SATURN ENCOUNTER: FIRST RESULTS FROM THE CASSINI PLASMA SPECTROMETER


(1) Southwest Research Institute, San Antonio, TX, dyoung@swri.edu/Fax: 210-543-0052, (2) University of Virginia, Charlottesville, VA, (3) Los Alamos National Laboratory, Los Alamos, NM, (4) Centre d’étude des Environnements Terrestre et Planétaires, CNRS, St. Maur, France, (5) Observatoire Midi-Pyrénées, Toulouse, France, (6) Jet Propulsion Laboratory, Pasadena, CA, (7) Mullard Space Science Laboratory, University College London, Surrey, England, (8) Goddard Space Flight Center, Greenbelt, MD, (9) Rutherford Appleton Laboratory, Oxfordshire England, (10) Rice University, Houston, TX, (11) VTT Automation, Espoo, Finland, (12) University of Oulu, Oulu, Finland, (13) Norwegian Defense Research Establishment, Kjeller, Norway; (14) KFKI Research Institute for Particle and Nuclear Physics, Budapest, Hungary

On June 30 UTC the Cassini spacecraft was placed into orbit around Saturn. During the inbound leg of the orbit prior to insertion around Saturn, the Cassini Plasma Spectrometer (CAPS) observed the electron and ion components of magnetospheric plasma populations with unprecedented temporal, and spatial resolution. Observations of the plasma populations directly over the B and outer rings were also made during orbital insertion. The CAPS measurements consisted of electrons between 1 and 30,000 eV, ion beam distributions between 1 and 50,000 eV and ion composition between 1 and 50,000 eV. In this presentation we will discuss initial and preliminary results from the measurements.

Electronic submittal information:

1. COSPAR 2004
2. First submission
3. Saturn encounter: First results from the Cassini Plasma Spectrometer
5. B0.5/D3.7/C3.4, Saturn: Cassini/Huygens Arrival and System Science
Matson, D. and J.-P. Lebreton

1 LCD projector

NONE

Oral

Word

Young

David T.

Dr.

Space Science and Engineering Division

Southwest Research Institute

6220 Culebra Dr.

San Antonio, TX 78228-0510

USA

210-522-5510

210-543-0052

dyoung@swri.edu