

SOME GRAPHICS OF TOUTATIS' ORBITAL PARAMETERS EVOLUTION
(M. Cavagna - P. Sicoli)

This report collects all our graphics on long term evolution of some orbital parameters of minor planet 4179 Toutatis discovered at Caussols by A. Maury and C. Pollas at the beginning of 1989. Of the 148 astrometric positions used for the computation of the orbit (Nakano, 1989) four of these were obtained at the Osservatorio di Sormano (Cavagna and Sicoli, 1989).

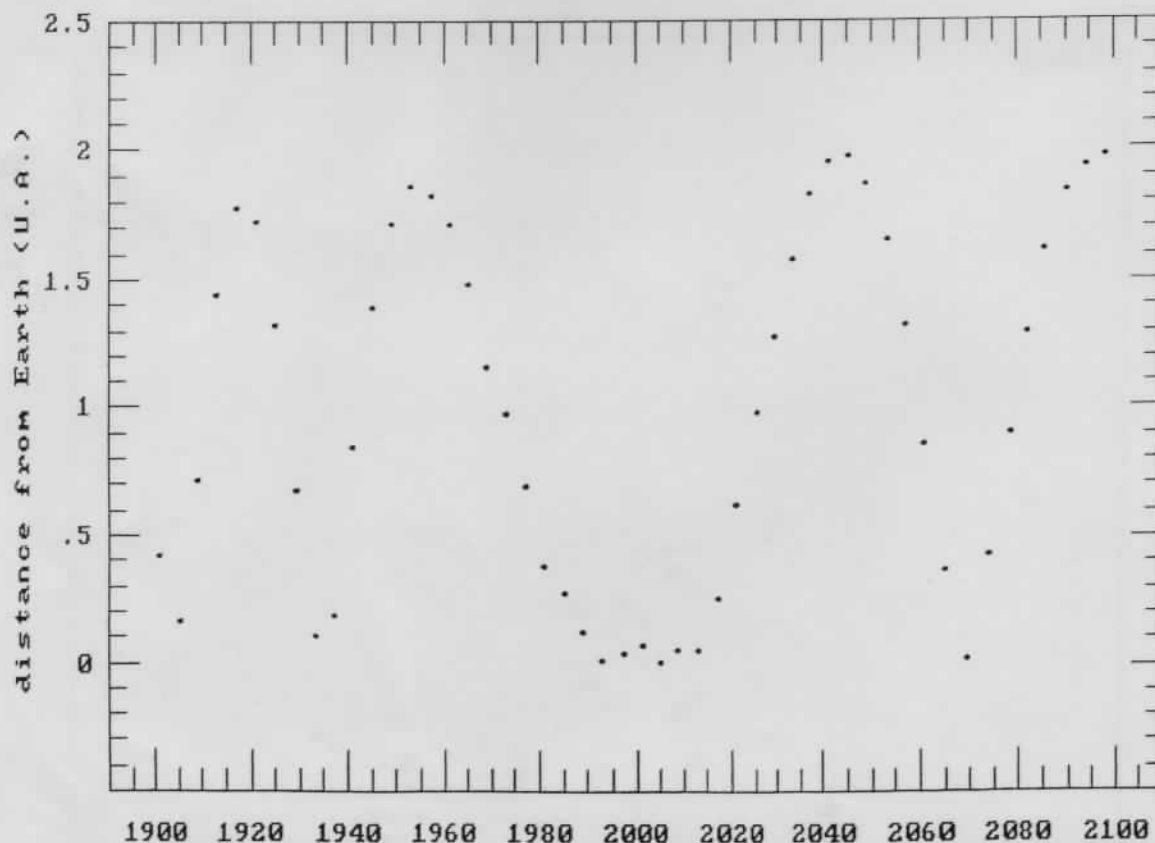
Elements of Toutatis' orbit

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Epoch 1989 Oct. 1.0 E.T. = JDE 2447800.5
(1950.0)

M = 77.47538 Peri = 275.02049
a = 2.5089424 Node = 127.16155
e = 0.6411414 Incl. = 0.46596

References:

- Cavagna M., Sicoli P.: (1989) "Astrometria di Pianetini e Comete. I. " Oss. Astron. di Sormano, Rapporto No. 13.
- Nakano S.: (1989) "Minor Planet Circular No. 15061 - 15062"



Perturbations from Venus to Neptune

