxxvi) and the Meridian Circle Nadir Point,  $168^{\circ} 45' 26''\cdot 9$ ; and (2) between Chēmbedu (xxxv) and the Meridian Circle Nadir Point,  $121^{\circ} 47' 45''\cdot 5$ , each of these two angles being the mean of two measures, one on face left and one on face right, made with Troughton and Simms' 24-inch Theodolite No. 1. By the application of these two angles to the azimuths of Malaipedu and of Chēmbedu respectively at the Dome Observatory Station, the values  $247^{\circ} 29' 49''\cdot 3$  and  $247^{\circ} 29' 48''\cdot 6$ , of the azimuth of the Meridian Circle Nadir Point were obtained, the mean of which  $247^{\circ} 29' 49''\cdot 0$ , was employed in calculating the latitude and longitude of the Meridian Circle Nadir Point as given below:—

*Madras Meridian Circle.*

Latitude North ... .. 13° 4' 3"·11.  
Longitude East of Greenwich ... .. 80 17 21 ·51.

June, 1887.

W. H. C.

LAMBTON'S ORIGIN OF LONGITUDE.

NOTE.—In course of a recent examination of the records of Lambton's triangulation it has been discovered that the point hitherto assumed as the origin of Lambton's Longitude, *viz.*, the centre of the present Meridian Circle of the Madras Observatory, cannot be correct. It appears from the triangulation connecting it with the southern station of his Base-line at Madras, which still exists, that the origin of Longitude must have been 13 feet west and 6 feet south of the centre of the Meridian Circle.

October, 1890.

MADRAS LONGITUDINAL SERIES.

PRINCIPAL TRIANGULATION. ALPHABETICAL LIST OF STATIONS.

Adhibëtta . . . . .	XVII.	Halasúrbëtta . . . . .	XXXIX.
Adhúrbëtta . . . . .	XII.	(Of the Great Arc Meridional Series, Section 8° to 18°).	
Ammëdikal . . . . .	V.	Háltibëtta . . . . .	XV.
Anandalamalai . . . . .	XXXI.	Hemagiri . . . . .	XLIV.
Ánchëttidurga . . . . .	LVI.	(Of the Great Arc Meridional Series, Section 8° to 18°).	
(Of the Great Arc Meridional Series, Section 8° to 18°).		Hösúr . . . . .	L.
Ánúr . . . . .	VI.	(Of the Great Arc Meridional Series, Section 8° to 18°).	
Avirimodu . . . . .	XXXIX.	Injambákam . . . . .	XLV.
Ballamale . . . . .	IV.	Kailásgarh . . . . .	XXIX.
Bánatimaribëtta . . . . .	XLV.	Káriveri . . . . .	XXI.
(Of the Great Arc Meridional Series, Section 8° to 18°).		Kittávar . . . . .	VIII.
Bandapalle . . . . .	XVIII.	Kolar . . . . .	XLVIII.
Bangalore Base-line N.E. End . . . . .	LIII.	(Of the Great Arc Meridional Series, Section 8° to 18°).	
(Of the Great Arc Meridional Series, Section 8° to 18°).		Köppabëtta . . . . .	LVIII.
Bangalore Base-line S.W. End . . . . .	LII.	(Of the Great Arc Meridional Series, Section 8° to 18°).	
(Of the Great Arc Meridional Series, Section 8° to 18°).		Krishnamakönda . . . . .	XXII.
Bannergatta . . . . .	XLII.	Kudurëmukha . . . . .	III.
(Of the Great Arc Meridional Series, Section 8° to 18°).		Kurudamale . . . . .	XIX.
Batinkönda . . . . .	XXVII.	Kurumkota . . . . .	XXXII.
Bhúpatamma . . . . .	XLIX.	Madras Dome Observatory . . . . .	XXXVII.
(Of the Great Arc Meridional Series, Section 8° to 18°).		Malaipedu . . . . .	XXXVI.
Chaudanhalli . . . . .	XVI.	Manamai Kunnatúr . . . . .	XL.
Chëmbedu . . . . .	XXXV.	Mandúr . . . . .	LIV.
Desáni . . . . .	XI.	(Of the Great Arc Meridional Series, Section 8° to 18°).	
Devarabëtta . . . . .	LV.	Mángád . . . . .	XLIII.
(Of the Great Arc Meridional Series, Section 8° to 18°).		Mangalore . . . . .	II.
Devarakönda . . . . .	XXIII.		

## MADRAS LONGITUDINAL SERIES.

## PRINCIPAL TRIANGULATION. ALPHABETICAL LIST OF STATIONS—(Continued).

Mariyálam . . . . .	LVII.	Pullúr . . . . .	XXX.
(Of the Great Arc Meridional Series, Section 8° to 18°).		Pushpagiri . . . . .	IX.
Mávandúr . . . . .	XXXIV.	Rámadevarabëttá . . . . .	XL.
Mijár . . . . .	I.	(Of the Great Arc Meridional Series, Section 8° to 18°).	
Muchil . . . . .	VII.	Rangaswámibëttá . . . . .	XLIII.
Mugali . . . . .	XXV.	(Of the Great Arc Meridional Series, Section 8° to 18°).	
Muruktöre . . . . .	XXVIII.	Sátanhalli . . . . .	X.
Nagari . . . . .	XXXIII.	Satghur . . . . .	XXVI.
Nandigudi . . . . .	XLVII.	Savandurga . . . . .	XLI.
(Of the Great Arc Meridional Series, Section 8° to 18°).		(Of the Great Arc Meridional Series, Section 8° to 18°).	
Nanmangalam . . . . .	XLII.	St. Thomas's Mount . . . . .	XLIV.
Náráyandurga . . . . .	XIV.	Tirthapalli . . . . .	XLVI.
Nughallibëttá . . . . .	XIII.	(Of the Great Arc Meridional Series, Section 8° to 18°).	
Patikönda . . . . .	XXIV.	Tirumani . . . . .	XXXVIII.
Pudupák . . . . .	XLI.	Turukungutta . . . . .	LI.
		(Of the Great Arc Meridional Series, Section 8° to 18°).	
		Yërrakönda . . . . .	XX.

## MADRAS LONGITUDINAL SERIES.

## PRINCIPAL TRIANGULATION. NUMERICAL LIST OF STATIONS.

I	.	.	.	.	.	Mijár.	XLV	} Of the Great Arc Meridional Series, Section 8° to 18°.	.	.	Bánatimaribëtta.	
II	.	.	.	.	.	Mangalore.	XLVI		.	.	.	Tirthapalli.
III	.	.	.	.	.	Kudurëmukha.	XLVII		.	.	.	Nandigudi.
IV	.	.	.	.	.	Ballamale.	XLVIII		.	.	.	Kolar.
V	.	.	.	.	.	Ammëdikal.	XLIX		.	.	.	Bhúpatamma.
VI	.	.	.	.	.	Ánúr.	L		.	.	.	Hösúr.
VII	.	.	.	.	.	Muchil.	LI		.	.	.	Turukungutta.
VIII	.	.	.	.	.	Kittávar.	LII		.	.	Bangalore Base-line S.W. End.	
IX	.	.	.	.	.	Pushpagiri.	LIII		.	.	Bangalore Base-line N.E. End.	
X	.	.	.	.	.	Sátanhalli.	LIV		.	.	.	Mandúr.
XI	.	.	.	.	.	Desáni.	LV		.	.	.	Devarabëtta.
XII	.	.	.	.	.	Adhúrbëtta.	LVI		.	.	.	Ánchëttidurga.
XIII	.	.	.	.	.	Nughallibëtta.	LVII		.	.	.	Mariyálam.
XIV	.	.	.	.	.	Náráyandurga.	LVIII		.	.	.	Köppabëtta.
XV	.	.	.	.	.	Háltibëtta.	XVIII		.	.	.	Bandapalle.
XVI	.	.	.	.	.	Chaudanhalli.	XIX		.	.	.	Kurudamale.
XVII	.	.	.	.	.	Adhibëtta.	XX		.	.	.	Yërrakönda.
XXXIX	.	.	.	.	.	Halasúrbëtta.	XXI		.	.	.	Káraveri.
XL	} Of the Great Arc Meridional Series, Section 8° to 18°.	.	.	.	.	Rámadevarabëtta.	XXII		.	.	.	Krishnamakönda.
XLI		.	.	.	.	Savandurga.	XXIII		.	.	.	Devarakönda.
XLII		.	.	.	.	Bannergatta.	XXIV		.	.	.	Patikönda.
XLIII		.	.	.	.	Rangaswámibëtta.	XXV		.	.	.	Mugali.
XLIV		.	.	.	.	Hemagiri.	XXVI		.	.	.	Satghur.

## MADRAS LONGITUDINAL SERIES.

## PRINCIPAL TRIANGULATION. NUMERICAL LIST OF STATIONS—(Continued).

XXVII . . . . .	Batinkönda.	XXXVII . . . . .	Madras Dome Observatory.
XXVIII . . . . .	Muruktöre.	XXXVIII . . . . .	Tirumani.
XXIX . . . . .	Kailásgarh.	XXXIX . . . . .	Avirimodu.
XXX . . . . .	Pullúr.	XL . . . . .	Manamai Kunnatúr.
XXXI . . . . .	Anandalamalai.	XLI . . . . .	Pudupák.
XXXII . . . . .	Kurumkota.	XLII . . . . .	Nanmangalam.
XXXIII . . . . .	Nagari	XLIII . . . . .	. Mángád.
XXXIV . . . . .	Mávandúr.	XLIV . . . . .	St. Thomas's Mount.
XXXV . . . . .	Chěmbedu.	XLV . . . . .	. Injambákam.
XXXVI . . . . .	Malaipedu.		

---

## MADRAS LONGITUDINAL SERIES.

## DESCRIPTION OF PRINCIPAL STATIONS.



The Principal Stations comprised in the eastern and western sections of this Series as well as all the stations of the Great Arc Meridional Series which are common to this Series, with certain exceptions noted below, are situated on hills or rising ground. Each consists of a solid, circular, isolated pillar of masonry about  $3\frac{1}{2}$  feet in diameter and varying from 1 to 10 feet in height. In the centre and upper surface of the pillar a mark (circle and dot) engraved on stone is embedded in the normal of one or more similar marks inserted within the pillar, the lowermost in several instances being cut on the rock *in situ*. Around the pillar, and level with its surface, a solid platform of stones or of earth and stones, about 16 feet square, has been built for the accommodation of the observatory tent. The exceptions are the stations numbered II (Mangalore), LII, LIII (stations defining the ends of the Bangalore base-line), XXXV (Chēmbedu) and XXXVII (Madras Dome Observatory), each of which will be found fully described hereafter.

All the stations—except XXXV and XXXVII of this Series and LII and LIII of the Great Arc Meridional Series—have their upper marks protected by small pillars of masonry in the form of a frustum of a pyramid, 28 inches square at base, 20 inches at top and  $3\frac{1}{2}$  feet in height. These protecting pillars carry sufficiently accurate marks on their upper surfaces for Topographical and Revenue Survey purposes as shewn at page 74 of Volume II of the *Account of the Operations &c.* At station XLIV (St. Thomas's Mount) the theodolite was set up on a well-braced wooden trestle, 24 feet in height, the observatory tent being accommodated on a timber scaffolding erected around the trestle; this station has therefore been called a trestle station in keeping with the procedure followed in the description of the stations of the South-East Coast Series of the Southern Trigon.

The following descriptions have been compiled from those given by the officers who executed the Series, supplemented in a few instances, as regards adjacent villages, from the Madras Revenue and the Mysore Topographical Survey maps (scale 1 inch = 1 mile) of the country traversed, and corrected, so far as the local sub-divisions in which the several stations are situated, from the Annual Returns furnished by the district officers to whose charge the stations are committed.

The orthography is in accordance with the official lists published under the orders of the Government of India with this difference that the long *é* is shewn without an accent, in conformity with the rules for spelling names in Northern India, and the short *e* as *è*, and *o* is treated in the same manner. Final vowels and those in well-known terminals are unaccented. When the popular spelling of a name has been accepted by Government, its correct transliteration is given in parenthesis where the name occurs for the first time.

I. Mijár Hill Station, lat.  $13^{\circ} 3'$ , long.  $74^{\circ} 59'$ —observed at in 1872—is situated on one of a group of low hills, rising to a height of about 500 feet above the surrounding country and locally known by the

name of Nishánigudda. The road to Mulki leaving the main road from Mangalore (Mangalúr) to Múdu Bidare, about 4 miles short of the latter place, passes close to the foot of the hill. The ascent is from the village of Pútagi, the station being easily reached in half an hour from the point where the path leaves the road. The station is about 4 miles W.N.W. of Mijár, and  $4\frac{1}{2}$  miles W. by S. of Múdu Bidare. It is close to the site of "Meejar H.S." of Colonel Lambton's triangulation. The station is in the lands of the village of Mijár, táluk Mangalore, district South Canara (Kannada).

The station consists of a platform enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains two mark-stones, one in the upper surface of the pillar and the other 1.40 feet below it. The azimuths and estimated distances of the circumjacent places are:—Tarapári (cross of the Roman Catholic Chapel)  $104^{\circ} 46'$ , miles  $3\frac{1}{2}$ ; Pútagi  $200^{\circ}$ , mile 1; Járanthaya (temple)  $17^{\circ} 5'$ , miles 2; and Múdu Bidare (temple)  $254^{\circ} 3'$ , miles 4.

II. Mangalore or Kodeyal Bandar Station, lat.  $12^{\circ} 52'$ , long.  $74^{\circ} 53'$ —observed at in 1872 and 1873—is situated on the high ground or hill of laterite overlooking the sea and a portion of the town, 45 feet N.E. by E. of the Light-house centre, and 200 feet W. of the Idgáh supposed to be the building fixed by Colonel Lambton's triangulation. The ground here is about the highest in the place, being 175 feet above the sea, and is nearly a mile inland from the river or backwater. The station is in the lands of Kodeyalbail village, táluk Mangalore, district South Canara.

The station which was surrounded by a temporary wooden platform, consists of a hollow pillar 6 feet square at base and 11.3 feet high, built of laterite stone set in mortar, which contains three mark-stones, the lowest about the ground level engraved on a piece of granite set in the foundation, the second in the chamber of the pillar 0.56 of a foot above the first, and the third on the surface of the pillar 11.29 feet above the first. When visited in 1873 for taking Circumpolar Star Observations for azimuth, the station was found in good preservation and no alteration appears to have been made from the absence of any remarks in the original records. The pillar for the Zenith Sector, employed in the Latitude Observations in 1872, is 6 yards east, and the site occupied by the Transit Telescope for the Electro-Longitude Observations in 1873, is 63 feet south of the station mark. The azimuths and distances of the circumjacent places are:—Kadri (pagoda in the suburbs of the town)  $216^{\circ} 42'$ , miles  $1\frac{1}{2}$ ; Kadri (cross of the Roman Catholic Chapel)  $123^{\circ} 39'$ , yards 300; Basil Mission Church (centre of the belfry)  $297^{\circ} 56'$ , yards 500; Idgáh (N. minaret)  $270^{\circ} 6'$ , yards 66; Idgáh (S. minaret)  $281^{\circ} 52'$ , yards 66; and Light-house (N.E. corner of Light-house buildings)  $55^{\circ} 39'$ , feet 22. *Note*:—The last three distances were obtained by actual measurements.

III. Kudurémukha Hill Station, lat.  $13^{\circ} 8'$ , long.  $75^{\circ} 18'$ —observed at in 1872 and 1873—is situated on the highest point of the lofty group of peaks, which stands out prominently from the Western Gháts; the peak on which the principal station is fixed is called "Funk Point" by the district officers and the residents of Mangalore, the former of whom have built a bungalow about a mile E.N.E., some twenty minutes' walk from the station. Another peak,  $\frac{2}{3}$  of a mile to the E. by S. of the present station, called "Mukh Head" was originally adopted as a station and built upon but was abandoned as being unsuitable for connecting the Mangalore Meridional and the Madras Longitudinal Series. The peak called Pándukal by the Natives and "Midge Point" by the Europeans, is a mile W. by N. and has been fixed as a secondary station and marked by a circle and dot engraved on the rock. These three peaks are on the ridge or watershed of the mountain which is the boundary between South Canara and Mysore (Maisúr). The station is most easily reached from the town of Bellat-angadi by a cart road  $7\frac{1}{2}$  miles to Nágúr at the E.S.E. foot of the mountain, whence the ascent, about 5,600 feet, is made by a well traced bridle path of  $12\frac{1}{2}$  miles to the bungalow above mentioned. The station is in the lands of the village of Samse, táluk Vástára, district Kadúr.

The station consists of a platform of stones and earth 16 feet square, enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains two mark-stones, one in the upper surface of the pillar and the other 1.21 feet below it. When visited in 1873, it is presumed from the absence of any remarks in the original records that the station was found in good order and no alteration in its construction was made. The directions and distances of the circumjacent villages are:—Allat-angadi S.S.W., miles  $6\frac{1}{2}$ ; Bangavádi E.S.E., miles  $7\frac{1}{2}$ ; Jamalabad S. by E., miles  $7\frac{1}{2}$ ; and Bangár E. by N., miles  $2\frac{1}{2}$ .

IV. Ballamale Hill Station, lat.  $12^{\circ} 49'$ , long.  $75^{\circ} 8'$ —observed at in 1872—is situated on one (though not the highest) of a group of hills, about  $6\frac{1}{2}$  miles S.S.E. of the large villages of Bantvál and Páni Mangalúr on the high road from Mangalore to Mercara (Madikeri) and on the right bank of the Netrávati river. It is approached from the village of Vírakumba on the road from Páni Mangalúr to Kásaragod, known as the Cannanore (Kannúr) road, at a distance of about 5 miles from the former place and 3 miles from where this road leaves the main road from Mangalore to Mercara. The ascent, some 640 feet, from the village of Vírakumba is a short but steep climb of about twenty minutes. There are numerous hamlets scattered round the base of the hill, at short distances, belonging to the villages of Vírakumba, Kalinja and Arëbëtta. The station is close to the site once occupied by "Bullamully H.S." of Colonel Lambton's triangulation, and is in the lands of the village of Vírakumba, táluk Kásaragod, district South Canara.

The station consists of a platform of stones and earth, enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains two mark-stones, one in the upper surface of the pillar and the other 1·98 feet below it. The azimuths and estimated distances of the circumjacent places are:—Kaliuja  $25^\circ$ , miles  $1\frac{1}{4}$ ; Arëbëtta  $168^\circ$ , miles  $1\frac{1}{4}$ ; Ananthári  $253^\circ$ , miles  $1\frac{1}{4}$ ; and Bantvål (travellers' bungalow)  $151^\circ 49'$ , miles  $6\frac{3}{4}$ .

V. Ammëdikal Hill Station, lat.  $12^\circ 59'$ , long.  $75^\circ 33'$ —observed at in 1872—is situated on the highest boulder of the hill so called which forms a prominent and conspicuous feature of this portion of the Western Ghâts, rising as it does from the low country and commanding a wide and extensive view of the sea on the west to far over the Mysore plateau on the east. The ascent to the station from the village of Miyár is a stiff climb of about five hours, the last 1,500 feet being not only very difficult but in places very dangerous. The station is in the lands of the village of Miyár, táluk Uppinangadi, district South Canara.

The station consists of a platform of stones and earth 16 feet square, enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains two marks, one engraved on the rock *in situ* and the other 1·17 feet above it on a stone imbedded in the upper surface of the pillar. The azimuths and estimated distances of the circumjacent villages are:—Puláji  $124^\circ$ , miles 3; Neria  $111^\circ$ , miles  $3\frac{1}{4}$ ; Púdubet  $81^\circ$ , miles  $4\frac{1}{4}$ ; Mulla  $59^\circ$ , miles  $2\frac{1}{4}$ ; Shishala  $6^\circ$ , miles  $3\frac{1}{4}$ ; Nálmalai  $156^\circ$ , miles  $2\frac{1}{4}$ ; and Miyár  $75^\circ$ , miles  $3\frac{1}{4}$ .

VI. Ánú or Rangaswámigiri Hill Station, lat.  $13^\circ 18'$ , long.  $75^\circ 42'$ —observed at in 1872 and 1873—is situated on the southernmost peak of the Madlakal group of hills, 2 or 3 miles W.N.W. of Ánú on the road from Múdagëre to Yëdëhalli, 8 miles W. of the town of Chikmagalúr, and  $4\frac{3}{4}$  miles N.W. of Vastára. A cart road from Chikmagalúr and Vastára runs to Ánú, whence the ascent to the station of about 3,000 feet is made by a foot and bridle path through the Basgodu coffee estate. The station is in the lands of the village of Hanjiravalli, táluk Chikmagalúr, district Kadúr.

The station consists of a platform of stones and earth 16 feet square, enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains two marks, one engraved on the rock *in situ* and the other 2·23 feet above it on a stone imbedded in the upper surface of the pillar. When visited in 1873, the station was found in a good state of preservation and no alteration in its construction appears to have been made. The azimuths and estimated distances of the circumjacent places are:—Chikmagalúr (travellers' bungalow)  $269^\circ 22'$ , miles  $8\frac{1}{4}$ ; Ánú (temple 120 yards E. of the road)  $285^\circ 27'$ , miles  $2\frac{1}{4}$ ; Baigúr (centre of the temple)  $103^\circ 44'$ , miles  $1\frac{1}{4}$ ; Mávinguri  $23^\circ$ , mile  $\frac{1}{4}$ ; and Koliganhalli  $303^\circ$ , mile  $\frac{1}{4}$ .

VII. Muchil Hill Station, lat.  $12^\circ 37'$ , long.  $75^\circ 22'$ —observed at in 1872—is situated on the eastern and higher point of the hill locally called Muchilpannai or Muchilgudda, about a mile to the N. of the village of Kanakmajil on the high road from Mangalore to Mercara. The hill is situated at the trijunction of the village lands of Kanakmajil, Súlia and Kurumarika. The ascent of about 900 feet is made from a point on the high road near Kanakmajil (the nearest village to the station) by a circuitous though moderately easy path leading through jungle. The station is in the lands of the village of Kanakmajil, táluk Kásaragod, district South Canara.

The station consists of a platform of stones and earth, enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains two mark-stones, one in the upper surface of the pillar and the other 1·30 feet below it. The directions and distances of the circumjacent villages are:—Súlia S.E., miles 6; Balari N.E., miles  $4\frac{1}{4}$ ; Uddúr S.W., miles  $6\frac{3}{4}$ ; and Esvaramangalam W., miles  $4\frac{3}{4}$ .

VIII. Kittávar Hill Station, lat.  $13^\circ 4'$ , long.  $75^\circ 50'$ —observed at in 1872—was on the eastern half of the roof of a small temple dedicated to Vírabhadra Devar, on the summit of the hill locally known as Kittávaradagatta or Shyalvaradagatta. The temple is  $1\frac{1}{3}$  miles N. by W. of the Hobli village Arëhalli, 8 miles S.W. by S. of the town of Belúr, and  $4\frac{3}{4}$  miles W. of the road from Saklespur to Belúr. The station is in the lands of the village of Anugatta, táluk Belúr, district Hássan.

The station consisted of a solid, circular pillar of masonry  $3\frac{1}{2}$  feet in diameter, built on the roof of the front or eastern room of the temple, and contained two mark-stones, one fixed on the roof and the other 2·71 feet above it and flush with the upper surface of the pillar: a mark was also engraved on the stone floor of the eastern room 11·04 feet below and in the normal of the upper mark in the surface of the pillar. When visited in 1889, by the Levelling Party, the roof of the temple on which the station pillar had stood was found entirely fallen in. The directions and distances of the circumjacent villages are:—Död Shyalvara N.W., mile 1; Kittávar E., mile  $\frac{1}{2}$ ; Kankuppe N.E. by N., miles  $1\frac{1}{4}$ ; and Basavan shrine N. by W., yards 54.

IX. Pushpagiri or Phúpgiri Hill Station, lat.  $12^\circ 40'$ , long.  $75^\circ 44'$ —observed at in 1872—is situated on the top of the conspicuous mountain on the northernmost frontier of Coorg (Kodagu), overlooking the Bisile Ghát, and about  $5\frac{1}{2}$  miles E. of Subrahmanya, after which large village it is also known. The station is 15 yards S. of the southern corner of the rude temple enclosure surrounding the rough, loose stone shrine dedicated to Sánt-Malesvara, and 40 yards S.W. by S. of the beacon pile on which once a year (on a Saturday in



January) a light is burnt. This is close to the point "Soobramanee" of Colonel Lambton's triangulation. The station is approached from Vangúr temple on the road from Ködlipet and Saklespur to the Bisile pass in about four hours' walk, or in a five hours' walk from Somavarpet in Coorg to Bidhalli and Hiridigadde at the N.E. by E. foot of the mountain, whence the ascent can be made in three hours without much difficulty by an old and improved elephant track through a dense and extensive forest along the N.E. foot of the mountain. The station is in the lands of the village of Kumbarhalli, táluk Nanjarápatna, district Coorg.

The station consists of a platform of stones and earth, enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains two mark-stones, one in the upper surface of the pillar and the other 1·83 feet below it. The azimuths and estimated distances of the circumjacent villages are:—Kumbarhalli  $261^\circ$ , miles 5; Bidhalli  $259^\circ$ , miles 3; and Hegaramani  $259^\circ$ , miles  $1\frac{1}{4}$ .

X. Sátanhalli Hill Station, lat.  $12^\circ 51'$ , long.  $76^\circ 15'$ —observed at in 1871—is situated on the highest of the group of hills, about  $4\frac{1}{2}$  miles N.W. of Narsipur, 2 miles N. of the Hemávati river, a little below the Srirámadevara anicut (recently restored), and  $1\frac{1}{2}$  miles N.W. by N. of the village of Bëttad Sátanhalli. The hill rises about 700 to 800 feet above the surrounding country, and is ascended from the village of Bëttad Sátanhalli. The station is in the lands of the village of Bëttad Sátanhalli, táluk Hõle Narsipur, district Hássan.

The station consists of a platform of stones and earth about 16 feet square, enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains two mark-stones, one in the upper surface of the pillar and the other 2·13 feet below it. The azimuths and distances of the circumjacent places are:—Mávinkëre (temple near the bank of the Hemávati river)  $77^\circ 27'$ , miles 3; Narsipur (Channel Superintendent's bungalow)  $838^\circ 12'$ , miles  $4\frac{1}{2}$ ; Halëkote (temple)  $92^\circ 42'$ , miles  $2\frac{1}{2}$ ; Shingaranhalli  $221^\circ$ , miles  $1\frac{1}{2}$ ; Hangarhalli  $98^\circ$ , miles  $3\frac{1}{2}$ ; and Srirámadevara anicut (pillar on the E. bank of the channel, N. side)  $31^\circ 1'$ , miles  $2\frac{1}{4}$ .

XI. Desáni or Döddachinginabëtta Hill Station, lat.  $13^\circ 17'$ , long.  $76^\circ 12'$ —observed at in 1871—is situated on the highest boulder of the northernmost peak of the Desáni group of hills,  $12\frac{1}{2}$  feet S. of the precipice, about a mile N.W. by N. and 800 feet above the village of Desáni, 2 miles N.E. of Undiganhál, and  $7\frac{1}{2}$  miles W.S.W. of Arsikëre at the junction of four roads. The higher (but not the highest) point of the group—the site of Colonel Lambton's station of "Daesauneegooda S."—was occupied at first but was abandoned in consequence of Sátanhalli station being invisible from it. The station is in the lands of the village of Desáni, táluk Arsikëre, district Hássan.

The station consists of a platform enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains two marks, one engraved on the rock *in situ* and the other 2·13 feet above it on a stone imbedded in the upper surface of the pillar. The azimuths and distances of the adjacent places are:—Hárnhalli (S.E. corner of the high bastion of the fort)  $294^\circ 3'$ , miles  $5\frac{1}{2}$ ; Matád Hõshalli  $196^\circ$ , miles  $1\frac{1}{2}$ ; Shinganhalli  $171^\circ$ , miles  $1\frac{1}{2}$ ; Kurbarhalli  $140^\circ$ , miles  $1\frac{1}{2}$ ; Handrál  $94^\circ$ , miles  $1\frac{1}{2}$ ; and Jyávagal (on the high road from Belúr to Bánávar)  $104^\circ$ , miles  $6\frac{1}{2}$ .

XII. Adhúrbëtta Hill Station, lat.  $12^\circ 29'$ , long.  $76^\circ 19'$ —observed at in 1871—is situated on a stony ridge or hill about 200 feet high, about 2 miles S. of the Hõsúr ferry on the Cauvery (Káveri) river,  $\frac{1}{2}$  mile N. of the road from Yëdatõre to Bëttadpur, and 8 miles W. of the former. The station is in the lands of the village of Halëyúr Bedarhalli, táluk Yëdatõre, district Mysore.

The station consists of a platform of stones and earth, enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains two mark-stones, one in the upper surface of the pillar and the other 2·58 feet below it. The azimuths and distances of the circumjacent places are:—Kuppe (old kasba)  $62^\circ$ , mile 1; Döddakopal  $98^\circ$ , miles 1·12; Halëyúr  $121^\circ$ , mile 0·9; Sálakopal  $134^\circ$ , miles 6·1; Hõsúr  $156^\circ$ , miles  $1\frac{1}{2}$ ; Melúr (tall white temple)  $195^\circ 49'$ , miles 7; and the anicut over the Cauvery river (the origin of the Mirle channel)  $207^\circ 46'$ , miles 1·75.

XIII. Nughallibëtta Hill Station, lat.  $13^\circ 2'$ , long.  $76^\circ 31'$ —observed at in 1868 and 1871—is situated on a small hill of bare rock, rising about 130 to 140 feet above its base and crowned by a temple dedicated to Jogi Náth, and about  $\frac{1}{2}$  a mile W. of a road from Nughalli village going northward. The station mark is 38 feet S. of the south Vimana of the temple. The station is in the lands of the village of Nughalli, táluk Chanarápatna, district Hássan.

The station consists of a platform enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains two marks, one engraved on the rock *in situ* and the other 1·0 foot above it on a stone imbedded flush with the surface of the pillar. When visited in 1871, the station was found in a state of perfect preservation and no alteration in its construction appears to have been made from the absence of any remarks in the original records. The azimuths and perambulated distances of the adjacent places are:—Nughalli (principal spire of a temple on the W. side of the fort)  $359^\circ 2'$ , miles 1·09; Jambúr (temple)  $20^\circ 6'$ , miles 2·7; and Dásapur  $283^\circ 51'$ , miles 1·2.

XIV. Náráyandurga Hill Station, lat.  $12^\circ 43'$ , long.  $76^\circ 38'$ —observed at in 1868 and 1871—is situated

on the well-known hill of this name, which rises about 700 feet above the general level of the ground and is the highest in the neighbourhood; its summit is fortified and occupied by a temple and several old buildings. The station is 42 feet E. of the temple and 12 feet W. of the large stone shaft in front of the same temple. The ascent to the station, much of which is over steep, bare rock, is not very easy and can only be made from the south-western side, from the small village of Ráyasamudra nearly  $\frac{3}{4}$  of a mile and at the foot of the hill. The station is in the lands of the village of Sindhugatta, táluk Attikuppa, district Mysore.

The station consists of a platform of stones and earth, enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains two marks, one engraved on the rock *in situ* and the other 1·0 foot above it on a stone imbedded in the upper surface of the pillar. When visited in 1871, the station was found in good order and no change in its construction appears to have been made. The azimuths and distances of the circumjacent places are:—Attikuppa (ridge of the roof of the travellers' bungalow)  $59^{\circ} 20'$ , miles 7·61; Attikuppa (P.W.D. bungalow)  $60^{\circ} 47'$ , miles 7·6; Attikuppa (spire of the temple)  $64^{\circ} 25'$ , miles 7; Sindhugatta (fort in the village)  $64^{\circ} 19'$ , miles 2·80; and Kikkeri (fort)  $107^{\circ} 47'$ , miles 11·5.

XV. Háltibëtta Hill Station, lat.  $12^{\circ} 53'$ , long.  $76^{\circ} 49'$ —observed at in 1868—is situated on a hill about 500 feet above the general level of the country; a somewhat higher point is about 55 yards to the N. and is occupied by a small temple called Malesvara. The easiest ascent is from the west, on which side the high road from Mysore to Túmkúr runs within about  $\frac{3}{4}$  of a mile of the foot of the hill. There are two small villages, Bairanhalli and Chitnahalli, close to the foot of the hill on the western side, but the station takes its name from the village of Hálti to the east. The station is in the lands of the village of Kanchinahalli, táluk Nágamangala, district Mysore.

The station consists of a platform of stones and earth, enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains two marks, one engraved on the rock *in situ* and the other 2·5 feet above it on a stone imbedded in the upper surface of the pillar. The directions and distances of the circumjacent villages are:—Nágamangala S. by W., miles  $4\frac{1}{2}$ ; Chitnahalli N.W. by N., miles  $1\frac{1}{2}$ ; Krishuapur N.N.E., miles 2; Mailáratna E. by N., miles  $2\frac{1}{2}$ ; and Belúr (on the high road) N.N.W., miles  $7\frac{1}{2}$ .

XVI. Chaudanhalli Station, lat.  $13^{\circ} 12'$ , long.  $76^{\circ} 43'$ —observed at in 1868—is situated on an open piece of rising ground about 2 miles N. by E. of the large village of Turuvekëre at the junction of three roads, and  $\frac{3}{4}$  mile E. of the road from Chiknáyakanhalli to Turuvekëre. The station is in the lands of the village of Chaudanhalli, táluk Tiptúr, district Túmkúr.

The station consists of a platform enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains two marks, one on a large stone imbedded in a mass of masonry 2 feet deep and  $6\frac{1}{2}$  feet square level with the general surface of the ground and the other 1 foot above it in the upper surface of the circular pillar. The directions and distances of the adjacent villages are:—Bevinhalli E.S.E., mile 1; Kalanjehalli E.N.E., mile  $\frac{1}{2}$ ; Chaudanhalli (on the high road) W. by S., mile  $\frac{3}{4}$ ; Muniyúr S.S.E., miles  $1\frac{1}{2}$ ; and Döddinhalli N.E., mile 1.

XVII. Adhibëtta Hill Station, lat.  $12^{\circ} 38'$ , long.  $76^{\circ} 49'$ —observed at in 1868—is situated on one of a short range of sharp-peaked hills, running nearly north and south and rising from 300 to 500 feet above the general level of the country. The one occupied by the station is the highest but one of the group and lies about 11 miles north-west of Mandya Railway Station. The station is on the boundary line of the villages of Hatna and Bëthalli. The highest summit of the hill is to the north, distant  $1\frac{1}{2}$  miles. The station is in táluk Mandya, district Mysore.

The station consists of a platform of stones and earth, enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains two marks, one engraved on the rock *in situ* and the other 2·0 feet above it on a stone imbedded in the upper surface of the pillar. The directions and distances of the circumjacent villages are:—Múdagandúr E.N.E., miles  $2\frac{1}{2}$ ; Dudda S.S.E., miles  $2\frac{1}{2}$ ; Bilianhalli S.W., miles  $3\frac{1}{2}$ ; Arkangiri W.N.W., miles  $4\frac{1}{2}$ ; and Mattegiri N., miles 4.

XXXIX. (*Of the Great Arc Meridional Series, Section  $8^{\circ}$  to  $18^{\circ}$* ). Halasúrbëtta Hill Station, lat.  $13^{\circ} 10'$ , long.  $77^{\circ} 40'$ —observed at in 1866, 1867 and 1870—is situated on the top of the singular, solid mass of rock  $\frac{1}{2}$  mile west of the main road from Bangalore (Bëngalúr) to Nundydroog (Nandidurga), and  $\frac{1}{2}$  mile N.N.W. of the 13th milestone from the former. It is identical with the station of "Allasoor" of Colonel Lambton's triangulation, the circle and dot mark of which was found engraved on the rock and adopted as the lower mark of the present station. The hill is of solid rock, and about 350 feet above the level of the adjacent ground. The station is in the lands of the village of Bëtta Halasúr, táluk Devanhalli, district Bangalore.

The station as built in 1866 consisted of a platform of stones and earth 10 feet square, enclosing a solid, circular and isolated pillar of masonry 2 feet high, which contains two marks, one engraved on the rock *in situ* and the other on a stone imbedded in the upper surface of the pillar. When visited in 1867 no change appears to have been made: in 1870 the station was found in good preservation and the platform was increased to 16 feet square. The directions and distances of the circumjacent villages

are:—Hálasúr W., mile  $\frac{3}{4}$ ; Chikjála (on the high road) N.E. by E., miles  $1\frac{1}{4}$ ; Bimangala S.E. by E., miles  $1\frac{1}{4}$ ; Hunsmáranhalli S., miles  $1\frac{1}{4}$ ; Sonappanhalli S.W., mile  $\frac{3}{4}$ ; and Bainhalli N., miles  $1\frac{1}{4}$ .

**XL.** (*Of the Great Arc Meridional Series, Section 8° to 18°*). Rámadevarabëtta Hill Station, lat.  $13^{\circ} 19'$ , long.  $77^{\circ} 12'$ —observed at in 1867 and 1870—is situated on a great boulder, the highest but one (the highest being inaccessible) on the summit of the well-known hill called Rámadevarabëtta (*i.e.* hill of the god Ráma) about 4 miles E.S.E. of the Civil Station of Týmúr. The hill is tolerably flat on the top and rises about 1150 feet above the plain lying between it and the road from Bangalore to Týmúr. This hill was originally selected as a hot weather retreat by the residents of Týmúr and a road was cut to its summit, but was abandoned in favor of another hill called Devaráyadurga, about 4 miles to the N.E. The station is in the lands of the village of Basavápatna, táluk and district Týmúr.

The station consists of a platform of earth and stones 1 foot high and about 16 feet square, enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains two marks, one engraved on a stone is imbedded in the upper surface of the pillar and the other below. When again visited in 1870, the station was found in good preservation and no alteration in its construction was made. The directions and distances of the circumjacent villages are:—Kyatsamudra (on the main road from Týmúr to Nelamangala) S.W. by W., miles  $1\frac{1}{2}$ ; Maidála E.S.E., miles  $1\frac{1}{4}$ ; and Devaráyapatna W.N.W., miles  $1\frac{3}{4}$ .

**XLI.** (*Of the Great Arc Meridional Series, Section 8° to 18°*). Savandurga Hill Station, lat.  $12^{\circ} 55'$ , long.  $77^{\circ} 20'$ —observed at in 1867—is situated on the highest point of the stupendous mass of rocks forming the well-known hill after which the station has been named; it lies about  $2\frac{1}{2}$  miles S. of the road from Bangalore to Mágadi and 5 miles S.E. by E. of the latter place. The station is 40 feet north of a small temple, and is identical with that of “Savendroog” of Colonel Lambton’s triangulation, the remains of a platform and circle and dot mark on the rock *in situ* being found and adopted. The station is in the lands of the village of Karisavandurga near Basavana temple, táluk Mágadi, district Bangalore.

The station consists of a platform of earth and stones  $1\frac{1}{2}$  feet high and about 16 feet square, enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains two marks, one on a stone imbedded in the upper surface of the pillar and the other below which was found engraved on the rock *in situ*. The directions and distances of the following villages are:—Virapur E.S.E., miles 2; Nágamangala S.W. by W., miles 3; and Matta S., miles  $2\frac{1}{4}$ .

**XLII.** (*Of the Great Arc Meridional Series, Section 8° to 18°*). Bannerhatta Hill Station, lat.  $12^{\circ} 49'$ , long.  $77^{\circ} 37'$ —observed at in 1866 and February and November 1867—is situated on a small rocky hill. This station is identical with that of “Bonnairegottah” of Colonel Lambton’s triangulation, the central pillar and mark and the remains of the platform of which were found and adopted. It lies about a mile W. of the 13th milestone on the road from Bangalore to Áněkal, about 10 miles S. of the fort and town of Bangalore. The station is in the lands of the village of Bannerhatta, táluk Áněkal, district Bangalore.

The station consists of a platform of stones and earth 2 feet high, enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains most probably two marks, though no mention of any is made in the original records. When visited in 1867 it is presumed from the absence of any remarks in the original records that the station was found in good order and that no alteration in its construction was made. The directions and distances of the circumjacent villages are:—Battanhalli W., miles  $1\frac{3}{4}$ ; Kariappanhalli S.E. by S., mile  $\frac{1}{2}$ ; Bairappanhalli S.E. by S., mile  $\frac{3}{4}$ ; Kěmpnáyakauhalli E.N.E., mile  $\frac{3}{4}$ ; and Jigani (on the high road) E.S.E., miles  $4\frac{1}{4}$ .

**XLIII.** (*Of the Great Arc Meridional Series, Section 8° to 18°*). Rangaswámibëtta Hill Station, lat.  $13^{\circ} 1'$ , long.  $77^{\circ} 1'$ —observed at in 1867 and 1868—is situated on the summit of the highest of a group of four or five small semi-detached rounded hills, about  $3\frac{3}{4}$  miles west of the large village of Kunigal on the high road from Maddúr to Týmúr. The station has been named from a well-known temple which stands on another hill of the same group about  $\frac{3}{4}$  of a mile to the north. The station is in the lands of the village of Gunágarh, táluk Kunigal, district Týmúr.

The station consists of a platform of stones and earth, enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains two mark-stones, one in the upper surface of the pillar and the other 1·90 feet below it. When visited in 1868, it is presumed from the absence of any remarks in the original records that the station was found in good order and that no alteration in its construction was made. The directions and distances of the circumjacent villages are:—Nidemávinhalli S.S.W., miles  $1\frac{1}{4}$ ; Chitanhalli S.E. by S., miles 2; Dásanpur N., miles  $1\frac{3}{4}$ ; and Bómmadgěre N.N.W., miles  $1\frac{1}{4}$ .

**XLIV.** (*Of the Great Arc Meridional Series, Section 8° to 18°*). Hemagiri Hill Station, lat.  $12^{\circ} 49'$ , long.  $77^{\circ} 5'$ —observed at in 1867 and 1868—is situated on the summit of a rocky hill rising about 500 feet above the plain, about a mile S.E. of the large village of Huliýúrdurga on the high road from Kunigal to Maddúr and  $5\frac{3}{4}$  and  $9\frac{3}{4}$  miles respectively N.E. by N. of the large villages of Hébbal and Kóppa. The station is in the lands of the village of Huliýúrdurga, táluk Kunigal, district Týmúr.

The station consists of a platform of stones and earth, enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains two mark-stones, one in the upper surface of the pillar and the other 2·88 feet below it. When visited in 1868, it is presumed from the absence of any remarks in the original records that the station was found in good order and that no alteration in its construction was made. The directions and distances of the circumjacent villages are:—Ködavatti W.S.W., miles  $4\frac{1}{4}$ ; Nidsále S. by E., miles 3; and Bandihalli S.W. by S., miles  $3\frac{1}{4}$ .

**XLV.** (*Of the Great Arc Meridional Series, Section 8° to 18°*). Bánatimaribëtta Hill Station, lat.  $12^{\circ} 34'$ , long.  $77^{\circ} 25'$ —observed at in 1867—is situated on the highest point of a lofty hill about 3 miles W.N.W., of the taluk town of Kánkánhalli on the high road from Bangalore to Malvalli: the station is ascended from the east side by a long but generally easy road cut through the jungle up a deep gorge, which traverses the hill from east to west. The station is in the lands of the village of Kotkonhalli, taluk Kánkánhalli, district Bangalore.

The station consists of a platform of stones and earth 2 feet high, enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which most probably contains two mark-stones, although no mention of any is made in the original records. The directions and distances of the circumjacent villages are:—Tungáni N.E. by E., miles  $3\frac{1}{4}$ ; Murkani W. by N., miles  $2\frac{1}{2}$ ; and Shivanhalli S.S.E., miles  $3\frac{1}{4}$ .

**XLVI.** (*Of the Great Arc Meridional Series, Section 8° to 18°*). Tirthapalli Hill Station, lat.  $13^{\circ} 2'$ , long.  $77^{\circ} 56'$ —observed at in 1866 and 1868—also called Kávarálagutta, is on the summit of a small isolated hill about  $\frac{1}{2}$  of a mile N. of the road from Höskote to Málúr, about 4 miles from the latter town. The station is identical with that of "Tirtapilly" of Colonel Lambton's triangulation, and is in the lands of the village of Tirthalli, taluk Höskote, district Bangalore.

The station consists of a platform of stones and earth 2 feet high and about 16 feet square, enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains two marks, one cut on a stone imbedded in the upper surface of the pillar and the other two feet below it. When visited in 1868, it is presumed from the absence of any remarks in the original records that the station was found in good order and that no alteration in its construction was made. The directions and distances of the circumjacent villages are:—Tirthalli N.N.W., mile  $\frac{1}{2}$ ; Málúr S.E. by E., miles 4; Gangapur E., mile  $\frac{1}{2}$ ; Kattéghanhalli S.S.W., miles  $1\frac{1}{2}$ ; Tapathalli N.W. by W., miles  $1\frac{1}{2}$ ; and Chiktagli N., mile  $\frac{1}{4}$ .

**XLVII.** (*Of the Great Arc Meridional Series, Section 8° to 18°*). Nandigudi Hill Station, lat.  $13^{\circ} 12'$ , long.  $77^{\circ} 56'$ —observed at in 1866—is situated on the summit of the hill immediately west of the village of that name but also known as Nandirájgutta. It lies  $\frac{1}{2}$  a mile N.W. of the high road from Höskote to Ambájidurga, between the 27th and 28th milestones from the former. The station is in the lands of the village of Nandigudi, taluk Höskote, district Bangalore.

The station consists of a platform of stones and earth  $1\frac{1}{2}$  feet high, enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which most probably contains two marks, though no mention of any is found in the records. The directions and distances of the circumjacent villages are:—Hindiginál (on the high road) N.E. by N., miles  $1\frac{1}{2}$ ; Itsandra N.W. by N., miles  $1\frac{1}{2}$ ; Tirthalli N., mile  $\frac{3}{4}$ ; Hallúr W.N.W., mile  $\frac{1}{2}$ ; and Choksandra S. by E., miles  $1\frac{1}{4}$ .

**XLVIII.** (*Of the Great Arc Meridional Series, Section 8° to 18°*). Kolár Hill Station, lat.  $13^{\circ} 9'$ , long.  $78^{\circ} 8'$ —observed at in 1866 and 1867—is situated on the highest of a group of hills (but not on its highest rock which was inaccessible) about  $2\frac{1}{2}$  miles W. of the town of Kolár, and  $\frac{3}{4}$  mile N.E. of the village of Páprághanhalli. The station is in the lands of the village of Páprághanhalli, taluk and district Kolár.

The station consists of a platform enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains two marks, one engraved on the rock *in situ* and the other 2·8 feet above it on a stone imbedded in the upper surface of the pillar. The directions and distances of the circumjacent villages are:—Hogari N.E. by N., mile  $\frac{3}{4}$ ; Khadripur E. by S., miles  $1\frac{1}{2}$ ; and Gardanhalli W.N.W., miles  $1\frac{1}{4}$ .

**XLIX.** (*Of the Great Arc Meridional Series, Section 8° to 18°*). Bhúpatamma Hill Station, lat.  $13^{\circ} 0'$ , long.  $78^{\circ} 8'$ —observed at in 1866—is situated on the summit of the rocky hill of this name, also called Tyákal, about  $1\frac{1}{2}$  miles N.E. by E. of the Tyákal Railway Station,  $1\frac{1}{2}$  miles N.E. by N. of Tyákal village, and 10 miles S. by W. of the town of Kolár. The station is in the lands of the village of Ulerhalli, taluk Málúr, district Kolár.

The station consists of a platform enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains two marks, one engraved on the rock *in situ* and the other 0·7 of a foot above it on a stone imbedded in the upper surface of the pillar. The directions and distances of the circumjacent villages are:—Metiganhalli S.E. by E., mile  $\frac{3}{4}$ ; Karmangala E. by N., miles  $2\frac{1}{2}$ ; Sulékunte N.E. by N., miles  $3\frac{1}{2}$ ; and Agara E., mile  $\frac{1}{4}$ .

**L.** (*Of the Great Arc Meridional Series, Section 8° to 18°*). Hösúr Hill Station, lat.  $12^{\circ} 44'$ , long.  $77^{\circ} 53'$ —observed at in 1866, 1867 and 1868—is situated on the northern summit of the hill on which the well-

known temple of Chúdanáth Iswára Swámi stands, from the middle of the gopuram of which it is about 128 yards distant to the north by east. The milestone marked 19 from Madras and 25 from Bangalore stands close to the N.E. foot of the hill, and the Bangalore and Salem (Selam) road runs close by its western side. The station is in the lands of the village of Chéndavadi, táluk Hösúr, district Salem.

The station consists of a platform of stones and earth about 16 feet square and  $2\frac{1}{2}$  feet high, enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains a mark-stone imbedded in the upper surface of the pillar. When visited in 1867 and 1868, it is presumed from the absence of any remarks in the original records that the station was found in good order and that no alteration in its construction was made. The directions and distances of the circumjacent villages are:—Therpet W.N.W., mile  $\frac{1}{2}$ ; Chénnatúr S.E., miles  $2\frac{1}{2}$ ; Hösúr town N.W., mile  $\frac{1}{2}$ ; Attipilli (on the high road) N.W. by W., miles  $5\frac{1}{2}$ ; and Mudagiri S.W. by S., miles 4.

LI. (*Of the Great Arc Meridional Series, Section 8° to 18°*). Turukungutta Hill Station, lat.  $12^{\circ} 59'$ , long.  $77^{\circ} 45'$ —observed at in 1867—is situated on the highest point of an elevated swell, hardly deserving the name of hill, but locally known as Turukungutta, 'the little hill of the Muhammadans,' from a legend that numbers of these people were in the habit of worshipping on the spot in times long gone by. It lies about  $3\frac{1}{2}$  miles W.S.W. of the Railway station of Kádgodí,  $1\frac{1}{2}$  miles south of the Railway line from Bangalore to Madras, and 7 miles E. of the station of Bangalore. The station is in the lands of the village of Död Nekundi, táluk and district Bangalore.

The station consists of a platform of stones and earth, enclosing a solid, circular and isolated pillar of masonry 5 feet high and  $3\frac{1}{2}$  feet in diameter, which contains three marks, one engraved on the rock *in situ*, the second and third cut on stones 2.58 and 5.08 feet respectively above it. The directions and distances of the circumjacent villages are:—Död Nekundi W.S.W., miles  $1\frac{1}{2}$ ; Kundahalli S.S.E., mile  $\frac{3}{4}$ ; Hudi N. by E., miles  $1\frac{1}{2}$ ; Nallúrhalli E.S.E., miles  $1\frac{3}{4}$ ; and Sonnenhalli N.E., mile  $\frac{1}{4}$ .

LII. (*Of the Great Arc Meridional Series, Section 8° to 18°*). Bangalore Base-line S.W. End or Uialdinna Observatory Station, lat.  $13^{\circ} 1'$ , long.  $77^{\circ} 37'$ —observed at in 1867—is situated on the highest part of the undulating ground to the north of Bangalore Cantonment. An old square building of about 7 feet side, having a pyramidal roof resting on four stone pillars stands some 70 feet S.E. of the station. The station is in the lands of the village of Uyalkaval, táluk and district Bangalore.

The azimuths and distances of some of the circumjacent places are:—St. John's Church  $304^{\circ} 37'$ , miles 2.51; Scotch Kirk  $327^{\circ} 16'$ , miles 2.73; and Commissioner's flag  $342^{\circ} 30'$ , miles 2.23. The point to which the measurement was referred is denoted by a dot drilled into a plug of brass, the dot being placed at the centre of a small circle on the brass and of a larger one 4 inches in diameter on the stone. The plug is let into a block of gneiss, pyramidal in form, 36 inches square at base, 8 inches square at top, and 42 inches in height. The block rests on the reddish indurated clay of which the highland is here composed. The base-line dot is covered for protection with a plate of brass some  $2.5 \times 5 \times 0.15$  inches. The plate carries a coarser dot and circle and is so adjusted that the two dots are in the same normal. Subsequent to the measurement an observatory was erected over the station. In the first instance, a pillar resting on stone beams thrown across the well in which the mark-stone is sunk, was built over the mark and carried up flush with the roof of the observatory; the theodolite rested on this pillar while the principal angles and azimuth were observed at this station. After these observations were concluded, the pillar and its supporting stone beams were removed. A stone cap was placed over the mark and an isolated pillar of cut-stone built over it to a height of 5 inches below the level of the observatory floor; there is a mark on a brass plug let into the surface of this pillar adjusted to agree with the normal of the lower mark, the distance between these two marks is 3 feet  $1\frac{1}{4}$  inches. The upper mark is covered over with stone flags flush with the floor of the observatory, a rough dot and circle being engraved on the stone exactly over the marks below. The observatory also contains an isolated platform  $5\frac{1}{2}$  feet square, the centre of which is on the prime vertical of the station already described and to the W.: the distance between the two centres is about  $6\frac{3}{4}$  feet. The platform was provided for the Pendulum observations subsequently taken at this point. The observatory is 15 feet 6 inches by 11 feet 1 inch, being a rectangle with the two eastern angles cut off. It is raised to a height of 12 feet above the ground floor and is provided with a meridional aperture for latitude observations. There are two abutment walls on the western side of the building which carry a flight of stone steps from the level of the roof to within 8 feet of the ground. A block of stone fixed in the roof carries a rough mark adjusted in the normal of the base-line dot.

LIII. (*Of the Great Arc Meridional Series, Section 8° to 18°*). Bangalore Base-line N.E. End, or Kannúr Observatory Station, lat.  $13^{\circ} 5'$ , long.  $77^{\circ} 42'$ —observed at in 1867—is situated on the crest of the high land S. of Kannúr and W. of Chota Gubbi village, 4 miles E.S.E. of the Yélahanka travellers' bungalow which is  $\frac{3}{4}$  of a mile N. of the junction of roads from Devanhalli and Dödballapur to Bangalore. The station is in the lands of the village of Kannúr, táluk Hösokote, district Bangalore.

The station is marked in the manner adopted for the station at the S.W. End of the base-line with the following differences—the surface of the cut-stone pillar built over the base-line dot is 4 inches below the ground floor and 2 feet 7 inches above the base-line dot. The roof of the observatory is 12 feet 8 inches above the ground floor.

LIV. (*Of the Great Arc Meridional Series, Section 8° to 18°*). Mandúr Hill Station, lat.  $13^{\circ} 5'$ ,

long.  $77^{\circ} 46'$ —observed at in 1867—is situated on a small flat-topped hill rising some 80 feet above the plain, lying  $\frac{1}{2}$  a mile W. of the small village from which it takes its name,  $3\frac{1}{2}$  miles W. by N. of the town of Hösokote,  $\frac{1}{4}$  miles N. by E. of Madihalli on the high road from Bangalore to Hösokote, and  $1\frac{3}{4}$  miles W. of the western edge of the large piece of water on the S.E. side of which the town of Hösokote stands. The station is in the lands of the village of Mandúr, táluk Hösokote, district Bangalore.

The station consists of a platform of stones and earth, enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains two marks, one on a large stone imbedded in the ground and the other 2·17 feet above it on a stone let into the upper surface of the pillar. The directions and distances of the circumjacent villages are:—Baiyapappanhalli S.W., mile 1; Jotipur N.E., miles  $1\frac{1}{2}$ ; Kátgolhalli N. by E., mile  $\frac{3}{4}$ ; Bömmanhalli S.E. by E., miles  $1\frac{1}{2}$  (nearly); Gundúr W. by N., miles  $1\frac{1}{2}$ ; and Bidarhalli S.W. by S., miles 2.

LV. (*Of the Great Arc Meridional Series, Section  $8^{\circ}$  to  $18^{\circ}$* ). Devarabëtta Hill Station, lat.  $12^{\circ} 37'$ , long.  $77^{\circ} 40'$ —observed at in 1867—is situated on the south-western and highest of a group of three small hills of bare rock on the eastern edge of a tract of hilly country extending to the west, north and south. About thirty yards to the east of the station is a small temple on which the station of “Deorabetta” of Colonel Lambton’s triangulation is supposed to have been situated, but of which no mark was found. The station is most easily approached from the east, there being a good cart road from Hösúr to Táli  $3\frac{1}{2}$  miles S.E. by S. of the station. The hill rises about 200 feet above its base and is in the lands of the village of Devarabëtta, táluk Hösúr, district Salem.

The station consists of a platform of stones and earth about 16 feet square, enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains two marks, one engraved on the rock *in situ* and the other 3 feet above it on a stone imbedded in the upper surface of the pillar. The directions and distances of the circumjacent villages are:—Ganganhalli N.E., miles  $2\frac{1}{2}$ ; Bailakurra N.N.W., miles  $2\frac{1}{2}$ ; Gopachandram E. by S., miles  $2\frac{1}{2}$ ; Basavanhalli S. by E., miles  $1\frac{1}{2}$ ; and Ánékal N.E. by N., miles  $7\frac{1}{2}$ .

LVI. (*Of the Great Arc Meridional Series, Section  $8^{\circ}$  to  $18^{\circ}$* ). Ánchëttidurga Hill Station, lat.  $12^{\circ} 35'$ , long.  $77^{\circ} 56'$ —observed at in 1867—is situated on a rocky hill having a nose-like profile, rising 400 feet above the plain, and lying about half a mile N.E. of the road from Ráyakota to Hösúr *via* Kílamangalam. The station is on the southern end of the summit (on the point of the nose), a large tree growing on the northern end, and a temple occupying the centre. The station is in the lands of the village of Anchëttidurga, táluk Hösúr, district Salem.

The station consists of a platform of stones and earth about 16 feet square and  $1\frac{1}{2}$  feet high, enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains a mark-stone imbedded in the upper surface of the pillar. The directions and distances of the circumjacent villages are:—Yërrataulam E.S.E., miles  $1\frac{1}{2}$ ; Kílamangalam W.N.W., miles  $2\frac{1}{2}$ ; Auliköllu W. by S., miles  $3\frac{1}{2}$ ; Tairanadurgam N.E., miles 2; and Dënkanikota S.W. by W., miles 8.

LVII. (*Of the Great Arc Meridional Series, Section  $8^{\circ}$  to  $18^{\circ}$* ). Mariyálam Hill Station, lat.  $12^{\circ} 23'$ , long.  $77^{\circ} 45'$ —observed at in 1867—is situated on the elevated end of a long spur running out from the Mysore plateau in a south-easterly direction, and lies to the south of the first line of the Ghâts which separates the plateau from the low country to the south. The station is about 1000 feet above the valley running round the base of the hill from N.N.W. to S. The ascent is from the small hamlet of Mariyálam at the N.E. foot of the hill. The station is in the lands of the village of Mariyálam, táluk Hösúr, district Salem.

The station consists of a platform of stones and earth about 16 feet square and varying in height from 3 feet at centre to 10 feet at the sides, enclosing a solid, circular and isolated pillar of masonry built on a projecting point of rock, which contains two marks, one engraved on the rock *in situ* and the other 3 feet above it on a stone imbedded in the upper surface of the pillar. The approximate directions and distances of the circumjacent villages are:—Ánchëtti (on the road from Dënkanikota) S.S.E., miles 2; Mariyálam N.E., mile 1; Athararnai W. by N., miles 2; Pannai N. by E., miles  $1\frac{1}{2}$ ; and Mallárjunadurgam N.N.E., miles 6.

LVIII. (*Of the Great Arc Meridional Series, Section  $8^{\circ}$  to  $18^{\circ}$* ). Köppabëtta Hill Station, lat.  $12^{\circ} 22'$ , long.  $77^{\circ} 32'$ —observed at in 1867—is situated on the well-known hill of this name, immediately over the precipice which terminates the hill to the south. The hill rises about 600 feet above the plain to the west, from which side it is easily ascended from the small village of Köttakuppa. The large village of Arubele or Háröhalli, having a Roman Catholic Chapel, lies N.W. by W., distant  $5\frac{1}{2}$  miles. The station is identical with that of “Copahbetta” of Colonel Lambton’s triangulation, and is in the lands of the village of Köttakuppa, táluk Kánkánhalli, district Bangalore.

The station consists of a platform of stones and earth enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains two marks, one engraved on the rock *in situ* and the other 3 feet above it on a stone imbedded in the upper surface of the pillar. The approximate directions and distances of the circumjacent villages are:—Mulhalli W.N.W., miles 4; Korihalli N., miles  $4\frac{1}{2}$ ; Huusanhalli E. by N., miles  $6\frac{1}{2}$ ; and Atamhalli W., miles  $6\frac{1}{2}$ .

XVIII. Bandapalle or Urkuntebanda Hill Station, lat.  $13^{\circ} 5'$ , long.  $78^{\circ} 23'$ —observed at in 1866 and 1867—also known as Boregutta, is  $83\frac{1}{2}$  feet N.N.E. of the small unfrequented temple on a bare rocky hillock about 5 miles N. by E. of Betmangala on the high road from Vellore (Ráya-állúr) to Kolár, and  $5\frac{1}{4}$  miles W. by N. of Tailúr. The station is in the lands of the village of Bandapalle, táluk Mulbágal, district Kolár.

The station consists of a platform of stones and earth, enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{4}$  feet in diameter, which contains two mark-stones, one in the upper surface of the pillar and the other 1·3 feet below it. When visited in 1867, it is presumed from the absence of any remarks in the original records that the station was found in good order and no alteration in its construction was made. The directions and distances of the circumjacent villages are:—Ávani N.W. by N., miles  $2\frac{1}{4}$ ; Kalikuppam W.S.W., miles  $2\frac{3}{4}$ ; Chěnnapur N.E. by E., miles  $1\frac{1}{2}$ ; and Nágasandra S.W., mile 1.

XIX. Kurudamale or Kúdumale Hill Station, lat.  $13^{\circ} 12'$ , long.  $78^{\circ} 25'$ —observed at in 1867—is situated on the top (not the highest point) of one of the rocky, isolated hills, so common in the neighbourhood: the hill rises to a height of about 750 feet above the plain and takes its name from a village a few hundred yards to the north to which it belongs, and  $3\frac{1}{4}$  miles N. by W. of the town of Mulbágal on the high road, and  $5\frac{1}{2}$  miles E. of Vutnúr. This station is near the site occupied by the secondary station or point of “Kootamalli” of Colonel Lambton’s triangulation, but was not identified. The station is in the lands of the village of Kurudamale, táluk Mulbágal, district Kolár.

The station consists of a platform enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{4}$  feet in diameter, which contains two marks, one engraved on the rock *in situ* and the other 1·83 feet above it on a stone imbedded in the upper surface of the pillar. The directions and distances of the circumjacent villages are:—Kuplamargo (on the high road) E.S.E., miles 5; Lingapur S.S.E., mile 1; Singasandra E.N.E., miles  $2\frac{3}{4}$ ; and Arěhalli N.W. by N., miles  $1\frac{1}{2}$ .

XX. Yěrrakōnda Hill Station, lat.  $12^{\circ} 52'$ , long.  $78^{\circ} 19'$ —observed at in 1866—is situated  $27\frac{1}{2}$  feet N. by E. from the centre of a small temple on a hill about  $2\frac{1}{2}$  miles N.E. of the Railway line, and  $9\frac{1}{2}$  miles S.E. of the Kolár Road Railway station. The station is identical with that of “Yerracondah” of Colonel Lambton’s triangulation, and is in the lands of the village of Byátaráyanahalli, táluk Betmangala, district Kolár.

The station consists of a platform enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{4}$  feet in diameter, which contains two marks, one engraved on the rock *in situ* and the other 2 feet above it on a stone imbedded in the upper surface of the pillar. The directions and distances of the circumjacent villages are:—Byátaráyanahalli N.N.E., mile  $\frac{1}{2}$ ; Mádmangala N. by E., miles 2; Nadampalle W. by S., miles  $4\frac{1}{4}$ ; and Redvarpalle E. by S., miles 3.

XXI. Káraveri or Karěddigudda Hill Station, lat.  $13^{\circ} 7'$ , long.  $78^{\circ} 34'$ —observed at in February and March 1866—also called Káraváda, is situated 48·2 feet N.N.E. from the stone shaft in front of a temple on a low hill, about 5 miles E.N.E. of Malarmpalli, and 9 miles N. by E. of Věnkataگیرikota on the high road from Vellore to Kolár. The station is in the lands of the village of Káraváda, táluk Palmaner, district North Arcot (Árkád).

The station consists of a platform enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{4}$  feet in diameter, which contains two marks, one engraved on the rock *in situ* and the other 1·67 feet above it on a stone imbedded in the upper surface of the pillar. The directions and distances of the circumjacent villages are:—Rámapuram E.N.E., mile 1; Gedúr E.S.E., miles  $1\frac{1}{2}$ ; Shemagapalle S. by W., miles  $1\frac{1}{4}$ ; and Tailúr S.W. by W., miles 8.

XXII. Krishnamakōnda Hill Station, lat.  $12^{\circ} 57'$ , long.  $78^{\circ} 33'$ —observed at in 1866—is situated on a hill so called near the head of the Naikaneri pass, about 4 miles S.E. by S. of Věnkataگیرi on the high road from Vellore to Kolár and some 2 miles S.W. of the same road. The station is  $35\frac{1}{2}$  feet N. by W. from the centre of a temple, and is in the lands of the village of Bairěddipalle, táluk Palmaner, district North Arcot.

The station consists of a platform enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{4}$  feet in diameter, which contains two marks, one engraved on the rock *in situ* and the other 1·65 feet above it on a stone imbedded in the upper surface of the pillar. The directions and distances of the circumjacent villages are:—Pěddavogu N.E. by E., miles  $1\frac{1}{4}$ ; Krishnapuram S.W., miles 8; Patimáyanpalli W., miles  $1\frac{1}{2}$ ; and Bělakunta S.E., mile 1.

XXIII. Devarakōnda Hill Station, lat.  $13^{\circ} 5'$ , long.  $78^{\circ} 43'$ —observed at in 1866—is situated on the summit of a hill, about a mile N. of the village of Něllipatla, 10 miles S.W. by S. of the sanitarium of Palmaner on the high road from Chittoor (Chittúr) to Bangalore. The station is in the lands of the village of Něllipatla, táluk Palmaner, district North Arcot.

The station consists of a platform of stones and earth, enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{4}$  feet in diameter, which contains three marks, one engraved on the rock *in situ* and two others on stones built within the pillar at 2·10 and 4·20 feet respectively above it, the uppermost being in the surface of the pillar. The directions and distances of the circumjacent villages are:—Yěrlabanda E., mile 1; Kurrupalle N. by E., miles  $1\frac{1}{2}$ ; Nagarěddipalle W., miles 4; Mallágapalle S.E. by S., miles  $2\frac{3}{4}$ ; and Zolarpalle N.W. by W., miles 4.

**XXIV.** Patikōnda Hill Station, lat.  $13^{\circ} 10'$ , long.  $78^{\circ} 41'$ —observed at in 1866—is situated on the highest point of a hill about a mile S.S.E. of the village of this name, 7 miles W.S.W. of the sanitarium of Palmaner. The station is identical with Colonel Lambton's station of "Patticondah", and is in the lands of the village of Patikōnda, táluk Palmaner, district North Arcot.

The station consists of a platform enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains two marks, one engraved on the rock *in situ* and the other 1.63 feet above it on a stone imbedded in the upper surface of the pillar. The directions and distances of the circumjacent villages are:—Vugani W., miles  $2\frac{1}{2}$ ; Átakarlápalle E. by N., miles  $1\frac{1}{2}$ ; Gundlapalle E.S.E., miles  $1\frac{1}{2}$ ; Ballipalle S. by W., miles  $1\frac{1}{2}$ ; and Chiliganpalle S.W. by W., miles 2.

**XXV.** Mugali Hill Station, lat.  $13^{\circ} 10'$ , long.  $78^{\circ} 52'$ —observed at in 1866—is situated on the bare summit of the well-known hill of this name about  $5\frac{1}{4}$  miles W.S.W. of Vēnkatagiri, a mile S. of the Mugali pass, and  $5\frac{3}{4}$  miles E.S.E. of the town of Palmaner. The station is in the lands of the village of Mugali, táluk Chittoor, district North Arcot.

The station consists of a platform enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains two mark-stones, one in the upper surface of the pillar and the other 1.98 feet below it. The directions and distances of the circumjacent villages are:—Takamanda E.S.E., miles  $1\frac{1}{2}$ ; Kōndarapalle N.E. by E., miles  $2\frac{1}{2}$ ; Mugali N. by E., miles  $1\frac{1}{2}$ ; Masalmaru W. by S., miles 4; and Kalupalle S.W. by W., miles  $5\frac{1}{4}$ .

**XXVI.** Satghur (Sátghadi) Hill Station, lat.  $12^{\circ} 57'$ , long.  $78^{\circ} 47'$ —observed at in 1866—is situated on the centre of a turret, the highest point of the old fortress,  $2\frac{1}{4}$  miles N.E. of Kamavaripalle,  $1\frac{1}{4}$  miles E. by N. of Satghur at the foot of the hill, and  $1\frac{1}{3}$  miles N.E. by N. of milestone No. 38 on the high road from Gudiyátam to Kamavaripalle. The station is in the lands of the village of Pēranambat, táluk Gudiyátam, district North Arcot.

The station consists of a platform enclosing a solid, circular and isolated pillar of masonry, which contains two mark-stones, one in the soil of the old turret and the other 2 feet above it in the upper surface of the pillar. The directions and distances of the circumjacent villages are:—Chintakanama E.S.E., miles  $1\frac{1}{2}$ ; Chērlápalle S.E., miles  $1\frac{1}{2}$ ; Lálápet S.W., miles  $1\frac{1}{2}$ ; and Gundlapalle N., miles  $2\frac{1}{4}$ .

**XXVII.** Batinkōnda Hill Station, lat.  $13^{\circ} 1'$ , long.  $79^{\circ} 9'$ —observed at in 1866—is situated on one of a group of hills on the high road from Vellore to Chittoor, about 2 miles S.E. of Chittapára,  $1\frac{1}{2}$  miles W.N.W. of the 3rd milestone from Vellore Railway Station,  $3\frac{1}{2}$  miles N.E. of Árambákam, and  $2\frac{3}{4}$  miles N.N.E. of Kari-samangalam. The station is in the lands of the village of Vandratángal, táluk Gudiyátam, district North Arcot.

The station consists of a platform enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains two marks, one engraved on the rock *in situ* and the other 2.48 feet above it on a stone imbedded in the upper surface of the pillar. The directions and distances of the circumjacent villages are:—Sorakálayam S.S.E., miles 2; Motúru S.W., miles  $2\frac{1}{2}$ ; and Tōndamtulasi W.S.W., miles 2.

**XXVIII.** Muruktōre Hill Station, also known as Jhandabodu, lat.  $13^{\circ} 16'$ , long.  $79^{\circ} 8'$ —observed at in 1866—is situated on a hill about a mile or so west of the high road from Chittoor to Cuddapah (Kadapa), and 3 miles N.N.W. of the town of Chittoor. The station is identical with "Moorookthora" a secondary station of Colonel Lambton's triangulation, and is in the lands of the village of Murukambattu, táluk Chittoor, district North Arcot.

The station consists of a platform enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains two marks, one on a rock or large boulder *in situ* and the other 2 feet above it on a stone imbedded in the upper surface of the pillar. The directions and distances of the circumjacent villages are:—Patnam W.N.W., miles  $1\frac{1}{2}$ ; Voiltota N.N.E., miles 2; Paduri E.S.E., miles  $2\frac{1}{2}$ ; Shalurapallé S.S.W., miles  $2\frac{1}{2}$ ; and Muturapalle W., miles  $1\frac{1}{2}$ .

**XXIX.** Kailásgarh Hill Station, lat.  $12^{\circ} 50'$ , long.  $79^{\circ} 7'$ —observed at in 1866—is situated on a hill  $6\frac{1}{4}$  miles S.W. by S. of the fort of Vellore, and  $4\frac{1}{2}$  miles W.N.W. of Kinyambádi on the high road from Pullúr to Vellore. The station is in the lands of the village of Athúr, táluk Vellore, district North Arcot.

The station consists of a platform enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains two marks, one engraved on the rock *in situ* and the other 1.56 feet above it on a stone imbedded in the upper surface of the pillar. The centre of an old platform believed to be that of Colonel Lambton's station of "Kylasghur" is 21 feet E. of the present station. The directions and distances of the circumjacent villages are:—Káttuputtúr E.N.E., miles  $1\frac{1}{2}$ ; Sattupálayam S.E. by E., miles 3; Solavaram S.E., miles  $2\frac{1}{2}$ ; Usúr N.N.W., miles 2; and Sekanúr N., miles  $2\frac{1}{2}$ .

**XXX.** Pullúr Hill Station, lat.  $13^{\circ} 14'$ , long.  $79^{\circ} 24'$ —observed at in 1865 and 1866—is situated on a hill known in the neighbourhood as Jhandakona,  $5\frac{3}{4}$  miles W.S.W. of Attimancheripet on the high road from



Sholinghur (Shōlangipuram) to Kōlagunta, and nearly a mile N.E. of Alidōnabanda, a point on the same mass of hills. The station is in the lands of the village of Pullūr, zamīndāri Kārvētnagar, district North Arcot.

The station consists of a platform enclosing a solid, circular and isolated pillar of masonry which contains two marks, one engraved on a stone in the upper surface of the pillar and the other  $1\frac{1}{2}$  feet below it which was found engraved on the rock *in situ*. This station is identical with that of "Pilloor" of Colonel Lambton's triangulation, the mark of which was found cut on the rock *in situ* under a shapeless pile of stones. When visited in 1866, the station was found in good order and no alteration in its construction was made. The directions and distances of the circumjacent villages are:—Pullūr N.W. by W., miles  $1\frac{1}{2}$ ; Bōmmarājapuram S.E., miles  $3\frac{1}{2}$ ; Rāmalingapuram S. by E., miles  $2\frac{1}{2}$ ; Lingasamudram S.W. by W., miles  $3\frac{1}{2}$ ; and Balla Vardappanayudi Khandrika W., miles  $1\frac{3}{4}$ .

XXXI. Anandalamalai Hill Station, lat.  $12^{\circ} 56'$ , long.  $79^{\circ} 26'$ —observed at in 1865 and 1866—is situated on a small rocky ridge close to the hamlet of Gōllapālaiyam,  $1\frac{3}{4}$  miles E. by N. of the táluk town of Wálabápet,  $3\frac{1}{2}$  miles S.E. of the Arcot station of the Madras Railway S.W. line, and  $4\frac{3}{4}$  miles W.N.W. of the town of Káveripák. The station is in the lands of the village of Anandalamalai, táluk Wálabápet, district North Arcot.

The station consists of a platform of stones and earth 16 feet square, enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains two marks, one engraved on a stone in the upper surface of the pillar and the other  $1\frac{1}{2}$  feet below it which was found engraved on the rock *in situ*. This station is identical with that of "Hanandamalli" of Colonel Lambton's triangulation, the mark of which was found engraved on the rock *in situ* and was adopted as the lower mark of the present station. When visited in 1866, the station was found in good order and no alteration in its construction is stated to have been made. The directions and distances of the circumjacent villages are:—Musiri E. by N., miles  $1\frac{1}{2}$ ; Tēnkadappautāngal S. by W., miles  $1\frac{1}{2}$ ; Mantāngal W. by N., miles  $3\frac{3}{4}$ ; and Bagavali E.S.E., miles 2.

XXXII. Kururikota Station, lat.  $13^{\circ} 3'$ , long.  $79^{\circ} 47'$ —observed at in 1865—is situated on an extensive swell of stony ground and occupies the site of an old cattle pen, the place being said to be named after a tribe of Kurumbars (herdsmen) who had a place (kot) of which the remains exist about a mile to E. The station is  $5\frac{1}{2}$  miles S.E. by E. of the Arkonam Junction station, and  $3\frac{1}{2}$  miles S. by W. of the station of Chinnammápet of the Madras-Beyepore (Bepúr) Railway. The station is in the lands of the village of Nagari-kupam, táluk Wálabápet, district North Arcot.

The station consists of a platform enclosing a solid, circular and isolated pillar of masonry 4 feet high and  $3\frac{1}{2}$  feet in diameter, which contains three marks, the lowest engraved on the rock *in situ* and two others on stones built within the pillar at 2 and 4 feet respectively above it. The directions and distances of the circumjacent villages are:—Nagarikupam W.N.W., mile  $\frac{3}{4}$ ; Uriyúr E., miles  $1\frac{1}{2}$ ; Anantapuram S., miles  $1\frac{1}{2}$ ; Takulam S.S.W., miles 2; Attúr W., miles  $3\frac{1}{2}$ ; and Pudúr E.N.E., miles  $1\frac{1}{2}$ .

XXXIII. Nagari Hill Station, lat.  $13^{\circ} 23'$ , long.  $79^{\circ} 38'$ —observed at in 1865—is situated on the summit of a very remarkable peak which rises abruptly at the western and south-western extremity of the mass of hills and  $3\frac{1}{2}$  miles S. by E. of the large village of Náráyanavaram on the high road from Tiruvallúr to Putúr Railway Station. The peak is precipitous on the N.W. and S. sides, and is composed of gigantic boulders which seem piled in the most insecure manner as if the least shock would hurl the whole down. The station is not on the highest boulder. The station is in the lands of the village of Náráyanavaram, zamīndāri Kārvētnagar, district North Arcot.

The station consists of a platform enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains two marks, one engraved on a stone in the upper surface of the pillar and the other 1.5 feet below on the rock *in situ*. The station is identical with that of "Naggery nose" of Colonel Lambton's triangulation, the mark of which was found engraved on the rock and adopted as the lower mark of the present station. The directions and distances of the circumjacent places are:—Putúr station of the Madras Railway N.W. by N., miles  $4\frac{3}{4}$ ; Paramesvaramangalam N.W., miles 2; Gavanapuram (on the high road near the fifth milestone) W.N.W., miles  $1\frac{1}{2}$ ; Bojarājapālēm N.N.E., miles 2; Maugad S.S.E., miles  $3\frac{1}{2}$ ; and Rāmasamudram W., miles  $2\frac{1}{2}$ .

XXXIV. Māvandúr or Māmandúr Hill Station, lat.  $12^{\circ} 45'$ , long.  $79^{\circ} 42'$ —observed at in 1865 and 1880—is situated on the summit and towards the N. extremity of the southern portion of the rocky ridge, about 150 feet high, at the southern end of the artificial bund of the Dúsi Māmandúr or Chinna Ságaram tank, and about 7 miles S.S.W. of Conjeeveram (Kánchivaram). The station is in the lands of the village of Narsamangalam, táluk and district North Arcot.

The station of 1865 is near the site of that of "Doosh Maumdoor" of Colonel Lambton's triangulation. No mark was found but a pile of stones and an old staff which subsequently appeared from calculation to be about 11 feet W.N.W. of the point occupied by Colonel Lambton's station: the staff was cut off level with the surface of the rock in a crevice of which it was found fixed, and a circle and dot engraved on the stump; over this was built a solid, circular pillar of masonry  $3\frac{1}{2}$  feet in diameter, carrying a mark engraved on a stone imbedded in its upper surface 1.5 feet above the lower mark. The pillar was surrounded by the usual annular wall and platform. When visited in 1880, the circular pillar and its upper mark were found apparently just as left in 1865, and no alteration in the construction of the station was made. The directions and distances of the circumjacent villages are:—Māmandúr N.E. by E., miles  $1\frac{1}{2}$ ; Dúsi N.N.E., miles 3; and Narsamangalam S.E., mile  $\frac{1}{2}$ .

**XXXV.** Chēmbedu Tower Station, lat.  $13^{\circ} 15'$ , long.  $80^{\circ} 1'$ —observed at in 1865—is situated on an extensive swell of ground, about 10 miles N.E. of the town of Tiruvallūr and the same distance N.N.W. of Tinnanūr station of the Madras Railway. The station is about 50 feet N.E. of an old cairn of stones supposed to indicate the site of a secondary point of Colonel Lambton's triangulation but in which no mark was found. The station is in the lands of the village of Chēmbedu, táluk Tiruvallūr, district Chingleput (Chēngalpat).

The station consists of a tower of sun-dried bricks enclosing a perforated pillar of masonry 70·3 feet high, which contains a mark-stone imbedded at the ground level. This tower was 54·9 feet high when the observations were taken from it; it was raised to its present height subsequently to fix the position of the Madras Dome Observatory station, number XXXVII of this Series. The directions and distances of the circumjacent villages are:—Chēmbedu S.E., miles  $1\frac{1}{2}$ ; Malandūr N.W., miles  $1\frac{1}{2}$ ; Maiūr S.W., miles  $2\frac{1}{2}$ ; Érikuppam N.E. by E., miles  $2\frac{1}{2}$ ; and Pēriyapálayam N.E., miles  $5\frac{1}{2}$ .

**XXXVI.** Malaipedu Hill Station, lat.  $12^{\circ} 55'$ , long.  $80^{\circ} 3'$ —observed at in 1865 and 1880—is situated on the N.W. end of the summit of the rocky hill of this name, also called Malaipatmalai, which rises to a height of about 370 feet above its base,  $1\frac{1}{2}$  miles N.W. of the road from Madras to Wálababad and nearly midway between Vandalūr and Srípērbudūr. The remains of the platform of Colonel Lambton's station "Malapode" occupy the highest point of the hill, distant 105 yards from the present station, but no mark was found. The station is in the lands of the village of Malaipedu, táluk Conjeeveram, district Chingleput.

The station, as built in 1865, consisted of a platform of stones and earth about 16 feet square, enclosing a solid, circular and isolated pillar of masonry 10 feet high and  $3\frac{1}{2}$  feet in diameter. The pillar contained six marks, the lowest being engraved on the rock *in situ* and five others on stones at 2, 4, 6, 8 and 10 feet respectively above it. When visited in 1880, it was found in good order and the upper mark apparently intact, and no alteration in the construction was made. The azimuths and distances of the circumjacent places are:—Malaipedu  $155^{\circ}$ , mile  $\frac{3}{4}$ ; Chetpat  $231^{\circ}$ , mile 1; Sirumátúr  $351^{\circ}$ , mile 1; Manimangalam (temple W. of village)  $268^{\circ} 40'$ , miles 2; Mágánam (temple)  $89^{\circ} 34'$ , mile 1; site of "Malapode" station of Colonel Lambton's triangulation  $309^{\circ} 45'$ , yards 105.

**XXXVII.** Madras Dome Observatory Station, lat.  $13^{\circ} 4'$ , long.  $80^{\circ} 17'$ —observed at in 1865—is in the centre of the new (larger) Equatorial Dome Observatory on the roof of the Government Astronomer's dwelling-house within the enclosure or compound in which are also the observatories containing the Meridian and Mural Circles.

The old dome having been removed, a hollow pier or pillar of masonry 3 feet in diameter, surmounted by a slab of granite pierced in the centre and  $3\frac{1}{2}$  feet in diameter, was raised over the slab of stone fixed on the cross walls of the Government Astronomer's dwelling-house. The total height above the stone being 30·77 feet. A scaffolding was provided for the observatory tent. The height of the stone on the cross walls above ground level is  $33\frac{1}{2}$  feet. When the observations were complete the pier was removed.

**XXXVIII.** Tirumani Hill Station, lat.  $12^{\circ} 39'$ , long.  $80^{\circ} 1'$ —observed at in 1880—is situated on the highest rock of the group of rocky hills rising rather abruptly to a height of 600 feet above its base, between the high road and the South Indian Railway line,  $2\frac{1}{2}$  miles S. of the town of Chingleput and a mile E. of the Pálar river. The lowest mark of the station is 4 feet 11 inches N. of a Revenue Survey mark cut on the same rock. The station is in the lands of the village of Tirumani, táluk and district Chingleput.

The station consists of a platform of rubble stones, enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains three marks, one engraved on a stone in the upper surface of the pillar and two others 1·5 and 3·0 feet respectively below it, the lowest being engraved on the rock *in situ*. The azimuths and distances of the circumjacent places are:—Tirumani  $261^{\circ}$ , mile  $\frac{1}{2}$ ; Ólalūr  $58^{\circ}$ , miles  $1\frac{1}{2}$ ; Chingleput  $178^{\circ}$ , miles  $2\frac{1}{2}$ ; Gundúr (principal spire of the temple in the village)  $174^{\circ} 23'$ , miles  $2\frac{1}{2}$ ; and Revenue Survey mark  $190^{\circ} 7'$ , feet 122.

**XXXIX.** Avirimodu Hill Station, lat.  $12^{\circ} 27'$ , long.  $79^{\circ} 57'$ —observed at in 1880—is situated on the western and highest point of the rocky hill which rises about 340 feet above its base, 4 miles S.S.E. of Madurántakam, and  $1\frac{1}{2}$  miles E. of the Chúnámpet road. The station is in the lands of the village of Avirimodu, táluk Madurántakam, district Chingleput.

The station consists of a platform of stones 16 feet square, enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains two marks, one engraved on the rock *in situ* and the other 1·6 feet above it on a stone imbedded in the upper surface of the pillar. The azimuths and distances of the circumjacent places are:—Avirimodu  $45^{\circ}$ , mile  $\frac{1}{2}$ ; Endattúr  $292^{\circ}$ , miles  $1\frac{1}{2}$ ; Chitrávádi  $164^{\circ}$ , mile  $\frac{1}{2}$ ; Karunguli (a small temple on a hill 2 miles N. of Madurántakam)  $166^{\circ} 22'$ , miles  $5\frac{1}{2}$ ; and Tiruvapádi (a rock temple)  $85^{\circ} 39'$ .

**XL.** Manamai Kunnatúr Hill Station, lat.  $12^{\circ} 34'$ , long.  $80^{\circ} 12'$ —observed at in 1880—is situated on a large rock rising 75 feet above its base and forming the E.S.E. summit of the group of rocks, about  $1\frac{1}{2}$  miles

from the sea coast, 3 miles N. of Sadurangapatnam, and 233 yards W. of the East Coast Canal. The station is not on the highest rock of the group but lies 340 yards S.E. by E. of it, and about 450 yards E. by N. of the rural shrine called Kanniyammankoil. The station is in the lands of the village of Manamai, taluk and district Chingleput.

The station consists of a platform of stones and earth 16 feet square, enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains three marks, one engraved on a stone in the upper surface of the pillar and two others 1.5 and 3.0 feet respectively below it, the lowest being engraved on the rock *in situ*. The directions, azimuths and distances of the circumjacent places are:—Manamai N.W., miles 1.4; Kunnatúr  $49^\circ$ , mile  $\frac{1}{2}$ ; Kílpákam  $206^\circ$ , mile  $\frac{1}{2}$ ; Kílkalani  $149^\circ$ , mile 0.4; and the East Coast Canal milestone (marked 32 under the letters E.C.C.)  $260^\circ 2'$ , yards 275.

**XL I.** Pudupák Hill Station, lat.  $12^\circ 48'$ , long.  $80^\circ 14'$ —observed at in 1880—is situated on the summit of a rocky hillock which rises about 100 feet above its base, about 4 miles W.N.W. (inland) from Kovallam, and 2 miles N.W. of Suttankuppam on the high road from Tiruporúr to Madras. The station is in the lands of the village of Pudupák, taluk and district Chingleput.

The station consists of a platform of stones and earth 16 feet square, enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains three marks, one engraved on a stone in the upper surface of the pillar and two others 1.5 and 3.0 feet respectively below it, the lowest being engraved on the rock *in situ*. The azimuths and distances of the circumjacent places are:—Pudupák  $278^\circ$ , mile  $\frac{3}{4}$ ; Vélíchai  $47^\circ$ , miles  $1\frac{1}{2}$ ; Kólattúr  $92^\circ$ , miles 2; Taiyúr (spire of the temple)  $354^\circ 41'$ , miles  $2\frac{1}{2}$ ; Kátámpuli  $234^\circ$ , miles  $1\frac{1}{2}$ ; N.W. corner of Mandapam (Pérumál temple)  $1^\circ 55'$ , feet 119; and Sónalúr  $147^\circ$ , miles  $1\frac{1}{2}$ .

**XL II.** Nanmangalam Hill Station, lat.  $12^\circ 56'$ , long.  $80^\circ 13'$ —observed at in 1880—is situated on the N.E. summit or peak of a group of stony hills which rises about 170 feet above its base,  $5\frac{1}{2}$  miles S. of St. Thomas's Mount, and between the villages of Rájakílapákam and Jaladampet, the cross road from the latter place which runs west to meet the great southern road from Madras, passes close to the S. foot of this group of hills. The station is in the lands of the village of Nanmangalam, taluk Saidápet, district Chingleput.

The station consists of a platform of stones and earth 16 feet square, enclosing a solid, circular and isolated pillar of masonry  $3\frac{1}{2}$  feet in diameter, which contains three mark-stones, one in the upper surface of the pillar and two others 1.5 and 3.0 feet respectively below it, the lowest being engraved on a large stone imbedded in the rocky surface of the hill, in the centre of the foundation. The directions or azimuths and distances of the circumjacent places are:—Nanmangalam  $178^\circ$ , mile  $\frac{3}{4}$ ; Modupákam  $286^\circ$ , mile 1; Gavuripákam S.W. by S., mile  $\frac{3}{4}$ ; Rájakílapákam W.S.W., miles  $1\frac{1}{2}$ ; and Jaladampet (bungalow)  $280^\circ 38'$ , miles  $1\frac{1}{2}$ .

**XL III.** Mángád Hill Station, lat.  $13^\circ 0'$ , long.  $80^\circ 8'$ —observed at in 1880—is situated on the rocky hillock which rises about 100 feet above the adjacent low ground, nearly midway between Mángád and Kunnatúr, a mile E. of the great Chambrambákam tank or lake,  $2\frac{1}{2}$  miles S. by W. of Púndamalai, and  $6\frac{1}{2}$  miles W. of St. Thomas's Mount. The station is on the highest part of the rocks which culminate at the S. end of the ridge, and occupies approximately the site of Colonel Lambton's survey station of "Mungot" of which only the remains of the platform were found. The station is in the lands of the village of Mángád, taluk Saidápet, district Chingleput.

The station consists of a platform of stones enclosing a solid, circular and isolated pillar of masonry, which contains two marks, one in the upper surface of the pillar and the other 1 foot below it. This point was fixed in season 1864-65 as a secondary station and was denoted by a masonry pillar containing two marks. When visited in 1880, the pillar and the upper mark were found destroyed, but the lower mark was forthcoming and adopted. The directions, azimuths and distances of the circumjacent places are:—Mángád  $201^\circ$ , miles  $1\frac{1}{2}$ ; Kólamanipákam (Pérumálkoil temple)  $182^\circ 5'$ , mile 1; Mángád (boundary stone at the S. foot of the hill)  $13^\circ 53'$ , yards 140, Kovúr E. by N., miles  $1\frac{1}{2}$ ; Kunnattúr S., miles  $1\frac{1}{2}$ ; and Sikkalayapuram N., mile  $\frac{3}{4}$ .

**XL IV.** St. Thomas's Mount Trestle Station, lat.  $13^\circ 0'$ , long.  $80^\circ 14'$ —observed at in 1880—is situated in the N.W. corner of the terrace of the Portuguese (Roman Catholic) Chapel of St. Thomas which stands on the well-known mount so called, distant 8 miles S.W. of Fort St. George, and 1.3 and 0.8 miles respectively W. by S. and N.W. of the Railway stations of Guindy (Kandi) and St. Thomas's Mount. The station is 50 yards W. of the signal flag-staff and 19 yards N.W. of the N.W. corner of the chapel, and is identical with the secondary station fixed in season 1864-65, the lower mark of which was found and adopted. Colonel Lambton's station of 1802 was at the S.W. angle of the hill near the chapel. The station is in the taluk of Saidápet, district Chingleput.

When visited in 1880, the platform of the station of 1864-65 was found to have been removed but the lower mark was intact, a large slab of stone  $3\frac{1}{2}$  feet in diameter was now laid down flush with the ground level; on the upper surface of this stone in addition to the usual circle and dot—in the normal of the mark below—indicating the point of observation, a broad arrow and the letters G.T.S. 1880 are also engraved.

**XLV.** Injambákam Hill Station, lat.  $12^{\circ} 55'$ , long.  $80^{\circ} 18'$ —observed at in 1880—is situated on a hillock of drift sand between the East Coast Canal and the sea shore, 0·6 of a mile E. of the former and 0·3 mile W. of the latter, and near the 7th milestone of the Adyár terminus. The hillock is included in the Përiyamanal (large sand waste) used as a casuarina plantation. The station is in the lands of the village of Injambákam, táluk Saidápet, district Chingleput.

The station consists of a platform of turf and sand enclosing a solid, circular and isolated pillar of masonry 6 feet high built upon piles of timber, and contains three mark-stones, the lowest set in the foundation which is 4 feet square and a foot thick, the second is a foot above in the centre of the next block  $3\frac{1}{2}$  feet square and 1 foot thick, and the 3rd or upper is on the surface of the circular block  $3\frac{1}{2}$  feet in diameter and 4 feet above the second mark, or 5 feet above the lowest. The azimuths and distances of the circumjacent villages are:—Injambákam  $165^{\circ}$ , mile  $\frac{1}{2}$ ; Karaipákam  $101^{\circ}$ , mile 1; Sölangiallúr  $54^{\circ}$ , miles  $1\frac{1}{2}$ ; Pallipat  $42^{\circ}$ , mile  $\frac{1}{4}$ ; boundary stone No. 55,  $74^{\circ} 7'$ , feet 410; and boundary stone No. 56,  $127^{\circ} 46'$ , feet 512.

*December, 1890.*

**J. ECCLES,**

*In charge of Computing Office.*



## MADRAS LONGITUDINAL SERIES.

## PRINCIPAL TRIANGULATION. TRIANGLES.

No. of Triangle	Station	Spherical Excess	Corrected Plane Angle			Distance		
						Log. feet	Feet	Miles
1	Kudurēmukha, III	1'06	57	13	43'64	5'1161212	130653'5	24'745
	Ānūr, VI	1'05	41	49	29'71	5'0154410	103619'4	19'625
	Ammēdikal, V	1'06	80	56	46'65	5'1859637	153448'9	29'062
2	Ānūr, VI	.83	52	29	1'11	5'0248980	105900'5	20'057
	Ammēdikal, V	.83	49	23	51'58	5'0059083	101369'8	19'199
	Kittāvar, VIII	.83	78	7	7'31	5'1161212	130653'5	24'745
3	Ammēdikal, V	1'08	79	11	37'74	5'1814840	151874'2	28'764
	Kittāvar, VIII	1'07	57	34	35'05	5'1156520	130512'5	24'718
	Pushpagiri, IX	1'07	43	13	47'21	5'0248980	105900'5	20'057
4	Pushpagiri, IX	1'25	68	26	54'91	5'1666105	146760'9	27'796
	Ammēdikal, V	1'25	55	44	52'57	5'1153656	130426'4	24'702
	Muchil, VII	1'25	55	48	12'52	5'1156520	130512'5	24'718
5	Muchil, VII	1'24	77	33	21'46	5'2118316	162866'4	30'846
	Ammēdikal, V	1'23	40	48	31'09	5'0374249	108999'6	20'644
	Ballamale, IV	1'23	61	38	7'45	5'1666105	146760'9	27'796

NOTE.—The value of the side is given in the same line with the opposite angle.

No. of Triangle	Station	Spherical Excess	Corrected Plane Angle			Distance			
						Log. feet	Feet	Miles	
6	Ammédikal, V	1°08'	"	°	'	"	5°1199947	131824·1	24°067
	Ballamale, IV	1°07'	53	54	13·84	5°0154410	103619·4	19°625	
	Kudurémukha, III	1°08'	86	39	55·28	5°2118316	162866·4	30·846	
7	Kudurémukha, III	·94	48	49	8·82	5°0194752	104586·4	19·808	
	Ballamale, IV	·94	59	37	22·02	5°0787582	119883·2	22·705	
	Mijár, I	·94	71	33	29·16	5°1199947	131824·1	24·967	
8	Mijár, I	·52	57	0	5·83	4°9516898	89472·5	16·946	
	Ballamale, IV	·51	44	22	23·18	4°8727713	74605·6	14·130	
	Mangalore, II	·52	78	37	30·99	5°0194752	104586·4	19·808	
9	Kudurémukha, III	·90	29	29	50·73	4°9516898	89472·5	16·946	
	Ballamale, IV	·91	103	59	45·74	5°2462971	176318·2	33·394	
	Mangalore, II	·90	46	30	23·53	5°1199947	131824·1	24·967	
10	Pushpagiri, IX	1°98'	55	39	52·92	5°2293634	169575·6	32·117	
	Kittávar, VIII	1°98'	76	38	30·82	5°3006026	199803·3	37·842	
	Sátanhalli, X	1°98'	47	41	36·26	5°1814840	151874·2	28·764	
11	Kittávar, VIII	1°71'	59	35	48·35	5°2010505	158873·2	30°090	
	Sátanhalli, X	1°71'	53	23	28·59	5°1698666	147865·4	28°005	
	Desáni, XI	1°71'	67	0	43·06	5°2293634	169575·6	32·117	
12	Desáni, XI	1°26'	43	20	26·16	5°0550706	113519·5	21·500	
	Sátanhalli, X	1°27'	62	48	31·56	5°1676744	147120·9	27·864	
	Nughallibëtta, XIII	1°27'	73	51	2·28	5°2010505	158873·2	30°090	
13	Sátanhalli, X	1°04'	55	29	24·13	5°0820455	120794·0	22·878	
	Nughallibëtta, XIII	1°04'	73	45	32·63	5°1484175	140740·0	26·655	
	Náráyandurga, XIV	1°04'	50	45	3·24	5°0550706	113519·5	21·500	
14	Pushpagiri, IX	2°07'	36	38	33·47	5°1254663	133495·4	25·283	
	Sátanhalli, X	2°08'	80	4	14·51	5°3430670	220326·7	41·729	
	Adhúrbëtta, XII	2°08'	63	17	12·02	5°3006026	199803·3	37·842	
15	Adhúrbëtta, XII	1°30'	62	19	11·30	5°1484175	140740·0	26·655	
	Sátanhalli, X	1°29'	60	32	35·58	5°1410843	138383·5	26·209	
	Náráyandurga, XIV	1°29'	57	8	13·12	5°1254663	133495·4	25·283	
16	Nughallibëtta, XIII	·77	43	43	42·98	4°9474589	88605·1	16·781	
	Náráyandurga, XIV	·77	65	49	9·76	5°0679459	116935·4	22·147	
	Háltibëtta, XV	·77	70	27	7·26	5°0820455	120794·0	22·878	
17	Náráyandurga, XIV	·46	64	55	35·78	4°9433411	87769·0	16·623	
	Háltibëtta, XV	·46	48	57	12·60	4°8637985	73080·0	13·841	
	Adhibëtta, XVII	·47	66	7	11·62	4°9474589	88605·1	16·781	
18	Adhibëtta, XVII	·69	59	5	22·91	5°0136290	103188·0	19·543	
	Háltibëtta, XV	·69	74	2	35·75	5°0630912	115635·5	21·901	
	Hemagiri, XLIV*	·68	46	52	1·34	4°9433411	87769·0	16·623	
19	Háltibëtta, XV	·55	49	40	31·29	4°9131427	81873·4	15·506	
	Hemagiri, XLIV*	·56	56	24	23·01	4°9516016	89454·4	16·942	
	Rangaswámibëtta, XLIII*	·56	73	55	5·70	5°0136290	103188·0	19·543	
20	Nughallibëtta, XIII	·81	67	56	28·58	5°0765324	119270·3	22·589	
	Háltibëtta, XV	·80	46	44	18·66	4°9718174	93716·8	17·749	
	Chaudanhalli, XVI	·80	65	19	12·76	5°0679459	116935·4	22·147	

\* These stations appertain to the Great Arc Meridional Series, Section 8° to 18°.

PRINCIPAL TRIANGULATION. TRIANGLES.

No. of Triangle	Station	Spherical Excess	Corrected Plane Angle			Distance		
						Log. feet	Feet	Miles
21	Chaudanhalli, XVI	.79	43	25	46.75	4.9516016	89454.4	16.942
	Háltibëtta, XV	.80	70	8	10.37	5.0877122	122380.5	23.178
	Rangaswámibëtta, XLIII*	.79	66	26	2.88	5.0765324	119270.3	22.589
22	Hemagiri, XLIV*	.62	85	50	11.03	5.0819613	120770.6	22.873
	Rangaswámibëtta, XLIII*	.61	51	37	16.37	4.9773827	94925.5	17.978
	Savandurga, XLI*	.61	42	32	32.60	4.9131427	81873.4	15.506
23	Rangaswámibëtta, XLIII*	1.19	75	57	23.13	5.1858445	153406.8	29.054
	Savandurga, XLI*	1.19	54	14	58.73	5.1083491	128336.2	24.306
	Rámadevarabëtta, XL*	1.18	49	47	38.14	5.0819613	120770.6	22.873
24	Rámadevarabëtta, XL*	1.66	52	54	25.47	5.1639886	145877.6	27.628
	Savandurga, XLI*	1.67	70	4	34.95	5.2353677	171936.4	32.564
	Halasúrbëtta, XXXIX*	1.66	57	0	59.58	5.1858445	153406.8	29.054
25	Savandurga, XLI*	1.06	58	17	38.58	5.1071928	127994.9	24.241
	Halasúrbëtta, XXXIX*	1.06	45	51	55.21	5.0333336	107977.6	20.450
	Bannergatta, XLII*	1.06	75	50	26.21	5.1639886	145877.6	27.628
26	Halasúrbëtta, XXXIX*	1.01	72	13	34.48	5.1414716	138507.0	26.232
	Bannergatta, XLII*	1.01	46	7	54.54	5.0206086	104859.7	19.860
	Tirthapalli, XLVI*	1.01	61	38	30.98	5.1071928	127994.9	24.241
27	Tirthapalli, XLVI*	.88	44	45	44.43	4.9953918	98944.5	18.730
	Bannergatta, XLII*	.89	54	55	48.76	5.0607093	115003.0	21.781
	Hösúr, L*	.89	80	18	26.81	5.1414716	138507.0	26.232
28	Hösúr, L*	.56	45	16	28.57	4.8876657	77208.6	14.623
	Bannergatta, XLII*	.57	69	9	0.35	5.0066960	101553.8	19.234
	Turukungutta, LI*	.56	65	34	31.08	4.9953918	98944.5	18.730
29	Bannergatta, XLII*	.26	36	55	34.52	4.6786222	47711.4	9.036
	Turukungutta, LI*	.27	66	36	39.46	4.8626645	72889.4	13.805
	Bangalore Base-line S.W. End, LII*	.27	76	27	46.02	4.8876657	77208.6	14.623
30	Turukungutta, LI*	.12	46	13	23.60	4.5573104	36083.6	6.834
	Bangalore Base-line S.W. End, LII*	.12	61	5	8.50	4.6409274	43744.9	8.285
	Bangalore Base-line N.E. End, LIII*	.12	72	41	27.90	4.6786222	47711.4	9.036
31	Hösúr, L*	.68	34	12	51.73	4.8770744	75348.5	14.271
	Tirthapalli, XLVI*	.69	86	40	8.16	5.1263791	133776.3	25.336
	Bhúpatamma, XLIX*	.68	59	7	0.11	5.0607093	115003.0	21.781
32	Tirthapalli, XLVI*	.32	39	31	20.34	4.7365755	54522.5	10.326
	Bhúpatamma, XLIX*	.32	78	54	2.78	4.9246596	84073.6	15.923
	Kolar, XLVIII*	.32	61	34	36.88	4.8770744	75348.5	14.271
33	Savandurga, XLI*	.92	54	49	20.61	5.0519944	112718.3	21.348
	Bannergatta, XLII*	.93	73	38	31.84	5.1216304	132321.5	25.061
	Bánatimaribëtta, XLV*	.92	51	32	7.55	5.0333336	107977.6	20.450
34	Bannergatta, XLII*	.50	52	39	25.07	4.9524485	89629.0	16.975
	Bánatimaribëtta, XLV*	.49	38	25	20.45	4.8454801	70061.6	13.269
	Devarabëtta, LV*	.50	88	55	14.48	5.0519944	112718.3	21.348
35	Bánatimaribëtta, XLV*	.58	75	14	38.49	5.0246792	105847.2	20.047
	Devarabëtta, LV*	.57	49	47	9.98	4.9221324	83585.8	15.831
	Köppabëtta, LVIII*	.57	54	58	11.53	4.9524485	89629.0	16.975

\* These stations appertain to the Great Arc Meridional Series, Section 8° to 18°.



## MADRAS LONGITUDINAL SERIES.

No. of Triangle	Station	Spherical Excess	Corrected Plane Angle			Distance		
						Log. feet	Feet	Miles
86	Köppabëtta, LVIII*	.54	59	32	0.79	4.9718473	93723.3	17.751
	Devarabëtta, LV*	.54	43	42	18.98	4.8758232	75131.7	14.229
	Mariyálam, LVII*	.54	76	45	40.23	5.0246792	105847.2	20.047
87	Hemagiri, XLIV*	.98	61	5	11.70	5.1216304	132321.5	25.061
	Savandurga, XLI*	.98	80	0	48.10	5.1728174	148873.5	28.196
	Bánatimaribëtta, XLV*	.97	38	54	0.20	4.9773827	94925.5	17.978
88	Mariyálam, LVII*	.63	58	12	51.03	4.9771568	94876.1	17.969
	Devarabëtta, LV*	.64	64	40	40.62	5.0038551	100891.6	19.108
	Ánchëttidurga, LVI*	.63	57	6	28.35	4.9718473	93723.3	17.751
89	Ánchëttidurga, LVI*	.35	62	6	37.26	4.9258238	84299.3	15.966
	Devarabëtta, LV*	.35	33	45	58.62	4.7243688	53011.3	10.040
	Hösúr, L*	.35	84	7	24.12	4.9771568	94876.1	17.969
40	Bannergatta, XLII*	.46	56	47	48.73	4.9258238	84299.3	15.966
	Devarabëtta, LV*	.46	79	8	34.26	4.9953918	98944.5	18.739
	Hösúr, L*	.46	44	3	37.01	4.8454801	70061.6	13.269
41	Hösúr, L*	.53	35	1	58.04	4.8223569	66428.9	12.581
	Turukungutta, LI*	.53	83	36	56.92	5.0607093	115003.0	21.781
	Tirthapalli, XLVI*	.53	61	21	5.04	5.0066960	101553.8	19.234
42	Tirthapalli, XLVI*	.17	36	7	16.01	4.5945737	39316.4	7.446
	Turukungutta, LI*	.18	59	0	1.68	4.7571620	57169.2	10.827
	Mandúr, LIV*	.18	84	52	42.31	4.8223569	66428.9	12.581
43	Mandúr, LIV*	.09	79	4	53.06	4.6409274	43744.9	8.285
	Turukungutta, LI*	.08	38	58	25.52	4.4474874	28021.3	5.307
	Bangalore Base-line N.E. End, LIII*	.09	61	56	41.42	4.5945737	39316.4	7.446
44	Halasúrbëtta, XXXIX*	.45	33	38	43.08	4.7735338	59365.5	11.243
	Tirthapalli, XLVI*	.46	68	13	4.09	4.9978142	99498.0	18.844
	Nandigudi, XLVII*	.46	78	8	12.83	5.0206086	104859.7	19.860
45	Nandigudi, XLVII*	.34	77	16	49.40	4.9246596	84073.6	15.923
	Tirthapalli, XLVI*	.34	59	11	8.30	4.8693585	74021.6	14.019
	Kolar, XLVIII*	.34	43	32	2.30	4.7735338	59365.5	11.243
46	Kolar, XLVIII*	.39	74	59	30.59	4.9770267	94847.7	17.964
	Bhúpatamma, XLIX*	.39	71	16	52.83	4.9684980	93003.2	17.614
	Bandapalle, XVIII	.38	33	43	36.58	4.7365755	54522.5	10.326
47	Bhúpatamma, XLIX*	.48	53	1	25.64	4.8985937	79176.0	14.995
	Bandapalle, XVIII	.48	53	50	13.40	4.9031669	80014.2	15.154
	Yërrakönda, XX	.48	73	8	20.96	4.9770267	94847.7	17.964
48	Yërrakönda, XX	.44	52	17	35.80	4.8742979	74868.3	14.180
	Bandapalle, XVIII	.45	70	54	58.69	4.9514892	89431.2	16.938
	Krishnamakönda, XXII	.44	56	47	25.51	4.8985937	79176.0	14.995
49	Bandapalle, XVIII	.30	51	41	51.24	4.7924812	62012.8	11.745
	Krishnamakönda, XXII	.31	56	57	46.03	4.8211579	66245.7	12.547
	Káriveri, XXI	.31	71	20	22.73	4.8742979	74868.3	14.180
50	Kolar, XLVIII*	.34	27	54	42.71	4.6680268	46561.5	8.818
	Bandapalle, XVIII	.34	82	51	23.30	4.9942921	98694.3	18.692
	Kurudamale, XIX	.34	69	13	53.99	4.9684980	93003.2	17.614

\* These stations appertain to the Great Arc Meridional Series, Section 8° to 18°.

PRINCIPAL TRIANGULATION. TRIANGLES.

No. of Triangle	Station	Spherical Excess	Corrected Plane Angle	Distance		
				Log. feet	Feet	Miles
51	Kurudamale, XIX	23	71 17 44.66	4.8211579	66245.7	12.547
	Bandapalle, XVIII	22	66 57 54.62	4.8086364	64363.0	12.190
	Káraveri, XXI	22	41 44 20.72	4.6680268	46561.5	8.818
52	Káraveri, XXI	25	77 11 9.23	4.8562822	71826.1	13.603
	Krishnamakõnda, XXII	25	45 28 32.94	4.7202972	52516.7	9.946
	Devarakõnda, XXIII	25	57 20 17.83	4.7924812	62012.8	11.745
53	Krishnamakõnda, XXII	29	38 50 32.81	4.7131652	51661.3	9.784
	Devarakõnda, XXIII	29	80 28 1.98	4.9097333	81233.2	15.385
	Satghur, XXVI	29	60 41 25.21	4.8562822	71826.1	13.603
54	Devarakõnda, XXIII	27	88 31 26.70	4.9109826	81467.2	15.429
	Satghur, XXVI	26	52 8 7.95	4.8084596	64336.8	12.185
	Mugali, XXV	26	39 20 25.35	4.7131652	51661.3	9.784
55	Káraveri, XXI	12	41 9 40.62	4.5446197	35044.5	6.637
	Devarakõnda, XXIII	12	58 19 22.21	4.6562144	45312.1	8.582
	Patikõnda, XXIV	13	80 30 57.17	4.7202972	52516.7	9.946
56	Patikõnda, XXIV	17	73 13 9.36	4.8084596	64336.8	12.185
	Devarakõnda, XXIII	18	75 20 50.17	4.8129992	65012.9	12.313
	Mugali, XXV	17	31 26 0.47	4.5446197	35044.5	6.637
57	Satghur, XXVI	73	58 10 23.71	5.0557373	113693.9	21.533
	Mugali, XXV	73	84 19 23.00	5.1243637	133156.9	25.219
	Batinkõnda, XXVII	72	37 30 13.29	4.9109826	81467.2	15.429
58	Mugali, XXV	65	47 54 59.85	4.9405958	87215.9	16.518
	Batinkõnda, XXVII	66	56 44 1.56	4.9923663	98257.6	18.609
	Muruktõre, XXVIII	66	75 20 58.59	5.0557373	113693.9	21.533
59	Muruktõre, XXVIII	64	77 55 3.22	5.0600425	114826.6	21.747
	Batinkõnda, XXVII	64	54 7 8.07	4.9783825	95144.2	18.020
	Pullúr, XXX	64	47 57 48.71	4.9405958	87215.9	16.518
60	Batinkõnda, XXVII	83	59 44 25.88	5.0429209	110387.8	20.907
	Pullúr, XXX	83	56 17 59.46	5.0266304	106323.8	20.137
	Anandalamalai, XXXI	84	63 57 34.66	5.0600425	114826.6	21.747
61	Satghur, XXVI	66	30 21 55.21	4.8325499	68006.4	12.880
	Batinkõnda, XXVII	66	67 49 37.77	5.0954527	124581.3	23.595
	Kailáagarh, XXIX	67	81 48 27.02	5.1243637	133156.9	25.219
62	Kailáagarh, XXIX	57	61 39 48.43	5.0266304	106323.8	20.137
	Batinkõnda, XXVII	57	84 4 29.35	5.0797351	120153.1	22.756
	Anandalamalai, XXXI	57	34 15 42.22	4.8325499	68006.4	12.880
63	Pullúr, XXX	113	55 55 44.43	5.1185474	131385.5	24.884
	Anandalamalai, XXXI	113	79 58 2.00	5.1936442	156186.8	29.581
	Kurumkota, XXXII	113	44 6 13.57	5.0429209	110387.8	20.907
64	Anandalamalai, XXXI	98	53 14 37.63	5.0503713	112297.8	21.269
	Kurumkota, XXXII	98	57 8 30.38	5.0709238	117740.0	22.299
	Mávandúr, XXXIV	98	69 36 51.99	5.1185474	131385.5	24.884
65	Mávandúr, XXXIV	92	48 34 9.64	5.0249554	105914.5	20.060
	Kurumkota, XXXII	92	78 46 50.42	5.1416548	138565.4	26.243
	Malaipedu, XXXVI	92	52 38 59.94	5.0503713	112297.8	21.269

## MADRAS LONGITUDINAL SERIES.

No. of Triangle	Station	Spherical Excess	Corrected Plane Angle				Distance		
			Log. feet	Feet	Miles				
66	Malaipedu, XXXVI	·89	58	1	4' 41	5·0533506	113070·8	21·415	
	Kurumkota, XXXII	·89	69	22	16' 57	5·0960669	124757·6	23·628	
	Chēmbedu, XXXV	·88	52	36	39' 02	5·0249554	105914·5	20·060	
67	Kurumkota, XXXII	1·13	70	27	11' 72	5·1557144	143124·7	27·107	
	Chēmbedu, XXXV	1·12	61	25	54' 10	5·1251105	133386·1	25·263	
	Nagari, XXXIII	1·12	48	6	54' 18	5·0533506	113070·8	21·415	
68	Pullūr, XXX	1·06	57	45	59' 78	5·1251105	133386·1	25·263	
	Kurumkota, XXXII	1·06	40	8	51' 23	5·0071975	101671·1	19·256	
	Nagari, XXXIII	1·06	82	5	8' 99	5·1936442	156186·8	29·581	
69	Malaipedu, XXXVI	·87	62	2	19' 47	5·0707230	117685·5	22·289	
	Chēmbedu, XXXV	·87	48	30	54' 45	4·9991897	99813·6	18·904	
	Madras Dome Observatory, XXXVII	·87	69	26	46' 08	5·0960669	124757·6	23·628	
70	Malaipedu, XXXVI	·88	56	19	19' 87	5·0679320	116931·6	22·146	
	Māvandūr, XXXIV	·87	43	13	53' 38	4·9833779	96244·9	18·228	
	Tirumani, XXXVIII	·88	80	26	46' 75	5·1416548	138565·4	26·243	
71	Māvandūr, XXXIV	·70	33	38	47' 34	4·8798320	75828·4	14·361	
	Tirumani, XXXVIII	·70	87	39	35' 20	5·1359073	136743·7	25·898	
	Avirimodu, XXXIX	·70	58	41	37' 46	5·0679320	116931·6	22·146	
72	Avirimodu, XXXIX	·42	45	12	53' 38	4·8526936	71235·0	13·491	
	Tirumani, XXXVIII	·43	85	42	51' 78	5·0003703	100085·3	18·956	
	Manamai Kunnatūr, XL	·43	49	4	14' 84	4·8798320	75828·4	14·361	
78	Manamai Kunnatūr, XL	·46	73	12	15' 97	4·9740758	94205·4	17·842	
	Tirumani, XXXVIII	·46	60	25	2' 17	4·9323501	85575·6	16·208	
	Pudupák, XLI	·46	46	22	41' 86	4·8526936	71235·0	13·491	
74	Tirumani, XXXVIII	·51	45	45	41' 12	4·8696632	74073·6	14·029	
	Pudupák, XLI	·52	68	34	22' 43	4·9833779	96244·9	18·228	
	Malaipedu, XXXVI	·51	65	39	56' 45	4·9740758	94205·4	17·842	
75	Pudupák, XLI	·20	51	30	43' 89	4·7637819	58047·3	10·994	
	Malaipedu, XXXVI	·20	35	44	11' 37	4·6366202	43313·2	8·203	
	Nanmangalam, XLII	·20	92	45	4' 74	4·8696632	74073·6	14·029	
76	Malaipedu, XXXVI	·14	43	46	17' 06	4·6051846	40288·8	7·630	
	Nanmangalam, XLII	·14	50	52	48' 96	4·6549809	45183·6	8·558	
	Mángád, XLIII	·15	85	20	53' 98	4·7637819	58047·3	10·994	
77	Mángád, XLIII	·07	44	59	17' 84	4·4623428	28996·3	5·492	
	Nanmangalam, XLII	·08	55	48	43' 19	4·5305561	33927·8	6·426	
	St. Thomas's Mount, XLIV	·08	79	11	58' 97	4·6051846	40288·8	7·630	
78	Pudupák, XLI	·09	36	20	21' 31	4·4372955	27371·3	5·184	
	Nanmangalam, XLII	·09	73	59	34' 83	4·6473857	44400·3	8·409	
	Injambákam, XLV	·09	69	40	3' 86	4·6366202	43313·2	8·203	
79	Injambákam, XLV	·06	48	28	18' 35	4·4623427	28996·3	5·492	
	Nanmangalam, XLII	·07	86	33	47' 70	4·5872943	38662·9	7·323	
	St. Thomas's Mount, XLIV	·06	44	57	53' 95	4·4372955	27371·3	5·184	

MADRAS LONGITUDINAL SERIES.

SECONDARY TRIANGULATION. TRIANGLES.

PRINCIPAL-AUXILIARY AND SECONDARY STATIONS, AND INTERSECTED POINTS.

Differences between the common sides of two triangles are shown by the small figures in the 5th and 12th columns between the data of the triangles, the first in order having supplied the greater value.

No. of Triangle	Station	Corrected Plane Angle	Distance			No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used
			Log. feet	Feet	Miles				Log. feet	Feet	Miles	
80	Santurkopalgudda	h.s.	4.747913	55965	10.599	85	Kadappanabëtta	48 38 46	4.855324	71668	13.573	Inch 86
	Partamalaigudda	"	4.684316	48341	9.155		Ballamale	7 46 51	4.111459	12926	2.448	"
	Mijär	"	4.710377	51331	9.722		Kannür	123 34 23	4.900630	79548	15.066	"
81	Partamalaigudda	h.s.	4.655717	45260	8.572	86	Kannür	81 27 39	4.740336	54997	10.416	"
	Mijär	"	4.711827	51502	9.754		Ballamale	57 57 37	4.922251	83609	15.835	"
	Inadagudda	"	4.747913	55965	10.599		Passodigumpe	79 17 39	4.855324	71668	13.573	"
82	Inadagudda	h.s.	4.709525	51230	9.703	87	Ballamale	35 9 20	4.773513	59363	11.243	"
	Mijär	"	4.793995	62225	11.785		Passodigumpe	79 17 39	4.541410	34786	6.588	"
	Kulibogudda	"	4.655717	45260	8.572		Ballanád	35 9 20	4.740336	54997	10.416	"
83	Kulibogudda	h.s.	4.776482	59770	11.320	88	Ballanád	83 44 32	5.100906	126155	23.893	"
	Mijär	"	4.567732	36960	7.000		Passodigumpe	26 14 42	5.125289	133441	25.273	"
	Kadappanabëtta	s.	4.709525	51230	9.703		Kandadakamale	53 37 58	4.773513	59363	11.243	"
84	Mijär	h.s.	4.900630	79548	15.066	89	Passodigumpe	92 36 54	4.846122	70165	13.289	"
	Kadappanabëtta	s.	5.019401	104569	19.805		Kandadakamale	53 37 58	5.007280	101690	19.260	"
	Ballamale	h.s.	4.776482	59770	11.320		Bekal	92 36 54	5.100906	126155	23.893	"

\* This base is taken from the Synoptical Volume of the Mangalore Meridional Series in which the continuation of the triangulation will be found.

NOTES.—1. Names followed by Roman numerals are those of Principal Stations.

2. The value of the side is given in the same line with the opposite angle.

3. C.T.I. stands for "Circular Transit Instrument"—probably a small theodolite with complete vertical circle.

No. of Triangle	Station	Corrected Plane Angle			Distance			Theodolite used
		°	'	"	Log. feet	Feet	Miles	
90	Bekal Kandadakamale Yemale	8. No. 1 h.s. No. 1 "	65 9 56 86 1 13	25° 02' 22" 27° 50' 6" 13° 28'	5.120961 5.162053 4.846122	132118 145229 70165	25.022 27.506 13.289	Inch 86 "
91	Yemale Kandadakamale Tadiandamol	No. 1 h.s. No. 1 " "	60 21 28 69 18 26	28° 25' 1" 30° 40' 8" 25° 02'	5.173674 5.205027 5.120961	149167 160556 132118	28.251 30.408 25.022	" "
92	Muchil, VII Pushpagiri, IX Kandadakamale	No. 2 h.s.	118 53 32 24 8 28 36 58 0	18° 59' 32" 16° 8' 0" 24° 7' 02"	5.278510 4.947947 5.115366	189893 88705 130426	35.965 16.800 24.702	12 "
93	Pushpagiri, IX Kandadakamale Tadiandamol	No. 2 h.s.	49 13 37 56 10 24 74 35 59	28° 25' 1" 30° 9' 8" 35° 9' 65"	5.173660 5.213848 5.278510	149163 163624 189893	28.251 30.989 35.965	" "
94	Pantamalaigudda Inadagudda Surágudda	h.s. " "	123 18 6 11 55 6 44 46 48	11° 57' 4" 2° 8' 60" 9° 7' 54"	4.786114 4.178973 4.711827	61110 15100 51502	11.574 2.860 9.754	C.T.L. "
95	Pantamalaigudda Surágudda Káral Great Statue	h.s. " "	39 34 41 33 4 49	1° 9' 9" 1° 6' 35"	4.003404 3.936221 4.178973	10079 8634 15100	1.909 1.635 2.860	" "
96	Inadagudda Mijár Koiyárgudda	h.s. " "	83 36 27 63 9 5	9° 54' 8" 5° 26' 7" 8° 57' 2"	4.702545 4.444164 4.655717	50413 27808 45260	9.548 5.267 8.572	" "
97	Mijár Kulibogudda Koiyárgudda	h.s. " "	65 31 50 67 39 28	9° 54' 8" 9° 54' 8" 9° 7' 03"	4.606208 4.702545 4.709525	40384 50413 51230	7.648 9.548 9.703	" "
98	Inadagudda Koiyárgudda Mulki	h.s. " "	129 11 37 100 9 50	3° 52' 58" 3° 05' 1" 5° 26' 7"	3.527588 4.477855 4.444164	3370 30051 27808	0.638 5.691 5.267	" "
99	Mijár Kulibogudda Súrtikal	h.s. " "	13 35 34 100 9 50	2° 49' 1" 10° 43' 5" 9° 7' 03"	4.119083 4.741109 4.709525	13155 55095 51230	2.491 10.435 9.703	" "
100	Ballamale Pasodigumpe Mangalore Flag-staff	h.s. " "	76 37 27 69 17 2	18° 07' 9" 17° 38' 1" 10° 41' 6"	4.979799 4.962715 4.740336	95455 91773 54997	18.079 17.381 10.416	86 "
101	Ballamale Kannir Mangalore Flag-staff	h.s. " "	4 50 12 158 37 59	4° 02' 2" 17° 38' 1" 13° 57' 3"	4.327116 4.962715 4.855324	21238 91773 71668	4.022 17.381 13.573	" "
102	Mijár, I Ballamale, IV Mangalore Light-house	h.s. " "	57 1 9 44 23 41	16° 9' 51" 14° 13' 7" 19° 8' 08"	4.951836 4.872999 5.019475	89503 74645 104586	16.951 14.137 19.808	24 "
	Kudurémukha, III Ballamale, IV Mangalore Light-house		29 29 49 104 1 4	89° 50' 3" 176° 36' 4" 24° 9' 07"	4.951836 5.246409 5.119995	89503 176364 131824	16.951 33.402 24.907	Inch 24 "
	Kulibogudda Kadappanabétta Mangalore	h.s. s. No. 1 "	25 28 59 86 11 32 68 19 29	17° 11' 2" 39° 68' 4" 7° 51' 6"	4.233295 4.598620 4.567732	17112 39684 36960	3.241 7.516 7.000	86 "
	Kulibogudda Mangalore Mangalore	h.s. s. No. 2 "	14 30 24 66 9 43 99 19 53	1° 00' 74" 6° 9' 07" 7° 51' 6"	4.003201 4.565680 4.598620	10074 36786 39684	1.008 6.907 7.516	" "
	Mijár, I Mangalore, II Mudapinna Hill Tree		30 16 14 98 12 2	48° 03' 5" 94° 31' 7" 14° 13' 0"	4.681556 4.974589 4.872771	48035 94317 74606	9.097 17.863 14.130	24 "
	Mijár, I Ballamale, IV Mudapinna Hill Tree		26 43 52 64 22 28	8° 9' 11" 17° 8' 63" 19° 8' 08"	4.672579 4.974589 5.019475	47032 94317 104586	8.911 17.863 19.808	" "
	Ballamale, IV Muchil, VII Ballanád Hill Peak		5 35 36 3 5 29	13° 32' 5" 7° 37' 3" 20° 6' 44"	4.847314 4.590276 5.037425	70358 38929 109000	13.325 7.373 20.644	" "
	Pasodigumpe Kandadakamale Anantapur	h.s. No. 1 " "	56 52 28 15 56 12 107 11 20	11° 05' 1" 36° 25' 9" 23° 8' 93"	5.043721 4.559410 5.100906	110591 36259 126155	20.945 6.867 23.893	86 "
	Kandadakamale Bekal Anantapur	No. 1 h.s. s. h.s.	37 41 46 104 23 0 37 55 14	69° 81' 2" 110° 591' 70° 165'	4.843930 5.043721 4.846122	69812 110591 70165	13.222 20.945 13.289	" "
	Pasodigumpe Anantapur Kumbha	h.s. " s.	28 3 7 84 1 23 67 55 30	18° 400' 7° 370' 6° 867'	4.264823 4.590107 4.559410	18400 38914 36259	3.485 7.370 6.867	" "
	Kandadakamale Bekal Kásaragod Fort	No. 1 h.s. s. "	23 9 49 112 55 4	39° 700' 93° 171' 13° 289'	4.599779 4.969281 4.846122	39790 93171 70165	7.536 17.646 13.289	" "
	Bekal Anantapur Chandragiri Fort	s. h.s.	7 34 0 5 7 55	418° 19' 284° 08' 698° 12'	4.621376 4.453436 4.843930	41819 28408 69812	7.920 5.380 13.222	" "
	Kandadakamale Anantapur Manjampádi	No. 1 h.s. " s.	63 26 14 23 37 0 92 56 46	99° 049' 44° 363' 110° 591'	4.995849 4.647024 5.043721	99049 44363 110591	18.759 8.402 20.945	" "
	Kandadakamale Bekal Manjampádi	No. 1 h.s. s. "	25 44 28 32 32 1 121 43 31	358° 26' 443° 63' 701° 65'	4.554203 4.647024 4.846122	35826 44363 70165	6.785 8.402 13.289	" "

SECONDARY TRIANGULATION. TRIANGLES.

No. of Triangle	Station	Corrected Plane Angle			No. of Triangle	Station	h.s.	Corrected Plane Angle			No. of Triangle	Station	h.s.	Distance			Theodolite used
		°	'	"				Log. feet	Feet	Miles				Log. feet	Feet	Miles	
116	Bekal Manjampédi Hósdrug Fort	8.	21 29 33	85 39 59	129	Mijár Bugargudda Mádu Bidare Pagoda	"	20 15 0	70 39 5	129	Mijár Bugargudda Mádu Bidare Pagoda	"	3' 922766 4' 358294 4' 383489	8371 22819 24182	1' 585 4' 322 4' 580	Inch 86	
117	Mijár, I Ballamale, IV Karinja Hill Pagoda	"	21 44 51	51 55 41	180	Ammédikal, V Kudurémukha Jamálabad Hill Mark	h.s.	19 23 6	45 53 39	180	Ammédikal, V Kudurémukha Jamálabad Hill Mark	h.s.	4' 564223 4' 899355 5' 001454	36663 79315 100335	6' 944 15' 022 19' 003	24 7	
118	Mijár, I Kudurémukha, III Karinja Hill Pagoda	"	49 48 39	45 26 56	131	Ammédikal, V Béllatangadi Jamálabad Hill Mark	s.	10 16 11	76 20 8	131	Ammédikal, V Béllatangadi Jamálabad Hill Mark	s.	4' 162933 4' 899355 4' 911062	14552 79315 81482	2' 756 15' 022 15' 432	24 8	
119	Mijár, I Ballamale, IV Kudurémukha Hill Mark	"	72 17 14	58 5 37	132	Ammédikal, V Kudurémukha Yerkal Hill Peak	h.s.	24 47 6	13 35 20	132	Ammédikal, V Kudurémukha Yerkal Hill Peak	h.s.	4' 830945 4' 579491 5' 001454	67756 37974 100335	12' 832 7' 192 19' 003	24 7	
120	Ammédikal, V Ánú, VI Kudurémukha	h.s.	80 33 9	40 55 7	133	Ammédikal, V Béllatangadi Yerkal Hill Peak	s.	54 26 23	27 28 43	133	Ammédikal, V Béllatangadi Yerkal Hill Peak	s.	4' 825757 4' 579491 4' 911062	66951 37974 81482	12' 680 7' 192 15' 432	24 7	
121	Kudurémukha, III Ammédikal, V Béllatangadi	"	50 45 19	29 15 38	134	Ánú, VI Kittávar, VIII Katégudda Hill Tree	"	54 50 58	66 5 6	134	Ánú, VI Kittávar, VIII Katégudda Hill Tree	"	4' 985108 5' 033561 5' 005908	96629 108034 101370	18' 301 20' 461 19' 199	24	
122	Ammédikal, V Kudurémukha Béllatangadi	h.s.	29 39 17	96 33 47	135	Ammédikal, V Kittávar, VIII Katégudda Hill Tree	"	60 30 26	12 2 2	135	Ammédikal, V Kittávar, VIII Katégudda Hill Tree	"	4' 985108 4' 364466 5' 024898	96629 23145 105900	18' 301 4' 384 20' 057	"	
123	Kudurémukha, III Ammédikal, V Balláráyandurga	h.s.	33 4 27	26 19 46	136	Ánú, VI Kittávar, VIII Siskalbétta Hill Peak	"	44 28 1	81 22 35	136	Ánú, VI Kittávar, VIII Siskalbétta Hill Peak	"	4' 942497 5' 092153 5' 005908	87599 123638 101370	16' 591 23' 416 19' 199	"	
124	Ammédikal, V Béllatangadi Balláráyandurga	h.s.	55 35 24	50 42 7	137	Kittávar, VIII Pushpagari, IX Siskalbétta Hill Peak	"	54 19 9	35 13 24	137	Kittávar, VIII Pushpagari, IX Siskalbétta Hill Peak	"	5' 091203 4' 942497 5' 181484	123368 87599 151874	23' 365 16' 591 28' 764	"	
125	Mijár Ballamale Angargudda	h.s.	37 46 10	126 11 32	138	Ánú, VI Kittávar, VIII Jénkhalbétta Hill Peak	"	35 29 48	92 56 13	138	Ánú, VI Kittávar, VIII Jénkhalbétta Hill Peak	"	4' 899602 4' 553856 5' 019401	79360 35798 104569	14' 231 24' 477 19' 199	"	
126	Angargudda Ballamale Balláráyandurga	h.s.	91 21 3	59 54 15	139	Kittávar, VIII Pushpagari, IX Jénkhalbétta Hill Peak	"	42 45 31	27 48 48	139	Kittávar, VIII Pushpagari, IX Jénkhalbétta Hill Peak	"	5' 038758 4' 875883 5' 181484	109335 75142 151874	20' 707 14' 231 28' 764	"	
127	Mijár Ballamale Bugargudda	h.s.	54 37 20	12 16 54	140	Ánú, VI Kittávar, VIII Múrkangudda Hill Peak	"	27 21 35	104 31 58	140	Ánú, VI Kittávar, VIII Múrkangudda Hill Peak	"	4' 796459 5' 119980 5' 005908	62583 131820 101370	11' 853 24' 966 19' 199	"	
128	Mijár Angargudda Bugargudda	h.s.	16 51 10	28 59 12	141	Kittávar, VIII Pushpagari, IX Múrkangudda Hill Peak	"	31 9 46	18 13 51	141	Kittávar, VIII Pushpagari, IX Múrkangudda Hill Peak	"	4' 160369 4' 383489 4' 553856	14467 24182 35798	19' 606 11' 853 28' 764	"	

\* For another triangle to this point, see the Synoptical Volume of the Mangalore Meridional Series.  
 † For another triangle to this station, see the Synoptical Volume of the Mangalore Meridional Series, by which the value of the common side was greater by 1 foot.

No. of Triangle	Station	Corrected Plane Angle	Distance			No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used
			Log. feet	Feet	Miles				Log. feet	Feet	Miles	
142	Desani, XI Nughalibetta, XIII Malékal Tirupati Temple	65 12 53 19 51 48	5 127310 4 700474 5 167674	134063 50173 147121	25 391 9 503 27 864	155	Kittávar, VIII Sátanhalli, X Málambi Hill Peak No. 1	47 2 21 59 1 17	5 111058 5 179817 5 229363	129139 151292 169576	24 458 28 654 32 117	Inch 24 "
148	Sátanhalli, X Nughalibetta, XIII Malékal Tirupati Temple	47 35 22 93 42 52	5 127310 5 258146 5 055971	134063 181195 113520	25 391 34 317 21 500	156	Sátanhalli, X Adhúrbetta, XII Málambi Hill Peak No. 1	68 44 38 54 14 20	5 171192 5 111058 5 125466	148317 129139 133495	28 090 24 458 25 283	" " "
144	Desani, XI Malékal Tirupati Temple	131 40 17	4 734025 3 763449	54203 5800	10 266 1 099	157	Kundhalli Kundúrbetta Málambi Hill Peak No. 2	45 36 57 29 4 5	4 853794 4 686191 4 983986	71416 48550 96380	13 526 9 195 18 254	36 "
145	Desani, XI Nughalibetta, XIII Desani	43 44 38	4 700474	50173	9 503	158	Ánú, VI Kittávar, VIII Belúr Temple	24 24 42 62 49 54	4 622666 4 955640 5 005908	41944 90290 101370	7 944 17 100 19 199	24 "
146	Ballamale Ballárayandurga Kundhalli	66 27 24 2 6 11	5 161073 3 763449 5 167674	14902 5800 147121	27 443 1 099 27 864	159	Kittávar, VIII Sátanhalli, X Sigégudda	38 2 37 29 43 46	5 052661 4 958295 5 229363	112892 90844 169576	21 381 17 205 32 117	" " "
147	Kundhalli Ballárayandurga Kundúrbetta	78 48 3 25 59 36 75 12 21	5 327006 5 333998 4 983986 5 327006	212621 215724 96380 212621	40 269 40 857 18 254 40 269	160	Sátanhalli, X Desani, XI Sigégudda	23 39 44 39 14 27	4 855062 5 052661 5 201051	71624 112892 158873	13 565 21 381 30 090	" " "
148	Ballárayandurga Kundúrbetta Hannébetta	21 36 33 136 19 14	5 069548 5 060827 5 333998	117368 115034 215724	22 229 21 787 40 857	161	Kittávar, VIII Sátanhalli, X Mulagalalejenkal Hill Mark	31 57 31 19 1 32	5 062665 4 852162 5 229363	115522 71148 169576	21 879 13 475 32 117	" " "
149	Kundúrbetta Hannébetta Desani	65 36 46 71 32 31 42 50 43	5 196437 5 214089 5 069548	157195 163715 117368	29 772 31 007 22 229	162	Kittávar, VIII Pushpagiri, IX Mahárájburga Pagoda	45 46 7 28 0 5	5 054380 4 870775 5 181484	113339 74263 151874	21 466 14 065 28 704	" " "
150	Pushpagiri, IX Tadiándamol Mercara	21 39 31 23 8 38 135 11 51	4 932981 4 960304 5 213848	85700 91265 163624	16 231 17 285 30 989	163	Kittávar, VIII Sátanhalli, X Mahárájburga Pagoda	30 52 26 19 48 9	5 051103 4 870775 5 229363	112487 74263 169576	21 304 14 065 32 117	" " "
151	Tadiándamol Mercara Mercara Hill Mark	0 31 30 150 16 29	3 206712 4 940026 4 932981	1610 87101 85700	0 305 16 496 16 231	164	Kittávar, VIII Mulagalalejenkal Hill Mark Mánjarabad	43 45 27 85 1 42	4 603659 4 745611 4 852162	49392 55069 71148	9 355 10 543 13 475	" 7 "
152	Pushpagiri, IX Tadiándamol Mercara Hill Mark	21 55 34 22 37 8	4 940026 4 952848 5 213848	87101 89712 163624	16 496 16 991 30 989	165	Kittávar, VIII Mahárájburga Pagoda Mánjarabad	44 50 32 86 42 29	4 719778 4 745611 4 870775	52454 55669 74263	9 934 10 543 14 065	24 7 "
158	Sátanhalli, X Adhúrbetta, XII Kotébetta Hill Peak	65 18 52 74 8 9	5 270860 5 295617 5 125466	186578 197522 133495	35 337 37 410 25 283	166	Kundúrbetta Sigégudda Mánjarabad	88 54 41 36 36 17 54 29 2	5 082766 4 858303 4 993443	120995 72161 98502	22 916 13 667 18 656	C.T.I. " "
154	Kittávar, VIII Sátanhalli, X Kotébetta Hill Peak	65 55 56 62 27 3	5 295617 5 282850 5 229363	197522 101801 169576	37 410 36 326 32 117	167	Sátanhalli, X Adhúrbetta, XII Kabbáigiri Hill Temple	54 35 7 38 44 10	5 037343 4 922586 5 125466	108979 83673 133495	20 640 15 847 25 283	24 " "

\* Deduced base.

SECONDARY TRIANGULATION. TRIANGLES.

No. of Triangle	Station	Corrected Plane Angle	Distance			No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used
			Log. feet	Feet	Miles				Log. feet	Feet	Miles	
168	Kittávar, VIII Pushpagiri, IX Handinkere Hill Temple	93 8 43 27 59 48	5.248412 4.920029 5.181484	177179 83297 151874	33.557 15.776 28.764	181	Ánúr, VI Bába Budan Chikmagalúr	45 26 44 50 8 15 84 25 1	4.599583 4.631873 4.744682	39773 42842 55550	7.533 8.114 10.521	Inch 24 7
169	Pushpagiri, IX Sátanahalli, X Handinkere Hill Temple	27 40 7 62 28 10	4.967456 5.248412 5.300003	92780 177179 199803	17.572 33.557 37.842	182	Ánúr, VI Kittávar, VIII Chikmagalúr Mosque	65 10 52 24 42 48	4.963822 4.627167 5.005908	92007 42381 101370	17.426 8.037 19.199	24
170	Pushpagiri, IX Sátanahalli, X Kabbati Hill Pagoda	7 25 23 31 11 3	4.616678 5.219587 5.300003	41369 165801 199803	7.835 31.402 37.842	183	Bába Budan Sakanagiri Bába Budan	62 43 2 44 31 36 72 45 22	4.653025 4.550110 4.684269	44981 35490 48336	8.519 6.722 9.155	7
171	Kittávar, VIII Pushpagiri, IX Kabbati Hill Pagoda	71 28 15 48 14 32	5.219587 5.115425 5.181484	165801 130444 151874	31.402 24.705 28.764	184	Sakanagiri Manjihalli Sakkarapatna	25 56 34 14 43 29 139 19 57	4.475978 4.240159 4.649053	29921 17384 44571	5.667 3.292 8.441	"
172	Nughallibétta, XIII Nárayandurga, XIV Mallappanabétta	78 36 33 35 44 32	5.113871 4.889028 5.082046	129978 77451 120794	24.617 14.669 22.878	185	Sakanagiri Manjihalli Kadúr	59 35 56 67 15 22 53 8 42	4.681639 4.710723 4.649053	48044 51372 44571	9.099 9.729 8.441	"
173	Sátanahalli, X Nárayandurga, XIV Mallappanabétta	65 42 13 15 0 32	5.113871 4.567396 5.148418	129978 30931 140740	24.617 6.995 26.655	186	Manjihalli Kadúr Gardangiri	75 34 47 72 35 26 31 49 47	4.945599 4.939137 4.681639	88227 86923 48044	16.710 16.403 9.099	"
174	Sigéudda Mallappanabétta Mukundurbétta Pagoda	31 8 19 63 25 9	4.756848 4.994750 5.041889	57128 98798 110126	10.820 18.712 20.857	187	Desáni, XI Manjihalli Gardangiri	68 33 22 59 55 52 51 30 46	4.939137 4.907520 4.863913	86923 80820 73099	16.403 15.307 13.845	"
175	Sigéudda Mallappanabétta Mávkérbétta Pagoda	23 44 16 70 31 21	4.647912 5.017498 5.041889	44454 10411 110126	8.419 19.718 20.857	188	Kadúr Gardangiri Kugankal	82 1 36 16 1 13 81 57 11	4.945678 4.390770 4.945599	88242 24591 88227	16.713 4.657 16.710	"
176	Ánúr, VI Bába Budan Marale	89 33 25 42 42 20	4.782578 4.913291 4.744682	60615 81901 55550	11.480 15.512 10.521	189	Desáni, XI Gardangiri Malékal Tirupati	38 44 24 37 33 2 103 42 34	4.716500 4.705019 4.907520	52059 50701 80820	9.860 9.603 15.307	"
177	Bába Budan Marale Sakanagiri	66 5 45 47 7 28 66 46 47	4.780317 4.684269 4.782578	60300 48336 60615	11.420 9.155 11.480	190	Gardangiri Malékal Tirupati Bánávar	61 7 41 45 31 38 73 20 41	4.677469 4.588558 4.716500	47585 38776 52059	9.012 7.344 9.860	"
178	Sakanagiri Marale Manjihalli	69 0 33 43 11 13 67 48 14	4.783933 4.649053 4.780317	60804 44571 60300	11.516 8.441 11.420	191	Desáni, XI Malékal Tirupati Bánávar	57 38 50 58 10 56 64 10 14	4.677469 4.680011 4.705019	47585 47864 50701	9.012 9.065 9.603	"
179	Manjihalli Marale Desáni, XI	89 25 45 50 35 2 39 59 13	4.975962 4.863913 4.783933	94615 73099 60804	17.920 13.845 11.516	192	Sátanahalli, X Nárayandurga, XIV Yénné-hölé-rauganbétta Pagoda	27 59 47 6 44 52	5.064167 4.462643 5.148418	115922 29016 140740	21.955 5.490 26.655	24
180	Marale Desáni, XI Kittávar, VIII	105 8 10 36 43 2 38 8 48	5.169867 4.961805 4.975962	147866 91581 94615	28.005 17.345 17.920	198	Sátanahalli, X Nughallibétta, XIII Gunjurbétta Hill Pagoda	65 40 55 21 13 40	5.015351 4.614503 5.055071	103598 41163 113520	19.621 7.796 21.500	"

\* Deduced base. † This base is taken from the Synoptical Volume of the Mangalore Meridional Series in which the continuation of the triangulation will be found.  
‡ For another triangle to this station, see the Synoptical Volume of the Mangalore Meridional Series, by which the value of the common side was greater by 1 foot.



MADRAS LONGITUDINAL SERIES.

No. of Triangle	Station	Corrected Plane Angle	Distance			No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used
			Log. feet	Feet	Miles				Log. feet	Feet	Miles	
194	Nughallibétta, XIII Náráyandurga, XIV Gunjurbétta Hill Pagoda	52 31 54 54 54 26	5°00'21.31 5°01'53.51 5°08'20.46	100492 103598 120794	19°03.33 19°6.21 22°8'78	206	Bömmanhalli Sidragudda Somanhalli Ranganagudda	28 7 23 92 58 5 58 54 32	4°8'06.804 5°13'28.62 5°06'00.95	64002 135788 116438	12°13.9 25°7'17 22°05.3	Inch C.T.I. " " " "
195	Sátanhalli, X Náráyandurga, XIV Channaráyapána Fort (helio.)	38 7 6 24 28 5	4°9'06.36 4°8'17.344 5°14'84.18	97867 65666 140740	18°53.5 12°43.7 26°6'55	207	Yérrakónnda, XX Patikónnda, XXIV Rahmanghar	78 25 55 56 22 9 45 11 56	5°37'21.32 5°30'14.93 5°23'20.32	235577 200214 170621	44°6'17 37°9'19 32°3'15	86 " " " "
196	Nughallibétta, XIII Náráyandurga, XIV Channaráyapána Fort (helio.)	52 40 25 26 16 59	4°9'06.36 4°7'36.376 5°08'20.46	97867 54497 120794	18°53.5 10°32.1 22°8'78	208	Tirthapalli, XLVI† Yérrakónnda, XX Rahmanghar	93 5 53 37 31 23 49 22 44	5°30'14.93 5°08'08.04 5°18'23.89	200214 122125 152191	37°9'19 23°1'30 28°8'24	" " " " " "
197	Sátanhalli, X Náráyandurga, XIV Sravanbégóla Statue	21 51 42 34 43 13	4°7'07.872 4°9'82.448 5°14'84.18	62787 96039 140740	11°8'02 18°1'89 26°6'55	209	Tirthapalli, XLVI† Rahmanghar Nundydroog	51 31 46 72 4 33 56 23 41	5°05'09.048 5°14'46.619 5°08'08.04	114802 139514 122125	21°7'43 26°4'23 23°1'30	" " " " " "
198	Nughallibétta, XIII Náráyandurga, XIV Sravanbégóla Statue	16 0 18 16 1 51	4°7'07.872 4°7'08.554 5°08'20.46	62787 62886 120794	11°8'02 11°9'10 22°8'78	210	Savandurga, XLI† Tirthapalli, XLVI† Nundydroog	37 44 42 70 48 45 71 26 33	5°14'46.19 5°33'29.40 5°33'45.73	139514 215249 216059	26°4'23 40°7'67 40°9'20	" " " " " "
199	Nughallibétta, XIII Náráyandurga, XIV Bukkadabétta Hill Pagoda	17 12 1 9 15 46	4°9'03.950 4°6'39.805 5°08'20.46	80159 43632 120794	15°18.2 8°26.4 22°8'78	211	Savandurga, XLI† Nundydroog Devaráyadurga	50 14 10 49 53 47 79 52 3	5°25'51.7 5°23'36.1 5°33'29.40	168080 167248 215249	31°8'33 31°6'76 40°7'67	" " " " " "
200	Sátanhalli, X Náráyandurga, XIV Bukkadabétta Hill Pagoda	34 35 27 60 0 50	4°9'03.950 5°08'41.3 5°14'84.18	80159 122296 140740	15°18.2 23°16.2 26°6'55	212	Savandurga, XLI† Bömmanhalli Devaráyadurga	51 25 8 89 33 38	5°31'73.52 5°23'36.1 5°42'42.84	207659 167248 265634	39°3'39 31°6'76 50°3'10	" " " " " "
201	Savandurga, XLI† Mallappanabétta Bömmanhalli	28 47 54 45 41 17 105 30 49	5°25'24.48 5°42'42.84 5°55'35.28	178833 265634 357707	33°8'70 50°3'10 67°7'48	213	Bömmanhalli Devaráyadurga Rangaawámibétta	46 14 43 44 59 30 88 45 47	5°17'61.74 5°16'68.75 5°31'73.52	150029 146850 207659	28°4'15 27°8'13 39°3'29	" " " " " "
202	Desáni Mallappanabétta Bömmanhalli	69 10 33 66 0 19 44 49 8	5°25'24.48 5°24'25.35 5°12'08.95	178833 174707 134864	33°8'70 33°1'06 25°5'42	214	Savandurga, XLI† Devaráyadurga Rangaawámibétta	60 10 18 44 34 8 75 15 34	5°17'61.74 5°08'40.88 5°23'36.1	150029 121363 167248	28°4'15 22°9'85 31°6'76	" " " " " "
203	Mallappanabétta Bömmanhalli Gardangiri	48 33 54 74 22 45 57 3 21	5°20'34.74 5°31'22.38 5°25'24.48	159762 205228 178833	30°25.8 38°8'69 33°8'70	215	Savandurga, XLI† Mallappanabétta Hatya Hill Pagoda	35 27 57 45 2 25	5°33'31.08 5°40'30.7 5°53'52.8	210430 256630 357707	39°8'54 48°6'04 67°7'48	" " " " " "
204	Desáni Bömmanhalli Gardangiri	65 33 12 29 33 37 84 53 11	5°20'34.74 4°93'74.12 5°24'25.35	159762 86579 174797	30°25.8 16°39.8 33°1'06	216	Savandurga, XLI† Devaráyadurga Hatya Hill Pagoda	44 45 5 94 44 48	5°25'83.92 5°40'30.7 5°23'36.1	181297 256630 167248	34°3'37 48°6'04 31°6'76	" " " " " "
† 205	Bömmanhalli Gardangiri Sidragudda	29 30 3 44 27 52 106 2 5	4°91'30.57 5°06'00.95 5°20'34.74	81857 116438 159762	15°50.3 22°05.3 30°25.8	217	Bömmanhalli Rangaawámibétta Múganáyakankote	68 42 39 31 14 11 80 3 10	5°14'27.57 4°88'26.0 5°16'68.75	138917 77314 146850	26°3'10 14°6'43 27°8'13	" " " " " "

\* Deduced base.  
 † For another triangle to this station, see the Synoptical Volume of the Great Arc Meridional Series, Section 8<sup>o</sup> to 18<sup>o</sup>.  
 ‡ For another triangle to this station, see the Synoptical Volume of the Great Arc Meridional Series, Section 8<sup>o</sup> to 18<sup>o</sup>.  
 § For another triangle to this station, see the Synoptical Volume of the Great Arc Meridional Series, Section 8<sup>o</sup> to 18<sup>o</sup>.  
 ¶ For another triangle to this station, see the Synoptical Volume of the Great Arc Meridional Series, Section 8<sup>o</sup> to 18<sup>o</sup>.

SECONDARY TRIANGULATION. TRIANGLES.

No. of Triangle	Station	Corrected Plane Angle			Distance			Theodolite used	No. of Triangle	Station	Corrected Plane Angle			Distance			Theodolite used
		°	'	"	Log. feet	Feet	Miles				Log. feet	Feet	Miles				
218	Bömmahalli Múganáyakankote Kondli Hill	h.s.	5 0 53	15 19 10	4.288881 4.769245 4.888260	19448 59782 77314	3.683 11.133 14.643	Inch C.T.I.	231	Séttigère Battankatte Belúr No. 2 Pagoda	h.s.	77 18 30 63 53 40	4.428844 4.392856 4.236553	26844 24709 17241	5.084 4.680 3.266	Inch C.T.I.	
219	Bömmahalli Kondli Hill Kadaba	h.s.	34 57 30	46 55 30	4.663789 4.901276 4.769245	46109 70667 58782	8.733 15.088 11.133	"	232	Séttigère Battankatte Chunchangiri	h.s.	108 59 0 26 40 30 44 20 30	4.367830 4.044294 4.236553	23325 11074 17241	4.418 2.097 3.266	"	
220	Bömmahalli Múganáyakankote Köndapur	h.s.	38 2 10 103 37 15 38 20 35	4.885303 5.083221 4.888260	76790 121121 77314	14.543 22.940 14.643	36 C.T.I.	233	Rangaswámibétta Séttigère Hálibétta Hill	h.s.	41 26 25 75 18 40	4.797651 4.902467 4.927734	62755 91721 84671	11.885 17.371 16.036	"		
221	Múganáyakankote Köndapur Huvinkatte	h.s.	125 8 50 15 27 56 39 23 14	4.995412 4.508787 4.885303	98949 32269 76790	18.740 6.112 14.543	"	234	Rangaswámibétta, XLIII† Hemagiri, XLIV† Hálibétta Hill Temple	h.s.	73 50 19 56 20 3	5.012480 4.950263 4.913143	102915 89179 81873	19.492 16.890 15.506	24		
222	Savandurga, XLI† Rangaswámibétta Hemagiri	h.s.	44 6 15 51 10 34 84 43 11	4.928522 4.977515 5.084088	84825 94954 121363	16.065 17.984 22.985	"	235	Savandurga, XLI† Rangaswámibétta Béttahalli	h.s.	25 4 54 89 50 0 65 5 6	4.753785 5.126510 5.084088	56726 133817 121363	10.744 25.344 22.985	C.T.I.		
223	Rangaswámibétta Hemagiri Narsuswámi	h.s.	62 15 43 62 31 36 55 12 41	4.961025 4.962074 4.928522	91417 91638 84825	17.314 17.356 16.065	"	236	Rangaswámibétta Narsuswámi Béttahalli	h.s.	23 36 17 29 48 10 126 35 33	4.659936 4.753785 4.962074	45702 50726 91638	8.656 10.744 17.356	"		
224	Bömmahalli Rangaswámibétta Séttigère	h.s.	30 50 0 31 54 23 117 15 37	4.927734 4.941077 5.166875	84671 87313 146850	16.036 16.537 27.813	"	237	Narsuswámi Béttahalli Nágamangala	h.s.	141 30 40 12 13 10 26 16 10	4.807975 4.339563 4.059936	64265 21856 45702	12.171 4.139 8.656	"		
225	Rangaswámibétta Narsuswámi Séttigère	h.s.	50 37 59 59 54 31 69 27 30	4.878840 4.927734 4.962074	75655 84671 91638	14.329 16.036 17.356	"	238	Narsuswámi Nágamangala Nágamangala Pagoda	h.s.	17 36 50 52 32 30	3.847020 4.265858 4.339563	7031 18444 21856	1.332 3.493 4.139	"		
226	Mallappanabétta Sigégudda Tagadúr	h.s.	99 32 51 31 7 43 49 19 26	5.155930 4.875445 5.041889	143196 75066 110126	27.120 14.217 20.857	"	239	Narsuswámi Béttahalli Amrutúr	h.s.	14 24 0 94 34 20 71 1 40	4.079851 4.682809 4.059936	12019 48174 45702	2.276 9.124 8.656	"		
227	Bömmahalli Séttigère Tagadúr	h.s.	64 15 55 65 50 20 49 53 45	5.012122 5.017071 4.941077	102830 104153 87313	19.475 19.726 16.537	"	240	Narsuswámi Béttahalli Amrutúr Pagoda	h.s.	40 5 30 85 34 0	3.978918 4.168722 4.079851	9526 14748 12019	1.804 2.793 2.276	"		
228	Bömmahalli Tagadúr Malékal Tirupati Pagoda	h.s.	60 5 47 71 7 2	5.079255 5.117279	120020 131002	22.731 24.811	"	241	Rangaswámibétta Hemagiri Chikkanangalam	h.s.	36 28 35 24 57 40 118 33 45	4.759027 4.610197 4.928522	57415 40750 84825	10.874 7.719 16.065	86 C.T.I.		
229	Narsuswámi Séttigère Ballára	h.s.	2 21 50 27 4 50 150 33 20	3.802628 4.845489 4.878840	6348 70063 75655	1.202 13.270 14.329	"	242	Rangaswámibétta Chikkanangalam Huliyúrdurga Building	h.s.	38 59 40 113 31 17	4.744841 4.908349 4.610197	55570 80975 40756	10.525 15.336 7.719	"		
230	Séttigère Ballára Battankatte	h.s.	69 52 27 88 31 45 21 35 48	4.209334 4.236553 3.802628	16193 17241 6348	3.067 3.266 1.202	"	243	Rangaswámibétta Chikkanangalam Kunigal Fort	h.s.	25 59 50 20 57 10	4.388222 4.299819 4.610197	24477 19944 40756	4.630 3.777 7.719	86 C.T.I.		

\* Deduced base. † These stations appertain to the Great Arc Meridional Series, Section 8° to 19°.

MADRAS LONGITUDINAL SERIES.

No. of Triangle	Station	Corrected Plane Angle			Distance			Theodolite used
		o	'	"	Log. feet	Feet	Miles	
244	Rangaswāmibēta, XLIIIt	47	16	28	4'779696	60214	11'404	Inch 24
	Hemagiri, XLIV†	45	27	45	4'766601	58425	11'065	"
	Hutridurga Hill Mark (helio.)				4'913143	81873	15'506	"
245	Savandurga, XLI†	66	5	59	5'184753	153022	28'981	86
	Devarāyadurga	21	40	48	4'791210	61832	11'711	"
	Hutridurga Stone				5'223361	167248	31'676	"
246	Savandurga, XLI†	17	2	33	4'833211	68110	12'900	"
	Devarāyadurga	28	59	7	5'051594	112614	21'328	"
	Rāmenhalli Hill Pillar				5'223361	167248	31'676	"
247	Savandurga, XLI†	23	39	7	5'009073	102111	19'339	"
	Devarāyadurga	17	25	36	4'882109	76227	14'437	"
	Bairandurga Staff				5'223361	167248	31'676	"
248	Nundydroog	24	21	1	4'871181	74333	14'078	C.T.I.
	Devarāyadurga	86	51	3	5'255297	180010	34'093	"
	Shivaganga Hill Pagoda				5'225517	168080	31'833	"
249	Savandurga, XLI†	55	45	32	5'255297	180010	34'093	86
	Nundydroog	25	32	46	4'972677	93902	17'785	"
	Shivaganga Hill Pagoda				5'332940	215449	40'767	"
250	Savandurga, XLI†	55	41	37	5'134534	136312	25'817	"
	Halsūrbēta, XXXIX†	62	10	39	5'164183	145943	27'641	"
	Sitakal	62	7	44	5'163989	145878	27'628	"
† 251	Halsūrbēta, XXXIX†	60	45	49	5'086784	122119	23'129	"
	Sitakal	42	19	25	4'974183	94229	17'846	"
	Kalkote	76	54	46	5'134534	136312	25'817	"
252	Devarāyadurga	46	44	56	4'525022	33498	6'344	"
	Sitakal	94	58	53	4'661034	45818	8'678	"
	Nijaldurga Pillar				4'454624	28485	5'395	"
253	Devarāyadurga	35	21	26	4'343003	22029	4'172	"
	Sitakal	96	12	10	4'578021	37846	7'168	"
	Rāmadevarabēta Pagoda				4'454624	28485	5'395	"
254	Devarāyadurga	23	22	49	4'217095	16485	3'122	"
	Sitakal	113	19	44	4'581448	38146	7'225	"
	Hēggunda Hill Pagoda				4'454624	28485	5'395	"
255	Halsūrbēta, XXXIX†	6	29	14	4'862256	72821	13'792	24
	Bannergatta, XLI†	4	58	1	4'746671	55805	10'569	"
	Uialinna Mandapam				5'107193	127995	24'241	"
256	Bannergatta, XLI†	0	2	49	1'958390	91	0'017	"
	Bangalore Base-line S.W. End, LI†	41	2	39	4'862256	72821	13'792	7
	Uialinna Mandapam				4'862665	72889	13'805	"

\* Deduced base. † These stations appertain to the Great Arc Meridional Series, Section 8° to 16°. ‡ The continuation of the triangulation will be found in the Synoptical Volume of the Great Arc Meridional Series, Section 8° to 16°.

SECONDARY TRIANGULATION. TRIANGLES.

No. of Triangle	Station	Corrected Plane Angle	Distance			No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used	
			Log. feet	Feet	Miles				Log. feet	Feet	Miles		
270	Uialdinna Mandapam	s.	3.908687	8104	1.535	283	Nágavára	55 46 13	4.104876	12731	2.411	Inch 24	
	Bangalore	h.s.	4.290536	19523	3.698		Machalbéttá	50 9 22	4.072726	11823	2.239	"	"
	Bangalore Palace		4.435584	27264	5.164		Hénnúr	74 4 25	4.170482	14808	2.804	"	"
271	Savandurga, XLI†	s.	4.789536	61594	11.665	284	Nágavára	87 19 21	4.118749	13145	2.490	"	"
	Bannergatta, XLII†		5.053598	113135	21.427		Basavangudda	49 30 3	4.000274	10006	1.895	"	"
	Bangalore		5.033334	107978	20.450		Ráchéhalli	43 10 36	3.954438	9004	1.705	"	"
272	Halasúrbétta, XXXIX†	s.	5.053598	113135	21.427	285	Nágavára	49 51 25	3.970675	9347	1.770	"	"
	Savandurga, XLI†		4.823012	66529	12.600		Hénnúr	54 55 13	4.000274	10006	1.895	"	"
	Bangalore		5.163989	145878	27.628		Ráchéhalli	75 13 22	4.072726	11823	2.239	"	"
273	Bannergatta, XLII†	s.	4.995507	98971	18.744	286	Basavangudda	33 44 45	3.907531	8082	1.531	"	"
	Tirthapalli, XLVI†		4.824138	66702	12.633		Ráchéhalli	81 38 15	4.158198	14395	2.726	"	"
	Bangalore Church No. 1		5.141472	138507	26.232		Sampigehalli	64 37 0	4.118749	13145	2.490	"	"
274	Halasúrbétta, XXXIX†	s.	4.995507	98971	18.744	287	Hénnúr	63 50 34	4.085817	12185	2.308	"	"
	Tirthapalli, XLVI†		4.790010	61746	11.094		Ráchéhalli	72 38 30	4.112496	12957	2.454	"	"
	Bangalore Church No. 1		5.020609	104860	19.860		Gubbi	43 30 56	3.970675	9347	1.770	"	"
275	Bannergatta, XLII†	s.	4.990666	97874	18.537	288	Ráchéhalli	55 11 9	4.039109	10942	2.072	"	"
	Tirthapalli, XLVI†		4.780071	60391	11.438		Sampigehalli	87 29 0	4.124342	13315	2.522	"	"
	Bangalore Church No. 2		5.141472	138507	26.232		Bangalore Base-line N.E. End, LIII†	37 19 51	3.907531	8082	1.531	"	"
276	Halasúrbétta, XXXIX†	s.	4.990666	97874	18.537	289	Ráchéhalli	32 8 8	3.853745	7141	1.352	"	"
	Tirthapalli, XLVI†		4.837932	68854	13.041		Gubbi	82 40 52	4.124342	13315	2.522	"	"
	Bangalore Church No. 2		5.020609	104860	19.860		Bangalore Base-line N.E. End, LIII†	65 11 0	4.085817	12185	2.308	"	"
277	Turukungutta, LI†	s.	4.677119	47546	9.005	290	Bangalore Base-line S.W. End, LII†	62 12 54	4.175626	14084	2.838	"	"
	Bangalore Base-line S.W. End, LII†		4.527060	33702	6.383		Nágavára	68 53 20	4.198656	15800	2.992	"	"
	Bangalore Base-line S. End s.		4.678622	47711	9.036		Dóddagunta	48 53 46	4.105923	†12762	2.417	"	"
278	Bangalore Base-line S.W. End, LII†	s.	4.599849	39797	7.537	291	Halasúrbétta, XXXIX†	28 12 40	4.709880	51272	9.711	C.T.I.	
	Bangalore Base-line S. End s.		4.421371	26386	4.997		Kalkote	32 6 21	4.760765	57645	10.918	36	
	Bangalore Base-line N. End "		4.677119	47546	9.005		Dódballapur Idgah	48 53 46	4.105923	†12762	2.417	"	
279	Turukungutta, LI†	s.	4.599849	39797	7.537	292	Halasúrbétta, XXXIX†	49 35 44	4.782855	60653	11.487	C.T.I.	
	Bangalore Base-line S. End s.		4.368189	23345	4.421		Nundydroog	46 21 46	4.760765	57645	10.918	36	
	Bangalore Base-line N. End "		4.527060	33702	6.383		Dódballapur Idgah	48 53 46	4.105923	†12762	2.417	"	
280	Bangalore Base-line S.W. End, LII†	s.	4.048873	11191	2.120	293	Tirthapalli, XLVI†	18 6 53	4.652313	44907	8.505	"	"
	Nágavára	h.s.	3.902544	7990	1.513		Nundydroog	56 53 27	5.082717	120981	22.913	"	"
	Géddahalli		4.105923	†12762	2.417		Kundana	104 59 40	5.144619	139514	26.423	C.T.I.	
281	Nágavára	s.	3.974775	9436	1.787	294	Halasúrbétta, XXXIX†	64 0 41	4.983602	96295	18.238	24	
	Géddahalli	h.s.	3.954438	9004	1.705		Nandigudi, XLVII†	47 44 34	4.899210	79288	15.017	"	
	Basavangudda		4.048873	11191	2.120		Nundydroog Building	47 44 34	4.997814	99498	18.844	"	
282	Bangalore Base-line S.W. End, LII†	s.	4.170482	14808	2.804	295	Halasúrbétta, XXXIX†	63 52 13	4.982858	96130	18.206	"	
	Nágavára	h.s.	4.223227	10743	3.171		Nandigudi, XLVII†	47 48 38	4.899455	79333	15.025	"	
	Machalbéttá		4.105923	†12762	2.417		Nundydroog Hill Mark (helio.)	47 48 38	4.997814	99498	18.844	"	

\* Deduced base. † Measured base. ‡ These stations appertain to the Great Arc Meridional Series, Section 8° to 18°.

MADRAS LONGITUDINAL SERIES.

No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used	Triangle No. of	Station	Corrected Plane Angle	Distance			Theodolite used
			Log. feet	Feet	Miles					Log. feet	Feet	Miles	
296	Halasúr-bétta, XXXIX† Tirthapalli, XLVI† Nundydroog Hill Mark (helio.)	97 30 57 34 18 52	5' 144633 4' 899455 5' 020609	139519 79333 104860	26' 424 15' 025 19' 860	Inch 24 "	809	Bannergatta, XLIII† Devarabétta, LV† Hósúr	56 33 14 79 23 28	4' 924654 4' 995790 4' 845480	84073 99035 70062	15' 923 18' 757 13' 269	Inch 24 "
297	Halasúr-bétta, XXXIX† Uialdinna Mandapam Shivansandra	62 52 56 59 4 17 58 2 47	4' 767456 4' 751422 4' 746671	58540 56118 55805	11' 087 10' 685 10' 569	" c.t.l. c.t.l.	310	Devarabétta, LV† Anchéttidurga, LVI† Hósúr	33 31 6 61 54 16	4' 721204 4' 924654 4' 977157	52626 84073 94876	9' 907 15' 923 17' 969	" " "
298	Halasúr-bétta, XXXIX† Shivansandra Koliga	37 46 20 93 45 35 48 28 5	4' 664303 4' 876244 4' 751422	46164 75205 56418	8' 743 14' 243 10' 685	" " "	311	Shivansandra Hósúr Apsándra	75 59 18 26 32 19 77 28 23	5' 099551 4' 762783 5' 102205	125762 57914 126533	23' 819 10' 909 23' 905	c.t.l. " "
299	Halasúr-bétta, XXXIX† Uialdinna Mandapam Koliga	100 39 16 46 40 29 32 40 15	5' 006876 4' 876244 4' 746671	101596 75205 55805	19' 242 14' 243 10' 569	" " c.t.l.	312	Hósúr Apsándra Márkandesvara	21 3 48 96 11 2 62 45 10	4' 706207 5' 148095 5' 099551	50840 140636 125762	9' 629 26' 636 23' 819	" " "
300	Halasúr-bétta, XXXIX† Koliga Kodagurki	60 19 32 47 42 8 71 58 20	4' 837052 4' 767137 4' 876244	68715 58497 75205	13' 014 11' 079 14' 243	" " "	313	Apsándra Márkandesvara Karadibanda	41 7 11 30 31 30 108 21 19	4' 546870 4' 434676 4' 706207	35227 27207 50840	6' 672 5' 153 9' 629	" " "
301	Uialdinna Mandapam Koliga Kodagurki	36 56 19 80 22 23 62 41 18	4' 837052 5' 052038 5' 006876	68715 112732 101596	13' 014 21' 351 19' 242	86 c.t.l. "	314	Shivansandra Kodagurki Guraganjagurki Tree	92 25 23 48 36 37	5' 139587 5' 015170 4' 938535	137907 103555 86803	26' 119 19' 613 16' 440	" " "
302	Shivansandra Koliga Kodagurki	51 54 33 96 10 13 31 55 14	4' 837052 4' 938535 4' 664303	68715 86803 46164	13' 014 16' 440 8' 743	" " "	315	Shivansandra Koliga Guraganjagurki Tree	40 30 50 115 49 46	4' 873550 5' 015170 4' 664303	74739 103555 46164	14' 155 19' 613 8' 743	" " "
303	Kundana Kodagurki Devanhalli	28 4 50 87 24 10 64 31 0	4' 208752 4' 535550 4' 491545	16172 34320 31013	3' 063 6' 500 5' 874	" " "	316	Shivansandra Kodagurki Kéndatti Hill Peak	82 57 53 56 35 0	5' 123136 5' 047942 4' 938535	132781 111671 86803	25' 148 21' 150 16' 440	" " "
304	Kodagurki Devanhalli Devanhalli Fort	23 57 55 87 24 30 41 4 10	3' 848420 4' 239254 4' 208752	7054 17348 16172	1' 336 3' 286 3' 063	" " "	317	Shivansandra Koliga Malesvaram Hill	24 6 43 140 52 5	4' 861955 5' 050845 4' 064303	72770 112420 46164	13' 782 21' 292 8' 743	" " "
305	Uialdinna Mandapam Shivansandra Betdásanpur	92 41 25 46 14 25 41 4 10	4' 949430 4' 808594 4' 767456	89008 64357 58540	16' 858 12' 189 11' 087	86 c.t.l. "	318	Rahmanghar Nundydroog Ambajidurga Building	99 26 16 6 53 42	5' 071919 4' 157200 5' 059948	118010 14362 114802	22' 350 2' 720 21' 743	86 " "
306	Shivansandra Betdásanpur Nallurhalli	33 20 7 131 32 56	4' 815209 4' 491501 4' 949430	65358 31014 89008	12' 378 5' 874 16' 858	" " "	319	Tirthapalli, XLVI† Devarabétta Ankiagiridrug	59 35 6 52 9 50	5' 215231 5' 177032 5' 247462	164146 150325 176792	31' 088 28' 471 33' 483	" " "
307	Shivansandra Nallurhalli Hóskote Idgah	99 10 10 24 56 0	4' 567928 4' 198377 4' 491501	36977 15790 31014	7' 003 2' 991 5' 874	" " "	320	Tirthapalli, XLVI† Yérrakónnda, XX Ankiagiridrug	38 16 4 69 50 52	4' 996395 5' 177032 5' 182389	99173 150325 152191	18' 783 28' 471 28' 824	" " "
308	Shivansandra Betdásanpur Chinnagara	104 40 0 17 24 40 57 55 20	5' 006991 4' 497377 4' 949430	101623 31432 89008	19' 247 5' 953 16' 858	" " "	321	Halasúr-bétta, XXXIX† Bangalore Kolár Peak	100 13 10 53 11 0	5' 261451 5' 171788 4' 919398	182579 148521 83061	34' 579 28' 129 15' 731	c.t.l. " "

\* Deduced base. † These stations appertain to the Great Arc Meridional Series, Section 8° to 18°. ‡ For another triangle to this point see the Synoptical Volume of the Great Arc Meridional Series, Section 8° to 18°.

SECONDARY TRIANGULATION. TRIANGLES.

No. of Triangle	Station	Corrected Plane Angle	Distance			No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used
			Log. feet	Feet	Miles				Log. feet	Feet	Miles	
322	Kolar, XLVIII† Bhūpatamma, XLIX† Kolar Building	69 57 48 13 26 47	4 712339 4 105944 4 736575	51563 12763 54522	9 766 2 417 10 326	384	Kolar, XLVIII† Bandapalle, XVIII Rājagundlahalli	48 19 29 84 11 57 47 28 34	4 974310 5 098804 4 968498	94256 125546 93003	17 852 23 778 17 614	Inch 24 " " "
323	Kāraveri, XXI Devarakōnda, XXIII Krishnamakōnda	77 10 21 57 22 18	4 856408 4 792792 4 720297	71847 62057 5 517	13 607 11 753 9 946	385	Bandapalle, XVIII Kāraveri, XXI Rājagundlahalli	65 37 21 72 20 5 42 2 34	4 954732 4 974310 4 821158	90102 94256 66246	17 065 17 852 12 547	" " "
324	Devarakōnda, XXIII Satghur, XXVI Krishnamakōnda	80 26 2 60 43 21	4 909680 4 856408 4 713165	81223 71847 51661	15 383 13 607 9 784	386	Bandapalle, XVIII Kāraveri, XXI Mulbāgal Hill Mark	56 25 17 32 34 45 4 821158	4 741935 4 552381 4 821158	55200 35676 66246	10 454 6 757 12 547	" " "
325	Yērrakōnda, XX Krishnamakōnda Beturāyankōnda	90 51 47 30 26 41 58 41 32	5 019764 4 724570 4 951468	104656 53036 89427	19 821 10 045 16 937	387	Kāraveri, XXI Rājagundlahalli Mulbāgal Hill Mark	39 45 20 36 31 25 4 954732	4 773156 4 741935 4 954732	59314 55200 90102	11 234 10 454 17 065	" " "
326	Krishnamakōnda Beturāyankōnda Kurudamale	49 5 30 65 56 12 64 58 18	4 940971 5 023104 5 019764	87291 105404 104656	16 532 19 974 19 821	388	Krishnamakōnda Beturāyankōnda Devarabanda Hill Pagoda	62 35 21 16 20 55 5 019764	4 976189 4 477358 5 019764	94665 30016 104656	17 929 5 685 19 821	C.T.I. " " "
327	Krishnamakōnda Kurudamale Kudrakainigudda	72 6 38 36 27 22 71 26 0	5 024795 4 820255 5 023104	105875 66108 105464	20 052 12 520 19 974	389	Yērrakōnda, XX Krishnamakōnda Vēnkatagiri	9 26 0 88 4 20 82 29 40	4 169784 4 954960 4 951468	14784 90149 89427	2 800 17 074 16 937	" " "
328	Krishnamakōnda Beturāyankōnda Bandapalle	26 16 3 41 26 39 112 17 18	4 699462 4 874273 5 019764	50057 74864 104656	9 480 14 179 19 821	340	Krishnamakōnda Vēnkatagiri Vēnkatagiri Fort	7 41 40 151 56 50 4 300703	3 755090 4 300703 4 169784	5600 19985 14784	1 078 3 785 2 800	" " "
329	Kurudamale Kudrakainigudda Bandapalle	74 59 29 25 38 24 79 22 7	5 017241 4 668517 5 024795	104050 46614 105875	19 706 8 828 20 052	341	Kāraveri, XXI Krishnamakōnda, XXII Kudrakainigudda Hill Mark	76 18 4 37 59 46 4 792481	4 820228 4 622065 4 792481	66104 41886 62013	12 520 7 933 11 745	24 " " "
330	Mārkandesvara Beturāyankōnda Kolar Pagoda	56 37 50 41 12 45	4 751449 4 648478 4 825008	56422 44512 66928	10 686 8 430 12 676	342	Krishnamakōnda, XXII Devarakōnda, XXIII Kudrakainigudda Hill Mark	7 28 47 53 51 30 4 856282	4 027581 4 820228 4 856282	10656 66104 71826	2 018 12 520 13 603	" " "
331	Yērrakōnda, XX Krishnamakōnda, XXII Āmanikōnda Hill Mark	64 48 35 59 32 12	4 991208 4 970181 4 951489	98016 93364 89431	18 564 17 683 16 938	343	Yērrakōnda, XX Patikōnda, XXIV Kailāgarh	42 22 41 101 21 57 36 15 22	5 288826 5 451552 5 232032	194458 282847 170621	36 829 53 570 32 315	36
332	Bhūpatamma, XLIX† Yērrakōnda, XX Āmanikōnda Hill Mark	67 11 30 60 37 23	4 970181 4 945764 4 903167	93364 88260 80014	17 683 16 716 15 154	344	Patikōnda, XXIV Kailāgarh Bodmalai	43 49 42 50 46 41 85 23 37	5 130651 5 179366 5 288826	135099 151135 194458	25 587 28 624 36 829	" " "
333	Kurudamale Bandapalle Āmanikōnda Hill Pagoda	15 7 50 47 28 10	4 136867 4 587612 4 668517	13705 38691 46614	2 596 7 328 8 828	345	Bodmalai Kailāgarh Pullūr, XXX	93 58 12 35 25 28 50 36 20	5 241544 5 005737 5 130651	174399 101330 135099	33 030 19 191 25 587	" " "

\* Deduced base. † These stations appertain to the Great Arc Meridional Series, Section 8° to 18°.

MADRAS LONGITUDINAL SERIES.

No. of Triangle	Station	Corrected Plane Angle	Distance			No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used
			Log. feet	Feet	Miles				Log. feet	Feet	Miles	
846	Kailāgarh Pullūr, XXX Anandalamalai, XXXI	38 47 18 42 58 59 98 13 43	5 042921 5 079683 5 241544	110388 120139 174399	20 907 22 754 33 030	858	Ávulapallidrug Mugali Muruktōre, XXVIII	69 56 26 57 20 17 52 43 17	4 991876 4 944299 4 919803	98147 87963 83139	18 588 16 660 15 746	Inch C.T.I. "
847	Muruktōre, XXVIII Pullūr, XXX Bodmalai	103 17 4 10 40 31 66 2 25	5 005737 4 285257 4 978383	101330 19287 95144	19 101 3 653 18 030	859	Mugali Muruktōre, XXVIII Chittapāra	43 51 22 71 22 11 64 46 27	4 876041 5 012027 4 991876	75169 102808 98147	14 237 19 471 18 588	"
848	Bodmalai Patikōnda, XXIV Ávulapallidrug	h.s. 38 27 50 92 40 42	5 056681 4 973646 5 179366	113941 94112 151135	21 580 17 824 28 624	360	Chittapāra Muruktōre, XXVIII Pullūr, XXX	56 43 53 81 55 30 41 20 37	4 978383 5 051793 4 876041	95144 112666 75169	18 020 21 338 14 237	"
849	Patikōnda, XXIV Ávulapallidrug Adavi Ávalpalli	84 42 37 h.s. "	5 233944 5 142840 5 056681	171374 138944 113941	32 457 26 315 21 580	361	Patikōnda, XXIV Adavi Ávalpalli Mankurgutta	40 10 45 43 2 15 96 47 0	4 955571 4 979978 5 142840	90276 95494 138944	17 098 18 086 26 315	86
† 850	Ávulapallidrug Adavi Ávalpalli Tumakōnda	33 51 44 59 17 4 86 51 12	4 980609 5 108954 5 233944	95633 147555 171374	18 112 27 946 32 457	362	Kudrakainigudda Bandapalle Mulbāgal Stone	20 6 0 68 53 36 "	4 553436 4 987148 5 017241	35763 97084 104050	6 773 18 387 19 706	C.T.I. "
851	Patikōnda, XXIV Rahmanghar Adavi Ávalpalli	h.s. "	5 164694 5 142840 5 372132	146115 138944 235577	27 673 26 315 44 617	368	Patikōnda, XXIV Mankurgutta Mulbāgal Stone	92 21 49 43 20 47 "	5 135573 4 973524 4 979978	136638 93869 95494	25 878 17 778 18 086	86
† 852	Rahmanghar Adavi Ávalpalli Pulgurkote Fort	4 38 35 28 36 20 "	4 333903 5 105830 5 164694	21573 127594 146115	4 086 24 166 27 673	364	Patikōnda, XXIV Mankurgutta Rājagundlahalli Hill Peak	58 33 29 66 10 16 "	4 996219 5 026489 4 979978	99133 106289 95494	18 775 20 131 18 086	"
§ 853	Patikōnda, XXIV Adavi Ávalpalli Bālesvaramkōnda	10 34 10 52 11 49 117 14 1	4 457329 5 091560 5 142840	28663 123470 138944	5 429 23 384 26 315	365	Mankurgutta Gamkōnda Rājagundlahalli Hill Peak	101 9 15 53 0 14 "	5 085566 4 990219 4 733225	121777 99133 54103	23 064 18 775 10 247	"
854	Patikōnda, XXIV Adavi Ávalpalli Bāmasamudra Pagoda	9 47 51 27 2 41 "	4 595842 5 022680 5 142840	39431 105361 138944	7 468 19 955 26 315	366	Patikōnda, XXIV Gamkōnda Gundakal	80 32 47 27 32 23 71 54 50	4 793021 4 463943 4 776953	62090 29103 59835	11 759 5 512 11 332	"
855	Patikōnda, XXIV Ávulapallidrug Mankurgutta	44 31 52 55 35 37 79 52 31	4 990399 4 979978 5 056681	81171 95494 113941	15 373 18 086 21 580	367	Patikōnda, XXIV Gamkōnda Punganúr Palace	55 3 52 73 15 42 "	4 796070 4 863561 4 776953	62527 73040 59835	11 842 13 833 11 332	"
856	Mankurgutta Ávulapallidrug Gamkōnda	44 53 32 41 42 38 93 23 50	4 758830 4 733225 4 909399	57389 54103 81171	10 869 10 247 15 373	368	Mankurgutta Gamkōnda Punganúr Palace	80 48 15 40 31 45 "	4 796070 4 614491 4 733225	62527 41161 54103	11 842 7 796 10 247	"
857	Gamkōnda Ávulapallidrug Mugali	88 13 19 48 9 7 43 37 34	4 919803 4 702120 4 758830	83139 61961 57389	15 746 11 735 10 869	369	Adavi Ávalpalli Mankurgutta Malankōnda No. 1 Pagoda	55 3 4 15 35 7 "	4 894495 4 410083 4 955571	78432 25709 90276	14 855 4 869 17 098	"

\* Deduced base.  
† For another triangle to this point, see the Synoptical Volume of the Great Arc Meridional Series, Section 8<sup>o</sup> to 18<sup>o</sup>.  
‡ For another triangle to this station, see the Synoptical Volume of the Great Arc Meridional Series, Section 8<sup>o</sup> to 18<sup>o</sup>, by which the value of the common side was less by 8 feet.  
§ For another triangle to this station, see the Synoptical Volume of the Great Arc Meridional Series, Section 8<sup>o</sup> to 18<sup>o</sup>, by which the value of the common side was greater by 17 feet.

SECONDARY TRIANGULATION. TRIANGLES.

No. of Triangle	Station	Corrected Plane Angle ° ' "	Distance			No. of Triangle	Station	Corrected Plane Angle ° ' "	Distance			Theodolite used		
			Log. feet	Feet	Miles				Log. feet	Feet	Miles			
370	Adavi Avalpalli Tumakōnda Madanapalle	h.s. " s. " s.	11 19 56 10 11 30 15 28 34	4 709431 4 663904 4 986009	51219 46122 95633	9 701 8 735 18 112	382	Mankurgutta Gamkōnda Somopet Pagoda	h.s. " "	5 21 49 21 12 54	4 053205 4 641055 4 733225	11303 43758 54103	2 141 8 287 10 247	Inch 86 "
371	Adavi Avalpalli Mankurgutta Madanakōnda Platform	h.s. " "	35 16 7 28 54 27	4 762747 4 685566 4 955571	57909 48480 90276	10 968 9 182 17 098	388	Mankurgutta Gamkōnda Butakapalle Hill	h.s. " "	10 7 50 15 37 18	4 340500 4 525466 4 733225	21903 33532 54103	4 148 6 351 10 247	" " "
† 372	Ávulapalidrug Adavi Avalpalli Vadankōnda Platform	h.s. " "	25 13 43 35 17 25	4 923812 5 055883 5 233944	83910 113732 171374	15 892 21 540 32 457	384	Patikōnda, XXIV Gamkōnda Butakapalle Hill	h.s. " "	12 55 28 129 24 45	4 340500 4 878852 4 776953	21903 75057 59835	4 148 14 329 11 332	" " "
373	Patikōnda, XXIV Gamkōnda Davarkōnda	h.s. " "	29 15 6 122 37 19 28 7 35	4 792542 5 028986 4 776953	62021 106902 59835	11 746 20 247 11 332	385	Mankurgutta Gamkōnda Madrimalai Platform	h.s. " "	57 14 53 48 34 15	4 674799 4 624923 4 733225	47293 42162 54103	8 957 7 985 10 247	" " "
374	Mankurgutta Gamkōnda Davarkōnda	h.s. " "	127 1 45 8 49 52 44 8 23	4 792542 4 070532 4 733225	62021 11927 54103	11 746 2 259 10 247	386	Patikōnda, XXIV Gamkōnda Palmaner Pagoda	h.s. " "	42 26 58 36 55 55	4 613719 4 563232 4 776953	41088 36579 59835	7 782 6 928 11 332	" " "
375	Mankurgutta Gamkōnda Kōttakota Fort	h.s. " "	28 19 41 16 37 8	4 560396 4 340515 4 733225	36341 21904 54103	6 883 4 148 10 247	387	Patikōnda, XXIV Mankurgutta Palmaner Pagoda	h.s. " "	73 40 32 22 23 23	4 964545 4 563232 4 979978	92161 36579 95494	17 455 6 928 18 086	" " "
376	Patikōnda, XXIV Gamkōnda Ágashipuram Hill Pagoda	h.s. " "	28 51 37 90 45 30	4 521421 4 837728 4 776953	33222 68822 59835	6 292 13 034 11 332	388	Patikōnda, XXIV Gamkōnda Palmaner Bungalow	h.s. " "	38 44 20 36 10 5	4 588615 4 563166 4 776953	38781 36573 59835	7 345 6 927 11 332	" " "
377	Patikōnda, XXIV Adavi Avalpalli Ágashipuram Hill Pagoda	h.s. " "	42 32 42 27 48 22	4 998950 4 837728 5 142840	99758 68822 138944	18 894 13 034 26 315	389	Devarakōnda, XXIII Patikōnda, XXIV Palmaner House	h.s. " "	48 16 4 86 15 39	4 564483 4 690665 4 544620	36685 49053 35044	6 948 9 290 6 637	24 " "
378	Patikōnda, XXIV Mankurgutta Chaudapalli Pagoda	h.s. " "	8 23 4 90 52 28	4 149474 4 985623 4 979978	14108 96744 95494	2 672 18 323 18 086	390	Devarakōnda, XXIII Mugali, XXV Palmaner House	h.s. " "	27 4 46 47 13 23	4 483194 4 690665 4 808460	30422 49053 64337	5 762 9 290 12 185	" " "
379	Patikōnda, XXIV Adavi Avalpalli Chaudapalli Pagoda	h.s. " "	48 33 49 44 4 14	5 018181 4 985623 5 142840	104275 96744 138944	19 749 18 323 26 315	391	Patikōnda, XXIV Gamkōnda Kilpatla Hill Pagoda	h.s. " "	29 57 34 59 8 7	4 475444 4 710687 4 776953	29884 51367 59835	5 660 9 729 11 332	86 " "
380	Patikōnda, XXIV Gamkōnda Ankalamman Platform	h.s. " "	19 25 36 137 9 3	4 699529 5 010161 4 776953	50064 102367 59835	9 482 19 388 11 332	392	Ávulapalidrug Gamkōnda Kilpatla Hill Pagoda	h.s. " "	26 41 47 93 40 36	4 475444 4 822049 4 758830	29884 66382 57389	5 660 12 572 10 869	" " "
381	Mankurgutta Gamkōnda Ankalamman Platform	h.s. " "	67 41 49 23 21 36	4 699529 4 331550 4 733225	50064 21456 54103	9 482 4 064 10 247	393	Batikōnda, XXVII Murukōre, XXVIII Mugali Beacon	h.s. " "	56 41 20 75 21 52	4 991938 5 055501 4 940596	98161 113648 87216	18 591 21 524 16 518	24 " "

\* Deduced base. † For another triangle to this point, see the Synoptical Volume of the Great Arc Meridional Series, Section 8° to 18°, by which the value of the common side was less by 7 feet.



MADRAS LONGITUDINAL SERIES.

No. of Triangle	Station	Corrected Plane Angle ° ' "	Distance			Theodolite used	No. of Triangle	Station	Corrected Plane Angle ° ' "	Distance			Theodolite used
			Log. feet	Feet	Miles					Log. feet	Feet	Miles	
394	Satghur, XXVI Batinkōnda, XXVII Mugali Beacon	58 8 5 37 32 56	5.055561 4.911434 5.124364	113648 81552 133157	21.524 15.445 25.219	Inch 24 "	406	Chintemeklapalli Avulapallidrug Sattevaripalēm	89 35 41 56 37 35 33 46 44	5.142514 5.064264 4.887592	138840 115948 77195	26.295 21.960 14.620	Inch 86 "
395	Avulapallidrug Gamkōnda Tumbakōnda Hill	44 21 7 54 36 54	4.608687 4.675477 4.758830	40615 47367 57389	7.692 8.971 10.869	86 "	407	Avulapallidrug Sattevaripalēm Pēddadrag	99 13 27 50 6 45	4.965110 5.251893 5.142514	92280 178605 138840	17.477 33.827 26.295	"
396	Patikōnda, XXIV Gamkōnda Janalkōnda Platform	44 24 40 87 16 25	4.748715 4.903248 4.776953	56068 80029 59835	10.619 15.157 11.332	"	† 408	Pēddadrag Sattevaripalēm Tallarapet	44 36 33 90 52 40	4.811663 4.810923 4.965110	64813 64703 92280	12.275 12.254 17.477	"
397	Avulapallidrug Gamkōnda Janalkōnda Platform	56 11 40 65 32 18	4.748715 4.788305 4.758830	56068 61419 57389	10.619 11.632 10.869	"	409	Mankurgutta Gamkōnda Vakirikōnda Platform	27 23 4 109 10 55	4.558663 4.871136 4.733225	36196 74325 54103	6.855 14.077 10.247	"
398	Avulapallidrug Gamkōnda Mallakōnda Hill	68 57 27 36 37 14	4.745112 4.550704 4.758830	55605 35539 57389	10.531 6.731 10.869	"	410	Avulapallidrug Chintemeklapalli Vakirikōnda Platform	126 54 6 12 4 44	4.973388 4.391162 4.887592	94056 24613 77195	17.814 4.662 14.620	"
399	Mugali Chittapāra Venkatagiri	40 35 5 12 37 35 126 47 20	4.921773 4.448113 5.012027	83517 28062 102808	15.818 5.315 19.471	c.t.i. "	411	Avulapallidrug Chintemeklapalli Kundur Fort	14 48 32 62 18 58	4.306204 4.845850 4.887592	20240 70121 77195	3.833 13.281 14.620	"
400	Murukōre, XXVIII Chittapāra Venkatagiri	70 3 42 52 8 52 57 47 26	4.921773 4.840222 4.876041	83517 70149 75169	15.818 13.286 14.237	"	412	Sattevaripalēm Pēddadrag Chēriakōnda Platform	101 51 4 45 40 35	5.225863 5.089773 4.965110	168214 122962 92280	31.859 23.288 17.477	"
401	Mugali Venkatagiri Rakashmalai	18 55 57 142 9 55 18 54 8	4.448783 4.753363 4.448113	28105 53133 28062	5.323 10.063 5.315	"	413	Avulapallidrug Sattevaripalēm Tōndakōnda Hill	72 34 5 16 54 59	5.122114 4.606388 5.142514	132469 40401 138840	25.089 7.652 26.295	"
402	Mugali Venkatagiri Gurugukōnda	43 45 15 90 41 35 36 33 10	4.513019 4.666941 4.448113	32585 46445 28062	6.171 8.796 5.315	"	414	Avulapallidrug Gamkōnda Tōndakōnda Hill	127 29 4 21 21 34	4.944584 4.606388 4.758830	88021 40401 57389	16.671 7.652 10.869	"
403	Murukōre, XXVIII Venkatagiri Kamalgit	43 26 21 65 46 49 70 46 50	4.708254 4.830913 4.846022	51080 67751 70149	9.674 12.832 13.286	"	415	Avulapallidrug Sattevaripalēm Pullurdrug Hill	57 27 31 20 48 11	5.077522 4.702113 5.142514	119542 50363 138840	22.641 9.538 26.295	"
404	Murukōre, XXVIII Chittapāra Kamalgit	26 37 21 64 18 51 89 3 48	4.527484 4.830913 4.876041	33689 67751 75169	6.380 12.832 14.237	"	416	Chintemeklapalli Sattevaripalēm Mailesvaram	65 16 33 83 51 45	4.776850 5.025005 5.064264	59821 105927 115948	11.330 20.062 21.960	"
405	Tumakōnda Avulapallidrug Chintemeklapalli	25 19 3 29 30 28 125 10 29	4.887592 4.948962 5.168954	77195 88912 147555	14.620 16.839 27.946	86 "	417	Sattevaripalēm Pēddadrag Mailesvaram	67 43 38 38 29 40 73 46 42	4.949078 4.776850 4.965110	88936 59821 92280	16.844 11.330 17.477	"

\* Deduced base. † The continuation of the triangulation will be found in the Synoptical Volume of the Madras Meridional and Coast Series.

SECONDARY TRIANGULATION. TRIANGLES.

No. of Triangle	Station	Corrected Plane Angle			Distance			Theodolite used	
		o	'	"	Log. feet	Feet	Miles		
418	Sattevaripalēm	h.s.	112	14	25	5° 01' 49.80	103509	19.604	Inch 86
	Tallarapet	"	32	20	21	4° 77' 68.50	59821	11.330	"
	Mailesvaram	"	35	25	14	4° 81' 16.63	64813	12.275	"
419	Chintemeklapalli	h.s.	39	37	56	4° 94' 34.54	87792	16.627	c.t.l.
	Mailesvaram	"	10	41	14	4° 40' 69.52	25524	4.834	"
	Palamanda	"	129	40	50	5° 02' 50.05	105927	20.062	"
420	Sattevaripalēm	h.s.	67	43	56	4° 94' 34.54	87792	16.627	"
	Mailesvaram	"	73	10	31	4° 95' 81.14	90806	17.198	"
	Palamanda	"	39	5	33	4° 77' 68.50	59821	11.330	"
421	Sattevaripalēm	h.s.	70	7	25	4° 92' 30.59	83764	15.864	"
	Mailesvaram	"	67	41	6	4° 91' 59.27	82400	15.606	"
	Dōddapalli Hill Platform	"	42	19	19	4° 77' 68.50	59821	11.330	"
422	Chintemeklapalli	h.s.	54	19	25	4° 48' 84.75	30795	5.832	86
	Palamanda	"	42	19	19	4° 57' 58.18	37655	7.132	"
	Sadam	s.	42	19	19	4° 40' 69.52	25524	4.834	"
423	Sattevaripalēm	h.s.	37	57	32	4° 79' 64.41	62581	11.852	"
	Mailesvaram	"	106	1	42	4° 99' 02.78	97786	18.520	"
	Nallakōnda	"	36	0	46	4° 77' 68.50	59821	11.330	"
424	Sattevaripalēm	h.s.	29	42	29	4° 70' 11.80	50255	9.518	"
	Mailesvaram	"	114	8	29	4° 96' 63.16	92537	17.526	"
	Kanialbod Hill Platform	"	97	26	7	5° 14' 26.54	13885	26.304	"
425	Sattevaripalēm	h.s.	41	21	8	4° 96' 63.16	92537	17.526	"
	Pēddadrug	"	39	36	17	4° 77' 68.50	59821	11.330	"
	Kanialbod Hill Platform	"	29	42	29	4° 70' 11.80	50255	9.518	"
426	Sattevaripalēm	h.s.	28	23	16	4° 64' 94.71	44614	8.450	"
	Mailesvaram	"	112	0	27	4° 93' 95.21	87000	16.477	"
	Kōkārāyankōnda	"	39	36	17	4° 77' 68.50	59821	11.330	"
427	Āvalapallidrug	h.s.	19	17	44	4° 47' 42.55	29803	5.645	"
	Kanialbod Hill Platform	"	30	59	23	4° 84' 12.20	69378	13.140	"
	Dāmalcheri	s.	30	59	23	4° 66' 68.71	46438	8.795	"
428	Āvalapallidrug	h.s.	22	51	43	4° 90' 00.89	79614	15.078	"
	Sattevaripalēm	"	19	47	21	4° 84' 12.20	69378	13.140	"
	Dāmalcheri	s.	137	20	56	5° 14' 25.14	138840	26.295	"
429	Sattevaripalēm	h.s.	36	35	44	4° 59' 80.26	39630	7.506	"
	Mailesvaram	"	79	15	39	4° 81' 49.87	65311	12.370	"
	Bakrupet Choultry	"	42	28	28	4° 69' 56.69	49621	9.398	c.t.l.

\* Deduced base. † For another triangle to this station see the Synoptical Volume of the Madras Meridional and Coast Series, the value of the common side being the same.

No. of Triangle	Station	Corrected Plane Angle	Distance			No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used
			Log. feet	Feet	Miles				Log. feet	Feet	Miles	
442	Péddadrug Chandragiri Nágapatá Pagoda	h.s. 15 18 39 s. 144 2 19	4.258145 4.605265 4.383815	18119 40296 24200	3.432 7.632 4.583	454	Kailágarh Chittapára Nágalamalai	h.s. 51 28 27 " 54 40 55 " 73 50 38	4.805896 4.824174 4.895008	63958 66707 78525	12.113 12.634 14.872	Inch C.T.I. " " "
443	Péddadrug Chandragiri Malakónda No. 2 Pagoda	h.s. 13 7 43 s. 38 31 19	3.845655 4.283724 4.383815	7009 19219 24200	1.327 3.640 4.583	455	Kailágarh Vellore Nágalamalai	h.s. 89 54 3 " 59 52 15 " 30 13 42	4.887210 4.824174 4.589164	77128 66707 38830	14.607 12.634 7.354	" " "
444	Muruktóre, XXVIII Bodmalai Chittoor Fort	h.s. 27 28 50 s. 55 11 40	3.952939 4.203209 4.285257	8973 15966 19287	1.699 3.024 3.653	456	Chittapára Nágalamalai Satghur, XXVI	h.s. 13 59 26 " 153 5 1 " 12 55 33	4.839640 5.112052 4.805896	69126 129435 63958	13.092 24.514 12.113	" " "
445	Muruktóre, XXVIII Chittapára Vélkúr	h.s. 66 10 47 " 23 33 36 " 90 15 37	4.837380 4.477790 4.876041	68767 30046 75169	13.024 5.691 14.237	457	Satghur, XXVI Nágalamalai Pallikónda	h.s. 18 35 5 " 107 44 21 " 53 40 34	4.436868 4.912320 4.839640	27344 81719 69126	5.179 15.477 13.092	" " "
446	Pullúr, XXX Anandalamalai, XXXI Vélkúr	h.s. 97 14 45 " 29 7 29 " 53 37 46	5.133536 4.824290 5.042921	135999 66725 110388	25.757 12.637 20.907	458	Kailágarh Vellore Pallikónda	h.s. 105 28 9 " 39 46 58 " 34 44 53	4.817288 4.639411 4.589164	65658 43592 38830	12.435 8.256 7.354	" " "
447	Muruktóre, XXVIII Vélkúr Patúr	h.s. 125 22 25 " 35 42 42 " 18 54 53	4.878398 4.733224 4.477790	75578 54103 30046	14.314 10.247 5.691	459	Kailágarh Pallikónda Kambattimalai	h.s. 65 55 12 " 94 51 52 " 19 12 56	5.082512 5.120485 4.639411	120924 131973 43592	22.902 24.995 8.256	" " "
448	Chittapára Vélkúr Gudipáipálem Platform	h.s. 57 30 19 " 12 2 45	4.791702 4.185158 4.837380	61902 15316 68767	11.724 2.901 13.024	460	Nágalamalai Pallikónda Gudiyátam Pagoda	h.s. 90 9 3 " 42 46 40	4.572235 4.404206 4.436868	37345 25363 27344	7.073 4.804 5.179	" " "
449	Pullúr, XXX Vélkúr Narikáldrug Pillar	h.s. 30 48 7 " 80 4 34	4.563116 4.847338 4.824290	39569 79346 66725	6.926 13.323 12.637	461	Satghur, XXVI Pallikónda Koikuttimalai	h.s. 17 2 5 " 33 58 36 " 128 59 19	4.488543 4.769047 4.912320	30799 58755 81719	5.833 11.128 15.477	" " "
450	Kailágarh Anandalamalai, XXXI Karnátakgarh	h.s. 32 7 59 " 42 11 12	5.236135 4.978426 5.079683	172241 95154 120139	32.621 18.022 22.754	462	Pallikónda Koikuttimalai Rásimalai	h.s. 100 10 26 " 56 11 59 " 23 37 35	4.878764 4.805239 4.488543	75642 63861 30799	14.326 12.095 5.833	" " "
451	Anandalamalai, XXXI Karnátakgarh Vellore	h.s. 44 40 10 " 29 39 5 " 105 40 45	5.099569 4.946905 5.236135	125768 88504 172241	23.820 16.762 32.621	463	Pallikónda Kambattimalai Básimalai	h.s. 6 9 54 " 6 48 35 " 167 1 31	4.762227 4.805239 5.082512	57840 63861 120924	10.955 12.095 22.902	" " "
452	Kailágarh Karnátakgarh Vellore	h.s. 135 19 59 " 12 32 7 " 32 7 54	5.099569 4.589104 4.978426	125768 38830 95154	23.820 7.354 18.022	464	Vellore Nágalamalai Pallikónda Pagoda	h.s. 14 53 52 " 76 0 40	4.297358 4.874189 4.887210	19832 74850 77128	3.756 14.176 14.607	" " "
453	Kailágarh Vellore Chittapára	h.s. 38 25 36 " 114 55 54 " 26 38 30	4.730941 4.805008 4.589164	53820 78525 38830	10.193 14.872 7.354	465	Nágalamalai Pallikónda Magadevi Hill Pagoda	h.s. 115 43 22 " 21 6 0	4.56327 4.157947 4.436868	36002 14386 27344	6.819 2.725 5.179	" " "

\* For another triangle to this point, see the Synoptical Volume of the Madras Meridional and Coast Series, by which the value of the common side was less by 1 foot.

SECONDARY TRIANGULATION. TRIANGLES.

No. of Triangle	Station	Corrected Plane Angle ° ' "	Distance			Theodolite used	No. of Triangle	Station	Corrected Plane Angle ° ' "	Distance			Theodolite used		
			Log. feet	Feet	Miles					Log. feet	Feet	Miles			
466	Chittapāra Vellore Virinjipuram Pagoda	h.s. " "	48 26 16 65 57 57	4 645624 4 732201 4 730941	44221 53976 53820	8 375 10 223 10 193	Inch C.T.I. "	478	Pullūr, XXX Vēlkūr Allamadugu	h.s. " "	64 31 22 47 41 40 67 46 58	4 813364 4 726770 4 824290	65067 53305 66725	12 323 10 096 12 637	Inch C.T.I. "
467	Kailāgarh Vellore Virinjipuram Pagoda	h.s. " "	73 37 47 48 57 57	4 645624 4 541152 4 589164	44221 34766 38830	8 375 6 584 7 354	" "	479	Muruktōre, XXVIII Pullūr, XXX Allamadugu	h.s. " "	34 3 33 57 30 17 88 26 10	4 726770 4 904596 4 978383	53305 80278 95144	10 096 15 204 18 020	" "
468	Batinkōnda, XXVII Kailāgarh, XXIX Vellore Pagoda	h.s. " "	22 5 20 22 29 22	4 561524 4 568931 4 832550	36435 37062 68006	6 901 7 019 12 880	24 "	480	Muruktōre, XXVIII Allamadugu Dāmalcheri Hill	h.s. " "	55 49 35 65 53 45	4 892551 4 935245 4 904596	78082 86148 80278	14 788 16 316 15 204	" "
469	Kailāgarh Vellore Vellore Pagoda	h.s. " "	9 33 6 64 20 42	3 826491 4 501474 4 589164	6706 36431 38830	1 270 6 900 7 354	C.T.I. "	481	Muruktōre, XXVIII Allamadugu Kallūr Hill	h.s. " "	41 6 30 93 39 57	4 871292 5 052517 4 904596	74352 112854 80278	14 082 21 374 15 204	" "
470	Batinkōnda, XXVII Kailāgarh, XXIX Karigiri	h.s. " "	68 24 42 21 23 0	4 800966 4 394376 4 832550	63236 24796 68006	11 977 4 696 12 880	24 "	482	Muruktōre, XXVIII Allamadugu Mogrāl	h.s. " "	24 20 12 52 49 22 102 50 26	4 530595 4 816928 4 904596	33931 65604 80278	6 426 12 425 15 204	" "
471	Chittapāra Vellore Karigiri	h.s. " "	25 54 15 38 28 12 115 37 33	4 416259 4 509773 4 730941	26077 37134 53820	4 939 7 033 10 193	C.T.I. "	483	Muruktōre, XXVIII Allamadugu Kukiralkōnda Stone	h.s. " "	21 38 9 89 33 20	4 501685 4 934991 4 904596	31746 86098 80278	6 012 16 306 15 204	" "
472	Kailāgarh Karnātakgarh Ārni Monument	h.s. " "	50 32 29 65 47 35	4 913675 4 986040 4 978426	81974 96837 95154	15 525 18 340 18 022	" "	484	Allamadugu Kukiralkōnda Stone Kuripati	h.s. " "	61 3 15 33 56 47	4 696773 4 753070 4 501685	49748 56033 31746	9 422 10 726 6 012	" "
473	Karnātakgarh Ārni Fort Tāmrāpākam	h.s. " "	19 8 15 117 55 13 42 56 32	4 594710 5 025308 4 912366	39329 106001 81727	7 449 20 076 15 479	" "	485	Pullūr, XXX Allamadugu Pērmanallūr	h.s. " "	85 13 10 40 14 22 54 32 28	4 814349 4 626083 4 726770	65215 42275 53305	12 351 8 007 10 096	" "
474	Ārni Fort Tāmrāpākam Kaniyanūr	h.s. " "	29 26 52 101 27 6	4 407907 4 707536 4 594710	25580 50996 39329	4 845 9 658 7 449	" "	486	Allamadugu Kuripati Pērmanallūr	h.s. " "	21 56 3 99 0 26 59 3 31	4 392076 4 814349 4 753070	24665 65215 56033	4 671 12 351 10 726	" "
475	Tāmrāpākam Kaniyanūr Arcot Building	h.s. " "	64 8 25 84 3 30	4 640293 4 683776 4 407907	43681 48281 25580	8 273 9 144 4 845	" "	487	Kuripati Pērmanallūr Vēlagaram	h.s. " "	45 5 3 33 30 10 101 24 47	4 250872 4 142671 4 392076	17819 13889 24665	3 375 2 630 4 671	" "
476	Batinkōnda, XXVII Anandalamalai, XXXI Wāljāpēt Mosque	h.s. " "	3 55 24 32 22 31	4 089507 4 983042 5 026630	12289 96171 106324	2 327 18 214 20 137	24 "	488	Kuripati Pērmanallūr Yerchikallu	h.s. " "	53 7 40 57 9 47 69 42 33	4 322976 4 344290 4 392076	21037 22095 24665	3 984 4 185 4 671	" "
477	Batinkōnda, XXVII Kailāgarh, XXIX Wāljāpēt Mosque	h.s. " "	80 9 5 61 26 55	5 032907 4 983042 4 832550	107872 96171 68006	20 430 18 214 12 880	" "	489	Kuripati Pērmanallūr Manghāt	h.s. " "	25 14 22 133 29 55 21 15 43	4 462429 4 693182 4 392076	29002 49338 24665	5 493 9 344 4 671	" "

\* This base is taken from the Synoptical Volume of the South-East Coast Series.

MADRAS LONGITUDINAL SERIES.

No. of Triangle	Station	Corrected Plane Angle	Distance			No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used
			Log. feet	Feet	Miles				Log. feet	Feet	Miles	
490	Allamadugu Pernanallūr Nārayanasvaram	h.s. " " "	4° 38' 31" 5° 11' 27" 4° 28' 50"	84201 124775 65215	15.947 23.632 12.351	† 502	Malaiapedu Māvandūr, XXXIV Karunguli	45° 48' 12" 69° 49' 56" 64° 21' 52"	5° 04' 25" 5° 15' 06" 5° 14' 20"	110302 144416 138705	20.801 27.352 26.270	Inch C.T.I. " " " "
491	Pullūr, XXX Anandalamalai, XXXI Punāk	h.s. " " "	5° 06' 33" 4° 47' 59" 5° 04' 29"	111356 90190 110388	21.090 17.082 20.907	503	Māvandūr, XXXIV Malaiapedu Sholinghur Hill Pagoda	98° 38' 55" 43° 1' 15"	5° 34' 45" 5° 18' 35" 5° 14' 20"	221103 152586 138705	41.876 28.899 26.270	" " " " " "
492	Anandalamalai, XXXI Māvandūr, XXXIV Punāk	h.s. " " "	5° 19' 07" 5° 04' 67" 5° 07' 09"	155162 111356 117740	29.387 21.090 22.299	504	Anandalamalai, XXXI Māvandūr, XXXIV Sholinghur Hill Pagoda	116° 49' 56" 19° 39' 8"	5° 18' 35" 4° 75' 97" 5° 07' 09"	152586 57508 117740	28.899 10.892 22.299	" " " " " "
493	Nagari, XXXIII Punāk Nemmalai	h.s. " " "	4° 21' 35" 38° 28' 27" 4° 11' 55"	32884 55583 77425	6.228 10.527 14.664	505	Anandalamalai, XXXI Sholinghur Hill Pagoda Fakirmalai	134° 45' 23" 39° 35' 5"	4° 80' 67" 3° 94' 34" 4° 75' 97"	64086 8899 57508	12.138 1.685 10.892	C.T.I. " " " "
494	Nagari, XXXIII Nemmalai Taduk	h.s. " " "	4° 24' 53" 48° 30' 32" 107° 23' 53"	23778 43631 55583	4.503 8.263 10.527	506	Anandalamalai, XXXI Fakirmalai Arcot, Rānipet	126° 6' 40" 40° 1' 2"	4° 47' 69" 4° 37' 80" 3° 94' 34"	29987 23868 8899	5.679 4.520 1.685	" " " " " "
495	Nagari, XXXIII Taduk Mudipalli	h.s. " " "	4° 22' 32" 64° 54' 34" 92° 32' 29"	16748 39553 43031	3.172 7.491 8.263	507	Kurumkota, XXXII Malaiapedu, XXXVI Conjeeveram (Great) Pagoda	76° 39' 10" 38° 54' 47"	5° 05' 78" 4° 86' 77" 5° 02' 49"	114239 73750 105914	21.636 13.968 20.000	24 " " " "
496	Nemmalai Taduk Wudugulūr	h.s. " " "	4° 40' 37" 100° 17' 33" 39° 4' 42"	24562 37113 23778	4.652 7.029 4.503	508	Anandalamalai, XXXI Kurumkota, XXXII Conjeeveram (Great) Pagoda	34° 4' 52" 59° 16' 13"	4° 86' 77" 5° 05' 58" 5° 11' 54"	73750 113131 131385	13.968 21.426 24.884	" " " " " "
497	Taduk Mudipalli Wudugulūr	h.s. " " "	87° 24' 0" 57° 29' 46" 35° 6' 14"	29094 24562 16748	5.510 4.652 3.172	509	Anandalamalai, XXXI Sholinghur Hill Pagoda Banavaram	47° 26' 1"	4° 65' 21" 4° 73' 04" 4° 75' 97"	44886 53764 57508	8.501 10.183 10.892	C.T.I. " " " "
498	Punāk Nemmalai Wudugulūr	h.s. " " "	86° 58' 47" 30° 47' 25" 62° 13' 48"	37113 19024 32884	7.029 3.603 6.228	510	Anandalamalai, XXXI Banavaram Dāmal	46° 32' 5" 85° 34' 47" 47° 53' 8"	4° 72' 10" 4° 85' 90" 4° 73' 04"	52603 72261 53764	9.963 13.686 10.183	" " " " " "
499	Taduk Mudipalli Satiravādi Hill	h.s. " " "	38° 42' 17" 116° 55' 47"	25385 36193 16748	4.808 6.855 3.172	511	Banavaram Dāmal Conjeeveram (Great) Pagoda	16° 29' 33" 142° 18' 4"	4° 61' 57" 4° 94' 03" 4° 72' 10"	41284 88927 52603	7.819 16.842 9.963	" " " " " "
500	Punāk Wudugulūr Ipurgutta	h.s. " " "	77° 45' 55" 75° 50' 12" 26° 23' 53"	41818 41489 19024	7.920 7.858 3.603	512	Ipurgutta Banavaram Paranchi Rock	73° 1' 15" 12° 16' 43"	4° 47' 34" 3° 82' 05" 4° 49' 13"	29747 6615 30998	5.634 1.253 5.871	" " " " " "
501	Punāk Māvandūr, XXXIV Malaiapedu	h.s. " " "	49° 19' 19" 72° 38' 36" 58° 2' 5"	138705 174567 155162	26.270 33.062 29.387	513	Anandalamalai, XXXI Banavaram Kāveripāk Fort	57° 59' 20" 28° 10' 7"	4° 65' 98" 4° 45' 47" 4° 73' 04"	45691 25437 53764	8.654 4.818 10.183	" " " " " "

\* Deduced base. † The continuation of the triangulation will be found in the Synoptical Volume of the South-East Coast Series.

SECONDARY TRIANGULATION. TRIANGLES.

No. of Triangle	Station	Corrected Plane Angle			No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used
		o	'	"				Log. feet	Feet	Miles	
514	Dámál Conjeeveram (Great) Pagoda Kakliri	9 47 48 143 14 52	4° 06' 05.6 4° 49' 52.3 4° 01' 57.8	11740 31275 41284	526	Malaipedu Tandurai Mángád, XLIII	28 17 41 27 1 14 124 41 5	4° 67' 31.79 4° 65' 47.47 4° 9' 12.423	47117 45159 81738	8.924 8.553 15.481	Inch 86 " " "
515	Conjeeveram (Great) Pagoda Kakliri Ráoji	51 49 15 21 19 48	4° 48' 08.10 4° 40' 43.34 4° 06' 05.6	30889 25371 11740	527	Malaipedu Tandurai Tiruvallúr Pagoda	37 54 31 80 0 1	4° 75' 45.75 4° 95' 9.473 4° 9' 12.423	56830 91090 81738	10.763 17.252 15.481	" " "
516	Conjeeveram (Great) Pagoda Ráoji Nelvay	112 14 48 38 28 12	4° 29' 08.93 4° 57' 08.76 4° 40' 43.34	19948 37746 25371	528	Malaipedu Tandurai Mannúr	52 53 12 33 10 30 93 50 18	4° 81' 50.98 4° 65' 27.00 4° 9' 12.423	65328 44947 81738	12.373 8.513 15.841	" " "
517	Mávanúúr, XXXIV Malaipedu, XXXVI Conjeeveram (Little) Pagoda	23 56 5 7 31 45	5° 03' 22.17 4° 54' 13.90 5° 14' 16.55	107700 34785 138505	529	Mángád, XLIII Malaipedu Mannúr	49 15 6 81 10 53 49 34 1	4° 65' 27.00 4° 76' 81.04 4° 65' 47.47	44947 58628 45159	8.513 11.104 8.553	" " "
518	Kurumkóta, XXXII Malaipedu, XXXVI Conjeeveram (Little) Pagoda	68 35 32 45 7 16	5° 03' 22.17 4° 91' 36.65 5° 02' 49.55	107700 81972 105914	580	Chémbedu, XXXV Malaipedu, XXXVI Tinnanúr Pagoda	12 31 13 9 40 14 5 09 06.07	4° 85' 49.58 4° 74' 41.93 5° 09' 06.07	71607 55487 124758	13.562 10.509 23.628	24 " " "
† 519	Nagari, XXXIII Punák Arumbákam	53 47 53 82 27 3 43 45 4	4° 95' 59.16 5° 04' 52.94 4° 88' 88.84	90347 110993 77425	581	Malaipedu, XXXVI Mángád, XLIII Tinnanúr Pagoda	38 9 53 104 6 11	4° 65' 91.85 4° 85' 49.58 4° 65' 49.81	45623 71607 45184	8.641 13.562 8.558	" " "
520	Punák Arumbákam Ellikúr	32 18 51 " " "	4° 71' 13.14 4° 76' 82.21 4° 95' 59.16	51442 58644 90347	582	Malaipedu, XXXVI Mángád, XLIII Tirumeshi Temple	22 46 59 98 59 28	4° 31' 34.79 4° 72' 01.26 4° 65' 49.81	20582 52496 45184	3.898 9.942 8.558	" " "
521	Punák Ellikúr Padari	23 52 57 91 22 12 64 44 51	4° 41' 19.51 4° 81' 17.19 4° 76' 82.21	26251 64821 58644	583	Mángád, XLIII St. Thomas's Mount, XLIV Tirumeshi Temple	130 40 20 18 14 57	4° 69' 76.54 4° 31' 34.79 4° 53' 05.56	49849 20582 33928	9.441 3.898 6.426	" " "
522	Punák Arumbákam Tirupasúr Fort	12 53 27 106 40 23	4° 36' 54.13 4° 99' 80.43 4° 95' 59.16	23196 99550 90347	584	Malaipedu, XXXVI Mángád, XLIII Pérumbákam	57 43 18 79 32 53 42 43 49	4° 75' 04.95 4° 81' 61.34 4° 65' 49.81	56298 65484 45184	10.663 12.402 8.558	" " "
523	Punák Malaipedu Chémbedu	45 10 9 52 23 4 82 26 47	5° 06' 51.12 5° 14' 45.42 5° 24' 19.63	124885 139489 174567	585	Malaipedu, XXXVI St. Thomas's Mount, XLIV Pérumbákam	36 39 24 63 35 6 79 45 30	4° 64' 00.10 4° 81' 61.34 4° 85' 70.47	43653 65484 71953	8.268 12.402 13.627	" " "
524	Nagari, XXXIII Punák Chémbedu	71 32 15 76 41 37 31 46 8	5° 14' 45.42 5° 15' 56.71 4° 88' 88.84	139489 143110 77425	586	Malaipedu Mannúr Kunavákam	81 20 52 50 52 44	4° 77' 82.08 4° 67' 29.37 4° 65' 27.00	60008 47091 44947	11.365 8.919 8.513	86 " " "
525	Punák Malaipedu Tandurai	27 31 49 71 39 43 80 48 28	4° 91' 24.23 5° 22' 49.42 5° 24' 19.63	81738 167858 174567	587	Malaipedu Pérumbákam Kunavákam	139 28 54 16 51 6	5° 02' 34.03 4° 67' 29.37 4° 81' 42.90	105537 47091 65206	19.988 8.919 12.350	" " "

\* Deduced base. † The continuation of the triangulation will be found in the Synoptical Volume of the Madras Meridional and Coast Series.

MADRAS LONGITUDINAL SERIES.

No. of Triangle	Station	Corrected Plane Angle			Distance			Theodolite used	No. of Triangle	Station	Corrected Plane Angle			Distance			Theodolite used
		°	'	"	Log. feet	Feet	Miles				Log. feet	Feet	Miles				
588	Malaipeadu, XXXVI Mángád, XLIII Sripérumbudúr Pagoda	92 15 14	32 44 18	112 17 11	4.741239	55111	10.438	Inch 24	550	Malaipeadu, XXXVI Nannangalam, XLII Pallávaram Hill Mark	16 39 9	75 53 47	4.221437	16651	3.154	Inch 24	
589	Mángád, XLIII Pérumbákam Sripérumbudúr Pagoda	33 26 50	4.741239	55111	10.438	86	17.523	"	551	Nannangalam, XLIII St. Thomas's Mount, XLIV Pallávaram Hill Mark	30 47 45	30 7 19	4.221437	16651	3.154	"	
540	Mángád, XLIII St. Thomas's Mount, XLIV Érumaiyúr Hill Staff	112 8 39	4.665498	46291	8.767	24	8.767	24	552	Nannangalam, XLIII St. Thomas's Mount, XLIV Madras Base-line S. End	117 55 25	23 31 39	4.613970	41112	7.786	"	
541	Nannangalam, XLII Mángád, XLIII Érumaiyúr Hill Staff	25 6 4	4.326363	21201	4.015	"	4.015	"	553	Pudupák, XLI Nannangalam, XLII Madras Base-line S. End	22 59 32	42 37 58	4.268906	18574	3.518	"	
542	Malaipeadu, XXXVI Mángád, XLIII Vandalúr Hill Mark	31 21 40	4.326363	21201	4.015	"	4.015	"	554	Pérumbákam Madras Base-line S. End St. Thomas's Mount No. 1	102 37 29	10 35 10	4.638382	43489	8.237	86	
543	Nannangalam, XLII Mángád, XLIII Vandalúr Hill Mark	67 17 52	4.484994	30549	5.786	"	5.786	"	555	Madras Base-line S. End St. Thomas's Mount No. 1 Madras Base-line N. End	77 31 28	91 8 59	4.602005	40000	7.576	"	
544	Malaipeadu, XXXVI Mángád, XLIII Tambarammalai Hill Mark	36 15 59	4.428643	26831	5.082	"	5.082	"	556	Pérumbákam St. Thomas's Mount No. 1 Madras Base-line N. End	10 32 19	88 6 38	3.905558	8046	1.524	"	
545	Nannangalam, XLII Mángád, XLIII Tambarammalai Hill Mark	48 42 2	4.534455	34077	6.454	"	6.454	"	557	Pérumbákam Madras Base-line N. End St. Thomas's Mount No. 2	82 36 30	87 3 5	4.643113	43966	8.327	"	
546	Nannangalam, XLII Mángád, XLIII Kunnattúr Hill Temple	40 29 7	4.428643	26831	5.082	"	5.082	"	558	Pérumbákam St. Thomas's Mount No. 2 Kunnattúr	43 57 0	78 48 27	4.556663	36030	6.824	"	
547	Malaipeadu, XXXVI Mángád, XLIII Kunnattúr Hill Temple	36 38 52	4.392126	24668	4.672	"	4.672	"	559	St. Thomas's Mount No. 2 Kunnattúr Poonamallee Flag-staff	10 20 25	82 36 30	3.897738	7902	1.497	C.T.I.	
548	Nannangalam, XLII Mángád, XLIII Tirunirmalai Hill Temple	11 13 7	3.930009	8512	1.612	"	1.612	"	560	Mángád, XLIII Pérumbákam St. Thomas's Mount Flag-staff	43 57 0	57 14 33	4.556663	36030	6.824	"	
549	Malaipeadu, XXXVI Mángád, XLIII Tirunirmalai Hill Temple	55 50 23	4.557223	36201	6.856	"	6.856	"	561	Malaipeadu, XXXVI Pérumbákam St. Thomas's Mount Flag-staff	36 7 35	64 11 20	4.334274	21591	4.089	"	
		29 30 31	4.579876	38008	7.199	"	7.199	"			50 47 25	37 14 33	4.639962	43648	8.267	"	
		15 32 8	4.235133	17184	3.255	"	3.255	"			36 35 43	79 58 22	4.639962	43648	8.267	"	
		23 21 47	4.405568	25443	4.819	"	4.819	"			79 58 22	4.816134	65484	12.402	"		
		22 14 2	4.235133	17184	3.255	"	3.255	"									
		61 59 7	4.603071	40093	7.593	"	7.593	"									
			4.654981	45184	8.558	"	8.558	"									

\* Deduced base.

SECONDARY TRIANGULATION. TRIANGLES.

No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used	No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used
			Log. feet	Feet	Miles					Log. feet	Feet	Miles	
562	Malaipeadu, XXXVI Përumbákam Kóttúr	35 16 59 100 33 59 44 9 2	4.732979 4.963913 4.814290	54073 92026 65206	10.241 17.429 12.350	Inch C.T.I. "	574	St. Thomas's Mount, XLIV Përumbákam Madras Flag-staff	128 13 38 25 40 38	4.891867 4.633476 4.640010	77959 43001 43053	14.765 8.144 8.268	Inch 24 "
563	Përumbákam St. Thomas's Mount No. 2 Kóttúr	20 32 6 110 12 2 49 15 52	4.305584 4.732979 4.640064	20211 54073 43658	3.828 10.241 8.269	"	575	Mángád, XLIII Përumbákam Madras Flag-staff	73 28 45 62 42 19	4.891867 4.858912 4.750495	77959 72262 56298	14.765 13.686 10.663	"
564	St. Thomas's Mount No. 2 Kóttúr	29 59 28 110 36 31 39 24 1	4.201845 4.474271 4.395584	15916 29804 20211	3.015 5.645 3.828	"	576	Mángád, XLIII Tandurai Madras	82 44 41 61 52 22 35 22 57	4.906085 4.855898 4.673179	80721 71763 47117	15.288 13.591 8.924	C.T.I. "
565	Madras Observatory No. 2 Madras Compound Madras Dome Observatory, XXXVII	55 50 17 47 12 22	2.510529 2.439625 2.387461	324 275 244	0.061 0.052 0.046	14 24	577	Mángád, XLIII Përumbákam Madras	73 25 6 62 29 25 44 5 29	4.889561 4.855898 4.750495	77546 71763 56298	14.687 13.591 10.663	86 "
566	Malaipeadu, XXXVI Përumbákam Madras Cathedral	39 52 24 99 9 24	4.806373 4.993883 4.816134	64029 98601 65484	12.127 18.675 12.402	"	578	Malaipeadu, XXXVI Tirumani, XXXVIII Appúr Hill Temple	6 37 42 5 1 51	4.740147 4.620794 4.983378	54973 41763 96245	10.411 7.910 18.228	24 "
567	Mángád, XLIII Përumbákam Madras Cathedral	68 36 55 56 25 35	4.806373 4.758089 4.750495	64029 57291 56298	12.127 10.851 10.663	"	579	Tirumani, XXXVIII Manamai Kunnatúr, XL Óttivákam Hill Mark	72 10 43 54 18 28	4.926083 4.857082 4.852694	84350 71958 71235	15.975 13.628 13.491	"
568	Malaipeadu, XXXVI Përumbákam Madras Church No. 1	43 25 52 99 32 29	4.873656 5.030345 4.816134	74758 107237 65484	14.159 20.310 12.402	"	580	Malaipeadu, XXXVI Tirumani, XXXVIII Óttivákam Hill Mark	47 43 12 34 0 1	4.857082 4.735493 4.983378	71958 54387 90245	13.628 10.301 18.228	"
569	Mángád, XLIII Përumbákam Madras Church No. 1	76 11 32 56 48 40	4.873656 4.809050 4.750495	74758 64424 56298	14.159 12.202 10.663	"	581	Pudupák, XLI Nanmangalam, XLII Kovalam Church	112 36 23 21 1 19	4.742264 4.331745 4.636620	55241 21466 43313	10.462 4.065 8.203	"
570	Mángád, XLIII Përumbákam Madras Church No. 2	71 27 27 59 44 16	4.850855 4.810384 4.750495	70934 64022 56298	13.434 12.239 10.663	"	582	Tirumani, XXXVIII Pudupák, XLI Kovalam Church	9 2 53 127 18 30	4.331745 5.035697 4.974076	21466 108567 94205	4.065 20.562 17.842	"
571	Malaipeadu, XXXVI Përumbákam Madras Church No. 2	40 36 13 102 28 5	4.850855 5.037028 4.816134	70934 106421 65484	13.434 20.156 12.402	"	583	Manamai Kunnatúr, XL Pudupák, XLI Vembed Hill Pagoda	15 41 21 33 45 24	4.483692 4.796470 4.932350	30457 62585 85576	5.768 11.853 16.208	"
572	Malaipeadu, XXXVI Përumbákam Madras Light-house	42 5 28 104 53 28	4.906095 5.064982 4.816134	80555 116140 65484	15.257 21.996 12.402	"	584	Tirumani, XXXVIII Manamai Kunnatúr, XL Vembed Hill Pagoda	54 31 29 57 30 55	4.796470 4.811753 4.852694	62585 64827 71235	11.853 12.278 13.491	"
573	Mángád, XLIII Përumbákam Madras Light-house	75 18 21 62 9 39	4.906095 4.807117 4.750495	80555 73641 56298	15.257 13.947 10.663	"	585	Tirumani, XXXVIII Manamai Kunnatúr, XL Tiruporúr	43 29 0 75 2 18	4.746563 4.893906 4.852694	55791 78326 71235	10.566 14.834 13.491	"

\* Deduced base. † Measured base.



MADRAS LONGITUDINAL SERIES.

Triangle	Station	Corrected Plane Angle	Distance			No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used
			Log. feet	Feet	Miles				Log. feet	Feet	Miles	
586	Tirumani, XXXVIII Pudupák, XLI Tiruporúr	h.s. 16 56 3 49 48 20	4 475192 4 893906 4 974076	29867 78326 94205	5 657 14 834 17 842	598	Tirumani, XXXVIII Manamai Kunnatúr, XL Idaiyúr Hill Temple	18 5 29 8 45 46	4 689932 4 380648 4 852694	48970 24024 71235	9 275 4 550 13 491	Inch 24 "
587	Manamai Kunnatúr, XL Pudupák, XLI Pataravákam Hill Mark	53 49 59 52 34 43	4 857451 4 850339 4 933350	72020 70850 85576	13 640 13 419 16 208	599	Tirumani, XXXVIII Avirimodu, XXXIX Tirukalikundram Temple	80 29 14 24 21 25	4 888560 4 509913 4 879832	77368 32353 75828	14 653 6 127 14 361	"
588	Tirumani, XXXVIII Manamai Kunnatúr, XL Pataravákam Hill Mark	79 24 15 19 22 17	4 850339 4 378540 4 852694	70850 23908 71235	13 419 4 528 13 491	600	Avirimodu, XXXIX Manamai Kunnatúr, XL Tirukalikundram Temple	20 51 29 44 45 3	4 592488 4 888560 5 000370	39128 77368 100085	7 411 14 653 18 956	"
589	Tirumani, XXXVIII Avirimodu, XXXIX Édámíchi	h.s. 90 39 3 29 52 57	4 944633 4 642084 4 879832	88030 43862 75828	16 672 8 397 14 301	601	Tirumani, XXXVIII Pudupák, XLI Mahabalipuram Light-house	47 15 49 53 14 0	4 847388 4 885081 4 974076	70370 76751 94205	13 328 14 536 17 842	"
590	Mávandúr, XXXIV Avirimodu, XXXIX Édámíchi	h.s. 35 26 21 28 48 41	4 944633 4 864308 5 135907	88030 73106 136744	16 672 13 857 25 898	602	Tirumani, XXXVIII Manamai Kunnatúr, XL Mahabalipuram Light-house	13 9 14 101 20 13	4 250749 4 885081 4 852694	17813 70751 71235	3 374 14 536 13 491	"
591	Mávandúr, XXXIV Avirimodu, XXXIX Chingleput	h.s. 37 40 51 53 29 14	4 922225 5 041105 5 135907	83604 10997 136744	15 834 20 820 25 898	603	Manamai Kunnatúr, XL Pudupák, XLI Mahabalipuram Temple	34 2 31 9 11 9	4 844755 4 299857 4 932350	69945 19946 85576	13 247 3 778 16 208	"
592	Avirimodu, XXXIX Manamai Kunnatúr, XL Chingleput	h.s. 50 25 18 53 59 56	4 901189 4 922225 5 000370	79651 83604 100085	15 085 15 834 18 956	604	Avirimodu, XXXIX Manamai Kunnatúr, XL Karunguli Hill Temple	77 52 57 17 34 13	4 992554 4 482168 5 000370	98300 30351 100085	18 617 5 748 18 956	"
598	Karunguli Édámíchi Tirumani	h.s. " " " "	4 641847 4 724197 4 701623	43838 52990 57759	8 303 10 036 10 939	605	Tirumani, XXXVIII Manamai Kunnatúr, XL Karunguli Hill Temple	103 45 41 31 30 2	4 992554 4 723295 4 852694	98300 52880 71235	18 617 10 015 13 491	"
594	Édámíchi Tirumani Chingleput Fort	h.s. " " " "	4 229318 4 611605 4 641847	16956 40889 43838	3 211 7 744 8 303	606	Tirumani, XXXVIII Avirimodu, XXXIX Madurántakam Pagoda	14 19 50 44 16 5	4 342212 4 792475 4 879832	21989 62012 75828	4 165 11 745 14 361	"
595	Karunguli Édámíchi Uttaramerúr Pagoda	h.s. " " " "	4 681262 4 77859 4 701623	48002 55958 57759	9 091 10 598 10 939	607	Vilankád Karunguli Kumarakuppam	52 17 47 48 34 56 79 7 17	4 759718 4 736447 4 853505	57507 54506 71378	10 891 10 323 13 519	C.T.I. " "
596	Tirumani, XXXVIII Avirimodu, XXXIX Malaivayávúr Hill Temple	h.s. " " " "	4 713183 4 570418 4 879832	51663 37189 75828	9 785 7 043 14 361	608	Karunguli Kumarakuppam Tirukalikundram	52 51 17 71 24 19 55 44 24	4 743996 4 819195 4 759718	55462 65947 57507	10 504 12 490 10 891	"
597	Mávandúr, XXXIV Tirumani, XXXVIII Malaivayávúr Hill Temple	h.s. " " " "	4 570418 4 988028 5 067932	37189 97281 116932	7 043 18 424 22 146	609	Kumarakuppam Tirukalikundram Karimarapákam	11 40 49 35 20 55 132 58 16	4 185983 4 642006 4 743996	15346 43854 55462	2 906 8 306 10 504	"

\* Deduced base. † This base is taken from the Synoptical Volume of the South-East Coast Series.

SECONDARY TRIANGULATION. TRIANGLES.

No. of Triangle	Station	Corrected Plane Angle	Distance			Spherical Excess	Station	No. of Theodolite used	Distance			Spherical Excess	
			Log. feet	Feet	Miles				Log. feet	Feet	Miles		
<b>MALABAR COAST SECONDARY SERIES.</b>													
610	Karimrapákam Tirukalikundram Mahábalipuram	93 41 27 67 21 57 18 56 36	4.673689 4.639783 4.185983	47172 43630 15346	8.934 8.263 2.906	"	619	Kandakamale No. 2 h.s. Tadiándamol Yemale	1.5 1.4 1.5	69 18 13.4 50 21 16.0 60 20 30.6	5.2056722 5.1211380 5.1736601	160573 132172 149163	30.412 25.032 28.251
611	Tirukalikundram Mahábalipuram Pérumbákam	61 58 42 92 53 44 25 7 34	4.991544 5.045142 4.673689	98072 110954 47172	18.574 21.014 8.934	"	620	Yemale Tadiándamol Dharmapatna	1.6 1.6 1.6	71 1 57.6 46 49 36.6 62 8 25.8	5.2349279 5.1220724 5.2056722	171762 132456 160573	32.531 25.086 30.412
612	Karimrapákam Mahábalipuram Sadras	49 31 53 52 6 20 78 21 47	4.530052 4.545959 4.639783	33888 35153 43630	6.418 6.658 8.263	"	621	Tadiándamol Dharmapatna Nattávaram	1.5 1.6 1.5	37 46 49.9 77 22 50.9 64 50 19.2	5.0654287 5.2676048 5.2349279	116260 185185 171762	22.019 35.073 32.531
613	Trumani, XXXVIII Avirinodu, XXXIX Pálar Beacon (heliotrope)	57 38 18 72 37 41	4.923976 4.977005 4.879832	83041 94843 75828	15.898 17.963 14.361	12	622	Dharmapatna Nattávaram Purakád	0.9 .9 .9	52 8 25.8 68 14 19.6 59 37 14.6	5.0269327 5.0974633 5.0654287	106398 125159 116260	20.151 23.704 22.019
614	Karimrapákam Sadras Kadalúr	35 39 35 102 35 45 41 44 40	4.488255 4.712029 4.545959	30779 51526 35153	5.829 9.759 6.658	C.T.I.	623	Nattávaram Purakád Narikot	0.8 .8 .8	71 43 58.6 51 38 8.6 56 37 52.8	5.0827123 4.9995296 5.0269327	120980 99892 106398	22.913 18.919 20.151
615	Marakanam Vilankád Kuppam	46 23 19 42 54 38 90 42 3	4.579051 4.552347 4.719259	37936 35674 52391	7.185 6.756 9.923	"	624	Yemale Dharmapatna Cannanore	No. 2 h.s. " "	2 11 30 3 34 59 174 13 31	4.701946 4.915247 5.122072	50344 82271 132456	9.535 15.582 25.086
616	Vilankád Kuppam Vémmani	83 24 16 30 38 21 59 57 23	4.638828 4.417521 4.579051	43534 20153 37936	8.245 4.953 7.185	"	625	Tadiándamol Yemale Cannanore Flag-staff	h.s. " "	31 59 5 71 49 12	4.942381 5.196117 5.205672	87575 157079 160556	16.586 29.750 30.408
617	Kuppam Vémmani Kumárakuppam	23 27 10 118 53 4 37 39 46	4.452053 4.795081 4.638828	28357 62385 43534	5.371 11.815 8.245	"	626	Kandakamale Yemale Cannanore Flag-staff	No. 1 h.s. " "	18 46 28 132 10 40 5.120961	4.942381 5.304593 5.120961	87575 201648 132118	16.586 38.191 25.022
618	Vilankád Kuppam Alambarai Fort	11 28 50 91 55 5	3.889966 4.590793 4.579051	7762 38976 37936	1.470 7.382 7.185	"	627	Tadiándamol Cannanore Flag-staff Tellicherry	h.s. " "	16 51 5 64 52 10	4.701538 5.234754 5.196117	50297 171694 157079	9.526 32.518 29.750

\* This base is taken from the Synoptical Volume of the South-East Coast Series.  
 † The continuation of the triangulation will be found in the Synoptical Volume of the Great Arc Meridional Series, Section 8° to 18°.  
 NOTE.—The observations of the Malabar Coast Secondary Series were taken with a 12-inch Theodolite to luminous signals.

MADRAS LONGITUDINAL SERIES.

No. of Triangle	Station	Corrected Plane Angle ° ' "	Distance			Theodolite used	No. of Triangle	Station	Corrected Plane Angle ° ' "	Distance			Theodolite used
			Log. feet	Feet	Miles					Log. feet	Feet	Miles	
628	Nattavaram	88 44 1	5 151874	141864	26 868	688	Adhibetta, XVII	49 24 37	4 709103	51180	9 693	Inch 12	
	Narikot	46 31 14	5 012690	102965	19 501		Vaddarhalli	42 10 51	4 055668	45255	8 571		"
	Brahmagiri Hill Mark	4 999530	99892	18 919	88 24 32		Byadarahalli	88 24 32	4 828472	67371	12 760		"
629	Nattavaram	61 40 35	4 977010	94844	17 963	689	Byadarahalli	57 50 1	4 667710	46527	8 812	"	
	Narikot	50 19 54	4 918740	82935	15 707		Vaddarhalli	53 33 1	4 645540	44212	8 373		"
	Manantoddy	67 59 31	4 999530	99892	18 919		Seringapatam	68 36 58	4 709103	51180	9 693		"
630	Nattavaram	35 50 35	4 721858	52706	9 982	640	Vaddarhalli	51 19 38	4 563267	36582	6 928	"	
	Manantoddy	31 17 30	4 669779	46750	8 854		Seringapatam	45 27 50	4 523740	33400	6 326		"
	Banasuram Hill Peak	4 918740	82935	15 707	83 12 32		Kannambadi	83 12 32	4 667710	46527	8 812		"
631	Narikot	30 55 16	4 721858	52706	9 982	641	Kannambadi	59 45 4	4 610767	40810	7 729	"	
	Manantoddy	36 42 1	4 787447	61298	11 610		Seringapatam	69 30 11	4 645928	44251	8 381		"
	Banasuram Hill Peak	4 977010	94844	17 963	50 44 45		Mysore	50 44 45	4 563267	36582	6 928		"
632	Narikot	100 5 37	5 038644	109306	20 702	642	Seringapatam	37 25 16	4 395798	24877	4 712	"	
	Manantoddy	21 13 40	4 604218	40199	7 613		Mysore	57 7 1	4 536297	34379	6 511		"
	Elambileri Hill Peak	4 977010	94844	17 963	85 27 43		Mysore	85 27 43	4 610767	40810	7 729		"
633	Nattavaram	53 18 24	5 038644	109306	20 702	643	Mysore	42 54 25	4 268186	18543	3 512	"	
	Manantoddy	89 13 11	5 134513	136305	25 815		Mysore	71 7 14	4 411144	25772	4 881		"
	Elambileri Hill Peak	4 918740	82935	15 707	65 58 21		Mysore	65 58 21	4 395798	24877	4 712		"
634	Narikot	113 33 43	5 133708	136053	25 768	644	Narayandurga, XIV	57 40 14	5 134537	136313	25 817	" 24	
	Manantoddy	26 43 17	4 824392	66741	12 640		Adhibetta, XVII	95 23 32	5 205761	160600	30 418		"
	Vellera Hill Peak	4 977010	94844	17 963	26 56 14		Mysore	26 56 14	4 863798	73080	13 841		" 12
635	Nattavaram	55 14 8	5 133708	136053	25 768	645	Narayandurga, XIV	71 27 47	4 820756	66185	12 535	"	
	Manantoddy	94 42 48	5 217628	165055	31 260		Vaddarhalli	35 7 3	4 603754	40156	7 605		"
	Vellera Hill Peak	4 918740	82935	15 707	153 36 9		Attikuppa Bungalow	153 36 9	4 861313	72663	13 762		"
636	Narikot	121 51 51	5 155304	142989	27 081	646	Vaddarhalli	14 36 20	4 615029	41213	7 805	"	
	Manantoddy	23 50 56	4 832973	68073	12 893		Kannambadi	10 21 3	4 615029	41213	7 805		"
	Wayutmalai Hill Peak	4 977010	94844	17 963	6 36 28		Gradikalbetta Hill Peak	6 36 28	4 421511	26394	4 999		"
MYSORE													
SECONDARY SERIES No. 1.													
637	Narayandurga, XIV	57 20 2	4 828472	67371	12 760	648	Vaddarhalli	84 47 42	4 833082	68090	12 896	"	
	Adhibetta, XVII	56 43 9	4 825449	66904	12 671		Byadarahalli	46 44 21	4 697152	49701	9 430		"
	Vaddarhalli	65 56 49	4 863798	73080	13 841		Melkote Hill Pagoda	47 39 3	4 697152	49701	9 430		"

\* For another triangle to this point, see the Synoptical Volume of the Great Arc Meridional Series, Section 8° to 18°, by which the value of the common side was greater by 48 feet.

SECONDARY TRIANGULATION. TRIANGLES.

No. of Triangle	Station	Corrected Plane Angle	Distance			No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used
			Log. feet	Feet	Miles				Log. feet	Feet	Miles	
650	h.s. Adhibetta, XVII Byadarahalli Tonnur Building	52 12 48 78 3 36	4.670052 4.763662 4.655668	46876 58031 45255	8.878 10.991 8.571	662	Vaddarhalli Mysore Karigatta Hill Peak	25 35 19 30 40 29	4.583948 4.724730 4.895549	38366 53055 78623	7.266 10.048 14.891	Inch 12 "
651	h.s. Naryandurga, XIV Vaddarhalli Chinakuruli Bungalow	7 22 45 60 0 31	3.968871 4.797756 4.825449	9308 62770 66904	1.763 11.888 12.671	663	Mysore Mysore Karigatta Hill Peak	45 59 12 106 13 3	4.583948 4.709477 4.395798	38366 51224 24877	7.266 9.702 4.712	" " "
652	h.s. Vaddarhalli Byadarahalli Bebibetta Hill Peak	147 37 4 8 24 2	4.828914 4.264731 4.709103	67439 18396 51180	12.773 3.484 9.693	664	Seringapatam Mysore Hunjanke Hill Peak	96 45 45 33 32 48	4.830033 4.575489 4.715342	67613 37626 51921	12.806 7.126 9.834	" " "
653	h.s. Byadarahalli Seringapatam Bebibetta Hill Peak	49 25 59 89 36 16	4.709536 4.828914 4.645540	51231 67439 44212	9.703 12.773 8.373	665	Seringapatam Mysore Hunjanke Hill Peak	88 36 9 48 20 39	4.701951 4.575489 4.536297	50344 37626 34379	9.535 7.126 6.511	" " "
654	h.s. Byadarahalli Seringapatam Hirod Hill Pillar	45 1 45 32 1 47	4.506420 4.381284 4.645540	32094 24059 44212	6.078 4.557 8.373	666	Mysore Mysore Mysore Barracks	91 15 48 42 10 47	4.407109 4.334234 4.268186	25533 17149 18543	4.836 3.248 3.512	" " "
655	s. Seringapatam Kannambadi Hirod Hill Pillar	82 3 1 44 40 45	4.655187 4.506420 4.563267	45205 32094 35582	8.562 6.078 6.928	667	Mysore Mysore Mysore Barracks	76 50 25 23 47 34	4.407109 4.024434 4.411144	25533 10579 25772	4.836 2.004 4.881	" " "
656	s. Seringapatam Kannambadi Seringapatam Monument No. 1	48 56 1 20 54 36	4.468056 4.143262 4.563267	29380 13908 35582	5.564 2.634 6.928	668	Mysore Mysore Mysore Race Stand	64 4 6 14 8 47	4.374309 3.808498 4.411144	23676 6434 25772	4.484 1.219 4.881	" " "
657	h.s. Byadarahalli Seringapatam Seringapatam Monument No. 1	18 12 27 65 8 47	4.143262 4.606260 4.645540	13908 40389 44212	2.634 7.649 8.373	669	Seringapatam Mysore Mysore Observatory	18 0 53 93 2 56	4.056656 4.565715 4.536297	11393 36789 34379	2.158 6.968 6.511	" " "
658	h.s. Vaddarhalli Byadarahalli Seringapatam Factory	66 39 24 50 12 56	4.721643 4.644350 4.709103	52680 44091 51180	9.977 8.351 9.693	670	Mysore Mysore Mysore Observatory	63 32 1 37 8 31	4.227687 4.056656 4.268186	16892 11393 18543	3.199 2.158 3.512	" " "
659	h.s. Vaddarhalli Kannambadi Seringapatam Factory	38 13 15 92 36 8	4.436274 4.644350 4.523740	27307 44091 33400	5.172 8.351 6.326	671	Mysore Mysore Mysore	43 9 22 57 31 41 79 18 57	4.110830 4.201946 4.268186	12907 15920 18543	2.445 3.015 3.512	" " "
660	h.s. Kannambadi Mysore Seringapatam Monument No. 2	56 31 44 56 42 58	4.603946 4.604881 4.645928	40174 40261 44251	7.609 7.625 8.381	672	Mysore Mysore Mysore	34 36 52 27 57 52 117 25 16	4.201946 4.118660 4.395798	15920 13142 24877	3.015 2.489 4.712	" " "
661	Mysore Mysore Seringapatam Monument No. 2	51 8 48 90 35 45	4.495370 4.603946 4.395798	31287 40174 24877	5.926 7.609 4.712	673	Mysore Mysore Mysore Palace	37 56 56 51 34 59	4.057046 4.102245 4.268186	11404 14529 18543	2.160 2.752 3.512	" " "

\* Deduced base.

No. of Triangle	Station	Corrected Plane Angle			Distance			No. of Triangle	Station	Corrected Plane Angle			Distance			Theodolite used
		o	'	"	Log. feet	Feet	Miles			o	'	"	Log. feet	Feet	Miles	
674	Mysore No. 1 h.s.	32	0	49	4.162245	14529	2.752	684	Mysore No. 8 h.s.	52	38	51	4.843092	69677	13.197	Inch C.T.I.
	Mysore No. 2 "	33	10	18	4.175976	14996	2.840		Arsinkere "	80	23	43	4.936639	86425	16.368	
	Mysore Palace	4.395798	24877	4.712	Jinahalli "	46	57		26	4.806595	64061	12.133				
675	Seringapatam s.	64	45	36	4.909590	81212	15.381	685	Arsinkere h.s.	99	0	59	4.990034	97731	18.510	"
	Mysore No. 2 h.s.	92	43	27	4.952676	89685	16.986		Jinahalli "	36	13	25	4.766976	58476	11.075	
	Ukalgere Hill Pagoda	4.536297	34379	6.511	Saragurbetta "	4.843092	69677		13.197							
676	Seringapatam s.	72	55	12	4.951613	89460	16.943	686	Jinahalli h.s.	83	45	36	5.051322	112544	21.315	"
	Mysore No. 3 h.s.	73	22	58	4.952676	89685	16.986		Saragurbetta "	67	434	12.772				
	Ukalgere Hill Pagoda	4.715342	51921	9.834	Adiganhalli "	4.990034	97731		18.510							
<b>MYSORE</b>																
<b>SECONDARY SERIES No. 2.</b>																
677	Kandakamale No. 1 h.s.	56	11	19	5.214174	163747	31.013	687	Saragurbetta h.s.	113	17	48	5.214755	163966	31.054	"
	Tadiandamol "	74	37	13	5.278801	190021	35.989		Adiganhalli "	39	4	53	5.051322	112544	21.315	
	Pushpagiri Hill Pagoda	5.173674	149167	28.251	Makalenbetta "	59	11		24	4.881001	76033	14.400				
678	Tadiandamol h.s.	54	50	40	5.232396	179764	32.342	688	Adiganhalli h.s.	51	35	18	4.841150	69366	13.138	"
	Pushpagiri Hill Pagoda	5.301058	200289	37.934	Makalenbetta "	69	13		18	4.917866	82769	15.676				
	Bettadpur	5.214174	163747	31.013	Bettadpur "	59	11		24	4.881001	76033	14.400				
679	Pushpagiri Hill Pagoda h.s.	83	35	0	5.253608	179311	33.960	689	Mallappanabetta h.s.	34	13	8	5.121183	132185	25.035	86
	Bettadpur "	46	38	37	5.232396	179764	32.342		Bettadpur "	96	3	56	5.368734	233740	44.269	
	Mallappanabetta	5.368074	233386	44.202	Kotébetta "	49	42		56	5.253608	179311	33.960				
680	Bettadpur h.s.	87	53	44	5.439589	269519	51.045	690	Adiganhalli h.s.	35	57	4	5.130653	135099	25.587	C.T.I.
	Mallappanabetta	5.026	0	5.317871	207908	39.376	Makalenbetta "		122	58	5	5.285693	193060	36.564		
	Mysore No. 8 "	4.1	40	16	5.253008	179311	33.960		Kotébetta "	21	4	51	4.917866	82769	15.676	
681	Bandhallidurga h.s.	21	56	20	5.021587	105096	19.905	691	Makalenbetta h.s.	63	35	23	5.086744	122108	23.126	"
	Mysore No. 8 "	36	16	6	5.221164	160404	31.516		Kotébetta "	34	8	14	4.883714	76509	14.490	
	Ummattur	121	47	34	5.378558	239088	45.282		Virarajendrapet "	82	16	23	5.130653	135099	25.587	
682	Ummattur h.s.	35	57	36	4.827125	67162	12.720	692	Makalenbetta h.s.	134	58	10	5.148957	140915	26.688	"
	Mysore No. 8 "	30	48	15	4.767683	58571	11.093		Bettadpur "	22	35	22	4.883714	76509	14.490	
	Mulaigunte	113	14	9	5.021587	105096	19.905		Virarajendrapet "	22	26	28	4.881001	76033	14.400	
683	Mulaigunte h.s.	55	51	18	4.806595	64061	12.133	693	Kotébetta h.s.	17	40	19	4.616202	41324	7.827	"
	Mysore No. 8 "	63	57	16	4.842255	69543	13.171		Virarajendrapet "	98	33	39	5.129083	134612	25.495	
	Arsinkere	60	11	26	4.827125	67162	12.720		Turumbetta "	63	46	2	5.086744	122108	23.126	
688	Mulaigunte h.s.	55	51	18	4.806595	64061	12.133	694	Virarajendrapet h.s.	47	52	21	4.487201	30704	5.815	"
	Mysore No. 8 "	63	57	16	4.842255	69543	13.171		Turumbetta "	38	39	27	4.412646	25861	4.898	
	Arsinkere	60	11	26	4.827125	67162	12.720		Watakoli "	93	28	12	4.016202	41324	7.827	
688	Mulaigunte h.s.	55	51	18	4.806595	64061	12.133	695	Bandhallidurga h.s.	38	32	40	5.036241	108703	20.588	86
	Mysore No. 8 "	63	57	16	4.842255	69543	13.171		Ummattur "	107	28	4	5.221164	166404	31.516	
	Arsinkere	60	11	26	4.827125	67162	12.720		Kundur "							

\* Deduced base.

SECONDARY TRIANGULATION. TRIANGLES.

No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used	No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used
			Log. feet	Feet	Miles					Log. feet	Feet	Miles	
696	Mysore Ummattūr Kundūr	No. 3 h.s. " " "	47 6 6 87 48 18 45 5 36	5'036241 5'171077 5'021587	108703 148278 105096	20.588 28.083 19.905	708	Ummattūr Kundūr Arakērbēṭṭa	48 9 58 74 35 58	4'983704 5'095619 5'036241	96317 124629 108703	18.242 23.604 20.588	Inch C.T.I. "
697	Ummattūr Kundūr Kuntūr	h.s. " " "	27 46 18 21 45 2 130 28 40	4'823390 4'723917 5'036241	66587 52956 108703	12.611 10.030 20.588	709	Mysore Ummattūr Arakērbēṭṭa	83 27 18 39 38 20	5'095619 4'903243 5'021587	124629 80028 105096	23.604 15.157 19.905	" " "
698	Kundūr Kuntūr Satteḡāl	h.s. " " s.	60 35 25 90 37 35	4'763499 4'506011 4'823390	58009 32064 66587	10.987 6.073 12.611	710	Mysore Ummattūr Karigatta	112 48 54 22 26 0 44 45 6	5'138611 4'755610 5'021587	137598 56965 105096	26.060 10.789 19.905	" " "
699	Ummattūr Kuntūr Muruktōre Hill Pagoda	h.s. " " "	21 13 10 123 33 15	4'521523 4'883720 4'723917	33229 76510 52956	6.293 14.491 10.030	711	Ummattūr Kundūr Karigatta	65 22 18 67 40 32 46 57 10	5'131026 5'138611 5'036241	135215 137598 108703	25.609 26.060 20.588	" " "
700	Kundūr Kuntūr Mudikundam Pagoda	h.s. " " "	28 26 27 60 8 30	4'501359 4'761672 4'823390	31722 57766 66587	6.008 10.940 12.611	712	Mysore Arakērbēṭṭa Karigatta	29 21 36 42 35 39 108 2 45	4'615608 4'755610 4'903243	41267 56965 80028	7.816 10.789 15.157	" " "
701	Ummattūr Kuntūr Mūḡūr Pagoda	h.s. " " "	18 48 57 19 8 37	4'443536 4'450760 4'723917	27767 28233 52956	5.259 5.347 10.030	718	Karigatta Arakērbēṭṭa Tumbāla Hill Pagoda	46 10 37 97 8 12 4 615608	4'697543 4'835940 4'615608	49836 68539 41267	9.439 12.981 7.816	" " "
702	Ummattūr Kuntūr Biligiriranganabēṭṭa Pagoda	h.s. " " "	40 4 37 107 41 47	4'805732 4'975918 4'723917	63934 94606 52956	12.109 17.918 10.030	714	Mysore Karigatta Serinḡapatam Pagoda	17 15 40 69 10 32	4'228807 4'727111 4'755610	16936 53347 56965	3.208 10.104 10.789	" " "
703	Ummattūr Kuntūr Mangala Hill Pagoda	h.s. " " "	64 57 17 44 21 30	4'706187 4'593638 4'723917	50838 39232 52956	9.628 7.430 10.030	715	Mysore Karigatta Mysore	48 47 4 121 19 27	4'700385 4'059006 4'755610	50163 11455 56965	9.501 2.170 10.789	" " "
704	Ummattūr Mulaigunte Haradhanhalli Hill Pagoda	h.s. " " "	110 35 57 37 35 33	5'017113 4'831166 4'767683	104019 67790 58571	19.701 12.839 11.093	716	Mulaigunte Arsinkēre Hōrḡyāl Hill Pagoda	74 54 47 45 32 2	4'891465 4'760193 4'842255	77887 57570 69543	14.751 10.903 13.171	" " "
705	Ummattūr Kuntūr Haradhanhalli Hill Pagoda	h.s. " " "	97 51 51 47 10 41	4'961680 4'831166 4'723917	91555 67790 52956	17.340 12.839 10.030	717	Mulaigunte Arsinkēre Rāḡhavapur Hill	80 9 42 54 0 37	4'980150 4'894598 4'842255	95532 78451 69543	18.093 14.858 13.171	" " "
706	Ummattūr Mulaigunte Hulimāv	h.s. " " "	95 27 20 60 24 12	4'440110 4'826430 4'767683	27549 67055 58571	5.218 12.700 11.093	718	Mulaigunte Arsinkēre Manchhalli Hill	75 47 20 62 8 7	5'002609 4'962586 4'842255	100603 91746 69543	19.054 17.376 13.171	" " "
707	Mulaigunte Hulimāv Nanjiḡūd Pagoda	h.s. " " "	60 50 45 28 24 17	4'381316 4'117477 4'440110	24061 13106 27549	4.557 2.482 5.218	719	Mulaigunte Arsinkēre Chik Devibēṭṭa Hill Pagoda	34 30 24 104 14 25	4'776317 5'009562 4'842255	59747 102226 69543	11.316 19.361 13.171	" " "

No. of Triangle	Station	Corrected Plane Angle	Distance			No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used
			Log. feet	Feet	Miles				Log. feet	Feet	Miles	
720	Mysore No. 3 h.s. Mulaigunte Chik Devibetta Hill Pagoda	56 26 34 90 21 42	5'009562 5'088734 4'827125	102226 122669 67162	19.361 23.233 12.720	730	Sátanúr Séttahalli Marama Hill Pagoda	51 49 15 91 54 25	4'742744 4'847036 4'619321	55302 70313 41622	10.474 13.317 7.883	Inch C.T.I. "
721	Kannambádi Mysore No. 3 h.s. Béttadúr Rock Pagoda	78 9 15 37 4 29	4'866171 4'655734 4'831983	73480 45268 67918	13.917 8.574 12.863	731	Séttahalli Ukalgère Hill Pagoda Tálagudi	63 3 20 95 8 40	4'710738 4'330447 4'758890	51373 21402 57397	9.730 4.053 10.871	" " "
722	Jinahalli Adiganhalli Béttadúr Rock Pagoda h.s.	139 56 29 11 8 39	4'953079 4'430666 4'828882	89759 26957 67434	17.000 5.105 12.772	732	Séttahalli Tálagudi Jenkal Hill Pagoda	47 54 40 65 55 50	4'239651 4'329680 4'330447	17364 21364 21402	3.289 4.046 4.053	" " "
MYSORE												
SECONDARY SERIES No. 3.												
723	Narsuwámi Hemagri Muttigère	86 32 0 38 39 30 54 48 30	5'047886 4'844335 4'961025	111657 69877 91417	21.147 13.234 17.314	734	Ankisiridrug Devarabétta Anchéttidurga	17 38 13 14 0 19	4'976812 4'879228 5'215231	94801 75723 164146	17.955 14.341 31.088	86 " "
724	Hemagri Muttigère Sátanúr	32 11 35 65 26 40 82 21 45	4'778298 5'010586 5'047886	60020 102467 111657	11.367 10.407 21.147	735	Devarabétta Anchéttidurga Karibétta	52 56 19 76 35 34	4'890810 4'876022 4'976812	77770 75166 94801	14.729 14.236 17.955	C.T.I. " "
725	Muttigère Sátanúr Chotanahalli	39 3 35 78 8 40 62 47 45	4'628640 4'819845 4'778298	42525 60046 60020	8.054 12.509 11.367	736	Anchéttidurga Karibétta Ráyakota	28 41 39 41 3 56 69 8 27	5'053432 4'766240 4'900386	113092 58377 79503	21.419 11.056 15.057	" " "
726	Sátanúr Chotanahalli Séttahalli	80 59 42 48 46 58 50 13 20	4'737592 4'619321 4'628640	54650 41622 42525	10.350 7.883 8.054	737	Karibétta Ráyakota Gutturáyan	69 47 37 41 3 56 69 8 27	5'055285 4'900386 5'053432	113576 79503 113092	21.511 15.057 21.419	" " "
727	Chotanahalli Séttahalli Ukalgère Hill Pagoda	55 11 15 73 23 35	4'758890 4'826030 4'737592	57397 66993 54650	10.871 12.688 10.350	738	Gutturáyan Ráyakota Pikili	55 50 18 36 53 54 87 15 48	4'973526 4'834219 5'055285	94086 68268 113576	17.819 12.930 21.511	" " "
728	Narsuwámi Muttigère Anékal Durga	91 45 50 63 0 15	5'216043 5'166531 4'844335	164453 146734 69877	31.146 27.791 13.234	739	Ráyakota Pikili Karimangalam	40 25 47 67 23 20 72 10 53	4'806795 4'960141 4'973526	64091 91231 94086	12.138 17.279 17.819	" " "
729	Sátanúr Séttahalli Tóppanahalli Hill	56 47 5 87 9 55	4'772108 4'849049 4'619321	59171 70640 41622	11.207 13.379 7.883							

\* Deduced base.

SECONDARY TRIANGULATION. TRIANGLES.

No. of Triangle	Station	Corrected Plane Angle	Distance			No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used
			Log. feet	Feet	Miles				Log. feet	Feet	Miles	
740	Pikili Karimangalam Alankarai	58 48 51 65 57 57 55 13 12	4.824484 4.852882 4.806795	66755 71266 64091	12.643 13.497 12.138	752	Ánehéttidurga Ráyakota Sulagiri Hill Tree	57 35 30 57 35 7	4.736063 4.736032 4.766240	54458 54454 58377	10.314 10.313 11.056	Inch C.T.I. "
741	Karimangalam Alankarai Podhari	82 33 30 57 2 40 40 23 50	5.009180 4.936663 4.824484	102136 86430 66755	19.344 16.369 12.643	753	Ánehéttidurga Ráyakota Bolkõnda Drug	33 8 15 101 46 52 4.766240	4.653848 4.906892 4.766240	45066 80703 58377	8.535 15.285 11.056	" " "
742	Alankarai Podhari Mukanúr	65 28 15 11 1 1 103 30 44	4.980292 4.302029 5.009180	95564 20074 102136	18.099 3.802 19.344	754	Ráyakota Pikili Moruvádi	26 52 30 14 20 12 138 47 18	4.809926 4.548528 4.973526	64554 35361 94086	12.226 6.697 17.819	" " "
743	Mukanúr Podhari Véllármalai	47 42 23 21 6 20 111 11 17	4.879750 4.567098 4.980292	75814 30906 95564	14.359 6.990 18.099	755	Ráyakota Pikili Boditimrádrug Hill	46 38 18 27 15 8	4.852478 4.651702 4.973526	71200 44844 94086	13.485 8.493 17.819	" " "
744	Véllármalai Podhari Arúr	97 13 7 35 12 54 47 33 59	5.008202 4.772568 4.879750	101907 59234 75814	19.300 11.218 14.359	756	Pikili Karimangalam Boditimrádrug Hill	40 8 12 78 7 0	4.671186 4.852478 4.806795	46901 71200 64091	8.883 13.485 12.138	" " "
745	Arúr Podhari Éttipati	47 36 54 38 40 1 93 43 5	4.877545 4.804853 5.008202	75430 63805 101907	14.286 12.084 19.300	757	Ráyakota Pikili Vírabadondrug Hill	25 48 5 26 59 5	4.711145 4.729223 4.973526	51422 53607 94086	9.739 10.153 17.819	" " "
746	Podhari Éttipati Vélagutta Rock	24 32 13 74 14 7 81 13 40	4.500996 4.866005 4.877545	31695 73452 75430	6.003 13.911 14.286	758	Karimangalam Podhari Karimangalam Rock	90 41 12 5 44 8	4.939366 3.939125 4.936663	86969 8692 86430	16.471 1.646 16.369	" " "
747	Devarabétta Ánehéttidurga Banavanakal	87 42 28 24 13 5 68 4 27	5.009072 4.622426 4.976812	102111 41920 94801	19.339 7.939 17.955	759	Karimangalam Karimangalam Rock Karimangalam	14 12 40 55 38 0	3.412481 3.994993 3.939125	2585 9885 8692	0.490 1.872 1.646	" " "
748	Devarabétta Kabbáldurga Banavanakal	63 11 16 19 5 39 97 43 5	5.058320 4.622426 5.103765	114372 41920 126989	21.661 7.939 24.051	760	Karimangalam Alankarai Modúr Pagoda	22 6 17 31 11 50	4.495955 4.634738 4.824484	31330 43126 66755	5.934 8.168 12.643	" " "
749	Ánehéttidurga Ráyakota Dénkanikota Fort	1124 2 25 23 3 22 33 13 30	4.949626 4.624137 4.766240	89048 42086 58377	16.865 7.971 11.056	761	Alankarai Mukanúr Dharmapuri Fort	136 32 10 19 7 45	4.525186 4.203137 4.302629	33511 15964 20074	6.347 3.023 3.802	" " "
750	Devarabétta Ankisgridrug Hudedurgam Pagoda No. 1	33 54 8 37 32 23 5.215231	4.879217 5.056411 5.215231	75721 113871 164146	14.341 21.566 31.088	762	Podhari Véllármalai Barúr Rock	72 33 5 40 34 53	4.895605 4.729418 4.879750	78649 53631 75814	14.896 10.157 14.359	" " "
751	Ánehéttidurga Ráyakota Hudedurgam Pagoda No. 2	31 9 42 20 42 17 4.766240	4.584373 4.418054 4.766240	38404 26239 58377	7.273 4.970 11.056	763	Podhari Véllármalai Kambainéllúr Fort	28 9 10 47 39 55	4.566972 4.761968 4.879750	36895 57805 75814	6.988 10.948 14.359	" " "

\* The triangulation eastward of this series will be found in the Synoptical Volume of the South-East Coast Series.



No. of Triangle	Station	Corrected Plane Angle	Distance			No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used
			Log. feet	Feet	Miles				Log. feet	Feet	Miles	
764	Arúr	43 22 14	4.649341	44601	8.447	774	Satghur, XXVI	23 19 54	5.026156	106208	Inch	
	Éttipati	57 23 42	4.738086	54712	10.362		Mugali	45 54 24	4.653069	44985	8.520	C.T.I.
	Punguni	79 14 4	4.804853	63805	12.084		Péddanadrug		4.911565	81577	15.450	"
765	Podhari	33 46 42	4.640341	44601	8.447	775	Devarakõnda Hill Pagoda	27 1 47	4.384006	24211	4.585	"
	Éttipati	36 19 23	4.676850	47517	8.999		Mallánaigrug	137 53 30	4.626281	42294	8.010	"
	Punguni	109 53 55	4.877545	75430	14.286		Chinnidrug		4.795214	62404	11.819	"
766	Éttipati	22 2 14	4.075270	11892	2.252	776	Podhari	46 23 8	5.079199	12005	22.728	"
	Vélagutta Rock	68 1 30	4.468239	29393	5.567		Mankunu	115 41 26	5.174258	149368	28.289	"
	Singarpet Village		4.500996	31695	6.003		Chinnidrug	17 55 26	4.707664	51011	9.661	"
767	Podhari	22 1 24	4.468239	29393	5.567	777	Mallánaigrug	66 2 10	4.413411	25907	4.907	"
	Éttipati	52 11 53	4.791927	61934	11.730		Chinnidrug	55 19 0	4.367594	23313	4.415	"
	Singarpet Village		4.877545	75430	14.286		Ványambádi Fort		4.384006	24211	4.585	"
ARÚR												
SECONDARY SERIES No. 2.												
768	Yérrakõnda, XX	65 47 14	4.959549	91107	17.255	780	Yérrakõnda, XX	64 23 22	4.845322	70036	13.264	"
	Krishnamakõnda	50 40 36	4.888047	77276	14.636		Devarakõnda Hill Pagoda	101 47 9	4.997816	99498	18.844	"
	Devarakõnda Hill Pagoda		4.951468	89427	16.937		Mallappakõnda	42 51 44	4.839731	69140	13.095	"
769	Krishnamakõnda	41 59 29	4.795214	62404	11.819	781	Devarakõnda Hill Pagoda	142 39 51	5.146893	140247	26.562	"
	Devarakõnda Hill Pagoda		4.909013	81099	15.360		Krishnagriri	14 43 59	4.760446	58809	11.138	"
	Mallánaigrug	77 36 55	4.959549	91107	17.255		Krishnagriri	22 36 10	4.948788	88877	16.833	"
770	Devarakõnda Hill Pagoda	35 8 20	4.839731	69140	13.095	782	Ráyakota	6 50 5	3.898309	7912	1.499	"
	Mallánaigrug	31 17 52	4.795214	62404	11.819		Krishnagriri	98 52 10	4.817517	65693	12.442	"
	Mallápádi		4.959549	91107	17.255		Daulatabad Palace		4.806219	64006	12.122	"
771	Mallánaigrug	41 8 41	4.948788	88877	16.833	788	Mankunu	3 6 20	4.628370	42498	8.049	"
	Mallápádi	84 15 8	5.128397	134399	25.454		Krishnagriri	7 11 36	4.992232	98227	18.604	"
	Mankunu	54 36 11	5.041828	110110	20.854		Jagadevadrug	169 42 4	5.146893	140247	26.562	"
772	Mallápádi	33 52 54	4.707664	51011	9.661	784	Mallápádi	49 56 16	4.666366	46384	8.785	"
	Mankunu	69 52 44	4.934086	85918	16.272		Krishnagriri	54 2 39	4.690709	49058	9.291	"
	Podhari	76 14 22	4.948788	88877	16.833		Gangangiri Hill Peak		4.769446	58809	11.138	"
778	Satghur, XXVI	29 6 13	4.891668	77923	14.758	785	Krishnagriri	24 14 53	4.279903	19050	3.608	"
	Mallánaigrug	93 29 18	4.653069	44985	8.520		Jagadevadrug	89 22 43	4.666366	46384	8.785	"
	Péddanadrug		4.965278	93316	17.484		Gangangiri Hill Peak		4.628370	42498	8.049	"

\* Deduced base.

SECONDARY TRIANGULATION. TRIANGLES.

No. of Triangle	Station	Corrected Plane Angle	Distance			No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used
			Log. feet	Feet	Miles				Log. feet	Feet	Miles	
786	Mallápádi Mankunu Tattakalludrug Hill	77 0 52 36 48 15	4' 976197 4' 764934 4' 948788	94667 58802 88877	17' 929 11' 023 16' 833	796	Pöttúr Vélliváyal Érnarúr	30 2 6 96 18 0 53 39 54	4' 417786 4' 715726 4' 624458	26169 51967 42117	4' 956 9' 842 7' 977	Inch C.T.I. " "
787	Mankunu Podhari Tirupatúr Pagoda	121 9 40 26 14 20	4' 908590 4' 621795 4' 707664	81020 41860 51011	15' 345 7' 928 9' 661	797	Vélliváyal Érnarúr Énnúr	61 1 22 58 58 55 59 59 43	4' 422190 4' 413259 4' 417786	26436 25898 26169	5' 007 4' 905 4' 956	" "
788	Mankunu Tirupatúr Pagoda Chandrapuram	38 49 22 41 27 3	4' 598160 4' 794664 4' 621795	39642 62325 41860	7' 508 11' 804 7' 928	798	Vélliváyal Énnúr Vallúr	52 40 44 25 0 55 102 18 21	4' 323857 4' 049550 4' 413259	21079 11200 25898	3' 992 2' 123 4' 905	" "
ENNÜR												
SECONDARY SERIES No. 1.												
789	Tandurai Madras Pöttúr	34 18 54 20 14 15 125 26 51	4' 747096 4' 534982 4' 906985	55859 34275 80721	10' 579 6' 492 15' 288	800	Énnúr Vallúr Váyalúr	58 24 46 71 38 19 49 56 55	4' 370291 4' 417237 4' 323857	23458 26136 21079	4' 443 4' 950 3' 992	" "
790	Madras Pöttúr Vélliváyal	43 39 18 70 3 36 66 17 6	4' 624458 4' 758562 4' 747096	42117 57354 55859	7' 977 10' 862 10' 579	801	Vallúr Váyalúr Káttúr Choulbry	12 13 8 150 14 42 49 56 55	4' 216894 4' 587019 4' 370291	16478 38638 23458	3' 121 7' 318 4' 443	" "
791	Tandurai Pöttúr Érumaivéttipálayam	43 48 22 79 34 23 56 37 15	4' 453515 4' 606039 4' 534982	28413 40368 34275	5' 381 7' 646 6' 492	802	Váyalúr Káttúr Choulbry Chintámanikol	51 11 35 65 16 58	4' 150308 4' 210507 4' 216894	14136 16237 16478	2' 677 3' 075 3' 121	" "
792	Pöttúr Érumaivéttipálayam Attantágal	22 15 36 11 51 52 145 52 32	4' 282979 4' 017574 4' 453515	19186 10413 28413	3' 634 1' 972 5' 381	803	Énnúr Váyalúr Chintámanikol	26 9 59 108 36 48 45 13 13	4' 210507 4' 542757 4' 417237	16237 34895 26136	3' 075 6' 609 4' 950	" "
793	Pöttúr Vélliváyal Attantágal	62 39 34 13 54 54 103 25 32	4' 585047 4' 017574 4' 624458	38463 10413 42117	7' 285 1' 972 7' 977	804	Tandurai Pöttúr Tirumulaváyal	18 3 50 30 57 15 130 58 55	4' 148553 4' 368344 4' 534982	14078 23353 34275	2' 666 4' 423 6' 492	" "
794	Érumaivéttipálayam Attantágal Nékkunram	71 50 21 69 30 37	4' 465207 4' 459016 4' 282979	29188 28775 19186	5' 528 5' 450 3' 634	805	Pöttúr Tirumulaváyal Bed Hills	137 11 0 17 47 55 25 1 5	4' 354600 4' 007567 4' 148553	22626 10176 14078	4' 285 1' 927 2' 666	" "
795	Vélliváyal Attantágal Nékkunram	49 21 38 41 11 19	4' 465207 4' 403649 4' 585047	29188 25331 38463	5' 528 4' 798 7' 285							

No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used	No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used
			Log. feet	Feet	Miles					Log. feet	Feet	Miles	
<b>ENNUR SECONDARY SERIES No. 2.</b>													
806	Mangad, XLIII St. Thomas's Mount, XLIV Red Hills	58 42 3 90 15 16 31 2 41	4 749848 4 818149 4 530556	56214 65788 33928	10 647 12 460 6 426	Inch 12 "	814	Andankuppam Manali Elandacheri	69 39 42 56 35 31 53 44 47	3 894456 3 843979 3 828966	7843 6982 6745	1 485 1 322 1 277	Inch 12 "
807	St. Thomas's Mount, XLIV Red Hills Medavaram	10 1 35 80 43 44 89 14 41	3 990689 4 744175 4 749848	9788 55485 56214	1 854 10 509 10 647	"	815	Manali Elandacheri Sadaiyankuppam	37 52 41 82 33 6 59 34 13	3 746978 3 95142 3 894456	5584 9019 7843	1 058 1 708 1 485	"
808	Madavaram Red Hills Vadapurambakam	85 27 9 37 13 19 57 19 32	4 064136 3 847192 3 990689	11591 7034 9788	2 195 1 332 1 854	"	816	Elandacheri Sadaiyankuppam Yarancheri	97 53 44 47 18 17 34 47 59	3 986426 3 856833 3 746978	9692 7102 5584	1 836 1 362 1 058	"
809	Red Hills Vadapurambakam Valankadpakam	27 54 44 100 1 51 52 3 25	3 837622 4 160577 4 064136	6881 14474 11591	1 303 2 741 2 195	"	817	Sadaiyankuppam Yarancheri Vichur	27 53 29 80 52 14 71 14 17	3 680196 4 004603 3 986426	4788 10107 9692	0 907 1 914 1 836	"
810	Valankadpakam Vadapurambakam Tyambakam	55 0 5 36 14 53 88 45 2	3 751097 3 609520 3 837622	5638 4009 6881	1 068 0 771 1 305	"	818	Elandacheri Sadaiyankuppam Vichur	72 55 15 75 11 46 31 52 59	4 004603 4 009530 3 746978	10107 10222 5584	1 914 1 936 1 058	"
811	Vadapurambakam Tyambakam Mattur	58 20 12 80 20 29 41 10 19	3 863364 3 926460 3 751097	7301 8442 5638	1 383 1 599 1 068	"	819	Yarancheri Vichur Karimmod	36 18 2 98 42 54 44 59 4	3 603166 3 825786 3 680196	4010 6606 4788	0 760 1 268 0 907	"
812	Tyambakam Mattur Andankuppam	37 24 29 89 11 32 53 23 59	3 742286 3 058705 3 863364	5524 9093 7301	1 046 1 722 1 383	"	820	Vichur Karimmod Ennur	50 28 27 114 6 30 15 25 3	4 065773 4 138892 3 603166	11635 13769 4010	2 204 2 608 0 760	"
813	Mattur Andankuppam Manali	69 2 34 61 3 38 49 53 48	3 828966 3 800764 3 742286	6745 6321 5524	1 277 1 197 1 046	"	821	Vichur Karimmod Ennur	51 34 7 110 48 6 17 37 47	4 015876 4 092644 3 603166	10372 12378 4010	1 964 2 344 0 760	"
						"	822	Karimmod Ennur Ennur	3 18 24 25 2 57 151 38 39	3 150156 4 015876 4 065773	1413 10372 11635	0 268 1 964 2 204	"

J. ECCLES,  
In charge of Computing Office.

March, 1892.

## MADRAS LONGITUDINAL SERIES.

AZIMUTHS OF SURROUNDING STATIONS AND POINTS AT PRINCIPAL,  
PRINCIPAL-AUXILIARY AND SECONDARY STATIONS.

The following table contains, in the first column, the name of each Principal, Principal-Auxiliary, or Secondary Station, at which azimuths of surrounding Points have been measured; immediately followed by those azimuths. The second column contains the number of the triangle which gives the distance between the Station and the Point.

Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance	Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance
<b>Adavi Ávalpalli h.s.</b>		<b>Adhúrbëtta, XII—(Contd.)</b>	
Bálesvaramkōnda h.s. 13 42 32	353	Kabbálgiri Hill Temple 131 46 58	167
Pulgurkote Fort 44 20 46	352	Sátanhalli, X 170 31 7·95	14
Rahmanghar " 72 57 6	351	Náráyandurga, XIV 232 50 20·54	15
Tumakōnda " 220 46 19	350		
Malaikōnda No. 1 Pagoda 223 25 24	369	<b>Adiganhalli h.s.</b>	
Madanapalle s. 232 6 15	370	Mákalenbëtta h.s. 79 52 12	687
Mudanakōnda Platform 243 12 21	371	Kotébëtta " 115 49 16	690
Vadankōnda Platform 244 45 58	372	Bëttadpur " 139 3 36	688
Ágshisapuram Hill Pagoda 277 26 29	377	Bëttadúr Rock Pagoda 255 44 49	722
Mankurgutta h.s. 278 28 28	361	Jinahalli " 266 53 28	686
Ávulapallidrug " 280 3 23	349	Saragúrbëtta " 326 34 24	686
Chaudapalli Pagoda 293 42 21	379		
Patikōnda, XXIV 321 30 43	349	<b>Alankarai h.s.</b>	
Rámasamudra Pagoda 348 33 24	354	Dharmapuri Fort 78 38 27	761
		Pikili h.s. 124 22 10	740
<b>Adhibëtta, XVII</b>		Modúr Pagoda 148 23 32	760
Byádarahalli h.s. 5 27 14	638	Karimangalam " 179 35 22	740
Mysore No. 3 16 11 28	644	Podhari " 236 38 2	741
Vaddarhalli " 54 51 51	637	Mukanúr " 302 6 17	742
Tönnúr Building 57 40 2	650		
Melkote Hill Pagoda 102 30 54	649	<b>Allamadugu h.s.</b>	
Náráyandurga, XIV 111 34 59·70	17	Vélkúr h.s. 41 29 16	478
Háltibëtta, XV 177 42 11·78	17	Muruktöre, XXVIII 62 8 28	479
Hemagiri, XLIV* 236 47 35·38	18	Mográl " 114 57 50	482
		Dámalcheri Hill 128 2 13	480
<b>Adhúrbëtta, XII</b>		Kallúr Hill 155 48 25	481
Kotébëtta Hill Peak 96 22 59	153	Náráyanavaram " 254 56 23	490
Pushpagiri, IX 107 13 53·85	14	Kuripati " 271 31 53	484
Málabi Hill Peak No. 1 116 16 48	156		

\* This station appertains to the Great Arc Meridional Series, Section 8° to 18°.

Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance	Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance
<b>Allamadugu h.s.—(Contd.)</b> ° ' "		<b>Ánchëttidurga h.s.</b> ° ' "	
Përmanallúr h.s. 293 27 56	485	Karibëtta h.s. 47 22 1	785
Kukiralkõnda Stone 332 35 8	483	DënkaniKota Fort 59 51 58	749
Pullúr, XXX 333 42 18	478	Banavanakal " 73 37 3	747
		Devarabëtta " 97 50 8	784
<b>Ammëdikal, V</b>		Sulagiri Hill Tree 238 14 3	752
Muchil, VII 27 16 26.77	4	Ankisgiridrug " 246 11 36	784
Ballamale, IV 68 4 59.10	5	Bolkõnda Drug " 262 41 18	753
Bëllatangadi s. 92 43 36	121	Ráyakota " 295 49 33	786
Jamálabad Hill Mark 102 59 47	130	Hudedurgam Pagoda No. 2 326 59 15	751
Kudurëmukha, III 121 59 14.02	1		
Kudurëmukha h.s. 122 22 53	120	<b>Andankuppam s.</b>	
Yerkal Hill Peak 147 9 59	132	Mattúr s. 29 9 2	812
Balláráyandurga " 148 19 0	123	Tyambákam " 82 33 1	812
Katëgudda Hill Tree 191 49 28	135	Elandacheri " 258 25 42	814
Ánú, VI 202 56 1.73	1	Manali " 328 5 24	813
Kittávar, VIII 252 19 54.13	2		
Pushpagiri, IX 331 31 32.95	8	<b>Angargudda h.s.</b>	
		Mijár h.s. 111 9 17	125
<b>Amrutúr s.</b>		Bugargudda " 140 8 29	128
Narsuswámi h.s. 58 50 26	239	Balláráyandurga " 253 36 42	126
Amrutúr Pagoda 262 14 46	240	Ballamale " 344 57 45	125
Bëttahalli " 347 48 46	239		
		<b>Ankisgiridrug h.s.</b>	
<b>Anandalamalai, XXXI</b>		Hudedurgam Pagoda No. 1 46 19 59	750
Karnátakarh h.s. 41 35 59	450	Ánchëttidurga h.s. 66 14 9	784
Kailágarh " 73 43 58	846	Devarabëtta " 83 52 22	819
Kailágarh, XXIX 73 44 23.17	62	Tirthapalli, XLVI* 152 7 26	819
Wálajápet Mosque 75 37 35	476	Yërrakõnda, XX 224 0 30	820
Vellore " 86 16 9	451		
Arcot, Ránipet 89 12 30	506	<b>Ánú, VI</b>	
Batinkõnda, XXVII 108 0 5.96	60	Jënkalbëtta Hill Peak 5 58 45	188
Vëlkúr " 142 50 12	446	Siskalbëtta Hill Peak 14 56 58	186
Pullúr, XXX 171 57 41.45	60	Ammëdikal, V 22 57 58.97	1
Sholinghur Hill Pagoda 188 20 27	504	Katëgudda Hill Tree 25 19 55	184
Punák " 219 57 30	491	Kudurëmukha h.s. 63 53 6	120
Banavaram " 235 46 28	509	Kudurëmukha, III 64 47 29.73	1
Kurumkota, XXXII 251 55 44.58	63	Bába Budan No. 1 " 223 55 32	176
Dámal s. 282 18 33	510	Chikmagalúr Mosque 265 18 5	182
Conjeeveram (Great) Pagoda 286 0 37	508	Chikmagalúr s. 269 22 16	181
Káveripák Fort 293 45 48	513	Marale h.s. 271 39 47	176
Mávandúr, XXXIV 305 10 23.18	64	Belúr Temple 306 4 15	158
Fakirmalai h.s. 323 5 50	505	Kittávar, VIII 330 28 57.03	2
		Múrkangudda Hill Peak 357 50 32	140
<b>Anantapur h.s.</b>		<b>Apsándra h.s.</b>	
Kumbla s. 116 47 54	111	Hösúr h.s. 10 21 39	311
Passodigumpe h.s. 200 49 17	109	Shivansandra " 87 50 2	311
Kandadakamale No. 1 " 308 0 37	109	Karadibanda " 233 3 26	313
Manjampádi s. 331 37 37	114	Márkandesvara " 274 10 37	312
Bekal " 345 55 51	110		
Chandragiri Fort 351 3 46	113	<b>Arakërebëtta h.s.</b>	
		Mysore No. 3 h.s. 49 13 0	709
<b>Ánchëttidurga, LVI*</b>		Karigatta " 91 48 39	712
Mariyálam, LVII* 40 48 53.23	38	Kundúr " 295 4 34	708
Devarabëtta, LV* 97 55 22.21	38	Ummattúr " 352 18 38	708
Hösúr h.s. 159 49 38	310	Tumbála Hill Pagoda 354 40 27	713
Hösúr, L* 160 1 59.82	39		

\* These stations appertain to the Great Arc Meridional Series, Section 8° to 18°.

Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance	Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance
<b>Árni Fort s.</b>		<b>Ávulapallidrug h.s.—(Contd.)</b>	
Karnátakgarh h.s. 65 52 39	473	Kundúr Fort 148 43 37	411
Támrapákam " 183 47 52	473	Chintemeklapalli h.s. 163 32 9	405
Kaniyanúr " 213 14 44	474	Sattevaripálém " 220 9 44	406
<b>Arsinkëre h.s.</b>		Kanialbod Hill Platform 223 43 43	427
Chik Devibëtta Hill Pagoda 31 47 48	719	Dámalcheri s. 243 1 27	427
Saragúrbëtta h.s. 47 57 15	685	Pëddadrug h.s. 250 49 32	407
Jinahalli " 146 58 14	684	Pullúrdrug Hill 277 37 15	415
Mysore No. 3 " 227 21 57	683	Töndakönda Hill 292 43 49	413
Mulaigunte " 287 33 23	683	Muruktöre, XXVIII 302 7 20	358
Höréyál Hill Pagoda 333 5 25	716	Bodmalai " 313 39 12	348
Rághavapur Hill 341 34 0	717	Mallákönda Hill 351 15 26	398
Manchhalli Hill 349 41 30	718	<b>Bába Budan No. 1 h.s.</b>	
<b>Arumbákam h.s.</b>		Ánúr, VI 43 57 2	176
Punák h.s. 82 11 56	519	Bába Budan No. 2 h.s. 185 34 50	183
Ellikúr " 119 44 43	520	Sakanagiri " 248 17 52	177
Nagari, XXXIII 125 57 0	519	Marale " 314 23 37	176
Tirupasúr Fort 335 25 33	522	Chikmagalúr s. 353 48 47	181
<b>Arúr h.s.</b>		<b>Bába Budan No. 2 h.s.</b>	
Véllármalai h.s. 121 47 32	744	Bába Budan No. 1 h.s. 5 34 58	183
Podhari " 169 21 31	744	Sakanagiri " 292 49 36	183
Punguni " 173 36 11	764	<b>Bálesvaramkönda h.s.</b>	
Éttipati " 216 58 25	745	Adavi Ávalpalli h.s. 193 42 16	353
<b>Attantángal s.</b>		Patikönda, XXIV 310 56 17	353
Érumaivëttipálayam s. 137 50 24	792	<b>Balláráyandurga h.s.</b>	
Nëkkunram 207 21 1	794	Béllatangadi s. 42 0 11	124
Vélliváyál " 248 32 20	793	Ballamale h.s. 44 57 12	126
Pöttúr h.s. 351 57 52	792	Angargudda " 73 41 54	126
<b>Avirimodu, XXXIX</b>		Kudurémukha, III 88 53 29	123
Mávandúr, XXXIV 140 20 57'43	71	Hannëbëtta " 275 41 10	148
Madurántakam Pagoda 154 46 31	606	Kundúrbëtta " 297 45 23	147
Karunguli Hill Temple 166 22 32	604	Kundhalli " 323 44 59	146
Édámichi h.s. 169 9 39	589	Ammëdikal, V 328 17 42	123
Melaivayávúr Hill Temple 172 56 28	596	<b>Ballamale, IV</b>	
Chingleput " 193 50 11	591	Múdapinna Hill Tree 84 33 35	107
Tirumani, XXXVIII 199 2 35'60	71	Mangalore Light-house 104 32 22	102
Tirukalikundram Temple 223 24 1	599	Mangalore, II 104 33 39'71	8
Manamai Kunnatúr, XL 244 15 29'40	72	Mijár, I 148 56 3'40	7
Pálár Beacon (heliotrope) 271 40 17	618	Karinja Hill Pagoda 200 51 44	117
<b>Ávulapallidrug h.s.</b>		Kudurémukha Hill Mark 207 1 40	119
Janákkönda Platform 4 1 13	397	Kudurémukha, III 208 33 26'36	6
Mugali h.s. 12 3 46	357	Ammëdikal, V 247 59 18'31	5
Tumbakönda Hill 15 51 46	395	Muchil, VII 309 37 27'00	5
Kilpatla Hill Pagoda 33 31 6	392	Ballanád Hill Peak 315 13 3	108
Vakirikönda Platform 36 38 3	410	<b>Ballamale h.s.</b>	
Patikönda, XXIV 46 19 54	348	Passodigumpe h.s. 25 4 16	86
Gamkönda " 60 12 53	356	Mangalore Flag-staff 101 41 43	100
Adavi Ávalpalli " 100 9 57	349	Kannúr " 106 31 55	85
Mankurgutta " 101 55 31	355	Kadappanabëtta s. 114 18 46	84
Vadankönda Platform 125 23 40	372	Mijár h.s. 148 56 14	84
Tumakönda " 134 1 41	350	Bugargudda " 161 13 8	127

Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance	Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance
<b>Ballamale h.s.—(Contd.)</b> ° ' "		<b>Bandapalle, XVIII—(Contd.)</b> ° ' "	
Angargudda h.s. 164 58 32	125	Rájagundlahalli h.s. 190 4 4	334
Balláráyandurga " 224 52 47	126	Mulbágal Hill Mark 199 16 8	336
Kundhalli " 282 39 9	146	Káráveri, XXI 255 41 24.71	49
Ballanád " 305 46 37	87	Krishnamakönda, XXII 307 23 16.26	48
<b>Ballanád h.s.</b>		<b>Bandapalle h.s.</b>	
Passodigumpe h.s. 60 14 39	87	Beturáyankönda h.s. 59 37 43	328
Ballamale " 125 47 40	87	Amanikönda Hill Pagoda 141 13 49	333
Kandadakamale No. 1 " 350 13 53	88	Kurudamale " 188 41 59	329
<b>Ballára h.s.</b>		Mulbágal Stone 199 10 30	362
Battankatte h.s. 102 2 25	230	Kudrakainigudda " 268 4 6	329
Séttigére " 190 34 10	229	Krishnamakönda " 307 20 25	328
Narsuswámi " 341 7 30	229	<b>Bandhallidurga h.s.</b>	
<b>Bánatimaribétta, XLV*</b>		Ummattúr h.s. 74 34 23	681
Hemagiri, XLIV* 127 7 24.26	37	Mysore No. 8 " 96 30 43	681
Savandurga, XLI* 166 1 25.44	38	Kundúr " 113 7 3	695
Bannergatta, XLII* 217 33 33.91	38	Kabbáldurga " 172 5 20	266
Devarabétta, LV* 255 58 54.85	34	Savandurga, XLI* 176 33 16	264
Köppabétta, LVIII* 331 13 33.92	35	Devarabétta " 214 3 46	264
<b>Banavanakal h.s.</b>		<b>Bangalore Base-line N. End s.</b>	
Kabbáldurga h.s. 87 45 39	748	Bangalore Base-line S. End s. 0 46 17	278
Devarabétta " 185 28 44	747	Bangalore Base-line S.W. End, LII* 90 14 38	278
Ánchéttidurga " 253 33 11	747	Turukungutta, LI* 303 4 23	279
<b>Bánávar h.s.</b>		<b>Bangalore Base-line N.E. End, LIII*</b>	
Herohalli s. 6 10 57	267	Ráchénhalli s. 44 32 24	288
Basavanhalli h.s. 79 59 51	260	Bangalore Base-line S.W. End, LII* 44 32 24.84	30
Bardi " 132 11 3	258	Sampigehalli t.s. 81 52 15	288
Halasúrbétta, XXXIX* 233 0 2	257	Mandúr, LIV* 269 54 15.31	43
Uialdinna Mandapam s. 306 39 22	257	Turukungutta, LI* 331 50 56.82	30
<b>Bánávar s.</b>		Gubbi s. 339 21 24	289
Desáni, XI 5 0 57	191	<b>Bangalore Base-line S. End s.</b>	
Gardangiri No. 1 h.s. 227 30 2	190	Bangalore Base-line S.W. End, LII* 147 3 56	277
Malékal Tirupati " 300 50 43	190	Bangalore Base-line N. End s. 180 46 16	278
<b>Banavaram h.s.</b>		Turukungutta, LI* 216 36 29	277
Káveripák Fort 27 38 2	518	<b>Bangalore Base-line S.W. End, LII*</b>	
Anandalamalai, XXXI 55 48 9	509	Bannergatta, XLII* 2 4 21.95	29
Sholinghur Hill Pagoda 126 27 56	509	Géddahalli h.s. 164 21 44	280
Ipurgutta h.s. 168 25 20	512	Nágavára s. 224 31 26	280
Paranchi Rock 180 42 3	512	Bangalore Base-line N.E. End, LIII* 224 31 27.04	30
Conjeeveram (Great) Pagoda 313 43 49	511	Bangalore Base-line N. End s. 270 13 39	278
Dámál s. 330 13 22	510	Machalbétta " 282 55 22	282
<b>Bandapalle, XVIII</b>		Turukungutta, LI* 285 36 35.66	29
Yérrakönda, XX 18 18 15.39	47	Döddagunta " 286 44 20	290
Bhúpatamma, XLIX* 72 8 20.27	46	Uialdinna Mandapam " 321 1 43	256
Kolar, XLVIII* 105 52 6.23	46	Bangalore Base-line S. End " 327 2 58	277
Kurudamale, XIX 188 43 20.87	50	<b>Bangalore h.s.</b>	
		Herohalli s. 130 43 59	268
		Halasúrbétta, XXXIX* 194 4 50	321
		Uialdinna Mandapam " 195 7 34	268

\* These stations appertain to the Great Arc Meridional Series, Section 8° to 18°.

Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance	Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance		
<b>Bangalore h.s.—(Contd.)</b>		<b>Battankatte h.s.</b>			
Bangalore Palace	209 36 4	270	Söttigère h.s. 260 26 1	230	
Kolár Peak	247 15 50	321	Ballára "	282 1 49	230
			Chunchangiri "	287 6 31	232
			Belúr No. 2 Pagoda .	324 19 41	231
<b>Bangalore s.</b>		<b>Bekal s.</b>			
Bannergatta, XLII*	9 48 10	271	Kásaragod Fort	157 24 27	112
Savandurga, XLI*	79 4 5	271	Chandragiri Fort	158 22 31	113
Halasúrbétta, XXXIX*	184 41 35	272	Anantapur h.s.	165 56 31	110
			Passodigumpe "	177 42 37	89
<b>Bannergatta, XLII*</b>			Kandadakamale No. 1 "	270 19 31	89
Bánatimaribétta, XLV*	37 36 6.46	83	Manjampádi s.	302 51 32	115
Savandurga, XLI*	111 14 39.22	25	Hósdrug Fort	324 21 5	116
Bangalore Hill Pagoda	176.56 44	269	Yemale No. 1 h.s.	335 29 27	90
Bangalore Base-line S.W. End, LII*	182 4 16.00	29			
Uialdinna Mandapam s.	182 7 5	255	<b>Béllatangadi s.</b>		
Halasúrbétta, XXXIX*	187 5 6.49	25	Kudurémukha, III	172 41 27	121
Bangalore "	189 44 16	271	Kudurémukha h.s.	176 6 43	122
Bangalore Church No. 1	191 42 52	273	Jamálábad Hill Mark	196 20 22	131
Bangalore Church No. 2	195 36 15	275	Ballálráyandurga "	221 58 23	124
Turukungutta, LI*	218 59 50.78	28	Yerkal Hill Peak	245 11 47	133
Tirthapalli, XLVI*	233 13 2.05	26	Ammédikal, V	272 40 30	121
Hósúr, L*	288 8 51.69	27			
Hósúr h.s.	288 23 27	309	<b>Betdásanpur h.s.</b>		
Devarabétta, LV*	344 56 40.89	34	Uialdinna Mandapam s.	165 20 45	305
			Shivansandra h.s.	206 24 55	305
<b>Bardi h.s.</b>			Nallurhalli "	221 31 52	306
Savandurga, XLI*	19 46 58	259	Chinnagara "	223 49 35	308
Basavanhalli h.s.	26 20 14	260			
Káskal "	79 15 54	261	<b>Béttadpur h.s.</b>		
Devaráyadurga "	139 41 49	259	Mákalenbétta h.s.	28 15 16	688
Halasúrbétta, XXXIX*	273 1 35	258	Vírarájendrapet "	50 50 38	692
Bánávar "	312 9 29	258	Tadiándamol "	64 41 56	678
			Kotébétta "	103 50 41	689
<b>Basavangudda h.s.</b>			Pushpagiri Hill Pagoda	116 19 37	678
Géddahalli h.s.	31 53 37	281	Mallappanabétta "	199 54 37	679
Sampigehalli t.s.	233 57 24	286	Mysore No. 3 "	287 48 21	680
Ráchénhalli s.	267 42 9	284	Adíganhalli "	319 1 58	688
Nágavára "	317 12 12	281			
			<b>Béttahalli h.s.</b>		
<b>Basavanhalli h.s.</b>			Nágamangala h.s.	61 1 22	237
Káskal h.s.	136 43 50	261	Narsuswámi "	73 14 32	236
Bardi "	206 19 20	260	Amrutúr s.	167 48 52	239
Bánávar "	259 57 23	260	Rangaswámibétta h.s.	199 50 5	235
			Amrutúr Pagoda	207 54 22	240
			Savandurga, XLI*	264 55 11	235
<b>Batinkönda, XXVII</b>					
Kailásgarh, XXIX	12 0 46.17	61	<b>Beturáyankönda h.s.</b>		
Satghur, XXVI	79 50 24.60	57	Márkandesvara h.s.	105 17 44	380
Mugali, XXV	117 20 38.61	57	Kolár Pagoda	146 30 29	330
Mugali Beacon	117 23 21	893	Kurudamale "	215 6 31	326
Muruktöre, XXVIII	174 4 40.83	58	Bandapalle "	239 36 4	328
Pullúr, XXX	228 11 49.54	59	Rangaswámikönda	281 2 43	325
Anandalamalai, XXXI	287 56 16.25	60	Devarabanda Hill Pagoda	297 23 38	338
Wálájápet Mosque	291 51 41	476	Yérrakönda, XX	339 44 15	325
Karigiri h.s.	303 36 4	470			
Vellore Pagoda	349 55 26	468			

\* These stations appertain to the Great Arc Meridional Series, Section 8° to 18°.



Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance	Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance
<b>Bhúpatamma, XLIX*</b>		<b>Chandragiri s.</b>	
Hósúr, L*	42 47 6.16	Nágápatla Pagoda	159 7 53
Tirthapalli, XLVI*	101 54 6.95	Tallarapet	h.s. 184 52 19
Kolar, XLVIII*	180 48 10.05	Péddadrag	" 303 10 12
Kolár Building	194 14 57	Malaikónda No. 2 Pagoda	" 341 41 31
Ámanikónda Hill Mark	237 54 59		
Bandapalle, XVIII	252 5 3.27		
Yérrakónda, XX	305 6 29.38		
		<b>Chandrapuram h.s.</b>	
<b>Bodmalai h.s.</b>		Tirupatúr Pagoda	280 29 30
Patikónda, XXIV	84 50 20	Mankunu	h.s. 321 56 33
Ávulapallidrug	h.s. 133 41 48		
Muruktóre, XXVIII	199 26 6		
Chittoor Fort	254 37 46	<b>Chaudanhalli, XVI</b>	
Pullúr, XXX	265 28 31	Nughallibétta, XIII	49 8 42.26
Kailásagarh	" 359 26 43	Rangaswámibétta, XLIII*	300 23 41.16
		Háltibétta, XV	343 49 28.70
<b>Bömmanhalli h.s.</b>			
Tagadúr	h.s. 41 0 57	<b>Chēmbedu, XXXV</b>	
Mallapanabétta	" 44 12 22	Kurumkota, XXXII	46 45 58.02
Desáni	" 89 1 30	Nagari, XXXIII	108 11 53.24
Malékal Tirupati Pagoda	" 101 6 44	Madras Dome Observatory, XXXVII	305 38 22.79
Gardangiri	No. 2 " 118 35 7	Tinnanúr Pagoda	341 38 5
Sidragudda	" 148 5 10	Malaipedu, XXXVI	354 9 18.11
Somanhalli Ranganagudda	" 176 12 33		
Múganávakaukote	" 237 12 23	<b>Chēmbedu s.</b>	
Kondli Hill	" 242 13 16	Punák	h.s. 76 28 7
Devaráyadurga	" 259 40 19	Nagari, XXXIII	108 14 15
Kóndapur	" 275 14 33	Malaipedu	" 354 1 20
Kadaba	s. 277 10 46		
Savandurga, XLI*	298 41 33	<b>Chikkanamangalam h.s.</b>	
Rangaswámibétta	h.s. 305 55 2	Hemagiri	h.s. 6 10 17
Séttigére	" 336 45 2	Huliyúrdurga Building	11 12 45
		Rangaswámibétta	" 124 44 2
<b>Bugargudda h.s.</b>		Kunigal Fort	145 41 12
Mijár	h.s. 94 17 46		
Múdu Bidare Pagoda	164 56 51	<b>Chikmagalúr s.</b>	
Angargudda	" 320 8 8	Ánúr, VI	89 23 56
Ballamale	" 341 12 0	Bába Budan	No. 1 h.s. 173 48 57
<b>Byádarahalli h.s.</b>		<b>Chingleput h.s.</b>	
Seringapatam	s. 39 12 32	Avirimódu, XXXIX	13 50 54
Seringapatam Factory	46 49 37	Mávandúr, XXXIV	102 40 49
Seringapatam Monument No. 1	57 24 59	Manamai Kunnatúr, XL	298 16 8
Hirod Hill Pillar	84 14 17		
Bebibétta Hill Peak	88 38 31	<b>Chinnagara h.s.</b>	
Vaddarhalli	h.s. 97 2 33	Betdásanpur	h.s. 43 52 16
Tónnúr Building	107 23 29	Shivansandra	" 101 47 36
Melkote Hill Pagoda	143 46 54		
Adhibétta, XVII	185 27 5		
		<b>Chinnidrug h.s.</b>	
<b>Cannanore s.</b>		Podhari	h.s. 13 14 9
Yemale	No. 2 h.s. 137 56 47	Devarakónda Hill Pagoda	95 28 0
Dharmapatna	" 312 10 18	Mallánaigdrug	" 233 21 30
		Vániyambádi Fort	288 40 30
		Mankunu	" 355 18 43

\* These stations appertain to the Great Arc Meridional Series, Section 8° to 15°.

Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance	Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance
<b>Chintámanikoil s.</b>		<b>Desáni, XI</b>	
Énnúr No. 1 s. 6 56 15	803	Desáni h.s. 14 45 48	144
Váyalúr " 52 9 28	802	Sigégudda " 30 53 19	160
Káttúr Choultry 117 26 26	802	Kittávar, VIII 58 39 36·38	11
		Marale " 95 22 38	179
<b>Chintemeklapalli h.s.</b>		Manjihalli " 135 21 51	179
Kundúr Fort 45 50 15	411	Bánávar s. 185 0 47	191
Tumakónda h.s. 108 41 46	405	Gardangiri No. 1 h.s. 203 55 13	187
Pálamanda " 245 9 22	419	Malékal Tirupati " 242 39 37	189
Sattevaripálém " 253 55 36	406	Malékal Tirupati Temple 243 5 31	142
Mailesvaram " 284 47 18	416	Nughallibétta, XIII 308 18 24·20	12
Sadam s. 299 28 47	422	Sátanhalli, X 351 38 51·62	11
Ávulapallidrug h.s. 343 31 17	405		
Vakirkónda Platform 355 36 1	410	<b>Desáni h.s.</b>	
		Kundúrbétta h.s. 25 8 22	149
<b>Chittapára h.s.</b>		Hannébétta " 67 59 5	149
Kailásgarh h.s. 5 35 3	453	Desáni, XI 194 45 45	144
Virinjipuram Pagoda 27 22 49	466	Gardangiri No. 2 " 203 21 37	204
Nágalamalai " 60 15 58	454	Malékal Tirupati Temple 238 30 23	144
Satghur, XXVI " 74 15 24	456	Bómmanhalli " 268 54 49	202
Mugali " 113 18 25	359	Nughallibétta, XIII 306 12 10	145
Kamalgat " 113 46 1	404	Mallappanabétta " 338 5 22	202
Vénkatagiri " 125 56 0	399		
Gudipatipálém Platform 144 8 9	448	<b>Devanhalli s.</b>	
Muruktóre, XXVIII 178 4 52	359	Devanhalli Fort 68 23 21	304
Vélkúr " 201 38 28	445	Kundana h.s. 91 16 51	303
Pullúr, XXX 234 48 45	360	Kodagurki " 155 47 51	303
Karigiri " 313 2 18	471		
Vellore " 338 56 33	453	<b>Devarabétta, LV*</b>	
		Köppabétta, LVIII* 26 14 55·83	35
<b>Chotanhalli s.</b>		Bánatimaribétta, XLV* 76 2 6·38	34
Muttigére h.s. 164 28 34	725	Bannergatta, XLII* 164 57 21·35	34
Sátanúr " 227 16 19	725	Hösúr, L* 244 5 56·07	39
Séttahalli s. 276 3 17	726	Hösúr h.s. 244 20 49	809
Ukalgére Hill Pagoda 331 14 32	727	Ánchéttidurga, LVI* 277 51 55·04	38
		Mariyálam, LVII* 342 32 36·31	36
<b>Chunchangiri h.s.</b>		<b>Devarabétta h.s.</b>	
Battankatte h.s. 107 7 22	232	Banavanakal h.s. 5 28 53	747
Séttigére " 151 27 52	232	Bandhallidurga " 34 7 38	264
		Kabbáldurga " 68 40 9	265
<b>Dámal s.</b>		Savandurga, XLI* 131 55 26	262
Anandalamalai, XXXI 102 21 13	510	Halasúrbétta, XXXIX* 179 16 4	262
Banavaram h.s. 150 14 21	510	Tirthapalli, XLVI* 211 36 16	263
Kakliri s. 282 44 37	514	Ankisgiridrug " 263 46 6	319
Conjeeveram (Great) Pagoda 292 32 25	511	Ánchéttidurga " 277 46 25	734
		Hudedurgam Pagoda No. 1 287 40 14	750
		Karibétta " 330 42 44	735
<b>Dámalcheri s.</b>		<b>Devarakónda, XXIII</b>	
Ávulapallidrug h.s. 63 3 53	427	Krishnamakónda h.s. 49 51 56	323
Kaniaibod Hill Platform 94 3 16	427	Krishnamakónda, XXII 49 53 56·41	52
Sattevaripálém " 200 24 49	428	Kudrakainigudda Hill Mark 103 45 26	342
		Káraveri, XXI 107 14 14·49	52
<b>Davarkónda h.s.</b>		Patikónda, XXIV 165 33 36·83	55
Patikónda, XXIV 3 43 32	373	Palmaner House 213 49 41	389
Mankurgutta h.s. 19 44 20	374	Mugali, XXV 240 54 27·18	54
Gamkónda " 335 35 57	373	Satghur, XXVI 329 25 54·14	53

\* These stations appertain to the Great Arc Meridional Series, Section 8° to 18°.

Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance	Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance
<b>Devaráyadurga h.s.</b>		<b>Énnúr No. 2 s.</b>	
Bairandurga Staff	7 39 55	Énnúr	No. 3 s. 48 8 20
Hutridurga Stone	11 55 7	Vichúr	" 57 46 14
Rámenhalli Hill Pillar	19 13 26	Karimmod	" 73 11 17
Rangaswámibétta h.s.	34 48 27		
Bómmanhalli	79 47 57	<b>Énnúr No. 3 s.</b>	
Hattýal Hill Pagoda	84 59 7	Vichúr	s. 58 51 51
Nundydroog	270 22 16	Karimmod	" 76 29 38
Sítakal	312 0 54	Énnúr	No. 2 " 228 8 17
Bardi	319 39 28		
Héggunda Hill Pagoda	335 23 43	<b>Érnavúr s.</b>	
Rámadevarabétta Pagoda	347 22 20	Pöttúr	h.s. 84 41 34
Savandurga, XLI*	350 14 19	Vélliváyal	s. 138 21 28
Shivaganga Hill Pagoda	357 13 19	Énnúr	No. 1 " 197 20 23
Nijagaldurga Pillar	358 45 50		
		<b>Érumaivéttipálaiyam s.</b>	
<b>Dharmapatna h.s.</b>		Tandurai	s. 26 19 1
Cannanore	s. 132 11 35	Nékkunram	245 59 33
Yemale	No. 2 h.s. 135 46 33.9	Attantángal	" 317 49 54
Tadiándamol	" 197 55 1.3	Pöttúr	h.s. 329 41 46
Nattávaram	" 275 17 53.8		
Purakád	" 327 26 20.5	<b>Éttipati h.s.</b>	
		Arúr	h.s. 36 59 47
<b>Dóddagunta s.</b>		Punguni	" 94 23 29
Bangalore Base-line S.W. End, LII*	106 44 54	Podhari	" 130 42 52
Nágavára	s. 155 38 40	Singarpet Village	182 54 45
		Vélagutta Rock	s. 204 56 59
<b>Édámichi h.s.</b>			
Uttaránmerúr Pagoda	53 42 24	<b>Fakírmalai h.s.</b>	
Mávandúr, XXXIV	104 53 59	Arcot, Ránipet	103 5 0
Chingleput Fort	266 47 49	Anandalamalai, XXXI	143 6 2
Tirumani	h.s. 289 32 34	Sholinghur Hill Pagoda	182 41 7
Tirumani, XXXVIII	289 41 1		
Avirimodu, XXXIX	349 9 1	<b>Gamkónnda h.s.</b>	
Karunguli	" 350 36 36	Patikónnda, XXIV	32 59 38
		Gundakal	s. 60 32 1
<b>Elandacheri s.</b>		Rájagundlahalli Hill Peak	93 46 51
Manali	s. 24 41 11	Punganúr Palace	106 15 20
Andankuppam	" 78 25 58	Ágshíspuram Hill Pagoda	123 45 8
Yarancheri	" 204 14 21	Somopet Pagoda	125 34 11
Vichúr	" 229 12 50	Köttakota Fort	130 9 57
Sadaiyankuppam	" 302 8 5	Mankurgutta	h.s. 146 47 5
		Davarkónnda	" 155 36 57
<b>Ellikúr h.s.</b>		Butakapalle Hill	162 24 23
Punák	h.s. 49 51 21	Ankalamman Platform	170 8 41
Padari	s. 141 13 33	Madrímalai Platform	195 21 20
Arumbákam	h.s. 299 42 59	Ávulapallidrug	" 240 10 55
		Vakirikónnda Platform	255 58 0
<b>Énnúr No. 1 s.</b>		Töndakónnda Hill	261 32 29
Érnavúr	s. 17 20 42	Mallákónnda Hill	276 48 9
Vélliváyal	" 77 20 25	Tumbakónnda Hill	294 47 49
Vallúr	" 102 21 20	Janálkónnda Platform	305 43 13
Váyalúr	" 160 46 6	Mugali	" 328 24 14
Chintámanikoil	" 186 56 5	Kálpatala Hill Pagoda	333 51 31
		Palmaner Pagoda	356 3 43
		Palmaner Bungalow	356 49 33

\* These stations appertain to the Great Arc Meridional Series, Section 8° to 18°.

Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance	Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance
<b>Gardangiri No. 1 h.s.</b>		<b>Halasúrbëtta, XXXIX*—(Ctd.)</b>	
Desáni, XI	187	Nandigudi, XLVII*	44
Bánávar	190	Koliga	298
Manjibhalli	186	Kolár Peak	321
Kadúr	186	Tirthapalli, XLVI*	26
Kugankal	188	Shivansandra	297
Malékal Tirupati	189	Devarabëtta	262
		Bangalore Church No. 2	276
<b>Gardangiri No. 2 h.s.</b>		<b>Háltibëtta, XV</b>	
Desáni	204	Nárayandurga, XIV	16
Sidragudda	205	Nughallibëtta, XIII	16
Bömmanhalli	203	Chaudanhalli, XVI	20
Mallappanabëtta	203	Rangaswámibëtta, XLIII*	19
		Hemagiri, XLIV*	18
<b>Gëddahalli h.s.</b>		Adhibëtta, XVII	17
Basavangudda	281		
Nágavára	280	<b>Hannëbëtta h.s.</b>	
Bangalore Base-line S.W. End, LII*	280	Ballárayandurga	148
		Desáni	149
<b>Gubbi s.</b>		Kundúrbëtta	148
Hënnúr	287		
Ráchënhalli	287	<b>Hemagiri, XLIV*</b>	
Bangalore Base-line N.E. End, LIII*	289	Adhibëtta, XVII	18
		Háltibëtta, XV	18
<b>Gundakal s.</b>		Háltibëtta Hill Temple	234
Gamkõnda	366	Rangaswámibëtta, XLIII*	19
Patikõnda, XXIV	366	Hutridurga Hill Mark (heliotrope)	244
		Savandurga, XLI*	22
<b>Gurigukõnda h.s.</b>		Bánatimaribëtta, XLV*	37
Mugali	402		
Vënkatahiri	402	<b>Hemagiri h.s.</b>	
		Sátanúr	724
<b>Guttiráyan h.s.</b>		Muttigëro	723
Karibëtta	737	Narsuswámi	223
Ráyakota	737	Rangaswámibëtta	222
Pikili	738	Chikkanamangalam	241
		Savandurga, XLI*	222
<b>Halasúrbëtta, XXXIX*</b>		<b>Hënnúr s.</b>	
Bangalore Church No. 1	274	Machalbëtta	283
Bangalore	272	Nágavára	283
Bannergatta, XLII*	25	Ráchënhalli	285
Bangalore Hill Pagoda	269	Gubbi	287
Uialdinna Mandapam	255		
Bangalore	321	<b>Herohalli s.</b>	
Savandurga, XLI*	24	Bánávar	267
Bánávar	257	Uialdinna Mandapam	267
Bardi	258	Bangalore	268
Rámadevarabëtta, XL*	24		
Sítakal	250	<b>Hösúr, L*</b>	
Dõdballapur Idgah	291	Devarabëtta, LV*	39
Kalkote	251	Bannergatta, XLII*	27
Nundydroog Building	294	Turukungutta, LI*	28
Nundydroog	292	Tirthapalli, XLVI*	27
Nundydroog Hill Mark (helio.)	295	Bhúpatamma, XLIX*	31
Kodagurki	300	Ánchëttidurga, LVI*	39

\* These stations appertain to the Great Arc Meridional Series, Section 8° to 18°.

Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance	Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance
<b>Hösúr h.s.</b> ° ' "		<b>Kadaba s.</b> ° ' "	
Devarabëtta, LV*	64 23 36	Bömmanhalli h.s.	97 13 50
Bannergatta, XLII*	108 26 54	Kondli Hill	144 9 20
Shivansandra h.s.	163 48 27	<b>Kadalúr s.</b>	
Apsáandra	190 20 46	Karimarapákam h.s.	153 58 16
Márkandesvara	211 24 34	Sadras s.	195 42 56
Ánchöttidurga, LVI*	339 48 58		
<b>Hulimáv h.s.</b>		<b>Kadappanabëtta s.</b>	
Mulaigunte h.s.	1 13 53	Mangalore No. 1 s.	53 24 52
Nanjangúd Pagoda	29 38 10	Kulibogudda h.s.	139 36 24
Ummattúr	300 49 41	Mijár	198 1 25
		Ballamale	294 16 3
		Kannúr	342 54 49
<b>Huvinkatte s.</b>		<b>Kadúr s.</b>	
Múganáyakankote h.s.	8 29 1	Sakanagiri h.s.	52 57 59
Köndapur	329 5 47	Kugankal	205 12 15
		Gardangiri No. 1	287 13 51
<b>Inadagudda h.s.</b>		Manjihalli	359 49 17
Kulibogudda h.s.	10 10 36	<b>Kailásgarh, XXIX</b>	
Koiyárgudda	39 35 51	Satghur, XXVI	110 11 46.47
Mulki s.	44 34 59	Batinkönda, XXVII	192 0 14.16
Partamalaigudda h.s.	245 39 22	Karigiri h.s.	213 23 14
Surálgudda	257 34 28	Vellore Pagoda	214 29 36
Mijár	315 59 24	Wálanjépet Mosque	253 27 9
		Anandalamalai, XXXI	253 40 3.16
<b>Injambákam, XLV</b>		<b>Kailásgarh h.s.</b>	
Pudupák, XLI	29 24 39.98	Kambattimalai h.s.	52 36 56
Nanmangalam, XLII	99 4 43.92	Yërrakönda, XX	92 24 38
St. Thomas's Mount, XLIV	147 33 2.34	Pallikönda	118 32 8
		Patikönda, XXIV	128 40 0
<b>Ipurgutta h.s.</b>		Nágalamalai	134 6 14
Wudugulúr h.s.	207 0 0	Virinjipuram Pagoda	150 22 30
Punák	233 23 53	Bodmalai	179 26 41
Paranchi Rock	275 23 50	Chittapára	185 34 41
Banavaram	348 25 5	Vellore Pagoda	214 27 11
		Pullúr, XXX	214 52 9
<b>Jagadevadrug h.s.</b>		Vellore	224 0 17
Gangangiri Hill Peak	32 31 58	Anandalamalai, XXXI	253 39 27
Krishnagiri h.s.	121 54 41	Árni Monument	308 47 47
Mankunu	291 36 45	Karnátakgarh	359 20 16
<b>Jinahalli h.s.</b>		<b>Kakliri s.</b>	
Saragúrbëtta h.s.	3 10 17	Dámal s.	102 45 46
Adiganhalli	86 55 53	Ráoji	267 41 39
Bëttadúr Rock Pagoda	226 52 22	Conjeeveram (Great) Pagoda	319 30 54
Mysore No. 3	279 59 26		
Arsinkëre	326 56 52	<b>Kalkote h.s.</b>	
		Dödballapur Idgah	28 0 23
<b>Kabbáldurga h.s.</b>		Sítakal h.s.	72 48 48
Savandurga, XLI*	179 41 11	Halasúrbëtta, XXXIX*	355 54 2
Devarabëtta	248 35 45		
Banavanakal	267 41 24		
Bandhallidurga	352 4 48		

\* These stations appertain to the Great Arc Meridional Series, Section 8° to 18°.

Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance	Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance
<b>Kamalgat h.s.</b>		<b>Káriveri, XXI</b>	
Vēnkatagiri h.s. 133 54 12	403	Krishnamakōnda h.s. 4 22 40	323
Muruktōre, XXVIII 204 41 2	403	Krishnamakōnda, XXII 4 23 28.91	49
Chittapára „ 293 44 50	404	Bandapalle, XVIII 75 43 51.95	49
		Mulbágal Hill Mark 108 18 37	386
		Kurudamale, XIX 117 28 12.90	51
<b>Kambattimalai h.s.</b>		Rájagundlahalli „ 148 3 57	385
Rásimalai h.s. 206 31 31	463	Patikōnda, XXIV 246 2 38.69	55
Pallikōnda „ 213 20 6	459	Devarakōnda, XXIII 287 12 19.44	52
Kailáagarh „ 232 33 2	459	Kudrakainigudda Hill Mark 288 5 25	341
		<b>Karibētta h.s.</b>	
<b>Kandadakamale No. 1 h.s.</b>		Devarabētta h.s. 150 44 22	735
Yemale No. 1 h.s. 4 20 50	90	Ānchēttidurga „ 227 19 56	735
Manjampádi s. 64 37 35	114	Ráyakota „ 256 1 35	736
Bekal „ 90 22 3	89	Guttiráyan „ 325 49 12	737
Kásaragod Fort 113 31 52	112		
Anantapur h.s. 128 3 49	109	<b>Karigatta h.s.</b>	
Passodigumpe „ 144 0 1	88	Mysore No. 3 h.s. 19 49 55	710
Ballanád „ 170 14 43	88	Mysore No. 2 s. 29 43 24	715
Pushpagiri Hill Pagoda 238 51 5	677	Seringapatam Pagoda 89 0 27	714
Tadiándamol „ 295 2 24	91	Arakērbētta h.s. 271 47 10	712
Cannanore Flag-staff 345 34 22	626	Kundúr „ 288 7 39	711
		Tumbála Hill Pagoda 317 57 47	713
<b>Kandadakamale No. 2 h.s.</b>		Ummattúr „ 335 4 49	710
Yemale No. 2 h.s. 4 21 12.1	619		
Muchil, VII 201 54 31.0	92	<b>Karigiri h.s.</b>	
Pushpagiri, IX 238 52 31.3	92	Vellore h.s. 17 25 42	471
Tadiándamol „ 295 2 57.2	93	Kailáagarh, XXIX 33 24 33	470
		Batinkōnda, XXVII 123 36 51	470
<b>Kaniyanúr h.s.</b>		Chittapára „ 133 3 15	471
Ārni Fort s. 33 15 46	474		
Támrápákam h.s. 82 21 48	474	<b>Karimangalam h.s.</b>	
Arcot Building 166 25 18	475	Karimangalam Rock 7 43 3	758
		Modúr Pagoda 21 41 38	760
<b>Kannambádi h.s.</b>		Karimangalam s. 21 55 43	759
Bēttadúr Rock Pagoda 52 19 1	721	Pikili h.s. 65 33 18	739
Gadikalbētta Hill Peak 187 16 32	646	Ráyakota „ 137 44 11	739
Vaddarhalli h.s. 201 52 52	640	Boditimrázdrug Hill 143 40 18	756
Hirod Hill Pillar 240 24 39	655	Podhari „ 277 1 51	741
Seringapatam Monument No. 1 264 10 48	656	Alankarai „ 359 35 21	740
Seringapatam s. 285 5 24	640		
Seringapatam Monument No. 2 288 18 44	660	<b>Karimangalam s.</b>	
Seringapatam Factory 294 29 0	659	Karimangalam h.s. 201 55 35	759
Mysore No. 3 h.s. 334 9 46	721	Karimangalam Rock 257 33 35	759
Mysore No. 1 „ 344 50 28	641		
		<b>Karimarapákam h.s.</b>	
<b>Kannúr h.s.</b>		Kumarakuppam h.s. 22 6 14	609
Mangalore Flag-staff 85 7 20	101	Tirukalikundram „ 155 4 30	609
Kadappanabētta s. 162 54 58	85	Mahábalipuram s. 248 45 57	610
Ballamale h.s. 286 29 21	85	Sadras „ 208 17 50	612
Passodigumpe „ 327 4 5	86	Kadalúr „ 333 57 25	614
<b>Karadibanda h.s.</b>			
Apsándra h.s. 53 4 16	313		
Márkandesvara „ 304 42 57	313		

Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance	Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance
<b>Karimmod s.</b>	° ' "	<b>Kodagurki h.s.—(Contd.)</b>	° ' "
Vichúr s. 7 17 21	819	Shivansandra h.s. 352 34 15	802
Yarancheri " 52 16 25	819	Devanhalli Fort 359 45 31	804
Énnúr No. 2 " 253 10 51	820		
Énnúr No. 3 " 256 29 15	821	<b>Koikuttimalai h.s.</b>	
<b>Karnátakgarh h.s.</b>		Rásimalai h.s. 15 54 8	462
Kailásgarh h.s. 179 20 19	450	Satghur, XXVI 88 41 28	461
Vellore " 191 52 26	451	Palikõnda " 319 42 9	461
Anandalamalai, XXXI 221 31 31	450		
Támrapákam " 226 41 43	478	<b>Koiyárgudda h.s.</b>	
Árni Monument 245 7 54	472	Mulki s. 90 23 33	98
Árni Fort s. 245 49 58	478	Inadagudda h.s. 219 35 10	96
		Mijár " 282 44 15	96
		Kulibogudda " 350 23 43	97
<b>Karunguli h.s.</b>			
Uttaránmerúr Pagoda 120 42 31	595	<b>Kõkáráyankõnda h.s.</b>	
Mávandúr, XXXIV 133 24 55	502	Sattevaripálém h.s. 217 4 39	426
Édámichi h.s. 170 36 53	598	Mangalapénta Pagoda 232 53 13	437
Malaipedu " 197 46 47	502	Mailesvaram " 256 40 56	426
Tirumani " 217 0 8	598		
Tirukalikundram " 246 7 24	608	<b>Kolár, XLVIII*</b>	
Kumarakuppam " 298 58 41	607	Bhúpatamma, XLIX* 0 48 11.80	32
Vilankád " 347 33 37	607	Tirthapalli, XLVI* 62 22 49.00	32
		Nandigudi, XLVII* 105 54 51.63	45
<b>Káskal h.s.</b>		Rájagundlahalli h.s. 237 29 12	334
Bardi h.s. 259 13 40	261	Kurudamale, XIX 257 53 57.78	50
Basavanhalli " 316 42 30	261	Bandapalle, XVIII 285 48 40.82	46
		Kolár Building 290 50 24	322
<b>Kittávar, VIII</b>			
Kotébétta Hill Peak 4 6 31	154	<b>Koliga h.s.</b>	
Mánjarabad No. 1 h.s. 13 53 33	164	Shivansandra h.s. 44 30 28	298
Pushpagiri, IX 14 49 8.05	3	Uialdinna Mandapam s. 60 18 18	299
Múrkangudda Hill Peak 45 58 54	140	Halasúrbétta, XXXIX* 92 58 33	298
Jénkalbétta Hill Peak 57 34 39	188	Kodagurki h.s. 140 40 41	300
Siskalbétta Hill Peak 69 8 17	186	Malesvaram Hill 263 38 23	317
Ammédikal, V 72 23 44.18	2	Guraganjagurki Tree 288 40 42	315
Katégudda Hill Tree 84 25 46	134		
Ánú, VI 150 30 52.31	2	<b>Kõndapur h.s.</b>	
Chikmagalúr Mosque 175 13 40	182	Bõmmanhalli h.s. 95 19 15	220
Marale h.s. 200 25 57	180	Múganáyakankote " 133 39 50	220
Belúr Temple 213 20 46	158	Huvinkatte s. 149 7 46	221
Desáni, XI 238 34 45.20	11		
Sigégudda " 260 7 58	159	<b>Kõppabétta, LVIII*</b>	
Handinkère Hill Temple 281 40 25	168	Bánatimaribétta, XLV* 151 15 1.54	35
Sátanhalli, X 298 10 35.26	10	Devarabétta, LV* 206 13 13.64	35
Kabbati Hill Pagoda 303 20 53	171	Mariyálam, LVII* 265 45 14.97	86
Maharájdurga Pagoda 329 3 1	162		
Mulagalalejenkal Hill Mark 330 8 6	161	<b>Kotébétta h.s.</b>	
Málambi Hill Peak No. 1 345 12 56	155	Turumbétta h.s. 8 36 22	693
		Mallappanabétta " 234 3 4	689
<b>Kodagurki h.s.</b>		Béttadpur " 283 46 0	689
Uialdinna Mandapam s. 23 20 19	301	Adiganhalli " 295 42 58	690
Halasúrbétta, XXXIX* 32 37 21	300	Mákalenbétta " 316 47 49	690
Kundana h.s. 63 11 46	303	Vírarájendrapet " 350 56 3	691
Këndatti Hill Peak 295 59 15	316		
Guraganjagurki Tree 303 57 38	314		
Koliga " 320 39 1	300		
Devanhalli s. 335 47 36	308		

\* These stations appertain to the Great Arc Meridional Series, Section 8° to 18°.

AZIMUTHS OF STATIONS AND INTERSECTED POINTS.

71—G.

Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance	Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance
<b>Köttúr s.</b>		<b>Kudurémukha h.s.</b>	
Përubákam h.s. 20 12 37	562	Ánúr, VI 243 47 55	120
Malaipedu " 64 21 39	562	Yerkal Hill Peak 288 44 19	182
St. Thomas's Mount No. 2 s. 69 28 29	568	Ammédikal, V 302 19 39	120
Madras Observatory No. 1 " 180 5 0	564	Jamálabad Hill Mark 348 13 18	180
		Bëllatangadi s. 356 6 35	122
<b>Krishnagiri h.s.</b>		<b>Kugankal h.s.</b>	
Ráyakota h.s. 84 18 27	782	Kadúr s. 25 12 40	188
Mallappakönda " 185 18 7	781	Gardangiri No. 1 h.s. 303 15 29	188
Devarakönda Hill Pagoda 229 13 52	778		
Mallápádi " 272 5 36	778	<b>Kulibogudda h.s.</b>	
Mankunu " 294 41 46	779	Súrtikal h.s. 135 45 59	99
Jagadevdrug " 301 53 22	788	Koiyárgudda " 170 23 59	97
Gangangiri Hill Peak 326 8 15	784	Inadagudda " 190 10 11	82
Daulatabad Palace 345 26 17	782	Mijár " 235 55 49	82
		Kadappanabëtta s. 319 35 28	88
<b>Krishnamakönda, XXII</b>		Mangalore No. 1 " 345 4 27	104
Yërrakönda, XX 70 38 5.79	48	Mangalore No. 2 " 359 34 51	105
Bandapalle, XVIII 127 25 31.74	48		
Ámanikönda Hill Mark 130 10 18	381	<b>Kumárakuppam h.s.</b>	
Káriveri, XXI 184 23 18.08	49	Kuppam s. 2 46 44	617
Kudrakainigudda Hill Mark 222 23 4	341	Vilankád h.s. 39 53 13	607
Devarakönda, XXIII 229 51 51.27	52	Vëmmani " 40 26 30	617
Satghur, XXVI 268 42 24.37	58	Karunguli " 119 0 30	607
		Tirukalikundram " 190 24 49	608
<b>Krishnamakönda h.s.</b>		Karimarapákam " 202 5 38	609
Devarakönda Hill Pagoda 19 59 18	768		
Devarabanda Hill Pagoda 38 31 14	388	<b>Kumbla s.</b>	
Yërrakönda, XX 70 39 54	325	Passodigumpe h.s. 228 51 48	111
Beturáyankönda h.s. 101 6 35	825	Anantapur " 296 47 18	111
Bandapalle " 127 22 38	828		
Kurudamale " 150 12 5	326	<b>Kunavákam h.s.</b>	
Vënktagiri Fort 151 2 34	340	Mannúr s. 191 16 30	586
Vënktagiri s. 158 44 14	389	Malaipedu h.s. 239 2 54	586
Káriveri, XXI 184 22 29	323	Përubákam " 262 42 54	587
Kudrakainigudda h.s. 222 18 43	327		
Devarakönda, XXIII 229 49 50	823	<b>Kundana h.s.</b>	
Satghur, XXVI 268 40 27	324	Nundydroog h.s. 206 0 55	298
Mallánaigdrug " 337 59 49	769	Kodagurki " 243 10 41	308
		Devanhalli s. 271 15 31	308
<b>Kudrakainigudda h.s.</b>		Tirthapalli, XLVI* 311 0 35	298
Krishnamakönda h.s. 42 20 24	327		
Bandapalle " 88 8 0	329	<b>Kundhalli h.s.</b>	
Mulbágal Stone 108 14 0	362	Ballamale h.s. 102 48 9	146
Kurudamale " 113 46 24	327	Balláráyandurga " 143 49 34	146
		Kundúrbëtta " 222 37 37	147
<b>Kudurémukha, III</b>		Málambi Hill Peak No. 2 268 14 34	157
Ballamale, IV 28 35 49.49	6		
Karinja Hill Pagoda 31 58 3	118	<b>Kundúr h.s.</b>	
Mangalore Light-house 58 5 38	108	Kuntúr h.s. 18 46 53	697
Mangalore, II 58 5 41.12	9	Ummattúr " 40 31 55	695
Mijár, I 77 24 59.25	7	Mysore No. 3 " 85 37 31	696
Ánúr, VI 244 42 8.43	1	Karigatta " 108 12 27	711
Balláráyandurga h.s. 268 51 26	123		
Ammédikal, V 301 55 53.13	1		
Bëllatangadi s. 352 41 12	121		

\* This station appertains to the Great Arc Meridional Series, Section 8° to 18°.



Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance	Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance
<b>Kundúr h.s.—(Contd.)</b>		<b>Kurudamale h.s.—(Contd.)</b>	
Arakërëbëtta h.s. 115 7 53	708	Kudrakainigudda h.s. 293 42 46	327
Bandhallidurga " 293 3 51	695	Krishnamakönda " 330 10 8	326
Sattegál s. 318 11 28	698		
Mudikundam Pagoda 350 20 26	700		
<b>Kundúrbëtta h.s.</b>		<b>Kurumkota, XXXII</b>	
Málambi Hill Peak No. 2 13 35 58	157	Conjeeveram (Little) Pagoda 4 40 38	518
Kundhalli h.s. 42 40 3	147	Conjeeveram (Great) Pagoda 12 44 16	507
Mánjarabad No. 2 " 111 23 48	166	Mávandúr, XXXIV 14 51 57.21	64
Balláráyandurga " 117 52 24	147	Anandakamalai, XXXI 72 0 28.57	68
Hannëbëtta " 139 28 57	148	Pullúr, XXX 116 6 43.27	63
Sigëgudda " 200 18 29	166	Nagari, XXXIII 156 15 35.56	67
Desáni " 205 5 43	149	Chëmbedu, XXXV 226 42 48.41	66
		Malaipedu, XXXVI 296 5 5.86	65
<b>Kunnattúr h.s.</b>		<b>Machalbëtta s.</b>	
Poonamallee Flag-staff 194 15 35	559	Bangalore Base-line S.W. End, LII* 102 55 59	282
St. Thomas's Mount No. 2 s. 258 26 55	558	Nágavára s. 150 9 42	282
Përubákam h.s. 315 41 28	558	Hënnúr " 200 19 4	288
<b>Kuntúr h.s.</b>		<b>Madanapalle s.</b>	
Haradhanhalli Hill Pagoda 21 6 30	705	Adavi Ávalpalli h.s. 52 7 41	370
Mangala Hill Pagoda 23 55 41	703	Tumakönda " 210 36 15	370
Ummattúr h.s. 68 17 11	697		
Múgúr Pagoda 87 25 48	701		
Muruktöre Hill Pagoda 191 50 26	699	<b>Madavaram s.</b>	
Kundúr " 198 45 51	697	St. Thomas's Mount, XLIV 11 59 25	807
Sattegál s. 227 32 51	698	Red Hills No. 2 h.s. 101 14 6	807
Mudikundam Pagoda 258 54 21	700	Vadapurambákam s. 186 41 15	808
Biligiriranganabëtta Pagoda 320 35 24	702		
<b>Kuppam s.</b>		<b>Madras Base-line N. End s.</b>	
Alambarai Fort 30 46 1	618	Madras Base-line S. End s. 0 12 35	555
Marakanam s. 31 59 3	615	Përubákam h.s. 10 0 31	556
Vilankád h.s. 122 41 6	615	St. Thomas's Mount No. 1 s. 91 21 34	555
Vëmmani " 159 19 27	616	St. Thomas's Mount No. 2 " 92 37 1	557
Kumárakuppam " 182 46 37	617		
<b>Kuripati h.s.</b>		<b>Madras Base-line S. End s.</b>	
Vëlagaram h.s. 37 38 42	487	Pudupák, XLI 16 3 22	558
Kukiralkönda Stone 57 37 18	484	Përubákam h.s. 66 15 33	554
Allamadugu " 91 34 5	484	Nanmangalam, XLII 130 25 52	552
Yerchikullu " 299 25 59	488	St. Thomas's Mount No. 1 s. 168 53 2	554
Manghát " 327 19 17	489	St. Thomas's Mount, XLIV 168 58 48	552
Përmanallúr " 352 33 39	486	Madras Base-line N. End " 180 12 35	555
<b>Kurudamale, XIX</b>		<b>Madras Compound s.</b>	
Bandapalle, XVIII 8 43 46.13	50	Madras Dome Observatory, XXXVII 114 42 12	565
Kolár, XLVIII* 77 57 40.46	50	Madras Observatory No. 2 s. 170 32 29	565
Káriveri, XXI 297 26 1.24	51		
<b>Kurudamale h.s.</b>		<b>Madras Dome Observatory, XXXVII</b>	
Bandapalle h.s. 8 42 15	329	Malaipedu, XXXVI 56 15 16.21	69
Ámanikönda Hill Pagoda 23 50 5	333	Chëmbedu, XXXV 125 42 3.15	69
Beturáyankönda " 35 8 26	326	Madras Observatory No. 2 s. 247 29 49	565
		Madras Compound " 294 42 11	565

\* These stations appertain to the Great Arc Meridional Series, Section 8° to 18°.

Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance	Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance
<b>Madras Observatory No. 1 s.</b> ° ' "		<b>Malaipedu, XXXVI—(Contd.)</b> ° ' "	
Köttúr                                    s.      0 5 0	564	Tinnanúr Pagoda                      183 50 1	580
St. Thomas's Mount      No. 2      ,,      39 29 1	564	Tirumeshi Temple                      199 12 56	582
<b>Madras Observatory No. 2 s.</b>		Mángád, XLIII                          221 59 54'56	76
Madras Dome Observatory, XXXVII    67 29 50	565	Kunnattúr Hill Temple                  228 19 53	547
Madras Compound                      s.      350 32 29	565	Madras Dome Observatory, XXXVII    236 12 7'54	69
<b>Madras s.</b>		Madras Church No. 1                      236 17 21	568
Përumbákam                              h.s.      25 0 8	577	Madras Light-house                      237 37 45	572
Mángád, XLIII                              69 5 37	576	Madras Church No. 2                      239 7 0	571
Tandurai                                    s.      104 28 34	576	Madras Cathedral                          239 50 49	566
Pöttúr                                        h.s.      124 42 49	789	St. Thomas's Mount, XLIV              243 3 49	585
Vëlliváyal                                  s.      168 22 7	790	St. Thomas's Mount Flag-staff        243 7 30	561
<b>Mahábalipuram s.</b>		Tirunirmalai Hill Temple              244 13 57	549
Sadras                                        s.      16 41 7	612	Pallávaram Hill Mark                    249 7 3	550
Karimarapákam                          h.s.      68 47 27	610	Tambarammalai Hill Mark              258 15 54	544
Tirukalikundram                        ,,      87 44 3	610	Nanmangalam, XLII                      265 46 11'77	75
Përumbákam                                ,,      180 37 47	611	Përumbákam                                h.s.      279 43 13	584
<b>Mailesvaram h.s.</b>		Vandalúr Hill Mark                        282 29 21	542
Kanialbod Hill Platform                  74 34 37	424	Pudupák, XLI                                301 30 23'34	74
Kökáráyankönda                          h.s.      76 42 39	426	Öttivákam Hill Mark                      319 27 8	580
Nallakönda                                ,,      82 41 24	423	<b>Malaipedu h.s.</b>	
Chintemeklapalli                        ,,      104 51 21	416	Karunguli                                    h.s.      17 48 29	502
Bakrapet Choultry                        109 27 27	429	Kunavákam                                ,,      59 4 25	586
Pálsamanda                                ,,      115 32 35	419	Mávándúr, XXXIV                        63 36 41	501
Döddapalli Hill Platform                  121 2 0	421	Sholinghur Hill Pagoda                  106 37 56	503
Chëllappachërugutta Platform          131 35 0	480	Punák                                        ,,      121 38 46	501
Motumallela Hill Pagoda                  165 16 40	433	Mannúr                                      s.      140 25 17	528
Mangalapénta Pagoda                      172 31 54	486	Tiruvallúr Pagoda                        155 23 58	527
Chinna Göttikallu Fort                    172 49 33	481	Chëmbedu                                  ,,      174 1 50	523
Sattevaripálëm                              h.s.      188 43 6	416	Tandurai                                    ,,      193 18 29	525
Mangalapéntadrug                        s.      218 21 39	484	Mángád, XLIII                              221 36 10	526
Tallarapet                                  h.s.      224 8 20	418	Köttúr                                        ,,      244 18 32	562
Ye Ávalcheri Platform                    249 46 55	489	Përumbákam                                h.s.      279 35 31	537
Kallúr Pagoda                                254 51 42	488	<b>Malëkal Tirupati h.s.</b>	
Pëddadrug                                  ,,      262 29 48	417	Desáni, XI                                    62 41 22	189
<b>Mákalenbëtta h.s.</b>		Bánávar                                      s.      120 52 18	180
Virarájendrapet                            h.s.      73 15 49	691	Gardangiri                                  No. 1 h.s.    166 23 56	189
Kotëbëtta                                    ,,      136 51 12	690	<b>Mallánaigdrug h.s.</b>	
Bëttadpur                                    ,,      208 13 59	688	Mankunu                                    h.s.      4 6 59	771
Adiganhalli                                ,,      259 49 17	687	Mallápádi                                    ,,      45 15 40	770
Saragúrbëtta                                ,,      298 54 10	687	Chinnidrug                                  ,,      53 22 13	775
<b>Malaipedu, XXXVI</b>		Devarakönda Hill Pagoda              80 24 0	769
Tirumani, XXXVIII                        7 10 20'31	70	Krishnamakönda                        ,,      158 0 55	769
Appúr Hill Temple                        13 48 2	578	Pëddanadrug                                ,,      184 18 49	773
Mávándúr, XXXIV                        63 29 41'05	65	Satghur, XXVI                              213 25 2	773
Conjeeveram (Little) Pagoda              71 1 26	517	Vániyambádi Fort                        347 20 3	777
Conjeeveram (Great) Pagoda              77 13 55	507	<b>Mallápádi h.s.</b>	
Kurumkota, XXXII                        116 8 41'91	65	Tattaikalludrug Hill                      26 28 46	786
Sripërumbudúr Pagoda                    129 44 41	588	Gangangiri Hill Peak                      42 11 29	784
Chëmbedu, XXXV                          174 9 47'20	66	Krishnagiri                                h.s.      92 7 45	778
		Devarakönda Hill Pagoda              193 54 54	770
		Mallánaigdrug                              ,,      225 12 46	770
		Mankunu                                    ,,      309 27 54	771
		Podhari                                      ,,      343 20 48	772

## MADRAS LONGITUDINAL SERIES.

Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance	Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance
<b>Mallappakōnda h.s.</b>	° ' "	<b>Mandúr, LIV*</b>	° ' "
Krishnagiri h.s.	5 18 22	Turukungutta, LI*	10 50 26·35
Yérrakōnda, XX	200 46 48	Bangalore Base-line N.E. End, LIII*	89 55 19·49
Devarakōnda Hill Pagoda	285 2 6	Tirthapalli, XLVI*	285 57 43·86
<b>Mallappanabētta h.s.</b>		<b>Mángád, XLIII</b>	
Béttadpur h.s.	19 56 53	Vandalúr Hill Mark	1 20 56
Sátanhalli, X	44 16 27	Kunnattúr Hill Temple	12 30 32
Kotēbētta	54 10 1	Ērumaiyúr Hill Staff	23 49 30
Mávinkērebētta Pagoda	58 28 58	Malaipedu h.s.	41 37 18
Mukundúrbētta Pagoda	65 35 10	Malaipedu, XXXVI	42 1 3·16
Pushpagiri Hill Pagoda	66 35 30	Sripērumbudúr Pagoda	74 45 21
Sigēgudda	129 0 19	Mannúr s.	90 52 24
Desáni	158 7 17	Tirumeshi Temple	141 0 31
Gardangiri No. 2	175 33 42	Tinnanúr Pagoda	146 7 14
Bōmmanhalli	224 7 36	Tandurai	166 18 23
Hattýal Hill Pagoda	224 46 28	Red Hills No. 2 h.s.	212 58 48
Tagadúr	228 33 10	Madras Church No. 1	246 16 38
Nughallibētta, XIII	239 20 17	Madras Light-house	247 9 49
Savandurga, XLI*	269 48 53	Madras Flag-staff	248 59 25
Naráyandurga, XIV	304 59 12	Madras s.	249 3 4
Mysore No. 8	329 30 53	Madras Church No. 2	251 0 43
		Madras Cathedral	253 51 15
		St. Thomas's Mount Flag-staff	271 40 45
		St. Thomas's Mount, XLIV	271 40 51·12
		Nanmangalam, XLII	316 40 9·04
		Pērubákam h.s.	322 28 10
		Tirunirmalai Hill Temple	340 1 56
		Tambarammalai Hill Mark	353 19 1
<b>Malvalli s.</b>		<b>Mangalapēntadrug s.</b>	
Ukalgēre Hill Pagoda	65 36 35	Mailesvaram h.s.	38 22 21
Tálagudi s.	136 58 20	Mangalapēnta Pagoda	85 34 46
		Sattevaripálém	167 12 15
		Tallarapēt	226 18 11
<b>Manali s.</b>		<b>Mangalore, II</b>	
Mattúr s.	98 11 44	Mijár, I	205 52 53·63
Andankuppam	148 5 32	Kudurēmukha, III	238 0 0·70
Elandacheri	204 41 3	Ballamale, IV	284 30 25·13
Sadayankuppam	242 33 44	Múdapinna Hill Tree	304 4 56
<b>Manamai Kunnatúr, XL</b>		<b>Mangalore No. 1 s.</b>	
Avirimodu, XXXIX	64 18 46·67	Mangalore No. 2 s.	
Karunguli Hill Temple	81 53 0	Mangalore h.s.	98 55 9
Idaiyúr Hill Temple	104 37 16	Kulibogudda h.s.	165 4 52
Tirukalikundram Temple	109 3 50	Kadappanabētta s.	233 24 21
Tirumani, XXXVIII	113 23 1·93		
Chingleput h.s.	118 18 43	<b>Mangalore No. 2 s.</b>	
Pataravákam Hill Mark	132 45 19	Kulibogudda h.s.	179 34 54
Óttivákam Hill Mark	167 41 30	Mangalore No. 1 s.	278 54 47
Vembed Hill Pagoda	170 53 57		
Pudupák, XLI	186 35 18·36		
Tiruporúr	188 25 20		
Mahábalipuram Light-house	214 43 15		
Mahábalipuram Temple	220 37 49		
<b>Manantoddy h.s.</b>		<b>Manghát h.s.</b>	
Narikot h.s.	5 46 9	Pērmanallúr h.s.	126 4 37
Bánásuram Hill Peak	42 28 10	Kuripati	147 20 20
Nattávaram	73 45 40		
Véllera Hill Peak	339 2 52		
Wáyútmalai Hill Peak	341 55 13		
Élambileri Hill Peak	344 32 29		

\* These stations appertain to the Great Arc Meridional Series, Section 8° to 18°.

AZIMUTHS OF STATIONS AND INTERSECTED POINTS.

75—G.

Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance	Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance
<b>Manjampádi s.</b>		<b>Mannúr s.</b>	
Hösdrug Fort	37 12 38	Kunavákam	h.s. 11 16 56
Bekal	s. 122 52 37	Tandurai	s. 226 33 54
Anantapur	h.s. 151 39 22	Mángád, XLIII	270 50 11
Kandadakamale	No. 1 „ 244 36 8	Malaipedu	h.s. 320 24 12
<b>Mánjarabad No. 1 h.s.</b>		<b>Marakanam s.</b>	
Kittávar, VIII	193 53 3	Vilankád	h.s. 165 35 3
Mulagalalejenkal Hill Mark	278 54 45	Kuppam	s. 211 58 22
Mahárájdurga Pagoda	280 35 32		
<b>Mánjarabad No. 2 h.s.</b>		<b>Marale h.s.</b>	
Sigégudda	h.s. 236 52 14	Kittávar, VIII	20 27 11
Kundúrbétta	„ 291 21 16	Ánúr, VI	91 42 58
		Bába Budan	No. 1 h.s. 134 25 18
		Sakanagiri	„ 181 32 46
		Manjihalli	„ 224 43 59
		Desáni, XI	275 19 1
<b>Manjihalli h.s.</b>		<b>Mariyálam, LVII*</b>	
Marale	h.s. 44 45 41	Köppabétta, LVIII*	85 47 56.95
Sakkarépatna	s. 97 50 26	Devarabétta, LV*	162 33 37.72
Sakanagiri	h.s. 112 33 55	Ánchéttidurga, LVI*	220 46 29.39
Kadúr	s. 179 49 17		
Gardangiri	No. 1 h.s. 255 24 4		
Desáni, XI	315 19 56		
		<b>Márkandesvara h.s.</b>	
		Hösúr	h.s. 31 27 23
		Apsándra	„ 94 12 33
		Karadibanda	„ 124 44 3
		Kolár Pagoda	228 37 27
		Beturáyankönda	„ 285 15 17
<b>Mankunu h.s.</b>		<b>Mattúr s.</b>	
Podhari	h.s. 59 37 39	Vadapurambákam	s. 78 47 5
Tattaikalludrug Hill	92 42 8	Tyambákam	„ 119 57 24
Jagadevadrug	„ 111 40 4	Andankuppam	„ 209 8 56
Krishnagiri	„ 114 46 24	Manali	„ 278 11 30
Mallápádi	„ 129 30 23		
Chandrapuram	„ 141 57 57		
Chinnidrug	„ 175 19 5		
Tirupatúr Pagoda	180 47 19		
Mallánaigdrug	„ 184 6 34		
		<b>Mávandúr, XXXIV</b>	
		Anandalamalai, XXXI	125 13 59.27
		Sholinghur Hill Pagoda	144 53 7
		Punák	h.s. 170 53 26
		Kurumkota, XXXII	194 50 52.24
		Conjeeveram (Little) Pagoda	219 28 58
		Malaipedu, XXXVI	243 25 2.80
		Malaipedu	„ 243 32 2
		Chingleput	„ 282 36 54
		Édámichi	„ 284 51 24
		Tirumani, XXXVIII	286 38 57.06
		Malaivayávúr Hill Temple	303 40 24
		Karunguli	„ 313 21 58
		Ávirimodu, XXXIX	320 17 45.10
<b>Mankurgutta h.s.</b>		<b>Mercara h.s.</b>	
Patikönda, XXIV	1 44 55	Tadiándamol	h.s. 32 54 6
Mulbágal Stone	45 5 42	Pushpagiri, IX	168 5 57
Punganúr Palace	47 34 11	Mercara Hill Mark	183 10 35
Rájagundlahalli Hill Peak	67 55 11		
Adavi Ávalpalli	h.s. 98 31 55		
Malaikönda No. 1 Pagoda	114 7 2		
Madanakönda Platform	127 26 22		
Davarkönda	„ 199 44 11		
Ankalamman Platform	259 4 7		
Madrimalai Platform	269 31 3		
Chaudapalli Pagoda	270 52 27		
Ávulapallidrug	„ 281 52 24		
Vakirikönda Platform	299 22 52		
Butakapalle Hill	316 38 6		
Gamkönda	„ 326 45 56		
Somopet Pagoda	332 7 45		
Palmaner Pagoda	339 21 32		
Köttakota Fort	355 5 37		

\* These stations appertain to the Great Arc Meridional Series, Section 8° to 18°.

Name of Station with Asimuths of surrounding Points	No. of Triangle giving Distance	Name of Station with Asimuths of surrounding Points	No. of Triangle giving Distance
<b>Mijár, I</b>	o ' "	<b>Mugali h.s.—(Contd.)</b>	o ' "
Mangalore, II	25 54 7'54	Ávulapallidrug	h.s. 192 3 3
Mangalore Light-house	25 55 10	Rakashmalai	" 233 43 40
Kudurémukha Hill Mark	256 36 47	Muruktöre, XXVIII	249 23 20
Kudurémukha, III	257 20 31'09	Vēnkatagiri	" 252 39 37
Karinja Hill Pagoda	307 9 10	Chittapāra	" 293 14 42
Ballamale, IV	328 54 1'19	Gurigukōnda	" 296 24 52
Múdapinna Hill Tree	355 37 53		
<b>Mijár h.s.</b>		<b>Múganáyakankote h.s.</b>	
Kadappanabētta	s. 18 2 6	Kondli Hill	h.s. 41 55 45
Kulibogudda	h.s. 55 57 26	Bōmmanhalli	h.s. 57 14 55
Súrtikal	" 69 33 0	Huvinkatte	s. 188 28 50
Koiyárgudda	" 102 46 8	Kōndapur	h.s. 313 37 40
Inadagudda	" 136 0 36	Rangaswámibētta	" 337 11 45
Santurkopalgudda	" 137 39 38		
Partamalaigudda	" 196 4 28		
Múdu Bidare Pagoda	254 1 52		
Bugargudda	" 274 16 52	<b>Mukanúr h.s.</b>	
Angargudda	" 291 8 2	Dharmapuri Fort	102 59 10
Ballamale	" 328 54 12	Alankarai	h.s. 122 6 55
		Podhari	" 225 37 39
		Vēllármalai	" 273 20 2
<b>Mogral h.s.</b>		<b>Mulaigunte h.s.</b>	
Muruktöre, XXVIII	h.s. 37 47 4	Rághavapur Hill	27 26 3
Allamadugu	h.s. 294 56 38	Manchhalli Hill	31 48 25
		Höréyál Hill Pagoda	32 40 58
		Chik Devibētta Hill Pagoda	73 5 21
<b>Moruvádi h.s.</b>		Arsinkēre	h.s. 107 35 45
Pikili	h.s. 12 28 34	Nanjangúd Pagoda	120 23 7
Ráyakota	" 151 15 52	Mysore	No. 3 " 163 27 3
		Hulimáv	" 181 13 52
		Ummattúr	" 276 41 12
		Haradhanhalli Hill Pagoda	314 16 45
<b>Muchil, VII</b>		<b>Mulki s.</b>	
Kandadakamale	No. 2 h.s. 21 55 43'4	Inadagudda	h.s. 224 34 10
Ballanád Hill Peak	126 35 5	Koiyárgudda	" 270 23 25
Ballamale, IV	129 40 33'62		
Ammédikal, V	207 13 56'31		
Pushpagiri, IX	263 2 10'08		
<b>Mudipalli h.s.</b>		<b>Muruktöre, XXVIII</b>	
Sattiravádi Hill	180 20 8	Bodmalai	h.s. 19 26 20
Nagari, XXXIII	204 43 26	Kamalgat	" 24 42 7
Taduk	h.s. 297 15 55	Vēnkatagiri	" 68 8 28
Wudugulúr	" 354 45 41	Mugali, XXV	69 25 19'35
		Mugali Beacon	69 26 12
		Mugali	" 69 26 57
<b>Mugali, XXV</b>		Ávulapallidrug	" 122 10 14
Satghur, XXVI	21 36 10'77	Patúr	" 166 31 34
Devarakōnda, XXIII	60 56 36'37	Dámalcheri Hill	186 16 8
Patikōnda, XXIV	92 22 37'01	Kallúr Hill	200 59 13
Palmaner House	108 9 59	Mogral	" 217 45 31
Muruktöre, XXVIII	249 21 46'52	Allamadugu	" 242 5 43
Batinkōnda, XXVII	297 16 47'03	Kukiralkōnda Stone	263 43 52
		Pullúr, XXX	276 9 16'25
		Vēlkúr	" 291 53 59
<b>Mugali h.s.</b>		Chittoor Fort	351 57 30
Satghur, XXVI	h.s. 21 38 12	Batinkōnda, XXVII	354 4 20'11
Pēddanadrug	h.s. 44 58 6	Chittapāra	" 358 4 46
Gamkōnda	" 148 25 29		

AZIMUTHS OF STATIONS AND INTERSECTED POINTS.

Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance	Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance
<b>Muttigēre h.s.</b>		<b>Mysore No. 3 h.s.—(Contd.)</b>	
Narsuswāmi h.s. 185 9 10	723	Bandhallidurga h.s. 276 22 1	681
Hemagiri " 239 57 40	723	Ummattūr " 312 38 7	681
Āṅēkal Durga " 248 15 25	728	Mulaigunte " 343 26 22	682
Sātanūr " 305 24 20	724		
Chotanhalli s. 344 27 55	725		
		<b>Mysore No. 1 s.</b>	
<b>Mysore No. 1 h.s.</b>		Mysore No. 1 h.s. 127 19 54	672
Mysore Race Stand 19 41 10	668	Mysore No. 2 " 244 45 10	671
Kannambādi h.s. 164 50 53	641	Mysore No. 3 " 324 4 7	671
Seringapatam s. 215 35 38	641		
Seringapatam Monument No. 2 221 33 51	660	<b>Mysore No. 2 s.</b>	
Karigatta Hill Peak 226 43 27	663	Karigatta h.s. 209 42 30	715
Mysore Barracks 238 46 39	667	Mysore No. 3 " 331 1 57	715
Mysore No. 2 h.s. 272 42 39	642		
Mysore Palace 304 43 28	674		
Mysore No. 1 s. 307 19 31	672		
Mysore No. 3 h.s. 315 37 4	643		
		<b>Nāgalamalai h.s.</b>	
<b>Mysore No. 2 h.s.</b>		Gudiyātam Pagoda 69 33 33	460
Mysore No. 3 h.s. 21 36 19	643	Satghur, XXVI 87 8 51	456
Mysore Palace 59 33 15	673	Magadevi Hill Pagoda 223 41 8	465
Mysore No. 1 s. 64 45 41	671	Chittapāra h.s. 240 13 52	454
Mysore Observatory 85 8 20	669	Vellore " 283 50 48	455
Mysore No. 1 h.s. 92 43 33	642	Kailāgarh " 314 4 30	454
Mysore Barracks 112 52 7	666	Pallikōnda " 339 24 30	457
Vaddarhalli " 162 16 7	662	Pallikōnda Pagoda 359 51 28	464
Seringapatam s. 178 11 16	642		
Seringapatam Monument No. 2 183 19 18	661	<b>Nāgamangala h.s.</b>	
Karigatta Hill Peak 198 56 36	662	Nāgamangala Pagoda 162 10 35	238
Hunjankēre Hill Peak 226 31 55	665	Narsuswāmi h.s. 214 43 5	237
Ukalgēre Hill Pagoda 270 54 43	675	Bēttahalli " 240 59 15	237
<b>Mysore No. 3 h.s.</b>		<b>Nagari, XXXIII</b>	
Chik Devibētta Hill Pagoda 39 52 56	720	Taduk h.s. 2 11 8	494
Arsinkēre h.s. 47 23 38	683	Mudipalli " 24 44 5	495
Jinahalli " 100 2 29	684	Pullūr, XXX 58 18 41'27	68
Bēttapur " 107 55 38	680	Chēmbedu s. 287 9 9	524
Bēttadūr Roek Pagoda 117 6 21	721	Chēmbedu, XXXV 288 6 35'92	67
Mysore Race Stand 121 28 56	668	Arumbākam h.s. 305 53 31	519
Mysore No. 1 " 135 37 43	643	Kurumkota, XXXII 336 13 31'22	67
Mysore No. 1 s. 144 4 23	671	Nēmmalai " 338 5 33	493
Mallappanabētta h.s. 149 35 54	680	Punāk " 359 41 24	493
Mysore Palace 150 1 5	673		
Mysore No. 2 s. 151 2 9	715		
Kannambādi h.s. 154 10 50	721	<b>Nāgavāra s.</b>	
Mysore Barracks 159 25 17	666	Bangalore Base-line S.W. End, LII* 44 31 46	280
Mysore Observatory 164 27 33	670	Gēddahalli h.s. 82 47 42	280
Nārāyandurga, XIV 169 13 51	644	Basavangudda " 137 12 26	281
Seringapatam Pagoda 182 33 33	714	Rāchēnhalli s. 224 31 47	284
Seringapatam s. 186 20 37	664	Hēnnūr " 274 23 12	283
Adhibētta, XVII 196 10 5	644	Machalbētta " 330 9 25	282
Karigatta h.s. 199 49 13	710	Dōddagunta " 335 38 26	290
Mysore No. 2 " 201 36 4	643		
Hunjankēre Hill Peak 219 53 25	664		
Arakērbētta " 229 10 49	709	<b>Nallakōnda h.s.</b>	
Ukalgēre Hill Pagoda 259 43 35	676	Sattevaripālēm h.s. 226 38 11	423
Kundūr " 265 32 1	696	Mailesvaram " 262 38 57	423

\* This station appertains to the Great Arc Meridional Series, Section 8° to 18°.

Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance	Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance
<b>Nallurhalli h.s.</b>		<b>Narsuswámi h.s.</b>	
Betdásanpur h.s. 41 33 31	306	Muttigère h.s. 5 9 24	723
Shivansandra " 173 6 27	306	Nágamangala " 34 43 33	237
Hóskote Idgah 198 2 27	307	Nágamangala Pagoda " 52 20 23	238
		Ballára " 161 8 22	229
<b>Nandigudi, XLVII*</b>		Söttigère " 163 30 12	225
Tirthapalli, XLVI* 3 8 57 12	44	Rangaswámibétta " 223 24 43	223
Halasúrbétta, XXXIX* 81 17 10 40	44	Amrutúr s. 238 48 53	239
Nundydroog Building 129 1 44	294	Béttahalli h.s. 253 12 53	236
Nundydroog Hill Mark (helio.) 129 5 48	295	Ánkal Durga 273 23 34	728
Kolár, XLVIII* 285 52 7 38	45	Hemagiri " 278 37 24	223
		<b>Nattávaram h.s.</b>	
<b>Nanmangalam, XLIII</b>		Purakád h.s. 27 7 30 7	622
Vandalúr Hill Mark 69 23 20	543	Dharmapatna " 95 21 51 2	621
Malaipedu, XXXVI 85 48 22 67	75	Tadiándamol " 160 12 11 9	621
Tambarammalai Hill Mark 96 12 5	545	Brahmagiri Hill Mark 226 39 30	628
Érumaiyúr Hill Staff 105 19 32	541	Manantoddy " 253 42 56	629
Tirunirmalai Hill Temple 121 9 4	548	Bánásuram Hill Peak 289 33 31	630
Kunnattúr Hill Temple 125 28 5	546	Élambileri Hill Peak 307 1 20	633
Mángád, XLIII 136 41 11 77	76	Véllera Hill Peak 308 57 4	635
Pallávaram Hill Mark 161 42 10	550	Narikot " 315 23 31 3	623
St. Thomas's Mount, XLIV 192 29 55 04	77		
Injambákam, XLV 279 3 42 81	78	<b>Nelvay h.s.</b>	
Madras Base-line S. End s. 310 25 20	552	Conjeeveram (Great) Pagoda 37 5 59	516
Kovalam Church 332 1 59	581	Ráoji s. 358 37 47	516
Pudupák, XLI 353 3 17 73	75		
		<b>Nemmalai h.s.</b>	
<b>Naráyanavaram h.s.</b>		Punák h.s. 38 10 39	493
Pérmanallúr h.s. 46 10 28	490	Wudugulúr " 68 58 4	496
Allamadugu " 75 1 5	490	Taduk " 109 35 49	494
		Nagari, XXXIII " 158 6 21	498
<b>Naráyandurga, XIV</b>			
Adhúrbétta, XII 52 54 23 56	15	<b>Nughallibétta, XIII</b>	
Attikuppa Bungalow 60 20 18	645	Gunjurbétta Hill Pagoda 33 18 7	193
Yénné-hólé-ranganbétta Pagoda 103 17 46	192	Channarápatna Fort (helio.) 33 26 38	196
Gunjurbétta Hill Pagoda 105 53 16	194	Sátanhalli, X 54 31 46 39	12
Sátanhalli, X 110 2 37 97	13	Mallappanabétta h.s. 59 22 46	172
Mallappanabétta h.s. 125 3 10	172	Desáni " 126 16 39	145
Channarápatna Fort (helio.) 134 30 43	195	Desáni, XI 128 22 49 94	12
Sravanbélgöla Statue 144 45 51	197	Malékal Tirupati Temple 148 14 38	142
Nughallibétta, XIII 160 47 42 26	13	Chaudanhalli, XVI 229 5 59 59	20
Bukkadabétta Hill Pagoda 170 3 28	199	Háltibétta, XV 297 2 28 97	16
Háltibétta, XV 226 36 52 79	16	Bukkadabétta Hill Pagoda 323 34 12	199
Adhibétta, XVII 291 32 29 04	17	Naráyandurga, XIV 340 46 12 73	13
Gadikalbétta Hill Peak 338 31 28	647	Sravanbélgöla Statue 356 46 31	198
Vaddarhalli h.s. 348 52 31	637		
Mysore No. 3 " 349 12 43	644	<b>Nundydroog h.s.</b>	
Chinakurali Bungalow 356 15 16	651	Halasúrbétta, XXXIX* 17 17 58	292
		Kundana h.s. 26 1 41	293
<b>Narikot h.s.</b>		Savandurga, XLI* 40 34 47	210
Purakád h.s. 78 48 0 0	623	Dóballapur Idgah 63 39 44	292
Nattávaram " 135 25 53 6	623	Shivaganga Hill Pagoda 66 7 33	248
Bánásuram Hill Peak 154 50 32	631	Devaráyadurga " 90 28 34	211
Brahmagiri Hill Mark 181 57 8	628	Amábjidurga Building 265 50 51	318
Manantoddy " 185 45 48	629	Rahmanghar " 272 44 33	209
Élambileri Hill Peak 285 51 25	632	Tirthapalli, XLVI* 329 8 14	209
Véllera Hill Peak 299 19 31	634		
Wáyútmalai Hill Peak 307 37 39	636		

\* These stations appertain to the Great Arc Meridional Series, Section 8° to 18°.

Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance	Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance
<b>Padari s.</b>		<b>Patikōnda, XXIV—(Contd.)</b>	
Punák h.s. 25 57 46	521	Palmaner Bungalow 251 42 44	388
Ellikúr " 321 12 55	521	Palmaner Pagoda 255 25 22	386
		Janálkōnda Platform 257 23 4	396
		Palmaner House 259 17 38	389
<b>Pálamanda h.s.</b>		Bodmalai h.s. 264 44 32	344
Chintemeklapalli h.s. 65 10 16	419	Mugali, XXV 272 20 7.21	56
Sattevaripálém " 256 23 53	420	Kailásgarh " 308 34 14	343
Mailesvaram " 295 29 26	419	Devarakōnda, XXIII 345 33 16.74	55
Sadam s. 341 49 0	422		
		<b>Patúr h.s.</b>	
<b>Pallikōnda h.s.</b>		Vélkúr h.s. 327 36 12	447
Kambattimalai h.s. 33 22 34	459	Muruktōre, XXVIII 346 31 5	447
Rásimalai " 39 32 28	462		
Satghur, XXVI 105 44 18	457	<b>Pëddadrug h.s.</b>	
Gudiyátam Pagoda 116 38 12	460	Ávulapallidrug h.s. 70 56 10	407
Koikuttimalai " 139 42 54	461	Chërlakōnda Platform 75 22 20	412
Nágalamalai " 159 24 52	457	Kanialbod Hill Platform 79 41 47	425
Magadevi Hill Pagoda 180 30 52	465	Mailesvaram " 82 33 15	417
Vellore " 263 45 49	458	Malaikōnda No. 2 Pagoda 110 3 17	443
Kailásgarh " 298 30 42	458	Sattevaripálém " 121 2 55	407
		Chandragiri s. 123 11 0	441
<b>Partamalaigudda h.s.</b>		Nágápatla Pagoda 138 29 39	442
Mijár h.s. 16 5 4	80	Tallarapet h.s. 165 39 28	408
Inadagudda " 65 41 10	81		
Santurkopalgudda " 69 25 44	80	<b>Pëddanadrug h.s.</b>	
Káراك Great Statue 262 48 23	95	Mallánaigdrug h.s. 4 19 5	773
Surálgudda " 302 23 4	94	Mugali " 224 55 23	774
		Satghur, XXVI 270 49 47	773
<b>Passodigumpe h.s.</b>		<b>Përmanallúr h.s.</b>	
Anantapur h.s. 20 49 46	109	Pullúr, XXX 58 57 48	485
Kumbla s. 48 52 53	111	Allamadugu h.s. 113 30 16	485
Mangalore Flag-staff 135 46 24	100	Vëlagaram " 139 3 37	487
Kannúr h.s. 147 5 49	86	Kuripati " 172 33 47	486
Ballamale " 205 3 26	86	Náráyanavaram " 226 8 6	490
Ballanád " 240 12 46	87	Yerchikallu " 229 43 34	488
Kandadakamale No. 1 " 323 57 18	88	Manghát " 306 3 42	489
Bekal s. 357 42 26	89		
		<b>Përumbákam h.s.</b>	
<b>Patikōnda, XXIV</b>		Mahábalipuram s. 0 37 49	611
Yërrakōnda, XX 49 56 11	207	Tirukalikundram h.s. 25 45 23	611
Káravéri, XXI 66 4 14.04	55	Kunavákam " 82 46 50	537
Mulbágal Stone 89 23 1	363	Malaipedu " 99 37 56	537
Rahmanghar h.s. 106 18 20	207	Malaipedu, XXXVI 99 45 39	534
Rájagundlahalli Hill Peak 123 11 21	364	Sripërumbudúr Pagoda 109 2 38	539
Bálesvaramkōnda " 130 59 55	353	Kunnattúr " 135 42 49	558
Rámasamudra Pagoda 131 46 14	354	Mángád, XLIII 142 29 28	534
Gundakal s. 132 25 37	366	St. Thomas's Mount No. 1 s. 179 27 55	554
Adavi Ávalpalli h.s. 141 34 5	349	St. Thomas's Mount, XLIV 179 31 9	535
Punganúr Palace 157 54 32	367	St. Thomas's Mount No. 2 " 179 39 49	557
Mankurgutta " 181 44 50	355	St. Thomas's Mount Flag-staff 179 44 1	560
Davarkōnda " 183 43 18	373	Madras Base-line N. End " 190 0 14	556
Ágshisipuram Hill Pagoda 184 6 47	376	Madras Cathedral 198 55 3	566
Chaudapalli Pagoda 190 7 54	378	Madras Church No. 1 199 18 8	568
Ankalamman Platform 193 32 48	380	Kóttúr " 200 11 55	562
Butakapalle Hill 200 2 56	384	Madras Church No. 2 202 13 44	570
Gamkōnda " 212 58 24	366	Madras Light-house 204 39 7	572
Ávulapallidrug " 226 16 42	348		
Kilpatla Hill Pagoda 242 55 58	391		



Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance	Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance
<b>Përumbákam h.s.—(Contd.)</b> ° ' "		<b>Pullúr, XXX</b> ° ' "	
Madras      s.    204 58 53	577	Kailásgarh      h.s.    34 56 5	845
Madras Flag-staff      205 11 47	574	Batinkõnda, XXVII      48 15 6·37	59
Madras Base-line S. End      "    246 15 16	554	Chittapára      "    54 52 19	360
		Narikaldrug Pillar      "    58 23 44	449
		Bodmalai      "    85 32 25	345
		Vëlkúr      "    89 11 51	446
<b>Pikili h.s.</b>		Muruktõre, XXVIII      "    96 12 55·72	59
Guttiráyan      h.s.    90 52 4	738	Allamadugu      "    153 43 13	478
Ráyakota      "    178 7 52	738	Nagari, XXXIII      238 15 19·67	68
Moruváidi      "    192 28 4	754	Përmanallúr      "    238 56 23	485
Vírabadondrug Hill      205 6 57	757	Punák      "    285 23 17	491
Boditimrázdrug Hill      205 23 0	755	Kurumkota, XXXII      296 1 20·51	63
Karimangalam      "    245 31 12	739	Anandalamalai, XXXI      351 57 6·08	60
Alankarai      "    304 20 3	740		
		<b>Punák h.s.</b>	
<b>Podhari h.s.</b>		Anandalamalai, XXXI      40 0 10	491
Vëllármalai      h.s.    24 33 45	748	Ipurgutta      h.s.    53 25 10	500
Mukanúr      "    45 40 5	742	Pullúr, XXX      105 26 32	491
Kambainëllúr Fort      52 42 45	763	Wudugulúr      "    131 11 5	498
Alankarai      "    56 41 6	741	Nagari, XXXIII      179 41 25	498
Karimangalam Rock      91 20 48	758	Padari      s.    205 56 40	521
Karimangalam      "    97 4 56	741	Nemmalai      h.s.    218 9 52	498
Barúr Rock      97 6 50	762	Ellikúr      "    229 49 37	520
Mallápádi      "    163 21 41	772	Chëmbedu      s.    256 23 2	523
Chinnidrug      "    193 12 55	776	Arumbákam      h.s.    262 8 28	519
Tirupatúr Pagoda      213 21 43	787	Tandurai      s.    274 1 22	525
Mankunu      "    239 36 3	772	Tirupasúr Fort      275 1 55	522
Vëlagutta Rock      s.    286 8 37	746	Malaipedu      h.s.    301 33 11	501
Singarpet Village      288 39 26	767	Mávaudúr, XXXIV      350 52 30	492
Èttipati      h.s.    310 40 50	745		
Punguni      "    344 27 32	765	<b>Punguni h.s.</b>	
Arúr      "    349 20 51	744	Podhari      h.s.    164 27 59	765
		Èttipati      "    274 21 54	764
		Arúr      "    353 35 58	764
<b>Pöttúr h.s.</b>			
Tirumulaváyal      s.    39 10 41	804	<b>Purakád h.s.</b>	
Tandurai      "    70 7 56	789	Dharmapatna      h.s.    147 28 37·0	622
Èrumaivëttipálayam      "    149 42 19	791	Nattávaram      "    207 5 52·5	622
Attantángal      "    171 57 55	792	Narikot      "    258 44 1·9	623
Vëlliváyal      "    234 37 29	790		
Red Hills      No. 1 h.s.    261 59 41	805	<b>Pushpagiri, IX</b>	
Èrnavúr      s.    264 39 35	796	Tadiándamol      h.s.    9 44 48·6	93
Madras      "    304 41 5	789	Kandadakamale      No. 2 "    58 58 27·5	92
		Muchil, VII      83 6 56·26	4
<b>Pudupák, XLI</b>		Ammëdikal, V      151 33 52·42	8
Tiruporúr      h.s.    3 10 2	586	Siskalbëtta Hill Peak      159 34 17	137
Manamai Kunnatúr, XL      6 35 40·17	73	Jënkalbëtta Hill Peak      166 58 53	139
Vembed Hill Pagoda      40 21 4	583	Múrkangudda Hill Peak      176 33 50	141
Tirumani, XXXVIII      52 58 22·49	73	Kittávar, VIII      194 47 40·70	8
Pataravákam Hill Mark      59 10 23	587	Handinkëre Hill Temple      222 47 29	168
Malaipedu, XXXVI      121 32 45·43	74	Maharájdurga Pagoda      222 47 46	162
Nanmangalam, XLII      173 3 29·51	75	Kabbati Hill Pagoda      243 2 13	170
Madras Base-line S. End      s.    196 3 2	553	Sátanhalli, X      250 27 35·60	10
Injambákam, XLV      209 23 50·92	78	Adhúrbëtta, XII      287 6 11·14	14
Kovalam Church      285 39 52	581	Mercara Hill Mark      347 49 15	152
Mahábalipuram Temple      357 24 31	603	Mercara      h.s.    348 5 18	150
Mahábalipuram Light-house      359 44 22	601		

AZIMUTHS OF STATIONS AND INTERSECTED POINTS.

81—G.

Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance	Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance
<b>Ráchēnhalli s.</b>		<b>Ráoji s.</b>	
Nágavára s. 44 32 3	284	Conjeeveram (Great) Pagoda 66 23 0	515
Basavangudda h.s. 87 42 39	284	Kakliri s. 87 42 48	515
Sampigehalli t.s. 169 20 54	286	Nelvay h.s. 178 37 48	516
Bangalore Base-line N.E. End, LIII* 224 32 3	288		
Gubbi s. 256 40 11	287	<b>Rásimalai h.s.</b>	
Hēnnúr " 329 18 41	285	Kambattimalai h.s. 26 32 28	468
		Koikuttimalai " 195 53 22	462
<b>Rahmanghar h.s.</b>		Pallikōnda " 219 30 57	462
Tirthapalli, XLVI* 20 44 28	208		
Nundydroog h.s. 92 49 1	209	<b>Ráyakota h.s.</b>	
Ambájidurga Building 192 15 17	318	Guttiráyan h.s. 35 1 39	737
Adavi Ávalpalli " 252 50 56	351	Karibētta " 76 5 35	736
Pulgurkote Fort 257 29 31	352	Dēnkanikota Fort 92 48 6	749
Patikōnda, XXIV 286 9 48	207	Hudedurgam Pagoda No. 2 95 9 11	751
Yērrakōnda, XX 331 21 44	207	Ánchēttidurga " 115 51 28	736
		Sulagiri Hill Tree 173 26 35	752
<b>Rájagundlahalli h.s.</b>		Bolkōnda Drug 217 38 20	753
Mulbágal Hill Mark 4 33 32	337	Krishnagiri " 264 16 7	782
Bandapalle, XVIII 10 4 41	334	Daulatabad Palace 271 6 12	782
Kolár, XLVIII* 57 33 15	334	Boditimrázdrug Hill 311 29 27	755
Káriveri, XXI 328 2 7	335	Karimangalam " 317 41 58	739
		Moruvádi " 331 15 15	754
<b>Rakashmalai h.s.</b>		Vírabadondrug Hill " 332 19 40	757
Vēnkatagiri h.s. 34 51 11	401	Pikili " 358 7 45	738
Mugali " 53 45 19	401		
		<b>Red Hills No. 1 h.s.</b>	
<b>Rámadevarabētta, XL*</b>		Tirumulaváyal s. 56 58 59	805
Rangaswámibētta, XLIII* 32 34 31 46	23	Pōttúr h.s. 82 0 4	805
Halasúrbētta, XXXIX* 289 52 25 00	24		
Savandurga, XLI* 342 46 52 13	23	<b>Red Hills No. 2 h.s.</b>	
		St. Thomas's Mount, XLIV 1 57 28	806
<b>Rangaswámibētta, XLIII*</b>		Mángád, XLIII 33 0 9	806
Háltibētta Hill Temple 53 56 52	234	Valankadpákam s. 216 5 41	809
Háltibētta, XV 54 1 39 70	19	Vadapurambákam " 244 0 25	808
Chaudanhalli, XVI 120 27 43 38	21	Madavaram " 281 13 44	807
Rámadevarabētta, XL* 212 31 52 16	23		
Savandurga, XLI* 288 29 16 47	22	<b>Sadaiyankuppam s.</b>	
Hutridurga Hill Mark (helio.) 292 50 5	244	Manali s. 62 34 3	815
Hemagiri, XLIV* 340 6 33 45	19	Elandacheri " 122 8 16	815
		Yarancheri " 169 26 33	816
<b>Rangaswámibētta h.s.</b>		Vichúr " 197 20 2	817
Bēttahalli h.s. 19 50 47	235		
Narsuswámi " 43 27 4	228	<b>Sadam s.</b>	
Háltibētta Hill " 52 38 38	233	Chintemeklapalli h.s. 119 30 4	422
Sēttigēre " 94 5 3	224	Pálamanda " 161 49 23	422
Bōmmanhalli " 125 59 26	213		
Múganáyakankote " 157 13 37	217	<b>Sadras s.</b>	
Devaráyadurga " 214 45 13	213	Kadalúr s. 15 43 14	614
Kunigal Fort 278 42 56	243	Karimarapákam h.s. 118 18 59	612
Savandurga, XLI* 290 0 47	214	Mahábalipuram s. 196 40 46	612
Chikkanamangalam " 304 42 46	241		
Hemagiri " 341 11 21	222		
Huliyúrdurga Building 343 42 26	242		

\* These stations appertain to the Great Arc Meridional Series, Section 8° to 18°.

Name of Station with Asimuths of surrounding Points	No. of Triangle giving Distance	Name of Station with Asimuths of surrounding Points	No. of Triangle giving Distance
<b>Sakanagiri h.s.</b>		<b>Satghur, XXVI</b>	
Marale h.s. 1 32 51	177	Mallánaigdrug h.s. 33 27 0	778
Bába Budan No. 1 „ 68 19 38	177	Krishnamakönda „ 88 43 33	824
Bába Budan No. 2 „ 112 51 14	188	Krishnamakönda, XXII „ 88 45 28.49	58
Kadúr s. 232 56 22	185	Pëddanadrug „ 90 51 29	778
Manjihalli h.s. 292 32 18	178	Devarakönda, XXIII 149 26 54.00	58
Sakkarëpatna s. 318 28 52	184	Mugali, XXV 201 35 2.21	54
		Mugali „ 201 37 11	774
<b>Sakkarëpatna s.</b>		Mugali Beacon 201 37 22	894
Sakanagiri h.s. 138 29 19	184	Chittapára „ 254 10 40	456
Manjihalli „ 277 49 16	184	Batinkönda, XXVII 259 45 26.65	57
		Nágalamalai „ 267 6 13	456
<b>Sampigehalli t.s.</b>		Koikuttimalai „ 268 39 13	461
Basavangudda h.s. 53 57 51	286	Pallikönda „ 285 41 18	457
Bangalore Base-line N.E. End, LIII* 261 51 51	288	Kailáagarh, XXIX 290 7 22.53	61
Ráchënhalli s. 349 20 51	286		
		<b>Sattegál s.</b>	
<b>Santurkopalgudda h.s.</b>		Kuntúr h.s. 47 34 39	698
Partamalaigudda h.s. 249 23 53	80	Kundúr „ 138 12 14	698
Mijár „ 317 38 23	80		
		<b>Sattevaripálëm h.s.</b>	
<b>Saragúrbëtta h.s.</b>		Mailesvaram h.s. 8 43 28	416
Mákalenbëtta h.s. 118 59 20	687	Pullúrdrug Hill 19 25 6	415
Adiganhalli „ 146 36 39	686	Dámalcheri s. 20 25 56	428
Jinahalli „ 183 10 7	685	Töndakönda Hill 23 18 18	413
Arsinkëre „ 227 55 43	685	Kökárayankönda h.s. 37 6 44	426
		Kanialbod Hill Platform 38 25 57	424
<b>Sátanhalli, X</b>		Ávulapallidrug „ 40 13 17	406
Kabbálgiri Hill Temple 45 5 26	167	Chërlakönda Platform 42 50 54	412
Kotëbëtta Hill Peak 55 49 11	158	Bakrapet Choultry 45 19 12	429
Málambi Hill Peak No. 1 59 14 57	155	Nallakönda „ 46 41 0	423
Pushpagiri, IX 70 34 35.80	10	Chinna Göttikallu Fort 51 54 21	431
Maharájdurga Pagoda 98 28 5	163	Chëllappachërugutta Platform 62 18 13	430
Mulagalalejenkal Hill Mark 99 14 42	161	Chintomeklapalli „ 74 0 1	406
Kabbati Hill Pagoda 101 45 39	170	Pálamanda „ 76 27 24	420
Kittávar, VIII 118 16 14.04	10	Döddapalli Hill Platform 78 50 53	421
Handínkëre Hill Temple 133 2 46	169	Motumallela Hill Pagoda 108 20 34	438
Sigëgudda h.s. 148 0 0	159	Tallarapet „ 256 29 3	408
Desáni, XI 171 39 44.34	11	Pëddadrug „ 300 59 50	407
Malëkal Tirupati Temple 186 52 55	148	Ye Avalcheri Platform 325 6 53	439
Mallappanabëtta „ 224 15 29	178	Kallúr Pagoda 333 22 24	438
Nughallibëtta, XIII 234 28 17.18	12	Mangalapëntadrug s. 347 11 55	434
Channaráypatna Fort (helio.) 251 50 36	195		
Bukkadabëtta Hill Pagoda 255 22 15	200	<b>Savandurga, XLI*</b>	
Sravanbëlgöla Statue 268 6 0	197	Hemagiri h.s. 65 58 51	222
Nárayandurga, XIV 289 57 42.34	18	Hemagiri, XLIV* 66 1 3.24	22
Gunjurbëtta Hill Pagoda 300 9 12	198	Bëttahalli „ 85 0 12	235
Yënnë-hölë-ranganbëtta Pagoda 317 57 29	192	Mallappanabëtta „ 90 2 22	201
Adhúrbëtta, XII 350 30 19.21	14	Hutridurga Stone 104 9 25	245
		Rangaswámibëtta, XLIII* 108 33 36.46	22
<b>Sátanúr h.s.</b>		Rangaswámibëtta „ 110 5 6	214
Chotanhalli s. 47 17 28	725	Bömmanhalli „ 118 50 16	201
Muttigëre h.s. 125 26 8	724	Hattýal Hill Pagoda 125 30 19	215
Hemagiri „ 207 47 53	724	Bairandurga Staff 146 36 17	247
Töppanhalli Hill 269 30 41	729	Rámenhalli Hill Pillar 153 12 51	246
Marama Hill Pagoda 274 28 31	730	Rámadevarabëtta, XL* 162 48 36.38	23
Sëttahalli s. 326 17 46	726	Shivaganga Hill Pagoda 164 44 2	249
		Devaráyadurga „ 170 15 24	211
		Sítakal „ 177 11 36	250

\* These stations appertain to the Great Arc Meridional Series, Section 8° to 18°.

Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance	Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance
<b>Savandurga, XLI*—(Contd.)</b>		<b>Sidragudda h.s.</b>	
Bardi h.s. 199 45 42	259	Gardangiri No. 2 h.s. 74 5 0	205
Nundydroog " 220 29 34	210	Somanhalli Ranganagudda " 235 4 50	206
Halasúrbétta, XXXIX* 232 53 12.99	24	Bömmanhalli " 328 2 55	205
Tirthapalli, XLVI* 258 14 16	210		
Bangalore s. 258 56 25	271	<b>Sigögudda h.s.</b>	
Bannergatta, XLII* 291 10 52.62	25	Kundúrbétta h.s. 20 19 47	166
Devarabétta h.s. 311 51 0	262	Mánjarabad No. 2 " 56 56 4	166
Bánatimaribétta, XLV* 346 0 14.16	83	Kittávar, VIII " 80 11 20	159
Bandhallidurga " 356 32 42	264	Desáni, XI 210 51 54	160
Kabbáldurga " 359 41 9	265	Tagadúr " 277 49 21	226
		Mallappanabétta " 308 57 4	174
<b>Seringapatam s.</b>		Sátanhalli, X " 327 57 43	159
Mysore No. 3 h.s. 6 20 52	664	Mávinkérebétta Pagoda 332 41 20	175
Mysore Observatory " 16 12 9	669	Mukundúrbétta Pagoda 340 5 23	174
Mysore No. 1 " 35 36 32	641		
Kannambádi " 105 6 43	640	<b>Sítakal h.s.</b>	
Bebibétta Hill Peak " 129 35 15	653	Héggunda Hill Pagoda 18 42 0	254
Vaddarhalli " 150 34 33	639	Rámadevarabétta Pagoda 35 49 34	253
Seringapatam Monument No. 1 154 2 44	656	Nijagaldurga Pillar 37 2 51	252
Hirod Hill Pillar 187 9 44	654	Devaráyadurga h.s. 132 1 44	252
Byádarahalli " 219 11 31	639	Kalkote " 252 44 11	251
Hunjanékere Hill Peak 269 35 7	664	Halasúrbétta, XXXIX* 295 3 36	250
Ukalgére Hill Pagoda 293 25 40	675	Savandurga, XLI* 357 11. 20	250
Mysore No. 2 " 358 11 16	642		
		<b>Somanhalli Ranganagudda h.s.</b>	
<b>Séttahalli s.</b>		Sidragudda h.s. 55 6 55	206
Jénkal Hill Pagoda 7 33 1	782	Bömmanhalli " 356 12 23	206
Ukalgére Hill Pagoda 22 41 41	727		
Chotanhalli s. 96 5 16	726	<b>St. Thomas's Mount, XLIV</b>	
Sátanúr h.s. 146 18 36	726	Nanmangalam, XLII 12 30 9.29	77
Töppanhalli Hill 233 28 31	729	Pallávaram Hill Mark 42 37 28	551
Marama Hill Pagoda 238 13 1	730	Malaipedu, XXXVI 63 6 14	535
Tálagudi s. 319 38 21	731	Érumaiyúr Hill Staff 66 36 4	540
		Mángád, XLIII 91 42 8.33	77
<b>Séttigére h.s.</b>		Tirumeshi Temple 109 57 5	533
Belúr No. 2 Pagoda 3 8 10	231	Red Hills No. 2 h.s. 181 57 24	806
Ballára h.s. 10 34 13	229	Madavaram s. 191 58 59	807
Battankatte " 80 26 40	230	Madras Flag-staff 231 17 30	574
Tagadúr " 90 55 56	227	Injambákam, XLV 327 32 15.28	79
Bömmanhalli " 156 46 16	224	Madras Base-line S. End " 348 58 30	552
Rangaswámibétta " 274 1 53	224	Pérumbákam h.s. 359 31 8	535
Chunchangiri " 331 27 40	232		
Narsuswámi " 343 29 23	225	<b>St. Thomas's Mount No. 1 s.</b>	
Háltibétta Hill 349 20 33	233	Madras Base-line N. End s. 271 21 16	555
		Madras Base-line S. End " 348 52 44	554
<b>Shivansandra h.s.</b>		Pérumbákam h.s. 359 27 54	554
Betdásanpur h.s. 26 26 26	305		
Uialdinna Mandapam s. 72 40 51	297	<b>St. Thomas's Mount No. 2 s.</b>	
Halasúrbétta, XXXIX* 130 43 38	297	Kunnattúr h.s. 78 28 15	558
Kodagurki h.s. 172 34 40	302	Poonamallee Flag-staff 114 35 50	559
Koliga " 224 29 13	298	Madras Observatory No. 1 s. 219 28 18	564
Malesvaram Hill 248 35 56	317	Köttúr " 249 27 46	563
Höskote Idgah 253 56 9	307	Madras Base-line N. End " 272 36 43	557
Kéndatti Hill Peak 255 32 33	316	Pérumbákam h.s. 359 39 48	557
Guraganjagurki Tree 265 0 3	314		
Apsándra " 267 47 50	311		
Chinnagara " 281 46 26	308		
Hösúr " 343 47 8	311		
Nallurhalli " 353 6 19	306		

\* These stations appertain to the Great Arc Meridional Series, Section 8° to 18°.

Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance	Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance
<b>Surálgudda h.s.</b>		<b>Tandurai s.</b>	
Inadagudda h.s. 77 36 46	94	Malaipedu h.s. 13 19 12	525
Partamalaigudda " 122 23 34	94	Mannúr s. 46 35 42	528
Kárákal Great Statue 155 28 23	95	Tiruvallúr Pagoda 93 19 13	527
		Punák h.s. 94 7 40	525
<b>Súrtikal h.s.</b>		Érumaivéttipálaiyam s. 206 18 20	791
Mijár h.s. 249 31 2	99	Pöttúr h.s. 250 6 42	789
Kulibogudda " 315 45 38	99	Tirumulaváyal s. 268 10 32	804
		Madras " 284 25 36	576
<b>Tadiándamol h.s.</b>		Mángád, XLIII 346 17 58	526
Tellicherry s. 15 57 4	627	<b>Tellicherry s.</b>	
Dharmapatna h.s. 17 56 52.0	620	Cannanore Flag-staff 131 3 1	627
Cannanore Flag-staff 32 48 9	625	Tadiándamol h.s. 195 55 11	627
Yemale No. 2 " 64 46 30.2	619		
Yemale No. 1 " 64 47 14	91	<b>Tirthapalli, XLVI*</b>	
Kandadakamale No. 1 " 115 7 20	91	Höaúr, L* 8 31 27.78	27
Kandadakamale No. 2 " 115 7 47.6	93	Devarabétta h.s. 31 39 51	263
Pushpagiri, IX 189 43 48.4	93	Bannergatta, XLII* 53 17 13.09	26
Pushpagiri Hill Pagoda 189 44 33	677	Turukungutta, LI* 69 52 33.35	41
Mercara Hill Mark 212 20 56	151	Bangalore Church No. 2 75 24 34	275
Mercara " 212 52 26	150	Savandurga, XLI* 78 22 17	210
Béttadpur " 244 35 13	678	Bangalore Church No. 1 79 48 46	273
Nattávaram " 340 10 0.6	621	Mandúr, LIV* 105 59 49.53	42
		Halasúrbétta, XXXIX* 114 55 45.07	26
<b>Taduk h.s.</b>		Kundana h.s. 131 4 9	293
Wudugulúr h.s. 29 52 30	496	Nundydroog " 149 11 2	209
Mudipalli " 117 16 30	495	Nundydroog Hill Mark (helio.) 149 14 37	296
Sattiravádi Hill 155 58 47	499	Nandigudi, XLVII* 183 8 49.63	44
Nagari, XXXIII 182 11 4	494	Rahmanghar " 200 42 48	208
Nemmalai " 289 34 57	494	Kolár, XLVIII* 242 19 58.27	82
		Bhúpatamma, XLIX* 281 51 18.92	31
<b>Tagadúr h.s.</b>		Yérrakönda, XX 293 48 41	208
Mallappanabétta h.s. 48 35 18	226	Ankisgiridrug " 332 4 45	319
Sigégudda " 97 54 44	226	<b>Tirukalikundram h.s.</b>	
Malékal Tirupati Pagoda 149 51 17	228	Kumarakuppam h.s. 10 25 11	608
Bömmanhalli " 220 58 19	227	Karunguli " 66 9 35	608
Séttigére " 270 52 4	227	Pérumbákam " 205 43 37	611
		Mahábalipuram s. 267 42 19	610
<b>Tálagudi s.</b>		Karimarapákam h.s. 335 4 16	609
Ukalgére Hill Pagoda 44 30 11	731	<b>Tirumani, XXXVIII</b>	
Jénkal Hill Pagoda 73 43 1	732	Avirimodu, XXXIX 19 3 29.92	71
Séttahalli s. 139 38 51	731	Madurántakam Pagoda 33 23 20	606
Malvalli " 316 57 51	733	Karunguli Hill Temple 37 6 19	605
		Malavayávúr Hill Temple 56 44 8	596
<b>Tallarapet h.s.</b>		Mávandúr, XXXIV 106 43 5.81	70
Chandragiri s. 4 52 29	441	Édámichi h.s. 109 42 33	589
Ye Ávalcheri Platform 28 20 47	440	Appúr Hill Temple 182 8 2	578
Mailesvaram h.s. 44 11 9	418	Malaipedu, XXXVI 187 9 53.45	70
Mangalapéntadrug s. 46 20 18	435	Pataravákam Hill Mark 213 56 23	588
Chinna Göttikallu Fort 71 0 16	432	Óttivákam Hill Mark 221 9 55	579
Sattevaripálém h.s. 76 31 30	408	Pudupák, XLI 232 55 35.08	73
Péddadrug " 345 38 50	408	Vembed Hill Pagoda 238 49 9	584
		Kovalam Church 241 58 28	582
<b>Támrapákam h.s.</b>		Tiruporúr h.s. 249 51 38	585
Árni Fort s. 3 48 2	473	Mahábalipuram Light-house 280 11 24	601
Karnátakarh h.s. 46 44 34	473	Manamai Kunnatúr, XL 293 20 37.71	72
Arcot Building 198 12 31	475	Tirukalikundram Temple 298 34 16	599
Kaniyanúr " 262 20 56	474	Idaiyúr Hill Temple 311 26 7	598
		Pálar Beacon (heliotrope) 321 25 12	618

\* These stations appertain to the Great Arc Meridional Series, Section 8° to 16°.

Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance	Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance
<b>Tirumani h.s.</b>		<b>Ummattúr h.s.</b>	
Karunguli h.s. 37 1 23	593	Mulaigunte h.s. 96 43 15	682
Édámichi " 109 34 6	593	Hulimáv " 120 51 43	706
Chingleput Fort 178 22 44	594	Mysore No. 3 " 132 40 51	681
		Karigatta " 155 6 51	710
		Arakérbétta " 172 19 11	708
<b>Tirumulaváyal s.</b>		Kundúr " 220 29 9	695
Tandurai s. 88 11 25	804	Muruktóre Hill Pagoda " 227 2 17	699
Pöttúr h.s. 219 10 20	804	Múgúr Pagoda " 229 26 30	701
Red Hills No. 1 " 236 58 15	805	Kuntúr " 248 15 27	697
		Bandhallidurga " 254 28 25	681
		Biligiriranganabétta Pagoda " 288 20 4	702
		Mangala Hill Pagoda " 313 12 44	703
		Haradanhalli Hill Pagoda " 346 7 18	704
<b>Tiruporúr h.s.</b>		<b>Vadapurambákam s.</b>	
Manamai Kunnatúr, XL 8 25 39	585	Madavaram s. 6 41 17	808
Tirumani, XXXVIII 69 54 21	585	Red Hills No. 2 h.s. 64 0 49	808
Pudupák, XLI 183 9 58	586	Valankadpákam s. 164 2 40	809
		Tyambákam " 200 17 33	810
		Mattúr " 258 46 45	811
<b>Tumakónda h.s.</b>		<b>Vaddarhalli h.s.</b>	
Madanapalle s. 30 37 20	370	Kannambádi h.s. 21 53 19	640
Adavi Avalpalli h.s. 40 48 50	350	Bebibétta Hill Peak " 64 37 44	652
Chintemeklapalli " 288 38 35	405	Chinakurali Bungalow " 108 52 29	651
Ávulapallidrug " 313 57 38	350	Attikuppa Bungalow " 133 45 57	645
		Náráyandurga, XIV " 168 53 0	637
		Gadikalbétta Hill Peak " 175 29 28	646
<b>Turukungutta, LI*</b>		Molkote Hill Pagoda " 192 12 58	648
Bangalore Base-line S. End s. 36 37 15	277	Adhibétta, XVII " 234 49 49	637
Bannergatta, XLII* 39 1 40 44	28	Byádarahalli h.s. 277 0 40	638
Bangalore Base-line S.W. End, LII* 105 38 20 17	29	Karigatta Hill Peak " 316 39 56	662
Bangalore Base-line N. End s. 123 5 8	279	Seringapatam s. 330 33 41	639
Bangalore Base-line N.E. End, LIII* 151 51 43 88	30	Mysore No. 2 h.s. 342 15 15	662
Mandúr, LIV* 190 50 9 48	42	Seringapatam Factory " 343 40 4	658
Tirthapalli, XLVI* 249 50 11 34	41		
Hósúr, L* 333 27 8 79	28	<b>Valankadpákam s.</b>	
		Red Hills No. 2 h.s. 36 6 1	809
<b>Turumbétta h.s.</b>		Tyambákam s. 289 2 31	810
Kotébétta h.s. 188 35 44	693	Vadapurambákam " 344 2 36	809
Virarajendrapet " 252 21 46	693		
Watakolli " 291 1 13	694	<b>Vallúr s.</b>	
		Vélliváyal s. 24 38 53	798
<b>Tyambákam s.</b>		Nékkunram " 93 32 38	799
Vadapurambákam s. 20 17 38	810	Káttúr Choultry " 198 29 5	801
Valankadpákam " 109 2 40	810	Váyalúr " 210 42 13	800
Andankuppam " 262 32 40	812	Énnúr No. 1 " 282 20 32	798
Mattúr " 299 57 9	811		
<b>Uialdinna Mandapam s.</b>		<b>Váyalúr s.</b>	
Bannergatta, XLII* 2 7 11	255	Vallúr s. 30 42 41	800
Bangalore Palace 9 10 30	270	Káttúr Choultry " 180 57 23	801
Bangalore h.s. 15 7 50	268	Chintámanikoil " 232 8 58	802
Herohalli s. 82 13 5	267	Énnúr No. 1 " 340 45 46	800
Bánávar h.s. 126 40 30	257		
Bangalore Base-line S.W. End, LII* 141 1 43	256		
Halasúrbétta, XXXIX* 193 34 26	255		
Kodagurki h.s. 203 18 36	301		
Koliga " 240 14 55	299		
Shivansandra " 252 38 43	297		
Betdásanpur " 345 20 8	305		

\* These stations appertain to the Great Arc Meridional Series, Section 8° to 18°.

Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance	Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance
<b>Vēlagaram h.s.</b>		<b>Vēnkatagiri h.s.</b>	
Kuripati h.s. 217 38 22	487	Mugali h.s. 72 40 39	399
Pērmanallūr " 319 3 9	487	Rakashmalai " 214 50 34	401
		Muruktōre, XXVIII " 248 5 53	400
		Chittapāra " 305 53 19	399
		Kamalगत " 313 52 42	403
		Gurigukōnda " 332 59 4	402
<b>Vēlagutta Rock s.</b>		<b>Vēnkatagiri s.</b>	
Ēttipati h.s. 24 57 28	746	Yērrakōnda, XX 61 13 42	339
Singarpet Village " 92 58 58	766	Vēnkatagiri Fort " 130 40 52	340
Podhari " 106 11 8	746	Krishnamakōnda h.s. 338 44 2	339
<b>Vēlkūr h.s.</b>		<b>Vichūr s.</b>	
Chittapāra h.s. 21 39 27	445	Sadaiyankuppam s. 17 20 9	817
Gudipatipālēm Platform " 33 42 12	448	Elandacheri " 49 13 8	818
Muruktōre, XXVIII " 111 55 4	445	Yarancheri " 88 34 26	817
Patūr " 147 37 46	447	Karimmod " 187 17 20	819
Allamadugu " 221 27 36	478	Ēnnūr No. 2 " 237 45 47	820
Pullūr, XXX " 269 9 16	446	Ēnūr No. 8 " 238 51 27	821
Anandalamalai, XXXI " 322 47 2	446		
Narikaldrug Pillar " 349 13 50	449		
<b>Vēllārmalai h.s.</b>		<b>Vilankād h.s.</b>	
Mukanūr h.s. 93 21 21	743	Karunguli h.s. 167 34 10	607
Kambainēllūr Fort " 156 52 43	763	Vēmmani " 219 15 41	616
Barūr Rock " 163 57 45	762	Kumārakuppam " 219 51 57	607
Podhari " 204 32 38	743	Kuppam s. 302 39 57	615
Arūr " 301 45 45	744	Alambarai Fort " 314 8 47	618
		Marakanam " 345 34 35	615
<b>Vēllivāyal s.</b>		<b>Vīrarājendrapet h.s.</b>	
Pōttūr h.s. 54 38 48	790	Watakoli h.s. 24 30 49	694
Attantāngal s. 68 33 42	793	Turumbētta " 72 23 10	693
Nēkkunram " 117 55 20	795	Kotēbētta " 170 56 49	691
Vallūr " 204 38 42	798	Bēttadpur " 230 46 44	692
Ēnnūr No. 1 " 257 19 26	797	Mākalenbētta " 253 13 12	691
Ērnāvūr " 318 20 48	796		
Madras " 348 21 42	790		
<b>Vellore h.s.</b>		<b>Watakoli h.s.</b>	
Karnātakgarh h.s. 11 53 24	451	Turumbētta h.s. 111 2 14	694
Kailāgarh " 44 1 18	452	Vīrarājendrapet " 204 30 26	694
Pallikōnda " 83 48 16	458		
Pallikōnda Pagoda " 88 59 41	464	<b>Wudugulūr h.s.</b>	
Virinjipuram Pagoda " 92 59 15	466	Ipurgutta h.s. 27 0 44	500
Nāgalunalai " 103 53 33	455	Mudipalli " 174 45 48	497
Vellore Pagoda " 108 22 0	469	Taduk " 209 52 2	496
Chittapāra " 158 57 12	453	Nemmalai " 248 56 44	496
Karigiri " 197 25 24	471	Punāk " 311 10 32	498
Anandalamalai, XXXI " 266 12 39	451		
<b>Vēmmani h.s.</b>		<b>Yarancheri s.</b>	
Vilankād h.s. 39 16 17	616	Elandacheri s. 24 14 28	816
Kumārakuppam " 220 25 50	617	Karimmod " 232 16 13	819
Kuppam s. 339 18 54	616	Vichūr " 268 34 15	817
		Sadaiyankuppam " 349 26 29	816

AZIMUTHS OF STATIONS AND INTERSECTED POINTS.

Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance	Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance
<b>Yemale No. 1 h.s.</b>		<b>Yërrakönda, XX</b>	
Bekal s. 155 31 38	90	Mallappakönda h.s. 20 47 20	780
Kandadakamale No. 1 h.s. 184 20 29	90	Ankisgiridrug " 44 3 4	320
Tadiändamol " 244 41 57	91	Tirthapalli, XLVI* 113 53 56	208
Cannanore Flag-staff 316 31 9	625	Bhúpatamma, XLIX* 125 8 57'50	47
		Rahmaughar " 151 25 19	207
<b>Yemale No. 2 h.s.</b>		Beturáyankönda " 159 44 57	325
Kandadakamale No. 2 h.s. 184 20 50'7	619	Ámanikönda Hill Mark 185 46 20	331
Tadiändamol " 244 41 22'8	619	Bandapalle, XVIII 198 17 18'95	47
Dharmapatna " 315 43 22'0	620	Patikönda, XXIV 229 51 14	207
Cannanore s. 317 54 52	624	Vënkata giri s. 241 10 44	339
<b>Yerchikallu h.s.</b>		Krishnamakönda, XXII 250 34 55'19	48
Përmanallúr h.s. 49 44 11	488	Krishnamakönda h.s. 250 36 44	325
Kuripati " 119 26 44	488	Kailásgarh " 272 13 55	343
		Devarakönda Hill Pagoda 316 23 58	768

\* These stations appertain to the Great Arc Meridional Series, Section 8° to 18°.

May, 1892.

S. G. BURRARD,

In charge of Computing Office.



## MADRAS LONGITUDINAL SERIES.

## CO-ORDINATES AND DESCRIPTIONS OF ALL STATIONS AND POINTS.

The following table gives the co-ordinates of all stations and other fixed points, arranged in alphabetical order, also the descriptions of the secondary and intersected (or unvisited) points, and references to the preceding pages where the descriptions of the principal stations are given.

NOTE.—Principal stations are followed by the Roman numerals I, II, &c., secondary stations by the letters h.s., s. and t.s. Stations and points fixed by Colonel Lambton's triangulation have his nomenclature given also, in italics, immediately below their names. The year or season when a station or point was originally fixed is given usually after its description.

For visited stations and points of superior accuracy, the values of latitude and longitude are given to two places of decimals, for well determined objects to one place, and for the remaining points to the nearest second.

The trigonometrical heights in general refer to the upper surface of the pillar or to the mark engraved on top of pillar, building, &c.; but in exceptional cases, where the information is forthcoming in the field books, the surfaces to which the heights refer are specified in footnotes. The spirit-levelled heights are given to two places of decimals of a foot, and the surfaces to which they refer are also indicated in footnotes. In a few cases, where trigonometrical heights do not exist, but values have been found on the Topographical Survey maps, these values have been reduced to the same terms as the trigonometrical heights and enclosed in brackets, thus [2981]; the surface to which they refer may be assumed to be the ground level. In the column of heights, the upper numeral gives the height of the station above mean sea level and the lower is that of the structure itself above ground level.

The numerals in the last column indicate the triangles given on pages 21—*a*. to 58—*a*., by which the station or point has been fixed; when these numerals are omitted it is to be understood that no triangles are given.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Adavi Ávalpalli h.s. <i>Adavee Auvulpilly H. S.</i>	Cuddapah	On a projecting rock, about $\frac{1}{4}$ of a mile E. by S. of Ávalpalli village, $2\frac{1}{4}$ miles N.E. by N. of Náranganpalli, 3 miles S.W. by S. of Malaipád, and 9 miles S.W. of the town of Madanapalle: taluk Madanapalle. The station is denoted by a platform with a mark-stone in the middle. 1805.	0 1 " 13 28 19.23	0 1 " 78 26 35.76	feet ...	349
Adhibëtta, XVII	Mysore	<i>Vide page 9—<i>a</i>.</i>	12 38 15.11	76 49 8.29	$\frac{2888}{2.0}$	17
Adhúrbëtta, XII	"	<i>Vide page 8—<i>a</i>.</i>	12 28 52.99	76 19 7.29	$\frac{2828}{*}$	14
Adiganhalli h.s. <i>Addigunkully</i>	"	At the N.W. end of a short range of hills running from S.E. to N.W., about $\frac{1}{4}$ a mile S. of the high road from Ilúnsúr to Périyapatna, and 3 miles W. of the town of Ilúnsúr: taluk Ilúnsúr. 1802-6.	12 18 29.57	76 17 6.93	[2981]	686

\* See description of this station.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Ágshíspuram Hill Pagoda <i>Augsheesprum H.P.</i>	North Arcot (Árkád)	Large pagoda, about 6 miles E. by N. of Punganúr town on the main road from Palmaner to Madanapalle. 1812.	13 21 41.0	78 42 1.1	feet ...	376 377
Alambarai Fort <i>Allumparva</i>	Chingleput (Chéngalpat)	N.W. turret of the fort near the coast, about $\frac{1}{2}$ of a mile S.W. of the hamlet of Pattanavarkuppam, and $5\frac{1}{2}$ miles S. of the large village of Seyúr: táluk Madurántakam. 1802-3.	12 16 5.1	80 3 13.5	...	618
Alankarai h.s. <i>Allangherry</i>	Salem (Sélam)	On a small isolated hill about $\frac{1}{4}$ of a mile E. by S. of the village so called, $3\frac{1}{2}$ miles E.N.E. of Dharmapuri town, and $\frac{1}{2}$ of a mile N. of the road from this town to Morappúr Station of the Madras Railway, S.W. Line: táluk Dharmapuri. 1802-6.	12 8 55.48	78 15 9.16	...	740
Allamadugu h.s. <i>Allummargo H.</i>	North Arcot	On the hill locally known as Pëddakönda, about $1\frac{1}{2}$ miles N.W. of the village so called: zamindári Kárvétnagar. 1802-6.	13 21 48.97	79 19 38.54	...	478 479
Ámanikönda Hill Mark	Kolár	On a small isolated hill having the village of Devaráysandra at its N.W. foot, about 2 miles N.W. of Ávani, and 6 miles W.S.W. of Mulbágal town: táluk Mulbágal. 1865-66.	13 7 31.23	78 20 45.88	[3601]	331 332
Ámanikönda Hill Pagoda <i>Auminycondah</i>	"	On an isolated hill having the village of Ávani at its E. foot, about 2 miles S.E. of Ámanikönda peak, and 6 miles S.W. by W. of Mulbágal town: táluk Mulbágal. 1802.	13 6 20.5	78 21 55.2	...	333
Ambájidurga Building <i>Amboidedroog</i>	"	Highest building on the summit of a detached hill, about $1\frac{1}{2}$ miles S.S.W. of Kónpalli, the same distance S.E. by E. of Upparpet, 2 miles N.N.E. of Mailapur, and $2\frac{1}{2}$ miles W.S.W. of Chintámani town: táluk Chintámani. 1806-12.	13 23 32.5	78 3 31.5	[4392]	318*
Ambúr Drug <i>Aamboor dr.</i>	North Arcot	On a hill, about 4 miles N. by W. of Ambúr Railway Station on the line from Jalárpét to Arkonam. 1802-6.	12 50 11	78 44 34	...	...
Ammapet Pagoda <i>Nepetory P.</i>	Salem	On the right bank of the Pönniár river, about 6 miles N.E. of the junction of the roads from the towns of Úttankarai and Arúr. 1803.	12 9 8.5	78 41 6.0	...	†
Ammédikal, V	South Canara (Kannada)	<i>Vide page 7—G.</i>	12 58 36.28	75 33 12.77	$\frac{4261}{1.2}$	1
Amrutúr Pagoda <i>Amaratoor H.P.</i>	Túmkúr	In a fort, about $\frac{1}{2}$ a mile N. of the village so called towards the S.W. end of a large tank, and 1 mile W. of Sondékóppe: táluk Kunigal. 1801.	12 55 18.6	76 58 44.9	...	240
Amrutúr s. <i>Amaratoor Station</i>	"	About $1\frac{1}{2}$ miles W. by N. of the village so called towards the S.W. end of a large tank, and 1 mile S.W. by S. of Chinnahalli: táluk Kunigal. 1801.	12 55 5.89	76 57 9.41	...	239
Anandalamalai, XXXI <i>Hanandamalli S.</i>	North Arcot	<i>Vide page 16—G.</i>	12 55 50.73	79 26 13.94	$\frac{926.96}{5.0}$	60, 62

\* For another triangle fixing this point, see the Synoptical Volume of the Great Arc Meridional Series, Section 8° to 18°.

† For triangle fixing this point, see the Synoptical Volume of the South-East Coast Series.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Anantapur h.s. ... <i>Anantapoor</i>	South Canara	About 6 miles N. of Kásaragod town. 1802-6. ...	0 1 " 12 34 41'56	0 1 " 75 1 39'71	feet ...	109 110
Ánchëttidurga, LVI*	Salem	<i>Vide</i> page 18—G. ...	12 35 17'99	77 55 53'74	$\frac{3192}{\dagger}$	38
Ánchëttidurga h.s. <i>Anchitty Dr.</i>	"	On a mandapam about 170 feet N.N.E. of the principal station of this name: táluk Hósúr. 1803-4.	12 35 19'60	77 55 54'28	...	784
Andankuppam s. ...	Chingleput	About 200 yards W. of the village of this name, $\frac{1}{4}$ a mile N.W. of Kadappakkam, $\frac{1}{2}$ of a mile N. of Vaikad, and the same distance W.N.W. of Elandacheri on the main road from Madras to Vallúr salt station. On the edge of the N. corner of a bit of waste land which, except within a few yards of the station, is sometimes cultivated with dry crops. The station is about 2 feet above the general ground level of the more arable and cultivated parts: táluk Saidápet. The station consists of a pillar of masonry 2 feet below and 2 feet above the surface of the ground; the lower portion is 3 feet square and the upper tapers from 2 to $1\frac{1}{2}$ feet square; the pillar contains three mark-stones, one at the foundation, the second at the ground level, and the third on the top, and is covered over by a mound of earth. 1886-87.	13 11 26'60	80 18 4'53	16	812
Ánékal Durga ... <i>Annicul Drg.</i>	Bangalore (Béngalúr)	On a conspicuous hill, about a mile W.N.W. of the large village of Jálmangala, $2\frac{1}{2}$ miles N.E. by N. of Chikganvádi, 2 miles E.N.E. of Akkúr, and $1\frac{1}{2}$ miles S. by E. of Gejgárkuppe: táluk Closepet. 1801.	12 49 31	77 14 53	[3832]	728
Ánékal Pagoda ... <i>Annicul</i>	Bangalore	In the fort of this town: táluk Ánékal. 1801. ...	12 42 29'3	77 44 11'4	...	...
Anganamalai Hill Pagoda <i>Unganamalli</i>	Salem	About $1\frac{1}{2}$ miles N.E. of Mahárájagadi, and 8 miles N.N.E. of Krishnagiri town: táluk Krishnagiri. 1802-6.	12 37 59'4	78 18 47'3	...	...
Angargudda h.s. <i>Ungargooda</i>	South Canara	On a hill peak about 4 miles S.E. by S. of Múdu Bidare. The station is marked on a platform. 1803-4.	13 1 12'16	75 4 17'23	...	125
Ankalamman Platform <i>Ankal Ummen</i>	North Arcot	On a small detached hill about 2 miles N.E. of the large village of Chaudapalli on the road from Punganúr. The point is denoted by a mark in the centre of the platform. 1812.	13 26 47'17	78 45 14'10	...	380 381
Ankisgiridrug h.s. <i>Ankisgherry Dr.</i>	Salem	On a hill, about a mile W.S.W. of Máranambayilu, the same distance S.S.E. and E. by N. of Agraharamkampakal and Sorakkappati respectively, and $2\frac{1}{2}$ miles N.E. by N. of Kundalappati close N. of the road from Hósúr to Krishnagiri: táluk Hósúr. The station is marked by a circle engraved on a rock. 1802-6.	12 40 22'54	78 7 34'20	...	319 320
Ánúr, VI ...	Kadúr	<i>Vide</i> page 7—G. ...	13 18 29'67	75 41 48'43	$\frac{4885}{2'2}$	1
Appúr Hill Temple	Chingleput	Spire of temple on a small, low, isolated hill about $\frac{1}{2}$ of a mile E. of the village so called, and 3 miles N.N.W. of Singapérumálkoil Railway Station on the line from Chingleput to St. Thomas's Mount: táluk Chingleput. 1879-80.	12 48 9'4	80 1 39'0	$\dagger$ 516	578

\* This station appertains to the Great Arc Meridional Series, Section 8° to 18°.

† See description of this station.

‡ To flat roof of temple.

## CO-ORDINATES AND DESCRIPTIONS OF ALL STATIONS AND POINTS.

91—G.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Apsáandra h.s. ... <i>Appasundra H.</i>	Bangalore	On a pagoda on a small isolated hill about $\frac{1}{4}$ a mile N.E. by N. of the village so called, $1\frac{1}{4}$ miles S. of Nallál, and $7\frac{1}{2}$ miles E. of Hóskote town: táluk Hóskote. The station is denoted by a mark on the top of the pagoda which is a small square building without a tower. 1801.	13 35 14	77 56 38.89	feet [3099]	311
Arakërebëtta h.s. <i>Arakerrabetta</i>	Mysore (Maisúr)	On a hill, about 2 miles E.N.E. of Arakëre village which is $8\frac{1}{2}$ miles E. of Seringapatam (Srirangapatna) and 6 miles W.N.W. of the large village of Bannúr on the road to Seringapatam: táluk Seringapatam. The station is denoted by a mark-stone in the centre of a platform. 1802-6.	12 25 15.24	76 52 56.13	[2775]	708 709
Arcot Building ... <i>Arcot</i>	North Arcot	S.W. angle of the Nawáb's house in the fort of this town: táluk Arcot. 1802-8.	12 54 8.2	79 22 31.4	...	475
Arcot, Ráuípet ... <i>Arcot Cantonments</i>	"	The point is in the European station of Ránipet on the left bank of the Pálár river, about 8 miles from the Railway station: táluk Wáíajápet. 1802-8.	12 55 47	79 22 13	...	506
Árni Fort (heliotrope)	"	On the S.W. bastion of the fort, about $\frac{1}{4}$ a mile S. of the Kamandala river. The high road from Polúr to Arcot runs through the town of Árni: zamíndári Árni. The point is denoted by a mark-stone set in masonry. 1879-80.	12 40 4.52	79 19 15.31	514	*
Árni Fort s. ... <i>Arnee</i>	"	On the S.E. cavalier of the fort immediately N. of the town so called on the high road from Polúr to Arcot, and about 5 miles N.E. of the large village of Aliyabad: zamíndári Árni. 1802-8.	12 40 4.00	79 19 32.48	...	*
Árni Monument ... <i>Arnee</i>	"	About $\frac{1}{4}$ of a mile N. by W. of Árni Fort: zamíndári Árni. 1802-8.	12 40 14.0	79 19 30.6	...	472
Arsinkëre h.s. ... <i>Arsenkerrae</i>	Mysore	On a hill, about a mile S.S.W. of the village of the same name, $1\frac{1}{2}$ miles E. of Gujgandanpur on the road from Antarsante to Mysore, $4\frac{1}{2}$ miles N. by W. of Hulhalli, and 9 miles W. by N. of Nanjangúd town: táluk Mysore. 1802-6.	12 9 26.20	76 34 49.45	[2668]	688
Arubële Chapel ...	Bangalore	Centre of the tower of the Roman Catholic Chapel in the village of this name also known as Hárðhalli, about a mile N. of Nalhalli, $2\frac{1}{2}$ miles N.E. of Uyamballi, and 10 miles S. of Kánkánhalli town: táluk Kánkánhalli. 1866-67.	12 24 5.2	77 28 6.2	...	...
Arumbákam h.s. ... <i>Urrumbaucum H.S.</i>	Chingleput	On the top of a small detached hill on the N.W. bank of the Kórtalayár river, about $\frac{1}{4}$ a mile W. of the village of this name, and $5\frac{1}{2}$ miles N.W. of Tiruvallúr town: táluk Tiruvallúr. The station is marked by either a circle and dot or a round stone perforated at the centre in the middle of a platform. 1802-8.	13 11 59.20	79 53 23.95	321	519
Arúr Fort ... <i>Hurroor</i>	Salem	At the junction of the main roads from Dharmapuri, Úttankarai and Morappúr Railway Station, about 8 miles S.E. of the latter place. 1802-6.	12 2 44	78 31 33	...	†

\* For triangle fixing this point, see the Synoptical Volume of the South-East Coast Series.

† For triangle fixing this point, see the Synoptical Volume of the Great Arc Meridional Series, Section 8° to 18°.

## MADRAS LONGITUDINAL SERIES.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Arúr h.s. ... <i>Hurroor H.</i>	Salem	On a small isolated hill about 2½ miles S.E. of the place so called at the junction of the main roads from Dharmapuri, Úttankarai and Morappúr Railway Station, and 1½ miles S. of Máveripati. 1802-6.	12 1 38·85	78 32 39·57	feet ...	744
Attantánga! s. ... <i>Autungtallum</i>	Chingleput	About a mile S.W. by W. of the village of this name, 1½ miles E.S.E. of Alamári on the main road from Tiruvallúr to Madras, and 3 miles S. by W. of Solavaram on the high road from Nellore (Nellúr) to Madras: táluk Pönnéri. 1802-3.	13 11 36·67	80 11 44·13	...	792 798
Attikuppa Bungalow	Mysore	E. end of the roof of the travellers' bungalow about a mile S. of the town of this name, at the junction of the roads from Attikuppa with that from Channaráypatna to Seringapatam: táluk Attikuppa. 1867-68.	12 39 24·3	76 31 49·1	2669	645
Avirimodu, XXXIX	Chingleput	<i>Vide page 17—G.</i> ... ..	12 27 13·49	79 57 8·32	$\frac{490}{1·6}$	71
Ávulapallidrug h.s. <i>Auvulpully Dr. S.</i>	North Arcot	On a very high and well-known drug: zamíndári Pungánúr. The station is denoted by a platform surmounted by a pile of stones. 1812.	13 23 20·83	78 55 5·42	3847	848
Bába Budan Hill Peak	Kadúr	Also known as Mulaingiri peak. Summit of the southern of the Bába Budan or Chandradrona Hills, about 2 miles W.N.W. of Hóshalli on the road from Chikmagalúr to Santaveri, 2½ miles W. of Dásarahalli, 2½ miles N. of Hirékolale, and 3 miles N.W. of Alampur: táluk Chikmagalúr. 1872-73.	13 23 23	75 45 47	6310	†
Bába Budan No. 1 h.s.	"	On a high point towards the S.E. portion of the Chandradrona Hills, about 2½ miles N.W. by W. of Hébbali near the road from Chikmagalúr to Santaveri, 3 miles W. of Linganahalli village, 1½ miles N.N.W. of Arasinguppe, 2½ miles N. by E. of Dásarahalli, and 6½ miles N. of Chikmagalúr: táluk Chikmagalúr. The station is denoted by a mark-stone securely embedded in an old platform about 6 feet in diameter. 1872-73.	13 25 6·44	75 48 18·92	6209	§
Bába Budan No. 2 h.s. <i>Bababooden</i>	"	Also known as Kalhattigiri. On an embankment on the summit of the flat-topped hill to the S.S.E. of the Government houses at Kalhatti, about 2 miles W. of Santaveri travellers' bungalow on the road from Chikmagalúr to Tarikére, and 2½ miles E. by N. of Virupakshikan bungalow: táluk Tarikére. The station is denoted by a circle and dot engraved on a piece of hard stone embedded in the embankment. When visited in 1872-73, the old station mark was found intact. 1813.	13 30 56·79	75 48 53·91	6151	‡ 183
Bába Budan Pagoda <i>Purdaesheemutta P.</i>	"	Also known as Pardeshímáta. Summit of the southern of the Bába Budan or Chandradrona Hills, about 2 miles W.N.W. of Hóshalli on the road from Chikmagalúr to Santaveri, 2½ miles W. of Dásarahalli, 2½ miles N. of Hirékolale, and 3 miles N.W. of Alampur: táluk Chikmagalúr. 1805.	13 23 23·1	75 45 47·4	...	†
Bairandurga Staff ... <i>Byramdroog</i>	Bangalore	A large staff on the W. end of a conspicuous hill, about a mile E. of Golhalli, the same distance W. by N. of Malligunte, and 2 miles N. of Narsándra village between the 33rd and 34th mile-stones on the high road from Nélamangala to Kunigal: táluk Mágadi. 1801.	13 5 37	77 12 58	[3492]	247

\* To eastern end of roof.

† For triangles fixing this point, see the Synoptical Volume of the Mangalore Meridional Series.

§ For triangle fixing this station, see the Synoptical Volume of the Mangalore Meridional Series.

‡ For triangle fixing this station, see the Synoptical Volume of the Mangalore Meridional Series.

CO-ORDINATES AND DESCRIPTIONS OF ALL STATIONS AND POINTS.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Bakrapet Choultry <i>Baukrapetti ch.</i>	North Arcot	Tiled choultry about 8 miles S.E. by S. of Pfler on the main road from Váyalpád town to Karakambádi: táluk Chandragiri. 1812.	13 33 17' 2	79 2 23' 0	... feet	429
Bálesvaramkõnda h.s. <i>Vaul Eeshrumcondah</i>	Kolár—North Arcot	On a pagoda on the highest part of a conspicuous hill, about a mile N. by W. of Pilgundlapalli, 1½ miles S.W. by W. of Gundvarpalli, 2 miles N.E. by E. of Kullagurki, and 3 miles S.E. by S. of Pulgurkote: táluk Chintámani, 1812.	13 23 43' 02	78 25 26' 93	[3950]	353
Balláráyandurga h.s. <i>Balroyndroog S.</i>	Kadúr	On a square redoubt on the summit of a well-known hill in the Western Gháts, about 2 miles W. by S. of Mudagundi, 1 mile S. of Hõrikán bungalow, and 8 miles S.E. by S. of the Kalasa travellers' bungalow: táluk Múdgere. The station is marked by a circle and dot on the S. angle of the redoubt. 1805-6. It was revisited in 1871-72.	13 7 50' 72	75 27 23' 55	4934	123 124
Ballamale, IV	South Canara	<i>Vide page 6—G.</i>	12 48 32' 03	75 7 45' 46	$\frac{813 \cdot 94}{\dagger}$	5
Ballamale h.s. <i>Bullamully H.S.</i>	"	About 17 feet S.W. by S. of the principal station of this name: táluk Kásaragod. The station is marked by a circle and dot cut on a stone. 1803-6.	12 48 31' 89	75 7 45' 36	790	84
Ballanád Hill Peak	"	A forest-clad hill, about 2 miles W. by S. of Putúr, and 8 miles S.W. of Uppinangadi town: táluk Uppinangadi. 1871-72.	12 43 58	75 12 23	$\ddagger$ 964	108
Ballanád h.s. <i>Bullanauddgooda</i>	"	On a flat-topped hill, about 2½ miles W. by S. of Putúr, and 8 miles S.W. of Uppinangadi town: táluk Uppinangadi. The station is marked at the centre and bottom of a pile of stones. 1803-6.	12 45 10' 12	75 12 30' 57	...	87
Ballára h.s. <i>Bollara Rock</i>	Hássan	Near a large stone on the top of nearly the western of a great cluster of hills, about a mile N.N.W. of Chunchanhalli village on the high road from Nágamangala to Nittur: táluk Nágamangala. The station is denoted by a pile of stones. 1801.	13 1 56' 18	76 46 23' 50	...	229
Bánásuram Hill Peak	Malabar (Malayám)	Pile of stones on the summit of a hill known as Buffalo's Hump. About 4 miles S.S.E. of Korothangádi, and 9½ miles S.W. of Manantoddy (Mánantavádi). 1872-73.	11 41 34' 8	75 56 58' 0	6758	630 631
Bánatimaribëtta, XLV§	Bangalore	<i>Vide page 11—G.</i>	12 33 52' 28	77 25 26' 17	$\frac{3419}{**}$	33, 37
Banavanakal h.s. <i>Bannawuncul</i>	Salem	On a hill, about 3½ miles W. of Basavanhalli, 2 miles S.E. of Këmbathalli, and 6 miles S.S.W. of Táli at the junction of the roads from Hõsúr and Dënkankota: táluk Hõsúr. 1802-6.	12 30 33' 36	77 39 25' 26	...	747 748
Bánávar h.s. <i>Bonapooram H.</i>	Bangalore	On the top of a detached hill, about ¼ of a mile S.W. of the Railway station so called on the line from Tímikúr to Bangalore: táluk Bangalore. The station is marked on the trunk of a tree S. of a pagoda. 1801.	13 4 19' 06	77 32 28' 09	[3101]	257

\* To top of rectangular protecting pillar, the assumed height of which above circular pillar is 3' 5 feet.  
 † See description of this station. ‡ To summit of peak.

## MADRAS LONGITUDINAL SERIES.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Bánávar s. ...	Hásson	The station is denoted by a circle and dot engraved on the S. (central) bastion of the fort of the town of this name: táluk Arsikére. 1872-73.	13 24 31.22	76 12 14.05	2584	190 191
Banavaram h.s. ... <i>Bannavaram H.</i>	North Arcot	On a small isolated hill about $\frac{1}{2}$ a mile S. of the Railway line from Beypore (Bepúr) to Madras, and $2\frac{1}{2}$ miles E. of Banavaram village: táluk Wálajápet. 1802-3.	13 0 50.58	79 33 43.66	...	509
Bandapalle, XVIII	Kolár	<i>Vide page 14—G.</i> ...	13 4 35.48	78 23 22.25	$\frac{2819}{*}$	46
Bandapalle h.s. ... <i>Oorcoontabunda</i>	"	About 99 feet S.S.W. of the principal station of this name: táluk Mulbágal. 1802.	13 4 34.52	78 23 22.02	...	328 329
Bandhallidurga h.s. <i>Bundhully Dr. S.</i>	Coimbatore (Koyambatur)	About 42 feet W.N.W. of the principal station of this name of the Great Arc Meridional Series, Section 8° to 18°. On a high peak locally known as Vikkarámgi, about 3 miles N.N.W. of the large village of Bandhalli, and 9 miles S.W. of the confluence of the Arkavati and Cauvery (Káveri) rivers; the peak rises about 2000 feet above Bandhalli village and 700 feet above a table-land on which stands a small village known as Bëttayúr: táluk Kóllegál. The station is denoted by a mark on the platform of a small building on the highest pinnacle of the droog, and is covered over by a pyramid of bricks several feet high. There is another building close to it to the west. 1803-6.	12 12 10.53	77 22 41.06	4282	264
Bangalore Base-line N. End s. <i>Base in 1804</i>	Bangalore	Close E. of Bánasvádi village, and $1\frac{1}{2}$ miles N.W. by W. of Kóttúr Railway Station: táluk Bangalore. The station consists of a masonry platform about 4 feet square and $2\frac{1}{2}$ feet high, having in the centre a large picket hooped at the top with iron, two inches of which appear above the masonry. When visited in 1865-66, it was identified and marked by a circle and dot (placed in the normal of the old mark) engraved on a stone embedded in the upper surface of an isolated pillar built over the old mark; this again is surrounded by a rough masonry platform 16 feet square and 4 feet high. 1804.	13 0 39.84	77 41 54.30	3025	278 279
Bangalore Base-line N.E. End, LIII†	"	<i>Vide page 12—G.</i> ...	13 4 56.05	77 41 43.41	$\frac{3016.41}{§}$	80, 43
Bangalore Base-line S. End s. <i>Base in 1804</i>	"	About $\frac{1}{2}$ of a mile W. by N. of Harlúr village, 1 mile N. of Kúdlu, and $1\frac{1}{2}$ miles S. by E. of Agara on the road from Bangalore to Sarjápúr: táluk Bangalore. The station consists of a masonry platform about 4 feet square and $2\frac{1}{2}$ feet high, having in the centre a large picket hooped at the top with iron, two inches of which appear above the masonry. When visited in 1865-66, it was identified and marked by a circle and dot (placed in the normal of the old mark) engraved on a stone embedded in the upper surface of an isolated pillar built over the old mark; this again is surrounded by a masonry platform 16 feet square and 5 feet high. 1804.	12 54 5.12	77 41 48.88	3004	277
Bangalore Base-line S.W. End, LII†	"	<i>Vide page 12—G.</i> ...	13 0 40.91	77 37 27.37	$\frac{3125.75}{§}$	29

\* See description of this station.  
† To mark on roof of observatory.

† These stations appertain to the Great Arc Meridional Series, Section 8° to 18°.  
§ See description of this station.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Bangalore Church No. 1 ...	Bangalore	Spire of St. John's Church on St. John's Hill in the Cantonment, about 630 yards S.W. of the N.W. end of the Halsúr tank, and a little over a mile E. of the Cantonment Railway Station: táluk Bangalore. 1865-66.	12 59 26' 2	77 39 17' 7	<i>feet</i> * 3058	273 274
Bangalore Church No. 2 ...	"	Centre of tower of the Trinity Church in the Cantonment, about 500 yards S. of the S. end of the Halsúr tank, and 1 mile E. by N. of the Convent and B. C. Cathedral: táluk Bangalore. 1865-66.	12 58 15' 3	77 39 45' 0	...	275 276
Bangalore Flag-staff ...	"	Government House Flag-staff near the new Post Office, and N. of the Public Offices of the Mysore Government (1867) in the Cantonment, about $\frac{1}{4}$ of a mile N.E. by E. of the Jail, and 1 mile S. by W. of the Cantonment Railway Station: táluk Bangalore. 1865-66.	12 58 50' 3	77 38 3' 3	[3035]	...
Bangalore Hill Pagoda <i>Bussawun P.</i> ...	"	The highest gopuram on a small isolated hill about $\frac{1}{4}$ miles S. by W. of Bangalore fort, $\frac{1}{4}$ of a mile S.E. of Sunkenhalli hamlet, and 1 mile N.W. by N. of Yédiyúr village on the road from Bangalore fort to Kánkánhalli town: táluk Bangalore. 1804. It was refixed in 1866-67.	12 56 25' 9	77 36 35' 3	...	269
Bangalore h.s. ... <i>Bangalore Old Pagoda</i>	"	On a hill, about a mile N.W. of Yédiyúr village on the road from Bangalore fort to Kánkánhalli, and $\frac{1}{4}$ miles S.S.W. of the former place: táluk Bangalore. The station is denoted by a mark in the centre of a platform. 1801.	12 56 19' 15	77 36 15' 98	[3049]	268
Bangalore Palace ... <i>Bangalore</i>	"	Centre of the palace in the fort: táluk Bangalore. 1801.	12 57 29' 0	77 36 56' 5	...	270
Bangalore s. ...	"	On the tower of St. Andrew's Kirk on the N. side of the General Parade Ground in the Cantonment, about $\frac{1}{4}$ of a mile nearly E. of the Government House, and 700 yards N.E. of St. Mark's Church: táluk Bangalore. 1866-67.	12 58 40' 53	77 38 46' 11	† 3003.	271 272
Bangárbelige Hill Peak ...	Kadúr	Summit of a prominent peak between Kudurémukha and Balláráyandurga, near the boundary between the districts of South Canara and Kadúr, about $\frac{1}{4}$ miles S. by E. of Malvádi, $2\frac{1}{4}$ miles S.W. by W. of Bangárbelige, and $2\frac{1}{4}$ miles S.W. by S. of Guttérka: táluk Múdgere. 1872-73.	13 7 59	75 21 20	‡ 5643	§
Bannergatta, XLII** <i>Bonnairgottah S.</i> ...	Bangalore	<i>Vide page 10—<i>a</i>.</i> ...	12 48 38' 37	77 37 0' 73	$\frac{3268}{\uparrow}$	25
Bardi h.s. ... <i>Berjic H.P.</i>	"	On the summit of a high rocky hill, a few feet W. of a pagoda and close to the wall that surrounds it, about $\frac{1}{4}$ miles E. of the village so called, $\frac{1}{4}$ a mile S. by E. of Chikkanhalli, the same distance W. of Tyágadhalli close to the Railway line from Bangalore to Túmkúr, $\frac{1}{4}$ of a mile N. of Bétahalli, and 5 miles N. by W. of Nélamangala town: táluk Nélamangala. The station is denoted by a mark on a square platform supported by stone pillars. 1801.	13 10 22' 25	77 25 38' 98	[3238]	258 259

\* To base of church. † To top of parapet of steeple. ‡ To summit of peak.  
§ For triangles fixing this point. see the Synoptical Volume of the Mangalore Meridional Series



Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Barúr Rock ... <i>Barroor Rock</i>	Salem	About a mile S.W. by S. of Mallikal village, 1½ miles N.N.W. of Párúr, and 4½ miles W. of Pochampalli near the main road from Tirupatúr to Dharmapuri: táluk Krishnagiri. 1802-6.	12 19 18	78 20 33	feet ...	762
Basavangudda h.s.	Bangalore	On a rocky hillock about 200 yards W. of the high road from Devanhalli to Bangalore, 4½ miles N. of the Bangalore Cantonment Railway Station, and ¼ a mile S. of Byatráyanpur: táluk Bangalore. The station consists of a circular, isolated pillar of masonry, 1 foot high, with mark-stones at top and bottom, and surrounded by a platform of stones and earth. 1867-68.	13 3 16.70	77 37 56.02	[3082]	281
Basavanhalli h.s. ... <i>Bussavapilly H.</i>	"	On a small detached hill of solid rocks about ¼ a mile N.E. of the village of this name, 1½ miles S. of mile-stone No. 23 on the high road from Bangalore to Kunigal, and 6½ miles S.W. of Nēlamangala town on the road from Bangalore to Tūmkúr: táluk Mágadi. The station is denoted by a heap of stones surrounded by a circle of stones. 1801.	13 2 26.55	77 21 38.79	[2996]	260
Batinkōnda, XXVII	North Arcot	<i>Vide page 15—G,</i> ... ..	13 1 16.11	79 9 10.94	$\frac{1902}{2.5}$	57
Battankatte h.s. ... <i>Betnacutta</i>	Mysore	About a mile S. of Rájapur, and 3½ miles E. of Dabbé-gatta: táluk Nágamangala. 1801.	13 2 29.67	76 43 43.27	...	280
Bebibētta Hill Peak	"	Bush on peak. About 2½ miles S.W. of Chinakurali village on the high road from Attikuppa to Seringapatam, and 1 mile W. by N. of the small village of Mádarihalli: táluk Attikuppa. 1867-68.	12 30 32	76 37 4	3196	652 653
Bekal s. <i>Baekul</i>	South Canara	On the high cavalier of a fort on a high point projecting into the sea, about 5½ miles S.S.E. of Chandragiri town. The station is denoted by a mark-stone embedded nearly in the centre of the cavalier. 1803-6.	12 23 29.81	75 4 30.96	128	89
Bēllatangadi s. ...	"	About 12 yards N. of the N.W. corner of the travellers' bungalow. The station is denoted by a mark-stone embedded level with the ground and 1.75 feet below the level of the interior floor of the bungalow. 1871-72.	12 59 14.37	75 19 29.48	350	121 122
Belúr No. 1 Pagoda <i>Bailoor</i>	Hásson	Large pagoda in the fort of this town: táluk Belúr. 1802-6.	13 9 42.6	75 54 9.9	...	...
Belúr No. 2 Pagoda <i>Belloor</i>	Mysore	In a fort in the W. quarter of the large village so called, about ¼ of a mile W. of the right bank of the Vira Vaishnair river, 2½ miles N.W. of Nēlligēre on the high road from Nágamangala to Kunigal, and ¼ of a mile S.S.E. of Nágápur: táluk Nágamangala. 1801.	12 58 53.4	76 46 21.6	...	281
Belúr Temple ...	Hásson	Gilt ball of spire of the large temple near the centre of the fort of this town: táluk Belúr. 1871-72.	13 9 42.1	75 54 7.2	* 3276	158

\* To golden ball of temple.

## CO-ORDINATES AND DESCRIPTIONS OF ALL STATIONS AND POINTS.

97—G.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangles
Betdásanpur h.s. ... <i>Timmarayah H.P.</i>	Bangalore	On a hillock about $\frac{1}{4}$ of a mile W. of the small village of this name, and 2 miles S. of the large village fort of Begúr: táluk Bangalore. The station is denoted by a mark on the N.W. bastion of a pagoda which is surrounded by a rampart. 1801.	12 50 22·62	77 40 12·66	feet ...	805
Béttadpur h.s. ... <i>Bettatipoor H.S.</i>	Mysore	On a pagoda on the conspicuous hill peak known as Bétadpurbétta, about 8 miles N. by E. of Périyapatna town, and $1\frac{1}{4}$ miles S.E. by S. of Béttadpur on the road from Périyapatna to Rámnáthpur: táluk Húnsúr. The station is denoted by a small mill-stone surmounted by a small platform nearly on the centre of the platform of the pagoda. 1803-6. It was refixed in 1871-72.	12 27 9·25	76 9 28·11	4384	678
Béttadúr Rock Pagoda <i>Bettatoor</i>	"	Also known as Shrávana. Steeple of a pagoda about $\frac{1}{4}$ a mile E. of Béttadúr village, and $3\frac{1}{4}$ miles W. by N. of Yelwal town at the junction of the roads from Yédátóre, Húnsúr and Mysore: táluk Húnsúr. 1802-6. The point was refixed in 1867-68.	12 22 8·4	76 31 44·8	...	721 722
Béttahalli h.s. ... <i>Wuttelly H.P.</i>	Túmkúr	On a prominent hill, about $\frac{1}{4}$ of a mile E. of the village so called, 1 mile W. of Hóskére, $1\frac{1}{4}$ miles S. by W. of Kirangúr, and $2\frac{1}{4}$ miles S.W. by S. of Amrutúr village: táluk Kunigal. The station is denoted by a mark on the top of a pagoda. 1801.	12 53 9·36	76 57 35·06	[2661]	285 286
Beturáyankónda h.s. <i>Bairine H.P.</i>	Kolár	On a small hill about 3 miles E. by N. of Karhalli which is $\frac{1}{4}$ of a mile E. of the high road from Kolár to Bowringpet, $1\frac{1}{4}$ miles S.E. by E. of Aitándhalli, and 7 miles W. of Betmangala town at the junction of the roads from Bowringpet and Kolár to Vénkatagiri: táluk Bowringpet. The station is marked by a star on the platform of a pagoda. 1802-6. It was refixed in 1865-66.	13 0 23·37	78 16 5·13	[2999]	825
Bhúpatamma, XLIX†	"	<i>vide page 11—G.</i>	12 59 46·52	78 8 9·03	$\frac{3699}{0·7}$	81
Biligiriranganabétta Pagoda <i>Billacl H.P.</i>	Mysore	Steeple of pagoda on a peak towards the N. extremity of a range of hills, about 8 miles E.S.E. of Yélandúr town: jaghír Yélandúr. 1802-6.	11 59 54·4	77 10 49·2	[4188]	702
Boditimrázdrug Hill <i>Bodeetimrauze Dr.</i>	Salem	One of a large group of hills, about 2 miles E. of Kótalam village, and 6 miles W. by N. of Káveripatnam on the Pónniár river: táluk Krishnagiri. 1802-6.	12 26 12	78 10 24	...	755 756
Bodmalai h.s. ... <i>Bodeemalli S.</i>	North Arcot	On a small detached rocky hill about 2 miles W. of Chittoor (Chittúr) town, and $1\frac{1}{4}$ miles N. of Iruvaram village which is a little S. of the road from Chittoor to Gudiyátam: táluk Chittoor. The station is denoted by a mark-stone in the centre of a platform. 1803-4.	13 12 36·19	79 6 34·83	1609	344
Bolkónda Drug <i>Bolcondah Dr.</i>	Salem	On a hill, about a mile W. by S., W.N.W. and E.N.E. respectively of Bimandahalli, Puliyanjéri and Mētamalai, the last named being close N. of the road from Krishnagiri to Hósur: táluk Hósur. 1802-6.	12 37 1	78 9 23	...	753

\* To level of roof.

† This station appertains to the Great Arc Meridional Series, Section 8° to 18°.

## MADRAS LONGITUDINAL SERIES.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Bömmanhalli h.s. ... <i>Bomanelly H.S.</i>	Túmkúr	At the S.E. extremity of a short range of hills, about $\frac{1}{2}$ a mile N.W. of the small village so called, 3 miles S.S.W. of the junction of the roads from Chiknáyakanhalli, Turuvekére and Tiptúr, and $1\frac{1}{2}$ miles W.N.W. of Banasandra Station of the Mysore State Railway: táluk Tiptúr. The station is denoted by a mark nearly on the centre of the platform of a pagoda. 1801-6.	13 16 13·86	76 40 46·53	3162	201 202
Brahmagiri Hill Mark	Malabar	On the highest point of a range of hills between Coorg (Kodagu) and Wynaad (Vayanád), about 9 miles N. of Manantoddy. The station is marked by a circle and dot engraved on a stone. 1873-74.	11 55 50·89	76 2 8·96	5272	628
Búdēlmalai h.s. ... <i>Boodelmalli</i>	Cuddapah (Kadapa)	On the slope of the S. extremity of a hill, about $4\frac{1}{2}$ miles S.E. of Nimmanapalli village which is 5 miles S.E. by S. of Váyalpád town: táluk Madanapalle. The station is denoted by a mark in the centre of a platform. 1812.	13 31 53·38	78 45 21·10	...	...
Bugargudda h.s. ... <i>Booggargooda</i>	South Canara	At the N. end of a range of hills, about a mile S. of the large village of Múdu Bidare on the road from Mangalore to Harihar. 1802-6.	13 3 2·31	75 2 43·42	662	127 128
Bukkabētta Hill Pagoda <i>Booknah H.P.</i>	Hásson	On a hill, about $1\frac{1}{2}$ miles E. by N. of Rájapur, 1 mile W. by N. of Sorēkayipur, and $1\frac{1}{2}$ miles and $2\frac{1}{2}$ miles respectively S.W. by W. of Bukka village and Hirésáve fort, the fort being on the high road from Channaráypatna to Kunigal: táluk Channaráypatna. 1802-6. The point was refixed in 1871-72.	12 55 44·7	76 35 21·7	3072*	199 200
Butakapalle Hill ... <i>Bootagapilly</i>	North Arcot	The highest part of a hill, about $\frac{1}{4}$ of a mile S.S.E. of the village so called: zamúndári Punganúr. 1812.	13 22 5	78 45 34	...	383 384
Byádarahalli h.s. ...	Mysore	On a rather high hill forming one of a range which starting near the E. extremity of the island of Seringapatam runs N. from the Cauvery for many miles. This hill is about 6 miles E. of Hirod (French Rocks), and 1 mile N.E. of Dōdda Byádarahalli village which is close N. of the Railway line from Mysore to Bangalore: táluks Seringapatam-Mandya. The station consists of a platform of dry masonry 9 feet square and $1\frac{1}{2}$ feet in height, encircling an isolated pillar of paka masonry $3\frac{1}{2}$ feet in diameter and 1 foot in height, having marks at top and bottom. 1867-68.	12 30 48·23	76 48 24·86	2795	638
Cannanore Flag-staff <i>Cannanore</i>	Malabar	In the N.W. quarter of the fort near the landing place. 1802-6. The point was refixed in 1872-73.	11 51 8·3	75 24 45·1	...	625 626
Cannanore s. ...	"	About 100 yards from the west cliff, and 1 mile W.N.W. of the fort flag-staff. The station is denoted by a mark-stone embedded flush with the ground level. 1872-73.	11 51 32·63	75 23 53·44	47	624
Chámundi h.s. ...	...	<i>Vide Mysore No. 3 h.s. ...</i>	...	...	...	...
Chandragiri Fort ... <i>Chendragherry</i>	South Canara	N.E. cavalier. About 2 miles S.S.E. of Kásaragod town on the high road from Quilon (Kóllam) to Mangalore. 1802-6.	12 27 51·8	75 2 45·3	...	113

\* To flat roof of temple.

CO-ORDINATES AND DESCRIPTIONS OF ALL STATIONS AND POINTS.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Chandragiri s. ... <i>Chendergherry</i>	North Arcot	On a small magazine on the highest part of the drug in the town of Chandragiri, about 7½ miles S.W. by W. of Tirupati which is 6½ miles W. of Tirupati Station of the South Indian Railway: táluk Chandragiri. 1812.	13 35 12.42	79 20 10.41	... feet	* 441
Chandrapuram h.s. <i>Chendrapoor H.</i>	Salem	On a hill, about ¼ a mile W. of the village so called, and 3 miles S. by E. of Baiyanipalli village on the main road from Krishnagiri to Vániyambádi: táluk Krishnagiri. 1802-6.	12 30 35.16	78 30 26.01	...	788
Channaráypatna Fort (helio.) ...	Hásson	In the N.W. quarter of the old fort of this town: táluk Channaráypatna. The point is marked by a circle and dot engraved on the N. wall of the highest bastion. 1871-72.	12 54 1.84	76 25 55.93	2791.86 †	195 196
Chaudanhalli, XVI	Támkúr	<i>Vide page 9—G.</i> ... ..	13 11 41.31	76 42 56.77	2664 ‡	20
Chaudapalli Pagoda <i>Choudapilly P.</i>	North Arcot	In the large village of this name on the main road from the town of Punganúr and about 10 miles N.E. of it. 1812.	13 26 4.7	78 44 3.6	...	378 379
Chéllappachērugutta Platform ... <i>Chellupcherroogootak</i>	"	On a hill, about 5 miles S.E. of Pfler on the main road from the town of Váyalpád to Karakambádi: táluk Chandragiri. 1812.	13 36 45.0	79 2 11.4	...	480
Chēmbedu, XXXV	Chingleput	<i>Vide page 17—G.</i> ... ..	13 15 22.76	80 1 11.17	257 70.3	66
Chēmbedu s. ... <i>Chumbade H.</i>	"	About 105 feet S.S.W. of the principal station of this name: táluk Tiruvallúr. 1802-3.	13 15 21.85	80 1 10.65	...	523 524
Chērlakōnda Platform <i>Jerlaconda</i>	North Arcot	On a large flat-topped hill, about 3½ miles N. by E. of Ávulapallidrug. The point is denoted by a mark in the centre of the platform. 1812.	13 25 58.22	78 56 6.39	...	412
Chik Devibētta Hill Pagoda <i>Chickadaivy H.P.</i>	Mysore	Steeple of E. pagoda about 3 miles E. by N. of Itna on the left bank of the Kabbani river, and 4 miles E.N.E. of Saragur town on the right bank of the same river and on the road from Húnsúr to Begúr: táluk Hēggaddevankote. 1802-6.	12 1 2.4	76 29 32.2	...	719 720
Chikkanamangalam h.s. <i>Chikkanagmunglum</i>	Támkúr	On the summit of a hill, about 1½ miles E. of Kitlamangala, and ¼ of a mile W. by N. of Rájgēre: táluk Kunigal. The station was denoted by the trunk of a large palmyra tree surrounded by bushes. 1801.	12 58 8.35	77 6 28.67	...	241
Chikmagalúr Mosque	Kadúr	In the principal street of Basavanhallipet or Chikmagalúr bazár: táluk Chikmagalúr. 1871-72.	13 19 4.0	75 48 56.3	† 3412	182
Chikmagalúr s. ...	"	On the travellers' bungalow towards the S. extremity of the town, and close W.N.W. of the fort: táluk Chikmagalúr. 1871-72.	13 18 34.24	75 49 2.34	§ 3372	181

\* For another triangle fixing this station, see the Synoptical Volume of the Madras Meridional and Coast Series.  
† No pillar was built at this station. ‡ To level of wall between minarets. § To floor of bungalow.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Chinakurali Bungalow ...	Mysore	N.E. pillar of the travellers' bungalow verandah. Close W. of the large village of Chinakurali on the high road from Attikuppa to Seringapatam: taluk Attikuppa. 1867-68.	0 1 " 12 32 20' 2	0 1 " 76 38 23' 0	feet 2695	651
Chingleput Fort ... <i>Chinglepet</i>	Chingleput	Flag-staff. About $\frac{1}{4}$ of a mile N. of the town so called, immediately E. of the Railway line running N. to St. Thomas's Mount, and $\frac{1}{4}$ a mile N.N.W. of Chingleput Railway Station: taluk Chingleput. 1802-3.	12 41 53' 7	80 1 13' 5	...	594
Chingleput h.s. ... <i>Chinglepet H.</i>	"	On the top of Gundur hill which is one of a group of small hills, about a mile S.W. of the town of this name, and $\frac{1}{4}$ a mile E. of the left bank of the Palár river: taluk Chingleput. The station is marked by a circle and dot engraved on the hill and surmounted by a pile of stones. 1802-3. It was refixed in 1879-80.	12 40 38' 71	80 0 30' 32	772	591 592
Chinnagara h.s. ... <i>Jinnagra H.</i>	Bangalore	On the top of a small isolated hill about $\frac{1}{4}$ of a mile N.N.E. of the village so called, and $3\frac{1}{4}$ miles S.E. by E. of Höskote travellers' bungalow: taluk Höskote. The station is denoted by a mark at the foot of a stone pillar. 1801.	13 2 29' 57	77 52 4' 65	[3013]	308
Chinna Göttikallu Fort ... <i>Gooticul</i>	Cuddapah	S.E. angle. At the W. foot of a small isolated hill on the main road from Bakrapet to Pfler, about 4 miles E. of the village of Bömmayágaripalli: taluk Váyalpád. 1812.	13 38 55' 9	79 7 41' 4	...	431 432
Chinna Tēppasamudram Pagoda <i>Chinni Tēpsundrum</i>	"	Platform of the pagoda in the fort, about $\frac{1}{4}$ a mile N. of the main road from Váyalpád to Gumma Samudram, and $4\frac{1}{4}$ miles W. of the former place: taluk Madanapalle. 1812.	13 38 45' 3	78 36 24' 1	...	*
Chinnidrug h.s. ... <i>Chinnidroog</i>	North Arcot	About $1\frac{1}{4}$ miles N.E. of Timmampet village, $5\frac{1}{4}$ miles N.W. by W. of Ványambádi Railway Station, and $\frac{1}{4}$ of a mile N.W. of Diguvapálém: zamindári Kangundi. 1802-6.	12 42 14' 71	78 35 14' 75	...	775 776
Chintámani Hill Tree <i>Chintominee H.</i>	Kolár	Large tree on a small isolated hill on W. side of the town so called: taluk Chintámani. 1812.	13 24 14	78 5 41	[3168]	*
Chintámanikoil s. <i>Chintominicoil</i>	Chingleput	About $\frac{1}{4}$ of a mile from the sea coast, 1 mile N.N.E. of Kálánji, and $1\frac{1}{4}$ miles S. by E. of Karinkáli village: taluk Pönneri. 1802-3.	13 20 36' 11	80 22 45' 11	...	802 803
Chintemeklapalli h.s. <i>Chintamaklepilly H.</i>	North Arcot	On a low hill, about 3 miles W. by S. of Guttapálém village, and $3\frac{1}{4}$ miles S. by E. of Kalikiri. The station is denoted by a platform. 1812.	13 35 35' 10	78 51 23' 56	...	† 405
Chittapára h.s. ... <i>Chittaparah H.</i>	"	About a mile N. of the village of this name, $\frac{1}{4}$ of a mile S.E. of Bandapalle, and $3\frac{1}{4}$ miles S.W. of Vasantapur on the high road from Chittoor to Vellore (Báya-éllúr): taluk Chittoor. 1802-6.	13 3 11' 40	79 8 5' 31	...	359
Chittoor Fort ... <i>Chittoor</i>	"	About $\frac{1}{4}$ a mile W.N.W. of the town of this name on the main road from Gudiyátam to Cuddapah: taluk Chittoor. 1802-6.	13 13 0	79 8 2	...	444

\* For triangle fixing this point, see the Synoptical Volume of the Great Arc Meridional Series, Section 8° to 18°.

† For another triangle fixing this station, see the Synoptical Volume of the Madras Meridional and Coast Series.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Chotanhalli s. ... <i>Chottanelly</i>	Mysore	About $\frac{1}{4}$ a mile N. of the small village so called, and $2\frac{1}{2}$ miles E.S.E. of Tumbinkere on the high road from Seringapatam to Mandya: taluk Seringapatam. 1801.	0 1 " 12 28 57.00	0 1 " 76 52 7.76	feet [2469]	725
Chunchangiri h.s. ... <i>Chinchinigherry</i>	"	On a hill, about a mile E. by N. of Chunchanhalli village on the high road from Nagamangala to Nittur: taluk Nagamangala. The station is denoted by a pile of stones. 1801.	13 1 21.58	76 47 28.80	[3214]	232
Conjeeveram (Great) Pagoda ... <i>G. Conjevaram</i>	Chingleput	Centre of the great gopuram of Shiva Kanchi near Daudpet towards the N.W. end of the town so called, and immediately W. of the Railway line: taluk Conjeeveram (Kanchivaram). 1802-3. It was refixed in 1864-65.	12 50 40.6	79 44 33.3	* 454	507 508
Conjeeveram (Little) Pagoda ... <i>L. Conjevaram P.</i>	"	Large gopuram near Hudson's Pet in the village of Vishnu Kanchi towards the E. part of the town so called, about $\frac{1}{4}$ of a mile N. of the main road from Great Conjeeveram to Chingleput: taluk Conjeeveram. 1802-3. It was refixed in 1864-65.	12 49 3.8	79 46 10.1	...	517 518
Damal s. ... <i>Damul P.</i>	"	On a pagoda on the N. side of the village of this name on the main road from Vellore to Conjeeveram, about 2 miles W.N.W. of Ballichetti Choultry on the same road: taluk Conjeeveram. 1802-3.	12 53 17.65	79 38 7.81	...	510
Damalcheri Hill ... <i>Damulcherree</i>	North Arcot	Stone. 1802-6. ... ..	13 29 46	79 9 15	...	480
Damalcheri s. ... <i>Damulcherree</i>	"	On the N.W. angle of a fort. 1812. ... ..	13 28 32.76	79 5 32.10	...	427 428
Daulatabad Palace ... <i>Dowletabad</i>	Salem	About 2 miles S. by E. of Krishnagiri town: taluk Krishnagiri. 1802-6.	12 30 54.4	78 15 48.0	...	782
Davarkonda h.s. ... <i>Davurcondah</i>	Cuddapah	In the gap between the two great rocks on a hill, about $1\frac{1}{2}$ miles N. by W. of Kondamari village: taluk Madanapalle. 1812.	13 27 58.19	78 42 21.42	...	373 374
Denkanikota Fort ... <i>Denkanicottah</i>	Salem	About $\frac{1}{4}$ a mile W. by N. of the town so called, and at the junction of the roads from Tali and Hosur to Denkanikota: taluk Hosur. 1802-6.	12 31 50	77 49 47	...	749
Desani, XI ...	Hassan	<i>Vide page 8—G.</i> ... ..	13 16 38.27	76 11 31.67	$\frac{3779}{2.1}$	11
Desani h.s. ... <i>Daasavneegooda S.</i>	"	On a rocky hill, about $1\frac{1}{4}$ miles W.S.W. of the village so called, $1\frac{1}{2}$ miles E.N.E. of Undiganhal, and 5 miles W. by N. of Hamhalli town: taluk Arsikere. The station is denoted by a mark-stone in the middle of a square platform on the peak. 1803-6. It was revisited in 1871-72.	13 15 42.64	76 11 16.70	† 3812	144 145
Devanhalli Fort ... <i>Deonelly</i>	Bangalore	N.W. angle of the fort of this town: taluk Devanhalli. 1801.	13 14 55.0	77 45 0.5	...	304

\* To top of gopuram below ornaments.

† To level of platform.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Devanhalli s. ... <i>Deonelly Station</i>	Bangalore	About 1½ miles N.E. by N. of the travellers' bungalow, and close to the 31st mile-stone on the road from Kolár to Devanhalli: táluk Devanhalli. 1801.	13 15 20·73	77 46 6·90	... <i>feet</i>	303
Devarabanda Hill Pagoda ... <i>Deorabunda</i>	Kolár	About a mile W. by N. of the small village of Attikuppa, the same distance S.S.E. of Pilvára, 1½ miles S. of Rájpet, and 2½ miles E. by S. of Gunduséttihalli close E. of the road from Kuppam to Vēnkatagirikot: táluk Bowringpet. 1802-6.	12 53 10·9	78 30 15·0	...	338
Devarabētta, LV* ...	Salem	<i>Vide page 13—G.</i>	12 37 27·24	77 40 4·55	$\frac{3364}{3}$	34
Devarabētta h.s. ... <i>Deorabetta S.</i>	"	On a pagoda about 40 yards E. of the principal station of this name: táluk Hūsúr. The station is denoted by a small mill-stone on the platform of the pagoda. 1801-6.	12 37 27·29	77 40 5·69	3371	262 263
Devarakōnda, XXIII	North Arcot	<i>Vide page 14—G.</i>	13 4 43·44	78 42 39·56	$\frac{2727}{4·2}$	52
Devarakōnda Hill Pagoda ... <i>Deorcondah</i>	"	About 3½ miles S. of Kangundi, 3 miles E. of the Railway line from Bangalore to Jalárpet, and 6½ miles E.S.E. of Kuppam Railway Station: zamíndári Kangundi. 1802-6.	12 42 54·6	78 28 9·3	...	768
Devaráyadurga h.s. ... <i>Devaroydroog</i>	Túmkúr	On a flat rock on a fortified hill, the summer retreat for the people of Túmkúr, about ¼ a mile E. by N. of the place so called, 2½ miles N.W. by N. of the large village of Urudugére on the road from Kōrtagiri to Dobbspet, 2 miles S.W. of Nágenhalli, and 7½ miles E. by N. of Túmkúr town: táluk Túmkúr. The station is denoted by a mark on the rock a little to E. of a large stone. 1803-6.	13 22 20·92	77 15 16·24	3896	211 212
Dharmapatna h.s. ...	Malabar	On the high rugged edge on the western coast, a few yards from the edge of the cliff, about 2 miles N.W. of Tellicherry (Talacheri), 1 mile S.W. of Dharmapatna redoubt, and 9½ miles S.E. of Cannanore (Kannúr). The station is denoted by a mark-stone embedded flush with the surface of the ground. 1872-73.	11 45 57·28	75 30 9·11	108	620
Dharmapuri Fort ... <i>Darampoory</i>	Salem	Táluk Dharmapuri. 1802-6.	12 8 24	78 12 31	...	761
Dōdballapur Idgah ... <i>B. Ballapoor</i>	Bangalore	S. minaret. About ¼ a mile W. of the N. end of the town so called, 1½ miles S.S.W. of the travellers' bungalow, ¼ of a mile E. by N. of Jagihalli village, and close S. of the road from the town to Dobbspet <i>via</i> the small village of Kōdagihalli: táluk Dōdballapur. 1806.	13 17 41·5	77 34 28·5	[2976]	291 292

\* This station appertains to the Great Arc Meridional Series, Section 8° to 18°.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Döddagunta s. ... <i>Dodagontah S.</i>	Bangalore	About $\frac{1}{4}$ a mile N.N.W. of the village so called on the Railway line to Bangalore: taluk Bangalore. Colonel Lambton in 1805 described the station as follows:— “It lies half-way between the N. end of the base and the Mandapam, and is marked by a large well-built stone platform of a circular form, and about 10 feet in diameter. Its foundation is about $2\frac{1}{2}$ feet under ground having a large stone at the bottom with a circle whose centre corresponds with the centre of the circle above, and over which the plummet of the instrument was suspended during the observations.” When visited in 1868 it was described as follows:— “The whole platform was beneath the ground in a field which had been ploughed over for years. It was very dilapidated at the top, the upper mark-stone seemed to have been removed and the platform cut into on the west side probably by natives in search of hidden money. The eastern side and the lower part generally was in good preservation and the mark-stone appeared to be perfectly firm and untouched, being well embedded in the masonry of the platform which was extremely good and very hard and firm from age. There was no isolation. The platform has been raised to the height of 1 foot above the ground, enclosing a solid, isolated pillar of masonry built on the old platform which is as solid as rock. The mark in the upper surface of the pillar is $3\frac{1}{2}$ feet above Colonel Lambton's lower mark. The station is situated about half-way between the N. End of Colonel Lambton's Base and the S.W. End of the Bangalore Base-line, measured in 1868.” In 1870 astronomical observations for latitude were taken at this station. 1805.	12 59 55' 76	77 40 0' 43	$\frac{\text{feet}}{3003}$ 1	290
Döddapalli Hill Platform <i>Dodapilly H.</i>	Cuddapah	About $1\frac{1}{4}$ miles N.W. by N. of the village of Rayágallu, and $3\frac{1}{2}$ miles S.W. of the postal village of Piler on the main road from Chinna Göttikallu to Váyalpád: taluk Váyalpád. 1812.	13 38 14' 4	78 56 33' 8	...	421
Edámichi h.s. ... <i>Yeddamicly</i>	Chingleput	On a hill at the E. foot of which lies the village so called, about $1\frac{1}{2}$ miles N.N.E. of Mambudúr, $2\frac{1}{2}$ miles N.W. of Salavakam, 7 miles W. of Chingleput, and $8\frac{1}{2}$ miles N.E. by E. of the large village of Uttaránmerúr on the road from Wandiwash (Vandarási) to Chingleput: taluk Madurántakam. The station is marked by a circle and dot engraved on a rock and surmounted by a pile of stones. 1802-3. It was refixed in 1879-80.	12 41 31' 11	79 54 21' 05	652	589 590
Elambileri Hill Peak	Malabar	The higher and southern of the twin peaks known as Elambileri and Chandra, about 4 miles S.E. of Vaiyitri. 1873-74.	11 30 35	76 7 49	6802	632 633
Elandacheri s. ...	Chingleput	About $\frac{1}{4}$ of a mile S.E. of Ichankuli, and the same distance N.E. by N. of Elandacheri on the main road from Madras to Vallúr salt station. It is nearly in the middle of an extensive waste saturated with saline matter. The waste is under water for about 4 months of the year. A narrow strip of swamp lies about 130 yards W.: taluk Saidápet. The station consists of a pillar of masonry 2 feet below and 2 feet above the surface of the ground; the lower portion is 3 feet square and the upper tapers from 2 to $1\frac{1}{2}$ feet square; the pillar contains three mark-stones, one at the foundation, the second at the ground level, and the third on the top, and is covered over by a mound of earth. 1886-87.	13 11 40' 49	80 19 13' 78	$\frac{13}{2}$	814



Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Ellikúr h.s. ... <i>Allicoor H.S.</i>	North Arcot	On a hill, about 2 miles E. of Víráyapuram, and 2½ miles N.E. of Ilattúr village: zamindari Kárvétnagar. The station is denoted by a round stone perforated at the centre in the middle of a platform. 1802-3.	13 16 12·25	79 45 51·64	feet 1050	520
Ēnnúr No. 1 s. ... <i>Ennore</i>	Chingleput	On a remarkable tree in the village so called: táluk Pönneri. 1802-3.	13 14 52·52	80 22 2·43	...	797
Ēnnúr No. 2 s. ...	"	On a sand bar running in a northerly direction towards the present mouth of the Kagri Kalwa Creek; the bar lies close to and runs in a N.E. direction of the European Settlement of Ēnnúr. It is about 30 yards off the sea coast and 9 feet above it: táluk Pönneri. The station is denoted by a thick wooden stake 6 feet long driven 4 feet into the ground. 1886-87.	13 13 59·56	80 22 30·06	11	820
Ēnnúr No. 3 s. ...	"	On the roof of a double-storied D.P.W. bungalow on an artificial mound about 8 feet above the general ground level and 13 feet above the high-water line of the Kagri Kalwa Creek. The bungalow is the last but one lying towards the N.E. extremity of the European Settlement of Ēnnúr and about 3½ miles S.E. by E. of Vallúr. The roof is 25½ feet high and is L-shaped, the longer arm of which runs E. and W.: táluk Pönneri. The station is marked by a circle and dot engraved on the roof. 1886-87.	13 13 50·20	80 22 19·41	...	821 822
Ērnavúr s. ... <i>Yernaoor</i>	"	On the coast, about ½ of a mile S.S.W. of the village so called on the main road from Madras to Kattivákam or Ēnnúr, and 7 miles N. of Fort St. George: táluk Saidápet. 1802-3.	13 10 42·23	80 20 42·65	...	796
Ērumaivéttipálayam s. <i>Yerramootipollam</i>	"	On a pagoda about ¼ a mile S.W. by S. of the village of this name, and 3 miles W. of Solavaram on the high road from Nellore (Néllúr) to Madras: táluk Pönneri. 1802-3.	13 13 57·73	80 9 33·73	...	791
Ērumaiyúr Hill Staff	"	Stone shaft on a hill, about ¼ of a mile W. of the village of this name, 1½ miles S.S.W. of Palantandalam, 2½ miles S. of Sirukaluttúr on the main road from Conjeeveram to Pallávaram, and 9 miles S.W. of St. Thomas's Mount: táluk Saidápet. 1879-80.	12 57 12·3	80 6 58·9	* 378	540 541
Ēttipati h.s. ... <i>Ettiput H.</i>	Salem	On the northern extremity of a hill lying close S. of the Pönniár river, about 1 mile S. by E. of the village of Ēttipati, and 3½ miles E. by N. of Mattiyampate on the main road from Úttankarai to Arúr: táluk Úttankarai. 1803.	12 10 4·42	78 39 6·52	...	745
Fakírmalai h.s. ... <i>Fakierthucka H.</i>	North Arcot	On a small hill about ¼ a mile N. of the main road from Wálanjápet to Madras, and 3½ miles E. by S. of the former place. 1802-3.	12 54 40·14	79 27 7·98	...	505
French Rocks Pillar	...	<i>Vide</i> Hirod Hill Pillar. ...	...	...	...	...
Gadikalbétta Hill Peak	Mysore	About 2½ miles S.W. of Melkote, and the same distance S.E. by S. of Vasantapur village on the road from Attikuppa: táluk Attikuppa. 1867-68.	12 38 38	76 39 19	[3700]	646 647

\* To top of hill.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Gamkōnda h.s. ... <i>Gumcondah</i>	North Arcot	On a hill, about 10 miles E. by S. of Punganūr town: táluk Chittoor. The station is denoted by a mark in the centre of a platform. 1812.	13 18 37·92	78 46 40·94	... <i>feet</i>	356
Gangangiri Hill Peak <i>Gungangherry</i>	Salem	Towards the S.E. extremity of a range of hills, about a mile N.N.E. of Balekuli village, and 4½ miles E. of Káveripatnam on the Pōnniár river: táluk Krishnagiri. 1803-4.	12 25 48	78 19 49	...	784 785
Gardangiri No. 1 h.s. ...	Hásson	Also known as Garudangiri. On a conspicuous hill, about ¼ a mile N. of the high road from Bánávar to Huliýár, ¼ of a mile N.E. by E. of Shankaranpalli, and 7 miles N.E. of Bánávar town: táluk Arsikére. The station is marked by a circle and dot engraved on the highest point of a flat rock near the summit of Garudandurga and 28 yards W. of a masonry ball. 1871-72.	13 28 51·01	76 17 3·82	3652	186 187
Gardangiri No. 2 h.s. ... <i>Gurradandroog</i>	"	Close to Gardangiri No. 1 h.s.: táluk Arsikére. 1802-6.	13 28 50·96	76 17 4·65	...	203 204
Gēddahalli h.s. ...	Bangalore	On a small hill about 350 yards from the village so called, 1 mile W.S.W. of Hébbal village on the high road from Devanhalli to Bangalore, nearly the same distance E. of Mattikére, 1½ miles N. by W. of Bangalore Base-line S.W. End; and 3 miles N.N.W. of Bangalore Cantonment Railway Station: táluk Bangalore. The station consists of a circular, isolated pillar of masonry, 7 feet high, with mark-stones at top and bottom, and surrounded by a platform of stones and earth. 1867-68.	13 1 57·23	77 37 5·58	[3014]	280
Golhalli Pagoda ...	"	Close N.W. of the village so called, about a mile W. of Dōddakōppa, 4½ miles S.S.W. of the large village of Kodihalli, and 3 miles S.E. of the Roman Catholic Chapel at Arubēle village: táluk Kánkánhalli. 1866-67.	12 22 47·3	77 30 17·5	...	•
Gubbi s. ...	"	On rising ground nearly a mile S.W. of the village of this name, the same distance N.W. by N. of Rámpur village, and 5 miles S.E. of Yēlahanka travellers' bungalow on the high road from Devanhalli to Bangalore: táluk Bangalore. The station consists of a circular, isolated pillar of masonry, 2 feet high, with mark-stones at top and bottom, and surrounded by a platform of stones and earth. 1867-68.	13 3 49·77	77 42 8·89	[2968]	287
Gudipatipálēm Platform <i>Goodipaud H.</i>	North Arcot	On a hill, about 2 miles N.W. of Bandapalli village, the same distance E. of Kotála, and 5 miles W. by S. of Vasantapur on the high road from Chittoor to Vellore: táluk Chittoor. 1802-6.	13 5 14·5	79 6 34·5	...	448
Gudiyátam Pagoda <i>Gooriattum</i>	"	In the town so called: táluk Gudiyátam. 1802-6. ...	12 56 28·7	78 54 43·2	...	460
Gundakal s. ... <i>Goondicul</i>	"	On the N.E. angle of a fort, about 2½ miles N. of Gandrájpalli on the road from Mulbágal to Chittoor, 2 miles E. of Negavara, and 1½ miles N.E. of Byátnúr. 1812.	13 13 34·80	78 37 33·59	...	366

\* For triangle fixing this point, see the Synoptical Volume of the Great Arc Meridional Series, Section 8° to 18°.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Gungurkibatrine Pagoda <i>Goongoorkeebatrine</i>	North Arcot	Also known as Batraswámikönda. Great pagoda on a hill, about 1½ miles W. of the high road from Velúrpalle to Kuppam, and 4½ miles S.S.W. of the latter: zamindári Kangundi. 1802-6.	0 1 " 12 41 7'9	0 1 " 78 21 15'7	<i>feet</i> ...	...
Gunjurbëtta Hill Pagoda	Hásson	On a prominent isolated hill, about a mile S.W. by W. of Gunja, 1½ miles W. of the Hemávati river, 5 miles E. of Narsipur town, and 2½ miles S.E. by S. of Hippakère on the road from Narsipur to Attikuppa: táluk Hóle Narsipur. 1871-72.	12 47 13'9	76 21 24'7	* 3272	193 194
Guraganjagurki Tree	Kolár	On a small isolated hill about ¼ of a mile S.S.E. of the village so called, 1 mile N.N.W. of the large village of Vakkaleri on the high road from Málúr to Kolár, and 7½ miles W.S.W. of the latter town: táluk Kolár. 1801.	13 5 2	78 4 17	...	314 315
Gurigukönda h.s. <i>Goorigoconda</i>	North Arcot	On a hill, about 2 miles N.E. of Bodaguttapalle village, and 3 miles in the same direction of Paradarami on the road from Gudiyátam to Chittoor: táluk Chittoor. 1802-6.	13 6 29'34	78 59 10'51	...	402
Guttiráyan h.s. ... <i>Gooty H.</i>	Salem	On a hill, about 2½ miles S.E. of Kémpakarai village, and 9 miles N.N.W. of the large village of Pénngaram on the high road to Dharmapuri: táluk Hósúr. 1802-6.	12 15 44'40	77 53 47'28	...	737
Halasúrbëtta, XXXIX† <i>Allasoor H.S.</i>	Bangalore	<i>Vide page 9—g.</i> ... ..	13 9 38'27	77 39 40'53	$\frac{3337}{2}$	24
Háltibëtta, XV	Mysore	<i>Vide page 9—g.</i> ... .. Note.—When visited by the Levelling Party in 1888-89, the station was found in good order.	12 52 45'02	76 48 32'72	† $\frac{3047'43}{60}$	16
Háltibëtta Hill <i>Halteebetta</i>	"	About 130 feet N. of the principal station of this name: táluk Nágamangala. 1802-6.	12 52 46	76 48 33	...	233
Háltibëtta Hill Temple	"	Centre of the temple about 300 feet E. by N. of the principal station of this name: táluk Nágamangala. 1867-68.	12 52 45'6	76 48 35'7	...	234
Handinkère Hill Temple	Hásson	Centre of the temple on a low hill, about 5 miles W. by N. of Hásson town, and 1½ miles E. of Kanagál: táluk Hásson. 1871-72.	13 1 7'0	76 3 59'1	* 3278	168 169
Hannëbëtta h.s. ... <i>Hunnaebetta</i>	"	On the highest part of a low hill, about 3½ miles N.E. of the Hemávati river, 1½ miles W.N.W. of Kumbárhalli, 4½ miles W. of Hire Hasade, and 2½ miles S. by W. of Gavattvalli: táluk Belúr. The station is denoted by a mark-stone in the middle of a square platform. 1806.	13 5 56'98	75 46 41'92	3719	148
Haradhanhalli Hill Pagoda <i>Ardanelly H.</i>	Mysore	Steeple of a pagoda about 2 miles N.W. by N. of the large village so called on the road from Chámrájnagar to Atakalpur travellers' bungalow, and 1½ miles S. by W. of the former town: táluk Chámrájnagar. 1802-6.	11 53 57'2	76 58 28'0	[2943]	704 705

\* To base of temple. † This station appertains to the Great Arc Meridional Series, Section 8° to 18°.  
‡ To top of rectangular protecting pillar, the height of which above circular pillar is 3'5 feet.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Hattiyál Hill Pagoda <i>Hytaloo H.P.</i>	Túmkúr	Tower of a pagoda about 1½ miles E. of Hattiyál, 8½ miles E.N.E. of the junction of the high roads from Turuvekere, Chiknáyakanhalli and Nittur, and the same distance W. of Död Guni on the high road from Tiptúr to Túmkúr: táluk Tiptúr. 1802-6.	13 19 41·9	76 44 46·8	<i>feet</i> [3365]	215 216
Hëggunda Hill Pagoda <i>Yeggoondah Dr.</i>	Bangalore	On a small isolated hill at the E. foot of which lies the village so called, about a mile E. of Hálenhalli on the road from Dobbspet to Körtagiri, and 3¼ miles N.W. by W. of the large village of Manne: táluk Nélamangala. 1802-6.	13 16 36·9	77 17 57·1	[3463]	254
Hemagiri, XLIV* ...	Túmkúr	<i>Vide page 10—g.</i> ... ..	12 48 42·80	77 5 26·29	$\frac{3083}{\dagger}$	18
Hemagiri h.s. .... <i>Yammagherry H.P.</i>	"	On the large tower of a pagoda on a prominent hill, about a mile S.E. of the large village of Huliýúrdurga on the high road from Kunigal to Maddúr, the same distance E. of this road, and 3 miles W.N.W. of Ujani: táluk Kunigal. 1801.	12 48 42·14	77 5 26·27	[3079]	222
Hënnúr s. ...	Bangalore	On the top of the rocks above a stone quarry, about ¼ a mile E.N.E. of the village of this name, 1 mile W. of Agara, and 4¼ miles N.E. of Bangalore Cantonment Railway Station: táluk Bangalore. The station consists of a circular, isolated pillar of masonry, 2 feet high, with mark-stones at top and bottom, and surrounded by a platform of stones and earth. 1867-68.	13 2 2·18	77 40 57·18	[2940]	288
Herohalli s. ... <i>Yarrapilly S.</i>	"	About ¼ a mile N.N.E. of the village of this name which is ½ of a mile N. of the high road from Bangalore city to Mágadi, and 5¼ miles W. by N. of Bangalore City Railway Station: táluk Bangalore. 1801.	12 59 56·07	77 31 59·04	...	267
Hirod Hill Pillar ... <i>French Rocks</i>	Mysore	On the highest rock on the E. extremity of the hills called French Rocks, about 1¼ miles E. by N. of Hirod town: táluk Seringapatam. 1802-6. The point was refixed in 1867-68.	12 30 24·2	76 44 23·2	2880	654 655
Hoblespuram Hill Platform <i>Hobleesprum H.</i>	Cuddapah	On a small isolated hill about a mile N.W. by N. of Chintaparti village on the road to Váyalpád, and 5 miles E. of this town: táluk Váyalpád. The point is denoted by a mark in the centre of a platform. 1812.	13 39 17·18	78 44 34·32	...	‡
Hörëyál Hill Pagoda <i>Horihaul H.P.</i>	Mysore	On a prominent peak about a mile N.N.W. of the village so called, 2¼ miles N.W. by W. of Begúr travellers' bungalow at the junction of the roads from Sargúr and Nanjangúd to Gundlupet, ¼ of a mile W. of Rangapur, and 2¼ miles S.W. by S. of Hire Káti: táluk Gundlupet. 1802-6.	11 57 57·2	76 40 44·6	[2973]	716
Hösdrug Fort ... <i>Woos-droog</i>	South Canara	Highest and N.E. cavalier of the fort about 7 miles S.E. by S. of Bekal town. 1802-6.	12 18 28·4	75 8 10·8	...	116
Höskote Idgah ... <i>Ooscottah</i>	Bangalore	South minaret. On high ground, about ¼ of a mile N.N.W. of the travellers' bungalow, and ¼ a mile S. of the fort and on the road to it: táluk Höskote. 1801.	13 4 16·6	77 49 26·9	[2890]	307

\* This station appertains to the Great Arc Meridional Series, Section 8° to 18°.

† See description of this station.

‡ For triangle fixing this point, see the Synoptical Volume of the Madras Meridional and Coast Series.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Hösúr, L* ... ..	Salem	<i>Vide</i> page 11— <i>G.</i> ... ..	0 1 " 12 43 32' 20	0 1 " 77 52 50' 82	<i>feet</i> 3115 †	27,39 40
Hösúr h.s. ... .. <i>Oossoor H.P.</i>	"	On the centre of the tower or gopuram of a temple on the same small isolated hill as the principal station of this name. The local name of the temple is Chúdanáth Iswáraswámi: táluk Hösúr. 1801-2. The station was refixed in 1866-67.	12 43 27' 98	77 52 50' 35	...	309 810
Hudedurgam Pagoda No. 1 ... .. <i>Oodea Dr.</i>	"	Close to Hudedurgam Pagoda No. 2: táluk Hösúr. 1802-6.	12 31 43' 8	77 58 21' 1	...	750
Hudedurgam Pagoda No. 2 ... .. <i>Oodea Dr.</i>	"	On a hill, about a mile S.S.W. of Puram, 2 miles S.E. by E. of Kadudi, and 2½ miles S.S.E. of Nagatone close S. of the road from Ráyakota to Hösúr: táluk Hösúr. 1802-6.	12 31 41' 3	77 58 18' 6	...	751
Hulimáv h.s. ... .. <i>Woolymhau</i>	Mysore	On a hill, about 1½ miles N.N.W. of the village of this name, the same distance N. of the Kabbani river, 4½ miles N.N.E. of Nanjangúd town, and 1½ miles W.N.W. of Hadinár: táluk Nanjangúd. 1802-6.	12 10 31' 11	76 46 3' 81	[2598]	706
Huliyárdurga Building ... .. <i>Hoolyároog</i>	Támkúr	On a prominent peak. The large village of this name is at the N. foot of the hill and on the high road from Kunigal to Maddúr: táluk Kunigal. 1801.	12 49 7' 7	77 4 39' 4	[2766]	242
Hunjankère Hill Peak ... ..	Mysore	About 1½ miles N.E. of Hangarhalli village close N. of the high road from Seringapatam to Bannúr, 1½ miles W. by N. of the large village of Arakère, and 5½ miles E. by N. of Tippoo Sahib's tomb: táluk Seringapatam. 1867-68.	12 25 11	76 50 3	[2805]	664 665
Hutridurga Hill Mark (helio.) ... ..	Támkúr	On the summit of a fortified hill, about a mile E.N.E. of the village so called, the same distance S. of Hálvágal, and 6½ miles W. of Mágadi town: táluk Kunigal. 1867-68.	12 57 41' 46	77 9 49' 34	3708	244
Hutridurga Stone ... .. <i>Ooturdroog</i>	"	Large stone on the N. side of a fortified hill, about 310 yards S.E. by S. of Hutridurga Hill Mark (heliotrope): táluk Kunigal. 1801.	12 57 35' 7	77 9 56' 6	...	245
Huvinkatte s. ... .. <i>Oovenacottah</i>	"	About 1½ miles S.W. by S. of the village so called, and 5 miles W.N.W. of Chelúr town on the high road from Nittur to Síra: táluk Gubbi. 1801.	13 28 25' 55	76 52 33' 25	...	221
Idaiyúr Hill Temple ... ..	Chingleput	Dome of a small temple on the S.W. extremity of a hill, about 7 miles S.S.E. of Chingleput, ¼ a mile E.S.E. of the village so called, and 1½ miles W. of Tirukalikundram town on the main road from Chingleput to Sadras: táluk Chingleput. 1879-80.	12 36 26' 8	80 4 20' 2	‡ 429	598

\* This station appertains to the Great Arc Meridional Series, Section 8° to 18°.

† See description of this station.

‡ To flat roof of temple.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Inadagudda h.s. ... <i>Innadagooda</i>	South Canara	On a hill, about 2 miles E. by N. of Palmár village, and 5½ miles N.E. of Mulki fort on the road from Mangalore (Mangalúr) to Bárkúr: táluk Mangalore. 1811-14.	13 8 43' 18"	74 53 21' 26"	feet ...	81
Injambákam, XLV	Chingleput	<i>Vide page 19—G.</i> ... ..	12 54 51' 18"	80 17 38' 41"	29 *	78
Ipurgutta h.s. ... <i>Ipoorgootah</i>	North Arcot	About 7 miles W. of Paranchi village, and the same distance S.E. by S. of Vangapát: táluk Wálanjápet. 1802-3.	13 5 51' 80"	79 32 40' 70"	...	500
Jagadevadrug h.s. <i>Jaggadeo Dr.</i>	Salem	On an isolated hill, about a mile S.S.W. of Jagadevápálayam which is a little N. of the main road from Krishnagiri to Mattúr, and ¼ of a mile N.N.E. of Madikuppam village: táluk Krishnagiri. 1802-6.	12 28 27' 61"	78 21 32' 17"	...	783
Jamálabad Hill Mark <i>Jemalabad</i>	South Canara	About 3 miles N. of Bállatangadi on the road from Ballálráyandurga to Mangalore: táluk Uppinangadi. The point is marked by a circle and dot engraved on the highest point of the rock fortress. 1802-6. It was refixed in 1871-72.	13 1 32' 89"	75 20 10' 90"	1788	130 181
Janálkónda Platform <i>Janelcondah or Jaggamurlacondah</i>	North Arcot	On a hill about 2¼ miles N.W. by W. of the large village of Vénkatagiri, and 3 miles N.E. by N. of Mugali, both on the road from Palmaner to Chittoor: táluk Chittoor. 1812.	13 13 13' 1"	78 54 21' 8"	...	896 897
Jénkal Hill Pagoda <i>Gincul H.P.</i>	Mysore	About ¼ a mile N. of Ittanhalli, 6 miles W. by N. of Malvalli town, and 3½ miles W.S.W. of Kalagvádi: táluk Malvalli. 1801.	12 24 29' 6"	77 0 48' 0"	...	732
Jénkalbétta Hill Peak <i>Jainculbetta</i>	Hássan	Summit of a remarkable peak about 10 miles W.N.W. of Mánjarabad, and 1½ miles S.W. of the small village of Málgod: táluk Mánjarabad. 1802-6. The point was refixed in 1871-72.	12 57 15"	75 39 32"	† 4553	138 139
Jinahalli h.s. ... <i>Jeenelly</i>	Mysore	On a peak, about a mile W. by S. of the village of this name, 2¼ miles S.W. of Bilikére on the high road from Húnsúr to Mysore, and 9¼ miles E. of Húnsúr: táluk Húnsúr. 1802-6.	12 19 5' 61"	76 28 26' 28"	...	684
Kabbáldurga h.s. ... <i>Gopauldroog</i>	Bangalore	On one of the highest points of a range of hills, about ¼ of a mile N.N.W. of Saalápur village, and 3¼ miles in the same direction of the large village of Sátanúr which is ¼ of a mile nearly S. of the junction of the roads from Channapatna and Kánkánhalli to Halgúr: táluk Kánkánhalli. 1802-6.	12 29 48' 36"	77 20 11' 46"	[3495]	265 266
Kabbálgiri Hill Temple	Mysore	Spire of a temple on the E. and lower point of a rocky hill, about ¼ a mile N. of the village so called, and 6 miles S. of Árkalgúd town: táluk Árkalgúd. 1871-72.	12 40 52' 9"	76 5 26' 3"	‡ 3200	167

\* See description of this station.

† To highest point.

‡ To flat roof of temple.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Kabbati Hill Pagoda <i>Kubbatty H.P.</i>	... Hássan	Spire of the temple on a prominent peak, about $\frac{1}{2}$ a mile W.N.W. of the village so called, $\frac{1}{2}$ of a mile S. of Channagihalli, $7\frac{1}{2}$ miles N. by E. of Árkalgúd town, and 4 miles N.E. by N. of Gorúr close E. of the road from Árkalgúd to Hássan and to the left bank of the Hemávati river: táluk Hássan. 1802-6. The point was refixed in 1871-72.	12 52 2'6	76 8 35'5	feet * 3388	170 171
Kadaba s. <i>Curpah</i>	... Túmkúr	On the N.W. angle of a fort on the road from Nágaman-gala to Nittur: táluk Gubbi. 1801.	13 14 34'75	76 54 6'89	...	219
Kadalúr s. <i>Koodilloorcoopum</i>	... Chingleput	On the coast, about a mile S.E. of the village so called, and near the hamlet of Périyakuppam: táluk Madu-rántakam. 1802-3.	12 26 33'13	80 10 58'95	...	614
Kadappanabëtta s. <i>Kudapoonabetta S.</i>	... South Canara	On the road from Mangalore to Káarakal, about $4\frac{1}{2}$ miles N.E. of the former, and midway between two pagodas on the same road: táluk Mangalore. 1806.	12 53 56'48	74 55 32'32	326	88
Kadúr s.	... Kadúr	On the S.W. bastion of the fort which adjoins the Rail-way station. It is about $\frac{1}{2}$ a mile W. and W. by N. respectively of the town and the travellers' bungalow: táluk Kadúr. The station is denoted by a mark-stone embedded in the middle of the bastion. 1872-73.	13 33 10'60	76 2 49'72	2558	185
Kailásgarh, XXIX	... North Arcot	<i>Vide page 15—G.</i> ... ..	12 50 16'30	79 6 47'85	$\frac{2741}{1'6}$	61
Kailásgarh h.s. <i>Kylasghur S.</i>	... "	On the very summit of the hill 21 feet E. of the principal station of this name: táluk Vellore. The station is denoted by a hole in the centre of a stone embedded in a platform of bricks and sand. 1803-6.	12 50 16'19	79 6 48'08	...	343
Kakliri s. <i>Cakleery Chy.</i>	... Chingleput	On a choultry on the main road from Vellore to Madras, about 2 miles N.W. by N. of Conjeeveram: táluk Conjeeveram. 1802-3.	12 52 9'16	79 43 16'23	...	514
Kalhattigiri h.s.	... ..	<i>See Bába Budan No. 2 h.s.</i> ... ..	...	...	...	...
Kalkote h.s. <i>Kulkotah H.S.</i>	... Kolár—Ban-galore	On a hill close E. of the village so called, about $3\frac{1}{2}$ miles N.E. by N. of the large village of Túbgère, $1\frac{1}{2}$ miles S. of Kánraddihalli, and $5\frac{1}{2}$ miles S. of Manchenhalli close to the road from Goribidnúr to Chikballapur. It is on the boundary of Goribidnúr and Dódballapur táluks. The station is marked by a circle cut on a stone embedded in a platform. 1806.	13 25 10'46	77 38 32'32	3370	251
Kallúr Hill <i>Kulloor</i>	... North Arcot	About $\frac{1}{2}$ a mile nearly N. of Kallúr Pagoda. 1808. ...	13 33 2	79 14 30	...	481
Kallúr Pagoda <i>Kulloor</i>	... "	South-western of two pagodas E. of Kallúr village. 1812.	13 32 37'7	79 14 27'5	...	488
Kamalgat h.s. <i>Camulgut H.</i>	... "	On a hill, about $2\frac{1}{2}$ miles N.E. of Paradarami on the road from Gudiyátam to Chittoor, and 1 mile S. of Votivari-palle village: táluk Chittoor. 1802-6.	13 5 26'02	79 2 53'31	...	403 404

\* To base of temple.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Kambainēllūr Fort ... <i>Comenelloor</i>	Salem	On the main road from Karimangalam to Morappūr Railway Station, and 7½ miles N.W. by N. of the former: taluk Uttankarai. 1802-6.	12 12 25	78 21 46	... <i>feet</i>	763
Kambattimalai h.s. <i>Kumbutmalli</i>	"	On a hill, about 1½ miles N.E. of Kalarámpati village, and 2 miles E. of Alangayam at the junction of the main roads from Vellore, Vániyambádi and Mittúr: taluk Patúr. 1802-6.	12 37 0'77	78 49 8'90	...	459
Kandadakamale No. 1 h.s. ... <i>Kunduddakamully</i>	South Canara	Close to Kandadakamale No. 2 h.s. The station is denoted by a mark on a platform. 1806.	12 23 25'60	75 16 19'05	1898	88
Kandadakamale No. 2 h.s. ...	"	On the peak so called on the W. spur of the Western Gháts, about 3 miles E. by N. of Belúr, 11 miles N.E. of Hösdrug, and 13 miles E. of Bekal town. The station is marked by a circle and dot engraved on the summit of the hill. 1872-73.	12 23 25'80	75 16 19'17	1893	92
Kangundi Drug ... <i>Kongoondy Dr.</i>	North Arcot	Also known as Dingsamkōnda. On a small hill immediately S. of Kangundi, and 6½ miles E.N.E. of Kuppam Railway Station: zamindári Kangundi. 1802-6.	12 45 58	78 28 35	...	...
Kanialbod Hill Platform <i>Kunnailbode</i>	"	About 2 miles S. of Murgutpalli village and fort. The point is denoted by a mark in the centre of the platform. 1812.	13 28 53'62	79 0 30'78	...	424 425
Kaniyanúr h.s. ... <i>Kunnimoormalli</i>	"	About 60 feet N. by W. of the principal station of this name. 1802-8.	12 47 7'02	79 24 15'05	...	474
Kannambádi h.s. ...	Mysore	On the highest knoll of a low ridge running in a northerly direction at right angles to the Cauvery river. The knoll itself being composed of quartz and talc has a very whitish appearance which renders it easily distinguishable from a distance. It is close S. of the road from Kannambádi to French Rocks, about 1½ miles E. by N. of the large village of Kannambádi, and 6 miles W. by N. of Seringapatam Railway Station: taluk Seringapatam. The station consists of a platform of dry masonry 9 feet square and 1½ feet in height, encircling an isolated pillar of paka masonry 3½ feet in diameter and 1 foot in height, having marks at top and bottom. 1867-68.	12 26 42'92	76 37 46'28	$\frac{2587}{1}$	640
Kannúr h.s. ... <i>Kunnoor S.</i>	South Canara	On the northernmost of the three hills which can be seen from Mangalore, close to the high road from Bantvál to Mangalore, and about half-way between Faringipet and Mangalore. The station is marked by a circle cut deep in the rocky substance which forms the hill. 1806.	12 51 53'92	74 56 10'72	274	85
Karadibanda h.s. ... <i>Curridibunda</i>	Kolár	On a small hill about 1½ miles S. of the 29th mile-stone on the high road from Hösokote to Kolár, and 3 miles S.W. of Narsápur on the same road: taluk Málúr. The station is at the foot of a stone pillar. 1801.	13 6 37'31	78 0 18'95	[3071]	313
Káarakal Fort ... <i>Karcul</i>	South Canara	About ¼ a mile N.W. of the great statue. 1802-6. ...	13 12 32	75 2 23	...	...



Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Kárákal Great Statue <i>Karcul</i>	South Canara	The colossal monolithic figure of Gautama Buddha locally known as Gumpá, about a mile S.E. of the town of Kárákal. The figure which is about 50 feet high is placed on a huge black rock on which there is also a Jain temple or Basti containing images of the later Buddhist type. 1811-14.	13 12 24' 36"	75 2 43' 05"	feet ...	95
Káráveri, XXI	North Arcot	<i>Vide page 14—G.</i>	13 7 17' 67"	78 34 11' 92"	$\frac{2588}{1'7}$	49, 51
Karibétta h.s. <i>Berrabetta</i>	Salem	On a hill, about 1½ miles W. by S. of Hóshatti on the road to Hósúr, and ¼ a mile S. of Lambádi Tána: táluk Hósúr. 1802-6.	12 26 36' 93"	77 46 16' 75"	...	735
Karigatta Hill Peak	Mysore	Close to Karigatta h.s.: táluk Seringapatam. 1867-68.	12 25 27	76 45 59	...	662 663
Karigatta h.s. <i>Carrighaut H.</i>	"	On the S.W. extremity of a mass of hills overlooking Seringapatam, about a mile N.E. of the point where the Lokapávani joins the Cauvery river, and 2 miles E. of Seringapatam: táluk Seringapatam. The station is denoted by a small heap of stones. 1801.	12 25 28' 09"	76 45 59' 82"	...	710 711 712
Karigiri h.s. <i>Kurrykurry H.P.</i>	North Arcot	On a small isolated hill about a mile W. by S. of the village and fort so called, 2¼ miles E.N.E. of Vellore Railway Station, and 4¼ miles N.N.E. of Vellore town: táluk Gudiyátam. 1802-6. The station was refixed in 1865-66.	12 58 59' 98"	79 12 39' 85"	...	470 471
Karimangalam h.s. <i>Caramungle H.</i>	Salem	On a hill, on the main road from Krishnagiri to Dharmapuri, about 2 miles N. of Karimangalam: táluk Dharmapuri. 1802-6.	12 19 57' 65"	78 15 4' 33"	...	739
Karimangalam Rock <i>Caramungle Rock</i>	"	About ¼ a mile E. of the place so called: táluk Dharmapuri. 1802-6.	12 18 32	78 14 53	...	758
Karimangalam s. ... <i>Caramungle</i>	"	On a fort at the junction of the main roads from Krishnagiri, Ráyachoti and Dharmapuri: táluk Dharmapuri. 1802-6.	12 18 26' 69"	78 14 27' 08"	...	759
Karimarapákam h.s. <i>Komarpuak H.</i>	Chingleput	On a small isolated hill about ¼ of a mile W. of the village of the same name, and 2½ miles S.S.E. of Tirukalikundram town on the main road from Chingleput to Sadras (Sathurangapatnam) on the sea coast: táluk Chingleput. 1802-3.	12 34 12' 38"	80 7 10' 61"	...	609
Karimmod s. ...	"	On a narrow embankment about 15 feet high separating salt pans, about 180 yards E. of Karimmod village, 100 yards S.E. of the coolies' lines, and 2 miles E. by S. of Vėlliváyal Savad on the road from Vallúr to Madras: táluk Pónneri. The station is denoted by a thick wooden stake 6 feet long driven 4 feet into the ground. 1886-87.	13 13 26' 17"	80 20 37' 29"	17	819
Karinja Hill Pagoda <i>Karinjah H.P.</i>	South Canara	Spire of the temple at the northern end of a hill, about ¼ a mile S. of the road from Mangalore to Bėllatangi, and 7 miles E.N.E. of Bantvál postal town. 1802-6. The point was refixed in 1871-72.	12 54 46' 3"	75 10 10' 9"	* 735	117 118

\* To base of temple.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Karnátakgarh Hill Mark (helio.)	North Arcot	On a bare piece of rock, 51 feet N. of a round tower, about 410 yards E. of the new Revenue Survey station on the summit of the hill which is marked by a small circle and dot with a broad arrow attached to it, about 2½ miles W.N.W. of Pöttarai village, 3 miles N. of Tindivanam, and 6 miles N.W. of Polúr: taluk Polúr. The point is marked by a cylindrical hole 3 inches in diameter and about 3 inches deep at the bottom of which is a 2-inch circle and dot. The rock is dressed smooth an inch or two round the large hole, and a circle about 40 inches in diameter is engraved on the rock. Another smaller but somewhat similar mark is 5·7 feet to E.N.E. 1879-80.	12 34 42·62	79 7 3·15	feet 3139	*
Karnátakgarh h.s. <i>Carnatighur S.</i>	...	On the summit of a hill, about 2½ miles N. of Tindivanam, 2½ miles W.N.W. of Pöttarai village, and 5½ miles N.W. of Polúr: taluk Polúr. The station is denoted by a round mark-stone embedded in the centre of a large platform. 1802-8.	12 34 32·38	79 6 59·19	3180	450
Karunguli h.s. ... <i>Carangooly H.S.</i>	Chingleput	On a small isolated hill close in the rear of the Collector's house, about 1 mile W. of the large village of this name on the main road from Madurántakam to Chingleput, and 2 miles N. of the former: taluk Madurántakam. The station is denoted by a well built platform with a perforated stone in the centre. 1802.	12 32 5·82	79 55 56·22	410	502
Karunguli Hill Temple	...	Small stone-built temple on a hill, about a mile W. of the large village of the same name on the main road from Madurántakam to Chingleput, and 2 miles N. of the former. To the west of the hill is a large tank: taluk Madurántakam. When visited in 1887-88, a circle and dot was cut on the centre of the roof. 1879-80.	12 32 6·08	79 55 56·13	† 428	604 605
Kásaragod Fort ... <i>Kasragooda</i>	South Canara	On the right bank of the Chandragiri river, about 2 miles N.N.W. of Chandragiri town. 1802-6.	12 29 34	75 1 57	...	112
Káskal h.s. ... <i>Cascul H.</i>	Bangalore	On a prominent point of a range of hills, about 1¼ miles N.W. of Udkunte, 2 miles S.W. by S. of Kambálu, 5 miles E. by N. of the large village of Hulikal, 2½ miles E. by S. of Shrigiripur, and 5½ miles N.N.W. of the large village of Solúr close N. of the high road from Yédiyúr to Bangalore: taluk Mágadi. The station is denoted by a pile of stones on a rock. 1801.	13 8 32·18	77 15 47·52	[3390]	261
Katēgudda Hill Tree	Kadúr-South Canara	On the highest point of the hill, about 5½ miles S.E. by S. of the main road from Mangalore across the hills to Múdgere town, and 11 miles S.W. by W. of the latter. 1871-72.	13 2 21	75 34 1	‡ 4534	194 135
Káttúr Choultry ... <i>Salleery Choultry</i>	Chingleput	About 1½ miles N.E. of the village so called on the road from Vallúr to Pulicat (Paraverkád), and ¼ of a mile S.S.W. of a salt station: taluk Pönneri. 1802-3.	13 21 40·7	80 20 38·0	...	801
Káveripák Fort ... <i>Cauveryppak</i>	North Arcot	Of this town: taluk Wálapéet. 1802-3.	12 54 9	79 30 9	...	513
Kēndatti Hill Peak <i>Kendetty</i>	Kolár	On an isolated hill at the W. foot of which is the village so called, about a mile N.E. by N. of the 34th milestone on the road from Hóskote to Kolár, and 2½ miles E. by N. of Narsápur town on the same road: taluk Kolár. The point is denoted by a pillar. 1801.	13 8 9·1	78 5 7·8	[3878]	316

\* For triangle fixing this point, see the Synoptical Volume of the South-East Coast Series.

† To flat roof of temple. ‡ To base of tree.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Kilpatla Hill Pagoda <i>Keelpetlah H.</i>	North Arcot	Great pagoda about 3 miles N.E. of Palmaner town on the road from Kolár to Chittoor: zamíndári Punganúr. 1812.	13 14 11·8	78 48 54·3	... <i>feet</i>	391 392
Kittávar, VIII ...	Hásson	<i>Vide page 7—G.</i>	13 3 54·54	75 50 13·79	3766 †	2
Kodagurki h.s. <i>Koadly H.</i>	Bangalore	On the highest peak towards the S.W. end of a small mass of hills, about $\frac{1}{2}$ a mile E. by S. of the village so called on the road from Bangalore to Nundydroog (Nandidurga), and 1 mile W. of Ávati which is $\frac{1}{2}$ of a mile S. of the 26th mile-stone on the road from Bangalore to Chikballapur: táluk Devanhalli. The station is denoted by a pile of stones. 1801.	13 17 47·03	77 44 59·75	[3486]	300 301 302
Kodinjákal Hill Peak <i>Koningakul</i>	South Canara	The highest point of a peak of a detached hill, the Asses' Ears of the Marine Survey chart, about 3 miles E. by N. of Múdu Bidare town on the high road from Mangalore to Harihar, and 11 $\frac{1}{4}$ miles W. by N. of Allatangadi on the high road from Uppinangadi to Kárákal. 1802-6. The point was refixed in 1871-72.	13 5 4	75 5 5	† 1135	...
Koikuttimalai h.s. <i>Koegooty H.</i>	North Arcot	On a hill, about a mile N. of the high road from Gudiyátam to Vellore Railway Station, and 2 $\frac{1}{2}$ miles N.E. by E. of the former: táluk Gudiyátam. 1802-6.	12 57 35·70	78 56 59·41	...	461
Koiyárgudda h.s. ... <i>Koeyargooda</i>	South Canara	On a hill, about a mile E. of Mulki fort, the same distance N.W. of Shimantúr village, and 2 $\frac{1}{2}$ miles W. by S. of Kolúr: táluk Mangalore. 1802-6.	13 5 10·63	74 50 21·90	...	96, 97
Kökáráyankönda h.s. <i>Kookaroyecondah</i>	North Arcot	On a hill, close to the trijunction of the táluks of Chittoor, Punganúr and Chandragiri, about 4 $\frac{1}{2}$ miles N.W. by W. of Gundlapalle on the high road from Chittoor to Cuddapah. 1812.	13 29 24·49	79 1 21·70	...	426
Kolár, XLVIII§ ...	Kolár	<i>Vide page 11—G.</i>	13 8 47·28	78 8 16·76	$\frac{4021}{2·8}$	32, 45
Kolár Building ...	"	About a mile S.W. of the travellers' bungalow: táluk Kolár. The point is marked by a circle and dot engraved on the roof of the old kachahri in the town. 1865-66.	13 8 2·23	78 10 17·49	2781	322
Kolár Pagoda <i>Colar</i>	"	Great pagoda in the fort of this town: táluk Kolár. 1801-2.	13 8 10·1	78 10 50·0	...	330
Kolár Peak <i>Colar</i>	"	Of one of a group of hills lying between the high roads from Kolár to Hóskote and Málúr and having the small village of Chik Haiyúr at its southern foot, about 2 $\frac{1}{2}$ miles S.E. by E. of Narsápur town on the former road, and 3 miles N. of Vakkaleri on the latter: táluk Kolár. 1801.	13 7 58	78 4 40	...	321
Koliga h.s. <i>Koagly H.</i>	Bangalore	On a hill, about $\frac{1}{2}$ a mile S. of Chik Koliga village close E. of the road from Hóskote to Jangamkote, and 5 $\frac{1}{2}$ miles N.E. by N. of the former: táluk Hóskote. The station was denoted by a tent-peg and bushes. 1801.	13 8 59·86	77 52 20·76	...	298 299

\* To mark engraved on stone floor of eastern room of temple.

† See description of this station.

‡ To summit of highest peak.

§ This station appertains to the Great Arc Meridional Series, Section 8° to 18°.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Köndanmät Hill Mark ...	...	<i>Vide Mercara (Madikeri) Hill Mark.</i> ...	0 1 "	0 1 "	feet	...
Köndanmät h.s. ...	...	<i>Vide Mercara h.s.</i> ...	...	...	...	...
Köndapur h.s. ... <i>Kondapooram H.P.</i>	Támkúr	On a small hill about a mile N.N.E. of the village so called, 1½ miles E.S.E. of Madanhalli, 1½ miles W. by S. of Kodampur, and 2 miles N.W. of Shirvára close to the road from Gubbi to Kunigal: táluk Gubbi. The station is about 15 or 20 feet N. of a small pagoda. 1801.	13 14 23'28	77 1 7'84	[2745]	220
Kondli Hill ... <i>Konely H.</i>	"	At the S.E. extremity of a mass of hills, about 8 miles E.S.E. of the village so called, and 2 miles N.E. of Död Guni town on the high road from Tiptúr to Támkúr: táluk Gubbi. 1801.	13 20 45	76 49 33	[3165]	218
Köppabétta, LVIII* <i>Copahbetta</i>	Bangalore	<i>Vide page 18—G.</i> ...	12 21 45'44	77 32 12'17	$\frac{2819}{3}$	35
Kotébétta Hill Peak ...	Coorg	The most remarkable peak, locally known as Harangal-bétta, of one of the ridges which branch off from the Subrahmanya range of the Western Gháts, about 8 miles N. by E. of Mercara. 1871-72.	12 32 17	75 47 55	† 5369	153 154
Kotébétta h.s. ... <i>Kotabetta</i>	"	On a hill, about 8 miles N. by E. of Mercara. 1802-6.	12 32 22'15	75 47 52'13	...	689 690
Köttakota Fort ... <i>Kotookotah</i>	North Arcot	S.W. angle of the fort about 6½ miles E. by N. of Punganúr town: táluk Chittoor. 1812.	13 22 30'4	78 41 59'6	...	375
Köttúr s. ... <i>Mowbray's House</i>	Chingleput	On Mr. Mowbray's house near the left bank of the Adyar river, about ¼ a mile N. of Köttúr village, and 1½ miles E. of Saidépét Railway Station: táluk Saidépét. 1802-3.	13 1 25'17	80 17 21'15	...	562 563
Kovalam Church ... <i>Covelung</i>	"	Cross over peak of gable at the W. end of the Roman Catholic church at the N. end of the town of this name on the sea coast, about 2 miles E.N.E. of Sátankuppan village on the main road from Madras to Tirupórá, and 7½ miles N.E. by N. of the latter: táluk Chingleput. 1802-3. The point was refixed in 1879-80.	12 47 29'99	80 17 26'92	‡ 56	581 582
Krishnagiri h.s. ... <i>Kistnagherry</i>	Salem	On a small isolated hill immediately N.W. of the place so called, and close N. of the main road from Hósúr: táluk Krishnagiri. 1802-6.	12 32 10'38	78 15 27'90	...	778 779
Krishnamakönda, XXII ...	North Arcot	<i>Vide page 14—G.</i> ...	12 57 4'36	78 33 23'89	$\frac{2763}{1'7}$	48
Krishnamakönda h.s. <i>Kistnamah</i>	"	On a hill pagoda, close to the principal station of the same name: táluk Palmaner. The station is denoted by a small pyramid of stones. 1802. It was refixed in 1865-66.	12 57 3'91	78 33 24'01	...	323 324
Kudrakainigudda Hill Mark ...	"	About 50 feet E.S.E. of Kudrakainigudda h.s. 1865-66.	13 5 8'57	78 40 54'82	...	341 342

\* This station appertains to the Great Arc Meridional Series, Section 8° to 18°.

† To south end of dark object on summit of hill.

‡ To top of gable.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Kudrakainigudda h.s. <i>Koodrakinegootah</i>	North Arcot	Between two very large stones on the flat rocky surface on the southernmost of a double rocky hill, about 12 miles N.E. of Vēnkatagirikota: zamīndāri Punganūr. 1802.	13 5 8'72	78 40 54'34	... <i>feet</i>	327
Kudurēmukha, III	Kadūr	<i>Vide</i> page 6— <i>G.</i>	13 7 40'32	75 18 23'26	$\frac{6207}{*}$	1,6
Kudurēmukha Hill Mark	"	Also called Pāndukal by the natives and "Midge Point" by the Europeans, about a mile W. by N. of the principal station of the same name. On the highest rock of the western or north-westernmost point of the Kudurēmukha group, near the boundary between the districts of South Canara and Kadūr, about 5½ miles S. of Aroli, and 4 miles S.W. by W. of Malvadi: tāluk Mūdgēre. The point is marked by a circle and dot engraved on the rock. 1872-73.	13 7 47'46	75 17 47'00	† 6177	† 119
Kudurēmukha h.s.	"	Commonly called "Mukh Head." Immediately over the remarkable precipice at the S.E. point of the Kudurēmukha or Kote-kau-mukh group, near the boundary between the British districts of South Canara and Kadūr: tāluk Mūdgēre. The station consists of a circular masonry pillar, carrying a mark-stone in its upper surface surrounded by a platform. 1872-73.	13 7 28'89	75 18 55'19	[6173]	† 120
Kugankal h.s. <i>Koogunkul</i>	"	On a detached hill of this name in the village lands of Dasarhalli, about 4½ miles E. by N. of Berūr on the high road from Tankēre to Banāvār, and the same distance N.N.E. of Kadūr town: tāluk Kadūr. The station consists of a platform enclosing a pillar which contains two marks, one in the upper surface of the pillar and the other about a foot below. When visited in 1872-73, the lower mark and the platform of Colonel Lambton's station were found intact. 1806.	13 36 51'28	76 4 35'92	[2687]	† 188
Kukiralkōnda Stone <i>Kookiralcondah</i>	North Arcot	Remarkable stone on an isolated hill, about 1½ miles S. of the high road from Chittoor to Kārvētnagar: zamīndāri Kārvētnagar. 1802-6.	13 17 9'4	79 22 6'6	...	488
Kulibogudda h.s. <i>Kooliebogooda</i>	South Canara	On a hill, about 1½ miles E. of Marpāndi village on the road from Mangalore to Bārkūr, and 7½ miles N. of the former: tāluk Mangalore. 1806.	12 58 35'67	74 51 30'06	192	82
Kumārakuppam h.s. <i>Komarcoopum</i>	Chingleput	On a small hill about 1½ miles W. by N. of the village so called, and ¼ of a mile E. by S. of Narajūr: tāluk Madurāntakam. 1802-3.	12 27 29'33	80 4 24'04	...	607
Kumbla s. <i>Koomlah</i>	South Canara	On the high cavalier of a fort about 8½ miles N.W. by W. of Kāsaragod town on the high road from Quilon to Mangalore. 1802-6.	12 36 3'84	74 58 53'83	...	111
Kunavākam h.s. <i>Coonawaucum H.S.</i>	Chingleput	On the centre of a choultry on a small isolated hill about ¼ a mile S.E. of the village so called close N. of the main road from Conjeeveram to Vandalūr, and 3 miles E. of the large village of Tēnner on the main road from Wālababad to Srīpērubudūr: tāluk Conjeeveram. 1802-3.	12 50 49'66	79 56 33'78	...	536 537

\* See description of this station. Mangalore Meridional Series.

† To highest point of peak.

‡ For another triangle fixing this point, see the Synoptical Volume of the

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure feet	No. of Triangle
Kunchár h.s. ...	South Canara	On a ridge, about 2 miles N. by E. of Mangalore: táluk Mangalore. The station is marked by a circle and dot engraved on a rock. 1871-72.	12 53 56·88	74 53 36·05	226	...
Kundana h.s. ... <i>Koondane H.</i>	Bangalore	Near the tower of a pagoda on a small isolated hill at the S. base of which lies the village so called, about 1½ miles S. of the 7th mile-stone on the road from the junction of the roads from Nundydroog, Chikballapur and Kolár to Dödballapur: táluk Devanhalli. The station is denoted by a long stone placed upon its end, and supported by a small pile built round it. 1801-6.	13 15 28·27	77 40 19·44	[3298]	293
Kundhalli h.s. ... <i>Koondhully H.S.</i>	Coorg	On a very high hill, about ¼ a mile S.W. by S. of the village so called and near the Bisale Ghát. The station is marked by a circle cut on a large stone sunk in the ground. 1806.	12 39 29·06	75 48 33·69	4390	146
Kundúr Fort ... <i>Kundoor</i>	North Arcot	S.E. angle of the fort about 10 miles N.E. by N. of the large village of Chaudapalli on the road from Pungánur to Sadam. 1812.	13 33 15·2	78 48 56·4	...	411
Kundúr h.s. ... <i>Koondoor</i>	Mysore	On a conspicuous isolated hill, about 1½ miles S.E. of the village of this name, 5½ miles S. by E. of Malvalli town, and ¾ of a mile W. of Dásanködi on the road from Malvalli to the island of Sivasamudra at which are the celebrated falls of the Cauvery: táluk Malvalli. 1802-6.	12 18 29·93	77 7 36·21	[3122]	695 696
Kundúrbötta h.s. ... <i>Koondoorbetta S.</i>	Hásson	On a rocky hill, about a mile S.S.W. of Bargarhalli village on the road to Hásson, ¾ of a mile E. by N. of Kanvibasavanhalli, and 1 mile N. by E. of Hóspura village. It is on the boundary of Mánjarabad and Hásson táluks. The station is denoted by a mark-stone in the centre of a square platform. 1806.	12 51 12·26	75 59 33·57	3868	147
Kunigal Fort ... <i>Goonicul</i>	Túmkúr	S.W. angle of the fort: táluk Kunigal. 1801.	13 1 28·6	77 4 9·2	...	243
Kunnattúr h.s. ... <i>Coonatoor H.</i>	Chingleput	On a pagoda on a small isolated hill close S. of the village of this name, ¾ of a mile in the same direction of Tirunágessvaram on the road from Madras via Pörrú to Vellore, and 7 miles W.S.W. of St. Thomas's Mount: táluk Saidápet. 1802-3.	12 59 3·36	80 8 12·58	...	558
Kunnattúr Hill Temple ...	"	Ridge of gopuram of the temple about 195 yards W. by S. of Kunnattúr h.s.: táluk Saidápet. 1879-80.	12 59 2·3	80 8 6·8	* 180	546 547
Kuntúr h.s. ... <i>Koontoor</i>	Coimbatore	S.W. of a hill pagoda, about a mile N.W. of the village so called, 2¼ miles S. of the Cauvery river, and 5¼ miles W. by S. of Köllegál town: táluk Köllegál. 1802-6.	12 8 4·53	77 4 0·16	[2435]	697
Kuppam s. ... <i>Allumparva Station</i>	Chingleput	Near the coast and a short distance N. of Kuppam hamlet, about 4¼ miles S. by E. of the large village of Seyúr: táluk Madurántakam. 1802-3.	12 17 11·23	80 3 53·52	...	615

\* To ridge of gopuram.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Kuripati h.s. ... <i>Cooriputty H.</i>	North Arcot	On a hill, about 6 miles N.E. of Kōlagunta village at the junction of the high roads from Sholinghur (Shōlangipuram), Chittoor and Kārvētnagar: zamīndāri Kārvētnagar. 1802-6.	13 21 33·78	79 29 12·07	<i>feet</i> ...	484
Kurudamale, XIX	Kolār	<i>Vide page 14—G.</i> ... ..	13 12 11·98	78 24 33·76	$\frac{3307}{1·8}$	50
Kurudamale h.s. ... <i>Kootamalli</i>	"	On a high hill, about 55 feet S.W. by S. of the principal station of this name: tāluk Mulbāgal. The station is denoted by a mark cut on a large flat stone. 1802.	13 12 11·56	78 24 33·40	...	326
Kurumkota, XXXII	North Arcot	<i>Vide page 16—G.</i> ... .. Note.—When visited by the Levelling Party in 1880-81, the station was found in good order.	13 2 34·14	79 47 17·68	$\frac{336·87}{7·5}$	63
Kyātanahalli h.s.	...	<i>Vide Mysore No. 2 h.s.</i> ... ..	...	...	...	...
Machalbētta s. ...	Bangalore	On the summit of a rocky eminence about 500 or 600 yards N. of the Madras Railway, $\frac{1}{4}$ a mile S. by E. of Lingrājpur village, and $2\frac{1}{2}$ miles E.N.E. of Bangalore Cantonment Railway Station: tāluk Bangalore. The station consists of a circular, isolated pillar of masonry, 1 foot high, with mark-stones at top and bottom, and surrounded by a platform of stones and earth. 1867-68.	13 0 3·75	77 40 12·45	[3032]	282
Madanakōnda Platform <i>Mauduncondah</i>	Cuddapah	On a hill, about 2 miles S.E. of Madanapalle town, and $\frac{1}{2}$ a mile S. of the main road from Madanapalle to Punganūr: tāluk Madanapalle. The point is denoted by a mark in the centre of the platform. 1812.	13 31 55·89	78 33 54·48	...	371
Madanapalle s. ... <i>Muddunpilly</i>	"	On the gateway of the fort of this name, immediately W. of the junction of the main roads from Punganūr and Chinna Tēppasamudram: tāluk Madanapalle. 1812.	13 33 0·15	78 32 44·77	...	370
Madavaram s. ...	Chingleput	On the N. bund of a tank about $\frac{1}{2}$ of a mile N.W. of the village of this name, and $2\frac{1}{2}$ miles in the same direction of Erukkanjeri on the main road from Nellore to Madras: tāluk Saidāpet. The station consists of a pillar of masonry 2 feet below and 2 feet above the surface of the ground; the lower portion is 3 feet square and the upper tapers from 2 to $1\frac{1}{2}$ feet square; the pillar contains three mark-stones, one at the foundation, the second at the ground level, and the third on the top, and is covered over by a mound of earth. 1886-87.	13 9 13·16	80 16 5·17	$\frac{26}{2}$	807
Madlakal Hill Peak	Kadūr	Called Cannon's nose, highest point of the Baṣgod or Ānūr hills, about $4\frac{1}{2}$ miles E. by N. of Aniganhalli on the road from Mūdḡēre to Kōppa, 2 miles S.E. of Uttaganhalli, $5\frac{1}{2}$ miles N.W. by N. of Vastāra, and 8 miles W. of Chikmagalūr: tāluk Chikmagalūr. 1872-73.	13 19 24	75 41 49	† 5164	‡

\* To top of rectangular protecting pillar, the height of which above circular pillar is 3·5 feet.

† To summit of peak.

‡ For triangles fixing this point, see the Synoptical Volume of the Mangalore Meridional Series.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Madras Base-line N. End s. ... <i>Madras Base N. End</i>	Chingleput	About $\frac{1}{2}$ of a mile S.E. of Guindy (Kandi) Railway Station, the same distance N.E. of Maduvankarai village, and $\frac{1}{2}$ a mile W. of Guindy Park: taluk Saidápet. The station consists of three rectangular blocks of stone masonry built over one another, the uppermost being 4 feet square, the next 6 feet square, and the third 8 feet square, each 1 foot in height; the upper surface of the topmost is 3 feet above the ground level, and carries a mark-stone coincident with the intersection of the diagonals of the platform. 1802.	13 0 11' 28"	80 15 29' 53"	... <i>feet</i>	555 556
Madras Base-line S. End s. ... <i>Madras Base S. End</i>	"	About a mile S.E. of Pērubákam village, and the same distance S.W. of the N. end of Sholanganallūr a little E. of the main road from Madras to Kovalam: taluk Saidápet. The station consists of three rectangular blocks of stone masonry built over one another, the uppermost being 4 feet square, the next 6 feet square, and the third 8 feet square, each 1 foot in height; the upper surface of the topmost is 3 feet above the ground level, and carries a mark-stone coincident with the intersection of the diagonals of the platform. 1802. The station was refixed in 1879-80.	12 53 34' 51"	80 15 28' 05"	...	552 553
Madras Cathedral ...	"	Ball of spire of St. George's Cathedral in Tanampet, about $1\frac{1}{4}$ miles S.W. of the Government House: taluk Saidápet. 1864-65.	13 3 2' 6"	80 17 42' 3"	...	566 567
Madras Church No. 1	"	Tall thin spire of St. Andrew's Church (the Scotch Kirk) in Egmore, 166 $\frac{1}{2}$ feet above the pavement, N. of the Railway line, and about $\frac{1}{2}$ of a mile W.S.W. of the Central Railway Station: taluk Saidápet. 1864-65.	13 4 41' 6"	80 18 22' 3"	...	568 569
Madras Church No. 2	"	Waller's Church about $\frac{1}{2}$ a mile S.W. of the Government House, and the same distance N.W. of the Club: taluk Saidápet. 1864-65.	13 3 53' 1"	80 18 43' 8"	...	570 571
Madras Compound s.	"	In the observatory compound: taluk Saidápet. 1864-65.	13 4 0' 72"	80 17 21' 92"	...	565
Madras Dome Observatory, XXXVII	"	<i>Vide</i> page 17— <i>g.</i> ...	13 4 2' 06"	80 17 18' 94"	* 53' 58" †	69
Madras Flag-staff ...	"	In Fort St. George: taluk Saidápet. 1864-65.	13 4 41' 5"	80 19 48' 1"	...	574 575
Madras Light-house	"	Flashing light on the granite column 128 feet above the sea, in the village of Mutial-petta, on the Esplanade between Fort St. George and the quay: taluk Saidápet. 1864-65.	13 5 8' 0"	80 19 52' 3"	...	572 573
Madras Observatory No. 1 s. <i>Observatory</i>	"	Lambton's origin of Longitude: taluk Saidápet. 1802-3.  Note.—In 1890 in course of an examination of the records of Lambton's triangulation, it was discovered that the point hitherto assumed as the origin of Lambton's Longitude, <i>viz.</i> , the centre of the present Meridian Circle of the Madras Observatory ( <i>vide</i> pages XII— <i>g.</i> to XIV— <i>g.</i> of the Introduction), cannot be correct. It appears from the triangulation connecting it with the southern station of his Base-line at Madras, which still exists, that the origin of Longitude must have been 13 feet west and 6 feet south of the centre of the Meridian Circle.	13 4 3' 05"	80 17 21' 38"	...	564

\* To upper surface of circular slab of granite on which the equatorial telescope was mounted.

† See description of this station by



Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Madras Observatory No. 2 s. ...	Chingleput	Centre of the Meridian Circle: táluk Saidápet. 1864-65.	° ' " 13 4 3' 11"	° ' " 80 17 21' 51"	feet ...	565
Madras s. ... <i>Fort St. George</i>	"	On the spire of St. Mary's old Church in Fort St. George: táluk Saidápet. 1802-3. The station was refixed in 1864-65.	13 4 38' 98"	80 19 43' 66"	...	576 577
Madrimalai Platform <i>Mudrimalli</i>	North Arcot	On one of the spurs of a large mass of hills, about 6 miles E. of the large village of Chaudapalli on the road from Punganúr town. The point is denoted by a mark in the centre of the platform. 1812.	13 26 10' 26"	78 48 47' 85"	...	385
Madurántakam Pagoda <i>Madranticum</i>	Chingleput	Big spire of the gopuram on the S.E. corner of a large tank W. of the town of the same name on the road from Trichinopoly (Tiruchinápalli) to Chingleput: táluk Madurántakam. 1802-3. The point was refixed in 1879-80.	12 30 30' 8"	79 55 33' 7"	* 173	606
Magadevi Hill Pagoda <i>Muggadawy H.P.</i>	North Arcot	On a mass of hills, about 5½ miles N. by W. of Virinjipuram Railway Station on the line from Arkonam to Jalárpet, and 2¼ miles S.E. by S. of Paradarami village on the main road from Gudiyátam to Chittoor: táluk Chittoor. 1802-6.	12 59 39' 8"	79 0 24' 1"	...	465
Mahábalipuram Light-house	Chingleput	Reef Light-house on the highest part of the rocks, about ¼ of a mile S.W. of the village of this name between the coast and the Buckingham canal, and ¼ of a mile E. of Punjeri village. It is on the ruins of one of the seven pagodas the position of which was originally fixed in 1879-80. The light-house was subsequently erected and its position determined in 1887-88: táluk Chingleput.	12 36 49' 5"	80 14 1' 3"	† 117	601 602
Mahábalipuram s. <i>Seven Pagodas</i>	"	Also known as seven pagodas. On the tower of a pagoda close to the light-house: táluk Chingleput. 1802-3.	12 36 49' 04"	80 14 1' 37"	...	610
Mahábalipuram Temple	"	Principal spire of the temple on the shore and E. of the village of this name, about ¼ a mile E. by N. of the light-house: táluk Chingleput. 1879-80.	12 36 54' 4"	80 14 30' 0"	...	603
Maharájdurga Building <i>Maharajedroog</i>	Hásson	On the eastern point of a group of hills, about 1½ miles S.W. of Nallúr village, 2 miles S.E. of Abana, and 2½ miles N.W. of Bargurhalli. It is on the boundary of Hásson and Mánjarabad táluks. 1802-6.	12 53 30' 4"	75 58 12' 8"	[3732]	...
Maharájdurga Pagoda <i>Mullagullallee P.</i>	"	Larger and western spire of a pagoda on one of a group of hills, about 3 miles W.S.W. of Nallúr village, and ¼ of a mile S. by E. of Mádgod: táluk Mánjarabad. 1802-6. The point was refixed in 1871-72.	12 53 22' 7"	75 56 40' 0"	‡ 3894	162 163
Mailesvaram h.s. ... <i>Mul Eeshwar H.</i>	North Arcot	On a pagoda on the N.W. slope of a hill. 1812. ...	13 31 6' 32"	79 8 41' 81"	...	416 417 418
Mákalenbétta h.s. <i>Mamcul H.P.</i>	Coorg	On a pagoda on a prominent hill peak known as Siddesvara or Gadgebétta in the Dubari Government Forest Reserve, about 7 miles S.W. of Périyapatna town, and 1½ miles N.E. of Maldare on the road from Virarájendrapet to Périyapatna, which passes ¼ a mile S. of the station: táluk Yédénálnkad. 1802-6.	12 16 4' 82"	76 3 25' 04"	[4010]	687

\* To ridge of gopuram below ornaments.

† To top of wall.

‡ To base of temple.

## CO-ORDINATES AND DESCRIPTIONS OF ALL STATIONS AND POINTS.

121—G.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Malaikōnda No. 1 Pagoda <i>Mullayecondah P.</i>	Cuddapah	On a hill, about a mile S.W. by S. of Vēmpalli, and 4 miles S.W. of Madanapalle town: táluk Madanapalle. 1812.	13 31 24·4	78 29 34·9	feet ...	369
Malaikōnda No. 2 Pagoda <i>Mullayecondah P.</i>	North Arcot	Táluk Chandragiri. 1812. ... ..	13 34 6·4	79 20 32·7	...	448
Malaikōnda Platform <i>Mullayecondah</i>	Cuddapah	On a hill, about 7 miles S.S.W. of Guttapálēm, and 5 miles S.E. of Nimmanapalli village which is about the same distance S.E. by S. of Váyalpád town: táluk Madanapalle. The point is denoted by a mark in the centre of the platform. 1812.	13 30 48·21	78 46 5·79	...	...
Malaipedu, XXXVI	Chingleput	<i>Vide</i> page 17—G. ... ..	12 54 51·70	80 3 19·65	$\frac{468}{10}$	65, 74
Malaipedu h.s. ... <i>Malapode H.S.</i>	"	On a hill, close to the principal station of this name: táluk Conjeeveram. The station is marked by either a circle and dot, or a round stone perforated at the centre, in the middle of a platform of stones. 1802-3.	12 54 49·81	80 3 22·17	472	501
Malaiyayávúr Hill Temple	"	Spire of a big temple on a small low hill at the S.E. foot of which lies the small village so called, about 4½ miles N. of the large village of Karunguli on the main road from Chingleput to Trichinopoly: táluk Madurántakam. 1879-80.	12 35 42·1	79 56 4·2	* 350	596 597
Málambi Hill Peak No. 1	Coorg	The top of a conspicuous hill distinguished by its beautifully conical shape which strikes the eye in every part of Coorg. 1871-72.	12 39 43	75 56 44	† 4483	155 156
Málambi Hill Peak No. 2 <i>Maulumby H.</i>	"	Close to Málambi Hill Peak No. 1. 1802-6. ...	12 39 44	75 56 44	...	157
Malapalli Hill Pagoda <i>Maulapilly H.</i>	Kolár	At the eastern extremity of a detached hill, about a mile S.S.W. of Vēnkataapur, 1½ miles S.W. of Chintámani town, ¼ a mile W. of Kannampalli close to the road from Hōskote to Chintámani, and 2½ miles N.E. by E. of Mailapur: táluk Chintámani. 1812.	13 23 8·9	78 4 53·1	[3739]	...
Malékal Tirupati h.s.	Hásson	On a hill, about 1½ miles N.N.E. of Arsikēre Railway Station: táluk Arsikēre. The station is marked by a circle and dot engraved on a large flat boulder. 1871-72.	13 20 29·12	76 19 7·90	3842	189
Malékal Tirupati Pagoda <i>Eoreekul H.P.</i>	"	On a hill, about 2 miles N.W. by W. of Agunda, 2½ miles N.E. of Arsikēre Railway Station, the same distance E. by N. of Jájúr, and 2½ miles S. by W. of Nágपुरi: táluk Arsikēre. 1802-6.	13 20 23·4	76 19 4·4	...	228
Malékal Tirupati Temple	"	On the southern summit of a hill, about 216 yards S.S.W. of Malékal Tirupati h.s. A flight of 1700 steps leads to the top, the ascent of which is an efficacious substitute for a pilgrimage to the famous Tirupati in North Arcot: táluk Arsikēre. 1871-72.	13 20 23·4	76 19 4·9	‡ 3795	142 143

\* To flat roof of temple.

† To summit of peak.

‡ To stone roof of temple.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Malesvaram Hill ... <i>Mullaasprum H.</i>	Kolár	Stone on a conspicuous peak, about $\frac{1}{2}$ a mile S.W. of the 7th mile-stone on the high road from Kolár town to Jangamkote, 2 miles S.E. of Vemgal, and 4 miles N.E. of the large town of Belúr: táluk Kolár. 1801.	0 1 19 5	0 1 4 32 9	feet [3561]	317
Mallákönda Hill ... <i>Mullacondah</i>	North Arcot	White-topped stone on the highest point rising above a flat-topped hill running E. and W., about 4 miles W. by N. of the large village of Aragönda, $1\frac{1}{2}$ miles S.S.W. of Mallákunta, and $2\frac{1}{2}$ miles N. of Kuppam: táluk Chittoor. 1812.	13 17 32 4	78 56 0 1	...	398
Mallánaigdrug h.s. <i>Mullanaig Dr.</i>	Salem	On a hill pagoda about $2\frac{1}{2}$ miles N.W. of Melakuppam village, and $4\frac{1}{2}$ miles N. by W. of Vániyambádi Railway Station. 1803-4.	12 44 38 02	78 38 31 06	...	769
Mallápádi h.s. ... <i>Mulpaddy H.</i>	"	About $\frac{1}{2}$ of a mile E. of the village so called, and immediately S. of the main road from Krishnagiri to Vániyambádi: táluk Krishnagiri. 1802-6.	12 31 48 89	78 25 21 32	...	770
Mallappakönda h.s. <i>Mullapunbetta P.</i>	Kolár-North Arcot	On a hill pagoda about $1\frac{1}{2}$ miles S.W. by W. of Sanganapalli, 2 miles S.S.E. of Böttalhalli, $4\frac{1}{2}$ miles S.E. by E. of Död Pönnándhalli, and 1 mile N.W. by N. of the small village of Pädä Pártigunta. 1803-6. The station was refixed in 1865-66.	12 45 55 04	78 16 45 87	...	780 781
Mallappanabëtta h.s. <i>Mullapunbetta S.</i>	Hásson	On a pagoda near the centre of a range of hills running nearly N. and S., about $3\frac{1}{2}$ miles S. of Dandiganhalli, $\frac{1}{2}$ a mile S. of the road from Channaráypatna to Hásson, 7 miles W. by N. of the former, 2 miles E. by S. of Mávanúr, and $6\frac{1}{2}$ miles S.E. of the large village of Grám: táluk Hásson. The station is denoted by a mill-stone on the roof of the pagoda, and is also marked on the floor below. 1806. It was refixed in 1871-72.	12 55 1 40	76 19 45 62	3438	172 173
Malvalli s. <i>Mallavilly</i>	Mysore	On the S.W. angle of the fort so called: táluk Malvalli. 1801.	12 22 56 37	77 5 50 67	...	733
Manali s. ...	Chingleput	At the S.E. end of a large waste of about 30 acres in extent, about a mile N.E. of the village of this name, and the same distance S by W. of Elandacheri on the main road from Madras to Vallúr salt station: táluk Saidápet. The station consists of a pillar of masonry 2 feet below and 2 feet above the surface of the ground; the lower portion is 3 feet square and the upper tapers from 2 to $1\frac{1}{2}$ feet square; the pillar contains three mark-stones, one at the foundation, the second at the ground level, and the third on the top, and is covered over by a mound of earth. 1886-87.	13 10 29 80	80 18 40 62	$\frac{11}{2}$	813
Manamai Kunnatúr, XL	"	<i>Vide page 17—G.</i> ... ..	12 34 24 25	80 12 18 77	$\frac{75}{3 0}$	72
Manantoddy h.s. ...	Malabar	On the highest point of a small hill of the Manantoddy group, on which the Solar Eclipse of December 11th and 12th, 1871, was observed; it was known originally as the Bank hill, and afterwards as the Eclipse Observatory hill. About $\frac{1}{2}$ of a mile E. of the Manantoddy main bazár. The station is marked by a circle and dot engraved on a large stone embedded on the summit of the hill flush with the ground, surrounded by a low platform 8 or 10 feet square and covered over by a large pile of earth and stones. 1873-74.	11 48 0 51	76 2 56 18	2554	629

\* To base of temple.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Manchhalli Hill ... <i>Munchelly H.</i>	Mysore	About 1½ miles W.S.W. of the village so called, 8½ miles N.W. by W. of Gundlupet town, 5 miles W. of Rághavapur close W. of the high road from Gundlupet to Nanjangúd, and 1½ miles N.W. of Álatúr: táluk Gundlupet. 1802-6.	11 53 4	76 37 51	<i>feet</i> [3426]	718
Mandúr, LIV* ...	Bangalore	<i>Vide</i> page 12— <i>G.</i> ...	13 4 56.48	77 46 26.97	$\frac{3000}{2.2}$	42
Mángád, XLIII ... <i>Mungot H.</i>	Chingleput	<i>Vide</i> page 18— <i>G.</i> ... Note.—By subsequent calculations it has been found that this station is identical with "Mungot H." of Colonel Lambton's triangulation of 1802-3.	13 0 24.72	80 8 25.49	$\frac{174}{\dagger}$	76
Mangala Hill Pagoda ... <i>Munglum H.</i>	Mysore	Steeple. On an isolated hill close E. of the road from Chámrájnagar to Yélandúr, about ¼ of a mile S.W. of Yadeyúr, and 1 mile N.E. by N. of Mangala: táluk Chámrájnagar. 1802-6.	12 0 23.6	77 0 32.4	[2610]	703
Mangalapēnta Pagoda ... <i>Munglepent P.</i>	North Arcot	About 5½ miles S. of Chinna Góttikallu on the main road from Váyalpád to Karakambádi. 1812.	13 34 30.0	79 8 14.5	...	436 437
Mangalapēntadrug s. ... <i>Munglepent P.</i>	"	About 5 miles S. of Bhákarapet on the main road from Váyalpád to Karakambádi. The station is denoted by a mark in the centre of the platform of a pagoda. 1812.	13 34 45.45	79 11 39.13	...	434 435
Mangalore, II ...	South Canara	<i>Vide</i> page 6— <i>G.</i> ... Note.—When visited by the Levelling Party in 1888-89, the station was found in good order.	12 52 14.76	74 53 9.89	$\frac{185.38}{11.3}$	8, 9
Mangalore Flag-staff ... <i>Mangalore</i>	"	Táluk Mangalore. 1802-6. ...	12 51 36.0	74 52 36.8	...	100 101
Mangalore Light-house ...	"	About 132 yards W. by S. of the old idgah, and 45 feet W.S.W. of the principal station of the same name: táluk Mangalore. 1871-72.	12 52 14.5	74 53 9.5	...	102 103
Mangalore No. 1 s. ... <i>Mangalore Eedgah</i>	"	On the S. minaret of the idgah about 118 yards E. by N. of the principal station of this name, and 132 yards nearly in the same direction of the light-house: táluk Mangalore. 1802-6.	12 52 15.30	74 53 13.40	146	104
Mangalore No. 2 s. ... <i>Station on the Beach</i>	"	Táluk Mangalore. 1802-6. ...	12 52 30.79	74 51 32.77	14	105
Manghát h.s. ... <i>Monghaut H.</i>	North Arcot	About a mile E.N.E. of Kisalam village, 1½ miles S.S.W. of Nidugallu, and 4 miles E.S.E. of Attimancheripet on the high road from Sholinghur to Kárvétnagar: zamindári Kárvétnagar. 1802-6.	13 14 41.82	79 33 41.81	...	489
Manjampádi s. ... <i>Manjuimpuddy</i>	South Canara	About 2½ miles N.E. by N. of Hósdrug town, and 7 miles S.E. by E. of Bekal. 1802-6.	12 20 16.94	75 9 34.61	...	114 115
Manjankaranai s. ... <i>Manjacarnah</i>	Chingleput	About ¼ of a mile S.W. of the hamlet of Kandigai, and 1½ miles E. by S. of Kannipper on the main road from Périyapálayam to Madras: táluk Tiruvallúr. 1802-3.	13 16 7.08	80 9 31.10	...	§

\* This station appertains to the Great Arc Meridional Series, Section 8° to 18°.

† See description of this station.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Mánjarabad No. 1 h.s. ...	Hásson	On the stone parapet at the north-western salient angle, about 20 feet above the interior level of the fort: táluk Mánjarabad. The station is marked by a circle and dot. 1871-72.  Note.—When visited by the Levelling Party in 1888-89, the station was found in good order.	0 1 " 12 54 58' 49"	0 1 " 75 47 58' 62"	feet * 3420' 37	164 165
Mánjarabad No. 2 h.s. ... <i>Monjerabad</i>	"	On a hill, close N. of the town so called and near the 141st mile-stone on the road from Hásson to Mangalore: táluk Mánjarabad. 1802-6.	12 55 33' 15"	75 48 14' 11"	...	166
Manjihalli h.s. ...	Kadúr	On the summit of a hill locally known as Tirumal Deva-rabétta, about a mile E. of the village so called, the same distance S. of Byáladhalli on the high road from Chikmagalúr to Bánávar, and 5 miles E. by S. of Sakkarépatna: táluk Kadúr. The station is marked by a circle and dot engraved on the rock <i>in situ</i> . 1872-73.	13 25 14' 06"	76 2 51' 24"	3152	178
Mankunu h.s. ... <i>Muncoonoo H.</i>	Salem	On a small isolated hill about 2½ miles N.E. of Kárapattu on the main road from Tirupatúr to Úttankarai. It is on the boundary between Tirupatúr and Úttankarai táluks. 1802-6.	12 22 28' 28"	78 36 53' 72"	...	771
Mankurgutta h.s. <i>Munkoorgootah</i>	North Arcot	On a small isolated hill about 8 miles N.E. of Punganúr town on the main road from Palmaner to Madanapalle. The station is denoted by a mark in the centre of a platform. 1812.	13 26 6' 84"	78 41 40' 60"	...	355
Mannúr s. <i>Mannoor S.</i>	Chingleput	A little E. of the road from Sripérumbudúr to Tiruvallúr, about 1¼ miles S.W. of the village of this name on the road from Conjeeveram to Madras, and 3 miles N.N.W. of the large village of Sripérumbudúr: táluk Conjeeveram. The station is marked by either a circle and dot, or a round stone perforated at the centre, in the middle of a platform of stones. 1802-3.	13 0 33' 40"	79 58 32' 47"	...	528 529
Marakanam s. <i>Marcanum S.</i>	South Arcot	On the sea coast near a choultry: táluk Tindivanam. 1803.	12 12 11' 06"	80 0 42' 97"	...	615
Marale h.s. ...	Kadúr	On Maralegudda hill, about 30 yards W. of the Mulain-giri Matta cave, 6¼ miles E. of Chikmagalúr, 3¼ miles W.N.W. of Kalasapura near the road from Chikmagalúr to Bánávar, 2¼ miles N.E. of Márle, and 2¼ miles S.S.W. of Kyátanbid: táluk Chikmagalúr. The station is marked by a circle and dot engraved on a stone. 1872-73.	13 18 5' 72"	75 55 37' 60"	4176	176
Marama Hill Pagoda <i>Maramah H.</i>	Mysore	On a hill, about 5 miles S.E. of Maddúr Station on the Mysore State Railway, 4 miles E. by S. of Nagaradkére, 1 mile S. by W. of Túppanhalli, 2½ miles N. of Hárúvanhalli, and 2¼ miles N.W. by W. of Garakhalli: táluk Mandya. 1801.	12 32 48' 5"	77 9 11' 1"	[2588]	730
Mariyálam, LVII†	Salem	<i>Vide page 13—G.</i> ...	12 22 40' 32"	77 44 48' 27"	$\frac{3445}{3}$	36
Márkandesvara h.s. <i>Maurcundeeshra H.P.</i>	Kolár	On a large pagoda on the E.N.E. of three isolated hills, about a mile S.E. by S. of the large village of Vakka-leri on the high road from Málúr to Kolár, and 8½ miles S.W. of the latter: táluk Kolár. The station is denoted by a star engraved on the platform of the pagoda. 1801.	13 3 18' 27"	78 5 11' 93"	...	312

\* To mark on parapet.

† This station appertains to the Great Aro Meridional Series, Section 8° to 18°.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Mattúr s. ... ..	Chingleput	On a small bit of slightly elevated waste land about 2½ acres in extent which is cultivable for dry crops. The station is about ¼ of a mile S.W. of Amulaváyal village, 1½ miles N.E. of Mattúr, and 1½ miles S.W. of Elandacheri on the main road from Vallúr salt station to Madras: táluk Sajdápét. The station consists of a pillar of masonry 2 feet below and 2 feet above the surface of the ground; the lower portion is 3 feet square and the upper tapers from 2 to 1½ feet square; the pillar contains three mark-stones, one at the foundation, the second at the ground level, and the third on the top, and is covered over by a mound of earth. 1886-87.	13 10 38·74	80 17 37·29	feet $\frac{20}{2}$	811
Mattúdrug Hill ... .. <i>Muddoor Dr.</i>	North Arcot	About 1½ miles N.W. by N. of the large village of Mattúr, and 2½ miles W.S.W. of Taduk which is ¼ a mile E. of the Railway line from Arkonam to Ráichur: zamíndári Kárvétnagar. 1811-14.	13 15 24	79 35 29	...	...
Mávandúr, XXXIV	"	<i>Vide page 16—G.</i> ... .. Note.—As Colonel Lambton's station of Doosh Maumdoor H. has disappeared, all his observations have been referred to this station.	12 44 37·47	79 42 26·53	$\frac{430}{1·5}$	64
Mávinkérebétta Pagoda <i>Mawunkerra H.P.</i>	Hásson	At the W. extremity of a short range of hills, about 1½ miles N.N.E. of Mávinkére fort, ¼ a mile N.E. by N. of Halékote on the road from Hásson to Narsipur, 1 mile S.S.E. of Kabbinhalli, 1½ miles W. by N. of Haradhanhalli, and 6 miles N.W. of Narsipur town: táluk Hóle Narsipur. 1802-6.	12 51 10·8	76 13 22·5	[3298]	175
Melkote Hill Pagoda <i>Mailcottah P.</i>	Mysore	Spire of the large pagoda close E. of the N. portion of this town, and about a mile W. of Kádalgère on the road from Hirod to Attikuppa: táluk Seringapatam. 1801. The point was refixed in 1867-68.	12 39 53·1	76 41 38·4	[3541]	648 649
Mercara Hill Mark	Coorg	Also called Kóndanmēt. On the S.W. bastion of the fort, about ¼ of a mile N. by E. of Mercara h.s.: táluk Mercara. The point is marked by a circle and dot engraved on the parapet wall. 1872-73.	12 25 8·19	75 46 52·40	3803	151 152
Mercara h.s. ... ..	"	Also called Kóndanmēt. On one of the peaks of the low range of hills that border the south side of the parade ground, about ¼ of a mile S. by W. of the fort, and W. of the road to Virarájendrapet: táluk Mercara. The station is marked by a circle and dot engraved on a large stone embedded flush with the top of the peak. 1872-73.	12 24 52·25	75 46 51·50	3835	150
Mijár, I ... ..	South Canara	<i>Vide page 5—G.</i> ... ..	13 3 20·50	74 58 39·40	$\frac{685}{*}$	7
Mijár h.s. ... .. <i>Meejar H.S.</i>	"	About 26 feet S. by E. of the principal station of the same name: táluk Mangalore. The station is marked by a circle and dot cut on the rock <i>in situ</i> , surmounted by a platform. 1803-6.	13 3 20·24	74 58 39·44	659	80

\* See description of this station.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Modúr Pagoda ... <i>Moodoorgootah P.</i>	Salem	Close N. of the village so called, and about 2½ miles W. of Mattakavundanhalli on the main road from Karimangalam to Dénkanikota: táluk Dharmapuri. 1802-6.	12 13 20·2	78 12 23·6	... <i>feet</i>	760
Mogral h.s. ... <i>Moograulpolliam</i>	North Arcot	On a hill, close N. of the place so called. 1802-6. ...	13 24 10·96	79 14 26·85	...	482
Moruvádi h.s. ... <i>Dewigherry</i>	Salem	On a hill, close S.E. of the village so called, about a mile W. of Kóttalam, and 2¼ miles N.E. of Mahendramangalam on the road from Pálkod to Ráyakota: táluk Krishnagiri. 1801-6.	12 25 59·63	78 7 36·48	...	754
Motumallala Hill Pagoda <i>Mote Mullail H.P.</i>	Cuddapah	On a small isolated hill close to the place so called, and about 2 miles N. of Rampichérta village: táluk Váyalpád. 1812.	13 42 21·4	79 5 40·4	...	433
Mount Dilli h.s.	...	<i>Vide Yemale No. 2 h.s.</i> ...	...	...	...	...
Muchil, VII	South Canara	<i>Vide page 7—G.</i> ...	12 37 2·11	75 21 53·48	$\frac{1210}{*}$	4
Múdapiinna Hill Tree	„	About 9 miles S.E. by E. of Mangalore. 1871-72. ...	12 47 48	74 59 52	† 686	106 107
Mudikundam Pagoda <i>Mooreedygootah</i>	Coimbatore	About ¼ a mile S.E. of Kóllegál town, and 1½ miles E.N.E. of the village so called: táluk Kóllegál. 1802-6.	12 9 5·0	77 9 14·0	[2260]	700
Mudipalli h.s. ... <i>Moodoopilly H.</i>	North Arcot	On a hill, about 1¼ miles S. by W. of the village so called, ¼ a mile E. of Vénkatapuram, ½ of a mile S.E. by E. of Rámapuram, and 2½ miles W. by N. of Taduk which is ¼ a mile E. of the Railway line from Arkonam to Ráichur: zamindári Kárvétnagar. 1802-3.	13 16 48·74	79 35 26·01	...	495
Múdu Bidare Pagoda <i>Moodabidery P.</i>	South Canara	Of the place so called on the road from Mangalore to Káarakal. 1802-6.	13 4 22·5	75 2 21·4	...	129
Mugali, XXV	North Arcot	<i>Vide page 15—G.</i> ...	13 9 53·56	78 52 8·65	$\frac{2458}{*}$	54, 56
Mugali Beacon	„	Pile on a hill, about 34 yards N.E. by E. of the principal station of this name: táluk Chittoor. 1865-66.	13 9 54·2	78 52 9·5	...	393 394
Mugali h.s. ... <i>Muglee H.</i>	„	On a pagoda about 41 yards N.E. of the principal station of this name: táluk Chittoor. 1812.	13 9 54·38	78 52 9·55	...	357

\* See description of this station.

† To base of tree.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Múganáyakankote h.s. ... <i>Kotaoor H.P.</i>	Túmkúr	On a hill pagoda about 2 miles W. by N. of the village so called, 6½ miles N.N.W. of Nittur Railway Station, and 2 miles S. by W. of Alagatta village situated between two large tanks: táluk Gubbi. The station is marked on the top of the pagoda. 1801-6.	13 23 8.98	76 51 45.02	feet [3056]	217
Múgúr Pagoda ... <i>Moogoor</i>	Mysore	Steeple of a pagoda in the town so called on the main road from Narsipur to Yélandúr, about 6 miles S.S.E. of the former town, and 5½ miles N.N.E. of Ummattúr on the main road from Nanjangúd to Yélandúr: táluk Tirumakúdu-Narsipur. 1802-6.	12 7 52.1	76 59 20.5	...	701
Mukanúr h.s. ... <i>Mooknoor H.</i>	Salem	On the N.E. end of a mass of hills, about 2 miles S. of the village so called close to the main road from Dharmapuri to Morappúr Railway Station, and 6 miles E. of the former: zamíndári Kadatúr. 1802-6.	12 7 9.64	78 18 0.58	...	742
Mukundúrbétta Pagoda ... <i>Mookundoor P.</i>	Hásson	On a peak of a short range of hills, about 8 miles N.W. by W. of Narsipur town, 8½ miles N.E. by N. of Arkalgúd, ¾ of a mile E. by N. of Malédevarpur, and 1½ miles W. by S. of Nijámanhalli on the road from Hásson to Narsipur: táluk Hásson. 1802-6.	12 51 7.0	76 10 59.7	[3422]	174
Mulagalalejenkal Hill Mark ...	"	About ¼ a mile S.W. of Mádgod, ¾ of a mile W. of Daikapur, 1½ miles S.W. by S. of Abaná, and 3¼ miles W. by S. of Nallúr village: táluk Mánjarabad. The point is marked by a circle and dot engraved on a rock of the ridge some little distance N. of the summit. 1871-72.	12 53 42.46	75 56 12.03	3823	161
Mulaigunte h.s. ... <i>Moolaygoontah</i>	Mysore	On a hill, about a mile N. of Arsinkère large tank, the same distance N.N.W. of Chinagudihundi on the road from Chámrájnagar to Nanjangúd, and 2½ miles S.E. by E. of the latter town: táluk Nanjangúd. 1802-6.	12 5 57.89	76 45 57.84	[2478]	682
Mulaingiri Hill Peak ...	...	<i>Vide</i> Bába Budan Hill Peak. ...	...	...	...	...
Mulbágal Hill Mark ...	Kolár	On a conspicuous hill, about ¼ a mile N.W. by W. of the town so called: táluk Mulbágal. 1865-66.	13 10 9.53	78 25 21.43	[3661]	336 337
Mulbágal Stone ... <i>Mulwaggle Dr.</i>	"	On a conspicuous hill, close to Mulbágal Hill Mark: táluk Mulbágal. The point is denoted by a mark in the centre of the great stone. 1802.	13 10 9.76	78 25 20.98	...	362 363
Mulki s. ... <i>Moolky</i>	South Canara	On a fort S. of the town so called which is on an inlet of the sea 15 miles N. of Mangalore: táluk Mangalore. 1802-6.	13 5 10.86	74 49 47.80	...	98
Munimalai h.s. ... <i>Moonimalli</i>	Salem	On the northern of two small isolated hills about 2 miles S.W. of the junction of the main roads from Dharmapuri, Adikarappati and Arúr, 1 and 4½ miles in the same direction respectively of Mullepati village and Morappúr Railway Station: zamíndári Kadatúr. 1802-6.	12 4 46.63	78 22 9.68	...	*

\* For triangle fixing this station, see the Synoptical Volume of the Great Arc Meridional Series, Section 8° to 18°.



Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Múrkangudda Hill Peak ...	Hásson	A prominent peak about 8 miles W. of the large village of Sakleshpur close to the right bank of the Hemávati river, 6½ miles W.N.W. of Mánjarabad, and 4 miles S.W. by S. of a bungalow on the road from Múdgère to Mánjarabad: táluk Mánjarabad. 1871-72.	12 56 43	75 42 39	feet * 4265	140 141
Muruktöre, XXVIII <i>Moorookthora</i> ...	North Arcot	<i>Vide page 15—G.</i> ... ..	13 15 36·59	79 7 39·82	$\frac{1781}{2}$	58
Muruktöre Hill Pagoda <i>Moorookthora</i> ...	Mysore	Steeple of a pagoda on the S. end of an isolated hill also known as Bétahalli, about 3 miles N.N.E. of Talkád town, and ¼ of a mile N.E. of Bétahalli village close to the left bank of the Cauvery river and on the road from Talkád to Bèlakvádi village: táluk Tirumakúdlu-Narsipur. 1802-6.	12 13 27·2	77 5 8·9	[2406]	699
Muttigère h.s. ... <i>Muttagherry H.P.</i>	"	On a pagoda on a high conspicuous hill, about 2 miles S. of the village of this name, 8½ miles E. of Melkote town, 3½ miles N.N.W. of Dudda, and 2½ miles W. by N. of Múdagandúr: táluk Mandya. 1801.	12 39 28·22	76 49 9·19	...	728
Mysore Barracks ...	"	Immediately E. of the Railway line, and about 1¼ miles N.N.W. of the travellers' bungalow which is at the N. end of the town: táluk Mysore. 1867-68.	12 20 34	76 41 14	...	666 667
Mysore No. 1 h.s. ...	"	Also known as Padvárhalli. On a high rocky ridge rendered conspicuous by a large cluster of rocks which crown its southern extremity, about a mile N.W. of Padvárhalli village which is 1 mile W. by N. of the Railway station, ¼ of a mile N. of the high road from Mysore to Yèlwál, and 2 miles W. by S. of Cole's garden temple: táluk Mysore. The station is denoted by a pillar surrounded by a platform. 1867-68.	12 19 39·23	76 39 43·03	2632	641
Mysore No. 2 h.s. ...	"	Also known as Kyátanahalli. On the highest point of a ridge, about 2 miles E.N.E. of the Residency, 1 mile in the same direction of Kyátanahalli village, and ¼ of a mile S. of the metalled road from Mysore to Mahádevpur on the Cauvery river: táluk Mysore. The station is denoted by a pillar surrounded by a platform. 1867-68.	12 19 27·53	76 43 53·74	2543	642
Mysore No. 3 h.s. ...	"	Also known as Chámundi. On the highest point of a conspicuous, isolated hill, about ¼ a mile N. of the village and temple of Chámundi on the hill, and 2½ miles S. by E. of the Residency: táluk Mysore. The station is marked by a circle and dot cut on a rock 3 or 4 feet square at top and 8 feet in height and immediately outside of the S.W. compound wall of a large bungalow built a little to the N.; it is 1·31 feet S.E. of Colonel Lambton's mark. 1867-68.  Note.—As Colonel Lambton's station of Mysoor H.S. (fixed in 1802-6) is very close, all his observations have been referred to this station.	12 16 36·50	76 42 44·87	3486	643 644
Mysore No. 1 s. ...	"	About ¼ a mile W. and opposite the W. gate of the fort: táluk Mysore. The station is denoted by a mark-stone embedded in the centre of the highest roof of the Jagan Mohan Mahal. 1867-68.	12 18 20·18	76 41 28·47	2522	671 672

\* To highest point.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Mysore No. 2 s. ... <i>Mysore</i>	Mysore	On the centre of the high cavalier of the fort: táluk Mysore. 1802-6.	12 18 15·92	76 41 48·90	feet ...	715
Mysore Observatory ...	"	At the N. end of the town and on the road from Mysore fort to Seringapatam, about $\frac{3}{4}$ of a mile N.W. by N. of the Residency: táluk Mysore. 1867-68.	12 19 18·0	76 41 59·2	...	669 670
Mysore Palace ...	"	In the inner fort of Mysore: táluk Mysore. 1867-68.	12 18 14·5	76 41 47·4	...	673 674
Mysore Race Stand ...	"	N.E. corner. About $\frac{1}{4}$ a mile S. of the high road from Mysore to Yélwál, and 2 miles W. by S. of the Railway station: táluk Mysore. 1867-68.	12 18 39·1	76 39 21·2	...	668
Nágalamalai h.s. ... <i>Nugla Allatoor H.</i>	North Arcot	On a small isolated hill about a mile N. of the high road from Gudiyátam to Vellore Railway Station, and $5\frac{1}{2}$ miles W. by N. of Virinjipuram Railway Station: táluk Gudiyátam. 1802-6.	12 57 56·58	78 58 43·58	...	454 455
Nágamangala h.s. ... <i>Nagmungalum Station</i>	Mysore	On a hill, about $\frac{1}{4}$ a mile S.E. of Mallenhalli village on the high road from French Rocks to Nágamangala, and 1 mile S. of the latter: táluk Nágamangala. 1801.	12 48 0·36	76 48 6·80	...	237
Nágamangala Pagoda <i>Nagmungalum</i>	"	Large pagoda in the fort close to the high road from French Rocks to Kunigal: táluk Nágamangala. 1801.	12 49 6·8	76 47 45·0	...	238
Nágapatla Pagoda <i>Nagapellah</i>	North Arcot	About 4 miles N.W. by N. of Chandragiri town: táluk Chandragiri. 1812.	13 38 0·4	79 19 5·0	...	* 442
Nagari, XXXIII ... <i>Naggery Nose</i>	"	<i>Vide</i> page 16—G. ...	13 22 45·08	79 38 13·62	$\frac{2814}{1·5}$	67, 68*
Nágavára s. ...	Bangalore	On the N. slope of the high land and on the straight line from the S.W. End to N.E. End of the Bangalore Base-line, being distant 2·4 miles from the former, about a mile W. of the village of this name, $1\frac{1}{4}$ miles E. of Hébbal village on the high road from Devanhalli to Bangalore, and 3 miles N. by E. of Bangalore Cantonment Railway Station: táluk Bangalore. The station is denoted in precisely the same manner as the South West End of the Bangalore Base-line. <i>Vide</i> page 12—G. The superstructure consists of a solid stone platform 10 feet 6 inches square and 1 foot above the ground level, on which rest four stone pillars carrying an upper platform. The former platform has a mark engraved on stone in the normal of and 1 foot 7 inches above the lower mark and the upper platform carries a circular slab of stone with an orifice in it, its upper surface being 8 feet 7 inches above the second mark. A cut-stone pyramid 2 feet square at base and 6 feet 3 inches high was erected on the slab. 1867-68.	13 2 11·16	77 38 57·91	[2977]	280
Nallakōnda h.s. ... <i>Nullacondah</i>	North Arcot	The station is denoted by a mark in the centre of a platform. 1812.	13 29 47·12	78 58 12·62	...	423

\* For another triangle fixing this point, see the Synoptical Volume of the Madras Meridional and Coast Series.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Nallurhalli h.s. ... <i>Pattendore H.</i>	Bangalore	About 200 feet E. of a small pagoda on the summit of a remarkable hill, about 1½ miles N.E. of the village of this name, immediately W. of the main road from Sarjápúr to Kádgodi Railway Station, and 2 miles S.S.W. of the latter: táluk Bangalore. The station is denoted by a pile of stones. 1801.	0 1 " 12 58 27·83	0 1 " 77 47 30·98	<i>feet</i> [2966]	306
Nandigudi, XLVII*	"	<i>Vide page 11—G.</i>	13 12 8·33	77 56 16·07	$\frac{3087}{\dagger}$	44
Nanjangúd Pagoda <i>Nunjengode</i>	Mysore	Steeple. At the S.E. extremity of this town and on the road side from Chámrájnagar to Nanjangúd: táluk Nanjangúd. 1802-6.	12 7 3·7	76 44 3·9	[2110]	707
Nanmangalam, XLII	Chingleput	<i>Vide page 18—G.</i>	12 55 33·99	80 13 5·07	$\frac{233}{3·0}$	75
Náráyanavaram h.s. <i>Narnavaram</i>	North Arcot	On a hill, about 2½ miles N.E. of the village so called on the road from Patúr to Tiruvallúr, and 2½ miles E.S.E. of Patúr Station of the Madras Railway, N.W. Line: zamindari Kárvétnagar. 1812.	13 27 9·74	79 39 59·65	...	490
Náráyandurga, XIV	Mysore	<i>Vide page 8—G.</i>	12 42 41·53	76 37 41·63	$\frac{3586}{1·0}$	13, 15
Narikaldrug Pillar <i>Naricul Dr.</i>	North Arcot	On a hill, about 2 miles S.E. of Chilapalle, 3 miles W. by S. of Tángal on the main road from Chittoor to Wárajápet, and 5 miles N.W. by N. of Mahimandalam which is 6½ miles N. by W. of Tiruvallam Railway Station on the line between Jalárpét and Arkonam: táluk Chittoor. 1803.	13 7 49·1	79 13 31·3	...	449
Narikot h.s. ...	Malabar	Also known as Tanotimalai. On a prominent peak of the Western Gháts, which is conspicuous from its commanding elevation and the peculiar resemblance it bears to the hump of a Brahmini bull, and which is known to the European inhabitants of Wynaad as the "Hump". It is the south-westernmost peak of the Lesser Terint range of the hills called Chinathu Terint which is separated by a deep valley from the Greater Terint range called Ballára about 4 miles W. of Vaitiri, and 1½ miles W.N.W. of the Lakadighát road: táluk Manantoddy. The station is marked by a circle and dot engraved on the rock or on a large stone embedded on the summit of the hill flush with the ground, surrounded by a low platform 8 or 10 feet square and covered over by a large pile of earth and stones. 1872-73.	11 32 24·40	76 1 20·27	5091	623
Narsuswámi h.s. ... <i>Narsooswamy H.P.</i>	Mysore	On the tower of a pagoda on a short rocky range of hills running from S.S.W. to N.N.E., about 3½ miles N.E. of Nágamangala town, 1 mile E. of Hóshalli, and 2 miles W. of Chikkanhalli: táluk Nágamangala. 1801. The station was refixed in 1867-68.	12 50 58·55	76 50 12·64	[2790]	223
Nattávaram h.s. ...	Malabar	On a very conspicuous peak, the highest point of a compact group of low lying hills detached from the main range of the Western Gháts, and situated to the W. of the Wynaad table-land, and separated from it by a deep valley about 1½ to 2 miles broad, about 20 miles E. of Tellicherry, and 15 miles W.S.W. of Manantoddy. The station is marked by a circle and dot engraved on a large rock <i>in situ</i> , surrounded by a platform of stones and earth about 10 feet square. 1872-73.	11 44 10·12	75 49 34·54	4553	621

\* This station appertains to the Great Arc Meridional Series, Section 8° to 18°.

† See description of this station.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Nëkkunram <i>Neccoonañ</i>	Chingleput	About $\frac{1}{2}$ of a mile E. by S. of the village of this name, and $2\frac{1}{2}$ miles N.E. by N. of Solavaram on the high road from Nellore to Madras: táluk Pönnéri. 1802-3.	13 15 54	80 14 0	... feet	794 795
Nelvay h.s. <i>Nelwauk H.</i>	"	About $\frac{1}{2}$ a mile E.S.E. of the village of this name, and $3\frac{1}{2}$ miles N. of Ráoji Choultry on the main road from Conjeeveram to Madras: táluk Conjeeveram. 1802-3.	12 55 39.25	79 48 23.48	...	516
Nemmalai h.s. <i>Nemhully H.</i>	North Arcot	About $1\frac{1}{2}$ miles S.S.W. of the village so called, $1\frac{1}{2}$ miles W. of Arungkulam, and $4\frac{1}{2}$ miles N.E. of Tirutani Railway Station: zamíndári Kárvétnagar. 1802-3.	13 14 13.54	79 41 43.61	...	498
Nijagaldurga Pillar <i>Negicul Dr.</i>	Bangalore	Stone pillar on the top of a hill fort accessible only from the N. and E. sides, about $\frac{1}{2}$ of a mile S.W. of Nijagal village which is $\frac{1}{2}$ of a mile E. of the 33rd mile-stone on the high road from Nēlamangala to Tūmkūr, $2\frac{1}{2}$ miles N.W. by W. of Dobbspet travellers' bungalow, and 4 miles W. of Nidvanda Railway Station: táluk Nēlamangala. 1801.	13 14 46.6	77 15 26.3	[3562]	252
Nughallibëtta, XIII	Hásson	<i>Vide page 8—G.</i>	13 1 32.95	76 30 59.64	$\frac{3140}{1.0}$	12
Nundydroog Building	Kolár	Highest point of Sir Mk. Cubbon's house on a hill, about 41 yards N.W. by N. of Nundydroog h.s.: táluk Chikballápur. 1865-66.	13 22 9.5	77 43 38.2	...	294
Nundydroog Hill Mark	"	On a hill, about 38 yards N.W. by W. of Nundydroog h.s.: táluk Chikballápur. 1865-66.	13 22 9.24	77 43 38.09	...	...
Nundydroog Hill Mark (helio.)	"	On a hill, about 50 yards E.N.E. of Nundydroog h.s., and 60 yards E. of the General's house: táluk Chikballápur. The point is marked by a circle and dot engraved on a bare rock. 1865-66.	13 22 9.34	77 43 40.25	4806	295 296
Nundydroog h.s. <i>Nundy-Droog S.</i>	"	On a famous fortified hill at the termination of a range of mountains, of which it is the highest point, running N. to Pēnukōnda: táluk Chikballápur. The station is on the S.E. rampart of an old Polygar fort, nearly halfway between the angles and is denoted by a mark-stone in the middle of a stone platform. 1806.	13 22 8.54	77 43 38.99	4813	209 210
Öttivákam Hill Mark	Chingleput	On the N. summit of a hill, about a mile N.W. of the village so called, $4\frac{1}{2}$ miles S.E. of Gúduvánchezeri Railway Station on the line from Madurántakam to St. Thomas's Mount, and 12 miles N.E. of Chingleput: táluk Chingleput. The point is marked by a circle and dot engraved on the highest point of the hill, surmounted by a pile of stones. 1879-80.	12 48 1.70	80 9 17.02	548	579 580
Padari s. <i>Paudree S.</i>	North Arcot	On an open spot near the village so called, about $5\frac{1}{2}$ miles E. of Nagari on the main road to Kárvétnagar: zamíndári Kárvétnagar. The station consists of a mass of stones sunk in the ground, the top being a little above its surface; there are two mark-stones, the one at the foundation being a large flat one, and the other, a long one, firmly fixed in the centre, one end of which projects a few inches above the upper surface of the mass. 1802-3.	13 19 35.24	79 43 5.11	313	521

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Padvárhalli h.s. ...	...	<i>Vide Mysore No. 1 h.s.</i> ...	0 1 "	0 1 "	feet	...
Pálamanda h.s. ... <i>Paulamunda</i>	Cuddapah	On a hill, about 2 miles W. of Rayágallu village, and 4½ miles S.W. of the postal village of Píler on the road from Váyalpád to Chinna Göttikallu: táluk Váyalpád. The station is denoted by a mark in the centre of a platform. 1812.	13 37 21·44	78 55 18·47	...	419 420
Pálár Beacon (helio.)	Chingleput	Also called Parjakuppam. About a mile E. of Kilár-kóllai village, 1½ miles S.E. of Kadalúr, and ¼ a mile N.E. of Allikuppam on the coast: táluk Madurántakam. 1887-88.	12 26 48·83	80 11 15·27	...	613
Pálhalli Factory ...	...	<i>Vide Seringapatam Factory.</i> ...	...	...	...	...
Pallávaram Hill Mark	Chingleput	On a hill, about ¼ a mile E. of Pallávaram Railway Station, and 3 miles S.W. of St. Thomas's Mount: táluk Saidápet. The point is marked by a circle and dot engraved on the E. summit of the hill, and surmounted by a pile of stones. 1879-80.	12 58 10·80	80 12 12·20	499	550 551
Pallikönda h.s. ... <i>Pollicondah H.P.</i>	North Arcot	On a hill pagoda about a mile S. of the high road from Beypore to Madras, and 4½ miles W.S.W. of the large village of Virinjipuram: táluk Vellore. 1802-6.	12 53 42·67	79 0 20·83	...	457 458
Pallikönda Pagoda ... <i>Pollicondah</i>	"	About ¼ of a mile N.W. of Kilachúr, and ½ of a mile N. of the high road from Beypore to Madras: táluk Vellore. 1802-6.	12 54 39·9	78 58 44·1	...	464
Palmaner Bungalow <i>Palamnaid</i>	"	About ½ a mile N.N.W. of the fort on the main road from Kolár to Chittoor: táluk Palmaner. 1812.	13 12 13·8	78 47 2·7	...	388
Palmaner House ...	"	Collector Robinson's house about ½ a mile S. of the town so called: táluk Palmaner. The point is marked by a circle and dot engraved on the roof. 1865-66.	13 11 27·60	78 47 16·01	2243	389 390
Palmaner Pagoda ... <i>Palamnaid</i>	"	In the S.W. angle of the fort: táluk Palmaner. 1812. ...	13 11 51·3	78 47 9·5	...	386 387
Pándukal Hill Mark	...	<i>Vide Kudurémukha Hill Mark.</i> ...	...	...	...	...
Paranchi Rock ... <i>Paranjairy rock</i>	North Arcot	About 2½ miles N.W. of the large village of Munnal, and 4½ miles in the same direction of Munnal Railway Station on the line from Jalárpet to Arkonam: zamindári Kárvétnagar. 1802-3.	13 5 46	79 33 47	...	512
Pardeshimáta Pagoda	...	<i>Vide Bába Budan Pagoda.</i> ...	...	...	...	...
Partamalaigudda h.s. <i>Purratamully</i>	South Canara	On a hill near and S.W. of Káarakal town, about 1½ miles W. of the remarkable statue of Buddha or Gautama: táluk Káarakal. 1811-14.	13 12 13·64	75 1 16·32	...	80
Passodigumpe h.s. <i>Goompay H.S.</i>	"	On a well-known hill, about 12½ miles N. by E. of Kásaragod, and about 18 miles S.E. of Mangalore. The station is marked by a circle and dot. 1803-6. It was refixed in 1871-72.	12 40 17·73	75 3 49·92	1059	86

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Pataravákam Hill Mark ...	Chingleput	On a hill, about 2½ miles N.E. of Chingleput town, and 3½ miles S. by E. of Singaperumálkoil Railway Station on the line from Chingleput to St. Thomas's Mount: taluk Chingleput. The point is marked by a circle and dot engraved on the rock surmounted by a pile of stones. 1879-80.	12 42 21' 21"	80 3 33' 12"	702	587 588
Patikōnda, XXIV ... <i>Patticondah S.</i>	North Arcot	<i>Vide page 15—G.</i>	13 10 20' 07"	78 41 11' 10"	$\frac{2905}{1'6}$	55
Patúr h.s. ... <i>Pooturput H.</i>	"	On a small isolated hill between the Pōnnai river and the high road from Cuddapah to Chittoor, about a mile S.E. of Patúr village, and the same distance N. of Talupulapalle on the above-named road: taluk Chittoor. 1802-6.	13 24 18' 46"	79 5 32' 09"	...	447
Pēddadrug h.s. ... <i>Paunt Dr. S.</i>	"	Also called Pántdrug. On a rock on the summit of a range of hills, about 11 miles W. of Púdi Station of the Madras Railway, N.W. Line: taluk Chandragiri. The station is denoted by a mark in the centre of a platform covered over by a pile of stones. 1812.	13 33 1' 07"	79 23 35' 79"	...	407
Pēddanadrug h.s. ... <i>Pednaig Dr.</i>	"	On an isolated hill, about a mile N. of the road from Vēnkatagiri to Satghur (Sátghadi), and 7 miles W. of the latter: taluk Palmaner. The station is denoted by a perforated stone on an old cavalier on the S.W. part of the upper fort, close to a white building or magazine. 1802.	12 57 28' 76"	78 39 30' 35"	...	778 774
Pērmanallúr h.s. ... <i>Permanoor H.</i>	"	On a hill immediately E. of the high road from Sholinghur to Kárvētnagar, about 2½ miles N.N.E. of Kar-lambákam, 2½ miles W.N.W. of Podattúrpet, and 1½ miles W. by S. of Bōmmarájpet: zamindári Kárvētnagar. 1802-6.	13 17 31' 19"	79 29 44' 41"	...	485 486
Pērubákam h.s. ... <i>Perumbauk H.S.</i>	Chingleput	On a small isolated hill, about a mile S. by W. of the village of this name, ¼ a mile E. of Sittalapákam, 2½ miles S.W. of Solanganallúr on the main road from Madras to Tiruporúr, and 8 miles S. of St. Thomas's Mount: taluk Saidápet. The station is denoted by a mark in the centre of a platform of stones. 1802-3. It was revisited in 1879-80.	12 53 1' 81"	80 14 12' 27"	263	534 535
Pikili h.s. ... <i>Peekly H.</i>	Salem	On a hill, about 3 miles N.E. by E. of the village so called, 1½ miles W. of Tomalappalle, and 3½ miles S.W. by S. of Pálakod town close to the junction of the roads from Dharmapuri and Pēnnagram to Ráyakota: taluk Dharmapuri. The station is denoted by a mark in the centre of a platform of stones. 1803.	12 15 34' 40"	78 5 15' 81"	...	738
Píler s. ... <i>Peclair</i>	Cuddapah	On the N.E. angle of the fort on the main road to Váyalpád, about ¼ a mile W. of the junction of the above road with that from Chittoor to Sandravaripalli: taluk Váyalpád. 1812.	13 39 7' 12"	78 58 49' 27"	...	*
Podhari h.s. ... <i>Podahry</i>	Salem	On a small isolated hill, about 2½ miles S.W. by W. of Sámalpati Railway Station, and 1½ miles N.E. by N. of Sámamartipati village on the main road from Úttan-karai to Párúr: taluk Krishnagiri. 1802-6.	12 18 12' 33"	78 29 29' 72"	...	741

\* For triangles fixing this station, see the Synoptical Volume of the Madras Meridional and Coast Series.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Poonamallee Flag-staff <i>Poondamallee</i>	Chingleput	Also called Púrviruntamalli. In the S.E. part of the place so called, about $\frac{1}{4}$ of a mile S.S.W. of the junction of the roads from Conjeeveram, Madras and Avadi Railway Station, and 1 mile N. of Mángád village: táluk Saidápet. 1802-3.	13 2 30'9	80 9 6'4	... <i>feet</i>	559
Pöttúr h.s. <i>Pottoor</i>	"	About $\frac{1}{4}$ a mile N. of the village of this name, 1 mile S.W. of Pammadukulam on the W. edge of the Red Hills lake: táluk Saidápet. 1802-3.	13 9 54'40	80 11 58'86	...	789
Pudupák, XLI	"	<i>Vide page 18—g.</i>	12 48 27'50	80 13 58'01	$\frac{170}{3'0}$	73
Pulgurkote Fort <i>Pooloogoorcottah</i>	Kolár	S.W. angle of the fort in the village so called, about $\frac{1}{4}$ a mile S.E. of the small village of Muddépalli, $\frac{1}{4}$ of a mile N.E. by E. of Manchuváripalli, $2\frac{1}{4}$ miles W. of Jaklopalli, and 5 miles E. by N. of Upparpalli village: táluk Chintámani. 1812.	13 25 46'2	78 24 3'0	...	* 352
Pullúr, XXX <i>Pilloor H.S.</i>	North Arcot	<i>Vide page 15—g.</i>	13 13 54'91	79 23 37'64	$\frac{1909}{1'5}$	59
Pullúdrug Hill <i>Puloor Dr.</i>	"	Peak of a detached hill, about $1\frac{1}{4}$ miles N. of Kótlapalle village, 2 miles N.N.W. of Pullúr, and 1 mile N.E. of Sangapalle on the road from Airála to Chittoor: táluk Chittoor. 1812.	13 22 14	79 3 31	...	415
Pulsanikónda Stone <i>Poolsanecondah</i>	Cuddapah	On a hill, about 3 miles W.N.W. of Váyalpád town: táluk Váyalpád. 1812.	13 38 53	78 38 12	...	†
Punák h.s. <i>Poonauk H.S.</i>	North Arcot	On a ridge of hills, about $\frac{1}{4}$ of a mile S. by W. of Amurdapuram village on the high road from Ráma-krishnamahárájpet to Tirutani Railway Station, and $1\frac{1}{4}$ miles S.W. of the latter: zamíndári Kárvétnagar. The station is denoted by a round stone perforated at the centre and embedded in the middle of a platform. 1802-3.	13 9 57'11	79 38 17'86	833	491 492
Pundi Pagoda <i>Boondy P.</i>	Chingleput	Immediately W. of the village so called, about a mile S.E. of Rangapuram village, and $1\frac{1}{4}$ miles S.W. by S. of Ódapai on the main road from Sripérumbudúr to Satyaved: táluk Tiruvallúr. 1811-14.	13 12 40'3	79 55 8'6	...	†
Punganúr Palace <i>Punganoor</i>	North Arcot	Rája's palace in the fort on the main road from Palmaner to Madanapalle: zamíndári Punganúr. 1812.	13 21 31'3	78 36 32'8	...	367 368
Punguni h.s. <i>Poongany Rock</i>	Salem	On a rock a little S. of Pudúrpunguni village, about $1\frac{1}{4}$ miles W. of Pudúr on the Pónniár river, and 4 miles W. by S. of Katteri on the main road from Úttankarai to Arúr: táluk Úttankarai. 1802-6.	12 10 38'20	78 31 38'10	...	764 765
Purakád h.s.	Malabar	On a low hill near the coast, about 4 miles N.W. of Koi-landi, and $\frac{1}{4}$ a mile N.W. of Váyamangalam. The high road to Vadakarai passes between the hill and the sea. 1872-73.	11 28 30'61	75 41 26'62	256	622

\* For another triangle fixing this point, see the Synoptical Volume of the Great Arc Meridional Series, Section 5<sup>o</sup> to 18<sup>o</sup>.  
† For triangles fixing these points, see the Synoptical Volume of the Madras Meridional and Coast Series.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Pushpagiri, IX ... ..	Coorg	<i>Vide page 7—<i>a</i>.</i> ... ..	0 1 " 12 39 38'08	0 1 " 75 43 41'37	<i>feet</i> 5620 *	8
Pushpagiri Hill Pagoda <i>Soobramanees</i> ... ..	"	Also known as Subrahmanya. Close to the principal station of the same name. Colonel Lambton writes:— "There is no station on it, though it forms one of the points of a great triangle in the verifying series carried southerly. The point is an old pagoda or rather a pyramid of stones near an old ruined pagoda. There is also a large mark put up to the southward of it, but it was not made use of." 1803-6.	12 39 39'2	75 43 41'9	5607	677
Ráchēnhalli s. ... ..	Bangalore	On the straight line from S.W. End to N.E. End of the Bangalore Base-line, being 2½ miles from the latter, on the rising ground between the villages of Ráchēnhalli and Tannisandra, about ¼ of a mile E. of the former, ¼ a mile W. by N. of the latter, 2½ miles N.E. of Hébbal on the high road from Devanhalli to Bangalore, and 5 miles N.N.E. of Bangalore Cantonment Railway Station: táluk Bangalore. The point is denoted in precisely the same manner as at the South-west-End Station of the Bangalore Base-line, the pyramidal mark-stone being sunk in a well and surrounded by concrete, but having its top rising about 12 inches above the well in which it is sunk. A circular isolated pillar is built over the mark, the latter being protected as usual by a hollow stone cap. A second mark is engraved on the pillar in the normal of the lower mark and 2 feet 3 inches above it. To protect the pillar and its mark, stone slabs have been placed over the whole, resting on the annulus wall, so as not to touch the pillar at all. These slabs form a circular platform 5 feet in diameter, and 9 inches high, having two lines cut into it intersecting over the mark. A pyramid of cut stones surmounts the platform. 1867-68.	13 3 21'91	77 40 8'92	[2953]	284 285
Rághavapur Hill ... .. <i>Ragapoor H.</i>	Mysore	About 3 miles W.N.W. of the village so called, close W. of the high road from Gundlupet to Nanjangúd, 8½ miles N.W. by N. of the former town, and 4½ miles S.W. of Begúr travellers' bungalow at the junction of the roads from Saragúr and Nanjangúd to Gundlupet: táluk Gundlupet. 1802-6.	11 54 27	76 39 54	[3321]	717
Rahmanghar h.s. ... .. <i>Bymandroog S.</i>	Kolár	On a conspicuous hill S. of Ambájidurga, about 1½ miles E.N.E. of the large village of Kaivára, ¼ of a mile S. of Mailapur, 1 mile N.W. of Pērmáchanhalli on the high road from Hóskote to Ráyalpád, and 4½ miles S.W. of Chintámáni town. A large boulder on the western side near Kaivára is crossed by belts of brown colour, and from a crevice in the side a liquid resembling blood is said to issue in January, which kites and crows eagerly eat: táluk Sidlagatta. The station is denoted by a mark-stone embedded on the centre of a mound of earth on a large well-known drug. 1806-12.	13 21 13'32	78 3 0'65	4183	207 208
Rájagundlahalli Hill Peak ... .. <i>Rajeegoondhully</i>	North Arcot	Close to Rájagundlahalli h.s. 1812. ... ..	13 19 57	78 26 10	[3506]	364 365
Rájagundlahalli h.s. ... ..	"	On an isolated hill, about ¼ a mile E.S.E. of the village so called, 2½ miles N.N.W. of Shilvakuppa, 4 miles W. by N. of Chokándlepalli, and 7½ miles E.N.E. of the large village of Yallúr. 1865-66.	13 19 56'01	78 26 9'16	3499	334 335

\* See description of this station.



Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Rakashmalai h.s. ... <i>Rakashmalli</i>	North Arcot	On a small isolated hill immediately N.W. of the Venkatagiri river, about 5 miles N.E. by N. of the large village of Venkatagiri on the road from Palmaner to Chittoor, and 1 mile S.E. of Sadakuppam: taluk Chittoor. 1802-6.	13 15 6'08	78 59 23'32	<i>feet</i> ...	401
Rámadevarabëtta, XL*	Túmkúr	<i>Vide page 10—G.</i> ... ..	13 19 19'49	77 12 23'76	$\frac{3880}{\dagger}$	23
Rámadevarabëtta Pagoda <i>Ramadavurbetta</i>	Bangalore	Close N.E. of the small village of Bëttadhëshalli, about $\frac{1}{2}$ of a mile W.N.W. of Narsimpur, $\frac{1}{2}$ a mile S.W. by S. of Hálenhalli close W. of the road from Dobbspet to Kóratagëre, $1\frac{1}{2}$ miles N.E. by N. of Nijagal, $\frac{1}{2}$ of a mile E. of the road from Túmkúr to Nélamangala, and 3 miles N. by W. of Dobbspet travellers' bungalow: taluk Nélamangala. 1802-6.	13 16 14'6	77 16 40'0	...	253
Rámasamudra Pagoda <i>Ramchendum P.</i>	North Arcot	On the high road to Kolár, about $9\frac{1}{2}$ miles E. of Punganúr. 1812.	13 21 55'9	78 27 55'0	...	354
Rámenhalli Hill Pillar <i>Ramanmalli</i>	Túmkúr	A stone pillar on a high solid rock, about $\frac{1}{2}$ of a mile N.E. of the village so called, 2 miles S.E. by E. of Hönnudipe, $\frac{1}{2}$ a mile S.W. of Vardanhalli, and $2\frac{1}{2}$ miles W. of Kóratagëre village: taluk Túmkúr. 1802-6.	13 11 43'0	77 11 29'2	...	246
Ranganhalli h.s. ... <i>Runganelly H.P.</i>	"	On a very high pagoda on a low hill, about $\frac{1}{2}$ a mile N.E. by N. of the village so called, $5\frac{1}{2}$ miles E. by N. of the large village of Bukkapatna on the high road from Huliýár to Síra, and $2\frac{1}{2}$ miles S.W. by S. of Hönnënhalli on the same road: taluk Síra. The station is denoted by a mark on the top of the pagoda. 1801.	13 39 51'94	76 52 23'09	[2604]	†
Rangaswámibëtta, XLIII*	"	<i>Vide page 10—G.</i> ... .. Note.—When visited by the Levelling Party in 1888-89, the station was found in good order.	13 1 26'52	77 0 44'72	$\frac{\$ 2995'68}{\dagger}$	19, 21
Rangaswámibëtta h.s. <i>Rungaswamy H.P.</i>	"	On a pagoda at the northern extremity of a short range of hills, about a mile S. of the small village of Dásanpur, $3\frac{1}{2}$ miles W. by N. of Kunigal town, $1\frac{1}{2}$ miles N.N.E. of Nidemavinhalli, and $\frac{1}{2}$ of a mile N. of the high road from Yëdiyúr to Kunigal: taluk Kunigal. The station is denoted by a mark on the platform of the pagoda. 1801.	13 1 58'63	77 0 49'80	[2997]	213 214
Ráoji s. <i>Riojees Chy.</i>	Chingleput	On a choultry on the main road from Conjeeveram to Madras, about 5 miles N.E. of the former: taluk Conjeeveram. 1802-3.	12 52 21'44	79 48 28'30	...	515
Rásimalai h.s. <i>Rasheemalli</i>	North Arcot	On a hill, about $2\frac{1}{2}$ miles S.W. of Kuppampat, and 1 mile S.E. of Kuppampálayam village: taluk Vellore. 1802-6.	12 45 34'08	78 53 29'95	...	462 463
Ráyakota h.s. <i>Ryacottah</i>	Salem	On a hill towards the S. foot of which is the large place so called on the road from Dénkanikota to Krishnagiri: taluk Krishnagiri. 1802-4.	12 31 7'19	78 4 44'83	...	736
Red Hills No. 1 h.s. <i>Red Hill</i>	Chingleput	Taluk Saidápet. 1802-3. ... ..	13 10 8'45	80 13 40'86	...	805

\* These stations appertain to the Great Arc Meridional Series, Section 8° to 18°.

† See description of this station.

‡ For triangles fixing this station, see the Synoptical Volume of the Great Arc Meridional Series, Section 8° to 18°.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Red Hills No. 2 h.s. ...	Chingleput	On the highest knoll of a group of low undulating hillocks between two large fresh water lakes and about 50 feet above them, about $\frac{1}{4}$ a mile W. of Polal village which lies a little E. of the main road from Nellore to Madras, $\frac{1}{4}$ of a mile E. of the D.P.W. bungalow, and 8 miles N.W. of Madras. The Red Hills water-works which gives its supply to Madras takes its name after this group of hillocks: taluk Saidápet. The station consists of a masonry pillar 3 feet square and 2 feet below, and 2 feet square and $1\frac{1}{2}$ feet above the surface of the ground, which contains three mark-stones, one at the foundation, the second at the ground level, and the third on the top, and is covered over by a mound of earth. 1886-87.	13 9 32'07	80 14 27'99	$\frac{\text{feet}}{84}$ 1'5	806
Sadaiyankuppam s. ...	"	On a firm embankment about 8 feet above the general ground level. To the W. are marshy wastes, but to the E. the ground is cultivated. About $\frac{1}{4}$ of a mile N. of the village of this name, and $\frac{1}{4}$ a mile N.W. by N. of a lock of the Buckingham Canal: taluk Saidápet. The station consists of a pillar of masonry 2 feet below and 2 feet above the surface of the ground; the lower portion is 3 feet square and the upper tapers from 2 to $1\frac{1}{2}$ feet square; the pillar contains three mark-stones, one at the foundation, the second at the ground level, and the third on the top, and is covered over by a mound of earth. 1886-87.	13 11 11'02	80 20 1'65	$\frac{18}{2}$	815
Sadam s. ... <i>Suddum Edgah</i>	North Arcot	On the N. minaret of a mosque on the road from Punganúr, about $2\frac{1}{2}$ miles S.E. of Patchérla. 1812.	13 32 31'24	78 56 55'90	...	422
Sadras s. ... <i>Sadras</i>	Chingleput	On a ruined house in the fort between the coast and the large village of Sadras, and about 9 miles S.E. of Tirukalikundram town: taluk Chingleput. 1802-3.	12 31 27'03	80 12 23'13	...	612
Sakanagiri h.s. ...	Kadúr	On the summit of a conspicuous hill above the N.E. corner of a tank, about $3\frac{1}{2}$ miles N.W. of Sakkarépatna close to the junction of the roads from Kadúr, Bánávar and Chikmagalúr, 3 miles W.S.W. of Dód Bukságar, and $2\frac{1}{2}$ miles S.E. by E. of Sakamibasvanhalli: taluk Kadúr. The station is marked by a circle and dot engraved on a large stone embedded in a rough platform. 1872-73.	13 28 3'61	75 55 54'09	4649	177
Sakkarépatna s. ...	"	On a fort in the large village of this name, near the junction of the roads from Bánávar, Kadúr and Chikmagalúr, about $2\frac{1}{2}$ miles N.W. by W. of Kanchagáranhalli, $2\frac{1}{2}$ miles N.E. of Kēnkēre, and $2\frac{1}{2}$ miles W. of Agrahára: taluk Kadúr. The station is marked by a circle and dot engraved on the highest bastion of the fort about 12 feet from an old large gun. 1872-73.	13 25 54'50	75 57 50'87	2817	184
Sampigehalli t.s. ...	Bangalore	On the summit of a bare rock about $\frac{1}{4}$ of a mile E.S.E. of the village of this name, 1 mile N.N.E. of Srirámpur, and $2\frac{1}{2}$ miles S.E. by S. of Yēlahanka travellers' bungalow on the high road from Devanhalli to Bangalore: taluk Bangalore. The station is denoted by a perforated pillar 12 feet high, having a mark below engraved on the rock <i>in situ</i> . 1867-68.	13 4 40'71	77 39 53'80	[3019]	286
Santurkopalgudda h.s. <i>Suntooragooda</i>	South Canara	On a hill, about 6 miles E.S.E. of Yermál, and the same distance N.E. of Mũlki: taluk Bárkúr. 1811-14.	13 9 14'61	74 53 9'87	...	*

\* For triangle fixing this station, see the Synoptical Volume of the Mangalore Meridional Series.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Saragúrbétta h.s. <i>Surgoorbetta</i>	Mysore	On a hill, about a mile E. of the Kabbani river, 6½ miles E.S.E. of Hëggaddevankote town, and 4¼ miles N. by E. of Saragúr town on the right bank of the Kabbani river and on the road from Húnsúr to Begúr: táluk Hëggaddevankote. 1802-6.	12 2 57·62	76 27 31·78	<i>feet</i> [3084]	685
Sátanhalli, X	Hásean	<i>Vide page 8—G.</i>	12 50 39·07	76 15 24·98	$\frac{3504}{*}$	10
Sátanúr h.s. <i>Sautnoor H.P.</i>	Mysore	On a pagoda about a mile N.E. of the place so called, the same distance N. of where the Railway line crosses the road from Mandya to Maddúr, and 2¼ miles N.E. by N. of the former: táluk Mandya. The station is denoted by a mark on the platform of the pagoda. 1801.	12 33 43·16	76 57 23·22	[2337]	724
Satghur, XXVI <i>Sautghur</i>	North Arcot	<i>Vide page 15—G.</i>  Note.—By subsequent calculations it has been found that this station is identical with "Sautghur" of Colonel Lambton's triangulation of 1802.	12 57 22·19	78 47 5·29	$\frac{2314}{2}$	53
Sattegál s. <i>Sattiagal</i>	Coimbatore	On the turret of a fort N. of the place so called on the high road from Köllegál town to Sivasamudram island. 1802-6.	12 14 32·83	77 11 11·80	...	698
Sattevaripálëm h.s. <i>Suttawarpolliam S.</i>	Cuddapah	On the southern of two small isolated hills, about 2¼ miles N.W. of Bhákarapet at the junction of the main roads from Píler and Yërravaripálëm, and 2 miles S. of the latter: táluk Váyalpád. The station is denoted by a mark-stone in the centre of a platform. 1812.	13 40 52·80	79 10 13·79	2524	406
Sattiravádi Hill <i>Sattivarada</i>	North Arcot	About 2 miles N. by W. of the village so called, and 4 miles N.W. by N. of Nagari Railway Station on the line from Arkonam to Cuddapah: zamíndári Kárvüt-nagar. 1802-3.	13 21 1	79 35 28	...	499
Savandurga, XLI† ... <i>Savendroog S.</i>	Bangalore	<i>Vide page 10—G.</i>	12 55 5·92	77 20 2·99	$\frac{4021}{*}$	22
Seringapatam Factory	Mysore	Also known as Pálhalli. Highest chimney of a sugar factory close N.N.E. of Pálhalli, about ¼ of a mile N. of the high road from Seringapatam to Yélwál, and 1¼ miles S.W. of the fort: táluk Seringapatam. 1867-68.	12 24 50·6	76 41 57·1	...	658 659
Seringapatam Monument No. 1	"	Webb's monument. On a small mound, about 2 miles N.W. by N. of the fort, and 1 mile E. of Kyátana-halli village: táluk Seringapatam. 1867-68.	12 27 12·4	76 42 41·3	...	656 657
Seringapatam Monument No. 2	"	Top of Baillie's monument erected to the memory of the Officers killed at the siege of Seringapatam, on a hill about ¾ of a mile S.E. of the fort, and 1¼ miles W. of Tippoo Sahib's tomb: táluk Seringapatam. 1867-68.	12 24 37·4	76 44 12·0	...	660 661

\* See description of this station.

† This station appertains to the Great Arc Meridional Series, Section 8° to 16°

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Seringapatam Pagoda <i>Seringapatam</i>	Mysore	Tower of the large pagoda in the W. portion of the fort: táluk Seringapatam. 1802-6.	12 25 25' 2	76 43 8' 9	... <i>feet</i>	714
Seringapatam s. ...	"	On the highest point of the island and within the fort of this name. Midway between the E. Mysore gates stands the flag-staff of Tippoo Sultán erected on a high platform overtopping the ramparts: táluk Seringapatam. The station is built on the N.E. corner of the platform. 1867-68.	12 25 8' 37	76 43 42' 78	2334	689
Sëttahalli s. <i>Shettelly</i>	"	About a mile S.W. of the village so called, the same distance E.N.E. of Yëdaganhalli, and 4 miles W. by N. of Manëgere close to the high road from Malvalli to Maddúr: táluk Malvalli. 1801.	12 27 59' 66	77 1 16' 37	...	726
Sëttigëre h.s. <i>Shettagherry</i>	Túmkúr	On a hill, about 1½ miles S. by W. of Död Sëttigëre village, and 2 miles N. of Chunchanhalli on the high road from Nágamangala to Nittur: táluk Tiptúr. The station is denoted by a large pile of stones a few feet N. of a large rock. 1801.	13 2 58' 08	76 46 35' 28	...	224 225
Seven Pagodas s. ...	...	<i>Vide Mahábalipuram s. ...</i>	...	...	...	...
Shivaganga Hill Pagoda <i>Shevagunga</i>	Bangalore	Largest pagoda on a sacred hill N.W. of Nëlamangala táluk, about ¾ of a mile S.S.W. of the village of Shivaganga which lies at the N. base of the hill, 1 mile W. by N. of Kambálu, 2½ miles E. of Döllënhalli, and 4½ miles S.S.W. of Dobbspet travellers' bungalow at the junction of the roads from Túmkúr and Dödballapur to Bangalore: táluk Nëlamangala. 1801.	13 10 4' 5	77 15 52' 7	4550	248 249
Shivansandra h.s. ... <i>Shevasundrum</i>	"	On the eastern of three small isolated hills, about a mile N. of the village so called, and 3 miles W. by S. of Höskote travellers' bungalow: táluk Höskote. The station was denoted by a tent peg driven into the ground. 1801.	13 3 33' 24	77 46 53' 32	[3013]	297
Sholinghur Hill Pagoda <i>Sholanghur</i>	North Arcot	Highest steeple of the large pagoda about 1½ miles S. of Sholinghur, and 1½ miles N. by E. of Kodakal: táluk Wálejápet. 1802-3. The point was refixed in 1864-65.	13 5 15' 1	79 27 38' 4	...	503 504
Shrávana Rock Pagoda	...	<i>Vide Bëttadúr Rock Pagoda</i>	...	...	...	...
Sidragudda h.s. ... <i>Siddragooda</i>	Túmkúr	On a hill, about 2½ miles W. by N. of the small village of Hadapádkatte on the road from Tiptúr to Huliýár, 5½ miles W.S.W. of the latter town, 2½ miles S. by W. of Koragëre close N. of the road from Bánávar to Huliýár, and 2½ miles E. by S. of Chik Yannëgere: táluk Chiknáyakanhalli. 1803-6.	13 32 33' 97	76 30 22' 53	[2920]	† 205
Sigëgudda h.s. ... <i>Shiggadabetta</i>	Hásson	On a hill, about 1½ miles W. by N. of Sige village, 7½ miles N.N.W. of Hásson town, 3 miles N.W. by W. of Salgáme, and 2½ miles E. by N. of Mallënhalli: táluk Hásson. 1802-6. The station was refixed in 1871-72.	13 6 28' 52	76 5 19' 55	‡ 4216	159 160

\* To base of pagoda.  
‡ To level of platform.

† For another triangle fixing this station, see the Synoptical Volume of the Great Arc Meridional Series, Section 8° to 18°.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Singarpet Village ... <i>Shingarpetta</i>	Salem	A little S. of the junction of the main roads from the towns of Úttankarai and Tirupatúr. 1803.	12 14 56	78 39 22	... <i>feet</i>	766 767
Siskalbëtta Hill Peak	Kadúr	Summit of a conspicuous, sharp peak over the Siskal ghát, about 1½ miles W.S.W. of Bairapur village: táluk Múdgere. 1871-73.	12 58 45	75 36 26	3921	136 137
Sítakal h.s. ... <i>Cheetkul</i>	Túmkúr	On a hill, about a mile S.S.W. of the village so called, ¼ of a mile N. by W. of Kálénhalli, and ¾ miles S.E. by E. of the large village of Uradgere on the road from Dobbspet to Kóratagere: táluk Túmkúr. The station is marked on the top of the rock, close N. of a very large stone. 1806.	13 19 11·78	77 18 50·61	3345	250
Somanhalli Ranganagudda h.s. <i>Samunhully Runganagooda</i>	"	On a hill pagoda about a mile E. of the small village of Somanhalli, ¾ miles S. of Dásudi, 6½ miles N.E. of Huliýár town, and 3 miles N. of Márhöle on the high road from Huliýár to Síra: táluk Chiknáyakanhalli. 1803-6.	13 38 37·71	76 39 15·56	[3028]	* 206
Somopet Pagoda ... <i>Somopettah P.</i>	North Arcot	Large pagoda about 9 miles E. of Punganúr town: táluk Chittoor. 1812.	13 19 43·1	78 45 7·8	...	382
Sravanbëlgöla Statue <i>Bellagolla</i>	Hásson	Head of a gigantic Jain statue on a hill S. of the village so called, about 7 miles E.S.E. of Channaráypatna: táluk Channaráypatna. 1802-6. The point was re-fixed in 1871-72.	12 51 10·2	76 31 35·4	† 3345	197 198
Sripërumbudúr Pagoda <i>Stree Permatoor P.</i>	Chingleput	Steeple of the highest pagoda in the large village so called at the junction of the roads from Madras, Tiruvallúr and Conjeeveram: táluk Conjeeveram. 1802. The point was re-fixed in 1879-80.	12 58 0·8	79 59 27·7	‡ 221	538 539
St. Thomas's Mount, XLIV ...	"	<i>Vide page 18—g.</i> ... Note.—When visited by the Levelling Party in 1885-86, the station was found in good order.	13 0 14·79	80 14 8·56	§ 250·04 	77, 79
St. Thomas's Mount Flag-staff ...	"	Signal flag-staff on the N.E. corner of the terrace of the Portuguese (Roman Catholic) St. Thomas's Chapel, about 55 yards E. of the principal station of this name: táluk Saidápet. 1864-65.	13 0 14·75	80 14 10·21	...	560 561
St. Thomas's Mount No. 1 s. ... <i>St. Thomas Mount</i>	"	About 56 yards S.S.W. of the principal station of this name: táluk Saidápet. 1802.	13 0 13·17	80 14 8·16	...	554
St. Thomas's Mount No. 2 s. ... <i>St. Thomas Mount</i>	"	At the S.W. angle of the well-known mount so called, near the Portuguese (Roman Catholic) St. Thomas's Chapel, about 37 yards E. of the principal station of this name which is on the N.W. corner of the terrace of the church above mentioned: táluk Saidápet. 1802.	13 0 14·86	80 14 9·68	...	557
Subrahmanya Hill Pagoda	...	<i>Vide Pushpagiri Hill Pagoda</i> ...	...	...	...	...

\* For another triangle fixing this station, see the Synoptical Volume of the Great Arc Meridional Series, Section 8° to 18°. † To top of head of statue.  
‡ To ridge of gopuram. § To upper mark—circle and dot—engraved on large circular slab of stone. || See description of this station.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Sulagiri Hill Tree ... <i>Soolagherry</i>	Salem	On a hill on the W. side of which is the large village so called on the high road from Krishnagiri to Hösür: táluk Hösür. 1802-6.	0 1 " 12 40 4	0 1 " 78 3 42	feet ...	752
Surálgudda h.s. ... <i>Sooraalgooda</i>	South Canara	On a hill, about 2½ miles S.S.E. of Káarakal town, and 1½ miles S. of the colossal monolithic figure of Gautama Buddha: táluk Káarakal. 1811-14.	13 10 53'41	75 3 25'41	...	94
Suriyanagrám h.s. <i>Eutnashura H.P.</i>	North Arcot	On the eastern of three knolls forming a small isolated hill about ½ of a mile W. by S. of the village so called, 1 mile W.N.W. of Tekkalúr, and 4 miles N.W. of Tirutani Railway Station on the line from Arkonam to Cuddapah: zamindári Kárvétnagar. 1802-3.	13 12 31'81	79 36 5'25	...	...
Súrtikal h.s. ... <i>Soorulkul</i>	South Canara	On the hill close to and N. of Súrtikalpet on the road from Mangalore to Mulki, about 9 miles N. of the former, and 3½ miles W. of Kutalúr village: táluk Mangalore. 1802-6.	13 0 9'16	74 49 57'23	...	99
Tadiándamol h.s. ... <i>Taddiandamole H.S.</i>	Coorg	On the northern peak of a double-peaked high hill of the Western Gháts that separate Coorg from the west coast, about 3½ miles S.W. by S. of Náálnád, 17 miles S.W. of Mercara, and 13 miles W. by N. of Virarájendrapet: táluk Pádinálnád. The station is marked by a circle and dot engraved on a large stone embedded in the centre of a platform of loose stones and earth, 12 feet square. 1806. It was revisited in 1872-73.	12 12 58'37	75 39 2'01	5724	91, 93
Taduk h.s. ... <i>Tudduck H.</i>	North Arcot	On a small isolated hill about a mile S. of the village so called, and ¼ a mile E. of the Railway line from Arkonam to Ráichur: zamindári Kárvétnagar. 1802-3.	13 15 32'62	79 37 56'77	...	494
Tagadúr h.s. ... <i>Thuggadore H.P.</i>	Hásson	On a pagoda on a low hill, about 1½ miles N.E. by E. of the village so called, ¼ a mile E. by N. of the small village of Ranganhalli, and 3½ miles N.W. by N. of Nuggihalli village on the high road from Tiptúr to Hirésáve: táluk Channaráypatna. 1801. The station was refixed in 1871-72.	13 3 14'10	76 29 14'94	3191*	226 227
Tálagudi s. ... <i>Tologoody</i>	Mysore	About 3½ miles N.W. of Malvalli town, ¼ a mile S.S.W. of Kalagvádi village, and ½ of a mile N. of Madhalli: táluk Malvalli. 1801.	12 25 17'88	77 3 36'26	...	731
Tallarapet h.s. ... <i>Tellaralpete S.</i>	Cuddapah	On the highest hill of the Páikónda range, about 2½ miles S. by E. of Jondrazikuppa peak, and 9 miles S.W. by W. of Ballipalle Railway Station: táluk Váyalpád. The station is denoted by a platform. 1812.	13 43 22'82	79 20 53'17	3766	408
Tambarammalai Hill Mark	Chingleput	On a hill, about ½ of a mile N.N.E. of Tambaram village, 1 mile N. of Irumbalúr on the main road and Railway line between Chingleput and Pallávaram: táluk Saídápet. The point is marked by a circle and dot engraved on the hill and surmounted by a pile of stones. 1879-80.	12 56 0'39	80 8 57'06	440	544 545

\* To floor of temple.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Támrapákam h.s. ... <i>Damarpauk</i>	North Arcot	On an isolated hill, about 1½ miles N.W. by W. of the village so called on the high road from Árni to Arcot, and 1½ miles E. of Putúr village: zamindari Árni. 1802-8.	12 46 33·25	79 19 58·82	feet ...	473
Tandurai s. ... <i>Tandray S.</i>	Chingleput	About 1½ miles N. by E. of the village so called, 2½ miles W.N.W. of Avadi Railway Station, 1½ miles S.E. of Palaved village, and 2½ miles E.N.E. of Tinnanúr Railway Station on the line from Beypore to Madras: taluk Saidápet. The station is marked by either a circle and dot, or a round stone perforated at the centre, in the middle of a mound of earth. 1802-3.	13 7 58·80	80 6 32·60	...	525
Tattaikalludrug Hill <i>Tataculloo Dr.</i>	Salem	On the N. point of a small group of hills, about 2 miles E.S.E. of Vélampati village, the same distance N.E. of Tattaikallu, and 1 mile S. of the main road from Káveripatnam to Tirupatúr Railway Station: taluk Krishnagiri. 1802-6.	12 23 12	78 20 59	...	786
Tellicherry Flag-staff <i>Tellicherry</i>	Malabar	1802-6. ... ..	11 44 49·1	75 31 40·0	...	...
Tellicherry s. ... <i>Tellicherry Stn. in Redoubt</i>	"	1802-6. ... ..	11 45 40·67	75 31 7·07	...	627
Timiri Hill Temple ...	North Arcot	The western and higher spire of a small temple on a rock about 1½ miles S. of the large village of Timiri on the high road from Árni to Arcot, 7 miles S.S.W. of the latter, and ½ of a mile W. of the above-mentioned high road: taluk Arcot. 1879-80.	12 48 18·9	79 20 43·8	* 737	†
Tinnanúr Pagoda ... <i>Tinnanore P.</i>	Chingleput	Steeple of the pagoda in the village so called, about ¼ of a mile S.S.W. of Tinnanúr Railway Station on the line from Beypore to Madras: taluk Saidápet. 1802-3. The point was refixed in 1879-80.	13 6 40·4	80 4 8·1	...	530 531
Tirthapalli, XLVI† <i>Tirtapilly H.</i>	Bangalore	<i>Vide</i> page 11—G. ... .. Note.—When visited by the Levelling Party in 1884-85, the station was found in good order.	13 2 20·36	77 55 43·07	§ 3142·33 	26, 41
Tirukalikundram h.s. <i>Tirrikitchcoonum H.P.</i>	Chingleput	On the steeple of a pagoda on the S. end of a hill lying immediately to the N. of the large village of this name on the high road from Chingleput to Sadras: taluk Chingleput. 1802-3.	12 36 30·42	80 6 5·29	...	608
Tirukalikundram Temple	"	Principal spire of the temple on a rock, about 53 feet N. by W. of Tirukalikundram h.s.: taluk Chingleput. 1879-80. In 1867-88 the seaward face of the temple was plastered and whitewashed with a view to its being used as a beacon.	12 36 30·95	80 6 5·23	* 500	599 600
Tirumani, XXXVIII	"	<i>Vide</i> page 17—G. ... .. Note.—When visited by the Levelling Party in 1885, the station was found in good order.	12 39 4·47	80 1 18·25	¶ 771·45 6·5	70
Tirumani h.s. ... <i>Teeramony H.</i>	"	On a hill, about 110 feet N. by E. of the principal station of this name: taluk Chingleput. 1802-3.	12 39 5·56	80 1 18·39	...	593

\* To flat roof of temple.

† For triangle fixing this point, see the Synoptical Volume of the South-East Coast Series.

‡ This station appertains to the Great Arc Meridional Series, Section 694, 160.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Tirumeshi Temple ...	Chingleput	White top of the gopuram of a temple near a bungalow in the village so called on the road from Tiruvallúr to Poonamallee (Púviruntamalli): táluk Saidápet. 1879-80.	13 3 3'4	80 6 14'5	feet * 168	532 533
Tirumulaváyal s. ... <i>Thrimalvail</i>	"	On the steeple of the largest pagoda about 1½ miles N.E. by E. of Avadi Railway Station on the line from Arkonam to Madras; táluk Saidápet. 1802-3.	13 8 6'15	80 10 28'84	...	804
Tirunirmalai Hill Temple ...	"	Higher gopuram of the temple on a small isolated hill immediately N. of the village of this name, about ¼ of a mile N.W. of Paracheri, 2¼ miles W. of Pallávaram Railway Station, and 6 miles S.W. of St. Thomas's Mount: táluk Saidápet. 1879-80.	12 57 44'5	80 9 24'8	† 218	548 549
Tirupasúr Fort ... <i>Trippasoor</i>	"	N. of and adjoining the large village of this name, and about 2 miles W. of Tiruvallúr town: táluk Tiruvallúr. 1802-3.	13 8 30	79 55 2	...	522
Tirupatúr Pagoda ... <i>Trippatoor P.</i>	Salem	About 1½ miles S.E. of the Railway station of this name: táluk Tirupatúr. 1802-6.	12 29 23'5	78 36 59'5	...	787
Tiruporúr h.s. ... <i>Trippilloor H.P.</i>	Chingleput	On the gopuram of a pagoda on a small isolated hill immediately N.W. of the large village of this name at the junction of the main roads from Chingleput and Madras, and about ¼ a mile S.S.W. of Kanapati: táluk Chingleput. 1802-3. The station was refixed in 1879-80.	12 43 31'69	80 13 41'33	† 149	585 586
Tirutani Hill Pagoda ... <i>Tritany H.P.</i>	North Arcot	On a hill close S.E. of Amurdapuram village on the high road from Rámakrishnamaharájpet to Tirutani Railway Station, about ¼ of a mile S.W. of the latter: zamíndári Kárvétnagar. 1802-3.	13 10 16'0	79 38 47'0	...	...
Tiruvallúr Pagoda ... <i>Trivilloor P.</i>	Chingleput	Steeple. In the town of this name on the main road from Madras to Tirupasúr, about 2 miles N. of Tiruvallúr Railway Station: táluk Tiruvallúr. 1802-3.	13 8 31'3	79 56 58'4	...	527
Töndakönda Hill ... <i>Thondoncondah</i>	North Arcot	Broad stone on a high hill, about 2 miles S.W. of Sangapalle village on the road from Airála to Chittoor, 2¼ miles S. of the former, and 3¼ miles N. of Echineri village: táluk Chittoor. 1812.	13 20 45'9	79 1 22'9	...	413 414
Tönnúr Building ...	Mysore	Spire of the white-domed building about ¼ of a mile S.W. by S. of the village of this name, 2 miles W.N.W. of Tirumalságar on the high road from Hirod to Nágamangala, and 4 miles N.W. by N. of the former town: táluk Seringapatam. 1867-68.	12 33 7'1	76 40 53'1	[2607]	650
Töppanhalli Hill ... <i>Töpanelly</i>	"	Pagoda, about a mile N. by E. of Marama: táluk Mandya. 1801.	12 33 48'9	77 9 16'6	[2638]	729
Totalappangiri Hill Temple ...	Kadúr	Centre of the base of a small building on an eastern point of the Basgod hills, about a mile W. by S. of Ilihole on the road from Múdgere to Yédhalli, 1½ miles S.E. by S. of Mattod, and 5 miles N.N.W. of Vastára: táluk Chikmagalúr. 1872-73.	13 19 40'3	75 42 22'2	4888	†

\* To ridge of gopuram. † To flat roof of temple.



Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Tumakōnda h.s. ... <i>Toomahcondah</i>	Cuddapah	On a very high hill, about 4 miles N.W. of Váyalpád town, 2 miles N.N.E. of Chinna Tēppasamudram village, and 5½ miles S.E. by E. of Mudivedu. It is on the boundary of Váyalpád and Madanapalle táluks. The station is denoted by a spacious and well-built platform surmounted by a pyramid of stones. 1812.	13 40 17' 35"	78 37 9' 29"	3610 <i>feet</i>	350
Tumbakōnda Hill ... <i>Toombacondah</i>	North Arcot	About 3½ miles W. by N. of Kuppam village, ¼ of a mile N.W. of Tumbapálém, 7¼ miles N.E. of Palmaner, and 6 miles N.W. by N. of Vēnkutagiri, the last two large places being on the road from Kolár to Chittoor: táluk Chittoor. 1812.	13 15 49	78 52 54	...	395
Tumbála Hill Pagoda <i>Tumbutt Rock</i>	Mysore	Steeple. On a hill, about a mile N. by W. of the village so called, and the same distance W. of the right bank of the Cauvery river: táluk Tirumakúdlu Narsipur. 1802-6.	12 17 3' 0"	76 53 42' 8"	...	713
Turukungutta, LI†	Bangalore	<i>Vide page 12—G.</i> ... ..	12 58 33' 45"	77 45 12' 17"	$\frac{2986}{5' 1}$	28
Turumbētta h.s. ... <i>Toorombetta</i>	Coorg	On a hill, about a mile E. by S. of Swámibētta, and 3¼ miles E.S.E. of the Kodanthorakutte toll-gate on the road from Malabar to Virarájendrapet. It is on the boundary of Yēdnálnknád and Pádnálnknád táluks. 1802-6.	12 10 21' 87"	75 44 28' 98"	...	693
Tyambákam s. ...	Chingleput	About ¼ of a mile S.E. of the village of this name, and the same distance N. of Kosappúr. It is on the boundary of two rice fields, one lying N. and the other S.E. Towards the S.W. is some waste land, too saline for cultivation: táluk Saidápet. The station consists of a pillar of masonry 2 feet below and 2 feet above the surface of the ground; the lower portion is 3 feet square and the upper tapers from 2 to 1½ feet square; the pillar contains three mark-stones, one at the foundation, the second at the ground level, and the third on the top, and is covered over by a mound of earth. 1886-87.	13 11 14' 90"	80 16 33' 25"	$\frac{20}{2}$	810
Uialdinna Mandapam s. <i>Muntapum</i>	Bangalore	On the centre of the Mandapam, 91 feet S.E. of Uialdinna Observatory. See description of Bangalore Base-line S.W. End principal station: táluk Bangalore. 1801. The station was revisited in 1865-66.	13 0 40' 21"	77 37 27' 95"	...	255 256
Ukalgēre Hill Pagoda <i>Ookleegherry H.P.</i>	Mysore	Spire. About 2¼ miles N. by E. of the village so called, and 3¼ miles E. by S. of the large village of Bannúr at the junction of the roads from Malvalli, Seringapatam and Lakshampur: táluk Tirumakúdlu Narsipur. 1801. The point was refixed in 1867-68.	12 19 14' 4"	76 57 32' 9"	...	675 676
Ummattúr h.s. ... <i>Womootoor H.</i>	"	Near the centre of a short range of hills running S.W. to N.E., about 2 miles N.W. of the village so called on the road from Nanjangúd to Yēlandúr, 1¼ miles S. of Jainúr, and the same distance E.S.E. of Kárya. It is on the boundary of Nanjangúd and Chámrájnagar táluks. 1802-6.	12 4 50' 06"	76 55 44' 23"	[2883]	681
Urkuntebanda h.s.	...	<i>Vide Bandapalle h.s.</i> ... ..	...	...	...	...

\* For two other triangles fixing this station, see the Synoptical Volume of the Madras Meridional and Coast Series, and of the Great Arc Meridional Series,

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Uttaránmerúr Pagoda <i>Ootramalloor</i>	Chingleput	A ruined pagoda in the fort situated in the large village of this name on the main road from Wandiwash to Chingleput: táluk Madurántakam. 1802-8.	0 1 " 12 36 49·2	0 1 " 79 47 50·3	feet ...	595
Vadankönda Platform <i>Wudduncondah</i>	Cuddapah	On the S.W. point of a somewhat detached group of hills, about 1½ miles N.W. of Mustúr village at the junction of the main roads from Váyalpád and Madanapalle: táluk Madanapalle. The point is denoted by a mark in the centre of the platform. 1812.	13 34 13·72	78 39 25·38	...	372
Vadapurambákam s.	Chingleput	On a small piece of waste land about 100 square feet in extent which is surrounded by rice fields. The station is about ¼ of a mile E. of the village of this name, and the same distance N.W. of Mattúr: táluk Saidápet. The station consists of a pillar of masonry 2 feet below and 2 feet above the surface of the ground; the lower portion is 3 feet square and the upper tapers from 2 to 1½ feet square; the pillar contains three mark-stones, one at the foundation, the second at the ground level, and the third on the top, and is covered over by a mound of earth. 1886-87.	13 10 22·45	80 16 13·46	$\frac{19}{2}$	808
Vaddarhalli h.s. ...	Mysore	On the top of a wedge-shaped hill running N. and S., with the ends sloping gradually till lost in the general level of the surrounding country. The E. and W. faces of the hill are very steep, and about 20 feet from the top almost perpendicular in some places and overhanging in others. At the N. end of the hill is a very large lake, and close by the S. foot of it passes the high road to Hássan. The station is about 1½ miles E.S.E. of the travellers' bungalow at Chinakurali village on the high road from Attikuppa to Seringapatam, and 4 miles N.W. by W. of Hirod. It is on the boundary of Attikuppa and Seringapatam táluks. The station is marked by a circle and dot cut on the rock surrounded by a perforated paka masonry pillar 6 inches high. 1867-68.	12 31 50·35	76 39 51·97	$\frac{3239}{0·5}$	687
Vakirikönda Platform <i>Vukkerrycondah</i>	North Arcot	On a flat-topped hill, about 11 miles N.N.E. of Palmaner town on the road from Madras to Bangalore. The point is denoted by a mark in the centre of the platform. 1812.	13 20 4·91	78 52 36·65	...	409 410
Valankadpákam s.	Chingleput	On the junction of three rice fields, about 2½ feet above their level. The rice fields belong to zamindárs Naina Mudli, Ponambákam Mudli, and Ratna Mudli, the fields of the first named lying towards W., and those of the two last towards E. The station is about ¼ of a mile S.E. of the village of this name, and the same distance W. of Tyambákam: táluk Saidápet. The station consists of a pillar of masonry 2 feet below and 2 feet above the surface of the ground; the lower portion is 3 feet square and the upper tapers from 2 to 1½ feet square; the pillar contains three mark-stones, one at the foundation, the second at the ground level, and the third on the top, and is covered over by a mound of earth. 1886-87.	13 11 28·07	80 15 54·31	$\frac{26}{2}$	809
Vallúr s. <i>Popham's Farm</i>	..	In Popham's farm about ¼ a mile W. of Vallúr village from which a well-made road runs to Madras, and 1½ miles S.S.E. of Minjúr village: táluk Pönnneri. 1802-3.	13 15 37·24	80 18 33·91	...	798 799

\* For another triangle fixing this point, see the Synoptical Volume of the Great Arc Meridional Series, Section 8° to 18°.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Vandalúr Hill Mark ...	Chingleput	On the N. extremity of an isolated hill, about $\frac{1}{4}$ of a mile N.E. of the Railway station of this name, and $\frac{1}{4}$ a mile S. of Pirkankarandi village: táluk Saidápet. The point is marked by a circle and dot engraved on the rock <i>in situ</i> , surmounted by a pile of stones. 1879-80.	12 53 47.27	80 8 15.95	563	542 548
Vániyambádi Fort ... <i>Vaniambaddy</i>	Salem	On the Pálár river, about $\frac{1}{4}$ a mile N.W. of the Railway station of this name. 1802-6.	12 40 52	78 39 23	...	777
Váyalpád Pagoda ... <i>Waiilpaud</i>	Cuddapah	N. Pagoda in the town of this name at the junction of the roads from Gurrankónda and Madanapalle: táluk Váyalpád. 1812.	13 38 11.2	78 40 21.1	...	*
Váyalúr s. ... <i>Oornummode</i>	Chingleput	On the edge of a sheet of water, about $1\frac{1}{2}$ miles N.E. of Váyalúr village, and between two hamlets of this village which lie $\frac{1}{4}$ a mile N.N.W. and S.S.E. respectively of the station: táluk Pönnéri. 1802-3.	13 18 57.29	80 20 35.23	...	800
Vélagaram h.s. ... <i>Velligram H.</i>	North Arcot	A short distance N. of the village so called: zamíndári Kárvétnagar. 1802-6.	13 19 44.69	79 27 46.14	...	487
Vélagutta Rock s. <i>Vellagootah</i>	Salem	About 2 miles E. of Singarpet village close S. of the junction of the main roads from the towns of Úttankarai and Tirupatúr. 1803.	12 14 49.48	78 41 21.37	...	746
Vélkúr h.s. ... <i>Yailcoor H.</i>	North Arcot	On a hill immediately N. of the road from Chittoor to Kárvétnagar, about $4\frac{1}{4}$ miles E. by N. of the former, and $1\frac{1}{4}$ miles W.N.W. of Vélkúr village: táluk Chittoor. 1802-6.	13 13 45.39	79 12 22.09	...	445 446
Véllármalai h.s. ... <i>Vellarmalli</i>	Salem	On a small isolated hill about $2\frac{1}{4}$ miles S.W. of Morappúr Railway Station, and 2 miles S.E. by E. of Gopinadampati village on the main road from the above-named Railway station to Dharmapuri: táluk Kadatúr. 1802-6.	12 6 48.28	78 24 12.01	...	743
Véllera Hill Peak	Malabar	About 9 miles S.E. of Vayitri. 1873-74.	11 27 0	76 11 5	7360	634 635
Vélliváyal s. ... <i>Vellavail</i>	Chingleput	About $\frac{1}{4}$ a mile N.N.W. of the village of this name, $1\frac{1}{2}$ miles N. by E. of Vichúr, and the same distance W. of Vélliváyal Savad village on the road from Vallúr to Madras: táluk Pönnéri. 1802-3.	13 13 56.19	80 17 46.58	...	790
Vellore h.s. ... <i>Vellore Dr.</i>	North Arcot	Near the S.E. bastion of a hill fort immediately E. of the town so called: táluk Vellore. The station is marked by a circle and dot cut on a large stone. 1802-3.	12 54 53.19	79 11 20.87	...	451 452
Vellore Pagoda ... <i>Vellore</i>	"	Centre of the large gopuram of the great pagoda in the N.E. corner of the fort which adjoins the N.W. side of the town so called: táluk Vellore. 1802-3. The point was refixed in 1865-66.	12 55 14.2	79 10 16.5	788	468 469

\* For triangle fixing this point, see the Synoptical Volume of the Madras Meridional and Coast Series.

CO-ORDINATES AND DESCRIPTIONS OF ALL STATIONS AND POINTS.

147—*g.*

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Vellore s. ... <i>Vellore P.</i>	North Arcot	On a pagoda in the town so called: <i>táluk</i> Vellore. 1802-3.	0 1 " 12 54 58.84	0 1 " 79 10 41.59	<i>feet</i> ...	...
Vembad Hill Pagoda <i>Bumbode H.P.</i>	Chingleput	Spire. On a small low isolated hill about $\frac{1}{2}$ a mile W.S.W. of the village of this name, the same distance N.E. of Ammapetnattam, 2 miles E. of Nēllikuppam, $1\frac{1}{2}$ miles N. of the main road from Chingleput to Tiruporúr, and $\frac{1}{2}$ of a mile N.N.W. of Káttúr: <i>táluk</i> Chingleput. 1802-3. The point was refixed in 1879-80.	12 44 37.2	80 10 38.7	* 276	583 584
Vēmmāni h.s. ... <i>Peddy Vamini H.</i>	"	On a small hill about $\frac{1}{2}$ of a mile S.W. of the village so called, and $2\frac{1}{2}$ miles N.E. of Vilanganúr a little S. of the main road from Seyúr to Wandiwash: <i>táluk</i> Madurántakam. 1802-3.	12 23 55.24	80 1 18.40	...	616
Vēnkatagiri Fort ... <i>Venkettygherry</i>	North Arcot	In the large village of this name on the high road to Palmaner, about a mile E.S.E. of Patrapalle: <i>táluk</i> Palmaner. 1802.	12 59 57	78 31 46	...	340
Vēnkatagiri h.s. ... <i>Venkettygherry H.</i>	"	On a hill, about $\frac{1}{2}$ of a mile S. of the large village and rest-house so called, and 1 mile S.W. of Bangárupálem on the road from Palmaner to Chittoor: <i>táluk</i> Chittoor. 1802-6.	13 11 17.30	78 56 40.72	...	399 400
Vēnkatagiri s. ... <i>Venkettygherry Station</i>	"	On rising ground, about $\frac{1}{2}$ of a mile N. of Pápepalle village, and 1 mile S.E. by S. of Vēnkatagiri on the high road to Palmaner: <i>táluk</i> Palmaner. The station is denoted by a pile of stones, in the centre of which on an upright stone is marked the latitude $12^{\circ} 59' 23''$ . 1802.	12 59 20.57	78 32 29.78	...	339
Vichúr s. ...	Chingleput	On a low artificial mound on the N. bank of a small creek which flows into the expansive creek called Kagri Kalwa. It is about a mile S. of Karimmod village, and $2\frac{1}{2}$ miles S.E. of Vēlliváyā Savad on the road from Vallúr to Madras: <i>táluk</i> Pōnneri. The station is denoted by a thick wooden stake 6 feet long driven 4 feet into the ground. 1886-87.	13 12 46.71	80 20 32.14	† 16	817 818
Vilankád Hill Mark (helio.) ...	"	On a rocky hill, about $\frac{1}{2}$ a mile E. of the village of the same name, 9 miles E.S.E. of Acharapákam Station of the South Indian Railway, and 2 miles E.S.E. of Porúr village: <i>táluk</i> Madurántakam. In 1887-88 a beacon was built over it in the shape of a rectangular pillar standing on a foundation $4\frac{1}{2}$ feet x 10 feet and 1 foot deep, which tapers to $3 \times 2$ feet at top. The height of pillar is 10 feet. The breadth of structure faces seawards. For want of room the original circle and dot mark could not be embraced centrally by the structure. There are two mark-stones inserted over the normal of the original one—one 5 feet from the base and the other on the top. 1879-80.	12 20 34.18	79 58 31.18	$\frac{322}{10}$	‡
Vilankád h.s. ... <i>Vellungcaud H.S.</i>	"	On a hill, close to Vilankád Hill Mark (helio.): <i>táluk</i> Madurántakam. A platform with a mark defines the station. 1802-3.	12 20 34.39	79 58 31.36	...	‡
Virabadondrug Hill <i>Veerabuder Dr.</i>	Salem	About $2\frac{1}{2}$ miles W. of Panakamuttalu on the road to Káveriapatnam, and 2 miles N.E. by E. of Sudenahalli on the road from Pálakod to Ráyakota: <i>táluk</i> Krishnagiri. 1802-6.	12 23 16	78 8 56	...	757

\* To flat roof of temple.

† To ground level.

‡ For triangles fixing these points, see the Synoptical Volume of the South-East Coast Series.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Vírarájdendrapet h.s. <i>Veer Rajenderpett</i>	Coorg	S.W. of a hill pagoda, about $\frac{1}{4}$ a mile N.E. of the town of the same name: táluk Yédénáknád. 1802-6.	12 12 25' 99	75 51 6' 14	... <i>feet</i>	691 692
Virinjipuram Pagoda <i>Erinjavarum P.</i>	North Arcot	Large spire of the gopuram in the extensive village so called, about $\frac{1}{4}$ of a mile N. of Seduvalai village on the high road from Beypore to Madras, and 7 miles W. of Vellore fort: táluk Vellore. 1802-6. The point was refixed in 1865-66.	12 55 16' 0	79 35 4' 3	...	466 467
Wálajápet Mosque	"	Southern minaret of the mosque in the town so called: táluk Wálajápet. 1865-66.	12 55 20' 5	79 24 13' 6	...	476 477
Watakolli h.s. ... <i>Poodacherrum H.</i>	Coorg	On a hill, about $1\frac{1}{4}$ miles W.N.W. of Watakolli bungalow on the road from Vírarájdendrapet to Cannanore, 4 miles S.S.W. of the former, and 3 miles N.E. of Héggal village: táluk Yédénáknád. 1802-6.	12 8 32' 57	75 49 17' 96	...	694
Wáyútmalai Hill Peak	Malabar	About 26 miles N.E. of Calicut (Korikot). 1872-73.	11 25 32	76 10 22	7673	* 636
Wudugulúr h.s. <i>Woodoogooloor</i>	North Arcot	On the S.E. extremity of a small low ridge, about a mile W.N.W. of Tékkalúr village, and 4 miles in the same direction of Tirutani Railway Station: zamindári Kárvétnagar. 1802-3.	13 12 1' 36	79 35 52' 91	...	496 497 498
Yarancheri s. ...	Chingleput	On a small strip of waste land, about 2 feet above the general ground level, on the N. bank of the Kortalam stream, about $1\frac{1}{4}$ miles S.E. by S. of Véliiváyál Savad village on the road from Vallúr to Madras: táluk Pönnneri. The station consists of a pillar of masonry 2 feet below and 2 feet above the surface of the ground; the lower portion is 3 feet square and the upper tapers from 2 to $1\frac{1}{4}$ feet square; the pillar contains three mark-stones, one at the foundation, the second at the ground level, and the third on the top, and is covered over by a mound of earth. 1886-87.	13 12 45' 54	80 19 43' 67	$\frac{14}{2}$	816
Ye Ávalcheri Platform <i>Yae Auvuljerry H.</i>	North Arcot	On a hill. The point is denoted by a mark in the centre of the platform. 1812.	13 33 32' 43	79 15 27' 62	...	439 440
Yemale No. 1 h.s. ... <i>Mount Dilli S.</i>	South Canara	On the same hill as and close to Yemale No. 2 h.s. The station was denoted by a stone. 1803-6.	12 1 38' 81	75 14 38' 12	847	90
Yemale No. 2 h.s. ...	"	On the highest and western peak of an isolated hill of this name, also called "Mount Dilli," on the western coast, with the sea at its base, about 16 miles N.W. of Cannanore, and 5 miles S. of Kavváya village. The village of Ettikulam lies at the S. extremity of the base of the hill. The station is marked by a circle and dot cut on the rock <i>in situ</i> . Colonel Lambton had his station of "Mount Dilli" on this hill, but the circle and dot mark of his station was not found. 1872-73.	12 1 38' 47	75 14 38' 06	851	619
Yännë-hölä-ranganbëtta Pagoda <i>Yennae Runganabetta</i>	Hássan	Spire. On a prominent peak of an isolated hill, about $1\frac{1}{4}$ miles E. of Narsipur town, 1 mile S. of the road from Narsipur to Attikuppa, and the same distance N.N.E. of Mallappanhalli: táluk Höle Narsipur. 1802-6. The point was refixed in 1871-72.	12 47 5' 3	76 18 41' 4	† 3161	192

\* For another triangle fixing this point, see the Synoptical Volume of the Great Arc Meridional Series, Section 8° to 18°. † To base of temple.

CO-ORDINATES AND DESCRIPTIONS OF ALL STATIONS AND POINTS.

149—G.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Yerchikallu h.s. ... <i>Yerchiculloo</i>	North Arcot	On a hill a short distance S. of the high road through Kōlagunta eastwards, and about 4 miles E. of Kōlagunta village: zamīndāri Kārvētnagar. 1802-6.	° ' " 13 19 46·06	° ' " 79 32 26·99	feet ...	488
Yerkal Hill Peak ...	South Canara	A sharp peak with two or three remarkable boulders on its summit, overhanging the Bhūnd Ghāt near Chārmādi. 1871-73.	13 3 53	75 29 44	* 3182	132 133
Yērrakōnda, XX ... <i>Yerracendak</i>	Kolār	<i>Vide page 14—G.</i> ... Note.—When visited by the Levelling Party in 1884-85, the station was found in good order.	12 52 9·83	78 19 10·84	† $\frac{3356·79}{5·5}$	47

\* To highest point of peak.

† To top of rectangular protecting pillar, the height of which above circular pillar is 3·5 feet.

October, 1892.

J. ECCLES,  
In charge of Computing Office.



\_\_\_\_\_

ON THIS C

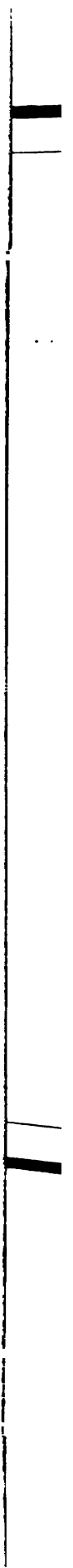
al)  
the plains)  
ary)  
n the plains)

\_\_\_\_\_

90

\_\_\_\_\_





...	...	...	ST. THOMAS'S MOUNT FLAG-STAFF
Chargutta h.s.	...	...	Chaudapalli Pagoda
Adúr, XXXIV	...	...	Malaipedu h.s.
li h.s.	...	...	Muruktóre, XXVIII
które, XXVIII	...	...	Satghur, XXVI
rára s.	...	...	Mugali Beacon
hydroog h.s.	...	...	" h.s.
ónda, XXIV	...	...	Bangalore Base-line S.W. End, LII*
abákam h.s.	...	...	Ráchénhalli s.
" "	...	...	Halasúrbétta, XXXIX*
" "	...	...	Gundakal s.
inhalli s.	...	...	Madras Church No. 1
Thomas's Mount No. 1 s.	...	...	Malaipedu h.s.
" " " "	...	...	St. Thomas's Mount Flag-staff
" " " "	...	...	" No. 1 s.
" " " "	...	...	" " 2 "
ur, XXVI	...	...	Bangalore Base-line N.E. End, LIII*
al h.s.	...	...	Nágavára s.
mani, XXXVIII	...	...	Madras Base-line N. End s.
apalli, XLVI*	...	...	" S. " "
inna Mandapam s.	...	...	Pérumbákam h.s.
re h.s.	...	...	Madras Observatory No. 1 s.
ir s.	...	...	Pérumbákam h.s.
			Krishnamakónda "
			Mugali h.s.
			Rámadevarabétta Pagoda
			Édámichi h.s.
			Karunguli Hill Temple
			Nundydroog Hill Mark (hel.)
			Bangalore Base-line S.W. End, LII*
			" Palace
			Vellore Pagoda
			Énnúr No. 2 s.

Of the Great Arc Meridional Series, Section 5° to 15°.

Photographed at the Office of the Trigonometrical Branch, Survey of India, Dehra Dún, November, 1892.



*List of Published Works of the Great Trigonometrical Survey of India.*

An Account of the Measurement of an Arc of the meridian between the parallels of  $18^{\circ} 3'$  and  $24^{\circ} 7'$ , being a continuation of the Grand Meridional Arc of India as detailed by the late Lieutenant-Colonel Lambton in the Volumes of the Asiatic Society of Calcutta. By Captain George Everest, of the Bengal Artillery, F.R.S., &c. London, 1830. (*Out of print*).

An Account of the Measurement of two Sections of the Meridional Arc of India, bounded by the parallels  $18^{\circ} 3' 5''$ ;  $24^{\circ} 7' 11''$ ; and  $29^{\circ} 30' 18''$ . By Lieutenant-Colonel Everest, F.R.S., &c., late Surveyor General of India, and his Assistants. London, 1847. (*Out of print*).

Account of the Operations of the Great Trigonometrical Survey of India.

*Price Rupees 10-8 per volume.*

- |        |      |  |
|--------|------|--|
| Volume | I.   | The Standards of Measure and the Base-Lines, also an Introductory Account of the early Operations of the Survey, during the period of 1800-1830. By Colonel J. T. Walker, R.E., F.R.S., &c., &c., Superintendent of the Survey. Dehra Dún, 1870.   |
| Do.    | II.  | History and General Description of the Principal Triangulation and of its Reduction. By Colonel J. T. Walker, C.B., R.E., F.R.S., &c., &c., Surveyor General of India and Superintendent of the Survey, and his Assistants. Dehra Dún, 1879.   |
| Do.    | III. | The Principal Triangulation, the Base-Line Figures, the Karáchi Longitudinal, N.W. Himalaya, and the Great Indus Series of the North-West Quadrilateral. By Colonel J. T. Walker, R.E., F.R.S., &c., &c., Superintendent of the Survey, and his Assistants. Dehra Dún, 1873.   |
| Do.    | IV.  | The Principal Triangulation, the Great Arc (Section $24^{\circ}$ - $30^{\circ}$ ), Rahún, Gurhagarh and Jogí-Tíla Meridional Series, and the Sutlej Series of the North-West Quadrilateral. By Colonel J. T. Walker, R.E., F.R.S., &c., &c., Superintendent of the Survey, and his Assistants. Dehra Dún, 1876.  |
| Do.    | IVA. | The Principal Triangulation of the North-West Quadrilateral, including the Reduction and Details of the Jodhpore and Eastern Sind Meridional Series. Prepared in the Office of the Trigonometrical Branch, Survey of India, Colonel C. T. Haig, R.E., Offg. Deputy Surveyor General, in charge, and published under the orders of Colonel G. C. DePrée, S.C., Surveyor General of India. Dehra Dún, 1886.  |
| Do.    | V.   | Details of the Pendulum Operations by Captains J. P. Basevi, R. E., and W. J. Heaviside, R.E., and of their Reduction. Prepared under the directions of Major-General J. T. Walker, C.B., R.E., F.R.S., &c., &c., Surveyor General of India and Superintendent of the Trigonometrical Survey. Dehra Dún and Calcutta, 1879.  |
| Do.    | VI.* | The Principal Triangulation of the South-East Quadrilateral, including the Great Arc—Section $18^{\circ}$ to $24^{\circ}$ , the East Coast Series, the Calcutta and the Bider Longitudinal Series, the Jabalpur and the Biláspur Meridional Series, and the Details of their Simultaneous Reduction. Prepared under the directions of Major-General J. T. Walker, C.B., R.E., F.R.S., &c., &c., Surveyor General of India and Superintendent of the Trigonometrical Survey. Dehra Dún, 1880. |

\* No copies available at the Trigonometrical Branch Office, Dehra Dún.

*List of Published Works of the Great Trigonometrical Survey of India.*

Account of the Operations of the Great Trigonometrical Survey of India—(*Continued*).

- Volume VII. General Description of the Principal Triangulation of the North-East Quadrilateral, including the Simultaneous Reduction and the Details of five of the component Series, the North-East Longitudinal, the Budhon Meridional, the Rangir Meridional, the Amua Meridional, and the Karara Meridional. Prepared under the directions of Lieutenant-General J. T. Walker, C.B., R.E., F.R.S., &c., &c., Surveyor General of India and Superintendent of the Trigonometrical Survey Dehra Dún, 1882.
- Do. VIII. Details of the Principal Triangulation of eleven of the component Series of the North-East Quadrilateral, including the following Series; the Gurwani Meridional, the Gora Meridional, the Hurilóng Meridional, the Chendwar Meridional, the North Párasnáth Meridional, the North Malúncha Meridional, the Calcutta Meridional, the East Calcutta Longitudinal, the Brahmaputra Meridional, the Eastern Frontier—Section 23° to 26°, and the Assam Longitudinal. Prepared under the directions of Lieut.-General J. T. Walker, C.B., R.E., F.R.S., &c., &c., Surveyor General of India and Superintendent of the Trigonometrical Survey. Dehra Dún, 1882.
- Do. IX. Electro-Telegraphic Longitude Operations executed during the years 1875-77 and 1880-81, by Lieut.-Colonel W. M. Campbell, R.E., and Major W. J. Heaviside, R.E. Prepared under the directions of Lieut.-General J. T. Walker, C.B., R.E., F.R.S., &c., &c., Surveyor General of India and Superintendent of the Trigonometrical Survey. Dehra Dún, 1883.
- Do. X. Electro-Telegraphic Longitude Operations executed during the years 1881-82, 1882-83 and 1883-84, by Major G. Strahan, R.E., and Major W. J. Heaviside, R.E. Prepared under the directions of Colonel C. T. Haig, R.E., Deputy Surveyor General, Trigonometrical Branch, and published under the orders of Lieut.-Colonel H. R. Thuillier, R.E., Surveyor General of India. Dehra Dún, 1887.
- Do. XI. Astronomical Observations for Latitude made during the period 1805 to 1885, with a General Description of the Operations and Final Results. Prepared under the directions of Lieut.-Colonel G. Strahan, R.E., Deputy Surveyor General, Trigonometrical Branch, and published under the orders of Colonel H. R. Thuillier, R.E., Surveyor General of India. Dehra Dún, 1890.
- Do. XII. General Description of the Principal Triangulation of the Southern Trigon, including the Simultaneous Reduction and the Details of two of the component Series, the Great Arc Meridional—Section 8° to 18°, and the Bombay Longitudinal. Prepared under the directions of Lieut.-Colonel G. Strahan, R.E., Deputy Surveyor General, Trigonometrical Branch, and published under the orders of Colonel H. R. Thuillier, R.E., Surveyor General of India. Dehra Dún, 1890.
- Do. XIII. Details of the Principal Triangulation of five of the component Series of the Southern Trigon, including the following Series; the South Konkan Coast, the Mangalore Meridional, the Madras Meridional and Coast, the South-East Coast, and the Madras Longitudinal. Prepared under the directions of Lieut.-Colonel G. Strahan, R.E., Deputy Surveyor General, Trigonometrical Branch, and published under the orders of Colonel H. R. Thuillier, R.E., Surveyor General of India. Dehra Dún, 1890.
- Do. XIV. General Description of the Principal Triangulation of the South-West-Quadrilateral, including the Simultaneous Reduction and the Details of its component Series. Prepared under the directions of W. H. Cole, Esq., M.A., Offg. Deputy Surveyor General, Trigonometrical Branch, and published under the orders of Colonel H. R. Thuillier, R.E., Surveyor General of India. Dehra Dún, 1890.

*List of Published Works of the Great Trigonometrical Survey of India.*

Synopses of the Results of the Great Trigonometrical Survey of India, comprising Descriptions, Co-ordinates, &c., of the Principal and Secondary Stations and other Fixed Points of the Several Series of Triangles. *Price Rupees 2 per volume.*

- Volume I. The Great Indus Series, or Series *D* of the North-West Quadrilateral. By Colonel J. T. Walker, R.E., F.R.S., &c., &c., Superintendent of the Survey, and his Assistants. Dehra Dún, 1874.
- Do. II. The Great Arc—Section 24° to 30°, or Series *A* of the North-West Quadrilateral. By Colonel J. T. Walker, R.E., F.R.S., &c., &c., Superintendent of the Survey, and his Assistants. Dehra Dún, 1874.
- Do. III. The Karáchi Longitudinal Series, or Series *B* of the North-West Quadrilateral. By Colonel J. T. Walker, R.E., F.R.S., &c., &c., Superintendent of the Survey, and his Assistants. Dehra Dún, 1874.
- Do. IV. The Gurhágárh Meridional Series, or Series *F* of the North-West Quadrilateral. By Colonel J. T. Walker, R.E., F.R.S., &c., &c., Superintendent of the Survey, and his Assistants. Dehra Dún, 1875.
- Do. V. The Rahún Meridional Series, or Series *E* of the North-West Quadrilateral. By Colonel J. T. Walker, R.E., F.R.S., &c., &c., Superintendent of the Survey, and his Assistants. Dehra Dún, 1875.
- Do. VI. The Jogí-Tíla Meridional Series, or Series *G*, and the Sutilej Series, or Series *H* of the North-West Quadrilateral. By Colonel J. T. Walker, R.E., F.R.S., &c., &c., Superintendent of the Survey, and his Assistants. Dehra Dún, 1875.
- Do. VII. The North-West Himalaya Series, or Series *C* of the North-West Quadrilateral, and the Triangulation of the Kashmir Survey. By Major-General J. T. Walker, C.B., R.E., F.R.S., &c., &c., Surveyor General of India and Superintendent of the Survey, and his Assistants. Dehra Dún, 1879.
- Do. VII A. The Jodhpóre Meridional Series and the Eastern Sind Meridional Series of the North-West Quadrilateral. Prepared in the Office of the Trigonometrical Branch, Survey of India, Colonel C. T. Haig, R.E., Deputy Surveyor General, in charge, and published under the orders of Colonel H. R. Thuillier, R.E., Surveyor General of India. Dehra Dún, 1887.
- Do. VIII. The Great Arc—Section 18° to 24°, or Series *A* of the South-East Quadrilateral. By Colonel J. T. Walker, C.B., R.E., F.R.S., &c., &c., Superintendent of the Survey, and his Assistants. Dehra Dún, 1878.
- Do. IX. The Jabalpur Meridional Series, or Series *E* of the South-East Quadrilateral. By Colonel J. T. Walker, C.B., R.E., F.R.S., &c., &c., Surveyor General of India and Superintendent of the Survey, and his Assistants. Dehra Dún, 1878.
- Do. X. The Bider Longitudinal Series, or Series *D* of the South-East Quadrilateral. By Major-General J. T. Walker, C.B., R.E., F.R.S., &c., &c., Surveyor General of India and Superintendent of the Survey, and his Assistants. Dehra Dún, 1880.
- Do. XI. The Biláspur Meridional Series, or Series *F* of the South-East Quadrilateral. By Major-General J. T. Walker, C.B., R.E., F.R.S., &c., &c., Surveyor General of India and Superintendent of the Survey, and his Assistants. Dehra Dún, 1880.
- Do. XII. The Calcutta Longitudinal Series, or Series *B* of the South-East Quadrilateral. By Major-General J. T. Walker, C.B., R.E., F.R.S., &c., &c., Surveyor General of India and Superintendent of the Survey, and his Assistants. Dehra Dún, 1880.
- Do. XIII. The East Coast Series, or Series *C* of the South-East Quadrilateral. By Major-General J. T. Walker, C.B., R.E., F.R.S., &c., &c., Surveyor General of India and Superintendent of the Survey, and his Assistants. Dehra Dún, 1880.
- Do. XIII A. The South Párasnáth Meridional Series and the South Malúncha Meridional Series of the South-East Quadrilateral. Prepared in the Office of the Trigonometrical Branch, Survey of India, Colonel C. T. Haig, R.E., Offg. Deputy Surveyor General, in charge, and published under the orders of Colonel G. C. DePrée, S.C., Surveyor General of India. Dehra Dún, 1885.

*List of Published Works of the Great Trigonometrical Survey of India.*

Synopses of the Results of the G. T. Survey of India, &c.—(Continued).

- Volume XIV. The Budhon Meridional Series, or Series *J* of the North-East Quadrilateral. By Lieutenant-General J. T. Walker, C.B., R.E., F.R.S., &c., &c., Surveyor General of India and Superintendent of the Survey, and his Assistants. Dehra Dún, 1883.
- Do. XV. The Rangir Meridional Series, or Series *K* of the North-East Quadrilateral. By Lieutenant-General J. T. Walker, C.B., R.E., F.R.S., &c., &c., Surveyor General of India and Superintendent of the Survey, and his Assistants. Dehra Dún, 1883.
- Do. XVI. The Amua Meridional Series, or Series *L*, and the Karára Meridional Series, or Series *M* of the North-East Quadrilateral. By Lieutenant-General J. T. Walker, C.B., R.E., F.R.S., &c., &c., Surveyor General of India and Superintendent of the Survey, and his Assistants. Dehra Dún, 1883.
- Do. XVII. The Gurwáni Meridional Series, or Series *N*, and the Gora Meridional Series, or Series *O* of the North-East Quadrilateral. By Lieutenant-General J. T. Walker, C.B., R.E., F.R.S., &c., &c., Surveyor General of India and Superintendent of the Survey, and his Assistants. Dehra Dún, 1883.
- Do. XVIII. The Huríláong Meridional Series, or Series *P*, and the Chendwár Meridional Series, or Series *Q* of the North-East Quadrilateral. By Lieutenant-General J. T. Walker, C.B., R.E., F.R.S., &c., &c., Surveyor General of India and Superintendent of the Survey, and his Assistants. Dehra Dún, 1883.
- Do. XIX. The North Párasnáth Meridional Series, or Series *R*, and the North Malúncha Meridional Series, or Series *S* of the North-East Quadrilateral. Prepared by J. B. N. Hennessey, Esq., M.A., F.R.S., &c., &c., Offg. Deputy Surveyor General, in charge of Trigonometrical Surveys, and his Assistants, and published under the orders of Colonel G. C. DePrée, S.C., Offg. Surveyor General of India. Dehra Dún, 1883.
- Do. XX. The Calcutta Meridional Series, or Series *T*, and the Brahmaputra Meridional Series, or Series *V* of the North-East Quadrilateral. Prepared by J. B. N. Hennessey, Esq., M.A., F.R.S., &c., &c., Offg. Deputy Surveyor General, in charge of Trigonometrical Surveys, and his Assistants, and published under the orders of Colonel G. C. DePrée, S.C., Offg. Surveyor General of India. Dehra Dún, 1883.
- Do. XXI. The East Calcutta Longitudinal Series, or Series *U*, and the Eastern Frontier Series—Section 23° to 26°, or Series *W* of the North-East Quadrilateral. Prepared by J. B. N. Hennessey, Esq., M.A., F.R.S., &c., &c., Offg. Deputy Surveyor General, in charge of Trigonometrical Surveys, and his Assistants, and published under the orders of Colonel G. C. DePrée, S.C., Offg. Surveyor General of India. Dehra Dún, 1883.
- Do. XXII. The Assam Valley Triangulation, E. of Meridian 92°, emanating from the Assam Longitudinal Series, or Series *X* of the North-East Quadrilateral. Prepared in the Office of the Trigonometrical Branch, Survey of India, Colonel G. Strahan, R.E., Deputy Surveyor General, in charge, and published under the orders of Colonel H. R. Thuillier, R.E., Surveyor General of India. *Preliminary Issue.* Dehra Dún, 1891.
- Do. XXIII. The South Konkan Coast Series, or Series *C* of the Southern Trigon. Prepared in the Office of the Trigonometrical Branch, Survey of India, Colonel G. Strahan, R.E., Deputy Surveyor General, in charge, and published under the orders of Colonel H. R. Thuillier, R.E., Surveyor General of India. Dehra Dún, 1891.
- Do. XXIV. The Mangalore Meridional Series, or Series *D* of the Southern Trigon. Prepared in the Office of the Trigonometrical Branch, Survey of India, Colonel G. Strahan, R.E., Deputy Surveyor General, in charge, and published under the orders of Colonel H. R. Thuillier, R.E., Surveyor General of India. Dehra Dún, 1891.
- Do. XXV. The South-East Coast Series, or Series *F* of the Southern Trigon. Prepared in the Office of the Trigonometrical Branch, Survey of India, Colonel G. Strahan, R.E., Deputy Surveyor General, in charge, and published under the orders of Colonel H. R. Thuillier, R.E., Surveyor General of India. Dehra Dún, 1891.

*List of Published Works of the Great Trigonometrical Survey of India.*

Synopses of the Results of the G. T. Survey of India, &c.—(*Continued*).

- Volume XXVI. The Bombay Longitudinal Series, or Series *B* of the Southern Trigon. Prepared in the Office of the Trigonometrical Branch, Survey of India, Colonel G. Strahan, R.E., Deputy Surveyor General, in charge, and published under the orders of Colonel H. R. Thuillier, R.E., Surveyor General of India. Dehra Dún, 1892.
- „ XXVII. The Madras Longitudinal Series, or Series *G* of the Southern Trigon. Prepared in the Office of the Trigonometrical Branch, Survey of India, Colonel G. Strahan, R.E., Deputy Surveyor General, in charge, and published under the orders of Colonel H. R. Thuillier, R.E., Surveyor General of India. Dehra Dún, 1892.

---

Spirit-Levelling Operations of the Great Trigonometrical Survey of India.

*Price Rupee 1 per volume.*

- Heights in Sind, the Punjab, N.W. Provinces, and Central India, to May 1862. Calcutta, 1863.
- Do. in N.W. Provinces and Bengal, to May 1865. Roorkee, 1866.
- Do. in the Punjab and N.W. Provinces, Season 1866-67, Sections I to IV. Dehra Dún, 1869.
- Do. in the N.W. Provinces and Oudh, Seasons 1867-69, Sections V and VI. Dehra Dún, 1869.
- Do. from Lucknow *via* Goruckpore &c., to Dildernugger G. T. Survey Bench-mark near Ghazee-pore, Seasons 1868-70, Section VII. Dehra Dún, 1871.
- Do. from Goruckpore *via* Bettiah &c., to G. T. Survey Bench-mark near Parsurman, Season 1870-71, Section VIII. Dehra Dún, 1872.
- Do. from G. T. Survey Bench-mark near Parsurman to G. T. Survey Bench-mark at Pirpanti Railway Station, and from G. T. Survey Bench-mark at Purniah Church to N.E. End of Sonakhoda Base-Line; Season 1871-72, Section IX. Dehra Dún, 1873.
- Do. in Cutch, Kattywar, Guzerat, Thána and Bombay districts, No. 1 Bombay Presidency, Seasons 1874-78. Dehra Dún, 1879.
- Do. in Cuttack, Balasore, Midnapore, Howrah, 24-Pergunnahs, the Sundarbans and Hooghly districts of Bengal, Seasons 1881-83. Dehra Dún, 1884.
- Do. in the Thána, Násik and Khándesh districts of Bombay, and in Dhár, Dewás, Gwalior, Bhopal and Tonk, Native States of the Central India Agency. No. 4 Bombay Presidency and Central India Agency, Seasons 1877-78 and 1881-84. Dehra Dún, 1885.
- Do. in the Bombay Presidency and Nizam's Dominions, Nos. 2 and 3 (Revised Edition), Seasons 1877-80. Dehra Dún, 1886.
- Do. in the Madras Presidency, No. 1, Seasons 1869-85. Dehra Dún, 1886.
- Do. in the Madras Presidency, No. 2, Season 1885-86. Dehra Dún, 1887.
- Do. in the Madras Presidency, No. 3, Season 1886-87. Dehra Dún, 1888.
- Do. in the Madras Presidency, No. 4, Season 1887-88. Dehra Dún, 1889.
- Do. in the Madras Presidency, No. 5, Season 1888-89. Dehra Dún, 1890.
- Do. in the Madras Presidency, No. 6, Seasons 1888-89 and 1889-90. Dehra Dún, 1891.
- Do. in the Bombay Presidency, No. 5, Season 1889-90. Dehra Dún, 1891.



*List of Published Works of the Great Trigonometrical Survey of India.*

**Auxiliary Tables to facilitate the Calculations of the Survey of India. *Third Edition.***  
Revised and extended under the direction of Lieut.-Colonel H. R. Thuillier, R.E., Surveyor General of India, by Colonel C. T. Haig, R.E., Deputy Surveyor General, in charge of the Trigonometrical Branch of the Survey of India. Dehra Dún, 1887. *Price Rupees 2.*

**Hand-book of Professional Instructions for the Topographical Branch, Survey of India Department.** Prepared by Colonel G. Strahan, R.E., Deputy Surveyor General, Trigonometrical Branch, under the direction of Colonel H. R. Thuillier, R.E., Surveyor General of India. Dehra Dún, 1891. *Price Rupees 2-8.*

**Hand-book of Professional Instructions for the Trigonometrical Branch, Survey of India Department.** Prepared by Colonel G. Strahan, R.E., Deputy Surveyor General, Trigonometrical Branch, under the direction of Colonel H. R. Thuillier, R.E., Surveyor General of India. Dehra Dún, 1891. *Price Rupees 5.*

*March, 1892.*







