THE PERIODS OF MIRAS IN THE BULGE AND THEIR LATITUDE DEPENDENCE

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ABSTRACT. A comparison is made of the period distribution of Miras in the Bulge in fields centred at $b = -3°.9$ and $b = -7°.5$ The field centred at $l = 0°.0$ $b = -7°.5$, occupies 3.79 square degrees and is part of Baade/Plaut field 3. The Miras are those discussed by Wesselink (1987) and those discovered through follow up observations of IRAS objects. The sample is almost certainly incomplete as there are probably Miras of intermediate period which were not detected by either Wesselink or IRAS. The period distribution is shown in Fig 1a.

The other field is centered at $l = 0°.9$ $b = -3°.9$, it covers 0.33 square degrees of the Baade window around NGC 6522. The Miras were discovered by Lloyd Evans (1976) and include the 11 IRAS Miras within the area (Feast 1986). The IRAS survey may have been incomplete by as much as a factor of two this close to the galactic centre, but any missing Miras are unlikely to have long periods. The period distribution is shown in Fig 1b.

A comparison of the two distributions shows no clear differences. There is certainly no indication of an absence of long period objects in the high latitude field.

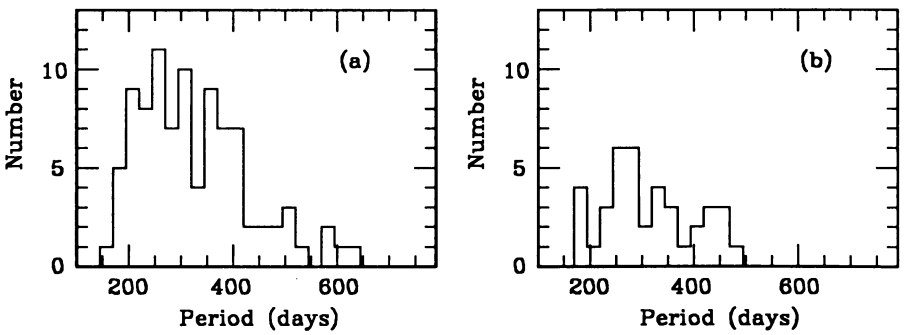

Figure 1: (a) All known Miras in the $b = -7°.5$ field. (b) All known Miras in the NGC 6522 field.

References

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