

AGB Stars in the Large Magellanic Cloud as Seen with DeNIS

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Abstract.

We present infrared photometry of LMC stars taken from a region of 2.5° in right ascension from the DeNIS (Deep Near Infrared Southern Sky Survey) survey.

1. Observations

The DeNIS experiment (Epchtein et al. 1997) has obtained simultaneous photometry in three photometric bands: I ($0.8 \mu\text{m}$), J ($1.25 \mu\text{m}$) and K_s ($2.15 \mu\text{m}$), during an observing campaign from the end of 1996 to the beginning of 1997.

2. Discussion

We have statistically subtracted the Galactic component towards the Magellanic Clouds. Figure 1 shows the corrected colour-magnitude diagram of the LMC sources that characterize the Asymptotic Giant Branch evolutionary stage (O-rich and C-rich AGB stars - Loup et al. 1998 and the Loup contribution to this conference).

References

- Epchtein, N., et al. 1997, *The Messenger*, 87, 27
Loup, C., et al. 1998, in *The Impact of Near-Infrared Sky Surveys on Galactic and Extragalactic Astronomy*, N. Epchtein, Kluwer Academic Publishers, 115

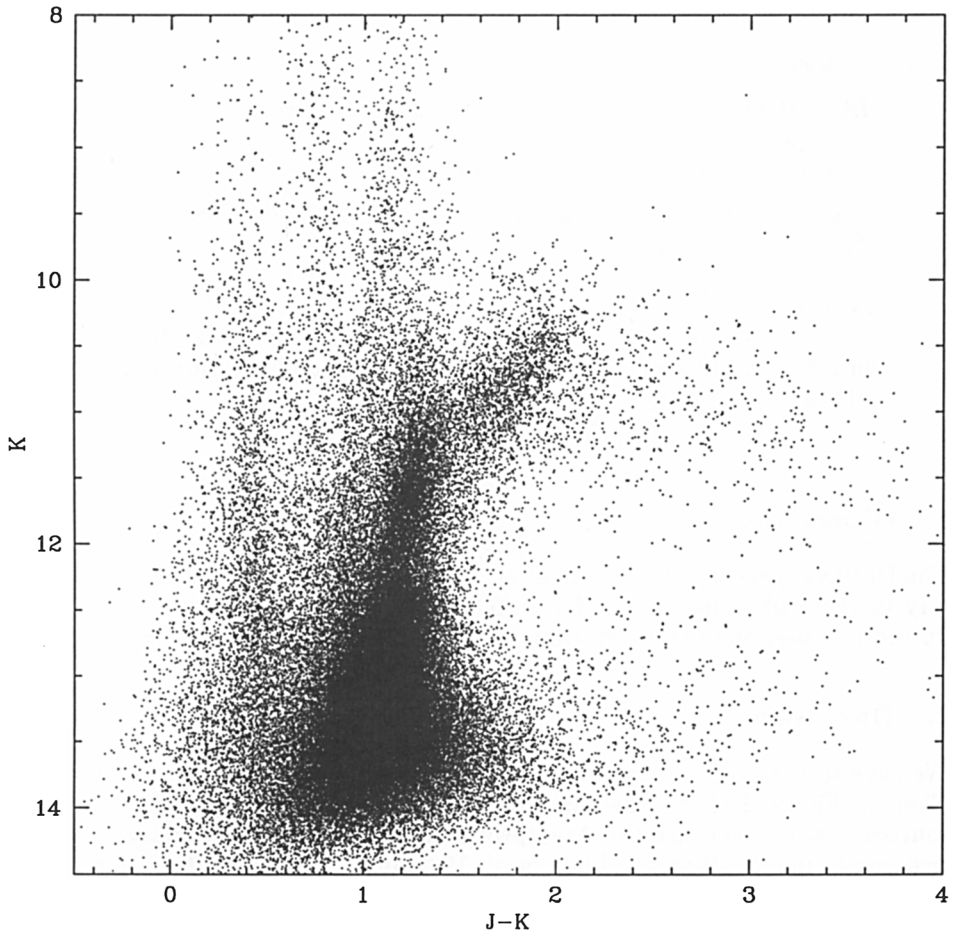


Figure 1. Colour-magnitude diagram of $\sim 10^5$ sources in the Large Magellanic Cloud.