

8. IUGS INHIGEO Anniversaries: April 1719: Mairan places the question of the Earth's 'central fire' on a new footing



300 years ago, J.-J. Dortous de Mairan stirred up renewed debate over the possibility that the Earth contains an internal heat reservoir, in a paper presented to the Paris Academy of Sciences. That the Earth has within it a 'central fire' was an idea embodied in conjectural theories that had been put forward by a number of physical theorists, notably

Descartes and Leibniz. Mairan's approach to the problem was through a climatological question: do measured differences in winter cold and summer heat at a given latitude conform with the supposition that the Sun is Earth's only source of heat? Through an elaborate series of calculations Mairan argued that the Earth must have some additional, intrinsic heat resource. His arguments were exploited by 18th-century advocates of Earth's *feu central*, but they remained controversial throughout the century.

Read more at:

https://iugs.org/uploads/Reports/Anniversaries_INHIGEO_April_2019_Taylor.pdf



Fig. 12 – Portrait of J.J. Dortous de Mairan. From a painting by Louis Tocqué, engraving by Étienne Ficquet. Author's collection.