

Abstract Submitted
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Ammonia and HC₇N Emission in Dense Cores TIERRA CANDELARIA, NRAO/The College of Idaho, SCOTT SCHNEE, NRAO, KATIE DEVINE, The College of Idaho, NRAO TEAM, THE COLLEGE OF IDAHO TEAM — Dense cores represent the transition between the turbulent, diffuse ISM and protostars. Thus, understanding dense cores' chemical and physical properties provides valuable information about the early stages of low mass star formation. We present an analysis of 13 starless dense cores in the Taurus Molecular Cloud using new data taken with the Green Bank Telescope. Our observations consist of ammonia (NH₃) (1,1) and (2,2) and HC₇N (J=21-20) emission. We present new detections of HC₇N (a carbon chain bearing species) in four cores and confirm detection in two cores. We also present temperature and velocity gradient maps. These results are the foundation of a more complete survey and illustrate an important relationship between ammonia and the carbon chain bearing species HC₇N.

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