

If the first branch continues, it will cross the high road from Naples to Salerno, and throw itself into the river Sarno, and change its course, and may go as far as Stabia, as it did in the reign of Titus Vespasian; though this buried city is twelve miles from the top of mount Vesuvius.

Marfeilles, 7 Nov. 1751.

Richard Supple.

XLIX. *An Account of the Eclipse of the Moon, which happened Nov. 21, 1751; observed by Mr. James Short, F. R. S. in Surry-street.*

Read Dec. 19, 1751. **T**HE weather was exceedingly tempestuous, and the sky pretty much overcast with clouds, so that the following times cannot be depended upon to less than 2 minutes.

| | | | | | |
|-----------------------------|---|---|----|----|---|
| Penumbra very visible at | . | . | 7 | 58 | 0 |
| Beginning of the eclipse at | . | . | 8 | 6 | 0 |
| End of the eclipse at | . | . | 11 | 6 | 0 |

The quantity of this eclipse seemed about the middle to be larger than according to all the tables; but its quantity, tho' the air was then exceedingly clear, could not be measured in the micrometer, because of the high wind; nor could the moon's diameter be measured, for the same reason.

Transit

Transit of the moon over the meridian.

| | |
|---------------------------------------------|---------|
| | h' " |
| Preceding limb passed the meridian at | 12 5 18 |
| Subsequent limb passed the meridian at | 12 7 50 |
| The sky was at this time exceedingly clear. | |

Mr. Pound observed a similar eclipse at Wanstead, just two Sarotic periods before this, and has described it in the *Philos. Transf.* N. 347, p. 402. and makes the following remark, " This eclipse is " the more considerable, as happening very near " the moon's perigee, and therefore useful to verify " her anomaly ; as also to limit the greatest diameter " of the shadow of the earth, and consequently the " parallax of the moon. This may be very properly " compared with that of the 19th of October 1697, " whose middle was at 7^h 41' p. m. at London, and " the quantity the same as now."

Here follows a computation made from Dr. Halley's tables by Mr. John Catlyn of Guy's Hospital.

| | |
|------------------------|---------|
| | h' " |
| Beginning at | 8 18 44 |
| Middle at | 9 41 55 |
| End at | 11 5 6 |

But if an allowance is made for the errors in the moon's motion, when she was in similar circumstances in the month of November 1733, the above times of this eclipse may be marked with the following numbers.

| | |
|------------------------|---------|
| | h' " |
| Beginning at | 8 14 0 |
| Middle at | 9 37 30 |
| End at | 11 0 30 |
| | I must |

I must add to Mr. Pound's remark above, that this eclipse happened nearer to the moon's perigee than that, which he observed in the year 1715, and therefore more proper for verifying the moon's anomaly, and limiting the greatest diameter of the shadow of the earth.

L. *A Letter from the Reverend Father Augustin Hallerstein, of the Society of Jesus, President of the Astronomical College at Pekin in China, to Dr. Mortimer, Sec. R. S. Translated from the Latin by Tho. Stack, M. D. & F. R. S.*

S I R,

Pekin, Sept. 18, N. S. 1750.

Read Dec. 19, 1751. **Y**OUR letter of Feb. 5, 1746, we duly received, and answered as well as the shortness of time allowed us would then permit. In the year 1749, a volume of the *Transactions* was brought to us, for which we return'd thanks to your illustrious Society, and now repeat them in the most cordial manner. As far as our condition here, and the iniquity of the times, will permit, we will never be ungrateful for so great a favour. What we had then ready, and thought might not prove disagreeable to the Royal Society, we sent directed to you, Sir; *viz.* two Chinese volumes, one of which contains logarithmic tables, formerly translated into Chinese by some of our Society; and the other luni-solar tables constructed from the numbers and measures of