

Public (1896) Department.

ORDINARY MS.

G.O., No: 1074-5

DATED 28-9-96.

INDIA

[Despatch Abstract.]

Comm? to the Gov^t. Astronomer
End^t of the Gov^t forwarding copy of its
letter to the Surveyor-General of
India sanctioning ~~the~~ ^{this} proposal
to reobserve the latitude of
Madras on the condition that it
involves no expenditure in excess
of the sanctioned budget grants;
and ~~informing~~ ^{informing} that the Gov^t End^t of the
~~Gov^t~~ No 8-58-7 of 5th Aug 96
has not been received by the Gov^t.

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.
3574/96	2020520797						

R. S. Comm. 2/10/96
 செப்பனிடும் பெயர்
 செப்பனிடும் பெயர்
 கொள்ளப்பட்ட நாள்
 செப்பனிடும் முடிந்த நாள்
 சம்பந்தம் இல்லாத நாள்
 முடிந்த நாள்
 கையொப்பம்

Pub.
 29
 1,000-50-7-96.

Public (1896) Department.

CURRENT No. 3029

From the Govt.
(Rev and Agri.)

Pub. may like to see this for information.
 Order No. 1074, 28/9/96.

Communicated to the Govt. Astronomer.

No. $\frac{3413}{129-2}$

Endt No. 8-58-74
 Aug '96 has not been received by Govt.

Dated 5. 9. 96

Received 12. 9. 96

Registered 13. 9. 96

Enclosure 1

Spare copies.

SUBJECT.

Sanctioning the proposal of the Surveyor General of India to reobserve the latitude of Madras.

Copy to the Govt. of India
 Dept. of Rev & Agri. with ref to W. S. No. $\frac{3413}{129-2}$
 2/5-9-96

2/5-9-96

BACK PAPERS.

G.O.	No.	Department.

FORWARD PAPERS.

G.O.	No.	Department.	Date.

From the Surveyor-General of India, to the Secretary to the Government of India, Department of Revenue and Agriculture, No. 2247 S. dated 19th August 1896.

I have the honour to forward copy of a letter No. 2180 dated 29th July 1896. from the Offg: Superintendent, Trigonometrical Surveys, asking permission to reobserve the Latitude of Madras for the reasons therein explained.

2. It is not merely an interesting question as to how there can possibly be such a large difference ^{but} between two sets of such carefully made observations, it is one of ~~the~~ real importance, as the issue of the Madras Catalogue of stars is delayed pending the final determination of the true Latitude. Moreover as Captain Burrard points out in his para: 4, it is very desirable to ascertain how the discrepancy has arisen, as until some explanation of it is given, there must be more or less a feeling of uncertainty with regard to all our other Latitude Observations.

3. No extra money is asked for; it will merely mean a little less work being done at the stations of the Singhi series. The cost of transporting the instruments and the rail fare of the observer and men to Madras will amount to about Rs. 700 and this it is almost certain can be met from savings in other parties.

No. 2180 dated Dehra Dun the 29th July 1896.
From - The Offg: Supdt., Trigonometrical Surveys,
To - The Surveyor-General of India.

I have the honour under the following circumstances to request your permission to reobserve the Latitude

Latitude of Madras Observatory. This latitude was observed in 1890 by Captain Lenox-Conyngham, R. F., and the resulting value was $13^{\circ}4'9''.38$. The Government Astronomer at Madras has now pointed out that the value of the latitude derived from 2787 Stars observed by Mr. Pogson and himself is $13^{\circ}4'5''.47$, with a probable error of $\pm 0''.04$.

2. It is impossible to suppose that this latter value, resulting from such a mass of observations, taken by professional astronomers in a fixed observatory, can be in error by $1''-5$ and I am therefore compelled to assume that Captain Lenox-Conyngham's value is incorrect. I have scrutinised Captain Lenox-Conyngham's observations throughout and can find nothing that can be taken the least exception to. On the contrary they are characterised throughout by the greatest care and close attention to detail. He observed 136 pairs of Stars and his probable error is $\pm 0''.06$, a better probable error relatively than Mr. Pogson's having regard to the number of observations. Captain Conyngham's 136 individual values from single pairs all fell within a range of $3''$, that is between $13^{\circ}4'8''.5$ $13^{\circ}4'11''.5$. I do not think it possible that any instrumental defect, sufficient to cause this large constant error could have existed without Captain Conyngham's knowledge, and I can offer no explanation.

3. The Government Astronomer has asked us to reobserve the latitude as the issue of the Madras Catalogue of stars is delayed on its account. I have included it in the programme for No. 22 Party for the coming field season, had not Colonel Gore left me a memo: in his own hand writing in which No. 22 party was put down for the Singi series. I do not think that Colonel Gore would object in any way to the proposed remeasurement which can easily be done without great expense.

4. Seeing that our latitudes are not subject to any circuit checks, like the longitude are, I consider it very

advisable

advisable to have this latitude reobserved. This is the only occasion or record on which any one of our latitudes has been independently checked and until the discrepancy is explained, all our latitudes will remain more or less under a cloud and the smallness of their probable errors be regarded with suspicion.

5. The discrepancy of $1''.41$ is reduced by $0''.25$, if Captain Lenox-Conyngham's latitude be corrected for the periodic variation of latitude by means of the United States formula.

No. 3412
129-2

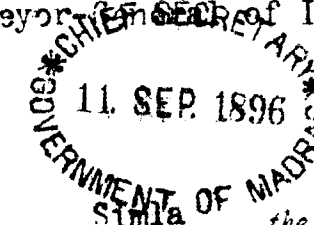
FROM

F. G. SLY, Esq., C.S.,

Under-Secretary to the Government of India,

To

The Surveyor-General of India.



5th September 1896.

Department of Revenue
and Agriculture.

(L. S.)

SIR,

I am directed to acknowledge the receipt of your letter No. 2247 S. dated 19th August 1896 and enclosure, relative to a proposal to reobserve the Latitude of Madras.

2. In reply, I am to say that the Government of India sanction the proposal on the condition that it involves no expenditure in excess of the sanctioned Budget grants.

I have the honour to be,

Sir,

Your most obedient servant,

Sd. F. G. Sly

Under-Secretary.

No. 3413
129-2

Copy, with copy of the Surveyor-General's

letter under reply and of its enclosure, forwarded to the Government of Madras for information, in continuation of endorsement No. 8-58-7 dated 5th August 1896.

By order,

[Signature]

Under-Secretary.

P.C.M

Noted here