

SCIENCE NEWS

Discovery of asteroid number 4130

We report the discovery of a new asteroid, number 4130, from India. The last asteroid discovery from India was by Pogson in 1885. In fact Norman Robert Pogson discovered five asteroids between 1861 and 1885. The sky survey project^{1,2} with the 45 cm Schmidt telescope has now led to the discovery of this asteroid. In figure 1 the arrow indicates the position of the new asteroid as observed on our plate taken on 17 February 1988.

This object was given the temporary designation 1988DQ1, and based on the preliminary orbital elements by Nakano³ an ephemerides for future positions was calculated. At its next opposition in May 1989 it was recovered on our plates and these positions were communicated to the Minor Planet Center.

The complete listing of all observations from Kavalur for this object can be found in the Minor Planet Circulars^{4,5} published on behalf of Commis-

sion 20 of the International Astronomical Union by the Director of the Minor Planet Center at Cambridge, USA. The final orbital elements together with the residuals (observed minus calculated positions) have been calculated by Nakano^{3,6}.

The apparent magnitude of the asteroid at the 1988 opposition was about 14.3 magnitudes. The orbital period is 5.34 years. The orbital plane is inclined to the ecliptic at about 9.80 degrees.

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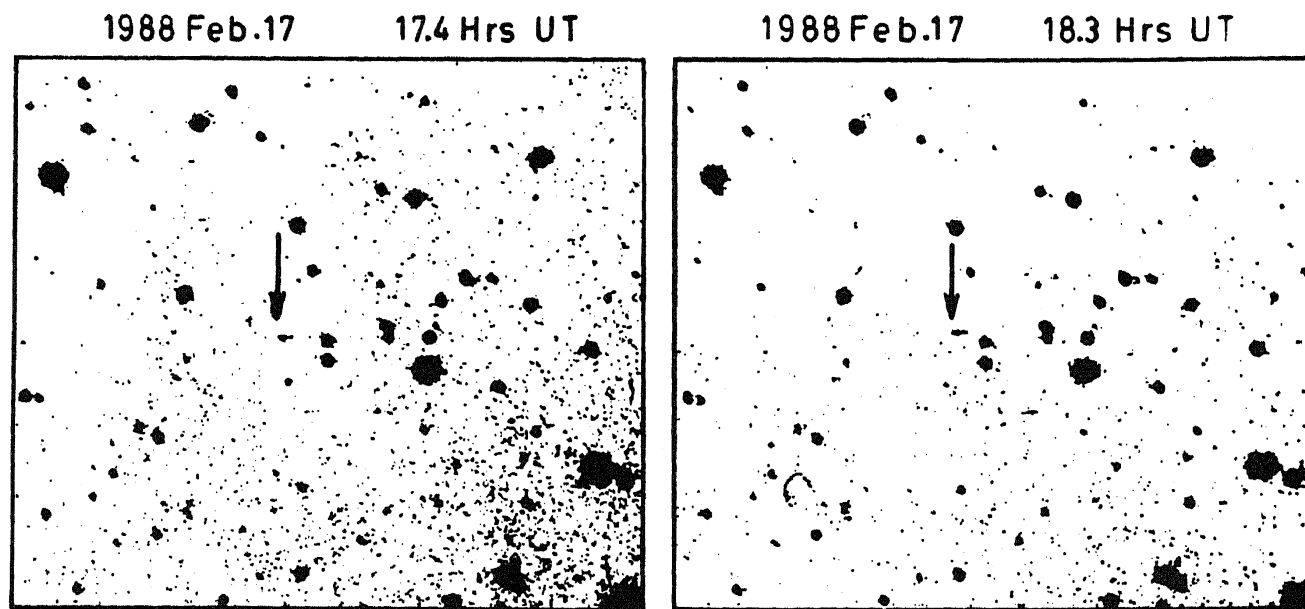


Figure 1. Asteroid Number 4130 discovered with the Kavalur 45 cm Schmidt telescope on 17 February 1988.

1. Rajamohan, R., Bhattacharyya, J. C., Kuppuswamy, K. and Paranjpye, A., *Bull. Astron. Soc. India*, 1987, 15, 174.
2. Rajamohan, R., Shankar, P. N., Bhattacharyya, J. C., Kuppuswamy, K. and Paranjpye, A., *Bull. Astron. Soc. India*, 1988, 16, 21.
3. Nakano, S., Minor Planet Circular Number

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4. Rajamohan, R., Minor Planet Circular Number 13 011, 1988.
5. Rajamohan, R., Minor Planet Circular Number 14 719, 1989.
6. Nakano, S., Minor Planet Circular Number 14 777, 1989.