

Long term integration of meteoroid streams

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Wiegert et al [1] have recently studied the Earth meteor background by means of long term integrations of meteoroid streams. We will show here further results about the behaviour of the streams over 100kyrs and underline the importance of the size for radiative effects (Poynting-Robertson and radiation pressure). The fate of meteoroids as individual particles but also as a stream will be discussed. In particular we will show that such integrations can put constraints on the age of a stable stream. We find indeed that the Perseid meteoroid stream is at least 60kyrs old.

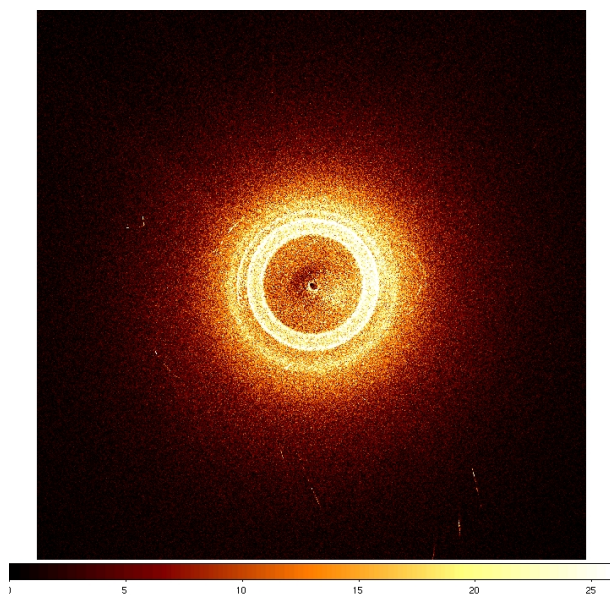


Figure 1: Distribution of the particles in the solar System after 100kyrs

References

- [1] Wiegert, P. and Vaubaillon, J. and Campbell-Brown, M (2009) *Icarus*, 201, 295-310.