

## SIMBA Mapping of the GMC associated with RCW 106

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We have mapped the dust continuum emission from the molecular cloud covering a region of 28 pc×94 pc associated with the well-known H II region RCW 106 at 1.2 mm using SIMBA on SEST. In all 95 dust emission peaks have been identified. Assuming a uniform dust temperature of 20 K we estimate the total mass of the GMC associated with RCW 106 to be  $\sim 10^5 M_{\odot}$ . The constituent millimeter clumps cover a range of masses and radii between 40 to  $10^4 M_{\odot}$  and 0.3 to 1.9 pc. Densities of the clumps range between  $(0.5-6) 10^4 \text{ cm}^{-3}$ . We have decomposed the continuum emission into gaussian and arbitrary shaped clumps using the two independent structure analysis tools `gaussclumps` and `clumpfind` respectively. The clump mass spectrum was found to have an index  $\alpha$  of  $1.6 \pm 0.3$ , independent of the decomposition algorithm used. The index of the mass spectrum for the mass and length scales covered here are consistent with results derived from large scale CO observations.