

Implications of hazes in observations of exoplanet atmospheres

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Abstract

The current inventory of exoplanet observations provide information for the composition and temperature conditions of these environments. Moreover they indicate that hazes can be an important component of their atmospheres. From studies on solar system atmospheres (e.g. Titan) it is well established that the presence of hazes can have significant implications on the thermal structure and composition of a planetary atmosphere. In this work we will present a study for the properties of photochemical hazes in exoplanet atmospheres in terms of their potential size and density distributions. Furthermore we will discuss their implications on the atmospheric heating and photochemistry in regard to the available observations.