Carlsberg optical astrometry of the outer Solar System

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The Carlsberg astrometric telescope has been operating since 1984 at the international observatory of the Roque de los Muchachos on the island of La Palma in the Canaries. It is at 28.7 deg N and at an altitude of 2400m, and is operated jointly by Copenhagen University Observatory, the Royal Greenwich Observatory and the Real Instituto y Observatorio de la Armada en San Fernando.

Absolute astrometry is carried out nightly on objects in the outer Solar System. In the period 1984-94 about 20 000 observations has been made. These include observations of about 60 minor planets.

The absolute positions of the major planets are compared with recent integrations of the JPL series DE-, and plots of the residuals and a discussion of the observational errors are presented.

Future developement of the Carlsberg astrometric telescope and its programme of Solar System observations are reviewed.