2001 Fall Meeting
Search Results

Cite abstracts as *Eos Trans. AGU, 82* (47), Fall Meet. Suppl., Abstract xxxxx-xx, 2001

Your query was:
burton

HR: 1330h
AN: SM12A-0837
TI: **Saturn's Magnetic Field: Modeling and Predictions for Cassini**
AU: * Burton, M E
EM: marcia.burton@jpl.nasa.gov
AF: Jet Propulison Laboratory, California Institute of Technology, 4800 Oak Grove Drive, Pasadena, CA 91109 United States
AU: Smith, E J
EM: edward.j.smith@jpl.nasa.gov
AF: Jet Propulison Laboratory, California Institute of Technology, 4800 Oak Grove Drive, Pasadena, CA 91109 United States
AU: Dougherty, M K
EM: m.dougherty@ic.ac.uk
AF: Imperial College, Prince Consort Road , London, SW7 2BW United Kingdom
AB: The Cassini spacecraft is en route to Saturn and will arrive there on July 1 of 2004. Cassini is equipped with both a fluxgate vector magnetometer and a helium magnetometer, which has vector and scalar modes of operation. Fluxgate vector measurements along with scalar measurements made by the helium sensor when Cassini is close to Saturn will be used to accurately determine the magnetic field and its higher order moments (up to fifth order). In preparation for Saturn orbit insertion and a four-year tour with more than seventy orbits, we have reexamined existing magnetic field models and magnetic field data obtained by the Pioneer-11 spacecraft during its brief Saturn flyby in 1979. We predict what might be measured by Cassini both at orbit insertion, when Cassini will come as close as 1.3 Saturn radii, as well as the remainder of the four-year tour.
DE: 5734 Magnetic fields and magnetism
DE: 5737 Magnetospheres (2756)
DE: 6275 Saturn
SC: SM
MN: 2001 AGU Fall Meeting

New Search