Three out-of-discipline PIES in S90 MAPS 219 segment

CIRS_219RH_RHEA001_PIE

2015-207T13:21-15:15:00

ISS, UVIS, VIMS in ridealong

VGR class

DIONE ORS PIE

2015-207T22:00-208T05:15

CIRS/ISS switch prime with VIMS, UVIS riding.

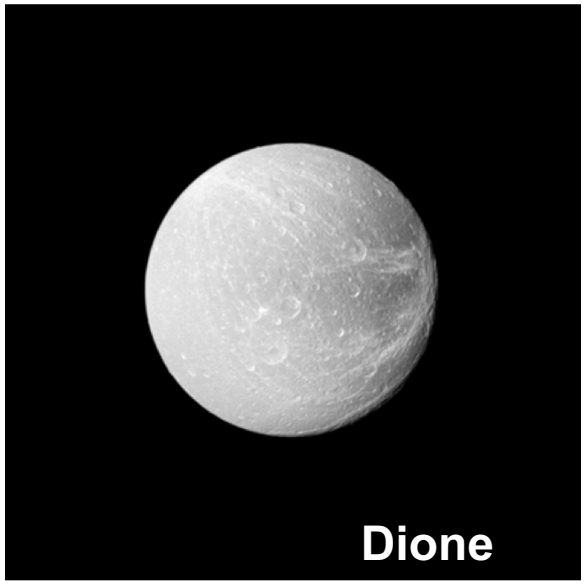
61,000 km; large range in phase angles providing thermal excursion for CIRS; ISS and VIMS mapping

CIRS_219EN_ENCEL001_PIE

2015-208T05:015-208T07:15

UVIS, VIMS, ISS in ridealong

These are collaborative riders with picky pointing (see SPASS and spreadsheet); VGR class; lit



Science Goals: to understand the thermal properties and surface texture of these moons (CIRS); to map composition (VIMS and UVIS); and to map geologic features in poorly imaged regions.

(See SPASS for a more entertaining description of these observations)

Rev 220 Dione RSS flyby (475 km)

2015-229T18:33 C/A

RSS flyby to study the internal structure of Dione, specifically how differentiated it is and whether it is in hydrostatic equilibrium. Combined with D1, D3, and D4, this flyby will substantially advance our knowledge in this area. ORS FOVs are dragging across Dione near C/A.

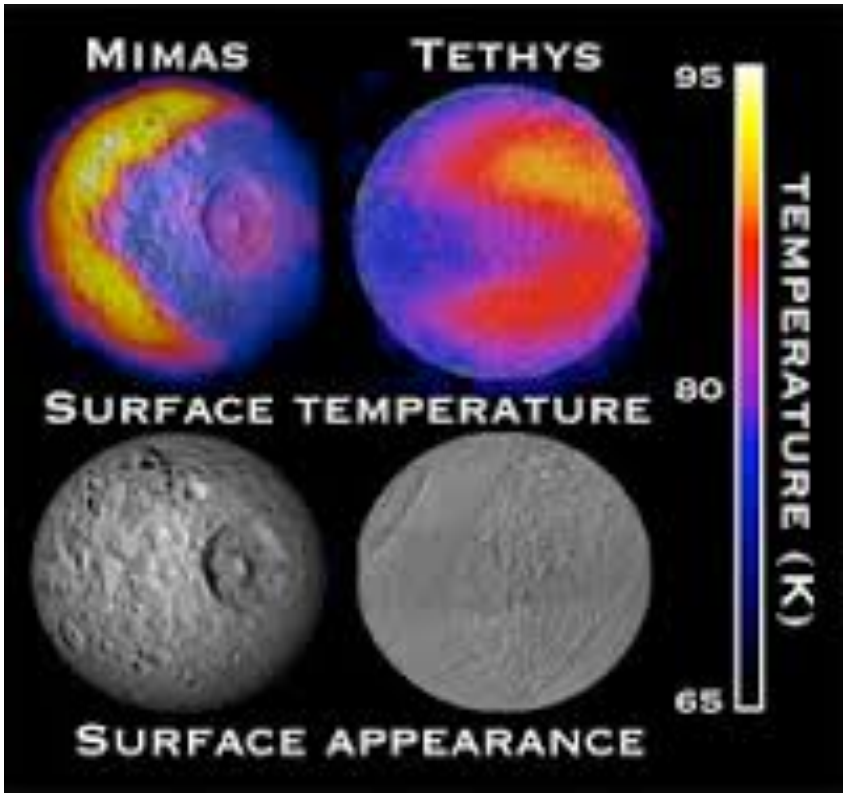
Other key observations:

CIRS: composition on lit approach; thermal cool-down on dark exit

Observations of Enceladus (UVIS icy long; ISS mapping; ISS plume PIE; CIRS FP3 scan)

CIRS observation of Tethys: further pacman mapping

Nearly 7 hours of observing outer irregular moon to determine pole position.



Pacmen

Rev 221 SOST Segment

2015-251T09:50-254T03:20:00

No targeted flybys; Highlights:

Dione PIE 2015-251T10:30:00-18:35 split between CIRS and ISS (~42,500 km C/A); good excursion in solar phase angles

Two ISS plume observations starting at 252T19 with additional Enceladus time.

CIRS distant observation (VIMS in ridealong) from 2015-252T10:30-15:30 of Dione to understand the thermal cool-down of the surface

Two ISS Plume non PIE observation on day 252

Nearly 20 hours ISS observations of an outer irregular moon

Plumes (above); Dione (below)