

Astronomers find smaller Neptunian rocks

August 10 2006

A Taiwan-led study suggests smaller frozen chunks of rock in the outer reaches of the Solar System can be spotted when they obscure starlight.

Nearly 1,000 trans-neptunian objects, or TNOs -- found beyond the orbit of the planet Neptune -- have been seen with conventional telescopes.

The size distribution of such frosty remnants gives astronomers important clues about the formation of the Solar System. But direct observation is only possible for TNOs larger than a few tens of miles across.

Now, astronomer Hsiang-Kuang Chang and colleagues at National Tsing Hua University in Hsinchu, Taiwan, say they've identified 58 TNOs smaller than about 325 feet across, by looking at X-rays being emitted from the star Scorpius X-1.

The scientists say as the TNOs move, they block the line of sight of NASA's orbiting telescope, the Rossi X-ray Timing Explorer, for a few milliseconds. That's long enough to identify the objects and estimate their size, the astronomers say.

The research appears in this week's issue of the journal Nature.

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