

[☞IM-07] FUV Images and Physical Properties of the Orion-Eridanus Superbubble region

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The far-ultraviolet (FUV) C IV and H₂ emission spectra of Orion-Eridanus Superbubble (OES) is hereby presented. The OES seems to consist of multiple phase through the detection of highly-ionized gas and pervasive neutral hydrogen. The former is traced by hot gas while the latter is traced by cold medium. A spectral image made with H₂ fluorescent emission shows that the spatial distribution of hydrogen molecule is well correlated with the dust map. The model spectra was taken from a photodissociation region (PDR) radiation code which finds a best suitable parameter such as hydrogen density and intensity of the radiation field. C IV emission is caused by intermediate temperature ISM about 10⁵ K. Therefore we could get more clear evidence to reveal the morphology of OES. In this process, the hydrogen density and gas temperature were also estimated. The data were obtained with the Far-Ultraviolet Imaging Spectrograph (FIMS) and the whole data handling were followed by previous FIMS analysis.

[☞IM-08] Monte-Carlo Simulation for dust scattering in the Ophiuchus molecular complex

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We present the results of FUV dust scattering simulation, which is based on the Monte-Carlo method. In this simulation, we focus on the multiple scattering in the Ophiuchus complex region because the single scattering case in the region already reported by Lee et al. 2008.

We compare the simulation result to the FUV intensity with FIMS and the single scattering result. We also discuss the parameters related to the results of this simulation, such as asymmetry factor, albedo and other different setting-ups.