

which, if perhaps it should be found out by you (which I can hardly believe it wil) in this case the Church will not at all scruple to declare, that these places are to be understood in a figurative and improper sense, according to that of the Poet, Terræque Urbesque recedunt.

citur; quæ si fortè aliquando à vobis excogitetur (quod vix crediderim) in hoc casu nullo modo dubitabit Ecclesia declarare, loca illa in sensu figurato & improprio intelligenda esse, ut illud Poetæ, Terræque Urbesque recedunt.

Whence this Author concludes, that the said *Jesuite* assuring us that the *inquisition* hath not absolutely declared, that those Scripture-places are to be understood literally, seeing that the Church may make a contrary declaration, no man ought to scruple to follow the *Hypothesis* of the *Earths motion*, but only forbear to maintain it in publick, till the prohibition be called in. But to return to the matter in hand, this Author, upon all these observations and relations of *Cassini* and *Campani*, doth find no reason to doubt any more of the excellency of the Glasses used by them, above his; except this difference may be imputed to that of the *Air*, or of the *Eys*. But yet he is rather inclined to ascribe it to the goodness of their Glasses, and that the rather, because, he would not be thought to have the vanity of magnifying his own; of which, yet he intimates by the by, that he caused one to be wrought, of 150 *Parisian* feet; which though it proved none of the best, yet he despairs not to make good ones of that, and of far greater Length.

### Signor Campani's Answer: and Monsieur Auzout's Animadversions thereon.

The other part of this *French Tract*, containing *Campani's* Answer, and *Mr. Auzout* his *Reflections* thereon, begins with the pretended *Shadows* of the *Ring* upon *Saturn*, and of *Saturn* upon the *Ring*. Concerning which, the said *Campani* declareth, that he never believed them to be *shadows*, made by the *Ring* upon the *Disk* of *Saturn*, or by the body of *Saturn* upon the *Ring*, but the *Rimms* of these bodies, which being *unequally* Luminous, did shew these appearances. In which Explication, forasmuch as it represents, that the said *Campani* meant to note only the *Inequality of the Light*, which, he saith, his Glasses did discover, *Mr. Auzout* does so

so far acquiesce, that he only wishes, that his own Glasses would shew him those differences. Next to the Objection, made by Monsieur *Auzout*, against Signor *Campani*, touching the Proportion of the Length of the *Ring* to its breadth, *Campani* replyeth, that the Glasses of Monsieur *Auzout*, shew not all the particulars, that his do, and therefore are unfit for determining the true Figure and breadth of the apparent *Ellipsis* of the *Ring*. To which M. *Auzout* rejoyns, that he is displeas'd at his being destitute of better Glasses; but that it will be very hard for the future to convince *Campani* touching the *Proportion* of the *Ring*, seing that the breadth of the *Ellipsis* is always diminishing, although, if the declination of the *Ring* remains always the same, one can at alltimes know, which may have been its greatest breadth. But he assures, that the breadth of the *Ring* is not the half of its length, and that it doth not spread out so much beyond *Saturn's* Body, as he hath alleged. And withal desirs to know, what can be answered by Sig. *Campani* to M. *Hugens*, who being perswaded, that the Declination of the *Ring* is not above 23 deg. 30' having seen the *Ring* to spread out above the Body of *Saturn*, concludes, in a Letter to M. *Auzout*, that the length of the *Ring* is more than treble the *Diameter* of *Saturn's* body, which, according to *Campani*, is only as about 67 to 31. Which difference yet dos not appear to M. *Auzout* to be so great; but that M. *Hugens* perhaps will impute it to the Optical reason, which he (*Auzout*) hath alleged of the Advance of the light upon the obscure space; although he is of Opinion, he should not have concluded so great a Length, if he had not seen the Breadth spread out more, than he hath done: for (*saieth he*) if the Length of the *Ring* be to the body of *Saturn*, as  $2\frac{1}{2}$  to 1. and the *Inclination* be 23 deg. 30' the *Ring* will be just as large, as the body, without spreading out; but if the *Ring* be bigger, it will a little spread out; and if it were treble, it must needs spread out the half of its breadth, which hath not so appeared to him.

Further, to M. *Auzout's* change of Opinion, and believing, that the *Advance* or *Sally*, seen by him in *Jupiter*, was the *shadow* of one of his Moons, *Campani* declares, that he would not have him guilty of that change: Whereupon M. *Auzout* wonders, why *Campani* then hath not marked it in his *Figure*; and would gladly

ly know, whether that *Sally* be more easie to discover, than the *shadows* of the *satellites*, which *Campani* believes, *Auzout* hath not seen; and whether he be assured, that those obscure parts, which he there distinguishes, do not change: for if they should not change, then *Jupiter* would not turn about his *Axii*, which yet, he saith, it doth, according to the *Observation* made by *Mr. Hook*, *May 9 1664.* inserted in the first papers of these *Transactions*. The full Discovery of which particular also he makes to be a part of *Cassini's* and *Campani's* work, seeing that they so distinctly see the inequalities in the *Belts*, and see also sometimes other *spots* besides the *shadows* of the *Satellites*: where he exhorts all the Curious, that have the conveniency of observing, to endeavor the discovery of a matter of that importance, which would prove one of the greatest *Analogies* for the *Earth's Motion*.

*An Account of Mr. Richard Lower's newly published Vindication of Doctor Willis's Diatriba de Febris.*

The Title of this Curious piece, is, *Diatriba Thome Willisii Med. Doct. & Profess. Oxon. De Febris Vindicatio, Authore Richardo Lower, &c.* In it are occasionally discussed many considerable Medical and Anatomical inquiries, as, Whether a Fever does consist in an Effervescence of Blood? And if so, of what kind? Whether there be a *Nervous* and *Nutritious* Juice? Whether the office of sanguification belongs to the Blood it self, existing *before* those *Viscera* (at least) that are commonly esteemed to be the Organs of sanguification? How *Nutrition* is performed, and the nourishing substance assimilated? Whether the Blood affords both the Matter for the structure of the Body, and such parts also, as are fit for the nourishment of the same? Whether the Pulse of the Heart ceasing, there remains yet a certain Motion in the blood, arguing, that *Pulse* and *Life* do ultimately rest in the *Blood*? Whether the Umbilical Vessels convey the blood of the Mother to the Child, or whether the *Fetus* be for the most part form'd and