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## Evaporation of high speed sporadic meteors

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**Abstract.** Recent measurements conducted at the Arecibo Observatory report high-speed sporadic meteors having velocities near 50 km/s. The results seem to indicate a bimodal velocity distribution in the sporadic meteors (maxima at ~20 km/s and ~50 km/s). The particles have a maximum mass of ~1µg. This paper will present an analysis of the ablation of 1µg meteoroids having velocities of 20, 30, 50, and 70 km/s. The calculations show that there is fractionation even for the fast meteoroids, the effect being particularly noticeable for the 1µg sporadic particles, and less so for the heavier particles. The relevance of the calculations to the radar observations of the sporadic meteors will be discussed.

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