

Explorations and current understandings for subsurface ocean of icy bodies

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Most of solid bodies in the outer solar system, around Jupiter's orbit and beyond, are covered with ice on its surface, which are called as "Icy bodies".

In these icy bodies, e.g., Jovian moon Europa and Saturnian moon Enceladus, existence of the global liquid water ocean under the icy crust, called as "subsurface ocean", has been strongly suggested through the past remote sensing (mainly by geodetic and electromagnetic measurement) and theoretical modelling.

In this talk, I introduce the results of previous observations and theoretical calculations, and summarize the current understandings focusing on the geophysical knowledge about the subsurface ocean of icy bodies.