

*Melpomene.*

Mean Solar Time of Observation.	Apparent R.A.	Apparent N.P.D.
1856, Oct. 21      h m s 12 34 41·4	h m s 2 37 13·01	° ' " 95 7 25·25
27 12 6 42·2	2 32 48·60	95 58 10·74

Oct. 21. It is doubtful whether the object observed is the planet.

*On the Projection of Stars on the Disk of the Moon.*  
By Capt. W. S. Jacob.

“I have now to communicate a veritable case (or rather two cases) of projection of stars on the moon’s face, the first that I have seen quite satisfactorily; for though I have often noticed something of the kind, there has generally been some defect of definition, or other ground for suspecting the accuracy of the observation.

“In the present instance, I was waiting for the immersion of 23 *Tauri* on the 18th instant. The sun had just risen, and there was a thick haze, so that the star was rather dim; but I saw it plainly enough. The moon’s limb advanced and touched it, but the star did not disappear; it continued to advance till the star was entirely on the moon’s face, and then suddenly disappeared, several seconds after contact with the limb. The immersion of  $\eta$  followed about an hour later; the daylight was stronger, but the haze had somewhat cleared, and the star being intrinsically brighter, I saw it much better than 23; the same phenomenon as before was repeated. My impression at the time was, that the star advanced rather *more* than its whole breadth on the moon; but on reflection immediately after, I could not be *quite* sure that I had seen any part of the moon *outside* of the star; but certainly the whole light of the star was on the moon. Irradiation can hardly be admitted in the present instance, the observation being made in daylight.

“On the 21st I saw one of *Jupiter’s* satellites for the first time with the naked eye; I have often looked for them before, but without success. *Jupiter* was shining very bright and clear, with little radiation; I looked at him with an eyeglass—a single lens, of long focus, and plainly saw a small point near him, and could get glimpses of it with the naked eye. My sight is not very good without glasses. To make sure there was no delusion, I asked a person who was with me, ‘Do you see anything unusual about *Jupiter*?’ ‘Yes, there is a small star almost touching him below.’ ‘Is it exactly below?’ ‘No, a little to the left;’ which was the true position. The satellite was the third, which was the largest of the four, and was near elongation. With the eyeglass, I had a

suspicion of another, nearer the planet; and on examination there were found the first and second, near together, whose united light may have slightly impressed my vision.

“*Observatory, Madras, 26th September, 1856.*”

*Annular Solar Eclipse, September 18th (Greenwich, 17<sup>d</sup>), 1857.*  
By J. F. Tennant, Lieut. Engineers, 1st Asst. Gt. Trig. Survey of India.

“The accompanying table has been circulated, as far as I have been able, among those likely to furnish observations; but as I can find few of the Fellows, perhaps you would admit it in the *Monthly Notices* for more extensive circulation among parties likely to be interested. The computations have been verified by a brother officer.

*Calculated Positions of the Central and Limiting Lines for the Annular Appearance within Indian Longitudes.*

Southern Limit.		Central Line.		Northern Limit.	
Lat. N.	Long. E.	Lat. N.	Long. E.	Lat. N.	Long. E.
35° 28'7	66° 59'4	36° 5'4	67° 17'2	36° 42'5	67° 34'3
34 10'2	70 50'0	34 45'1	71 9'8	35 20'3	71 28'9
32 51'0	74 4'7	33 24'3	74 25'8	33 57'6	74 46'8
31 32'2	76 52'4	32 3'9	77 14'7	32 35'7	77 36'9
30 13'8	79 19'6	30 44'1	79 42'9	31 14'5	80 6'1
28 55'7	81 31'0	29 24'5	81 54'9	29 53'6	82 18'8
27 38'1	83 29'0	28 5'7	83 53'6	28 33'2	84 18'1
26 20'6	85 16'3	26 47'0	85 41'3	27 13'7	86 6'4
25 3'4	86 54'6	25 28'9	87 20'0	25 54'4	87 45'4
23 46'4	88 25'5	24 11'1	88 51'0	24 35'5	89 17'0
22 30'4	89 49'7	22 54'0	90 15'6	23 17'7	90 41'5
21 14'2	91 8'4	21 37'1	91 34'5	22 0'0	92 0'7
19 58'4	92 22'6	20 20'5	92 48'9	20 42'7	93 15'3
18 42'8	93 32'9	19 4'3	93 59'3	19 25'9	94 25'7
17 27'5	94 39'9	17 48'6	95 6'3	18 9'8	95 32'8
16 12'3	95 44'1	16 33'0	96 10'6	16 53'5	96 37'2
14 57'1	96 46'0	15 17'4	97 12'6	15 37'6	97 39'2
13 42'8	97 46'6	14 2'5	98 13'1	14 22'5	98 39'7
12 27'4	98 45'4	12 47'4	99 11'9	13 7'3	99 38'5
11 12'6	99 43'2	11 32'5	100 9'9	11 52'3	100 36'6

N.B.—Observations with the true times and geographical position of the place will be very acceptable.

“*Masuri, September 15th, 1856.*”