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A CCD spectrum and production rates for Comet P/Temple 2

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Abstract

Now that comet P/Temple 2 has been resurrected as the primary target for the CRAF mission we wish to present an analysis of a 20 minute exposure taken 1988 Oct. 09. The comet displays a typical spectrum with no unusual omissions or additions. The comet therefore appears to be quite suitable for detailed spacecraft study as a representative object. Strong emissions by C_2 , NH_2 , CN and $OI\ ^1D$ are exhibited. Compared to the emissions, the continuum is moderately strong but appears somewhat weaker than for P/Halley. Production rates for H_2O (from $OI\ ^1D$) and the parent of C_2 , NH_2 , and CN will be presented and compared to P/Halley.

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