

P18a Multiple Non-axially Symmetric H₂ Shocks in S233 and IRAS20050

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There are two sets of deeply embedded sources(DESs). One set is revealed by the near infrared H₂ jets(e.g., HH212 and L1448C), and the other set by the near infrared polarimetric imaging(Yao et al. ASJ99b). While the H₂-DESs have little circumstellar nebulosity and are low-mass stars, the polarimetric DESs appear to be strongly illuminating the nebulae and associated with massive and clustered star formation. Both the DESs have been argued to be in the earliest phase of star formation.

We have carried out an H₂ survey for the twelve polarimetric DESs known up to date. This presentation will show our H₂ imaging toward the two polarimetric DESs in S233 and IRAS20050+2720. In both the regions we have significantly detected multiple non-axially-symmetric H₂ shocks around the DESs. The multiple H₂ flows in S233 diverge in a quite different direction from the surrounding reflection nebulae, and the H₂ flows in IRAS20050+2720 appear to coincide well with the multiple molecular outflows observed in the mm-wave(Bachiller et al. 1995). We will summarize the results of the H₂ survey for polarimetric DESs, and further compare the two sets of deeply embedded sources.