

Abstract Submitted  
for the SES16 Meeting of  
The American Physical Society

**Resolving the Mid-Infrared Population in Massive Protoclusters** ALLISON TOWNER, University of Virginia, CRYSTAL BROGAN, TODD HUNTER, National Radio Astronomy Observatory, CLAUDIA CYGANOWSKI, University of St. Andrews, STELLA OFFNER, University of Massachusetts - Amherst, REMY INDEBETOUW, University of Virginia — Simultaneous outflows from multiple protostars likely play an important and perhaps crucial role in forming a cluster containing massive stars (a “protocluster”). We have identified a sample of 20 typical Galactic protoclusters existing in a specific early evolutionary state in which outflows dominate their appearance in the IRAC bands. We have recently completed surveys of the circumprotostellar environment of these protoclusters at 1.3 cm and 1.3 mm. We recently observed 9 of these protoclusters with the SOFIA FORCAST instrument at 19.7 and 37.1  $\mu\text{m}$ . Targets were selected based on evidence for 1.3 mm multiplicity in the 1.3 mm data and inadequate 24  $\mu\text{m}$  observations. In this poster, we present first results from these new data. The high angular resolution and sensitivity of the SOFIA data offer a substantial improvement over existing data for these objects and is well-matched to our longer wavelength images. With these observations, in conjunction with our existing longer wavelength data, we plan to construct SEDs for the protoclusters. These SEDs will allow us to constrain the mass and temperature of the intermediate- to high-mass protostars within the observed 1.3 mm dust cores, as well as to constrain ancillary information such as extinction, accretion rate, etc.

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Date submitted: 06 Oct 2016

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