

*Southings*, and the True *Higb-Waters*, for which reason I forbear it, till further Experience shall have informed us better.

*An Observation of the Beginning of the Lunar Eclipse which hapned Aug. 19. 1681. in the Morning, made on the Island of St. Lawrence or Madagascar, by Mr. Tho. Heathcot, and communicated by Mr. Flamstead.*

**M**R. Heathcot was Chyrurgeon to a Ship which lay then at the bottom of a deep Bay on the *Western Shore* of the *Island*, and that part which the *Portugese* and our Maps call the *Terra del Gada*, he had with him then on Shore, a *Quadrant* of 2 Foot *Radius*, and a *Telescope* of 9 Foot, but no Clock; to supply which defect, he made a *Pendulum* of a String and a Bullet 39 Inches long, that each single *Vibration* might answer a *Second* of Time: Waiting the beginning of the *Eclipse* with his *Glass*, as soon as he saw the *True Shadow* enter on the *Moons Limb*, he caused his Friends, who assisted him, to make the *Pendulum* Vibrate, and count its *Vibrations*; of which they had numbred 140  $\frac{1}{2}$   $\frac{2}{3}$  of time when he took the height of *Procyon* (then East of the *Meridian*)  $\frac{0}{25}$   $\frac{3}{30}$ ; the next day he observed the *Suns Meridional* height with the same *Quadrant*, whence he found the *Latitude* of that Place  $\frac{0}{19}$   $\frac{1}{30}$  South, hence the time when he took the Height of *Procyon* is found  $\frac{4}{4}$   $\frac{1}{11}$  mane, and subtracting the  $\frac{1}{2}$   $\frac{2}{3}$  past since the observed beginning of the *Eclips*, its

True Beginning was at	$\frac{4}{4}$ $\frac{48}{48}$ $\frac{0}{40}$
Which at the Observatory, here, I noted at	1 50 40
therefore this part of <i>Madagascar</i> more easterly	2 58 00

or 44  $\frac{30}{30}$ , which our Maps make 52 gr; that is 7  $\frac{1}{2}$  gr more remote from it than it really is.

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