Geophysical Research Abstracts, Vol. 7, 04640, 2005
SRef-ID: 1607-7962/gra/EGU05-A-04640

Cassini magnetic field observations of Titan's magnetic tail structure at constant SLT : Ta, Tb, T3

F. Neubauer(1), H. Backes(1), M. Dougherty(2)

N. Achilleos(2), N. Andre(3), C. Arridge(2),

C. Bertucci(2),G. Jones(4), K. Khurana(5),

C. Russell(5), A. Wennmacher(1)

(1) Institut fuer Geophysik und Meteorologie, Universitaet zu Koeln,

Albertus Magnus Platz, 50678 Cologne, Germany,(2) Space and Atmospheric Physics, Blackett Laboratory, Imperial College London,

Prince Consort Road, London SW7 2AZ, United Kingdom,(3) Centre d'Etude Spatiale des Rayonnements, Universit´e Paul Sabatier, Toulouse, France,(4) Jet Propulsion Laboratory, California Institute of Technology,

4800 Oak Grove Drive, Pasadena 91109-8099, USA,(5) Institute of Geophysics and Planetary Physics, University of Califorinia,

Los Angeles, CA 90095-1567, USA

The first three close Titan encounters (Ta, Tb, T3) occur at almost the same SLT $\sim$ 10.6h, within Saturn's magnetosphere and through the magnetosperic wake of Titan at different latitudes and altitudes. These three encounters provide an interesting opportunity to investigate the structure and formation of Titan's induced magnetic tail also in comparison with Voyager 1 observations.New results on the geometry and the internal structure of the magnetoplasma boundaries and the tail asymmetry due to the strong deviation between the solar direction and the flow direction will be presented. The different dynamical states of the magnetosphere during the flybys will be taken into account.