

ECTDL SPECTRUM OF  $^{15}\text{NH}_3$  IN THE  $6370\text{-}6580\text{ cm}^{-1}$  REGION OF THE  $\nu_1 + \nu_3$  NH-STRETCHING COMBINATION BAND

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The infrared spectrum of the N-15 isotopic species of ammonia is being investigated in the  $6370\text{-}6580\text{ cm}^{-1}$  region with an external cavity tunable diode laser spectrometer. The patterns of some of the stronger absorption lines are very similar to those known for the  $\nu_1 + \nu_3$  N-H stretching combination band of normal  $^{14}\text{NH}_3$ , permitting immediate assignment by analogy with the known N-14 transitions. For  $^{15}\text{NH}_3$ , the  $\nu_1 + \nu_3$  band origin is shifted downwards by  $12.2\text{ cm}^{-1}$  relative to  $^{14}\text{NH}_3$ . From the preliminary spectra, the absorption intensities appear fairly comparable for both species, but more careful measurements to better define the isotopic intensity ratio are underway.