

Interannual analyses of the meridional distributions of Martian dust and clouds obtained by MRO-MCS

NOGUCHI, Katsuyuki^{1*} ; IMAE, Kaori¹ ; KAWANISHI, Mai¹

¹Nara Women's University

We investigated the interannual variability of the meridional distributions of dust and clouds in the Martian atmosphere by using Mars Reconnaissance Orbiter Mars Climate Sounder (MRO-MCS) measurements. As the previous analyses did not consider measurement errors to depict the zonal averages, we took a criterion of 10% for the measurement error. Results show that Mars Year (MY) 29, which is regarded as a standard year in the previous analyses, had an enhancement of dust in the high altitudes (above 10 Pa) in the tropical region, and such an enhancement was not found in other MYs (28, 30 and 31). On the other hand, the distribution of ice clouds in MY 29 roughly agreed with other MYs' distribution.