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Simulated images of energetic neutral atom emissions from a comet

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We present simulated images of energetic neutral atoms (ENAs) produced by charge exchange between solar wind ions and cometary neutrals. Proton bulk flow and temperature from MHD simulations are used along with a model of cometary neutral densities. The emission of ENAs from the comet is then calculated using cross sections for the charge exchange collisions. The ENA production rate is integrated along lines of sight to a virtual instrument, simulating what could be measured by a space-craft-carried ENA imager.