

Secular Obliquity Variations Due to Climate Friction on Mars

Yuji Harada[1]; Kosuke Heki[2]

[1] DEM, ERI, Univ. Tokyo; [2] Div.Earth Planet. Sci., Hokkaido Univ.

Secular obliquity variations due to climate friction on Mars are calculated. Martian interior is considered to be a three-layered structure. A viscosity of each layer is treated as a parameter. The results give knowledge as follows. First, under an internal structure with a visco-elastic crust and/or a solid core, the effect of the climate friction becomes greater than that concluded by previous research. Second, under an internal structure with a heterogeneous mantle, the possibility of the great effect of the climate friction becomes stronger than that concluded by previous research.