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1989

Activity was again at a record level during 1989, the number of *Circulars* issued, 240, being marginally greater than the 230 in 1987.

The high activity in 1989 was due principally to the record numbers of new comets (20) and of new Apollo/Aten objects (13) discovered. One of the latter, 1989 FC, approached the earth to within 0.0046 AU (just breaking the previous record approach—that of Hermes in 1937) about a week before its discovery. The 14 recoveries of periodic comets were topped only by the 17 of 1987; a case can be made for increasing the 1989 figure by one, for after the announcement in 1988 of the anomalous brightening of Chiron the discovery in 1989 of a tenous coma extending from this object was not a complete surprise.

Twenty-one supernovae were found to be at maximum in 1989, and additional discoveries that were at maximum in 1988 raised the number of 1988 supernova discoveries to a record 29 for one year. One new nova was discovered, and a second was immediately recognized by its discoverer as a recurrence of the 1937 nova V745 Sco; a nova discovered at x-ray wavelengths was found to be a recurrence of V404 Cyg, previously recorded at its outburst in 1938.

Announcements were made in the *Circulars* of the six new satellites and the ring system of Neptune discovered by Voyager 2, and the occultation of a bright star by Saturn's satellite Titan in July was widely observed in Europe.

This was the first full year of e-mail dissemination of the *Circulars*, and by the year's end there were more than 110 e-mail subscribers. This has reduced pressure on the Computer Service proper, although the frequent unreliability of e-mail continues to make this facility for remote logins to read the *Circulars* very desirable, and by the end of 1989 the combined e-mail/Computer Service had a total of about 180 subscribers.

The number of subscribers to the printed *Circulars* ranged between 706 in February and 726 in October. It is again worth noting that the printed *Circulars* are the "official" version, and that since the whole subscription schedule of the Bureau is predicated on the assumption that those who read the electronic *Circulars* will also subscribe to the printed version, the continuing decline from previous years, while understandable, is cause for concern. A note