

The physical association of the detected H α emission stars in the Kh141 region with the dark cloud is suggested from the following statistical argument. The relative number of H α emission stars to general stars has been found to be about ten times larger in the Kh141 region than in the comparison field at the same galactic latitude. Another evidence for the physical association is the clustering of the detected H α emission stars, most of the emission line stars make three small clusters in or near the opaque condensations of the dark cloud which is in agreement with the general tendency of clustering of premain sequence stars of low masses in dark cloud complexes (Hyland 1981). The largest clustering is seen at the southern part of Kh141; the cluster consists of three T-Tauri stars, 2 unclassified emission line stars and three stars with reflection nebulosities.

REFERENCES

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A SOUTHERN HEMISPHERE AMMONIA SURVEY

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A spectral line survey for interstellar NH₃ is being carried out using the 64-m telescopes at Parkes and Tidbinbilla. Both telescopes are equipped with K-band masers yielding system temperatures below 100 K. The preliminary survey was to be made with the Parkes antenna (beam = 1.5' arc) with follow-up mapping of the more interesting sources at Tidbinbilla (beam = 0.9' arc). Sources have in general been HII regions from the H₂CO surveys made at Parkes. Approximately 70 sources (out of a target of (~ 100) have been observed simultaneously in the metastable (1,1), (2,2) and (3,3) transitions. The (1,1) line has been detected in about 70% of the sources surveyed. The other lines which involve higher excitation are detected primarily in the more compact sources, particularly those associated with OH and H₂O masers. Examples are given of spectra for different types of source.