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## HIGH VELOCITY CO WINGS IN NGC 2071 AND GL 490 OBSERVED WITH THE 45-m TELESCOPE

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We have used the 45-m telescope for mapping two CO broad wing sources NGC 2071 and GL490 with a 15" beam in the J = 1-0 line. We obtained 250 CO and 130 <sup>13</sup>CO spectra for NGC 2071 and 150 CO spectra for GL490. The observations were made with the highest angular resolution for the CO line and, as well, cover the whole extent of the outflows. The results reveal significant details of the angular distribution of the CO wings.

The main points can be summarized as follows:

- (1) The outflow consists of the high velocity component ( $|\Delta v| \gtrsim 10$  km/s), and the intermediate velocity component ( $|\Delta v| < 10$  km/s).
- (2) The high velocity component appears well collimated and is being accelerated.
- (3) The intermediate velocity component is mildly collimated and shows the signs of deceleration.
- (4) The intermediate velocity component delineates a cavity, and the high velocity component is located in the central hole of the cavity.
- (5) The <sup>13</sup>CO data are used to derive the filling factor in NGC 2071. We found that the outflow is growing in mass at  $r \lesssim 0.1$  pc and the mass flux is nearly constant at  $r > 0.1$  pc. Therefore, we suggest that the interaction of the disk or stellar wind with the ambient cloud is occurring mostly at  $r \lesssim 0.1$  pc.

Based on these results, we suggest that the CO outflow consists of two components: the highly collimated velocity one, which is not interacting with the ambient gas, and the mildly collimated intermediate velocity one, which is significantly interacting with the ambient gas and is losing momentum.