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THREE LONG PERIOD VARIABLES IN SAGITTARIUS

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ABSTRACT:

Several variables in VSF 193 in Sagittarius were studied during the summer of 1972, three of which were of Mira type.

Variable B28* (18^h 22^m 55^s, -22° 50.9', 1900) was discovered in 1971 by Esther Hu on Nantucket plates. The star was found to have varying amplitude, ranging from magnitude 13.3 to 13.7 for its low and high maxima, to magnitude 15 at minima, with a period of 249 days.

The second star, B29* (18^h 27^m 17^s, -20° 10.4', 1900) was discovered by Pamela Bonnell in 1971 on the Nantucket plates. The star varies from magnitude 11.6 to below 14.2. It appears to have a changing period. From about JD 18,000 to 33,000 a period of 345 days fits the data. From about 35,000 to the present the period appears to be 358 days. Whether this change is a single event or is part of a systematically varying period remains to be determined.

The third star B30* (18^h 24^m 35^s, -28° 07.0', 1900) also has a changing period. Discovered by Pamela Bonnell in 1971 on the Nantucket plates, it was found to vary from magnitude 12.3 to (14.9. The period appears to be 358 days for the interval JD 24,000 - 33,800 and 368 days for the span 35,000 to the present. The exact nature of the change of period is still not clear, however.

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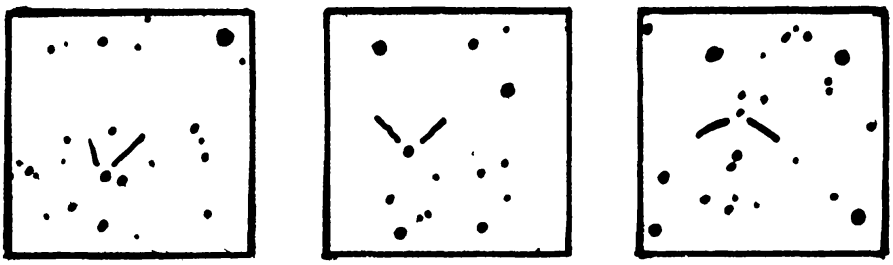
*Provisional designation for an as yet unpublished star.



Finder charts, south up, 10'x10' (approx).

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