10th bwHPC Symposium



Contribution ID: 114 Type: Lightning Talk (short presentation on 2nd day, max. 5 minutes, max. 2 slides)

The role of orbital parameters on the simulated sea surface temperature of the Earth-like aquaplanet

Thursday, September 26, 2024 10:00 AM (5 minutes)

We evaluate a role of independent orbital parameters, namely, eccentricity, obliquity, and longitude of perihelion, on the simulated Earth-like aquaplanet sea surface temperature.

We choose the parameters to be in the range that Earth underwent during last 150000 years and will undergo within next 150000 years.

Our results reveal that the sea surface temperature variability within this time span does not increase 0.3 K and that the main parameter that defines the amount of incoming solar radiation that reaches the aquaplanet surface and causes its warming or cooling is the obliquity.

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Session Classification: Lightning Talks

Track Classification: Contribution presents scientific results in a specific field acquired through bwHPC