UVIS MIMAS BOOK.

The intent of this Mimas icy satellite book is to give readers an idea of the observational geometry for each observation, along with a sense of the data quality.

Many of the more distant Mimas observations have the planet and/or rings in the same rows as the moon and pulling out the Mimas-only signal is non-trivial so we do not derive reflectance spectra for those observations here.

The reflectance of Mimas and the other icy satellites generally becomes very low at wavelengths shortward of the water ice absorption edge (~165 nm). At these short wavelengths, water ice is very dark; any apparent spectral structure at these short wavelengths is not necessarily real

For most observations, we include a calibrated average spectrum to demonstrate the brightness of any reflected solar emission lines (especially at λ<165 nm) which are likely the most appropriate demonstration of moon reflectance at these short wavelengths.

We also include an off-body background spectrum (to save space, we show this as a calibrated spectrum overplotted on the average moon spectrum though technically the background is subtracted off before calibration)

This book covers FUV data only; EUV data are also available.

Name of observation

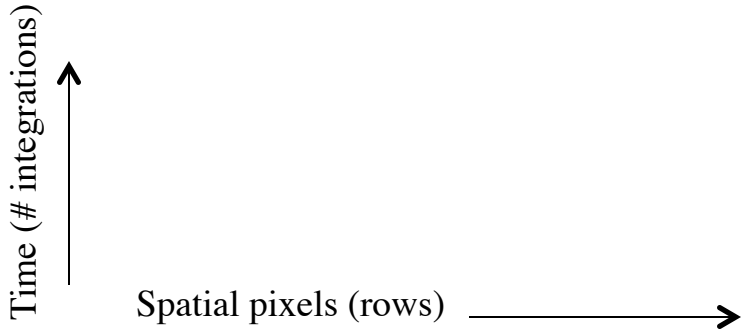
UVIS observation name
Date
Altitude (average)
Sub s/c longitude (avg)
Sub s/c latitude (avg)
Phase angle (avg)

ISS image

Planning/geometer graphic

Note: The geometry given is usually the average over the observing time; if an observation has multiple parts, the geometry is usually the average from the first part

Long wavelength (170-180nm) image (scaled to max value)



For many observations we also include:

Plot of signal vs. background

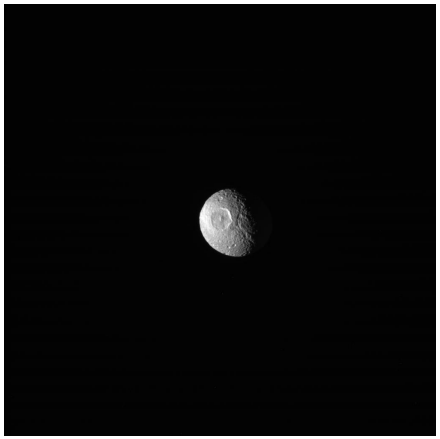
Plot of reflectance

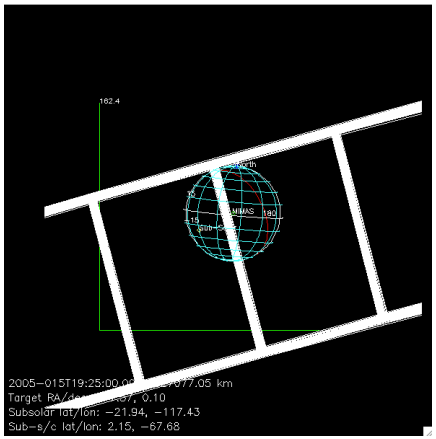
Note: most ICYLON observations using the low-res slit and 120 sec integration periods. Most ICYMAP observations use the high-res slit and 30-sec integration periods.

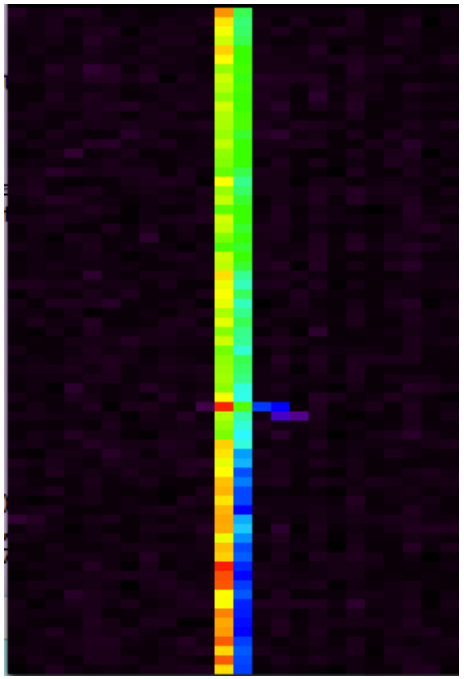
MIMAS_PHOTOM001

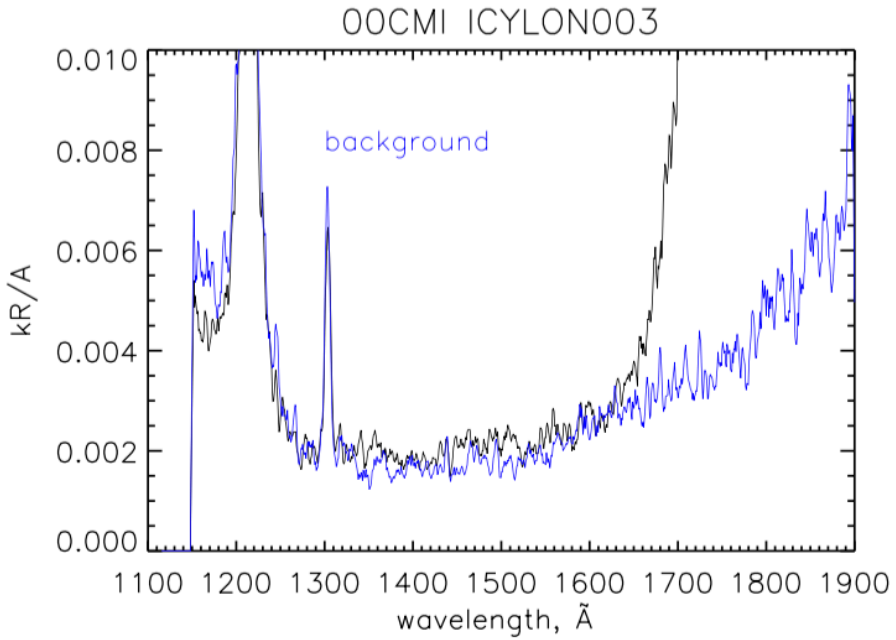
00CMI ICYLON003_ISS

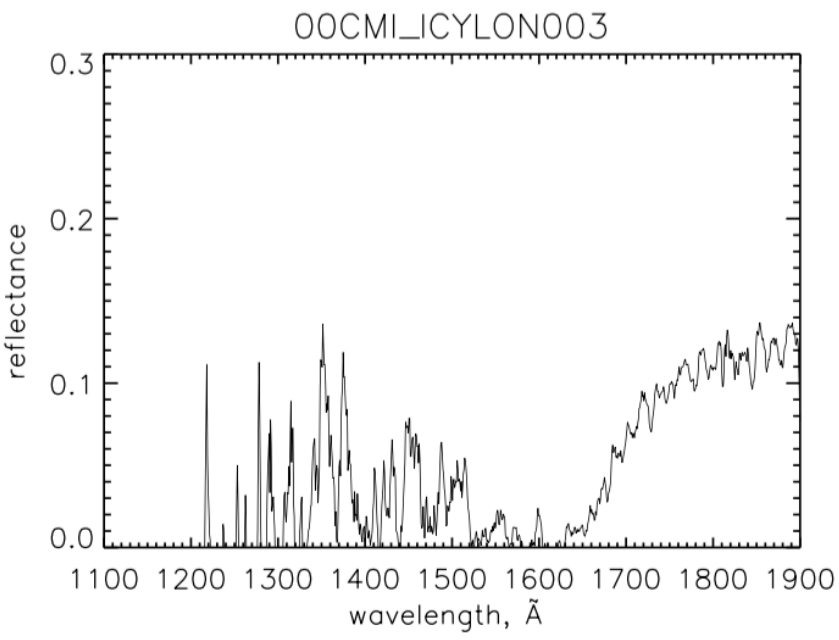
2005-015T19:26
Alt=456,780 km
Longitude=80°W
Latitude=2.6°N
Phase=57°



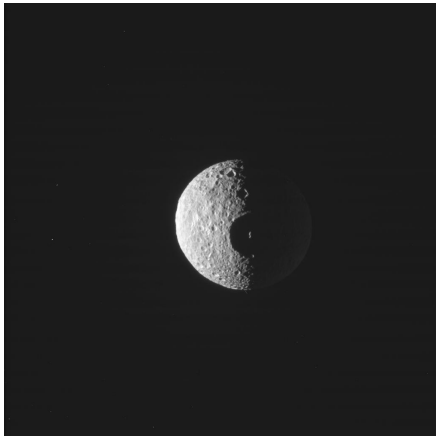


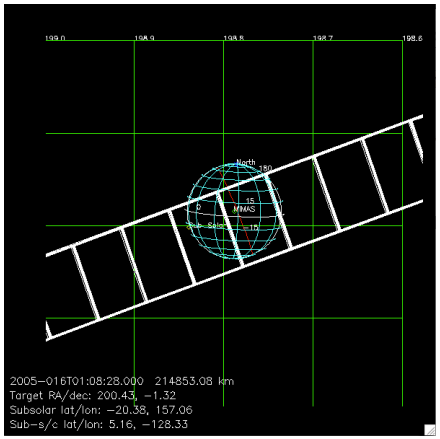




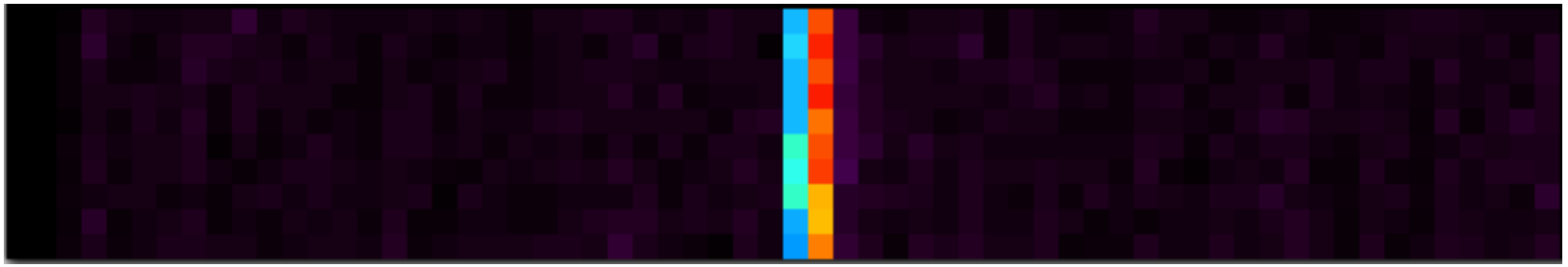


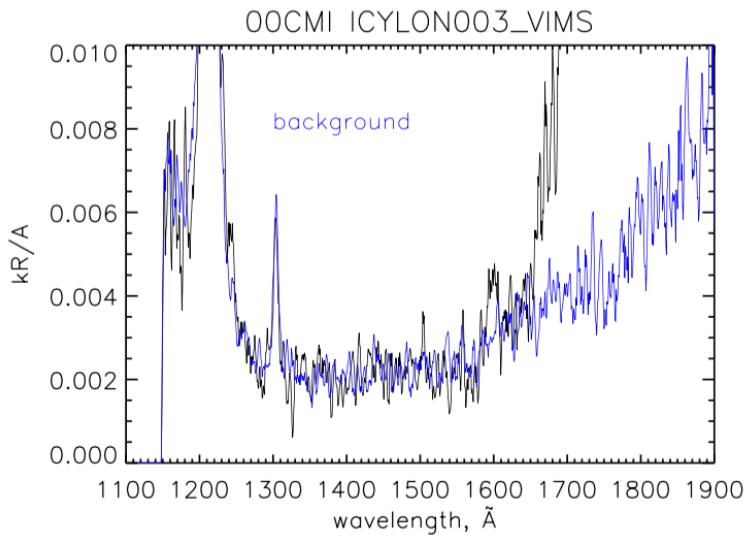
MIMAS_MIMAS002

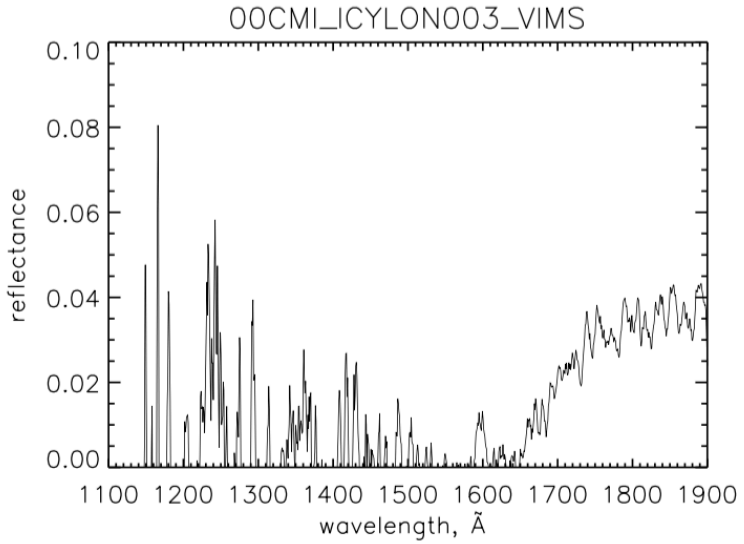




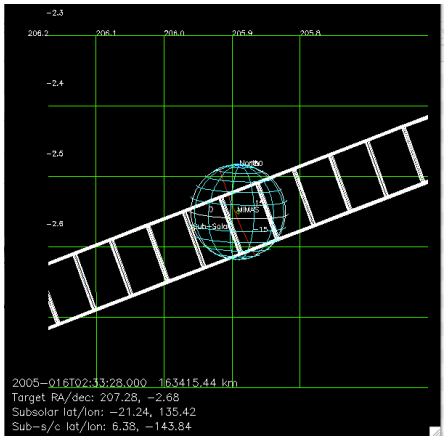
00CMI ICYLON003_VIMS
2005-016T01:09
Alt= 208,539 km
Longitude=130°W
Latitude=5.3°N
Phase=84.7°

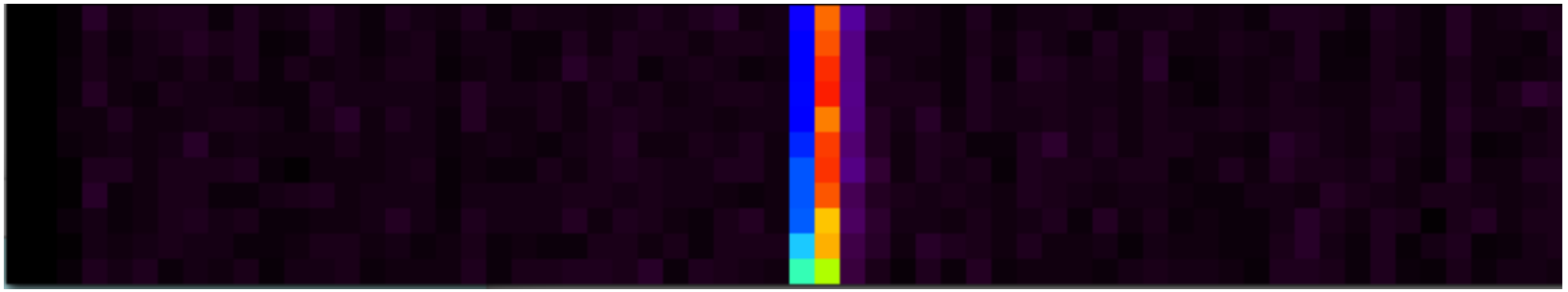






00CMI ICYLON004_VIMS
2005-016T02:34
Alt= 158,219 km
Longitude=146°W
Latitude=6.5°N
Phase=91.7°





A filled row on the night side and a partly-filled row on the day side

MIMAS_MIMAS007

00CMI_ICYLON008_VIMS

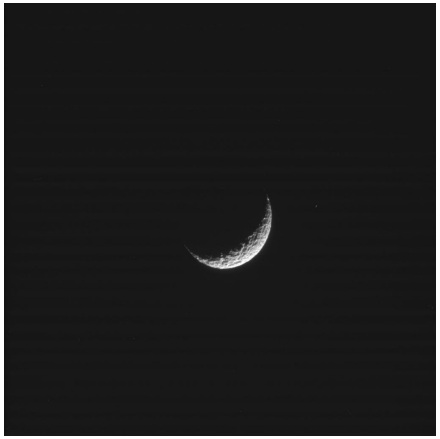
2005-016T13:03

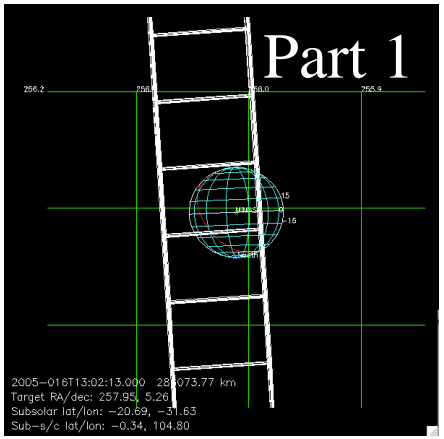
Alt=292,329 km

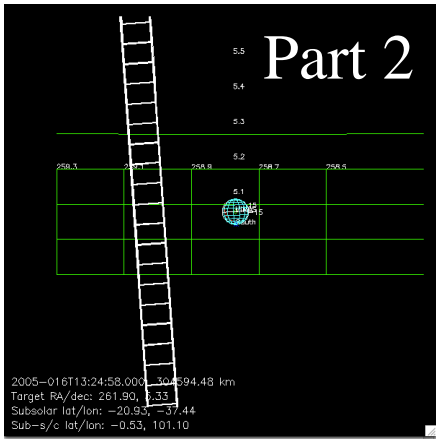
Longitude=257°W

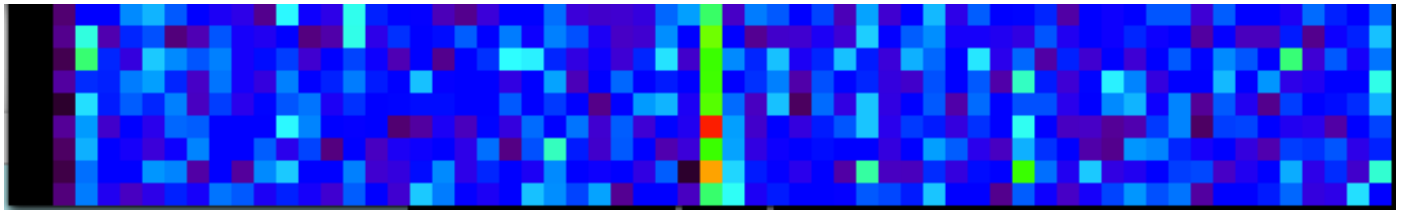
Latitude=0.4°S

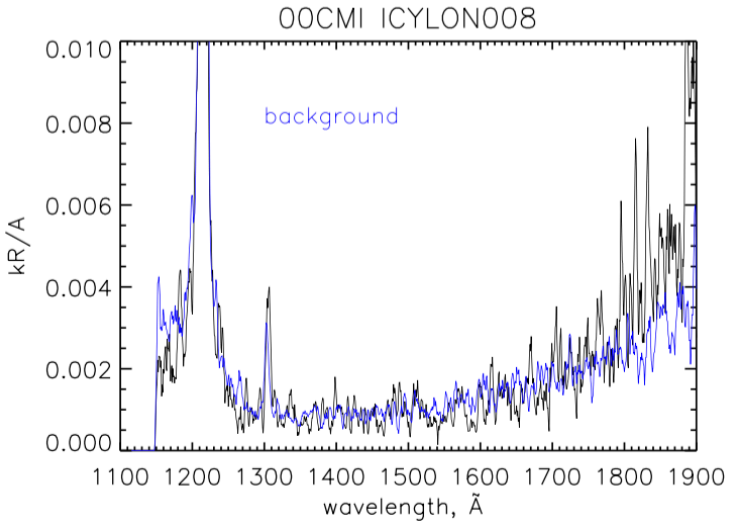
Phase=133.6°

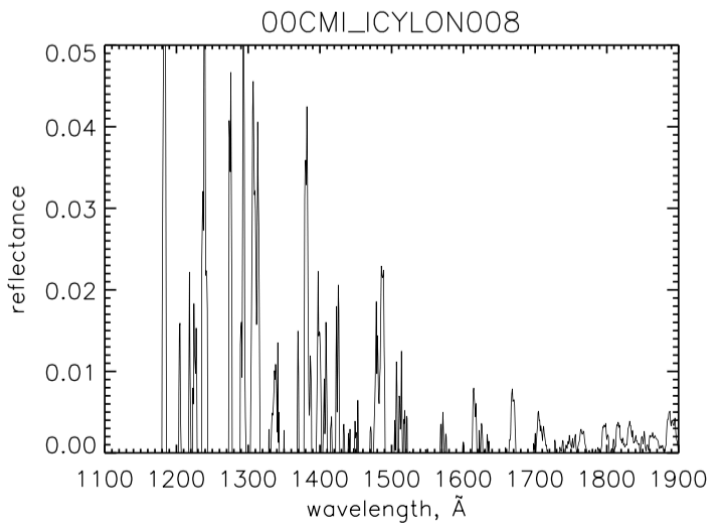




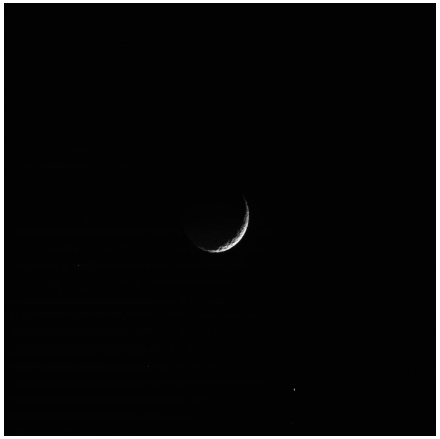


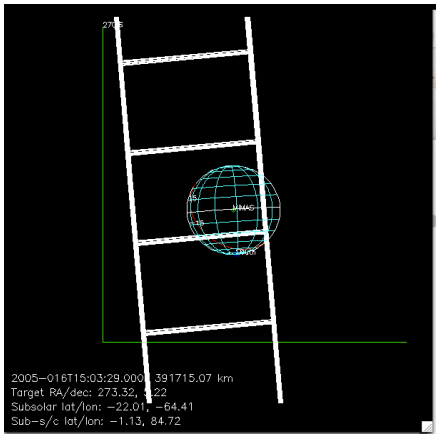




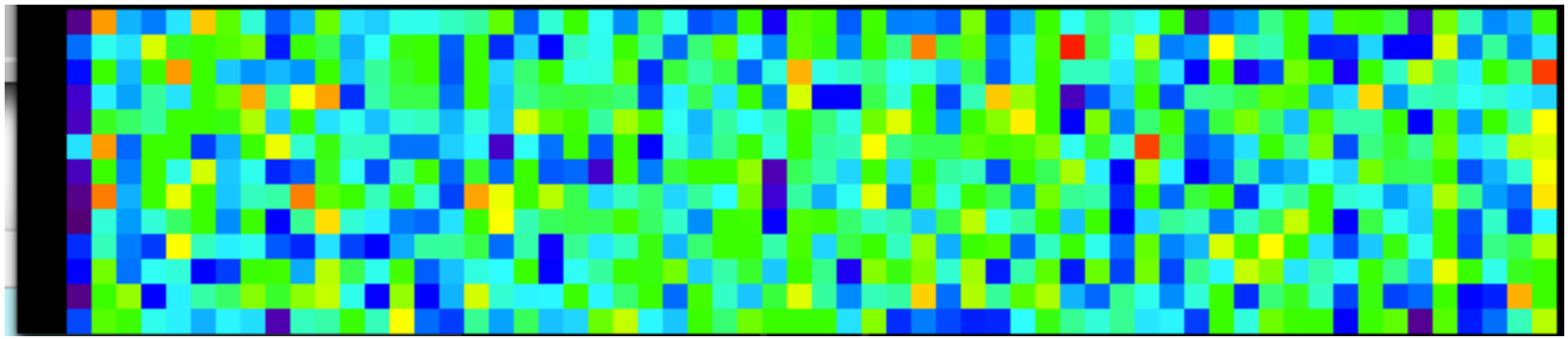


MIMAS_MIMAS008



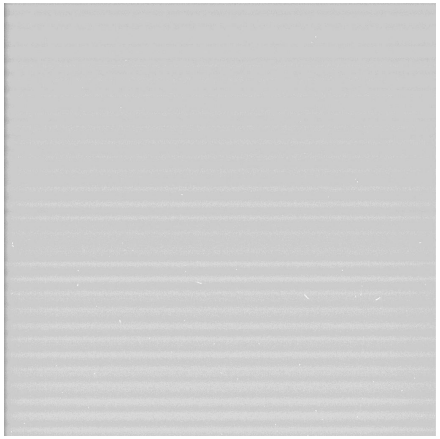


00CMI ICYLON009_VIMS
2005-016T15:04
Alt= 402,770 km
Longitude=277°W
Latitude=1°S
Phase=144.6°



Low SNR

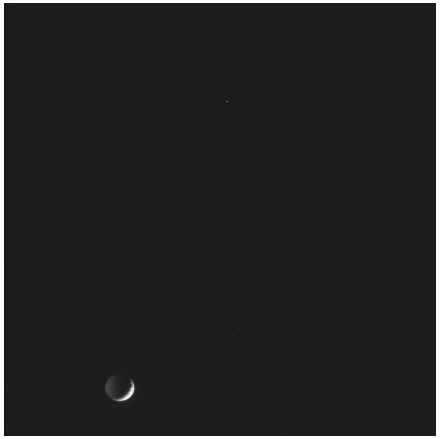
MIMAS_LONPHA001



00CMI_ICYLON012_ISS
2005-017T13:06

NOT IN UVIS SLIT

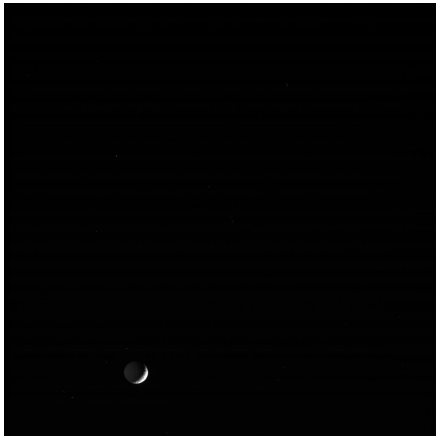
MIMAS lonpha002



00CMI_ICYLON014_ISS
2005-017T17:28

NOT IN UVIS SLIT

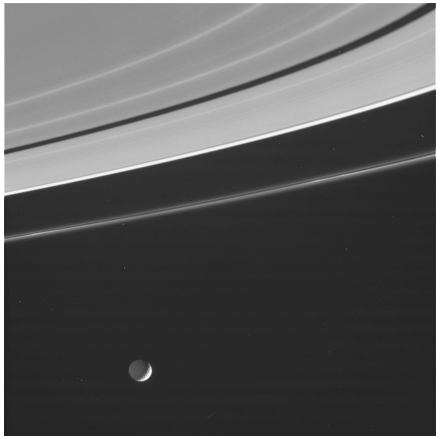
MIMAS 310W121PH001



00CMI_ICYLON015_ISS
2005-017T20:08

NOT IN UVIS SLIT

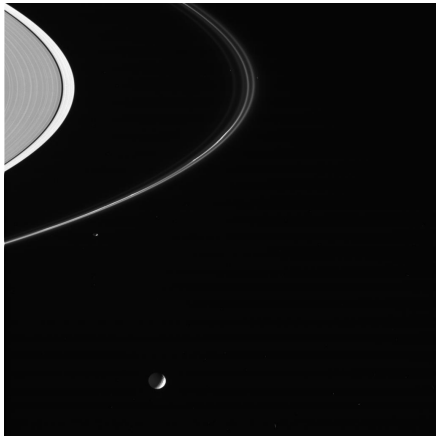
MIMAS lonpha003



00CMI_ICYLON016_ISS
2005-017T20:53

NOT IN UVIS SLIT

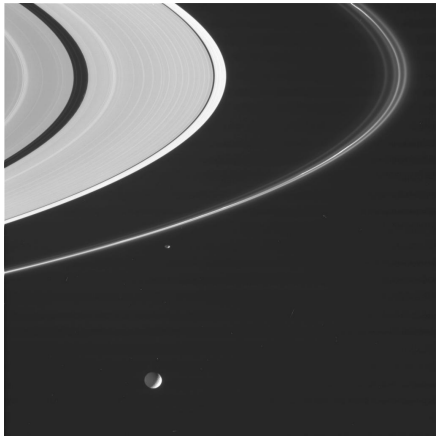
MIMAS lonpha005



00CMI_ICYLON017_ISS
2005-018T13:06

NOT IN UVIS SLIT

MIMAS lonpha006

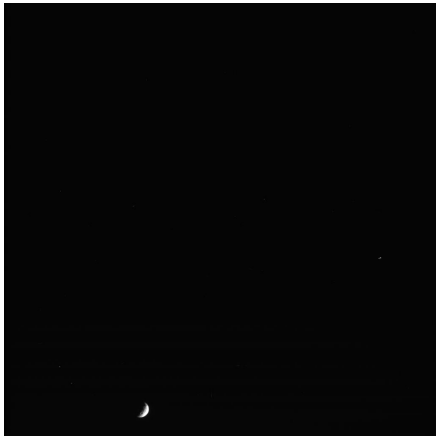


Mimas and Pandora

00CMI_ICYLON018_ISS
2005-018T20:09

NOT IN UVIS SLIT

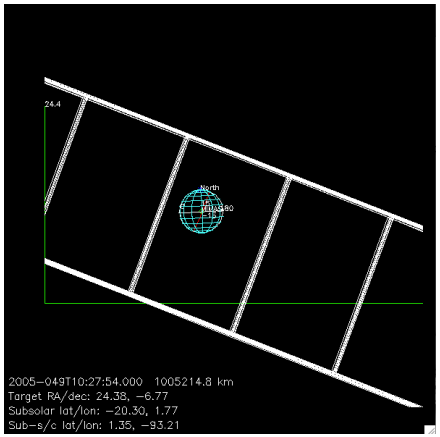
MIMAS lonpha009



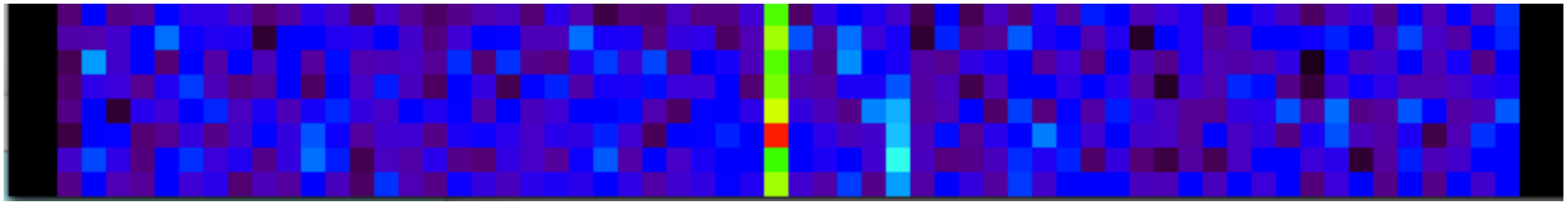
00CMI_ICYLON019_ISS
2005-019T13:08

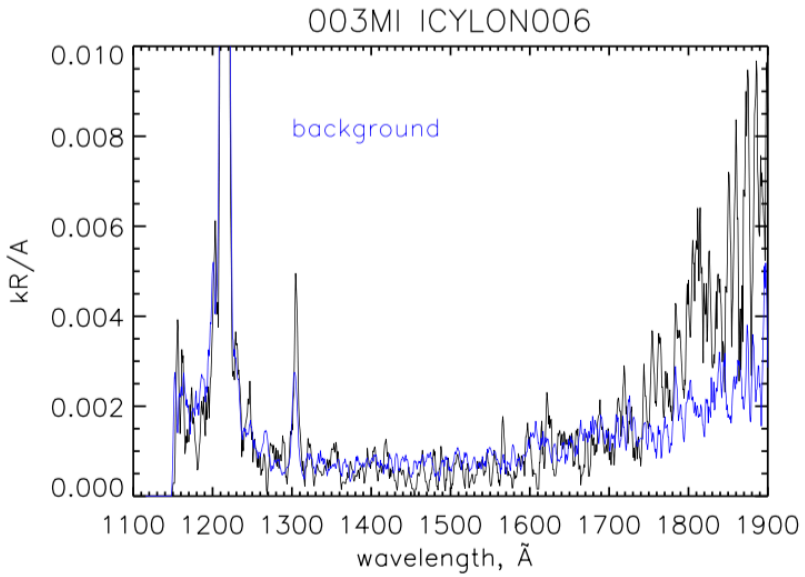
NOT IN UVIS SLIT

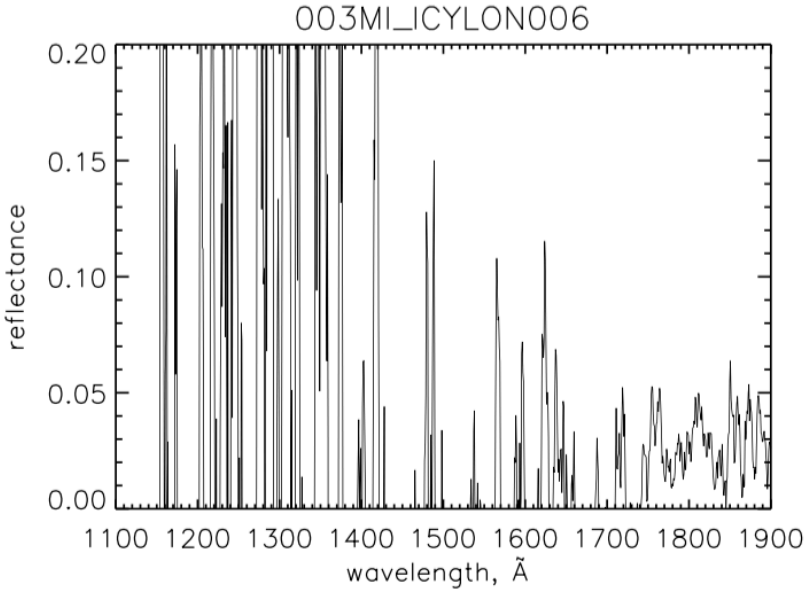
Rev 3 MIMAS 094W095PH001



003MI_ICYLON006_ISS
2005-049T10:28
Alt= 1,001,751 km
Longitude= 95°W
Latitude=1.4°N
Phase= 95°

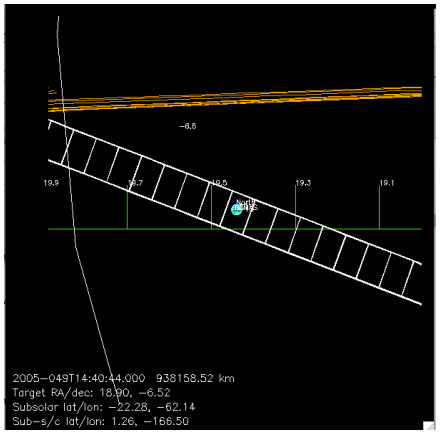




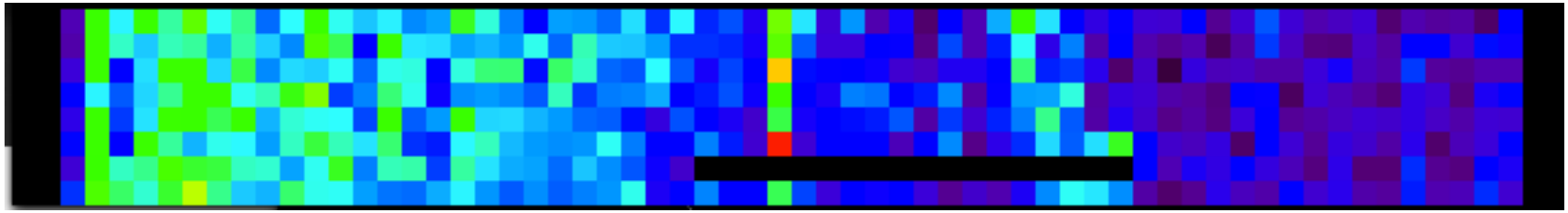


Rev 3 MIMAS 166W100PH001

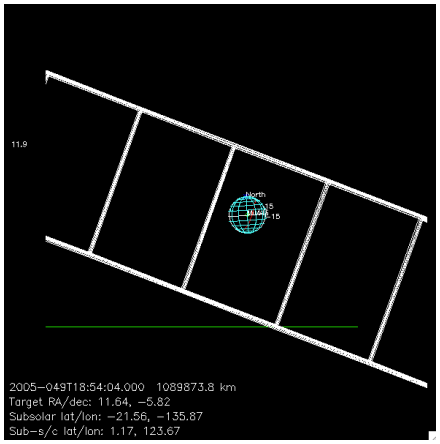
003MI_ICYLON007_ISS
2005-049T14:40
Alt= 938,827 km
Longitude= 168°W
Latitude=1.3°N
Phase= 99.7°



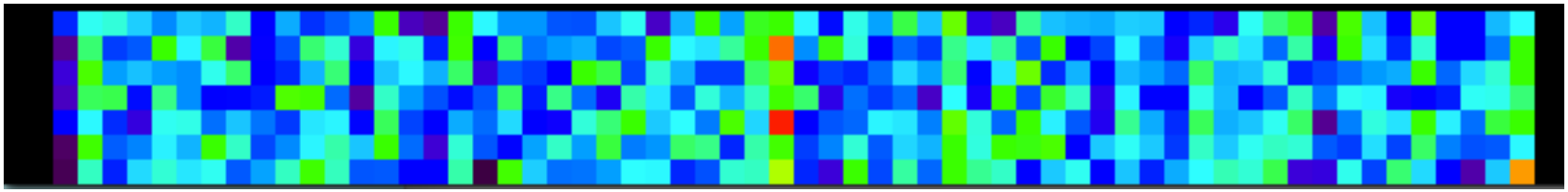
(Mimas in front of Saturn night side)

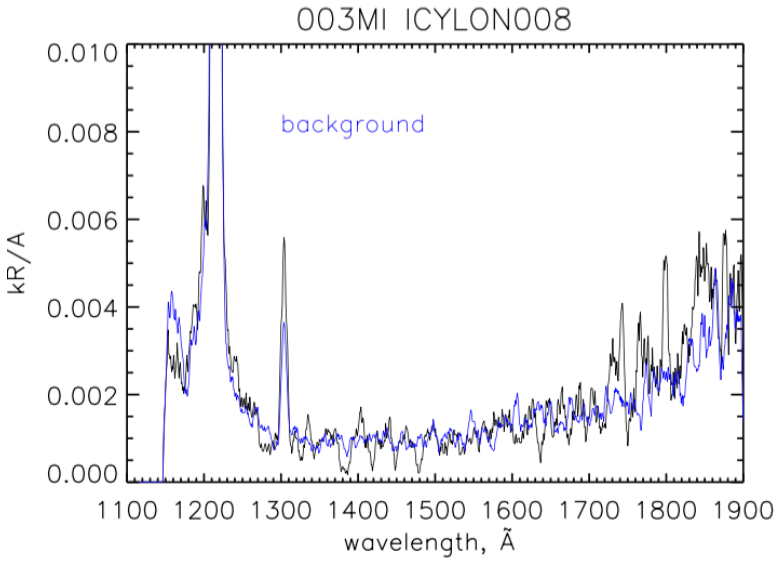


Rev 3 MIMAS 238W107PH001



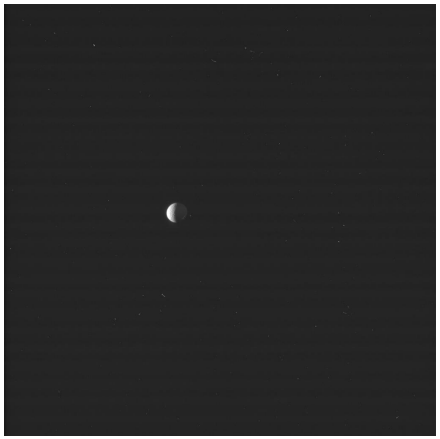
003MI_ICYLON008_ISS
2005-049T18:55
Alt= 1,095,773 km
Longitude= 238°W
Latitude=1°N
Phase= 106.4°

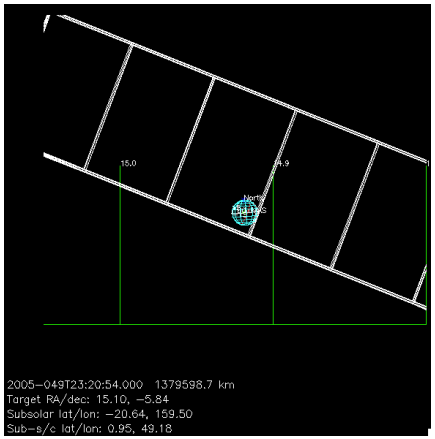




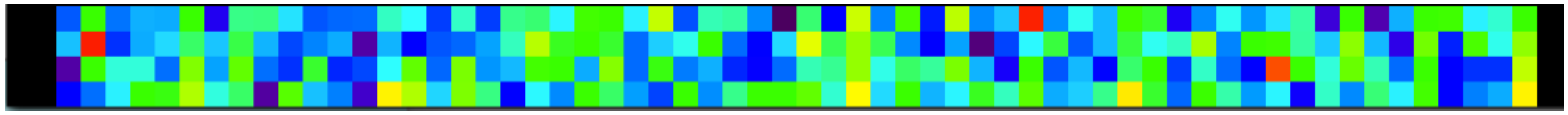
Low SNR

Rev 3 MIMAS 310W104PH001



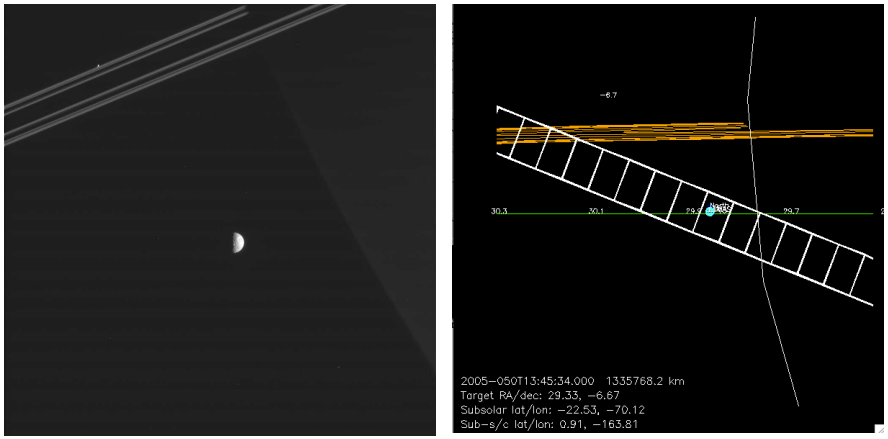


003MI_ICYLON009_ISS
2005-049T23:21
Alt= 1,382,306 km
Longitude= 311°W
Latitude=1°N
Phase= 103.4°



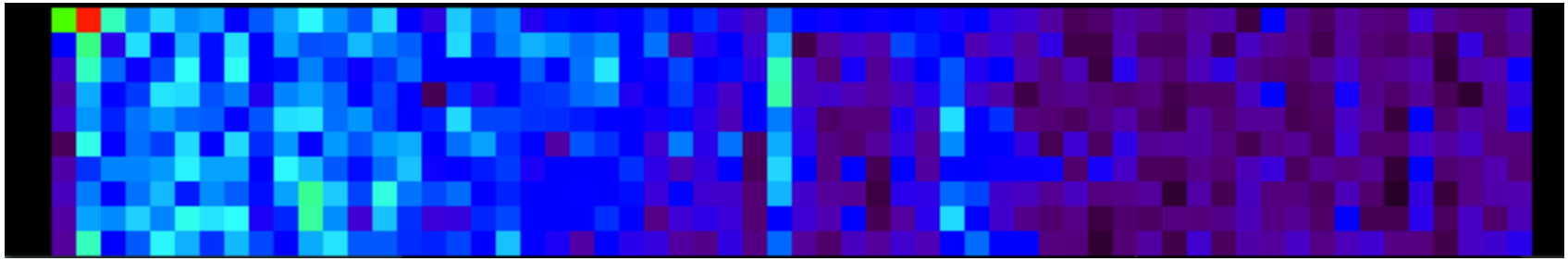
Low SNR

Rev 3 MIMAS 166W090PH001

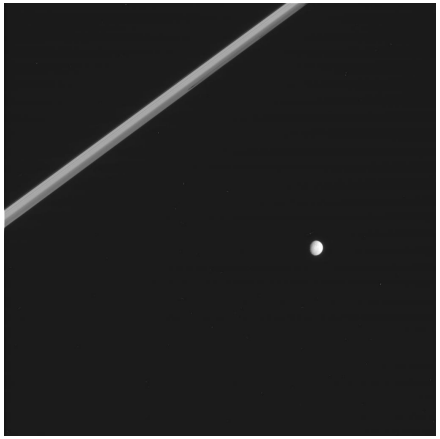


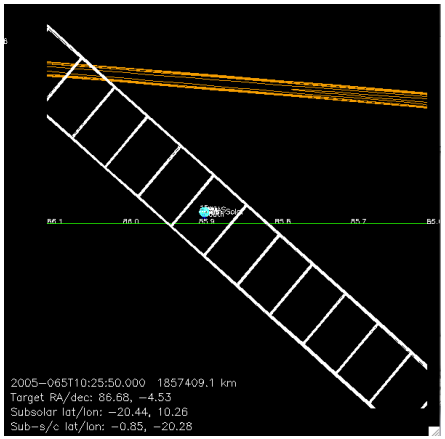
003MI_ICYLON010_ISS
2005-050T13:46
Alt= 1,335,617 km
Longitude= 166°W
Latitude=0.9°N
Phase= 90.1°

(Mimas in front of Saturn night side)



Rev 4 MIMAS 022W040PH001





004MI_ICYLON001_ISS

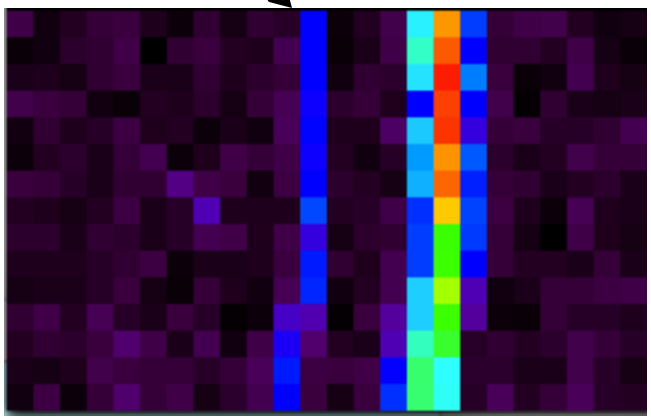
2005-065T10:26

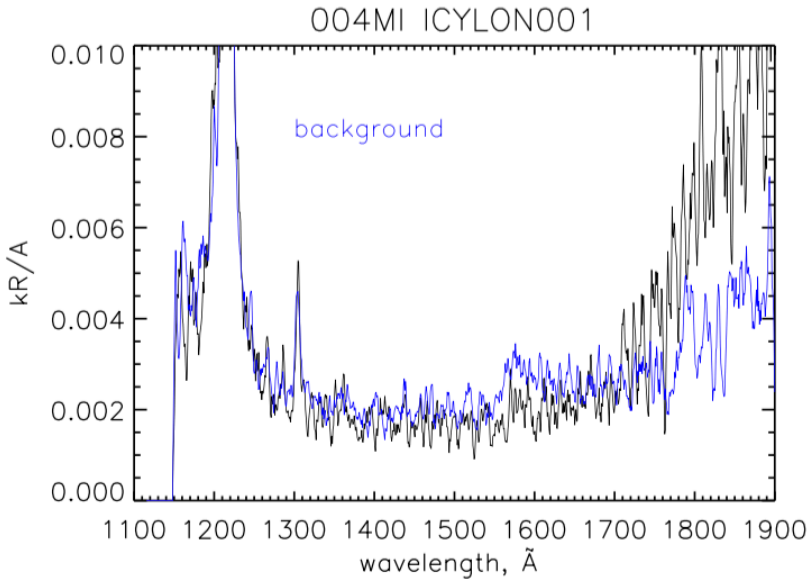
Alt= 1,849,017 km

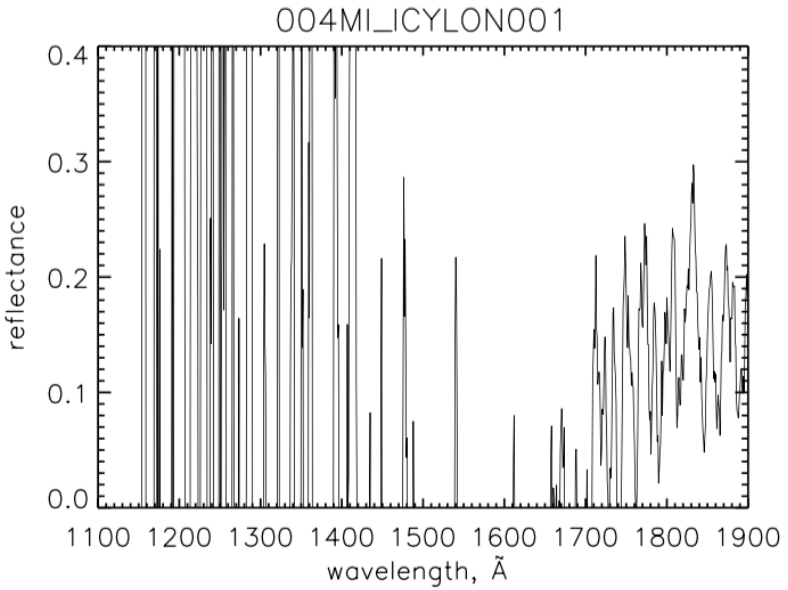
Longitude= 23°W

Latitude=0.85°S

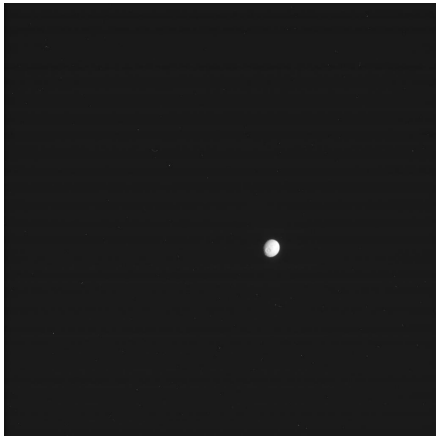
Phase= 40.1°

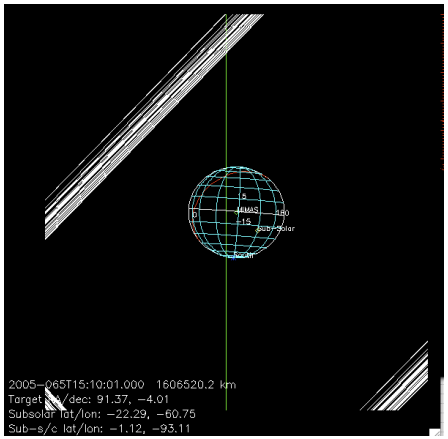


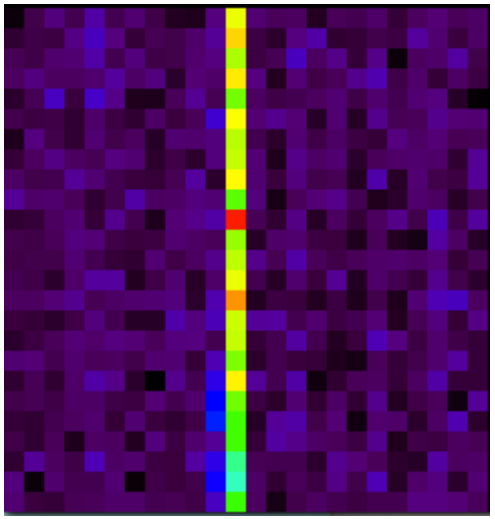




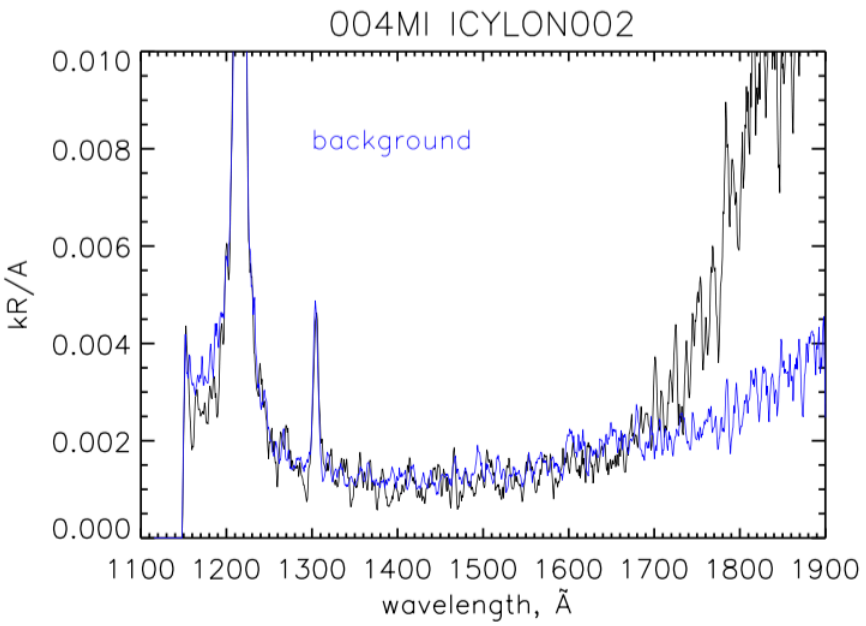
Rev 4 MIMAS 094W036PH001

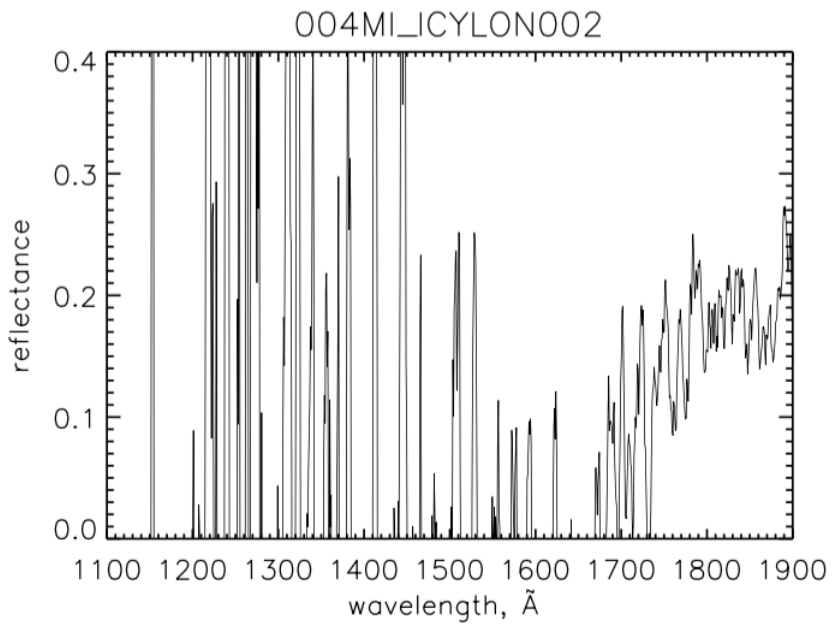




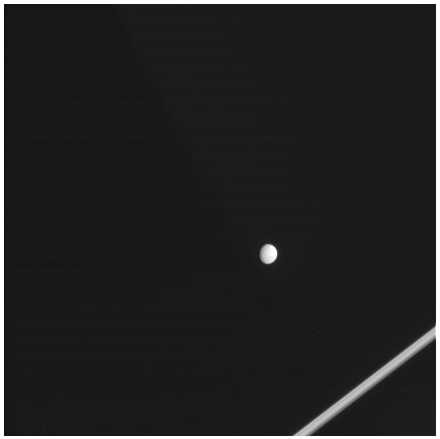


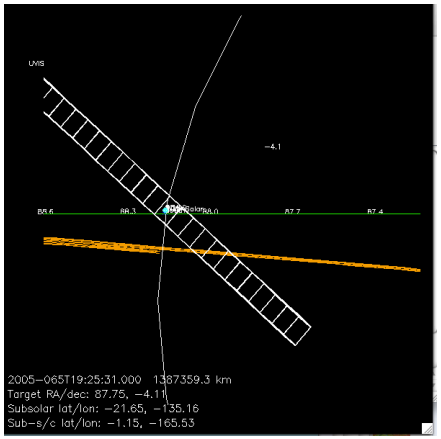
004MI_ICYLON002_ISS
2005-065T15:11
Alt= 1,581,167 km
Longitude= 100°W
Latitude=1.1°S
Phase= 36°





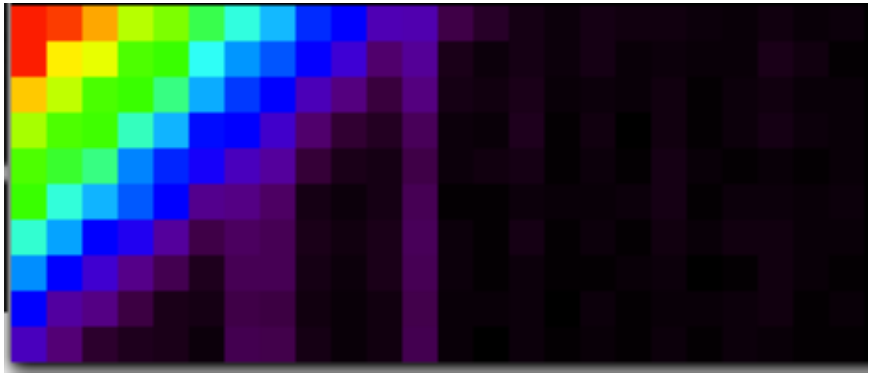
Rev 4 MIMAS 166W039PH001



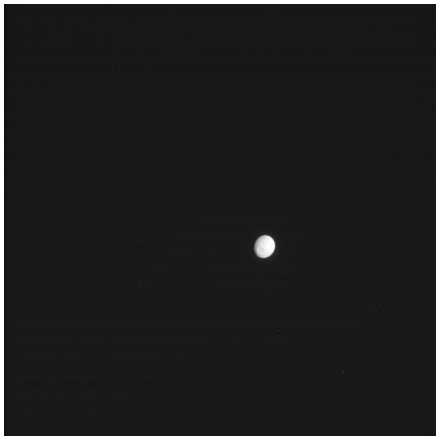


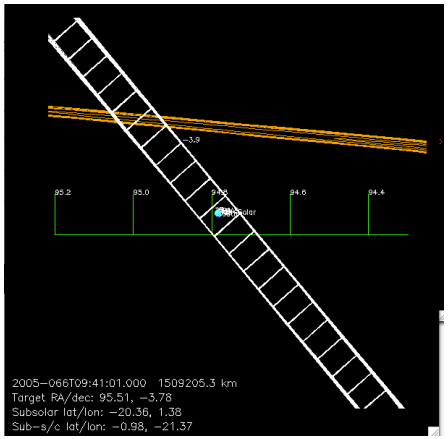
004MI_ICYLON003_ISS
2005-065T19:22
Alt= 1,384,800 km
Lon= 167°W
Latitude=1.1°S
Phase= 38.5°

The rings and Saturn are in the slit with Mimas



Rev 4 MIMAS 022W034PH001





004MI_ICYLON004_ISS

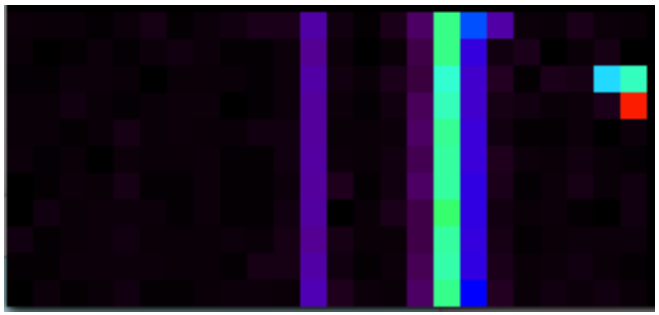
2005-066T09:42

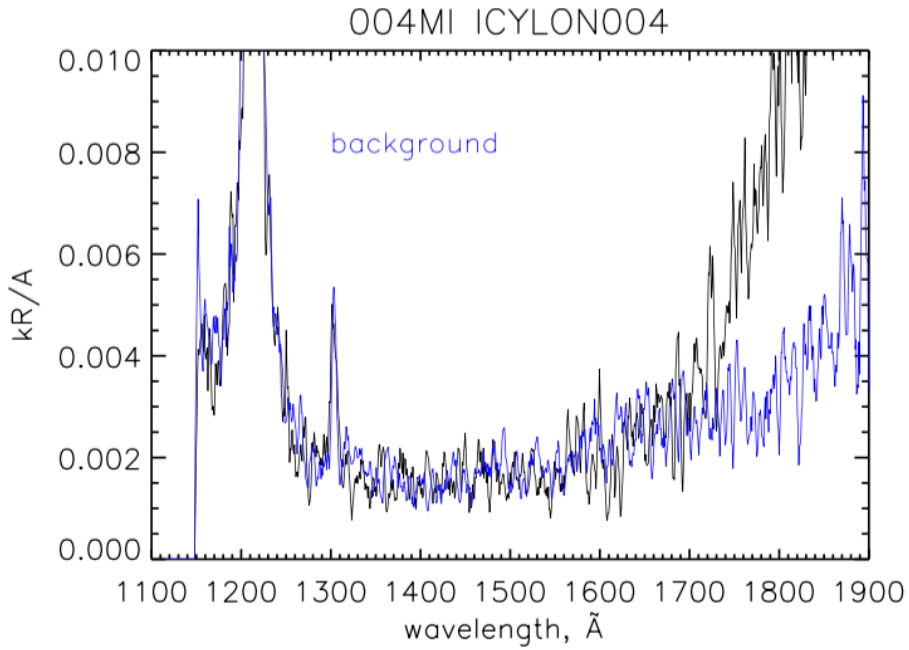
Alt= 1,502,530 km

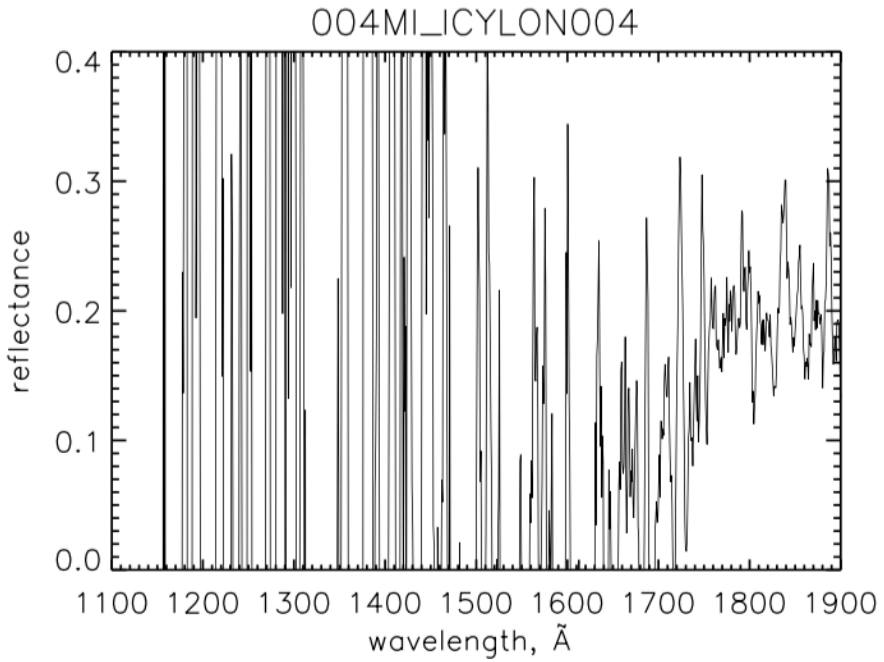
Lon= 23°W

Latitude=1°S

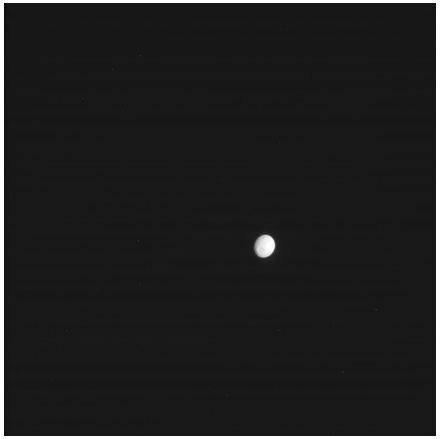
Phase= 33.3°

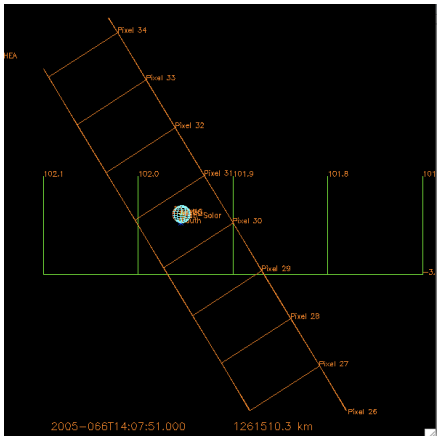


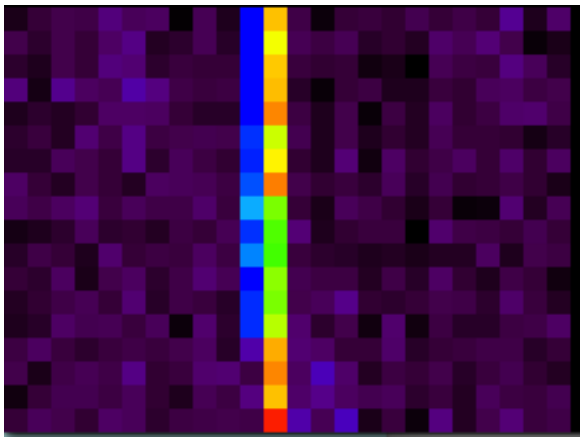




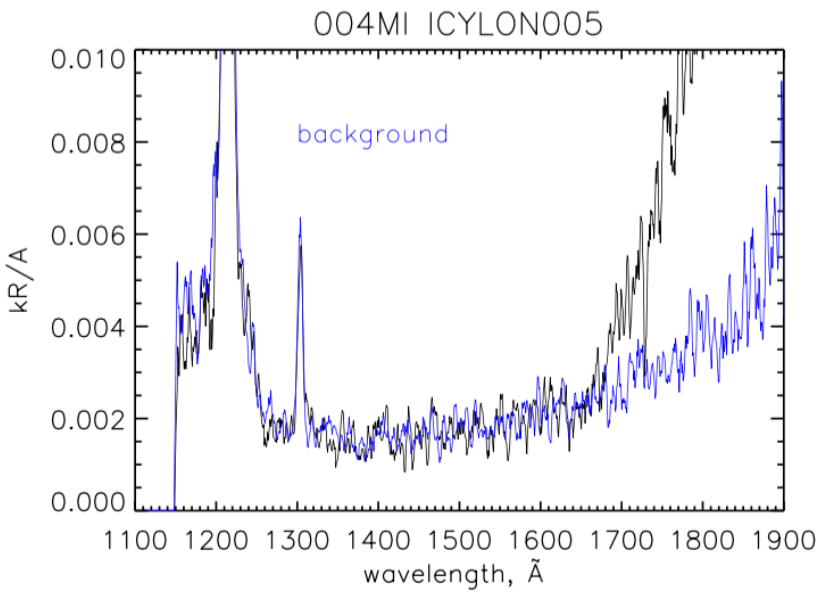
Rev 4 MIMAS 094W029PH001

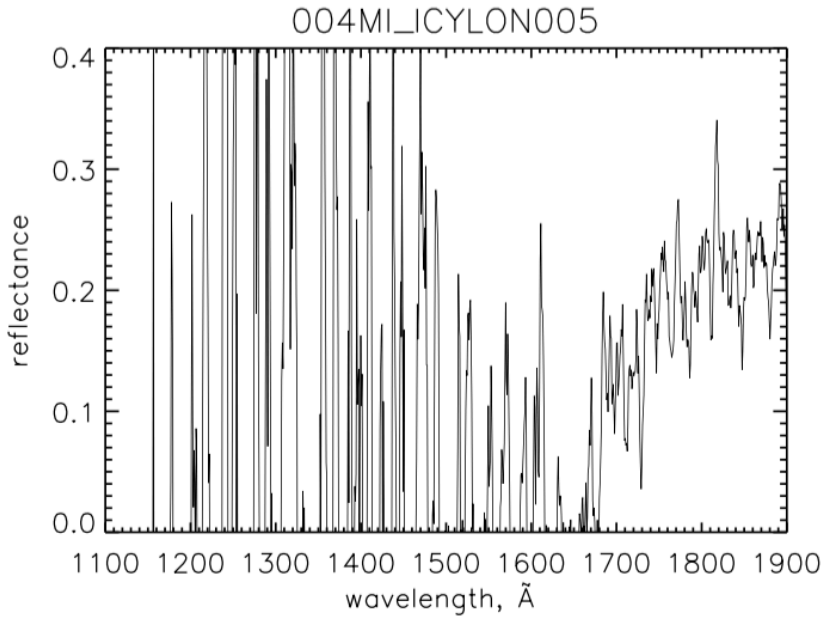




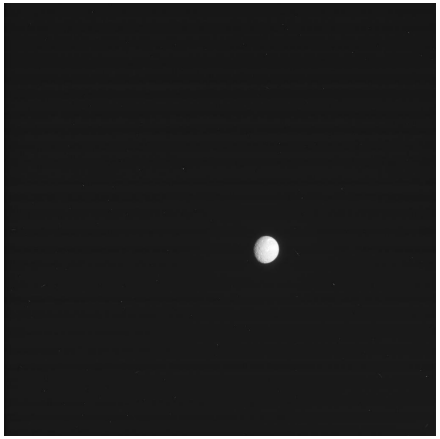


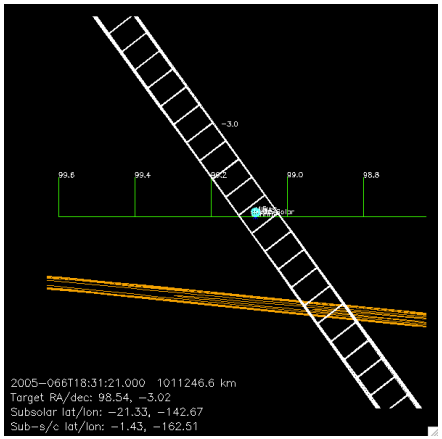
004MI_ICYLON005_ISS
2005-066T14:08
Alt= 1,242,487 km
Longitude= 92°W
Latitude=1.3°S
Phase= 28.5°





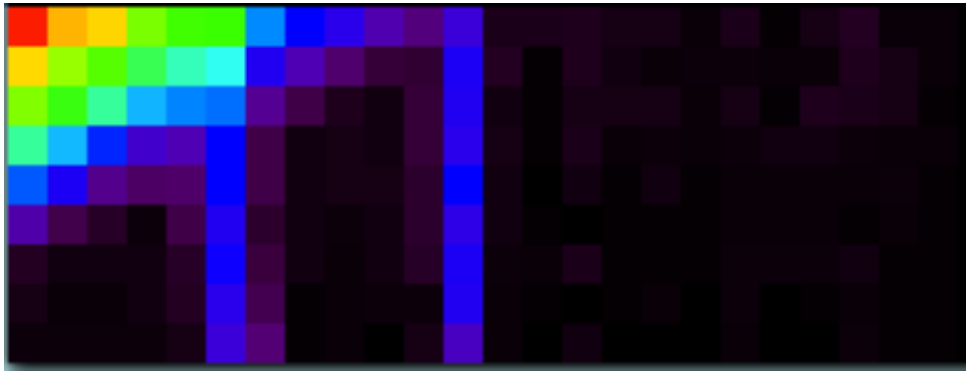
Rev 4 MIMAS 166W030PH001



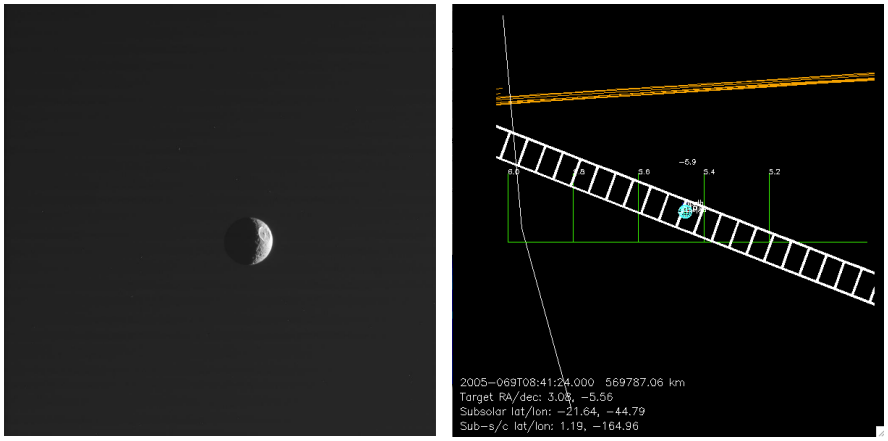


004MI_ICYLON006_ISS
2005-066T18:32
Alt= 1,006,359 km
Longitude= 165°W
Latitude=1.4°S
Phase= 30.4°

The rings and Saturn are in the slit with Mimas

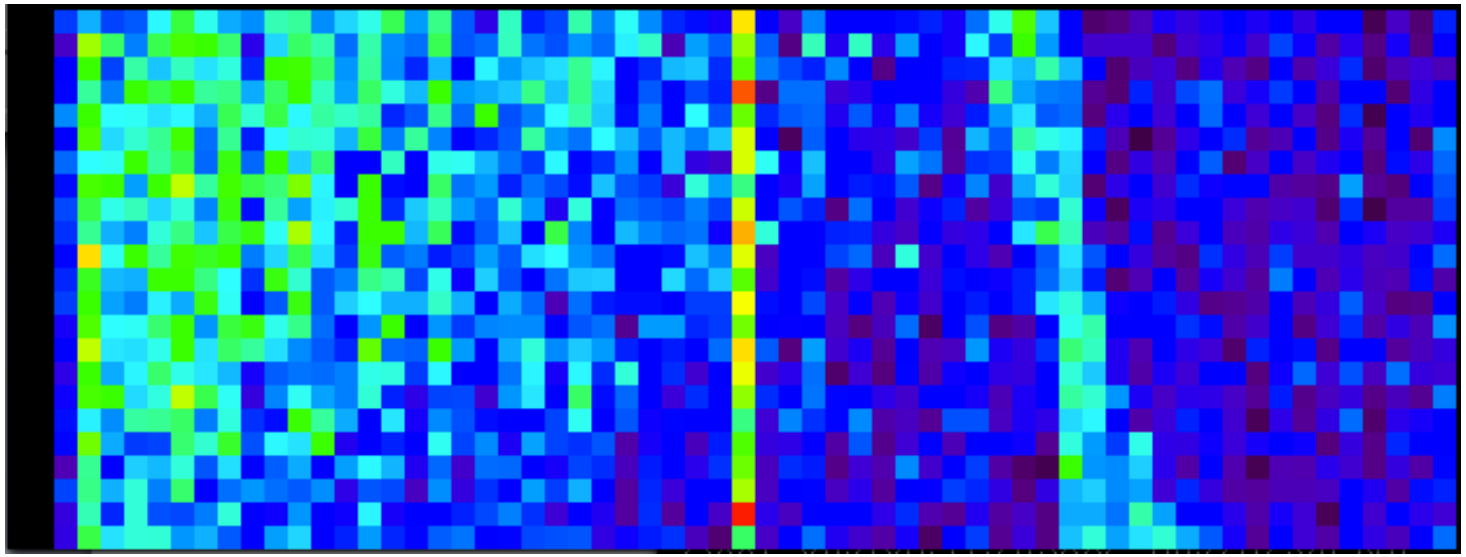


Rev 4 MIMAS 166W113PH001

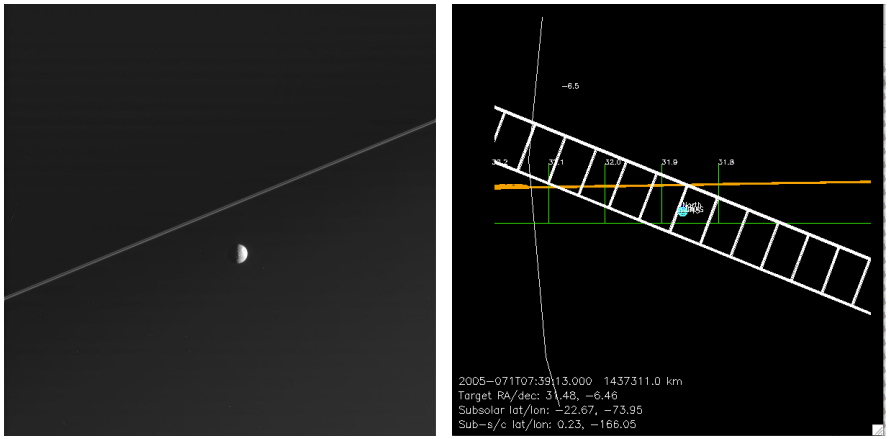


004MI_ICYLON007_ISS
2005-069T08:42
Alt= 575,139 km
Longitude= 171°W
Latitude=1.1°N
Phase= 114°

(Mimas in front of Saturn's night side)



Rev 4 MIMAS 166W089PH001



004MI_ICYLON008_ISS
2005-071T07:40
Alt= 1,437,257 km
Longitude= 168°W
Latitude=0.2°N
Phase= 88.9°

(Mimas in front of Saturn's night side)

Rev 4 MIMAS 238W094PH001

004MI_ICYLON009_ISS

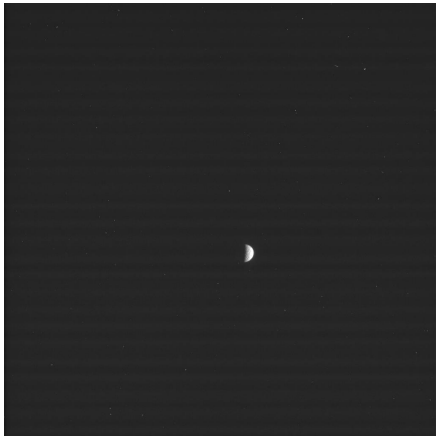
2005-071T11:47

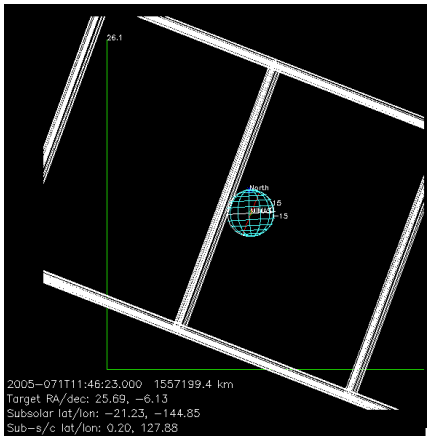
Alt= 1,573,698 km

Longitude= 237°W

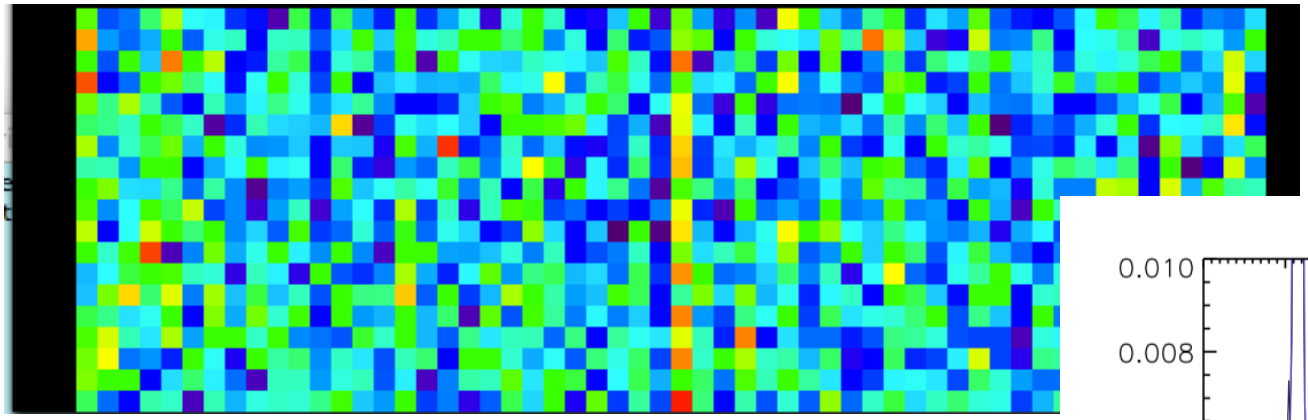
Latitude=0.2°N

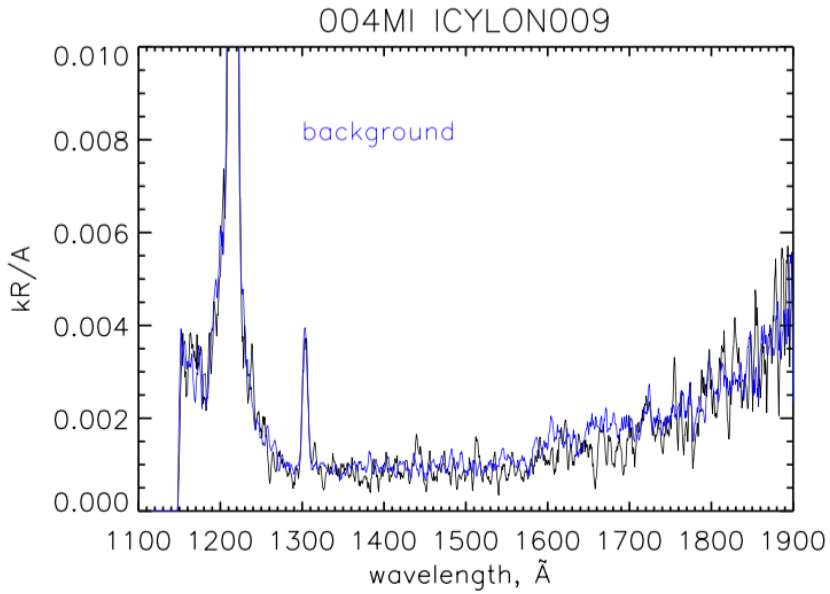
Phase= 94.2°





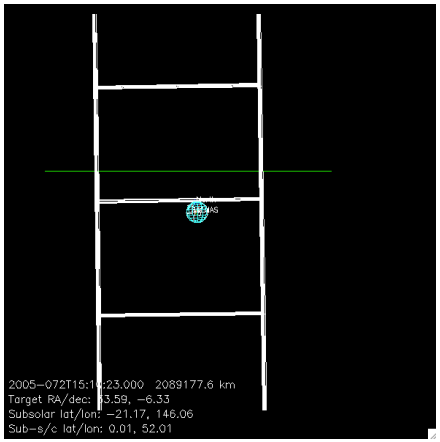
Low SNR





Rev 4 MIMAS 310W087PH001

004MI_ICYLON010_ISS



2005-072T15:11

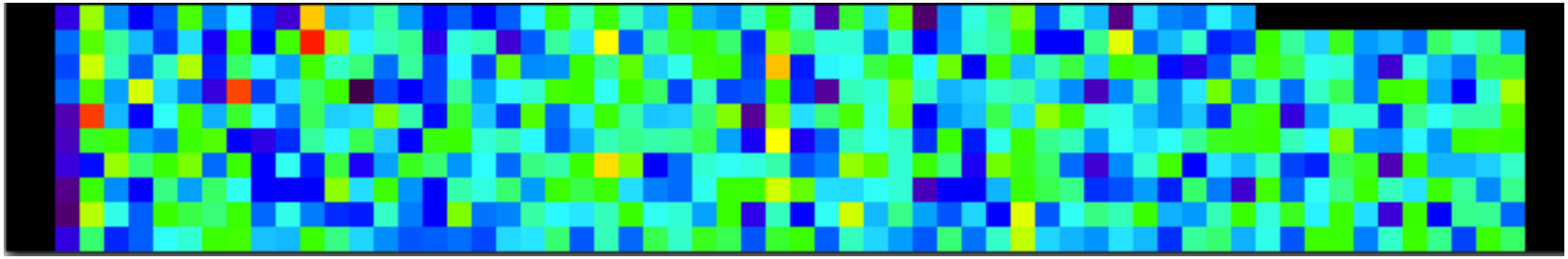
Alt= 2,096,850 km

Longitude= 310.3°W

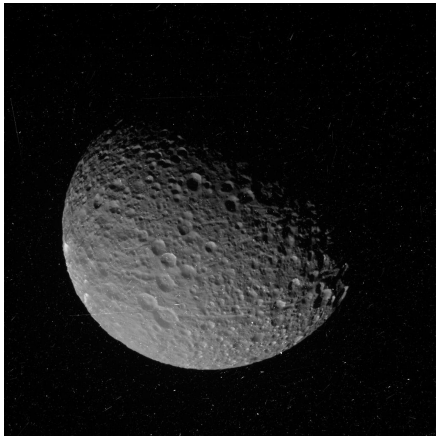
Latitude=0°N

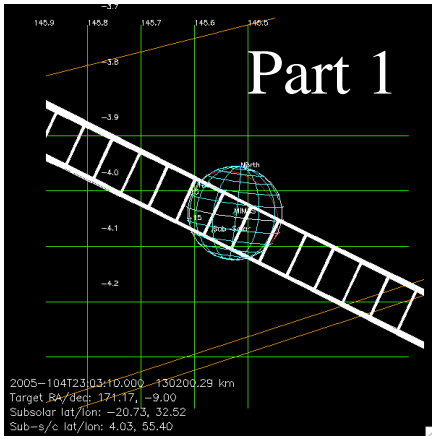
Phase= 87.2°

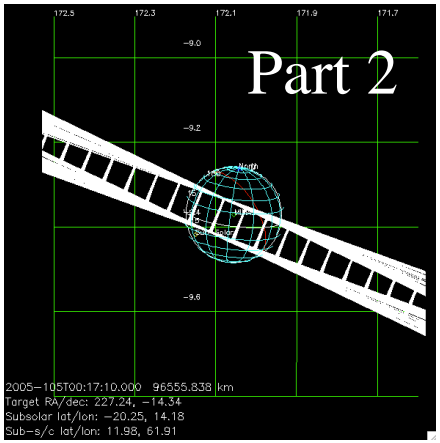
Low SNR



006MI_MIMAS001_VIMS



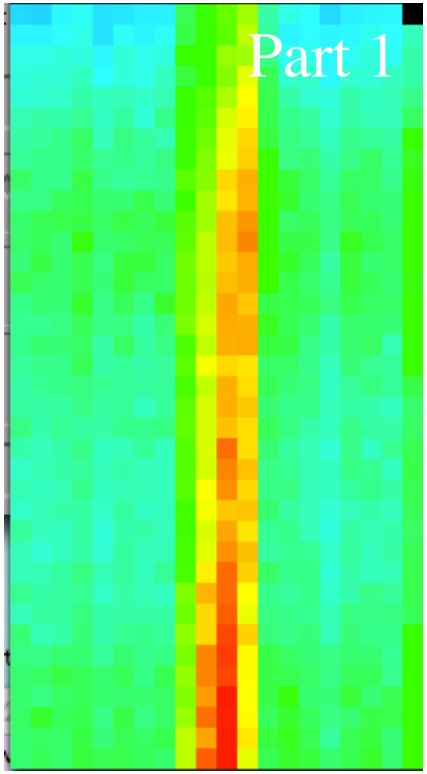


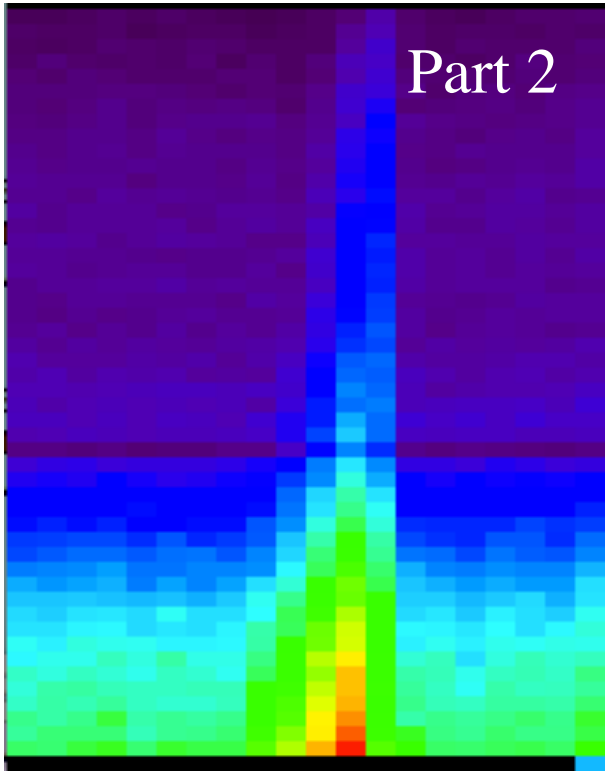


006MI_ICYLON020_VIMS

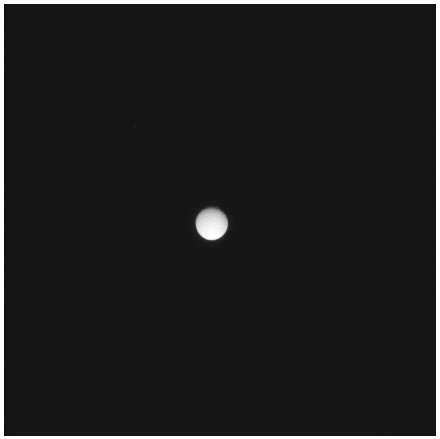
2005-104T23:04
Alt= 112,847 km
Longitude= 302°W
Latitude=7.6°N
Phase= 46°

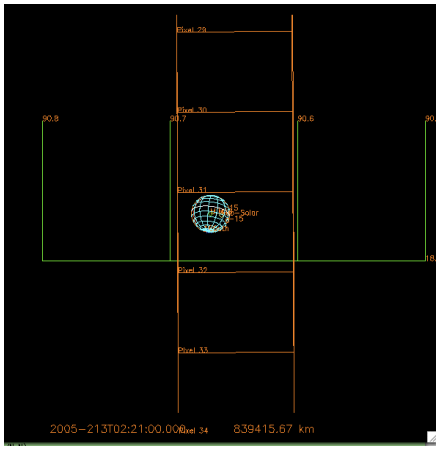
Mimas in front of rings for Part 1, some of Part 2





012MI_PHOTOM004_ISS





012MI_ICYLON002_ISS

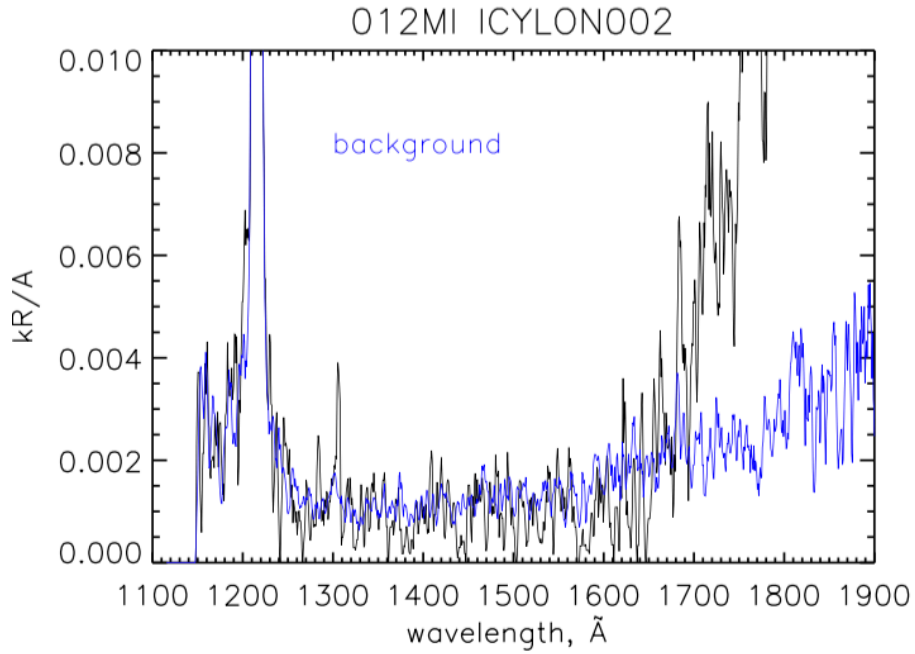
2005-213T02:22

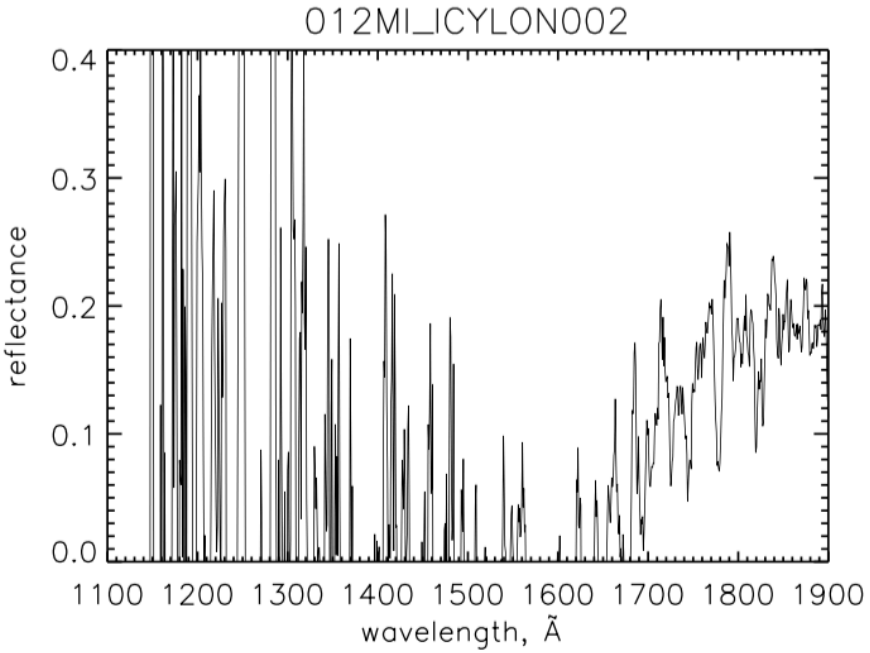
Alt= 840,284 km

Longitude= 260°W

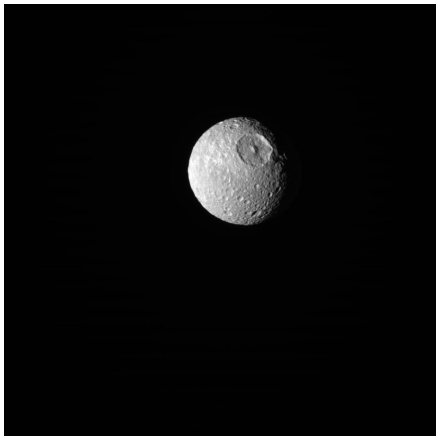
Latitude=21°S

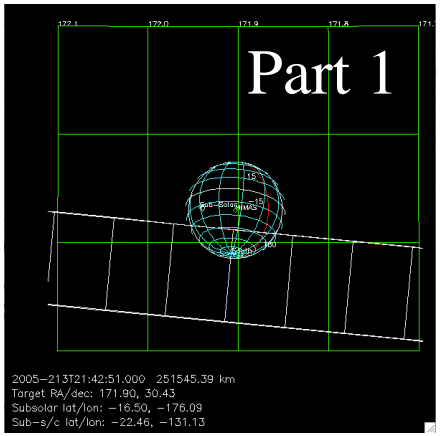
Phase= 30.9°

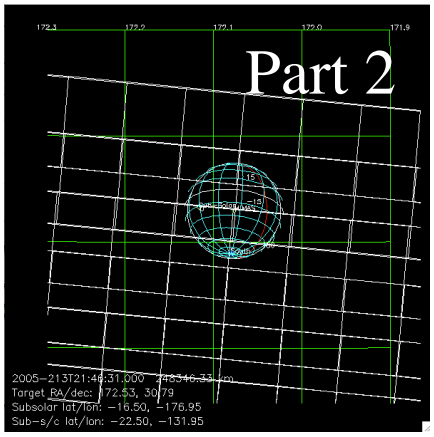


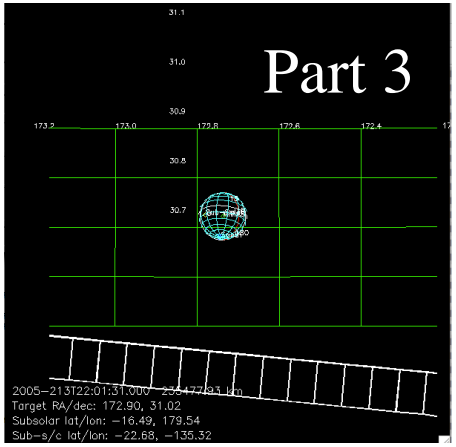


012MI_FP1FP3MAP666









012MI_ICYLON001_CIRS

2005-213T21:43

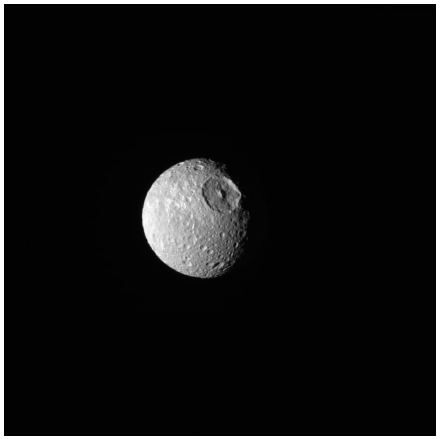
Alt= 251,346

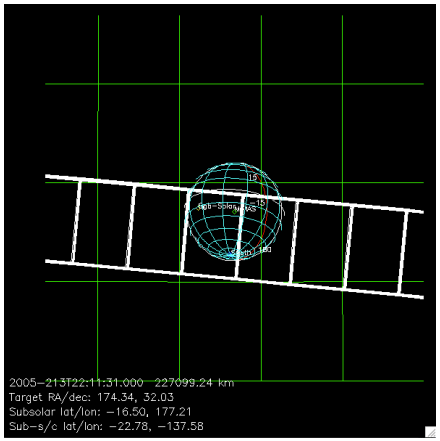
Longitude= 131°W

Latitude=22.5°S

Phase= 44.5°

012MI_MIMAS005_VIMS





012MI_ICYLON002_VIMS

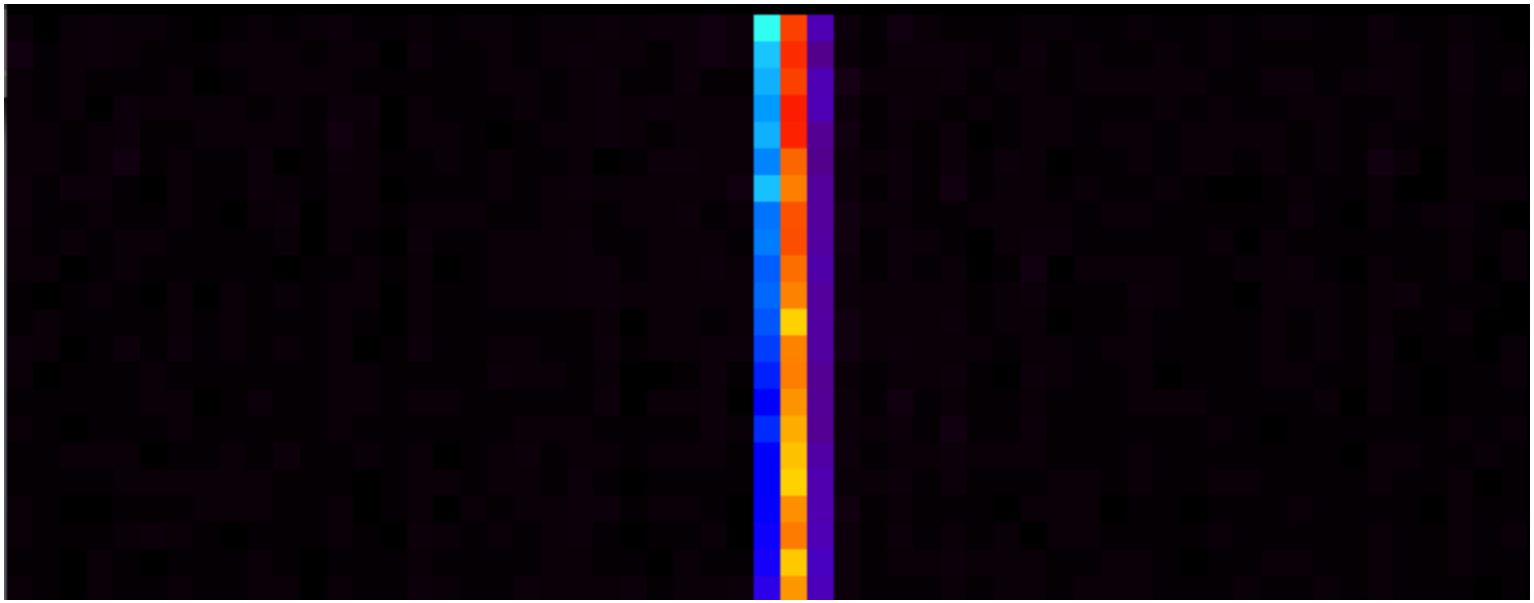
2005-213T22:12

Alt= 209,984 km

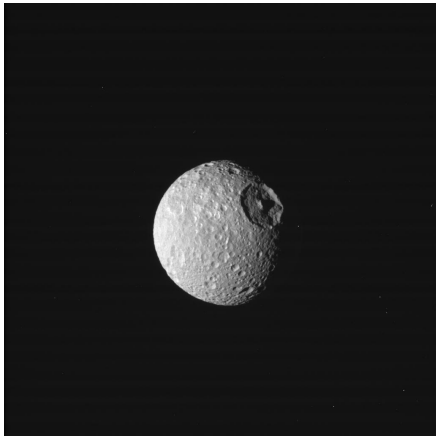
Longitude= 142°W

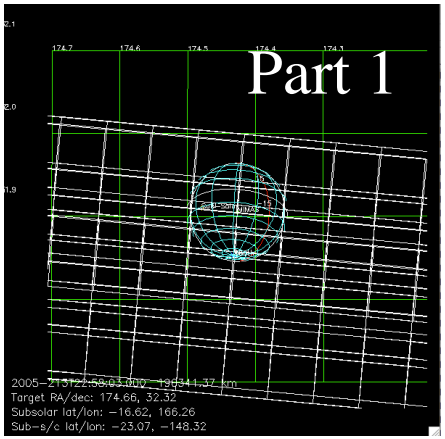
Latitude=22.9°S

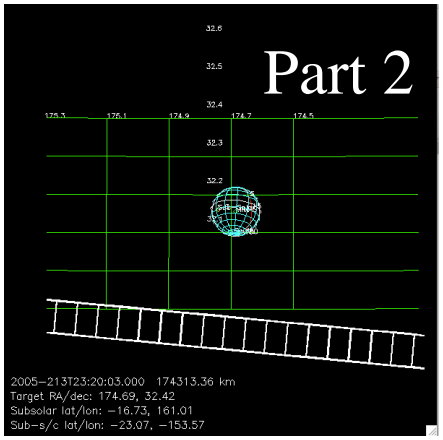
Phase= 46.2°



012MI_FP3REGION022







012MI_ICYLON003_CIRS

2005-213T22:59

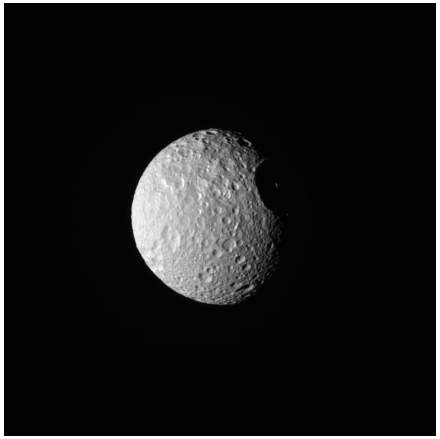
Alt= 183,504 km

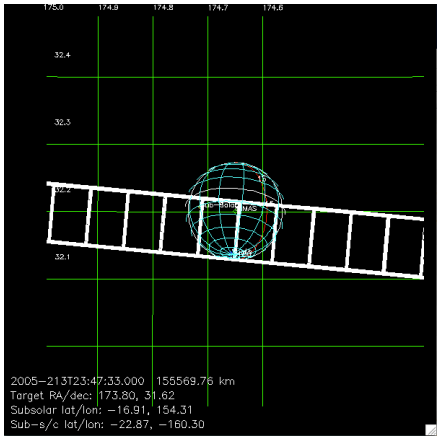
Longitude= 150°W

Latitude=23.1°S

Phase= 46.9°

012MI_MIMAS006_VIMS





012MI_ICYLON004_VIMS

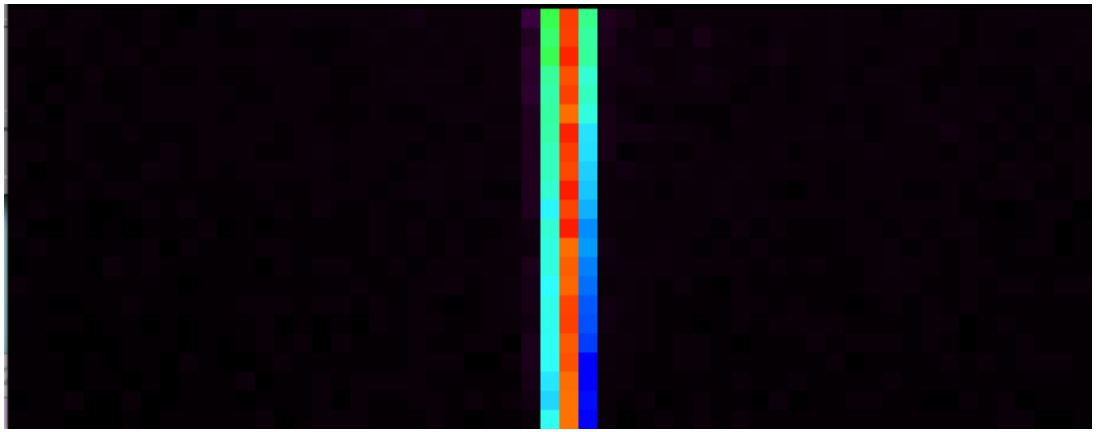
2005-213T23:48

Alt= 142,218 km

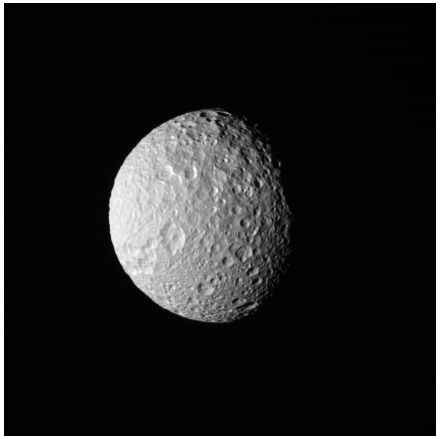
Longitude= 166°W

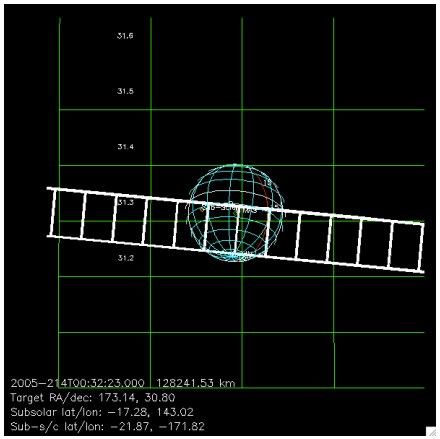
Latitude=22.5°S

Phase= 46.7°



012MI_LIMBTOP001_ISS





012MI_ICYLON005_ISS

2005-214T00:33

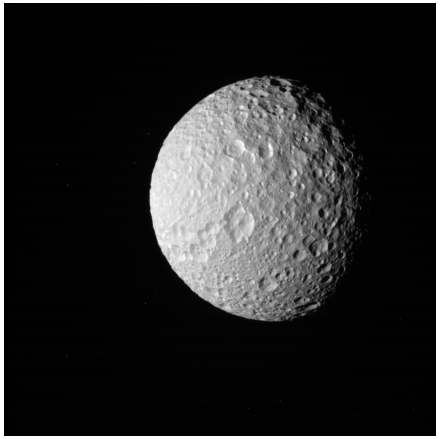
Alt= 123,625 km

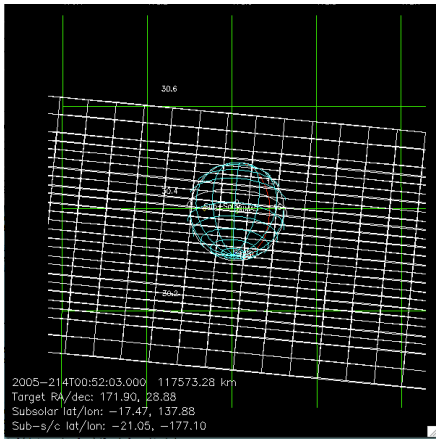
Longitude= 174°W

Latitude=21.6°S

Phase= 45.9°

012MI_FP3REGION020





012MI_ICYLON006_CIRS

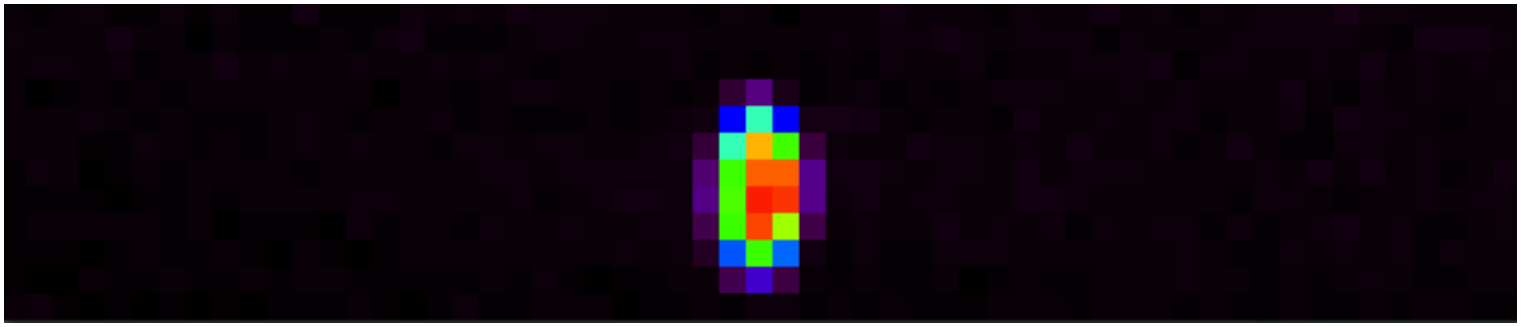
2005-214T00:53

Alt= 111,329 km

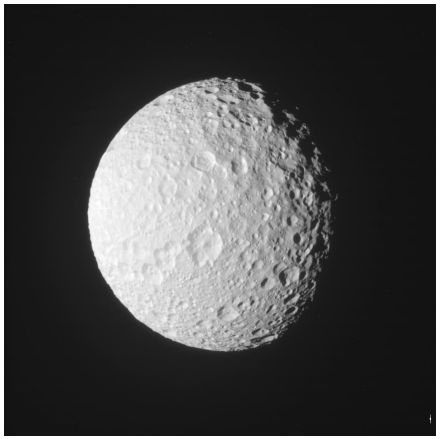
Longitude= 180°W

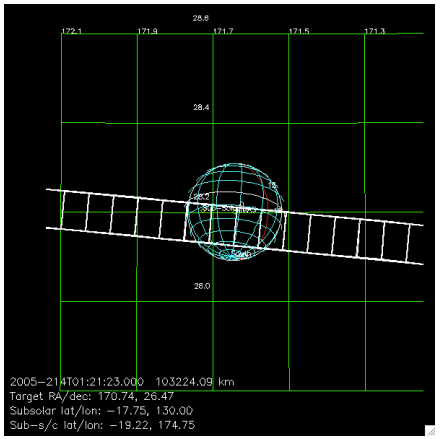
Latitude=20.3°S

Phase= 45°



012MI_COLORF004_ISS





012MI_ICYLON007_ISS

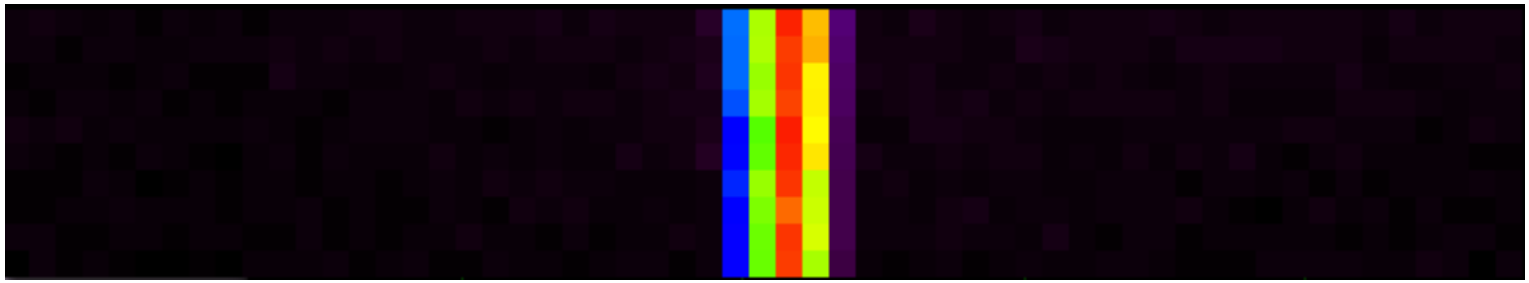
2005-214T01:22

Alt= 99,039 km

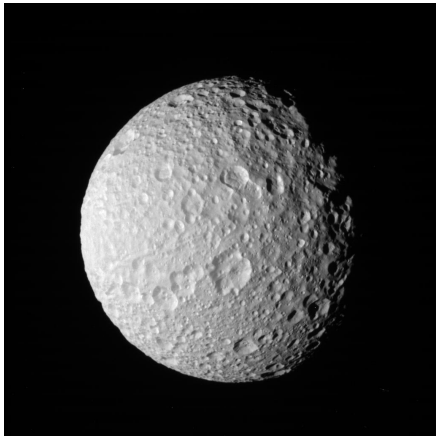
Longitude= 188°W

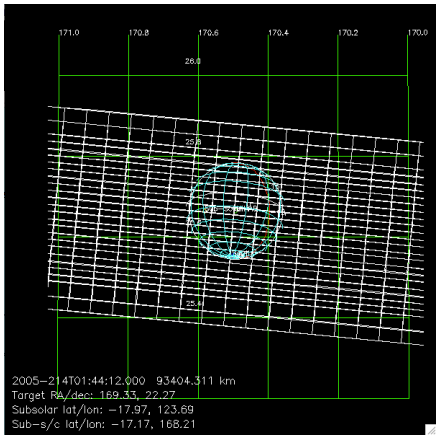
Latitude=18.5°S

Phase= 44°



012MI_FP3REGION024_CIRS





012MI_ICYLON071_CIRS

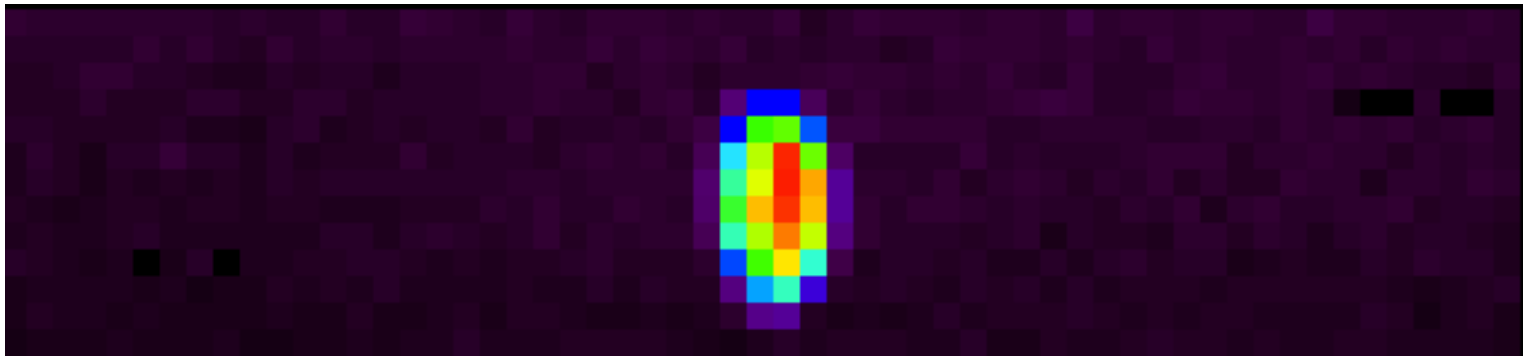
2005-214T01:45

Alt= 88,589 km

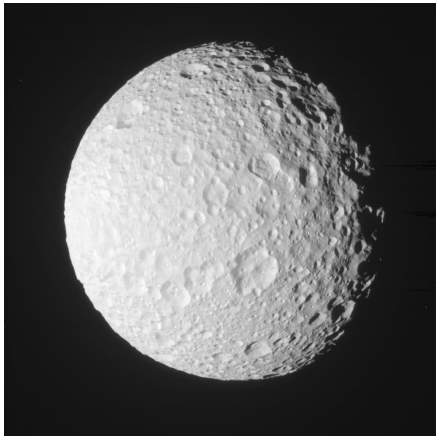
Longitude= 195°W

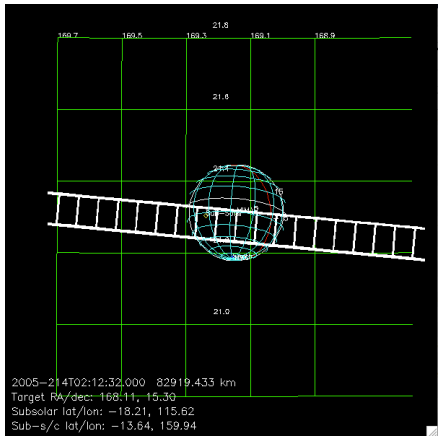
Latitude=15.8°S

Phase= 43°



012MI_MIMAS001_VIMS





012MI_ICYLON072_VIMS

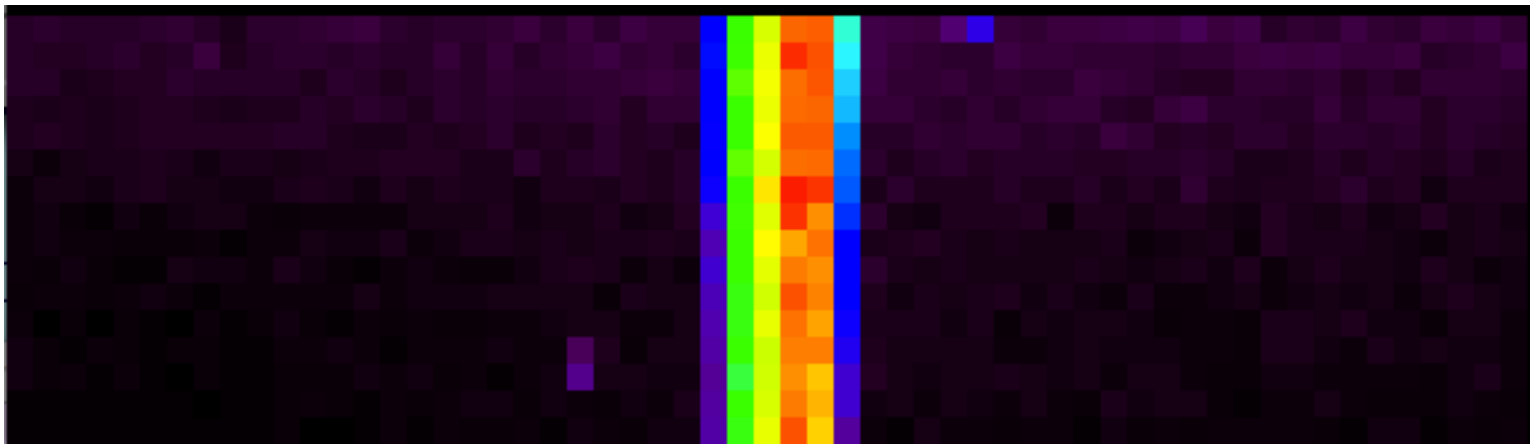
2005-214T02:13

Alt= 78,069 km

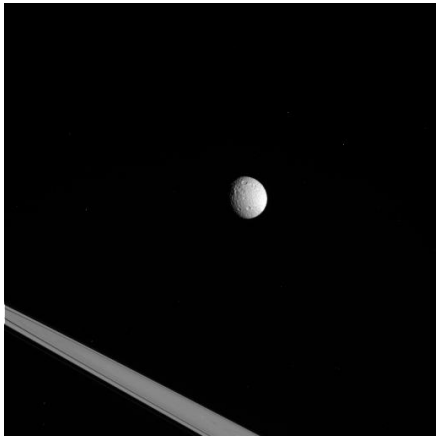
Longitude= 205°W

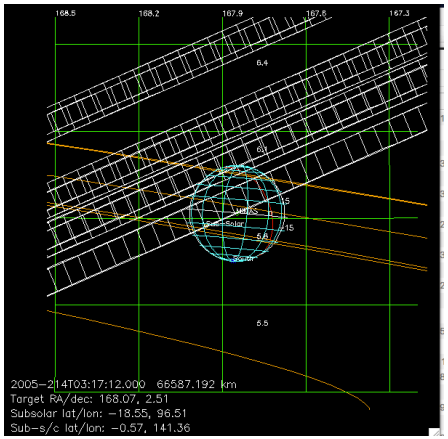
Latitude=11.2°S

Phase= 42.5°



012MI_FP1MAP023_CIRS

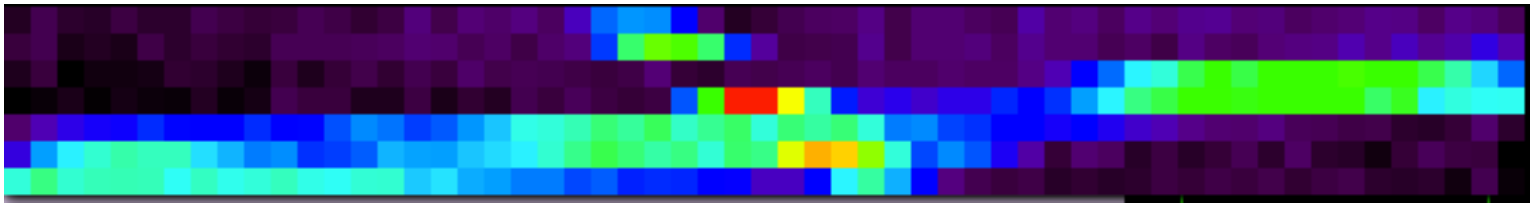




WAC image

012MI_ICYLON073_CIRS
2005-214T03:18
Alt= 65,453 km
Longitude= 220°W
Latitude=1°N
Phase= 46°

Mimas in front of rings for first part of observation



012MI_STEREO005_ISS

012MI_ICYLON074_ISS

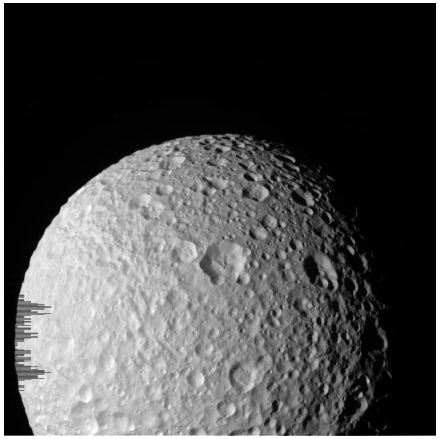
2005-214T03:38

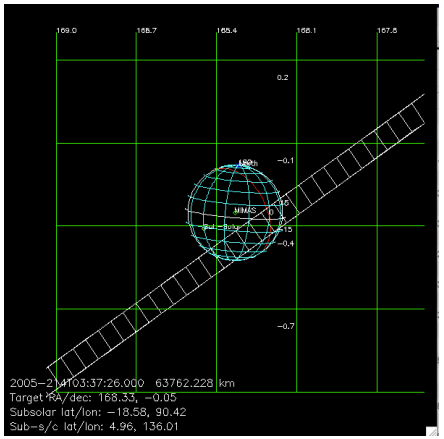
Alt= 63,560 km

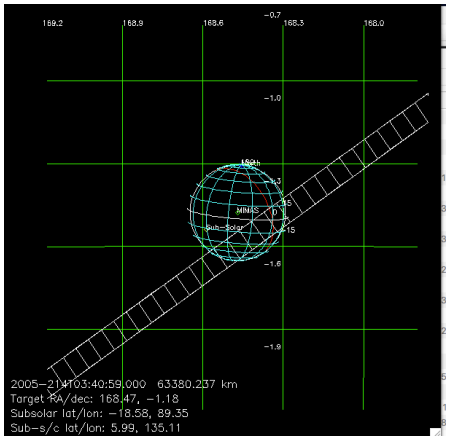
Longitude= 224°W

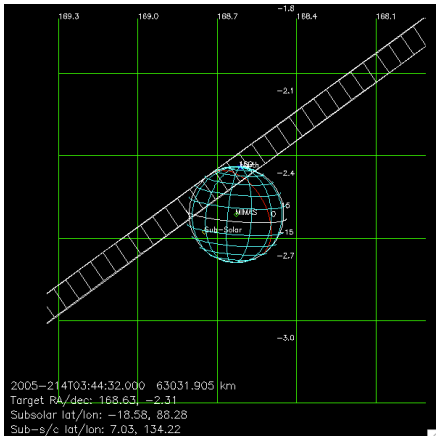
Latitude=5°N

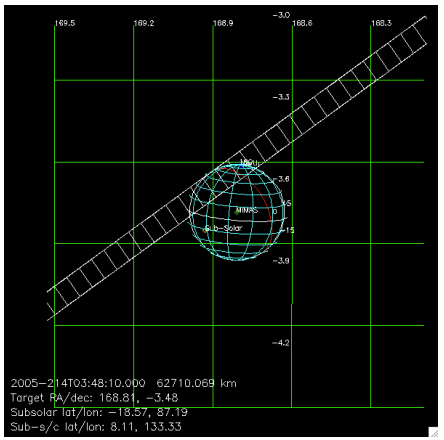
Phase= 48.3°











012MI_ICYLON008_PRIME

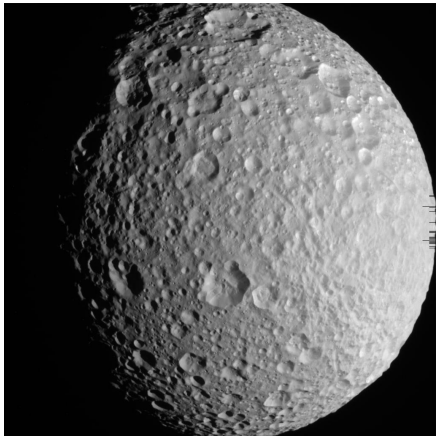
2005-214T03:52

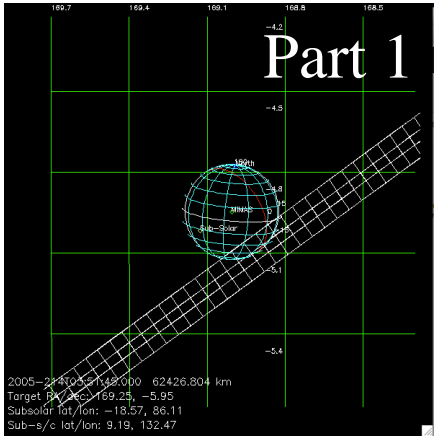
Alt= 62,086 km

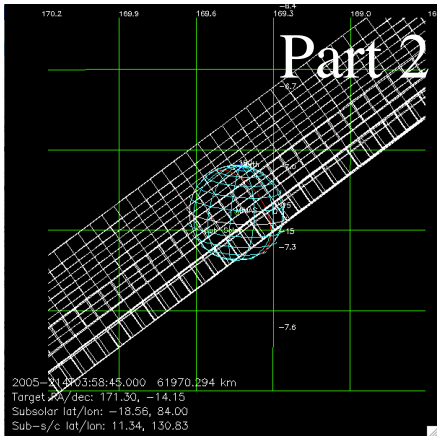
Longitude= 228°W

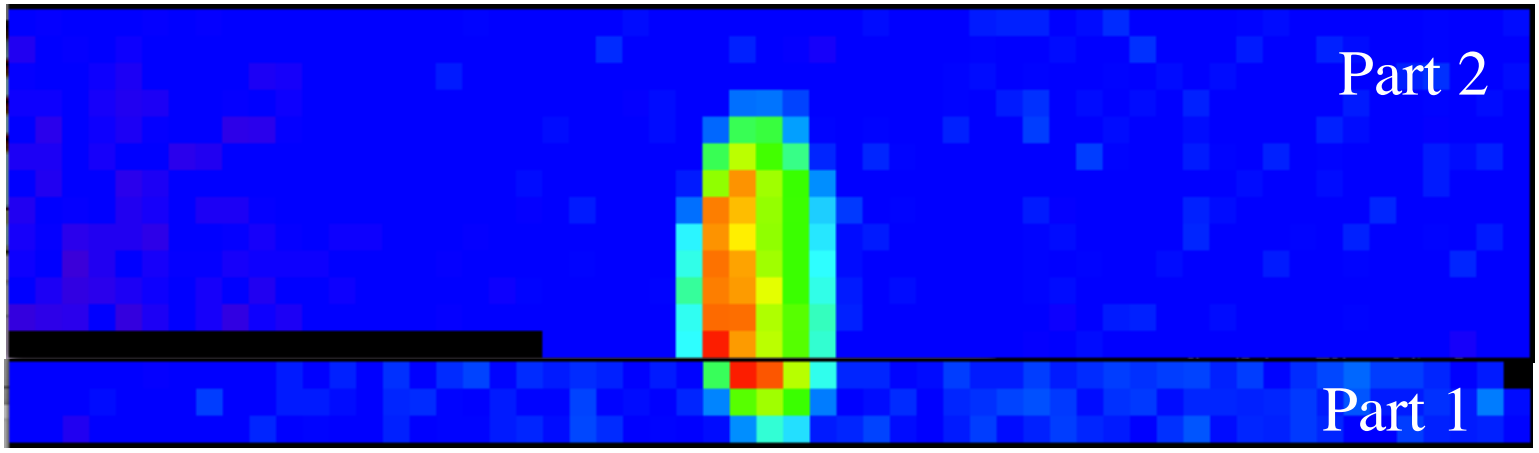
Latitude=9.8°N

Phase= 52°





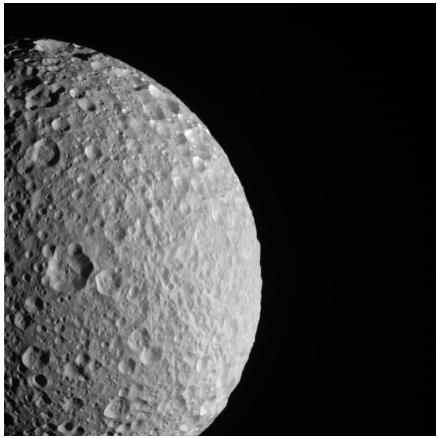


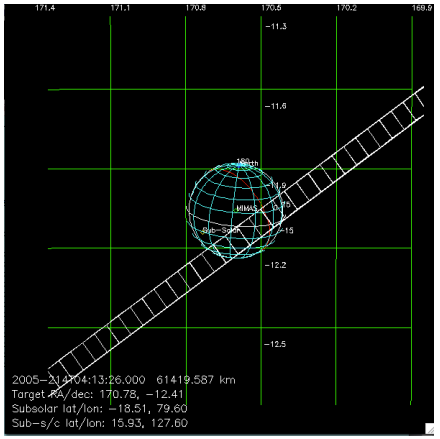


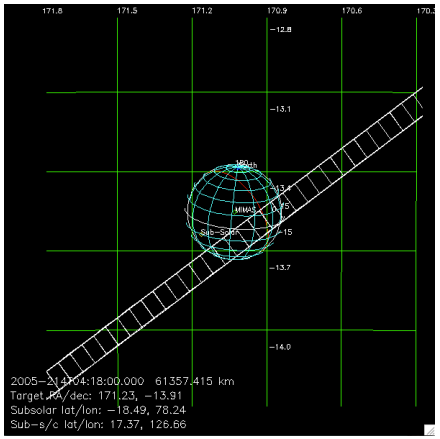
ISS_012MI_STEREO007 (12-panel mosaic)

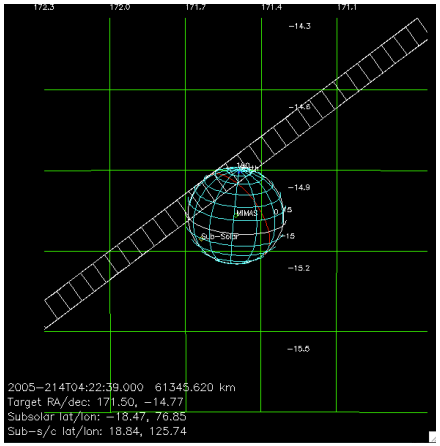
012MI_ICYLON009_ISS

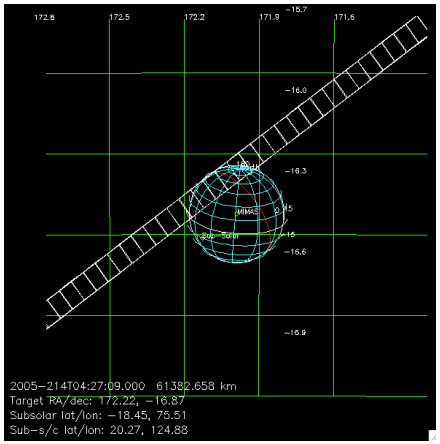
2005-214T04:14
Alt= 61,203 km
Longitude= 233°W
Latitude=16°N
Phase= 56.5°

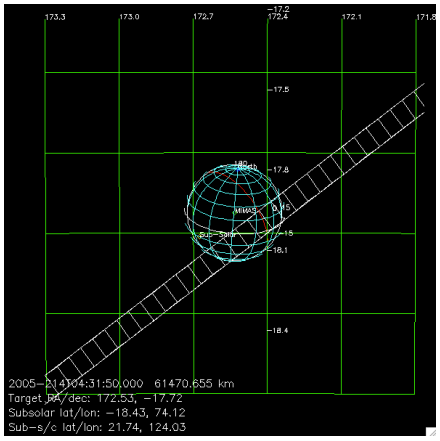


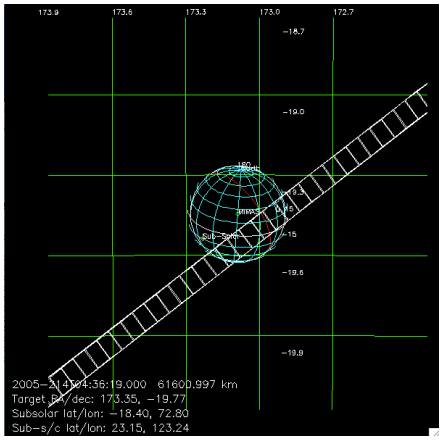


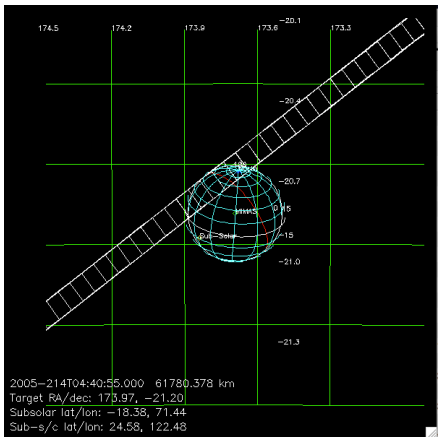


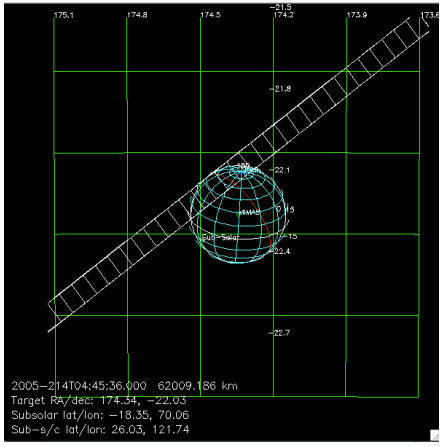


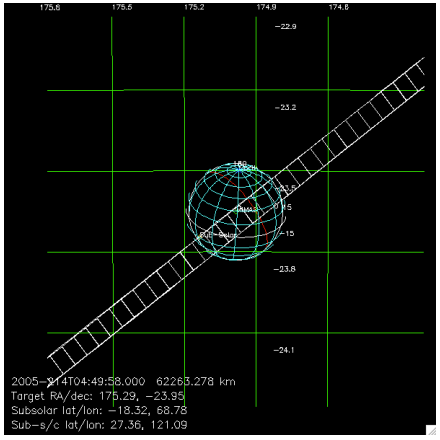


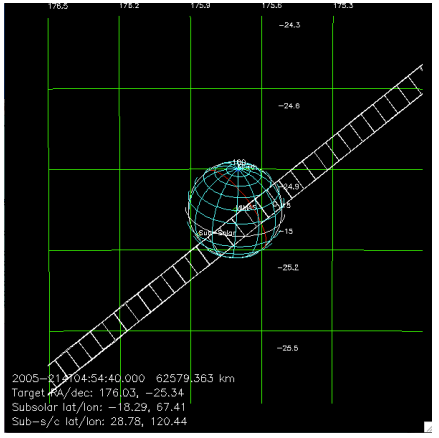




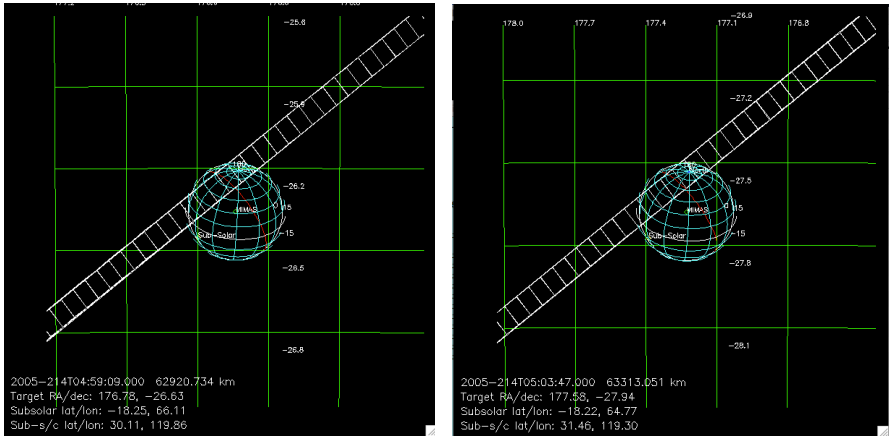


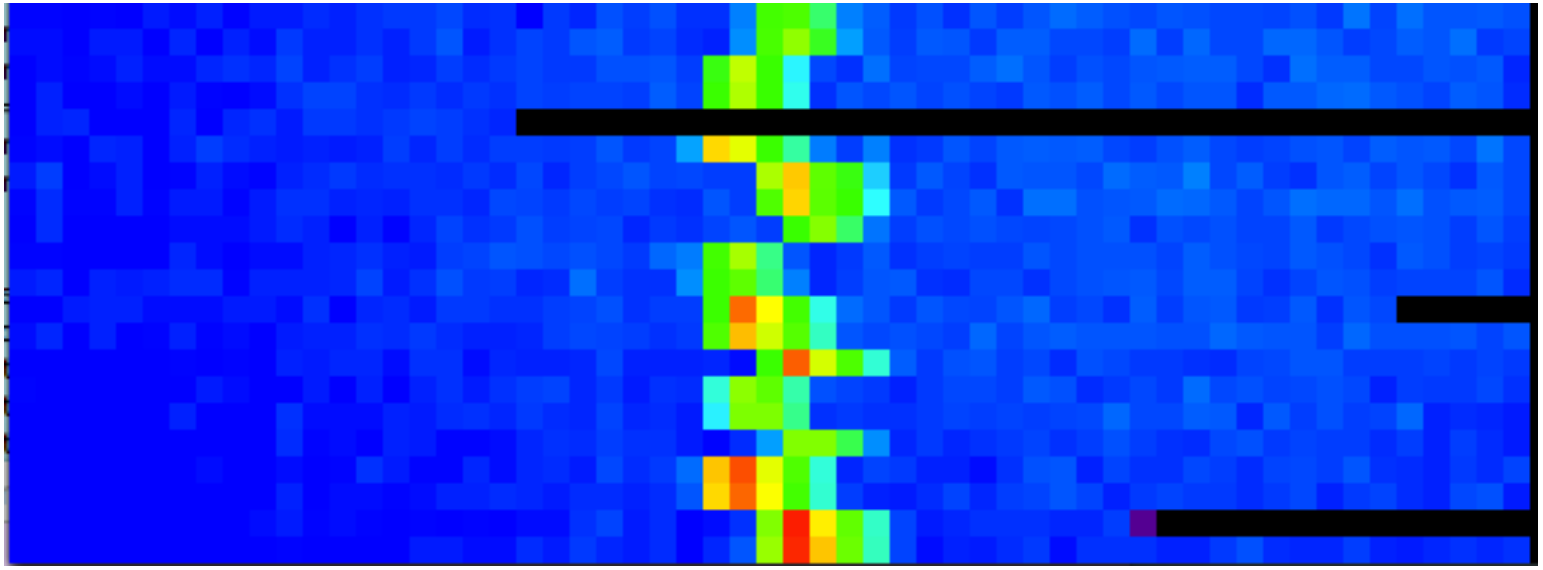






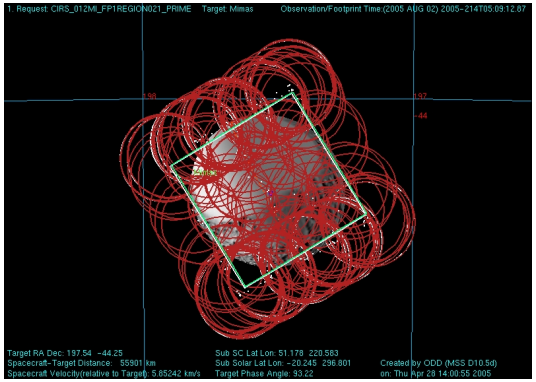
012MI_ICYLON009_ISS
Cont'd

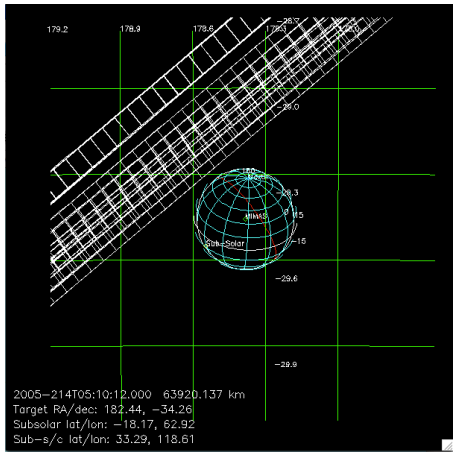




CIRS_012MI_FP1REGION021

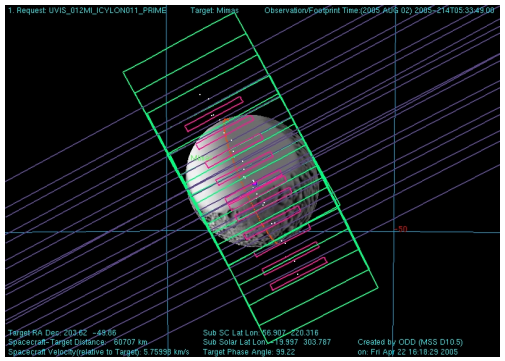
012MI_ICYLON010_CIRS
2005-214T05:11

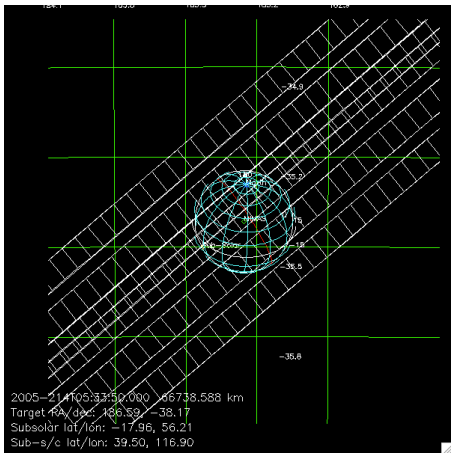


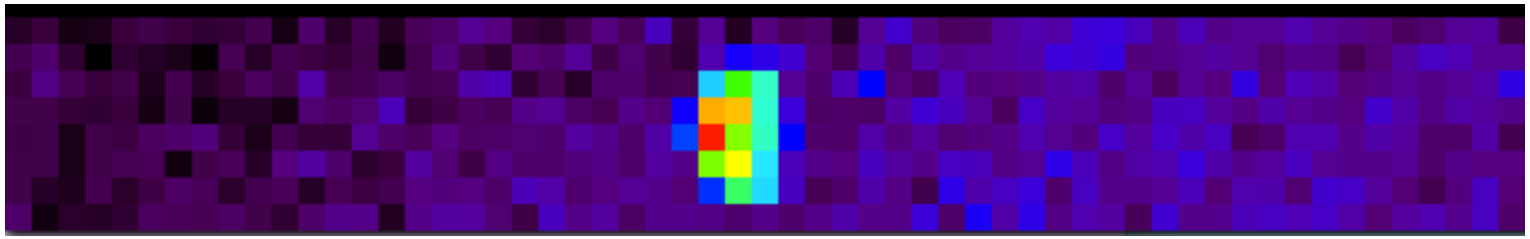


Mimas not in UVIS slit

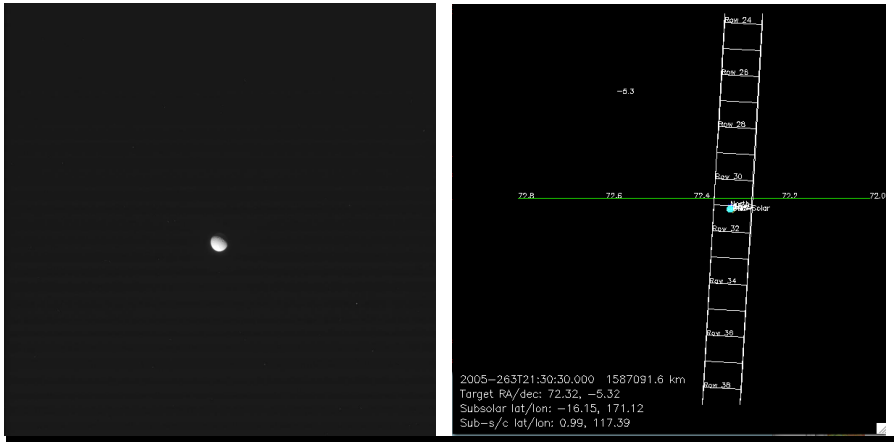
012MI_ICYLON011_PRIME
2005-214T05:34
Alt= 67,551 km
Longitude= 243°W
Latitude=41°N
Phase= 81°

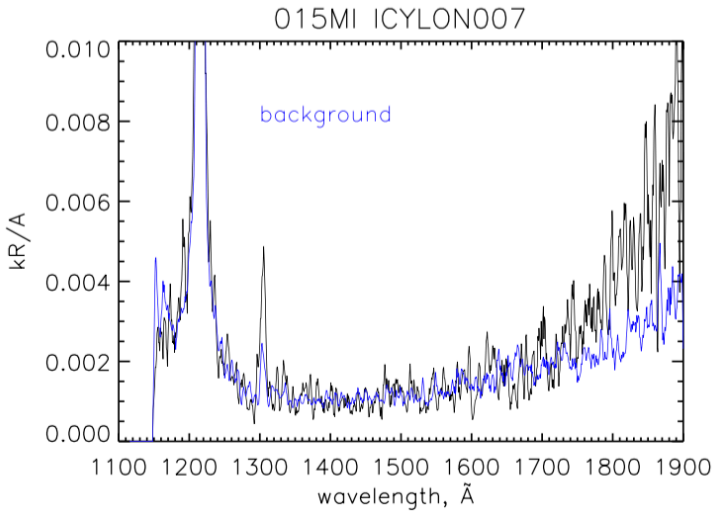






015MI_238W057PH001_ISS





015MI_ICYLON007_ISS

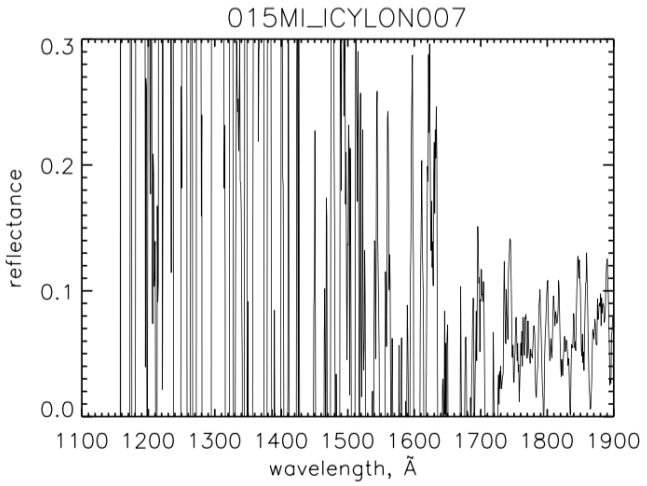
2005-263T21:11

Alt= 1,581,999 km

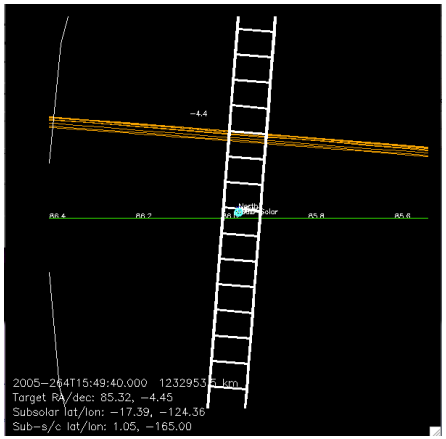
Longitude= 240°W

Latitude=1°N

Phase= 57.9°

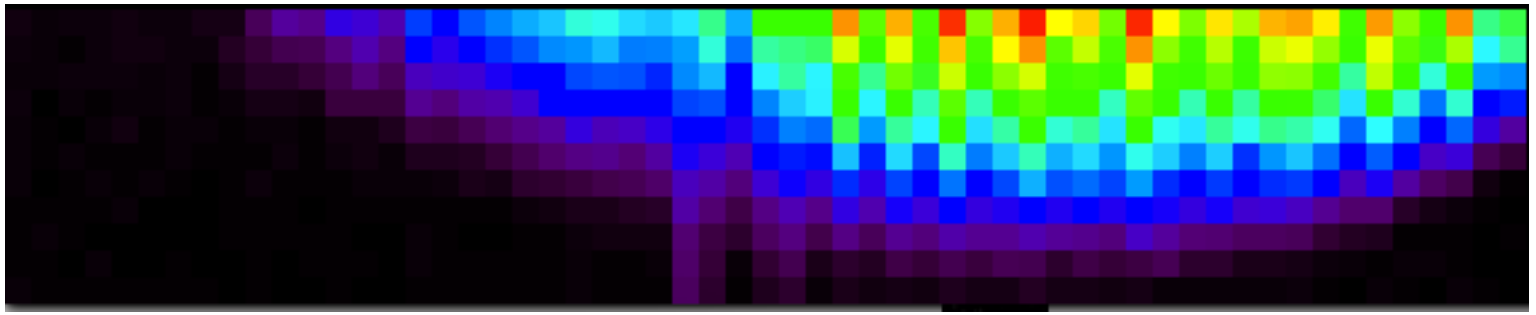


015MI_166W045PH001_ISS

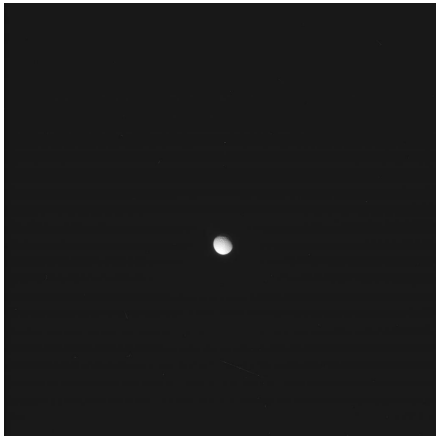


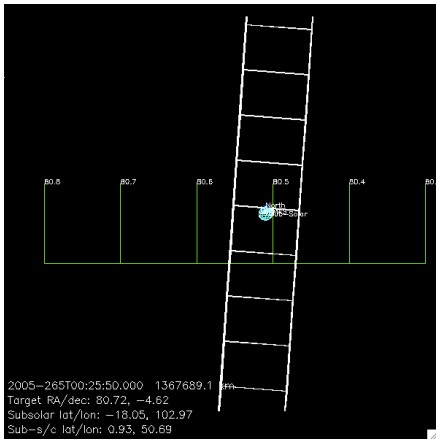
015MI_ICYLON015_ISS
2005-264T15:50
Alt= 1,228,039 km
Longitude= 168°W
Latitude=1°N
Phase= 46°

Mimas in front of Saturn



015MI_310W050PH001_ISS





015MI_ICYLON017_ISS

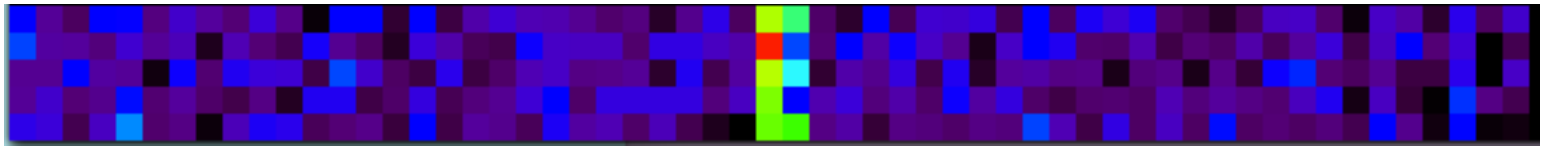
2005-265T00:20

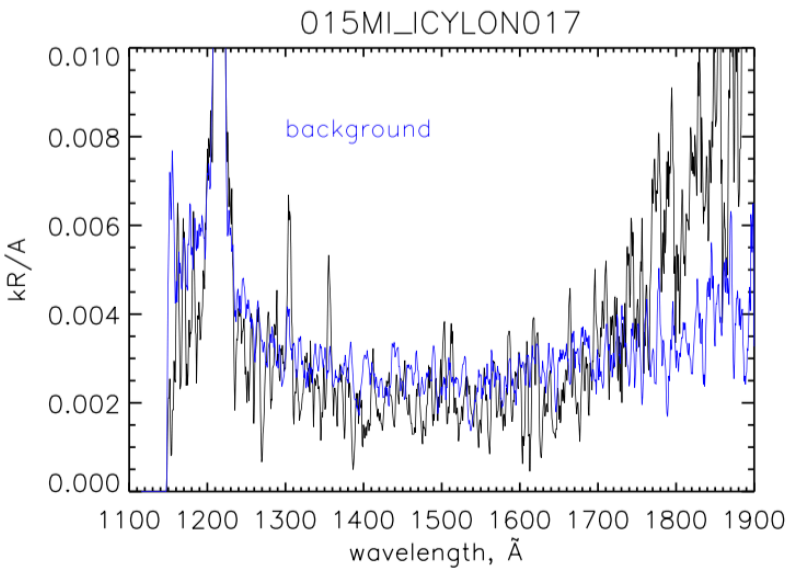
Range= 1,368,974 km

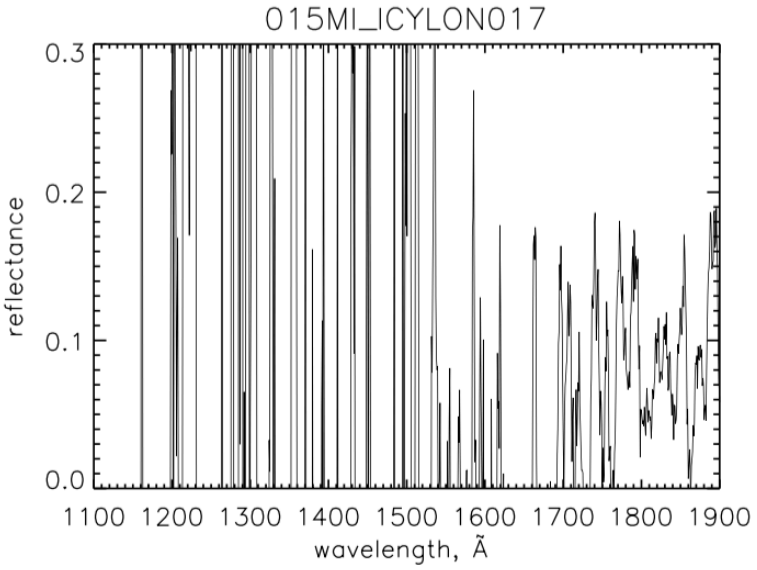
Longitude= 310°W

Latitude=1°N

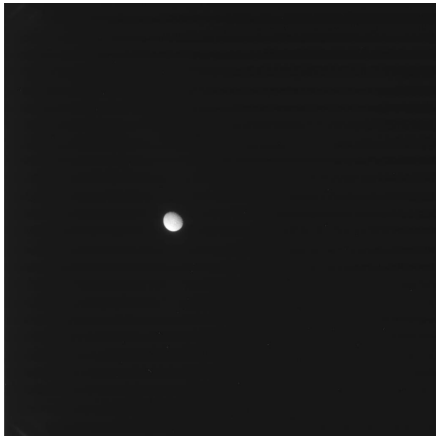
Phase= 50.4°

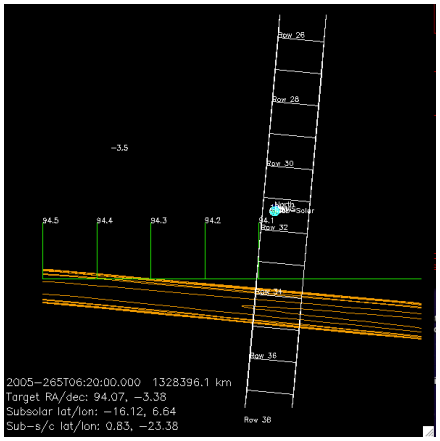






015MI_022W038PH001_ISS





015MI_ICYLON023_ISS

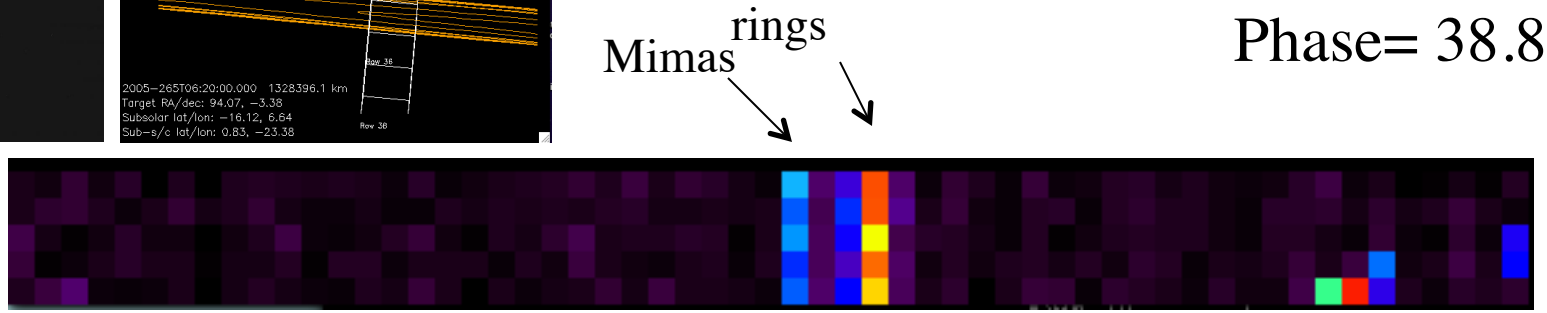
2005-265T06:11

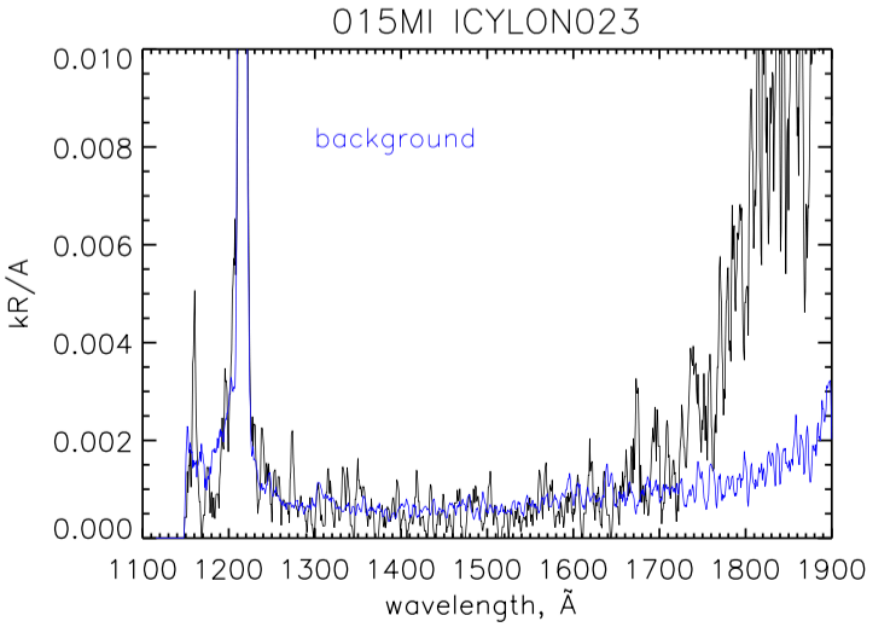
Alt= 1,332,074 km

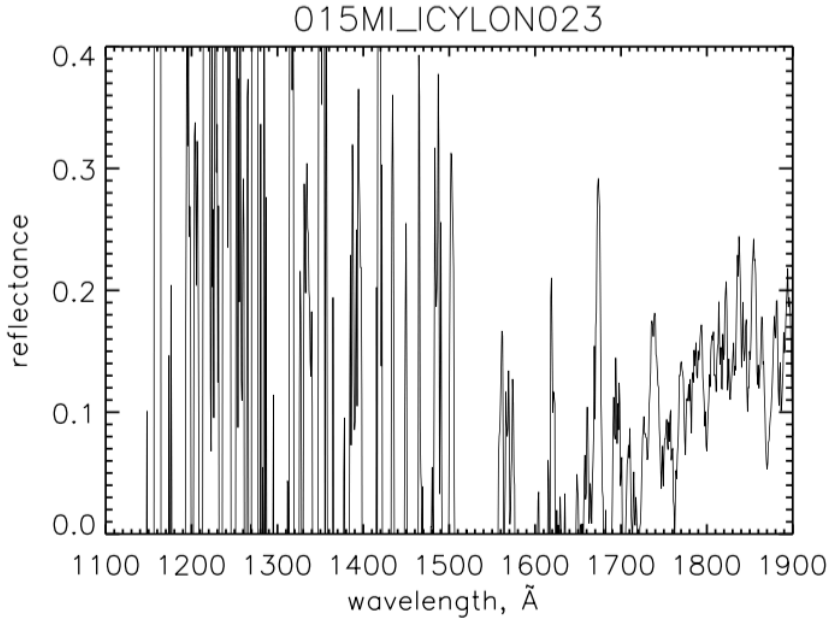
Longitude= 23°W

Latitude=0.8°N

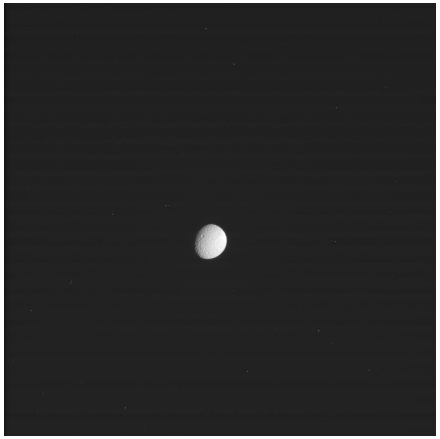
Phase= 38.8°

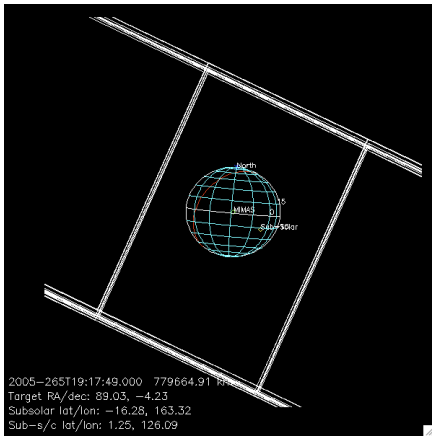






015MI_238W042PH001_ISS





015MI_ICYLON025_ISS

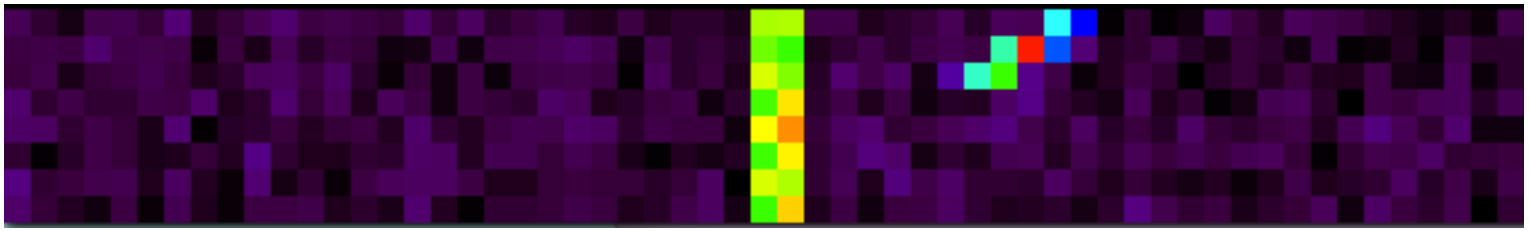
2005-265T19:18

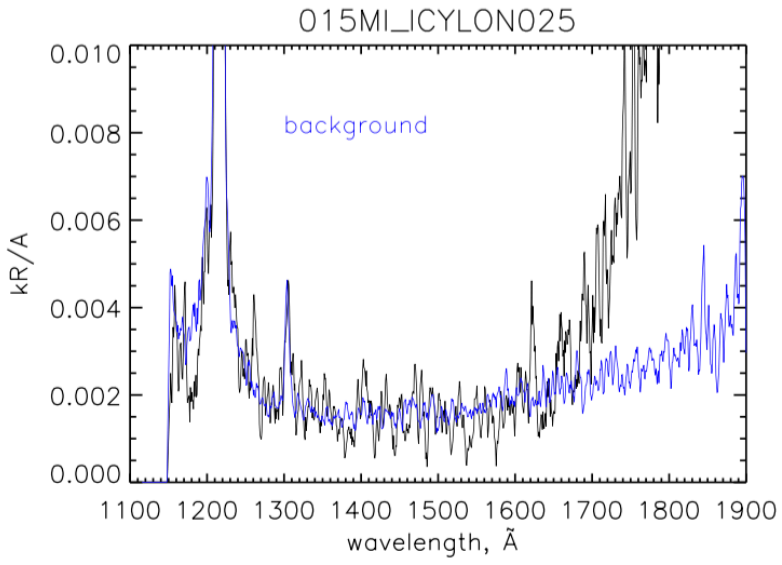
Alt= 781,635 km

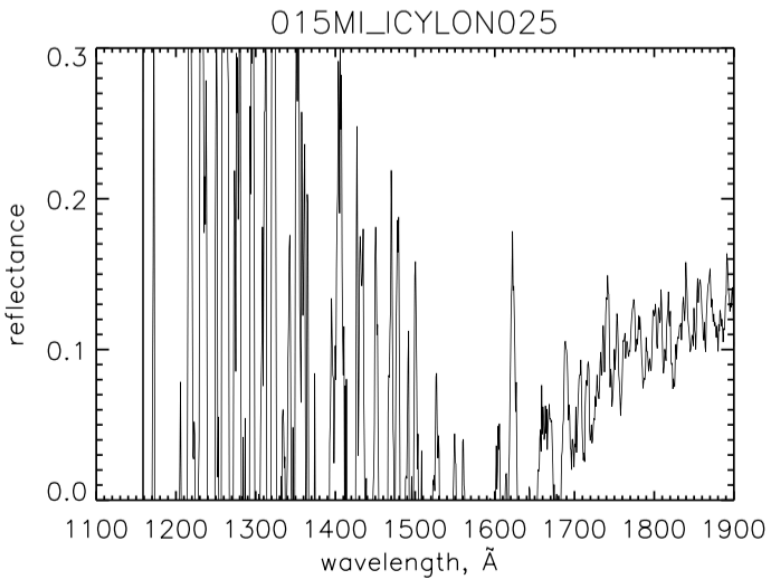
Longitude= 236°W

Latitude=1.2°N

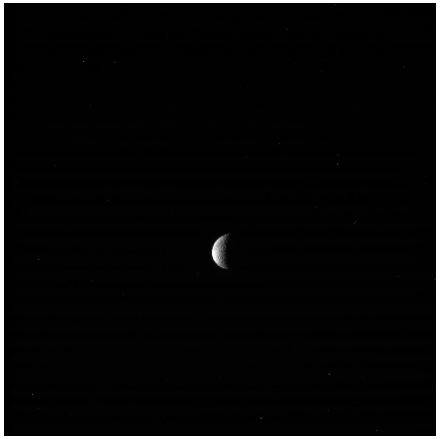
Phase= 43.1°

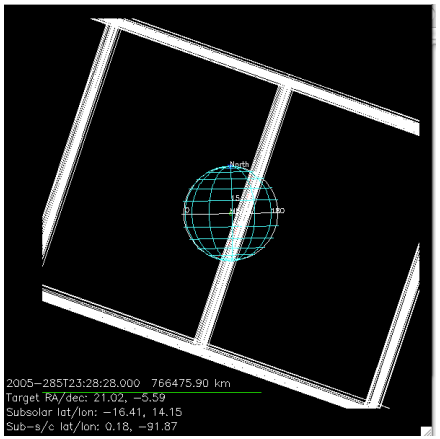


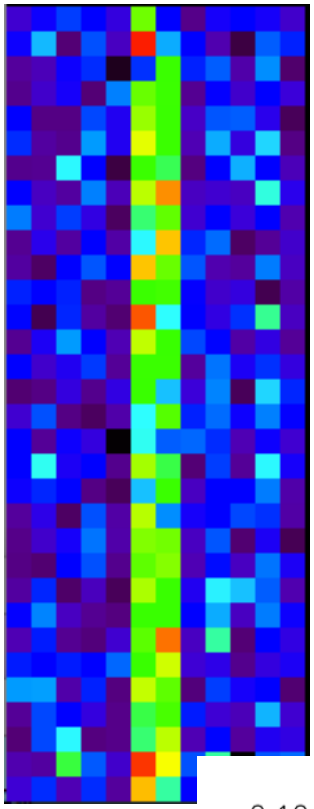




016MI_094W108PH001_ISS







016MI_ICYLON002_ISS

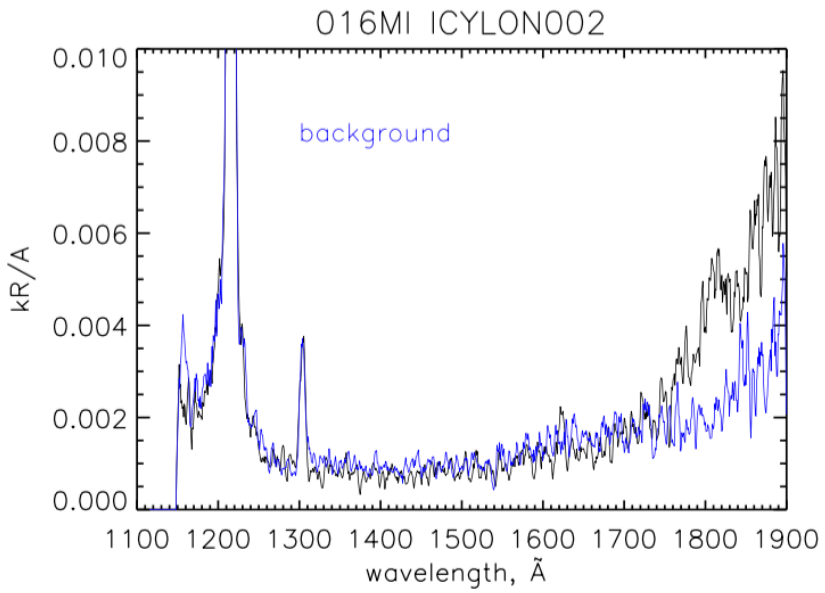
2005-285T23:29

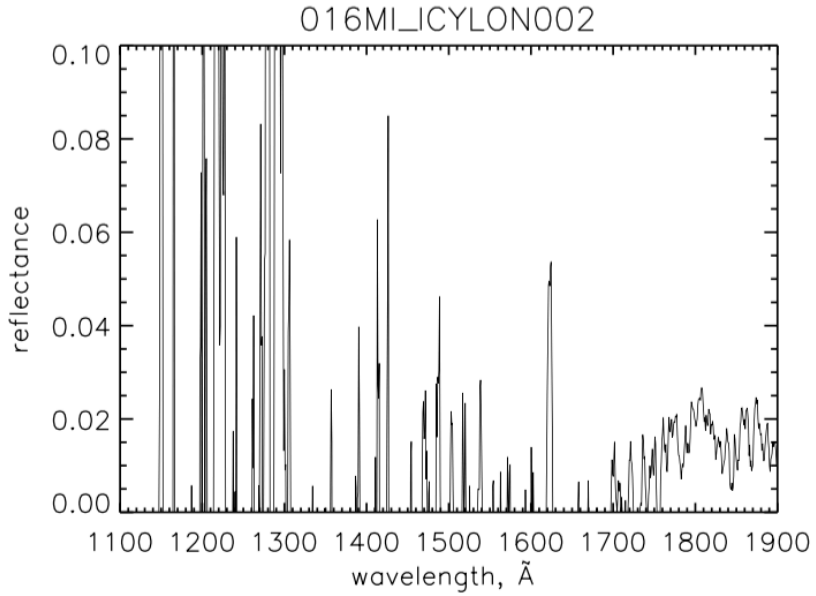
Alt= 754,307 km

Longitude= 101°W

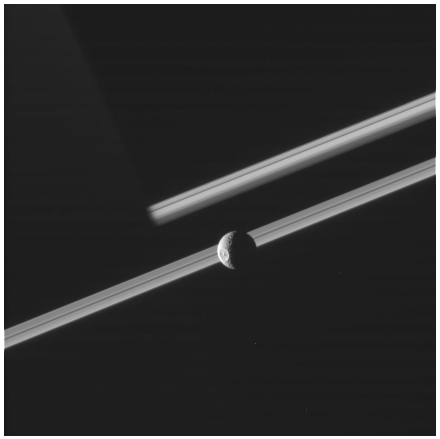
Latitude=0.2°N

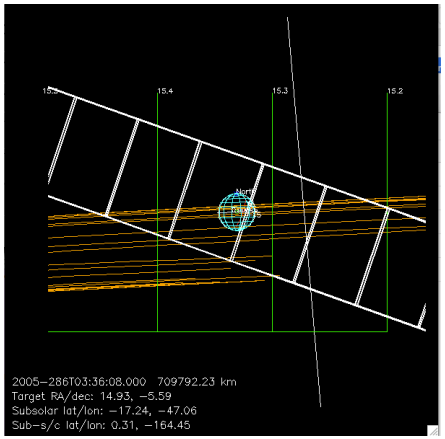
Phase= 106.2°





016MI_166W113PH001_ISS

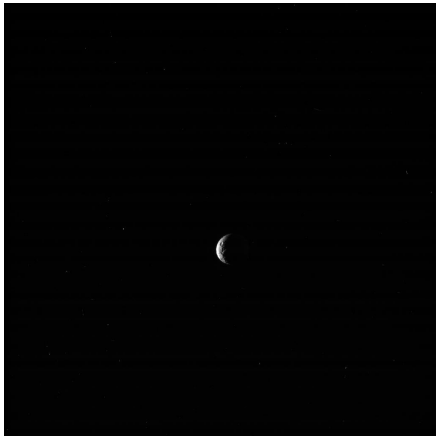


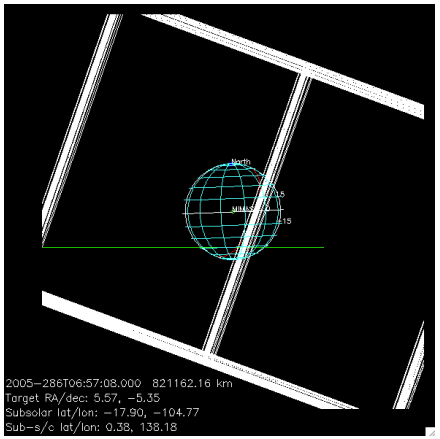


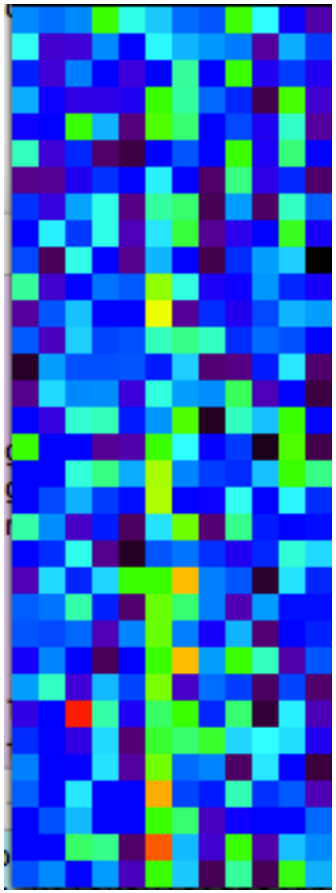
016MI_ICYLON003_ISS

2005-286T03:37
Alt= 710,124 km
Longitude= 166°W
Latitude=0.3°N
Phase= 111.8°

016MI_238W122PH001_ISS



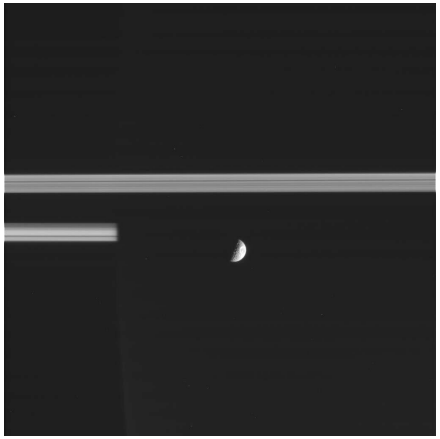


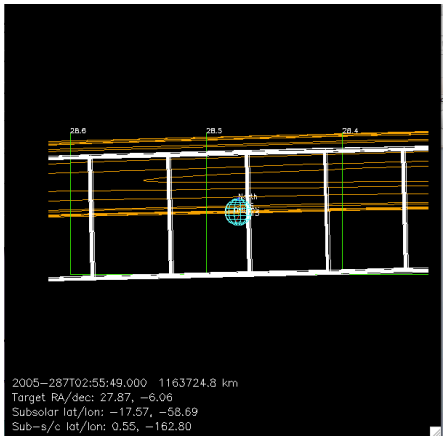


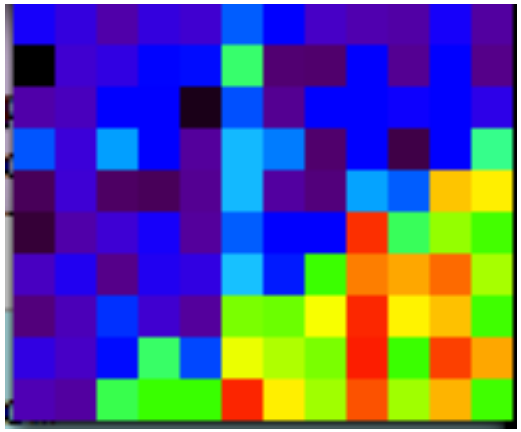
016MI_ICYLON004_ISS
2005-286T06:58
Alt= 852,948 km
Longitude= 231°W
Latitude=0.4°N
Phase= 120.3°

Low SNR

016MI_166W100PH001_ISS



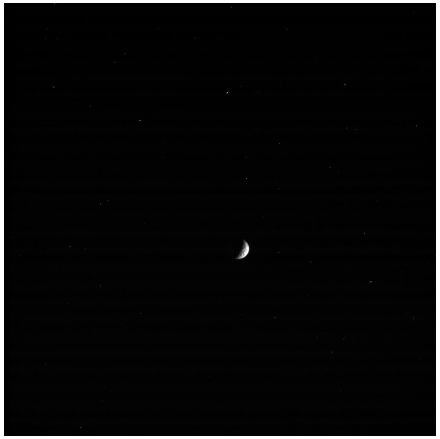


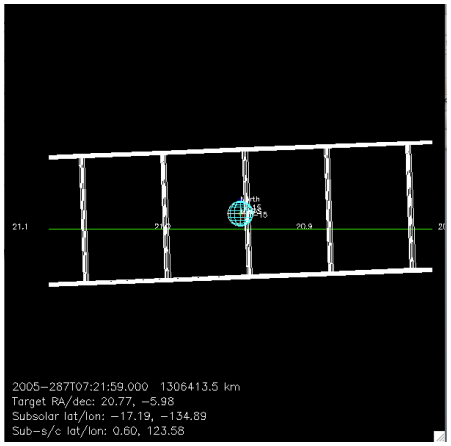


016MI_ICYLON005_ISS
2005-287T02:56
Alt= 1,163,582 km
Longitude= 165°W
Latitude=0.6°N
Phase= 99.7°

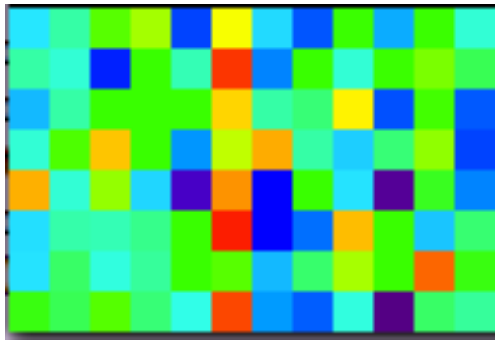
Saturn and the rings in the slit with Mimas for much of the observation

016MI_238W107PH001_ISS



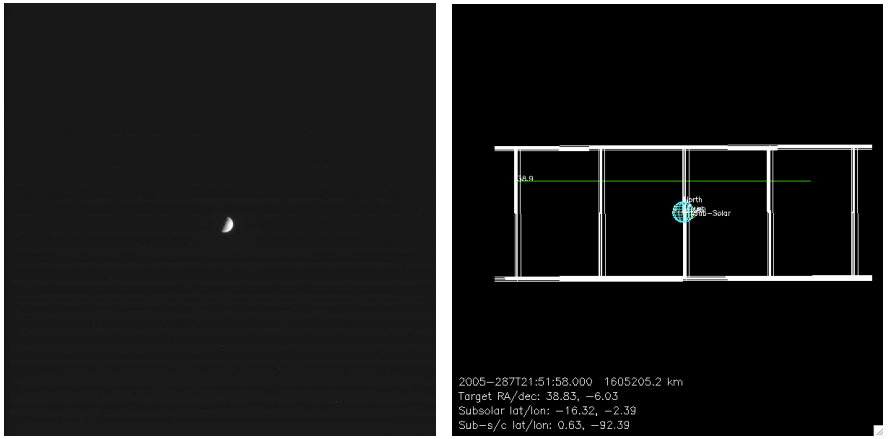


016MI_ICYLON006_ISS
2005-287T07:22
Alt= 1,314,235 km
Longitude= 239°W
Latitude=0.6°N
Phase= 106.6°



Low SNR

016MI_094W090PH001_ISS



016MI_ICYLON007_ISS

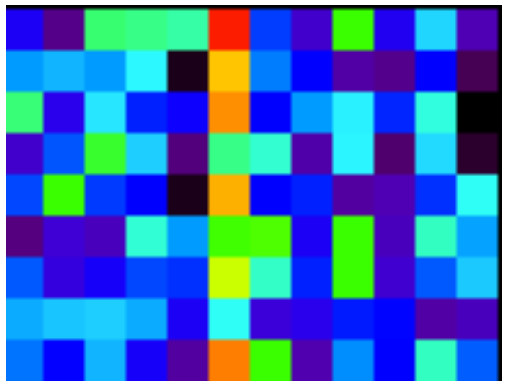
2005-287T21:52

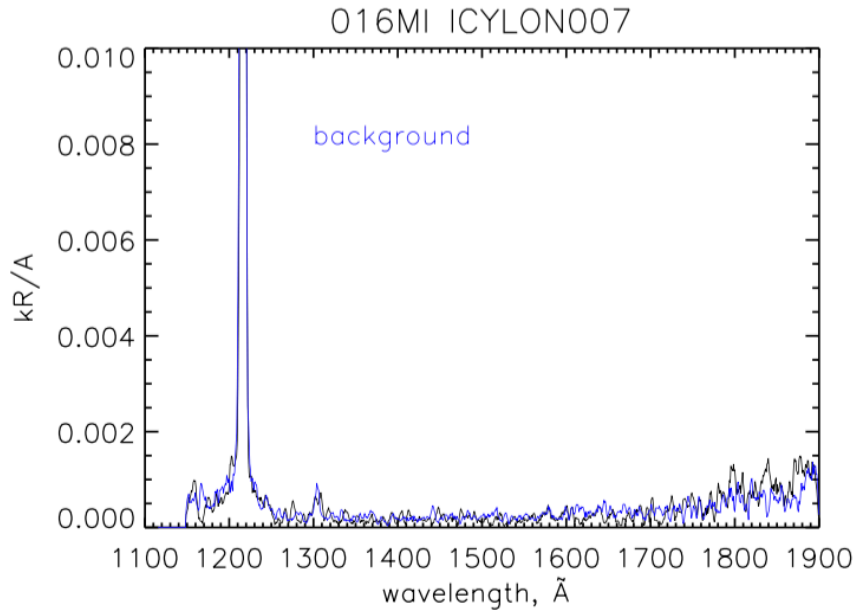
Alt= 1,600,026 km

Longitude= 94.7°W

Latitude=0.6°N

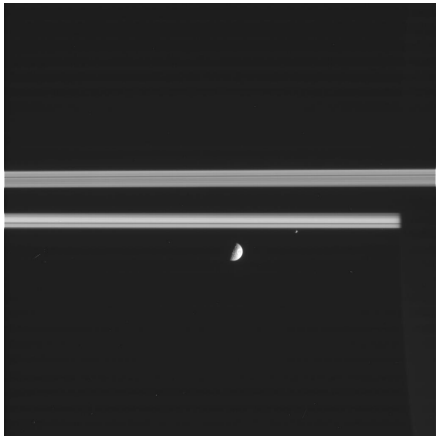
Phase= 90°

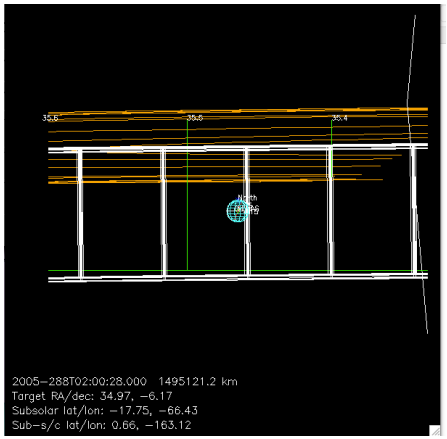


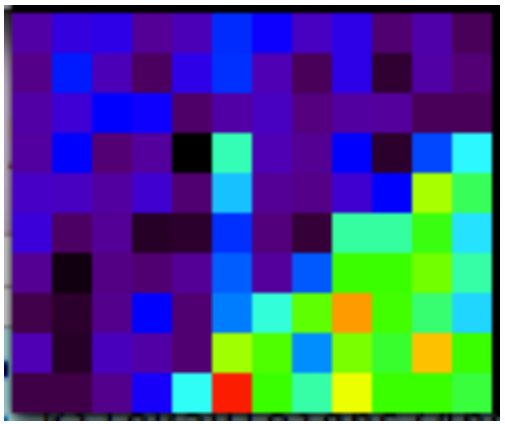


Low SNR

016MI_166W094PH001_ISS



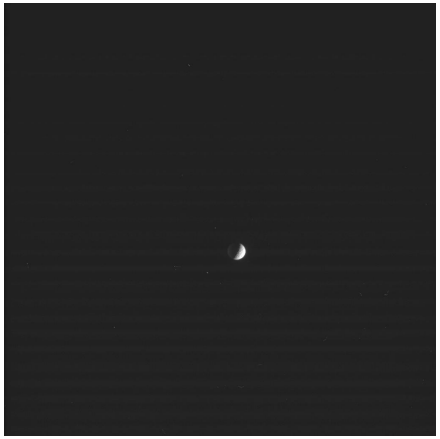


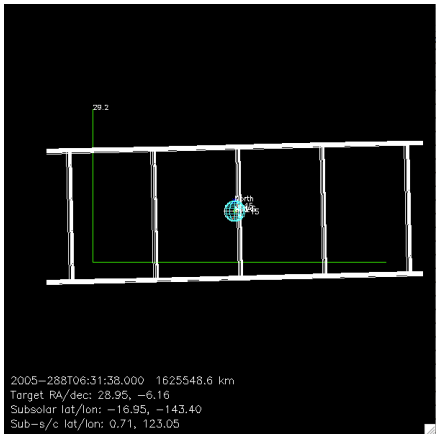


016MI_ICYLON008_ISS
2005-288T02:01
Alt= 1,494,421 km
Longitude= 165.5°W
Latitude=0.7°N
Phase= 93.1°

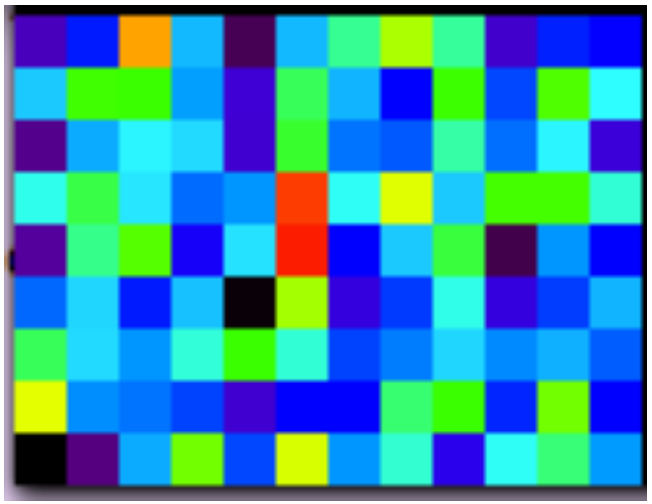
Saturn and the rings in the slit with Mimas for much of the observation

016MI_238W100PH001_ISS



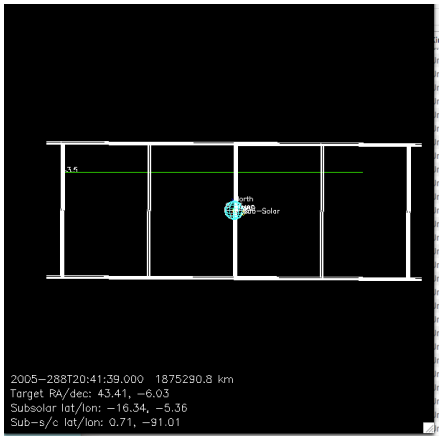


016MI_ICYLON009_ISS
2005-288T06:32
Alt= 1,632,964 km
Longitude= 239°W
Latitude=0.7°N
Phase= 99°



Low SNR

016MI_094W086PH001_ISS



016MI_ICYLON010_ISS

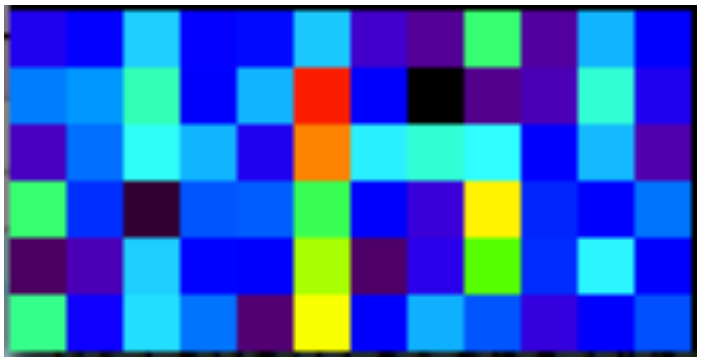
2005-288T20:42

Alt= 1,871,711 km

Longitude= 93°W

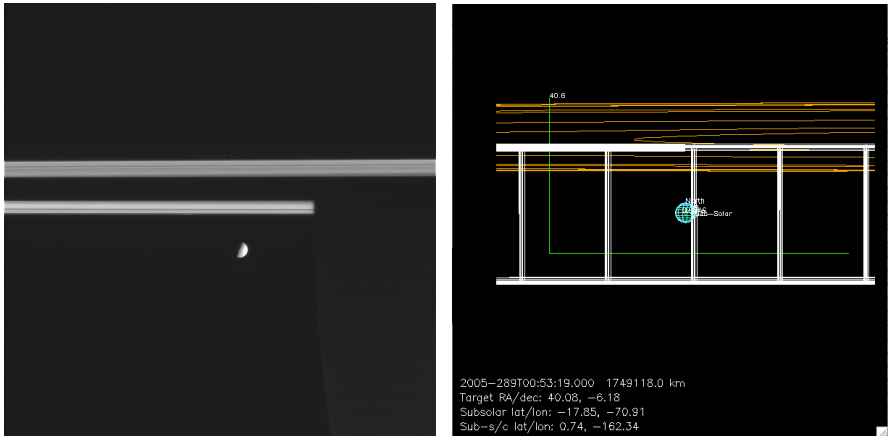
Latitude=0.7°N

Phase= 85.5°

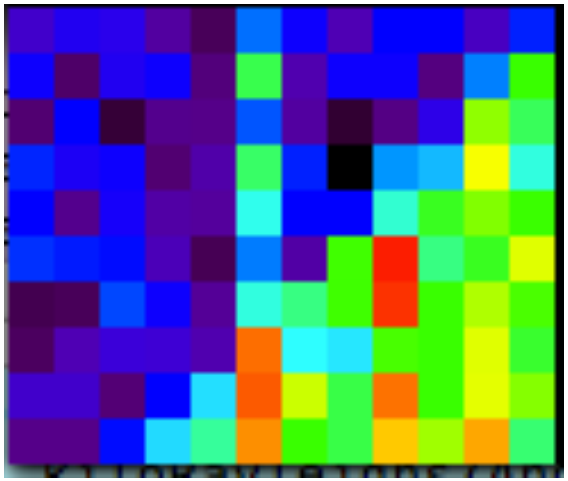


Low SNR

016MI_166W089PH001_ISS

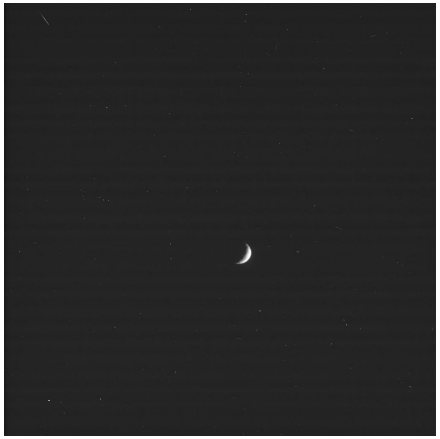


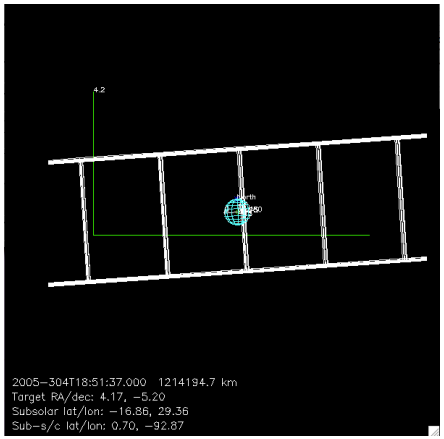
016MI_ICYLON011_ISS
2005-289T00:54
Alt= 1,747,878 km
Longitude= 165°W
Latitude=0.7°N
Phase= 88.4°

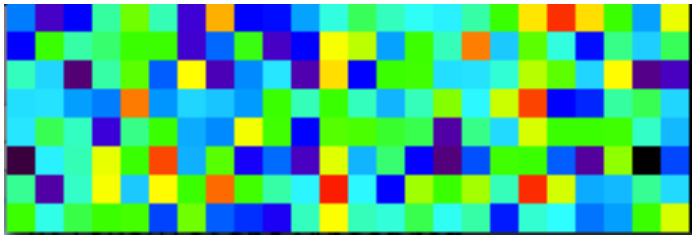


Saturn and the rings in the slit with Mimas for much of the observation

017MI_094W123PH001_ISS



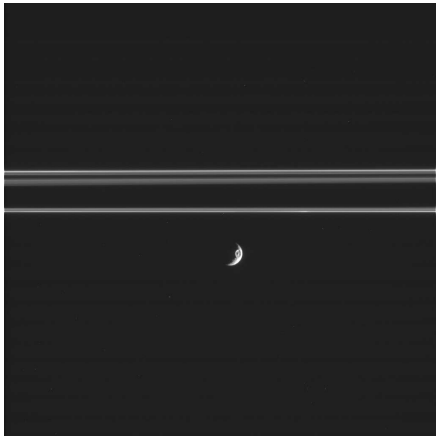


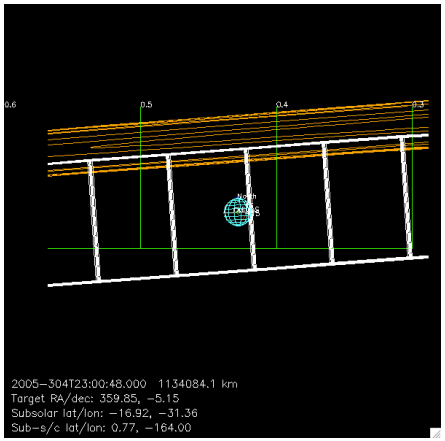


017MI_ICYLON001_ISS
2005-304T18:52
Alt= 1,210,508 km
Longitude= 95°W
Latitude=0.7°N
Phase= 122.6°

Low SNR

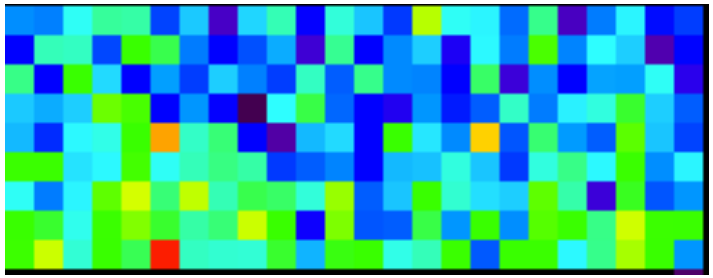
017MI_166W127PH001_ISS



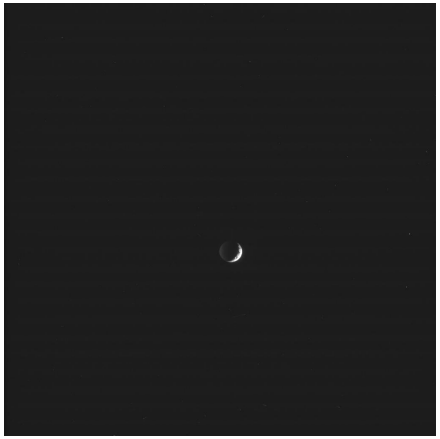


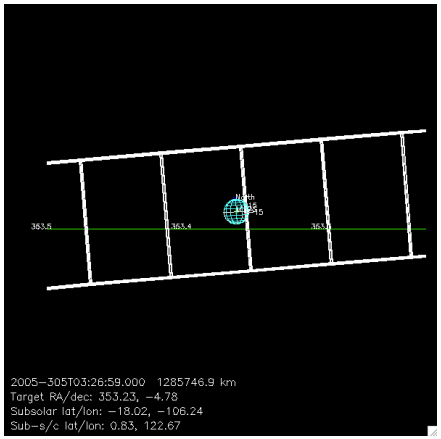
017MI_ICYLON002_ISS

2005-304T23:01
Alt= 1,134,371 km
Longitude= 166°W
Latitude=0.8°N
Phase= 126.4°

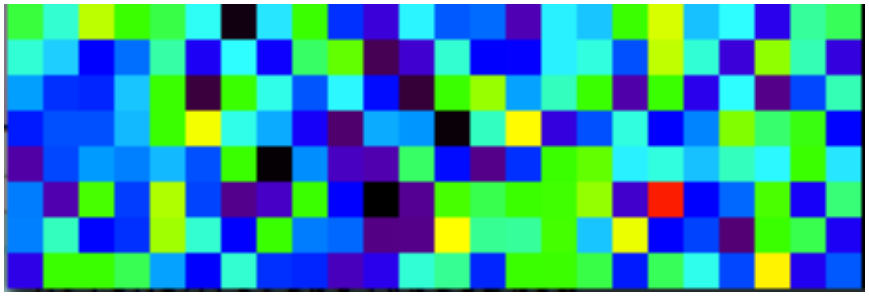


Low SNR; rings in slit with Mimas



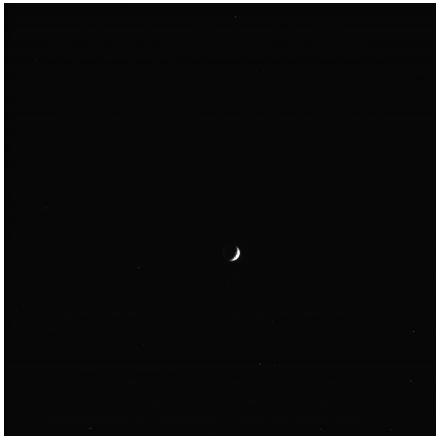


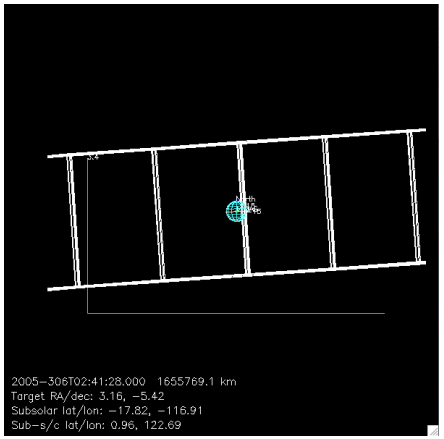
017MI_ICYLON003_ISS
2005-305T03:27
Alt= 1,292,757 km
Longitude= 239°W
Latitude=0.8°N
Phase= 132.6°



Low SNR

017MI_238W124PH001_ISS





017MI_ICYLON004_ISS

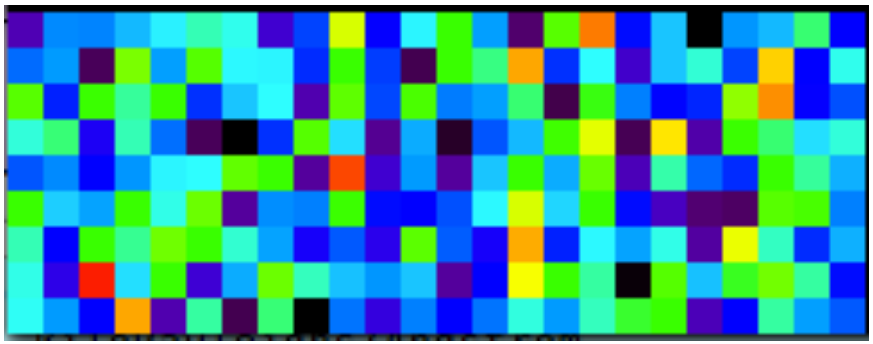
2005-306T02:42

Alt= 1,662,487 km

Longitude= 240°W

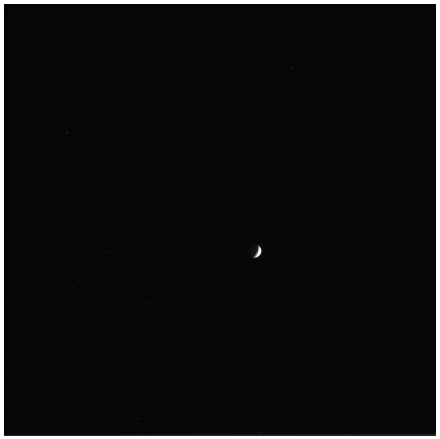
Latitude=1°N

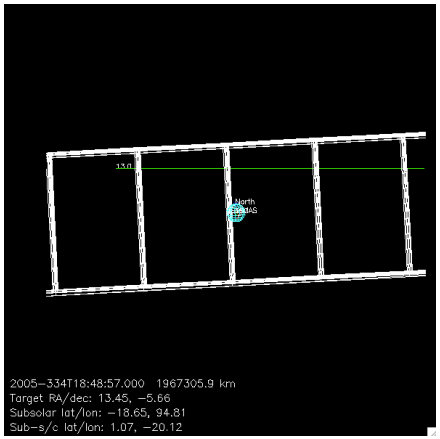
Phase= 123.6°



Low SNR

018MI_022W115PH001_ISS





018MI_ICYLON001_ISS

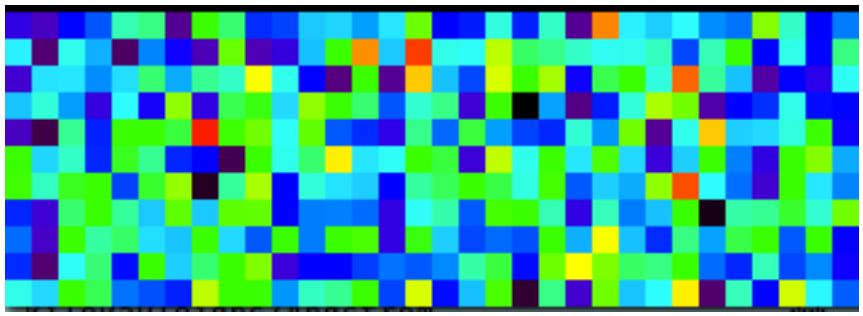
2005-334T18:49

Alt= 1,965,903 km

Longitude= 22°W

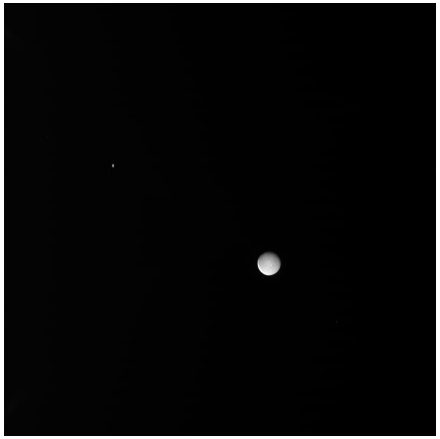
Latitude=1.1°N

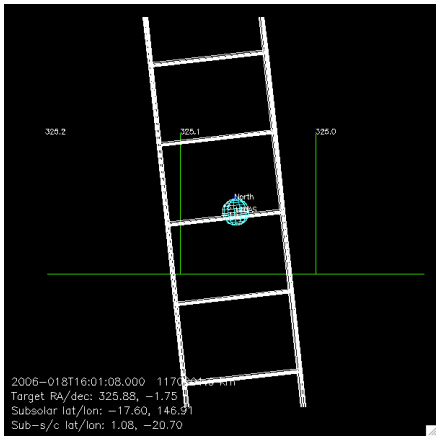
Phase= 115.4°

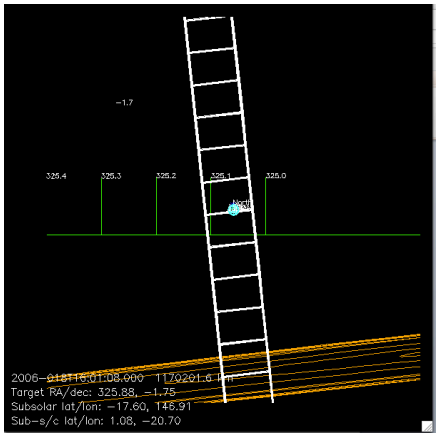


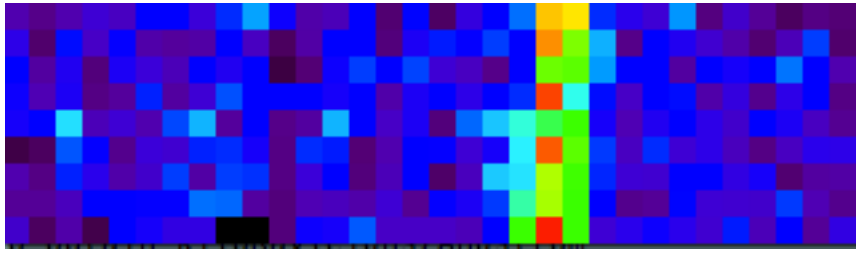
Low SNR

020MI_022W158PH001_ISS





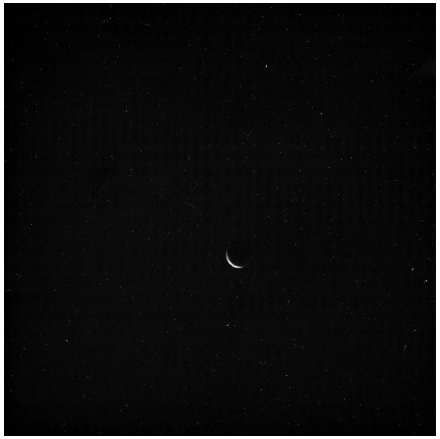


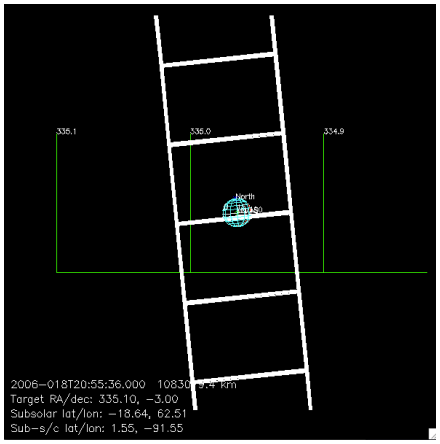


rings

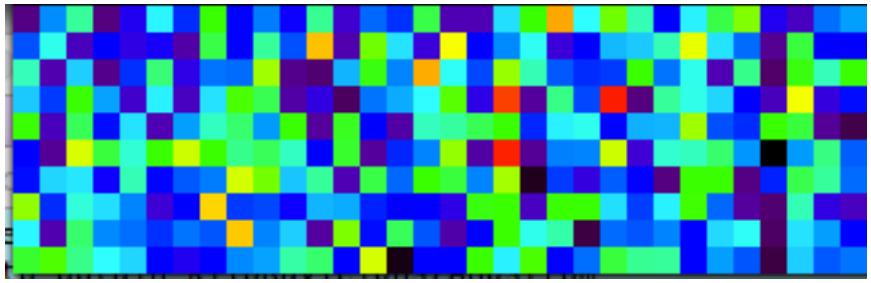
020MI_ICYLON001_ISS
2006-018T16:02
Alt= 1,170,147 km
Longitude= 22°W
Latitude=1°N
Phase= 157°

020MI_094W151PH001_ISS



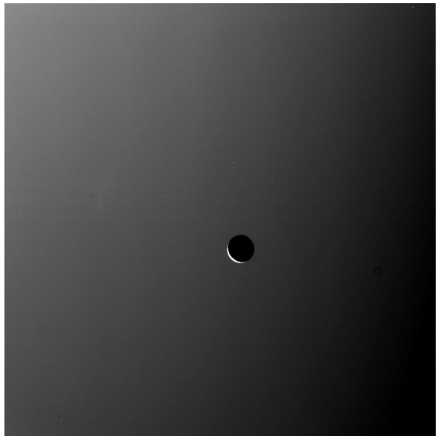


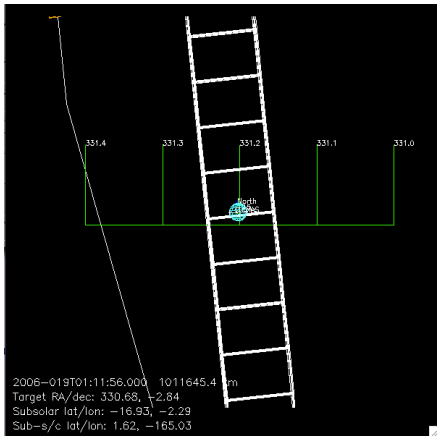
020MI_ICYLON006_ISS
2006-018T20:56
Alt= 1,078,610 km
Longitude= 94°W
Latitude=1.6°N
Phase= 151°



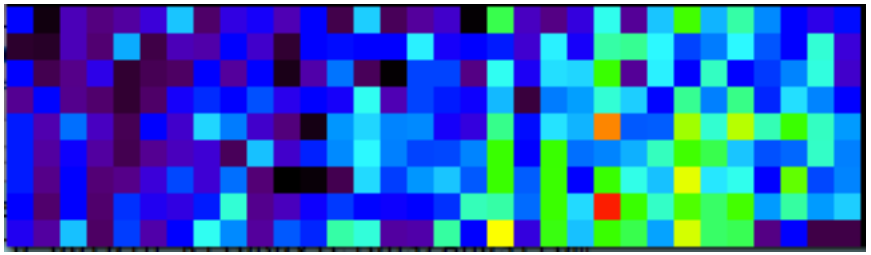
Low SNR

020MI_166W154PH001_ISS



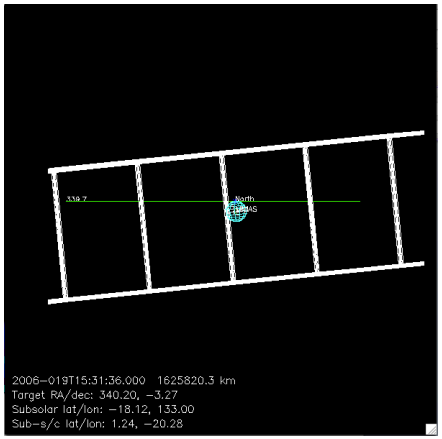


020MI_ICYLON008_ISS
2006-019T01:12
Alt= 1,012,313 km
Longitude= 167°W
Latitude=1.6°N
Phase= 154°

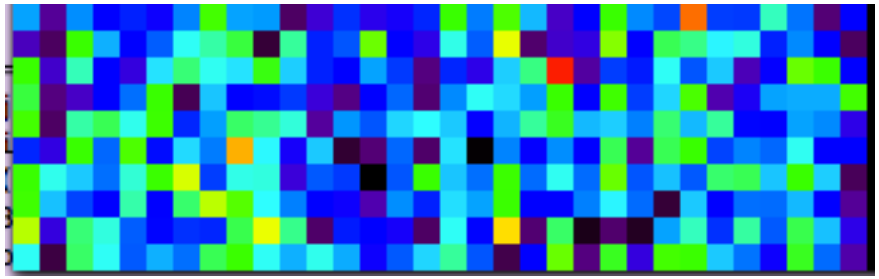


In front of Saturn

020MI_022W147PH001_ISS

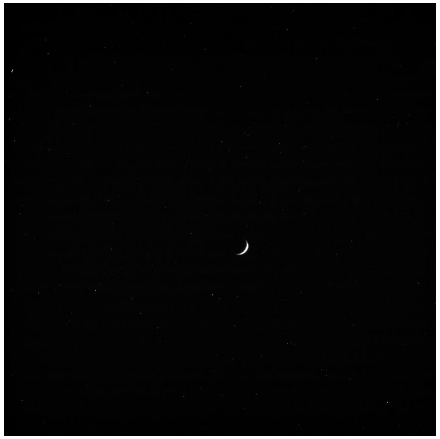


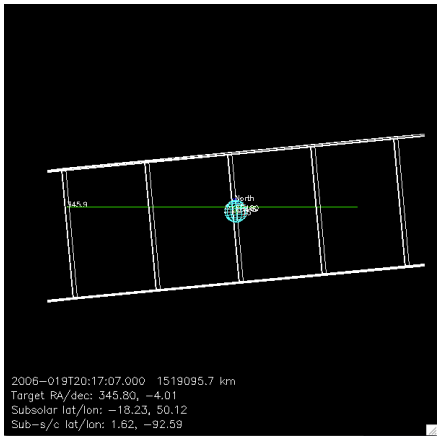
020MI_ICYLON011_ISS
2006-019T15:31
Alt= 1,625,132 km
Longitude= 22°W
Latitude=1.3°N
Phase= 146.8°



Low SNR

020MI_094W142PH001_ISS

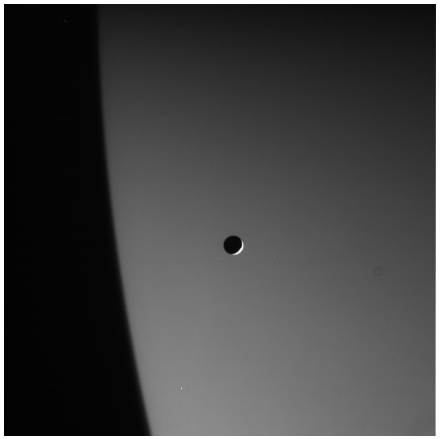


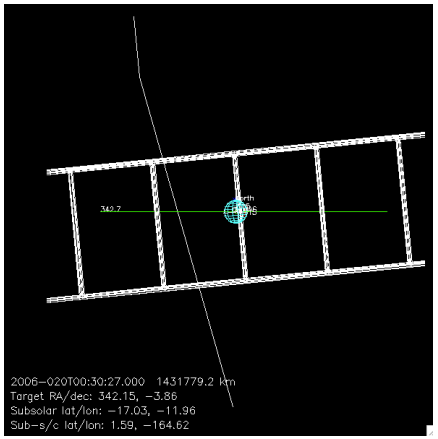


020MI_ICYLON013_ISS
2006-019T20:10
Alt= 1,517,803 km
Longitude= 93°W
Latitude=1.6°N
Phase= 142°

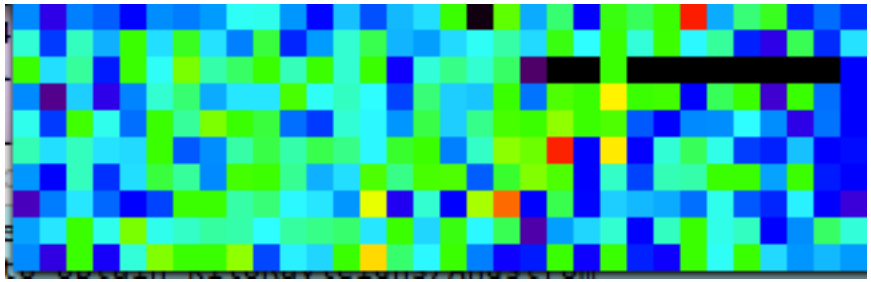
Low SNR

020MI_166W145PH001_ISS



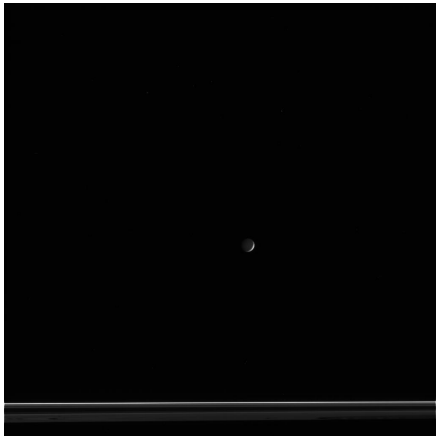


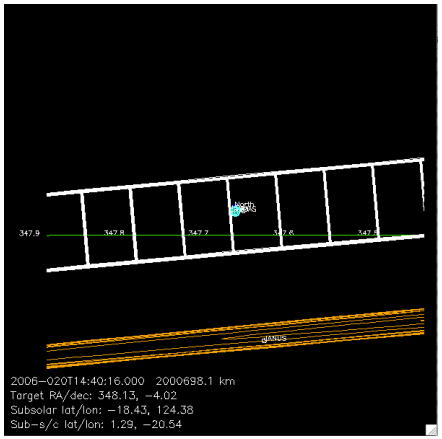
020MI_ICYLON016_ISS
2006-020T00:25
Alt= 1,431,845 km
Longitude= 166°W
Latitude=1.6°N
Phase= 145°



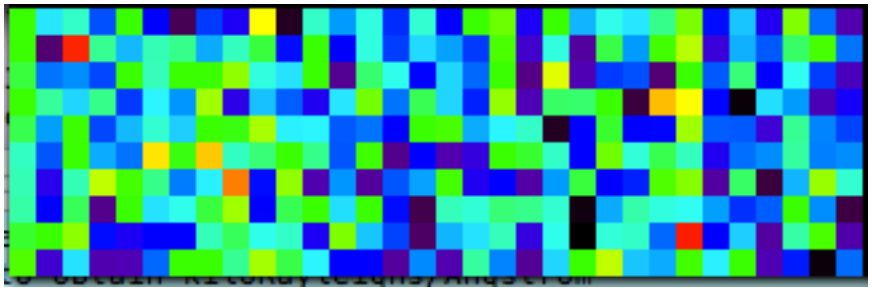
In front of Saturn

020MI_022W140PH001_ISS



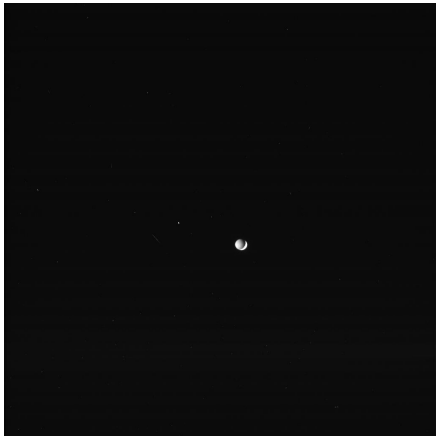


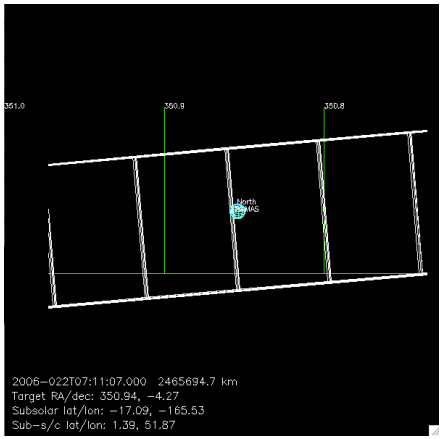
020MI_ICYLON017_ISS
2006-020T14:41
Alt= 1,999,539 km
Longitude= 22.5°W
Latitude=1.3°N
Phase= 140.2°



Low SNR

020MI_310W138PH001_ISS

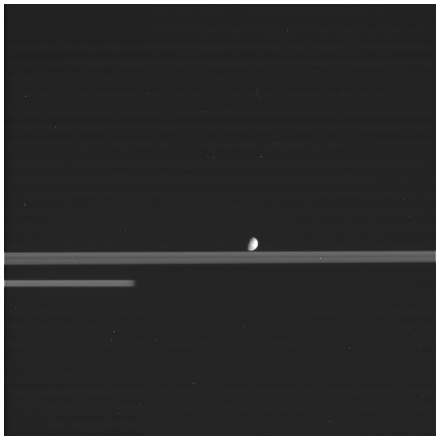


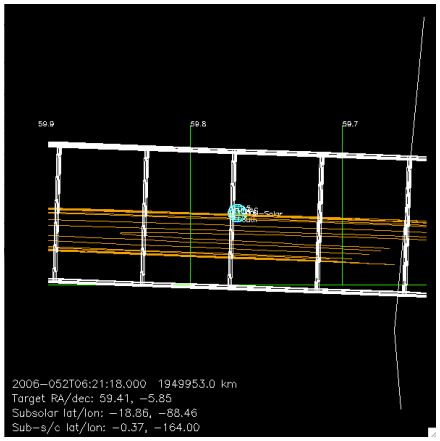


020MI_ICYLON019_ISS
2006-022T07:12
Alt= 2,468,234 km
Longitude= 309°W
Latitude=1.4°N
Phase= 137.6°

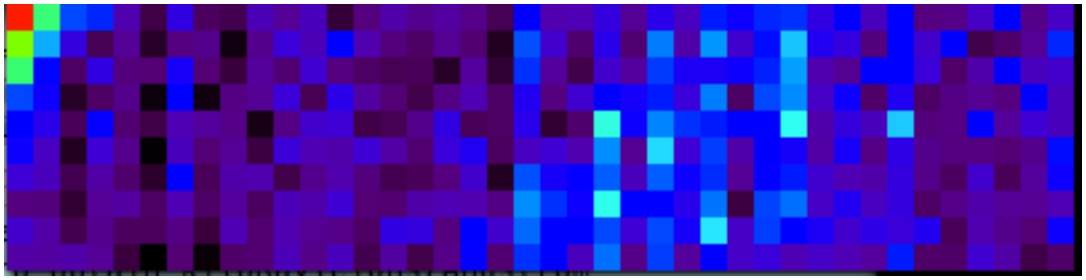
Low SNR

021MI_166W075PH001_ISS

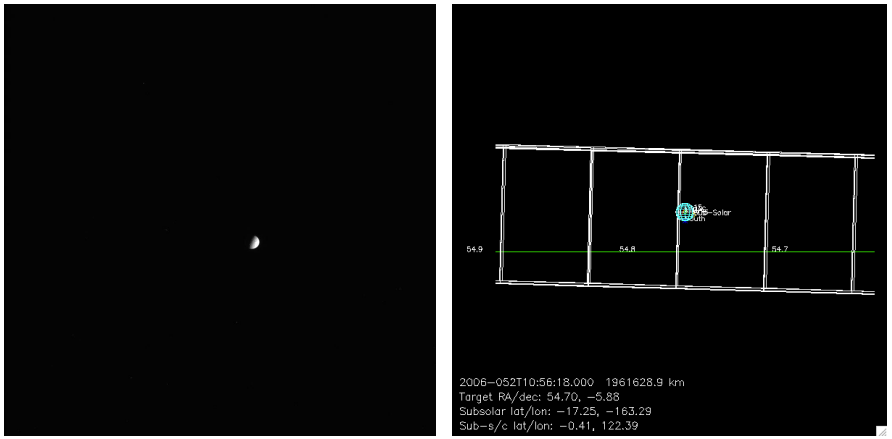




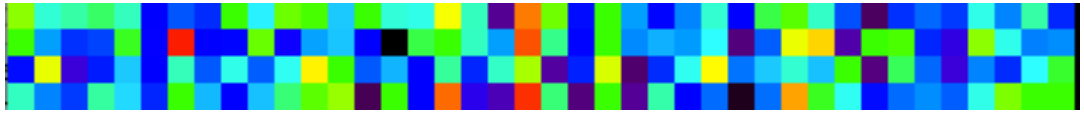
021MI_ICYLON001_ISS
2006-052T06:21
Alt= 1,945,526 km
Longitude= 166°W
Latitude=0.4°S
Phase= 74.7°



021MI_238W079PH001_ISS

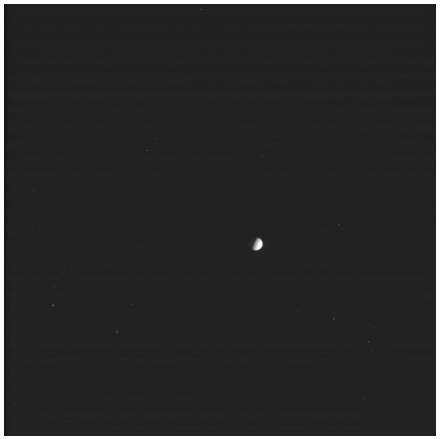


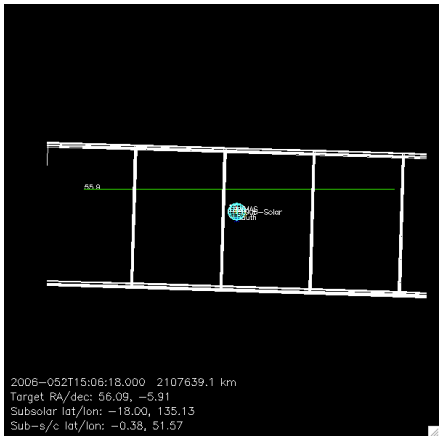
021MI_ICYLON002_ISS
2006-052T10:57
Alt= 1,962,949 km
Longitude= 238°W
Latitude=0.4°S
Phase= 79.3°



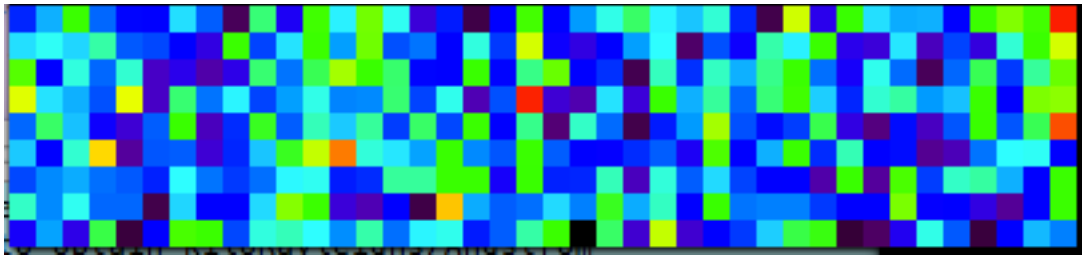
Low SNR

021MI_310W078PH001_ISS



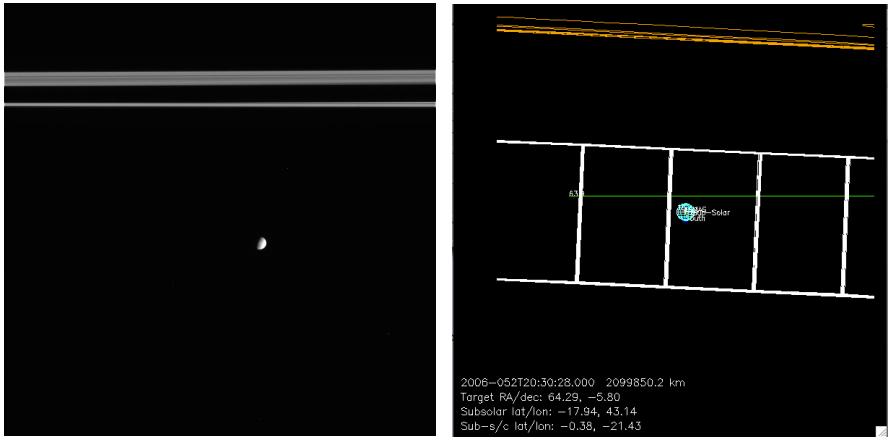


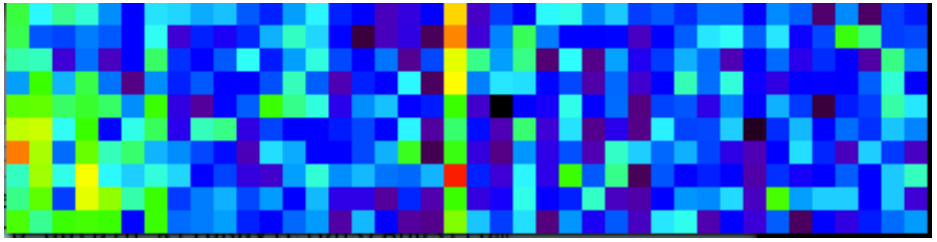
021MI_ICYLON003_ISS
2006-052T15:07
Alt= 2,111,167 km
Longitude= 311°W
Latitude=0.4°S
Phase= 78.2°



Low SNR

021MI_022W071PH001_ISS





021MI_ICYLON004_ISS

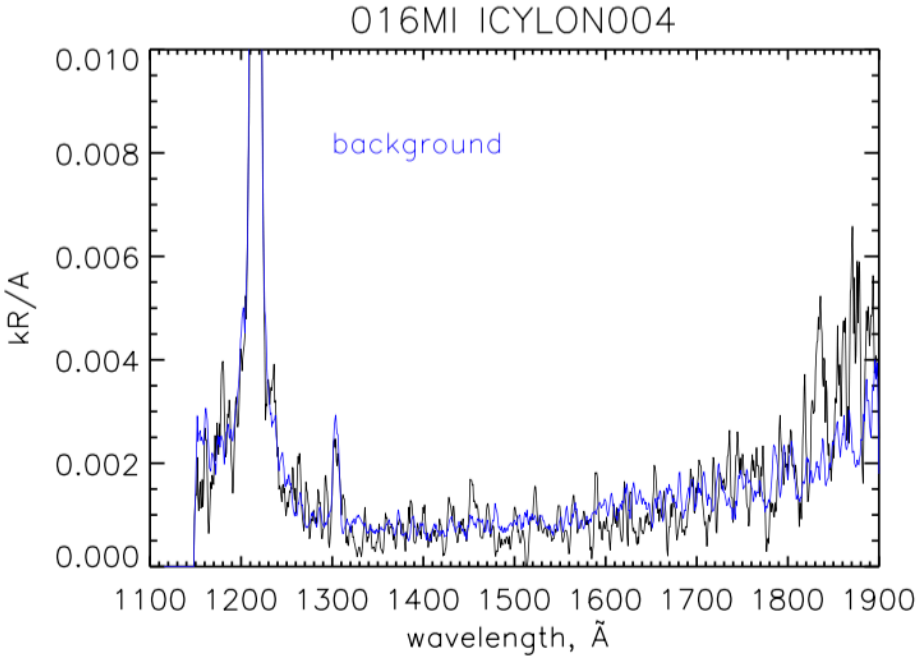
2006-052T20:31

Alt= 2,094,234 km

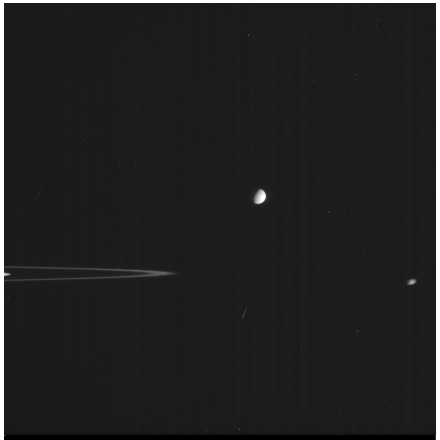
Lon= 23°W

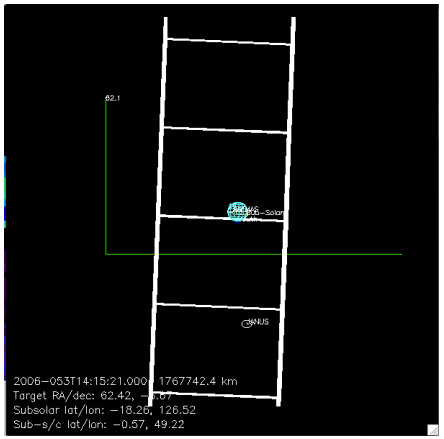
Latitude=0.38°S

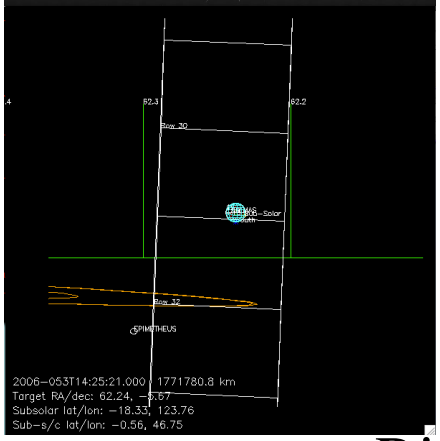
Phase= 70.6°



021MI_310W073PH001_ISS







021MI_ICYLON005_ISS

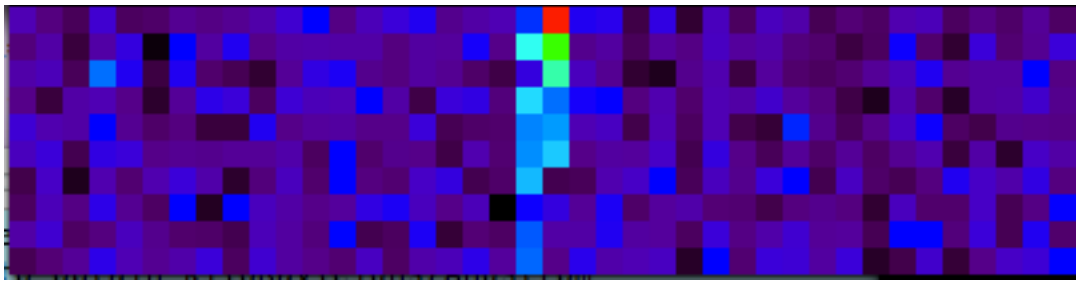
2006-053T14:16

Alt= 1,771,147 km

Longitude= 313°W

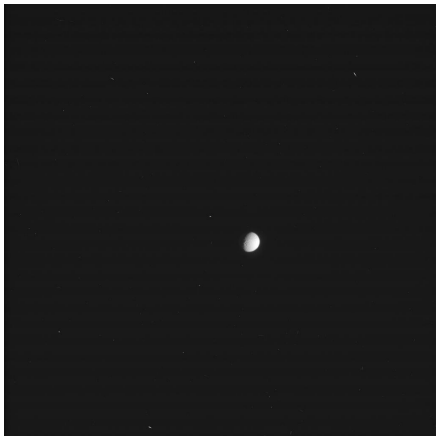
Latitude=0.6°S

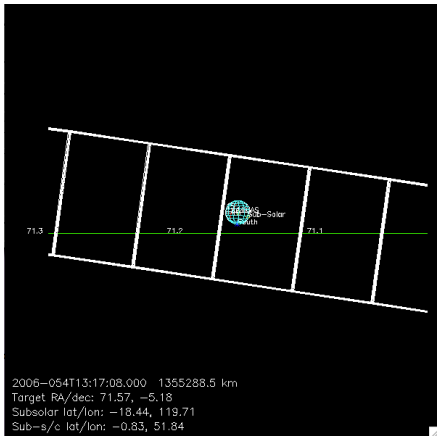
Phase= 72.2°



Rings come into slit part-way through the observation

021MI_310W064PH001_ISS





021MI_ICYLON006_ISS

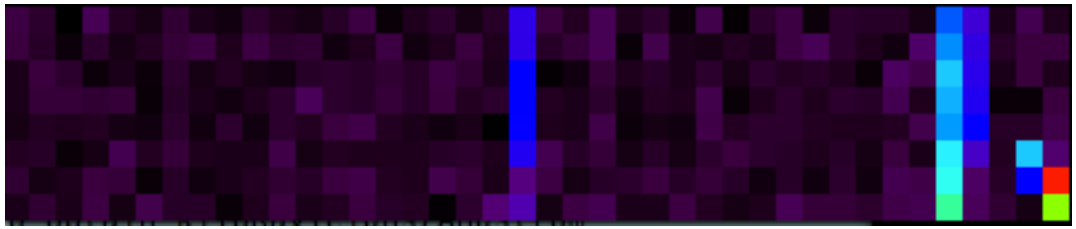
2006-054T13:18

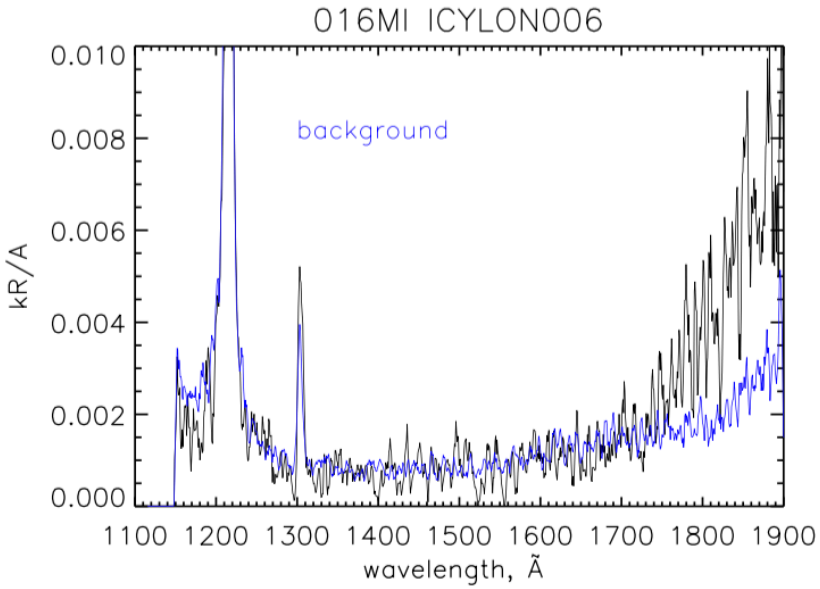
Alt= 1,357,642 km

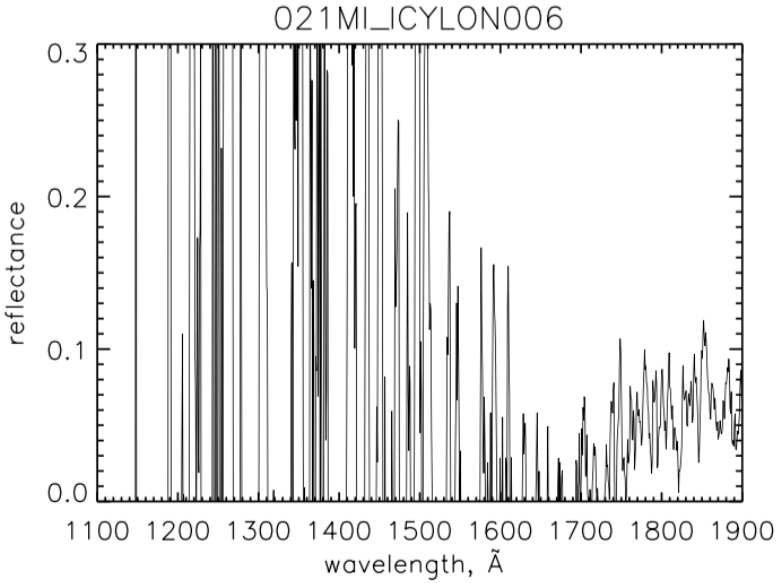
Lon= 310°W

Latitude=0.8°S

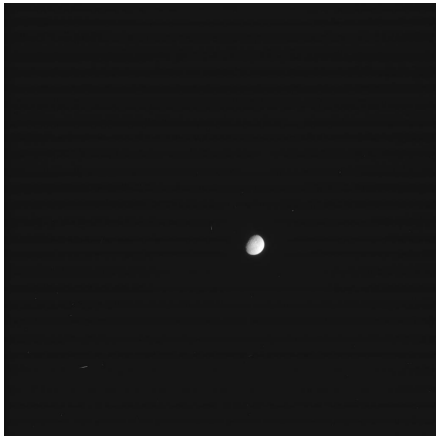
Phase= 63.7°

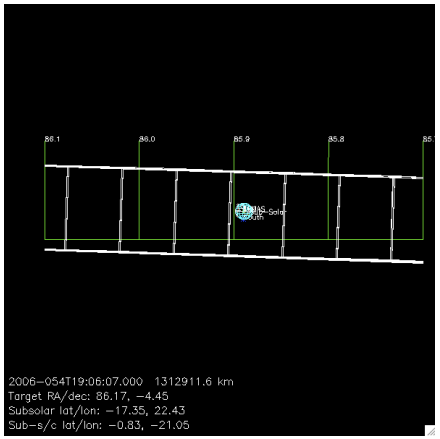






021MI_022W050PH001_ISS





021MI_ICYLON007_ISS

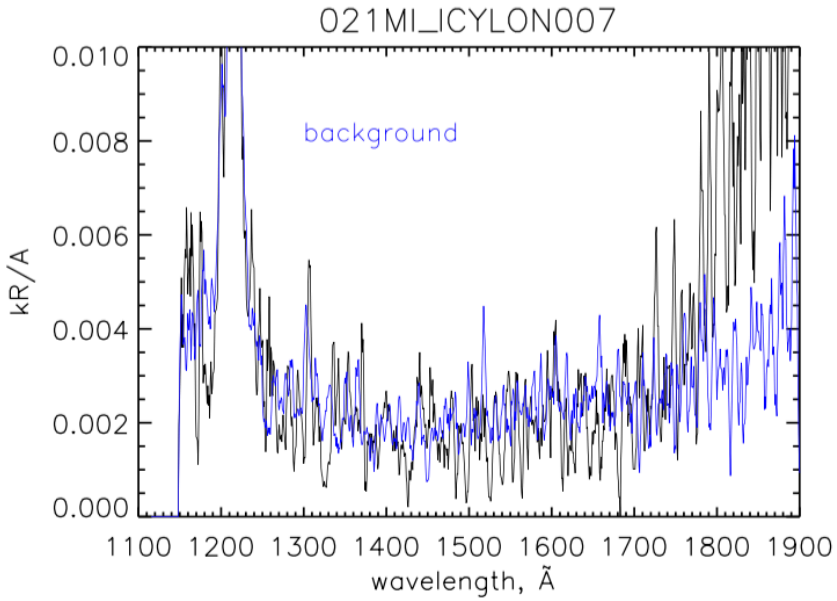
2006-054T19:07

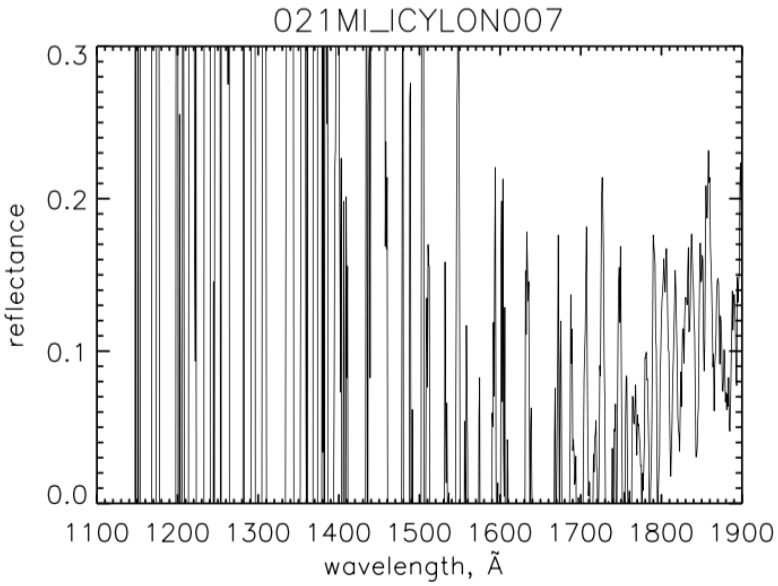
Alt= 1,310716 km

Longitude= 22°W

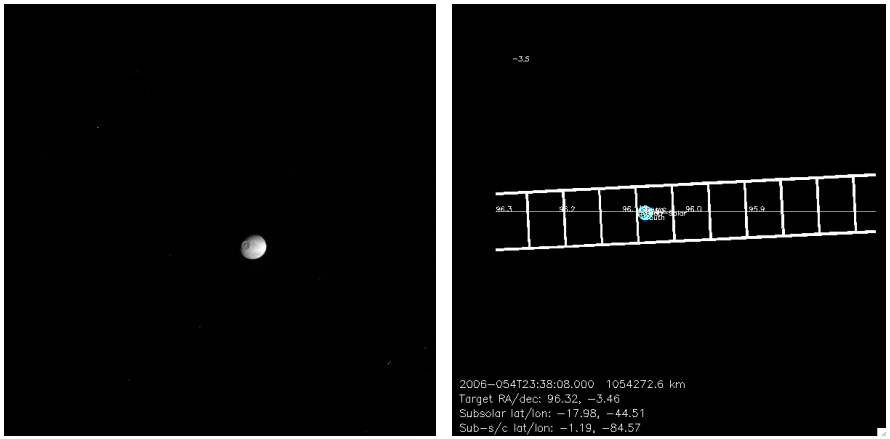
Latitude=0.8°S

Phase= 50°





021MI_094W041PH001_ISS



021MI_ICYLON008_ISS

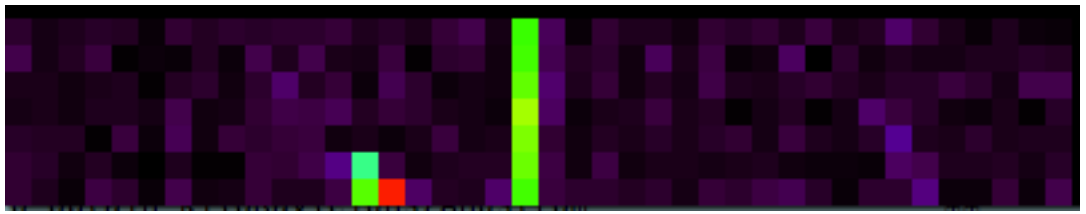
2006-054T23:39

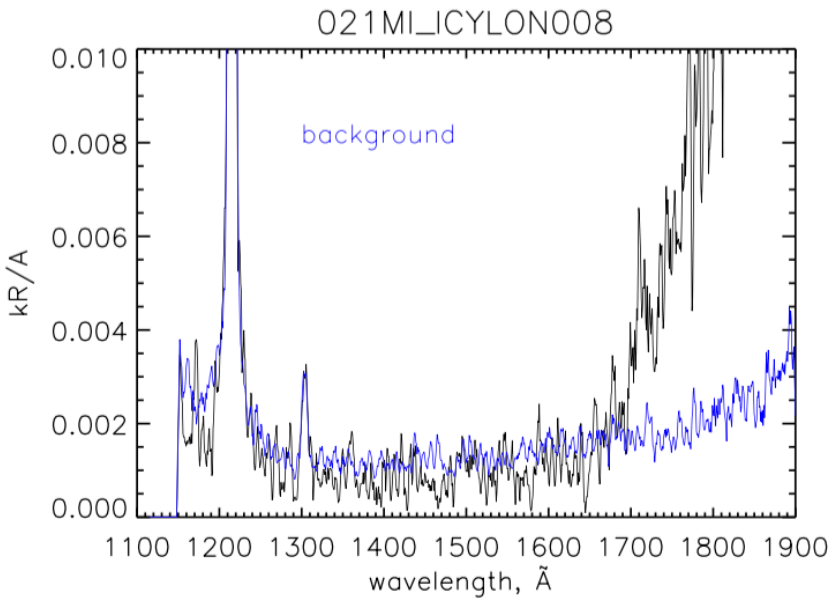
Alt= 1,047,281 km

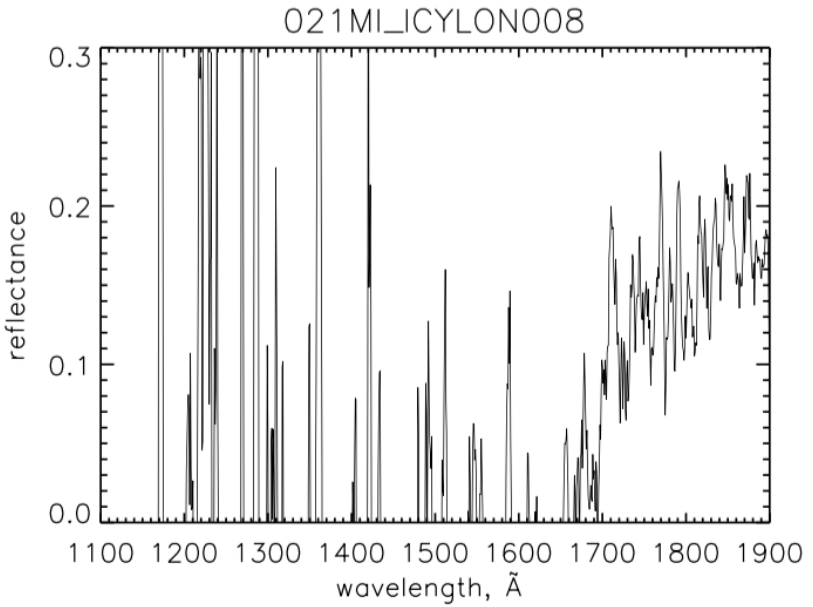
Longitude= 86°W

Latitude=1.2°S

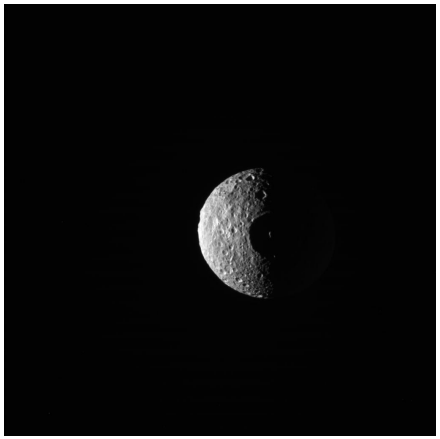
Phase= 41.1°

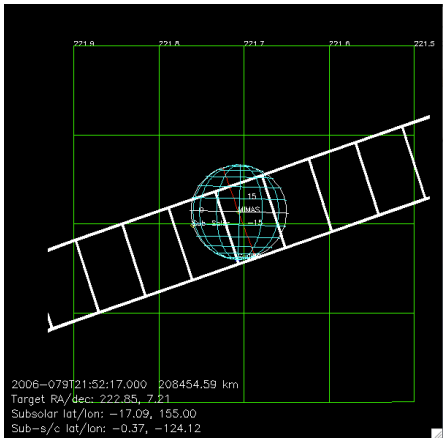






022MI_GEOLG002_ISS





022MI_ICYLON001_ISS

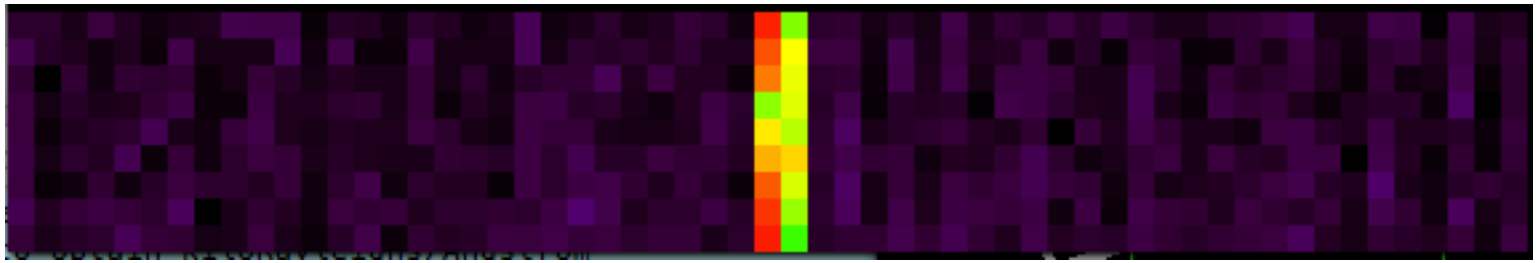
2006-079T21:53

Alt= 206,306 km

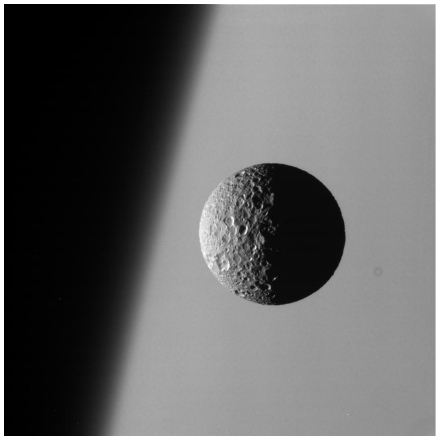
Longitude= 126°W

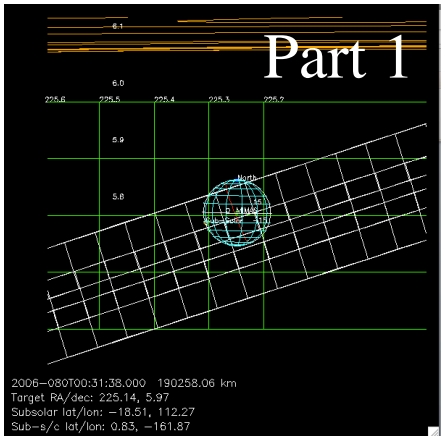
Latitude=0.3°S

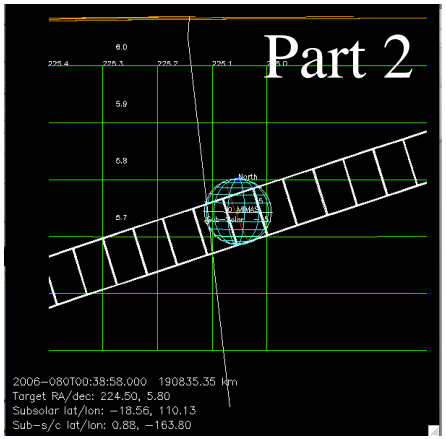
Phase= 87.7°



022MI_GEOLG003_ISS





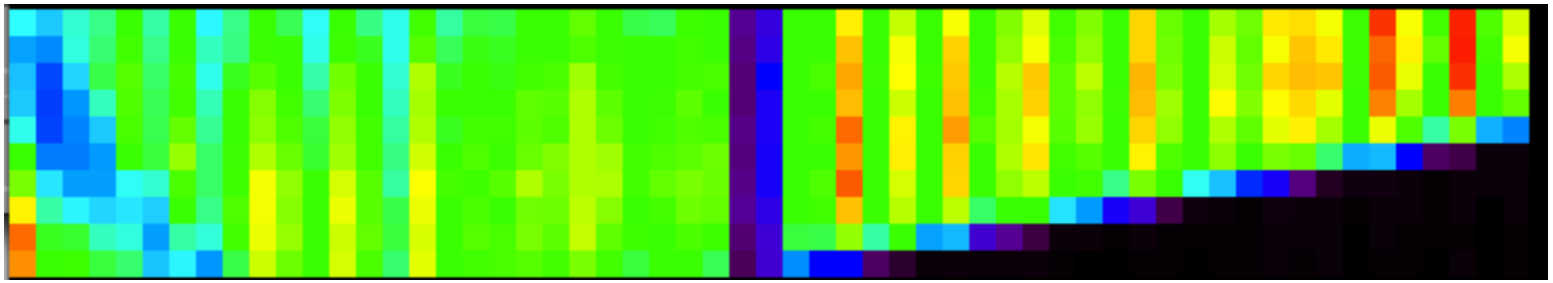


022MI_ICYLON002_ISS

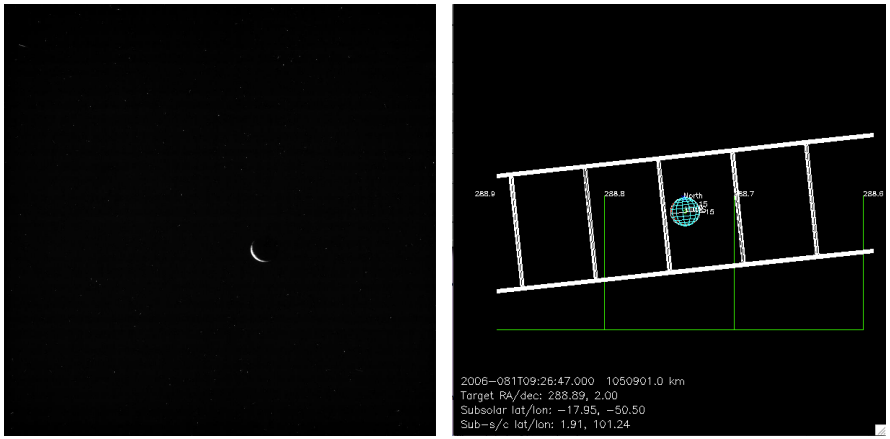
2006-080T00:32
Alt= 190,196 km
Lon= 162°W
Latitude=0.8°N
Phase= 90.8°

Part 1

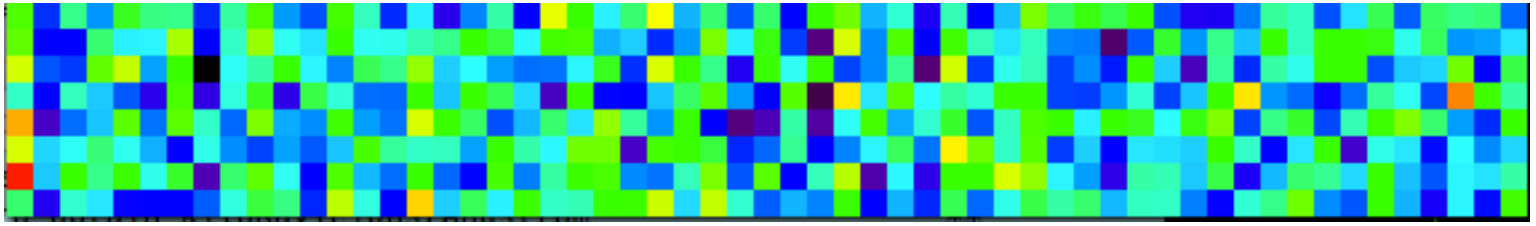
Part 2



022MI_238W149PH001_ISS

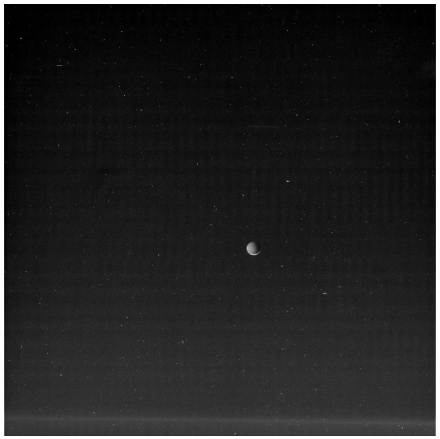


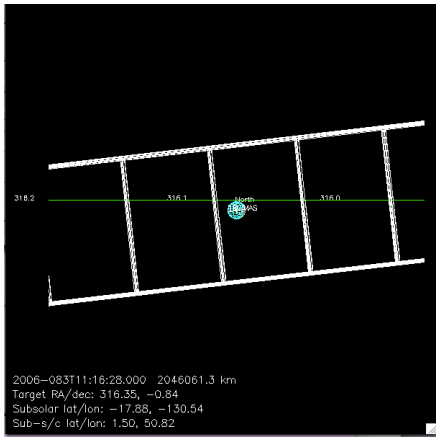
022MI_ICYLON003_ISS
2006-081T09:27
Alt= 1,058,585 km
Longitude= 261°W
Latitude=1.9°N
Phase= 149°



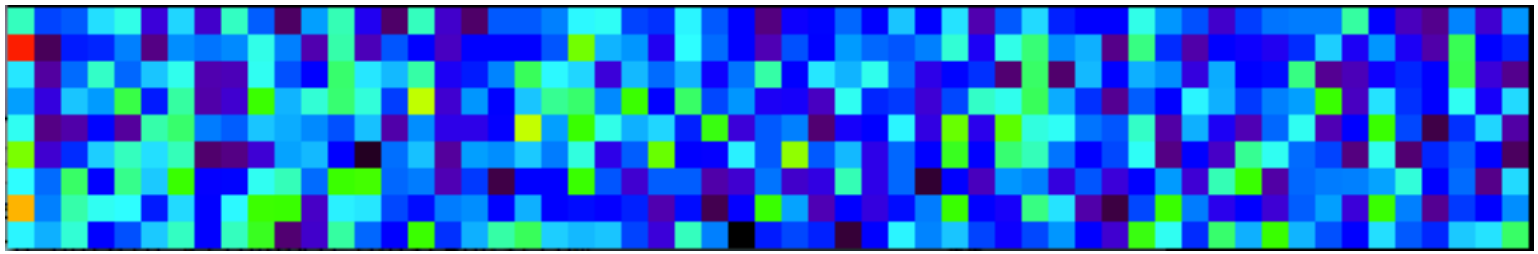
Low SNR

022MI_310W162PH001_ISS



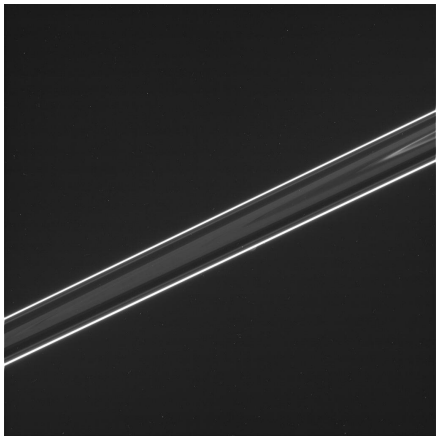


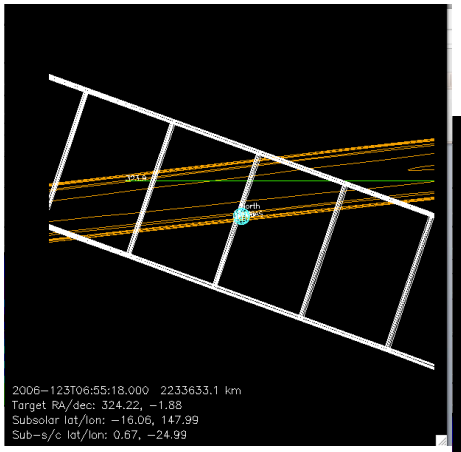
022MI_ICYLON004_ISS
2006-083T11:17
Alt= 2,053,187 km
Longitude= 311°W
Latitude=1.5°N
Phase= 162°



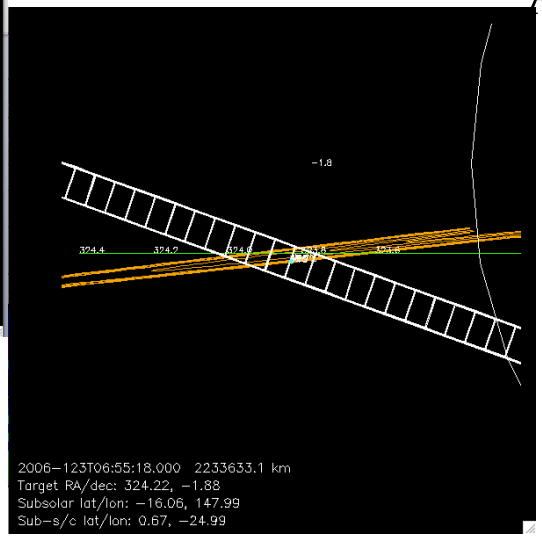
Low SNR

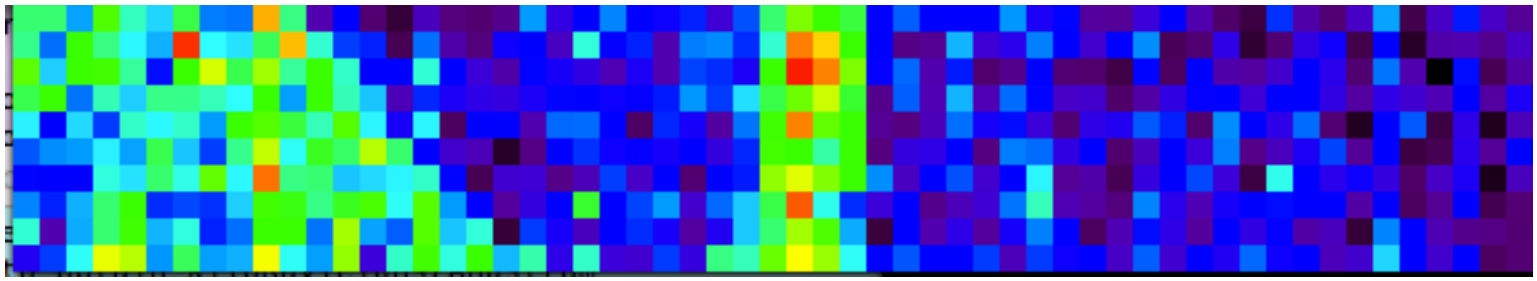
023MI_022W161PH001_ISS





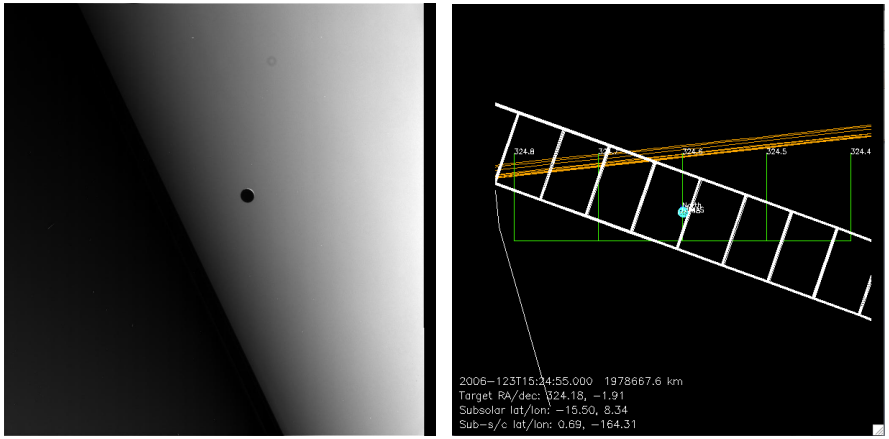
023MI_ICYLON069_ISS
2006-123T06:56
Alt= 2,231,465 km
Longitude= 27°W
Latitude=0.7°N
Phase= 161°



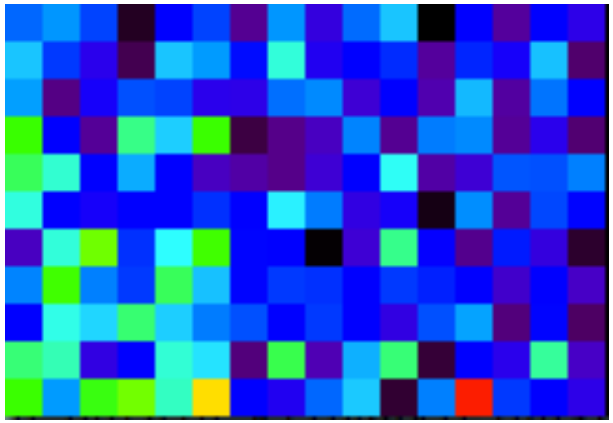


Saturn Rings + Mimas

023MI_166W161PH001_ISS

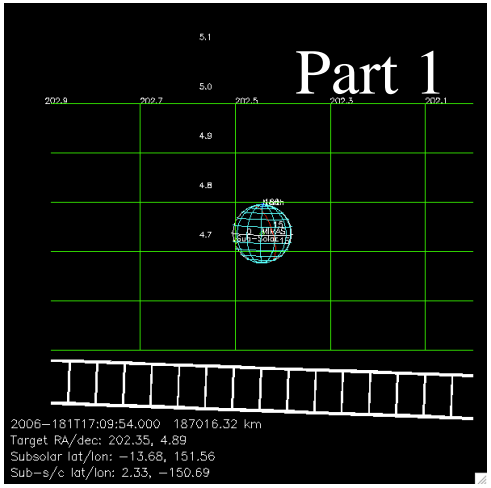


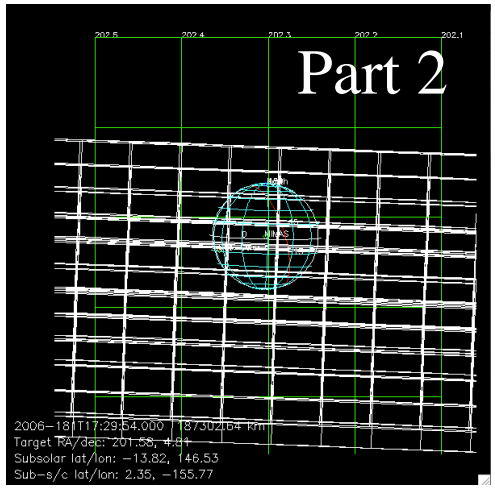
023MI_ICYLON071_ISS
2006-123T15:25
Alt= 1,977,847 km
Longitude= 167°W
Latitude=0.7°N
Phase= 160.8°



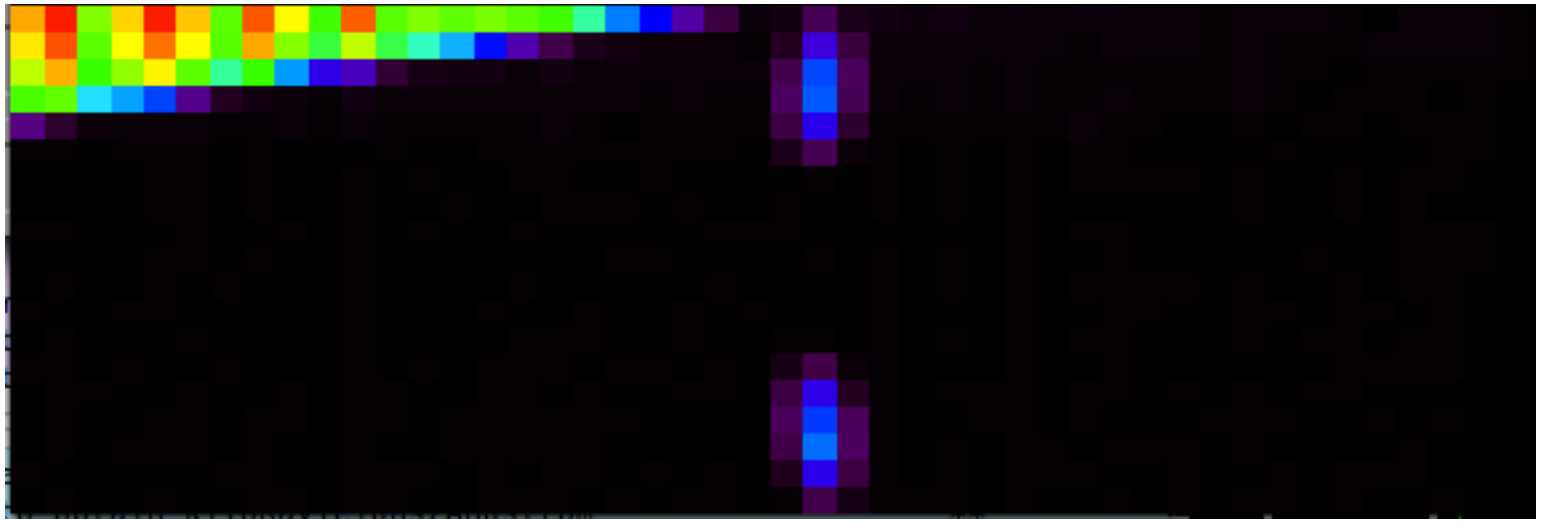
Mimas in front of Saturn

025MI_ICYLON001_CIRS
2006-181T17:10
Alt= 188,317 km
Longitude= 160°W
Latitude=2.4°N
Phase= 65.5°

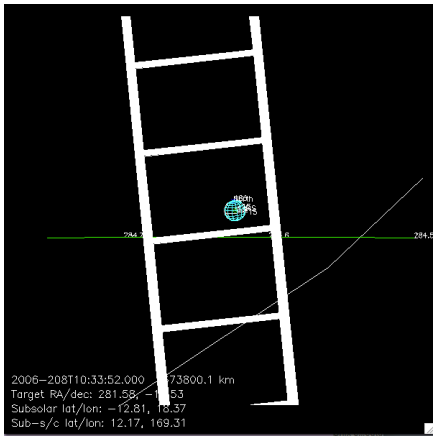




No ISS rider

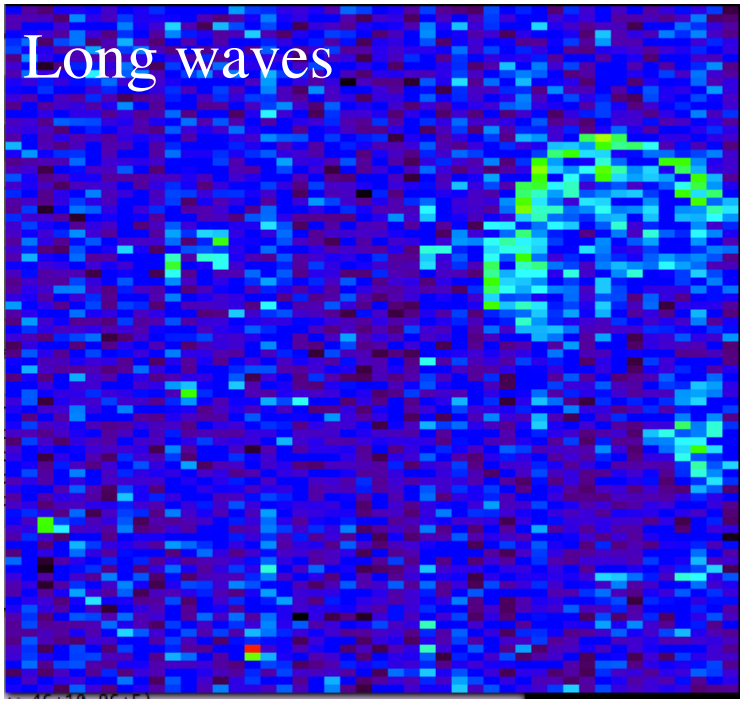


026MI_ISS_PHOTOM007

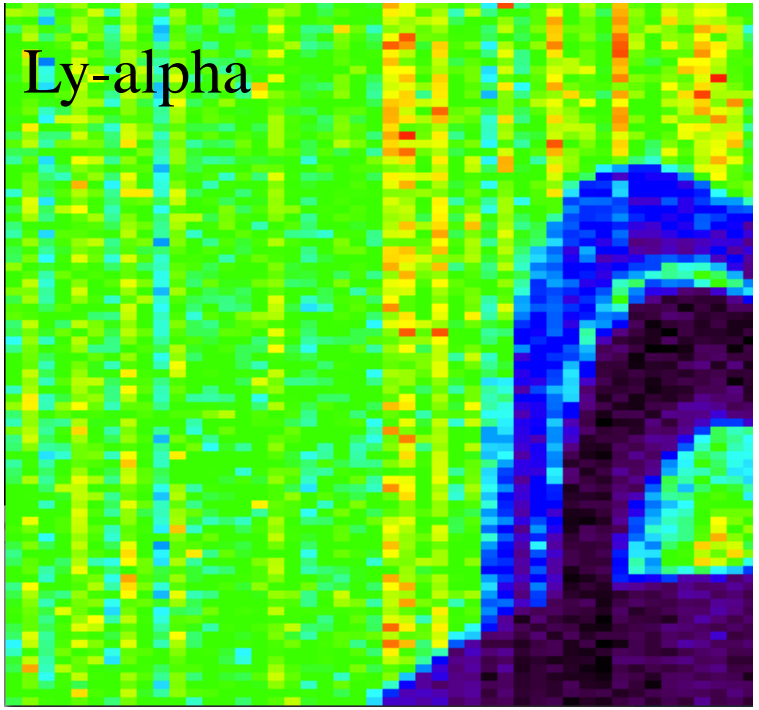


026MI_ICYLON001_ISS
2006-208T10:34
Alt= 1,723,062 km
Longitude= 213°W
Latitude=12.3°N
Phase= 146.5°

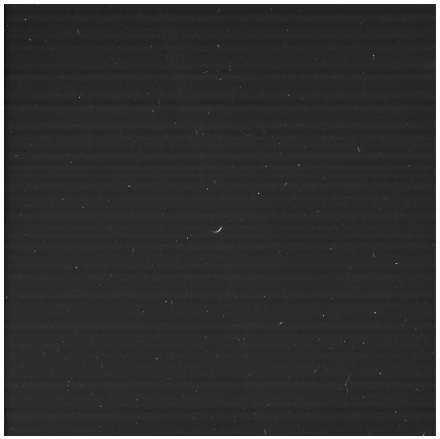
(note: the first part of this observation, at 10:05, is Dione)

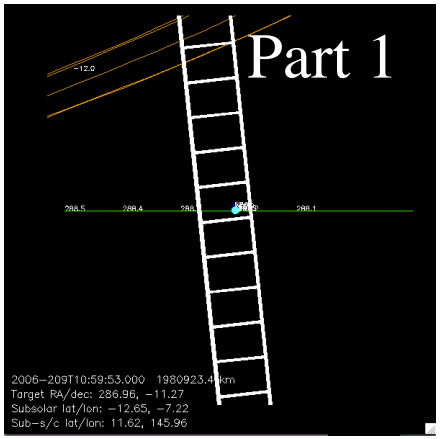


rings

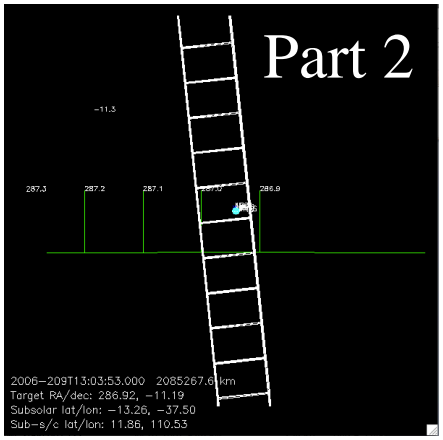


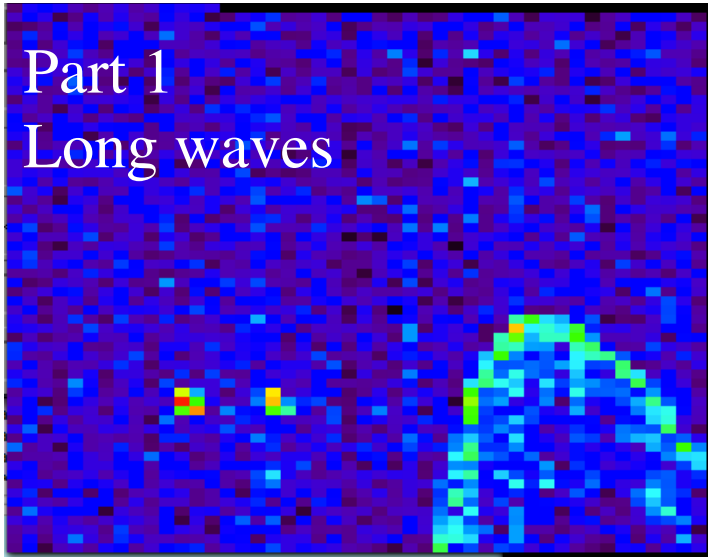
026MI_ISS_PHOTOM011

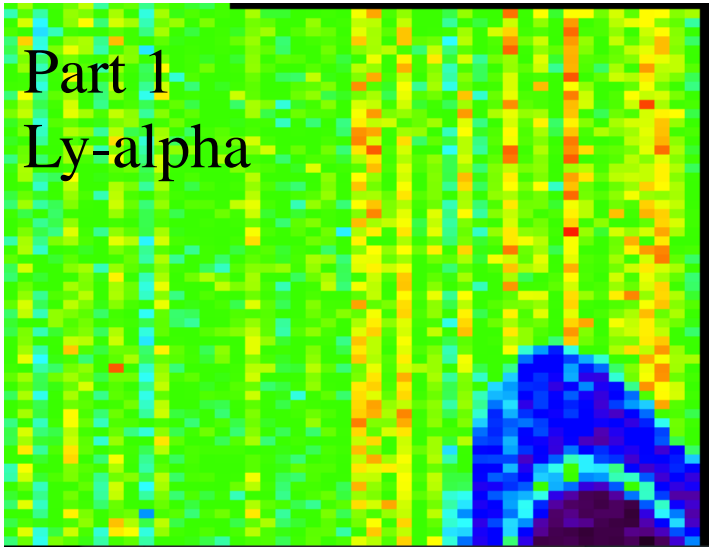




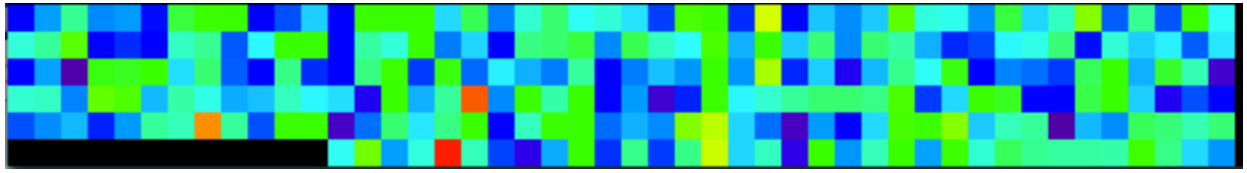
026MI_ICYLON002_ISS
2006-209T11:00
Alt= 2,027216 km
Longitude= 231°W
Latitude=11.8°N
Phase= 150.7°



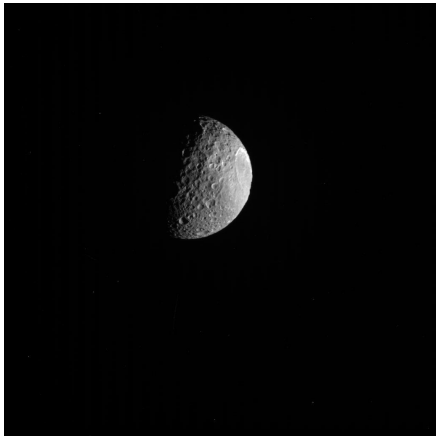


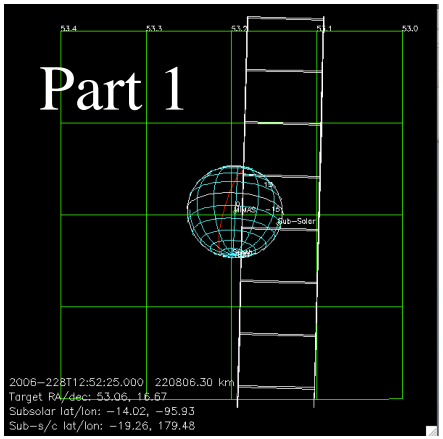


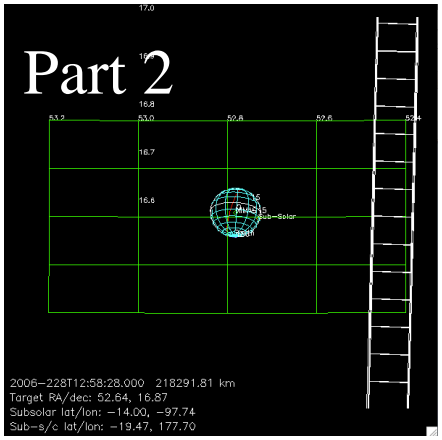
Part 2



027MI_MIMAS001_VIMS







027MI_ICYLON001_VIMS

2006-228T12:53

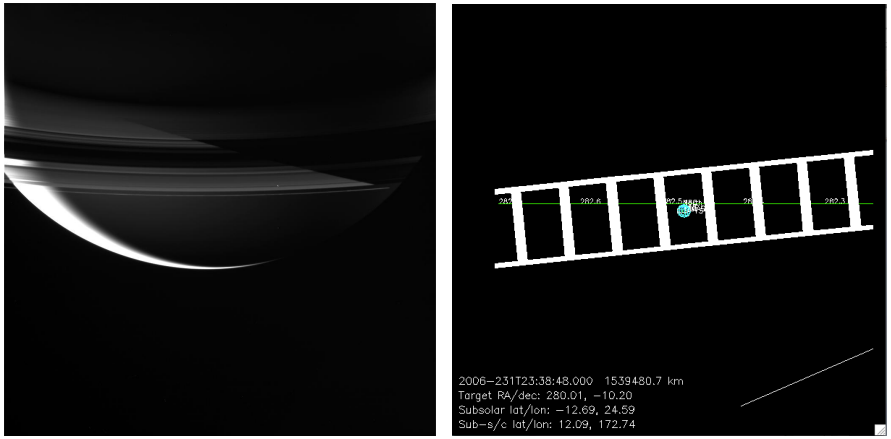
Alt= 220,178 km

Longitude= 181°W

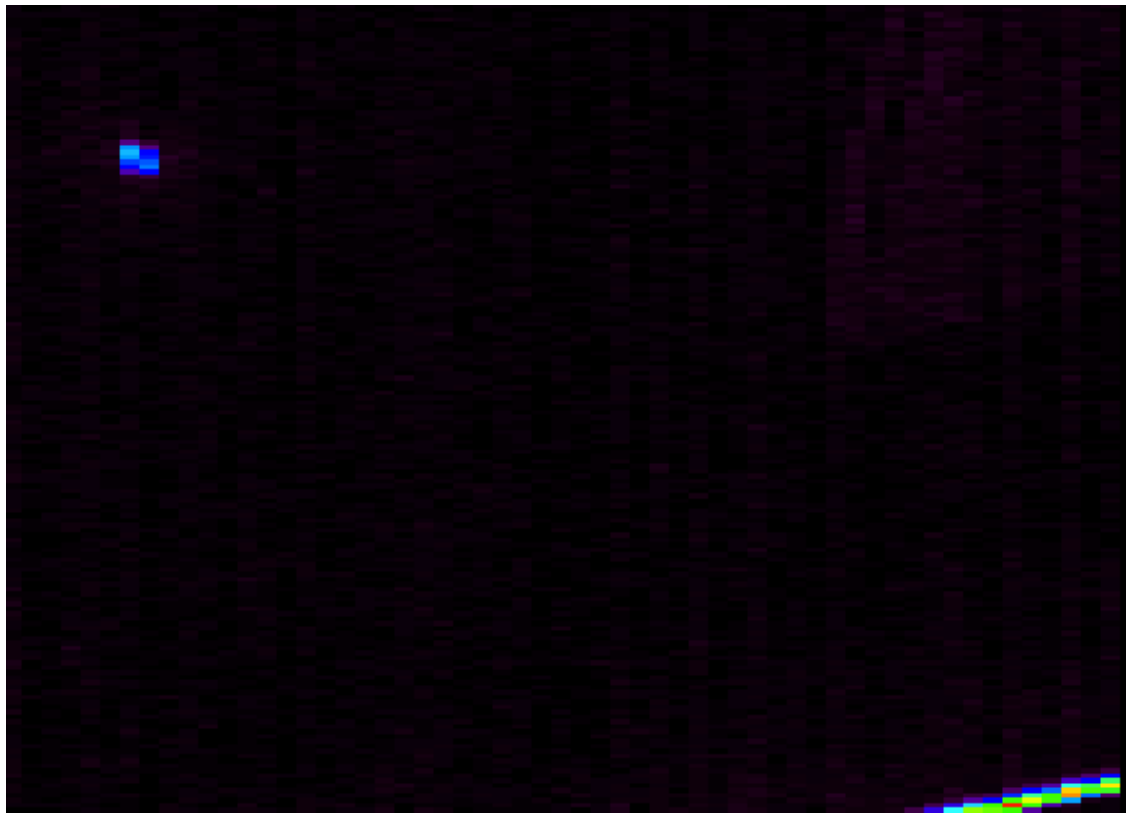
Latitude=19.3°S

Phase= 80.3°

027MI_STARE001_PRIME
2006-231T23:39
Alt= 1,689,263 km
Longitude= 243°W
Latitude=12°N
Phase= 142°



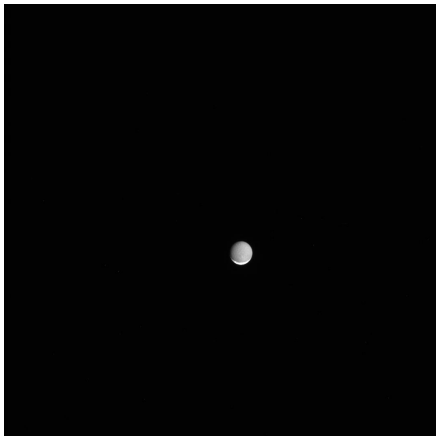
WAC image

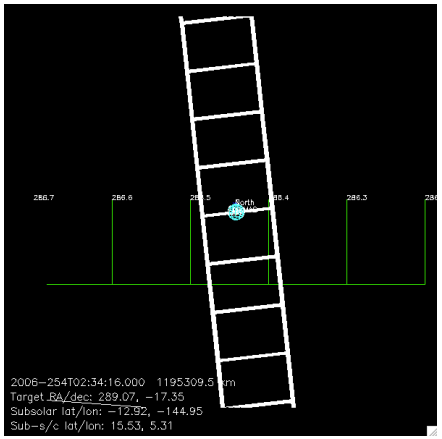


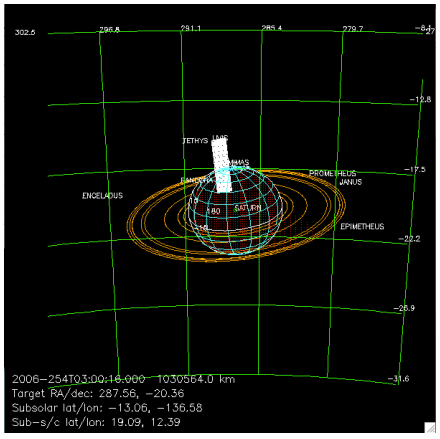
Low SNR

Saturn bright limb

028MI_ISS_PHOTOM001





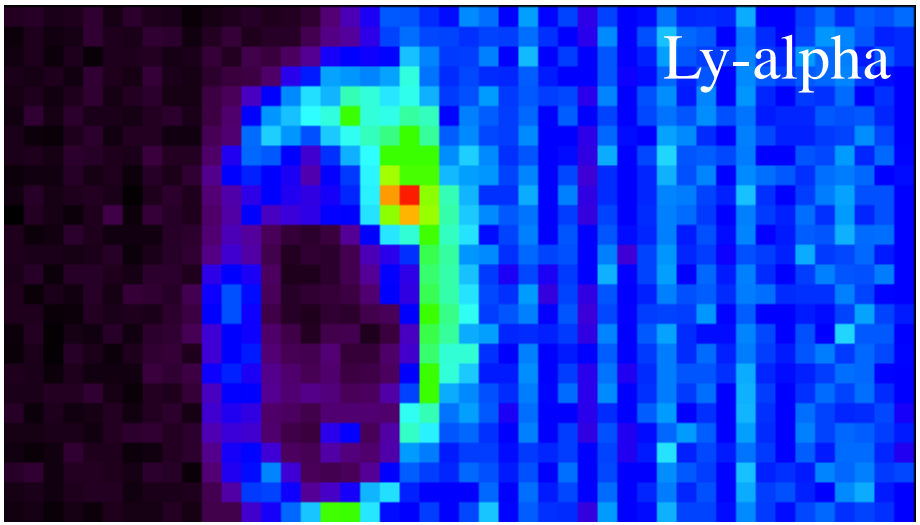


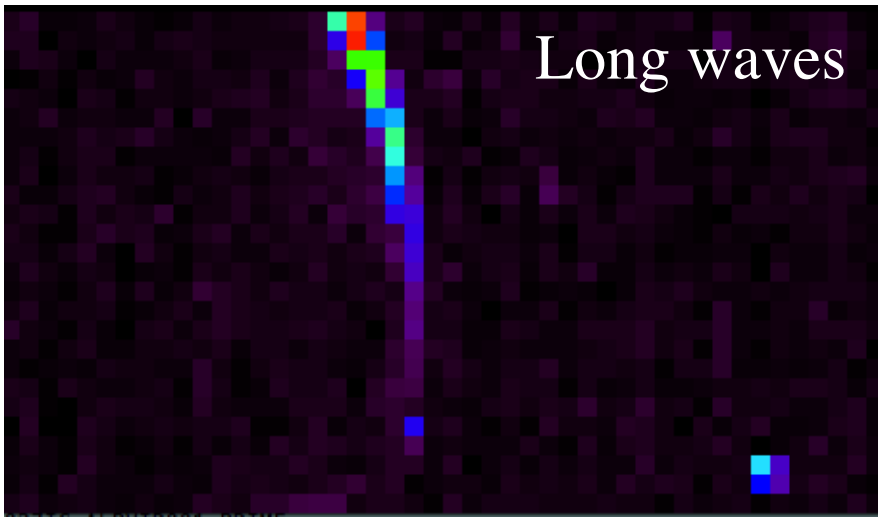
028MI_PHOTOM035_ISS
2006-254T02:35
Alt= 1,204,210 km
Longitude= 354°W
Latitude=15.5°N
Phase= 149.4°

Saturn night side

dark sky

Saturn bright limb





033MI_ICYLON001_ISS

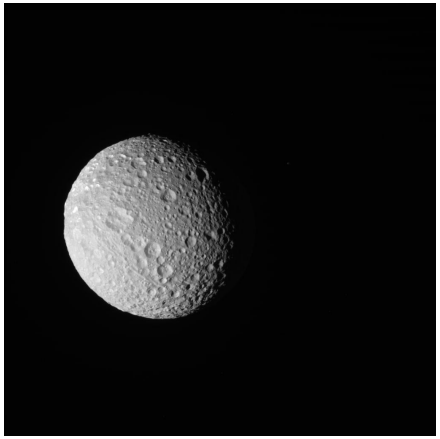
2006-324T22:47

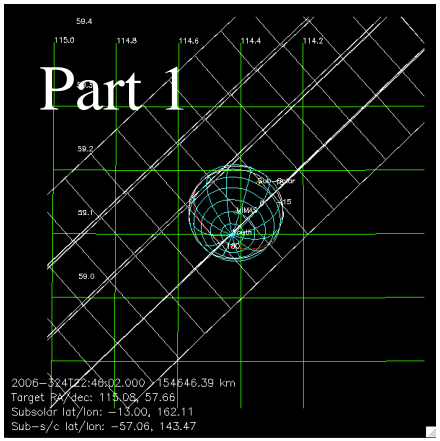
Alt= 153,678 km

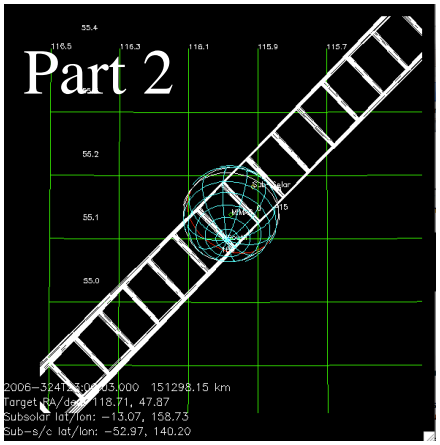
Lon= 217°W

Latitude=56.2°S

Phase= 46.6°

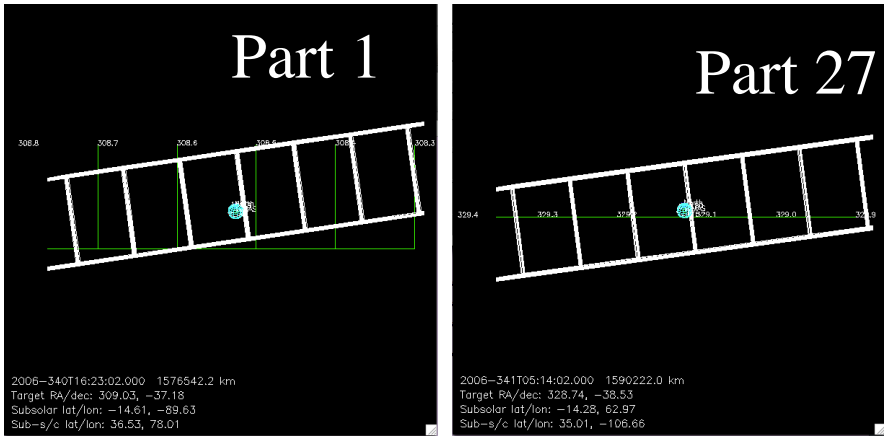






Part 1

Part 2



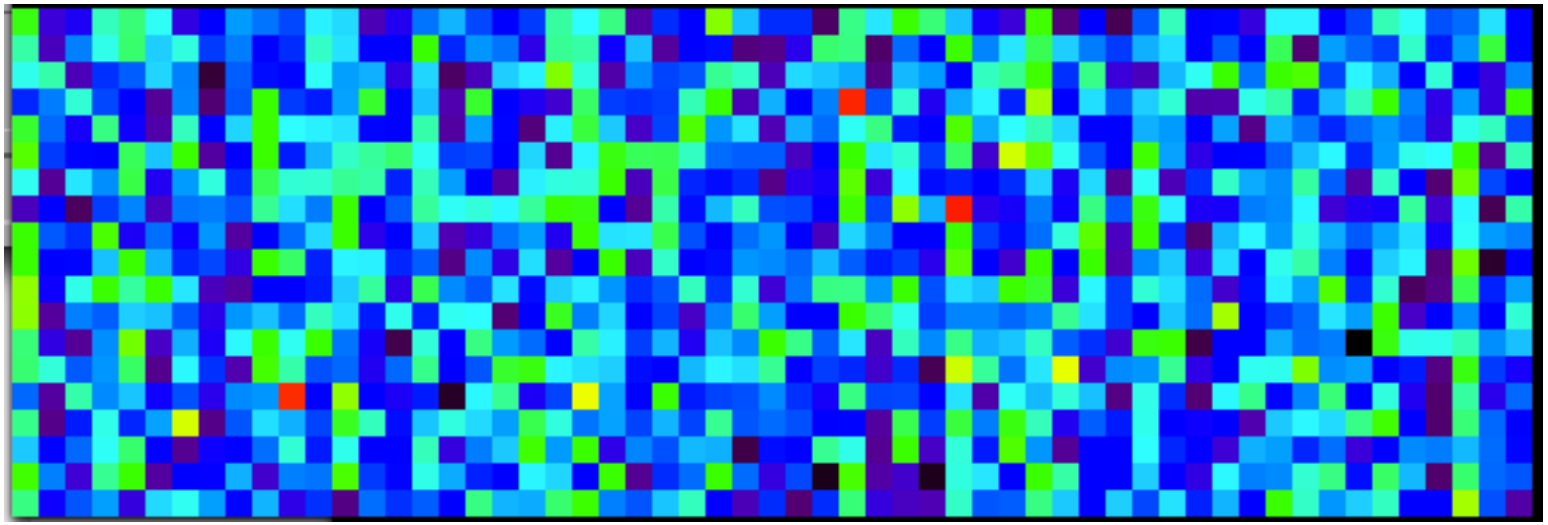
034MI_STARE001_ISS
2006-340T16:24
Alt= 1,587,053 km
Lon= 286 - 112°W
Latitude=36°N
Phase= 155.7°

27-part obs

No ISS rider

Low SNR

Part 27



CIRS_045MI_MIMASX001_PRIME

045MI_ICYLON001_CIRS

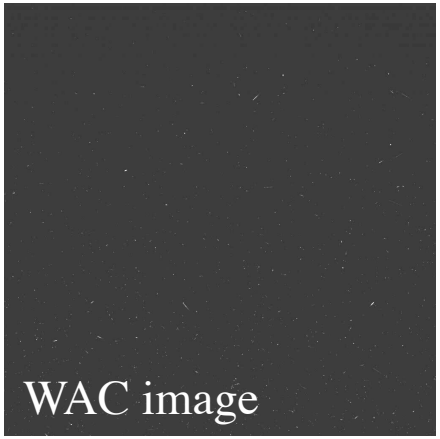
2007-146T23:16

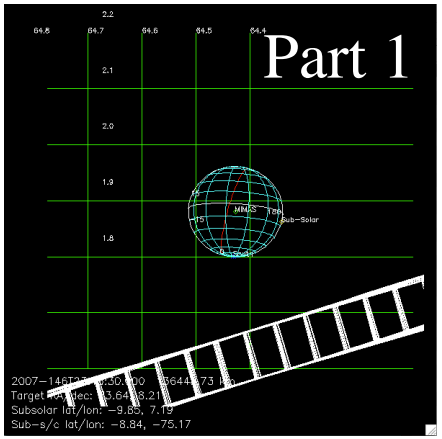
Alt= 159,813 km

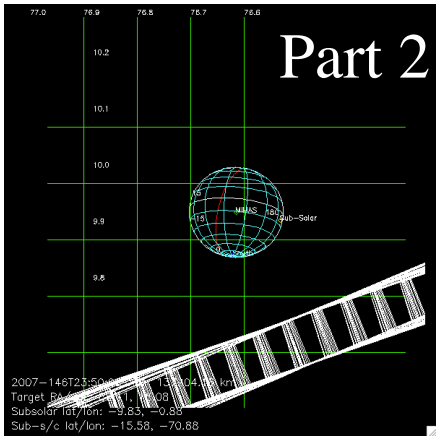
Longitude= 63°W

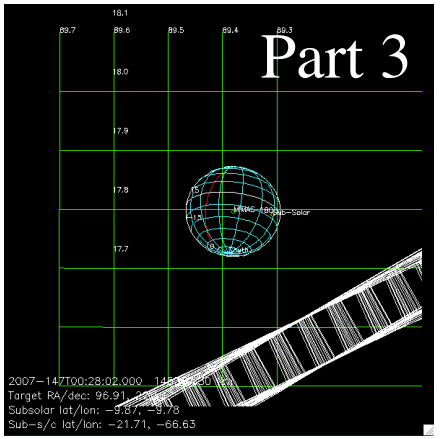
Latitude=27°S

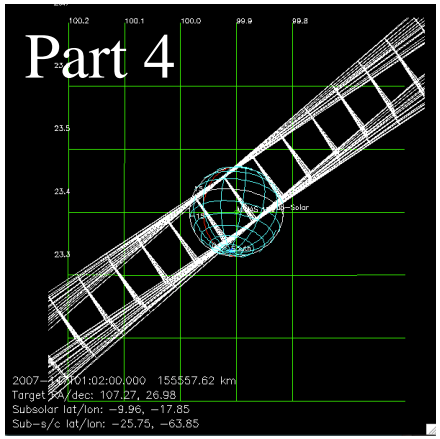
Phase= 43°



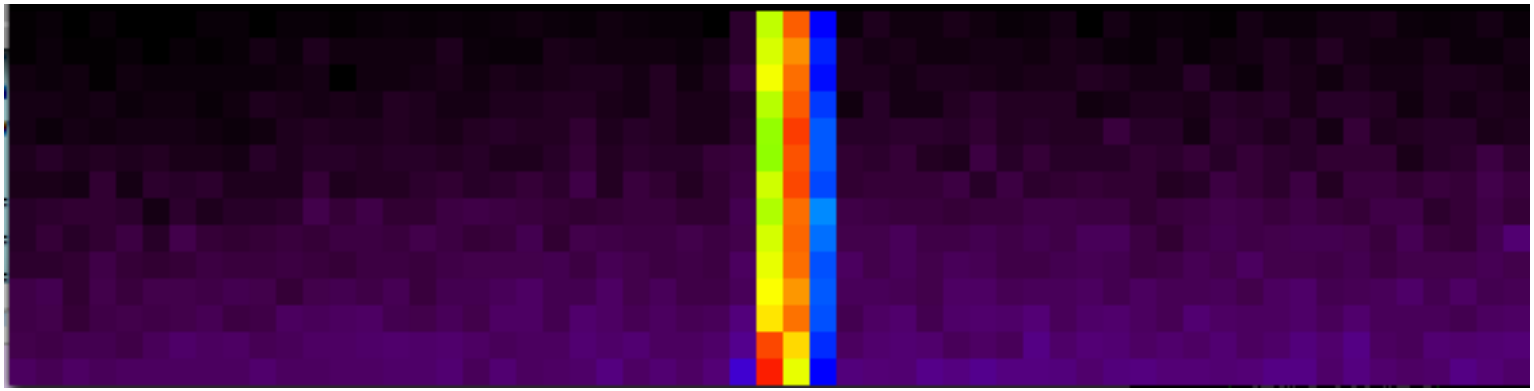








Part 4



CIRS_045MI_MIMAS002_PRIME

045MI_ICYLON002_CIRS

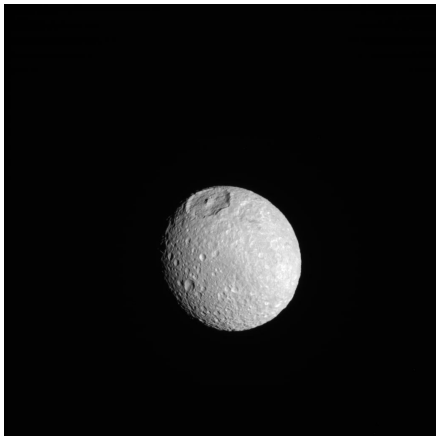
2007-147T02:42

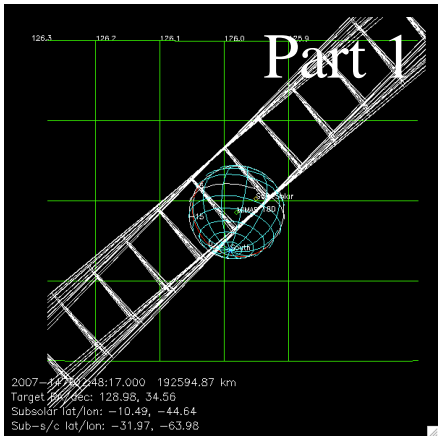
Alt= 194,897 km

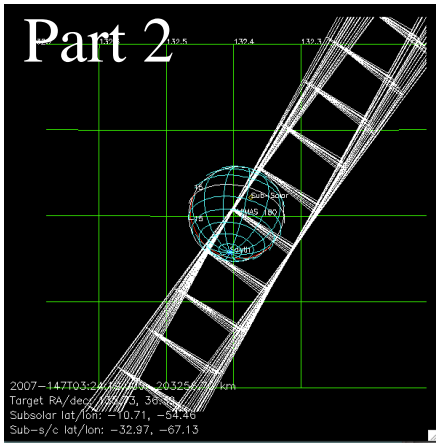
Longitude= 65°W

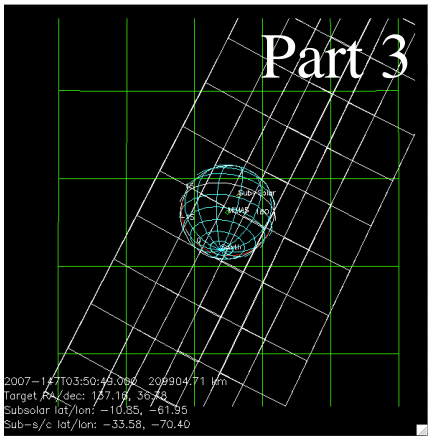
Latitude=32°S

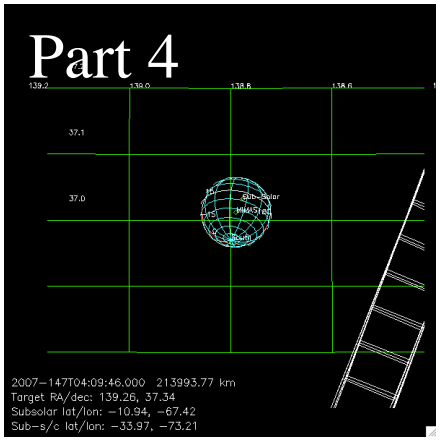
Phase= 27.2°











Part 3

045MI_ICYLON003_PRIME

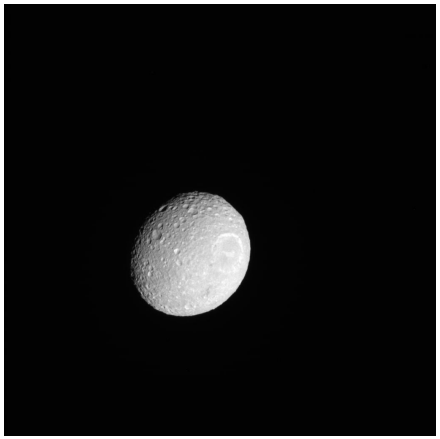
2007-147T05:52

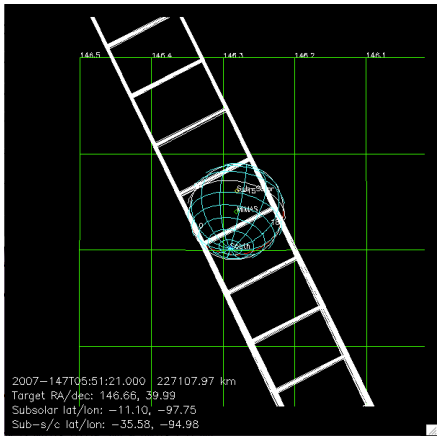
Alt= 227,720 km

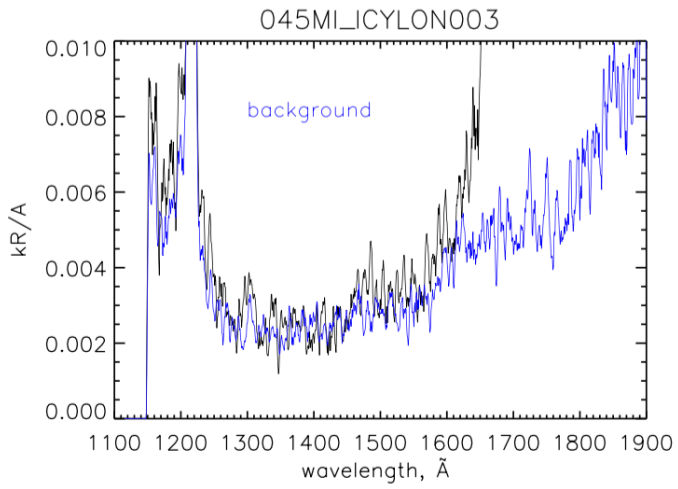
Longitude= 99°W

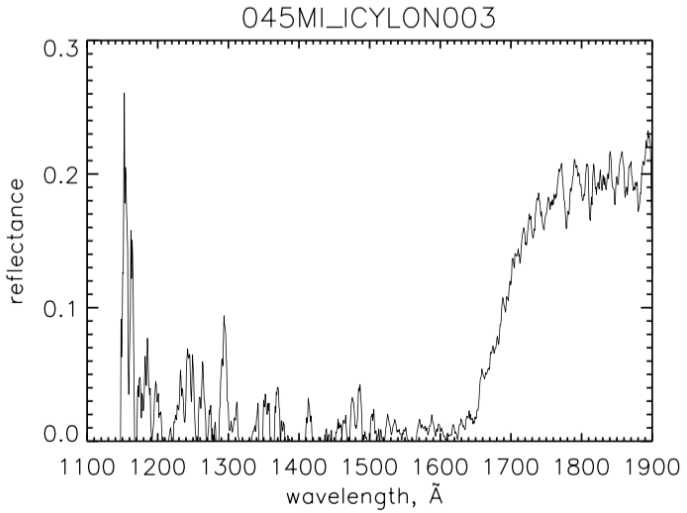
Latitude=35.7°S

Phase= 25.6°





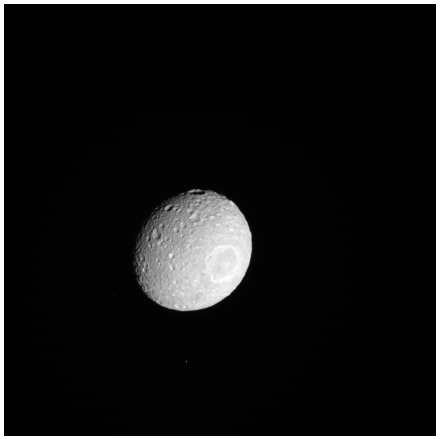


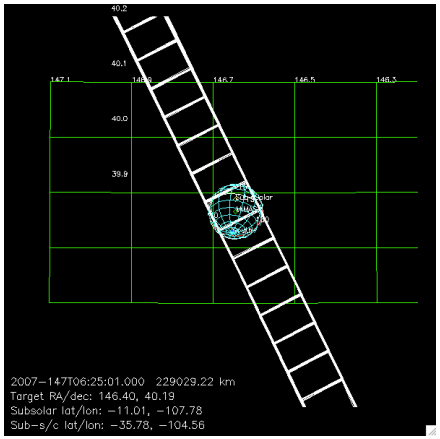


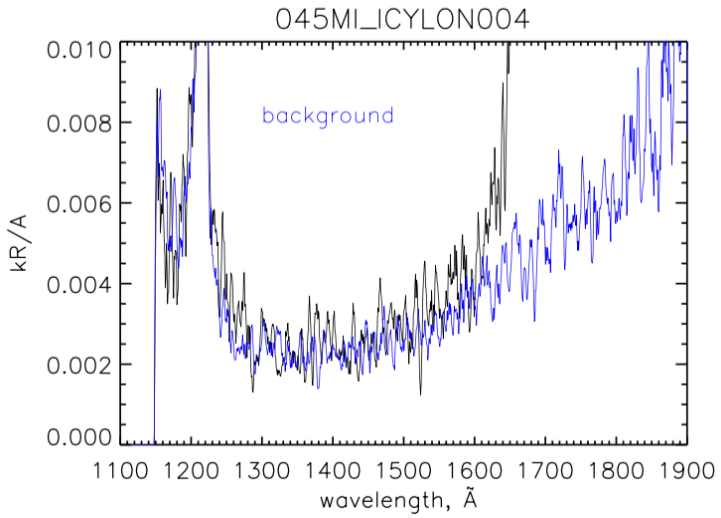
VIMS_045MI_MIMAS002_PRIME

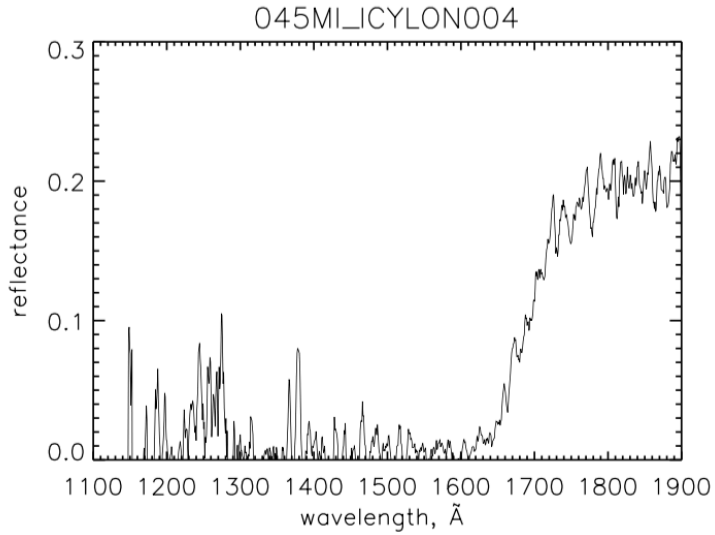
045MI_ICYLON004_VIMS

2007-147T06:26
Alt= 229,246 km
Longitude= 107°W
Latitude=35.8°S
Phase= 25.9°









045MI_ICYLON005_PRIME

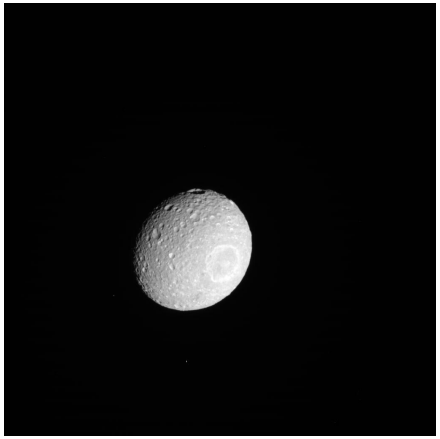
2007-147T06:52

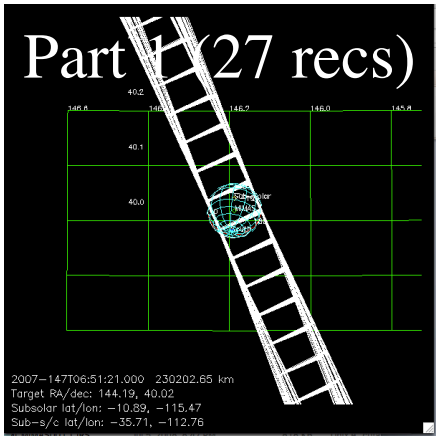
Alt= 230,995 km

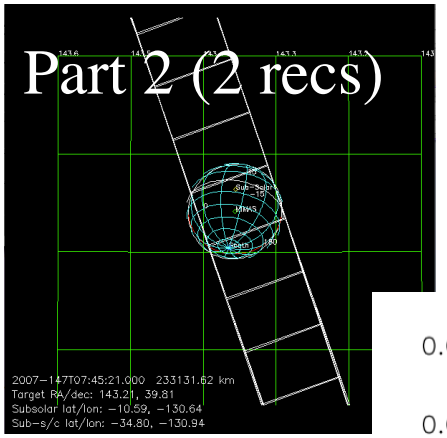
Longitude=120°W

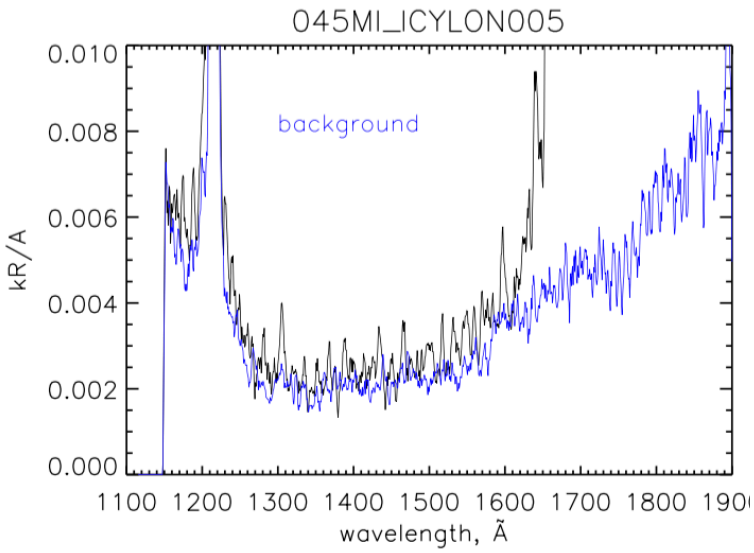
Latitude=35.5°S

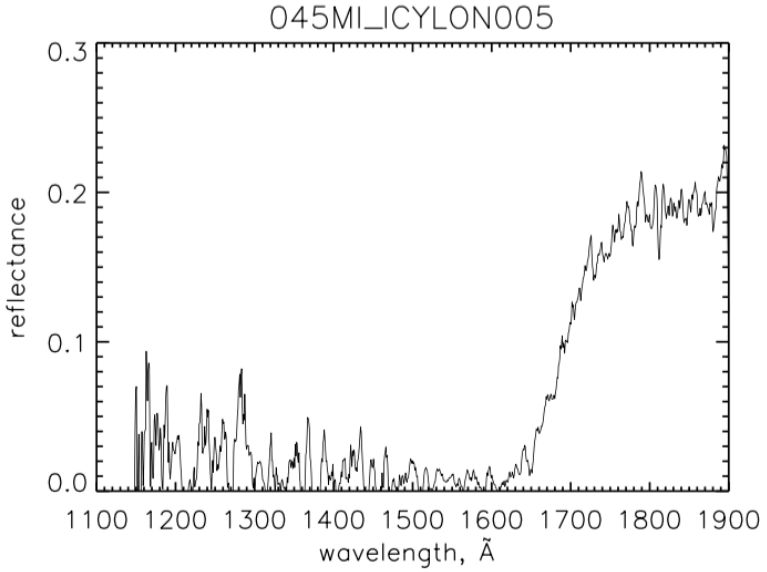
Phase= 26°



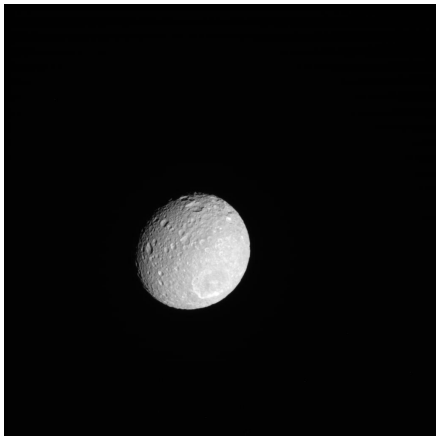


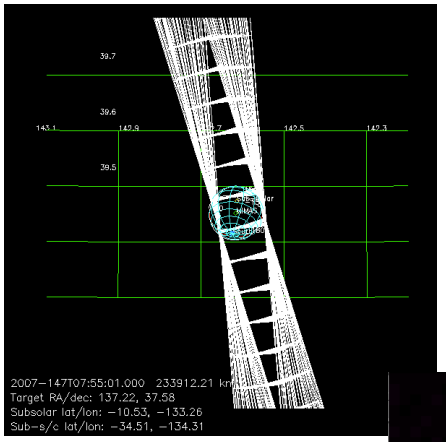


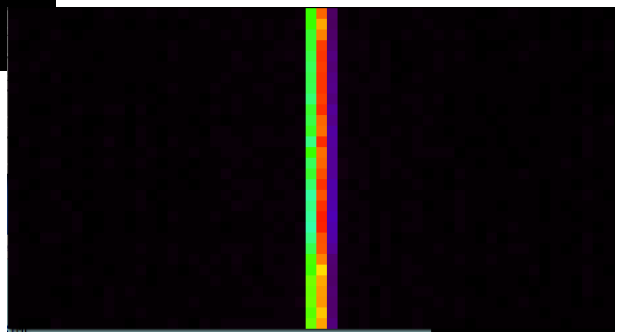




VIMS_045MI_MIMAS003_PRIME







045MI_ICYLON006_VIMS

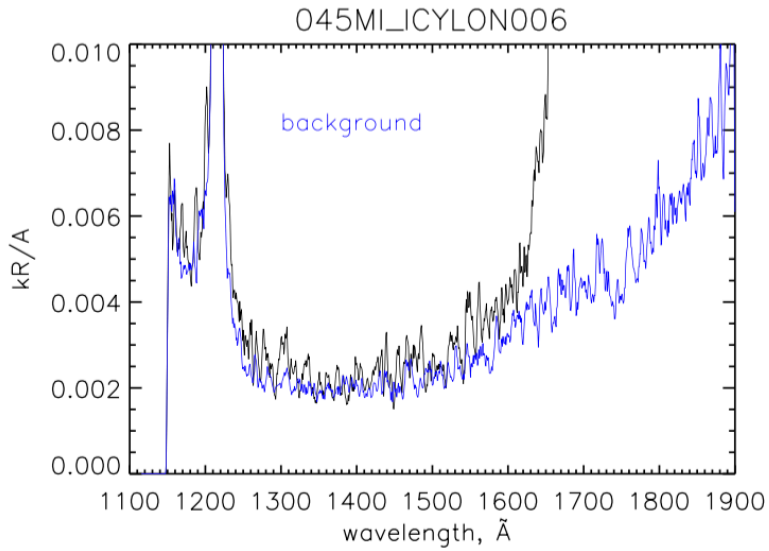
2007-147T07:56

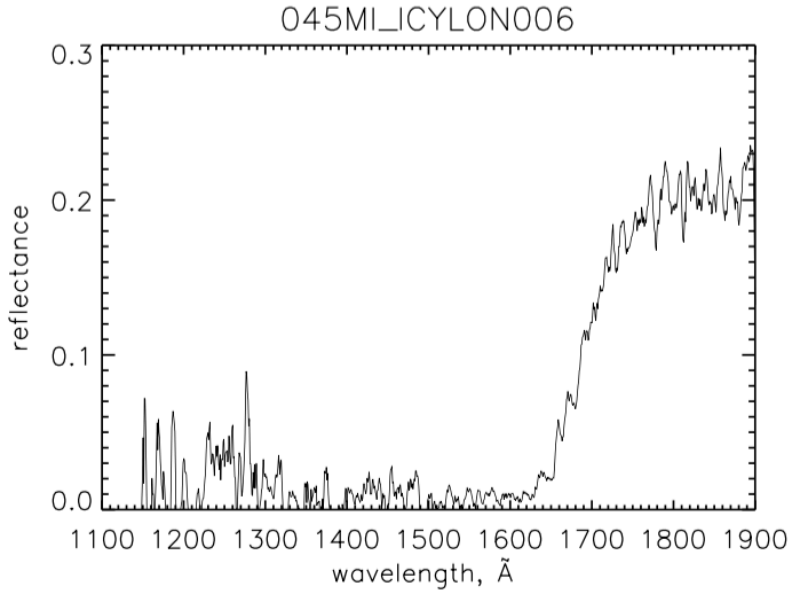
Alt=237,181 km

Longitude= 145°W

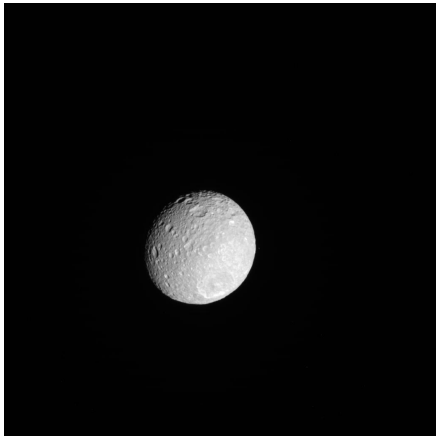
Latitude=33.4°S

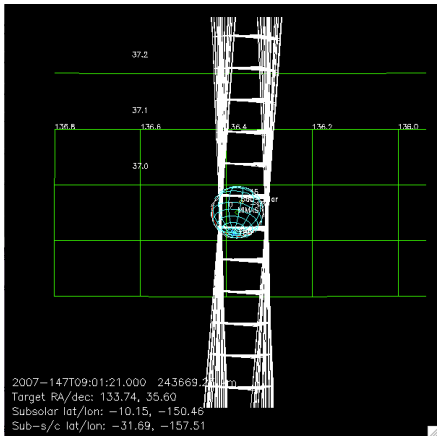
Phase= 25.5°

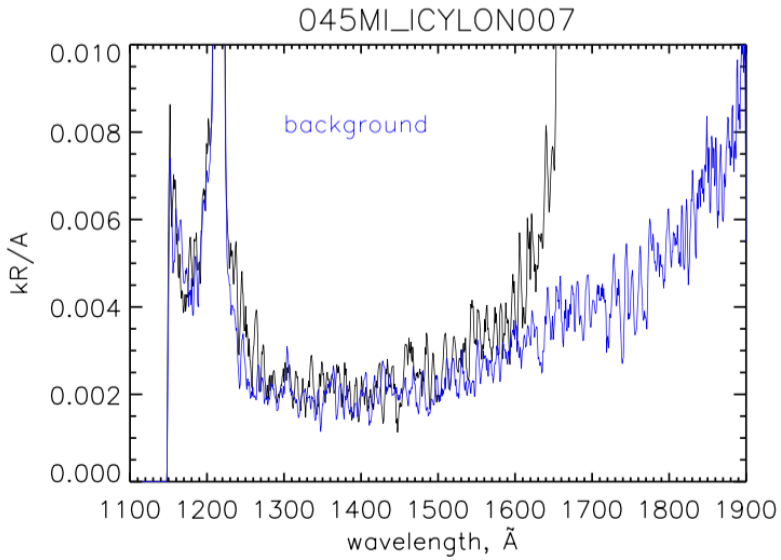


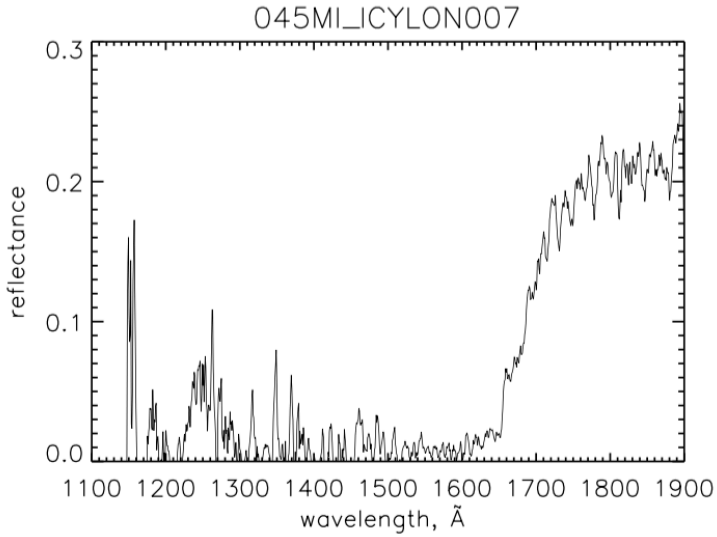


045MI_ICYLON007_PRIME
2007-147T09:02
Alt= 246,682 km
Longitude= 162°W
Latitude=31°S
Phase= 25°









046MI_ICYLON001_ISS

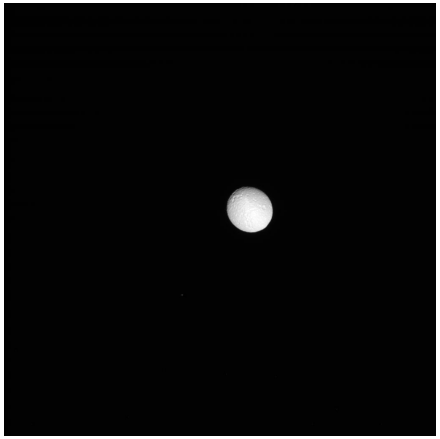
2007-163T16:40

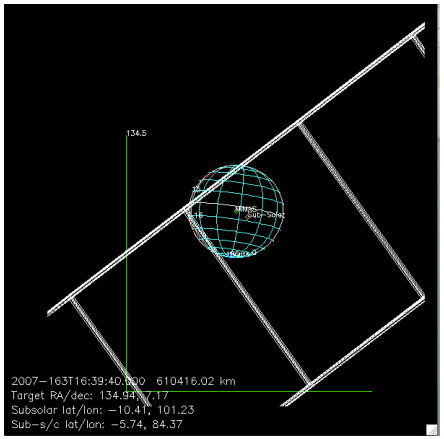
Alt= 616,276 km

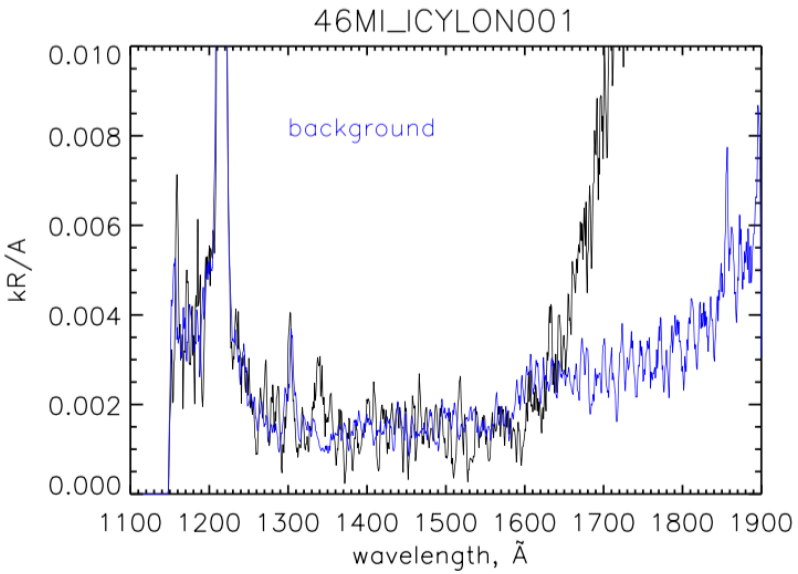
Longitude= 277°W

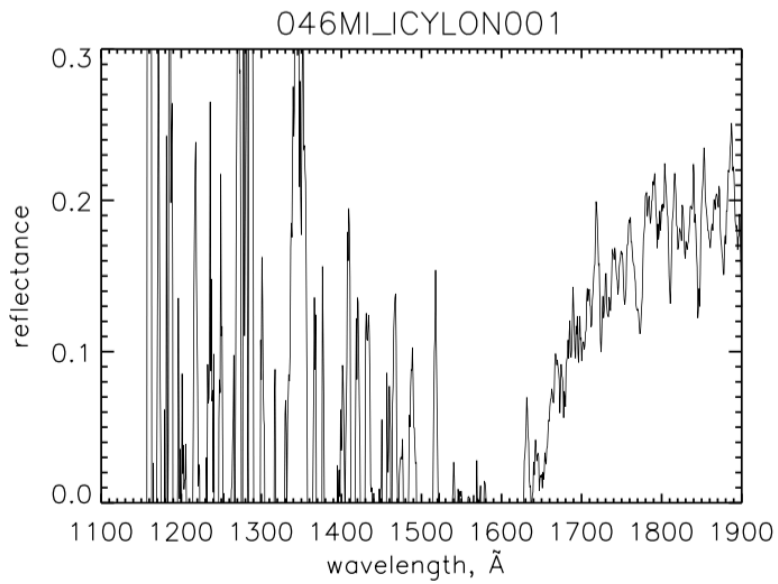
Latitude=5.7°S

Phase= 15.3°









047MI_ICYLON001_ISS

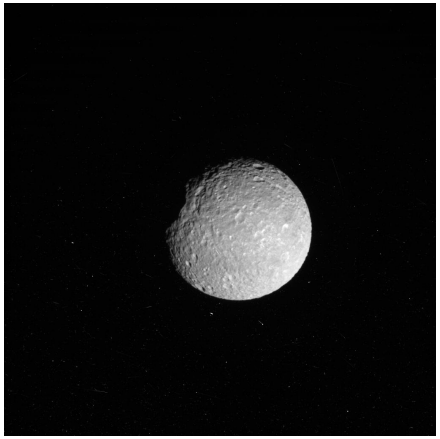
2007-179T01:58

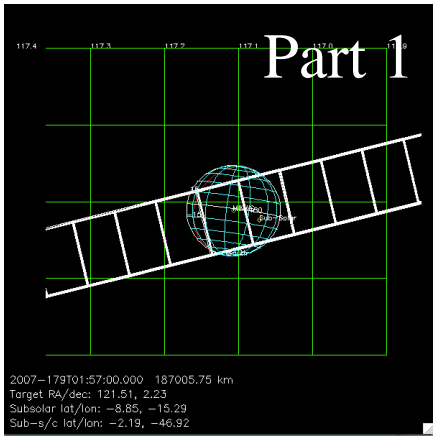
Alt= 191,820 km

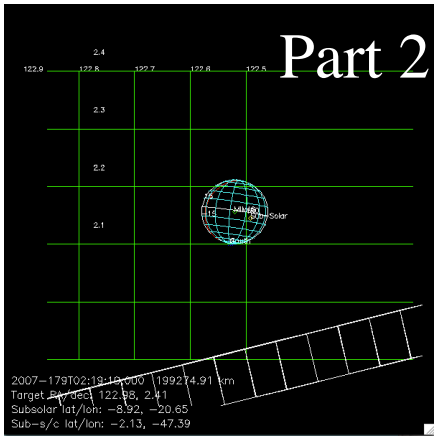
Longitude=47°W

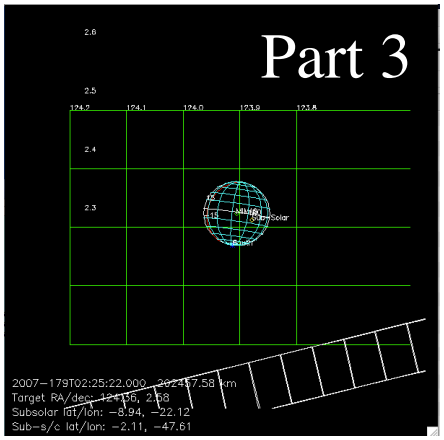
Latitude=2°S

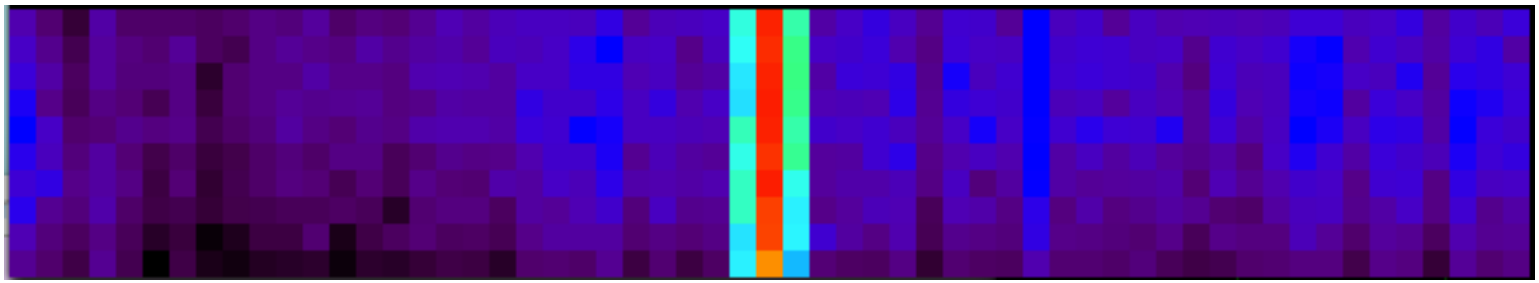
Phase=31.8°



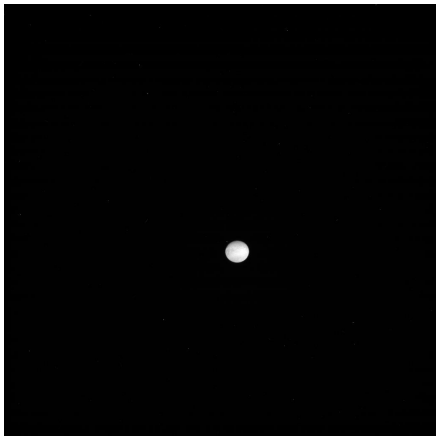


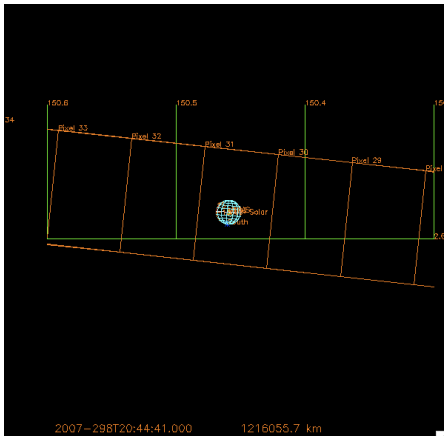


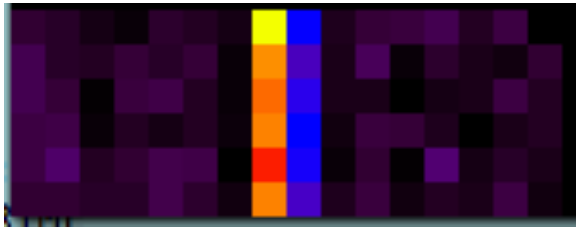


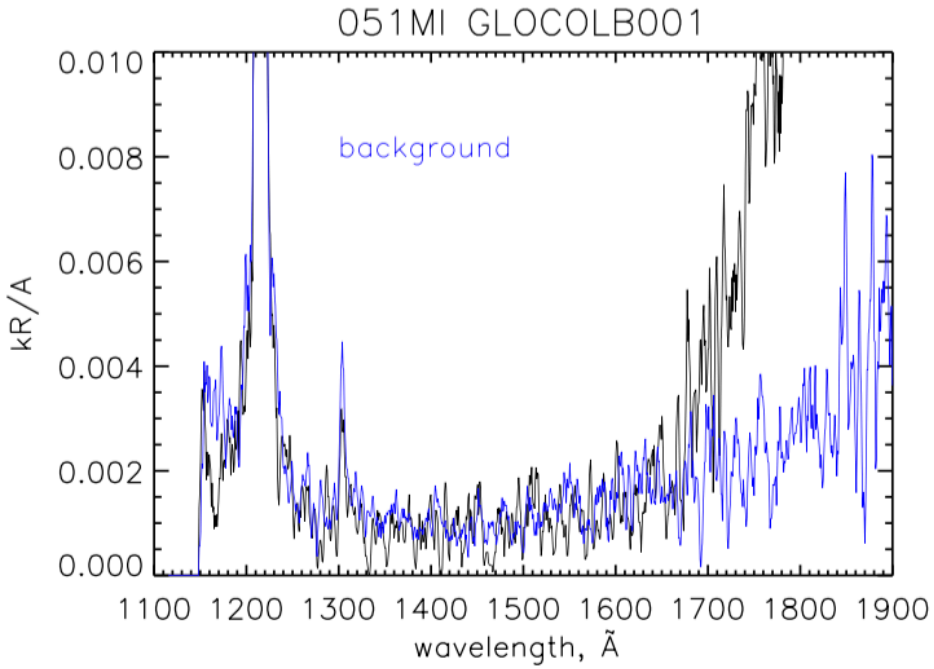


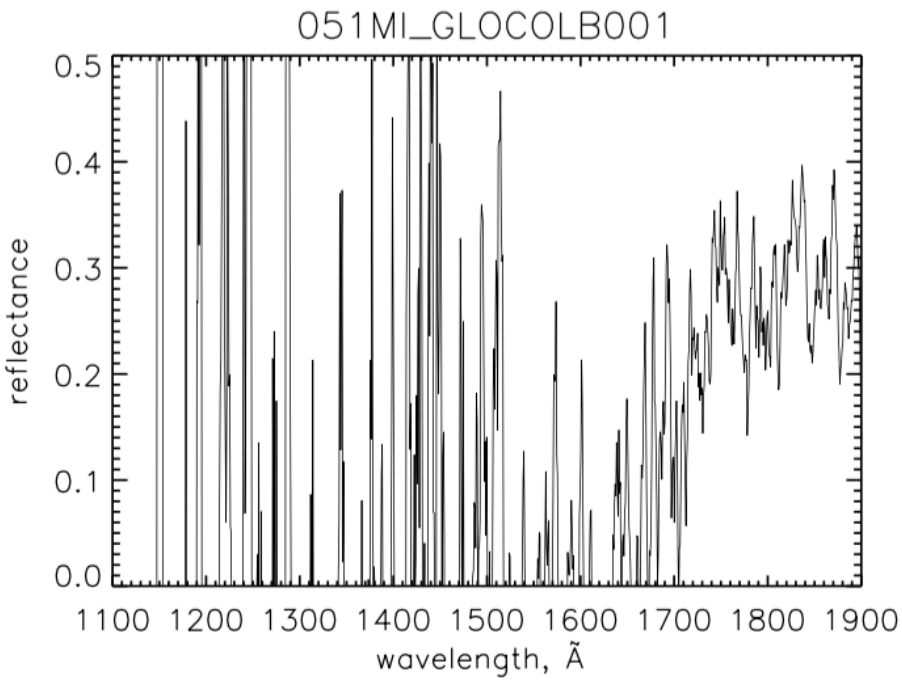
051MI_GLOCOLB001_ISS
2007-298T20:45
Alt= 1,214,266 km
Longitude=50°W
Latitude=0.4°S
Phase=10.3°



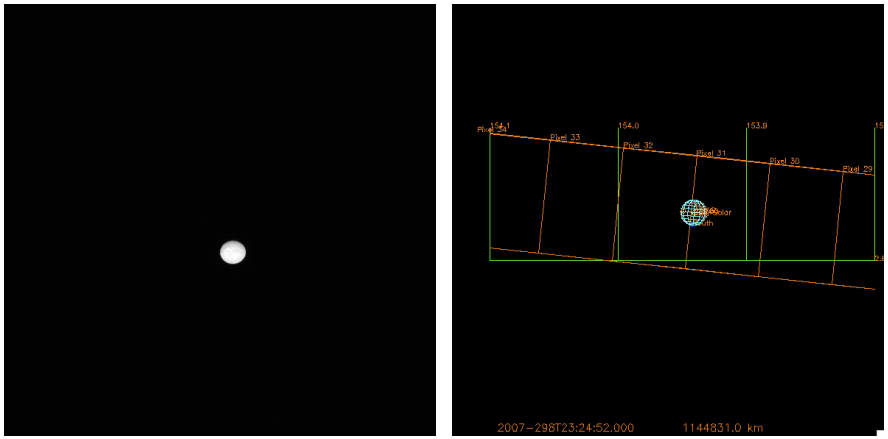


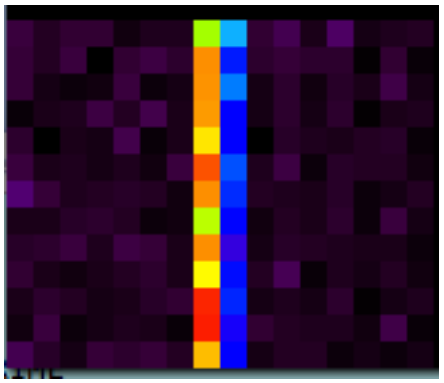


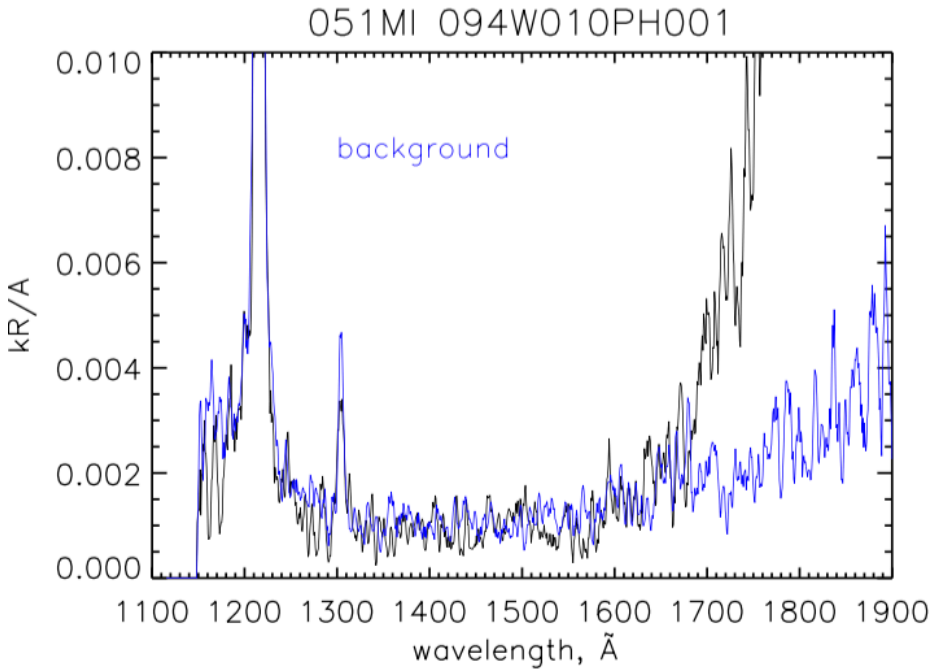


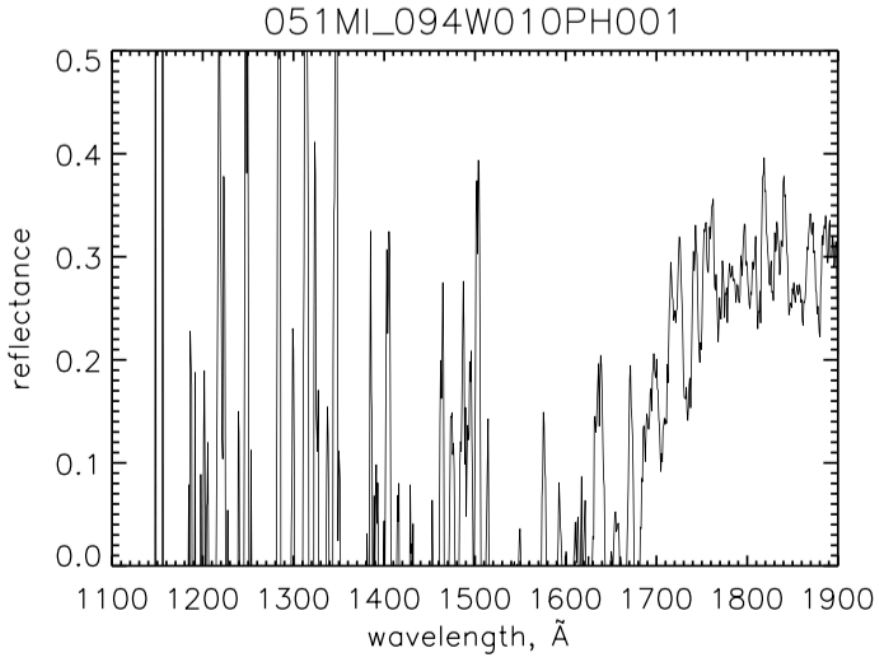


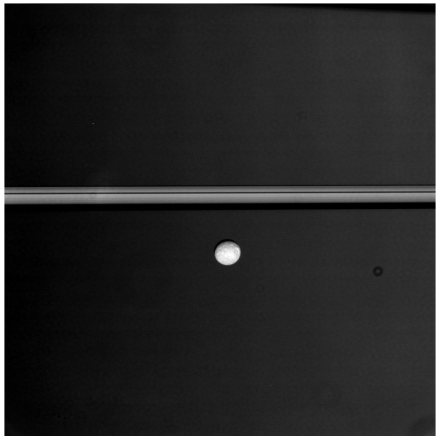
051MI_094W010PH001_ISS
2007-298T23:25
Alt= 1,138,400 km
Longitude=95°W
Latitude=0.3°S
Phase=9.8°

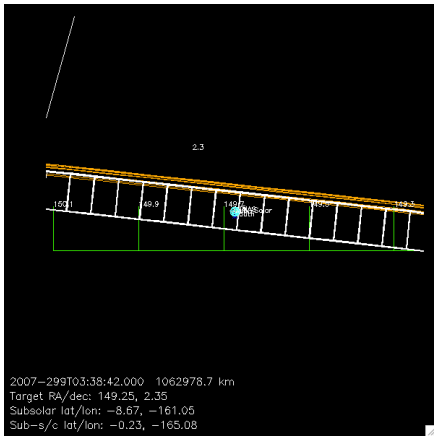






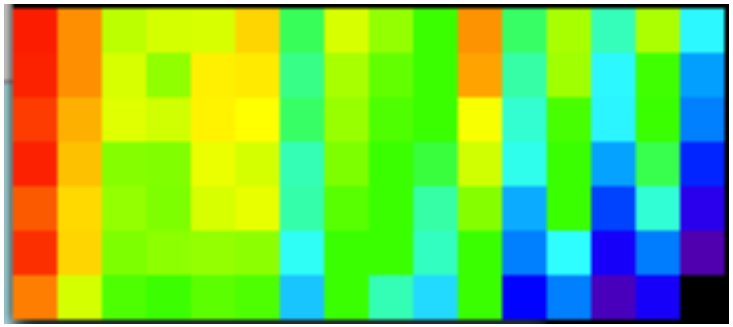


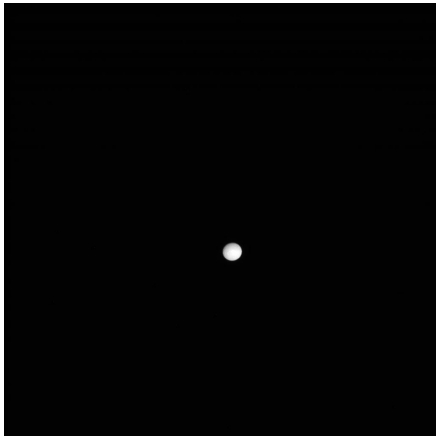


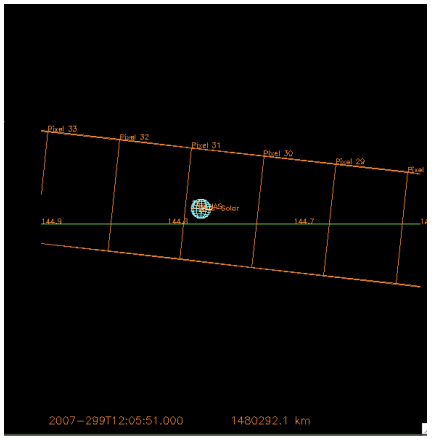


051MI_166W011PH001_ISS
2007-299T03:39
Alt= 1,063,296 km
Longitude=167°W
Latitude=0.2°S
Phase=10.9°

Mimas is in front of Saturn







051MI_310W014PH001_ISS

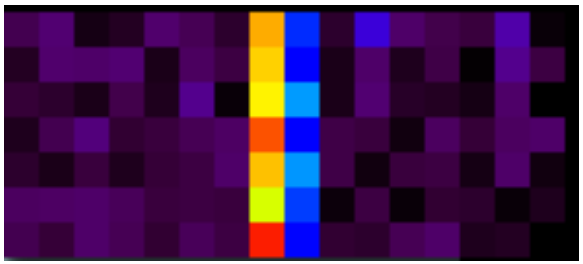
2007-299T12:06

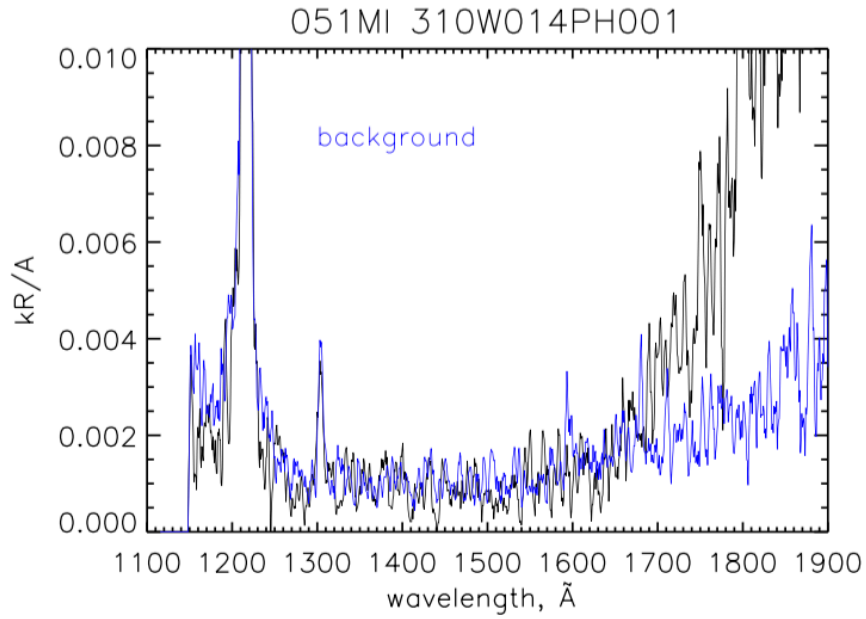
Alt= 1,485,935 km

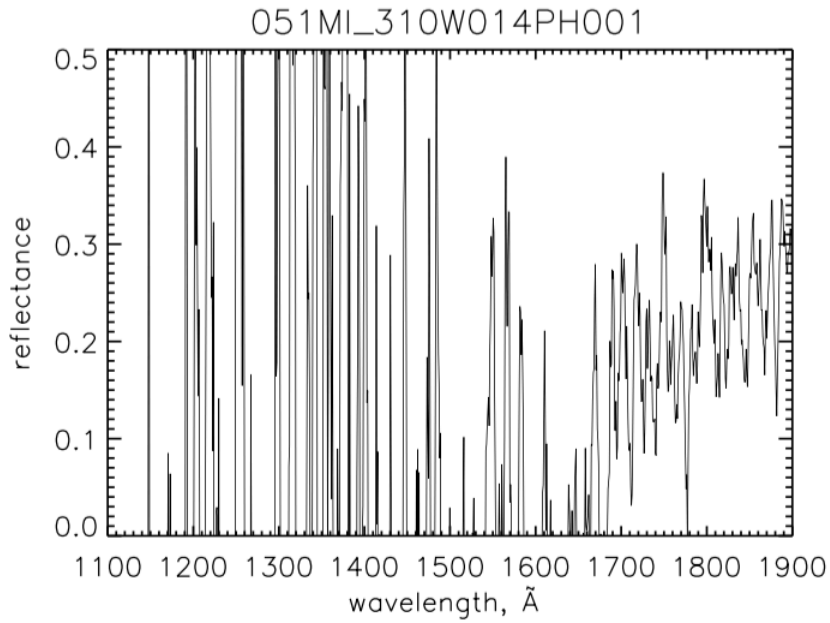
Longitude=308°W

Latitude=0°N

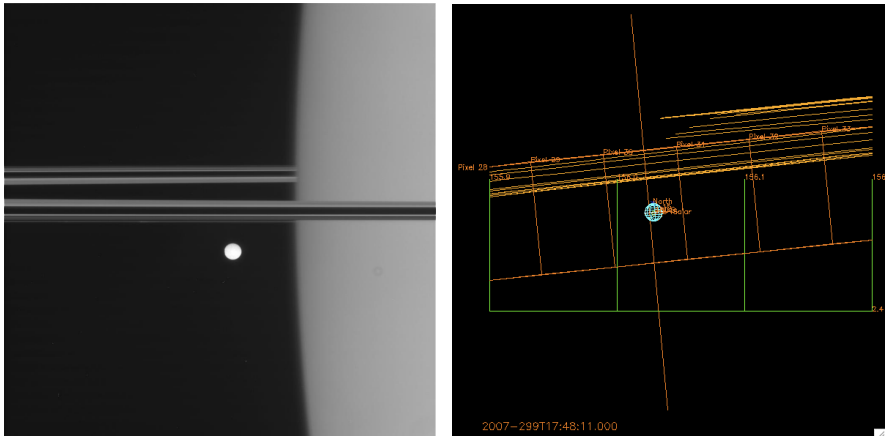
Phase=13.7°

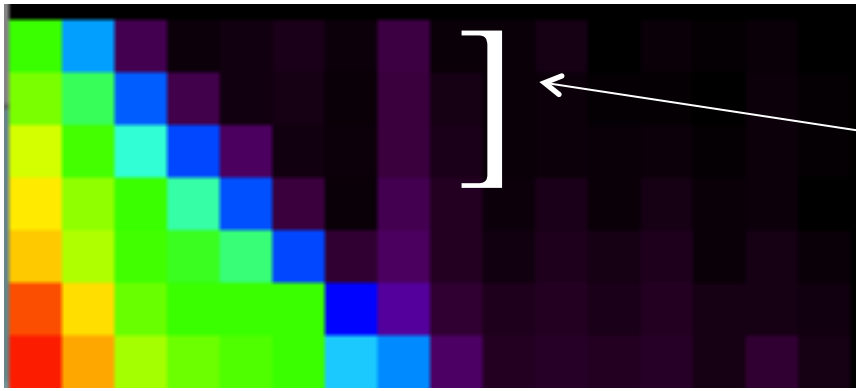




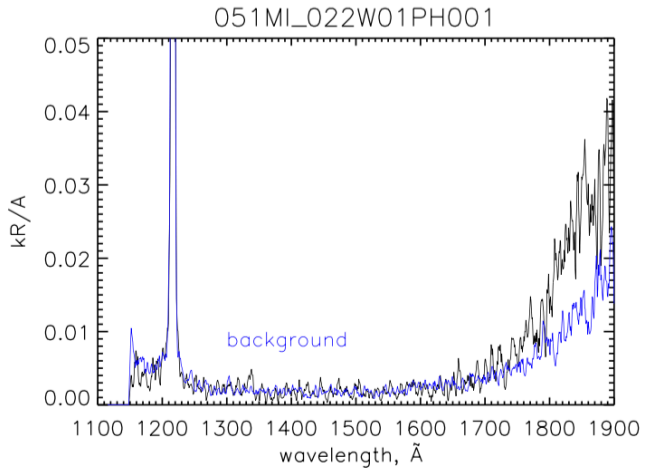


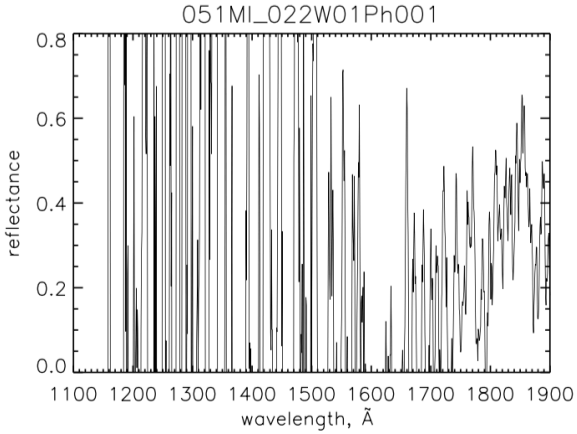
051MI_022W01PH001_ISS
2007-299T17:49
Alt= 1,659,645 km
Longitude=21°W
Latitude=0.1°N
Phase=10.5°





Try to pull out a Mimas reflectance spectrum using these records but background is still high and spectrum is pretty ratty …





051MI_094W017PH001_ISS

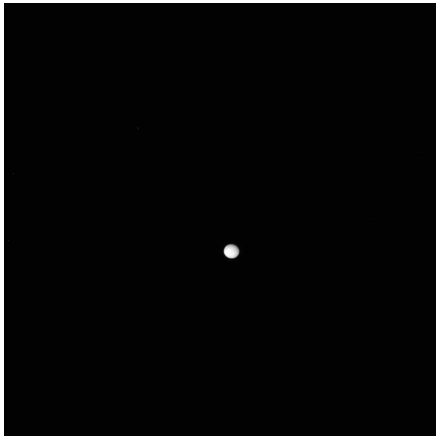
2007-300T21:29

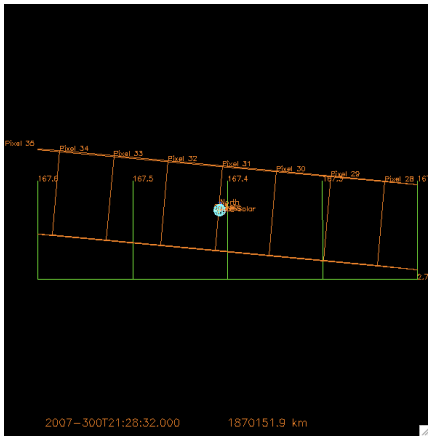
Alt= 1,862,754 km

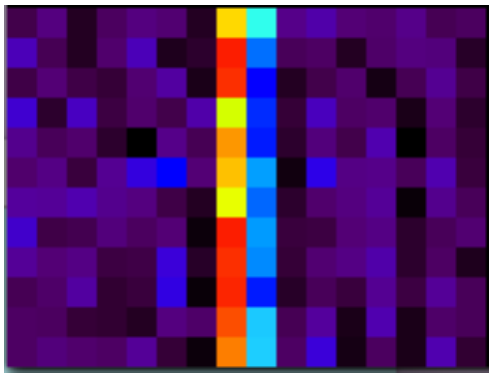
Longitude=95°W

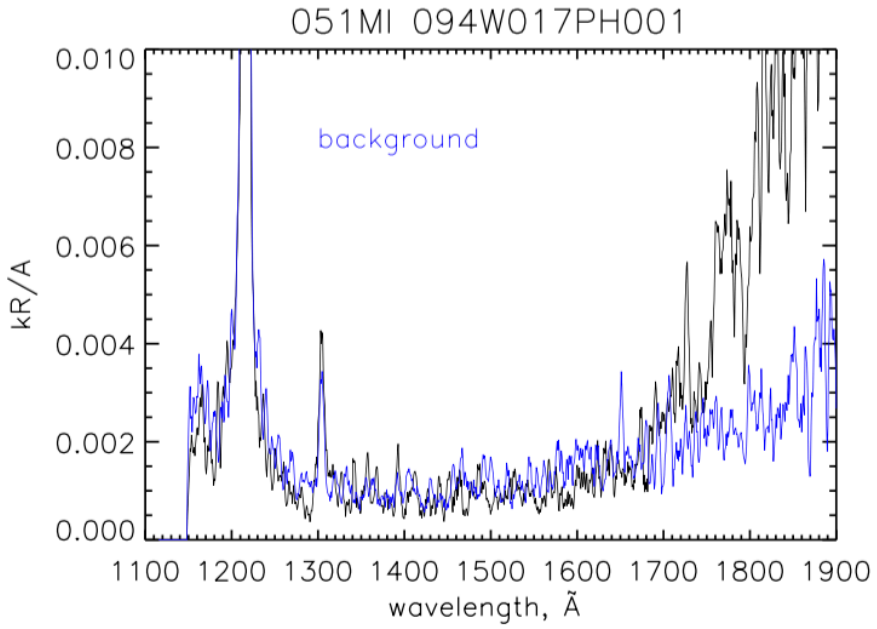
Latitude=0.6°N

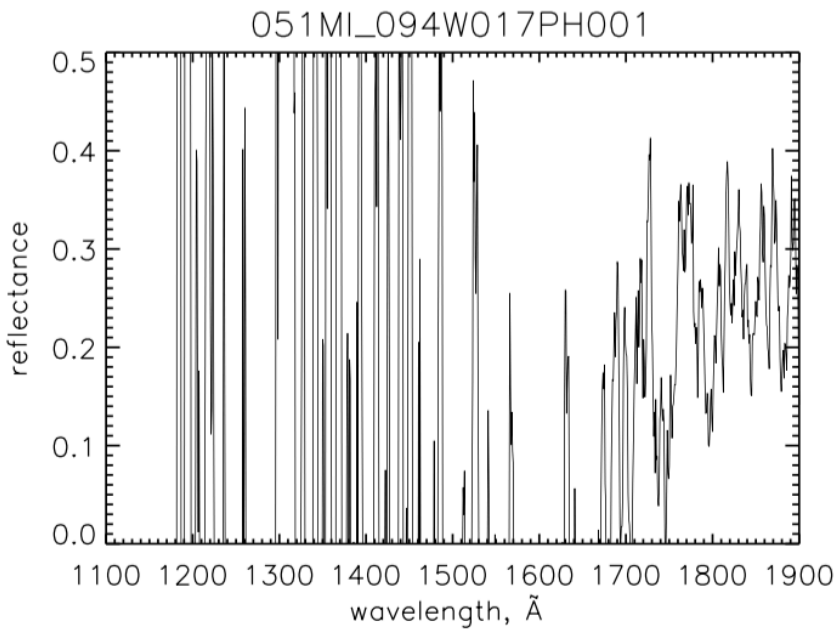
Phase=17.0°







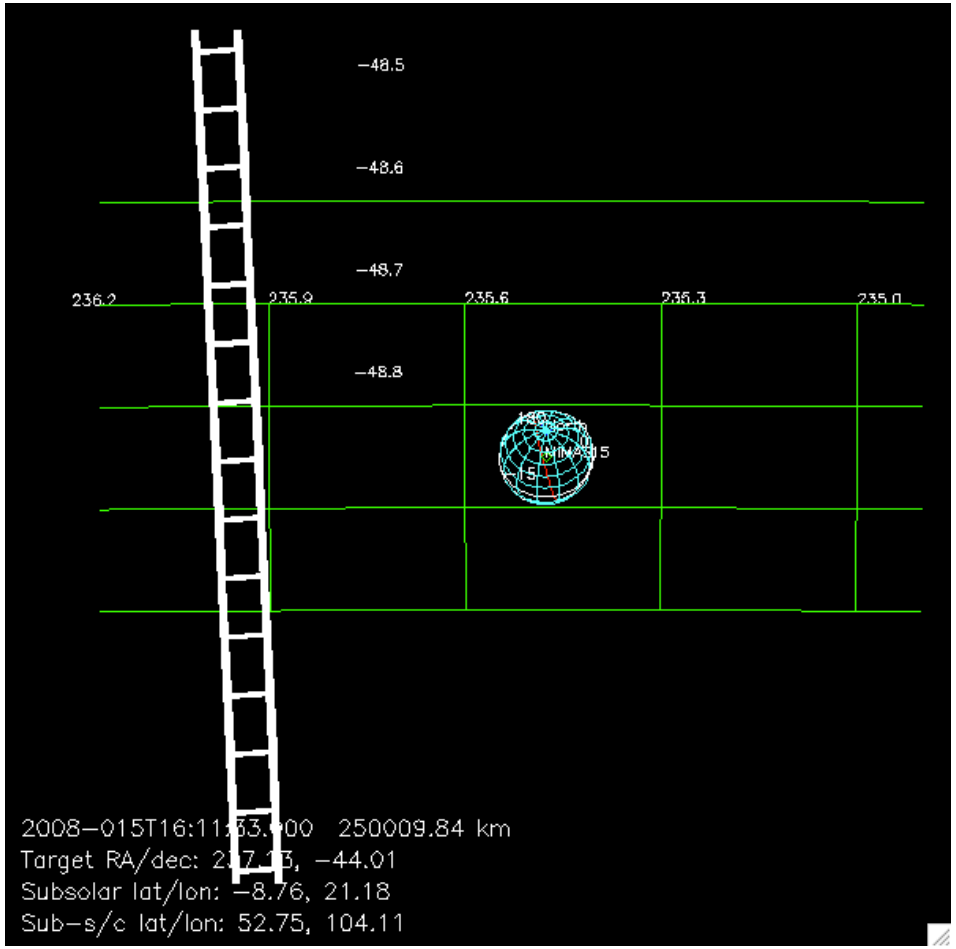




056MI_ICYLON001_VIMS
2008-015T16:12

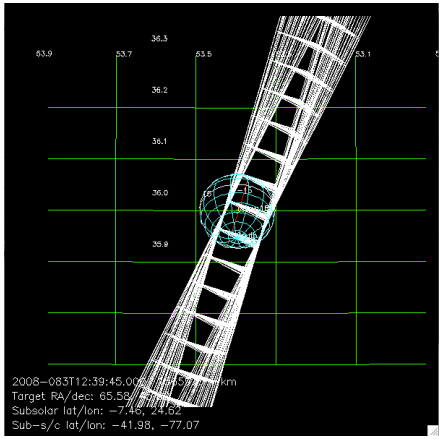
(no ISS rider)

Uses 30-sec integration period

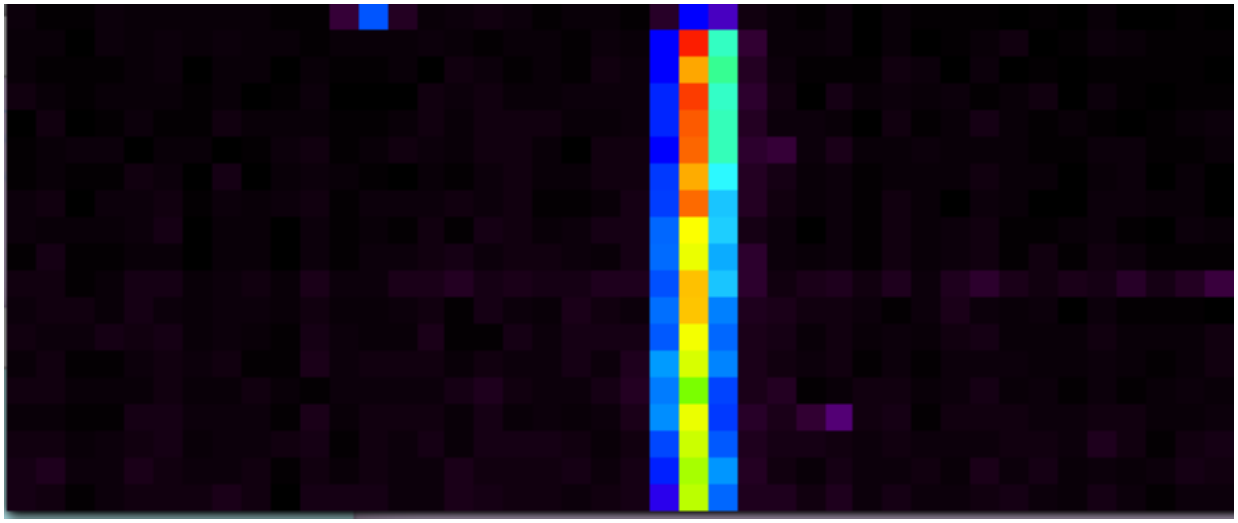


Mimas not in UVIS slit

062MI_ICYLON001_VIMS
2008-083T12:40
Alt= 161,529 km
Longitude=75°W
Latitude=47°
Phase=90°



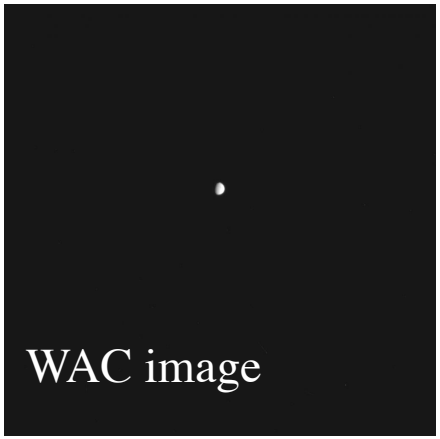
(no ISS rider)

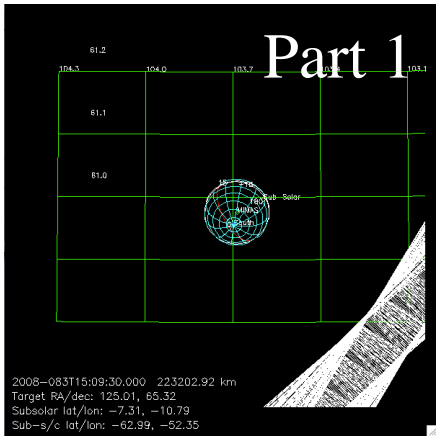


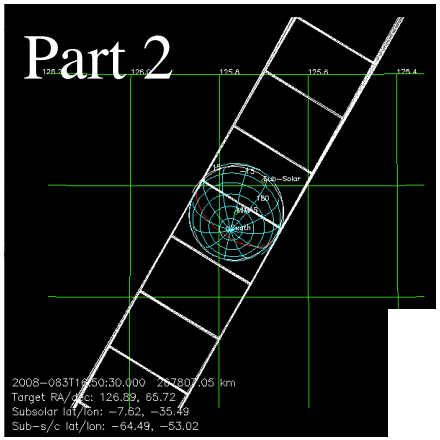
CIRS_062MI_FP1SECLX001

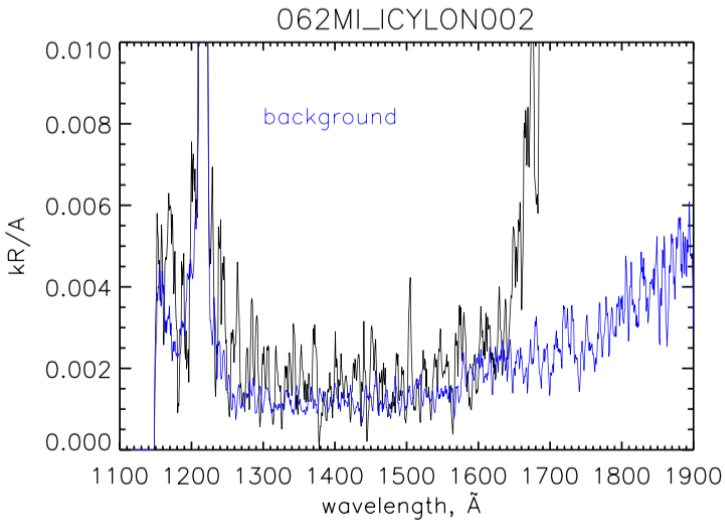
062MI_ICYLON002_CIRS

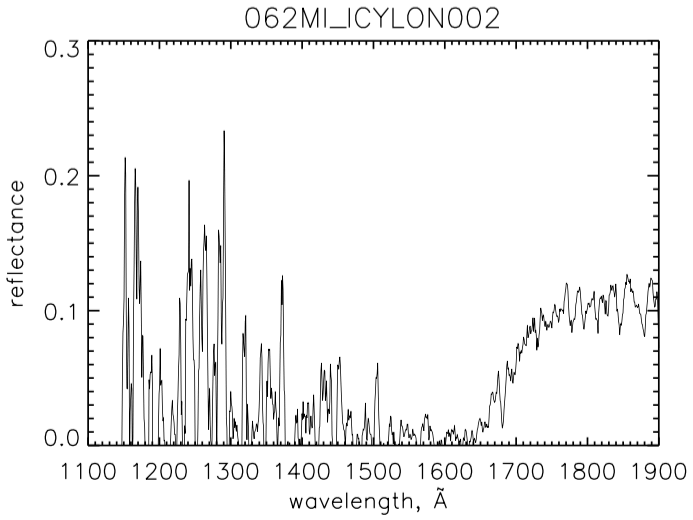
2008-083T15:10
Alt= 269,046 km
Longitude=53°W
Latitude=65°S
Phase=59°



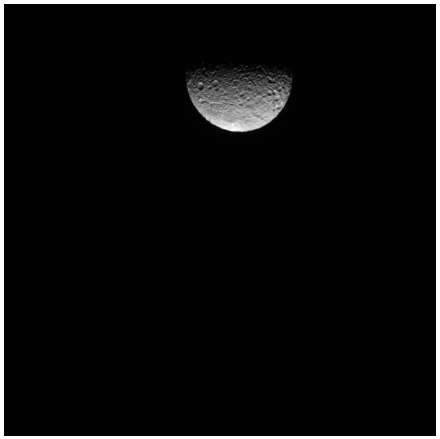


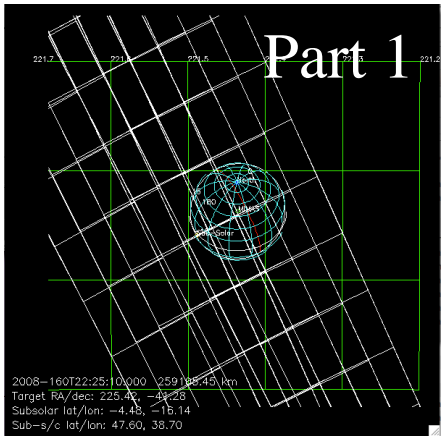


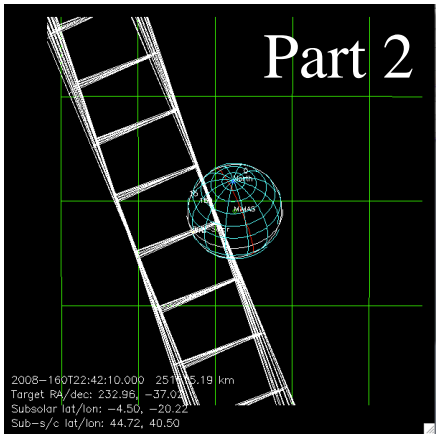


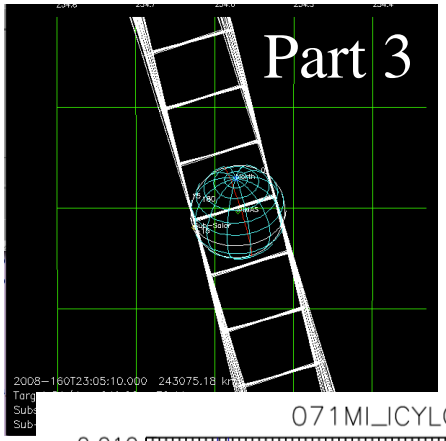


CIRS_071MI_MIMASORS









071MI_ICYLON001_CIRS

2008-160T22:26

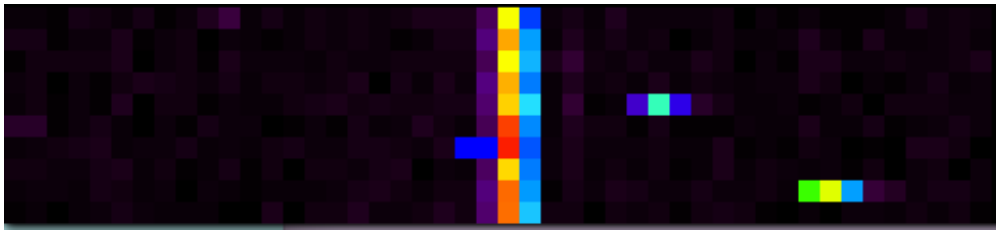
Alt= 240,175 km

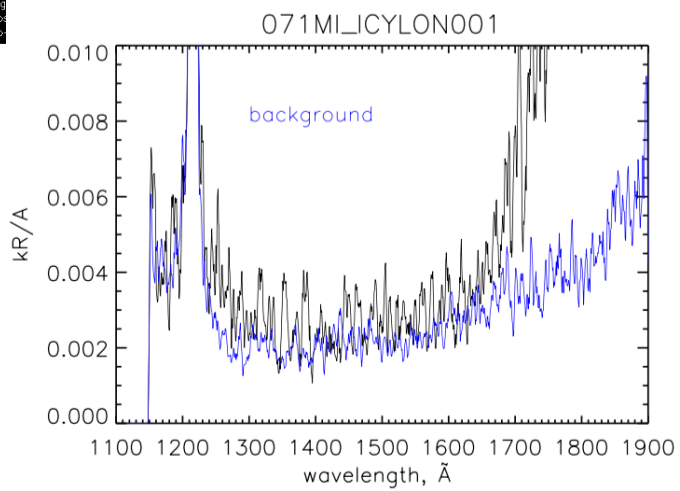
Longitude=317°W

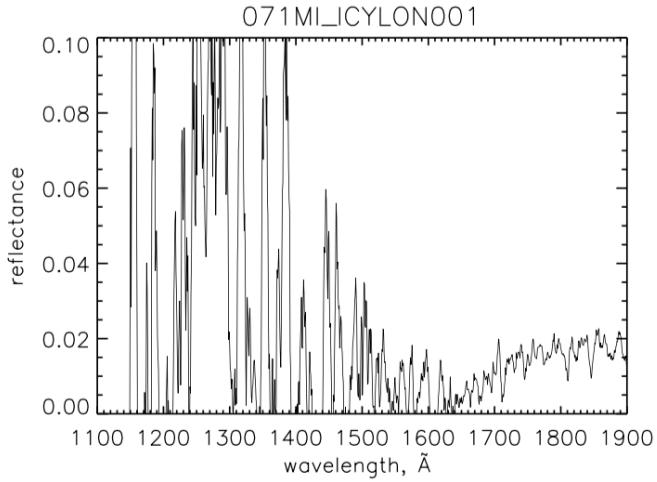
Latitude=38°N

Phase=85°

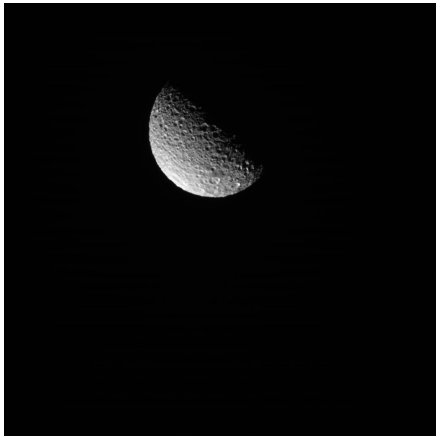
Part 3

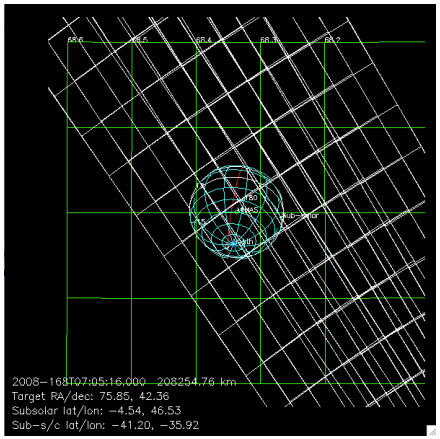






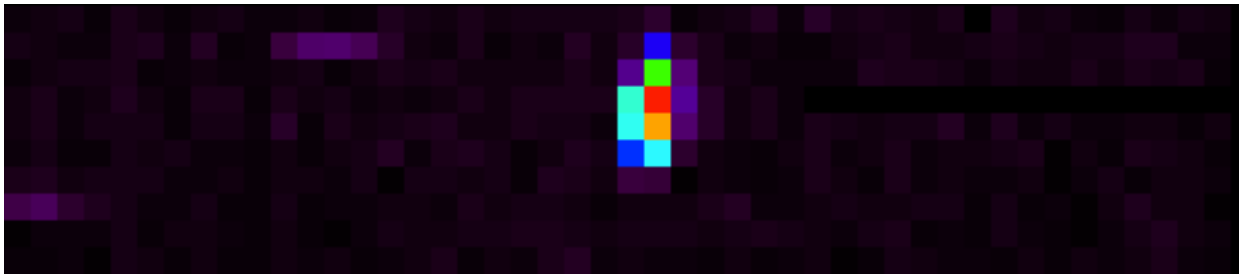
CIRS_072MI_MIDIECLN001



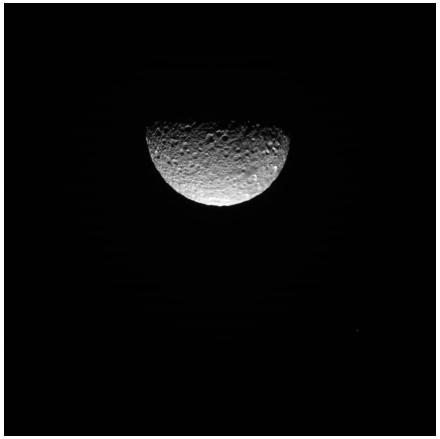


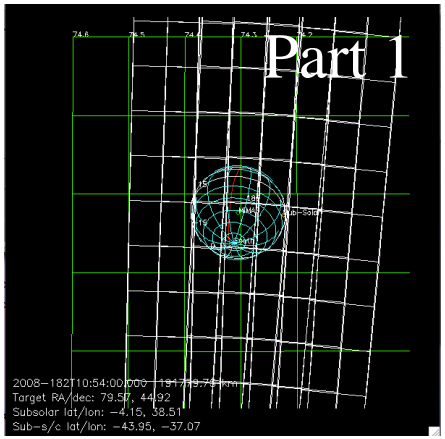
072MI_ICYLON001_ISS
2008-168T07:06
Alt= 213,193 km
Longitude=34°W
Latitude=42.7°S
Phase=83°

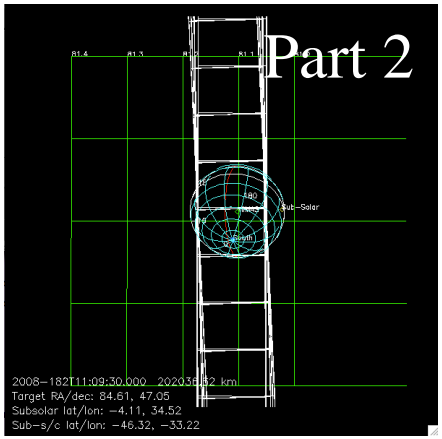
Only the first part of this observation is of Mimas; the others (4) are Dione



ISS_074MI_MIMAS001_CIRS







074MI_MIMAS001_CIRS

2008-182T10:55

Alt= 195,463 km

Longitude=35°W

Latitude=45°S

Phase=80°

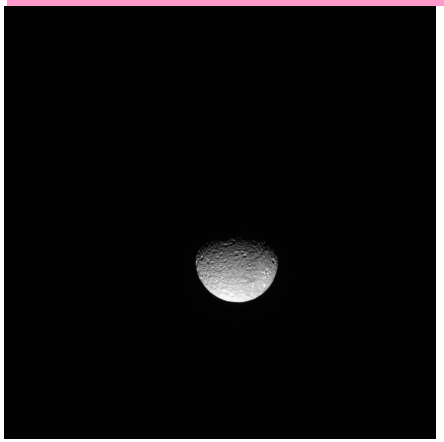
Part 1

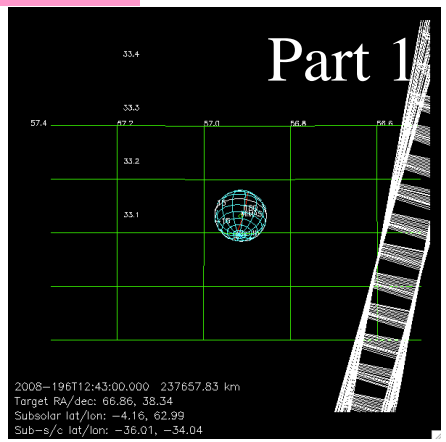
Part 2

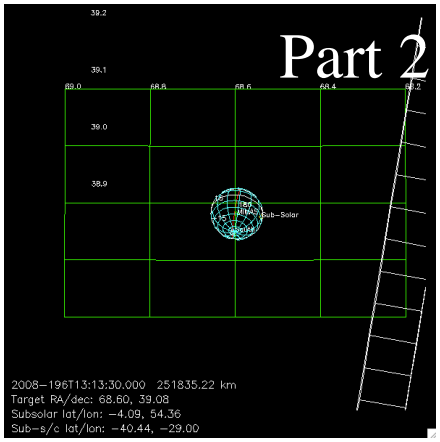
CIRS_076MI_ORSSECLN001_PRIME

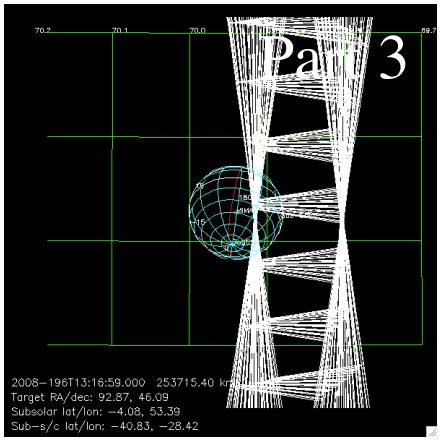
076MI_ICYLON001_CIRS

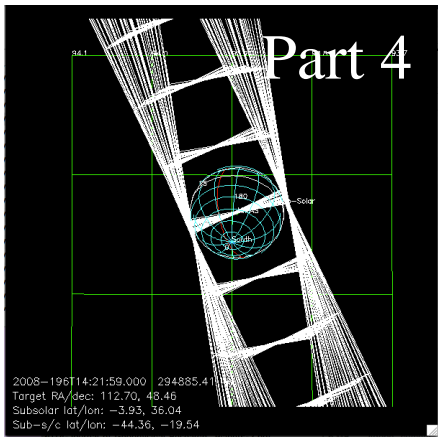
2008-196T12:44
Alt= 316,156 km
Longitude=18°W
Latitude=44°S
Phase=62.1°

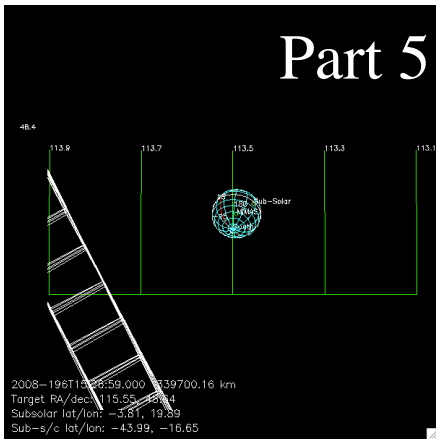


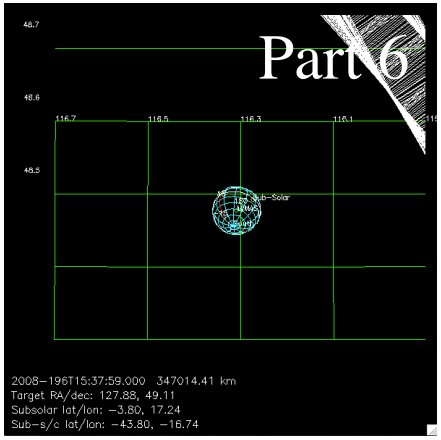


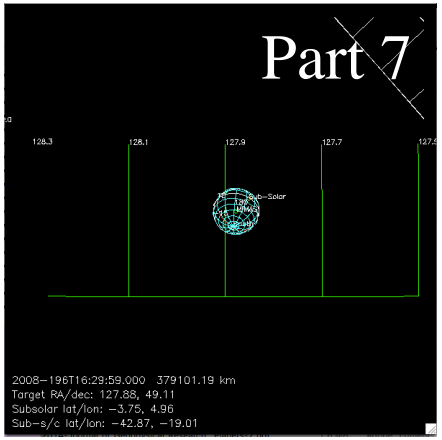












Mimas in eclipse 15:46:33.2-18:02:27.464

ISS_081MI_072W014PH001_PRIME

081MI_ICYLON002_ISS

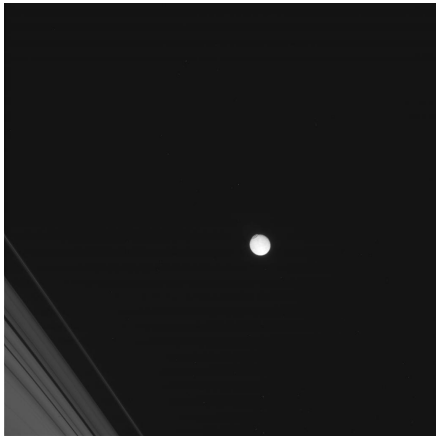
2008-235T10:06

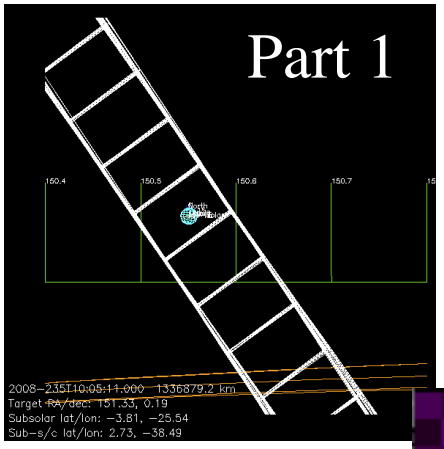
Alt= 1,329,580 km

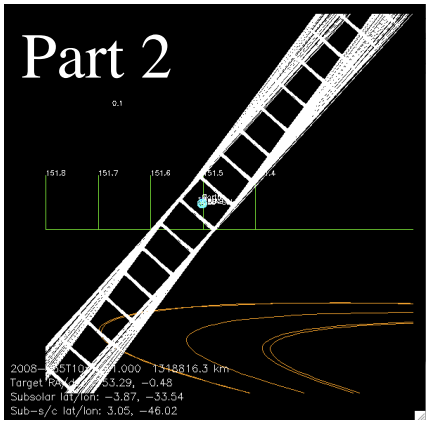
Longitude=42°W

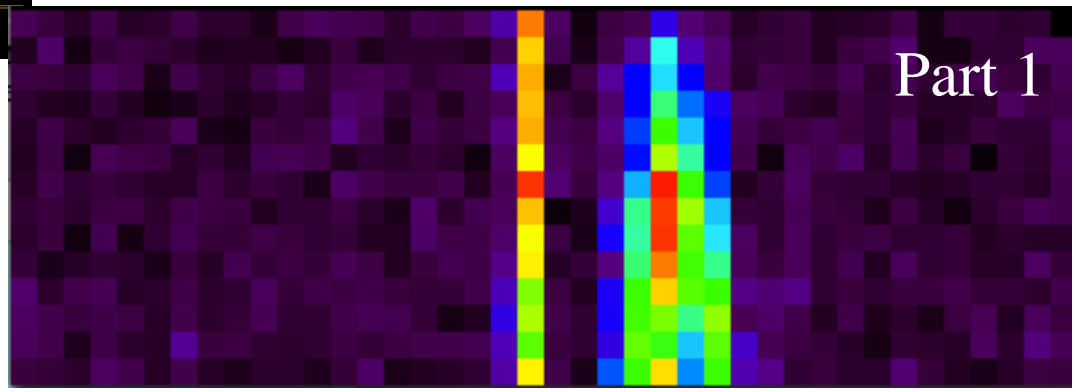
Latitude=3°N

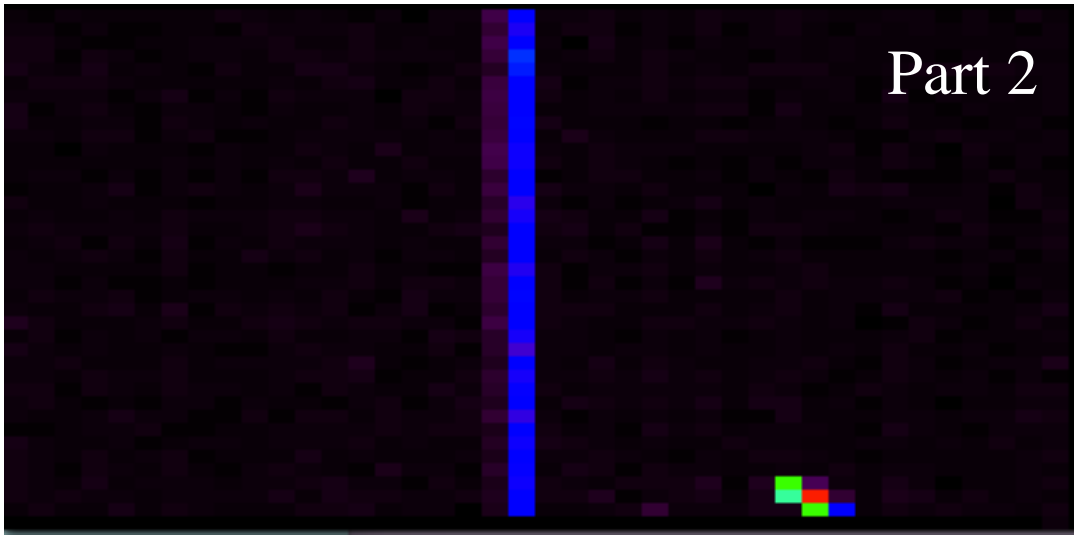
Phase=15.3°



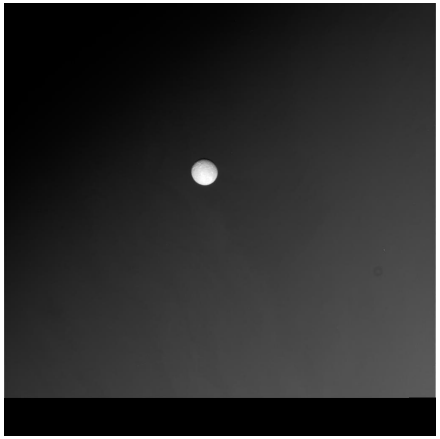


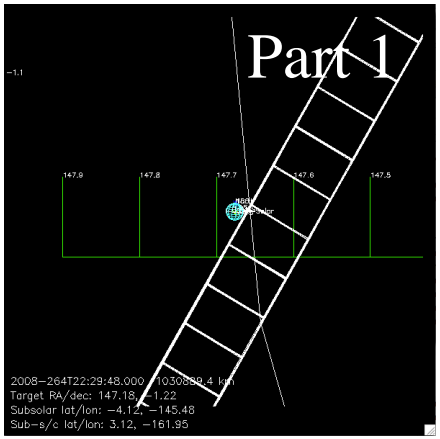


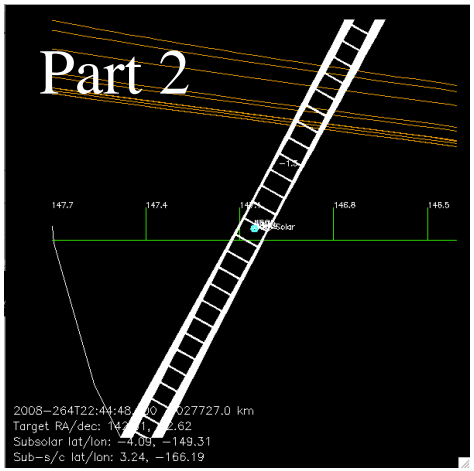




ISS_085MI_085W013PH001_PRIME



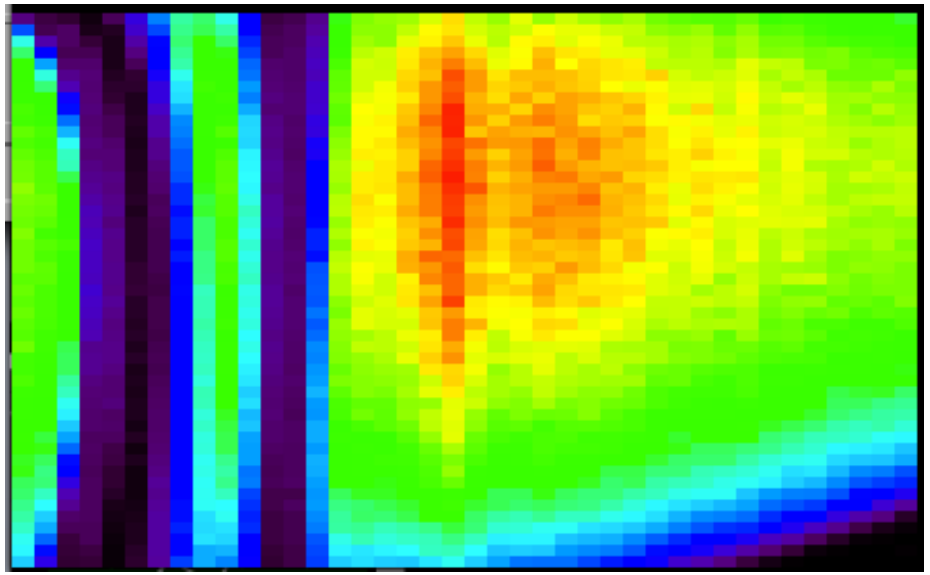




085MI_ICYLON001_ISS
2008-264T22:30
Alt= 1,025,896 km
Longitude=180°W
Latitude=3.7°N
Phase=22.1°

Mostly in front of Saturn

Part 2



ISS_086MI_ICYLON001_PRIME

086MI_ICYLON001_ISS

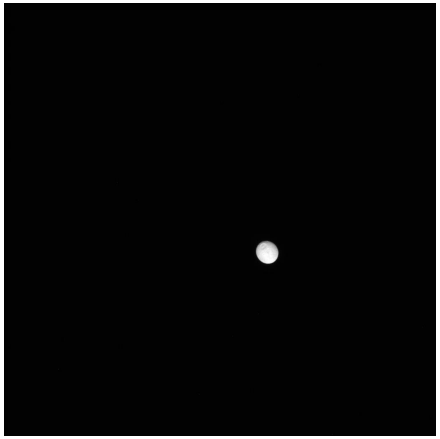
2008-272T06:17

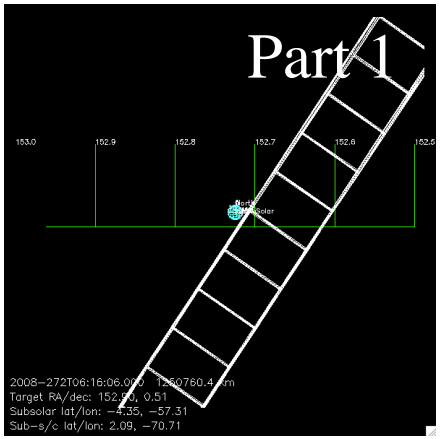
Alt= 1,201,242 km

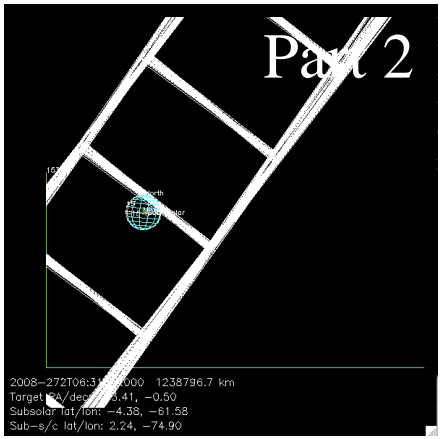
Longitude=88°W

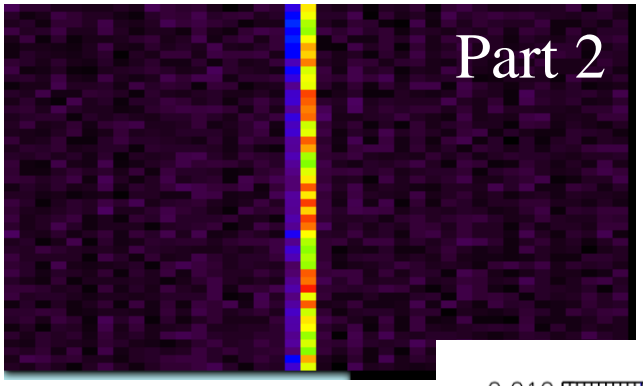
Latitude=2.7°N

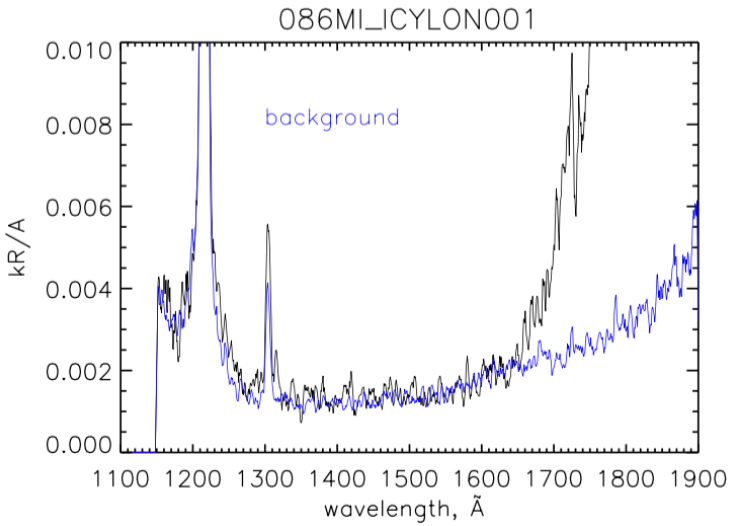
Phase=14.2°

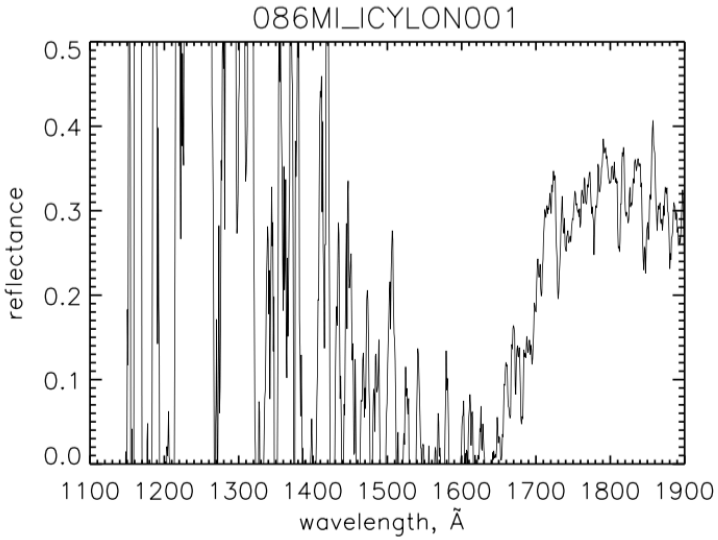












ISS_087MI_100W015PH001_PRIME

087MI_ICYLON001_ISS

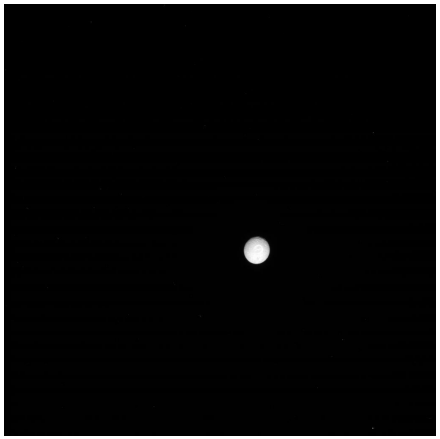
2008-278T21:18

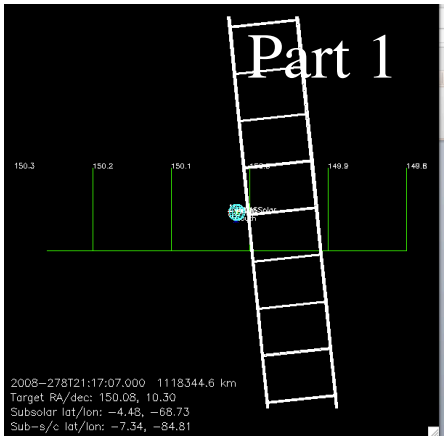
Alt= 1,072,448 km

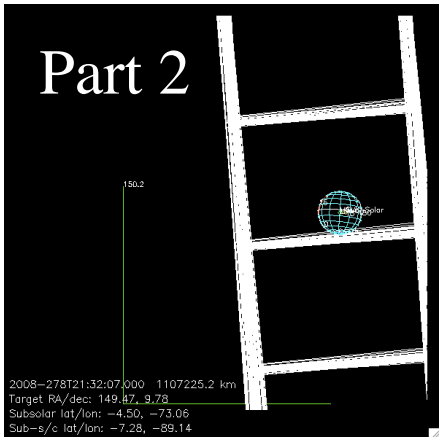
Longitude=103°W

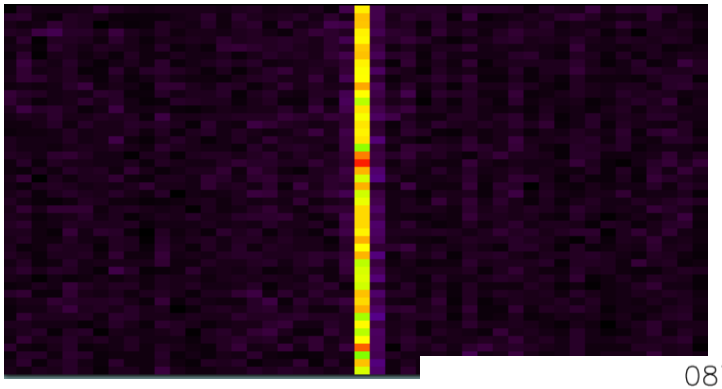
Latitude=7°S

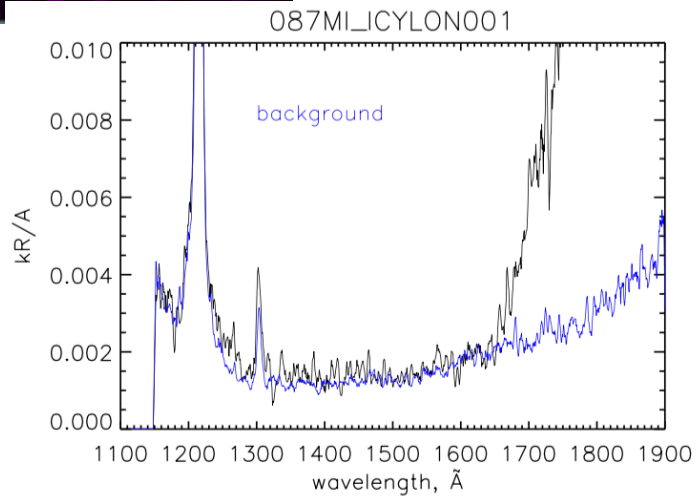
Phase=14.9°

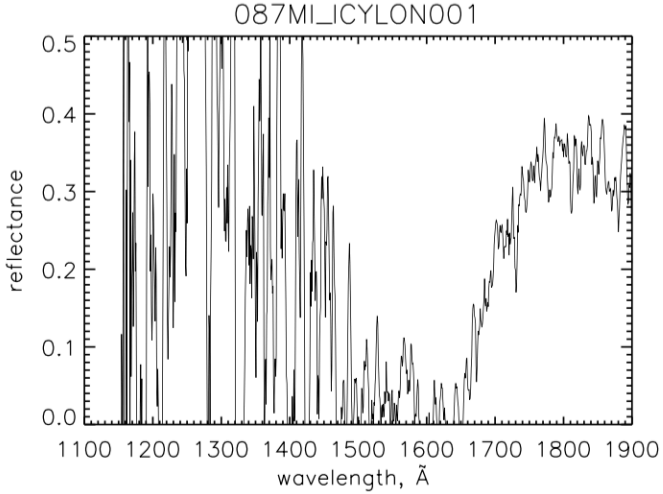




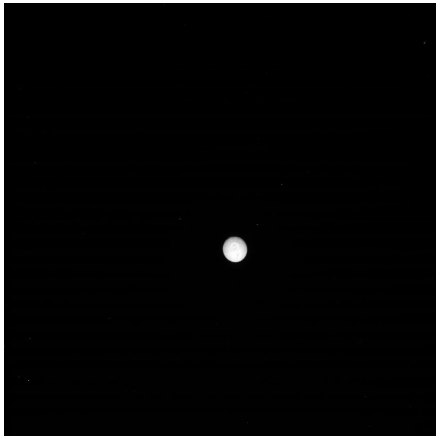


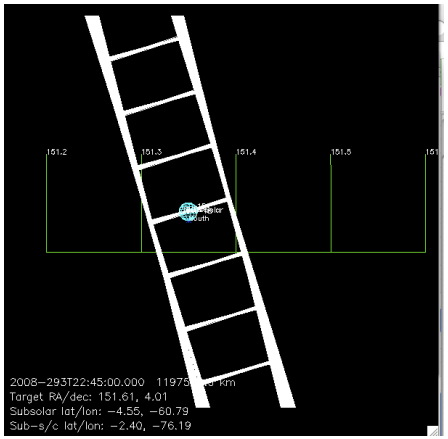




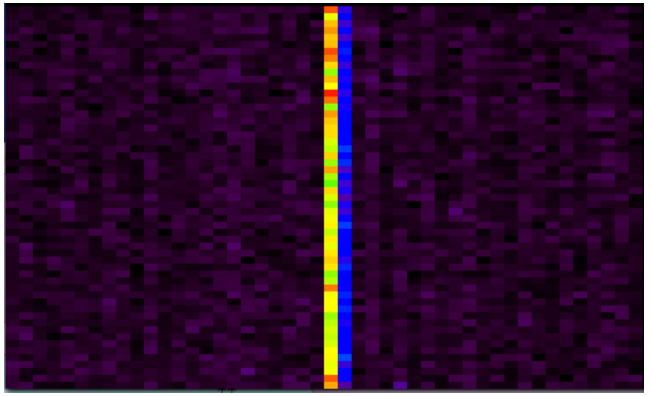


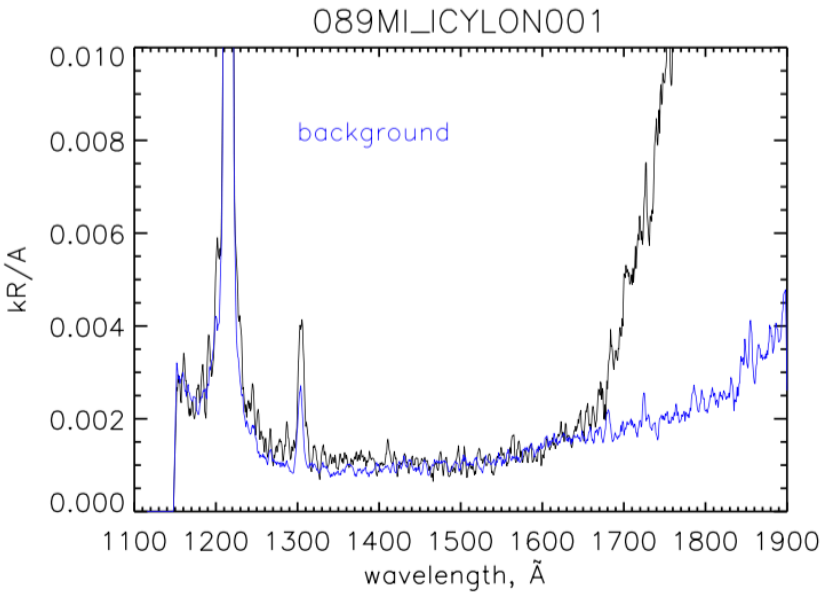
ISS_089MI_100W014PH001_PRIME

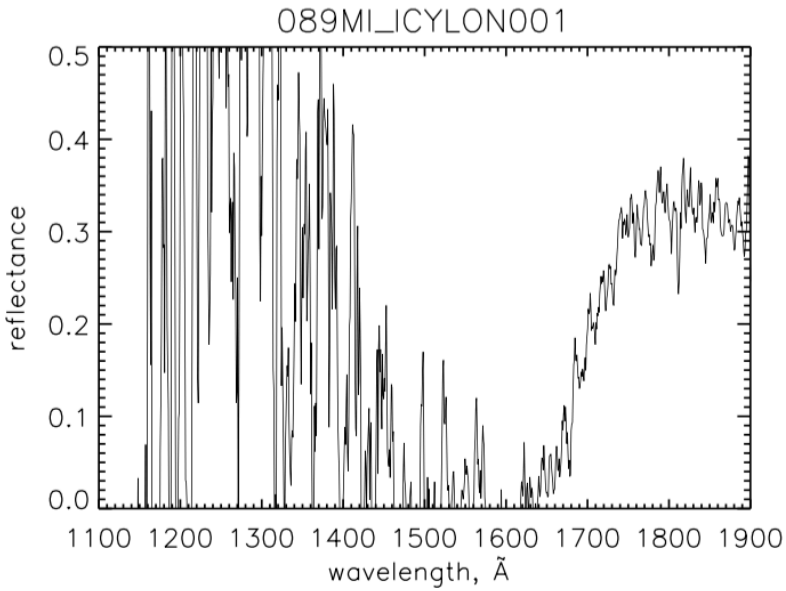




089MI_ICYLON001_ISS
2008-293T22:46
Alt= 1,155,108 km
Longitude= 92°W
Latitude=2°S
Phase=14.2°



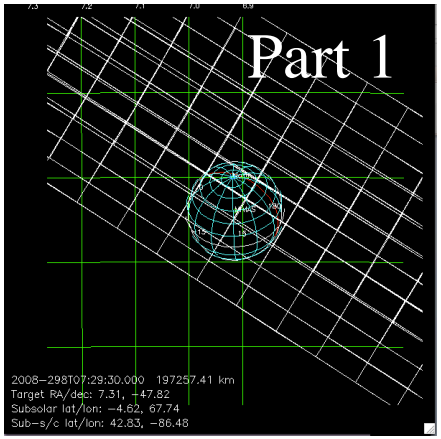


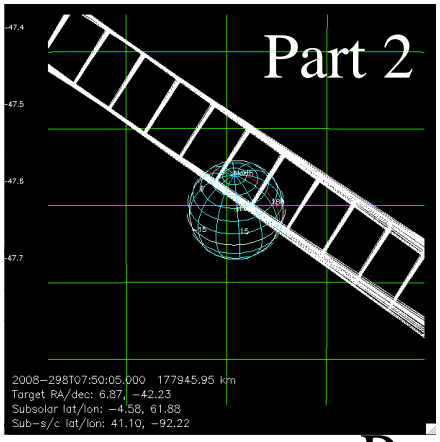


ISS_090MI_GEOLOG001_PRIME

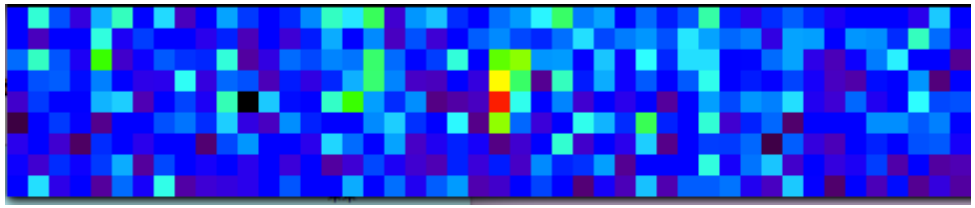
090MI_ICYLON002_ISS

2008-298T07:30
Alt= 189,598 km
Longitude=89°W
Latitude=42.2°N
Phase=135.8°

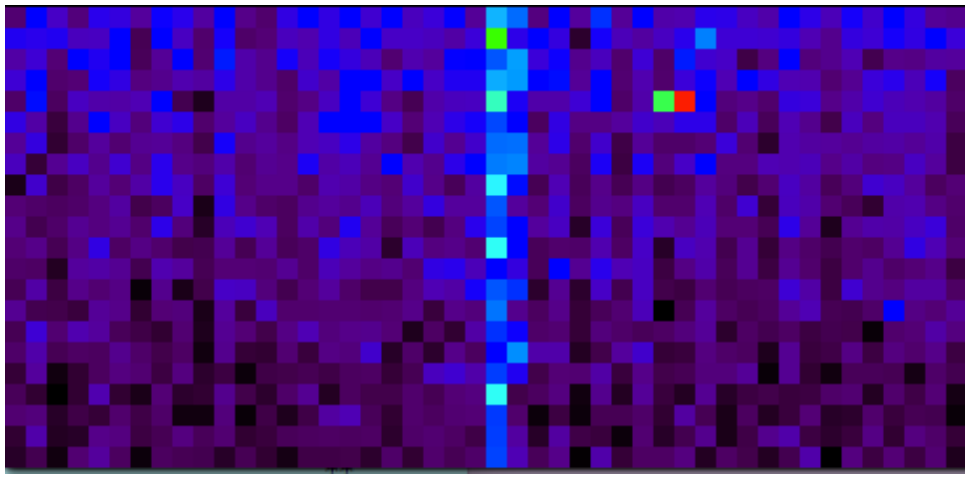




Part 1



Part 2



093MI_ICYSTARE001_PRIME

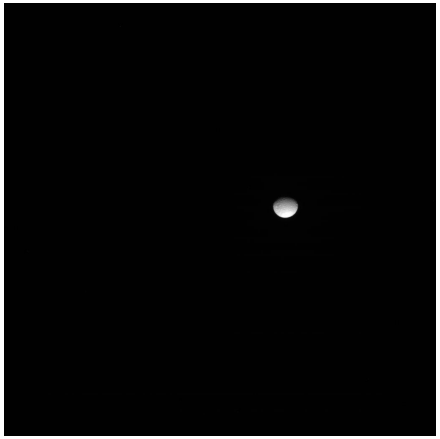
2008-319T02:06

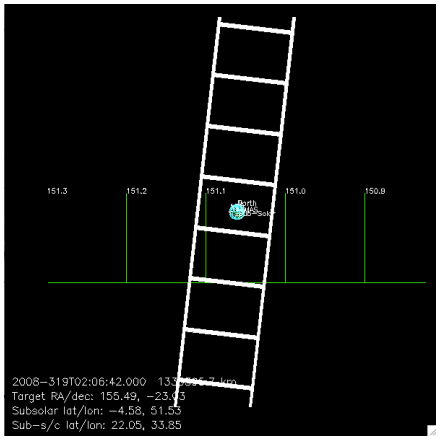
Alt= 1,350,151 km

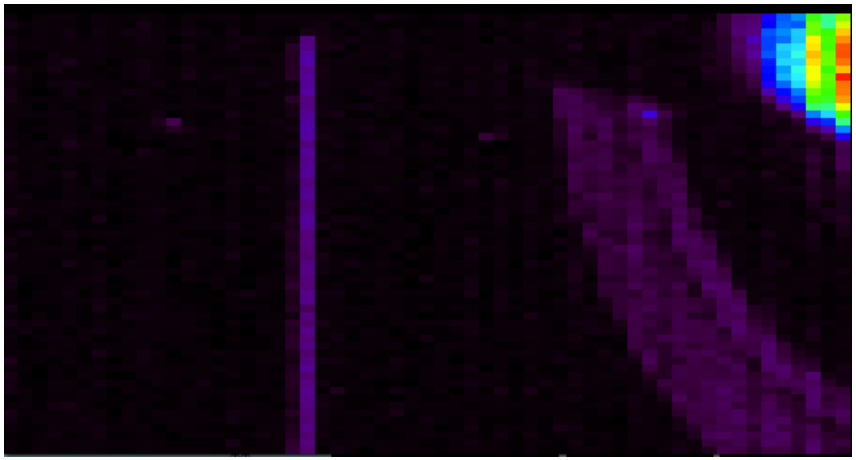
Longitude=339°W

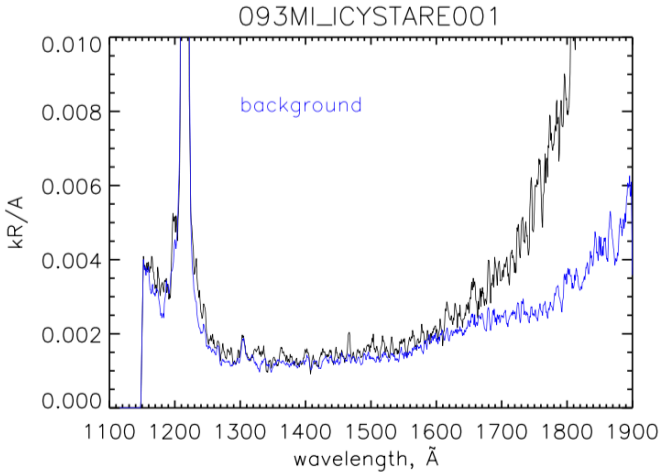
Latitude=21.7°N

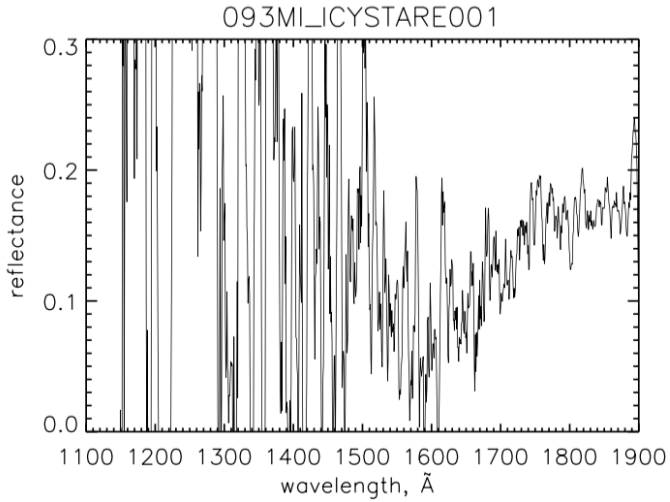
Phase=33.6°











ISS_101MI_086W151PH001_PRIME

101MI_ICYLON001_ISS

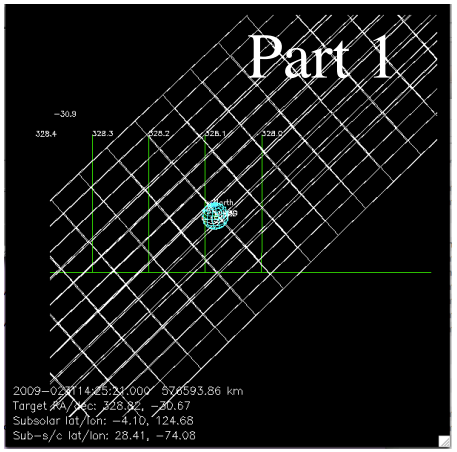
2009-023T14:26

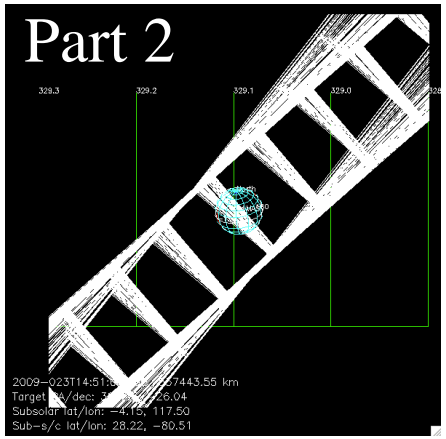
Alt= 569,733 km

Lon=76°W

Latitude=28.4°N

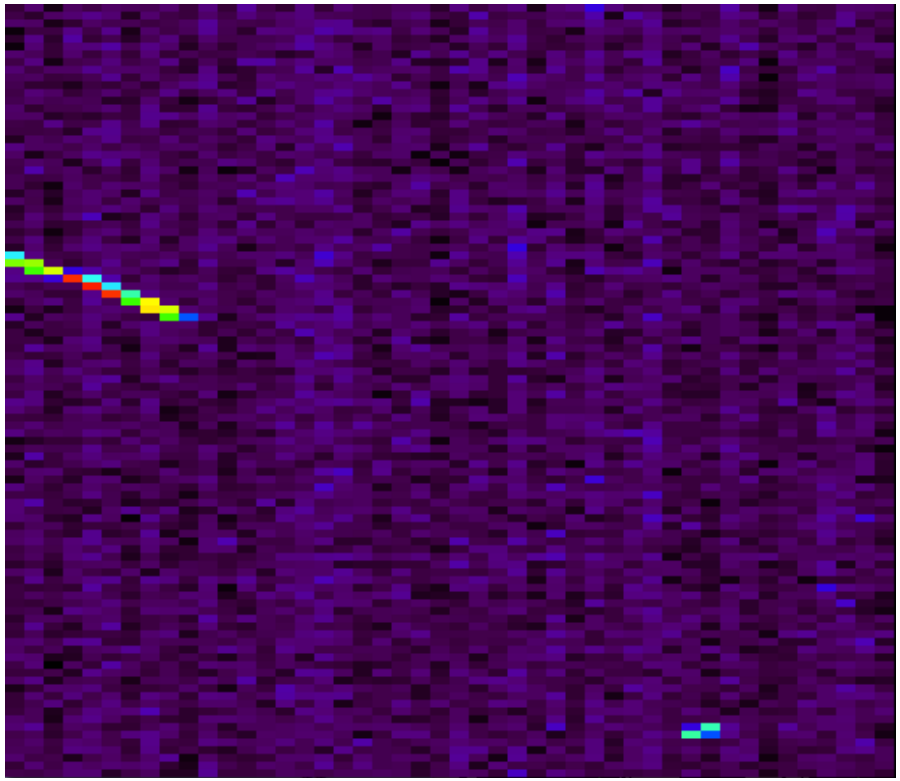
Phase=149.8°



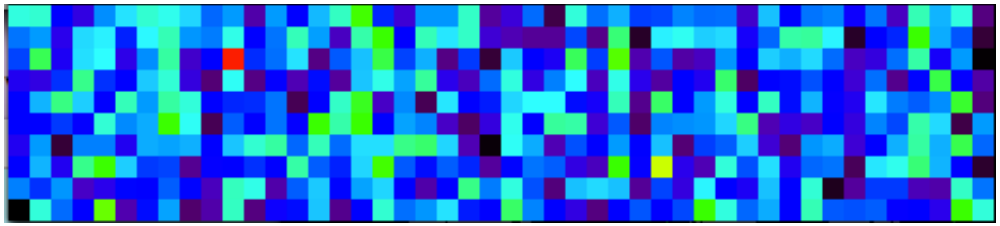


Low SNR

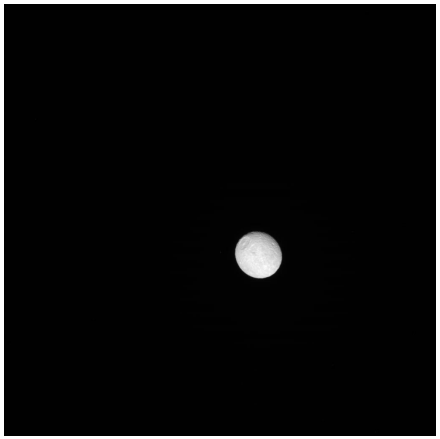
Part 2

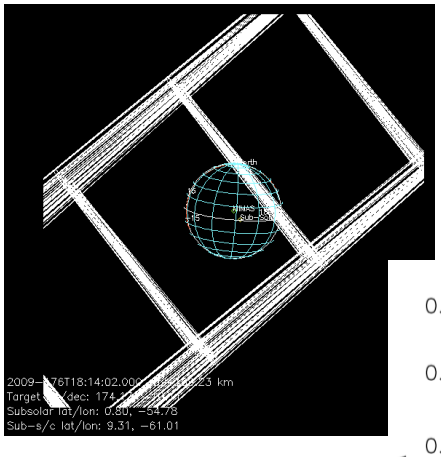


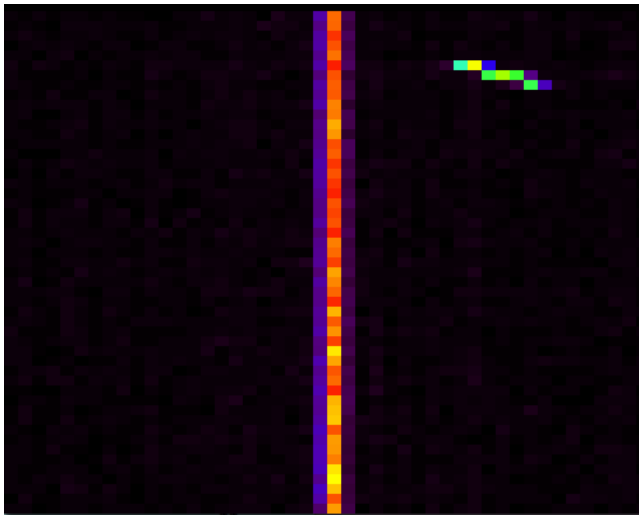
Part 1



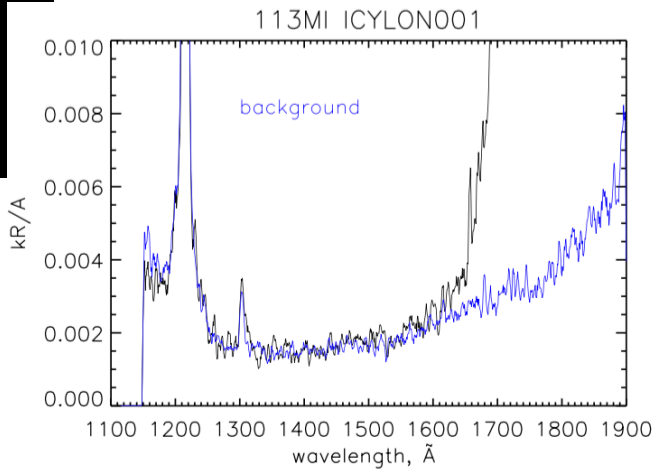
ISS_113MI_063W011PH001_PRIME

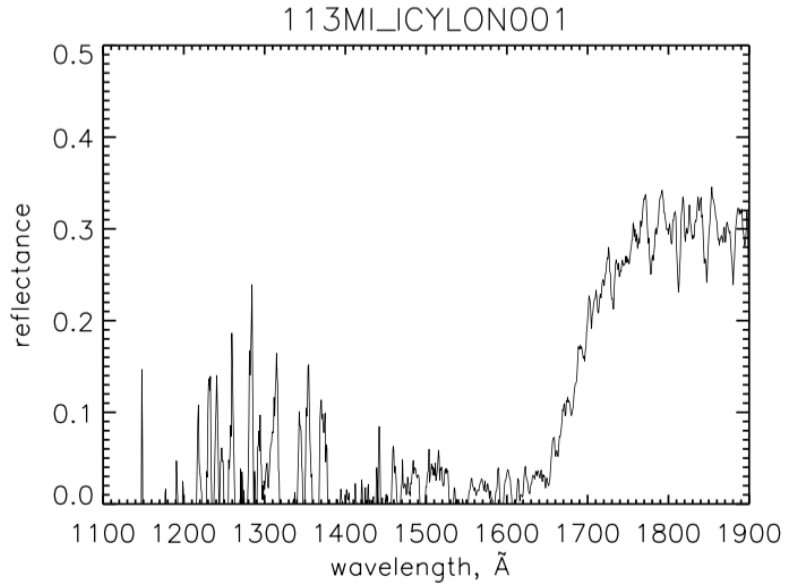




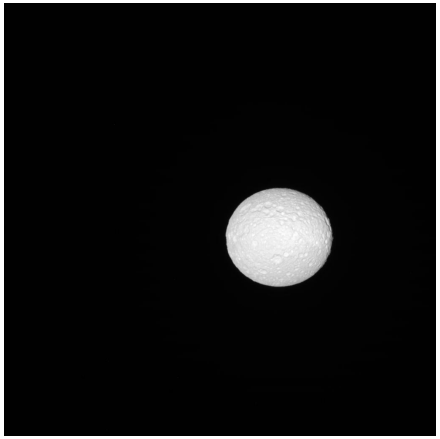


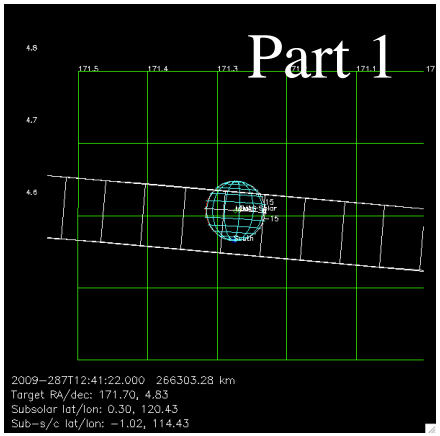
113MI_ICYLON001_ISS
2009-176T18:15
Alt= 572,337 km
Longitude=72°W
Latitude=12°N
Phase=12.7°

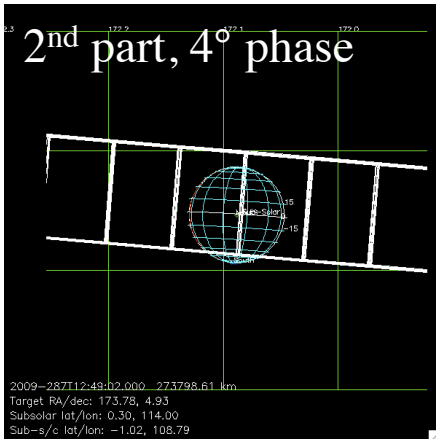


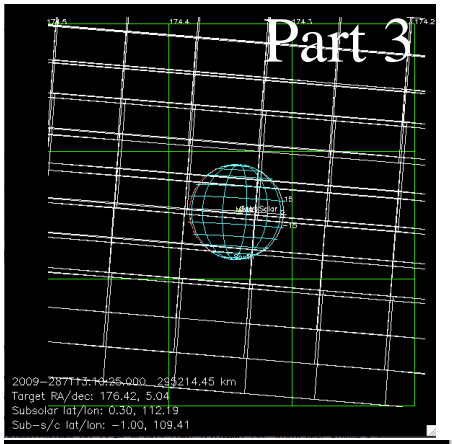


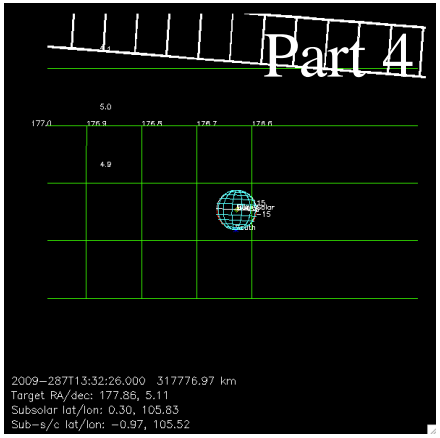
ISS_119MI_LOWPHASE001

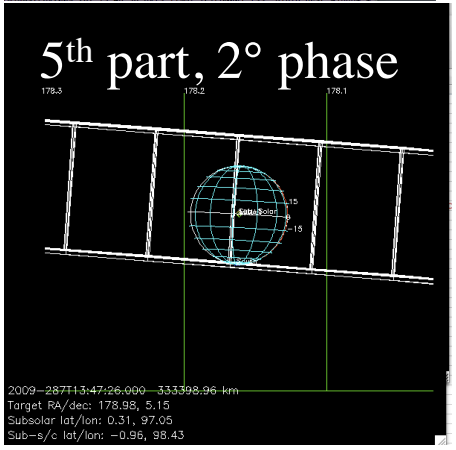












119MI_ICYLON001_ISS

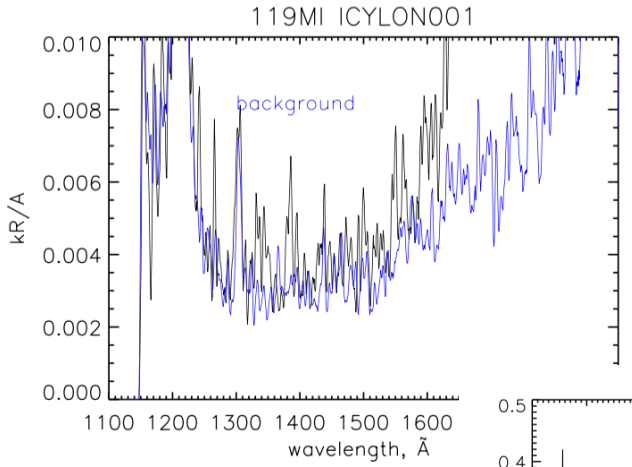
2009-287T12:42

Alt= 337,627 km

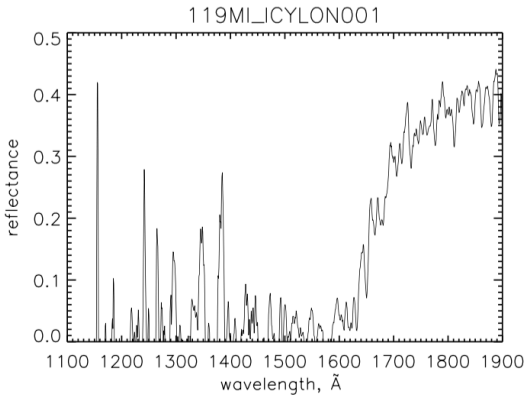
Longitude=258°W

Latitude=1°S

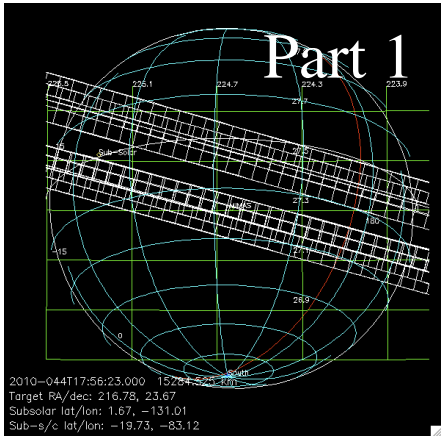
Phase=2.1° (part 5)

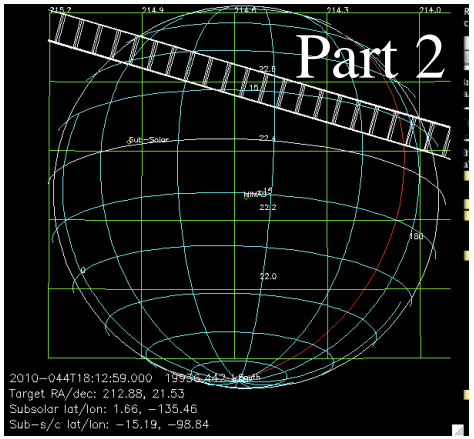


Part 5



ISS_126MI_GEOLOG001_PRIME





126MI_ICYLON001_ISS

2010-044T17:57

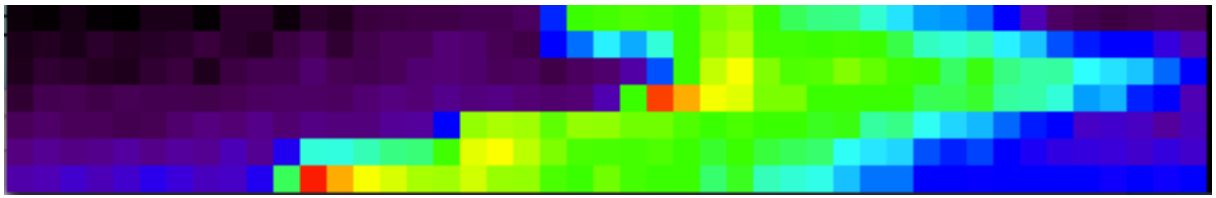
Alt= 16,826 km

Lon=89°W

Latitude=17.9°S

Phase=44.6°

Part 1



ISS_126MI_GEOLOG002_PRIME

126MI_ICYLON002_ISS

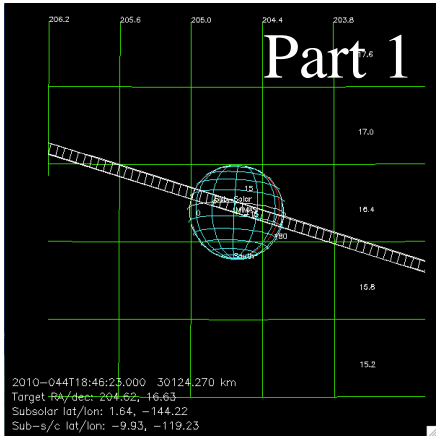
2010-044T18:47

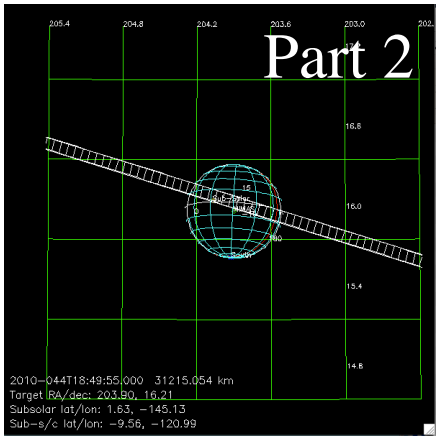
Alt= 29,926 km

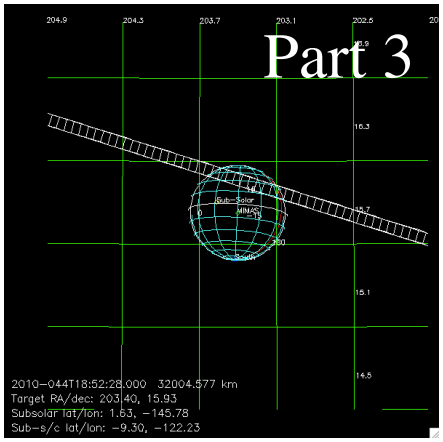
Longitude=119°W

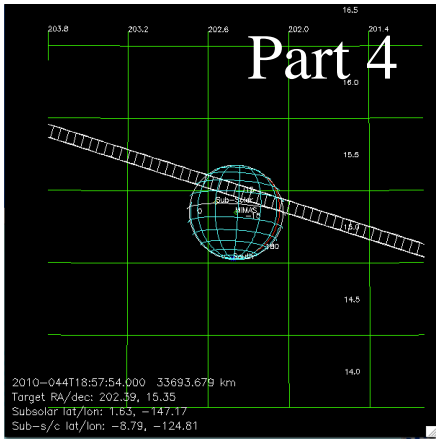
Latitude=10°S

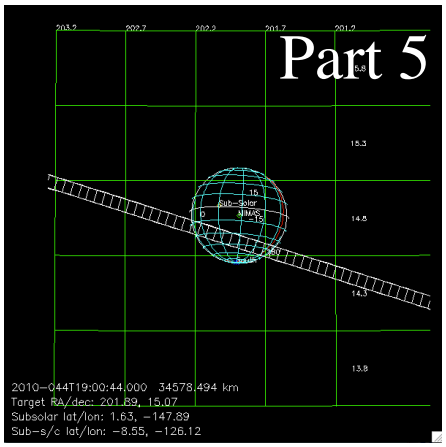
Phase=27.5°

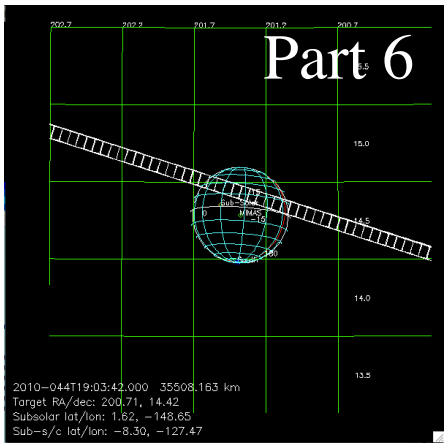








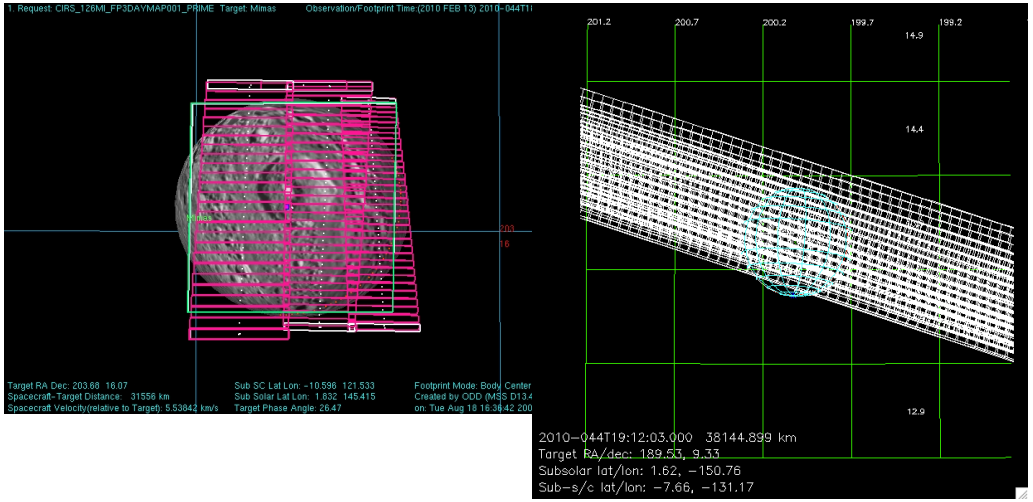


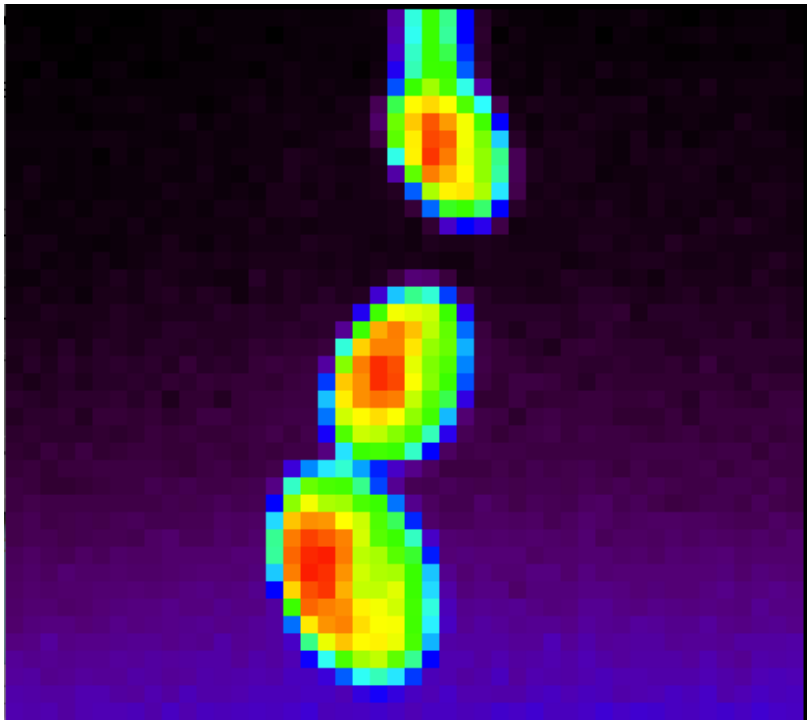


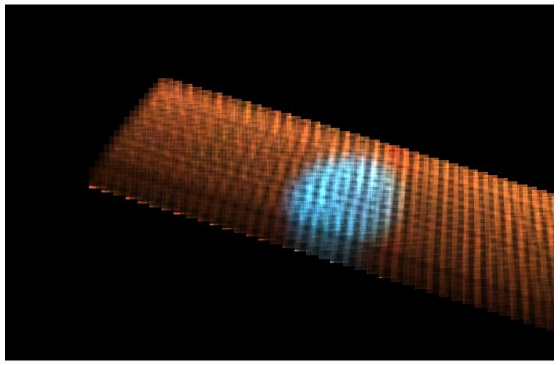
Part 6

CIRS_126MI_FP3DAYMAP001_PRIME

126MI_ICYLON003_CIRS
2010-044T19:13
Alt= 51,565 km
Longitude=147°W
Latitude=5.5°S
Phase=16.4°

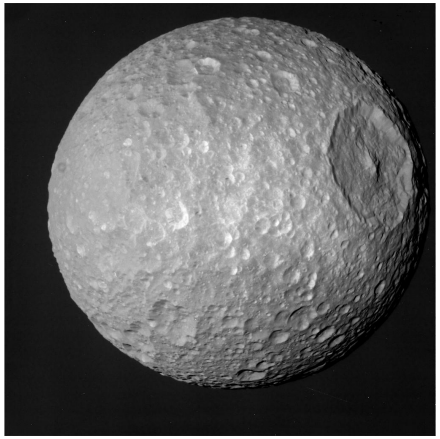


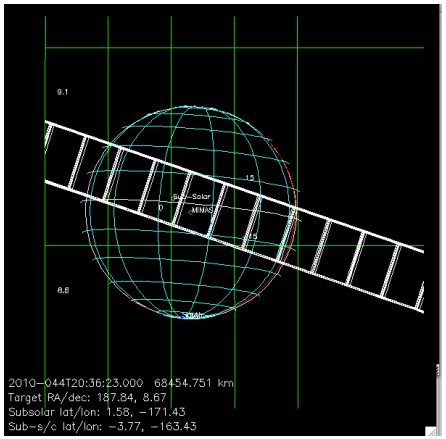




Swath 1 only

ISS_126MI_GLOCOL001_PRIME





126MI_ICYLON004_ISS

2010-044T20:37

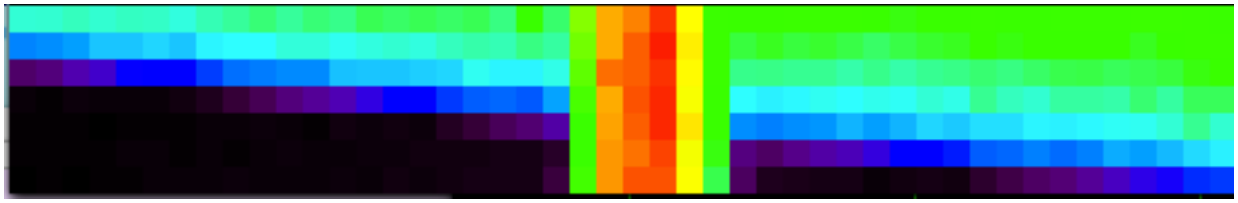
Alt= 70,834 km

Longitude=165°W

Latitude=3.6°S

Phase=10.2°

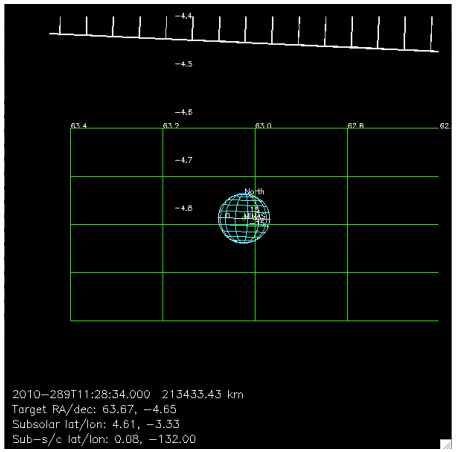
In front of Saturn part of the time



CIRS_139MI_MIMAS001_PRIME

26-part obs

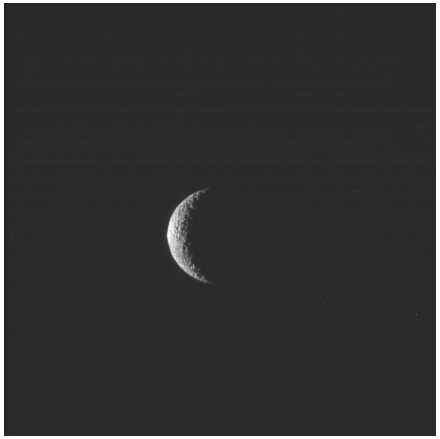
139MI_ICYECL001_CIRS
2010-289T11:30-16:59
Alt= 210,100 km
Longitude=133°W
Latitude=0.1°N
Phase=124.8°

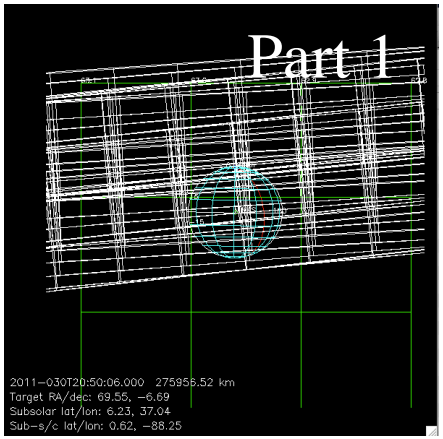


Mimas in solar eclipse 10:18:28-12:33:51
In front of Saturn 14:26-17:20
No bigger than 3.78 mrad across

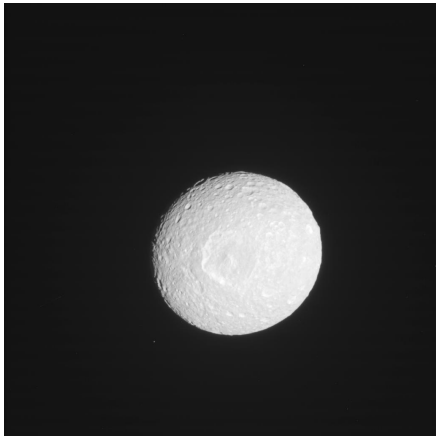
11-part obs

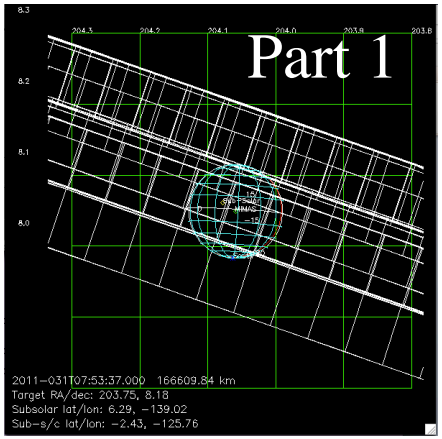
144MI_ICYLON001_CIRS
2011-030T20:51
Alt= 261,826 km
Longitude= 89°W
Latitude=0.5°N
Phase=125°

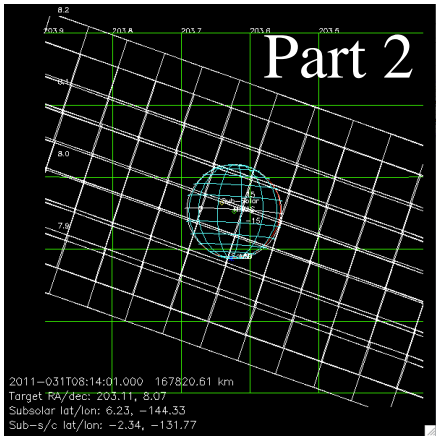


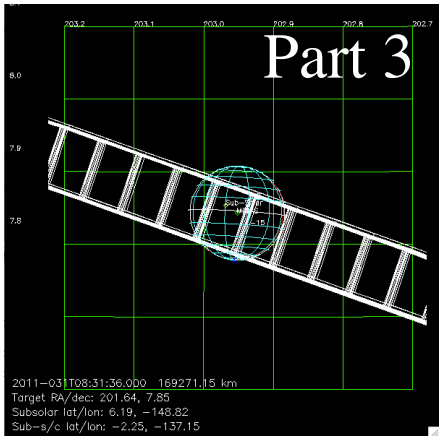


144MI_ICYLON002_ISS
2011-031T07:54
Alt= 166,848 km
Lon=128°W
Latitude=2°S
Phase=16°

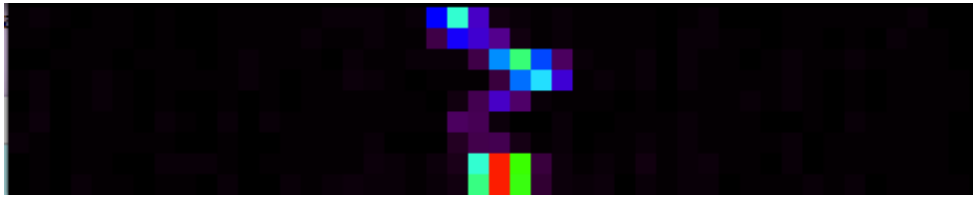




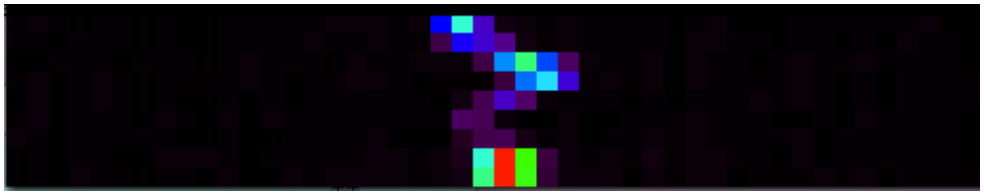




Part 1

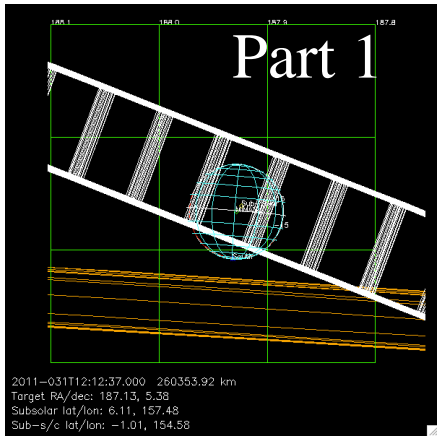


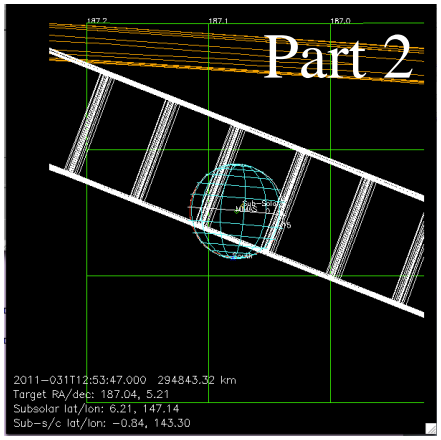
Part 2

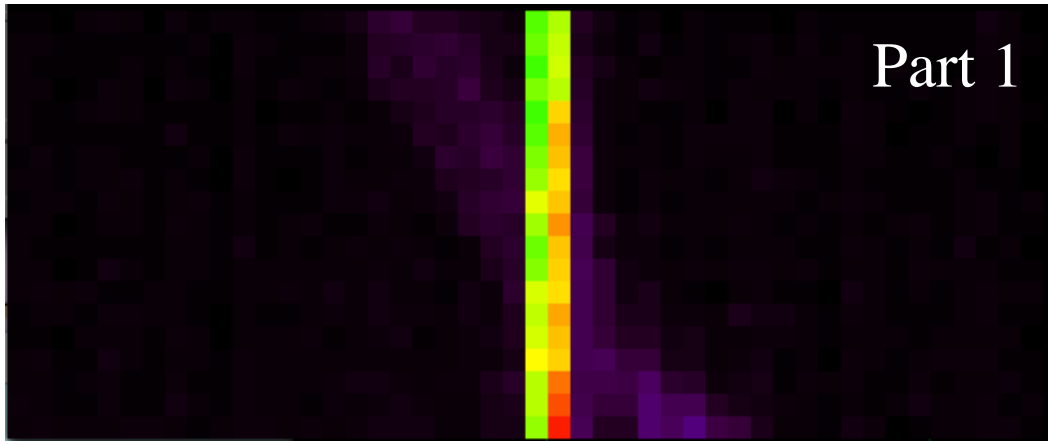


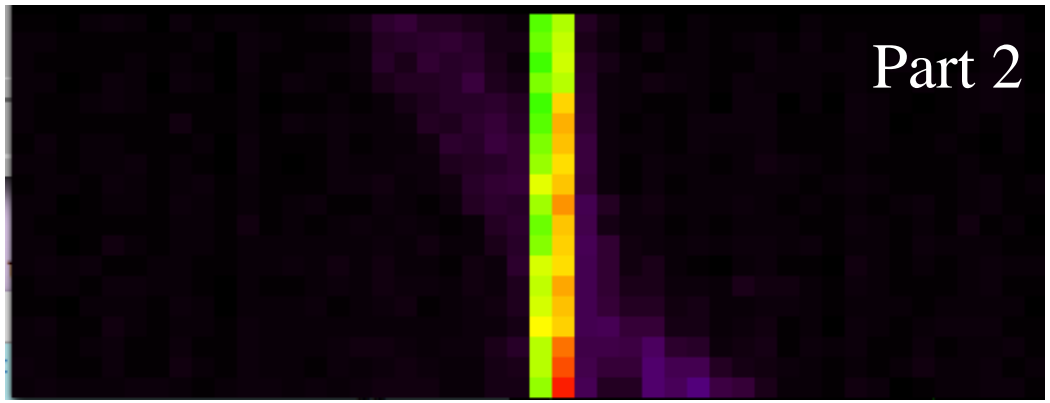
Part 3

144MI_ICYLON003_VIMS
2011-031T12:13
Alt= 274,819 km
Longitude=210°W
Latitude=1°S
Phase=8.9°

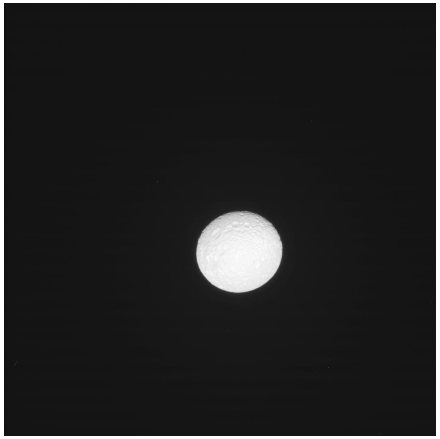


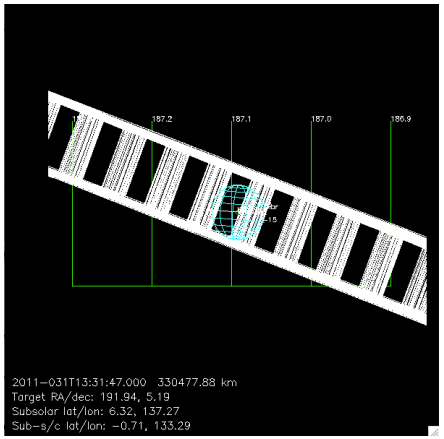


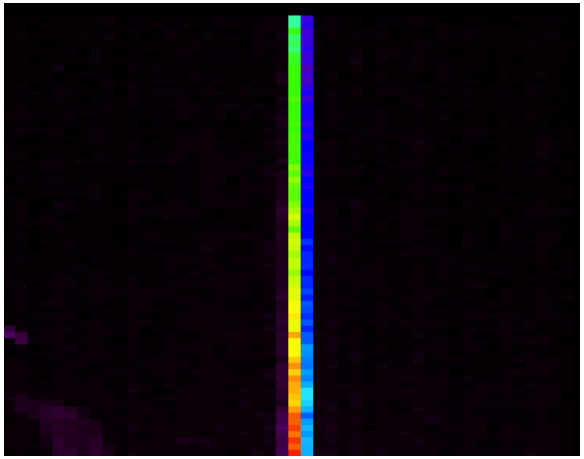


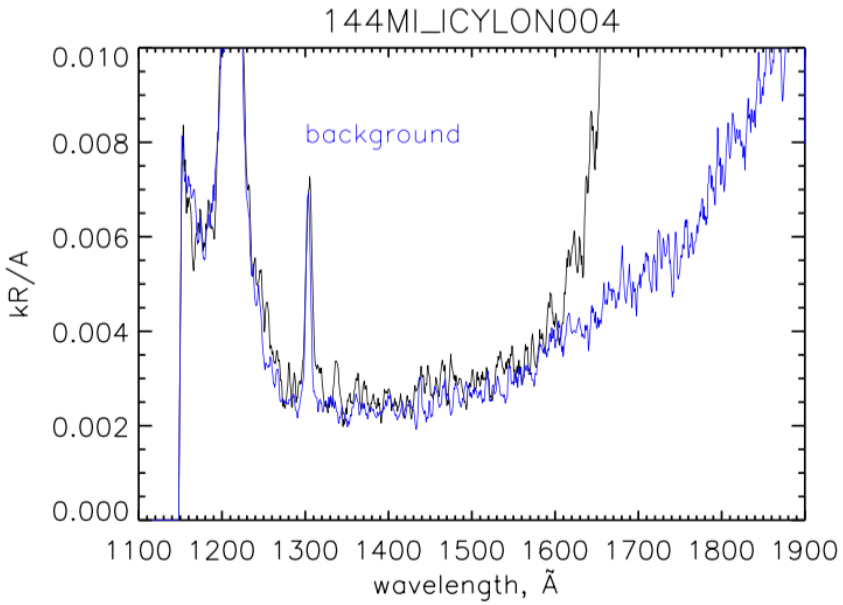


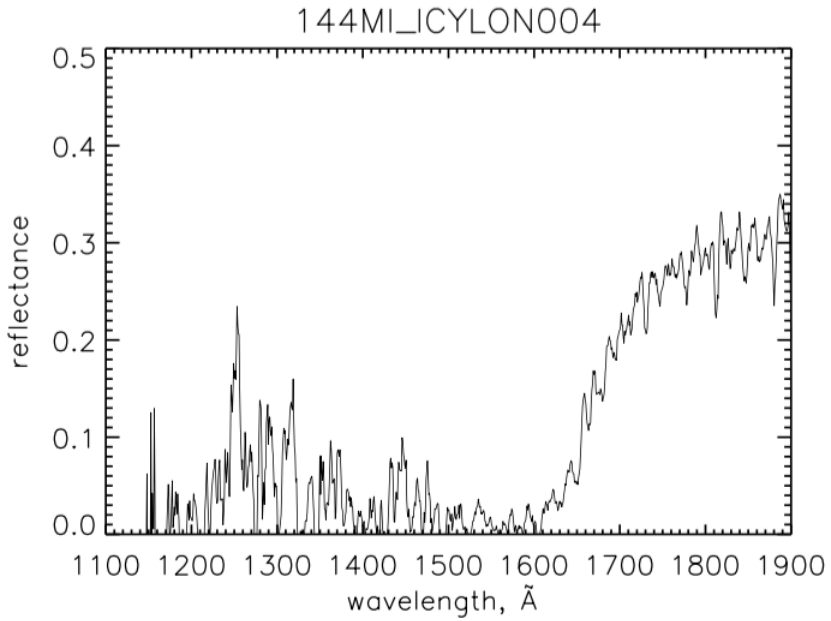
144MI_ICYLON004_PRIME
2011-031T13:32
Alt= 404,134 km
Longitude=244°W
Latitude=0.5°S
Phase=8°



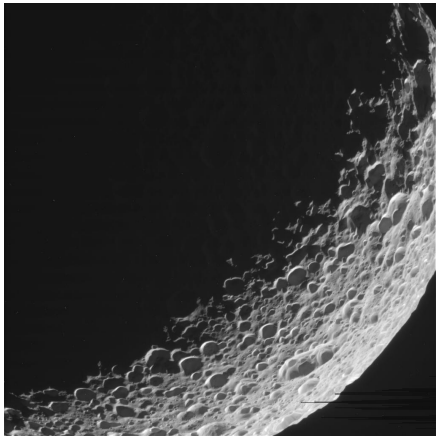


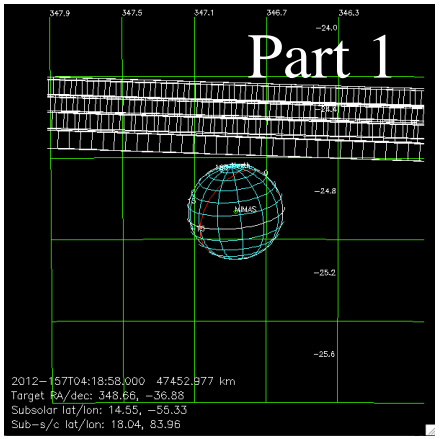


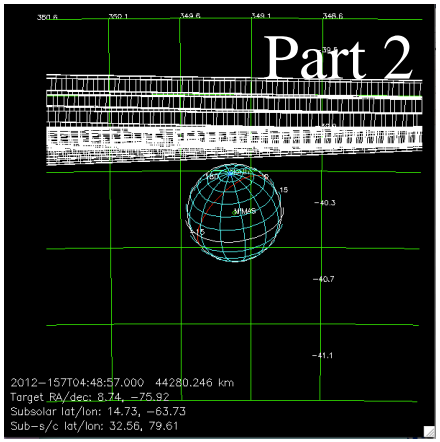




167MI_ICYLON001_CIRS
2012-157T04:20
Alt= 45,774 km
Longitude=278°W
Latitude=23.7°N
Phase=126°

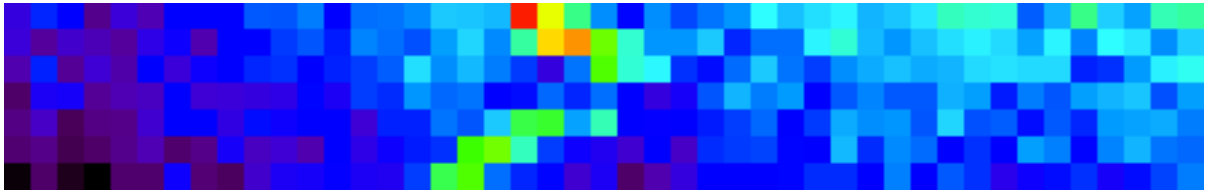


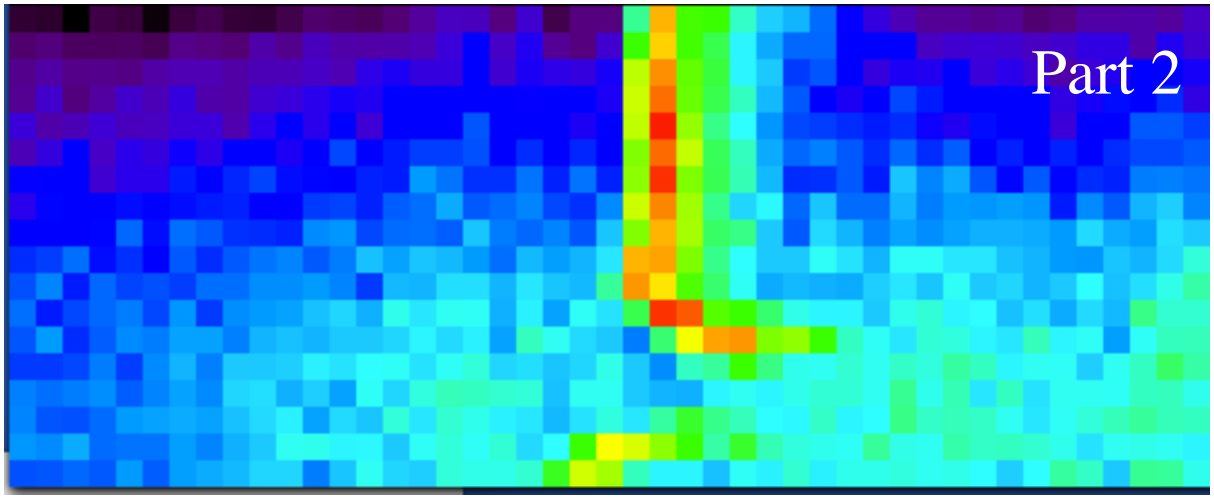




Fast scans?

Part 1





167MI_ICYMAP001_CIRS

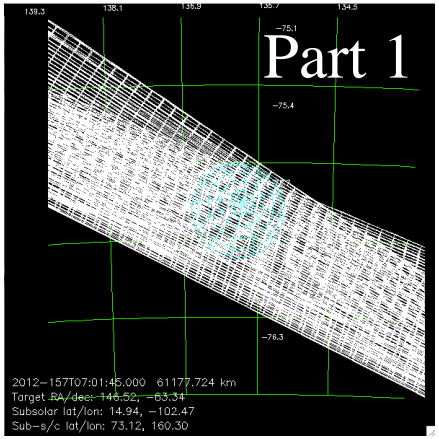
2012-157T07:02

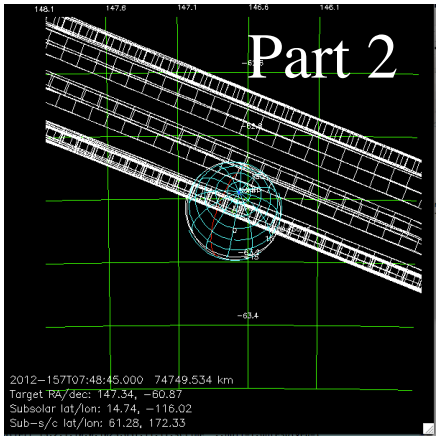
Alt= 67,247 km

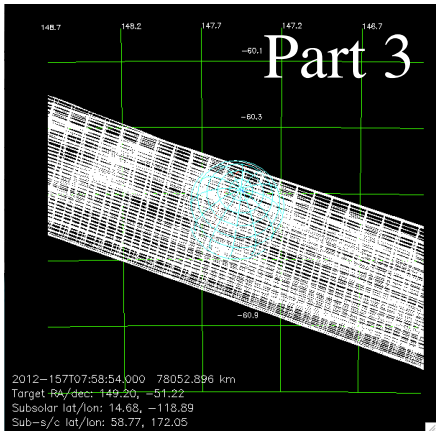
Longitude=191°W

Latitude=67.5°N

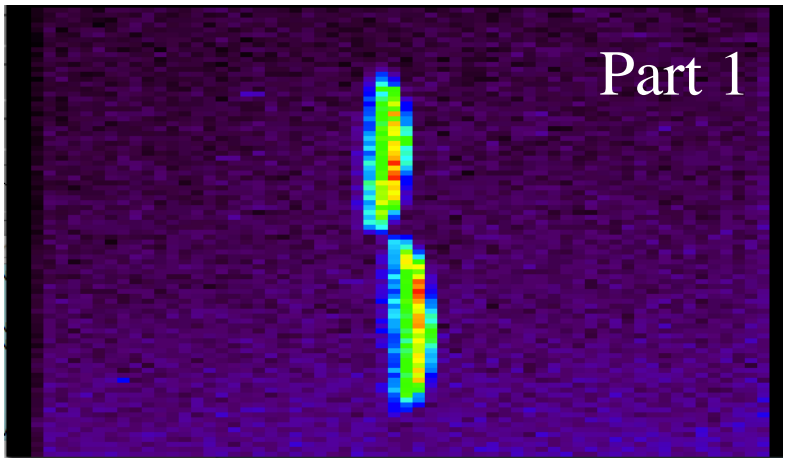
Phase=73°

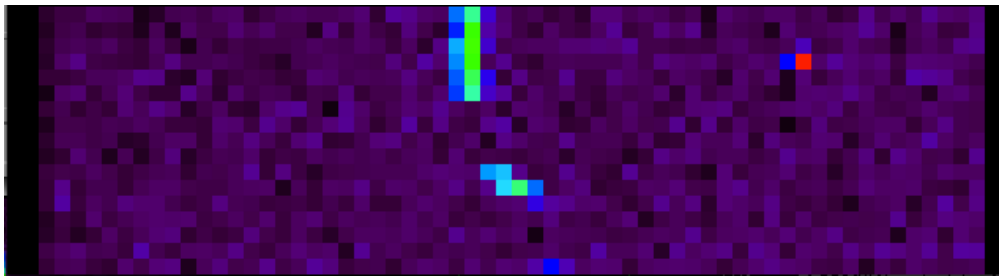


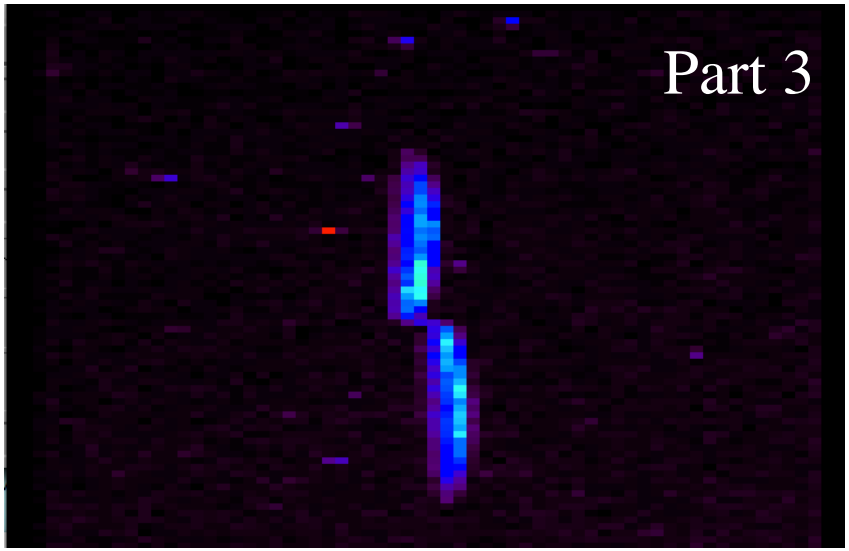




Part 2 (fast scan)







170MI_LOPHASE001_PIE

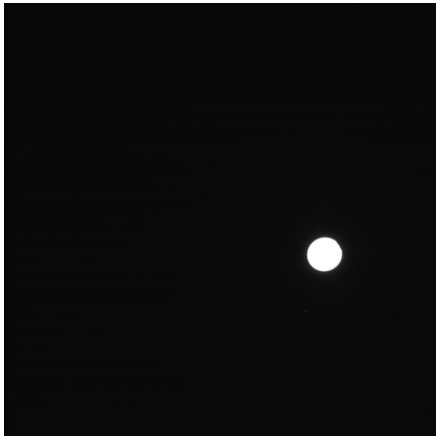
2012-226T19:38

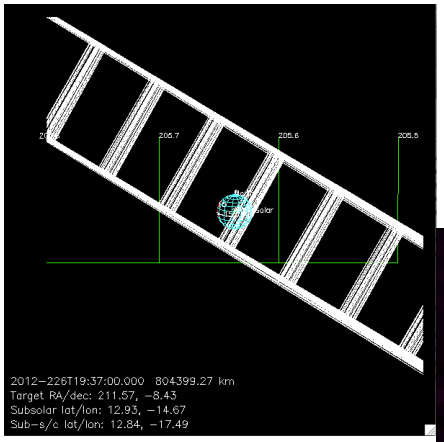
Alt= 807,118 km

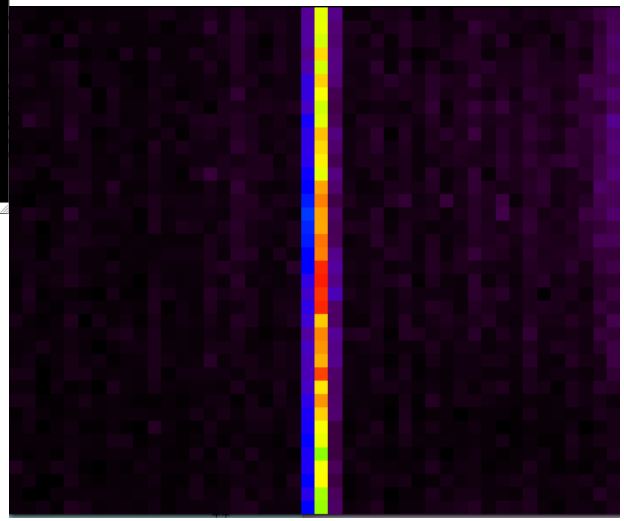
Longitude=24°W

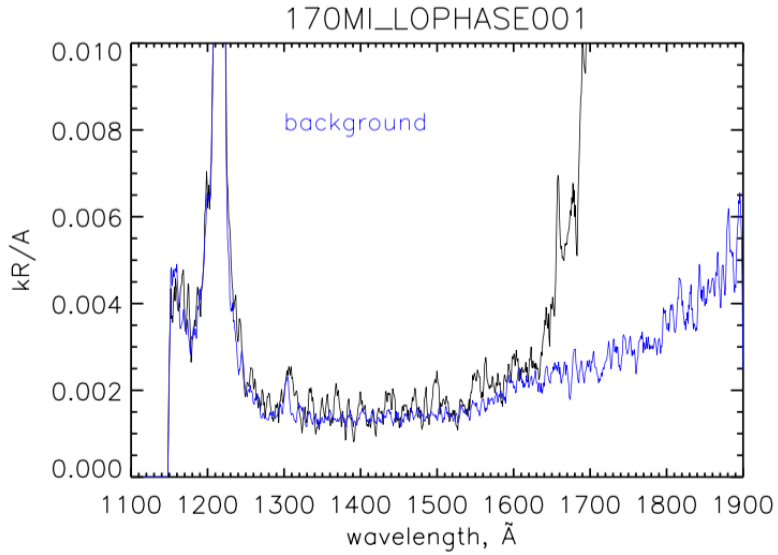
Latitude=13°N

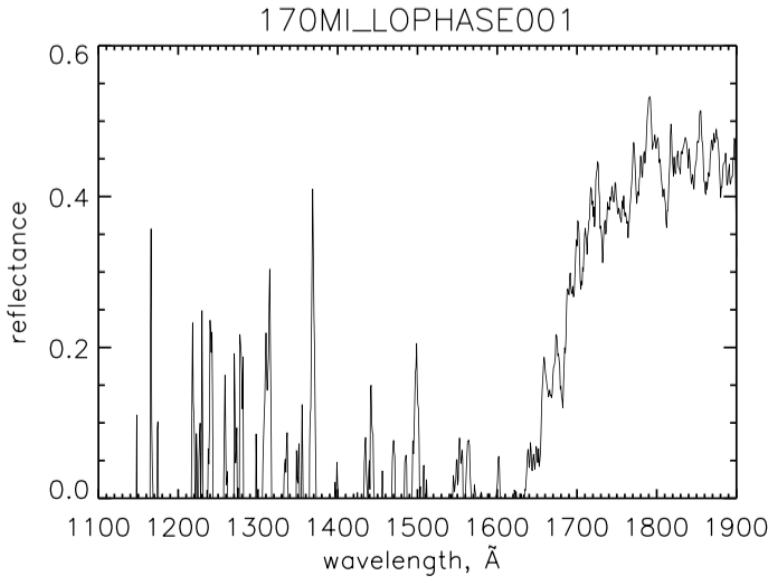
Phase=1.6°



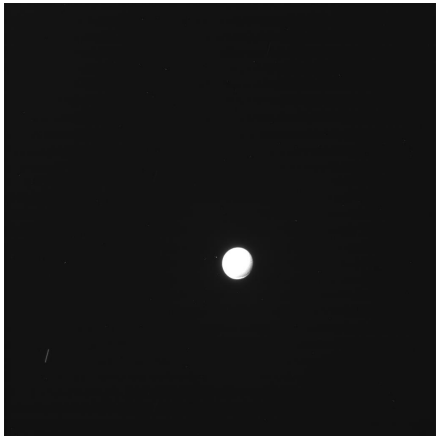


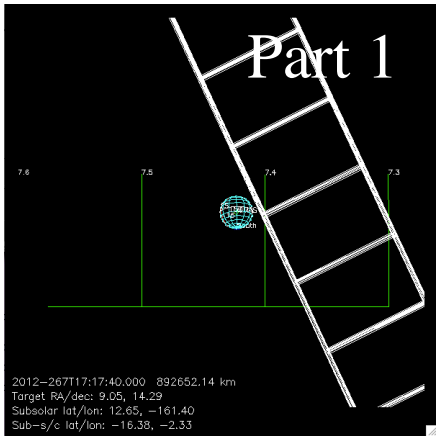


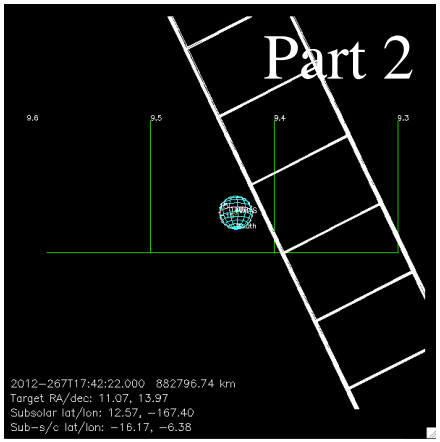


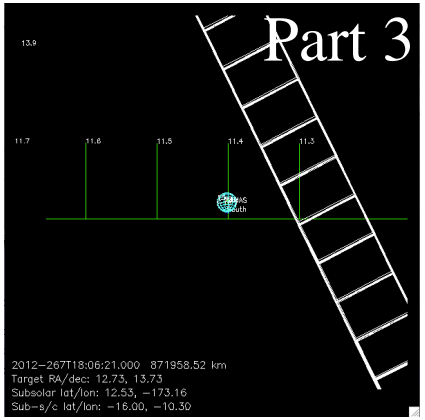


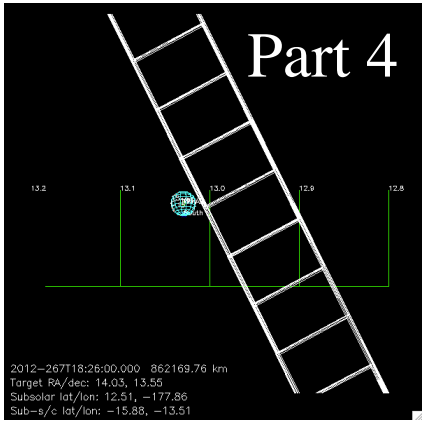
172MI_ICYLON001_ISS
2012-267T17:18
Alt= 888,574 km
Longitude=4°W
Latitude=16.3°S
Phase=158°











Mimas was not in the UVIS slit

185MI_ICYLON001_ISS

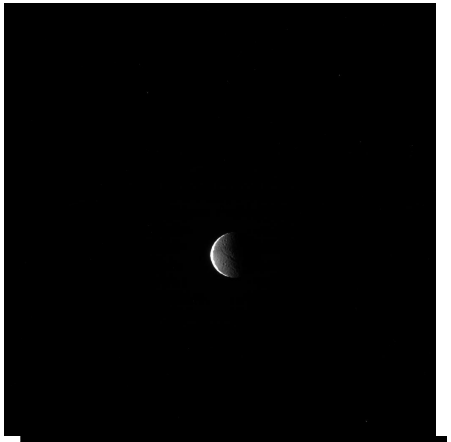
2013-092T10:02

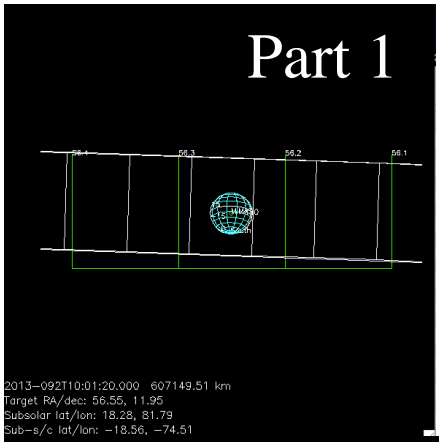
Alt= 604,259 km

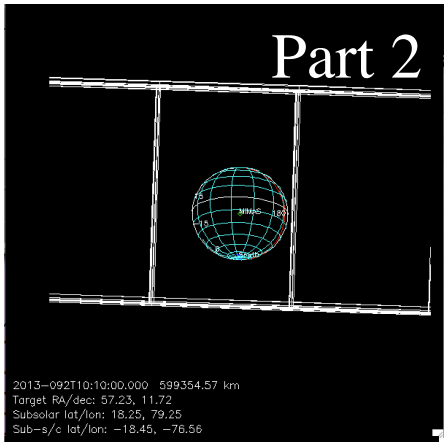
Longitude=75°W

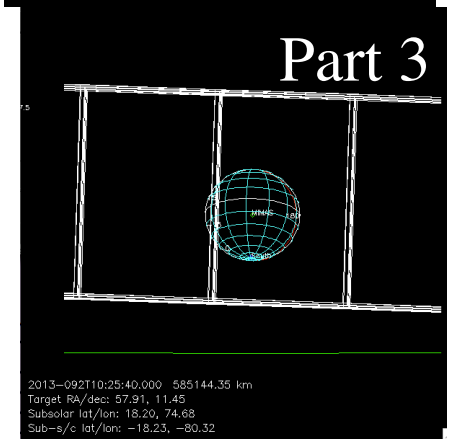
Latitude=19°S

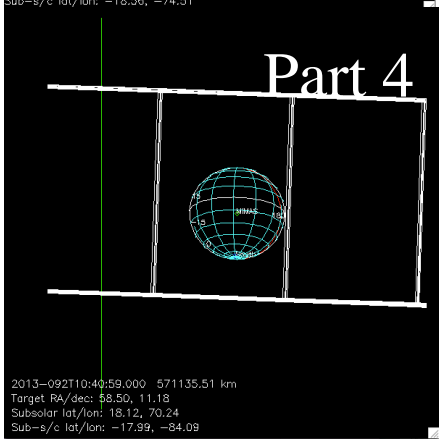
Phase=160°

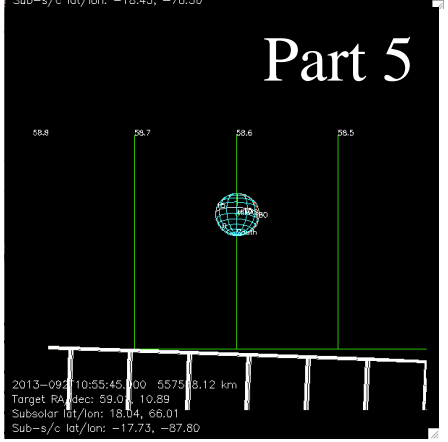




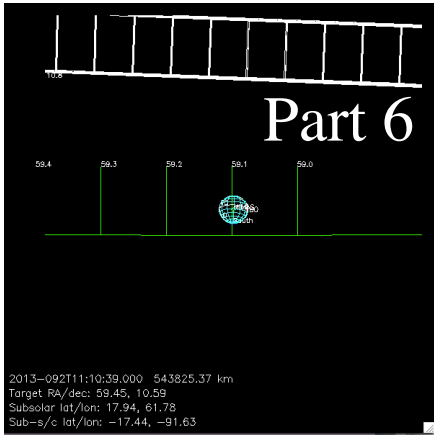


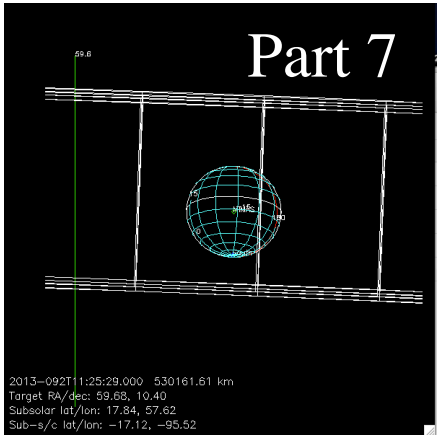




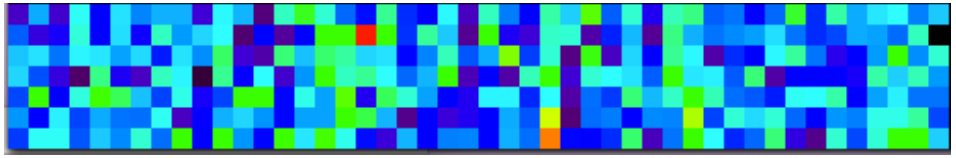


Low SNR

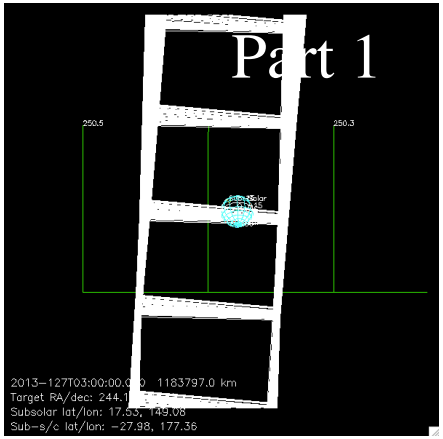


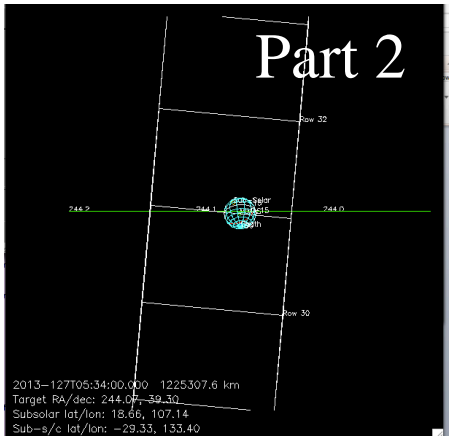


Part 2

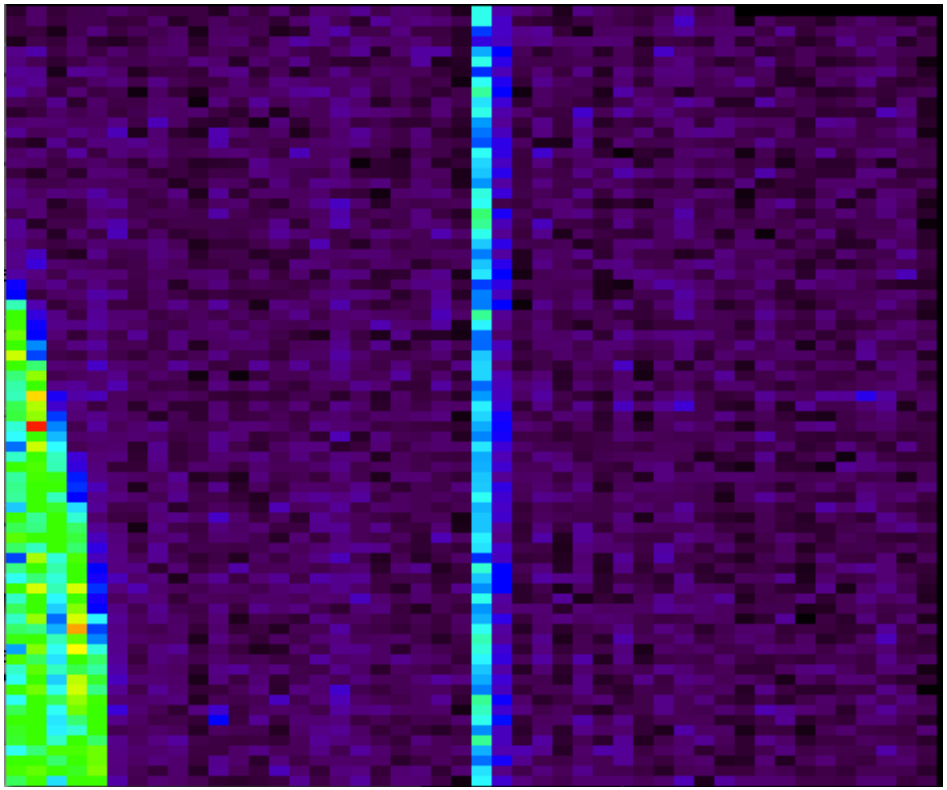


189MI_ICYLON001_PRIME
2013-127T03:01
Alt= 1,197,346 km
Longitude=204°W
Latitude=28.7°S
Phase=58.6°

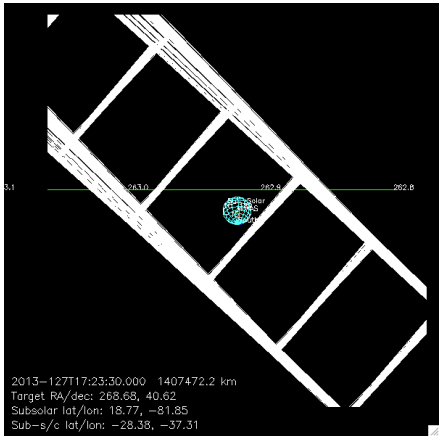




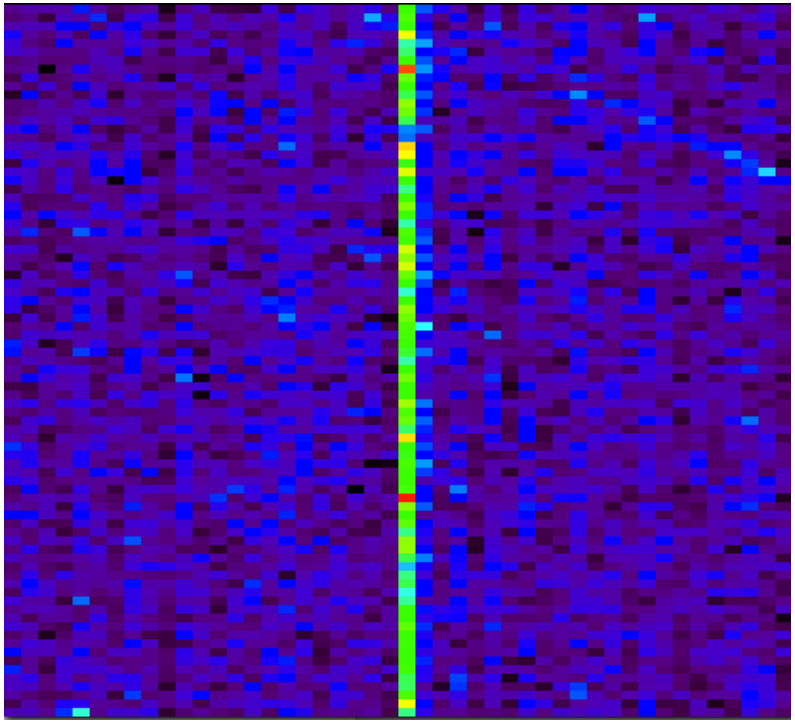
No ISS rider



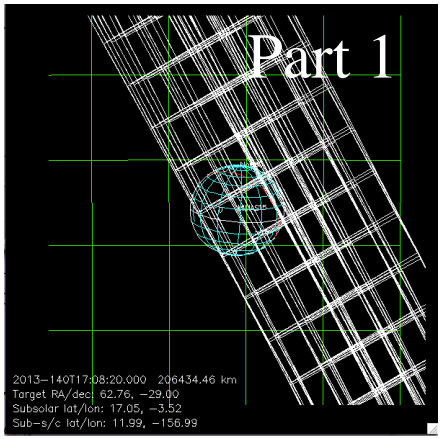
189MI_ICYLON002_PRIME
2013-127T17:24
Alt= 1,356,111 km
Longitude=57°W
Latitude=31°S
Phase=68.5°

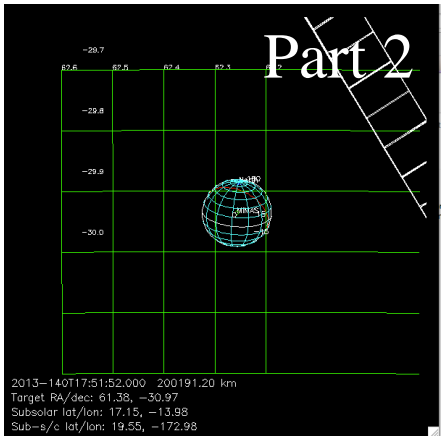


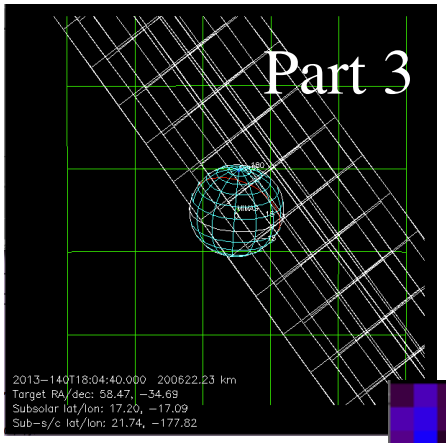
No ISS rider



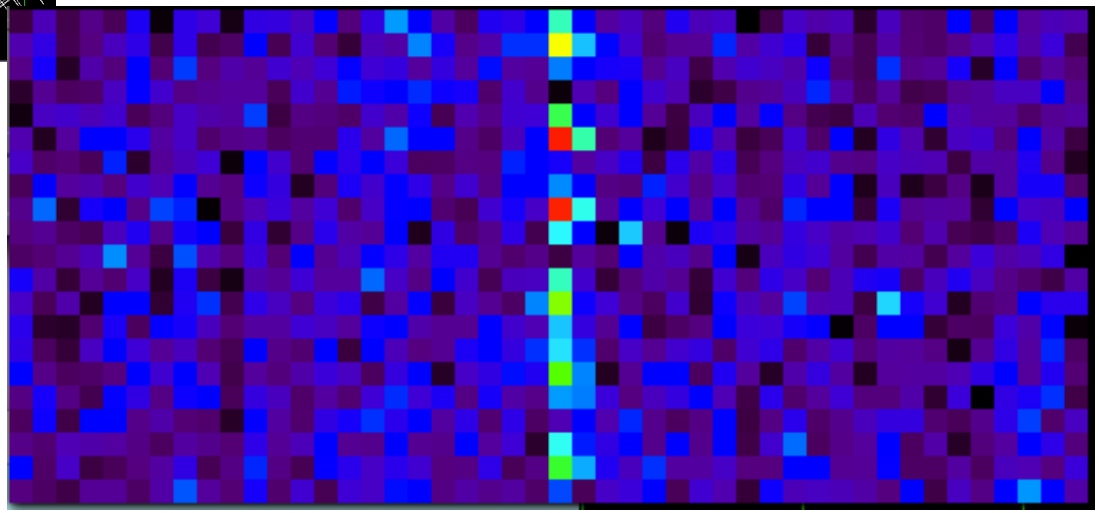
190MI_ICYLON001_CIRS
2013-140T17:08
Alt= 202,342 km
Longitude=164°W
Latitude=15.5°N
Phase=133.9°



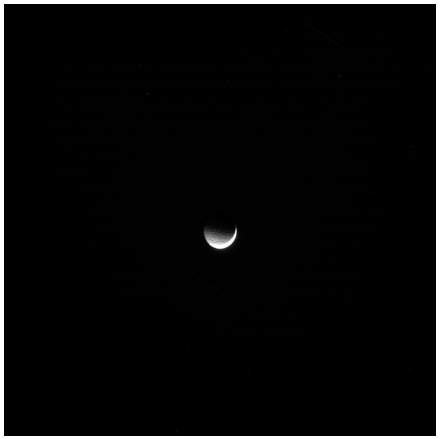


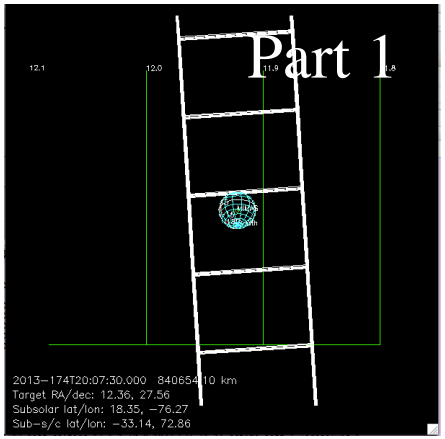


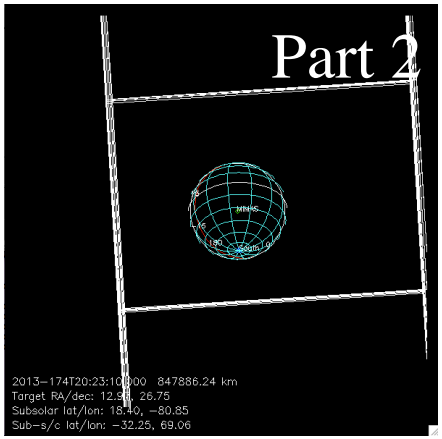
Part 1

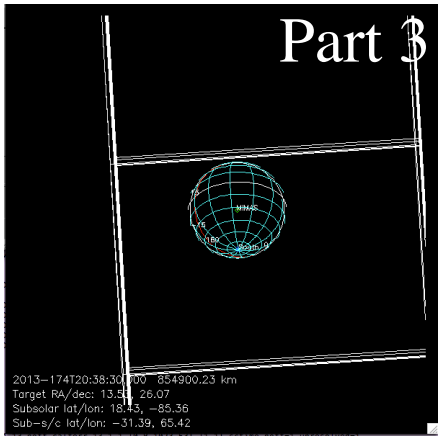


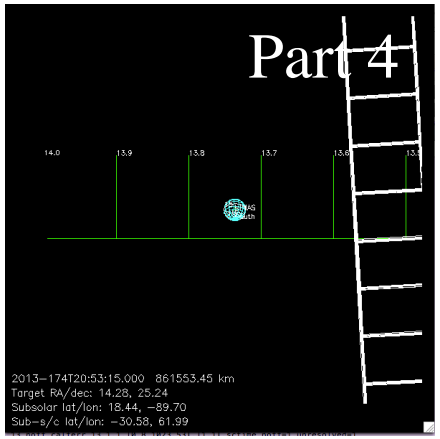
193MI_ICYLON001_ISS
2013-174T20:08
Alt= 843,232 km
Longitude=289°W
Latitude=32.8°S
Phase=151°

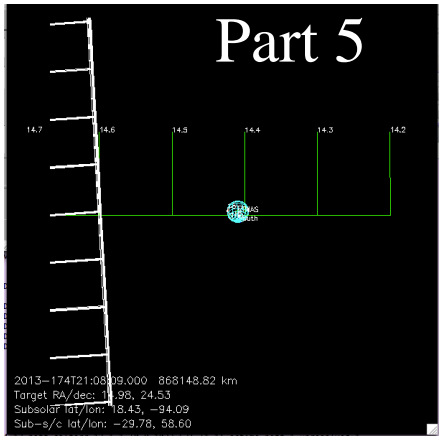




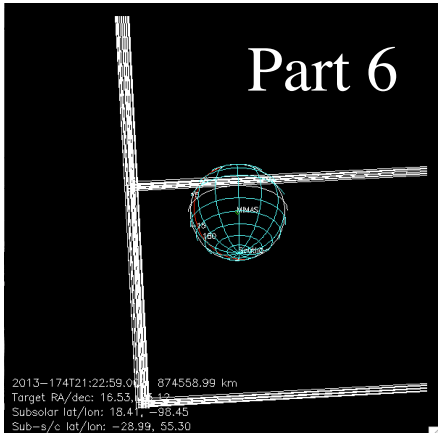




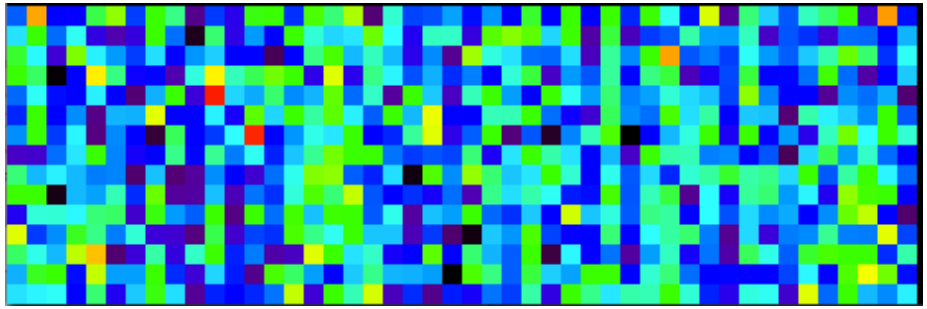




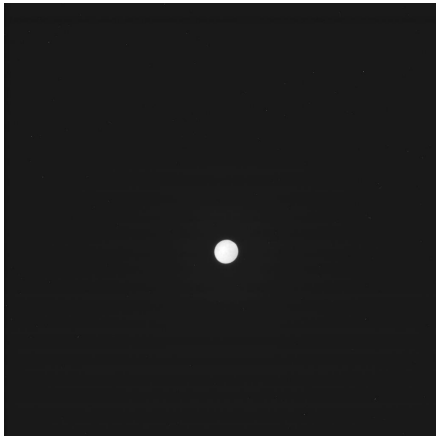
Low SNR

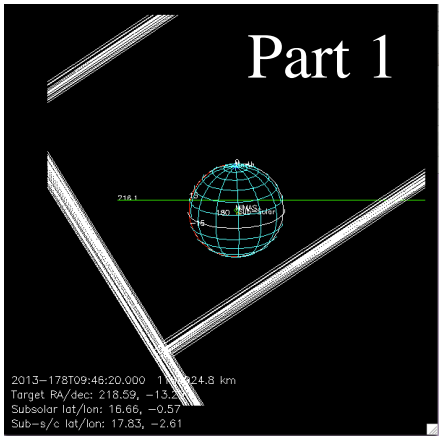


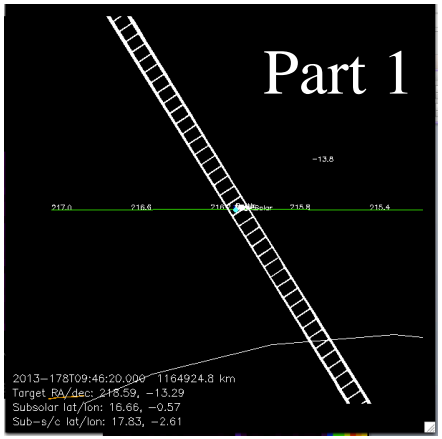
Part 6

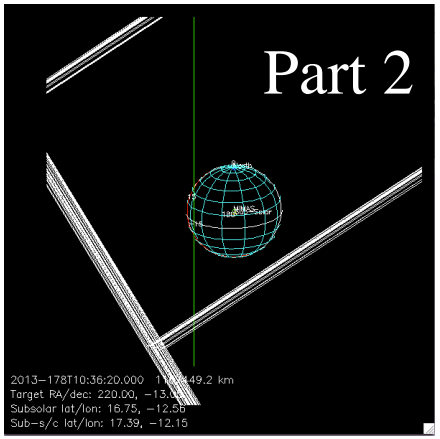


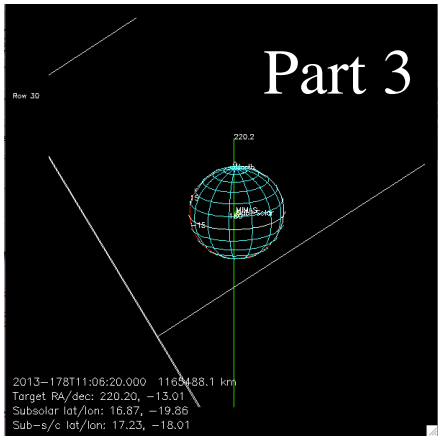
193MI_LOPHASE001_PIE
2013-178T09:47
Alt= 1,166,539 km
Longitude=7.2°W
Latitude=17.6°N
Phase=1.5°

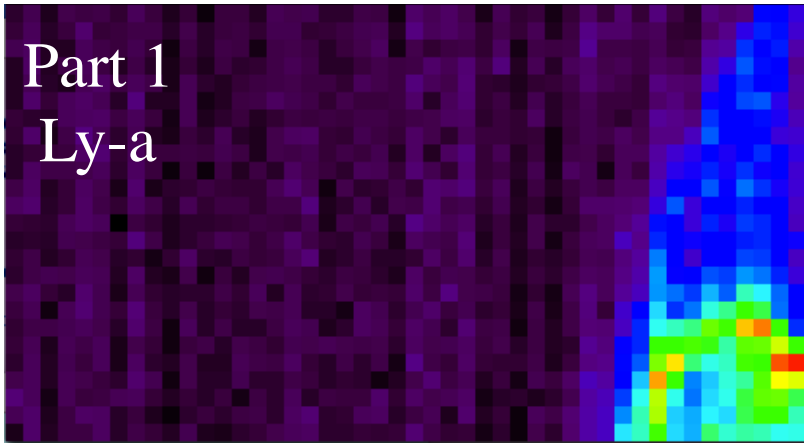


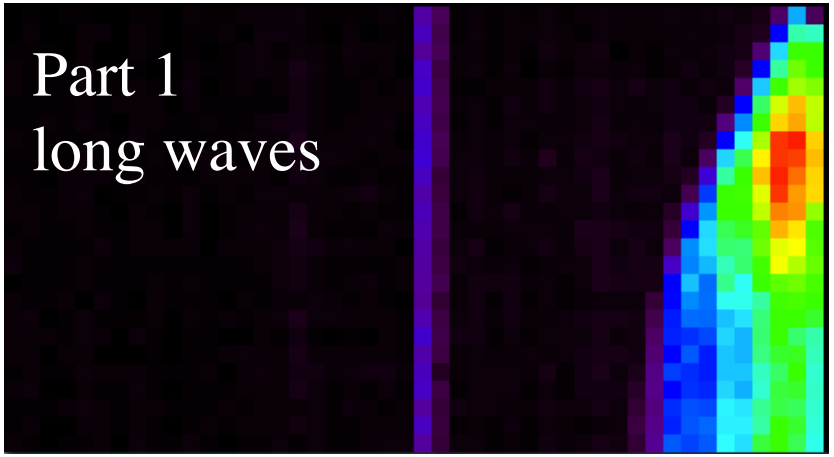




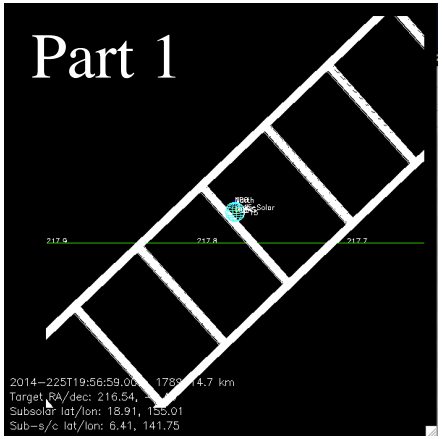


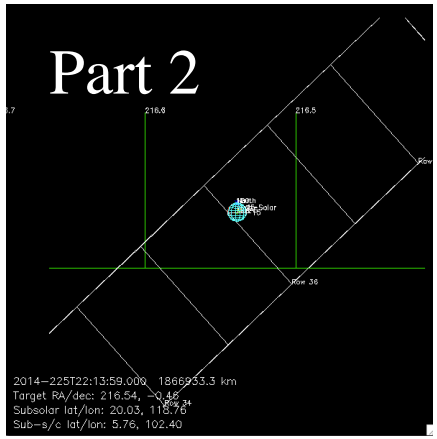




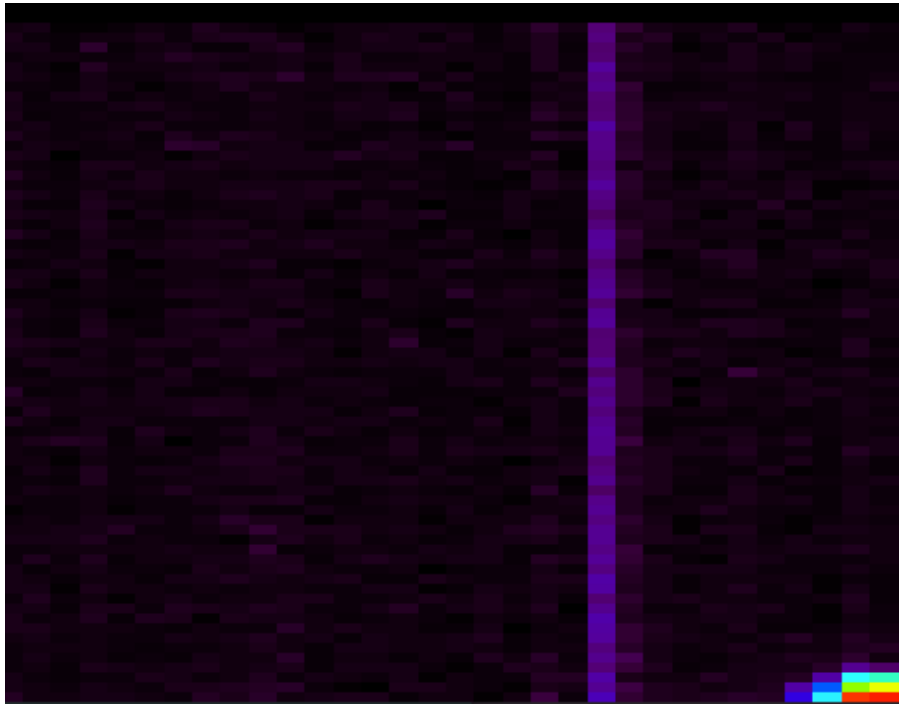


207MI_ICYLON001_PRIME
2014-225T19:56
Alt= 1,825,274 km
Longitude=238°W
Latitude=6°N
Phase=20.6°

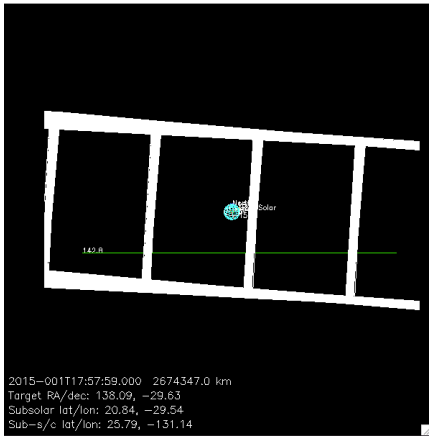




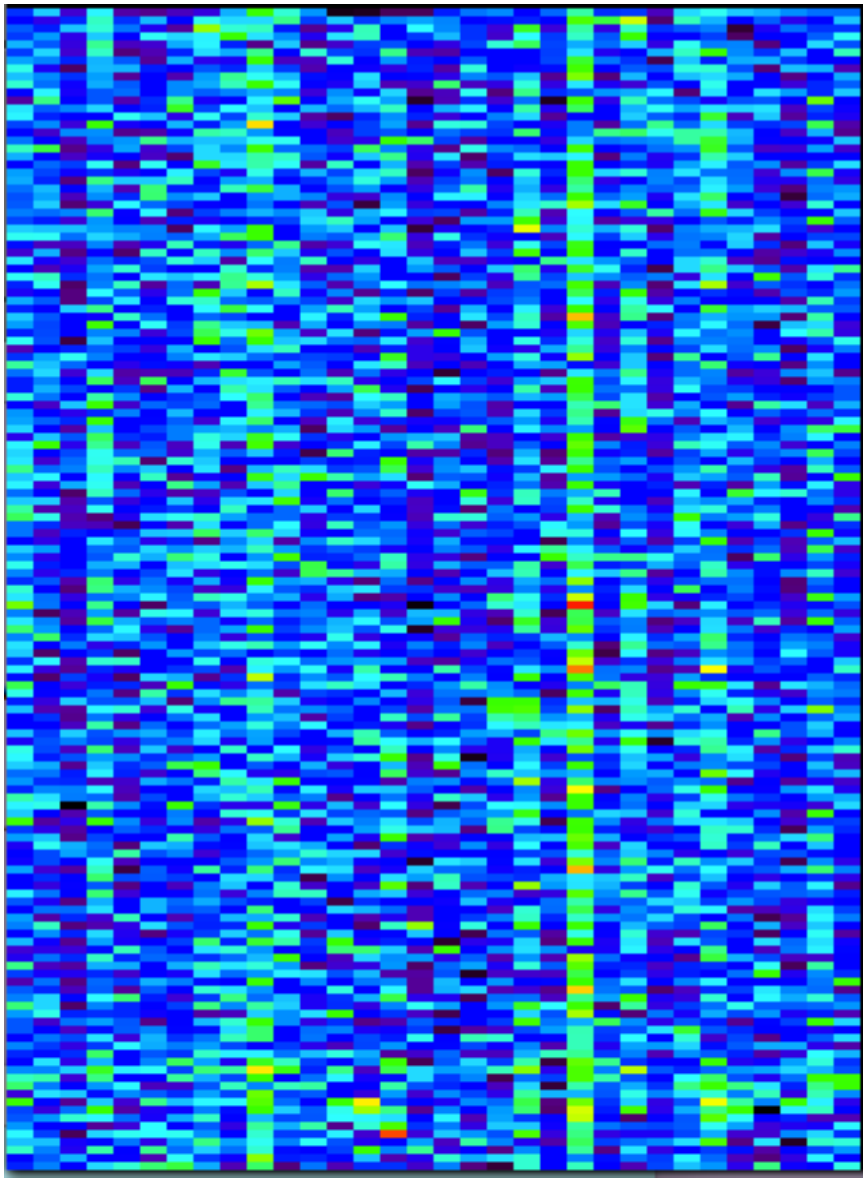
No ISS rider



211MI_ICYLON001_PRIME
2015-001T17:57
Alt= 2,612,642 km
Longitude=169°W
Latitude=25°N
Phase=85°

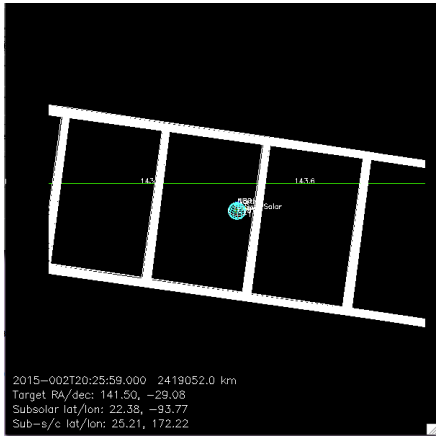


No ISS rider

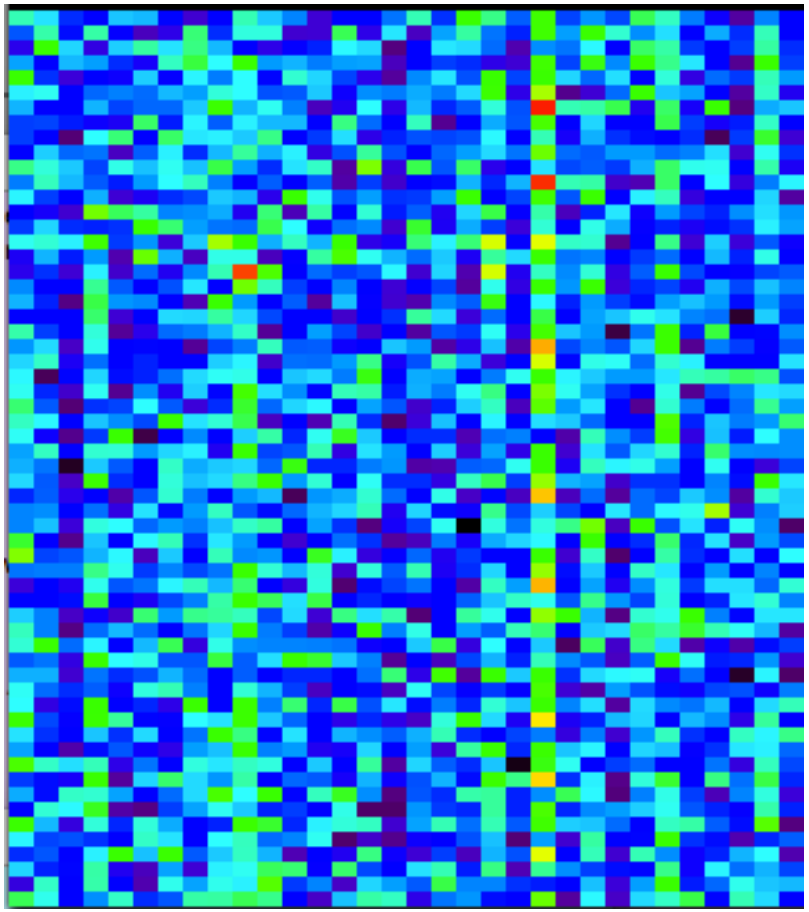


Low SNR

211MI_ICYLON002_PRIME
2015-002T20:26
Alt= 2,425,576 km
Longitude=203°W
Latitude=25°N
Phase=84°

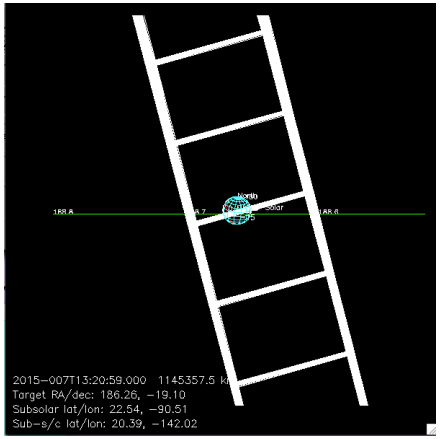


No ISS rider

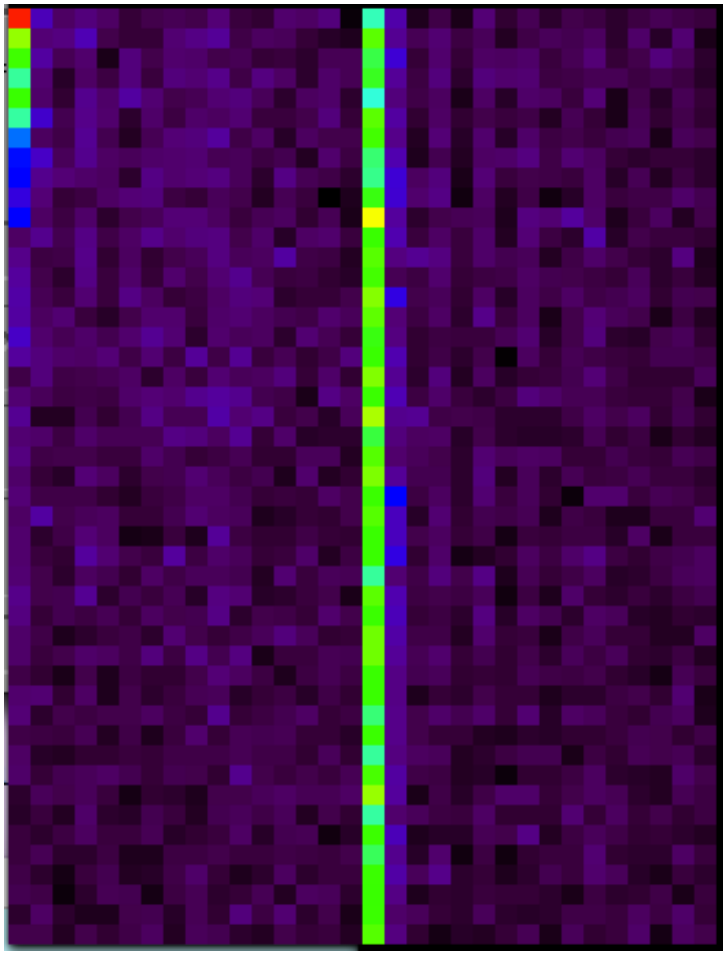


Low SNR

211MI_ICYLON004_PRIME
2015-007T13:21
Alt= 1,113,748 km
Longitude=155°W
Latitude=20°N
Phase=45°



No ISS rider



230MI_ICYLON001_ISS

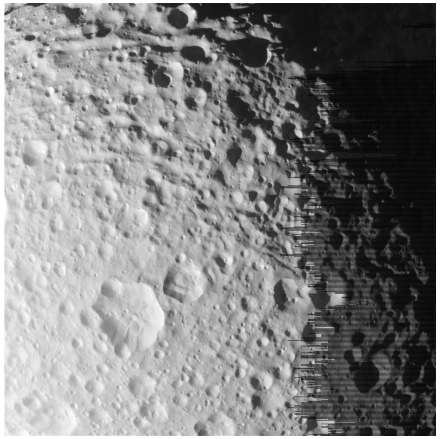
2016-014T04:45

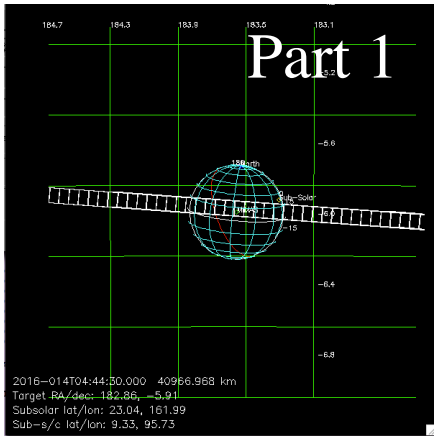
Alt= 40,509 km

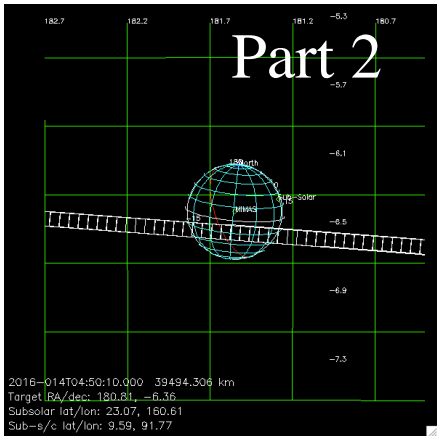
Longitude=265°W

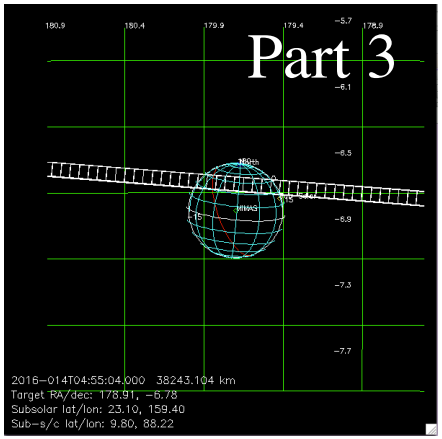
Latitude=9°N

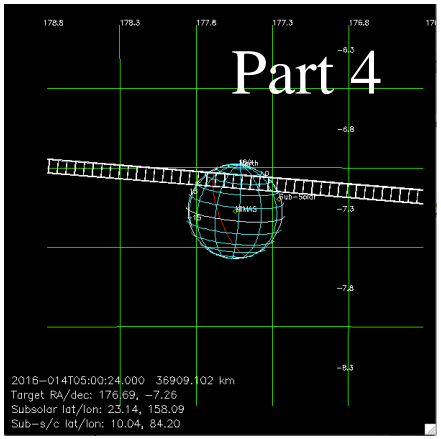
Phase=63.6°

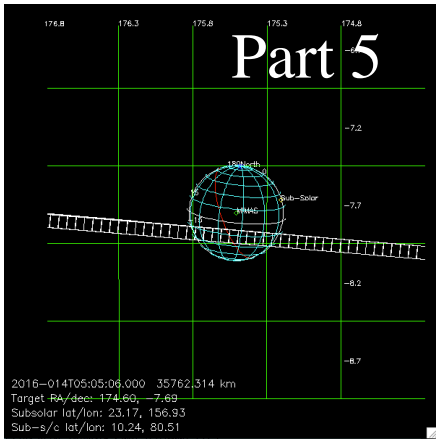


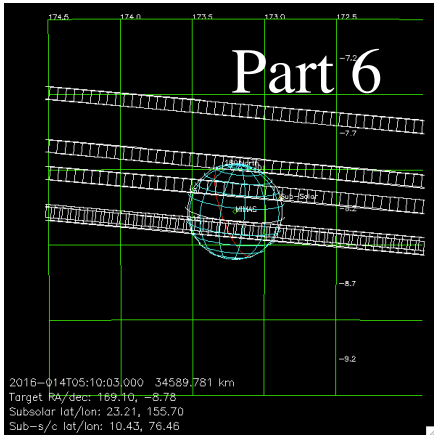


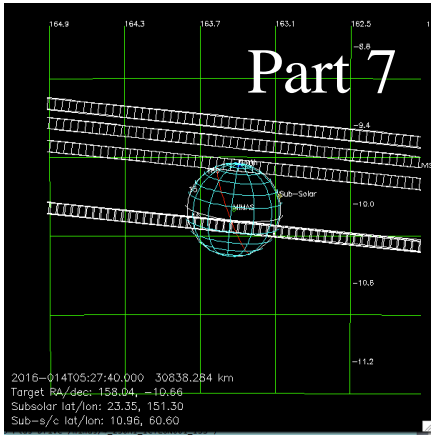


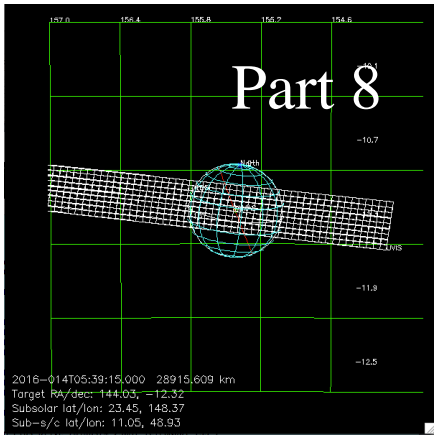


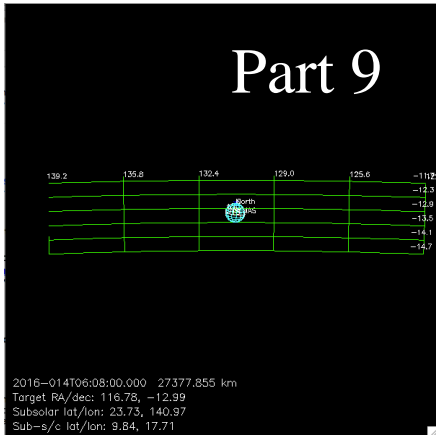












233MI_ICYLON001_CIRS

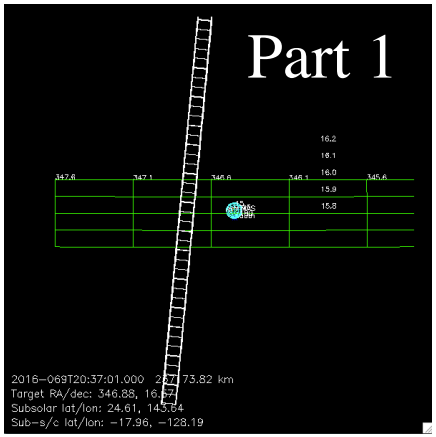
2016-069T20:38

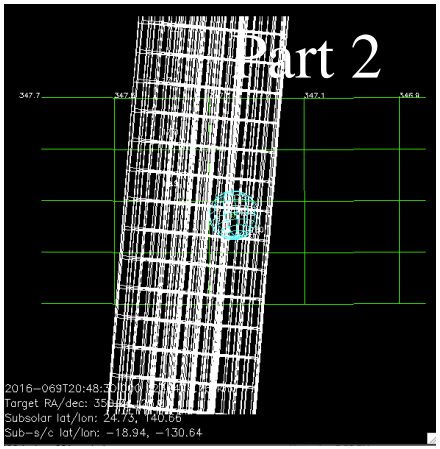
Alt= 235,723 km

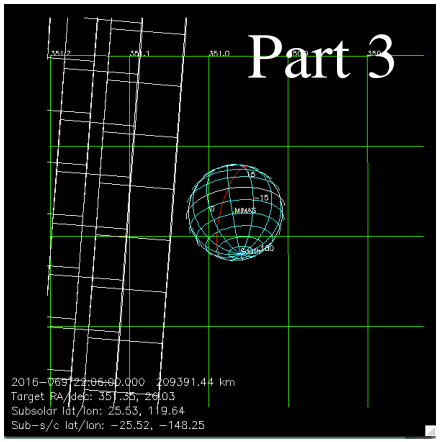
Longitude=129°W

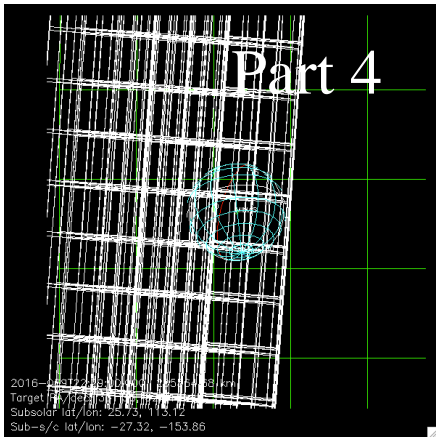
Latitude=18.2°S

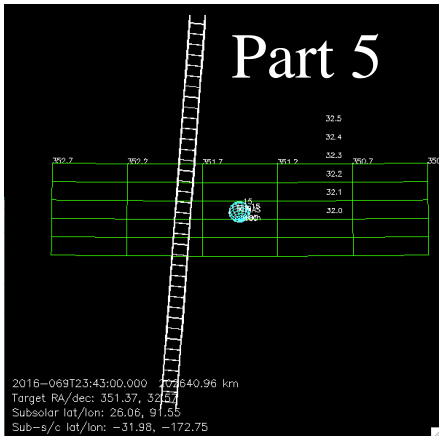
Phase=102.6°



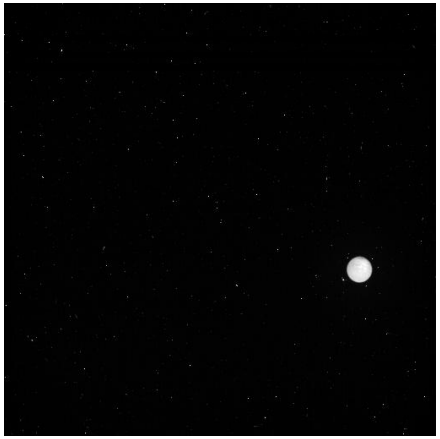


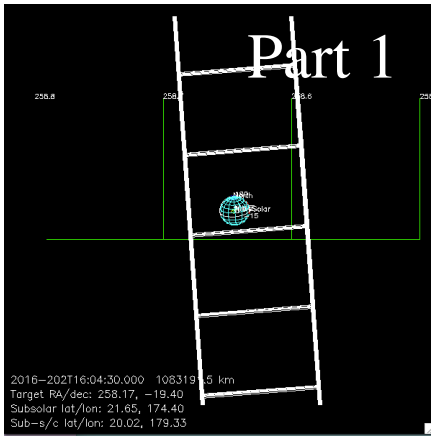


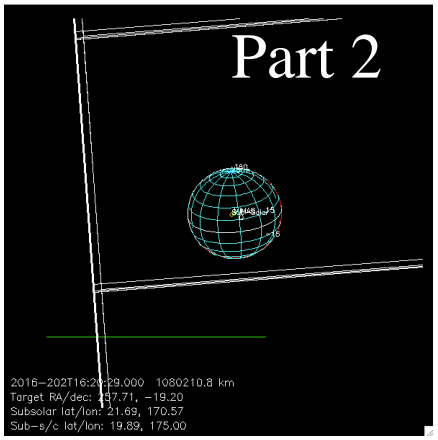


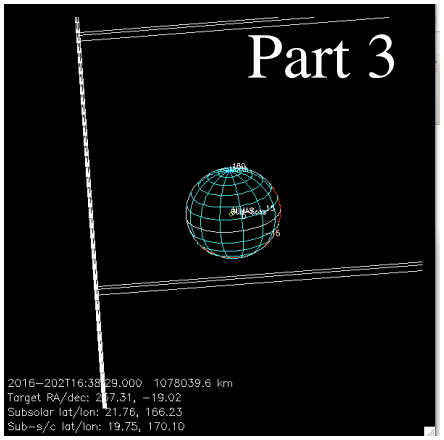


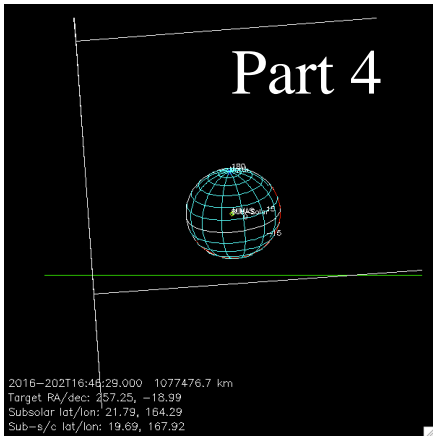
238MI_LOPHASE001_PIE
2016-202T16:05
Alt= 1,081,600 km
Longitude=182.6°W
Latitude=20°N
Phase=5°

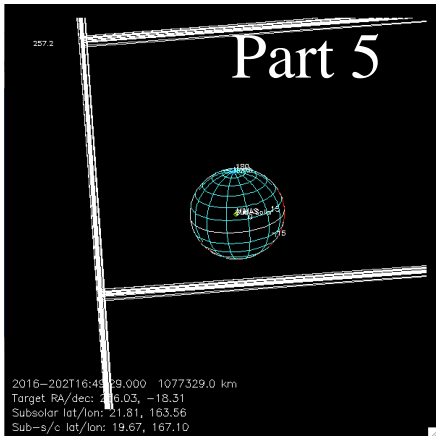


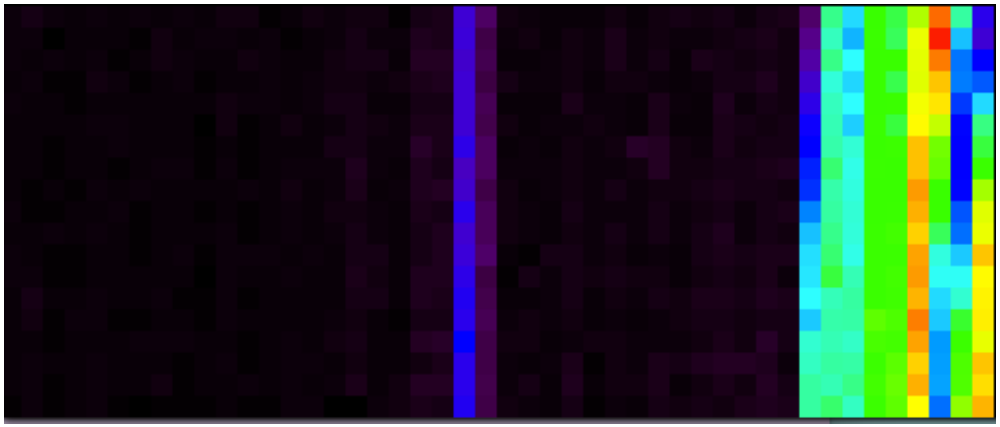












Part 5

244MI_LOPHASE001_PIE

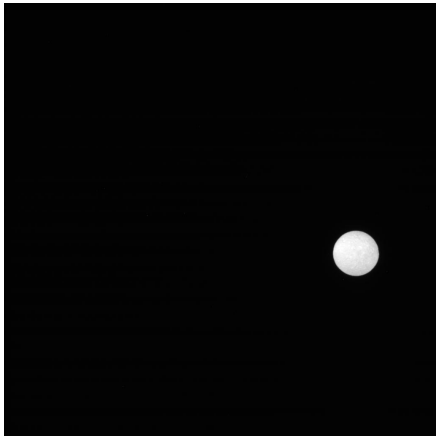
2016-277T13:38

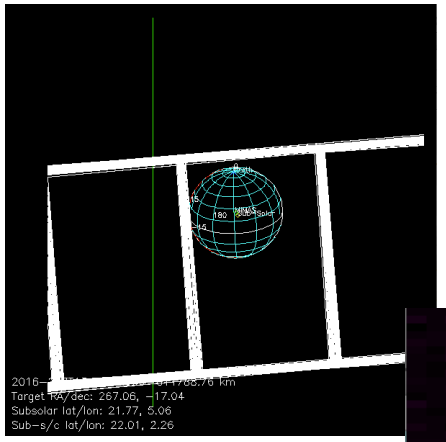
Alt= 599,028 km

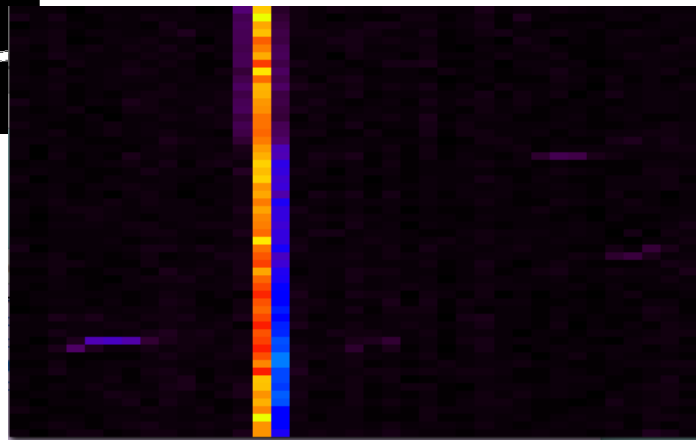
Longitude=68.6°W

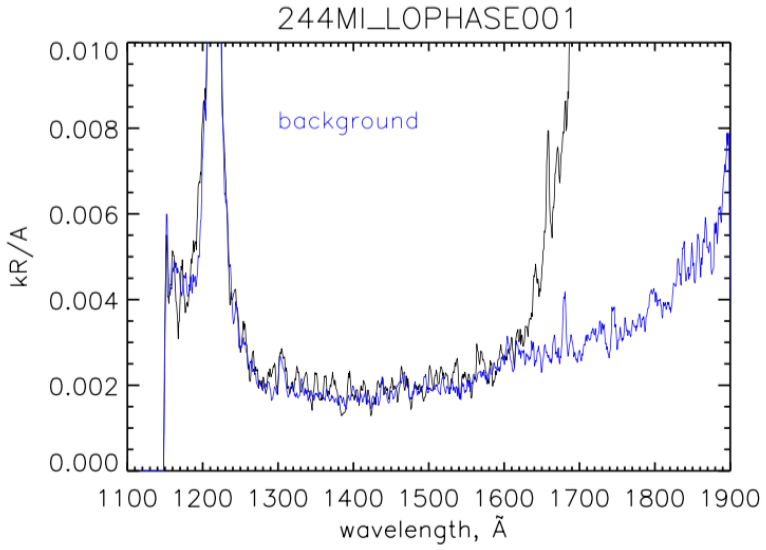
Latitude=19.7°N

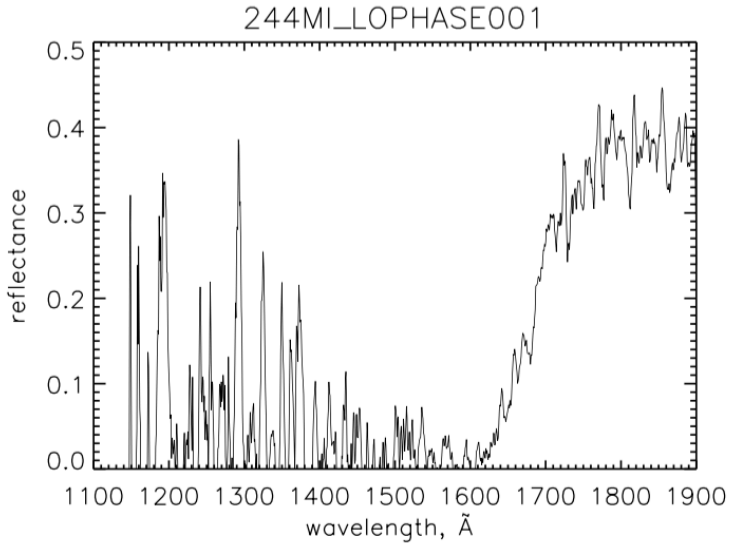
Phase=5.1°



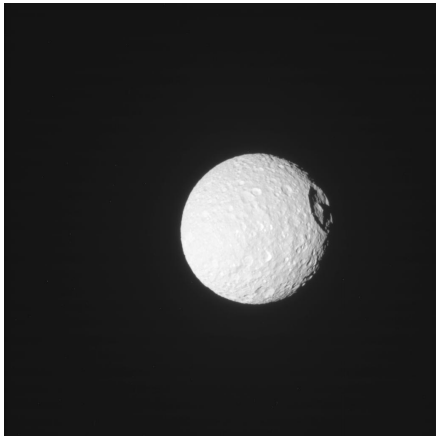


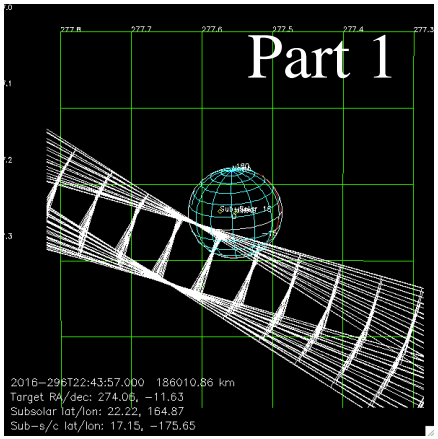


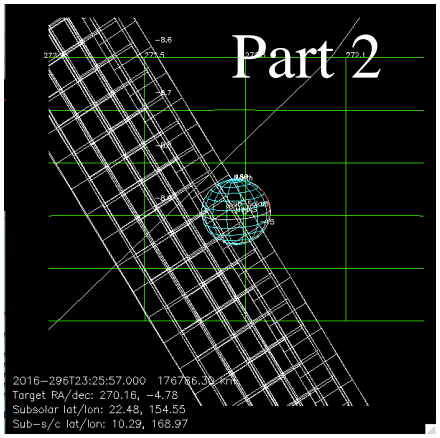


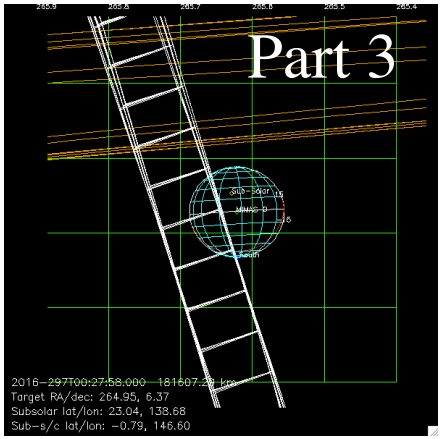


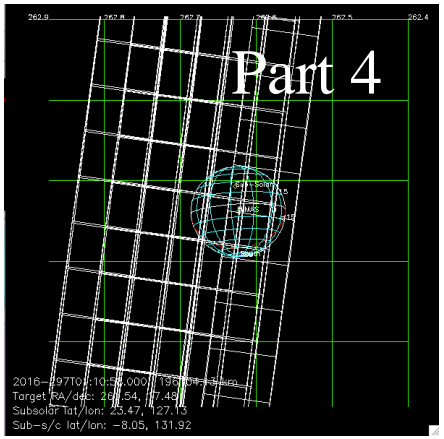
246MI_ICYLON002_CIRS
2016-296T22:44
Alt= 181,839 km
Longitude=181°W
Latitude=15°N
Phase=20°

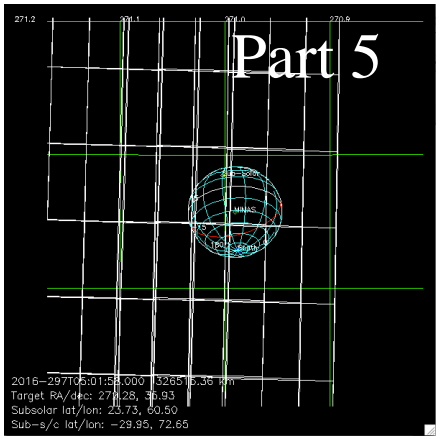


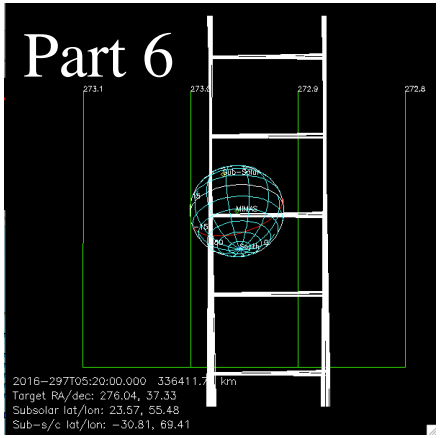


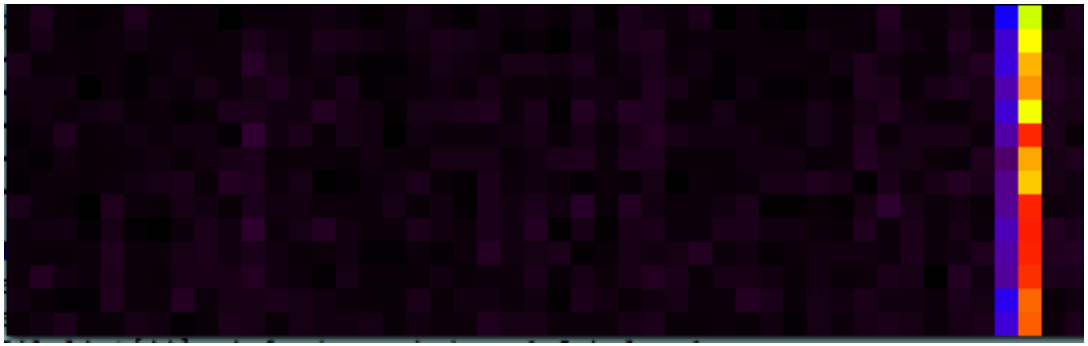












Part 6
(Mimas in row ~56)

249MI_ICYMAP001_CIRS

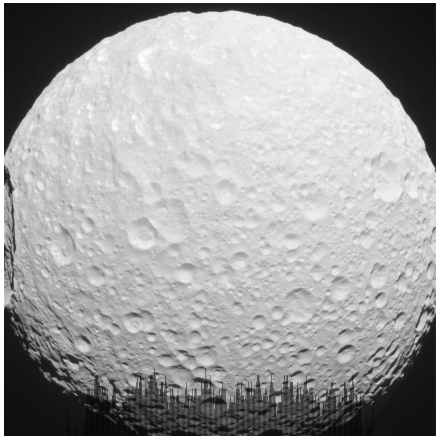
2016-324T06:17

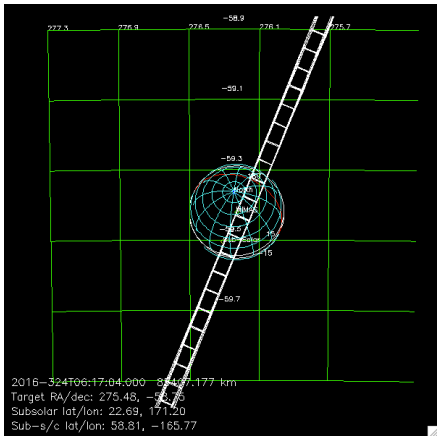
Alt= 84,415 km

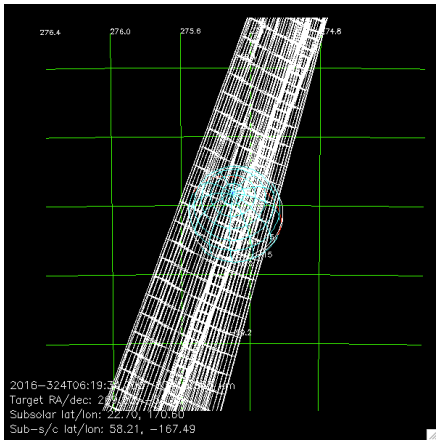
Longitude=167°W

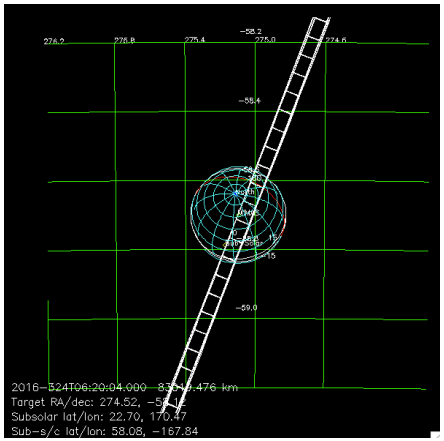
Latitude=59°N

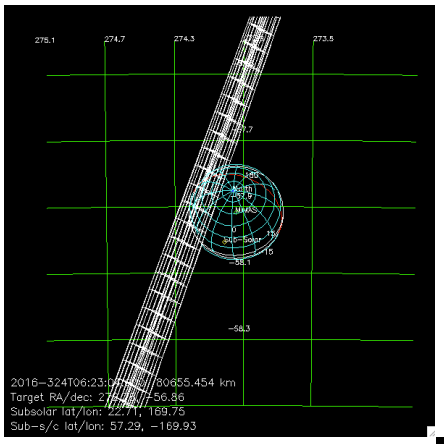
Phase=39.8°

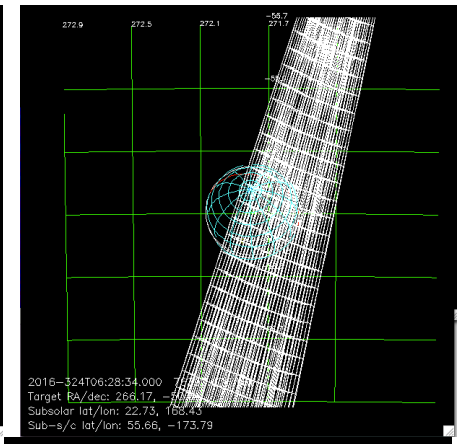


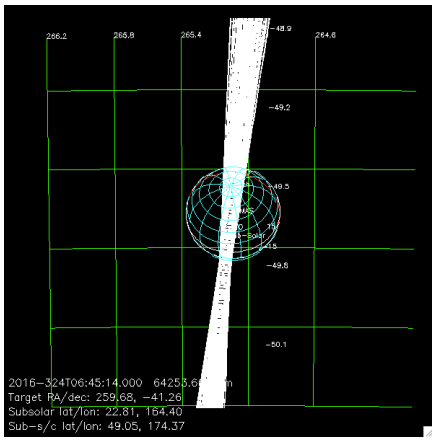


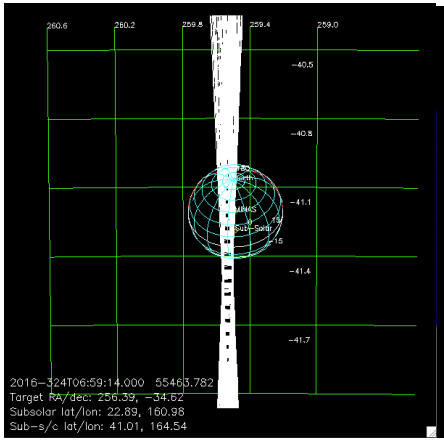


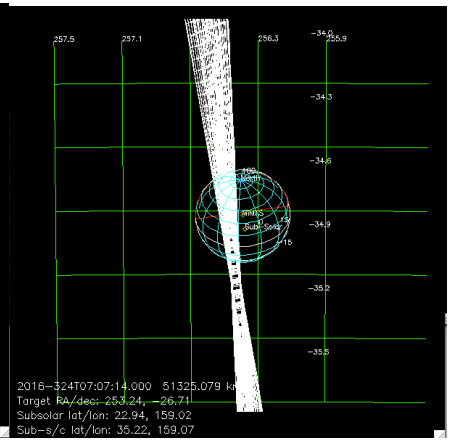


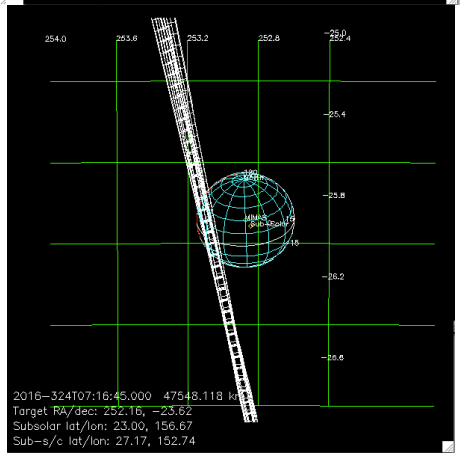


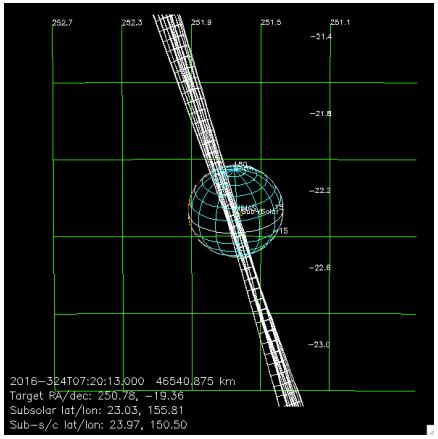




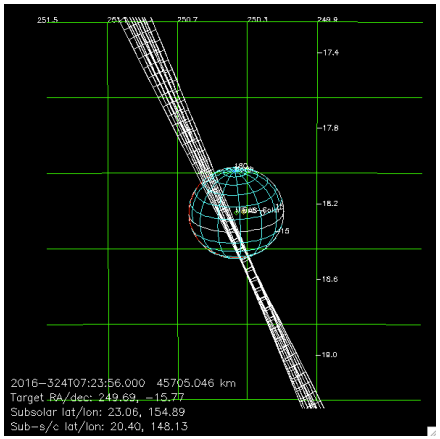


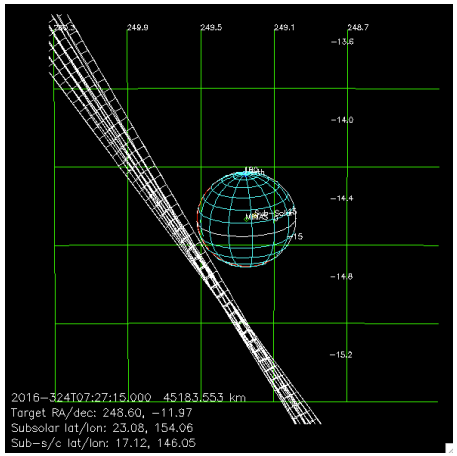


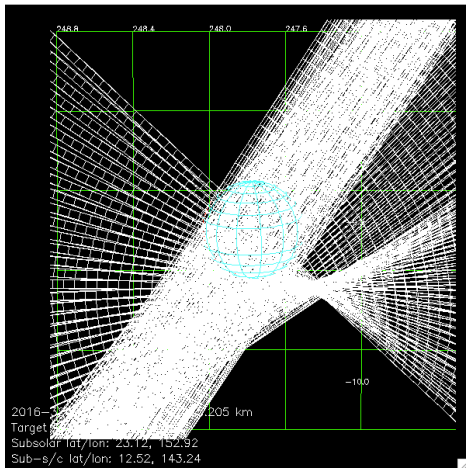




249MI_ICYMAP001_CIRS, cont'd







259MI_ICYLON001_ISS

2017-030T21:14

Alt= 42,210 km

Longitude=332°W

Latitude=10°S

Phase=123°