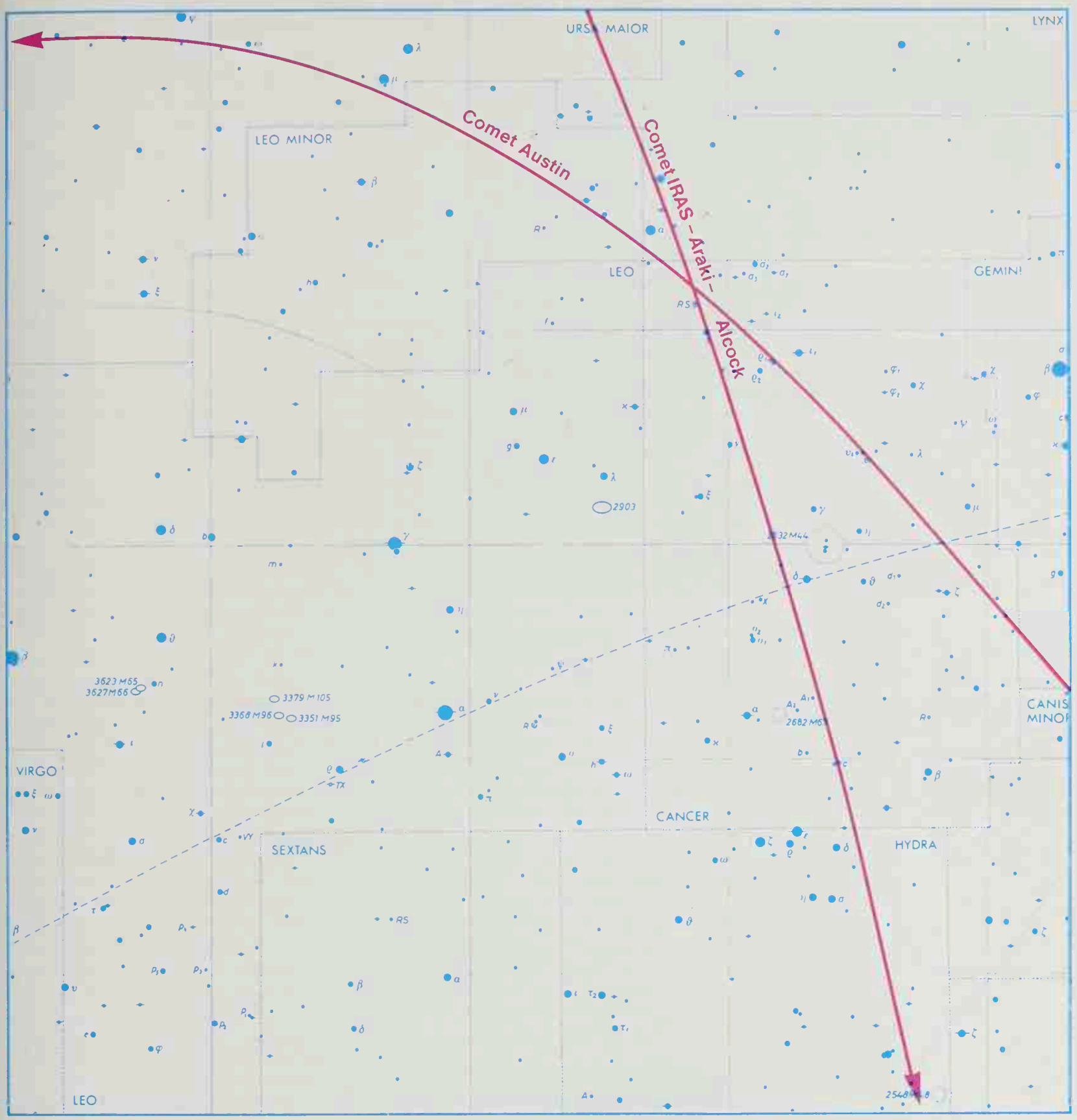

The paths of Comet Austin, 1982g, and the fast moving, close approach Comet IRAS-Araki-Alcock, 1983d.

magnitudes of comparison stars, but the real stumbling-block comes in trying to compare an extended object (the comet) with a point source (a star). Various methods involving the defocusing of the images have been devised, but although these are reasonably consistent within themselves, unfortunately they can never be as accurate as estimates between similar objects. Therefore, cometary magnitudes, especially early ones, remain uncertain overall.

Naturally estimates of a star-like nucleus can be more reliably undertaken, when one is visible. Under many circumstances photographs with ordinary cameras may well be as effective as visual estimates, as happened in the case of the large, close, and very fast-moving Comet IRAS Araki Alcock (1983d). Certain normally faint comets, particularly Comet Schwassmann-Wachmann 1, can undergo sudden outbursts of brightness, so observations are required on every possible occasion.

The general unpredictability of comets means that, as with other 'sudden' events such as novae and supernovae, information must be passed to the observers as rapidly as possible. The official channel through which this happens is the International Astronomical Union's Center for Astronomical Telegrams in Cambridge, Massachusetts, as well as the various individual countries' telephone and postal alert networks. When a cometary return is expected special watches may be mounted. The most significant example of this will come with the return of the Comet Halley in 1985/6, for which an International Halley Watch is being organized, involving professional and amateur astronomers around the world.