



Production of Energetic Neutral Atoms at HD209458b ("Osiris")

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Observations made with the Hubble Space Telescope indicate that Hydrogen atoms are escaping the atmosphere of the Hot Jupiter HD209458b. We study the production of Hydrogen Energetic Neutral Atoms (ENAs) as a result of charge exchange collisions between stellar wind protons and neutral atoms around HD209458b. The neutral environment is taken from a hydrodynamic model and the plasma flow is simulated with an MHD model. We get a large production of ENAs in front of the planet, and we find nothing that would rule out ENA production as an explanation of the observations.