

RADIO OH OBSERVATIONS OF 8P/TUTTLE

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We have observed 18-cm OH lines in periodic comet 8P/Tuttle during December 2007 and January 2008. Spectra were observed with the Arecibo Observatory 305m and with the National Radio Astronomy Observatory (NRAO) Green Bank Telescope (GBT), at spatial resolutions of 4 and 8 arcminutes. Such spectral line observations provide useful constraints on the gas production and velocity in the coma, and the distribution of outgassing from the nucleus. In addition, spatially-resolved spectroscopic mapping observations on these large arcminute scales provide constraints on the excitation conditions in the coma, including collisional quenching. Results will be presented and compared to observations of other long- and short-period comets, including Comet 73P/Schwassmann-Wachmann 3.