1980 is clearly visible as well as a new feature which extends about 4 arcsec from the star towards a position angle ~ 40°. The 30 sec exposures show that the brightness peak of this second nodule is at about 2 arcsec from the star. It coincides with a new radio spot signaled by Kafatos et al. (Ap. J., 267, L103, 1983). The integrated luminosities of the 10 and 4 arcsec nodules are roughly 7% and 6% of the luminosity of the star in the V colour band (namely m(10) = 13.9 and m(4) = 14.1 for m(V) = 11, assuming a linear response of the CCD even at very low and very high fluxes). The simplest interpretation of the 4 arcsec nodule is that it is due to a new ejection of matter which occurred between 1980 and 1982, unless it was not detected on the 1980 plates because of an overexposure of the star. The difference in the position angles of the two nodules expresses that those nodules have been ejected in two independent events or rather that they belong to the same beam curved by some effect as precession of the emitting system.

Due to its relative vicinity (200 parsec), R Aquarii is one of the few objects which could be used to confront directly with the observations the models of ejection of matter along the axis of an accretion disk, since its accretion disk is supposed to have an angular size of the order of 0.1 arcsec and could be resolved by interferometric techniques or by the space telescope. As it seems to be now in an active phase (are we observing a slow nova outburst?) it would be of interest to obtain a few times every year photographic (possibly with a stellar coronograph) and spectroscopic data of the object. The material difficulty to organize such a surveillance of a single object is expressed in the general question of M. Gerbaldi (Messenger of December 1982): how to obtain (officially) occasional observations without applying for several telescope nights?

Thanks are due to Nicolas Mauron for pointing out to me the existence of R Aquarii.

Fig. 1: This photograph of the central region of the R Aquarii complex has been obtained on November 25 1982. The minimum of the Mira was expected for December 3. A curved jet constituted by 2 nodules described in the text extends to 10 arcsec from the star, northwards (north is at top, east to the left). At the distance of the star (200 pc) these 10 arcsec correspond to a linear size of 1,000 astronomical units. The vertical line in the middle of the picture is due to a saturation of the CCD in the zone of the bright star: the excess of charges is transferred above and below the overexposed region. (V filter; 2 min exposure; 1 pixel = 0.471 arcsec.)
PERSONNEL MOVEMENTS

STAFF

Arrivals

Chile
BOHL, Thomas (D), Infrared Instrumentation Engineer, 1.7.1983 (in Europe 6 months to 1 year).
RAFFI, Gianni (I), Software Engineer, 25.5.1983 (change of duty station from Garching to La Silla for 6 months).

Departures

Europe
WOUTERS, Jacobus (NL), Designer/Draughtsman, 10.6.1983.
Chile
GIORDANO, Paul (F), Senior Technician in Optics, 15.6.1983.

FELLOWS

Arrivals

Europe
CRISTIANI, Stefano (I), 1.4.1983.

ASSOCIATES

Arrivals

Europe
CHINCARINI, Guido (I), 11.6.1983.

COOPERANTS

Arrivals

Chile
FOING, Bernard (F), 1.3.1983.
BOUVIER, Jerome (F), 22.4.1983.

Comet Halley observed with the 1.5 m telescope

Cometa Halley observado con el telescopio danés de 1,5 m

Cuando en 1977 fue publicada la pronosticada órbita del cometa Halley para su reaparición, varios astrónomos comenzaron una búsqueda sistemática para recuperar el objeto. Fuera del honor de ser el primero en ver el cometa, se presenta igualmente un aspecto meramente práctico. Se han planeado no menos de cuatro naves espaciales para captar el cometa en 1986, y por eso es muy importante conocer lo antes posible la órbita exacta del cometa.

Las primeras observaciones acertadas se hicieron con el telescopio de 5 m del Monte Palomar, seguidas en corto plazo por los telescopios de 4 m de Kitt Peak y de 3,5 m de Canada-Francia-Hawai. En 1980 ya se hicieron en ESO los primeros intentos (desafortunados) con placas fotográficas tomadas por el telescopio de 3,6 m y con el telescopio danés de 1,5 m por medio de la cámara electrógrafica McMillan. Sin embargo estos intentos estaban condenados al fracaso, pues, y como sabido hoy en día, en aquel entonces la magnitud del cometa correspondía a menos de 25.