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OMEGA/Mex observations of the evolution of the North seasonal cap in late summer and early spring : comparison between two successive martian years

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In late november 2004, the visible/near IR imaging spectrometer OMEGA on board Mars Express completed its first full martian years of observations, inititated in early January at Ls 330˚. The results on the permanent and seasonal caps demonstrated that OMEGA is able to unambiguously identify CO2 ice on the surface, and water ice on the surface or in clouds. In early 2005, the pericenter of Mars Express was close to the South pole. We report on a series of observations near apocenter which provide global maps of the North seasonal cap and high latitude clouds in late winter and early spring. These observations are compared with the maps of selected areas obtained at a higher resolution in early 2004. The first results support the conclusion from TES/MGS that the recess of the North seasonal cap is very consistent between successive martian years. However, significant differences are observed in the specific distribution of CO2 and H2O ices, as well as the evolution of high latitude clouds.