

Probing the Dust Structures in the LMC with Light Echoes

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Abstract

Light echoes provide us one of the best ways to map the dust structures in the ISM. A preliminary study in infrared an HI of three light echoes regions in the LMC associated to ancient supernovae (Rest et al. 2005) is presented. Infrared images are used to identify dust structures where light echoes have been detected and they are used to improve the measurements of relative distances to dust structures up to 1 kpc in the foreground of one of the SNR. HI data is used to measure the velocities of the dust structures. We find out different correlations between relative distances and HI-velocities and they allow us to recognize different dust structures for the light echoes regions.