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Last updates on Titan's cloud cover monitoring with CASSINI

Sebastien Rodriguez (1), Elizabeth P. Turtle (2), Stephane Le Mouélic (3), Pascal Rannou (4), Christophe Sotin (5), Jason W Barnes (6), Caitlin A Griffith (7), Robert H Brown (7), Kevin H Baines (8), Bonnie J Buratti (5), Roger N Clark (9), and Phil D Nicholson (10)

(1) Laboratoire AIM - Université Paris 7, Planetology, Gif/Yvette, France (sebastien.rodriguez@cea.fr), (2) Johns Hopkins Univ. Applied Physics Lab. 11100 John Hopkins Rd. Laurel, MD 20723, United States, (3) LPGN Laboratoire de Planétologie et Géodynamique de Nantes, Nantes Cedex 03, France, (4) GSMA - University of Reims Champagne-Ardennes, Reims, France, (5) NASA Jet Propulsion Laboratory, California Institute of Technology, Pasadena, CA, United States, (6) University of Idaho, Moscow, ID, United States, (7) University of Arizona, Tucson, AZ, United States, (8) Space Science and Engineering Center, University of Wisconsin, Madison, WI 53706, United States, (9) PSI, Tucson, AZ, United States, (10) Cornell University, Dept. of Astronomy, Ithaca, NY, United States

We report on the monitoring of cloud activity in Titan's atmosphere over a period spanning from early winter to mid-spring. Clouds on Titan have been observed by the Visual and Infrared Mapping Spectrometer (VIMS) onboard the Cassini spacecraft since its insertion into Saturn's orbit. A semi-automated method is used to detect cloud events in each VIMS cube acquired since July 2004 and statistics are drawn on the location of the clouds and their evolution. It is shown that the cloud activity has decreased at both pole approaching the equinox, while clouds at southern mid-latitudes were still very active. Close to the equinox, rare but intense cloud activity has also been detected in the equatorial area. After the equinox, the cloud activity has almost completely disappeared, except for rare and small cloud patches at northern high latitudes. Those long-term observations are compared with predictions of Global Circulation Models (GCMs) in order not only to better constrain the models, but also to better understand the processes which drive Titan's weather and how they interact with Titan's surface.