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火星探査機MRO搭載MCSにより観測された火星大気ダスト、水氷雲および気温の経度分布の複数年解析
Interannual analyses of the longitudinal distributions of Martian water ice clouds, dust and temperature by MRO-MCS

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We investigated the longitudinal distributions of dust and clouds with temperature and their correlations in the Martian atmosphere by using Mars Reconnaissance Orbiter Mars Climate Sounder (MRO-MCS) multi-year measurements. Results show that the water ice clouds concentration around Hellas Planitia (30-60S, 50-100E) decreased during late autumn and early spring in the southern hemisphere (Ls=70-110 deg), and temperature and the dust concentration in the same region increased simultaneously. The results suggest that the heatup by dust sublimated water ice clouds to decrease the concentration of water ice clouds. The decrease of water ice clouds and the corresponding behaviors of temperature and dust were clearly observed in three Mars Years (MY29-31), suggesting the strong interannual repeatability.

キーワード: 火星, 水氷雲, ダスト, 気温, MRO, MCS
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