

INITIAL RADIO OBSERVATIONS OF SN1987a IN THE LARGE MAGELLANIC CLOUD

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A prompt radio burst has been observed from the supernova 1987a in the Large Magellanic Cloud. Observations were made at 0.843, 1.415, 2.29, and 8.41 GHz. At frequencies around 1 GHz, the peak flux density reached about 150 mJy and occurred within four days of the supernova. This event may be a weak precursor to a major radio outburst of the type previously observed in other extragalactic supernovae. Radio monitoring of the supernova is continuing at each of the above frequencies, and coordination is underway of a southern hemisphere VLBI array to map the radio outburst region as it expands. Differential astrometry carried out on prime-focus plates taken with the Anglo-Australian telescope indicates that the component, star 1, of Sanduleak's star SK-69202 is within 0.05 ± 0.13 arcsec of the supernova.

A complete discussion of our observations can be found in *Nature*, **327**, 38-40 (1987) and *Nature*, **327**, 36-38 (1987).