# Advanced Radio Astronomy, Preliminary results of the G23.71 VLA-B observations

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**OBSERVATIONS:** The observations were conducted on April 24, 2005. We observed the region G23.71 in C-band spectral-line mode to: 1. verify the detection of a new $H_2CO$ maser discovered last January by our group, and 2. check whether weak spectral features found in our last January's observations are real. The reduction was done following the standard procedure for VLA spectral line reduction in `AIPS`.

**RESULTS:** We confirmed the detection of Araya et al. (2005, *in preparation*) of an $H_2CO$ 6 cm maser in the massive star forming region G23.71. Figure 1 shows the spectrum obtained with the VLA-B.

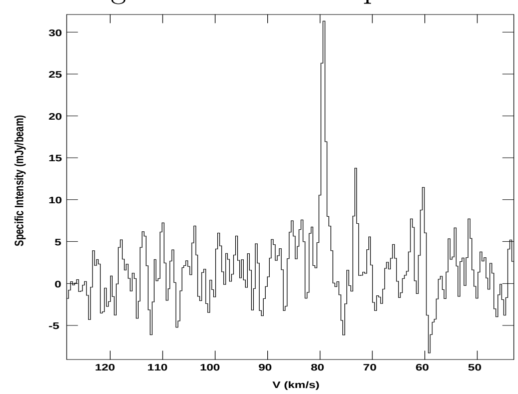


**Figure 1.** $H_2CO$ 6 cm spectrum obtained toward G23.71. The observations confirm $H_2CO$ 6 cm maser emission in this region.

We did not detect the weak maser candidates found in our January's run, thus the weak features were spectral artifacts or highly variable masers. We detected 6 cm radio continuum in the region. The radio continuum is clearly extended with respect to the VLA-B beam, and it was poorly mapped as it is clear from Figure 2. The $H_2CO$ 6 cm maser seems to be associated with the radio continuum region.

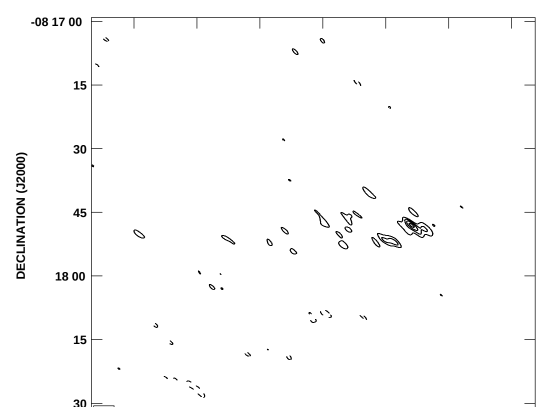


**Figure 2.** 6 cm radio continuum detected in our observations. This free-free emission is clearly extended with respect to the VLA-B beam, and it was poorly mapped. However, the positional coincidence between the radio continuum and the $H_2CO$ emission suggests that the maser is physically associated with this region of massive star formation.