

OBSERVATIONS OF THE SATELLITES OF URANUS

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ABSTRACT. Since 1982 we have been carrying out observations of the five main satellites of Uranus with the 1.6 meter telescope of the Laboratório Nacional de Astrofísica (Veiga 1986).

The satellite positions were measured on photographic plates using a reference system with FK4 stars, and these positions were compared with those calculated using the orbital parameters published by Dunham (1971), Veillet (1983), and Jacobson (1985). The residuals were analyzed considering more elaborate dynamical models, i.e., those with secular, long period and short period variations of the orbital parameters (Dermott *et al.* 1985; Laskar 1986; Lazzaro *et al.* 1986).

Key words: PLANETS AND SATELLITES

REFERENCES

- Dermott, S.F. and Nicholzen, P.D. 1986, *Nature*, 319, 115.
 Dunham, D.W. 1971, *The Motion of the Satellites of Uranus*, Ph. D. Dissertation, Yale University.
 Jacobson, R.A. 1985, *JPL Interoffice Memorandum*, 314.6-593.
 Laskar, J. 1986, to appear in *Astronomy and Astrophysics*.
 Lazzaro, D., Ferraz-Mello, S., and Vieira-Martins, R. 1986, to appear in *Astronomy and Astrophysics*.
 Veiga, C.H. 1986, *Observações dos Satélites de Urano*, Tese de Mestrado.
 Veillet, C. 1983, *De l'Observation et du Mouvement des Satellites d'Uranus*, Doctorat d'Etat.

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