



The north polar region of Titan with VIMS instrument

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VIMS observed the north polar region the 28th december 2006, and detected a vast polar cloud. Aside from this cloud, the observation also gives information about the haze layer in this region. The northern polar region is an important place for several reasons: it is the place where most of the liquid surfaces are found, in this region, atmosphere is enriched with aerosols and chemical species produced in the stratosphere. At last, it is also the place where the stratospheric components (aerosol, photochemical byproducts) penetrate into the troposphere and probably settle down to the surface. This should yield surface properties significantly different from the other locations of the planet.

The purpose of this work is twofold. First, we characterize the layer of scatterers (haze and drops) in this region and we can retrieve information about the structure of the cloud. The result can be compared to the prediction of a GCM. The second goal for determining the scatterer layer is to improve the procedures to retrieve surface albedo, since surface is screened by methane and particles. In this frame, the first step is to better constrain this layer.