

## Climate for land planets

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Most of the studies for habitable planets focus on the boundary of the habitable zone in which a planet can maintain liquid water on its surface for a long term. Previous studies assumed a planet with a large amount of water on its surface. However, exoplanets should have various amounts of water on their surface.

Kodama et al. (2019) showed the relationship between the insolation at the inner edge of the habitable zone and the water distribution on a planetary surface. A land planet that has a small amount of water on its surface can maintain liquid water when it receives stronger insolation than that at the inner edge of the habitable zone for a planet with a large amount of water.

In this presentation, we summarize the climate for a land planet and show the results for TRAPPIST-1 d as a land planet.

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