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A HaloSat Analysis of the Cygnus Superbubble JESSE BLUEM, The University of Iowa — The Cygnus Superbubble (CSB) is a large structure near the plane of the galaxy. The region is roughly 450 parsecs in diameter and glows in the soft X-ray band. Such a massive X-ray structure may be the result of a combination of stellar winds and supernovae or a hypernova. As Cygnus is in the direction of the local spiral arm, determining if the CSB is a cohesive object or a line of sight composite is vital to understanding its nature. HaloSat was used to take X-ray observations of different sections of the CSB in the 0.4-7.0 keV band. The spectra produced by these observations were analyzed to determine temperatures and column densities in order to probe the cohesive nature of the CSB.

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