

Meteor complex of asteroid 3200 Phaethon

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We study meteor complex originating from asteroid 3200 Phaethon. Based on a theoretical modeling of variety of meteoroid streams and following their dynamical evolution, we confirm the presence of two filaments crossing the Earth observed as Geminid and Daytime Sextantid meteor showers. We performed numerical integrations of modeled particles for several past perihelion passages of the asteroid considering (i) only the gravity of planets and (ii) gravity of planets and Poynting-Robertson's effect. We compare predicted showers (results from our models) with that observed showers (from databases). We also point out discrepancies within possible solutions and/or new hypothesis for inspected meteor complex of asteroid 3200 Phaethon.