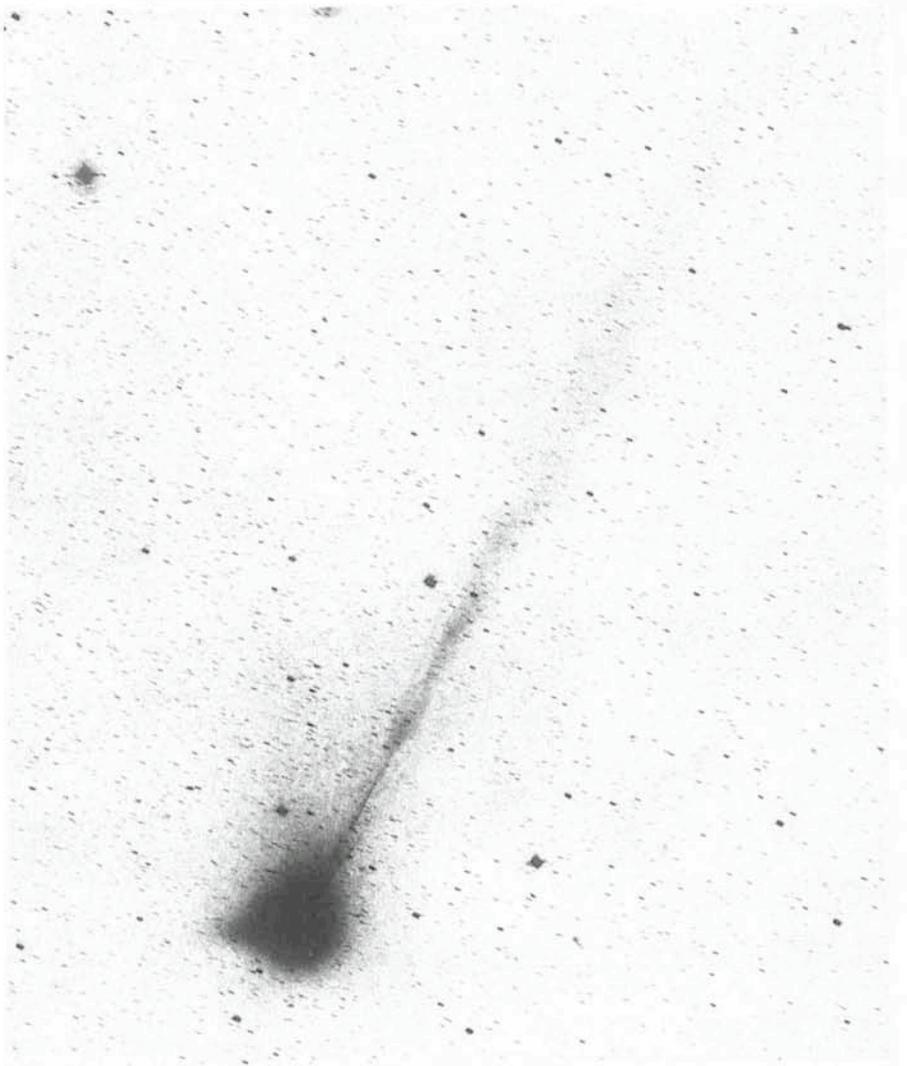


## Comet Wilson Photographed from La Silla

This contrast-enhanced photo of Comet Wilson was obtained with the ESO 1-m Schmidt telescope on March 28, 1987 (30-minute exposure on Ila-O emulsion with a GG 385 filter; observers: H.-E. Schuster and G. Pizarro). This was three weeks before perihelion and the development of a long, straight ion tail can be seen. It measures about 3 degrees, corresponding to approximately 11 million km (projected) and points towards southwest. Note also the streamers near the coma. A short, stubby dust tail is seen towards north (to the left in this picture).

On this day, the distance to the Earth was 210 million kilometres. The comet was situated in the constellation Sagittarius and moving rapidly south while approaching the Earth. The magnitude was estimated at about 6.5. In early May, when the comet came within 90 million kilometres from the Earth, the magnitude was about 5. At that time, observations were made with several telescopes on La Silla; it is expected that some of the results will be reported in the next issue of the *Messenger*. Thereafter, it became fainter as it rapidly receded, and by early June 1987 the magnitude had dropped to about 7.



## The Strange Supernova 1987 A Passes Maximum

The bright Supernova 1987 A in the Large Magellanic Cloud, about which initial reports were included in the *Messenger* No. 47, appears to be different from all others observed so far.

That is the unanimous conclusion of astronomers who have observed this rare object with ESO telescopes since the explosion in late February. After much hard work to meet a late March deadline, the collective, preliminary results from the ESO La Silla observatory of no less than 38 astronomers appeared in six "Letters to the Editor" in the May (I) 1987 issue of the European journal *Astronomy & Astrophysics*. They covered astrometry, optical and infrared photometry, polarimetry, optical and infrared spectroscopy and high-resolution spectroscopy. These articles have been bound together in a special Reprint which can be obtained by request to the ESO Information and Photographic Service (address on last page).

Due to its southern position, SN 1987 A cannot be observed from the northern hemisphere. A rather weak radio emission was detected in Australia during the first days after the explosion, but otherwise all astronomical observations until now have been made in UV, visual and IR light. Despite repeated efforts by satellite- and balloon-based instruments, no X-ray or gamma-ray radiation has been detected. Therefore the interpretation of this exceptional event rests heavily on measurements at a few optical southern observatories, among them the European Southern Observatory.

### Light Maximum by Mid-May

More than three months of observations have now been made of SN 1987 A. Measurements of its brightness showed an initial increase to a maximum near visual magnitude 4.5 on

February 28. During the next few days, the brightness dropped slightly, but after March 5, it increased again, reaching visual magnitude 4.0 in late March. The ultraviolet light was nearly constant after March 10, while the intensity increased in all other spectral regions. In the infrared, the rate of brightening was about 5% per day in late March. The visual brightness also continued to rise and by May 10 it attained magnitude 2.8, that is about half the intensity of the Polar Star. A plateau was then reached which lasted until about May 20, whereafter the supernova began to fade slowly. By early June, it is still too early to make predictions about the future rate of decline.

The time from the initial rise to the maximum, almost 3 months, is unexpectedly long and has never been observed for any other supernova. At the distance of the Large Magellanic Cloud, and taking into account the measured