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1978 July 28

Mr. Zane B. Stein
~~224 W. Maple Street~~
Ambler PA 19002

Dear Mr. Stein,

Thankyou for your letter of July 25 and money order. I enclose ephemerides of (2060) Chiron back to 1890, which is about as far as I can reasonably go. There are slight discontinuities at the ends of each ephemeris, but I think these can be smoothed out without too much trouble.

The discovery of the Plutonian satellite must, I think, still be regarded as tentative, but if the satellite should be confirmed, Pluto is indeed less massive than almost any astronomer has previously surmised. It is of course possible that further more distant planets exist, but I doubt that any are particularly massive, and I do not think one need postulate their existence in order to explain any possible irregularities in the orbits of Uranus and Neptune.

I noted the remarks about Chiron in Newsletter 8 of the Congress of Astrological Organizations. You are of course at liberty to choose a symbol for Chiron if you wish, but I wonder why astrologers should be interested in Chiron when they ignore the much larger (and closer) minor planets. We have classed Chiron as a minor planet, giving it the number 2060 in the series in which 1 refers to the largest minor planet, Ceres.

Yours sincerely,



Brian S. Marsden

BGM/cv

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