Tuesday, March 13, 2007
POSTER SESSION I: GALILEAN SATELLITES: GEOLOGY AND MAPPING
6:30 p.m. Fitness Center

Rathbun J. A. Spencer J. R.
Ground-based Observations of Io in Support of the New Horizons Flyby **[#2162]**
We use the IRTF to observe Io (3 runs in 2006 and 24 scheduled for 2007). These data will assist in putting New Horizon's observations of Io in proper temporal context. They will also allow us to further refine a model for the eruption of the powerful volcano Loki.

Rathbun J. A. Barrett S. E.
Combining Galileo SSI, NIMS, and PPR Data into GIS to Study Volcanic Centers on Io **[#2123]**
We imported Galileo data of the Amirani region of Io from three remote sensing instruments (the Solid State Imager, Near Infrared Mapping Spectrometer, and Photo-Polarimeter Radiometer) into a geodatabase for Geographic Information Systems (GIS) software.

Morgan R. S. Howell R. R.
Colors and Volatile Deposition Around Loki Patera **[#1940]**
To evaluate the role of volatiles at Loki Patera we are reprocessing Galileo images to obtain the highest spatial resolution color information available, and comparing the resulting spectra to candidate materials and other regions on Io.

Davies A. G. Veeder G. J. Matson D. L. Johnson T. V. Blaney D. L. Castillo J. C.
Io: Contributions to Global Heat Flow from Different Volcanic Eruption Classes, as Seen by Galileo NIMS **[#1849]**
NIMS and other SWIR data show that at least 30% of Io's thermal emission results from current, active volcanism. A class of smaller hot spots may exist. Additionally, very cool sources may also make up a substantial proportion of the remaining 70%.

Williams D. A. Keszthelyi L. Geissler P. Jaeger W. Becker T. Crown D. A. Schenk P.
Geologic Mapping of the Polar Regions of Io **[#1124]**
This abstract discusses our results from geologic mapping of the polar regions of Jupiter's moon Io using the combined Galileo-Voyager global mosaics.

Doggett T. Figueredo P. Greeley R. Hare T. Kolb E. Mullins K. Senske D. Tanaka K. Weiser S.
Global Geologic Map of Europa **[#2296]**
Global geologic map of Europa based on photomosaic of Galileo SSI data.

Patterson G. W. Head J. W. Collins G. C. Pappalardo R. T. Prockter L. M. Lucchitta B. K.
A Global Geologic Map of Ganymede **[#1098]**
We have compiled a global geologic map of Ganymede utilizing Galileo mission results. This contribution will help to provide constraints on models of the formation and evolution of Ganymede and potentially the other Galilean satellites.

Collins G. C.
Classification and Time Sequence Sorting of a Ganymede Global Grooved Terrain Database **[#1999]**
A global database of grooved terrain packets has been mapped and classified, and this will be used to show a preliminary global surface strain estimate for Ganymede. Relative age sorting of grooves will also be discussed.

Michaud R. L. Collins G. C.
Comparison of Strain Measurement Methods on Ganymede Grooved Terrain: Deformed Craters vs. Fault Geometry **[#1500]**
We used strain measurement techniques based on fault geometry as an independent check on strain measurements derived from deformed craters on Ganymede. The techniques agree, and offer a way to estimate strain in more areas of grooved terrain.

Kay J. P. Collins G. C. Patterson G. W.
Comparison of Crater Classification Schemes on Ganymede **[#2392]**
We have constructed a global crater database as part of the global geologic map of Ganymede, and we compare different schemes for classifying the craters by age and morphology.

Godwin R. Barlow N. G.
Interior Morphologies of Impact Craters on Ganymede **[#1243]**
We have classified 1298 impact craters on Ganymede with interior structures. We find no strong variation in interior morphology with bright versus dark terrain. Central peaks dominate among the interior morphologies.

Seddio S. Schenk P.
Crater Densities, Surface Ages and Evolution of Ganymede's Bright Terrain **[#2350]**
From crater counts of selected regions of Ganymede's bright terrain, we construct cumulative size frequency and R-plots, which are compared to cratering on Callisto and the Moon. Though similar, each of the bodies appear to represent a different geologic history.