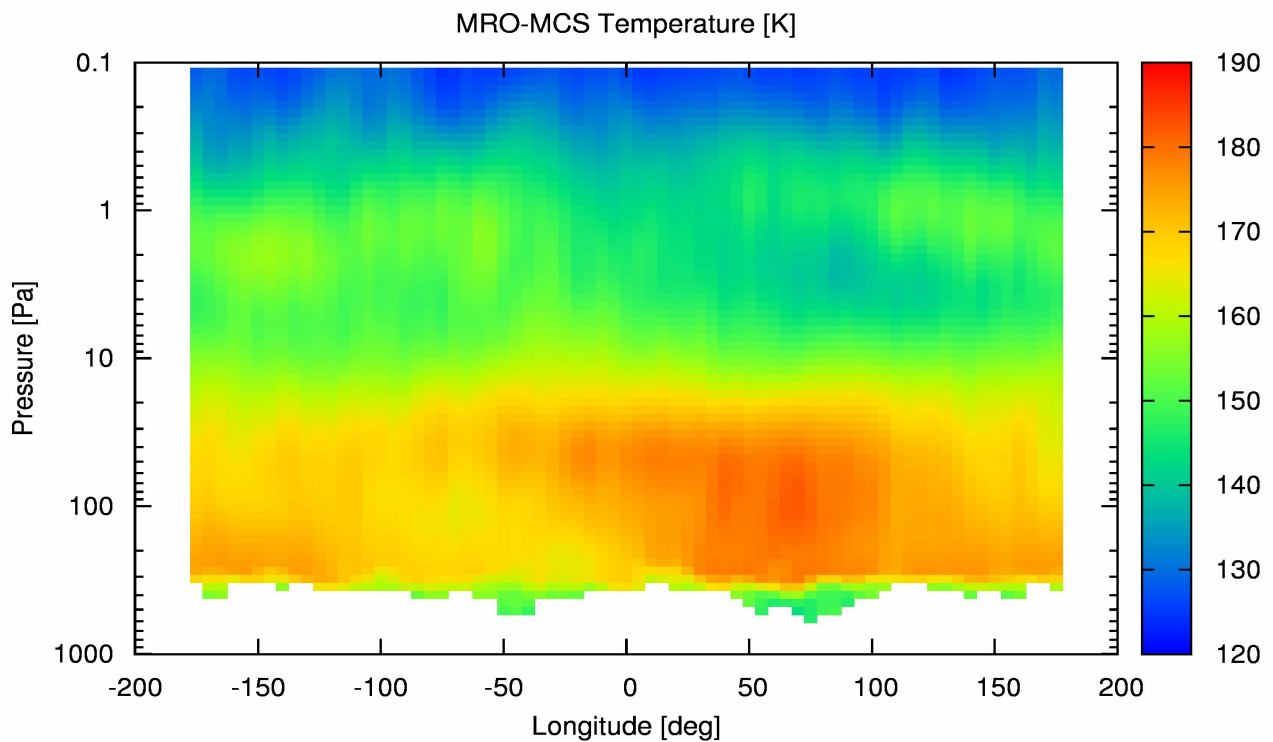


Earth and Planetary Atmospheric Science

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Longitudinal distribution of temperature observed by MRO-MCS

We study the atmospheres of Earth, Mars, Venus and other planets, using observational data obtained by planetary exploration spacecrafts and earth orbiters and the outputs from numerical simulations. For the study of the Martian atmosphere, we are using the data obtained by Mars Global Surveyor and Mars Reconnaissance Orbiter, and the outputs from Martian global circulation models (MGCMs) to interpret the observational results. Based on the analyses of those data, we have revealed 1) the spatio-temporal distribution of dust, water ice clouds, dry ice clouds and temperature and their relationships and 2) the cause of CO₂ supersaturation in the polar nights. We will also analyze the data from Planet-C (Akatsuki) and Venus Express for Venusian atmospheric science.

Keywords : Planetary atmosphere, Mars, Venus