

CURRENT STATUS OF HM Sge MEASUREMENTS

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A summary of radio and infrared observations of HM Sge made between late May and September 1st, 1977, is given.

Radio. HM Sge was observed by W. A. Altenhoff on 28. May 1977 at 15 GHz with the Effelsberg 100 m telescope. The flux density was 41 ± 6 mJy. This agrees with the observation by Feldman (IAU CIRC. 3083) on 19. May at 10.7 GHz. HM Sge seems to be optically thin at frequencies above 10.7 GHz.

Measurements made with the assistance of T. A. Th. Spoelstra at Westerbork at 1.4 GHz since late May (Figure 1) show that the flux density is decreasing overall. Monitoring is continuing and as this goes to press the flux density continues to decrease. The calibration was checked against the nearby source OV+168. No confusing sources appear to be in the single dish beams. Note the steep decrease near day 210.

Infrared. HM Sge was observed by E. Kreysa, G. V. Schultz, W. A. Sherwood and H. Tovmassian from 1.25μ to 3.6μ between 2. and 7. July 1977 at Byurakan observatory with the 2.6 m telescope and from 1.25μ to 30μ between 18. August and 1. September at ESO La Silla with the 1 m telescope. Although in the visual HM Sge brightened by $0.^m5$ (IAU CIRC. 3094; Ciatti, private communication) there was no change in the near infrared greater than $0.^m1$ (and probably less than $0.^m05$). The combined data is shown in Figure 2. The steep spectrum is similar to that found for V 1016 Cyg.

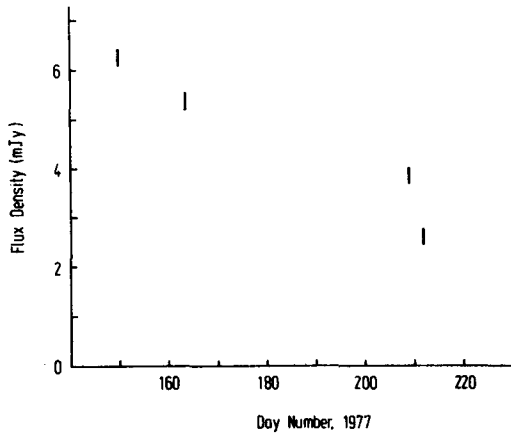


Fig. 1. The behaviour of 1414 MHz flux density of HM Sge as a function of time.

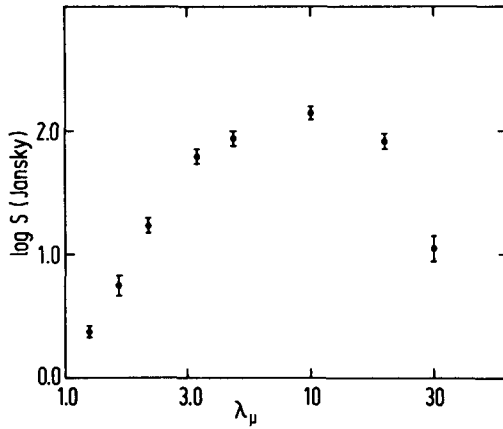


Fig. 2. The infrared flux density distribution between 1.25μ and 30μ .