

Two Observations of the last Eclipse November 30th last, made at Nuremberg; the one by Mr. G. C. Eimmart, the other by Mr. J. Ph. Wurtzelbaur: Communicated by Mr. Theodore Haak R. S. S.

THis Eclipse of the *Moon* was the more remarkable, for that it fell out very near the *Apogæon* of the *Moon*, and was nearly central; so that the duration was as great as possible. But so it happened, that neither at *London* nor *Greenwich*, nor *Paris* it could be seen by reason of thick Clouds, for the whole time intercepting the sight of the *Moon*: The only Account we have received is already published, from Letters of the famous Mr. *Hévelius* of *Dantzick*, in Num. 178 of these *Transactions*: and now these two from *Nuremberg*, made by the industrious Observers Mr. *Eimmart* and Mr. *Wurtzelbaur*.

The Observations of Mr. Eimmart was as follows.

9. b. 19. min. the *Penumbra* was very obscure, and the beginning of the Eclipse was at hand.

9b. 23m. 30s. the Eclipse was begun, the quantity almost half a *digit*, and the distance between the cusps was about 42 degrees of the *Moon's* limb, and *Palus Mareotis* was just all Eclipsed; hence we may conclude the beginning about 9b. 21m. 30s.

10b. 23m. 30s. as near as I can collect from the Observators words, was the time of the total Immersion into the shadow, to verify which, the Azimuth of the *Moon's* center was observed to the East, 41gr. 48m. 2min. 12sec. of time after the said Immersion.

12b. 23min. or 10m. 13sec. before the Culmination of the right shoulder of *Orion*, was the Emerfion or first appearance of the *Moon* out of the total Darknes.

13b. 14min. fere was the just end of the Eclipse, being 2m. 20sec. before the Culmination of *Sirius* or the great Dogg.
Whence

Whence the middle of this Eclipse should have hapned at 11h. 18min. P. M. at Nuremburgh: the total duration 3h. 52min. 30sec. and the total darknes 1h. 49m. 30s.

The Meridian Altitude of the *Moon's* upper limb was observed 63gr. 23m. 50sec. and the *Moon's* apparent Diameter while totally Eclipsed was found 30m. 7sec.

The other Observer Mr. *Wurtzelbaur* made use of the Pendulum Clock, corrected by *Altitudes*. According to his Observation.

9b. 23m. 30sec. was the beginning of the Eclipse, at about 119 degrees of the limb of the *Moon* in *Hévelius's Selenography*.

9b. 24m 50sec. *Paulus Mareotis* was all covered.

10b. 25m. 20sec. The Total Immerfion; about the 299th degree of the limb of the *Moon*.

12b. 11m. 30sec. The *Moon* began to emerge out of the fhadow, about the 112th degree of her limb.

13b. 14m. 30sec. The End of the Eclipse about the 295th degree of the limb.

By these Observations the middle of the Eclipse ought to have been about 11h. 12m. P. M. at Nuremburg, differing but one minute from Mr. *Eimmart's* Observation. The duration will be 3h. 51min. and the total Darknes 1h. 46m. The Longitude of Nuremburg has been formerly stated 11 degrees from London, and since found to be so by Observations of the last Eclipse of the Sun July 2d 1684, which made it 44½min. of time. So that the middle of this Eclipse at London should have been 10b. 34½m. which from the Observation of Mr. *Hévelius* had been formerly concluded 10b. 35m.

An Extract of a Letter written from Aramont in Languedoc near Avignon, giving an account of an extraordinary swarm of Grasshoppers in those parts; communicated by Mr. Justell R. S. S.

Since you demand of me a Relation of the *Grass-boppers* that have eaten up our Harvest the last Year, and which give