

ISO observations of the HH 24-26 regions ()

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We report the results of an investigation, performed with the Long Wavelength Spectrometer (LWS) and the Short Wavelength Spectrometer (SWS) on-board the ISO satellite, on the star forming region associated with the Herbig-Haro objects HH24-25 and 26. In particular, we obtained low-resolution LWS spectra towards the two Class 0 sources HH24MMS and HH25MMS as well as towards the Class I source HH26IR and its associated flow. In addition, SWS scans of pure H₂ rotational lines in HH24MMS were acquired. All the spectra present the [OI] 63 μm and the [CII] 158 μm lines, while significant molecular emission from CO and H₂O is detected only from HH25MMS and along the blue lobe of the HH26IR outflow, where the shocked activity is also evidenced by the presence of strong near infrared knots. The physical conditions of the regions strongly emitting in molecular lines are derived, showing that the two Class 0 sources are characterised by lower temperatures and higher densities than the HH26IR flow. The presence of both J and C shocks are envisaged to take into account the observed emission.

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