

[IM09] A multiwavelength study of NGC 7023

Youngung Lee¹, Miju Kang^{1,2}

¹*Korea Astronomy Space Science Institute*, ²*Chungnam National University*

We present an observational result of multiwavelength study toward a molecular cloud NGC 7023. The center of this cloud is the clear site of B-type star formation, and shows the phenomena of direct interaction between stellar wind and surrounding gas. We observed this star forming region in several molecular lines, such as ¹²CO, ¹³CO, CS, C¹⁸O, including far more extended region which is relatively calm. Several physical properties of the molecular cloud will be discussed.

[IM10] FUV spatial variation of the North Polar Spur

J. W. Park¹, K. W. Min¹, J. H. Shin¹, I. J. Kim¹, Y. M. Lim¹,

K. I. Seon², D. H. Lee²

¹*Korea Advanced Institute of Science and Technology*,

²*Korea Astronomy and Space Science Institute*

Radio astronomers found ridges of enhanced continuum emission in 1960s. The brightest part in one of these Loops, Loop I, is roughly aligned along $l=30^\circ$ and called North Polar Spur. Initially, NPS was thought to be a remnant of nearby old supernovae, as supported by X-ray observations. Many models have been proposed since then regarding its origin, from a bubble formed by stellar winds and SN explosions in Sco-Cen to Local Bubble, and to interactions of these two bubbles. It is interesting that the temperature of this interaction ring is expected to have $T \sim 10^5$ K and thus, FIMS observation might provide some information regarding the model. The FIMS C IV image shown below has a good correlation with the soft X-ray map, which shows clear anti-correlation with the dust map.