UVIS RHEA BOOK.

The intent of this UVIS Rhea book is to give readers an idea of the observational geometry for most observations, and for some observations, a sense of the data quality.

For a few observations, we include a calibrated average spectrum to demonstrate the brightness of any reflected solar emission lines (especially at $\lambda<165$ 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)

The reflectance of Rhea 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

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

Name of observation

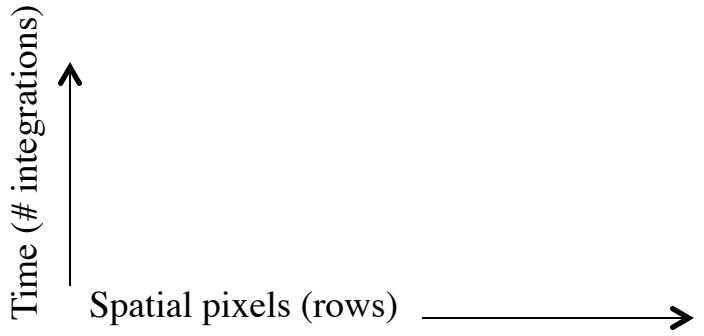
ISS image

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

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

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



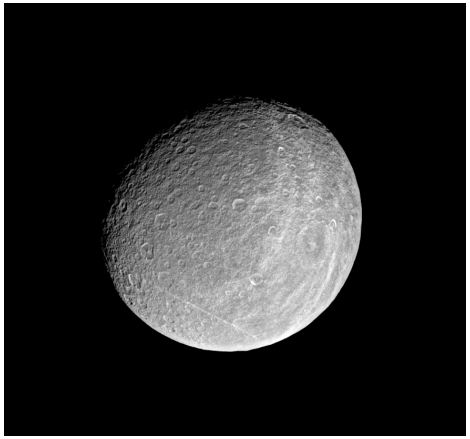
For many observations we also include:

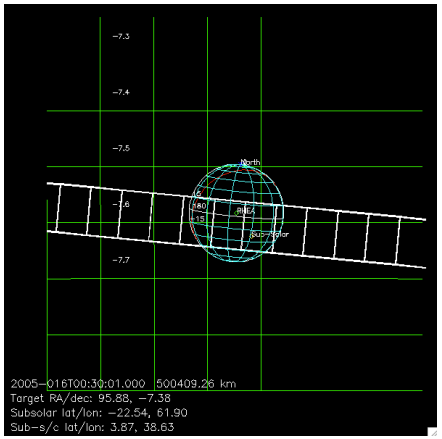
Plot of signal vs. background

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.

00CRH_reggeodA

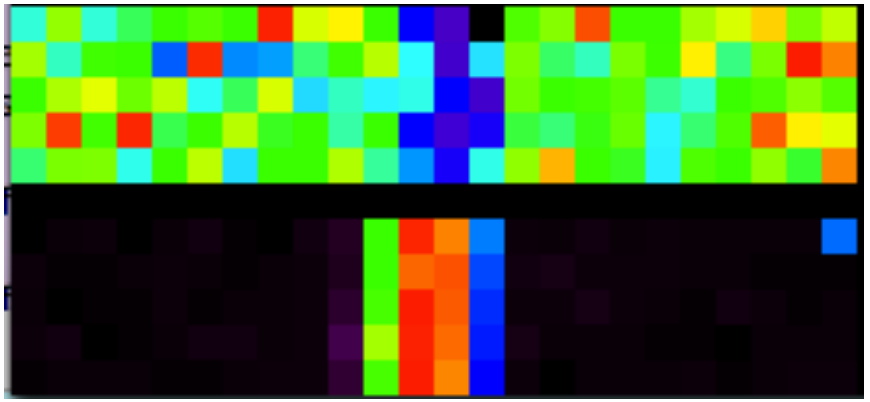




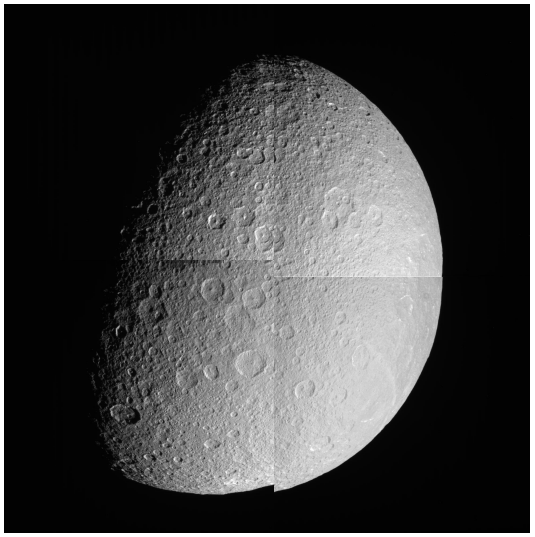
00CRH_ICYLON005_ISS
2005-016T00:31
Alt= 497,725 km
Longitude= 321°W
Latitude=4°N
Phase= 34.8°

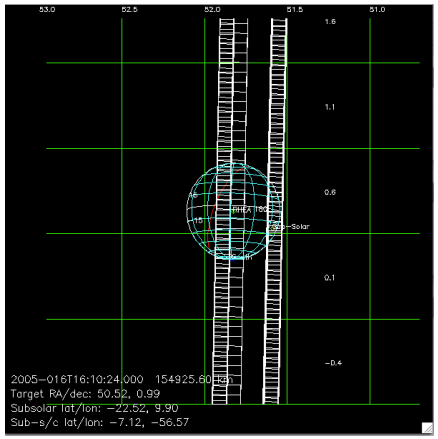
Ly-a

Long waves

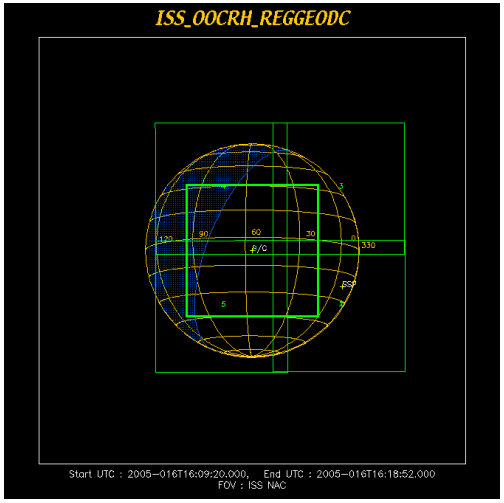


00CRH_reggeodC



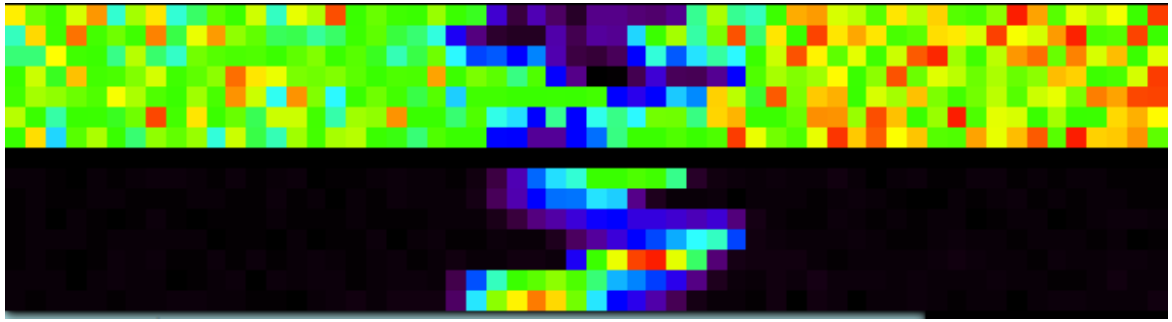


00CRH_ICYLON012_ISS
2005-016T16:11
Alt= 154,246 km
Longitude= 58°W
Latitude=7°S
Phase= 66°



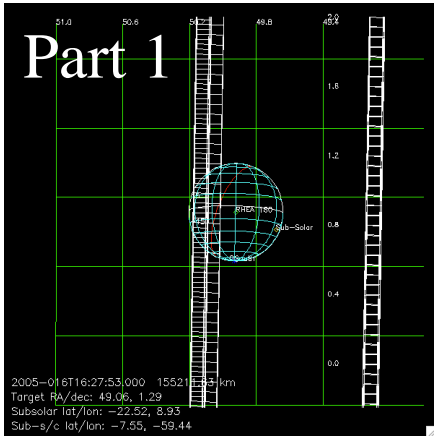
Ly-a

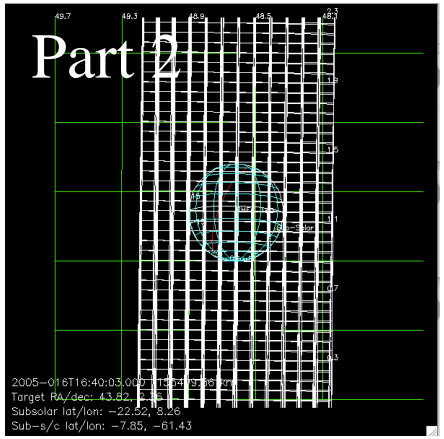
Long waves

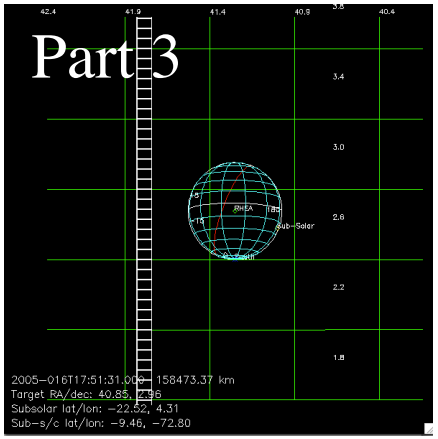


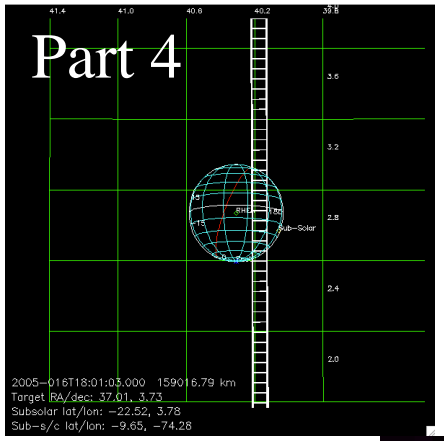
00CRH_fp1daymap001

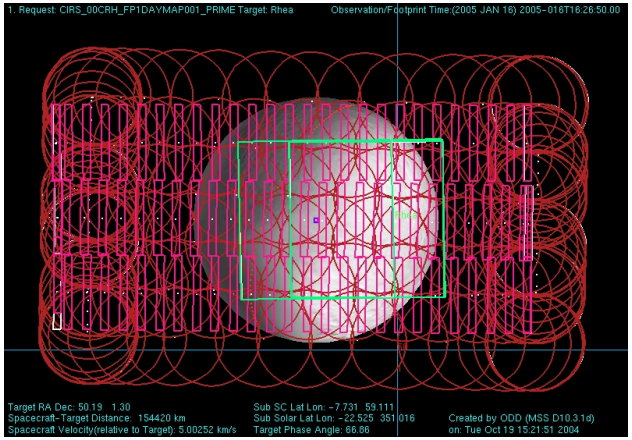
4-part











00CRH_ICYLON013_CRIS

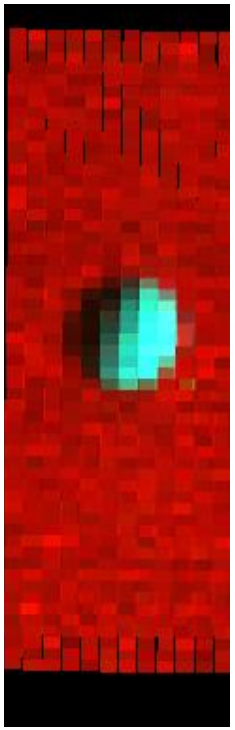
2005-016T16:28

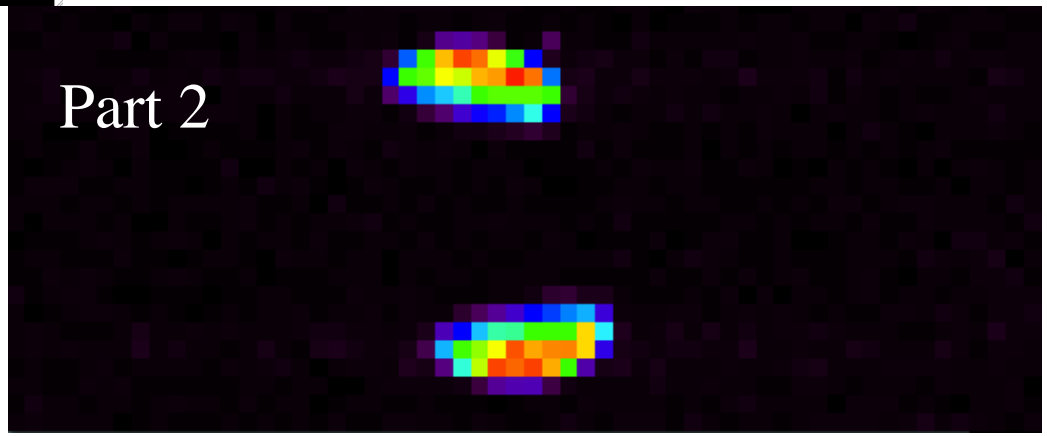
Alt= 154,536 km

Longitude= 60°W

Latitude=8°S

Phase= 67°





00CRH_reggeodD

5-part

00CRH_ICYLON019_ISS

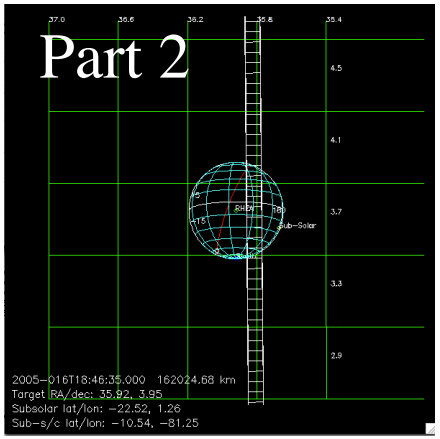
2005-016T18:44

Alt= 161,261 km

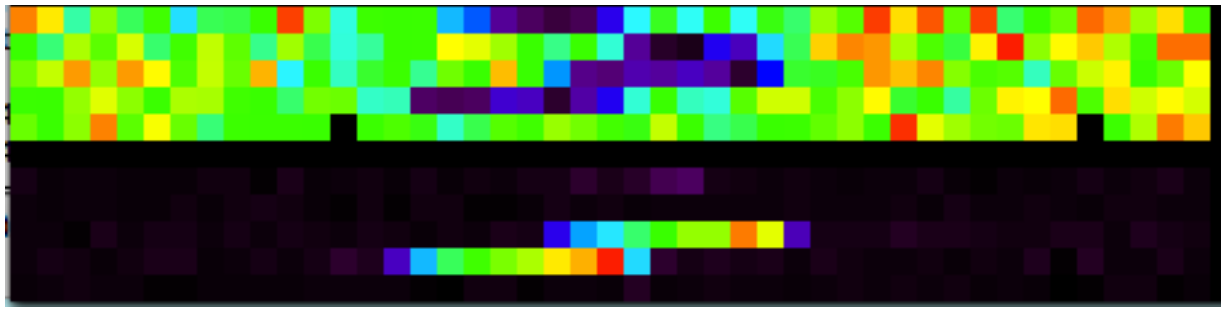
Longitude= 81°W

Latitude=10°S

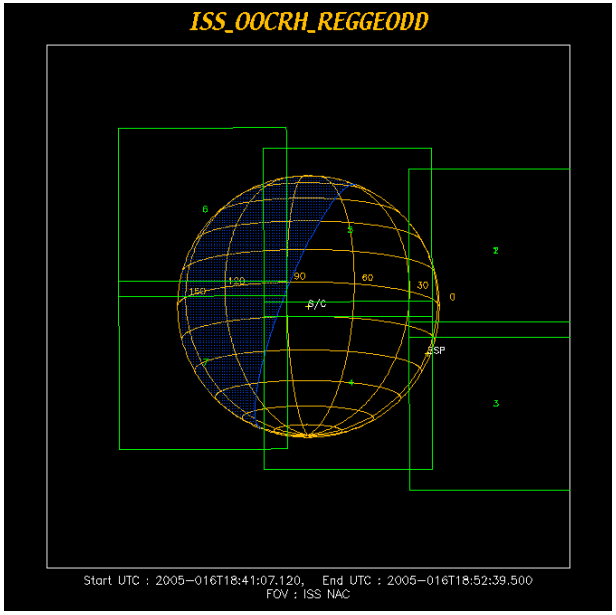
Phase= 79.0°



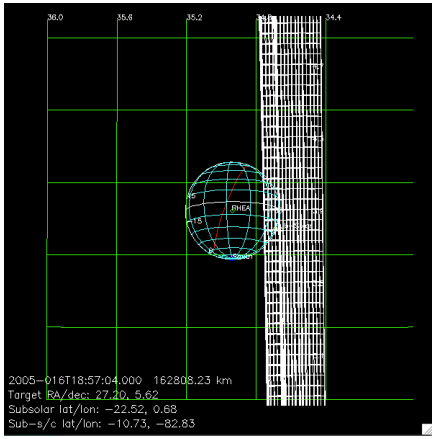
Ly-a

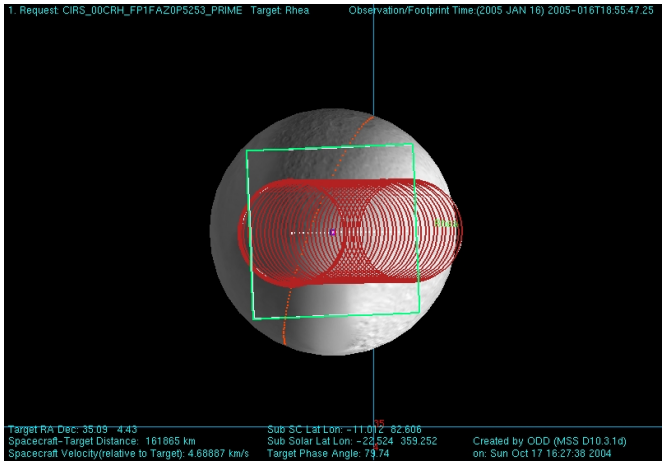


Long waves



00CRH_fp1faz0p5253





00CRH_ICYLON014_CIRS

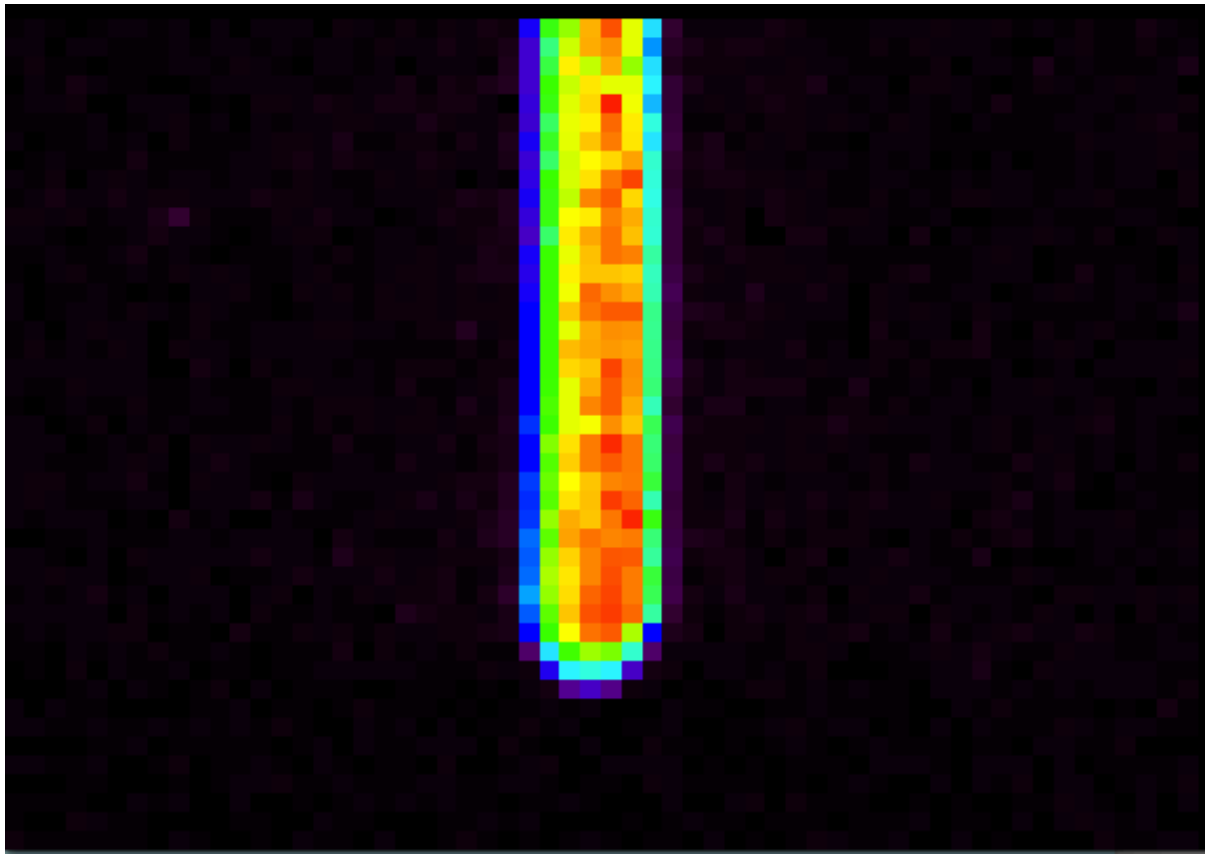
2005-106T18:58

Alt= 165,681 km

Longitude= 89°W

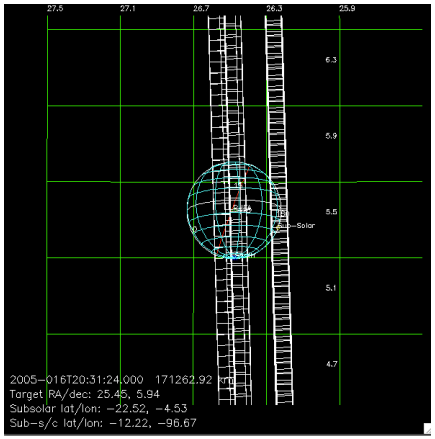
Latitude=11°S

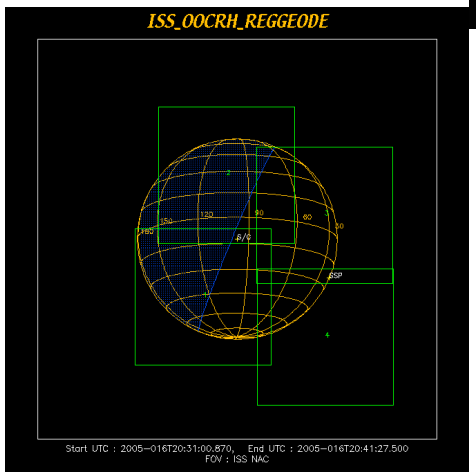
Phase= 83°

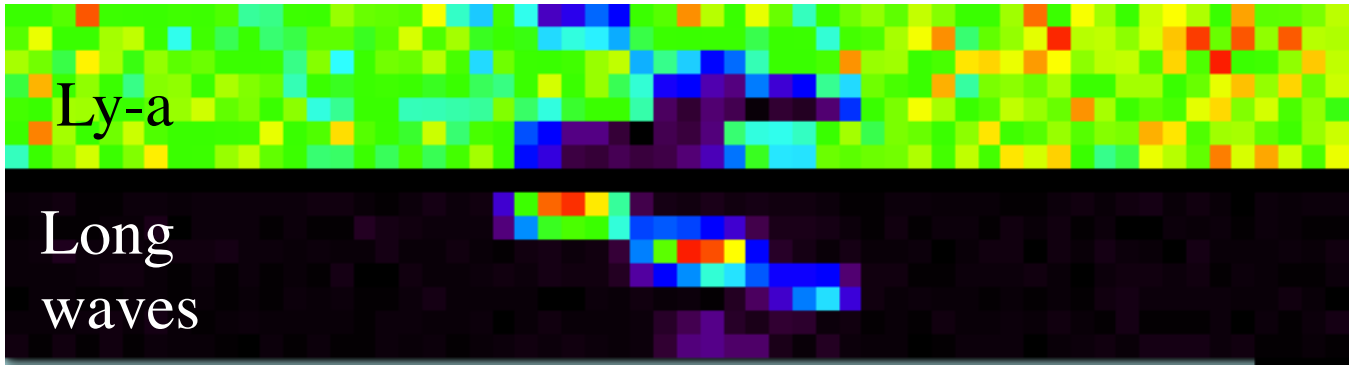


00CRH_reggeodE

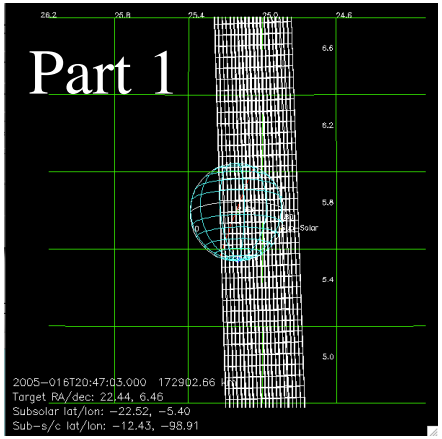
00CRH_ICYLON020_ISS
2005-016T20:32
Alt= 171,122 km
Longitude= 98°W
Latitude=12°S
Phase= 87.7

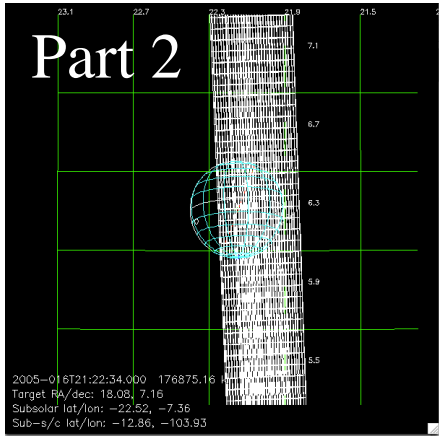






00CRH_fp3dskscan003





2-part 00CRH_ICYLON015_CIRS

2005-016T20:48

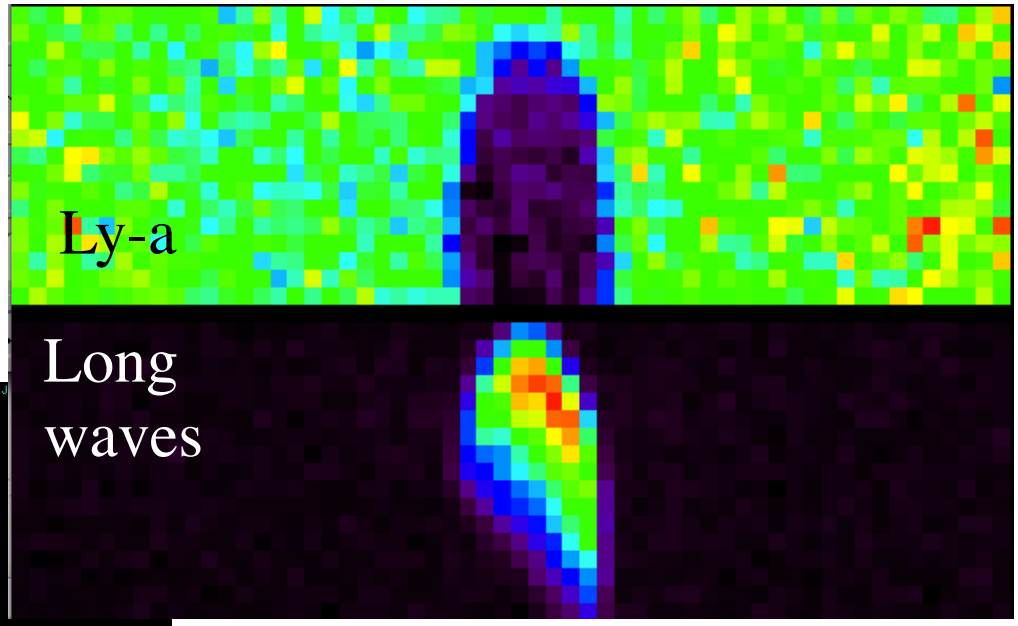
Alt= 173,898 km

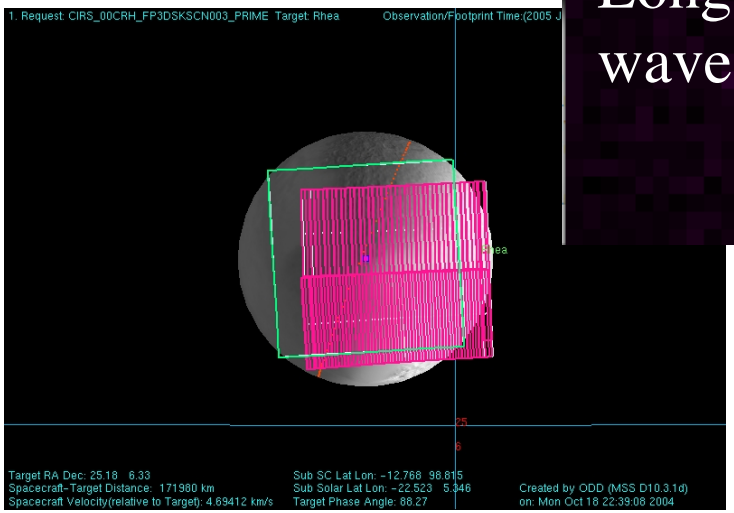
Longitude= 101°W

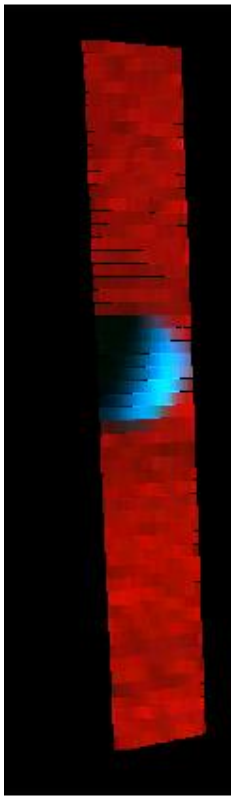
Latitude=13°S

Phase= 89.6°

Part 1

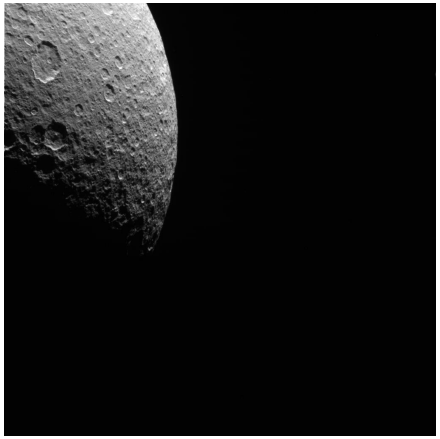


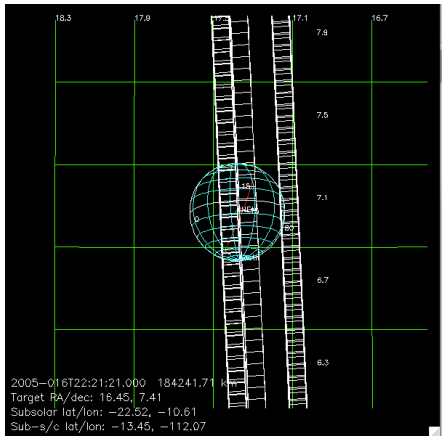




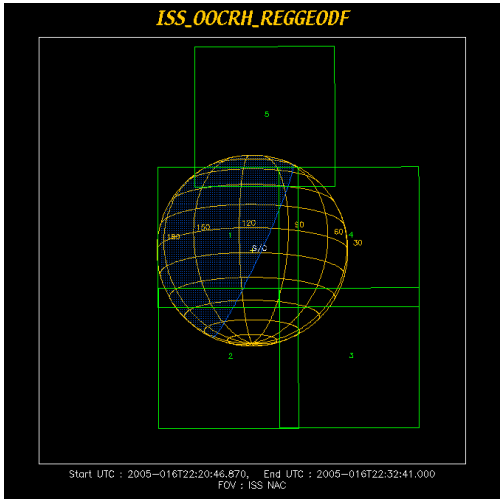
"true" UV color

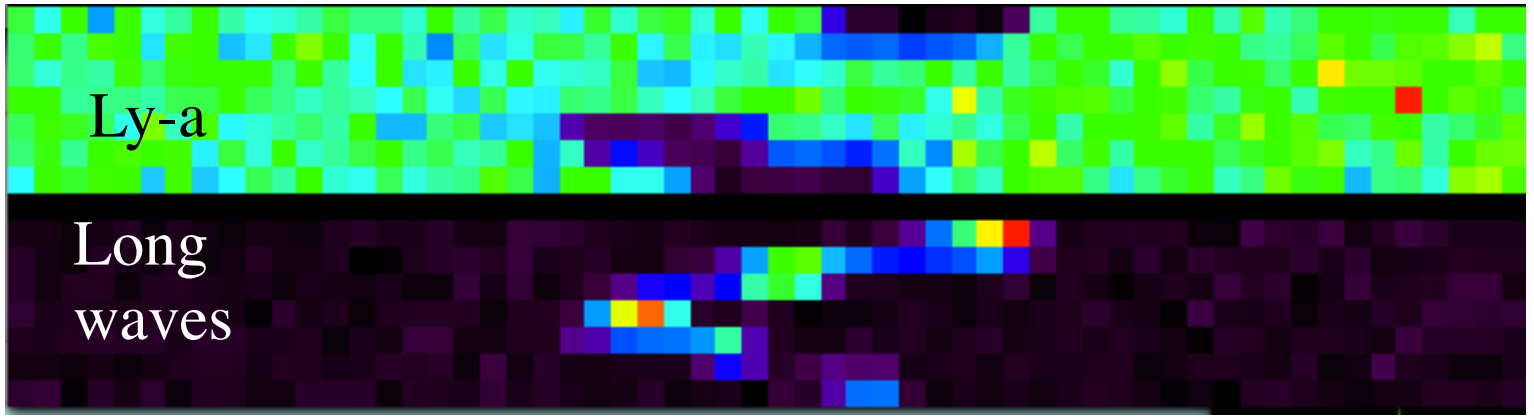
00CRH_reggeodF



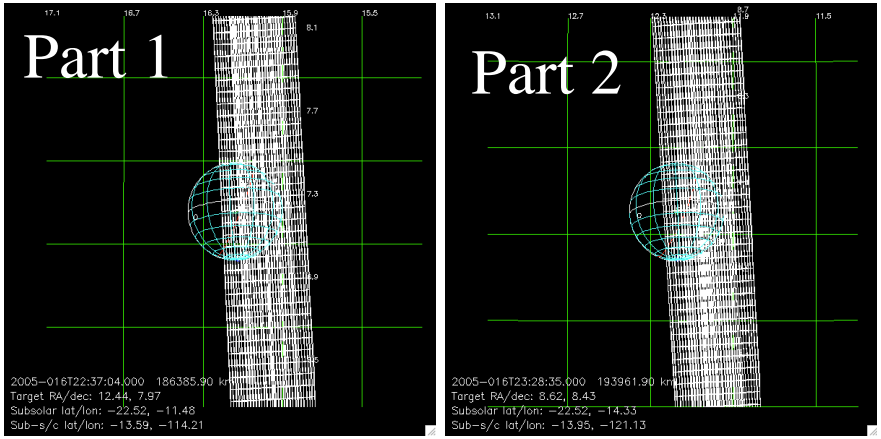


00CRH_ICYLON021_ISS
2005-016T22:22
Alt= 184,276 km
Longitude= 113°W
Latitude=14°S
Phase= 95.5°





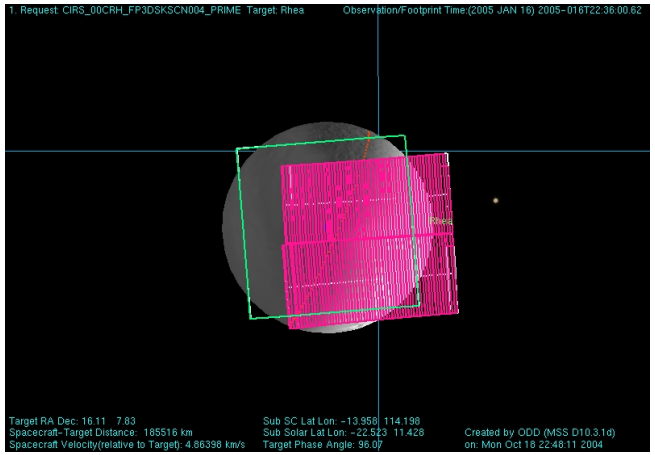
00CRH_fp3dskscan004

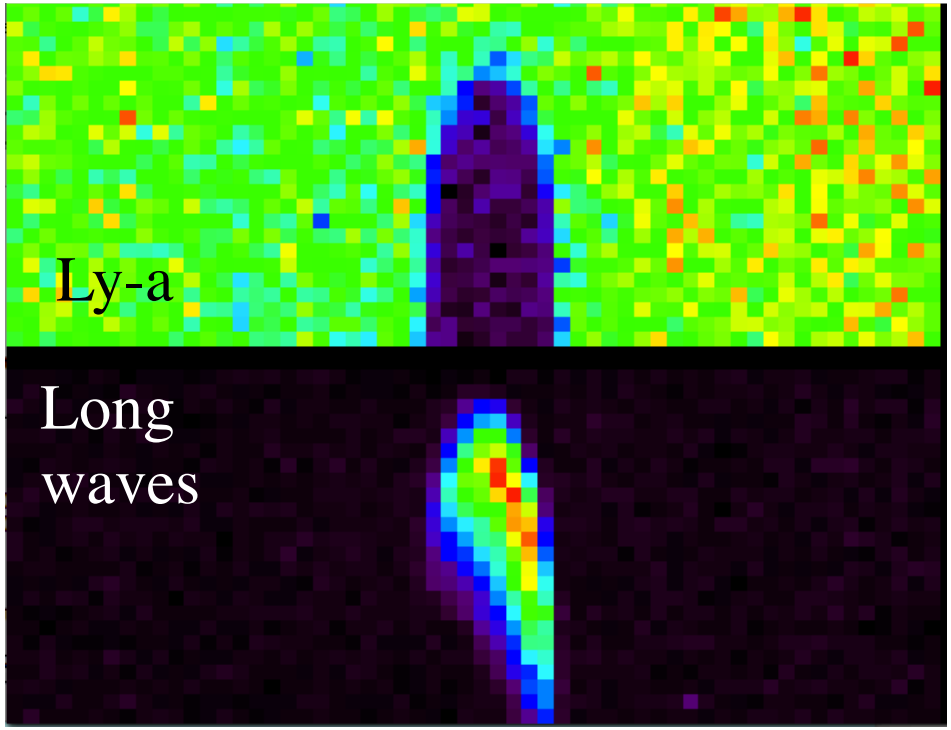


2-part

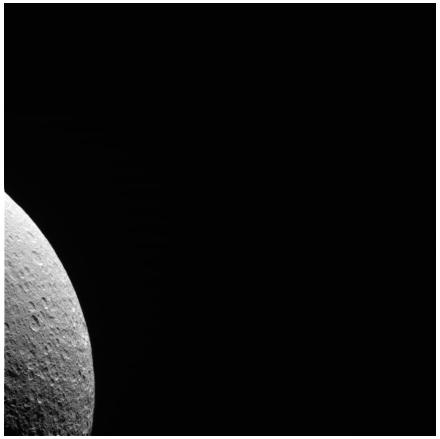
00CRH_ICYLON016_CIRS
2005-016T22:38
Alt= 189,078 km
Longitude= 117°W
Latitude=14°S
Phase= 97.8°

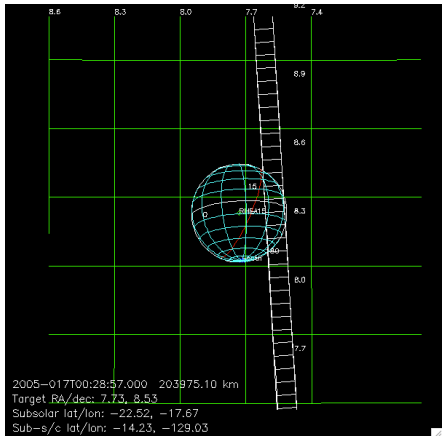
Part 1



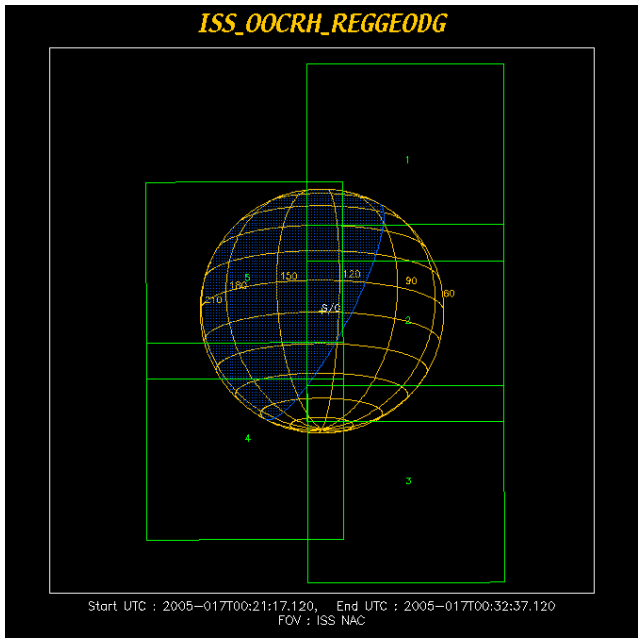


00CRH_reggeodG





00CRH_ICYLON022_ISS
2005-017T00:28
Alt= 203,211 km
Longitude= 129°W
Latitude=14°S
Phase= 103.4°

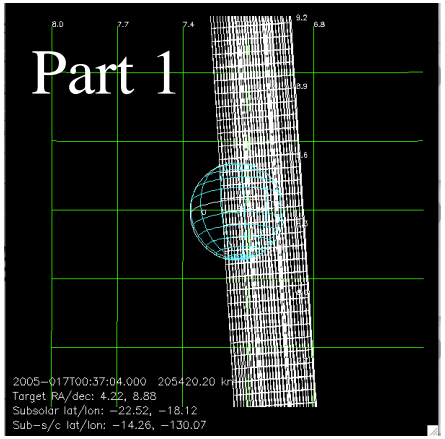


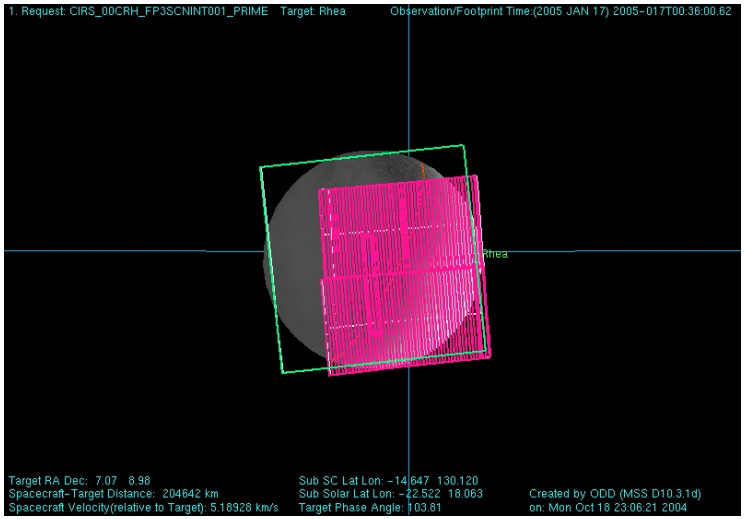
This was a mosaic within one UVIS integration period.

00CRH_fp3scnint001

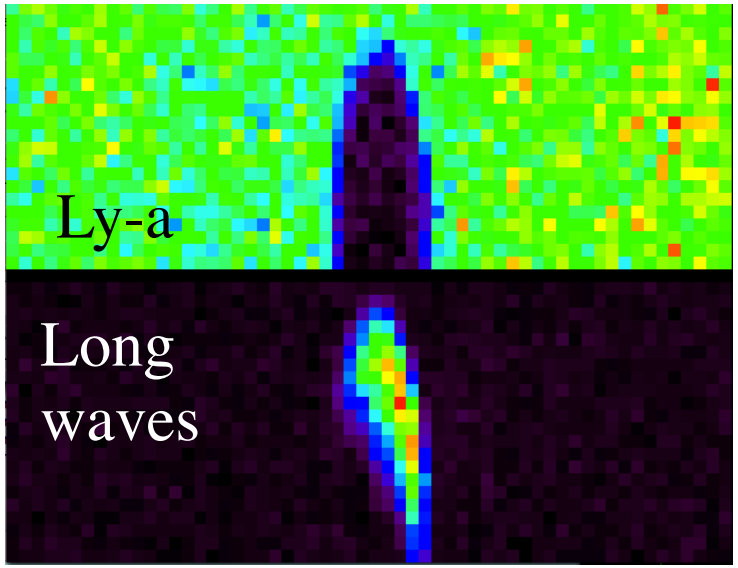
3-part

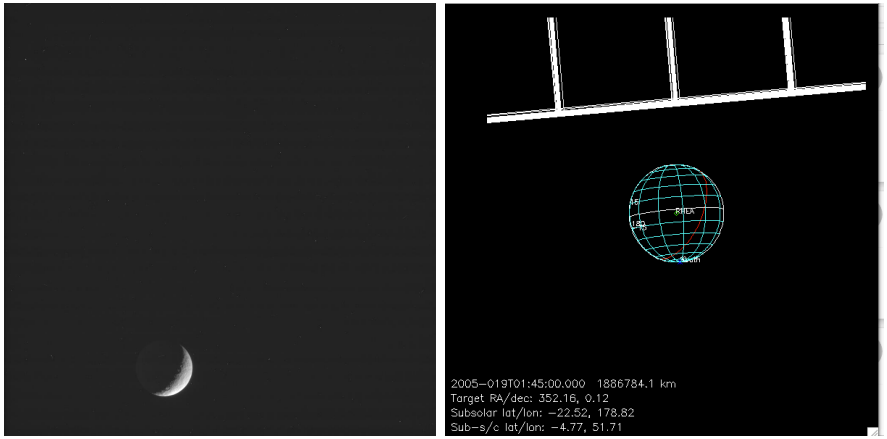
00CRH_ICYLON012_CIRS
2005-017T00:38
Alt= 220,504 km
Longitude= 141°W
Phase= 108.8°





Part 1

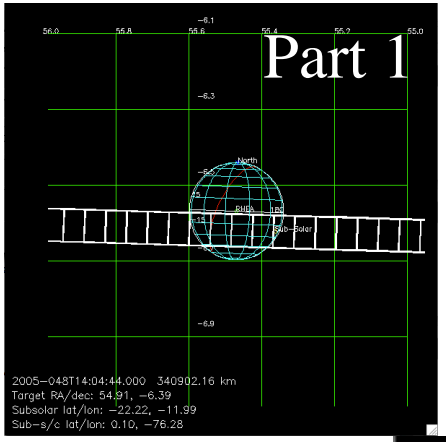




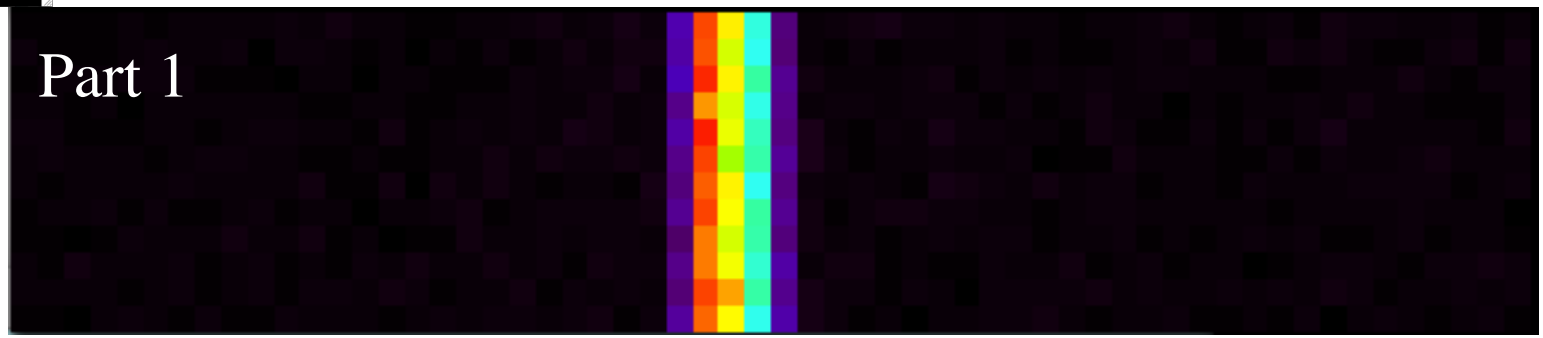
00CRH_ICYLON018_ISS
2005-019T01:46
Alt= 1,897,186 km
Longitude= 309°W
Latitude=5°S
Phase= 121°

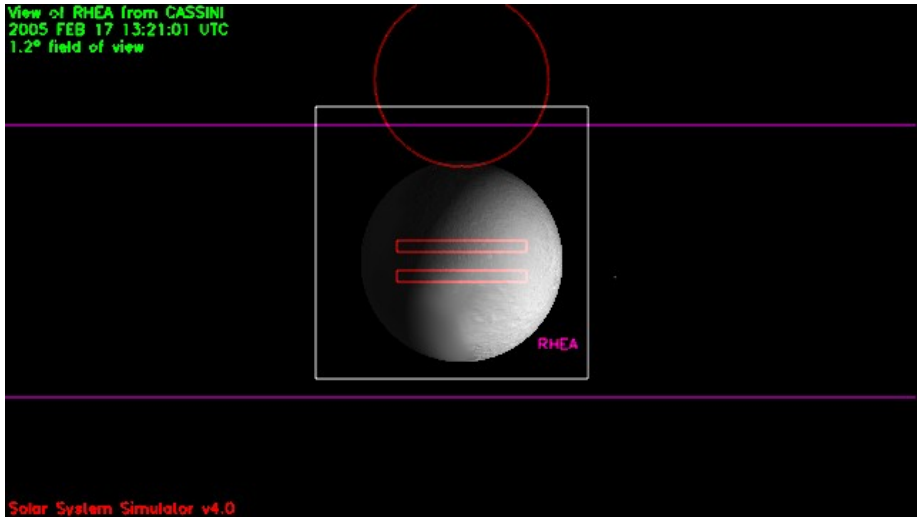
UVIS slit not on Rhea.

003RH_AD4P5MRAD001 4-part 003RH_ICYLON006_CIRS

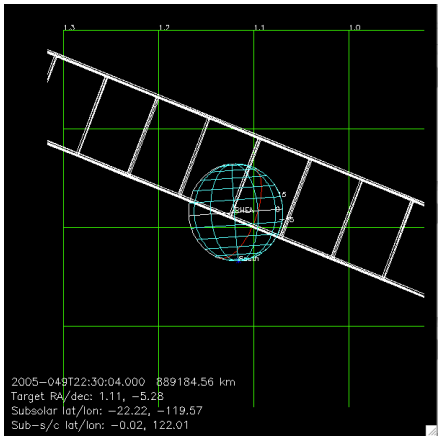


2005-048T13:14
Alt= 341,007 km
Longitude= 77°W
Latitude=0°N
Phase= 66.6°

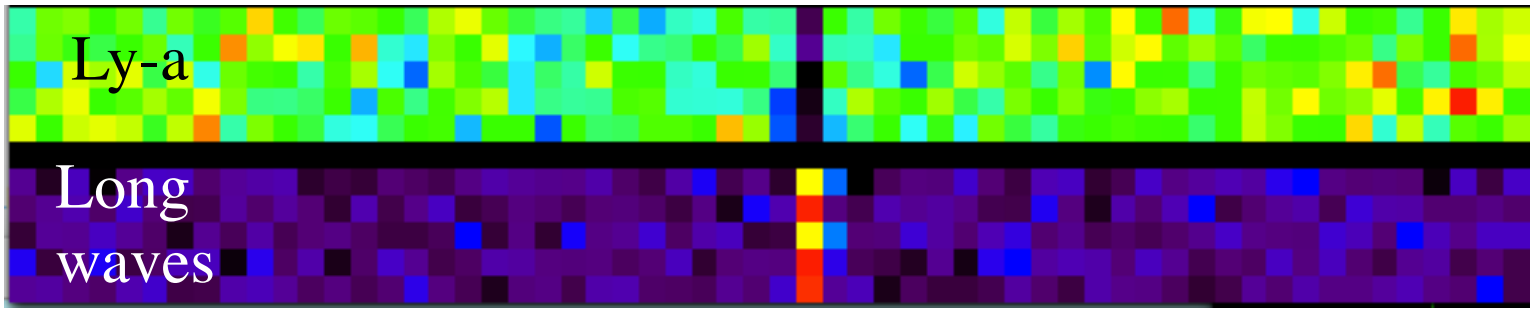




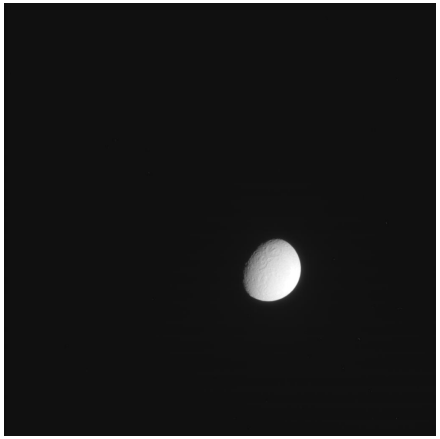
003RH_238W116PH001

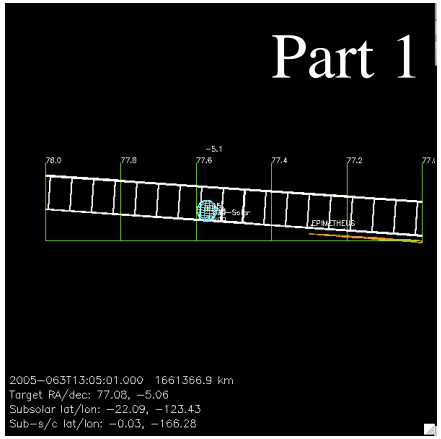


003RH_ICYLON008_ISS
2005-049T22:31
Alt= 890,957 km
Longitude= 238°W
Latitude=0°N
Phase= 116.1°



004RH_166W047PH001





2-part

004RH_ICYLON001_ISS

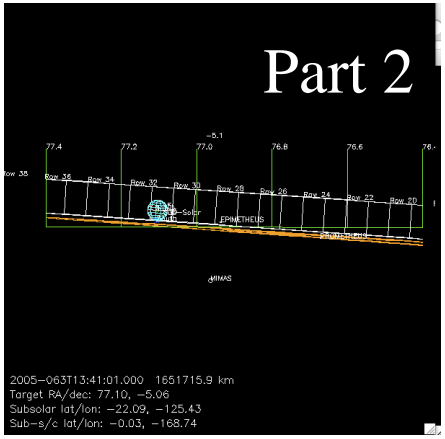
2005-063T13:06

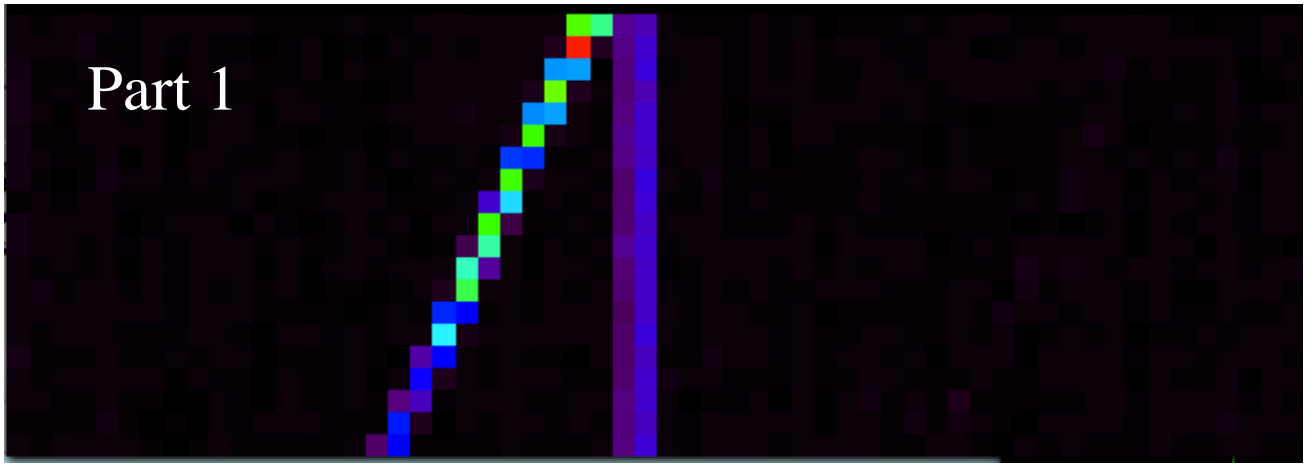
Alt= 1,655,459 km

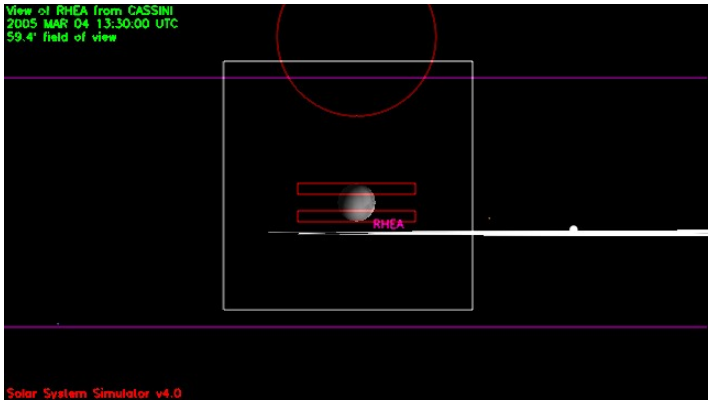
Longitude= 168°W

Latitude=0°N

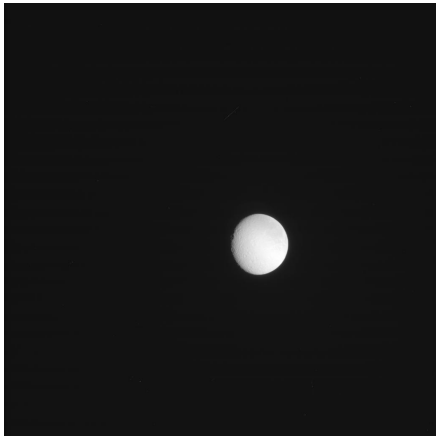
Phase= 47.4°

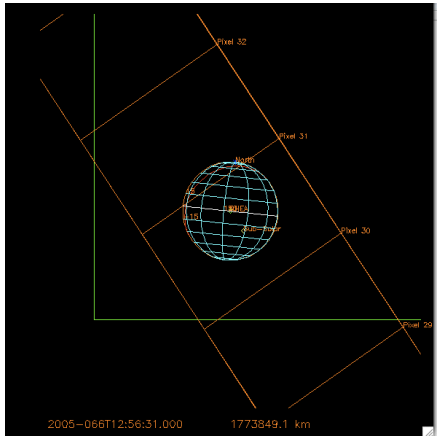






004RH_022W029PH001_ISS





004RH_ICYLON002_ISS

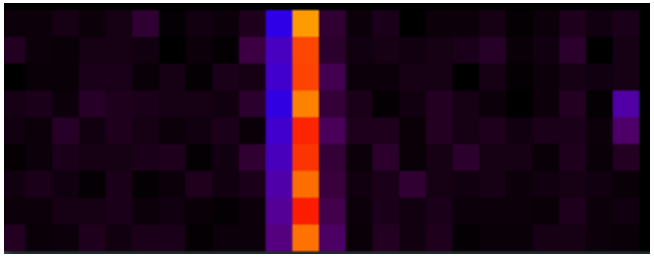
2005-066T12:57

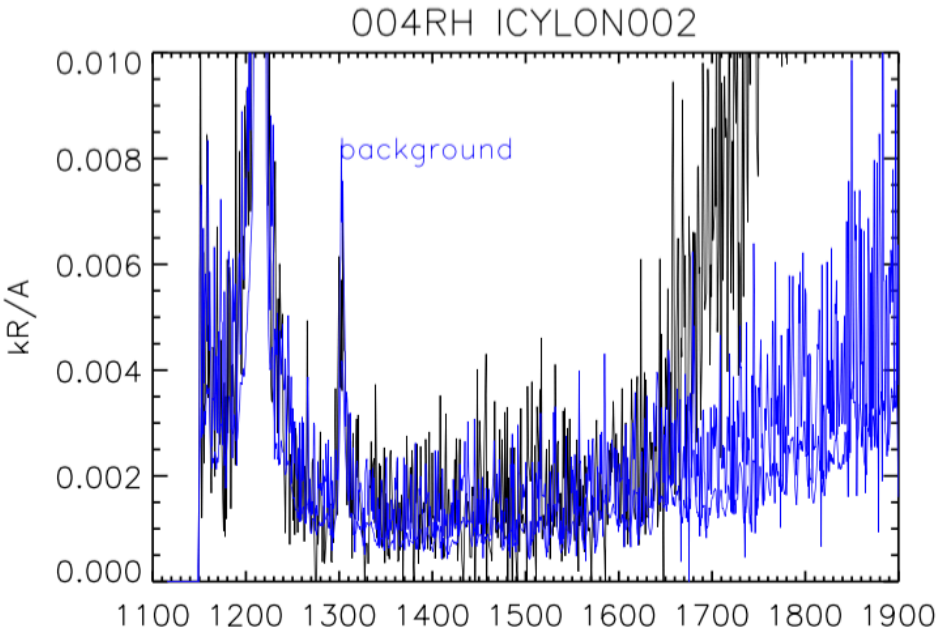
Alt= 1,769,617 km

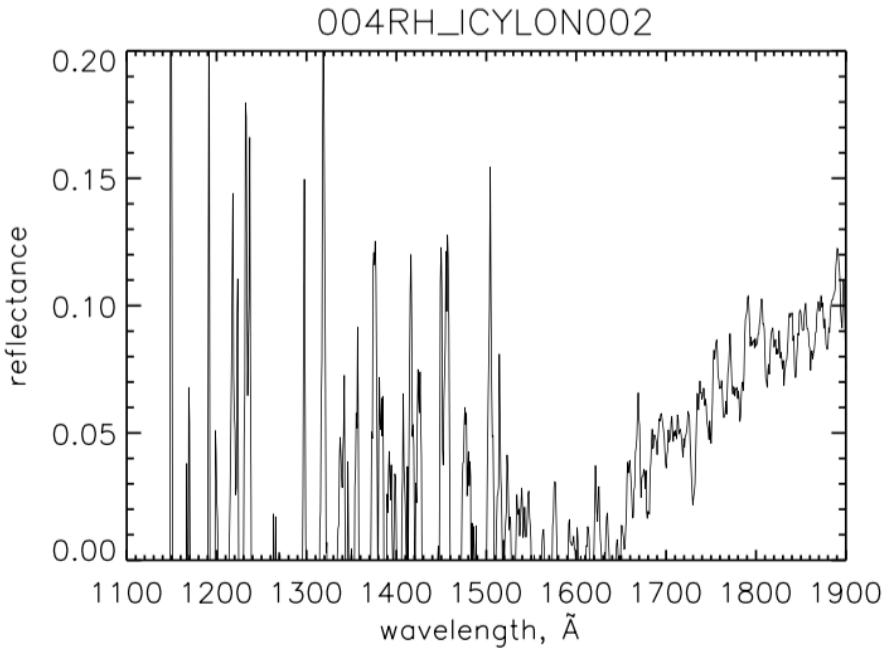
Longitude= 22°W

Latitude=0°N

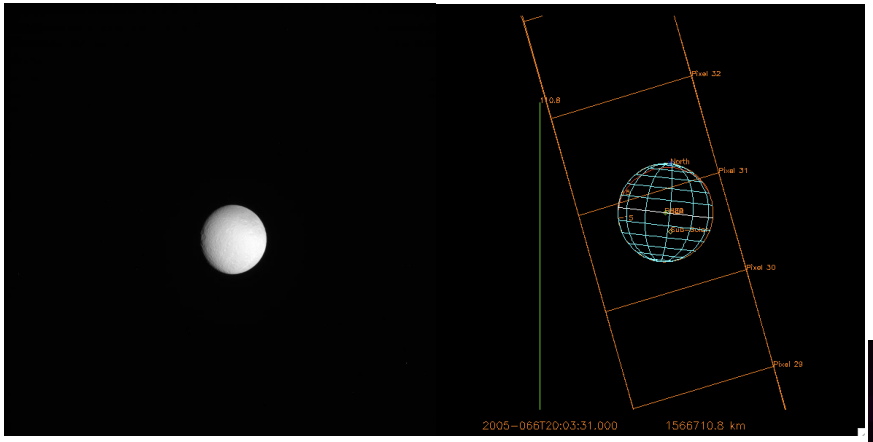
Phase= 29.3°





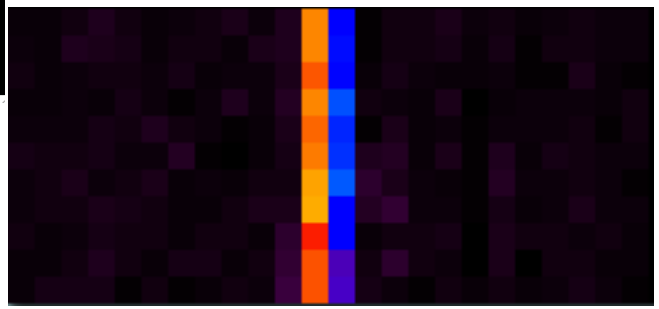


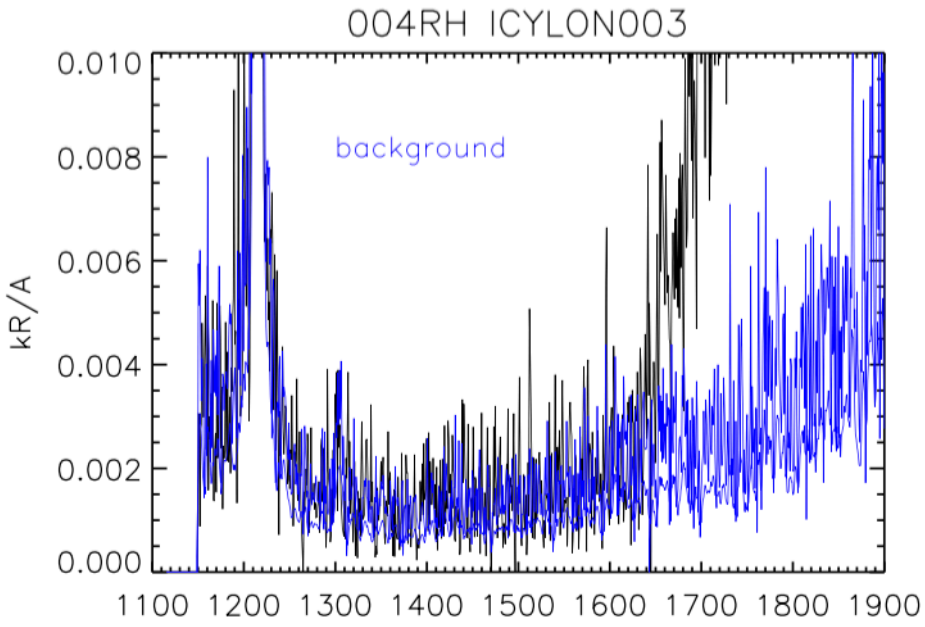
004RH_GLOCOL001_ISS

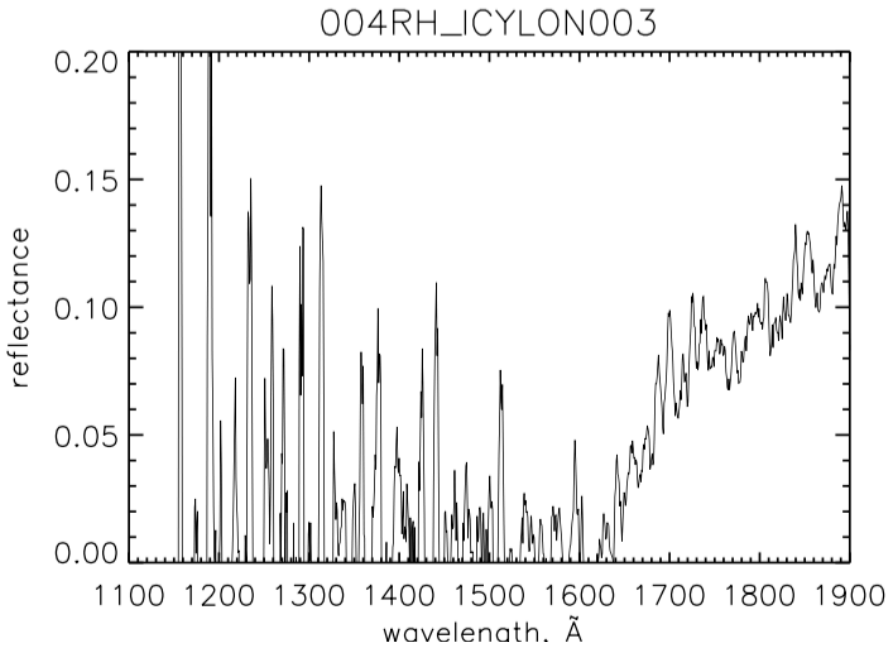


004RH_ICYLON003_ISS

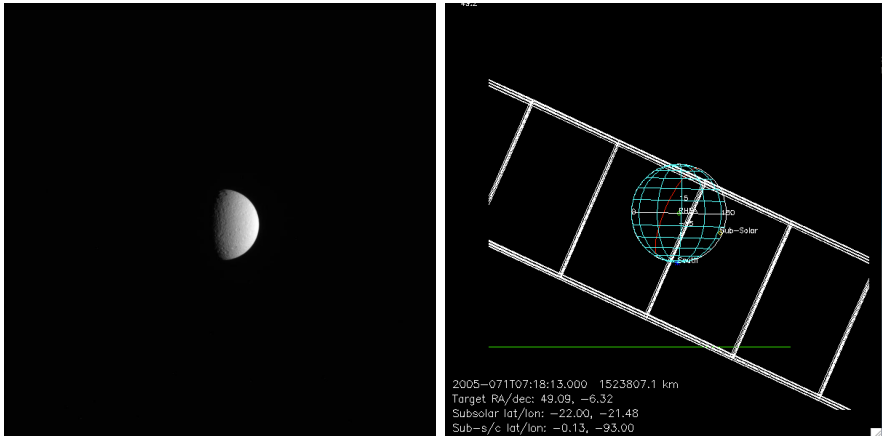
2005-066T20:04
Alt= 1,560,601 km
Longitude= 35°W
Latitude=0°N
Phase= 23.95°







004RH_094W073PH001_ISS



004RH_ICYLON004_ISS

2005-071T07:19

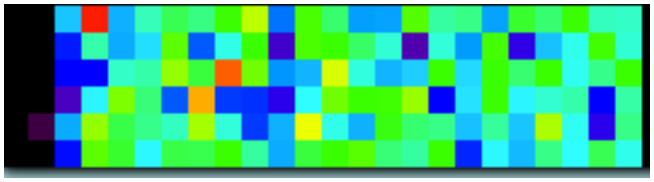
Alt= 1,521,832 km

Longitude= 93°W

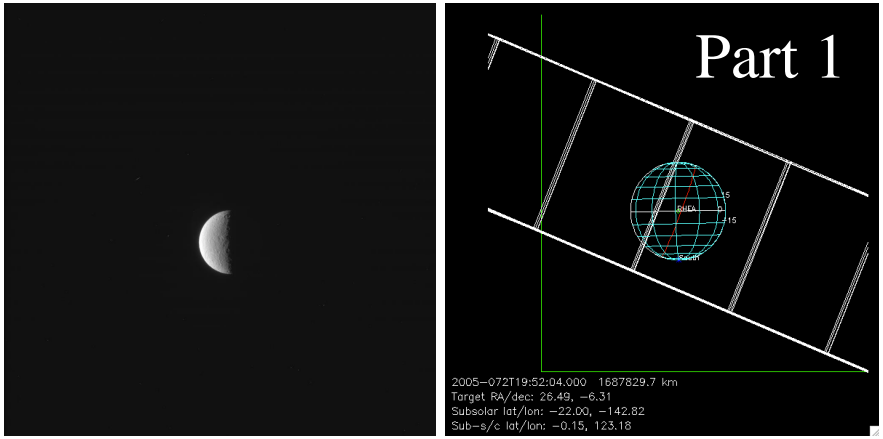
Latitude=0.13°S

Phase= 72.9°

Low SNR

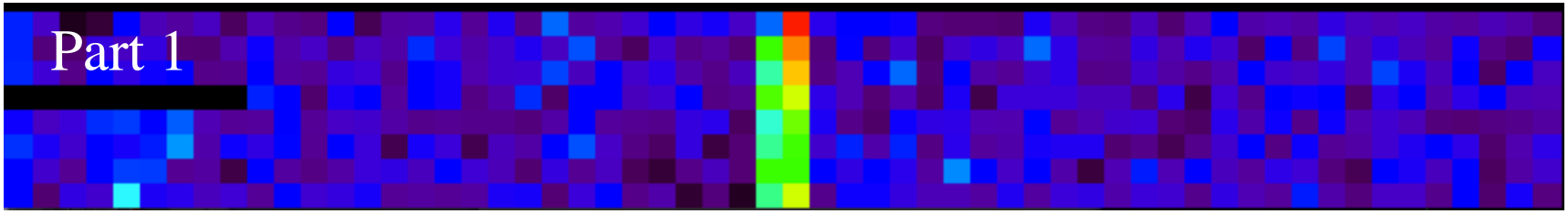


004RH_238W094PH001_ISS

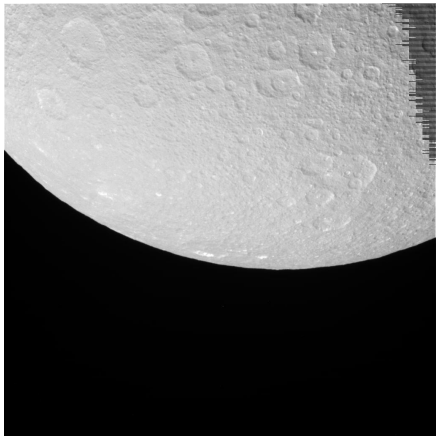


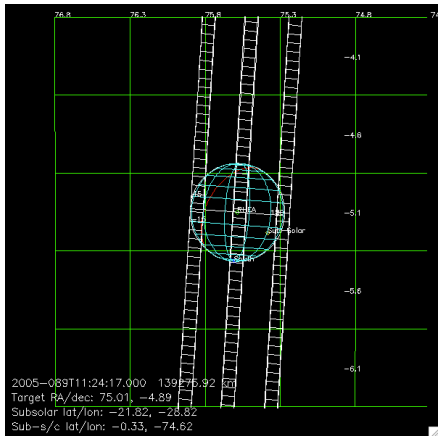
2-part

004RH_ICYLON005_ISS
2005-072T19:53
Alt= 1,688,708 km
Longitude= 237°W
Latitude=0.15°S
Phase= 93.7°



005RH_regmapA001





005RH_ICYLON012_ISS

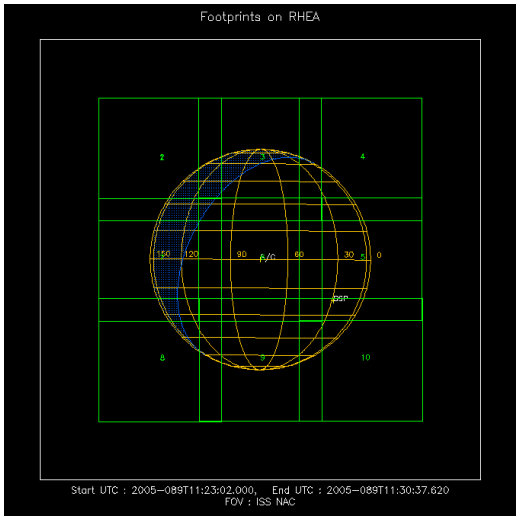
2005-089T11:25

Alt= 138,420 km

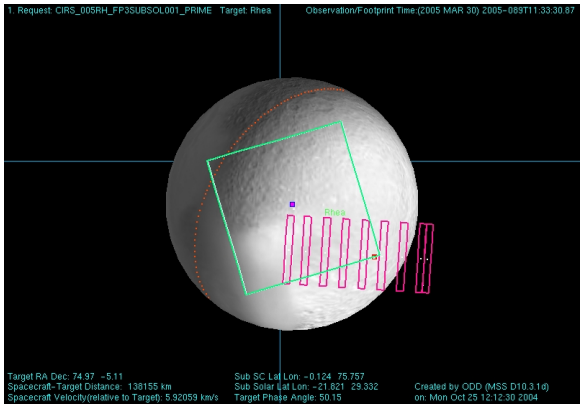
Longitude= 75°W

Latitude=0.3°S

Phase= 49.8°



005RH_fp3subsol001



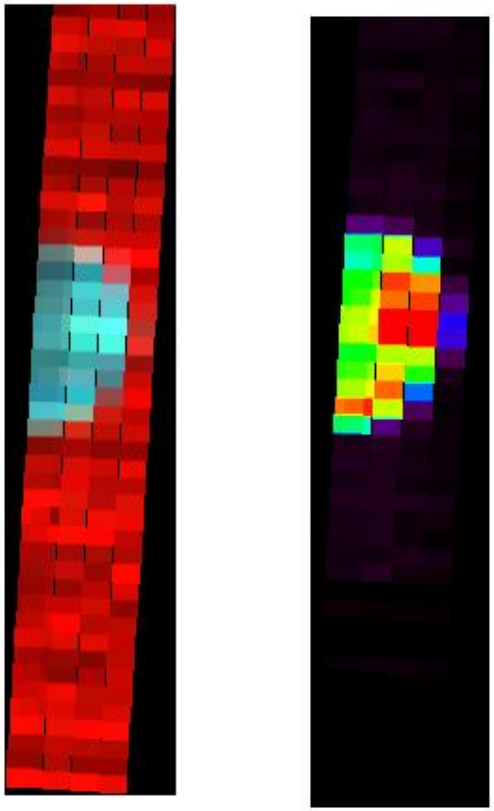
005RH_ICYLON013_CIRS

2005-089T11:35

Alt= 138,092 km

Longitude= 76°W

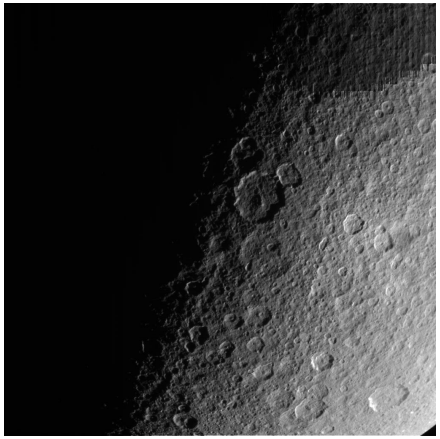
Phase= 50.7°



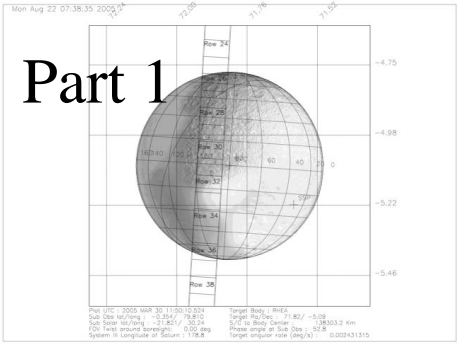
"true" UV color

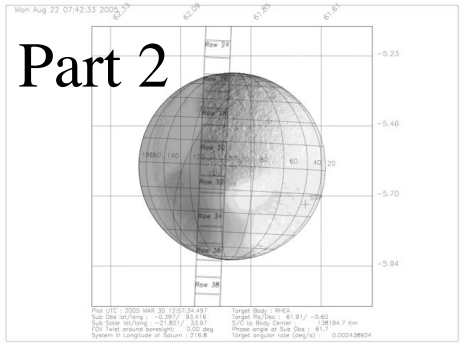
long-λ

VIMS_005RH_RHEA001_PRIME

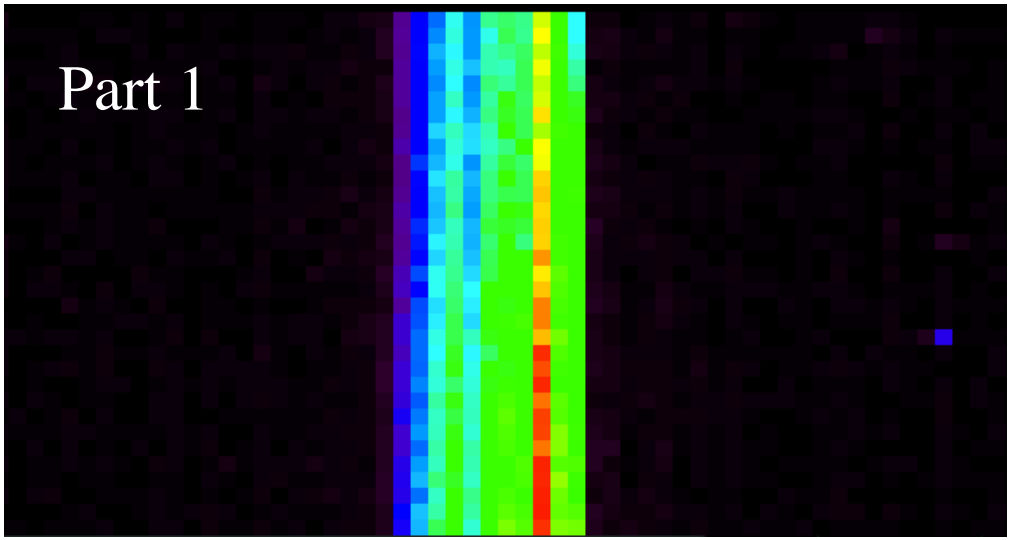


2-part

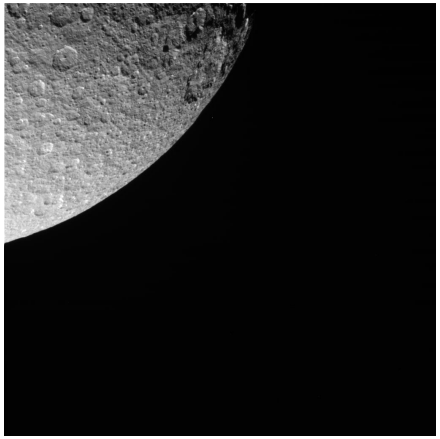


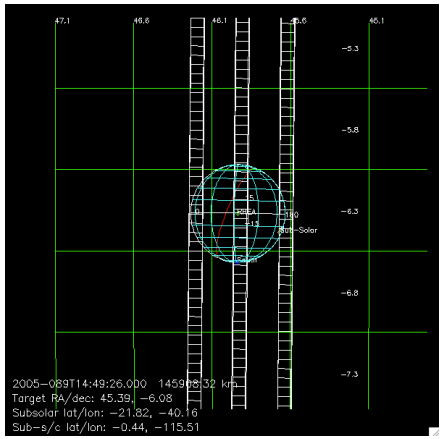


005RH_ICYLON013_VIMS
2005-089T11:50
Alt= 137,192 km
Longitude= 86°W
Latitude=0.4°S
Phase= 57°

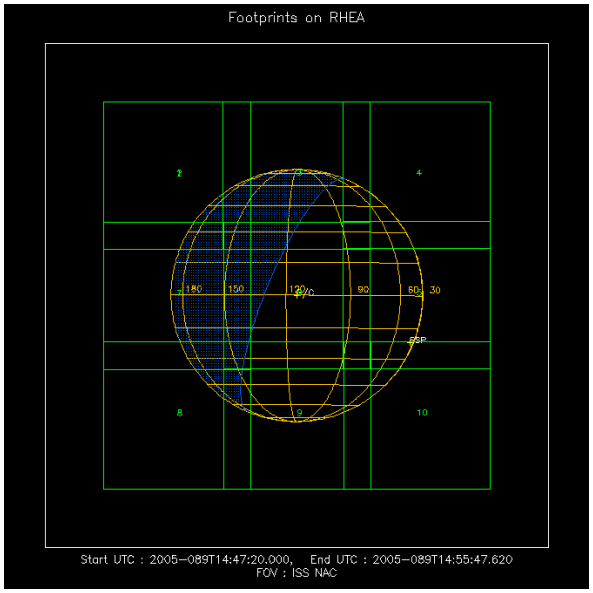


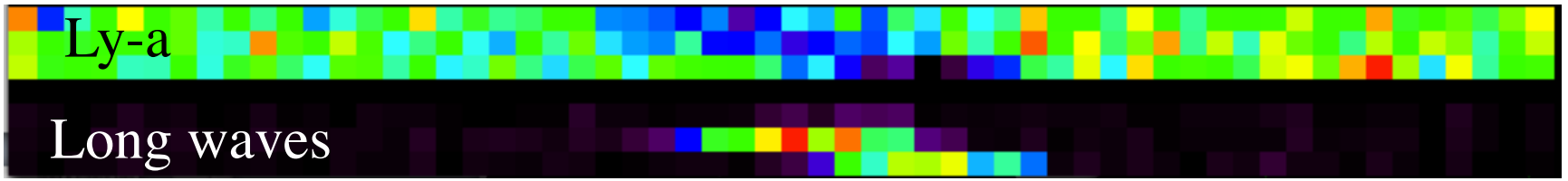
005RH_regmapE001





005RH_ICYLON013_ISS
2005-089T14:50
Alt= 145,373 km
Longitude= 116°W
Latitude=0.4°S
Phase= 76°

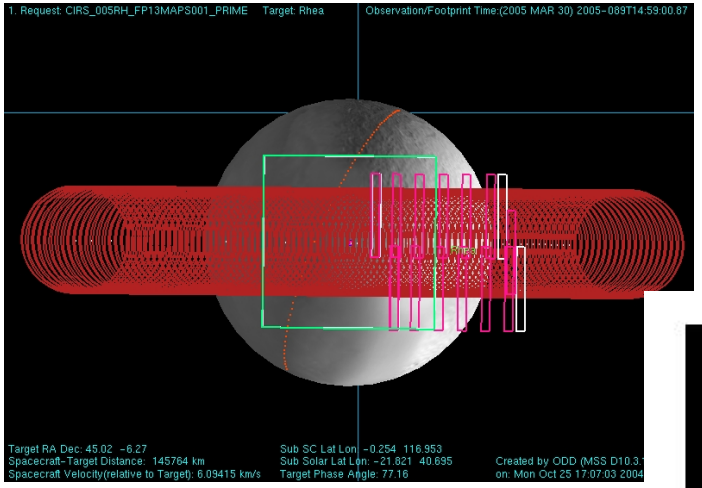


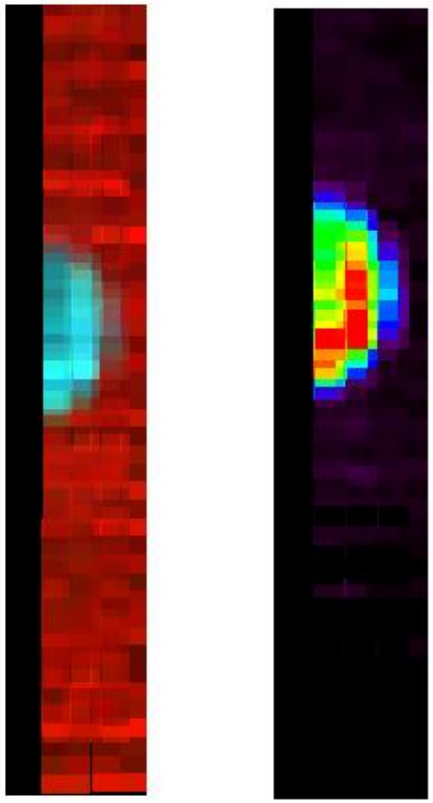


005RH_fp13maps001

2-part

005RH_ICYLON014_CIRS
2005-089T15:00
Alt= 146,094 km
Longitude= 117°W
Phase= 77.3°

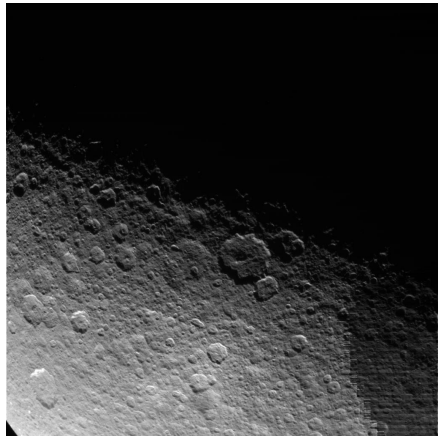


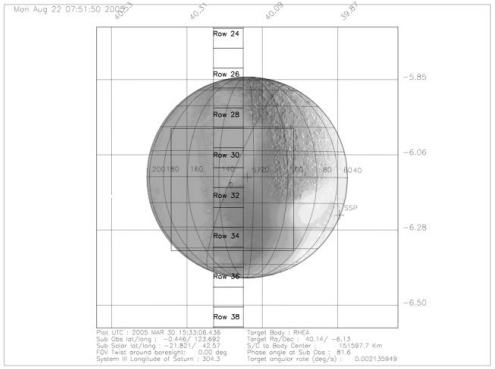


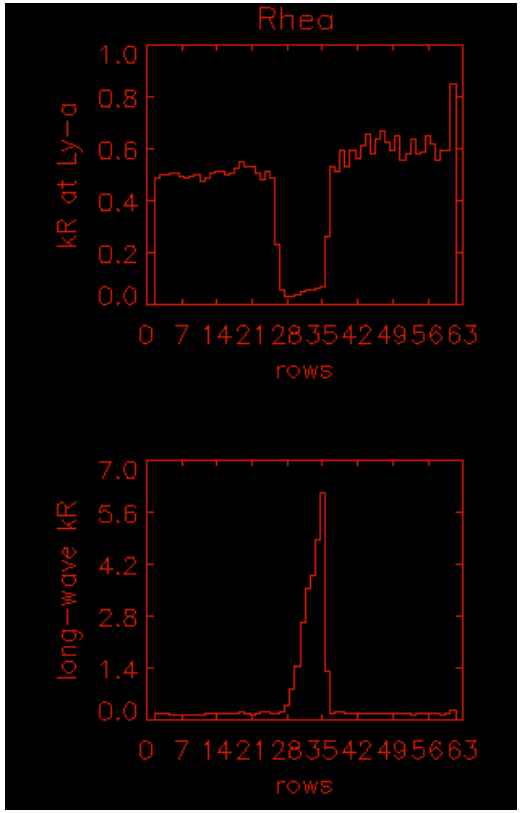
“true” UV color

long-λ

VIMS_005RH_RHEA002

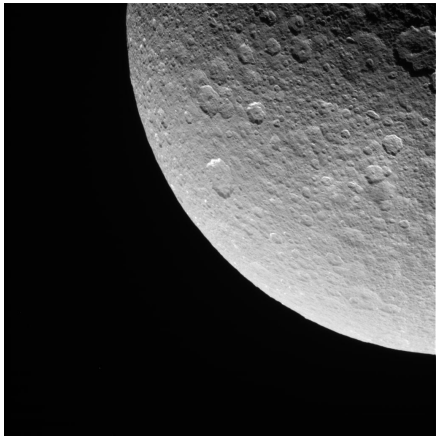


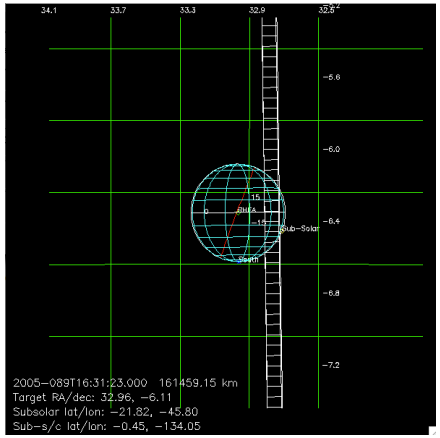




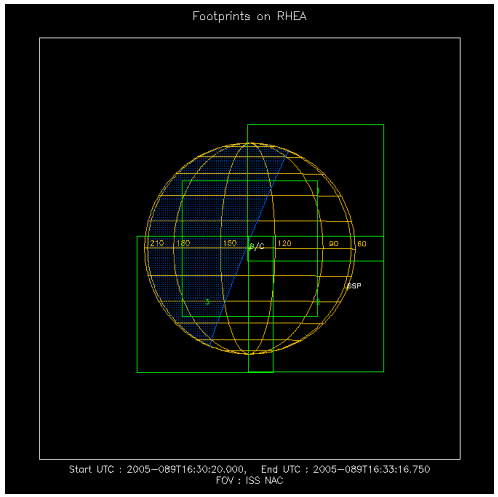
005RH_ICYLON018_VIMS
2005-089T15:33
Alt= 150,468 km
Longitude= 123°W
Phase= 81.3°

005RH_reggeodf001



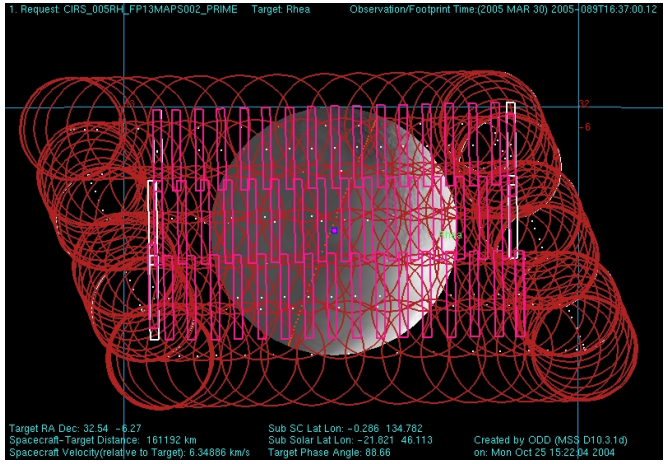


005RH_ICYLON015_ISS
2005-089T16:32
Alt= 160,550 km
Longitude= 134°W
Latitude=0.45°S
Phase= 88.1°



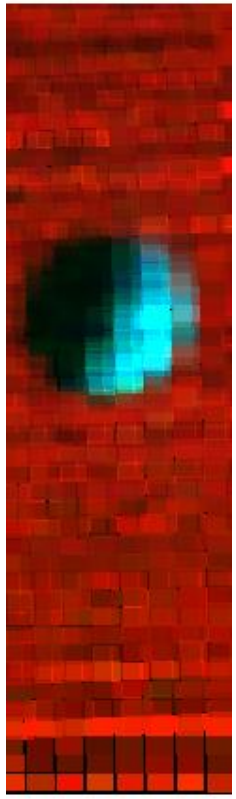
This was a mosaic within one UVIS integration period.

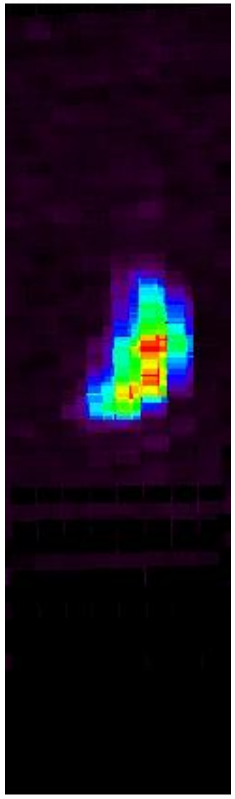
005RH_fp13maps002



2-part

005RH_ICYLON016_CIRS
2005-089T16:38
Alt= 161,511 km
Longitude= 135°W
Phase= 88.7°

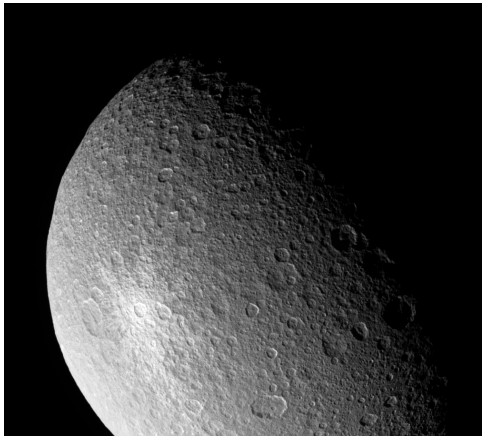


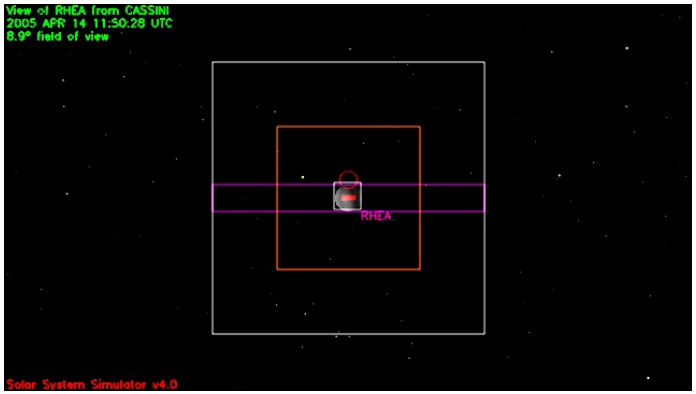


“true” UV color

long-λ

006RH_RHEA003_VIMS





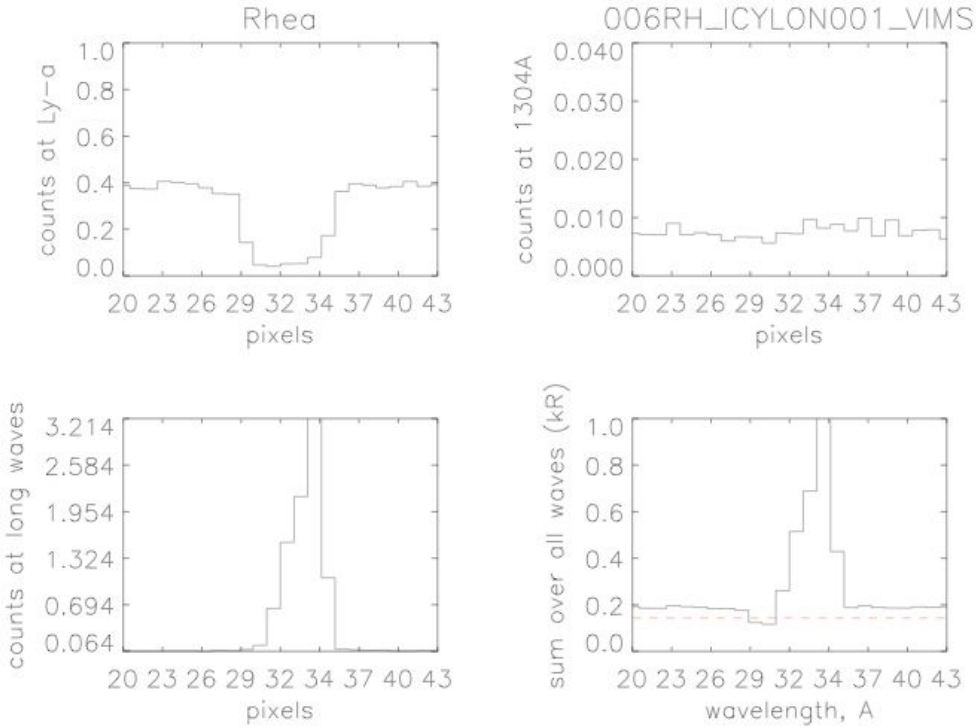
006RH_ICYLON001_VIMS

2005-104T12:18

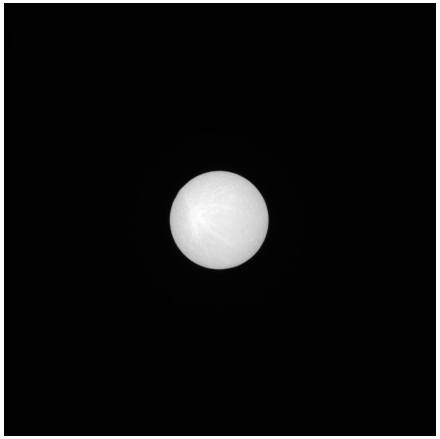
Alt= 249,251 km

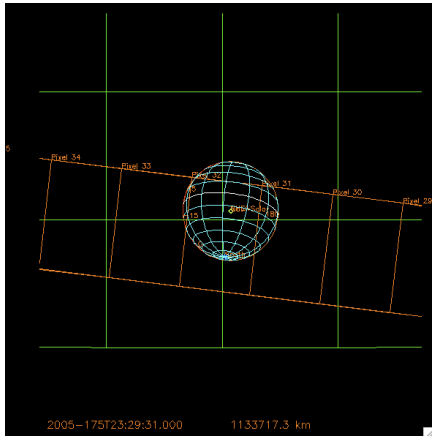
Longitude= 73°W

Phase= 67.9°



010RH_ZEROPHASE001





010RH_ZEROPHASE001_ISS

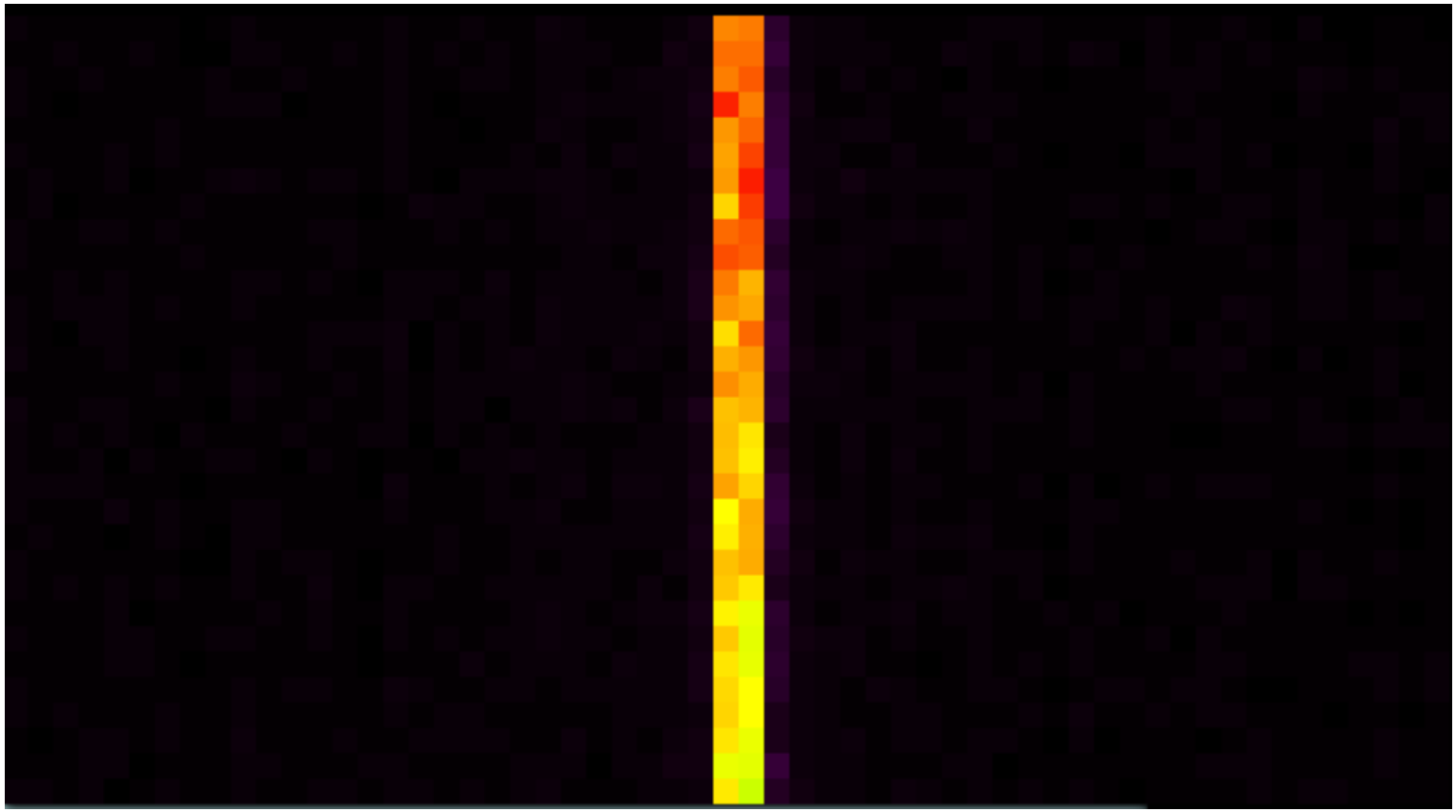
2005-175T23:30

Alt= 1,113,566 km

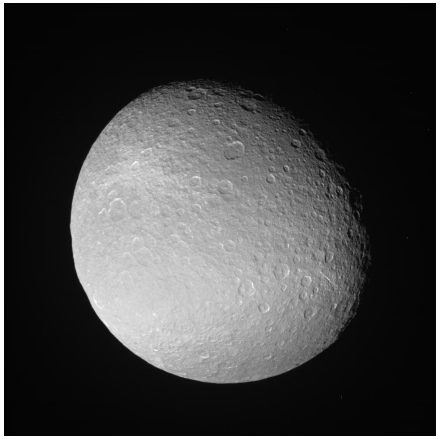
Longitude= 81°W

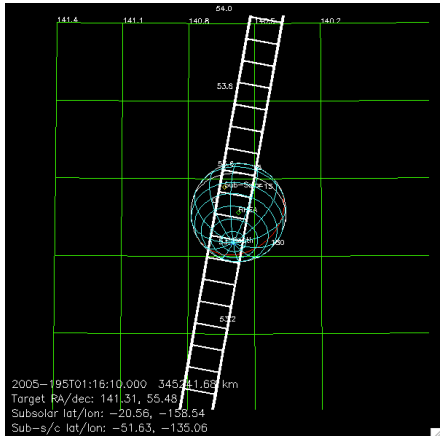
Latitude=21°S

Phase= 0.7°



011RH_GLOCOL001





011RH_ICYLON001_ISS

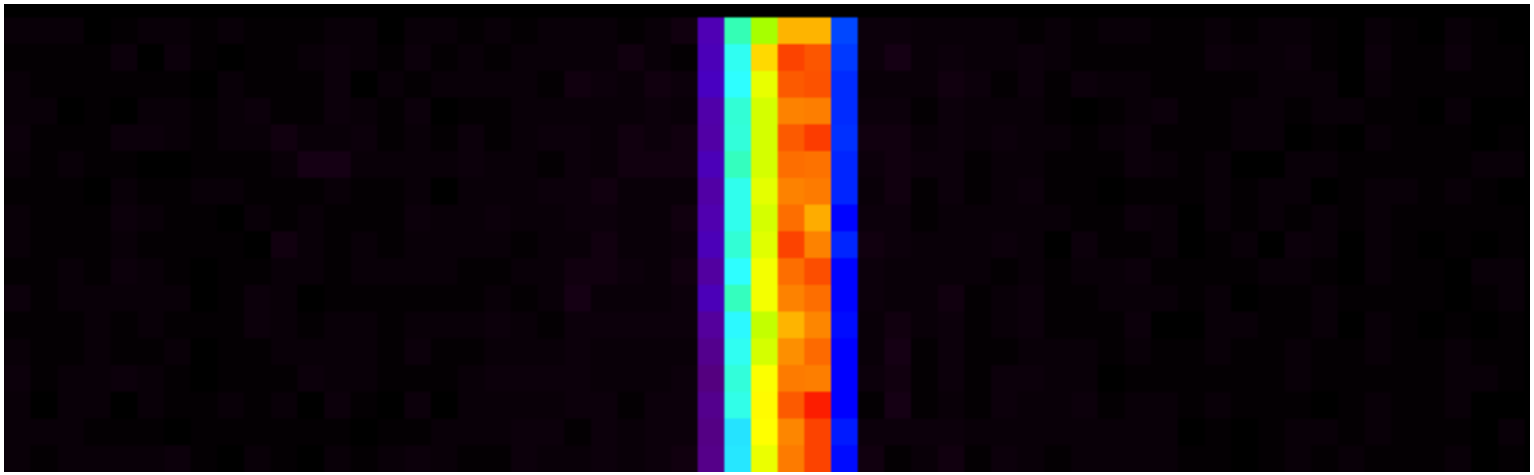
2005-195T01:17

Alt= 337,531 km

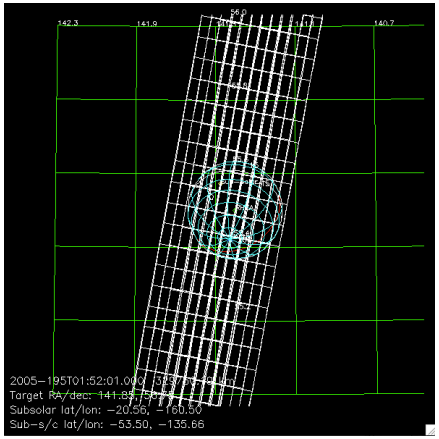
Longitude= 135°W

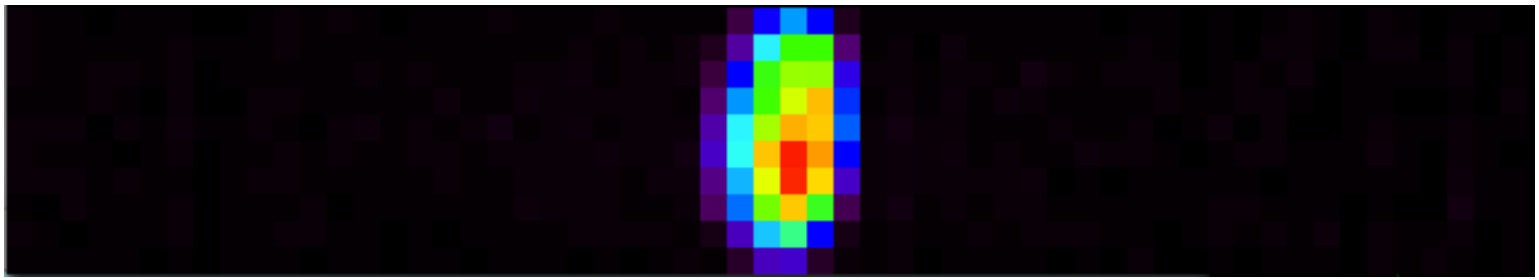
Latitude=52°S

Phase= 36.9°

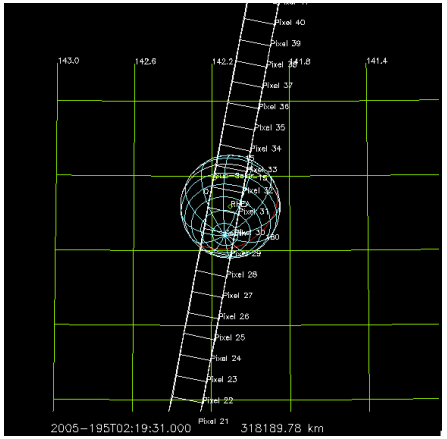


011RH_ICYLON002_PRIME
2005-195T01:53
Alt= 325,186 km
Longitude= 135°W
Latitude=54°S
Phase= 38.3°

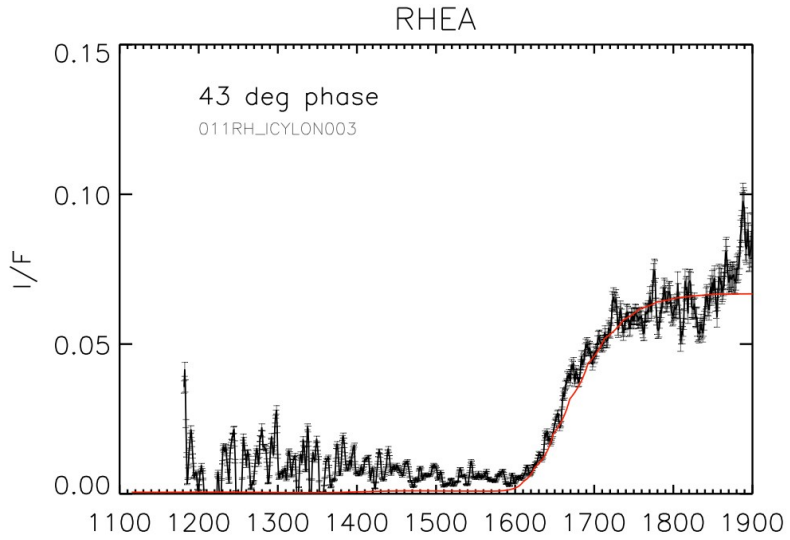


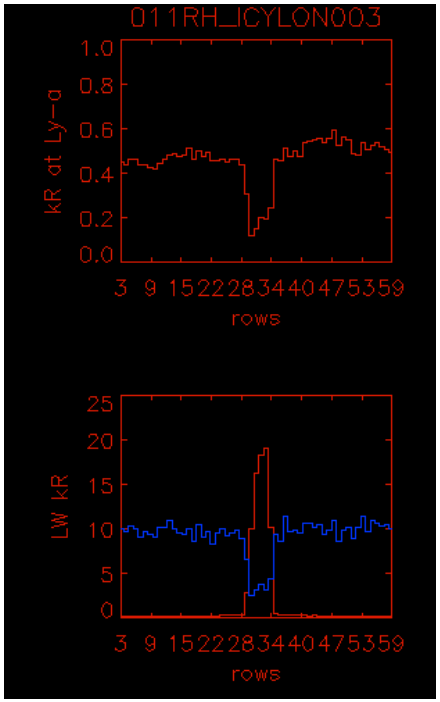


VIMS_011RH_RHEA003



011RH_ICYLON003_VIMS
2005-195T02:18
Alt= 295,054 km
Longitude= 136°W
Phase= 43.1°





CIRS_011RH_FP3REGION020

2-part

011RH_ICYLON005_CIRS

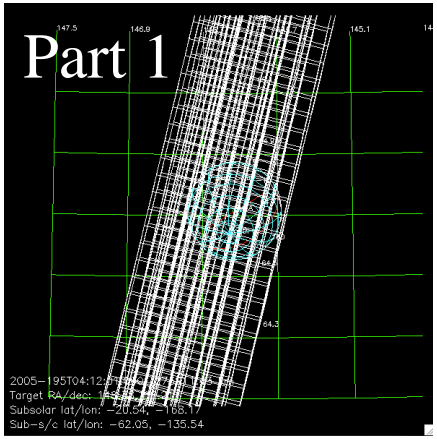
2005-195T04:13

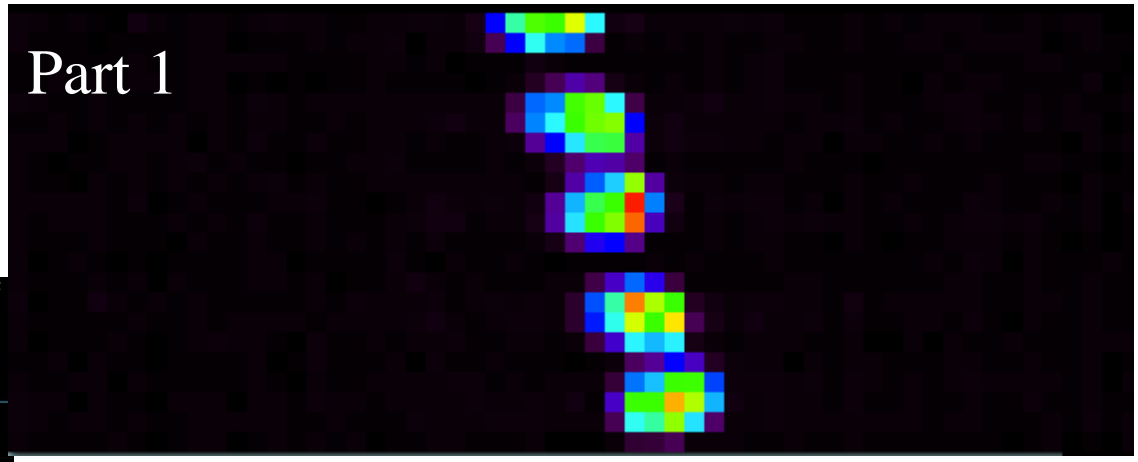
Alt= 266,301 km

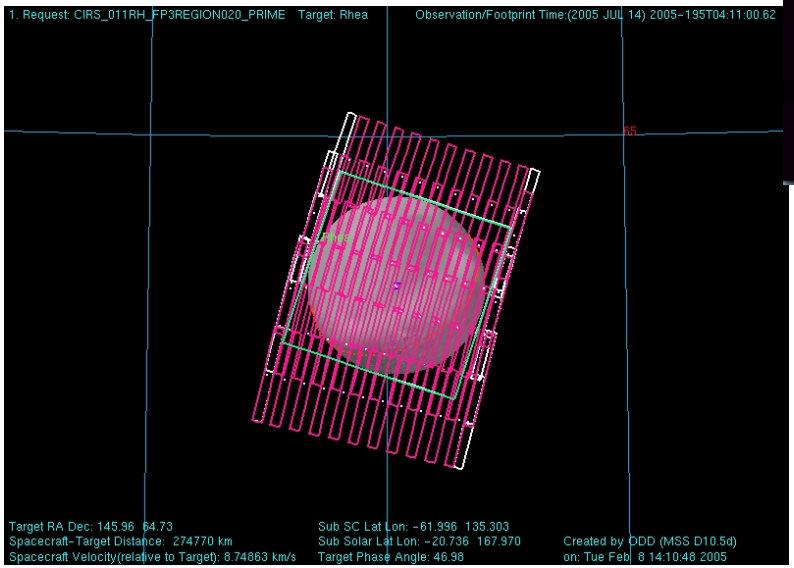
Longitude= 135°W

Latitude=64°S

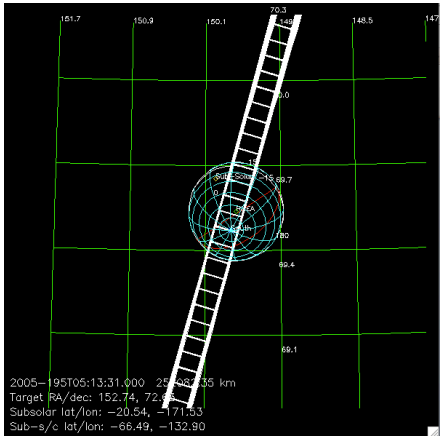
Phase= 48.6°



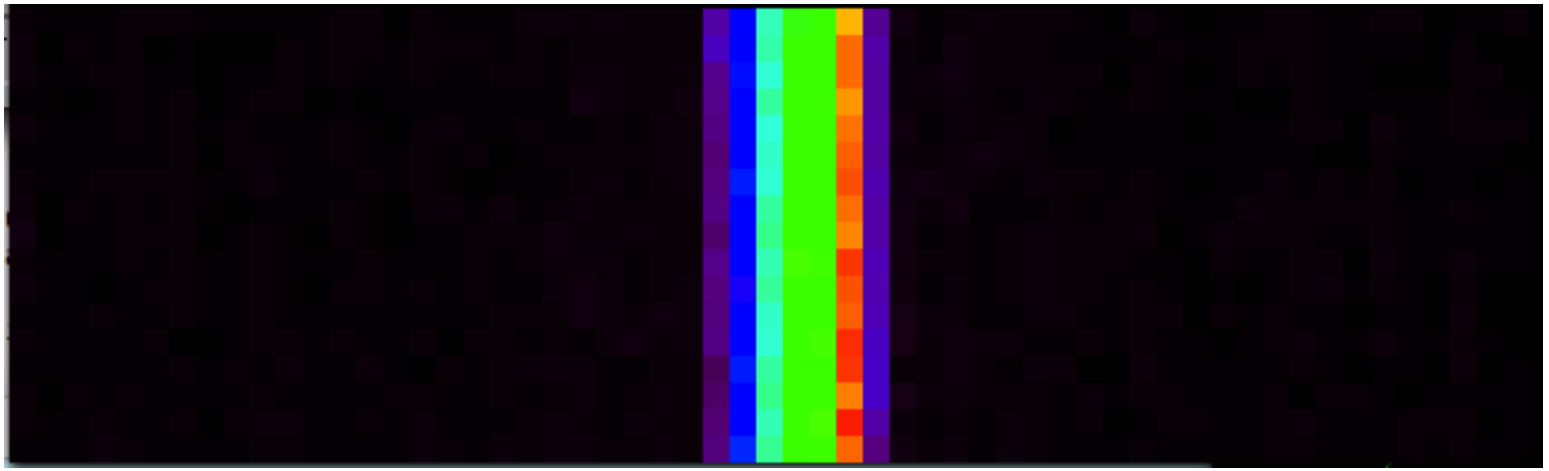




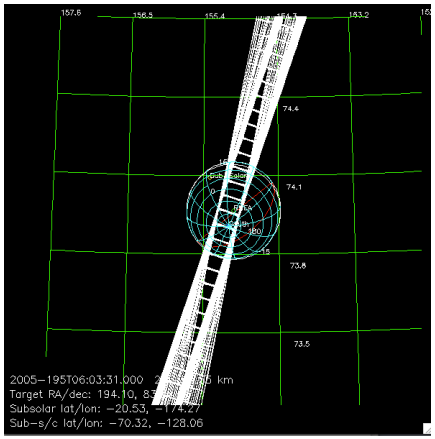
VIMS_011RH_RHEA001

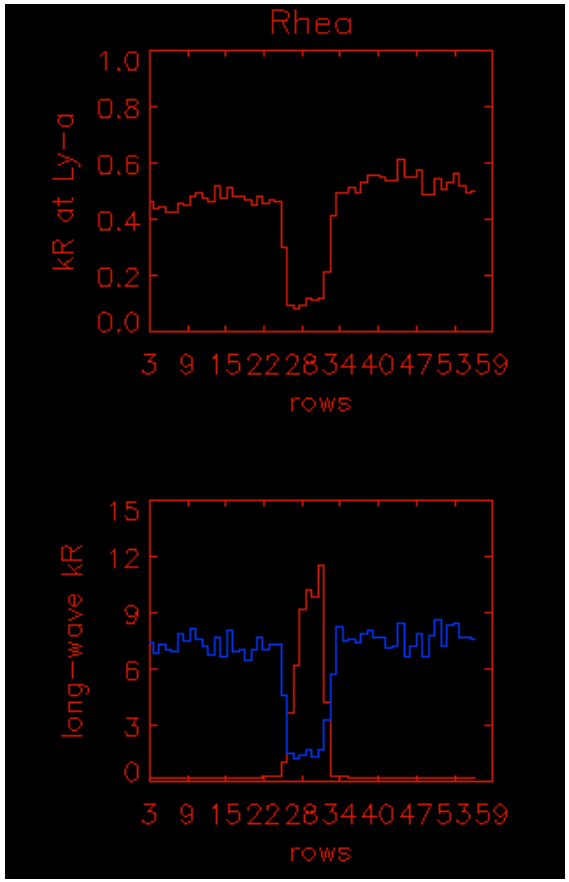


011RH_ICYLON006_VIMS
2005-195T05:14
Alt= 245,537 km
Longitude= 131°W
Latitude=68°S
Phase= 53.6°



VIMS_011RH_RHEA002





011RH_ICYLON008_VIMS

2005-195T06:04

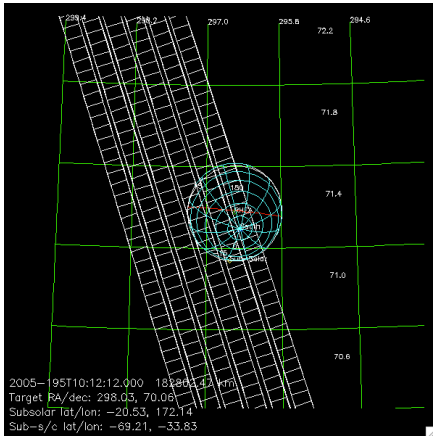
Alt= 218,512 km

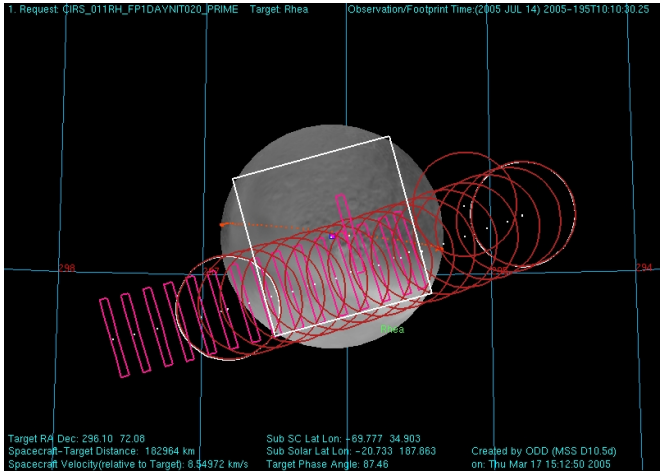
Longitude= 116°W

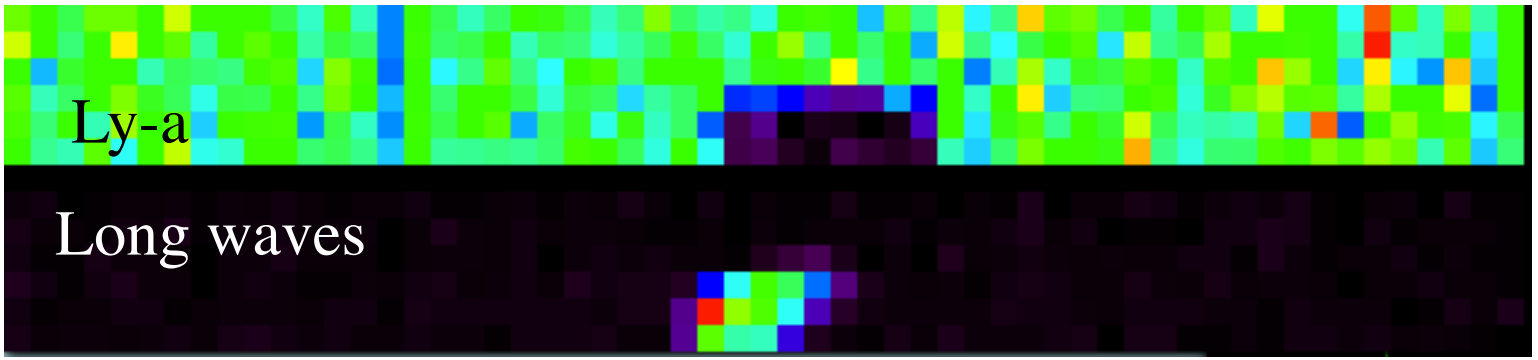
Phase= 62.4°

CIRS_011RH_FP1DAYNIT020

011RH_ICYLON011_CIRS
2005-195T10:13
Alt= 180,969 km
Longitude= 32°W
Latitude=69°S
Phase= 89°







VIMS_011RH_RHEA004

2-part

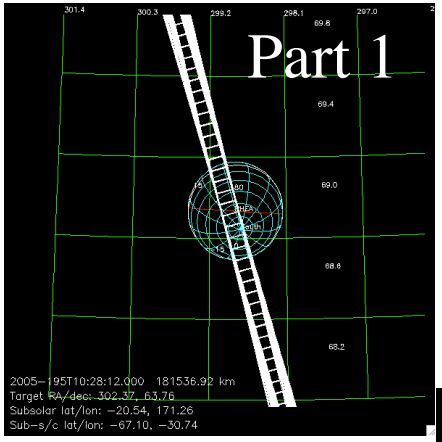
011RH_ICYLON012_VIMS

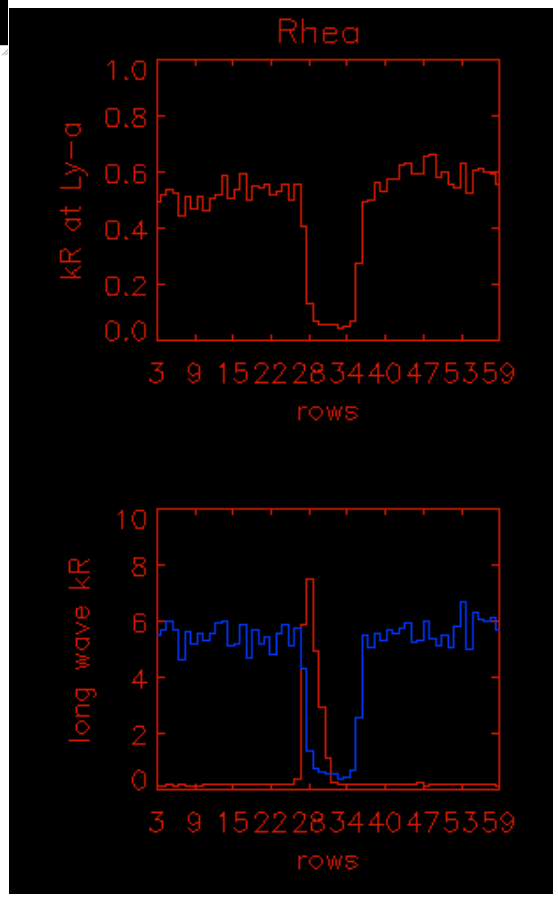
2005-195T10:29

Alt= 179,194 km

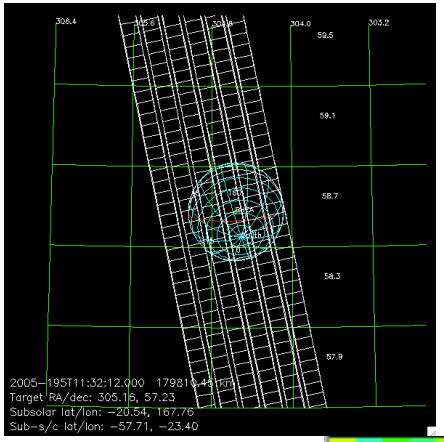
Longitude= 27°W

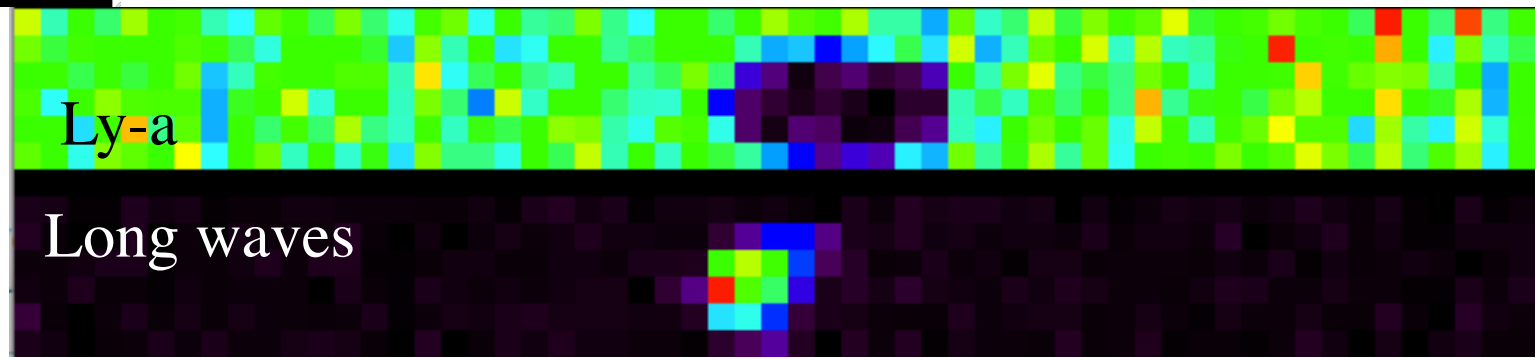
Phase= 95.5°

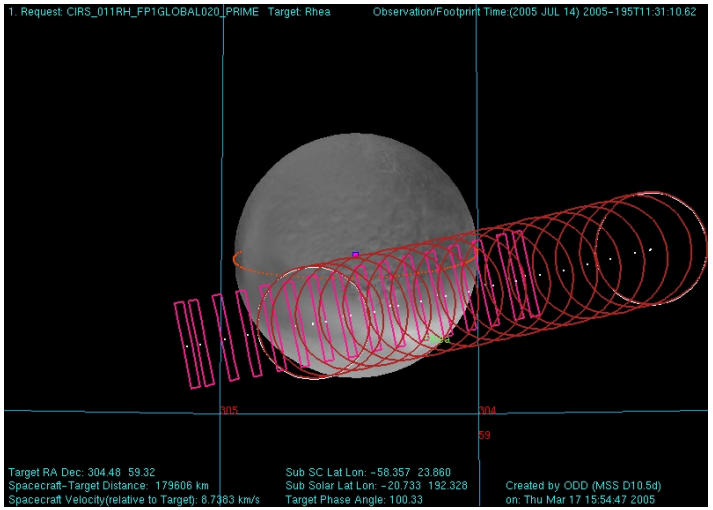




CIRS_011RH_FP1GLOBAL020





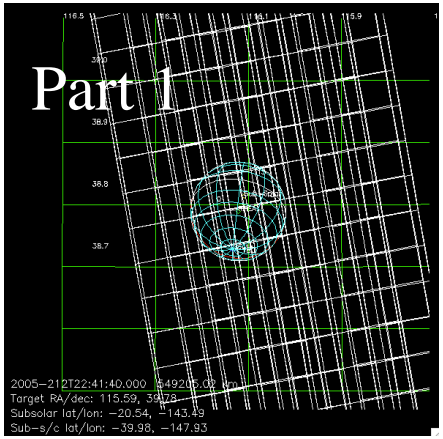


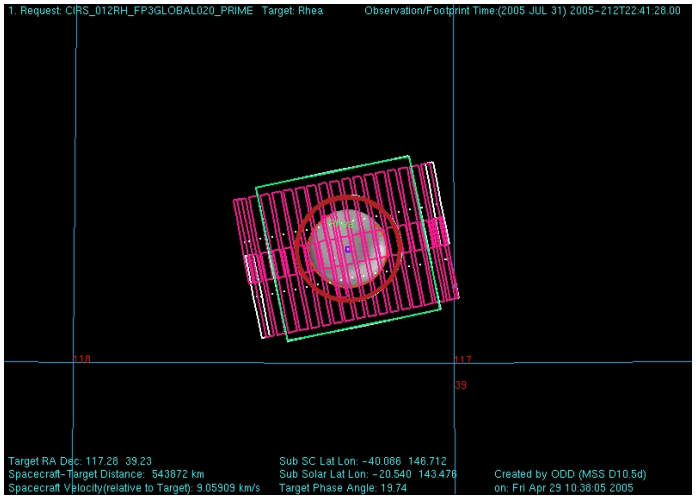
011RH_ICYLON014_CIRS
2005-195T11:33
Alt= 179,179 km
Longitude= 23°W
Latitude=57°S
Phase= 102°

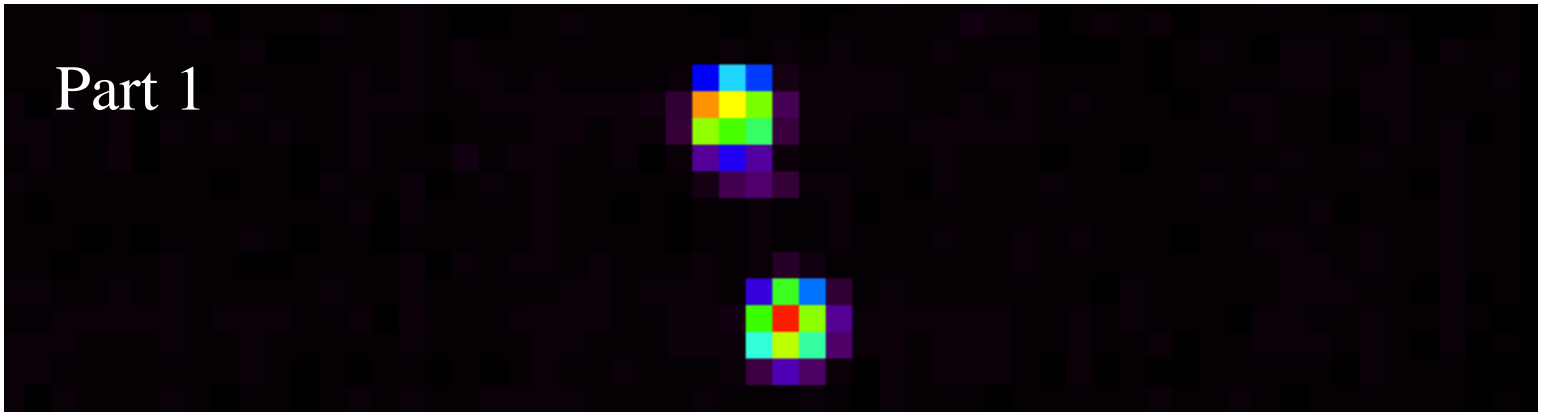
CIRS_012RH_FP3GLOBAL020

2-part

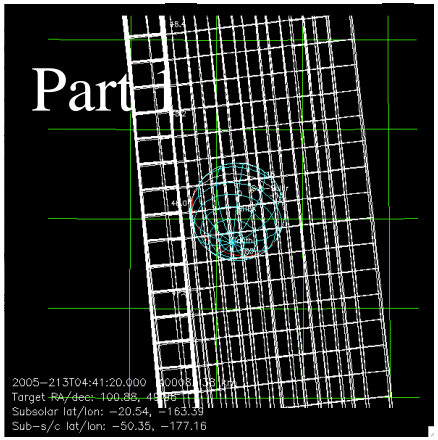
012RH_ICYLON001_CIRS
2005-212T22:42
Alt= 543,872 km
Longitude= 147°W
Latitude=40°S
Phase= 20°





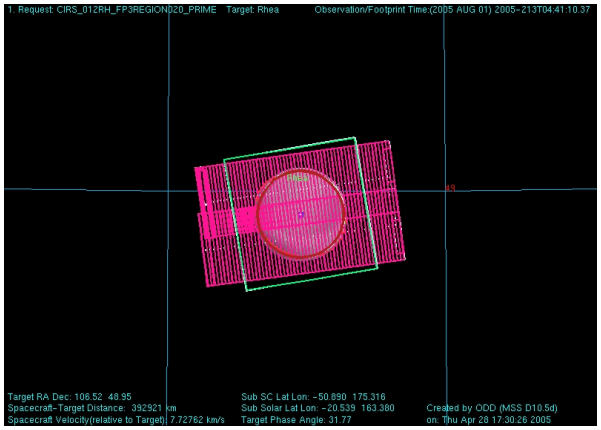


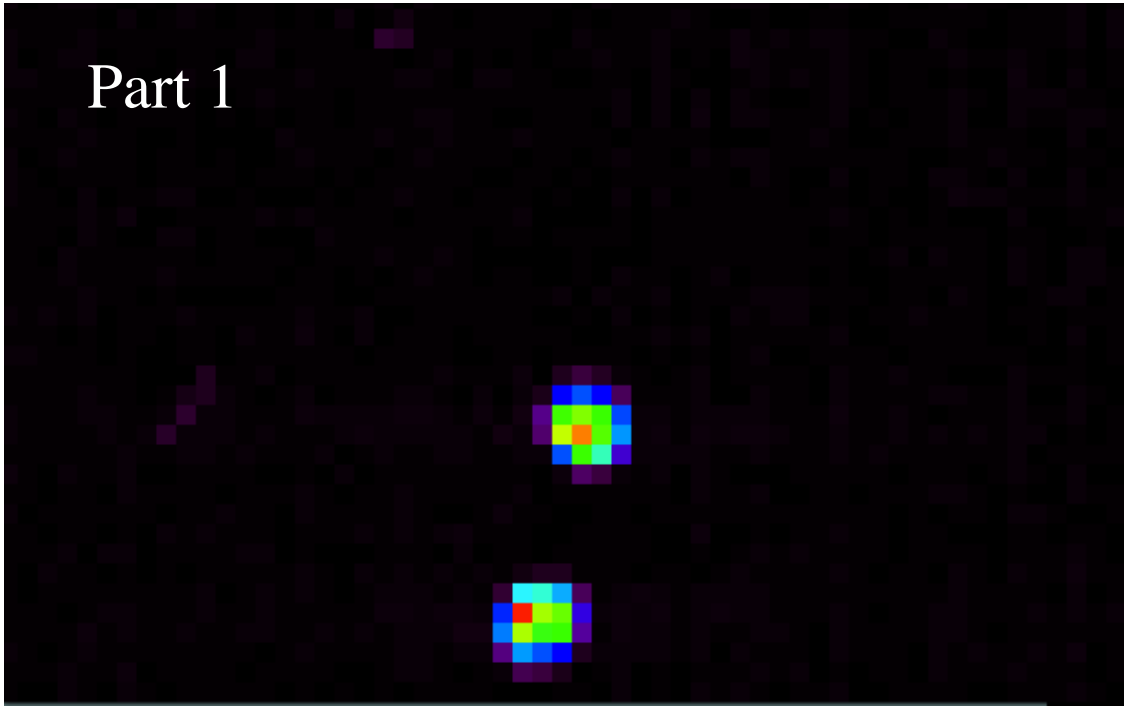
CIRS_012RH_FP3REGION020



2-part

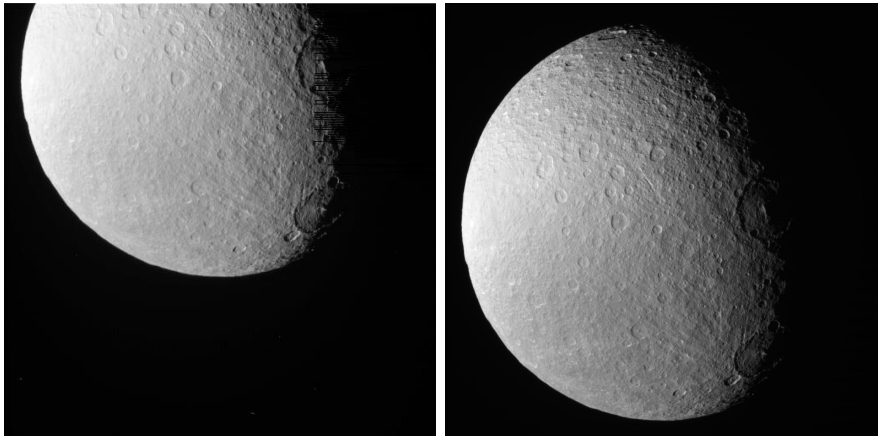
012RH_ICYLON003_CIRS
2005-213T04:42
Alt= 386,950 km
Longitude= 181°W
Latitude=51°S
Phase= 33°

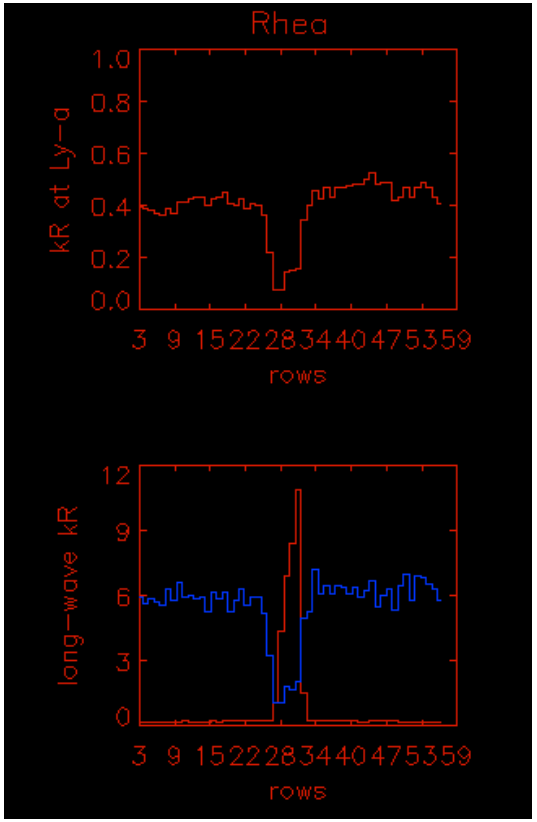




VIMS_012RH_RHEA001

012RH_ICYLON004_VIMS
2005-213T12:54
Alt= 262,110 km
Longitude= 256°W
Phase= 58.8°

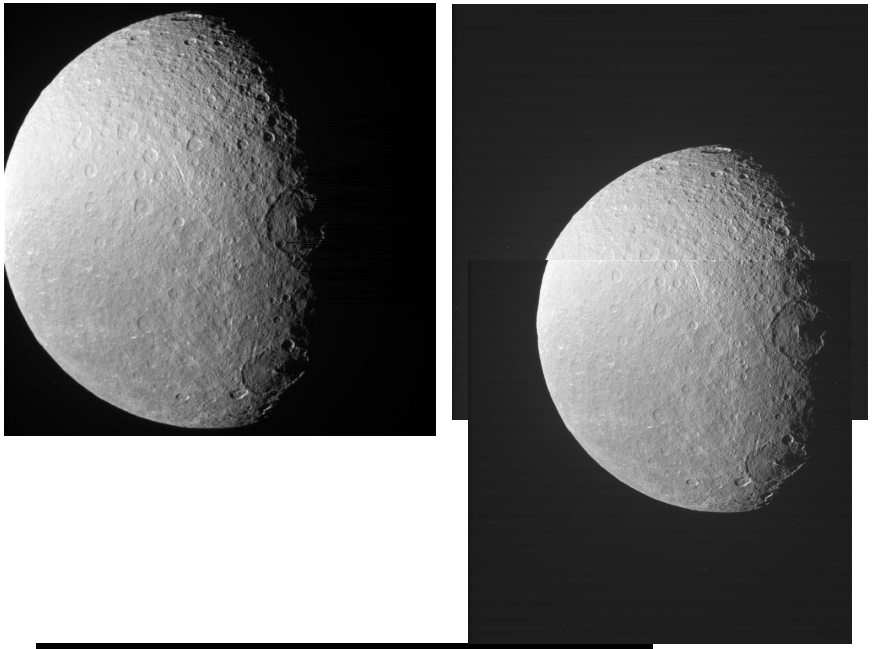


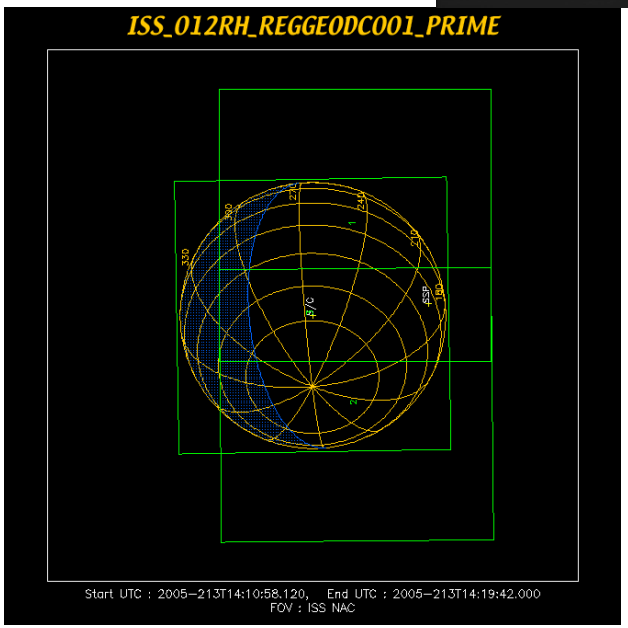


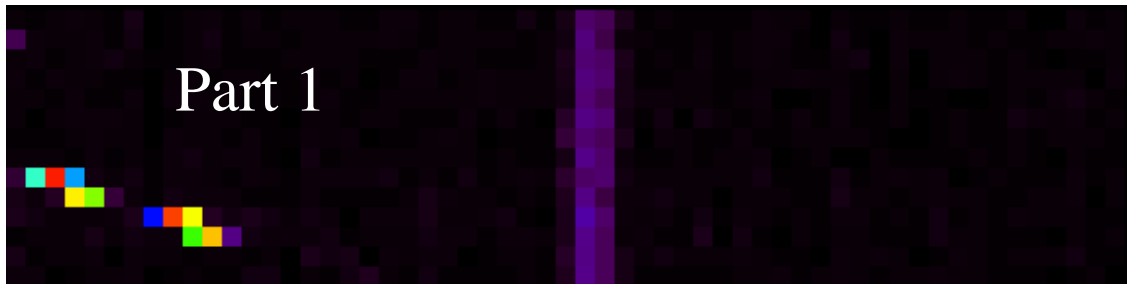
ISS_012RH_REGGEODC001

2-part

012RH_ICYLON005_ISS
2005-213T14:12
Alt= 254,355 km
Longitude= 264°W
Latitude=57°S
Phase= 61.7°







CIRS_012RH_FP1GLOBAL020

012RH_ICYLON006_CIRS

4-part

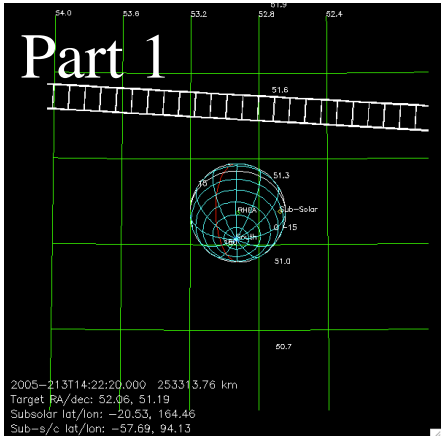
2005-213T14:23

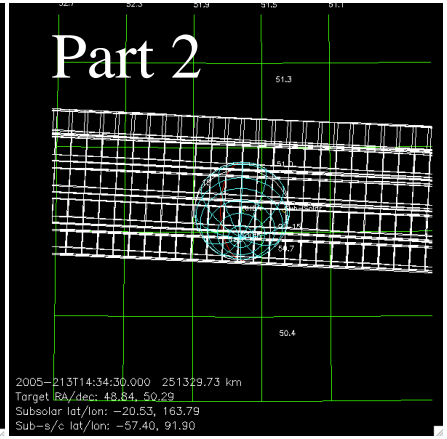
Alt= 247,115 km

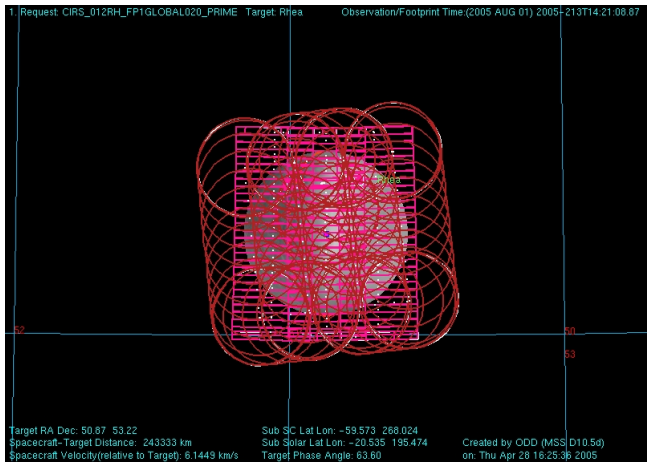
Longitude= 270°W

Latitude=57°S

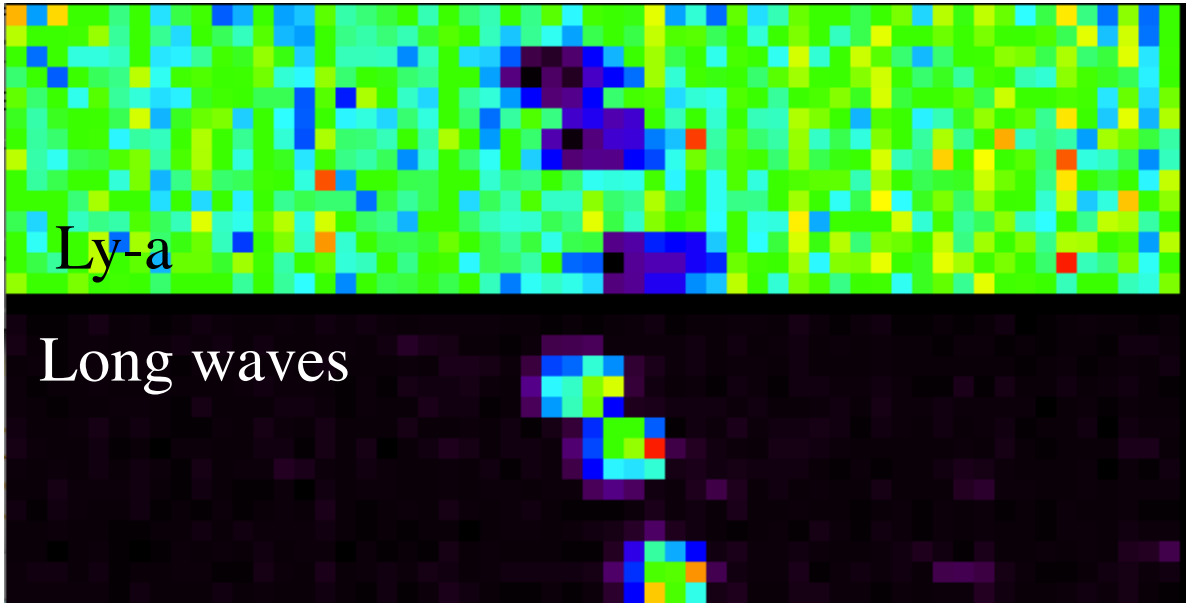
Phase= 64.°



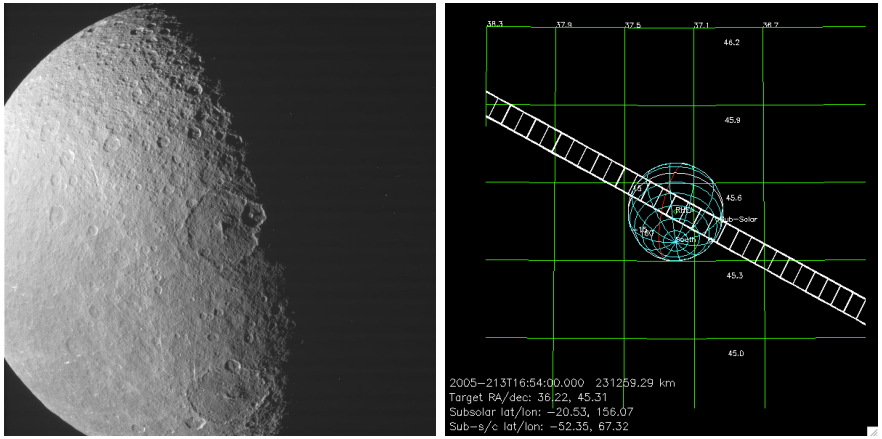




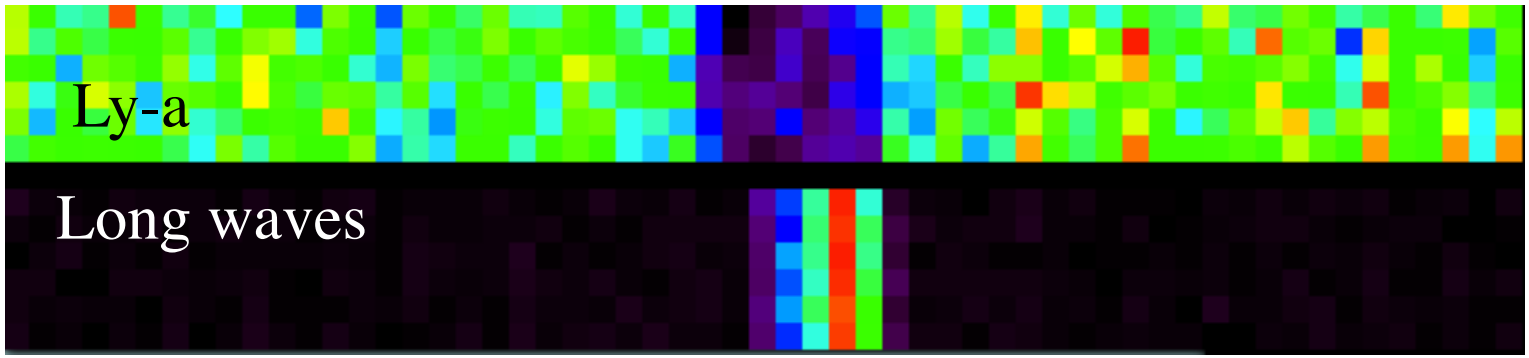
Part 2



VIMS_012RH_RHEA004

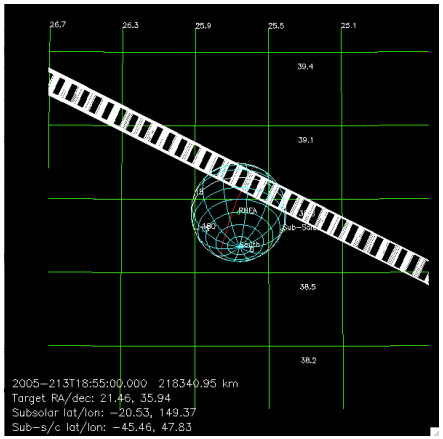


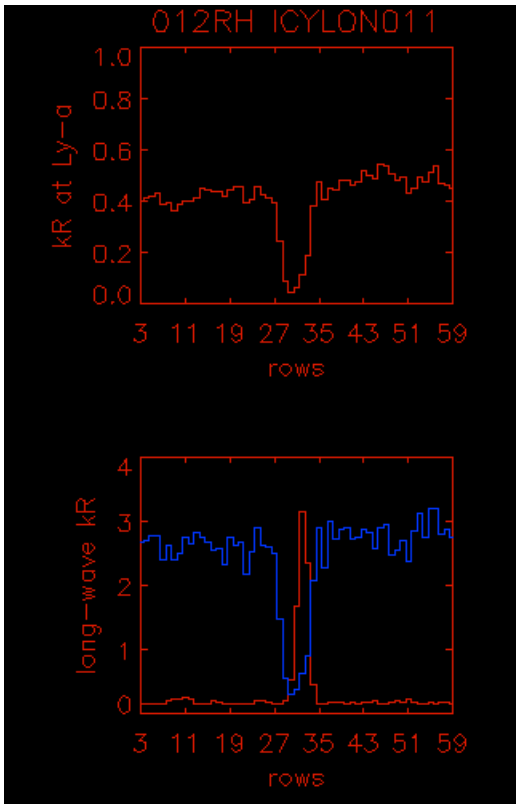
012RH_ICYLON008_VIMS
2005-213T16:55
Alt= 230,298 km
Longitude= 293°W
Latitude=52°S
Phase= 73.4°



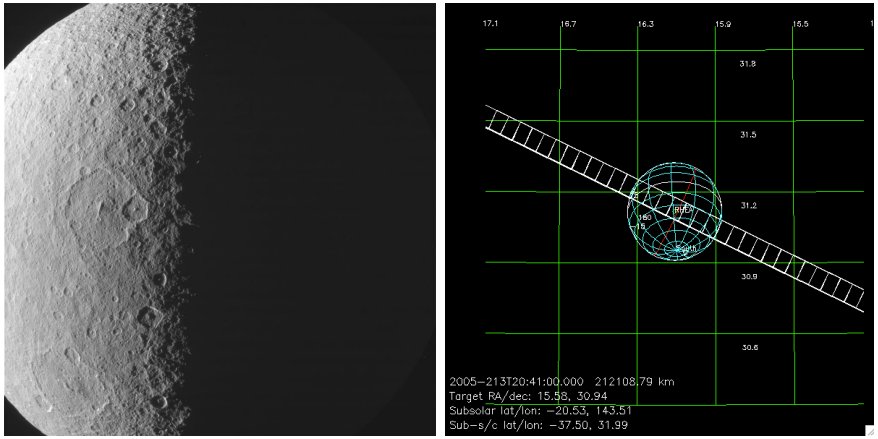
VIMS_012RH_RHEA003

012RH_ICYLON011_VIMS
2005-213T18:56
Alt= 215,301 km
Longitude= 317°W
Phase= 86.2°

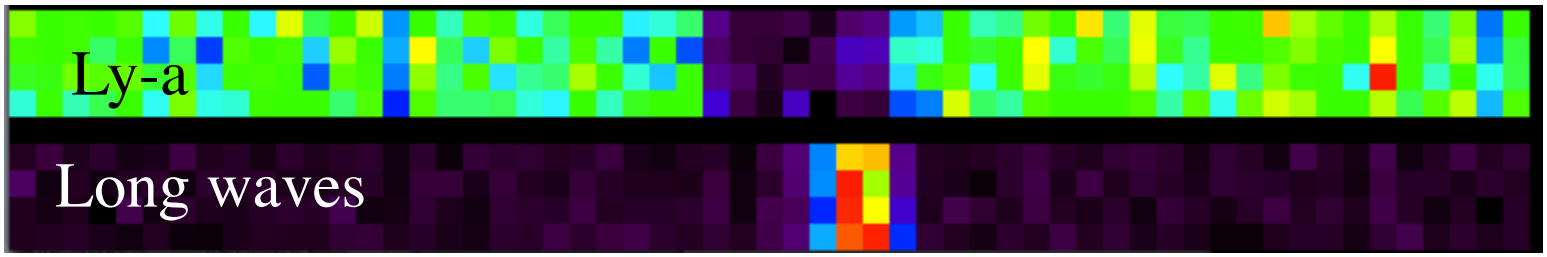




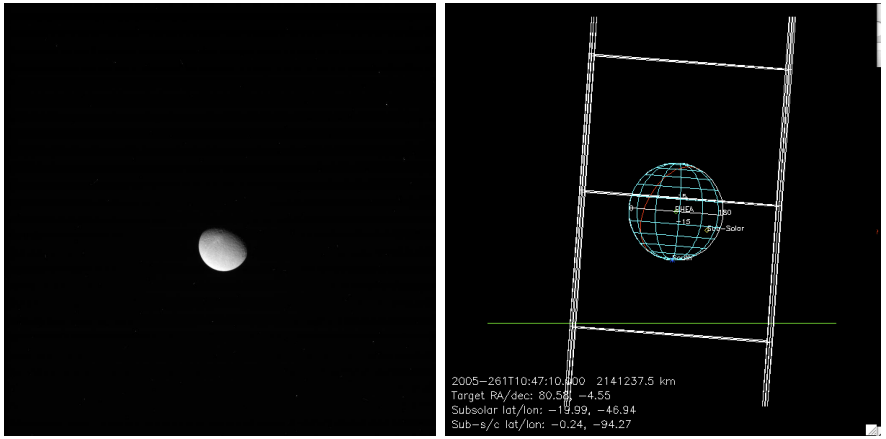
VIMS_012RH_RHEA005



012RH_ICYLON013_VIMS
2005-213T20:42
Alt= 211,560 km
Longitude= 328°W
Latitude=37°S
Phase= 93.5°



015RH_094PH050W001_ISS



015RH_ICYLON002_ISS

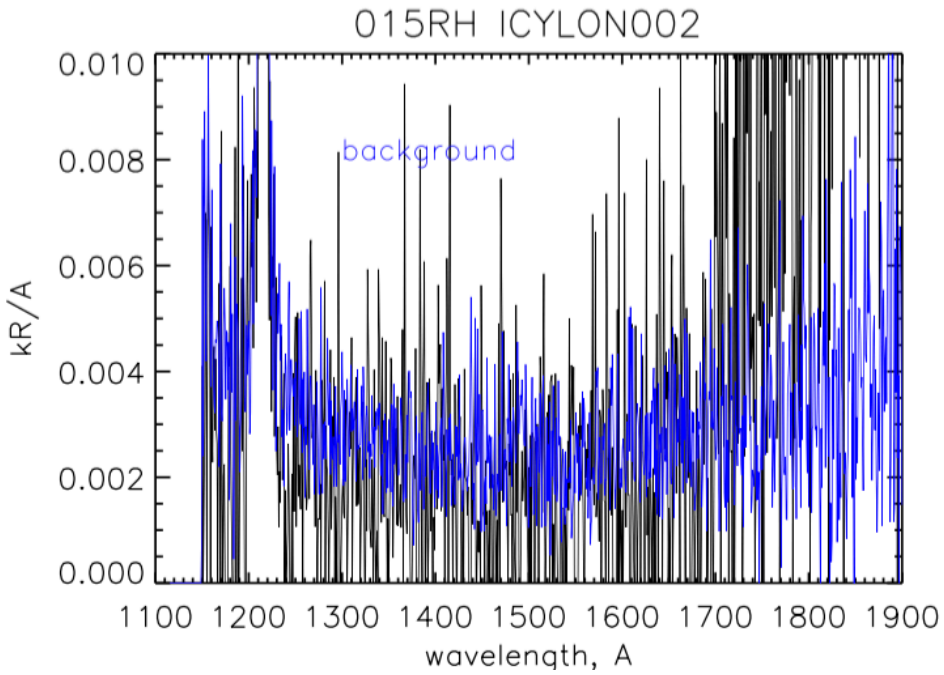
2005-261T10:40

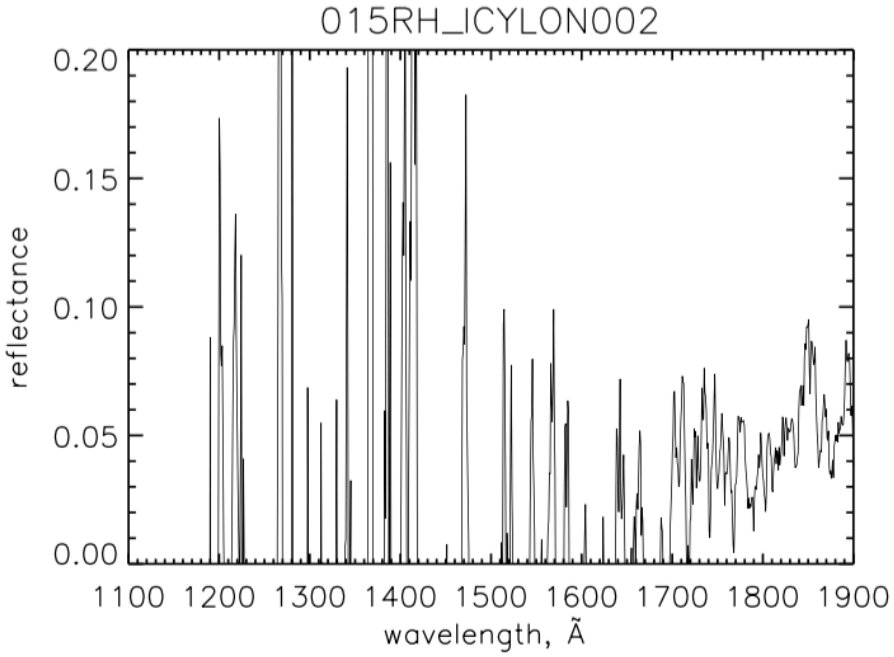
Alt= 2,141,536 km

Longitude=94°W

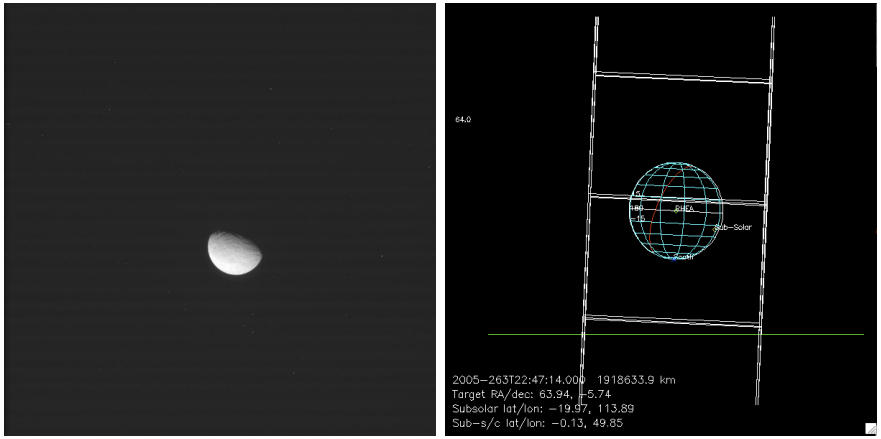
Latitude=0.2°S

Phase= 50°





015RH_310PH065W001_ISS



015RH_ICYLON009_ISS

2005-263T22:40

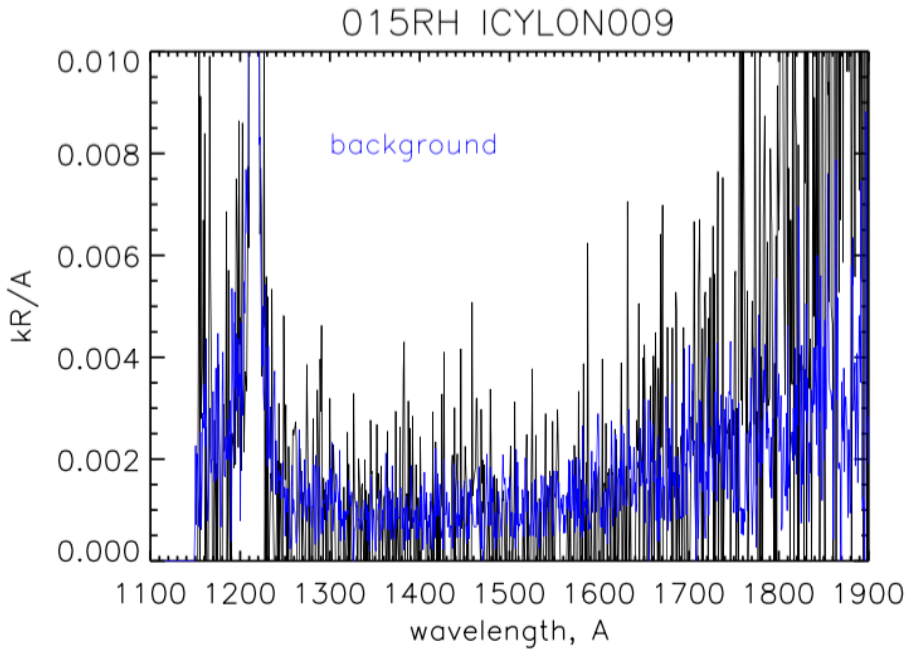
Alt= 1,917,642 km

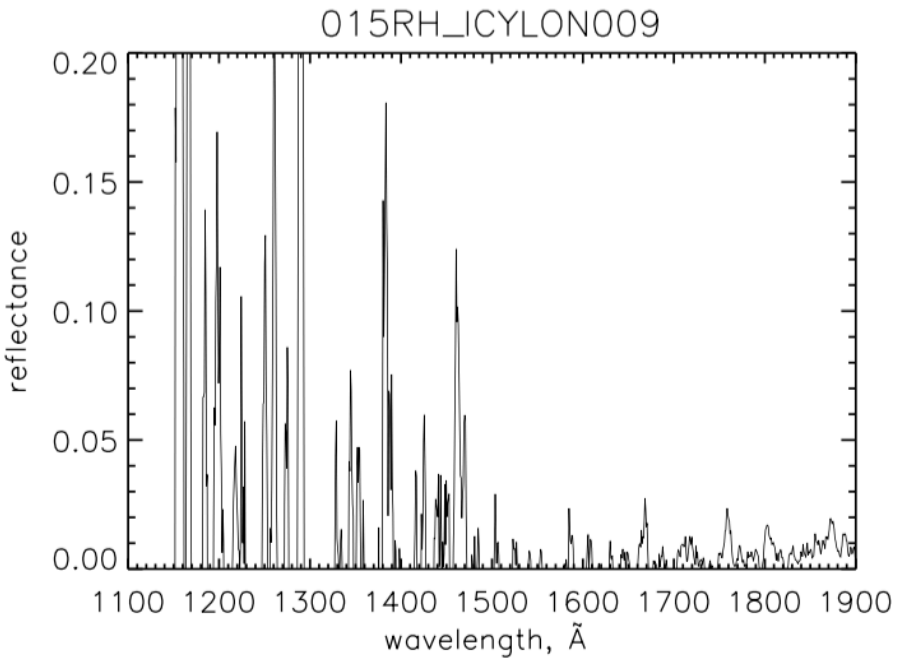
Longitude= 310°W

Latitude=0.1°S

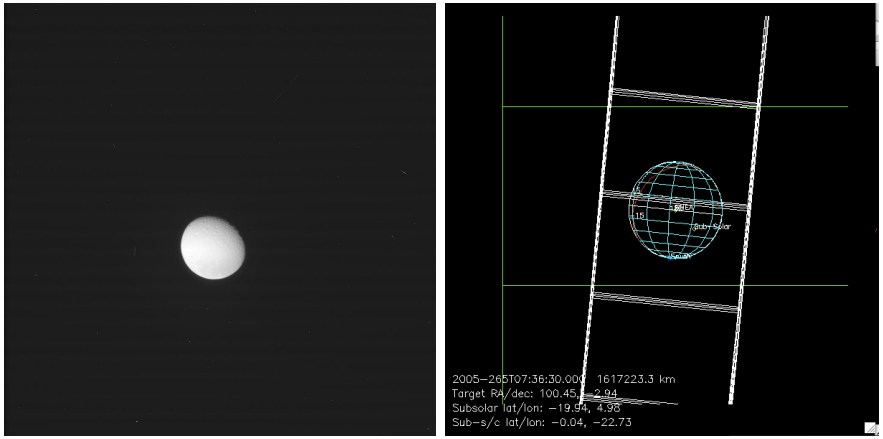
Phase= 65.7°

Low SNR





015RH_022PH033W001_ISS



015RH_ICYLON024_ISS

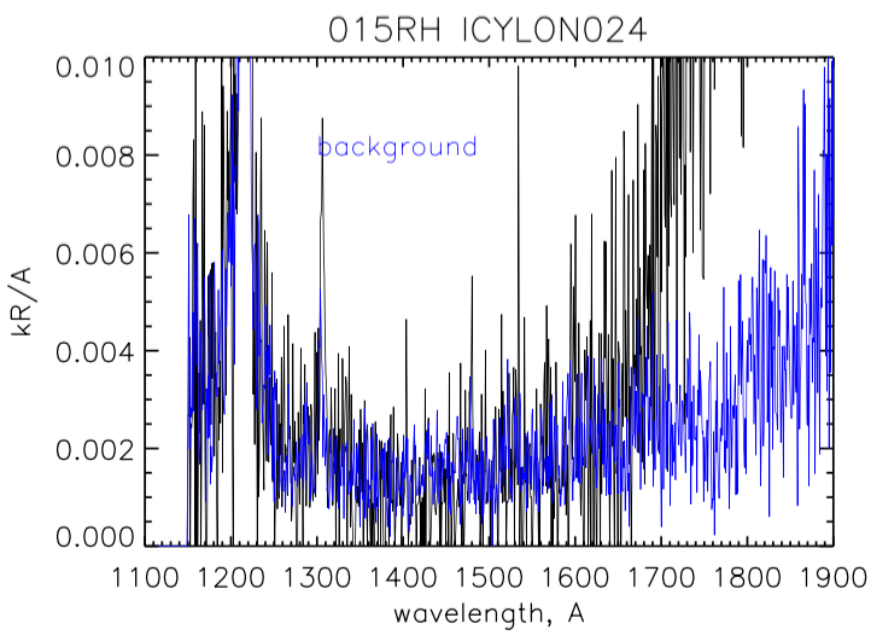
2005-265T07:30

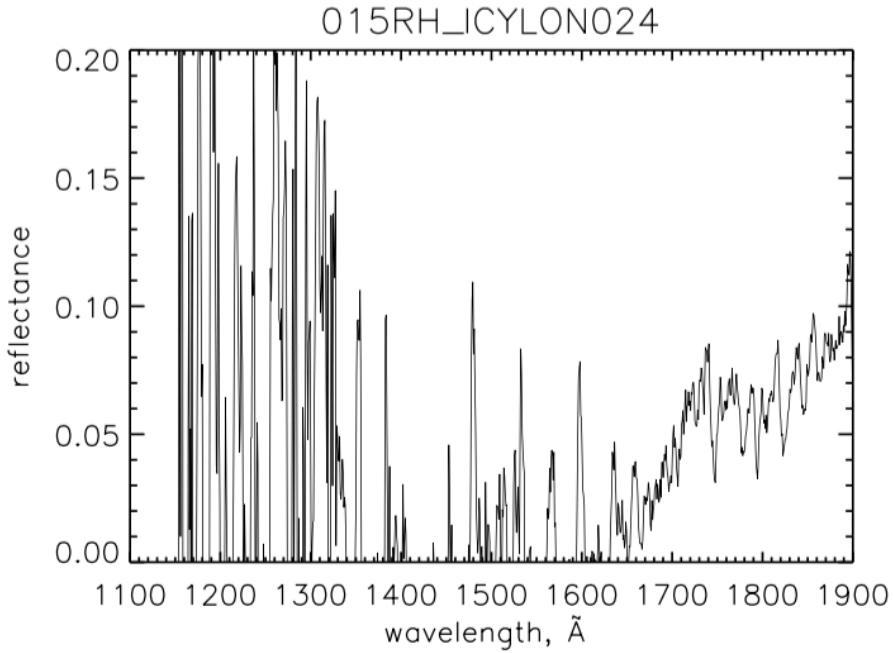
Alt= 1,614,733 km

Longitude= 23°W

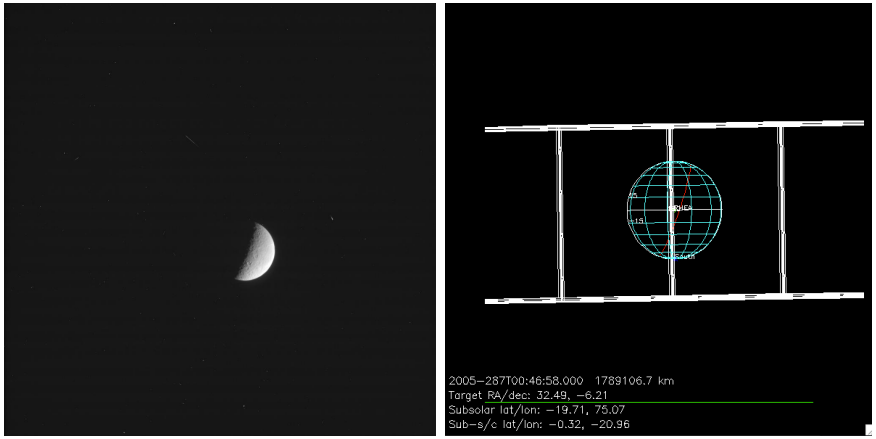
Latitude=0°N

Phase= 33.6°





016RH_022W096PH001_ISS



016RH_ICYLON001_ISS

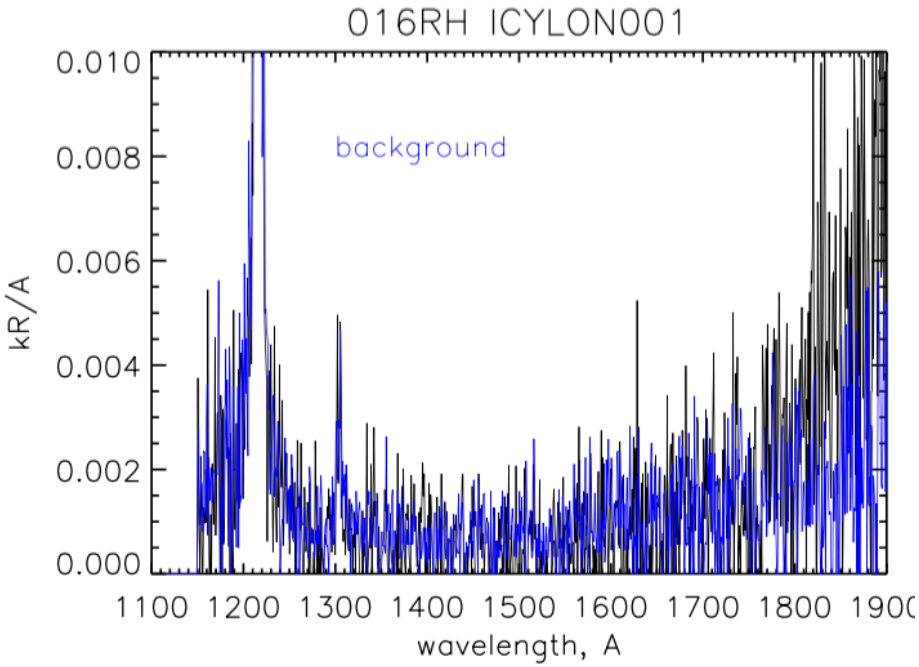
2005-287T00:47

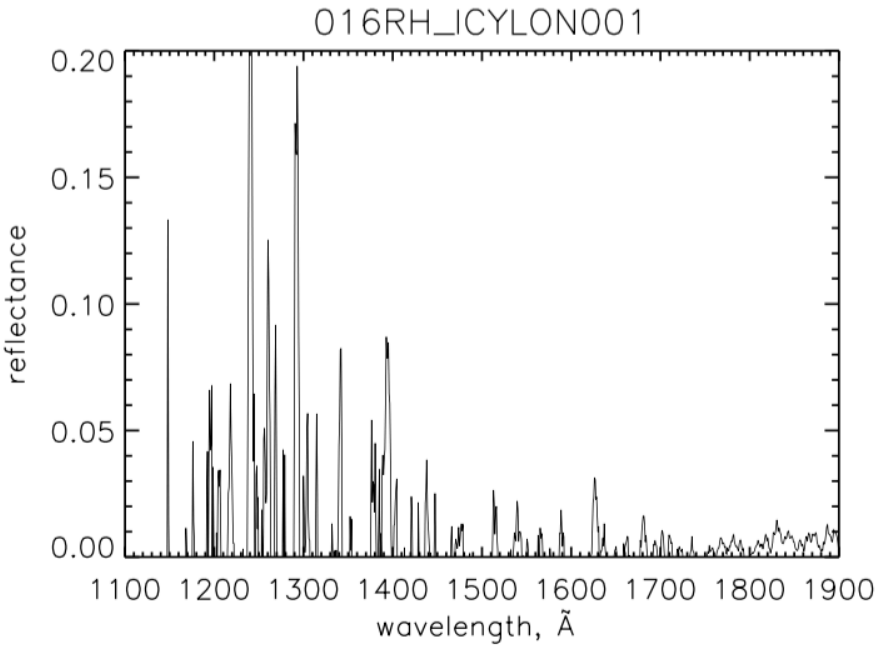
Alt= 1,787,780 km

Longitude= 21°W

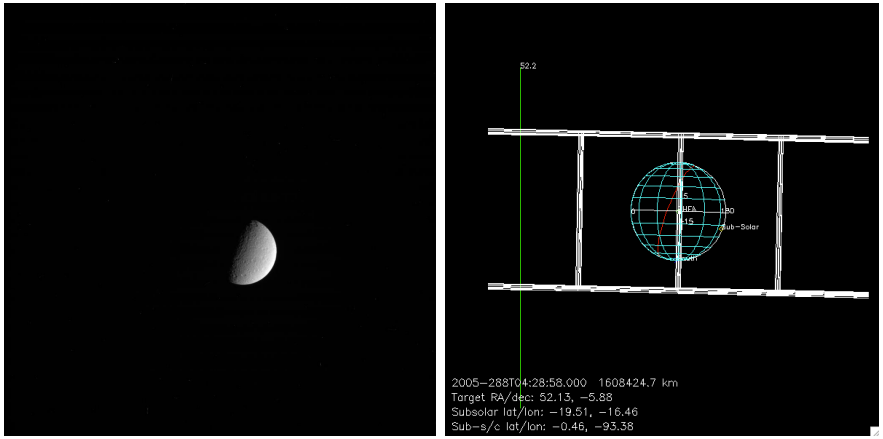
Latitude=0.3°S

Phase= 96°



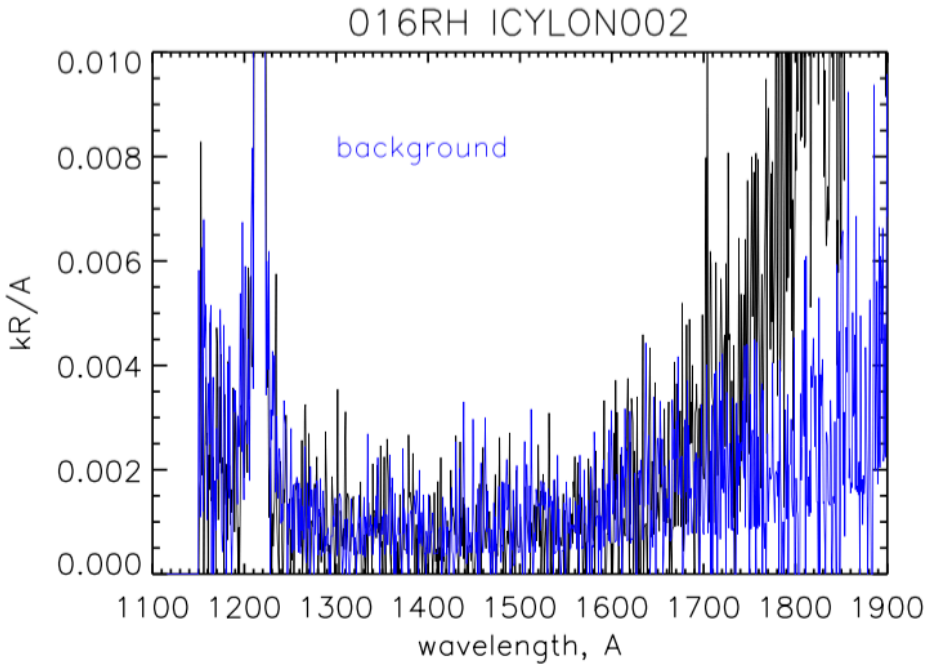


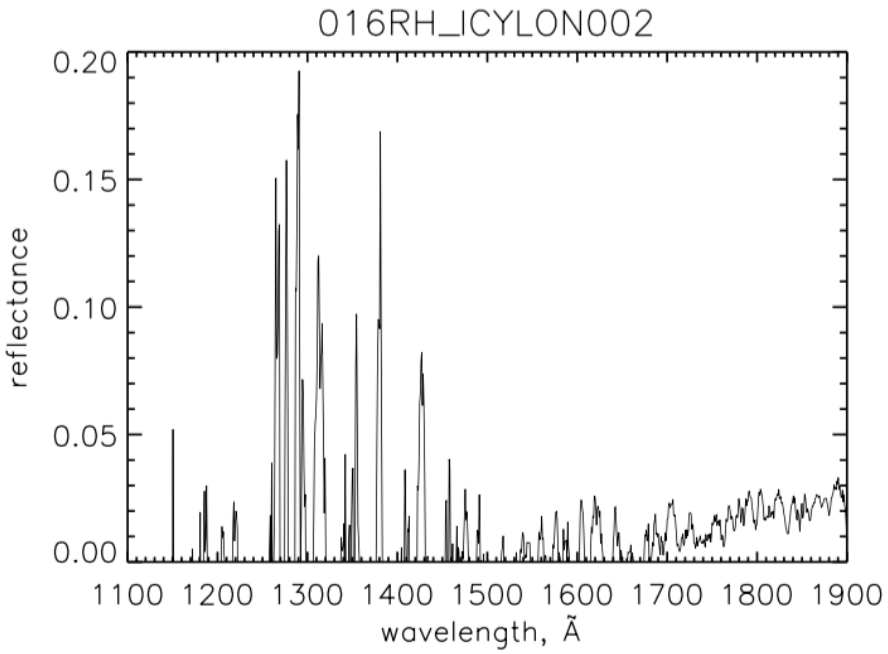
016RH_094W078PH001_ISS



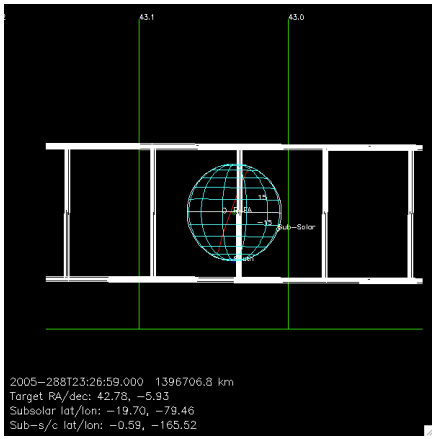
016RH_ICYLON002_ISS

2005-288T04:29
Alt= 1,608,326 km
Longitude= 93°W
Latitude=0.45°S
Phase= 77.3°





016RH_166W087PH001_ISS



016RH_ICYLON003_ISS

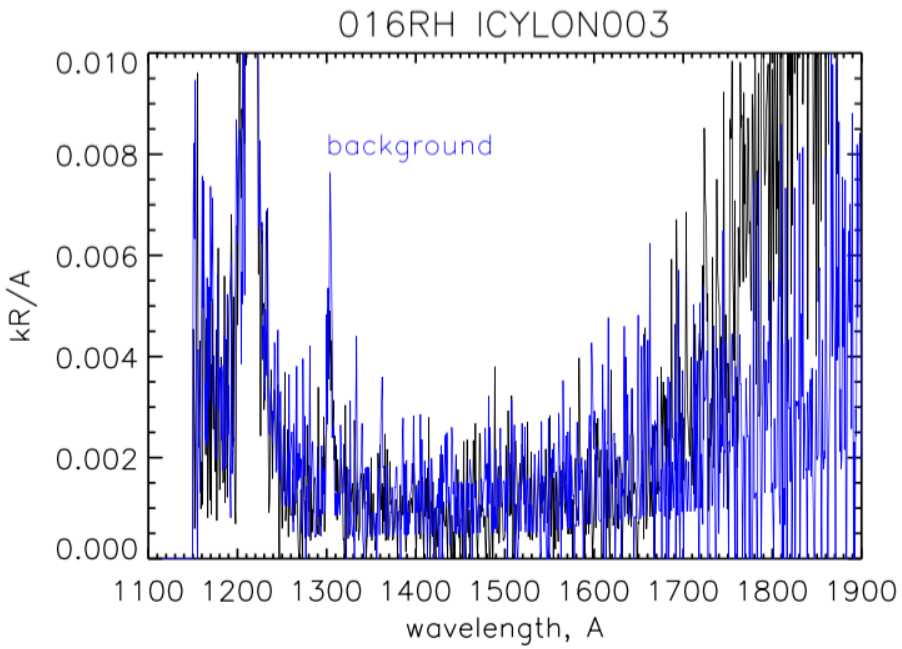
2005-288T23:27

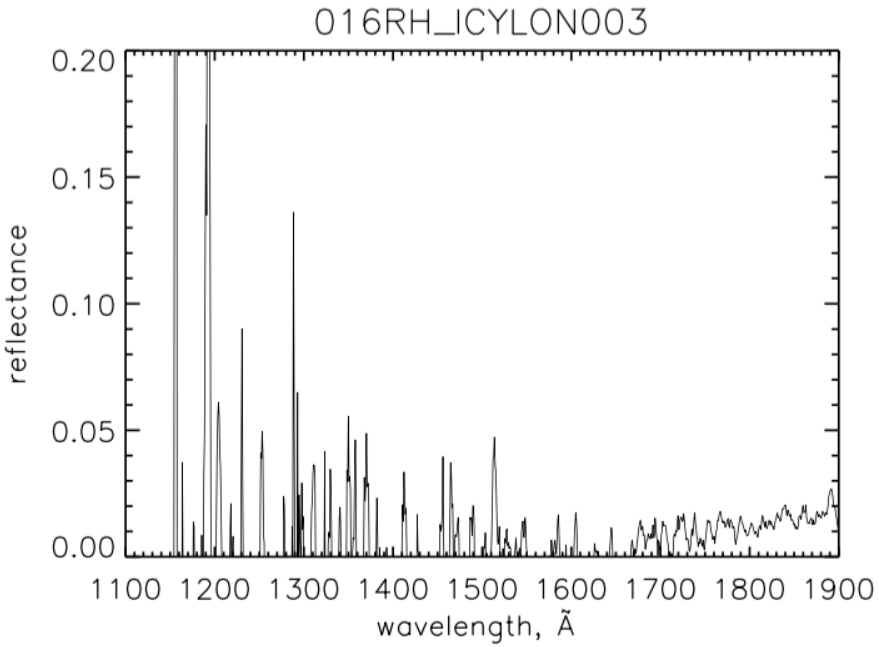
Alt= 1,395,898 km

Longitude= 165°W

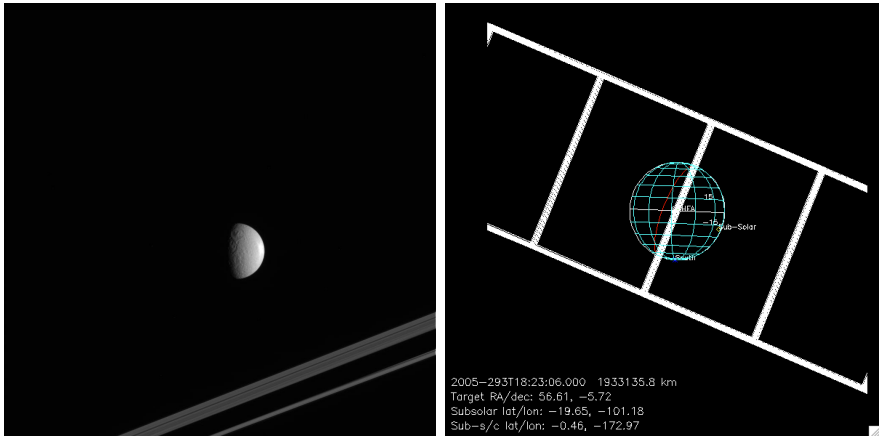
Latitude=0.6°S

Phase= 85.8°



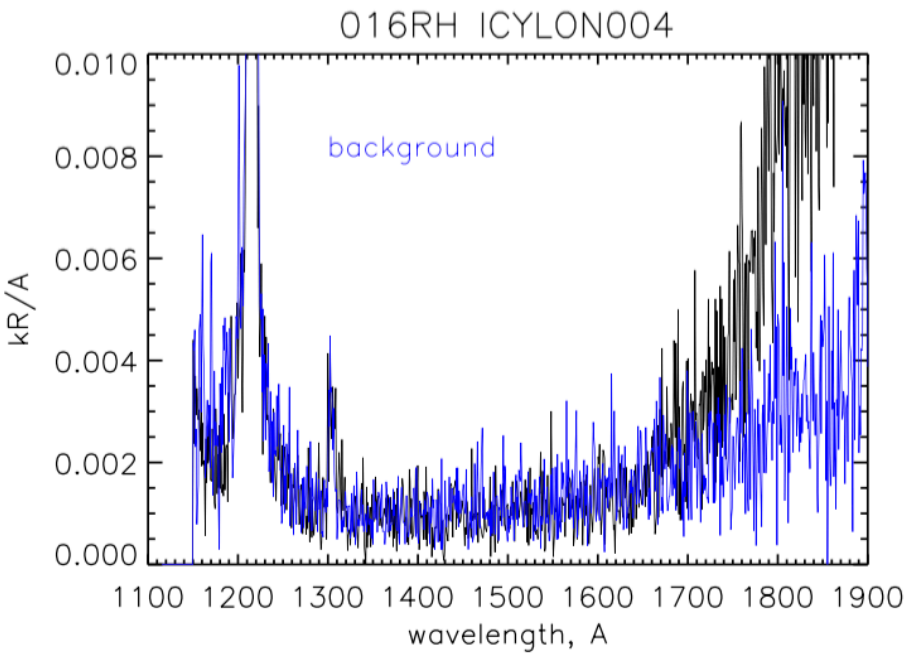


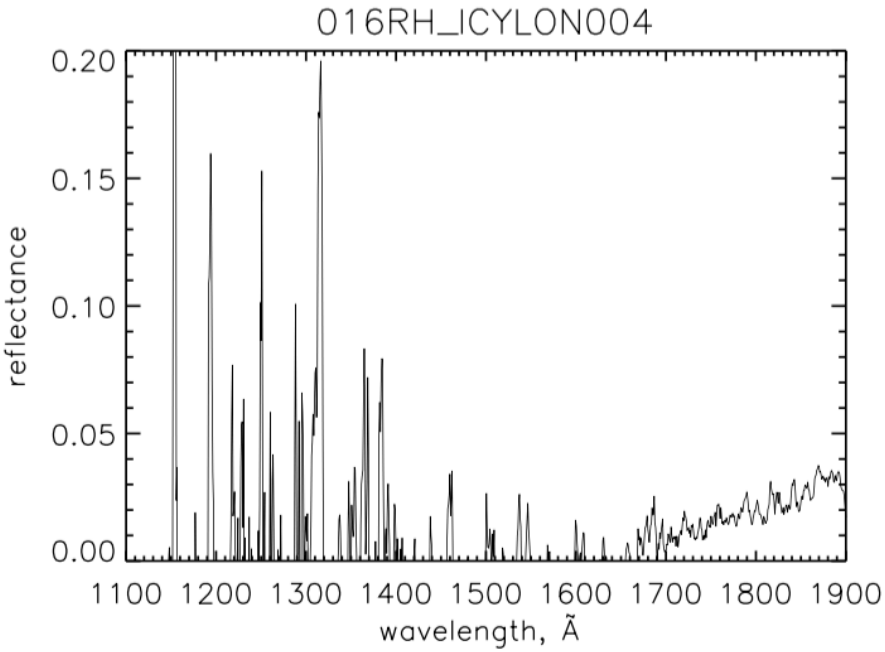
016RH_173W074PH001_ISS



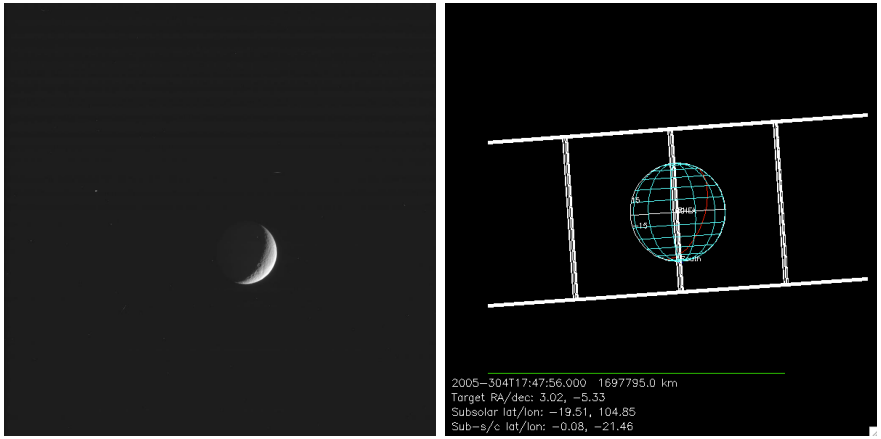
016RH_ICYLON004_ISS

2005-293T18:24
Alt= 1,932,210 km
Longitude= 173°W
Latitude=0.45°S
Phase= 723°





017RH_022W124PH001_ISS



017RH_ICYLON001_ISS

2005-304T17:48

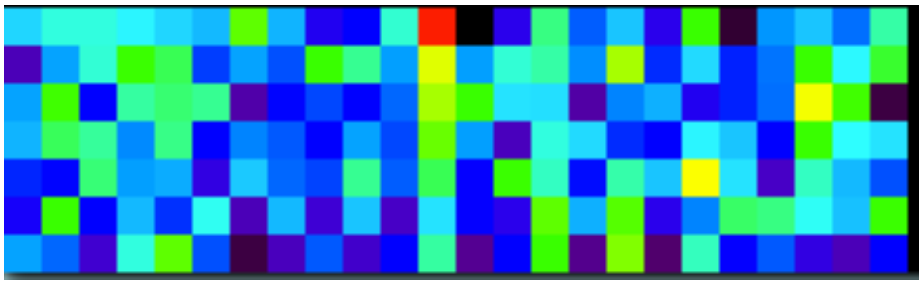
Alt= 1,695,712 km

Longitude= 22°W

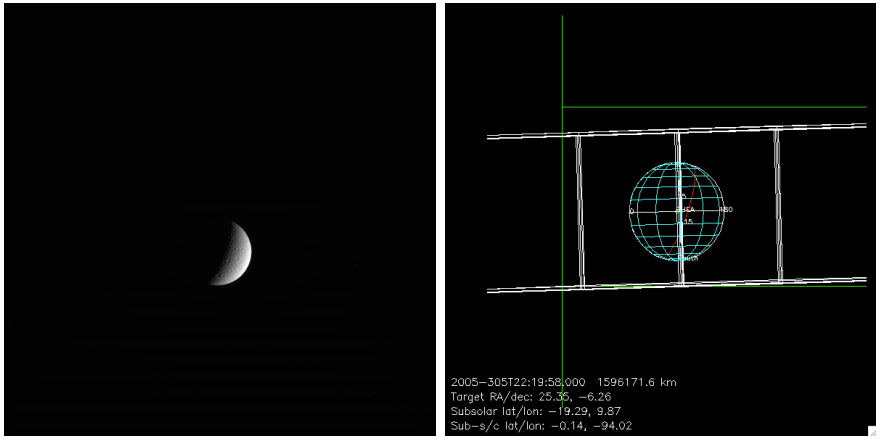
Latitude=0.1°S

Phase= 124°

Low SNR



017RH_094W103PH001_ISS



017RH_ICYLON002_ISS

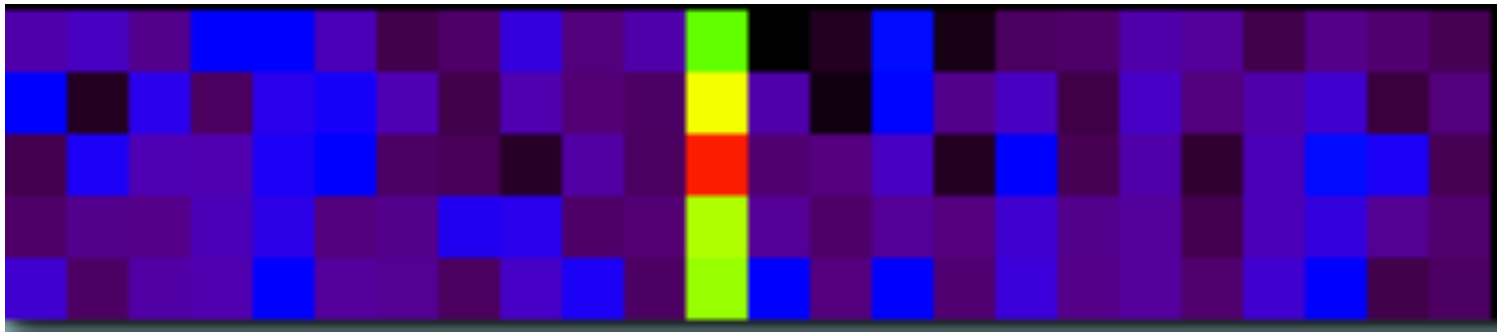
2005-305T22:20

Alt= 1,595,614 km

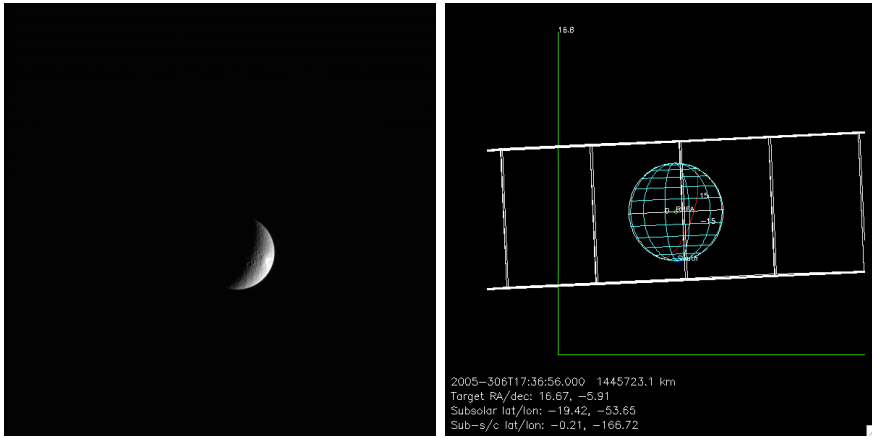
Longitude= 94°W

Latitude=0.15°S

Phase= 103.1°

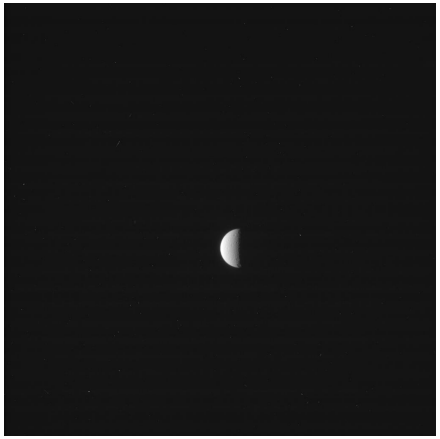


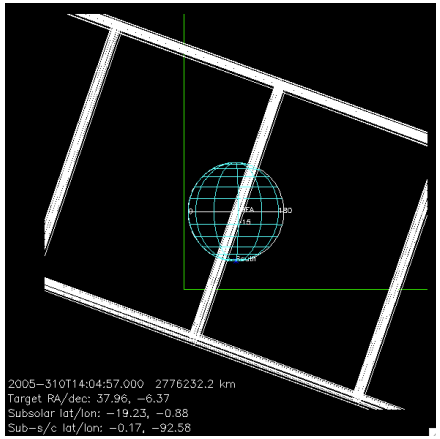
017RH_166W111PH001_ISS

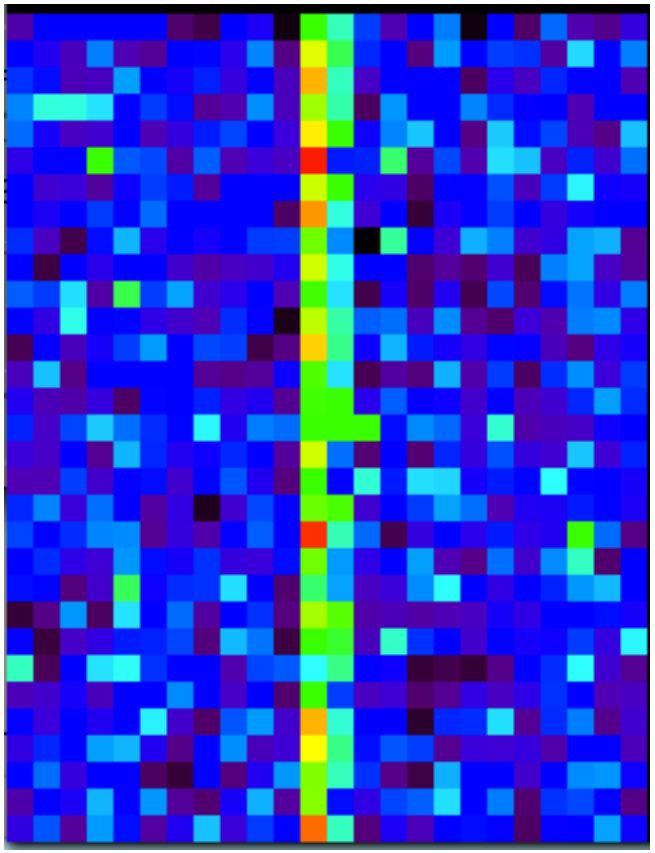


017RH_ICYLON003_ISS
2005-306T17:37
Alt= 1,445,228 km
Longitude= 167°W
Latitude=0.2°S
Phase= 111.2°

017RH_094W092PH001_ISS

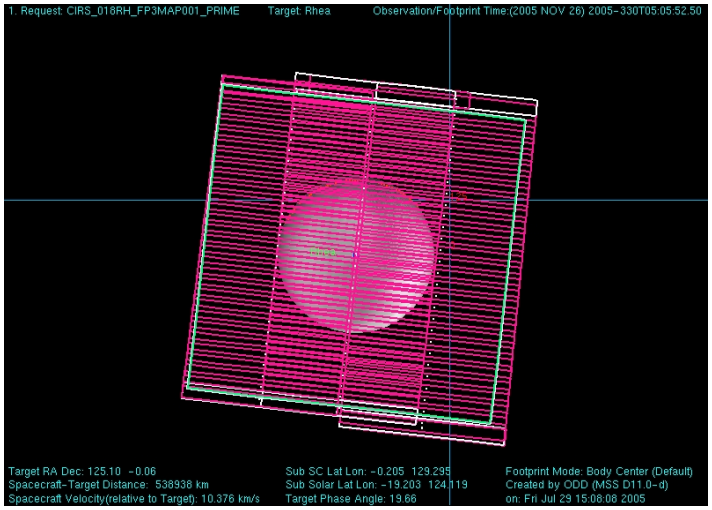






017RH_ICYLON004_ISS
2005-310T14:05
Alt= 2,782,906 km
Longitude= 91°W
Latitude=0.17°S
Phase= 91.5°

018RH_FP3MAP001_CIRS



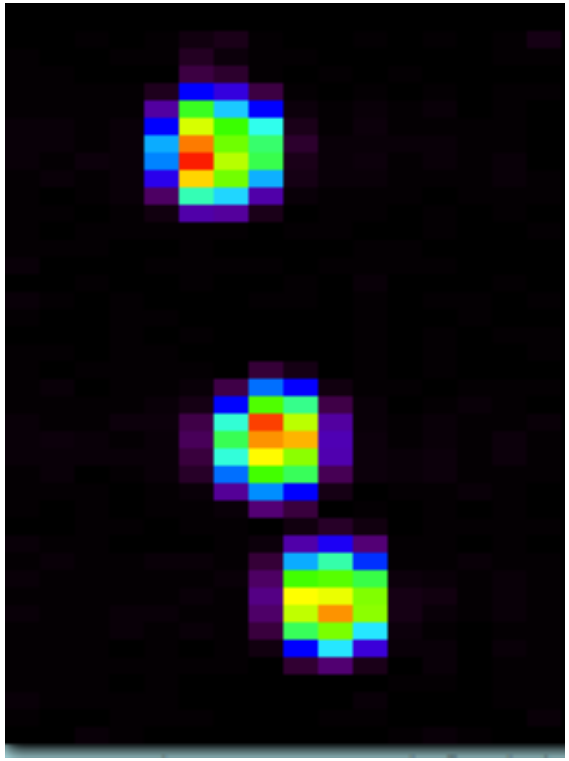
018RH_ICYLON001_CIRS

2005-330T05:09

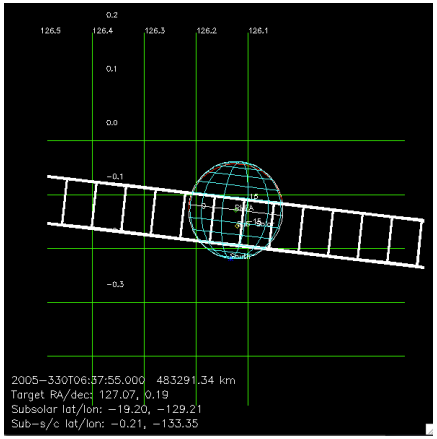
Alt= 530,779 km

Longitude= 130°W

Phase= 19.6°



018RH_RHEA001_VIMS



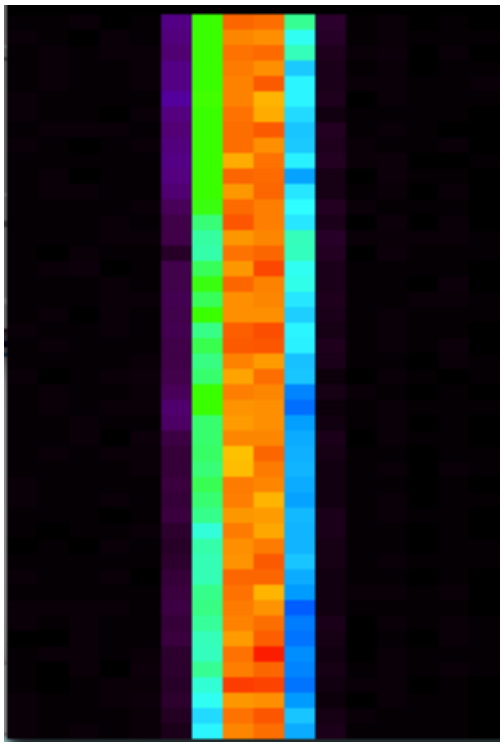
018RH_ICYLON002_VIMS

2005-330T06:38

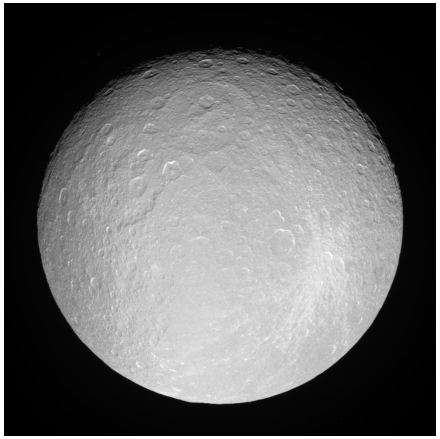
Alt= 477,160 km

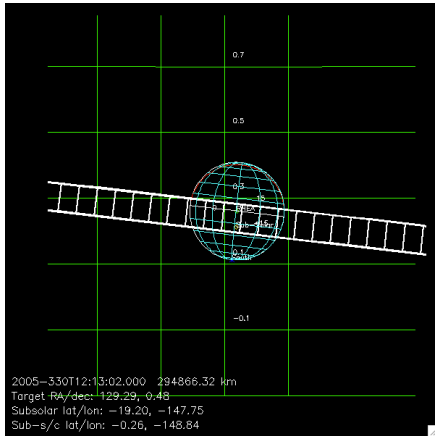
Longitude= 134°W

Phase= 19.4°



018RH_GLOCOL001_ISS





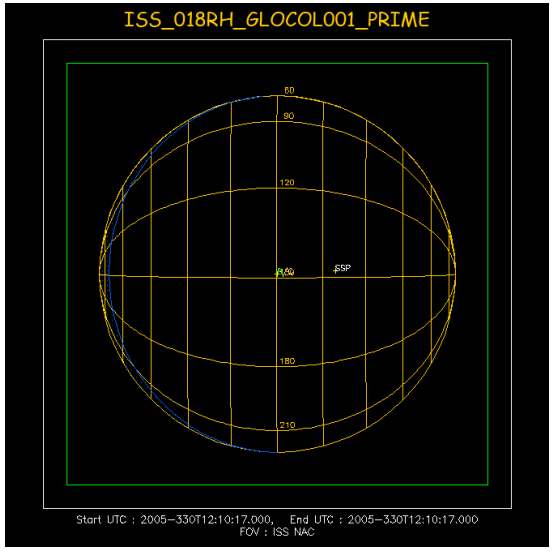
018RH_ICYLON003_ISS

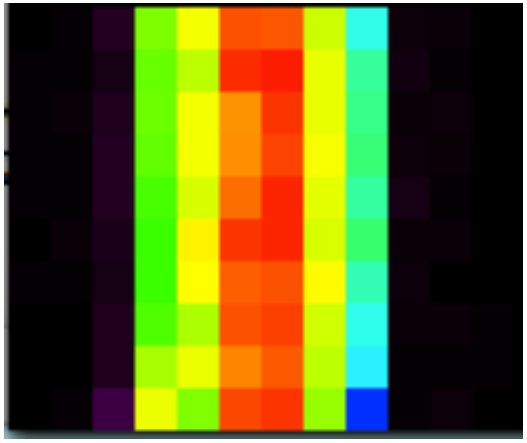
2005-330T12:11

Alt= 292,853 km

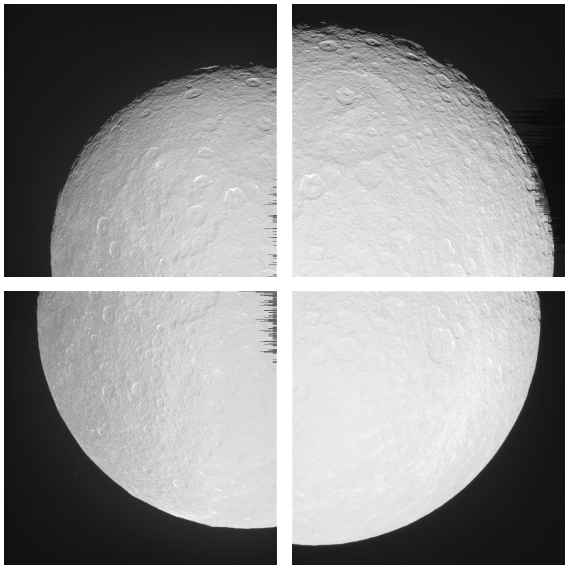
Longitude= 149°W

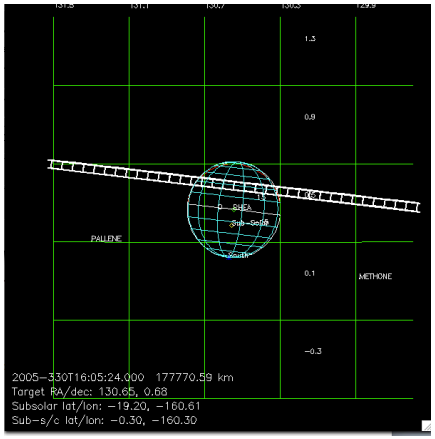
Phase= 19°



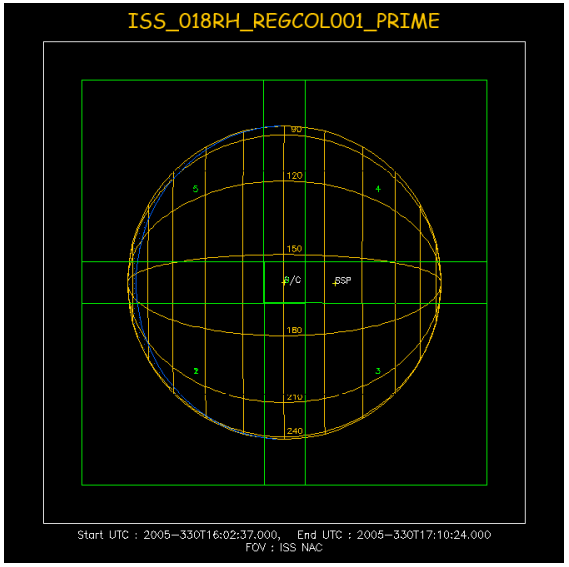


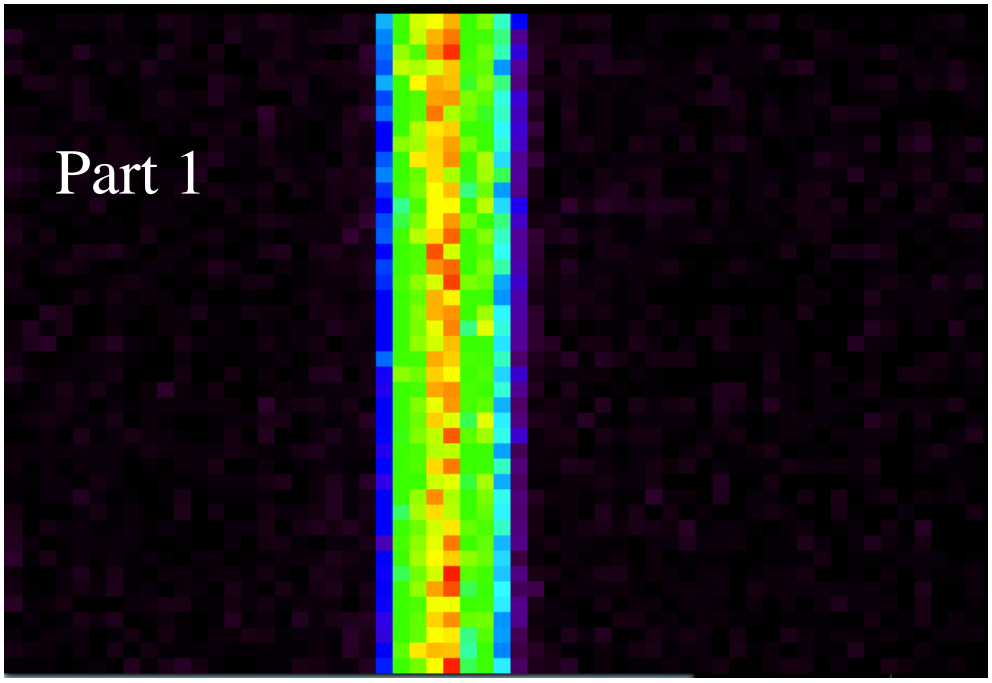
018RH_REGCOL001_ISS 5-part 018RH_ICYMAP004_ISS





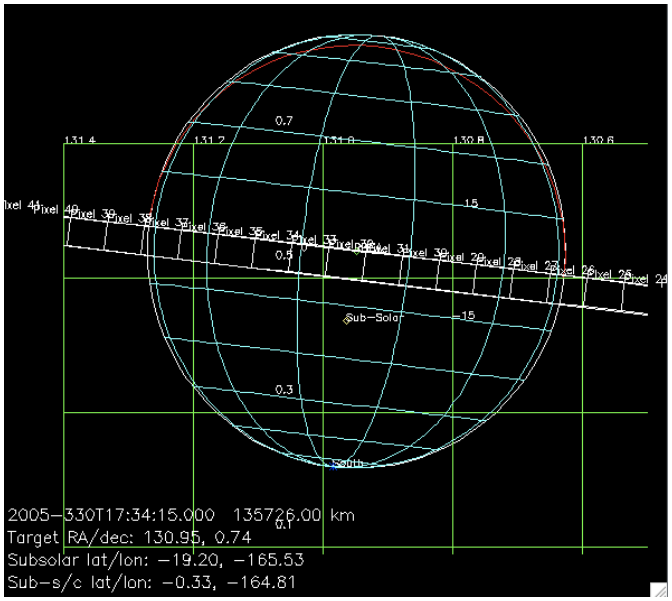
2005-330T16:05
Alt= 172,203 km
Longitude= 161°W
Phase= 18.9°





018RH_RHEA002_VIMS

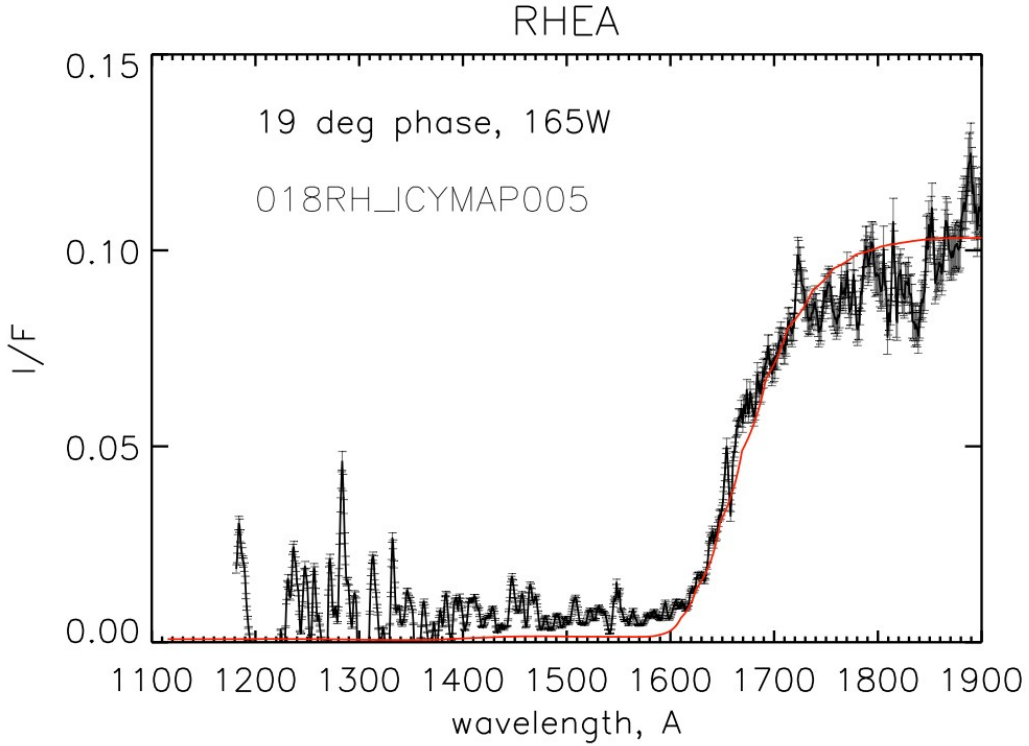
Recs 0-59 centered on equator
60-177 centered on ~15°N



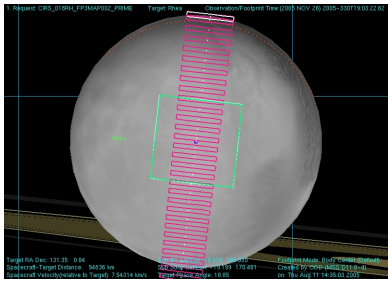
~80 min obs

018RH_ICYMAP005_VIMS

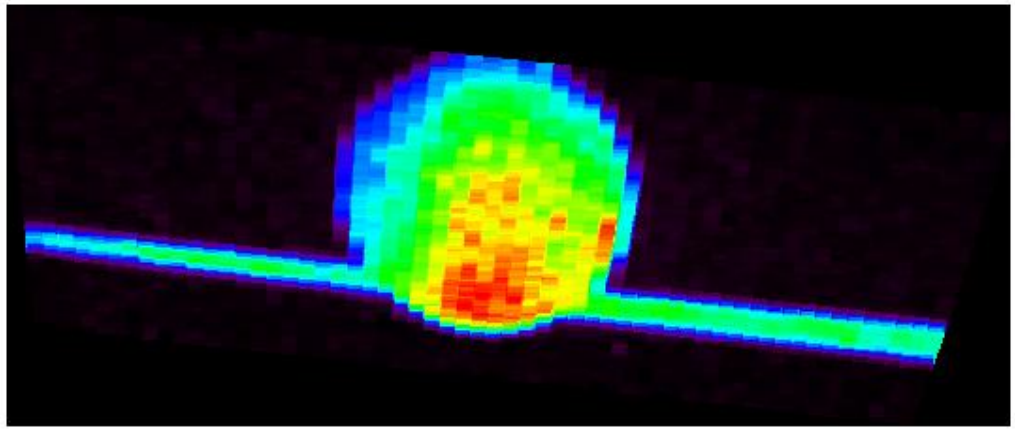
2005-330T17:34
Alt= 129,068 km
Longitude= 165°W
Phase= 18.9°

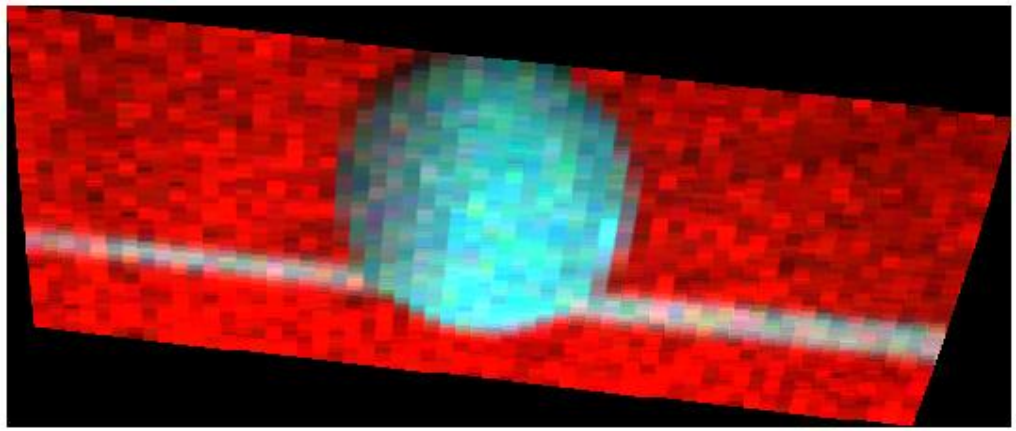


018RH_FP3MAP002_CIRS

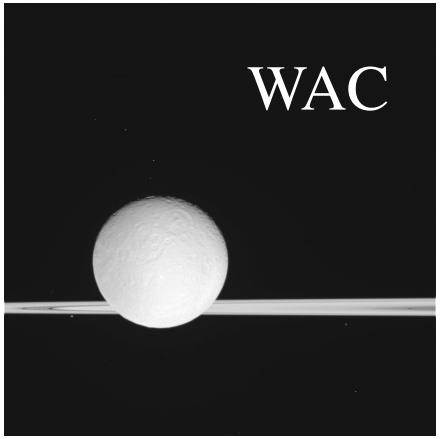


018RH_ICYMAP006_CIRS
2005-330T19:05
Alt= 87,493 km
Longitude= 170°W
Phase= 18.8°

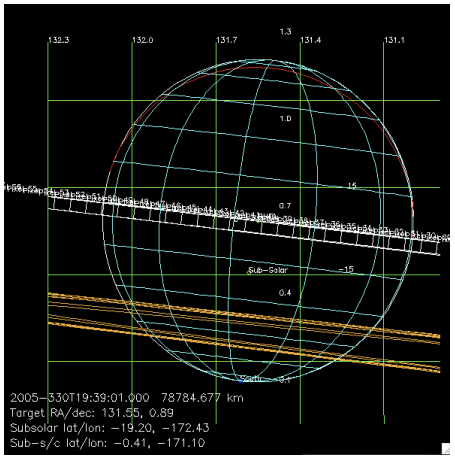


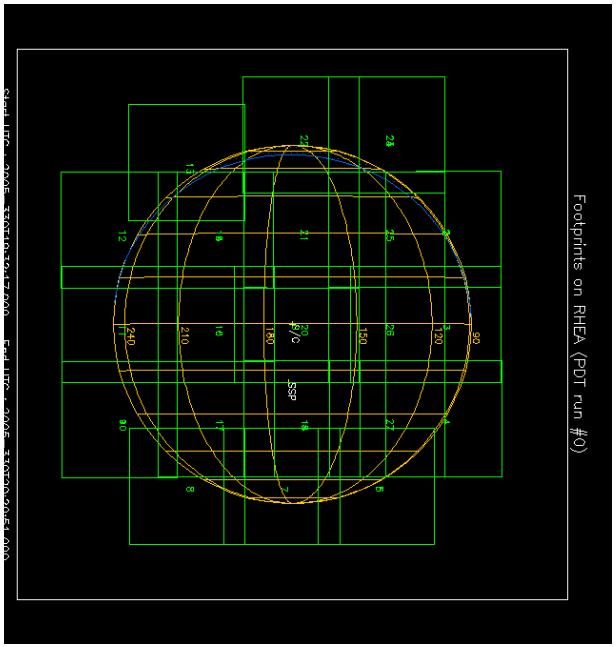


018RH_REGMAP001_ISS



24-part





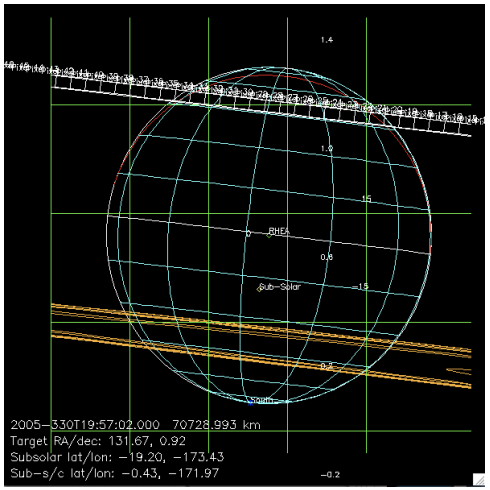
018RH_ICYMAP007_ISS

2005-330T19:33

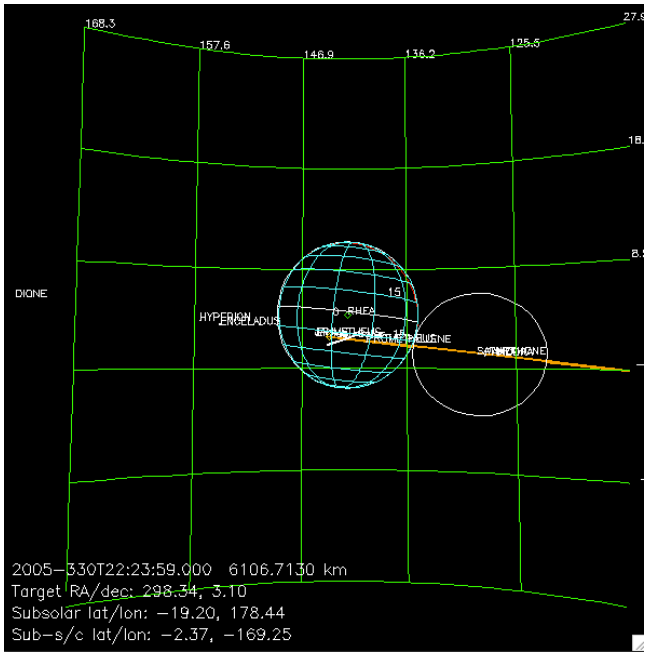
Alt= 78,295 km

Longitude= 171°W

Phase= 18.8°



018RH_RHEAORS001_SP

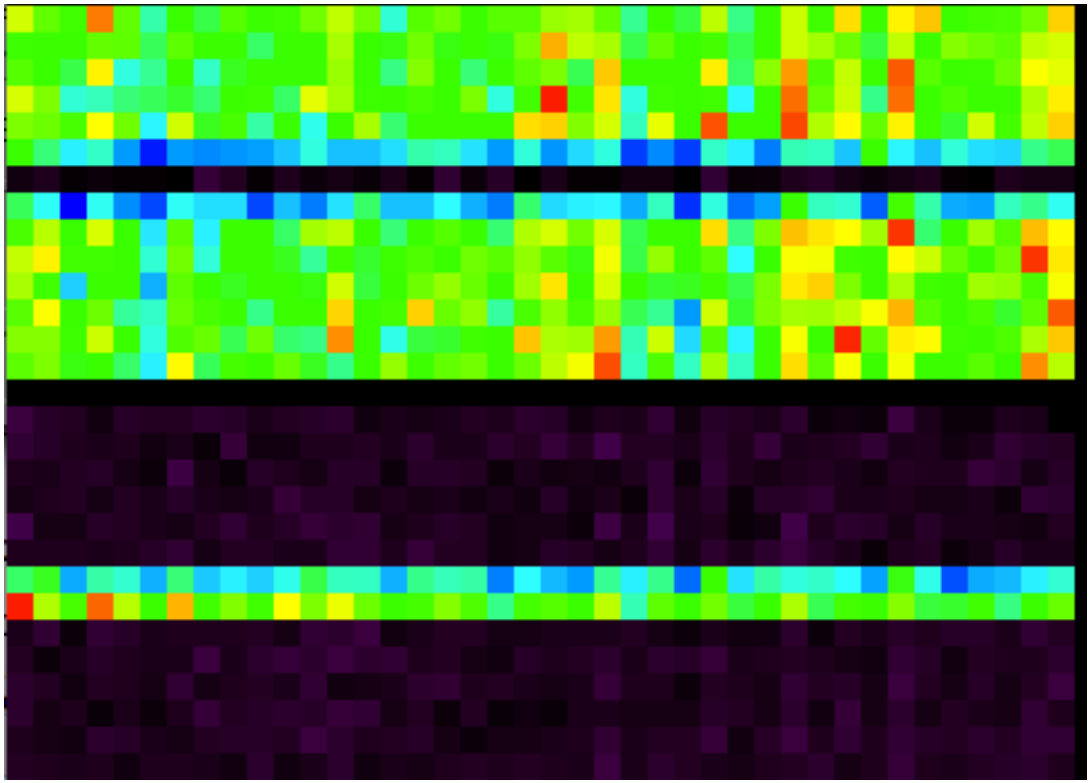


018RH_GRAVITY015_RSS
2005-330T22:22
Alt= 4000 km
Longitude= 166°W
Phase= 22.3°

Rhea passes quickly through low-res slit

Ly-a

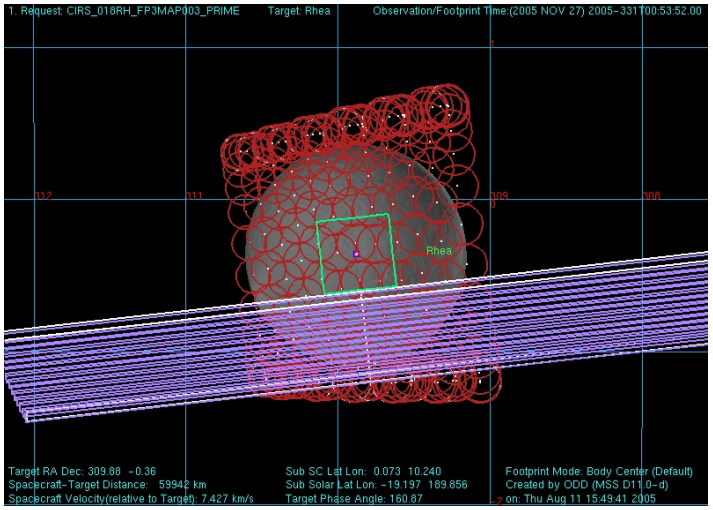
Long waves

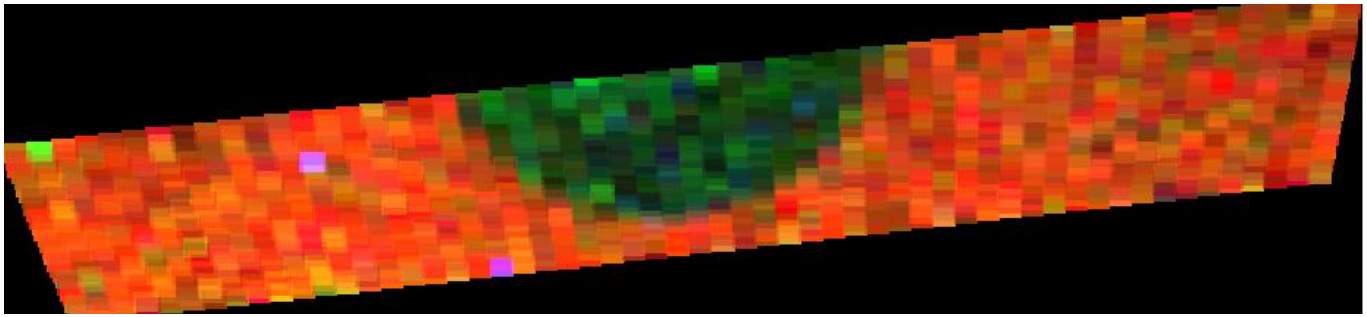


018RH_FP3MAP003003_CIRS

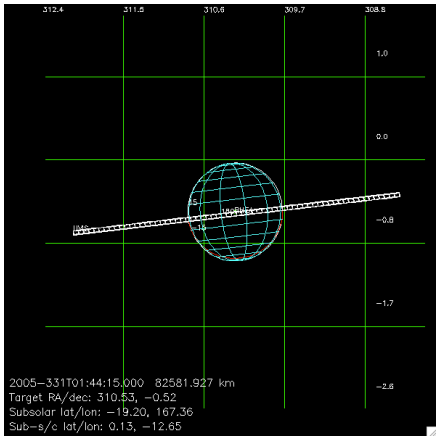
018RH_ICYMAP008_CIRS
2005-331T00:53
Alt= 59,942 km
Longitude= 10°W
Phase= 161°

2-part





018RH_RHEA003_VIMS



018RH_ICYMAP009_VIMS

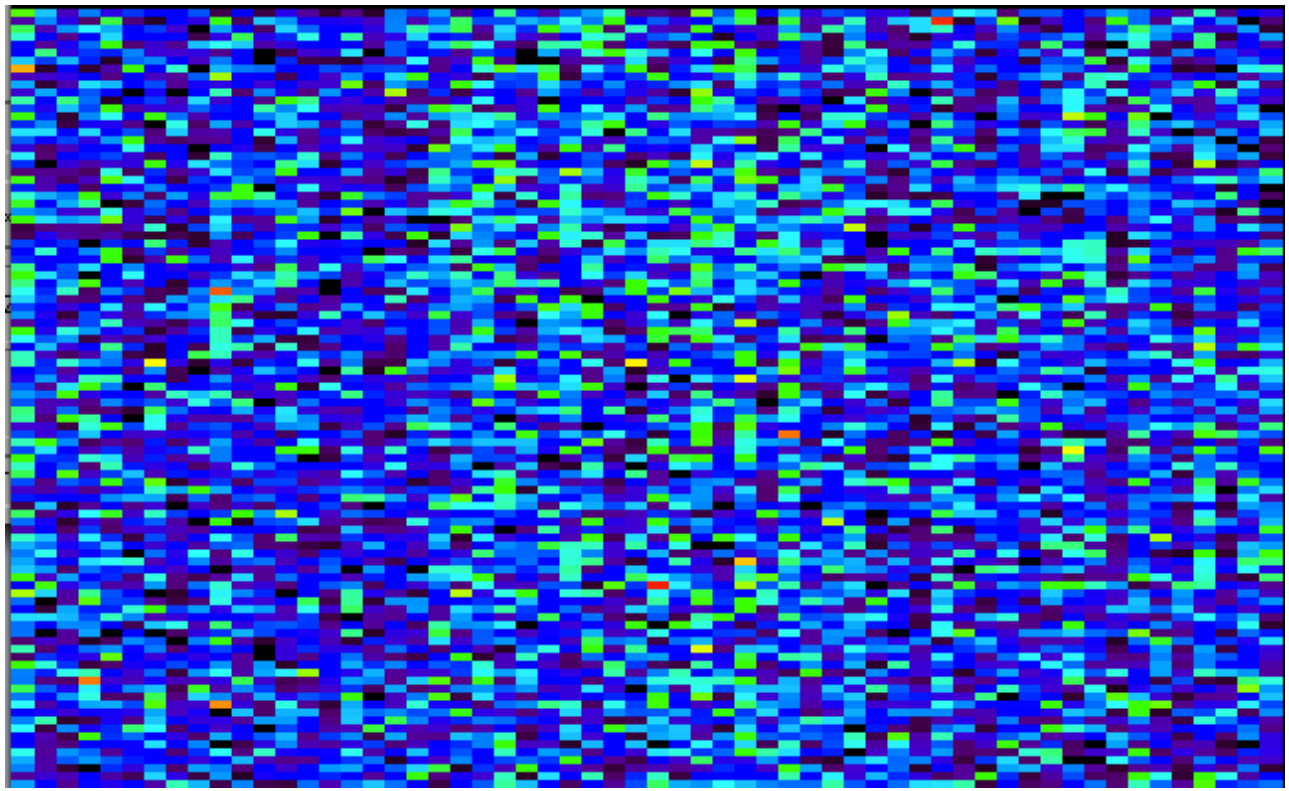
2005-331T01:43

Alt= 83,039 km

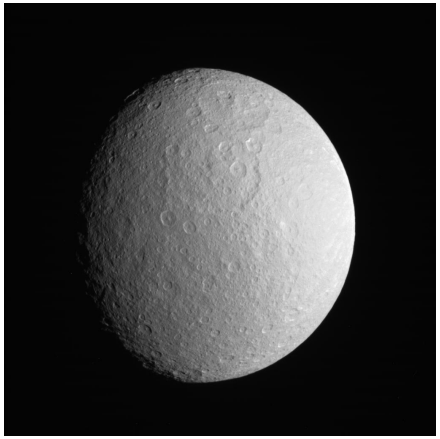
Longitude= 13°W

Phase= 160.9°

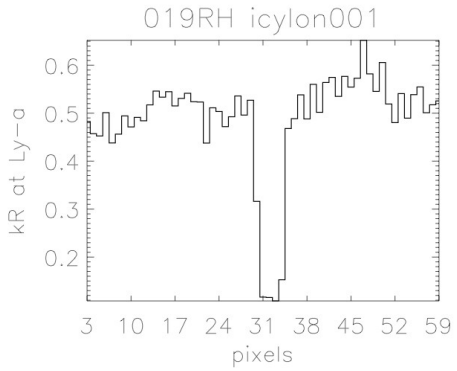
Extremely low SNR at this phase angle!

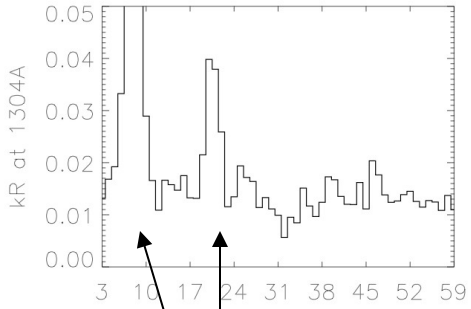


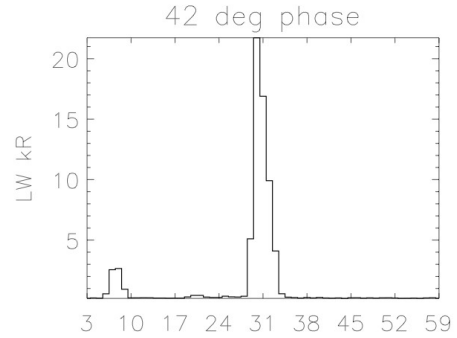
019RH_GLOCOL001_ISS



019RH_ICYLON001_ISS
2005-357T19:10
Alt= 340,385 km
Longitude= 200°W
Phase= 42°

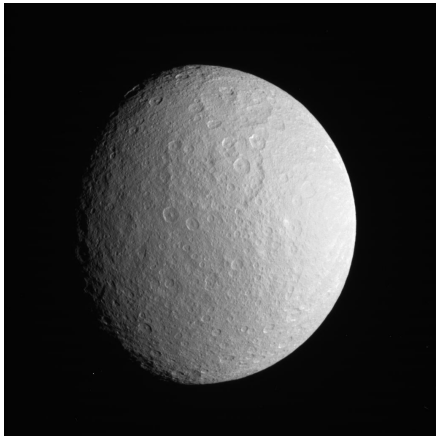


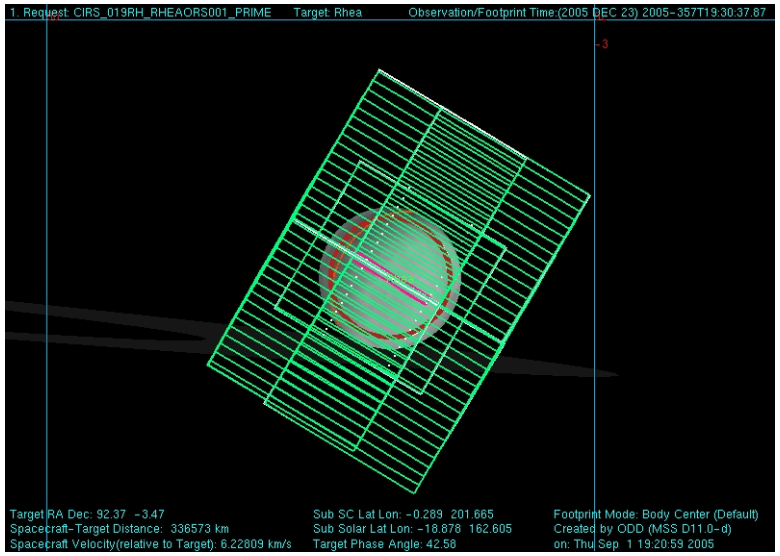




rings

019RH_RHEAORS001_CIRS 3-part





019RH_ICYLON002_CIRS

2005-357T19:30

Alt= 334,869 km

Longitude= 202°W

Phase= 42.7°

019RH_REGGEODB001_ISS

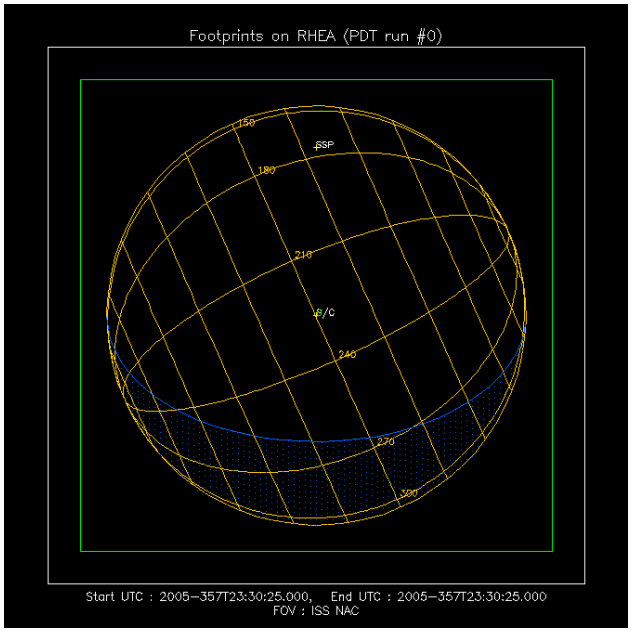
019RH_ICYLON003_ISS

2005-357T23:30

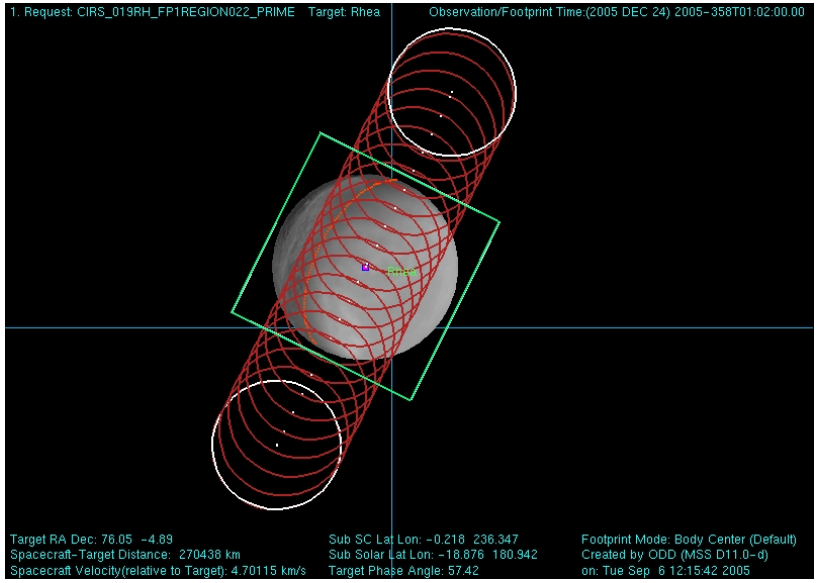
Alt= 281,910 km

Longitude= 228°W

Phase= 53.5°



019RH_FP1REGION022_CIRS



019RH_ICYLON004_CIRS

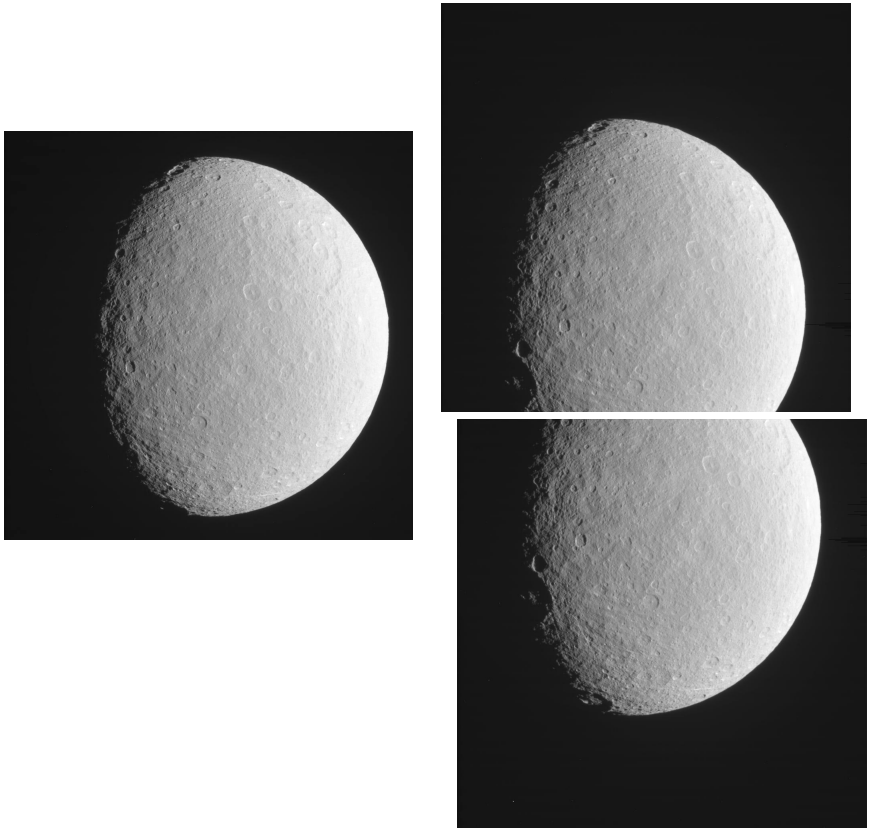
2005-358T01:00

Alt= 269,473 km

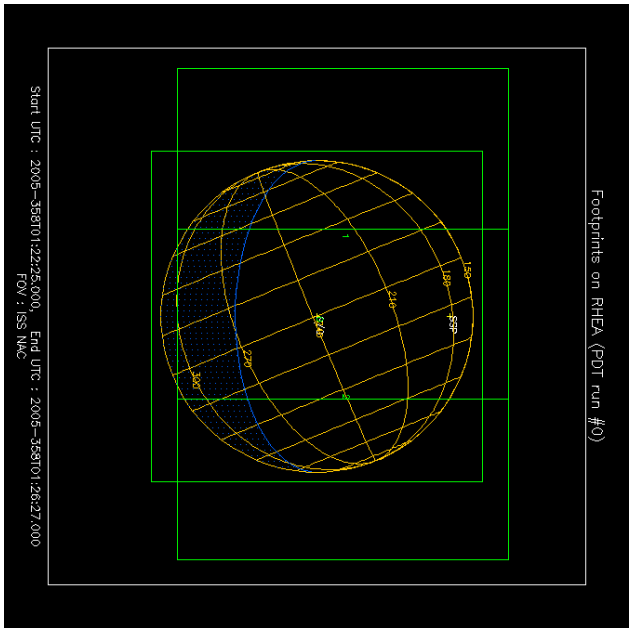
Longitude= 237°W

Phase= 57.5°

019RH_REGGEODC001_ISS 2-part



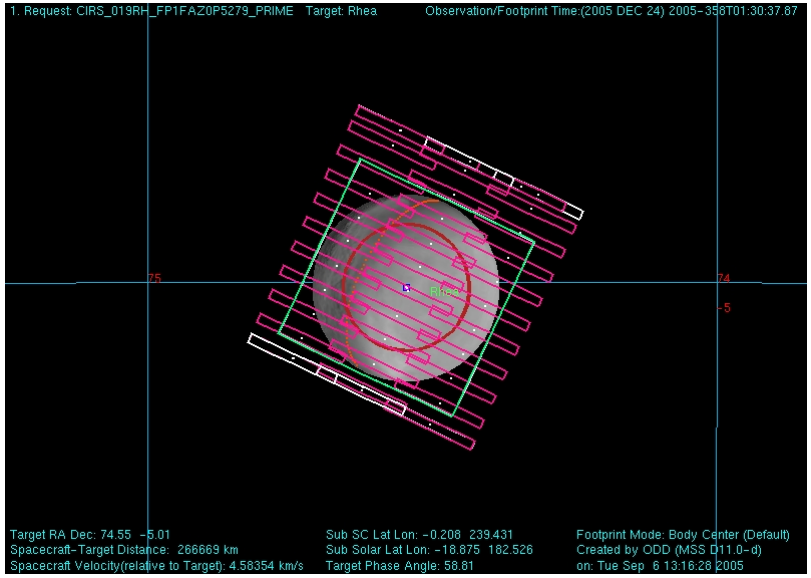
019RH_ICYLON005_ISS
2005-358T01:22
Alt= 266,179 km
Longitude= 239°W
Phase= 58.7°



019RH_FP1FAZ0P5279_CIRS

019RH_ICYLON006_CIRS
2005-358T01:30
Alt= 258,969 km
Longitude= 246°W
Phase= 61.6°

2-part



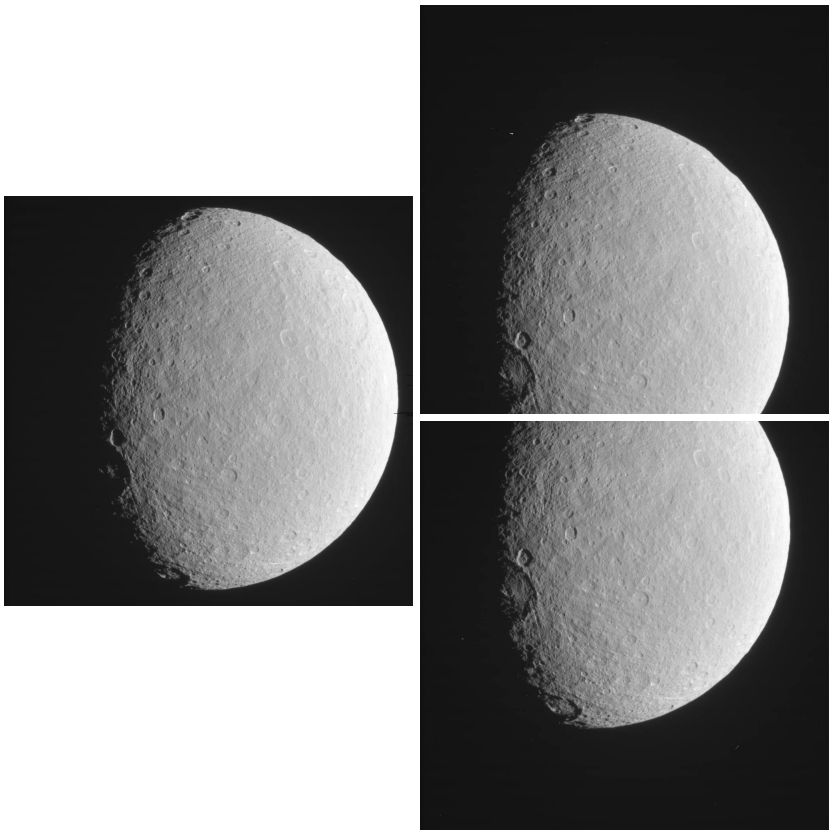
019RH_REGGEODD_ISS 2-part 019RH_ICYLON007_ISS

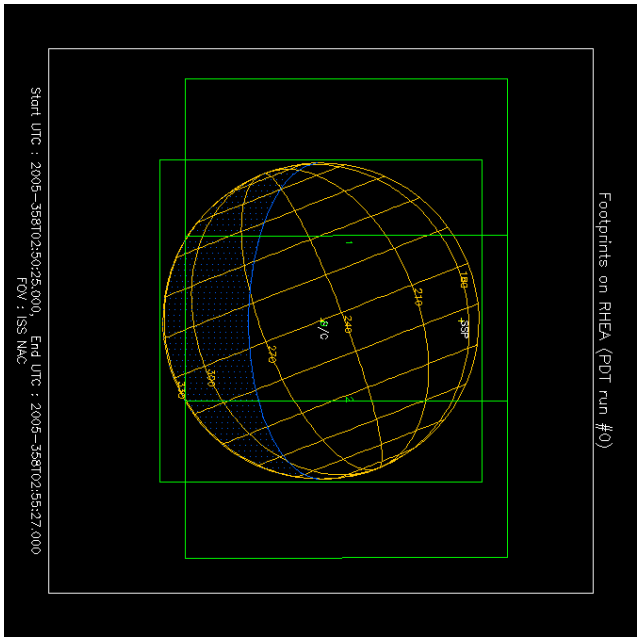
2005-358T02:50

Alt= 256,003 km

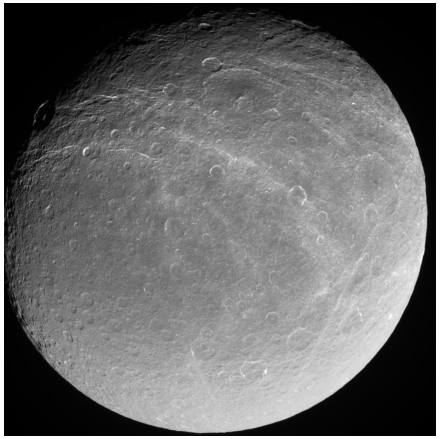
Longitude= 249°W

Phase= 62.9°





020RH_RHEA001_VIMS



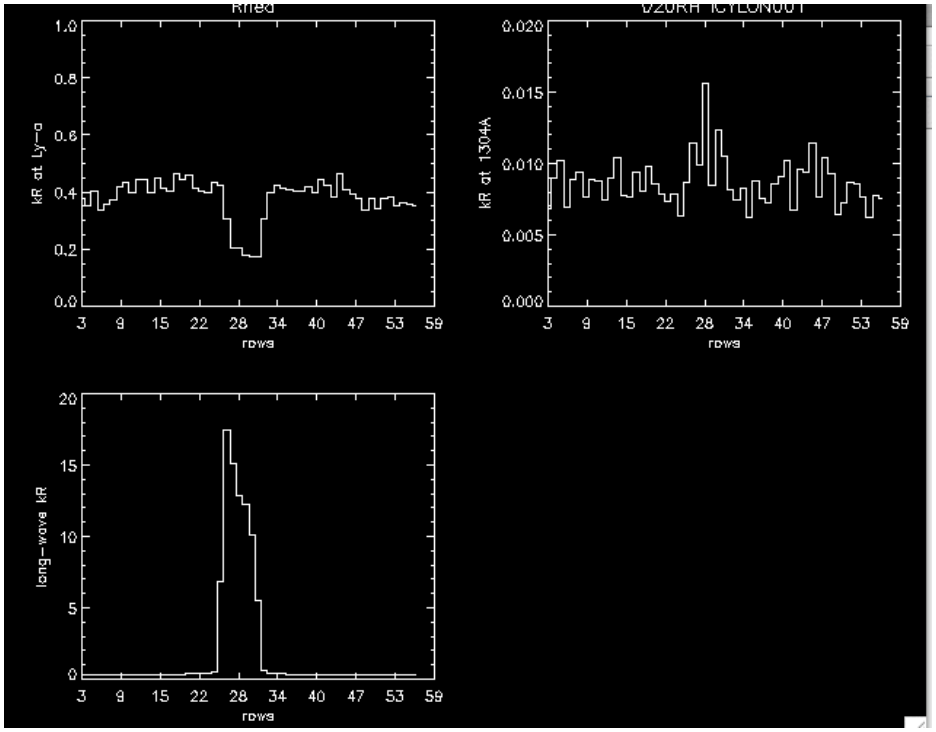
020RH_ICYLON001_VIMS

2006-017T12:55

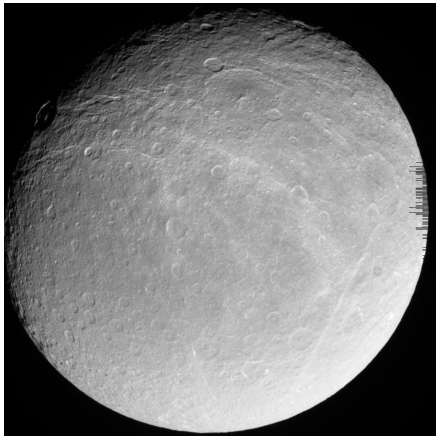
Alt= 268,674 km

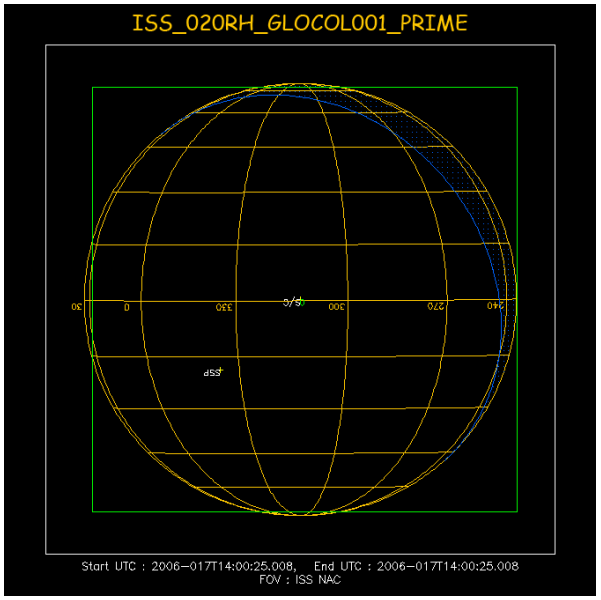
Longitude= 316°W

Phase= 25.0°



020RH_GLOCOL001_ISS





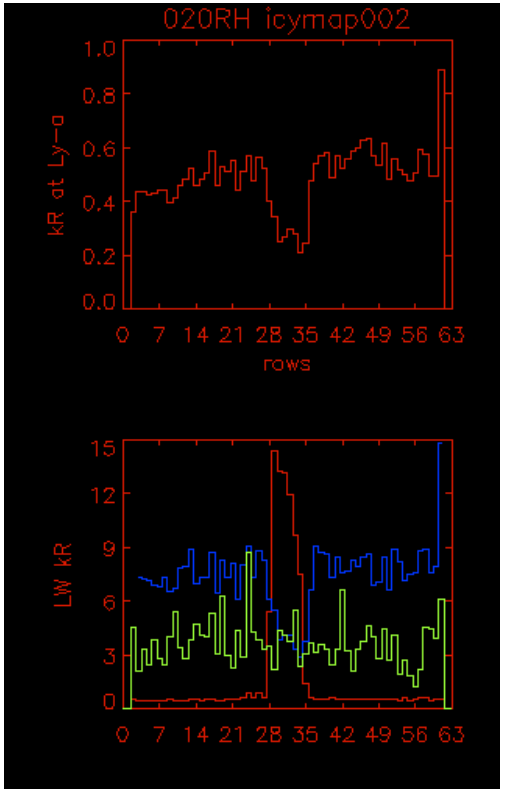
020RH_ICYMAP002_ISS

2006-017T14:00

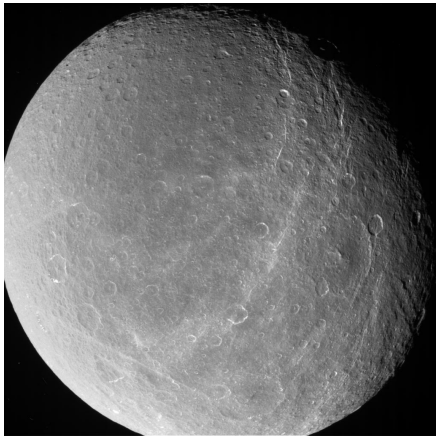
Alt= 243,916 km

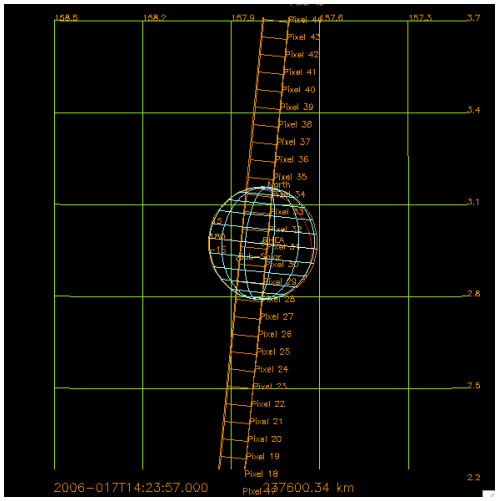
Longitude= 312°W

Phase= 29.8°



020RH_RHEA002_VIMS





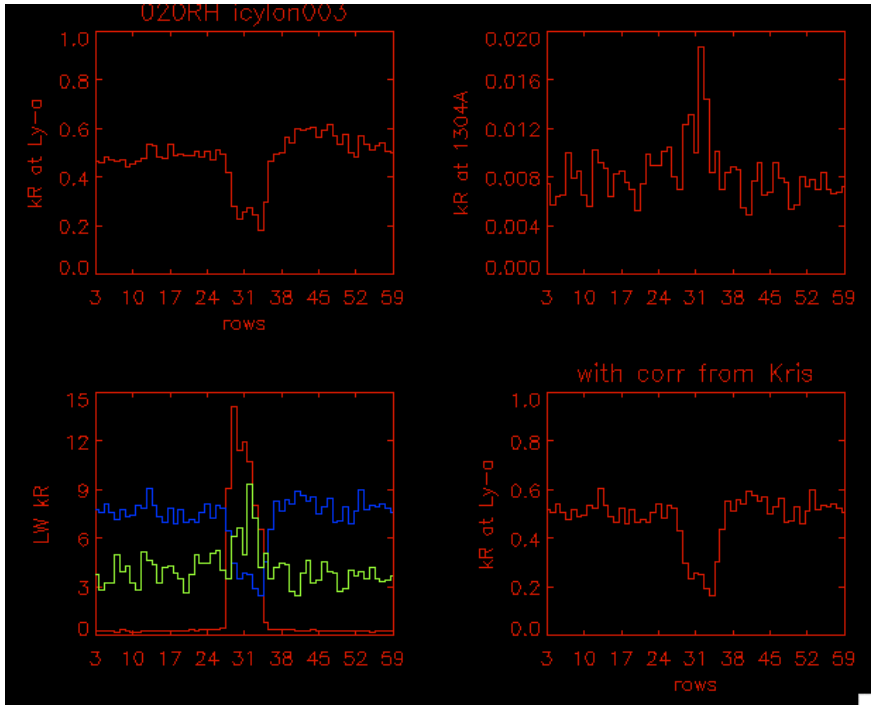
020RH_ICYLON003_VIMS

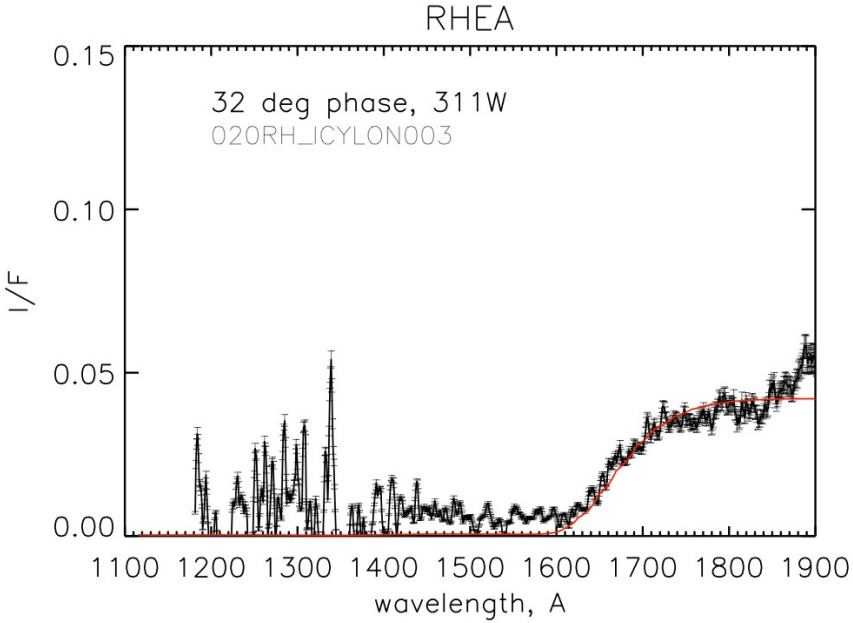
2006-017T14:24:57

Alt= 236,638 km

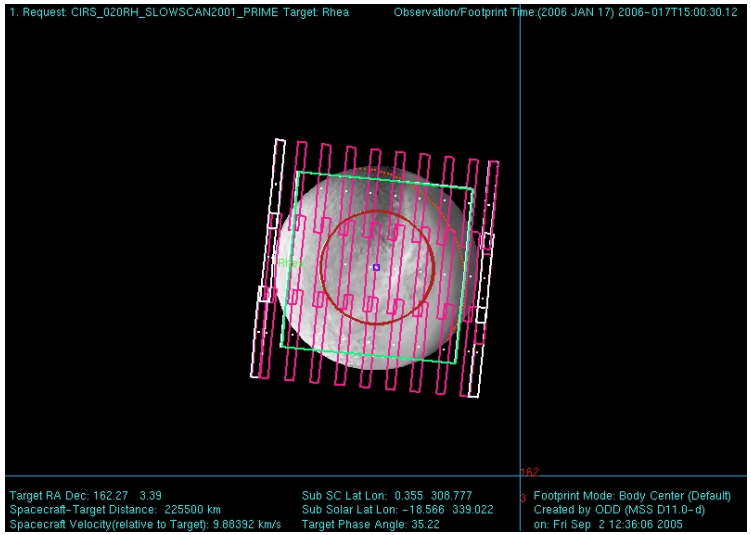
Longitude= 311°W

Phase= 31.7°



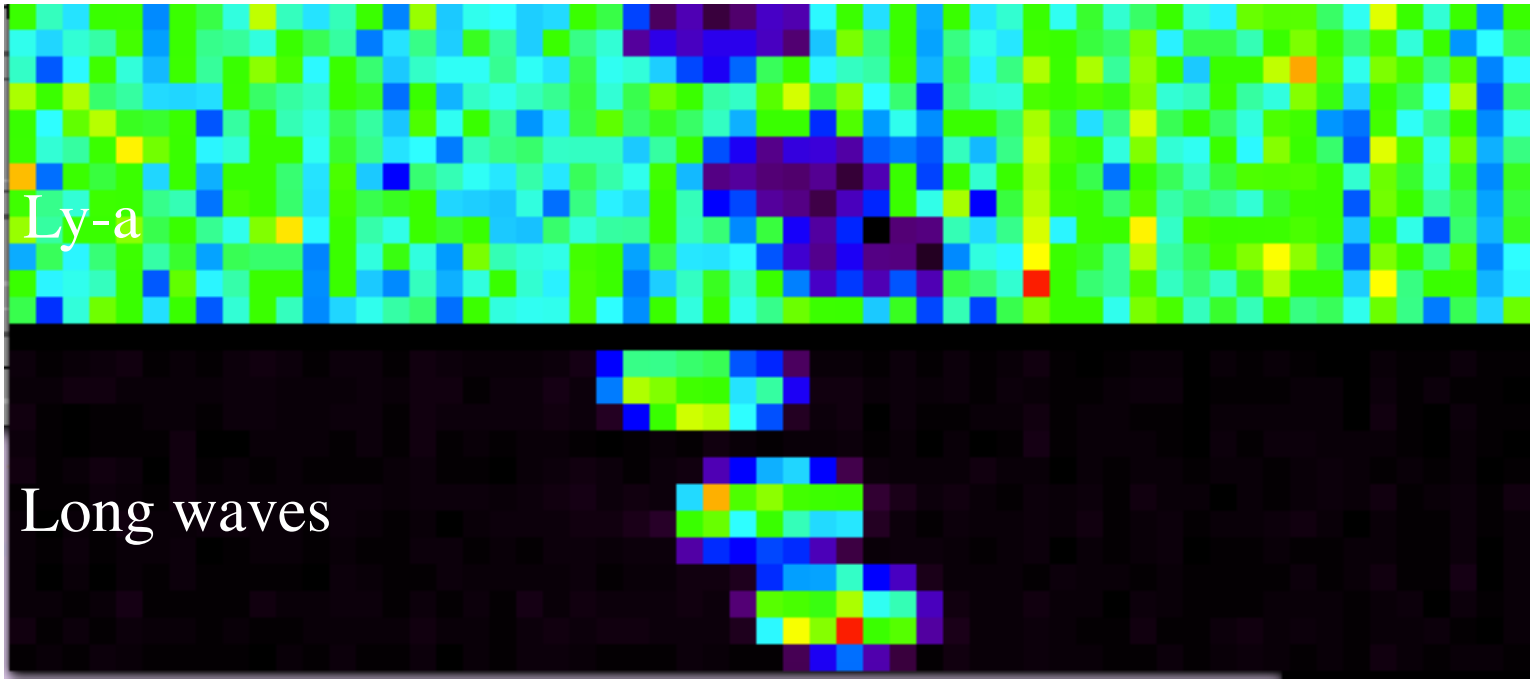


020RH_SLOWSCAN2001_CIRS



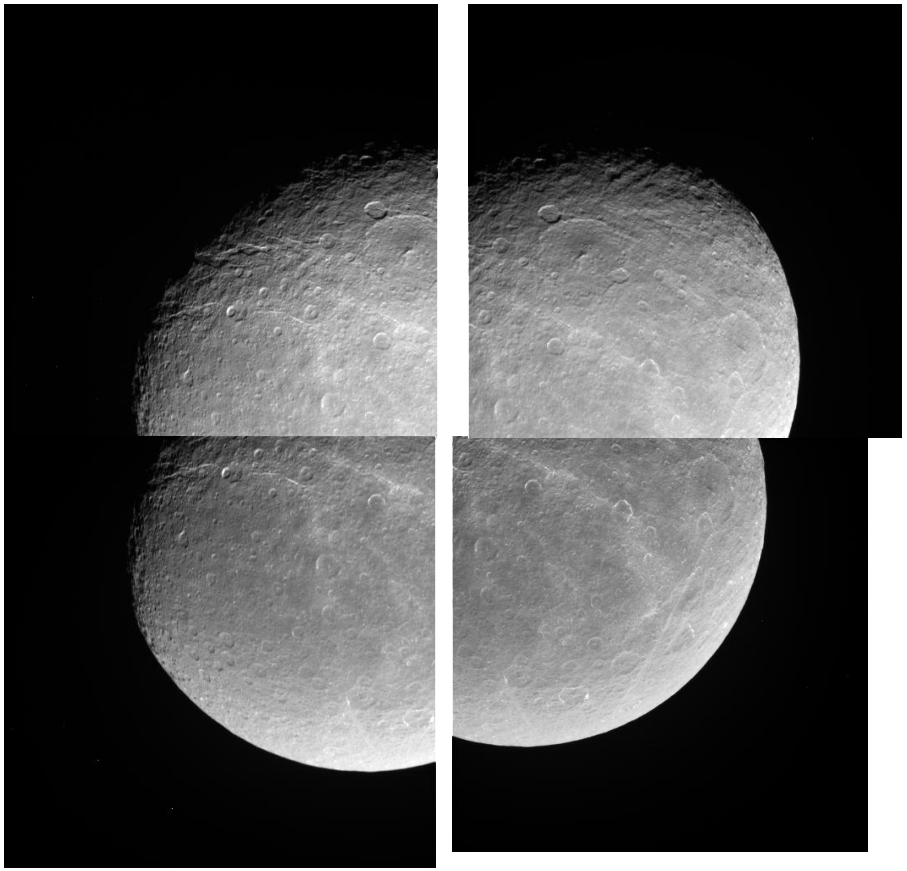
2-part

020RH_ICYLON004_CIRS
2006-017T14:59
Alt= 223,253 km
Longitude= 308°W
Phase= 35.7°

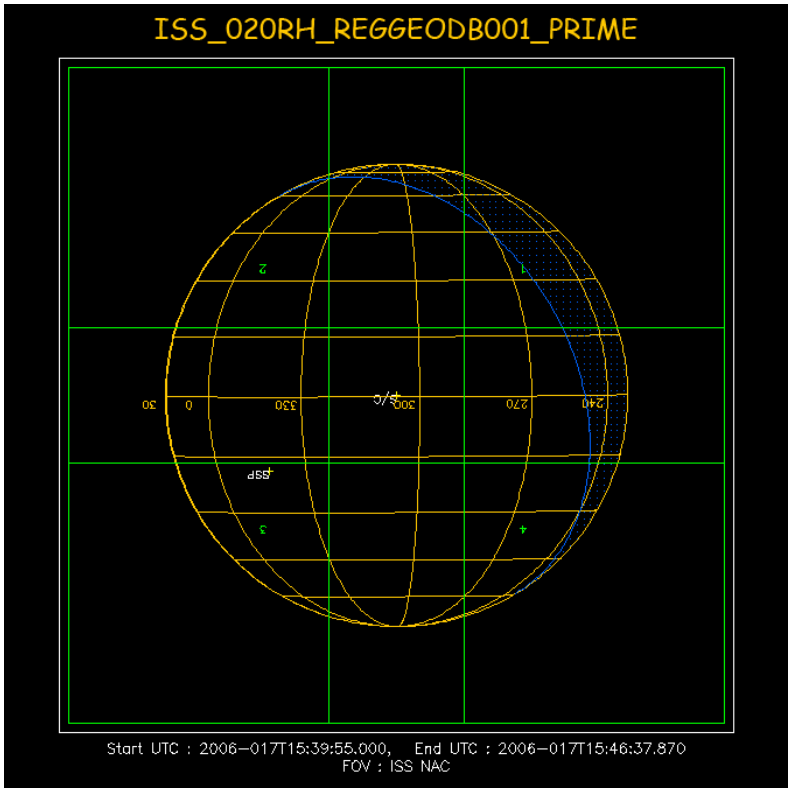


020RH_REGGEODB001_ISS

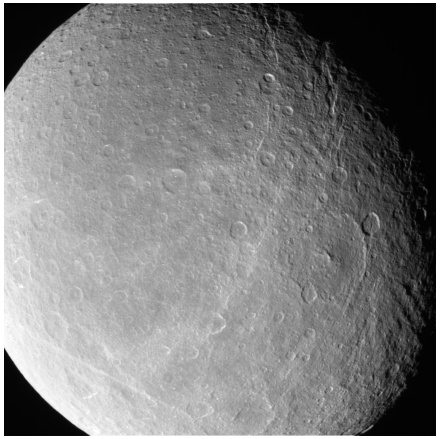
4-part

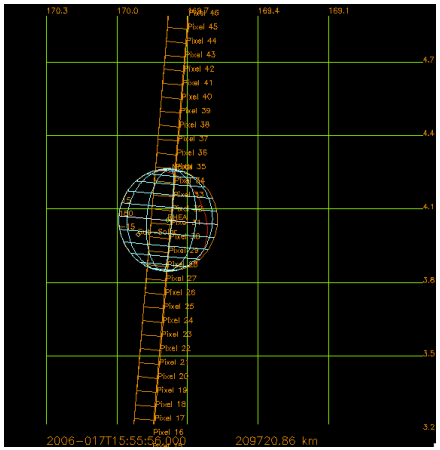


020RH_ICYMAP005_ISS
2006-017T15:39
Alt= 212,867 km
Longitude= 306°W
Phase= 39.8°



020RH_RHEA003_VIMS





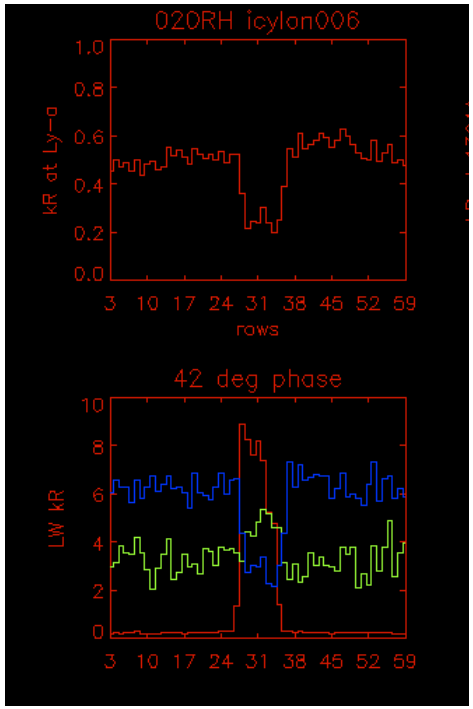
020RH_ICYLON006_VIMS

2005-017T15:54:56

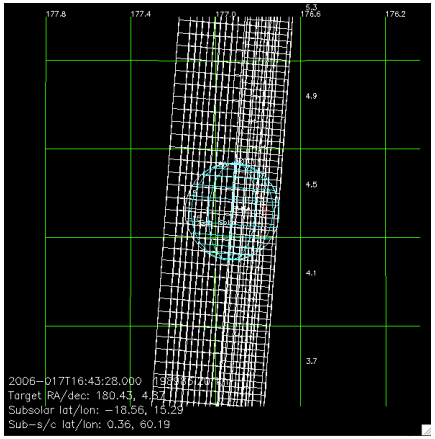
Alt= 209,369 km

Longitude= 304°W

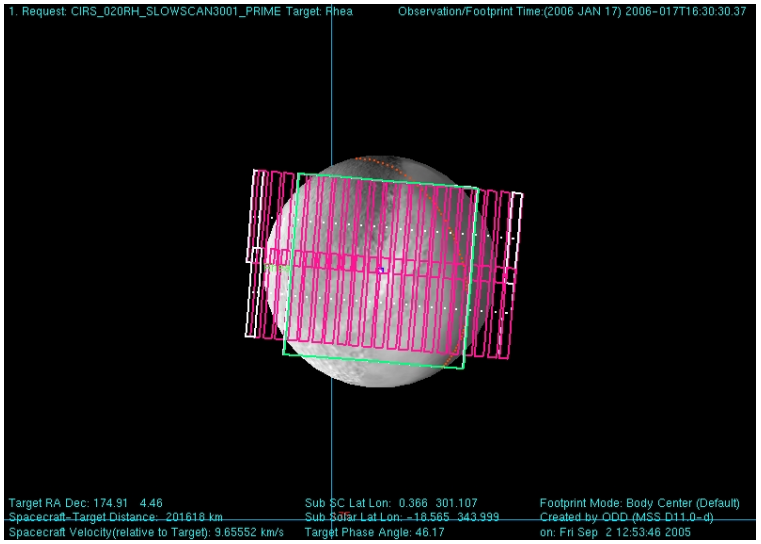
Phase= 41.4°



020RH_SLOWSCAN3001_CIRS



2-part



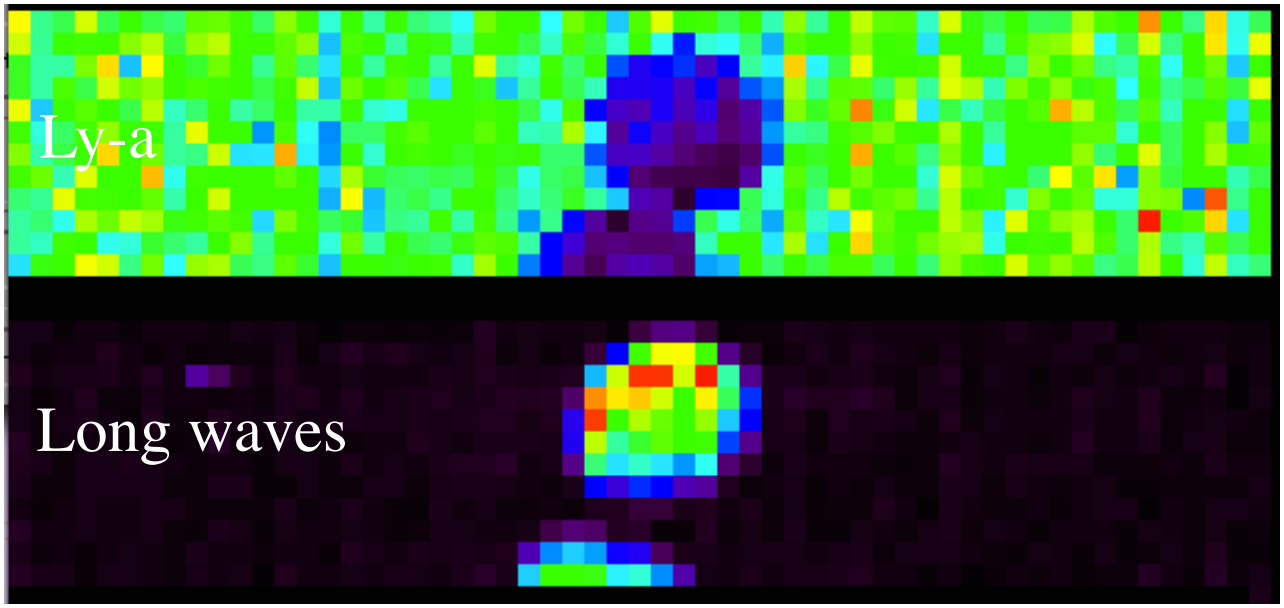
020RH_ICYLON007_CIRS

2006-017T16:29

Alt= 200,067 km

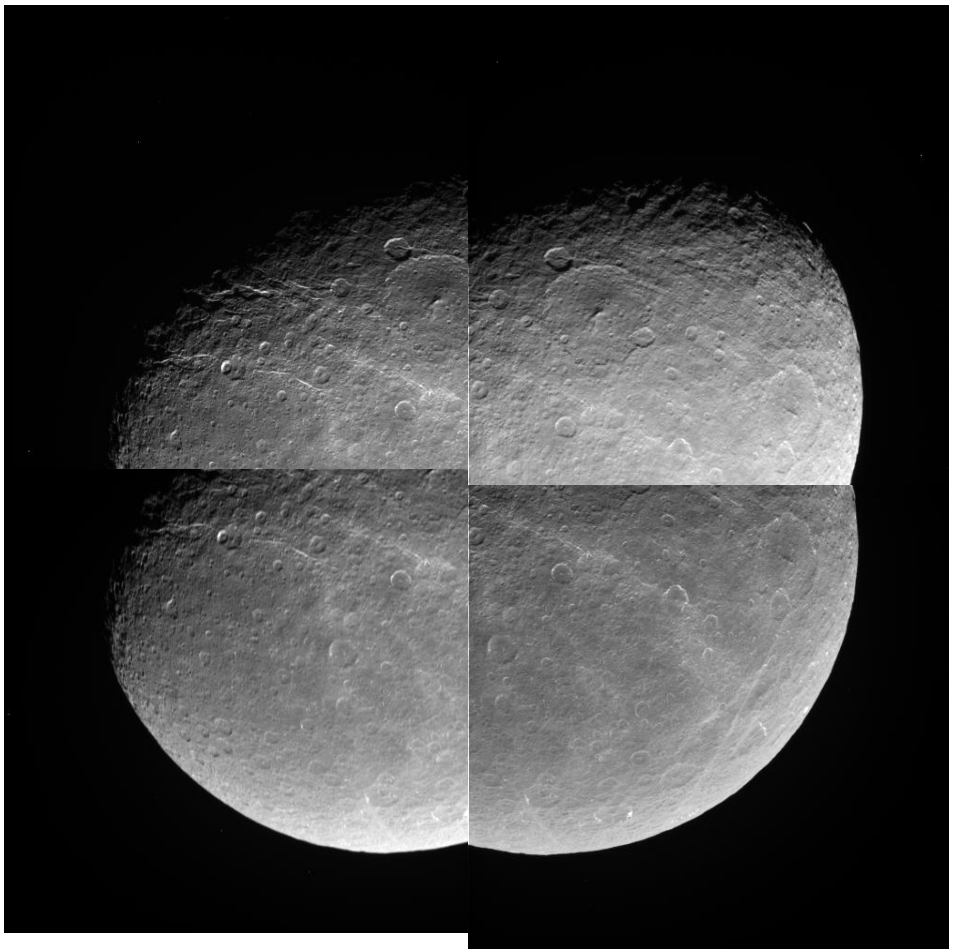
Longitude= 301°W

Phase= 46.7°



020RH_REGGEODC001_ISS

4-part



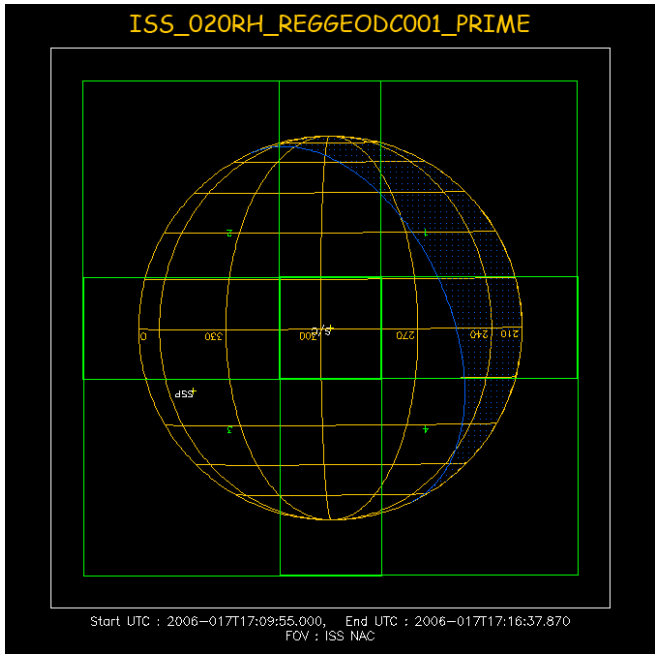
020RH_ICYMAP008_ISS

2006017T17:09

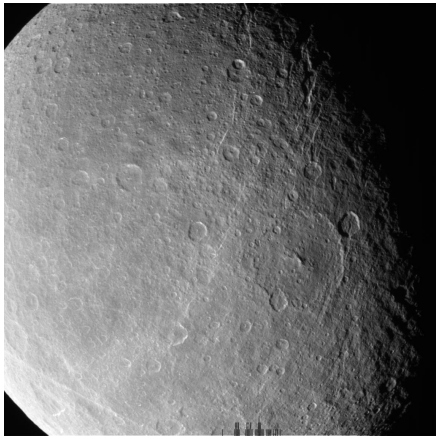
Alt= 193,328 km

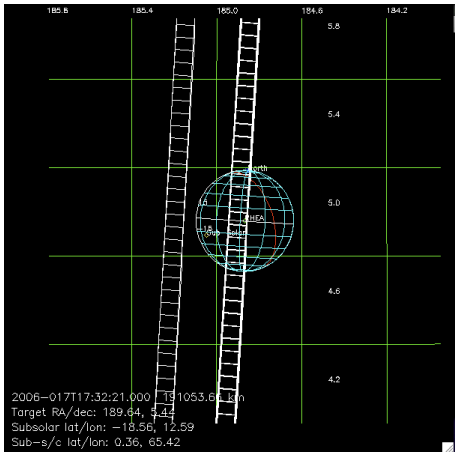
Longitude= 297°W

Phase= 52°



020RH_RHEA004_VIMS





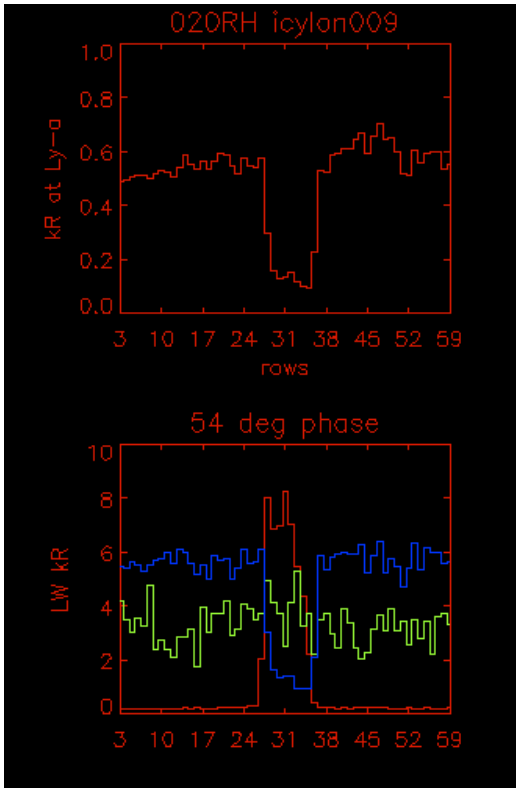
020RH_ICYLON009_VIMS

2006-017T17:24:56

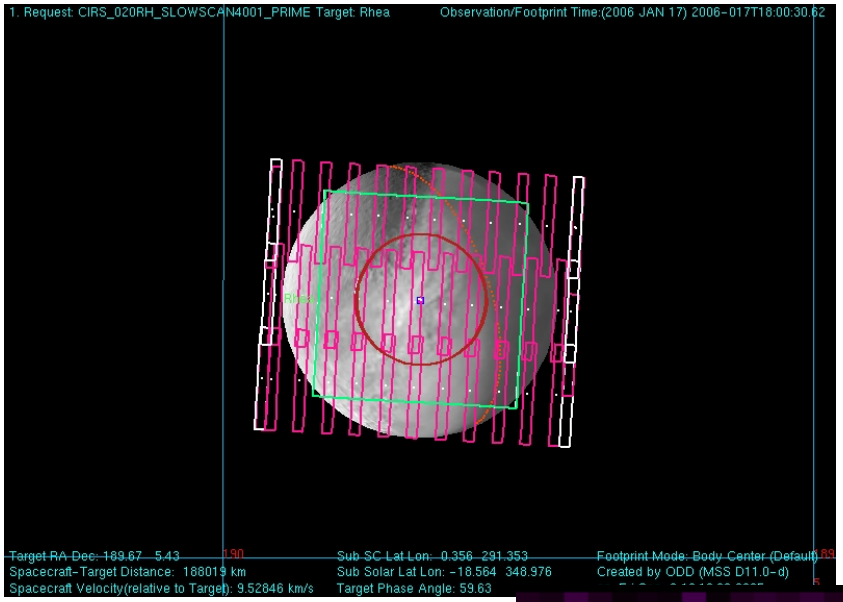
Alt= 191,216 km

Longitude= 295°W

Phase= 54.1°

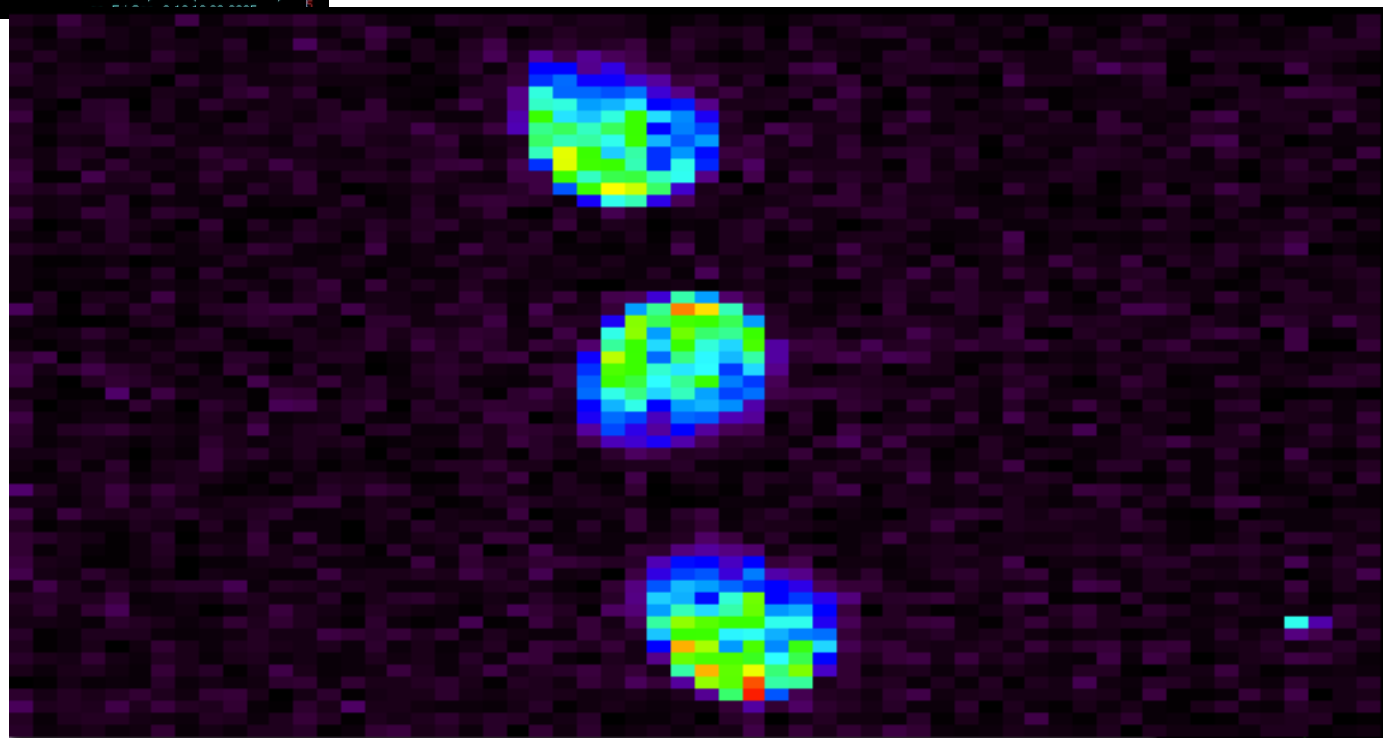


020RH_SLOWSCAN4001_CIRS



2-part

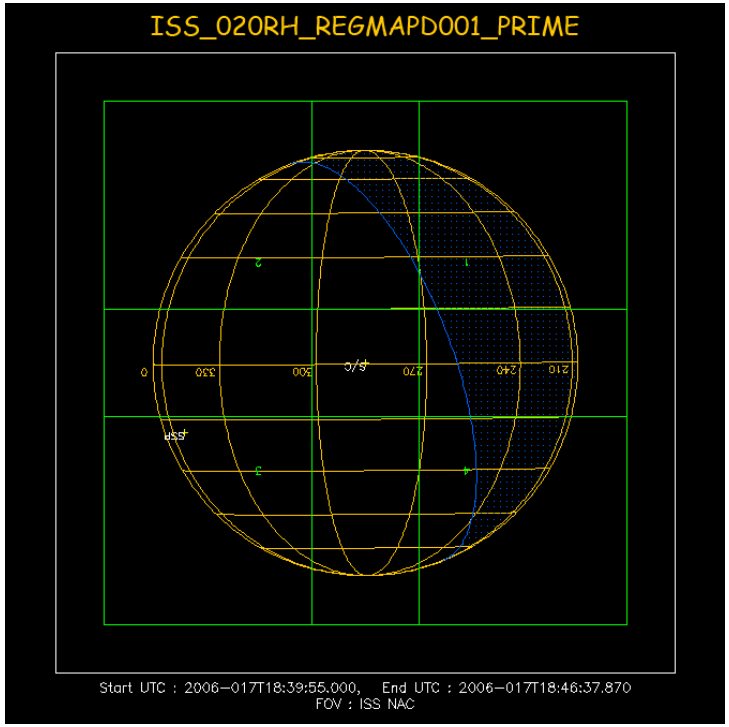
020RH_ICYMAP010_CIRS
2006-017T17:59
Alt= 186,872 km
Longitude= 291°W
Phase= 60.4°



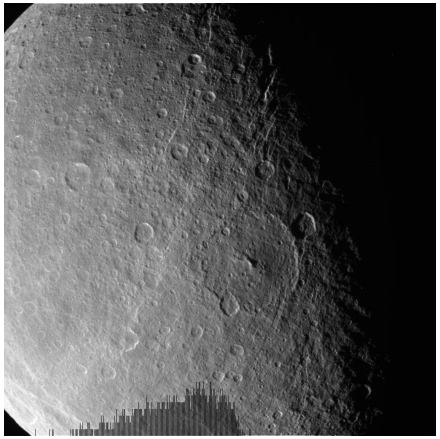
020RH_REGMAPD001_ISS

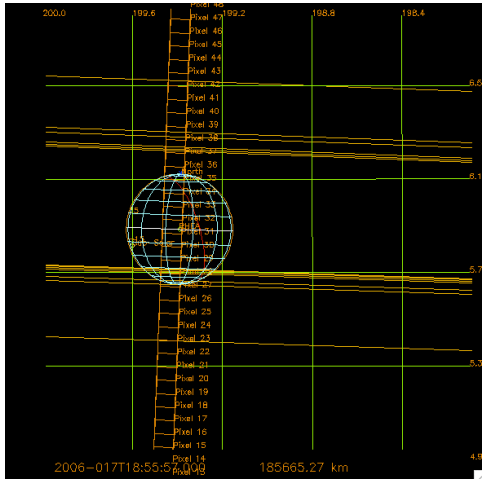
4-part

020RH_ICYMAP011_ISS
2006-017T18:39
Alt= 184,970 km
Longitude= 286°W
Phase= 66.9°



020RH_RHEA005_VIMS





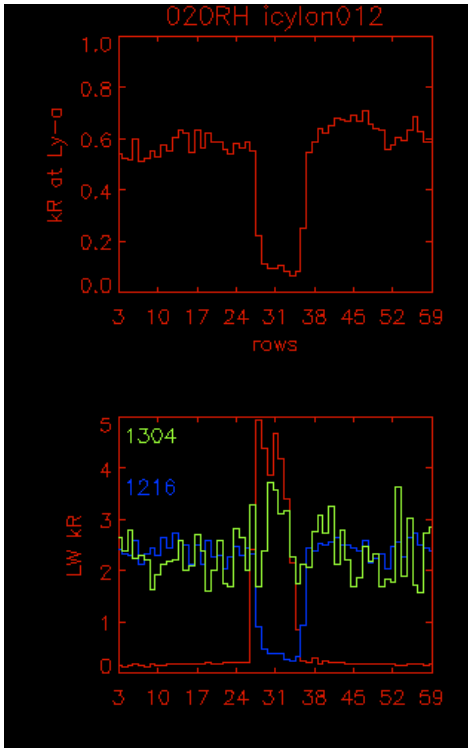
020RH_ICYLON012_VIMS

2006-017T18:54:57

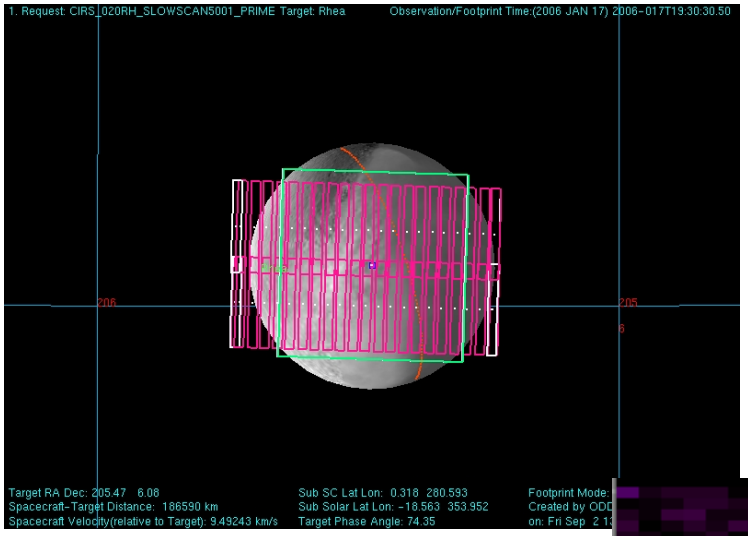
Alt= 184,885 km

Longitude= 285°W

Phase= 68.6°



020RH_SLOWSCAN5001_CIRS



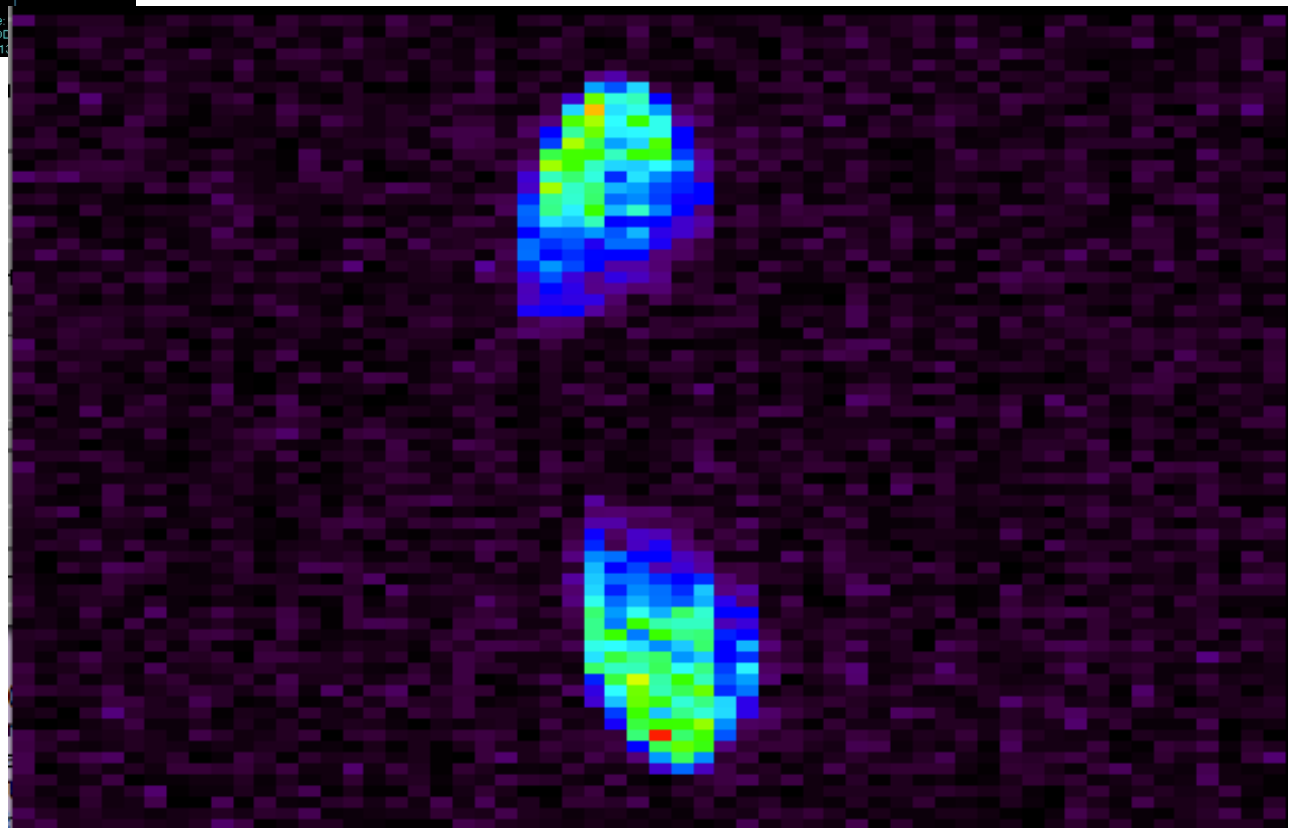
020RH_ICYMAP013_CIRS

2006-017T19:29

Alt= 186,116 km

Longitude= 280°W

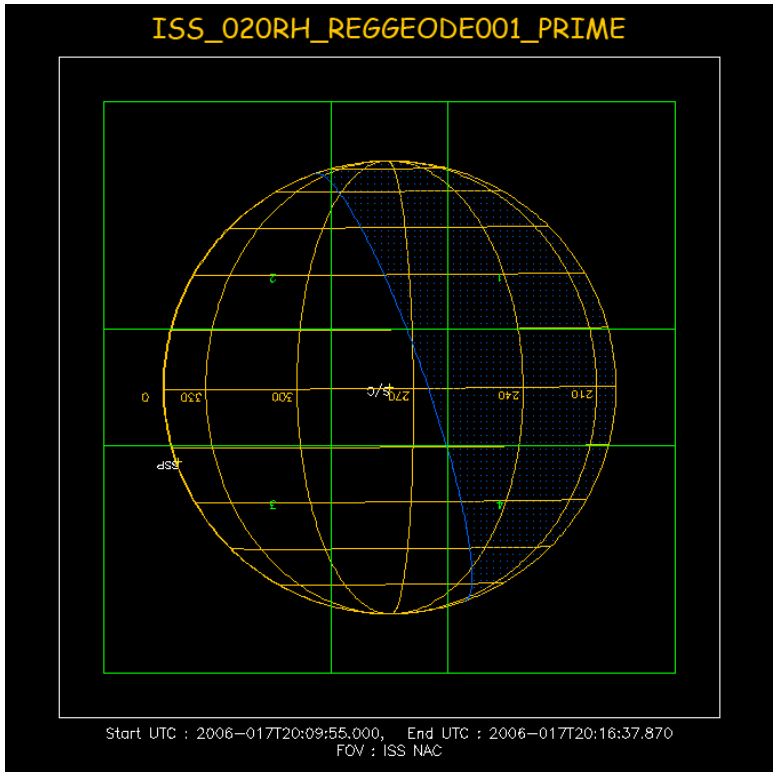
Phase= 75.1°



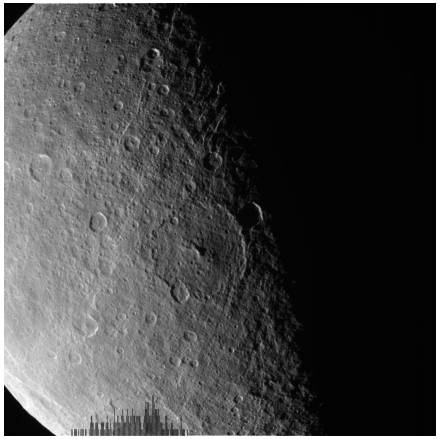
020RH_REGGEODE001_ISS

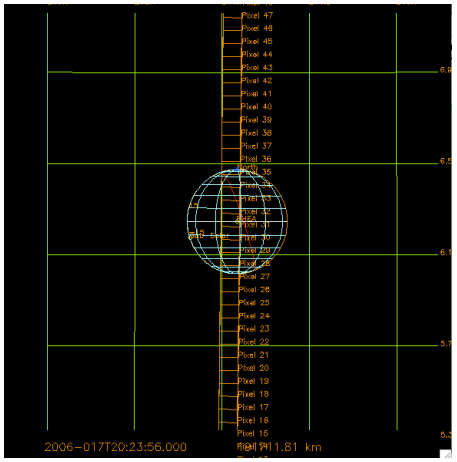
4-part

020RH_ICYMAP014_ISS
2006-017T20:09
Alt= 189,693 km
Longitude= 276°W
Phase= 81.4°



020RH_RHEA006_VIMS





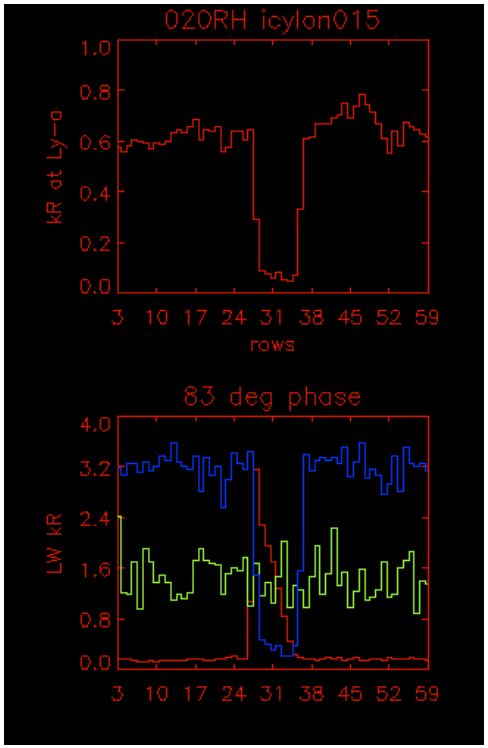
020RH_ICYLON015_VIMS

2006-017T20:24:56

Alt= 190,976 km

Longitude= 274°W

Phase= 83.0°



020RH_SLOWSCAN6001_CIRS

2-part

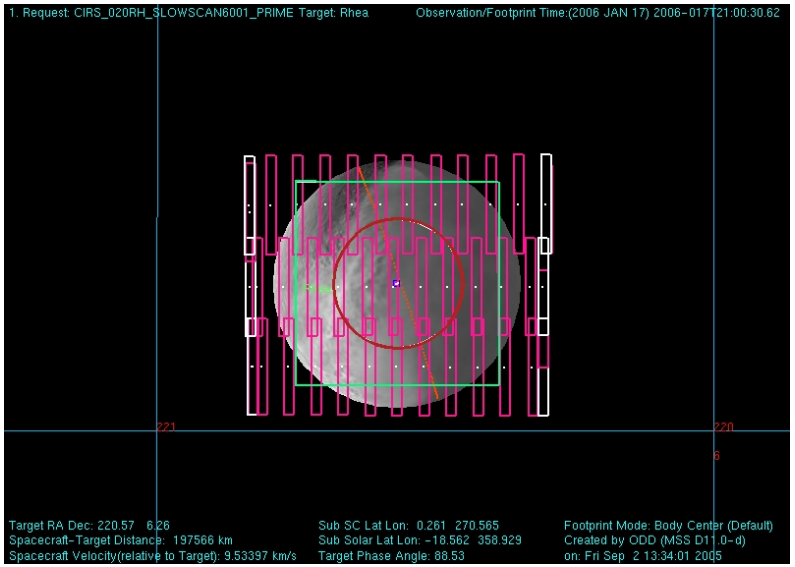
020RH_ICYMAP016_CIRS

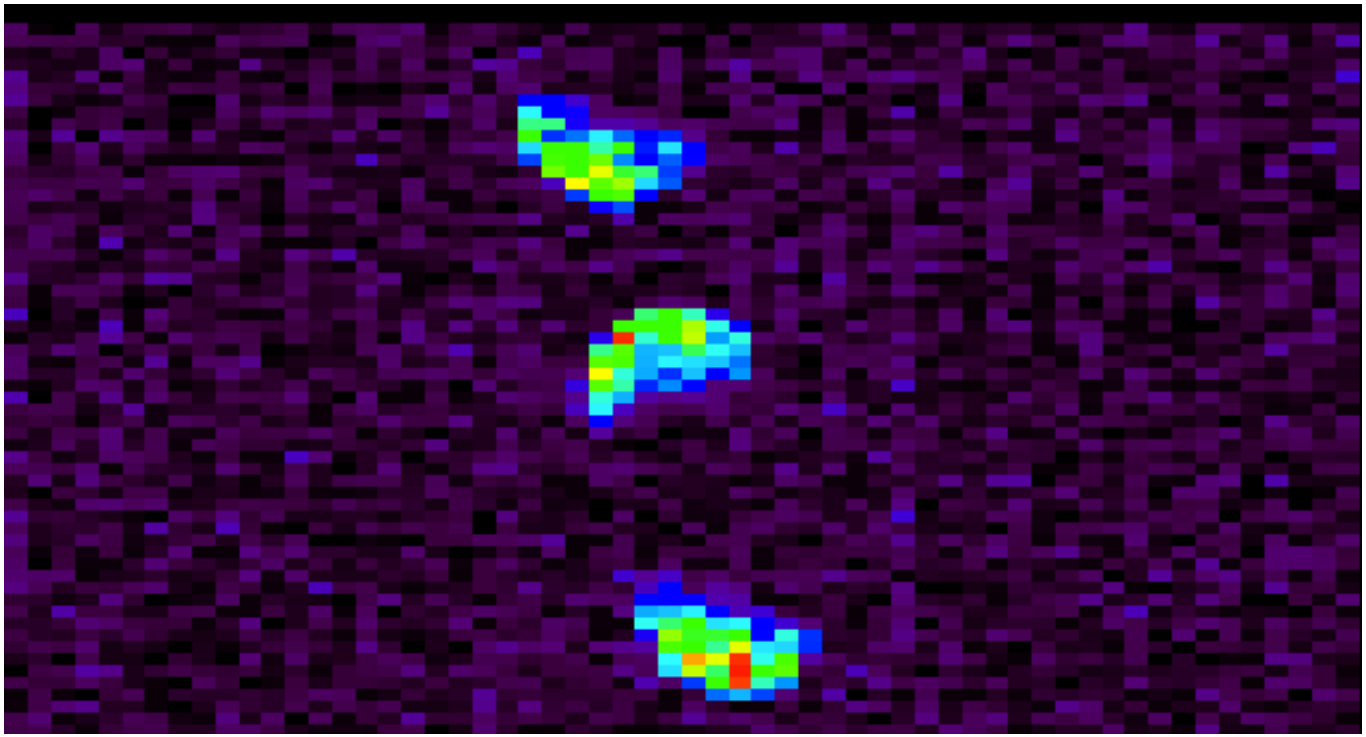
2006-017T20:59

Alt= 197,528 km

Longitude= 270°W

Phase= 89.1°

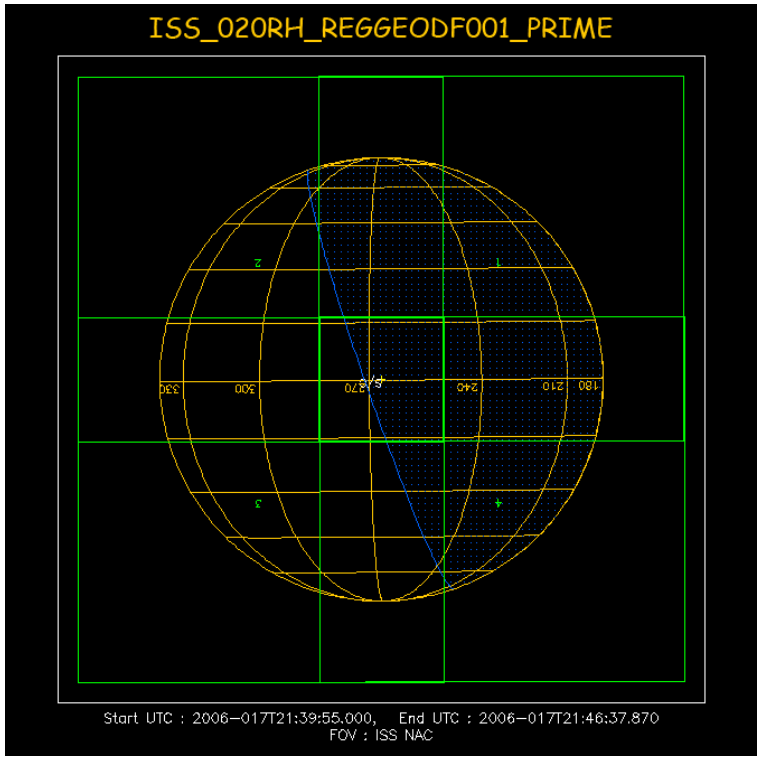




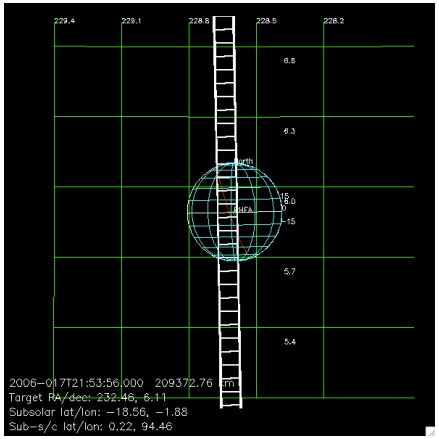
020RH_REGGEODF001_ISS

4-part

020RH_ICYMAP017_ISS
2006-017T21:39
Alt= 205,480 km
Longitude= 267°W
Phase= 94.4°



020RH_RHEA007_VIMS



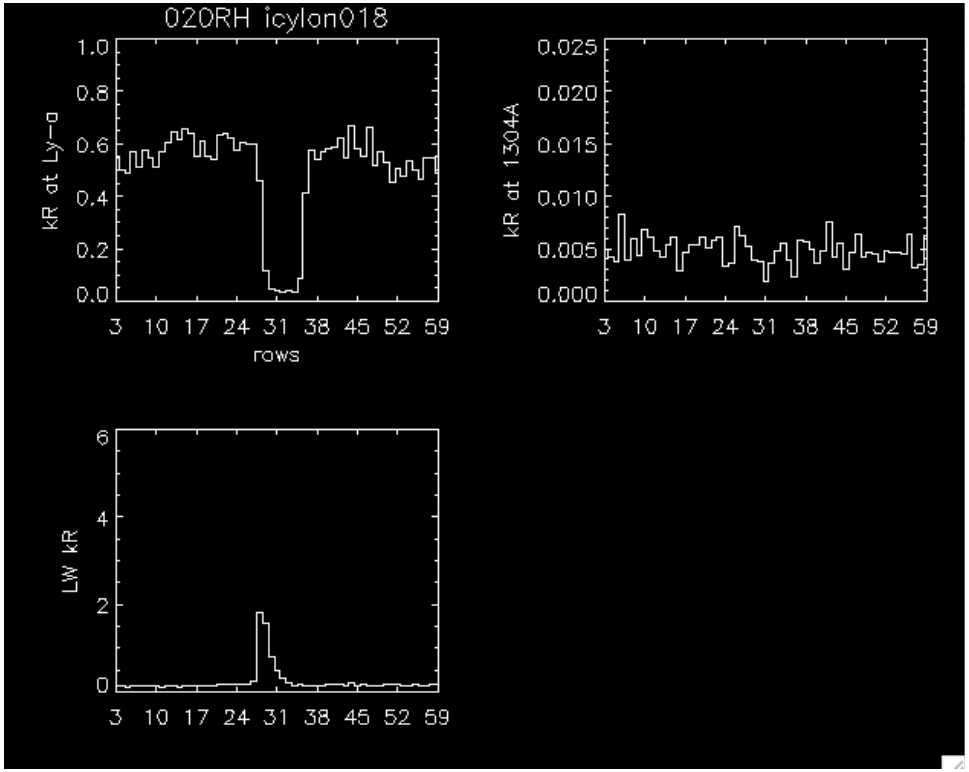
020RH_ICYLON018_VIMS

2006-017T21:49

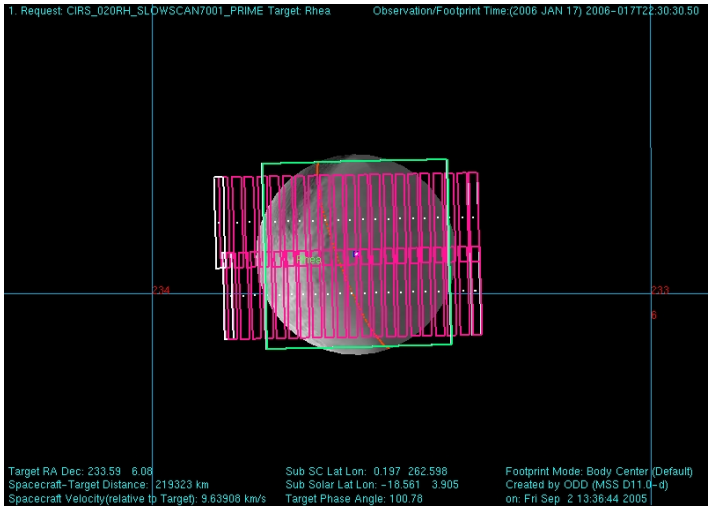
Alt= 207,919 km

Longitude= 266°W

Phase= 95.7°



020RH_SLOWSCAN7001_CIRS



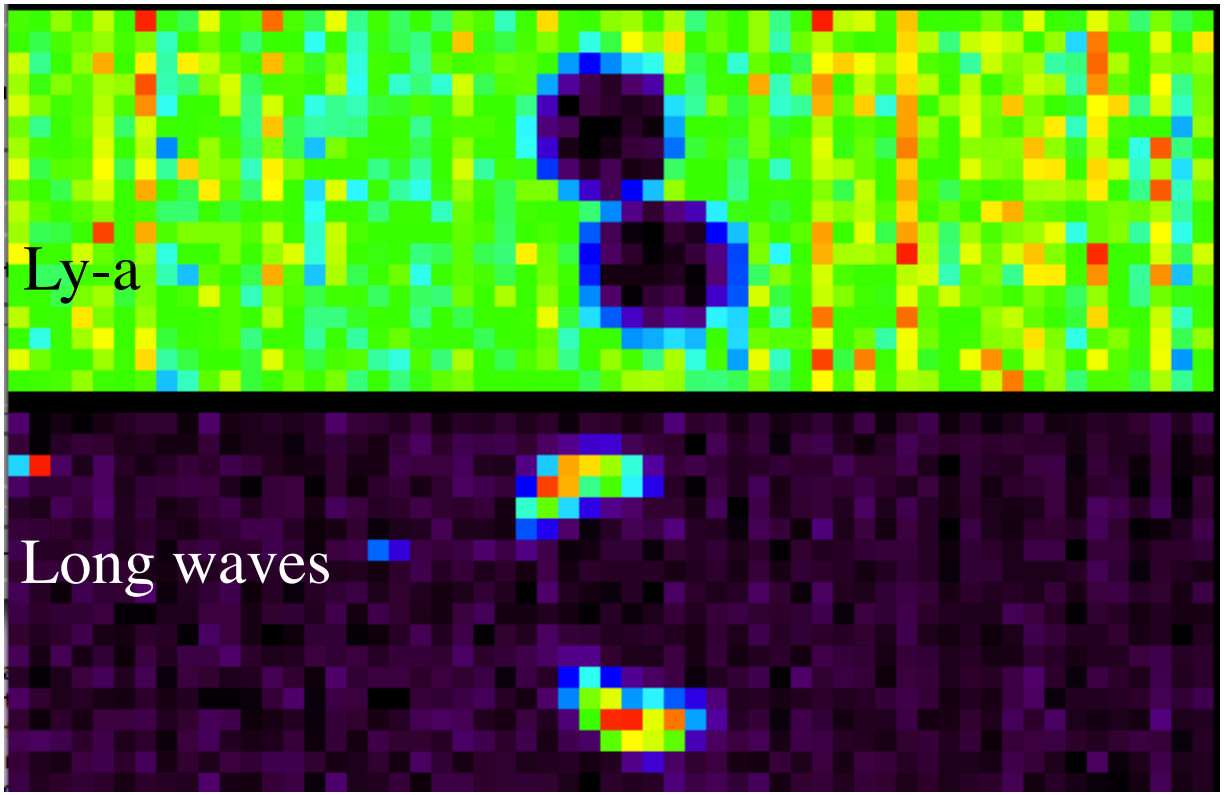
020RH_ICYLON019_CIRS

2006-017T22:29

Alt= 219,097 km

Longitude= 262°W

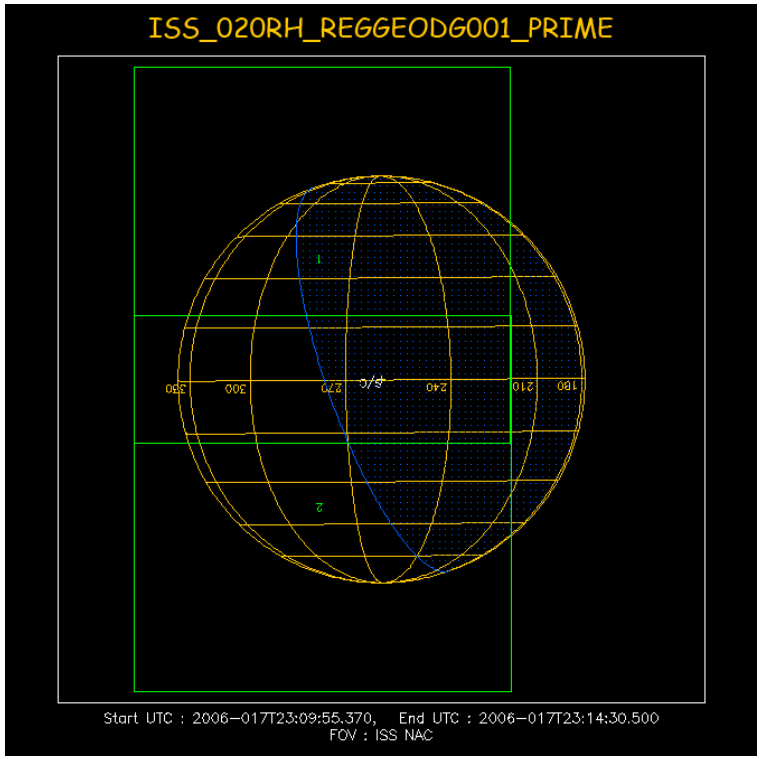
Phase= 101°



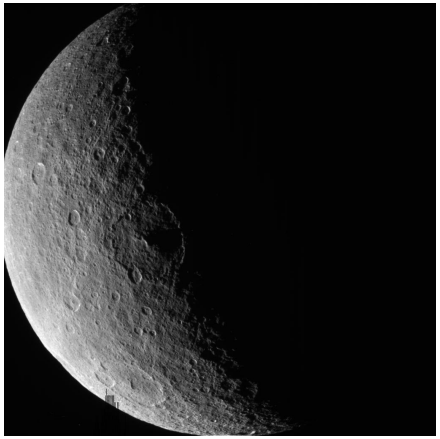
020RH_REGGEODG001_ISS

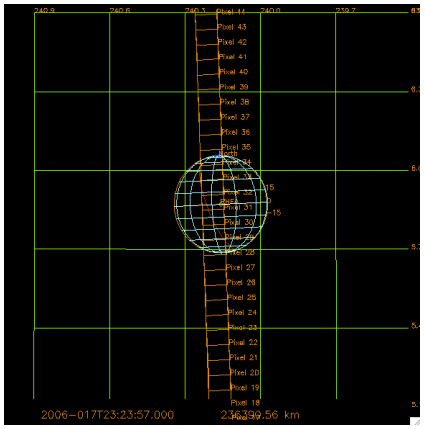
2-part

020RH_ICYMAP020_ISS
2006-017T23:09
Alt= 231,331 km
Longitude= 260°W
Phase= 105.5°



020RH_RHEA008_VIMS





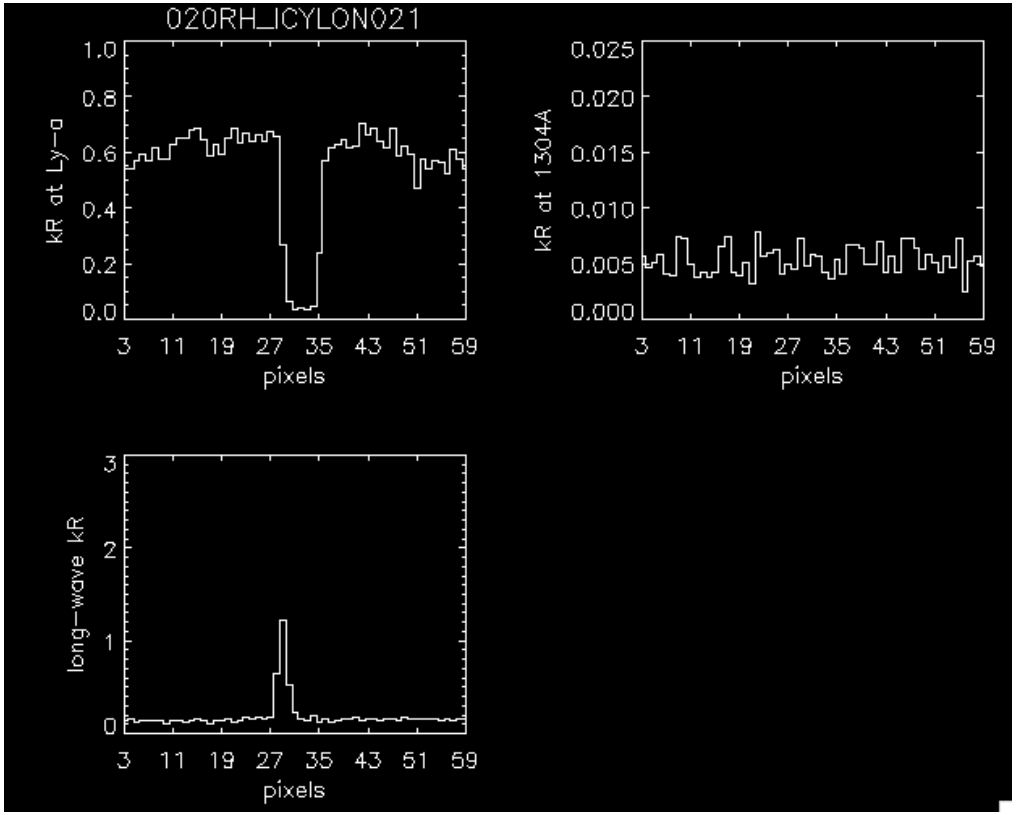
020RH_ICYLON021_VIMS

2006-017T23:24

Alt= 234,695 km

Longitude= 259°W

Phase= 106.6°



020RH_SLOWSCAN8001_CIRS

2-part

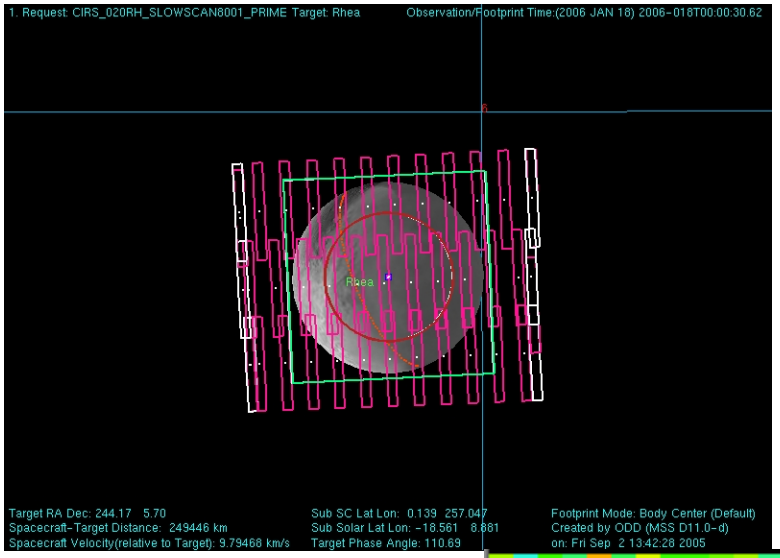
020RH_ICYLON022_CIRS

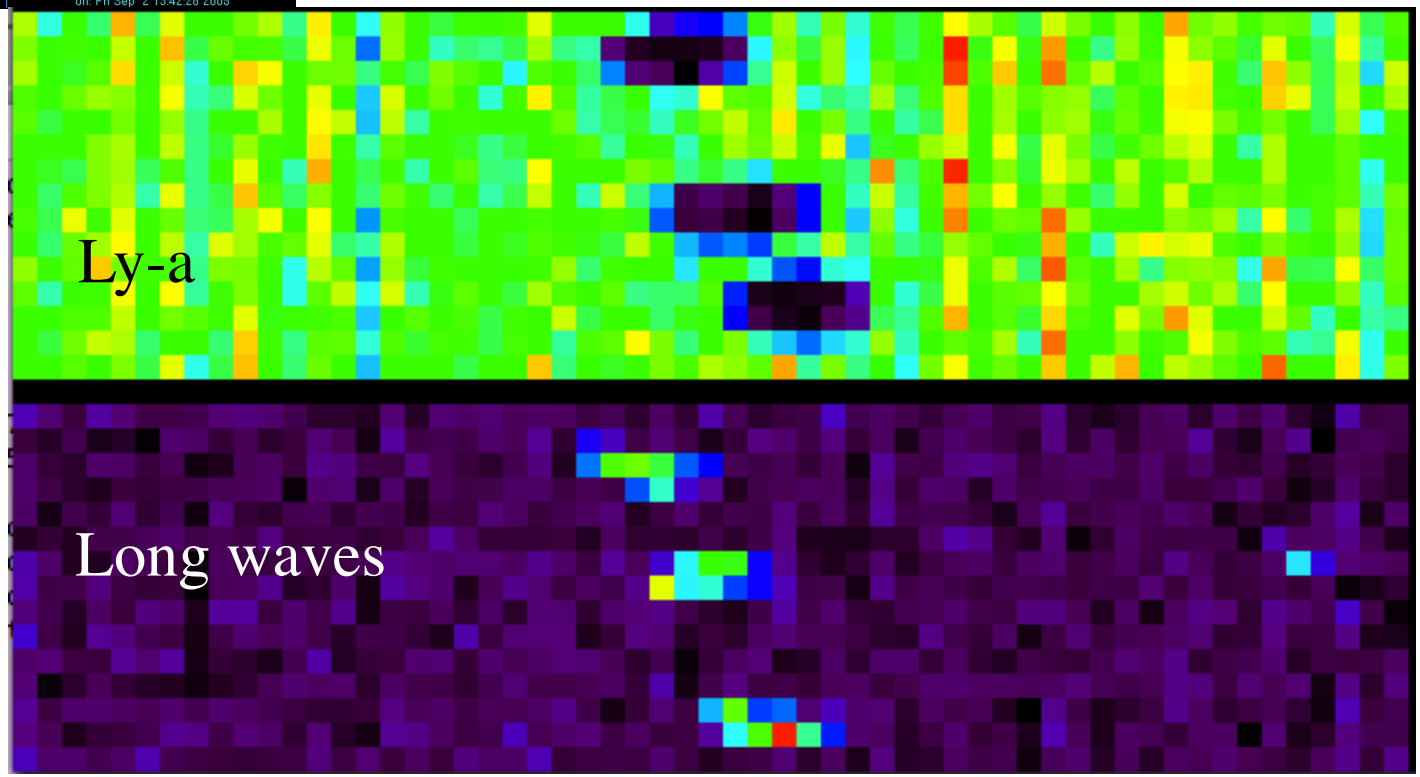
2006-017T23:59

Alt= 248,989 km

Longitude= 257°W

Phase= 110.8°





020RH_REGGEODH001_ISS

2-part

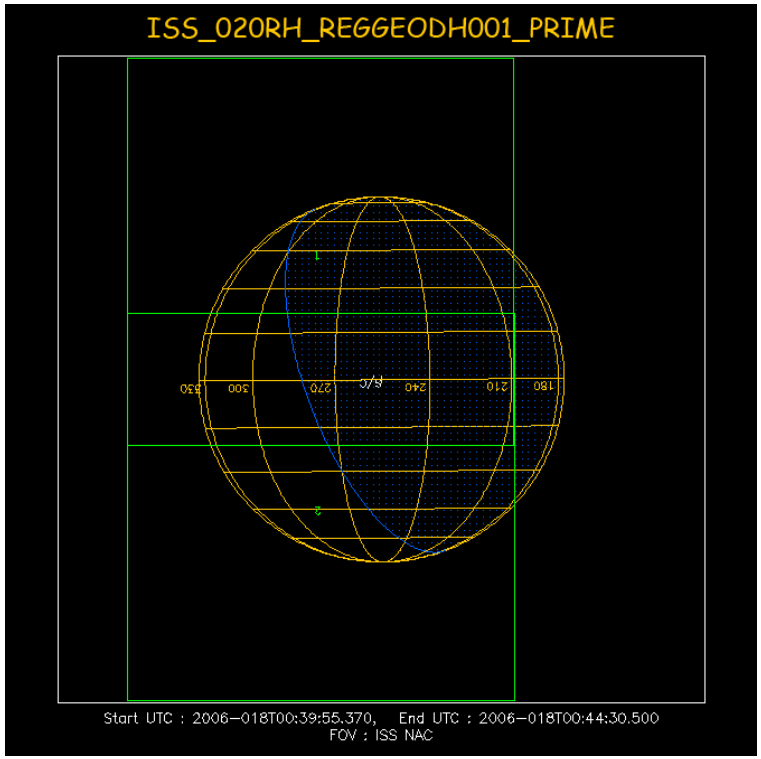
020RH_ICYMAP023_ISS

2006-018T00:39

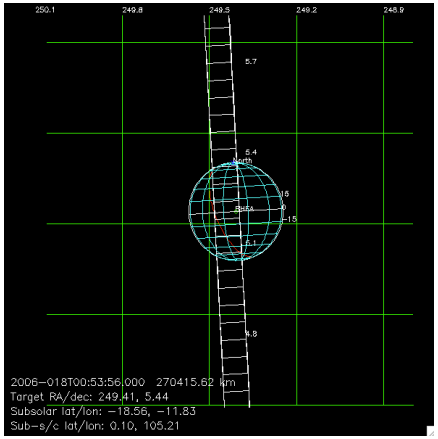
Alt= 264,094 km

Longitude= 255°W

Phase= 114.4



020RH_RHEA009_VIMS



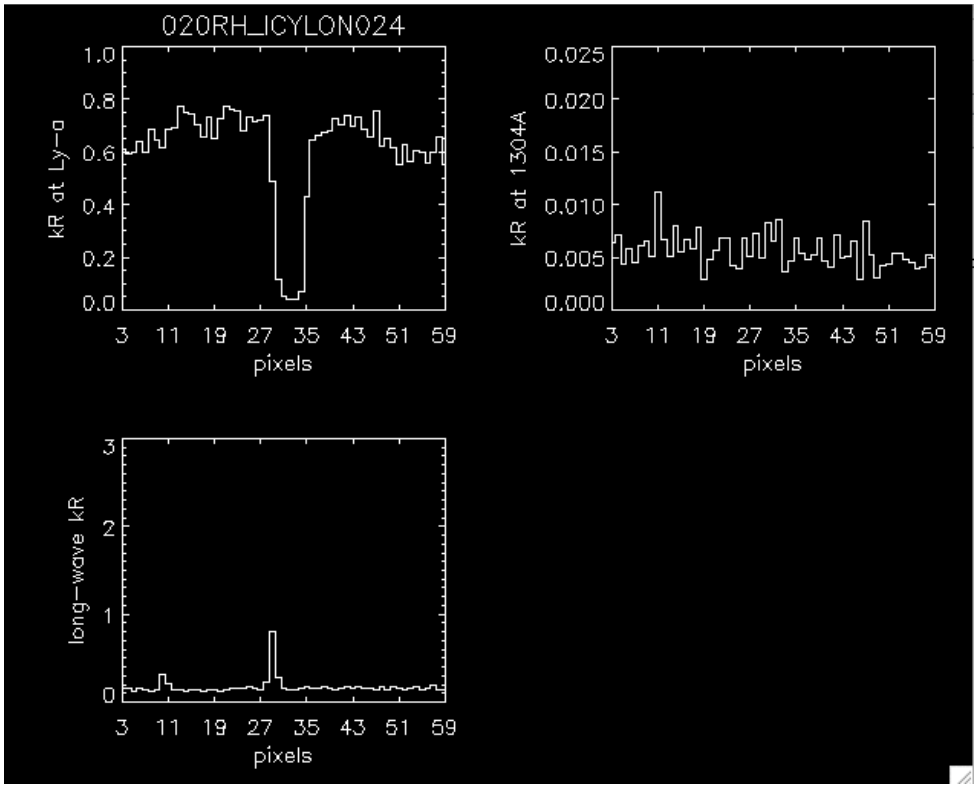
020RH_ICYLON024_VIMS

2006-018T00:49

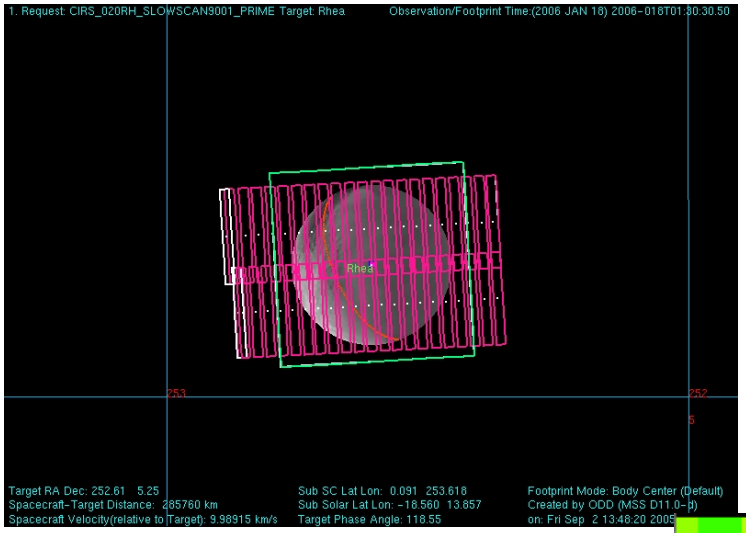
Alt= 268,542 km

Longitude= 255°W

Phase= 115.3°



020RH_SLOWSCAN9001_CIRS



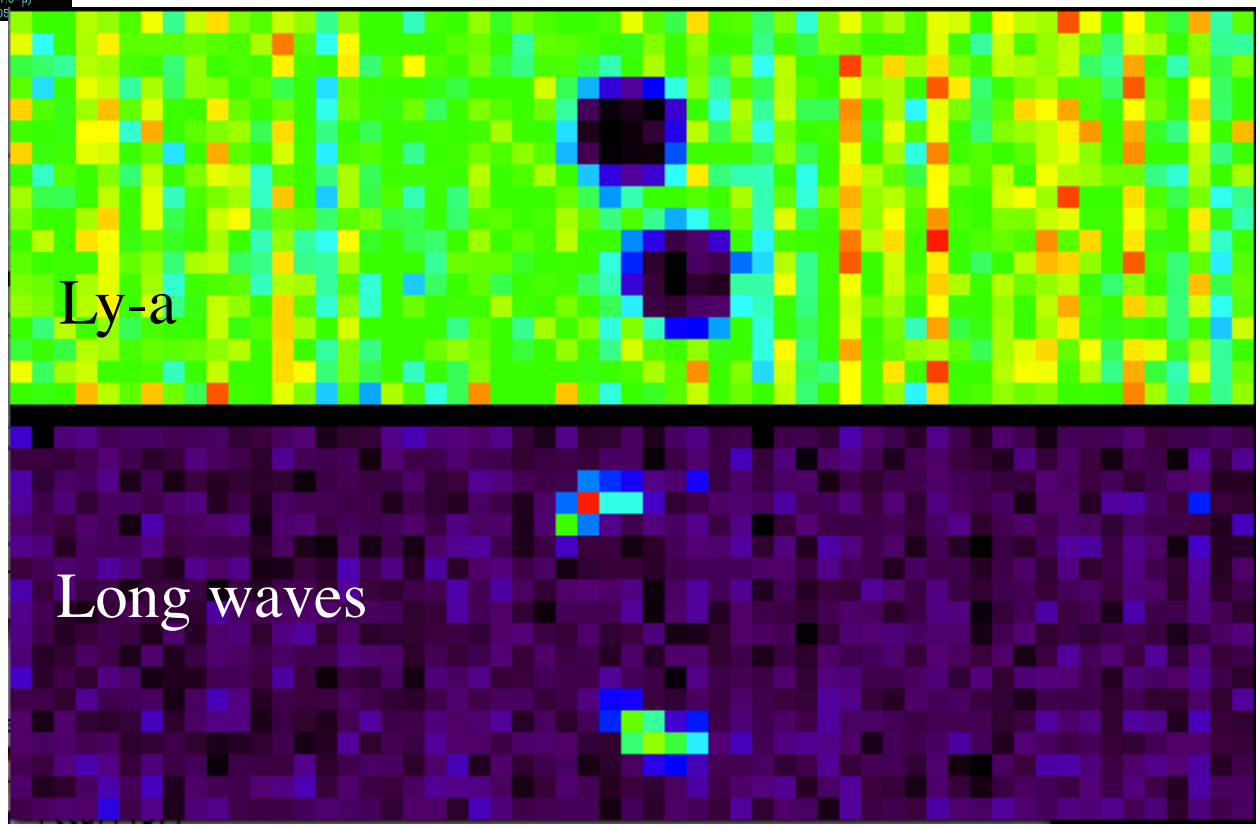
020RH_ICYLON025_CIRS

2006-018T01:29

Alt= 285,351 km

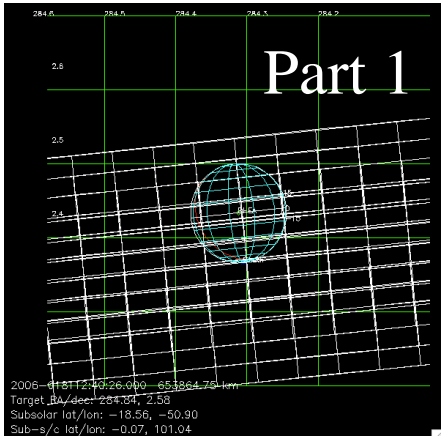
Longitude= 254°W

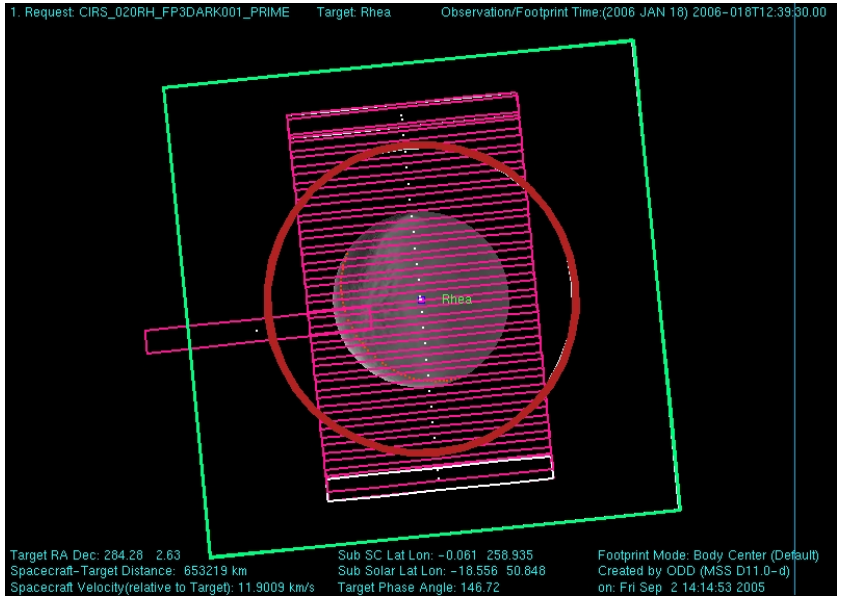
Phase= 118.6°



020RH_FP3DARK001_CIRS

3-part





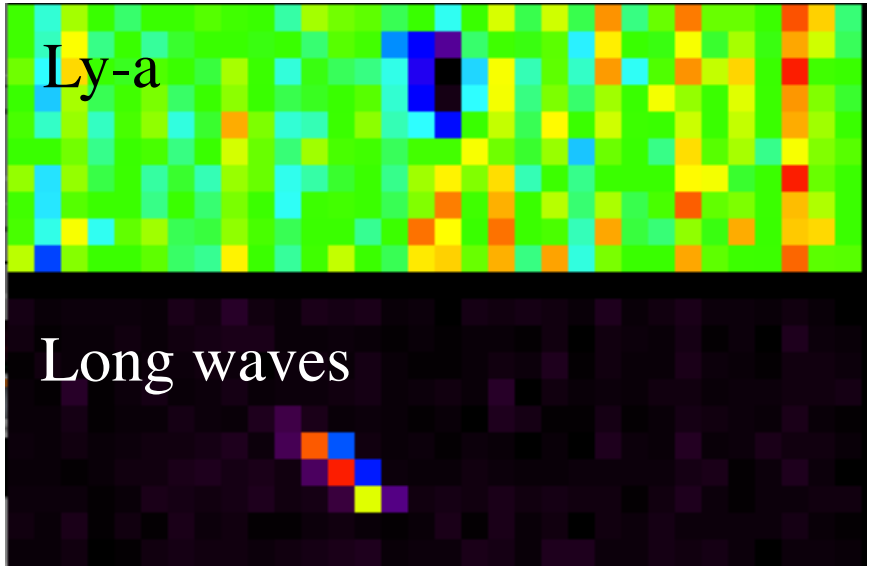
020RH_ICYLON026_CIRS

2006-018T12:19

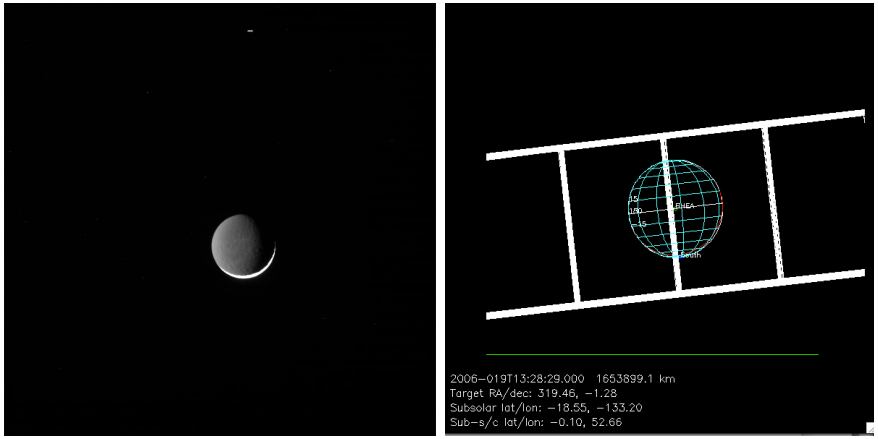
Alt= 644,206 km

Longitude= 259°W

Phase= 146.4°

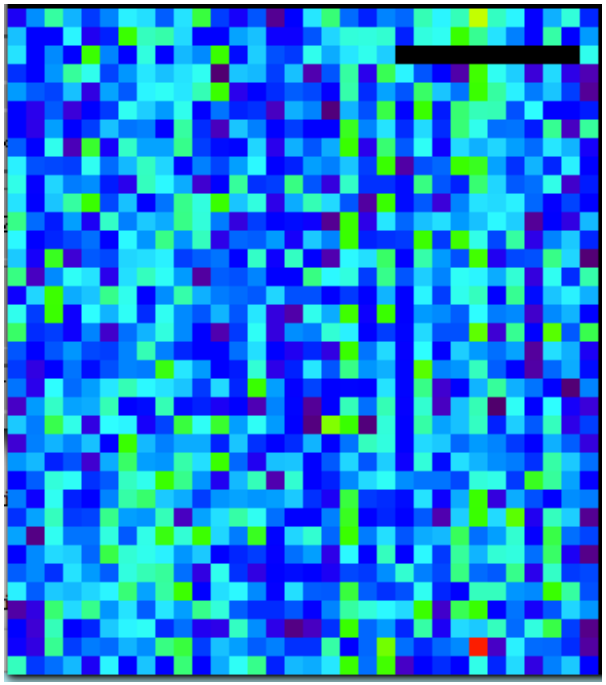


020RH_310W160PH001_ISS

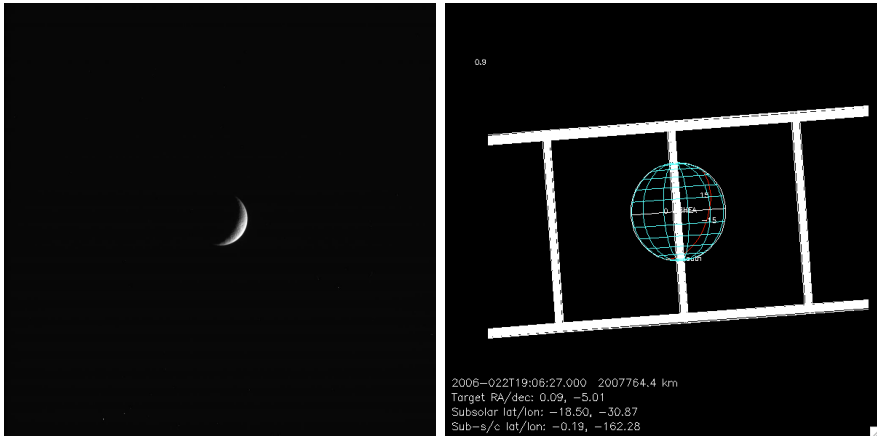


020RH_ICYLON024_ISS
2006-019T13:19
Alt= 1,675,422 km
Longitude= 308°W
Latitude=0.1°S
Phase= 160°

Low SNR



020RH_166W129PH001_ISS



020RH_ICYLON022_ISS

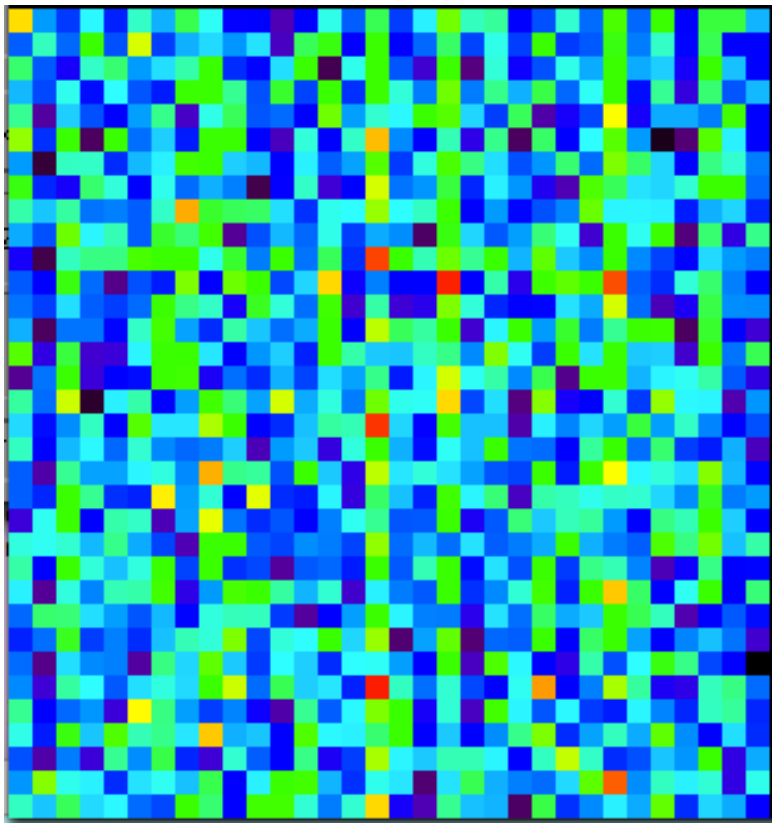
2006-022T19:00

Alt= 2,006,977 km

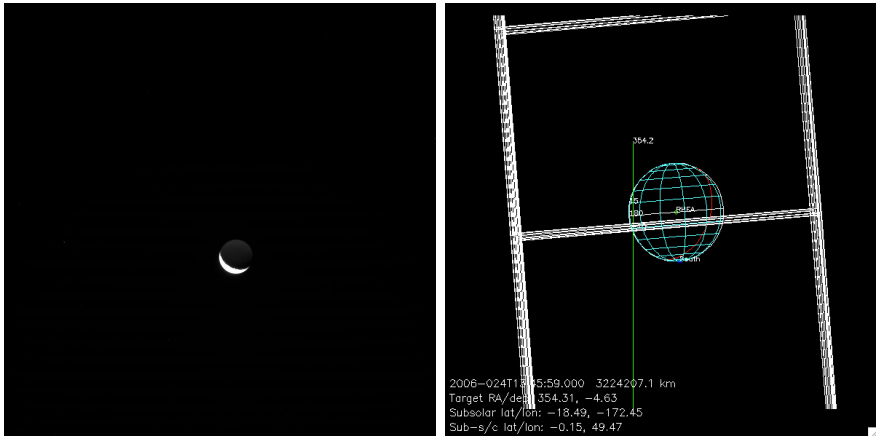
Longitude= 164°W

Latitude=0.2°S

Phase= 129°



020RH_310W135PH001_ISS



020RH_ICYLON025_ISS

2006-024T13:40

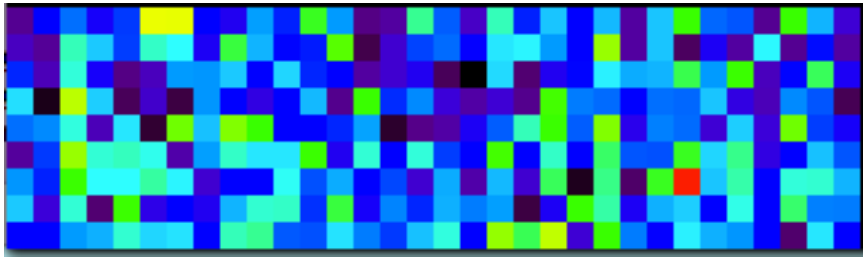
Alt= 3,225,801 km

Longitude= 311°W

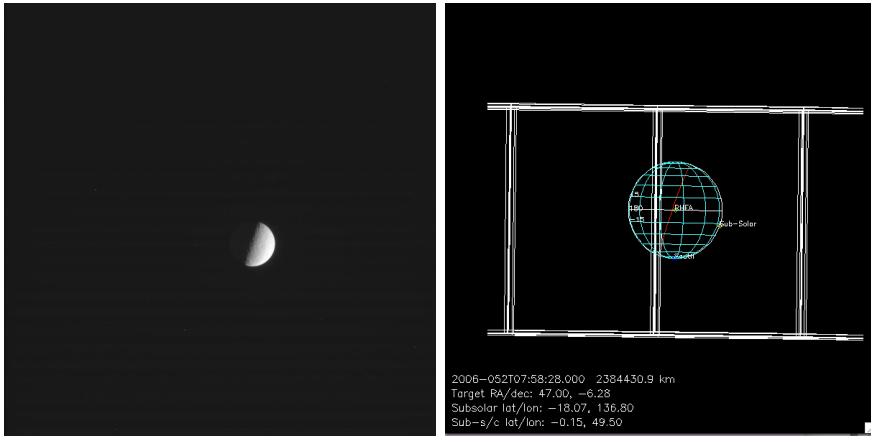
Latitude=0.15°S

Phase= 134.8°

Low SNR



021RH_310W087PH001_ISS



021RH_ICYLON001_ISS

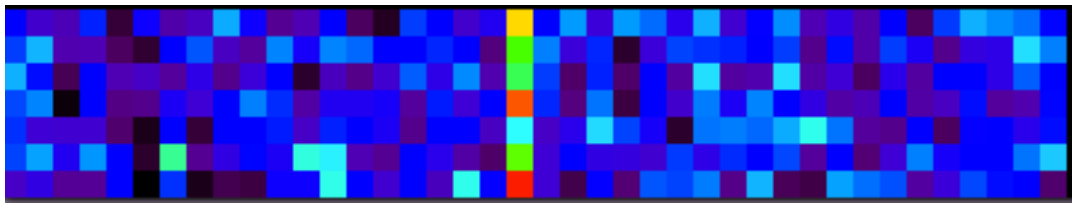
2006-052T07:59

Alt= 2,383,094 km

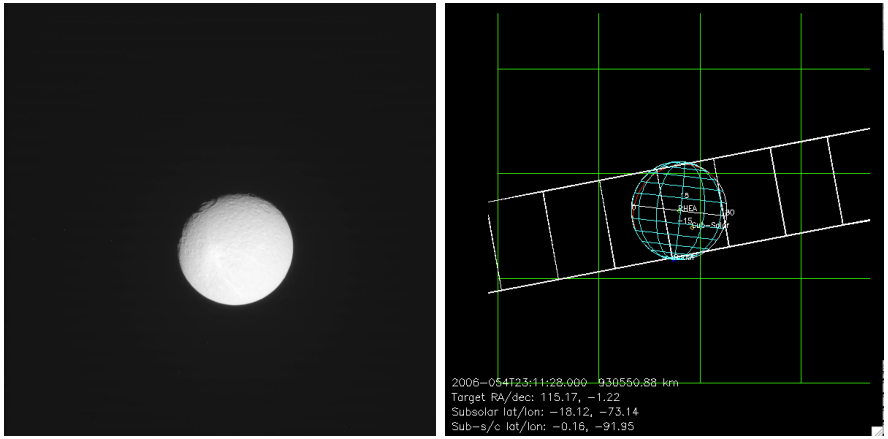
Longitude= 310°W

Latitude=0.15°S

Phase= 86.7°



021RH_094W025PH001_ISS



021RH_ICYLON002_ISS

2006-054T23:12

Alt= 933,841 km

Longitude= 92°W

Latitude=0.16°S

Phase= 25.7°

021RH_FP3GLOBAL001_CIRS

3-part

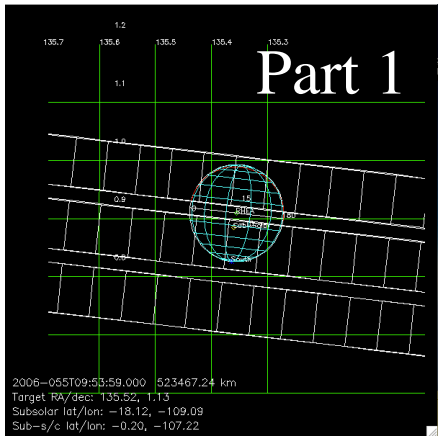
021RH_ICYLON063_CIRS

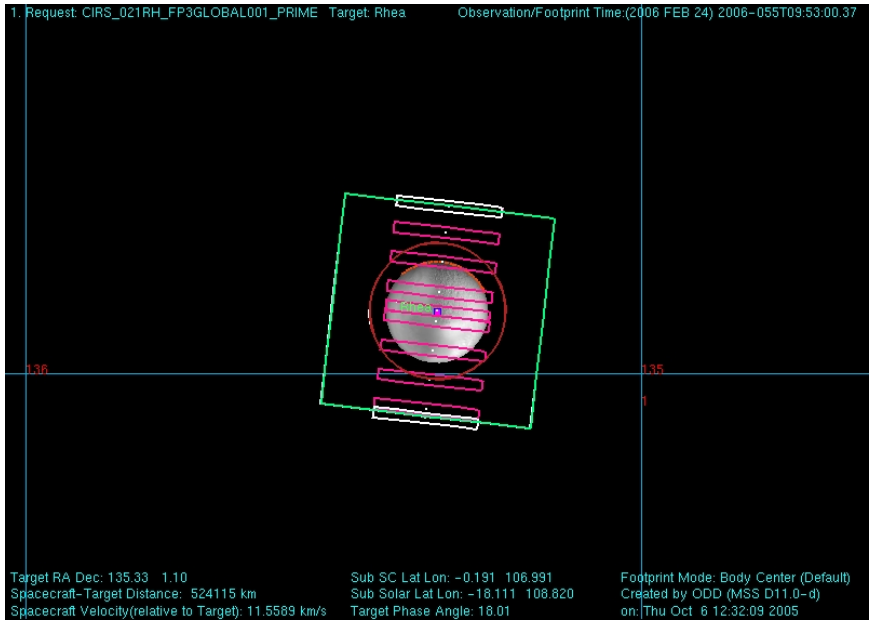
2006-055T09:54

Alt=519,608 km

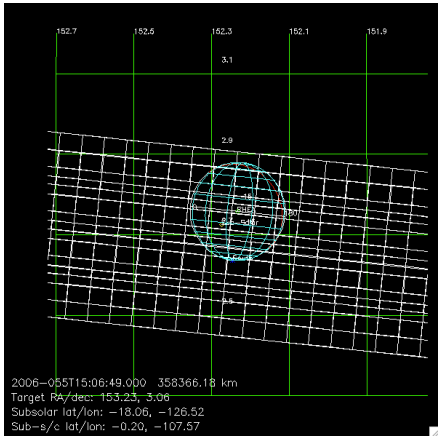
Longitude= 107°W

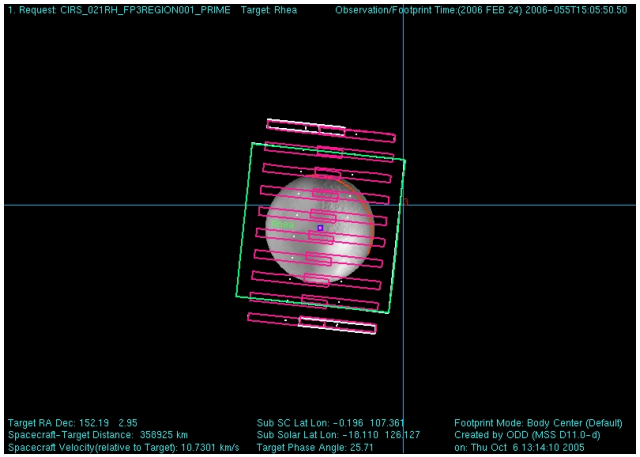
Phase= 18.0°





021RH_FP3REGION001_CIRS





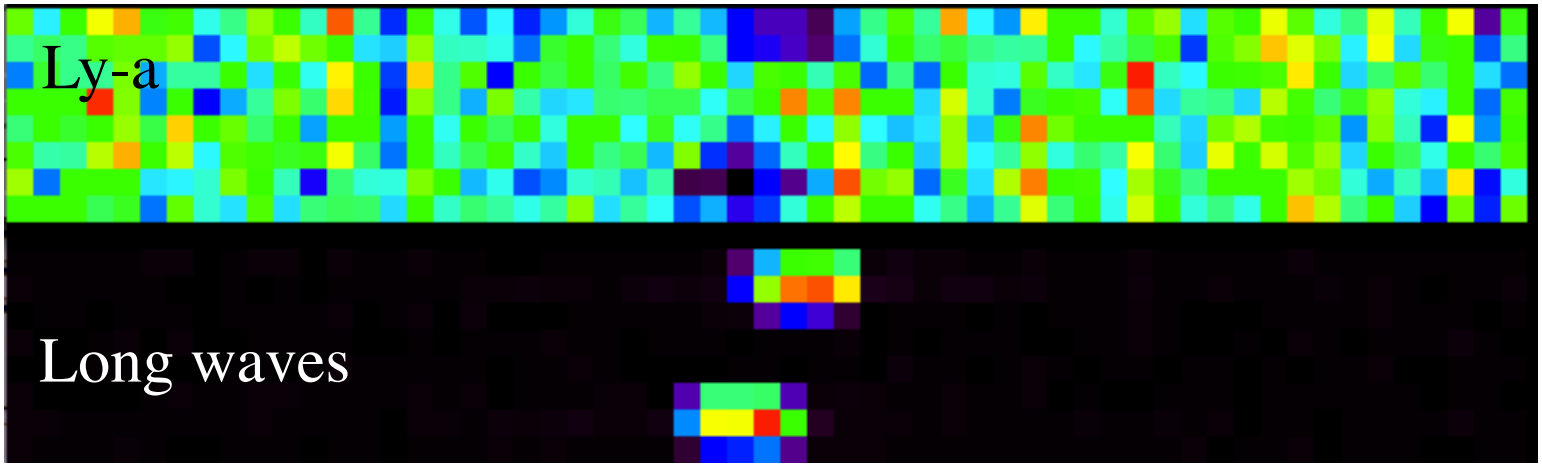
021RH_ICYLON064_CIRS

2006-055T15:05

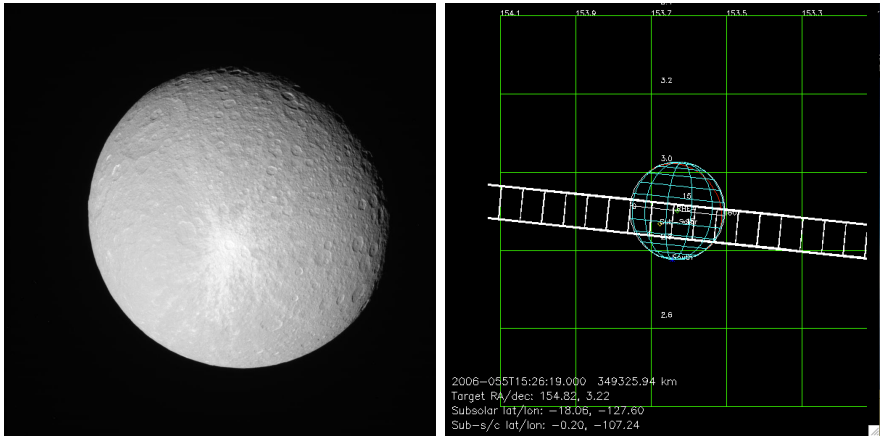
Alt= 356,446 km

Longitude= 107°W

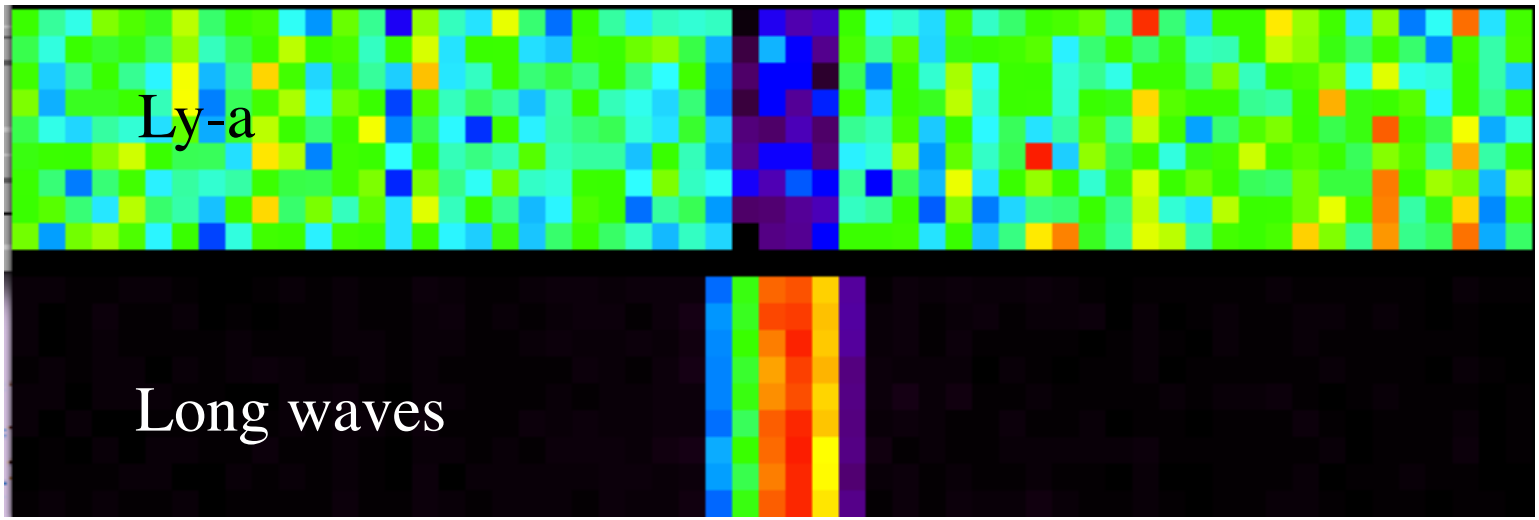
Phase= 25.9°



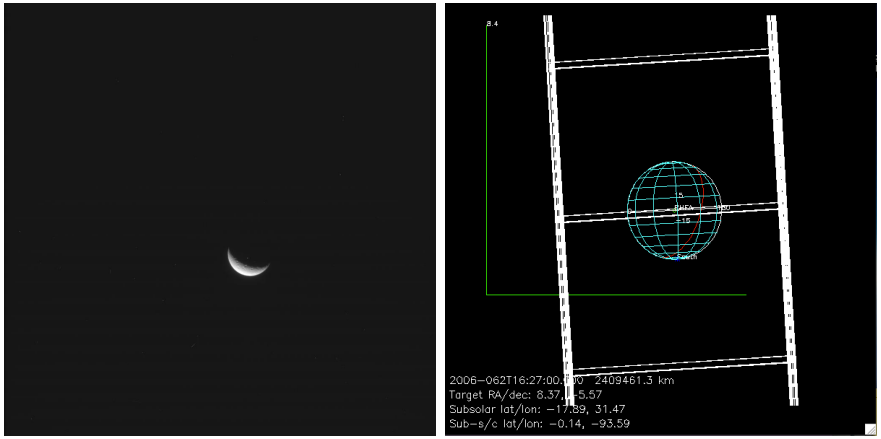
021RH_GLOCOL001_ISS



021RH_ICYLON003_ISS
2006-055T15:25
Alt= 346,748 km
Longitude= 107°W
Latitude=0.2°S
Phase= 27°

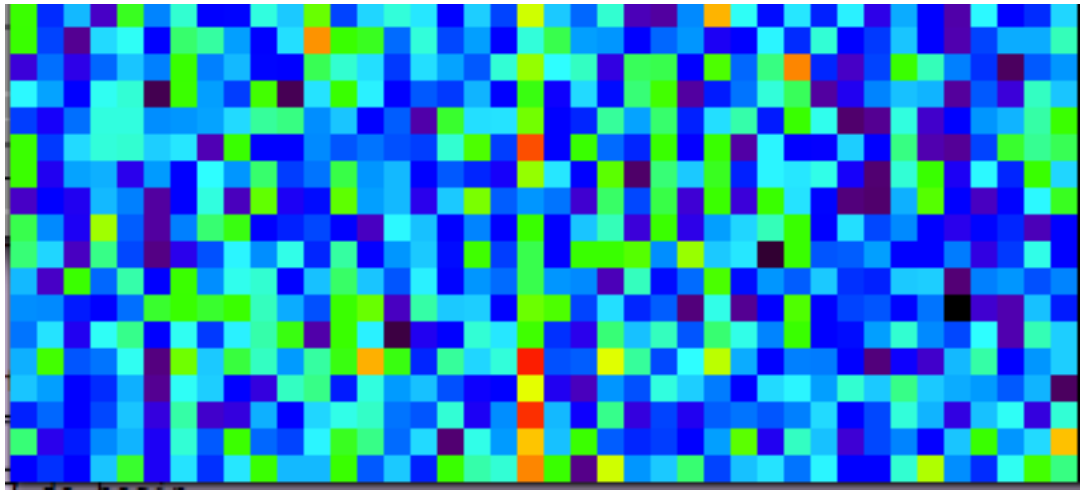


021RH_094W123PH001_ISS

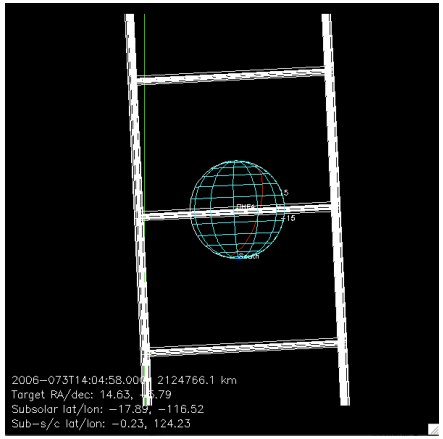


021RH_ICYLON004_ISS
2006-062T16:20
Alt= 2,409,117 km
Longitude= 93°W
Latitude=0.14°S
Phase= 123.3°

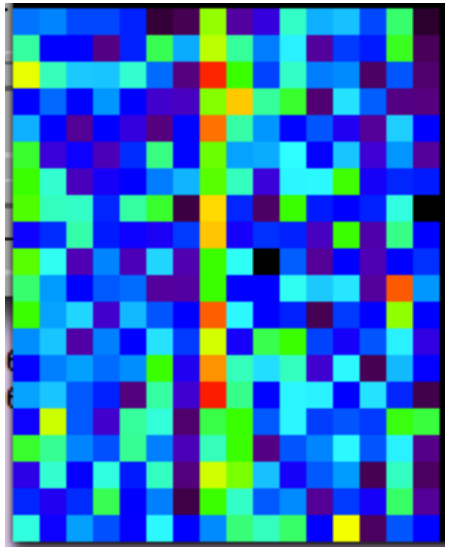
Low SNR



022RH_238W118PH001_ISS

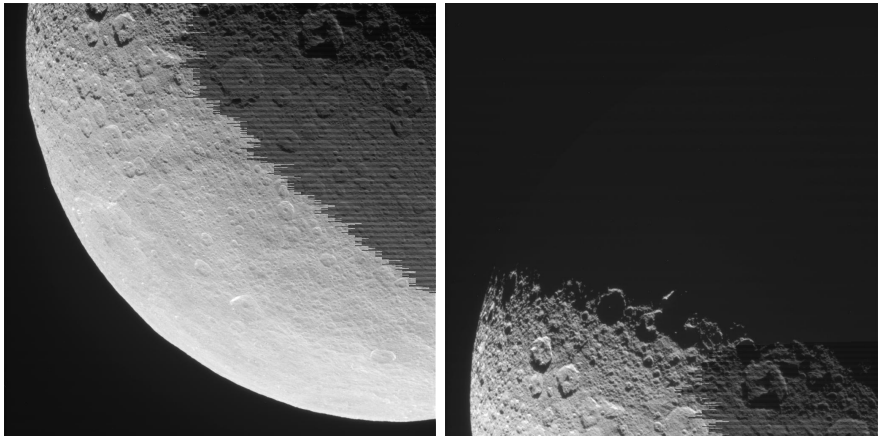


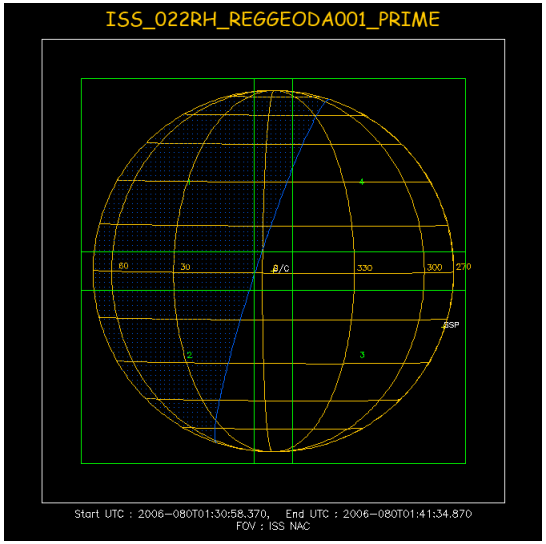
022RH_ICYLON001_ISS
2006-073T14:00
Alt= 2,124,118 km
Longitude= 236°W
Latitude=0.22°S
Phase= 117.6°



022RH_REGGEODA001_ISS

4-part





022RH_ICYLON002_ISS
2006-080T01:30
Alt= 144,935 km
Longitude= 357°W
Phase= 84.8°

022RH_FP3FP1DAY001_CIRS

3-part

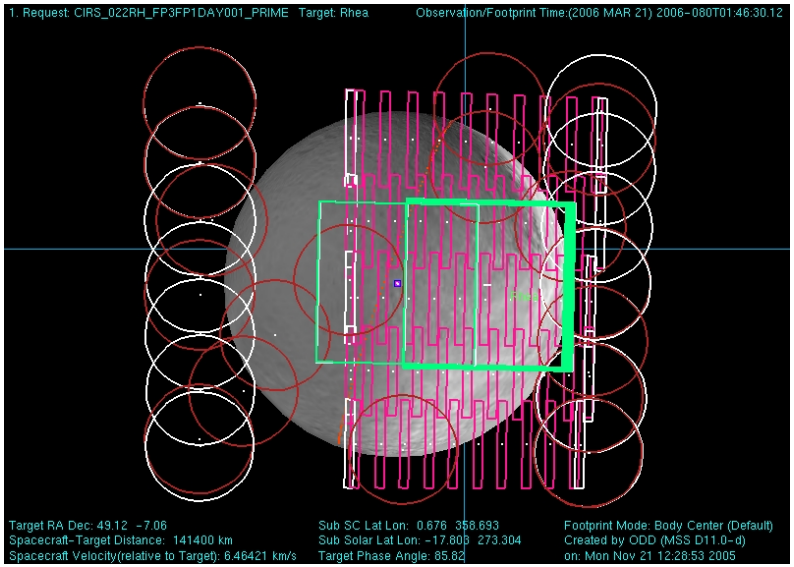
022RH_ICYLON003_CIRS

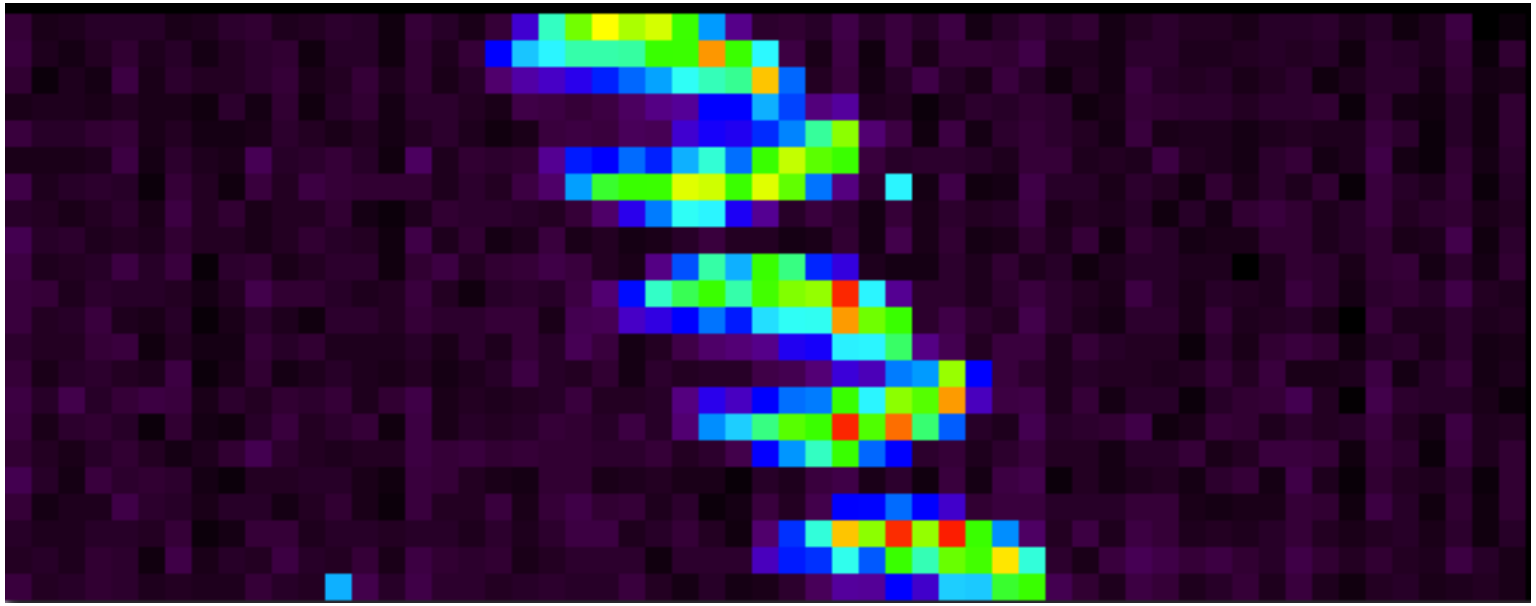
2006-080T01:45

Alt= 139,334 km

Longitude= 359°W

Phase= 86.1°

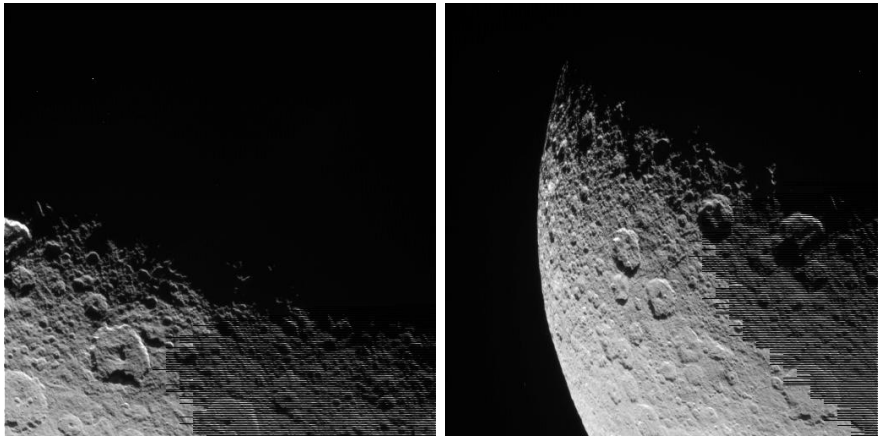


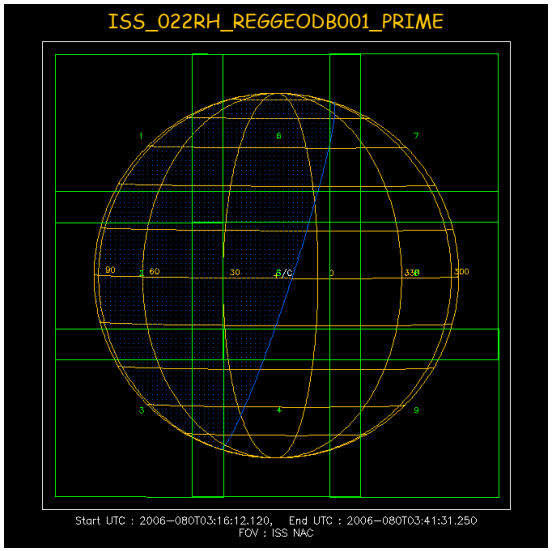


022RH_REGGEODB001_ISS

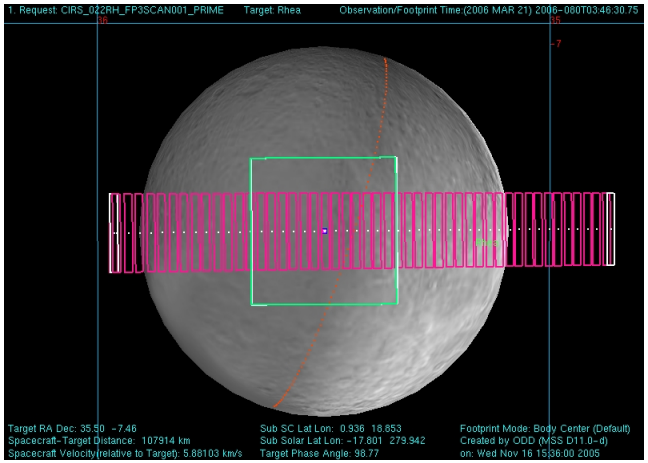
9-part

022RH_ICYLON004_ISS
2006-080T03:15
Alt= 114,659 km
Longitude= 13°W
Phase= 94.8°





022RH_FP3SCAN001_CIRS



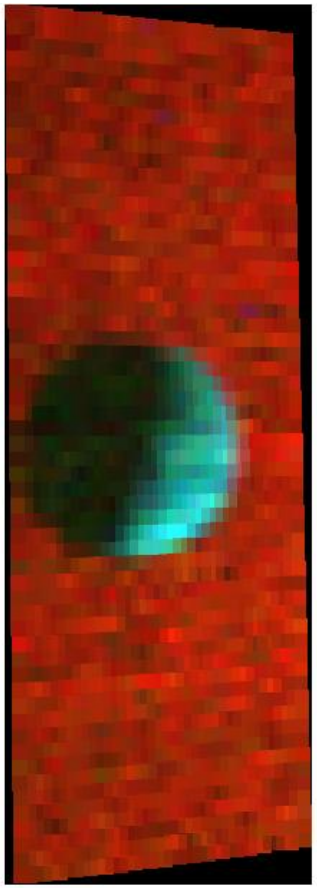
022RH_ICYLON005_CIRS

2006-080T03:45

Alt= 107,379 km

Longitude= 19°W

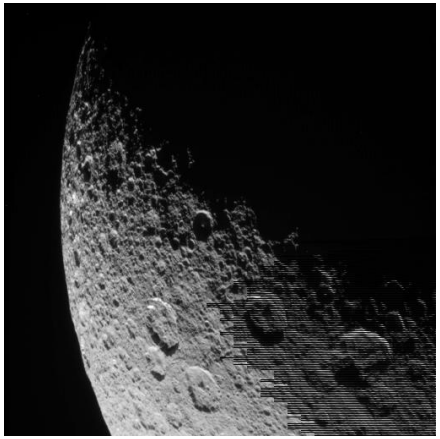
Phase= 98.6°

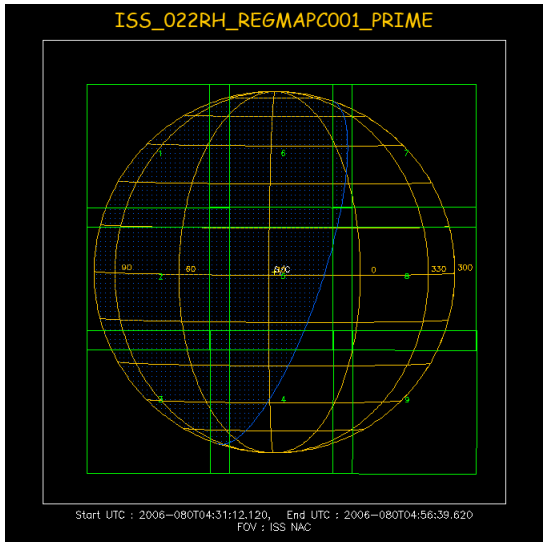


022RH_REGMAPC001_ISS

9-part

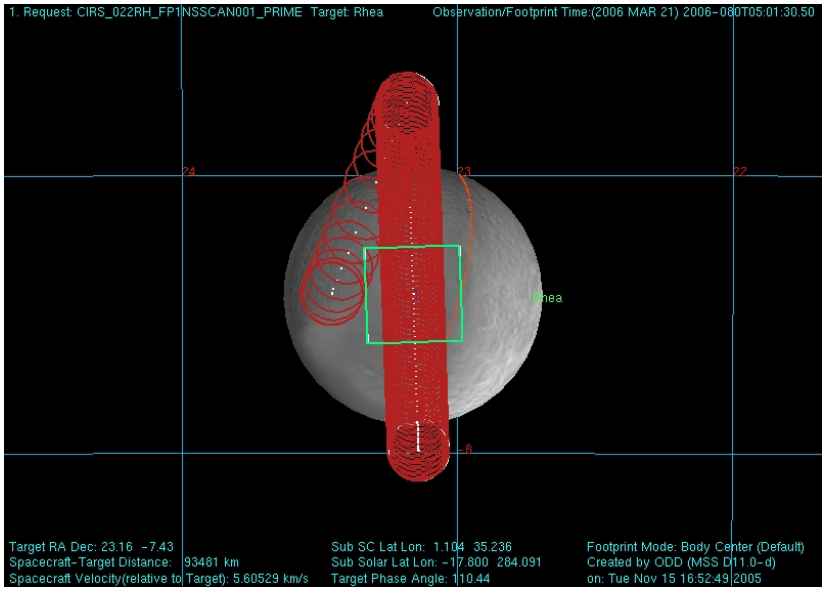
022RH_ICYLON006_ISS
2006-080T04:30
Alt= 97,087 km
Longitude= 29°W
Phase= 106.1°

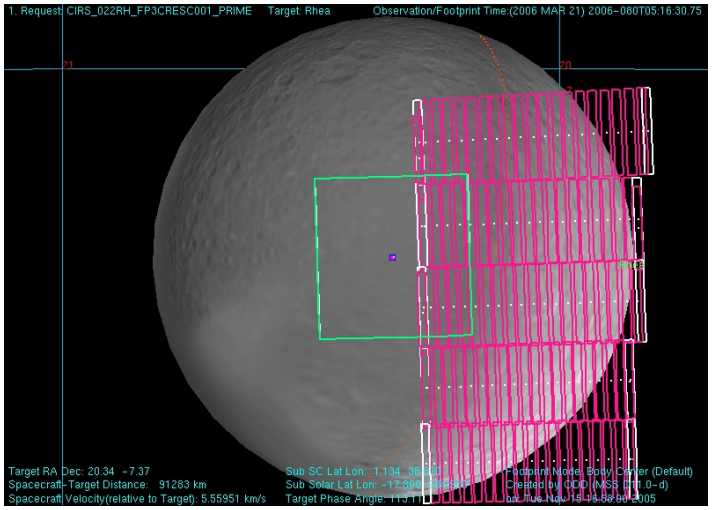




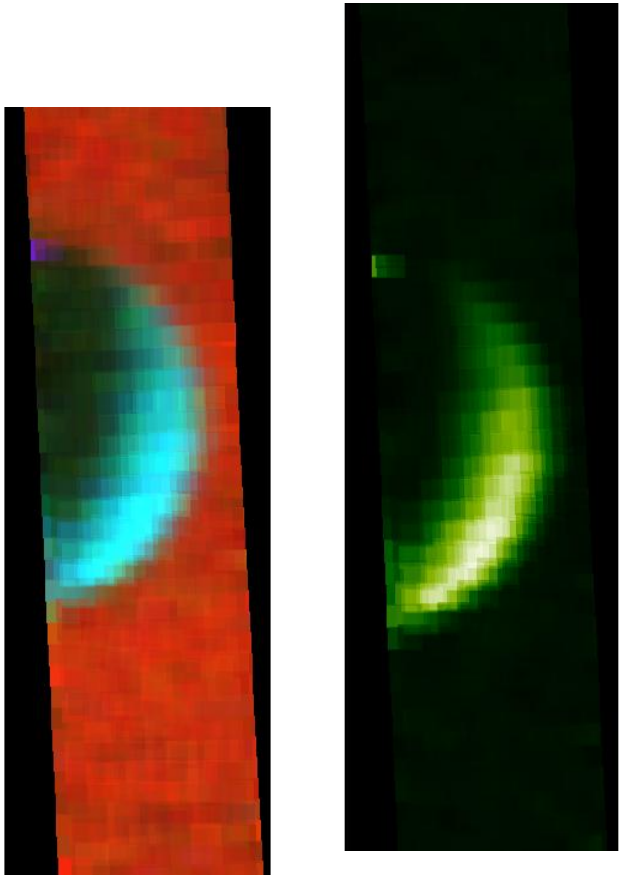
022RH_FP1NSSCAN001_CIRS;
022RH_FP3CRESC001_CIRS

3-part





022RH_ICYLON007_CIRS
2006-080T05:03
Alt= 91,410 km
Longitude= 37°W
Phase= 112°



022RH_REGGEOD001_ISS

022RH_ICYLON008_ISS

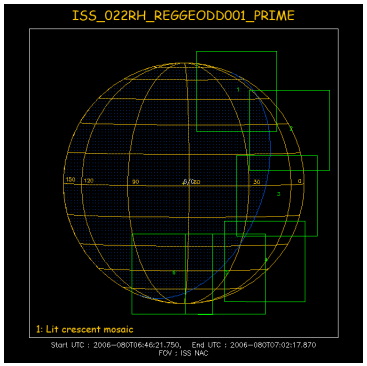
2006-080T06:45

Alt= 82,549 km

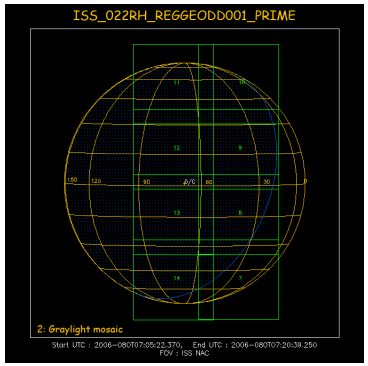
Longitude= 64°W

Phase= 131.4°

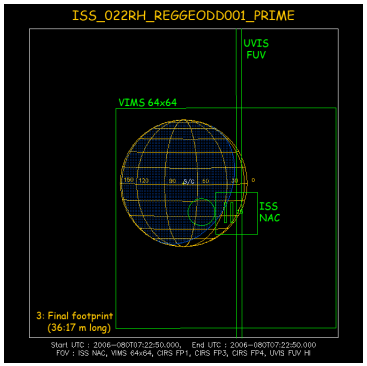
9-part



1



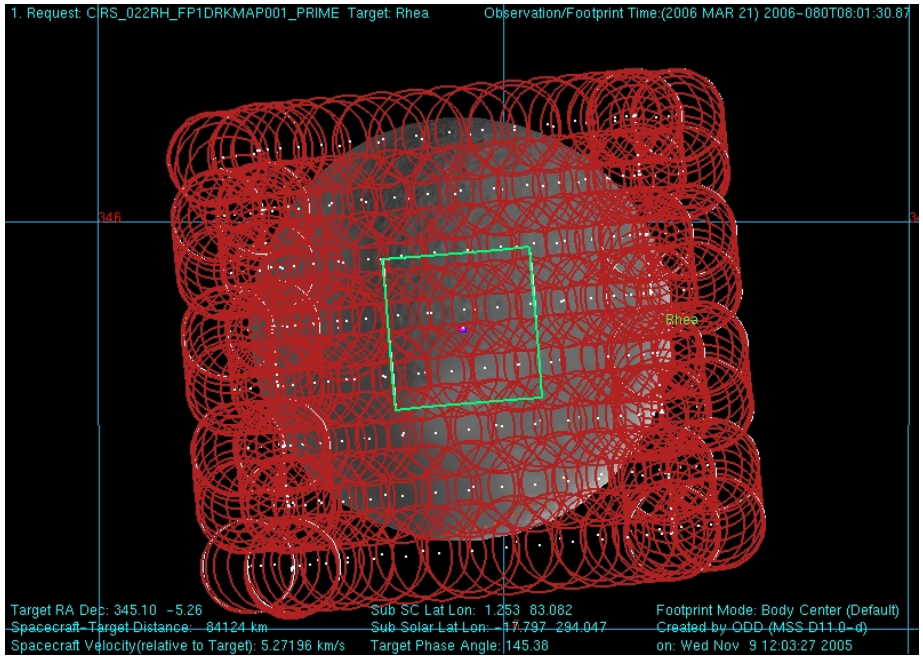
2



3

022RH_FP1DRKMAP001_CIRS

2-part



022RH_ICYLON009_CIRS

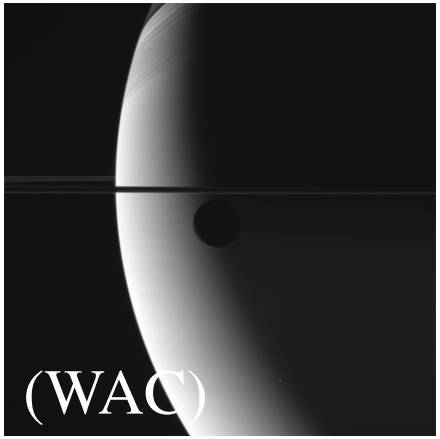
2006-080T08:00

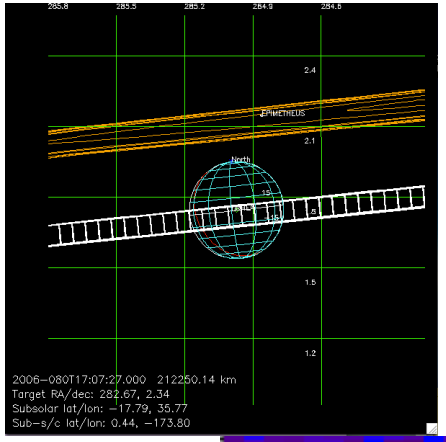
Alt= 83,554 km

Longitude= 84°W

Phase= 146.1°

022RH_PHOTOOPPS001_ISS

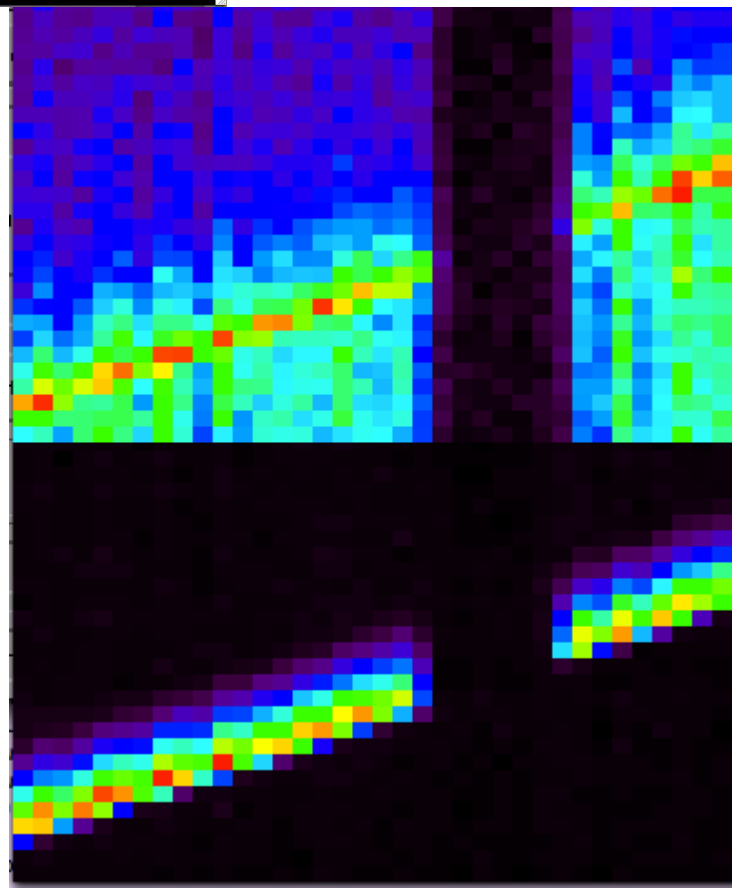




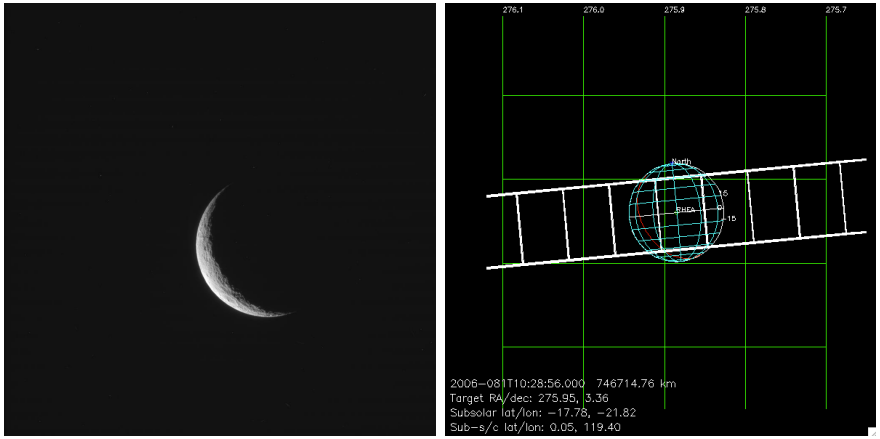
022RH_ICYLON010_ISS
2006-080T17:00
Alt= 213,315 km
Longitude= 174°W
Phase= 146°

Ly-a

Long waves



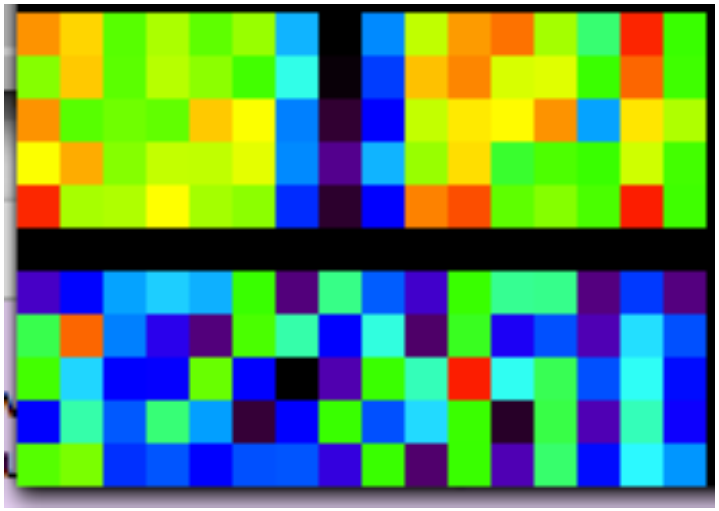
022RH_238W138PH001_ISS



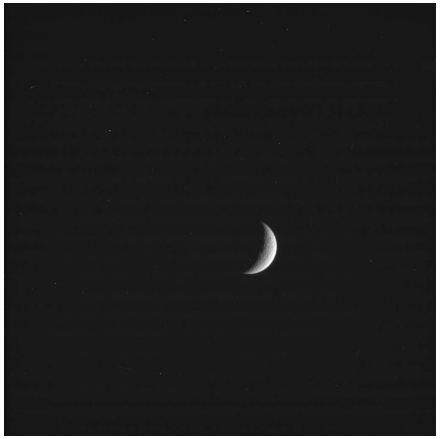
022RH_ICYLON011_ISS
2006-081T10:19
Alt= 743,029 km
Longitude= 240°W
Phase= 137.9°

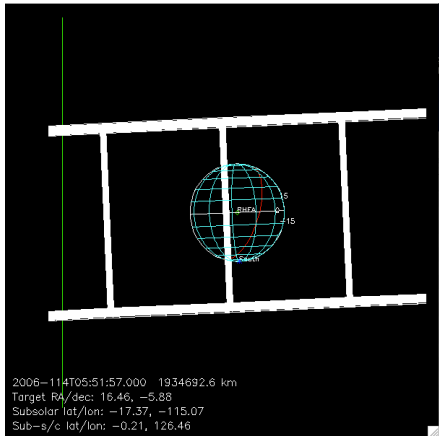
Ly-a

Long waves

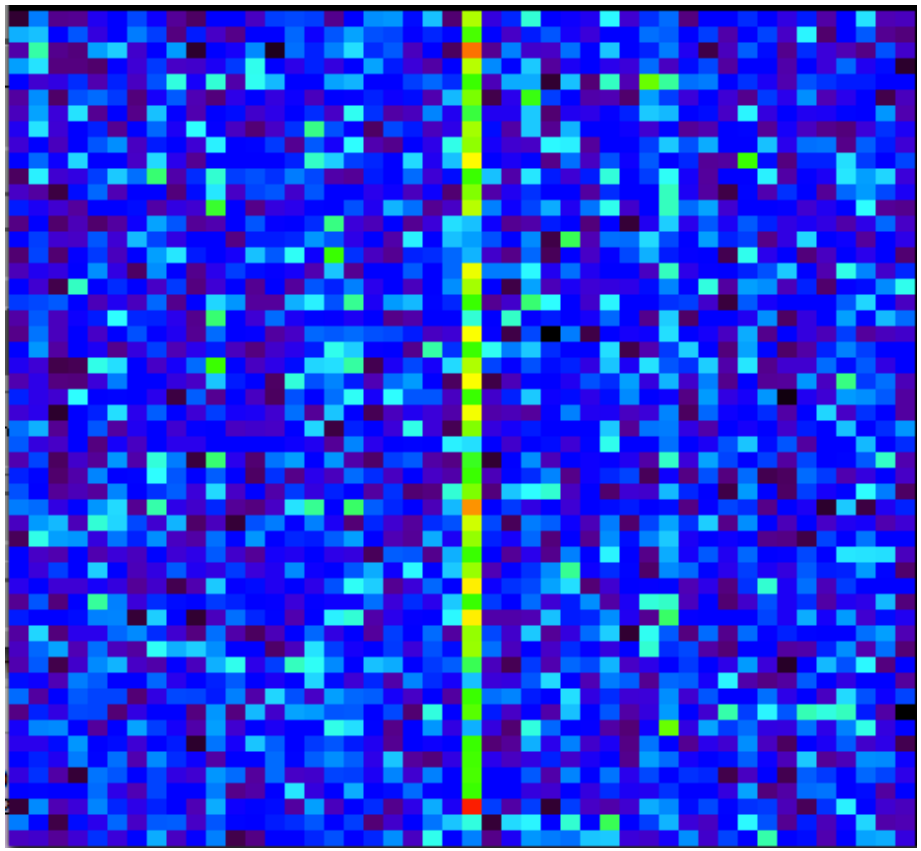


023RH_238W119PH001_ISS

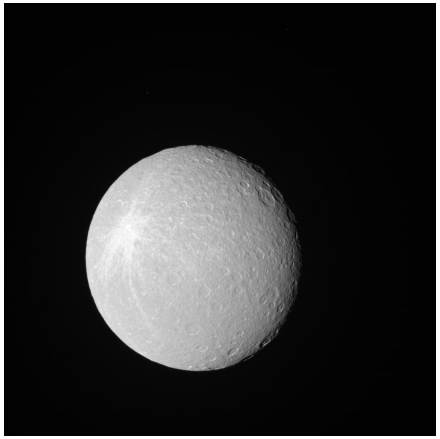


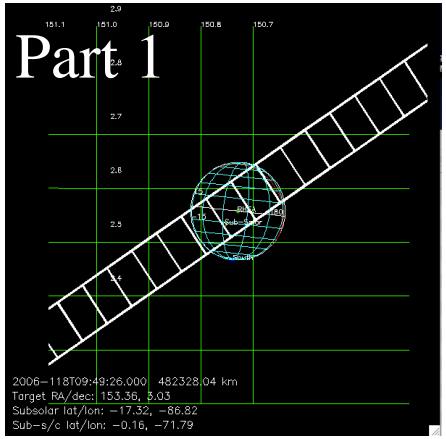


023RH_ICYLON066_ISS
2006-114T05:52
Alt= 1,934,668 km
Longitude= 234°W
Latitude=0.2°S
Phase= 117°



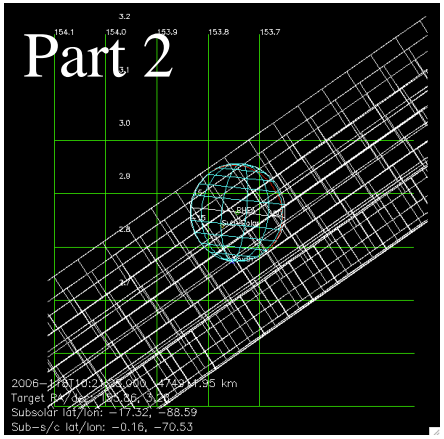
023RH_ORSRHCOL_ISS





2-part

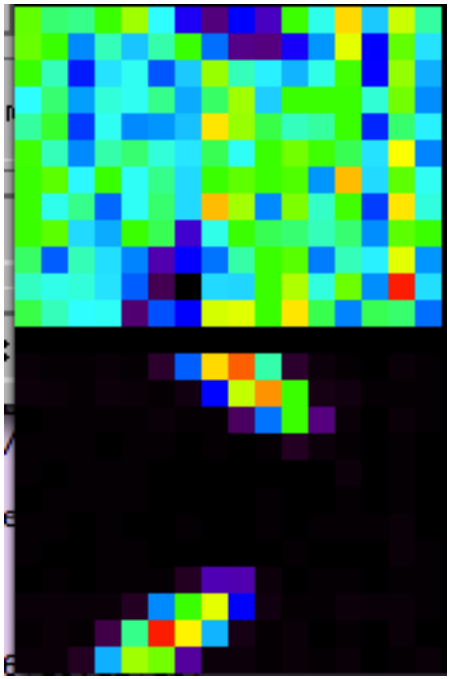
023RH_ICYLON067_ISS
2006-118T09:52
Alt= 479,855 km
Longitude= 71°W
Latitude=0.16°S
Phase= 23.1°



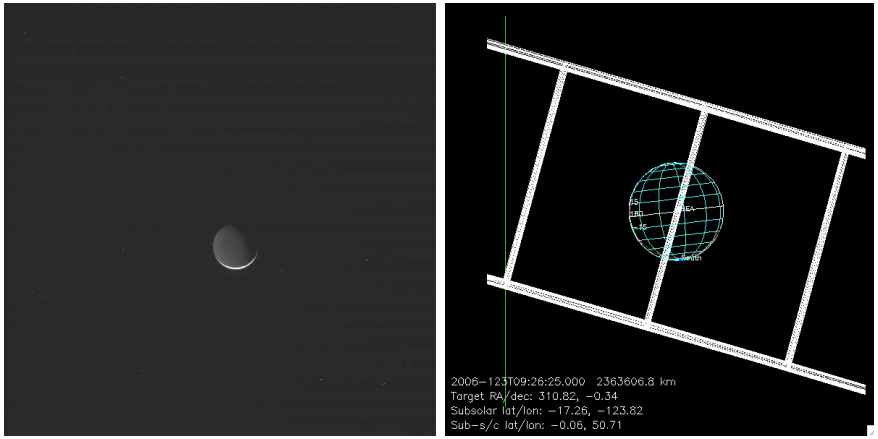
Part 2

Ly-a

Long waves



023RH_310W162PH001_ISS



023RH_ICYLON070_ISS

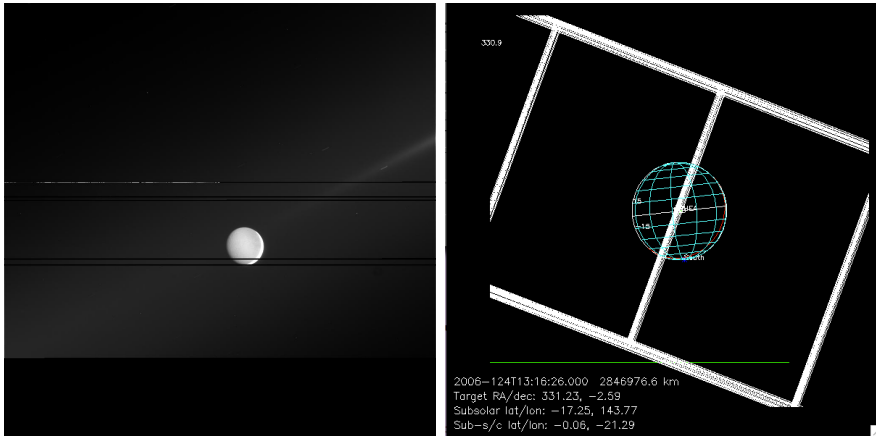
2006-123T09:27

Alt= 2,367,141 km

Longitude= 310°W

Phase= 161.9°

023RH_022W157PH001_ISS



023RH_ICYLON073_ISS

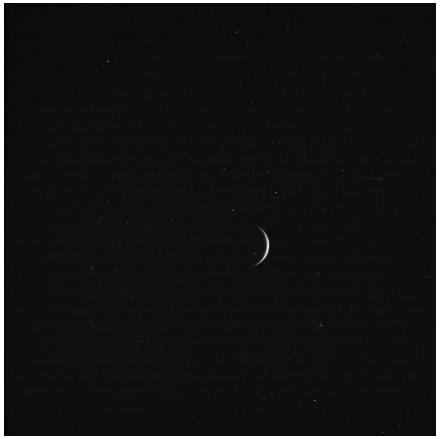
2006-124T13:17

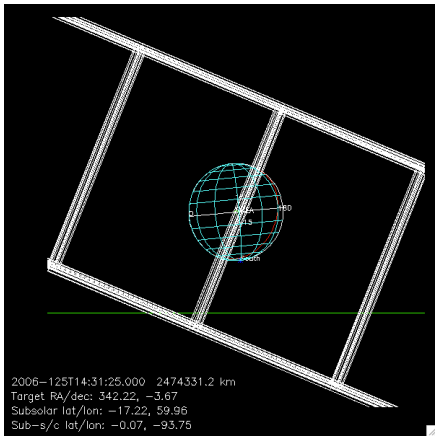
Alt= 2,845,913 km

Longitude= 22°W

Phase= 157.2°

023RH_094W149PH001_ISS





023RH_ICYLON075_ISS

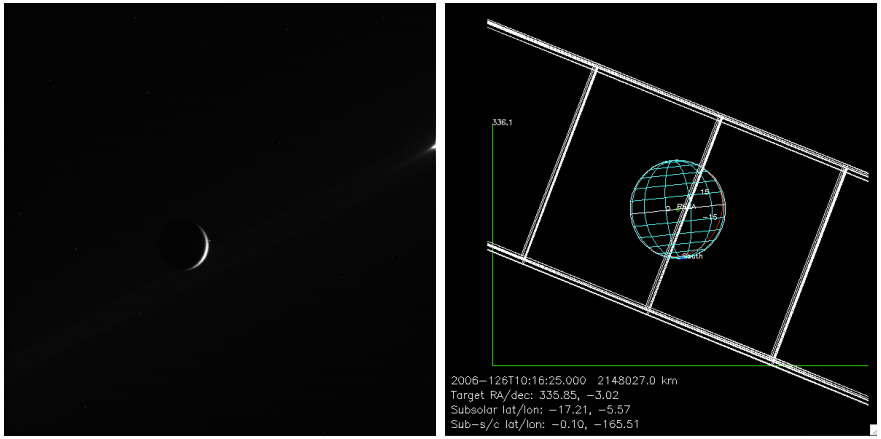
2006-125T14:32

Alt= 2,471,148 km

Longitude= 94°W

Phase= 148.9°

023RH_166W154PH001_ISS



023RH_ICYLON076_ISS

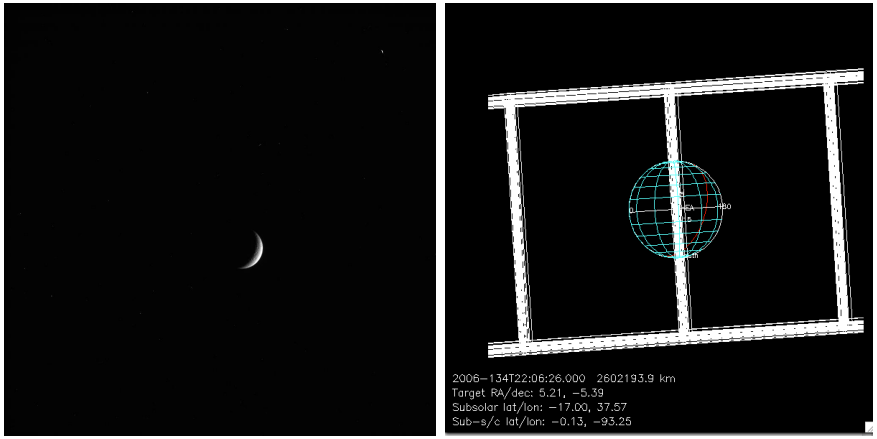
2006-126T10:17

Alt= 2,146,830 km

Longitude= 166°W

Phase= 153.8°

023RH_094W129PH001_ISS



024RH_ICYLON068_ISS

2006-134T22:07

Alt= 2,597,350 km

Longitude= 94°W

Phase= 128.9°

024RH_RHEA001_VIMS

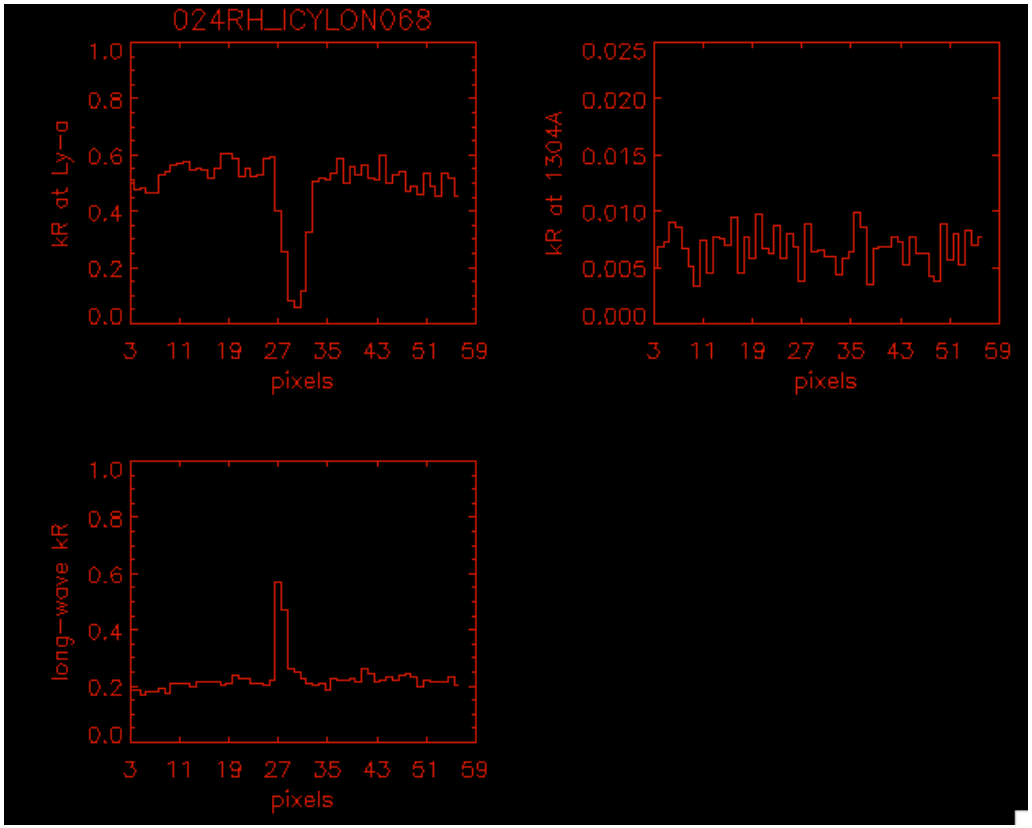
024RH_ICYLON068_VIMS

2006-142T02:53

Alt= 263,685 km

Longitude= 317°W

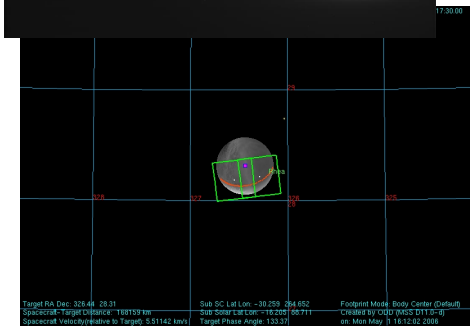
Phase= 138.2°

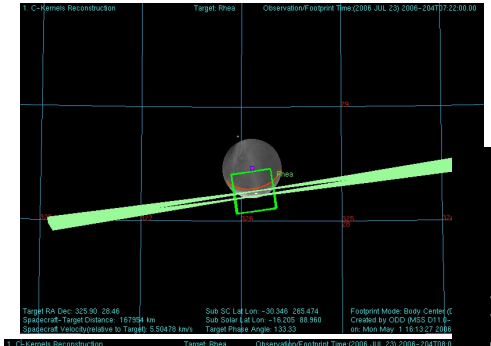


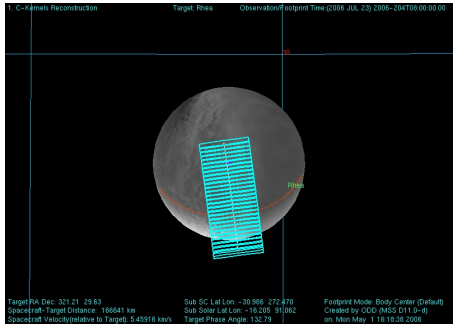
026RH_RHEA001_VIMS

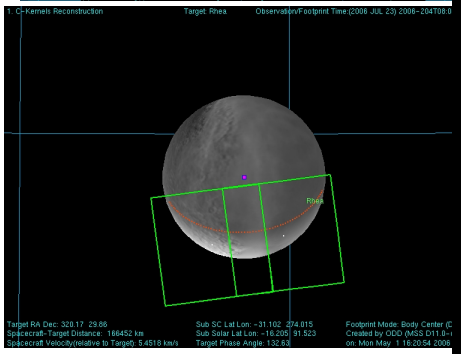
3-part

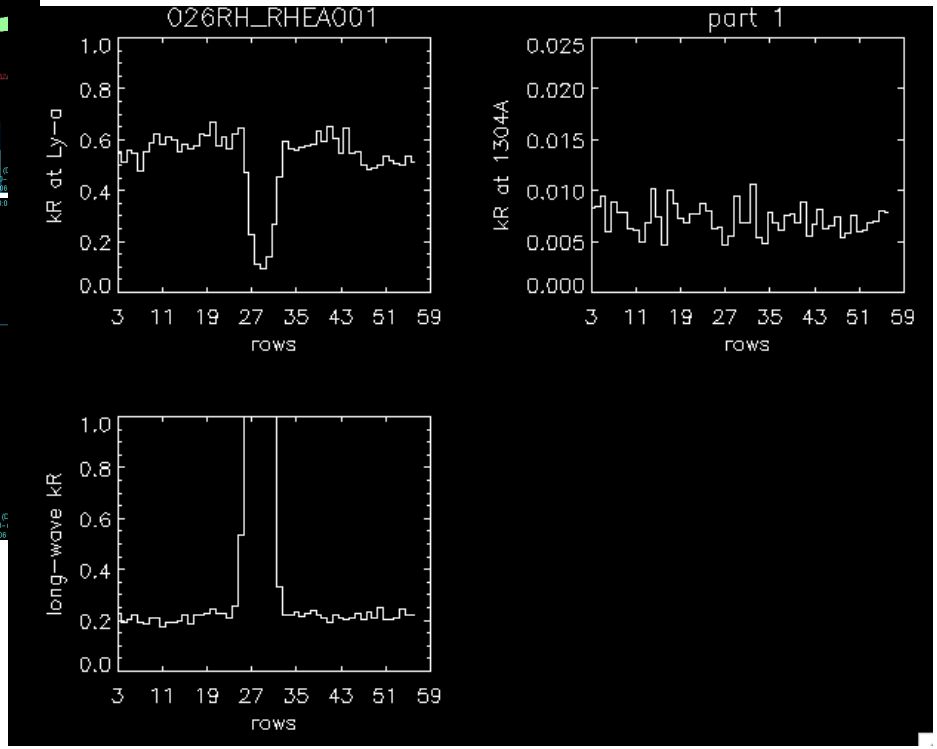
026RH_RHEA001_VIMS
2006-204T07:23
Alt= 167,151 km
Longitude= 266°W
Phase= 133.3°





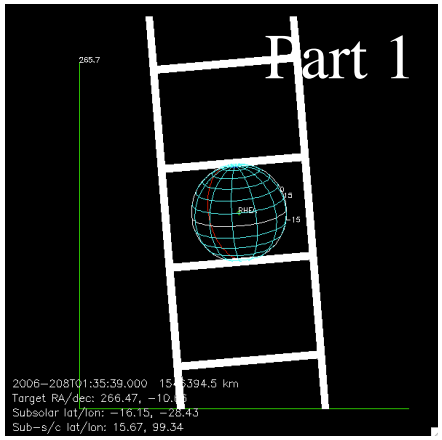


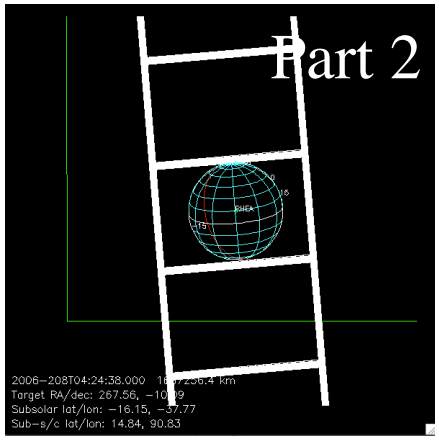




2-part

026RH_STARE001_PRIME
2006-208T01:36
Alt= 1,599,318 km
Longitude= 265°W
Latitude=15°N
Phase= 130°





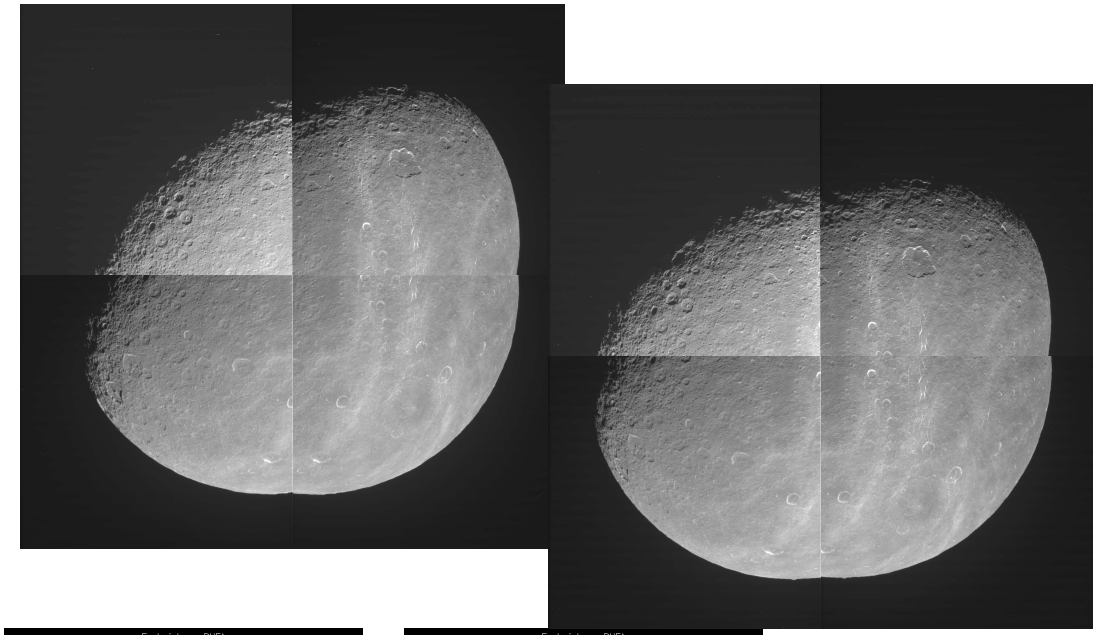
027RH_REGGEODA001_ISS 16-part 027RH_REGGEODA001_ISS

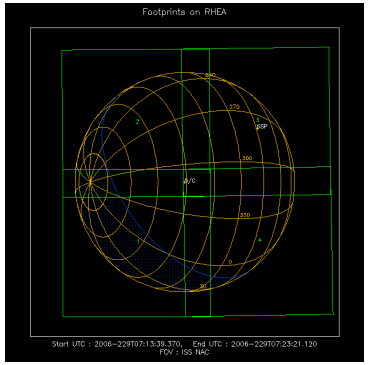
2006-229T07:16

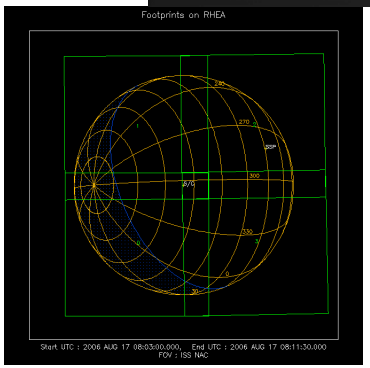
Alt= 166,761 km

Longitude= 310°W

Phase= 55.3°







032RH_ICYLON001_VIMS

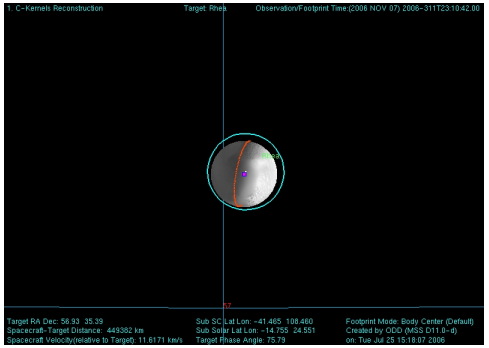
3-part

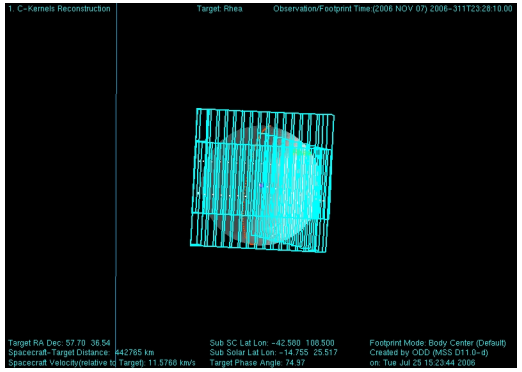
2006-312T00:51

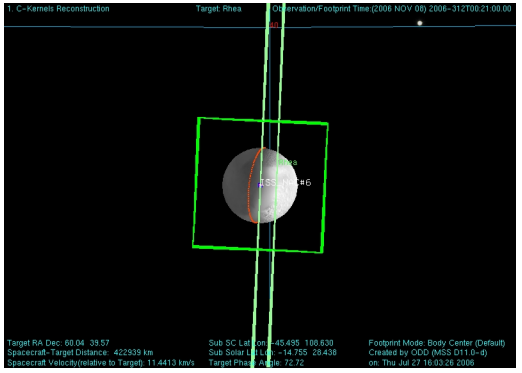
Alt= 410,636 km

Longitude= 108°W

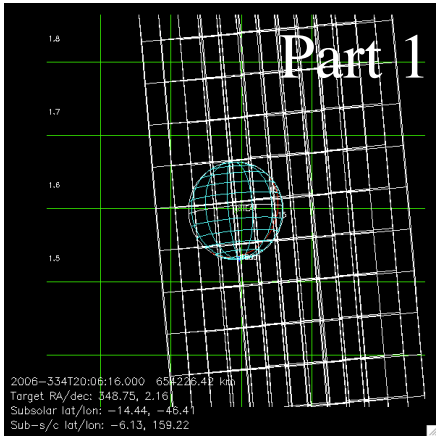
Phase= 71°







CIRS_034RH_ORS001_PRIME



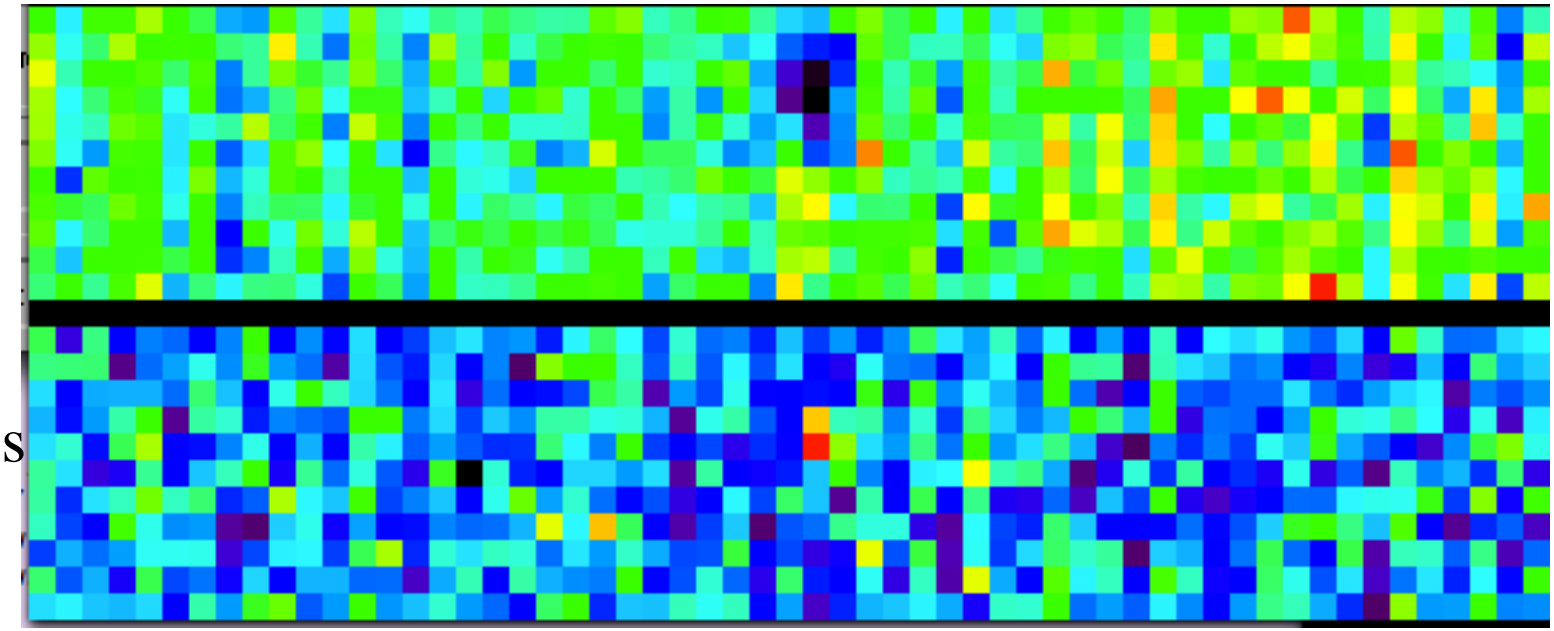
4-part

034RH_ICYLON001_CIRS
2006-334T20:00
Alt= 652,953 km
Longitude= 200°W
Phase= 147°

Part 1

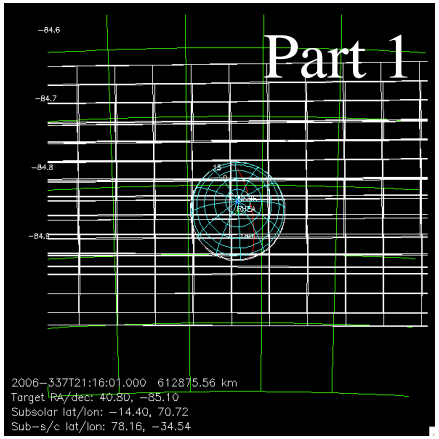
Ly-a

Long waves



VIMS_034RH_RHEA002_PRIME

034RH_ICYLON002_VIMS



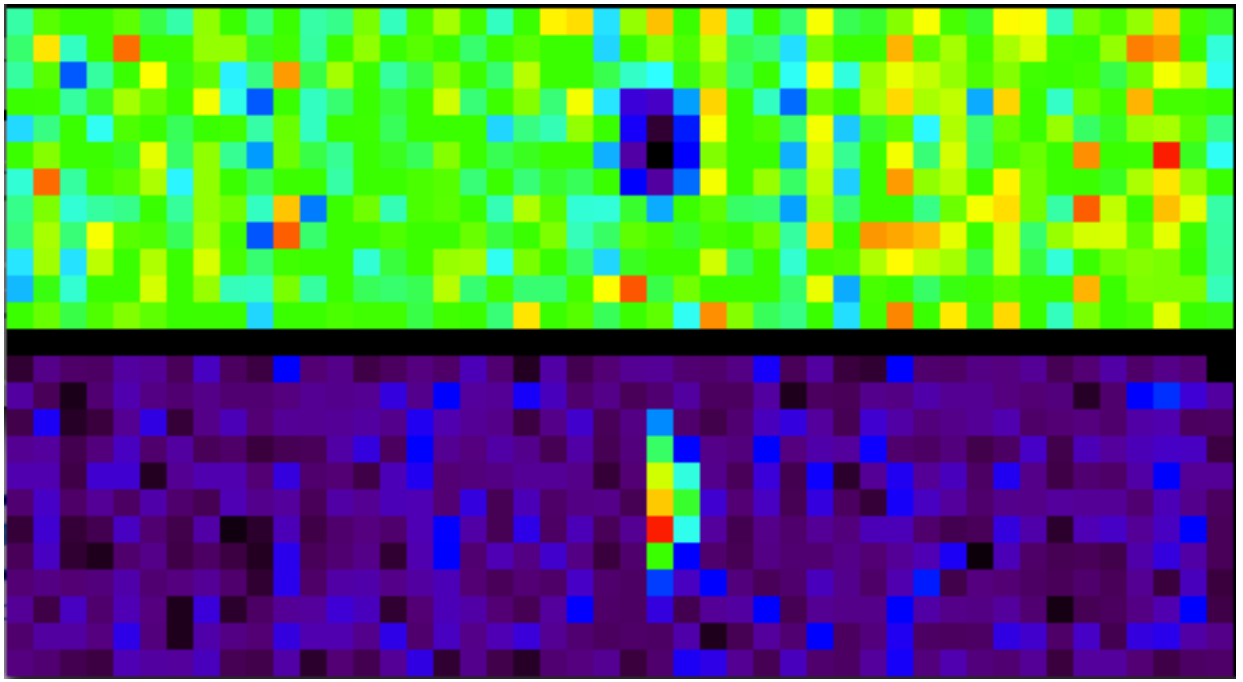
3-part

2006-337T21:00
Alt= 608,642 km
Longitude= 29°W
Phase= 106°

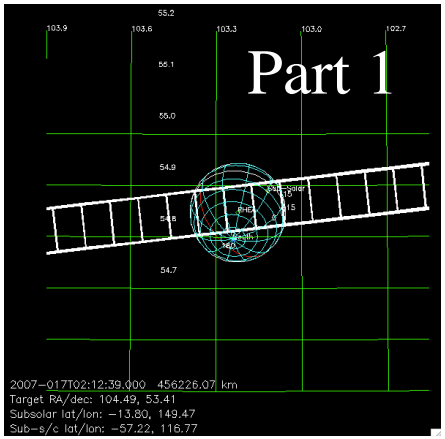
Part 1

Ly-a

Long waves



VIMS_037RH_RHEA002_PRIME



3-part

037RH_ICYLON001_VIMS

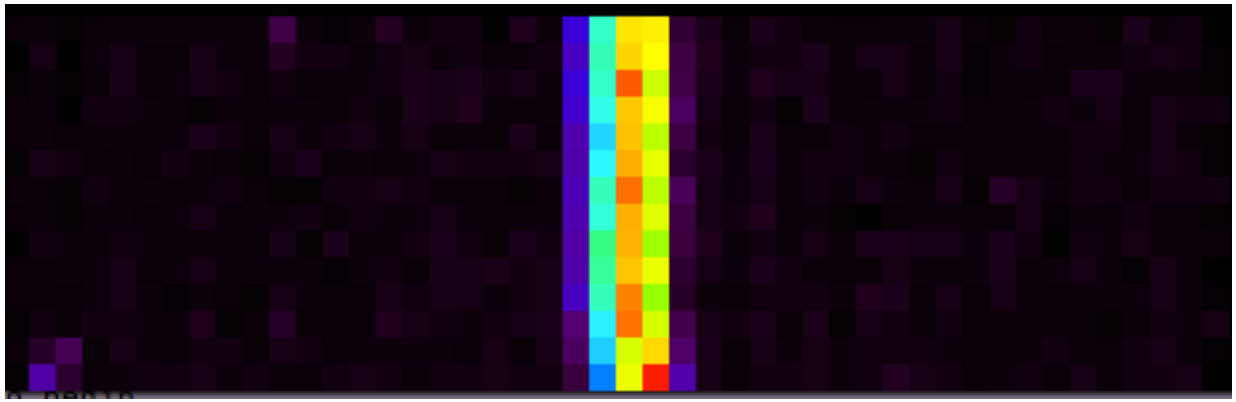
2007-017T02:00

Alt= 456,337 km

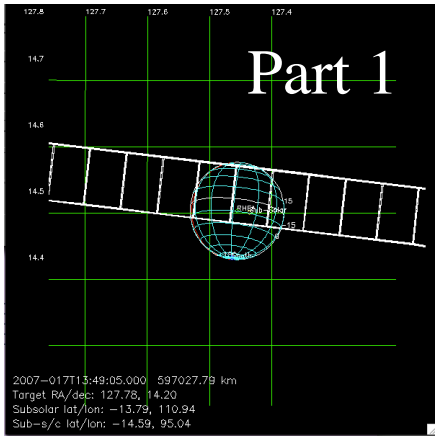
Longitude= 243°W

Phase= 57°

Part 1



VIMS_037RH_RHEA003_PRIME



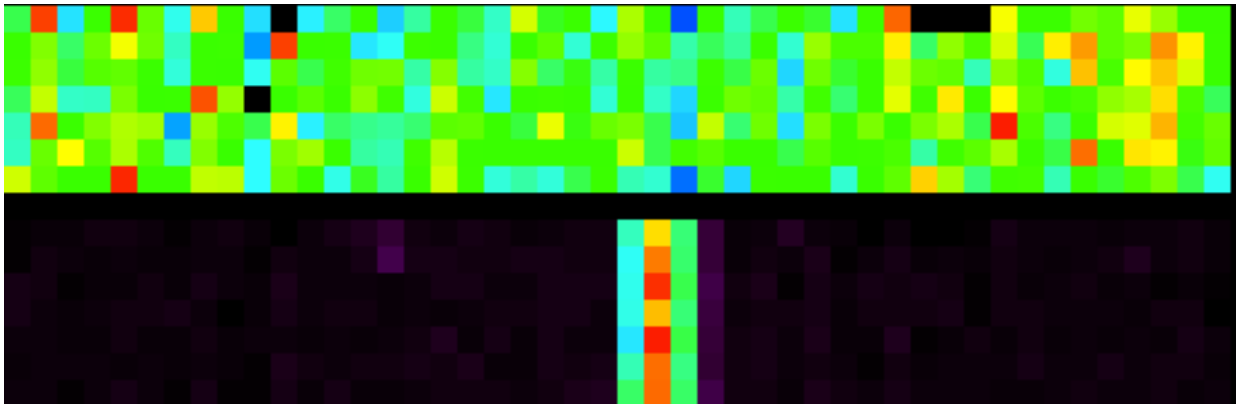
5-part

037RH_ICYLON002_VIMS
2007-017T13:00
Alt= 578,840 km
Longitude= 263°W
Phase= 17°

Part 1

Ly-a

Long waves



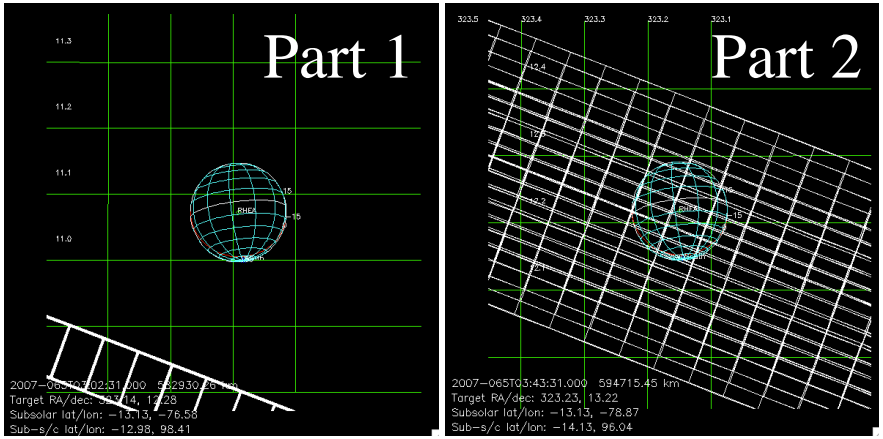
3-part 040RH_ICYLON001_CIRS

2007-065T03:03

Alt= 583,233 km

Longitude= 262°W

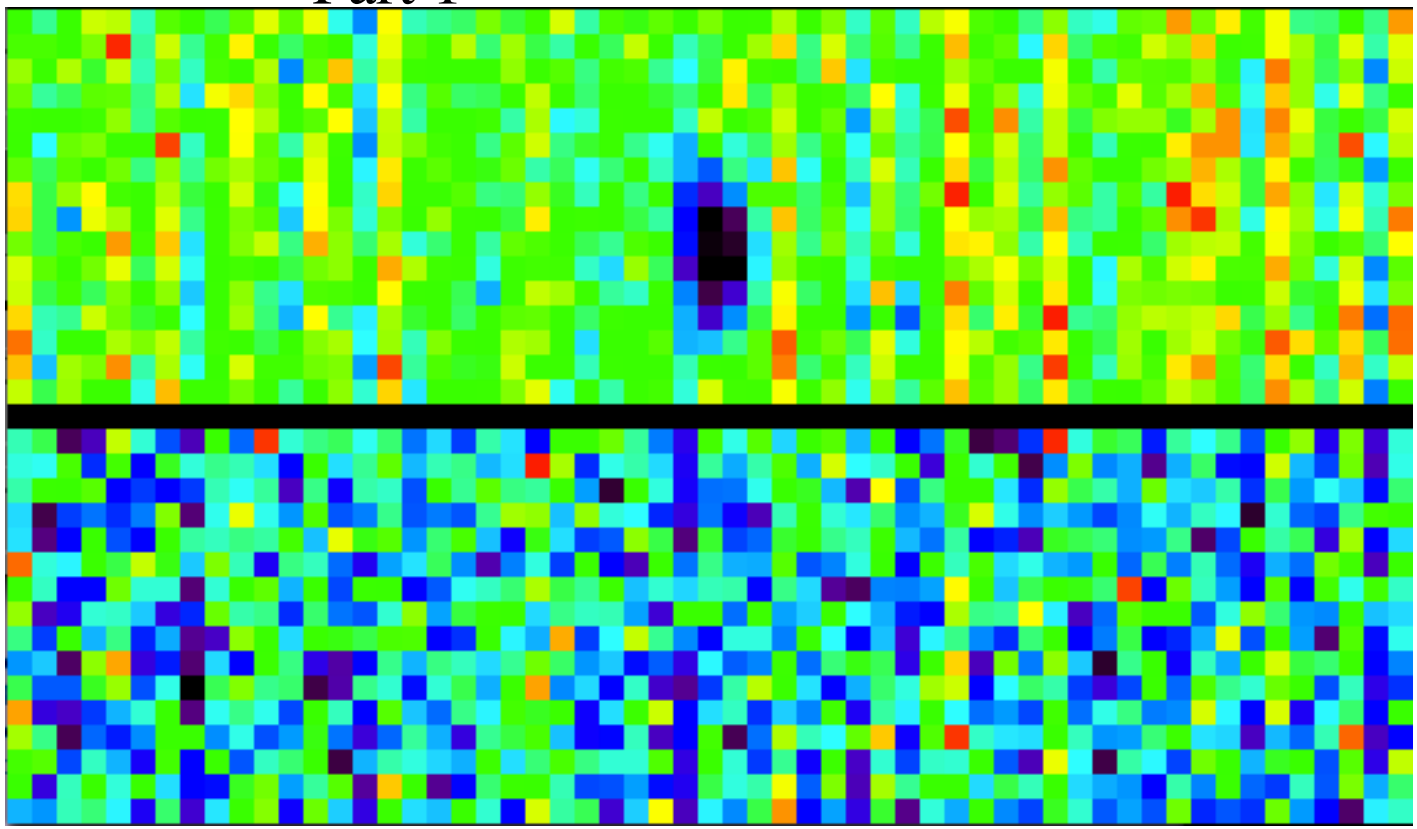
Phase= 153.4°



Part 1

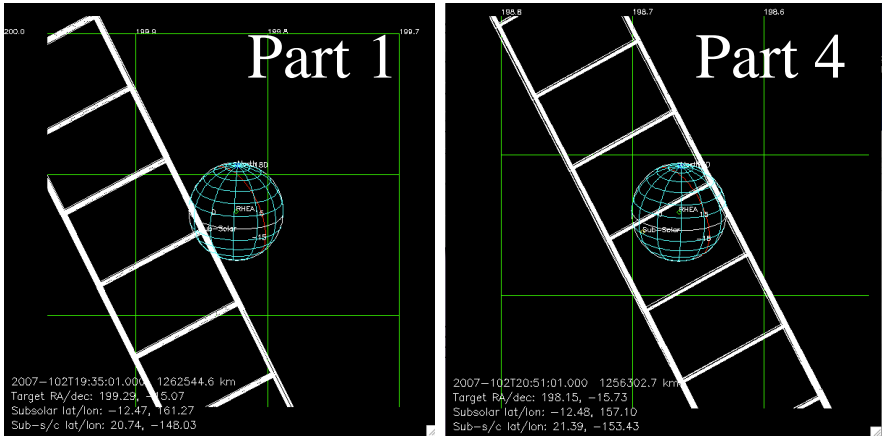
Ly-a

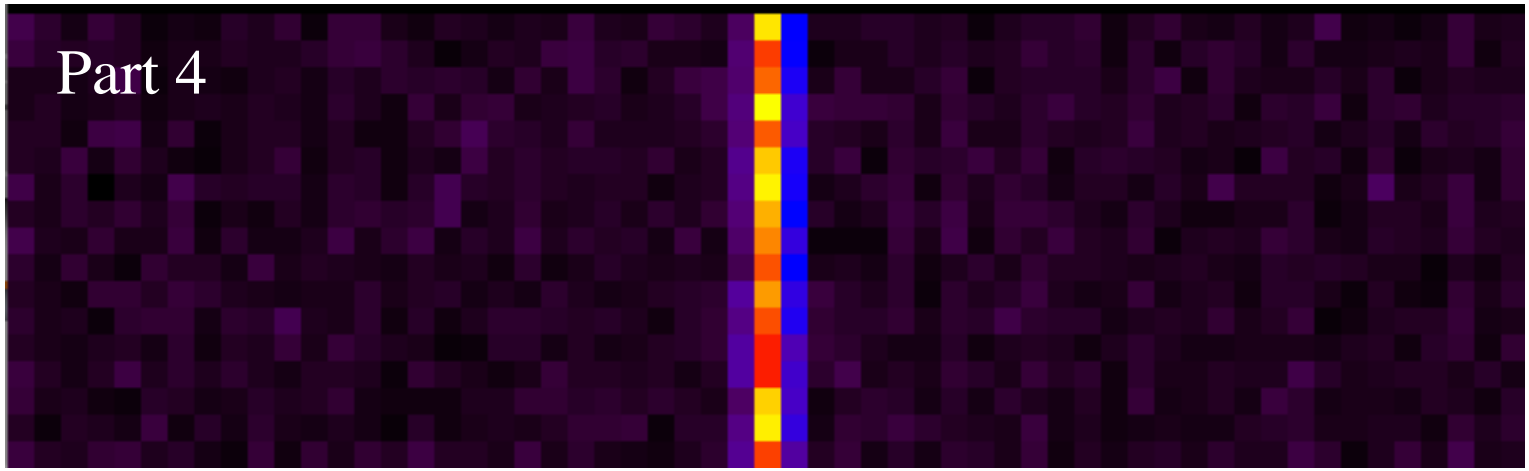
Long waves



4-part

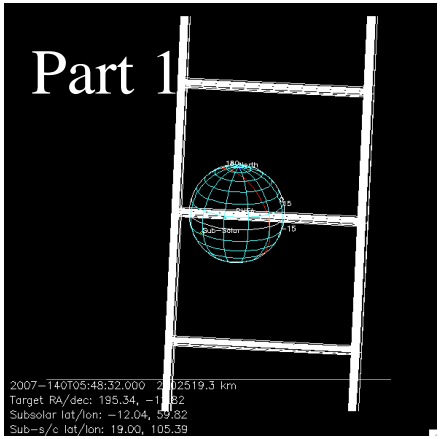
042RH_ICYLON001_CIRS
2007-102T19:36
Alt= 1,261,648 km
Longitude= 148°W
Phase= 60.4°

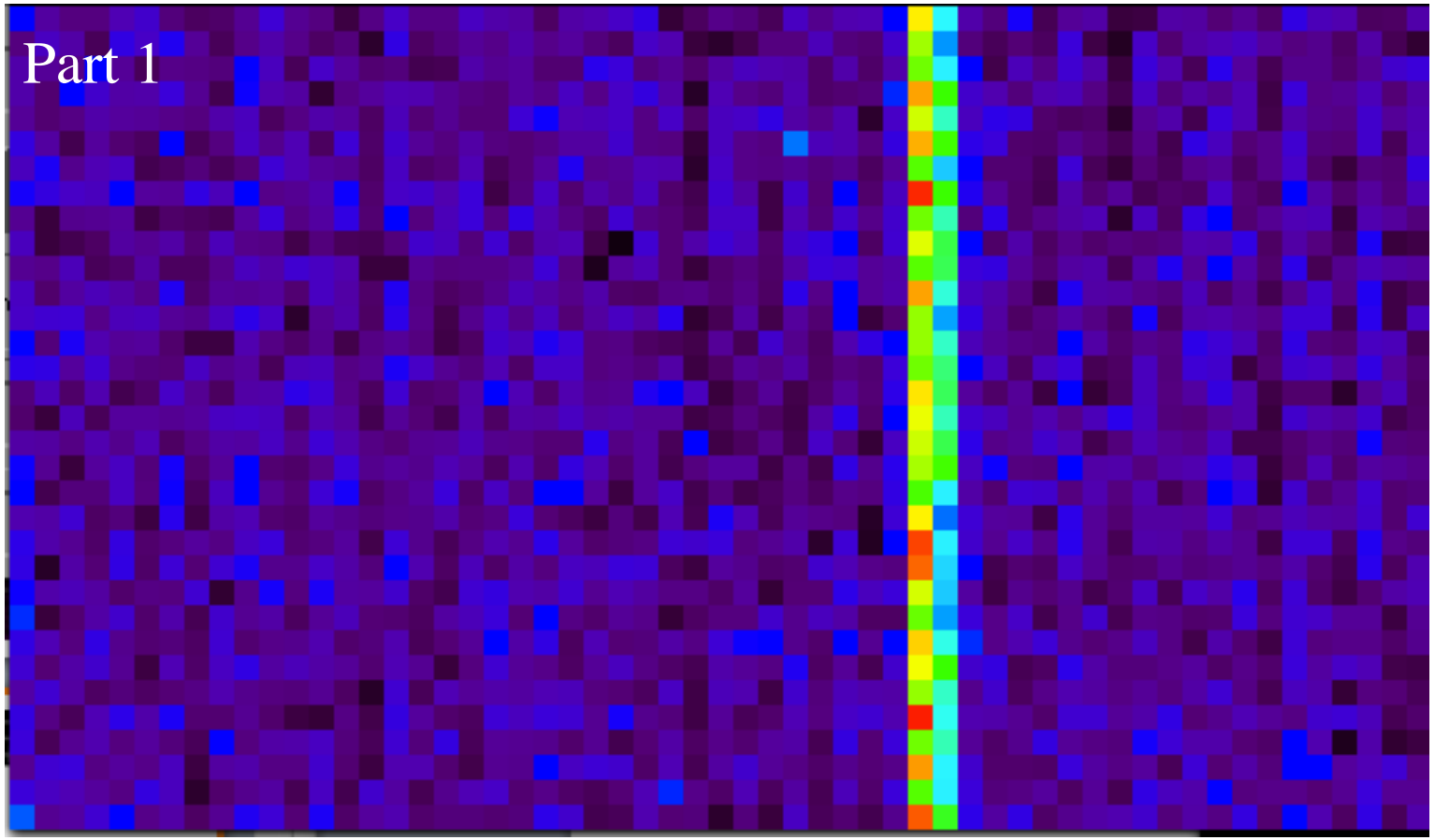




22-part

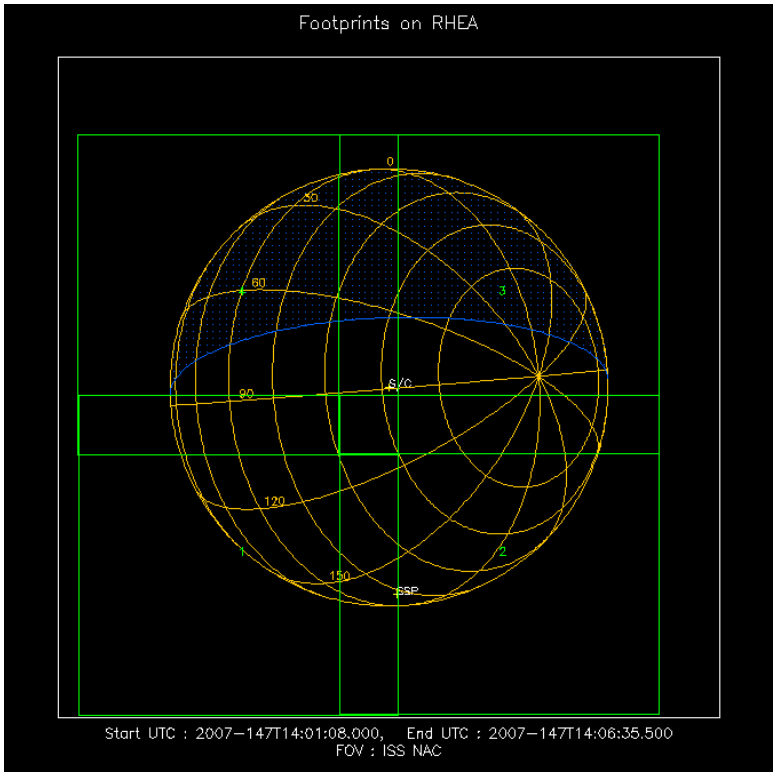
045RH_STARE001_PRIME
2007-140T05:49
Alt=2,015,036 km
Longitude= 256°W
Latitude=19°N
Phase= 55°



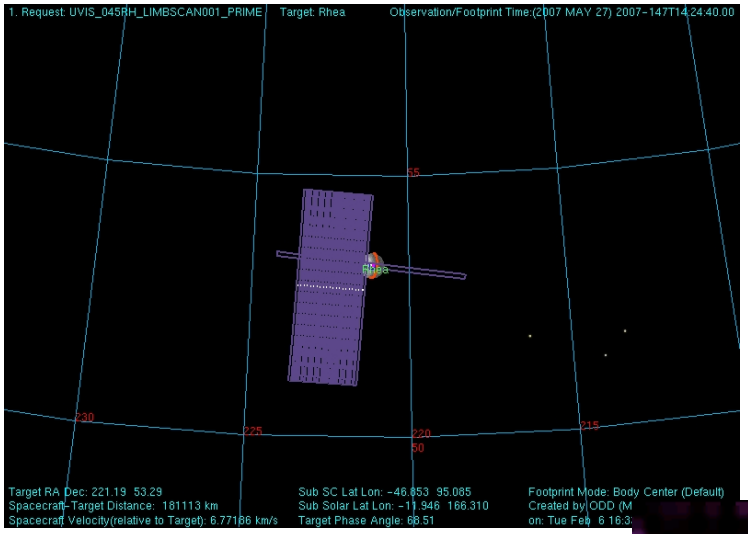


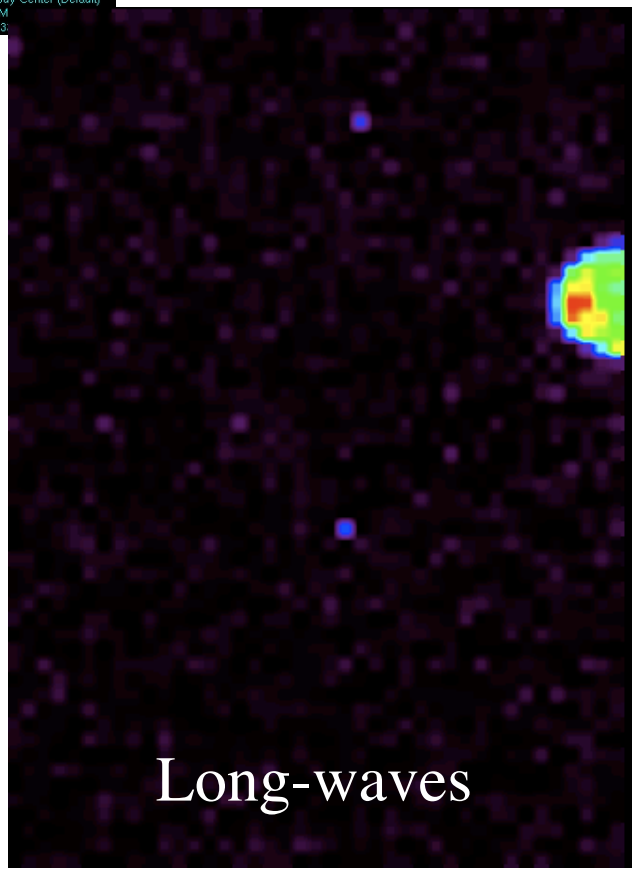
ISS_045RH_REGGEOD001_PRIME

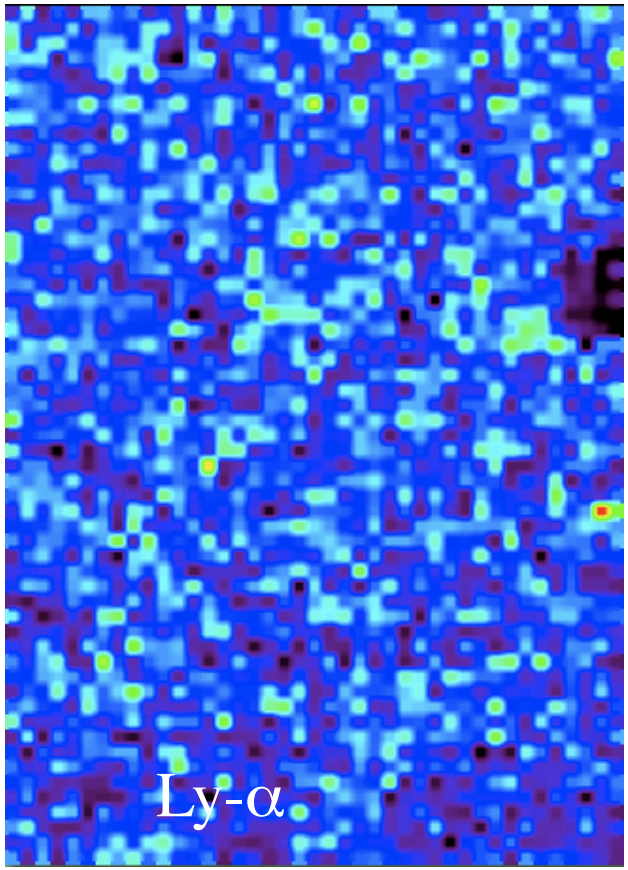
045RH_ICYLON001_ISS
2007-147T14:03
Alt= 180,546 km
Longitude= 89°W
Phase= 71.8°



045RH_LIMBSCAN001_PRIME
2007-147T14:25
Alt= 178,981 km
Longitude= 94°W
Phase= 69.0°

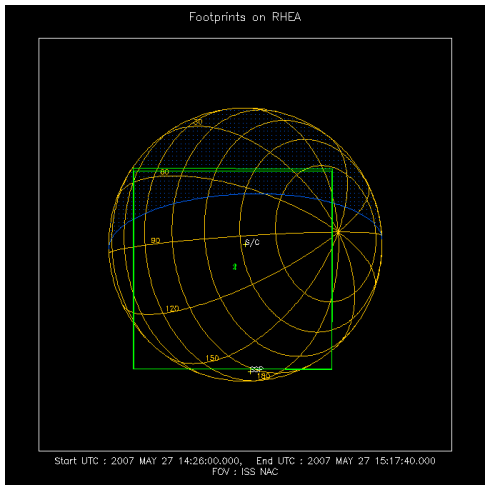


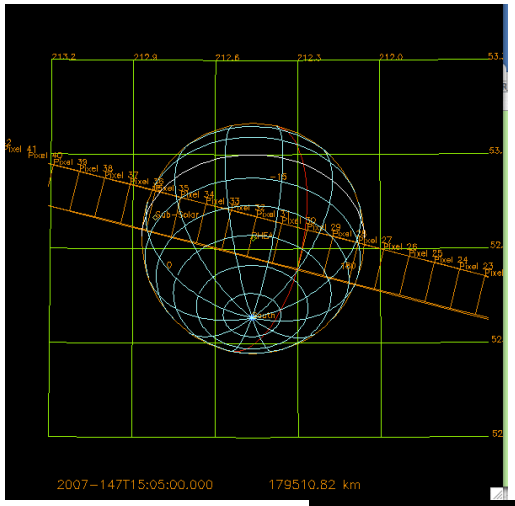


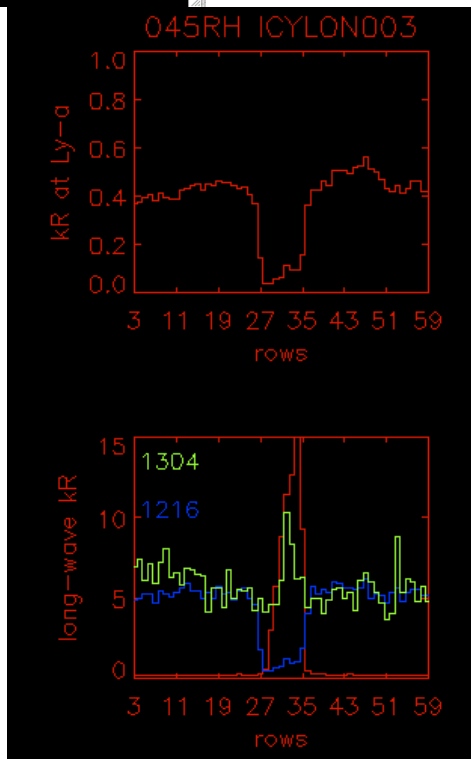


VIMS_045RH_RHEA001_PRIME

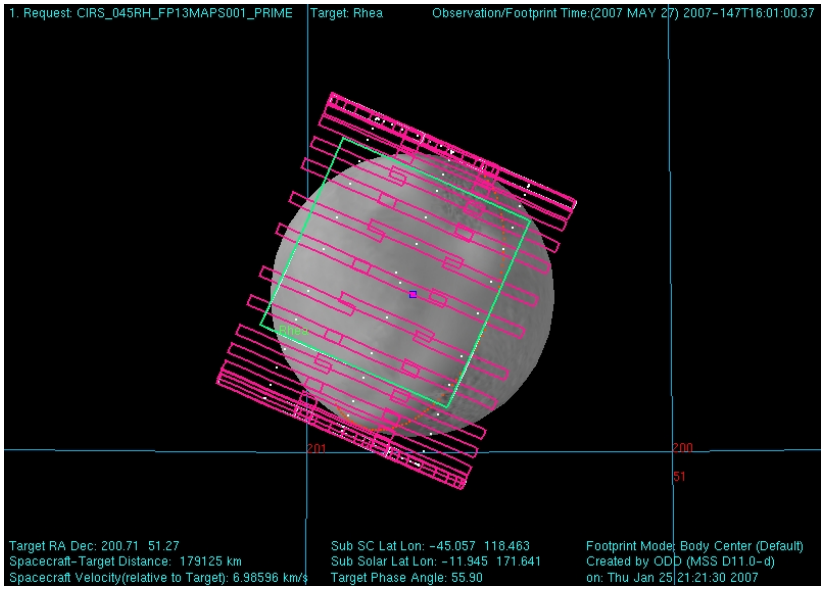
045RH_ICYLON003_VIMS
2007-147T15:06
Alt= 177,073 km
Longitude= 104°W
Phase= 63.7°





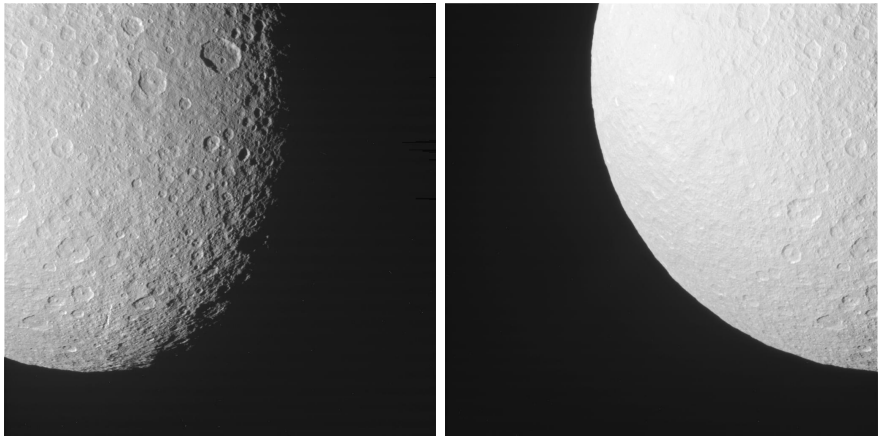


CIRS_045RH_FP13MAPS001_PRIME



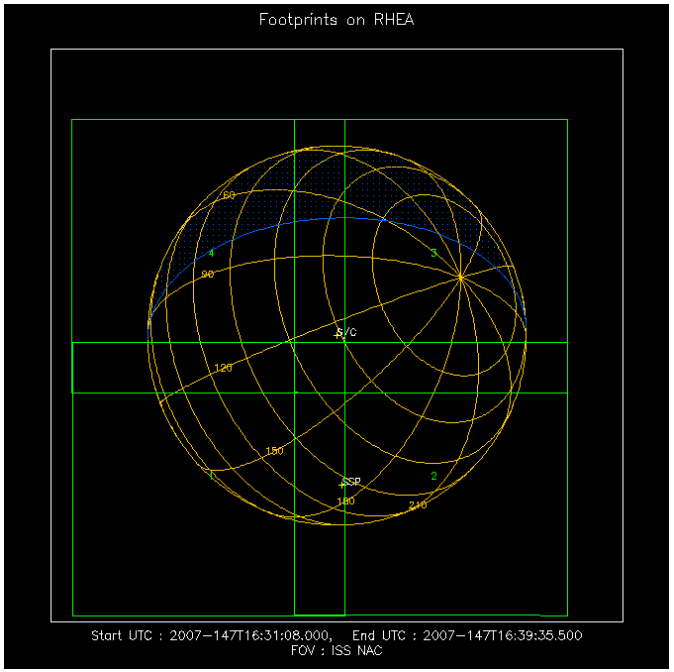
045RH_ICYLON004_CIRS
2007-147T16:03
Alt= 176,811 km
Longitude= 118°W
Phase=56°

ISS_045RH_REGMAP001_PRIME



5-part

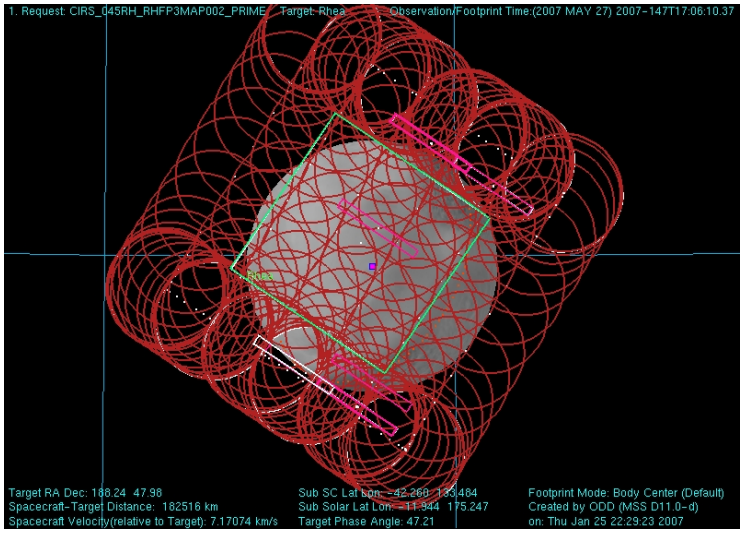
045RH_ICYLON005_ISS
2007-147T16:33
Alt= 177,870 km
Longitude= 125°W
Phase= 51.9°



CIRS_045RH_RHFP3MAP002_PRIME

045RH_ICYLON005_CIRS
2007-147T17:03
Alt= 179,810 km
Longitude= 132°W
Phase= 47.9°

2-part



VIMS_045RH_RHEA006_PRIME

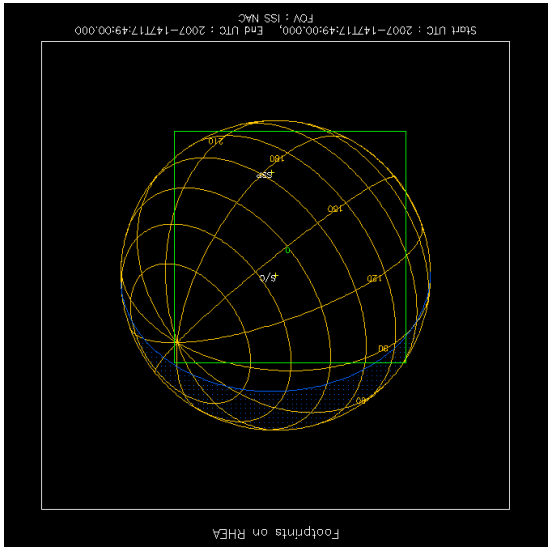
045RH_ICYLON005_VIMS

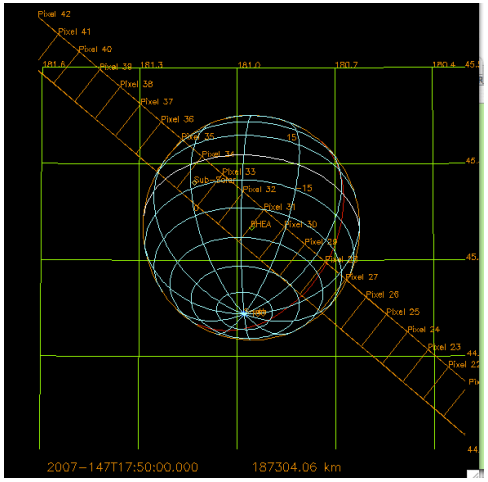
2007-147T17:51

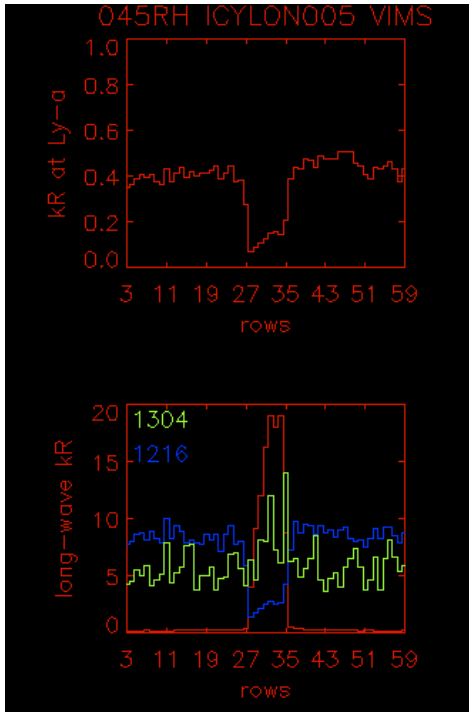
Alt= 184,778 km

Longitude= 142°W

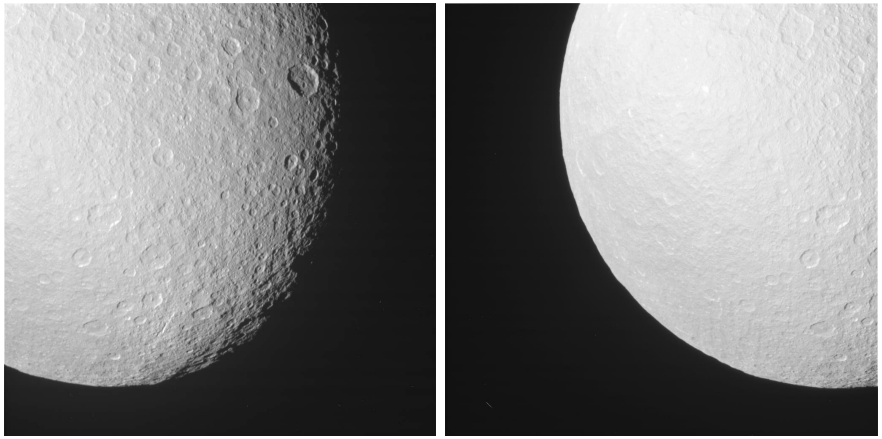
Phase= 41.6°





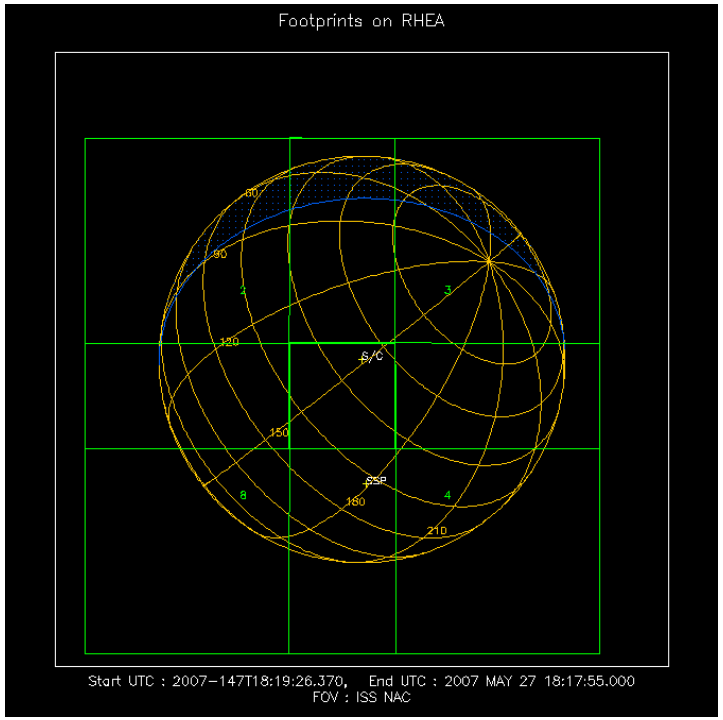


ISS_045RH_REGGEOD002_PRIME



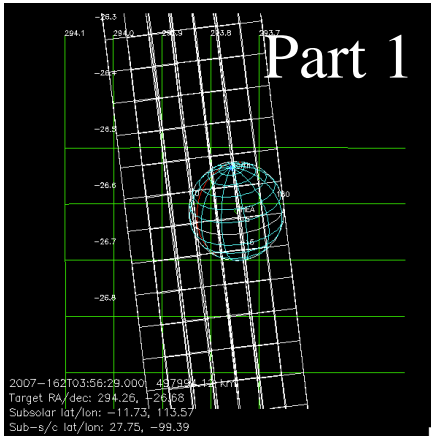
4-part

045RH_ICYLON006_ISS
2007-147T18:17
Alt= 188,434 km
Longitude= 148°W
Phase= 38.2°



2-part

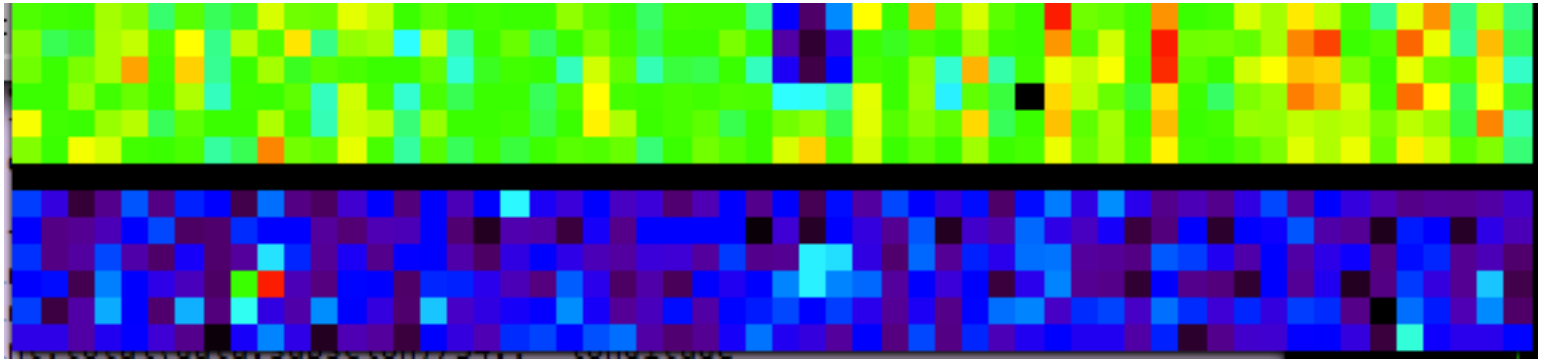
046RH_ICYLON001_CIRS
2007-162T03:57
Alt= 493,062 km
Longitude= 101°W
Phase=144.1°



Part 1

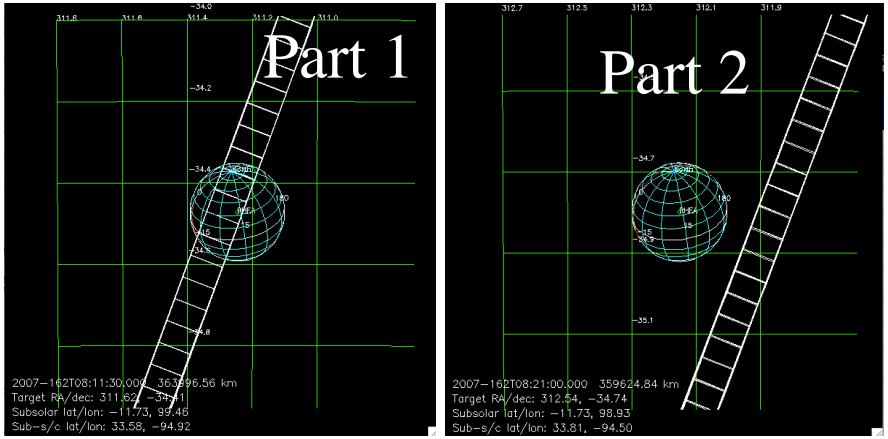
Ly-a

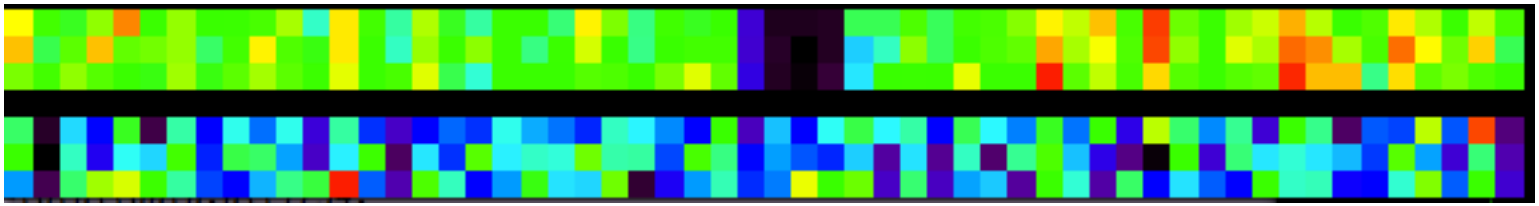
Long waves



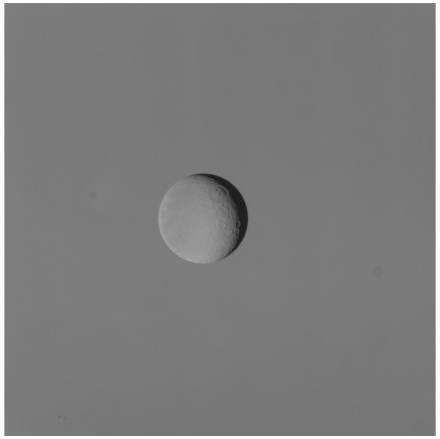
2-part

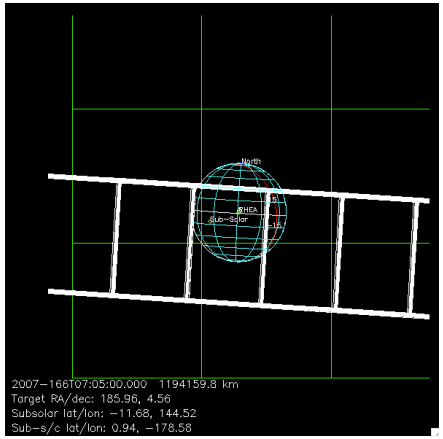
046RH_ICYLON002_CIRS
2007-162T08:12
Alt= 358,184 km
Longitude= 97°W
Phase= 153.2°

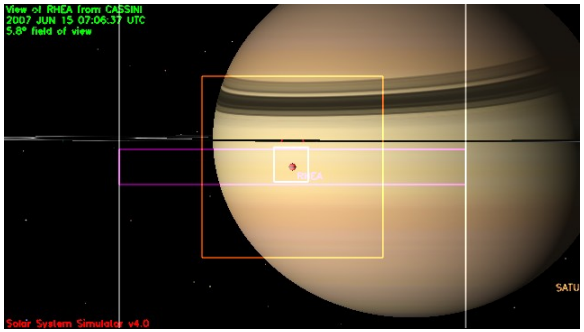




046RH_LIMB270L001_PRIME







046RH_ICYLON001_ISS

2007-166T07:06

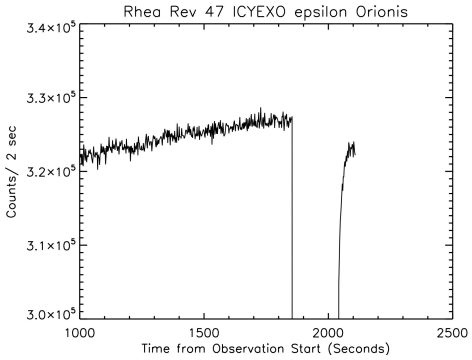
Alt= 1,194,398 km

Longitude= 179°W

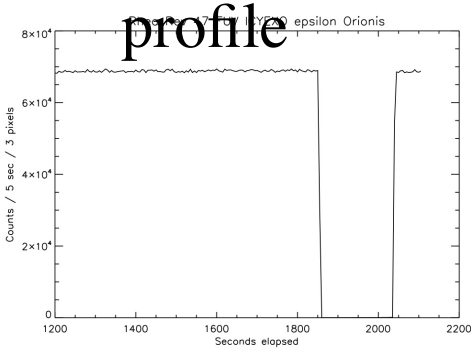
Phase= 38.6°

UVIS_047RH_ICYEXO001_PRIME
2007-179T13:45
Ingress lat/lon: 1.7 / 351.1
Egress lat/lon: 8.1 / 171.87
Star: epsilon Orionis

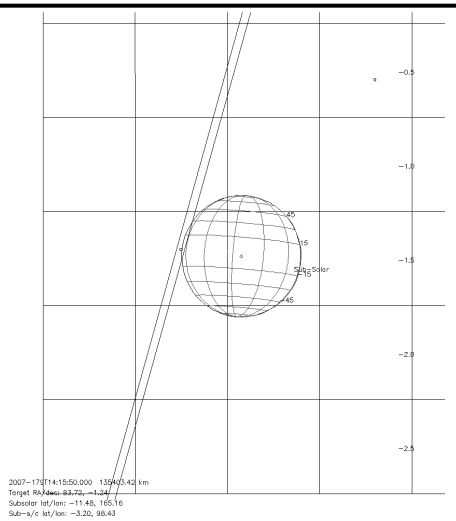
HSP



FUV profile

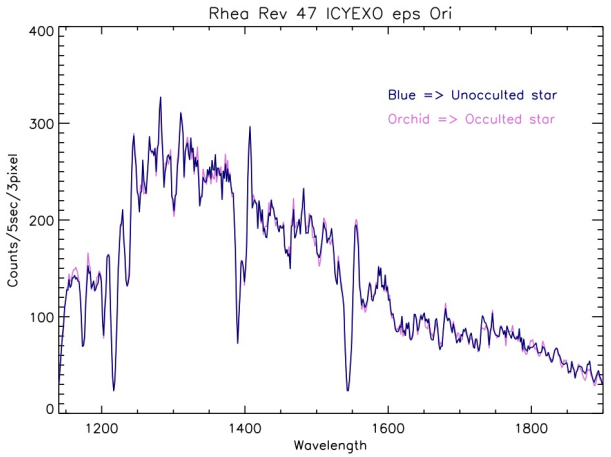


Summed over wavelength

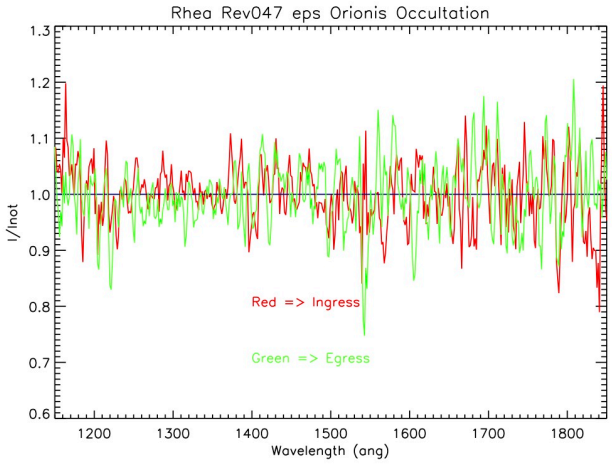


Ingress

Spectra of I, I_0 (counts per integration period vs wavelength)

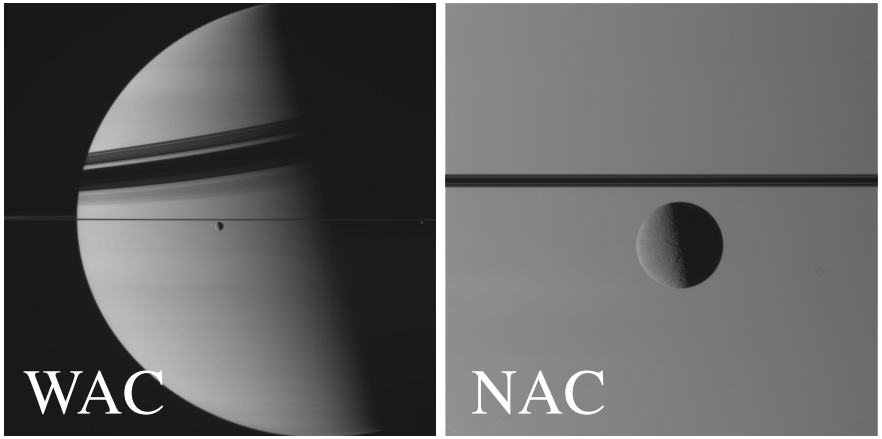


Ingress



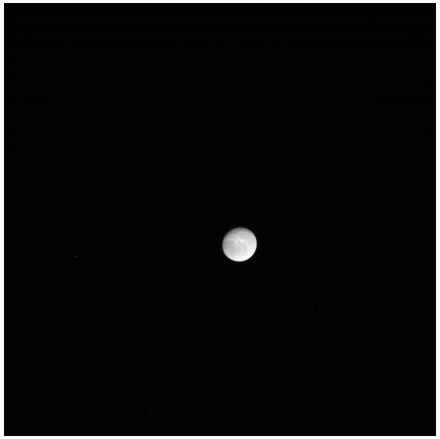
Spectrum of I/I_0

048RH_LIMB270L001_PRIME



048RH_ICYLON001_ISS
2007-198T14:45
Alt= 1,233,848 km
Longitude= 180°W
Phase= 90.0°

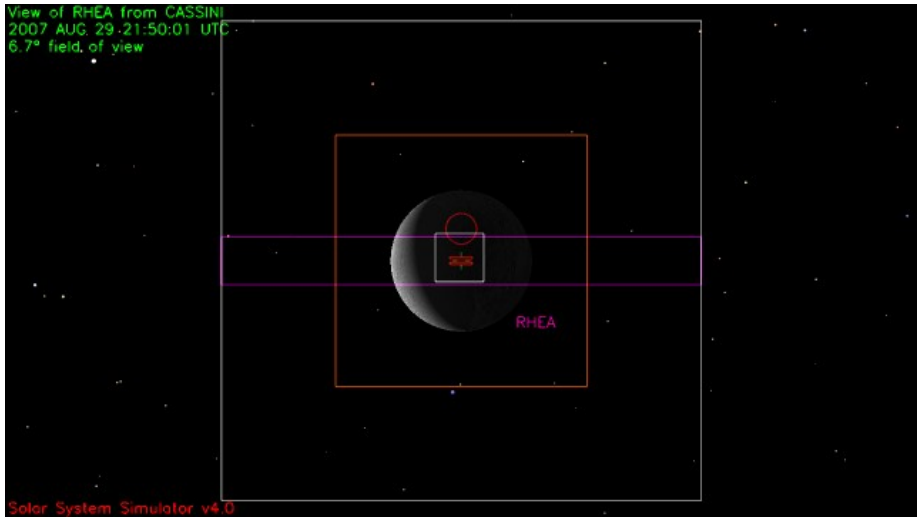
ISS_048RH_310W020PH_PRIME



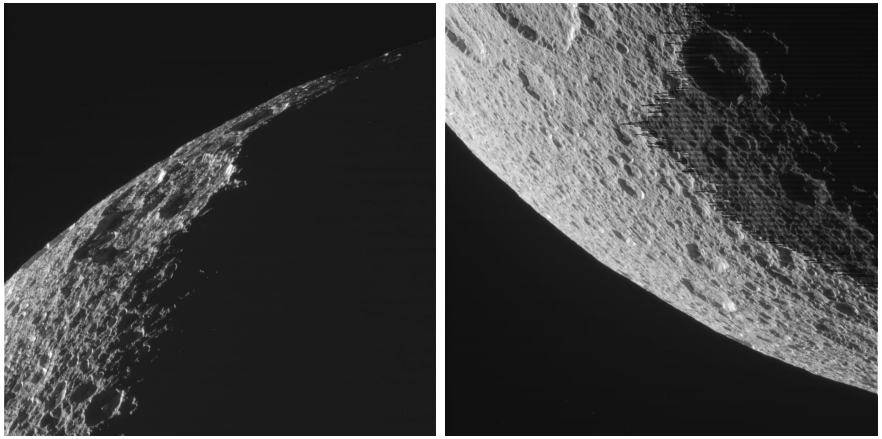
048RH_ICYLON003_ISS
2007-208T08:31
Alt= 3,061,753 km
Longitude= 310°W
Phase= 19.6°

VIMS_049RH_RHEA001_PRIME

049RH_ICYMAP001_VIMS
2007-241T21:48
Alt= 84,127 km
Longitude= 350°W
Phase= 127.6°



ISS_049RH_CRESCENT001_PRIME



9-part

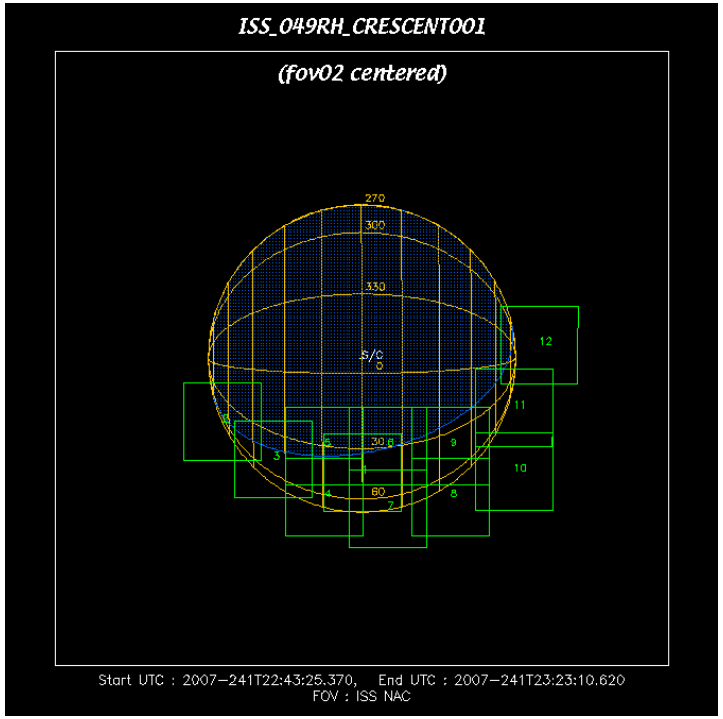
049RH_ICYLON001_ISS

2007-241T22:33

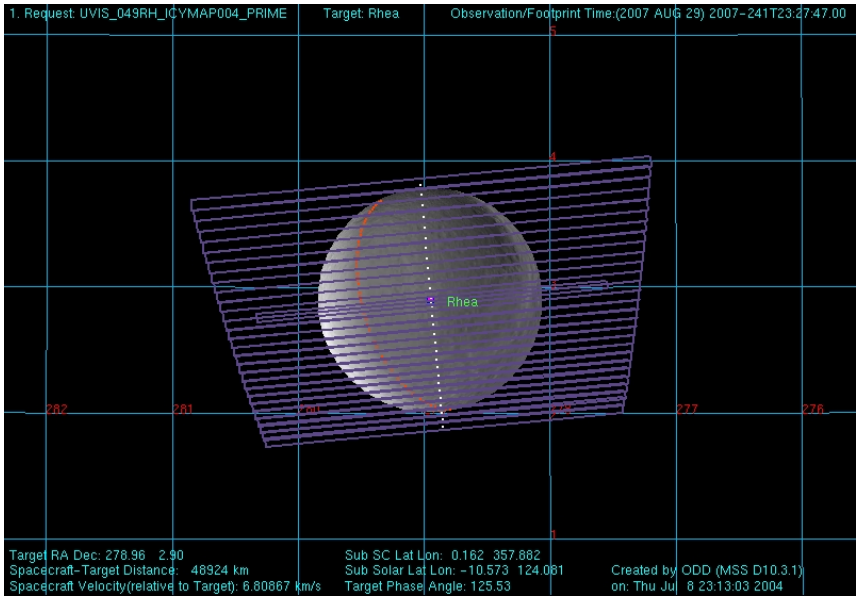
Alt= 65,568 km

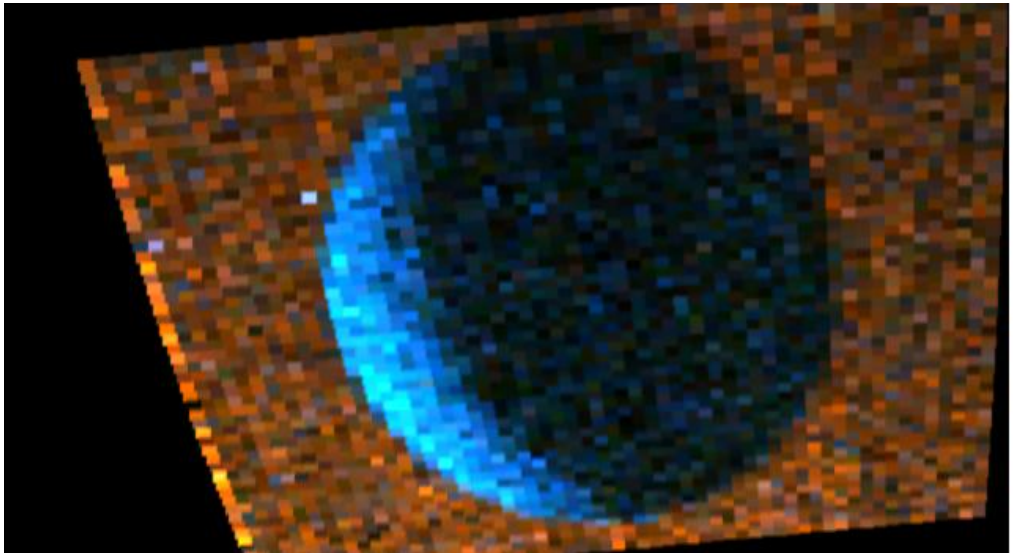
Longitude= 354°W

Phase= 126.6°



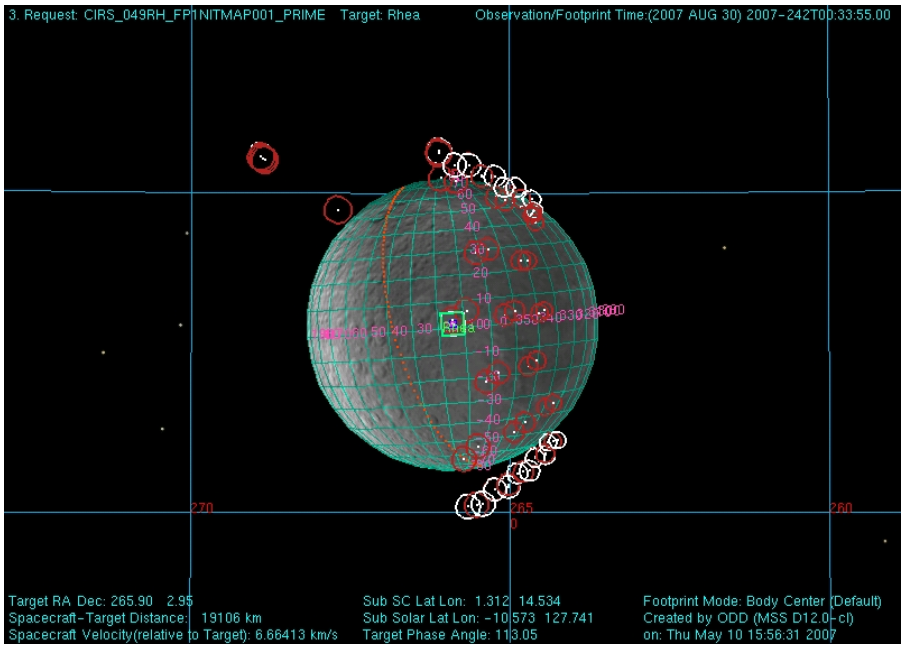
049RH_ICYMAP003_PRIME
2007-241T23:18
Alt= 47,351 km
Longitude= 358°W
Phase= 124.6°





CIRS_049RH_FP1NITMAP001_PRIME

2-part

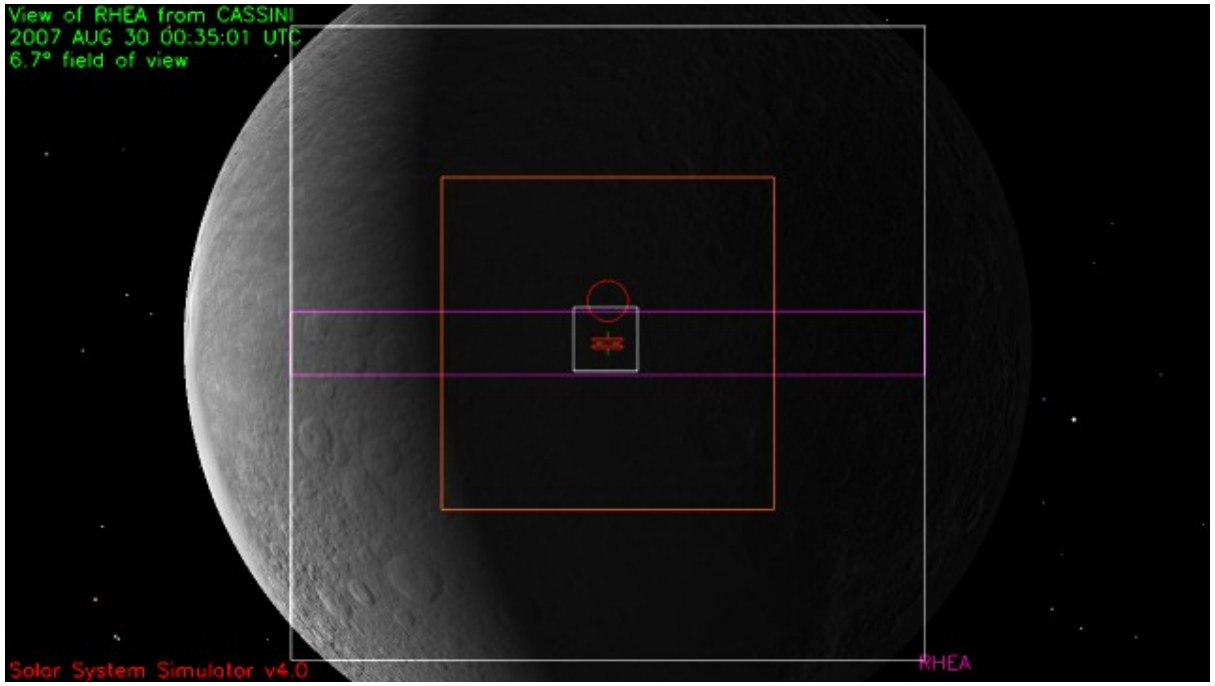


049RH_ICYMAP004_CIRS
2007-241T23:48
Alt= 35,393 km
Longitude= 3°W
Phase= 122.2°

VIMS_049RH_RHEA002_PRIME

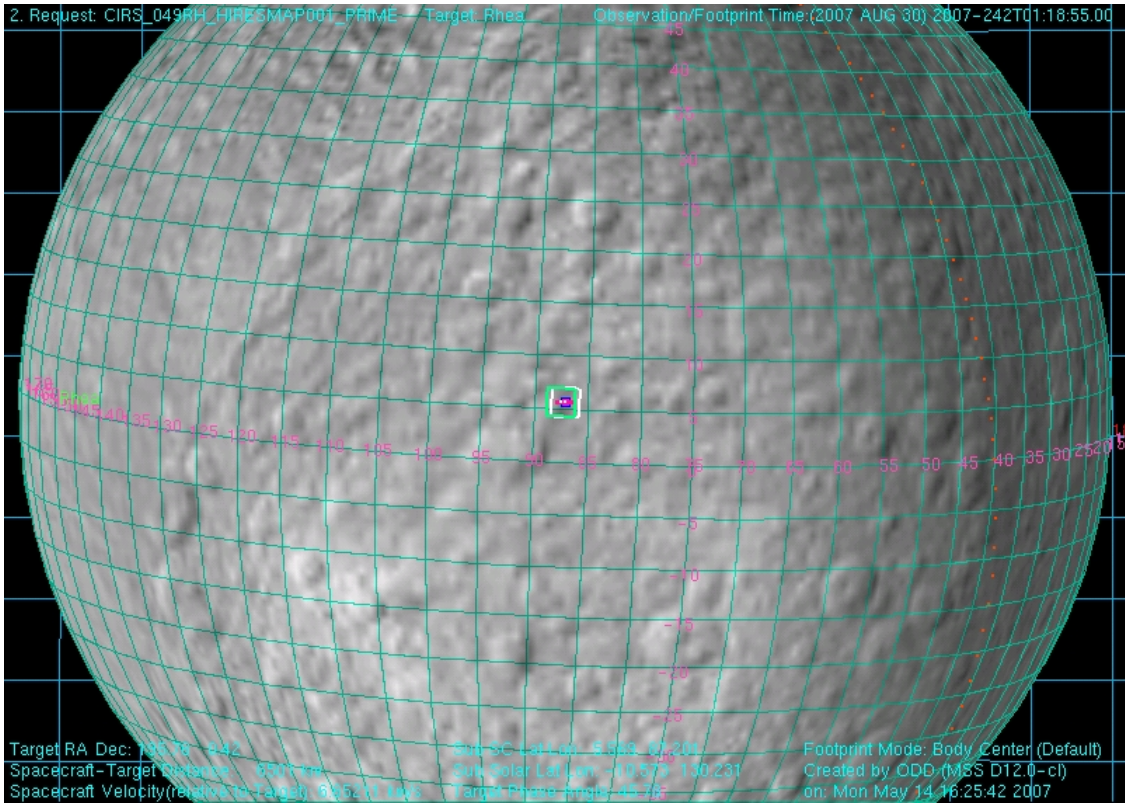
2-part

049RH_ICYMAP005_VIMS
2007-242T00:33
Alt= 17,931 km
Longitude= 15°W
Phase=112.6°

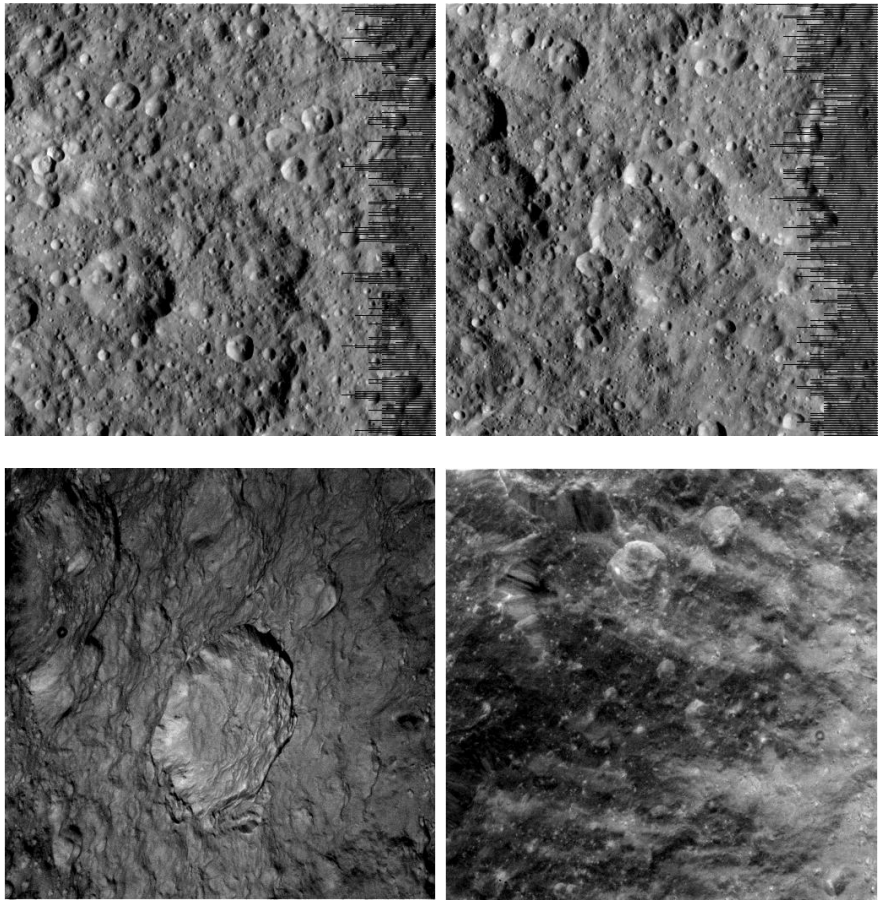


CIRS_049RH_HIRESMAP001_PRIME

049RH_ICYMAP006_CIRS
2007-242T01:03
Alt= 7782 km
Longitude= 46°W
Phase= 84.5°



ISS_049RH_HIGHRES001_PRIME



19-part

049RH_ICYMAP007_ISS

2007-242T01:18

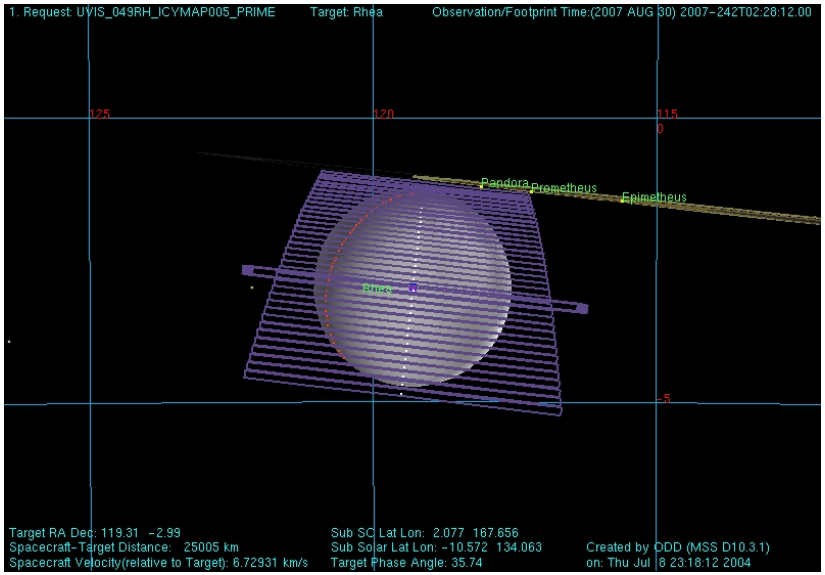
Alt= 5751 km

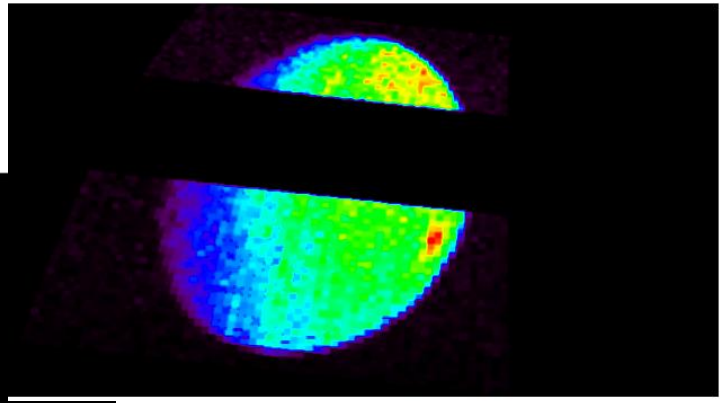
Longitude= 91°W

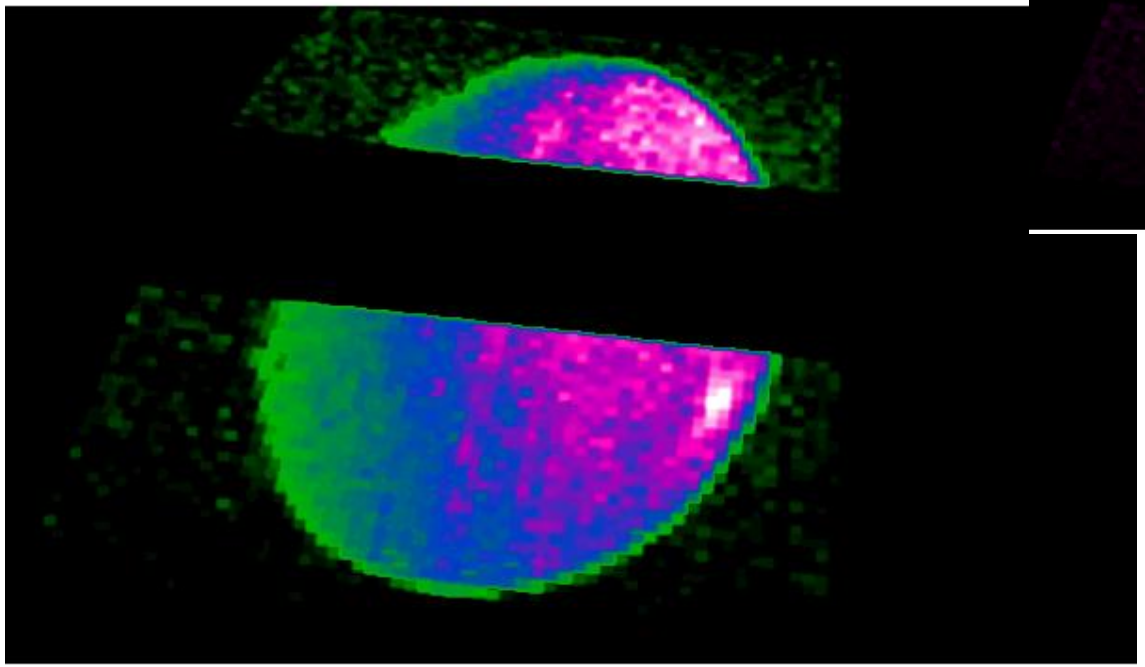
Phase= 42.2°

3-part

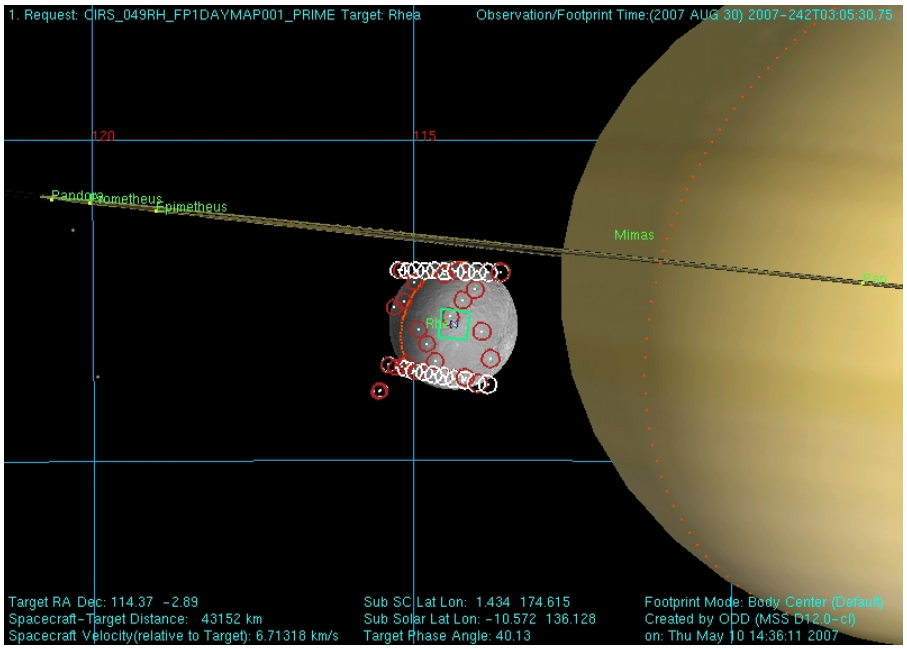
049RH_ICYMAP008_PRIME
2007-242T02:18
Alt= 24,485 km
Longitude= 166°W
Phase= 34.5°







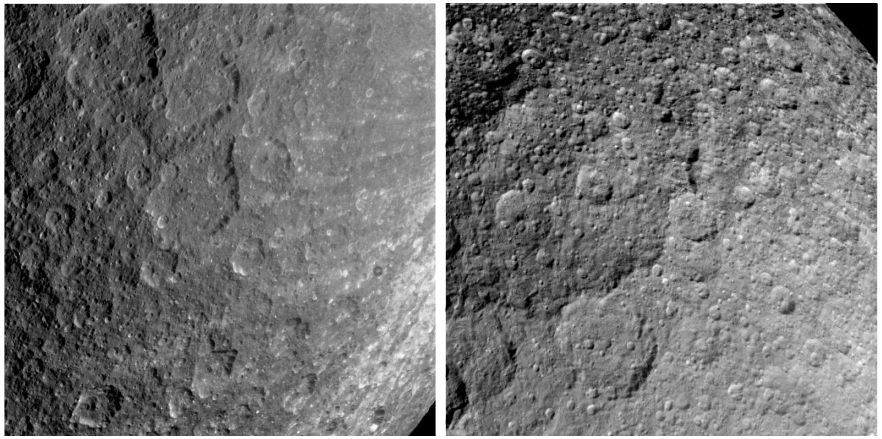
CIRS_049RH_FP1DAYMAP001_PRIME



049RH_ICYMAP009_CIRS
2007-242T03:03
Alt= 42,188 km
Longitude= 175°W
Phase= 40.1°

2-part

ISS_049RH_REGMAP001_PRIME



24-part

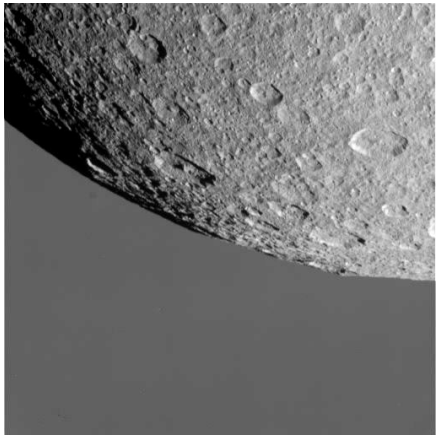
049RH_ICYMAP010_ISS

2007-242T03:30

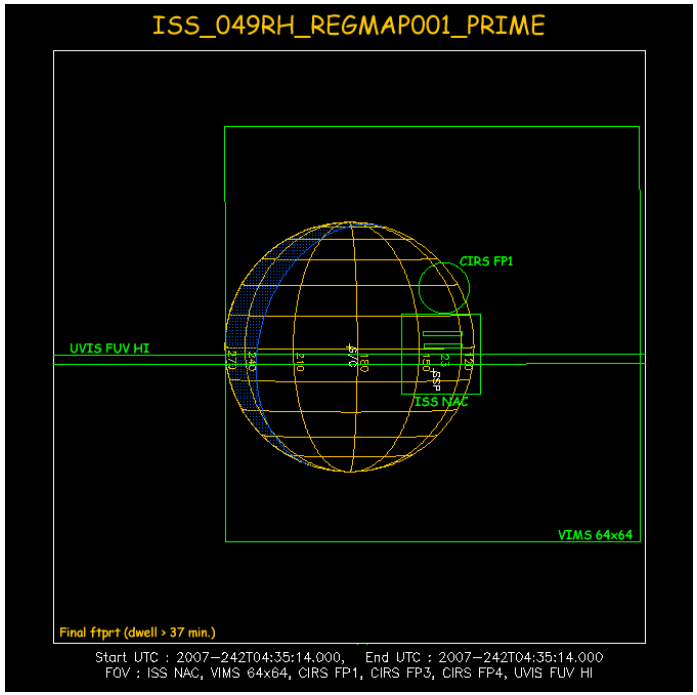
Alt= 54,195 km

Longitude= 178°W

Phase= 41.9°



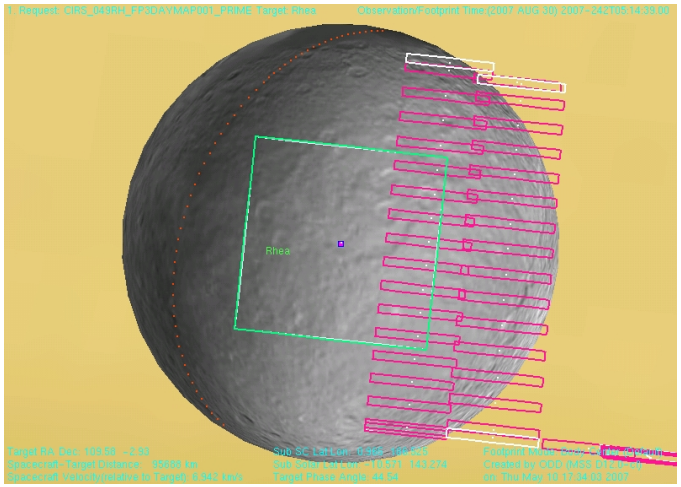
In front of Saturn



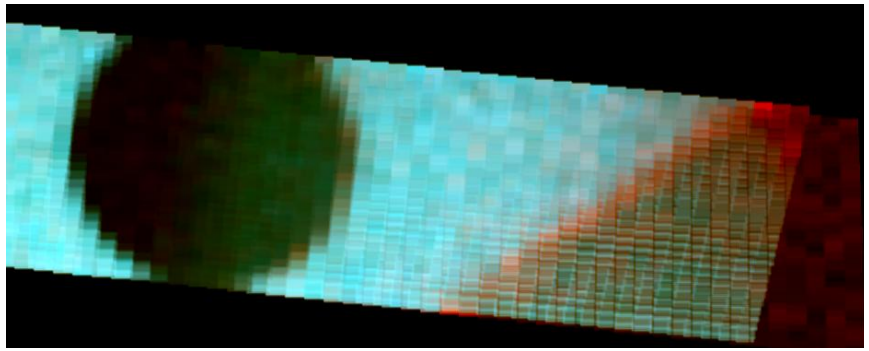
Final (#23) footprint

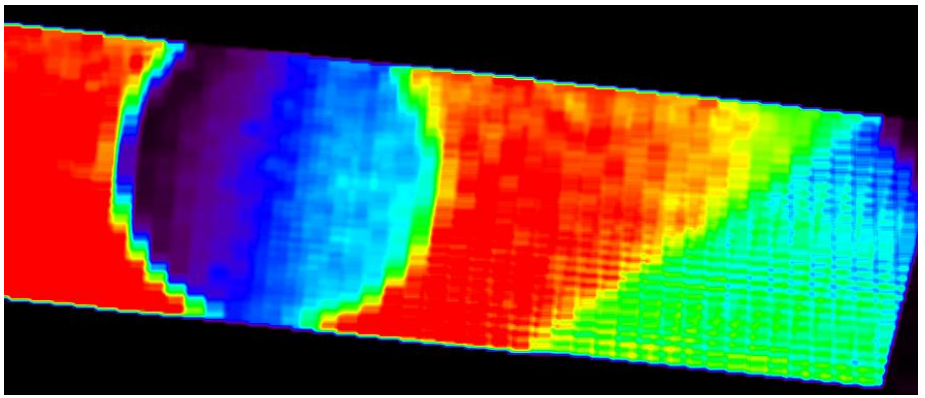
CIRS_049RH_FP3DAYMAP001_PRIME

3-part



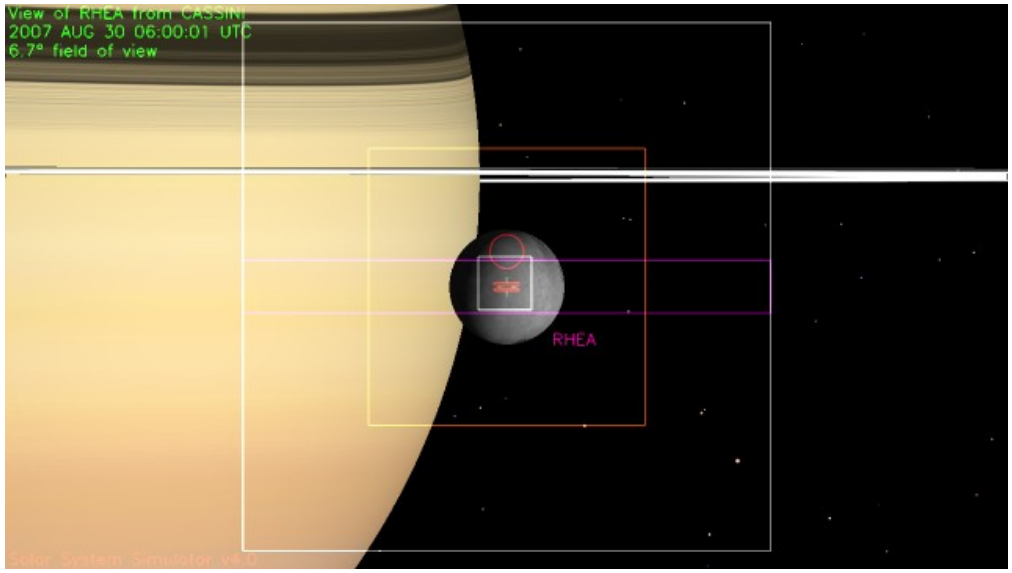
049RH_ICYMAP011_CIRS
2007-242T05:15
Alt= 95,074 km
Longitude= 187°W
Phase= 44.5°



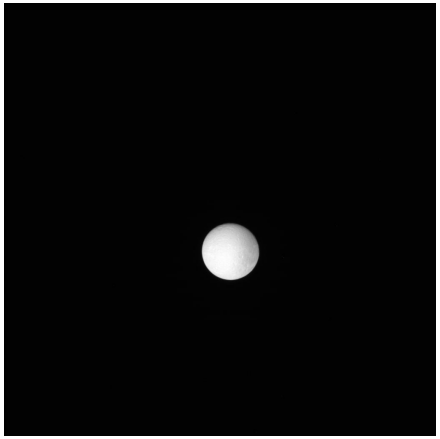


VIMS_049RH_RHEA003_PRIME

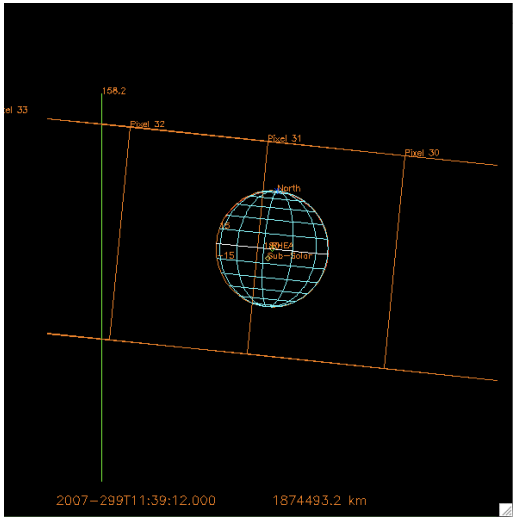
049RH_ICYMAP012_VIMS
2007-242T05:58
Alt= 113,932 km
Longitude= 190°W
Phase= 45.1°

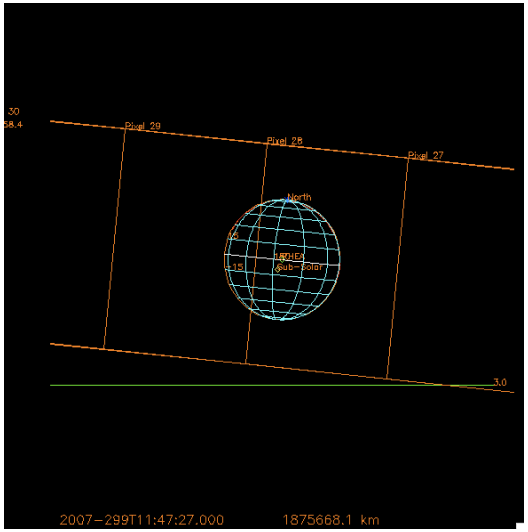


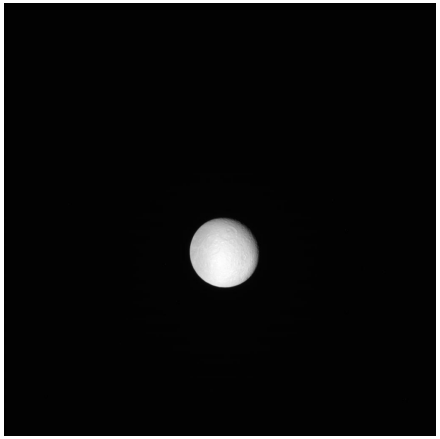
051RH_022W011PH001_ISS
2007-299T11:40
Alt= 1,874,600 km
Longitude= 21°W
Phase= 10.7°



2-part

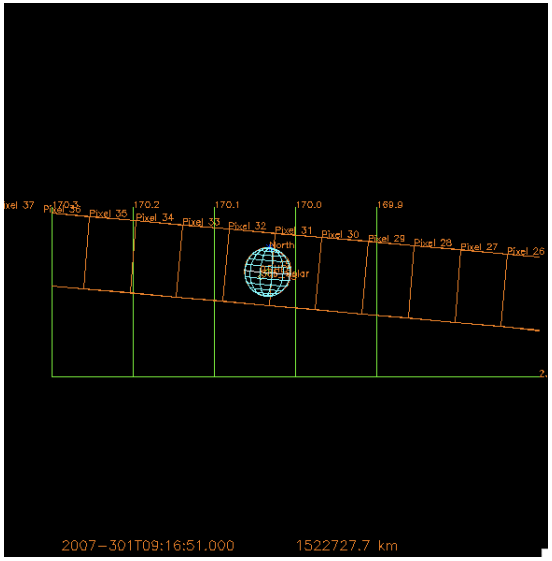


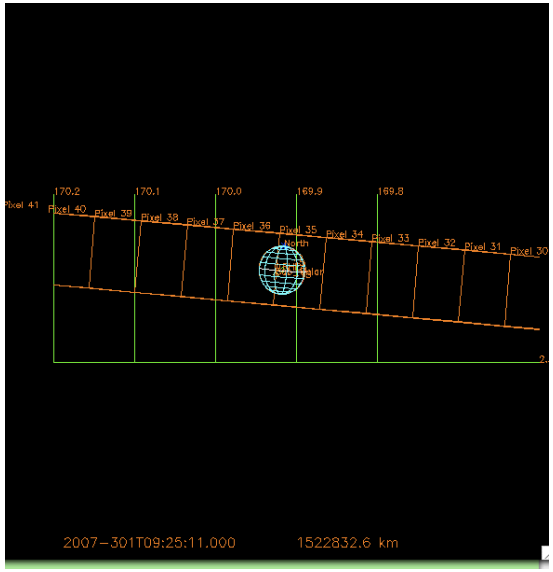




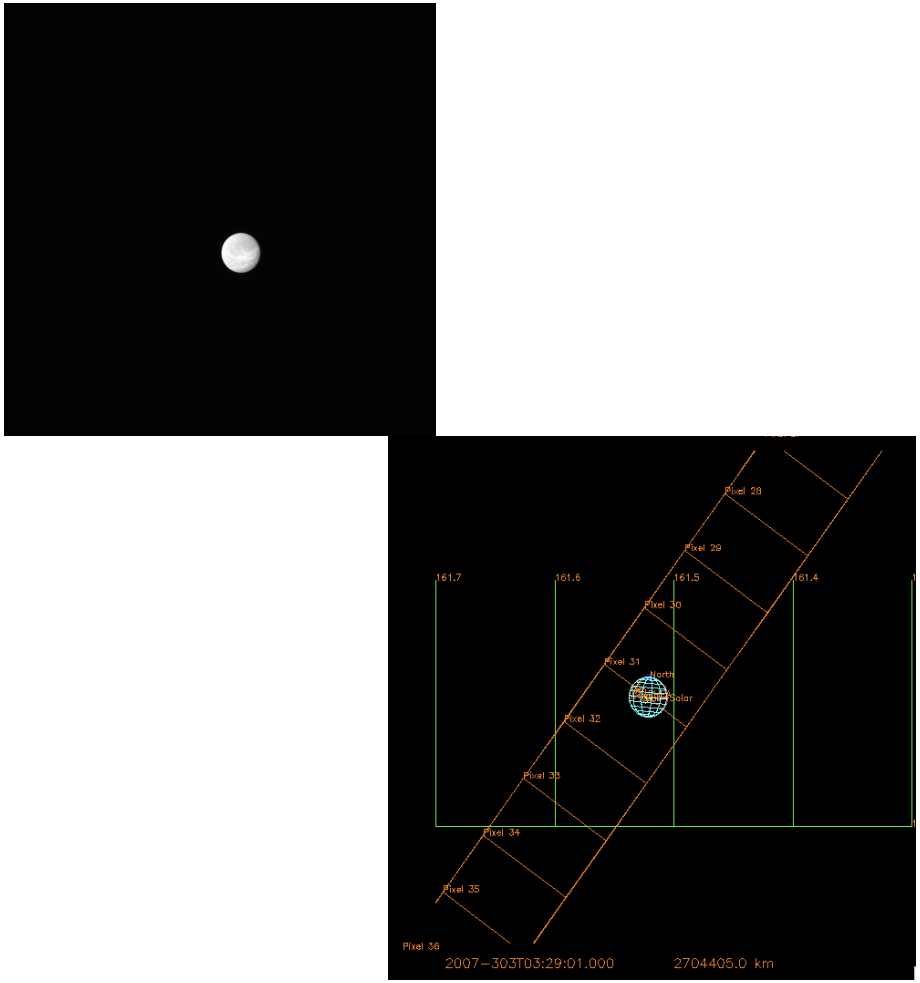
2-part

051RH_166W018PH001_ISS
2007-301T09:17
Alt= 1522060.7 km
Longitude= 161°W
Phase= 19.3°





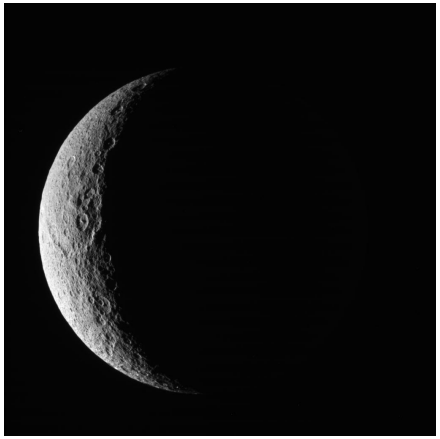
051RH_310W013PH001_ISS
2007-303T03:30
Alt= 2,704651 km
Longitude= 310°W
Phase= 13.4°



2-part

052RH_ICYLON003_CAPS
2007-320T04:49
Alt=532,350 km
Longitude= 118°W
Phase= 117.6°

052RH_ICYLON001_VIMS
2007-320T07:56
Alt=415,956 km
Longitude= 124°W
Phase= 122.4°



2-part

052RH_ICYMAP001_PRIME
2007-320T09:46
Alt=350,516 km
Longitude= 127°W
Phase= 125.7°

052RH_ICYLON002_CIRS
2007-320T10:31
Alt=324,478 km
Longitude= 128°W
Phase= 127.3°

052RH_ICYLON003_VIMS
2007-320T20:33
Alt=95,817 km
Longitude= 62°W
Phase= 134.8°

(no ISS rider)

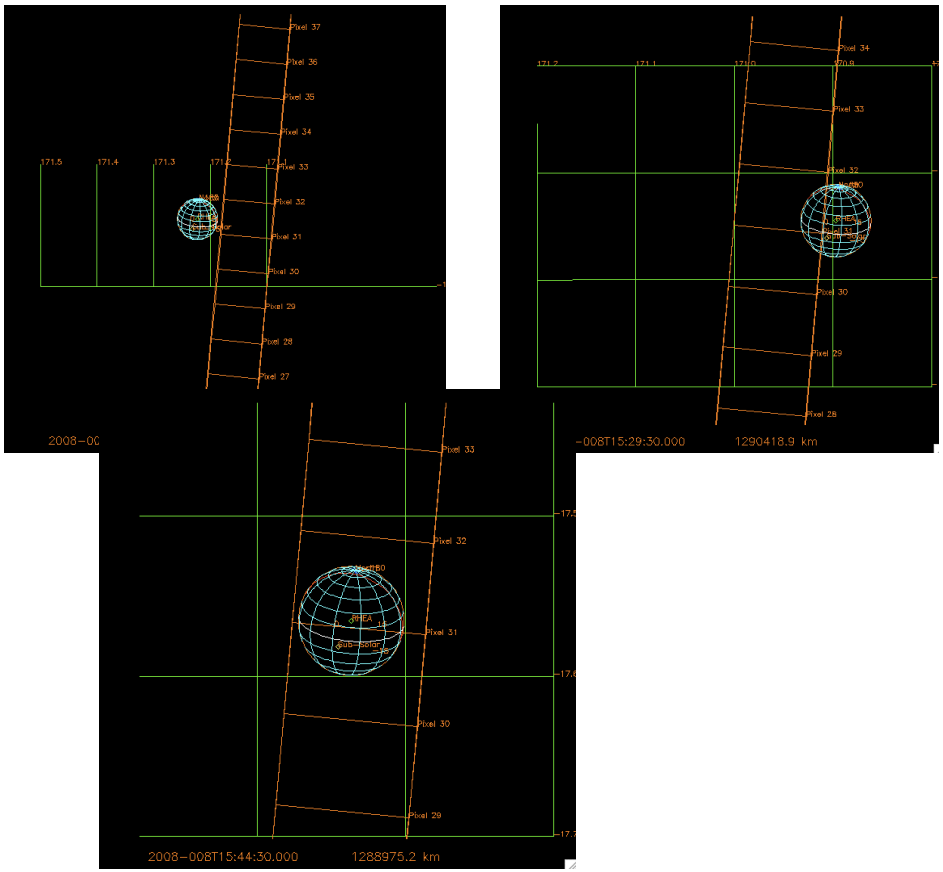
ISS_054RH_REGGEOD001_PRIME

054RH_ICYLON001_ISS
2007-351T21:58
Alt=549,539 km
Longitude= 178°W
Phase= 79.8°

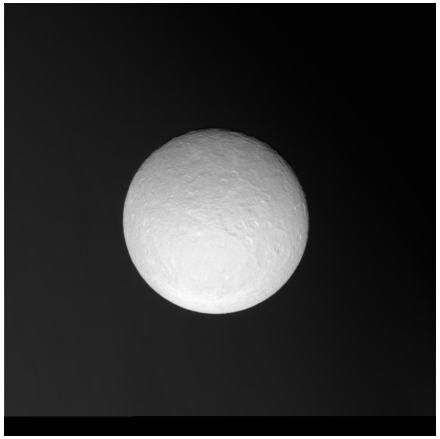
CIRS_055RH_FP3SCNSTA001_PRIME

055RH_ICYLON001_CIRS
2008-008T15:11
Alt= 1,287,759 km
Longitude= °W
Phase= 32.7°

3-part

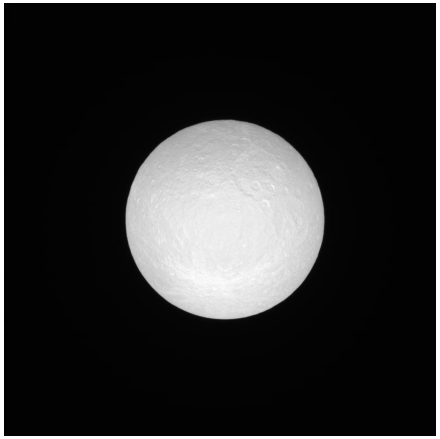


ISS_056RH_LOWPHASE001_PRIME



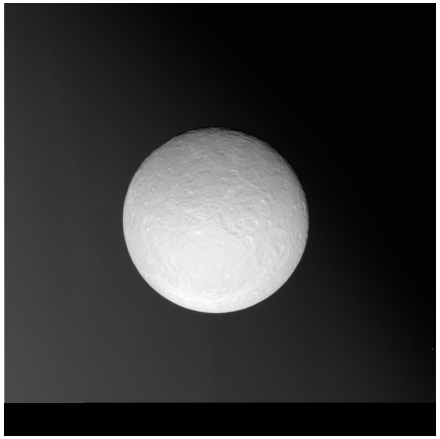
056RH_ICYLON001_ISS
2008-017T07:02

ISS_056RH_ZEROPHASE001_PRIME

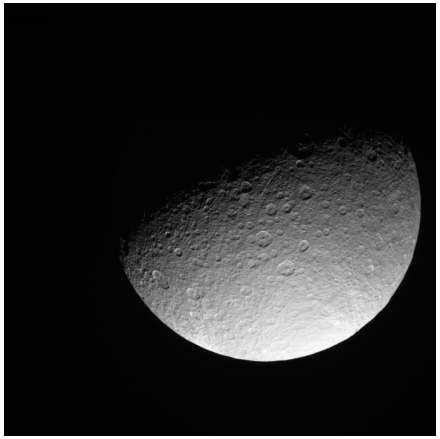


056RH_ICYLON002_ISS
2008-017T09:32

ISS_056RH_LOWPHASE002_PRIME



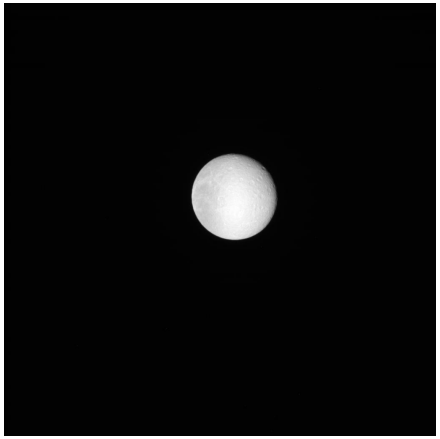
056RH_ICYLON003_ISS
2008-017T14:32

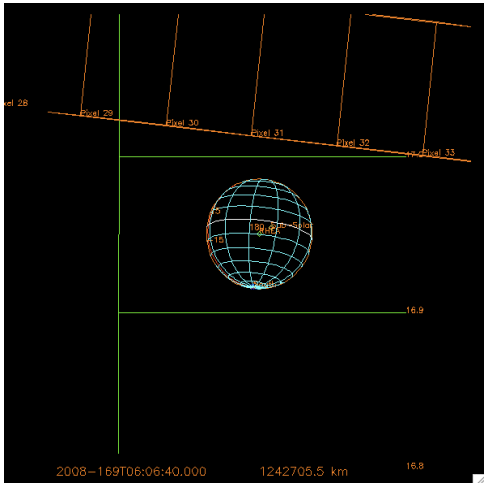


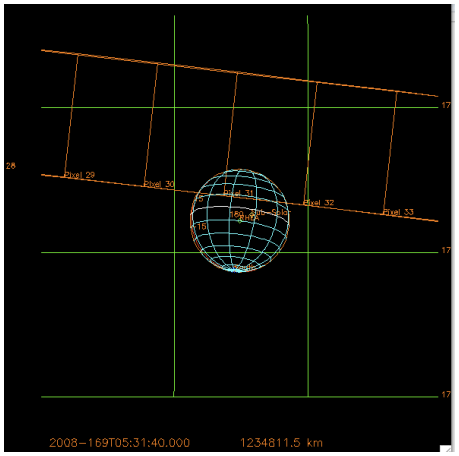
064RH_ICYLON001_ISS
2008-103T08:36

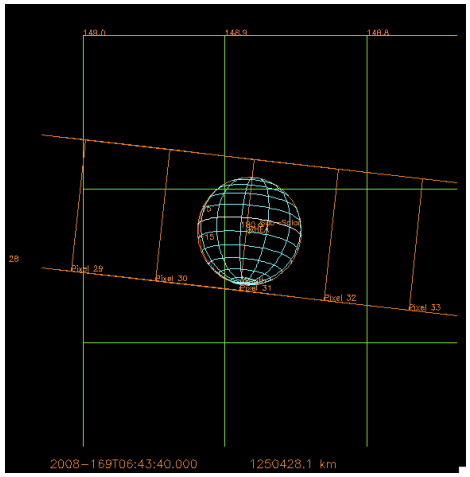
072RH_ICYLON001_CIRS
2008-169T05:32
Alt= 1,252,593 km
Longitude= °W
Phase= 13.6°

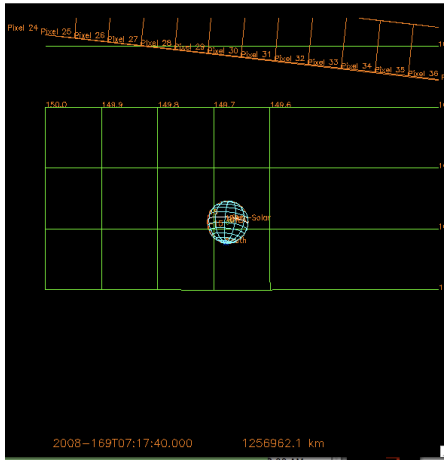
5-part

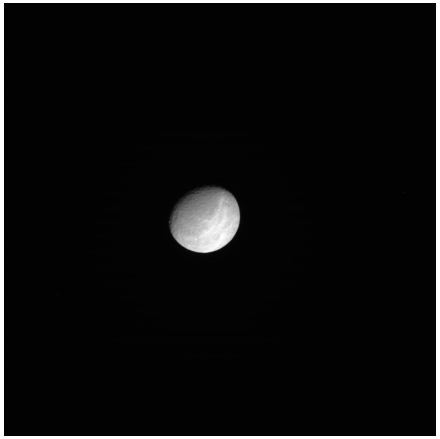












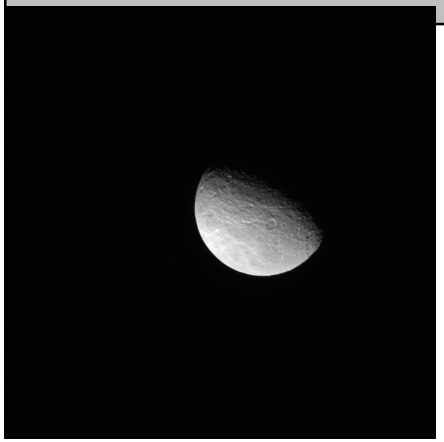
2-part

072RH_ICYLON001_ISS
2008-170T17:10

073RH_ICYLON001_CIRS

4-part 2008-173T13:47

ISS_074DI_RHTEHILAT001_PRIME



Turn from WP to Tethys (offset (0,10,0)), dwell 40 min, turn directly to Dione, dwell 40 min, turn directly to Rhea, dwell 40 min, turn to WP.

074DI_ICYLON001_ISS
2008-181T03:56

No ISS rider

074RH_ICYLON001_PRIME
2008-183T19:57
Alt= 938,052 km
Longitude= 75°W
Phase= 14.7°

CIRS_076RH_FP1SECLN001 4-part 076RH_ICYLON001_CIRS

2008-196T06:43

Alt= 503,464 km

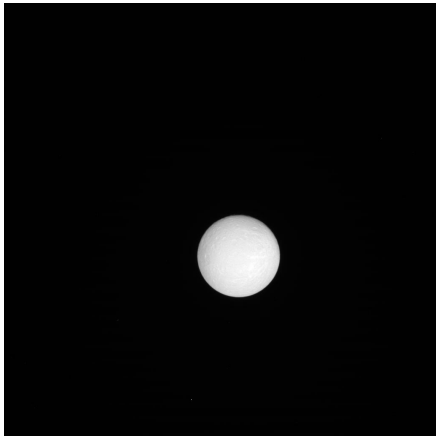
Longitude= 352°W

Phase= 31.8°

ISS_078RH_GLOCOL001_PRIME

078RH_ICYLON001_ISS
2008-211T14:42
Alt= 413,549 km
Longitude= 133°W
Phase= 43.7°

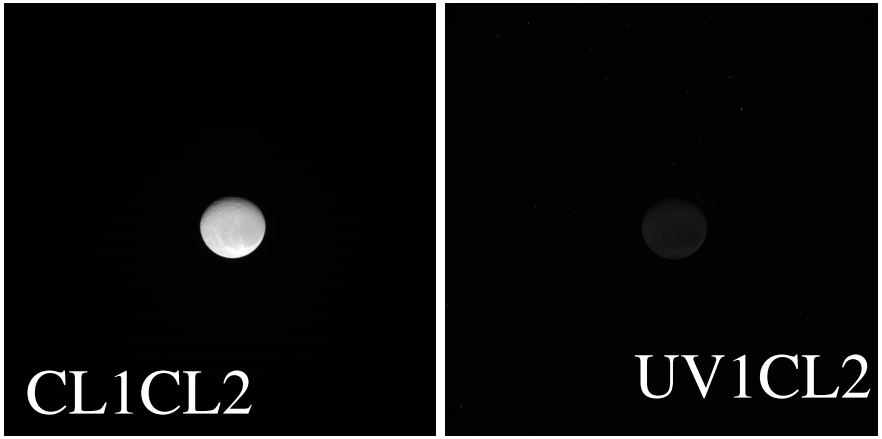
ISS_079RH_060W005PH001



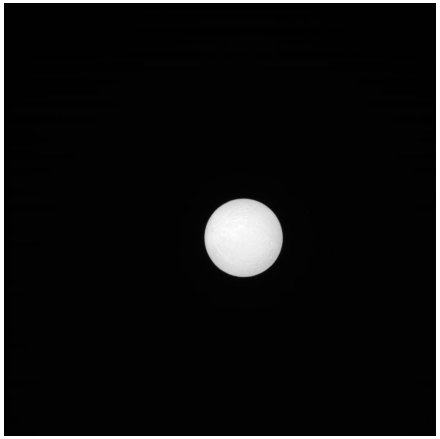
2-part

079RH_ICYLON001_ISS
2008-219T11:18
Alt= 1,313,191 km
Longitude= 48°W
Phase= 6.5°

ISS_080RH_RHEA001_PRIME

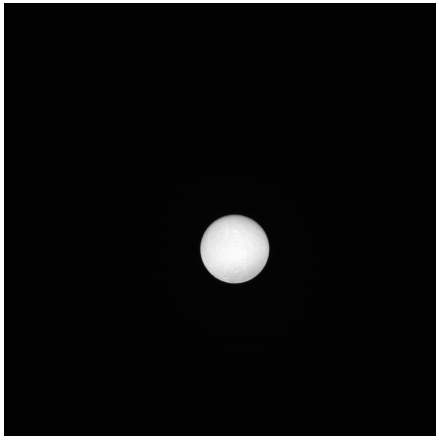


080RH_ICYLON001_ISS
2008-227T10:30
Alt= 1,638,665 km
Longitude= 349°W
Phase= 27.7°

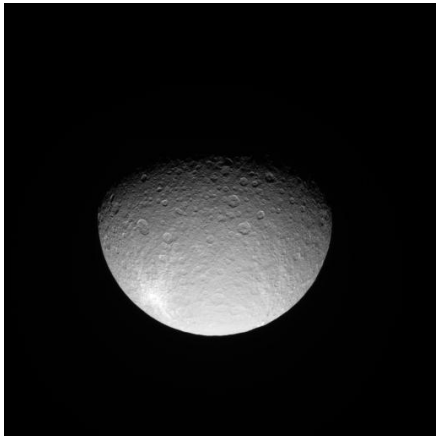


082RH_ICYLON001_ISS
2008-242T00:08
Alt= 1,436,833 km
Longitude= 45°W
Phase= 4.0°

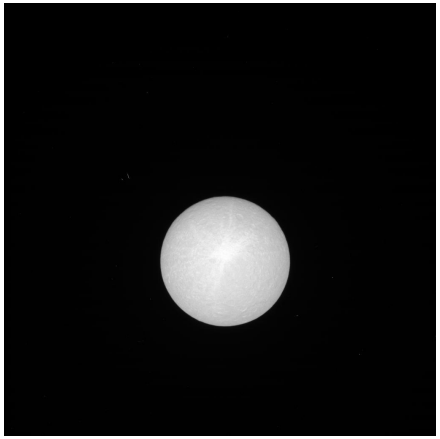
084RH_ICYSTARE001_PRIME
2008-257T01:39



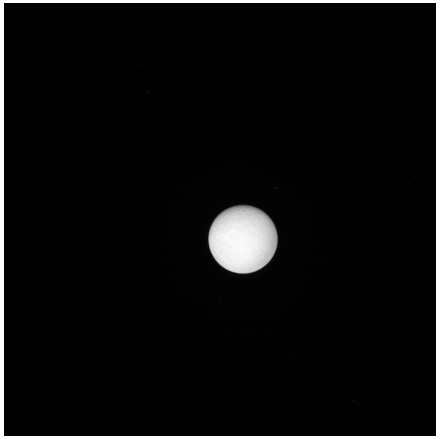
085RH_ICYLON001_ISS
2008-264T09:2
Alt= 1,572,233 km
Longitude= 34°W
Phase= 8.9°



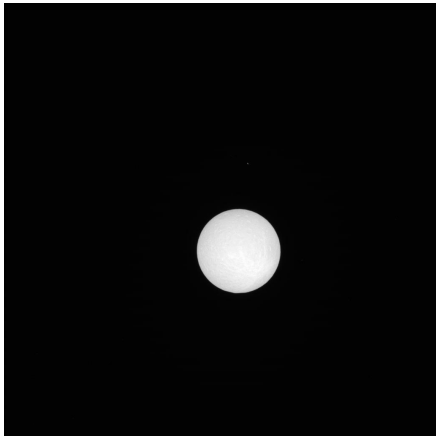
086RH_ICYLON001_ISS
2008-270T08:49
Alt= 463,303 km
Longitude= 142°W
Phase= 58.5°



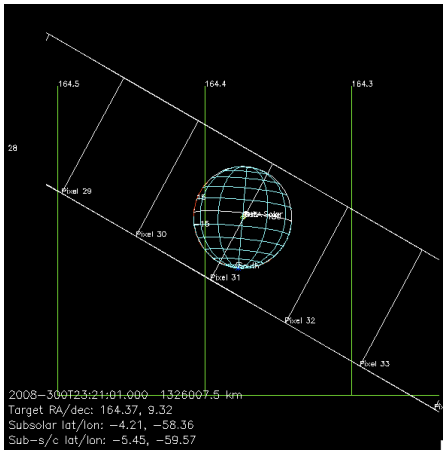
087RH_ICYLON001_ISS
2008-279T01:29
Alt= 867,874 km
Longitude= 110°W
Phase= 4.0°



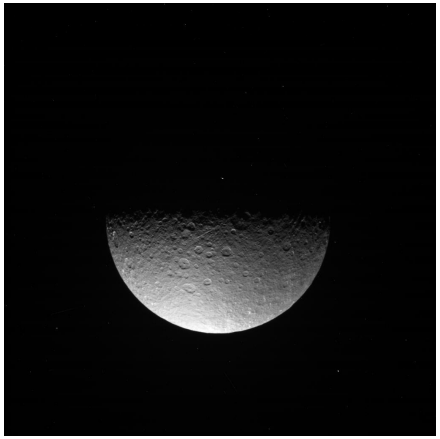
088RH_ICYLON001_ISS
2008-287T03:41
Alt= 1,567,191 km
Longitude= 42°W
Phase= 9.1°



2-part

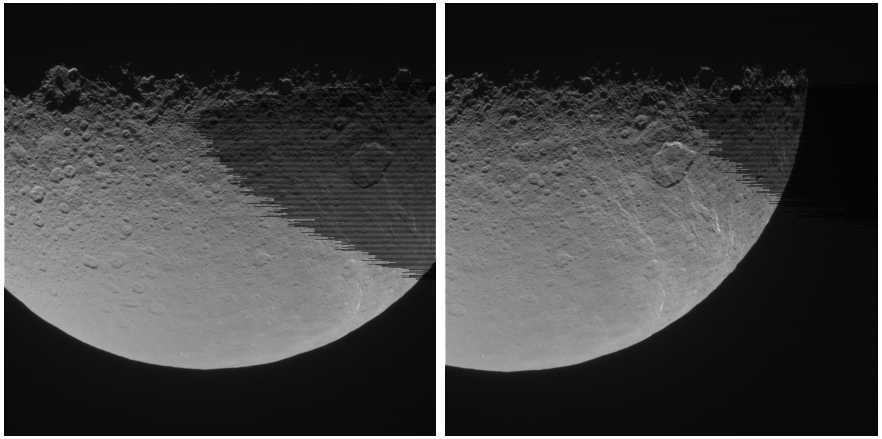


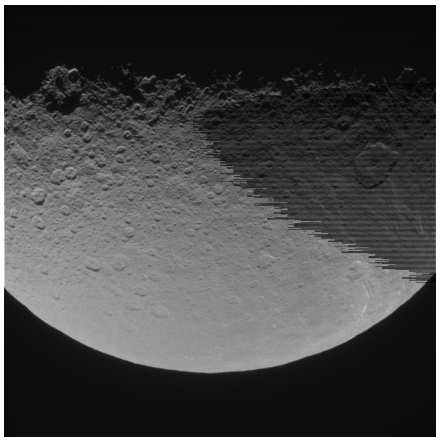
090RH_ICYLON001_ISS
2008-300T22:56
Alt= 1,332,629 km
Longitude= 59°W
Phase= 2.0°



091RH_ICYLON001_ISS
2008-306T20:09
Alt= 474,561 km
Longitude= 257°W
Phase= 86.6°

ISS_102RH_GEOLOG001_PRIME





102RH_ICYLON001_ISS

2009-033T06:41

Alt= 177,517 km

Longitude= 279°W

Latitude=88°N

Phase= 90.8°

102RH_ICYMAP001_PRIME

2-part

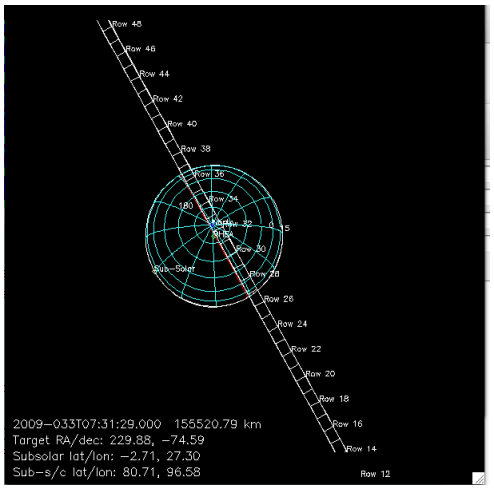
2009-033T07:11

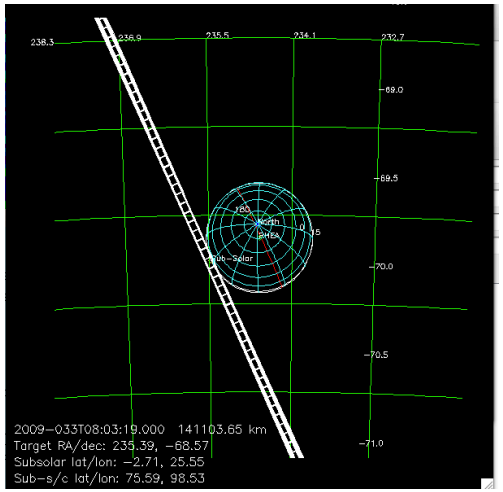
Alt= 162,787 km

Longitude= 265°W

Latitude=84°

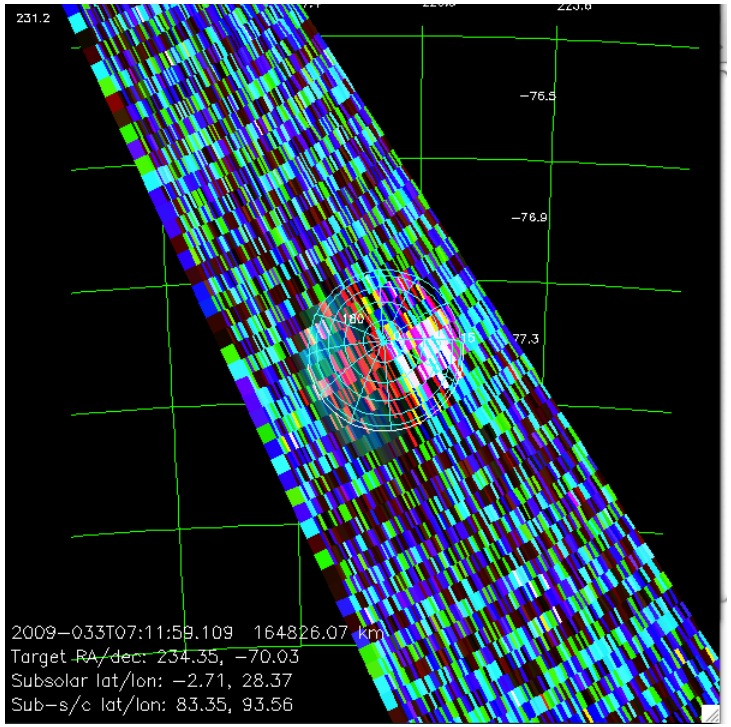
Phase= 90.1°





Scan across northern hem

2nd part: stare at limb



102RH_ICYMAP003_PRIME

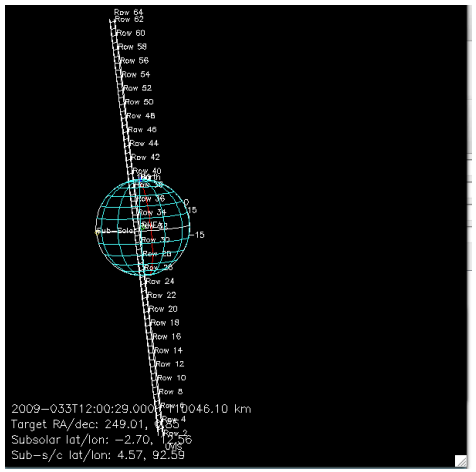
2009-033T11:31

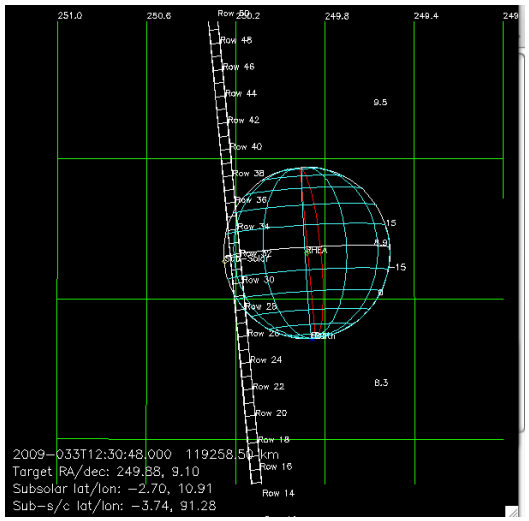
Alt= 101,843 km

Longitude= 266°W

Phase= 80.5°

2-part





CIRS_102RH_FP13SECLN001_PRIME

7-part

102RH_ICYECL001_CIRS
2009-033T14:29
Alt= 169,738 km
Longitude= 274°W
Phase= 81.1°

3-part

104RH_RHEARPXLP001_ISS
2009-062T06:02

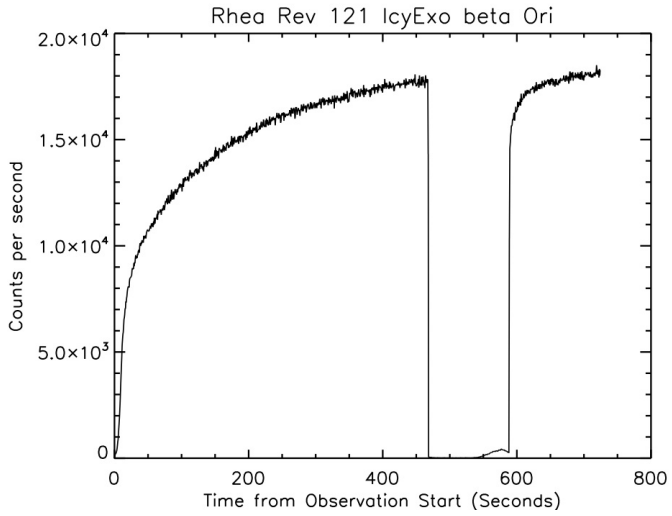
2-part 105RH_RHEARPXLP001_ISS 2009-068T14:22

105RH_ICYECL001_CIRS
2009-069T18:20
9-part
Alt= 596,587 km
Longitude= 143°W
Phase= 95.6°

119RH_ICYECL001_CIRS
2009-286T15:53
9-part
Alt= 52,216 km
Longitude= 116°W
Phase= 121.6°

119RH_ICYLON001_VIMS
2009-286T22:31
Alt= 193,789 km
Longitude= 20°W
Phase= 4.2°

120RH_ICYLON001_PRIME
2009-305T12:52
Alt= 614,129 km
Longitude= 298°W
Phase= 119.9°

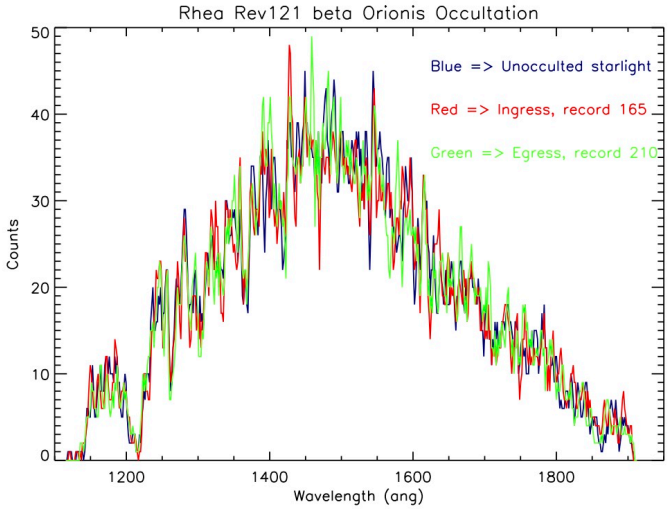


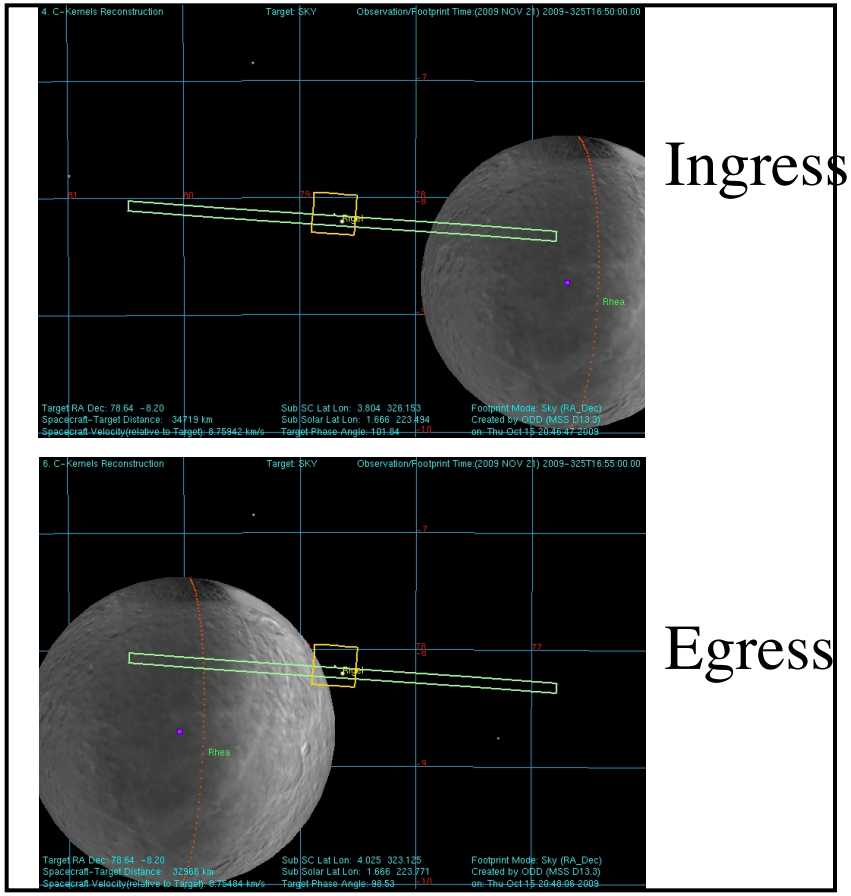
HSP profile

UVIS_121RH_ICYEXO001_PRIME
2009-325T16:37
Ingress lat/lon: 19.6 / 55.15
Egress lat/lon: 26.3 / 232.43
Star: beta Orionis

Purpose of this observation was to search for rings (but geometry was not ideal)

Spectra of I, I_0 (counts per integration period vs wavelength)



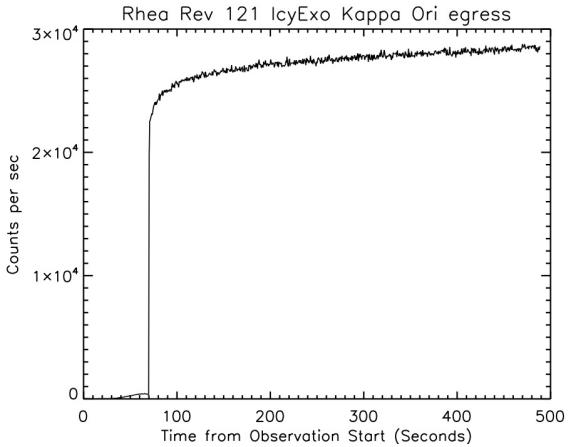


Ingress

Egress

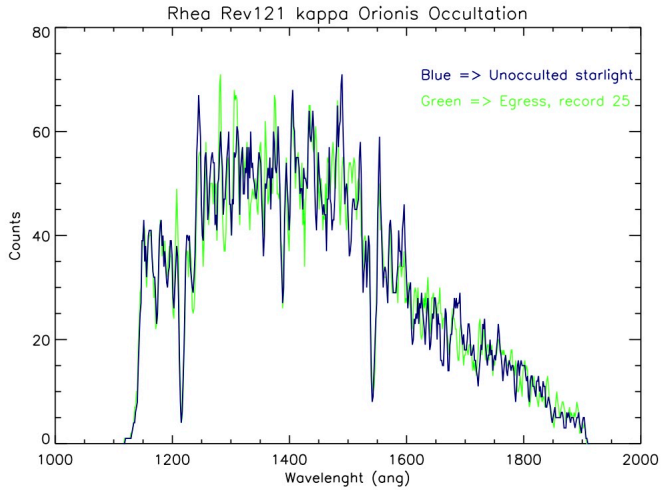
UVIS_121RH_ICYEXO001_PRIME
2009-325T16:37
Ingress lat/lon: 19.6 / 55.15
Egress lat/lon: 26.3 / 232.43
Star: beta Orionis

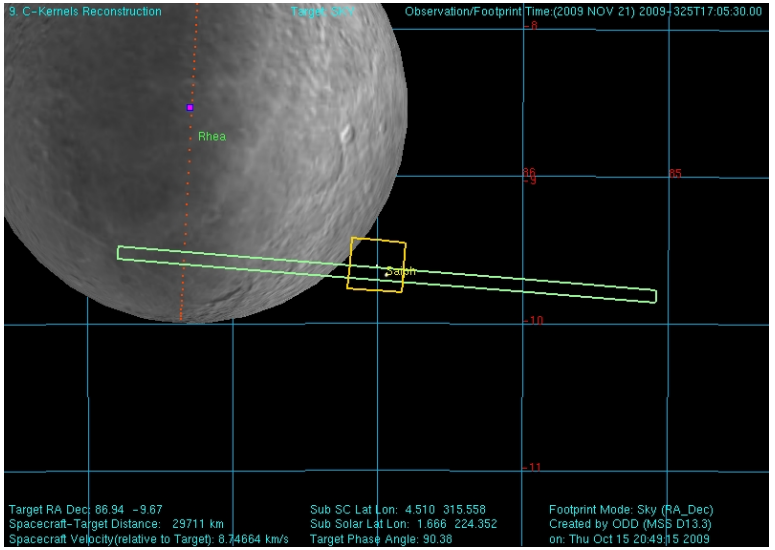
HSP profile



Observation purpose was to search for rings; only egress observed

Spectra of I, I_0 (counts per integration period vs wavelength)



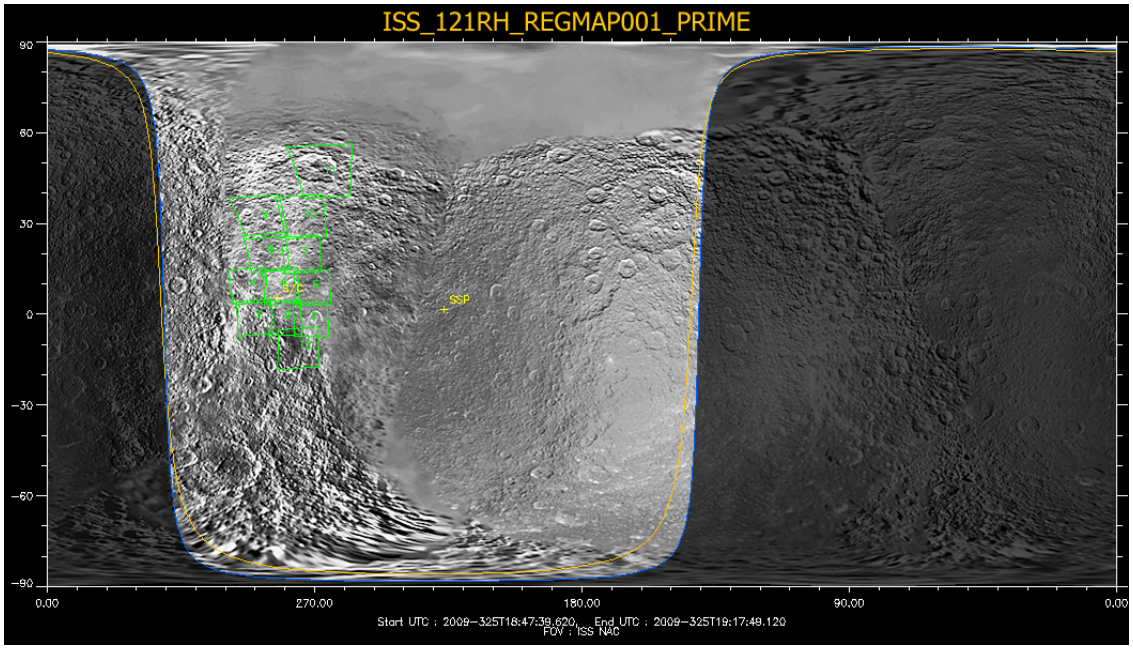


Egress

ISS_121RH_REGMAP001_PRIME

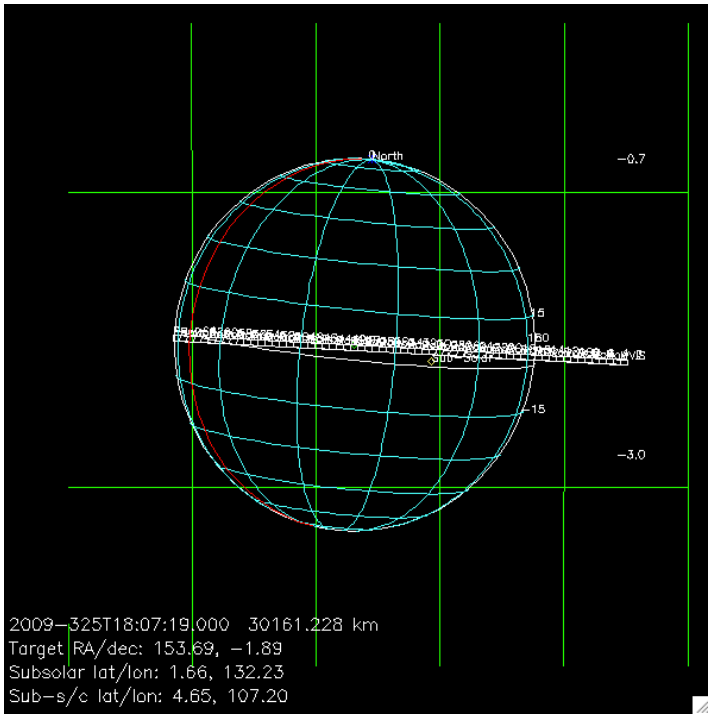
13-part

121RH_ICYMAP001_ISS
2009-325T17:37
Alt= 24,429 km
Longitude= 283°W
Phase= 56.6°



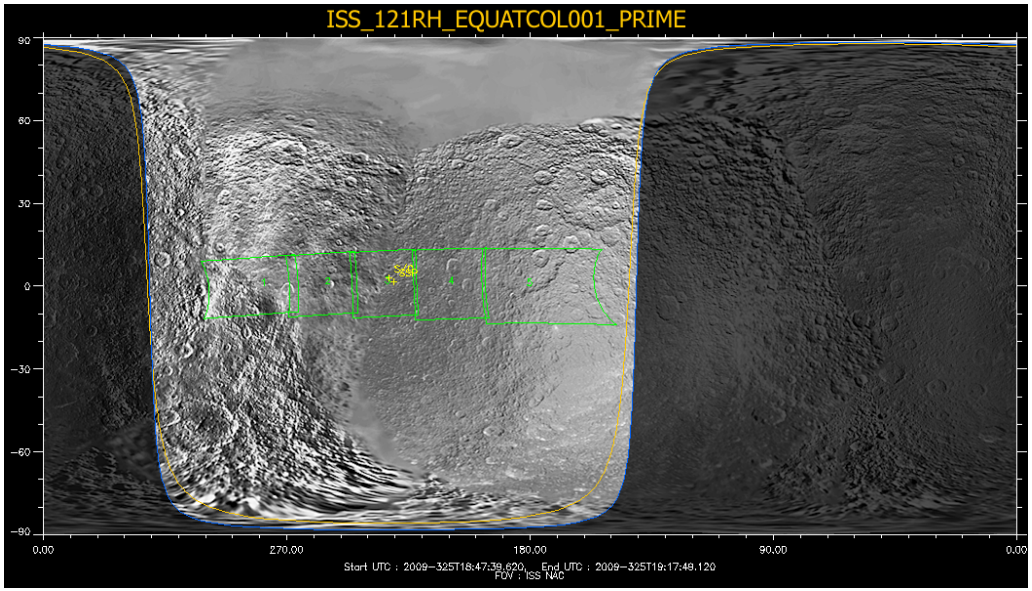
VIMS_121RH_RHEA001_PRIME

121RH_ICYMAP002_VIMS
2009-325T18:07
Alt= 29,318 km
Longitude= 253°W
Phase= 25.1°-5°



ISS_121RH_EQUATCOL001_PRIME

5-part

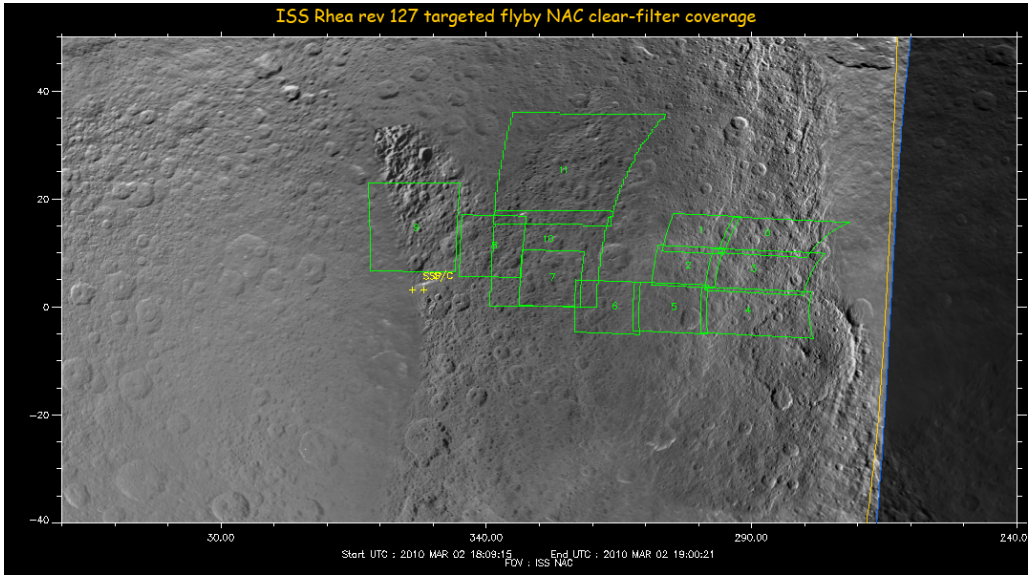


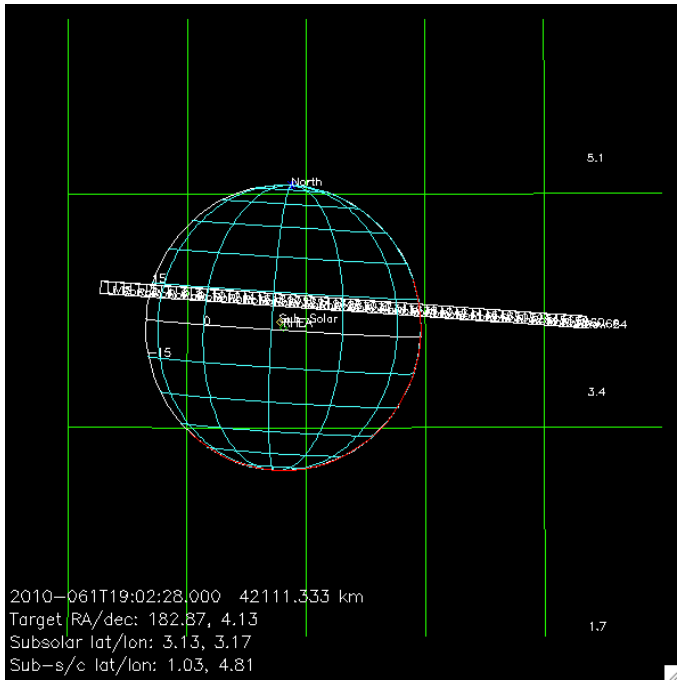
121RH_ICYLON003_ISS
2009-325T19:19
Alt= 59,484 km
Longitude= 225°W
Phase= 7.3°

124RH_ICYLON001_PRIME
2010-011T15:14
Alt= 774,431 km
Longitude= 323°W
Phase= 5.7°

127RH_ICYLON005_VIMS
2010-061T18:11
Alt= 15,922 km
Longitude= 352°W
Phase= 2.0°

6-part





11-part

127RH_ICYLON005_CIRS
2010-061T18:54
Alt= 40,111 km
Longitude= 355°W
Phase= 2.7°

#3 at 19:03: 19 records
Eclipse ~19:13-22:30

Part 3:
Stare as Rhea enters eclipse

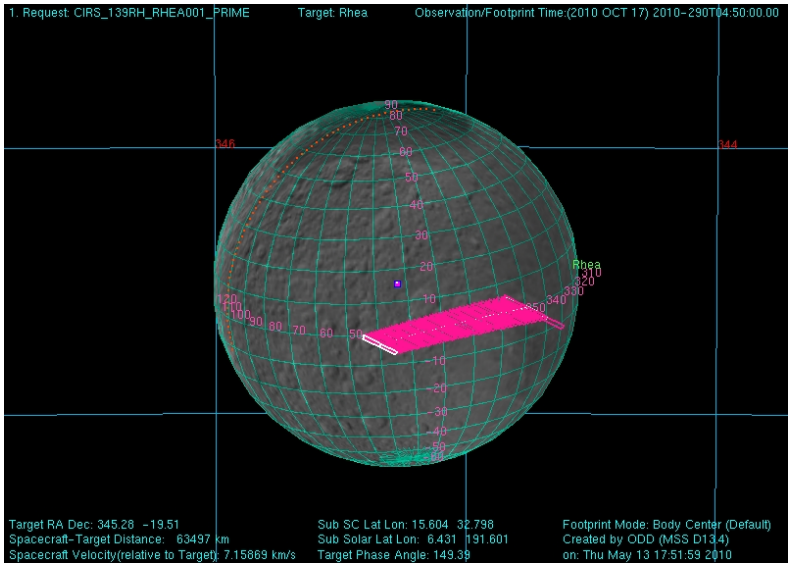
132RH_ICYMAP001_CIRS
2010-154T22:38
Alt= 92,810 km
Longitude= 165°W
Phase= 61°

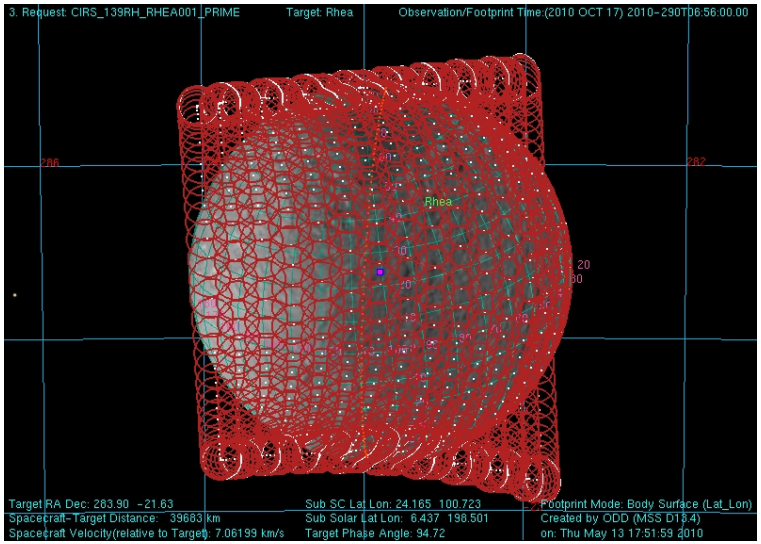
9-part

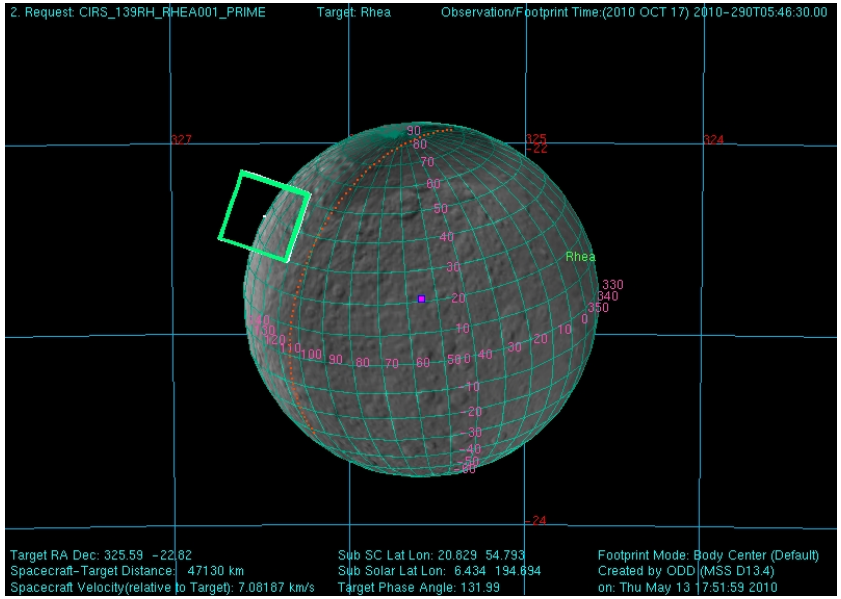
CIRS_139RH_RHEA001_PRIME

3-part

139RH_ICYLON001_CIRS
2010-290T05:33



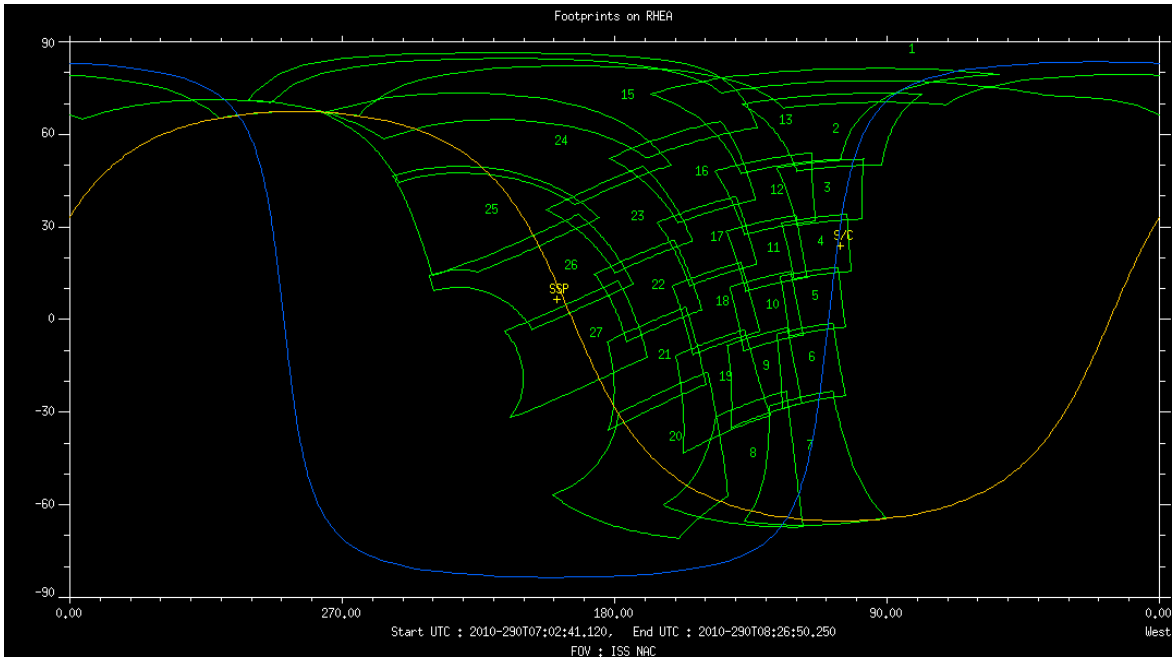


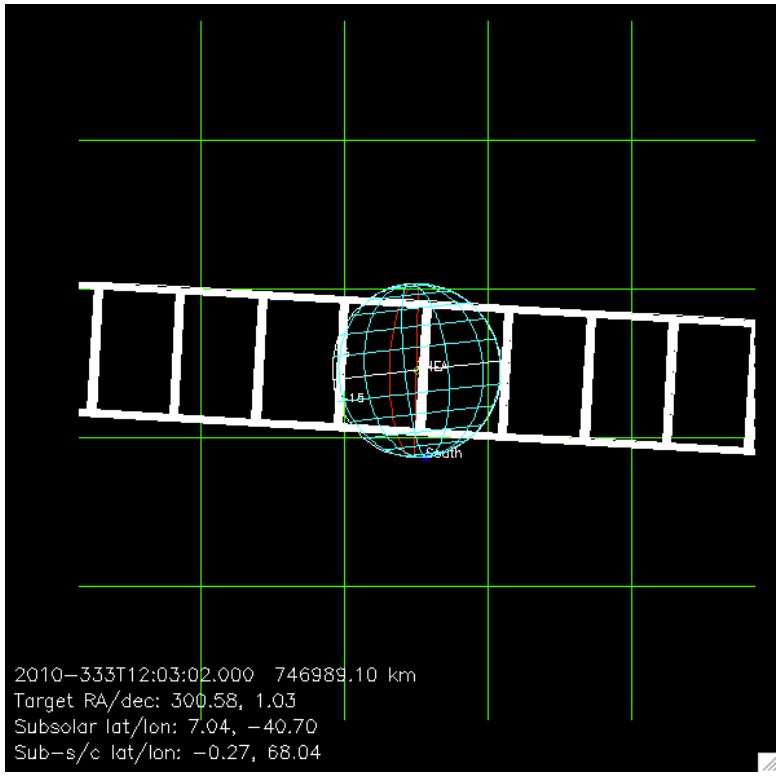


The image cannot be displayed. Your computer may not have enough memory to open the image, or the image may have been corrupted. Restart your computer, and then open the file again. If the red x still appears, you

139RH_ICYLON001_ISS 2010-290T07:05

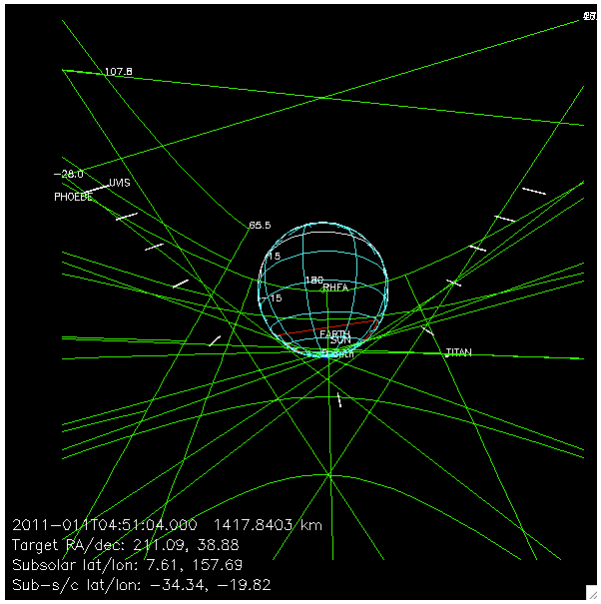
26-part





141RH_ICYLON001_PRIME
2010-333T12:03
Alt= 746,200 km
Longitude= 292°W
Phase= 109°

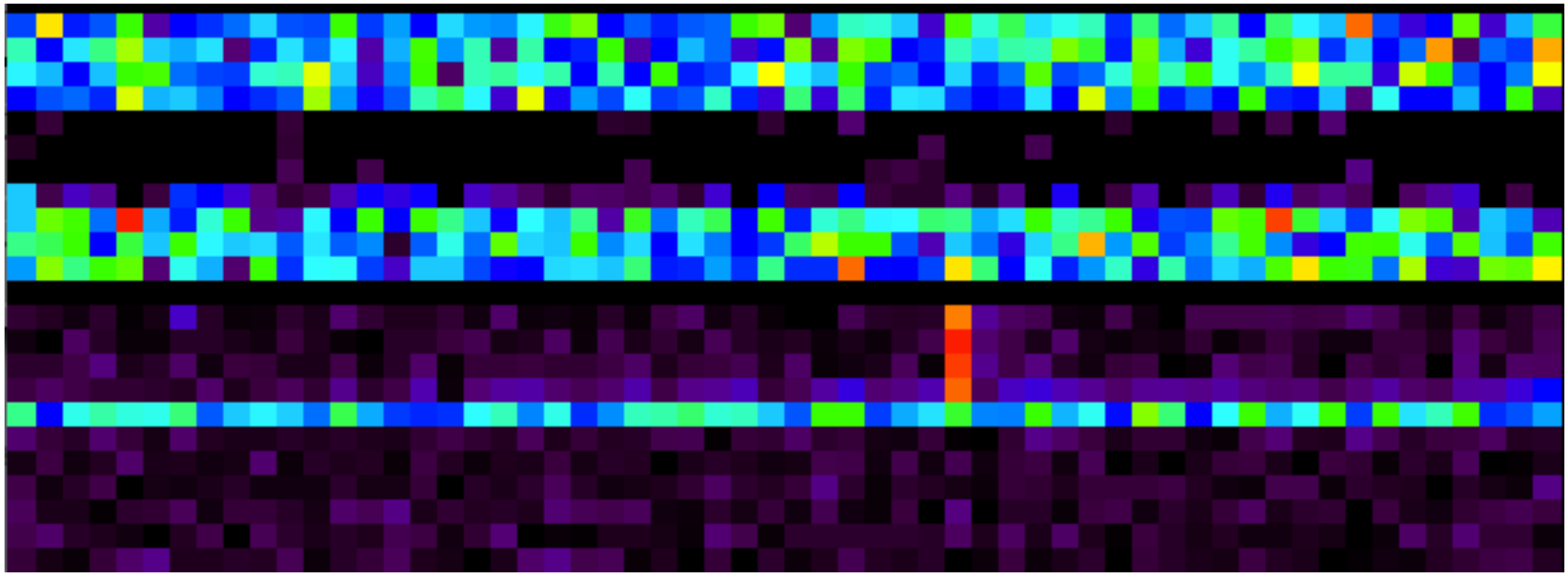
143RH_ICYMAP001_CAPS
2011-011T04:51
Alt=344 km
Longitude=104°W
Latitude=52°S
Phase=98°



Rhea passes through UVIS slit

Ly-a

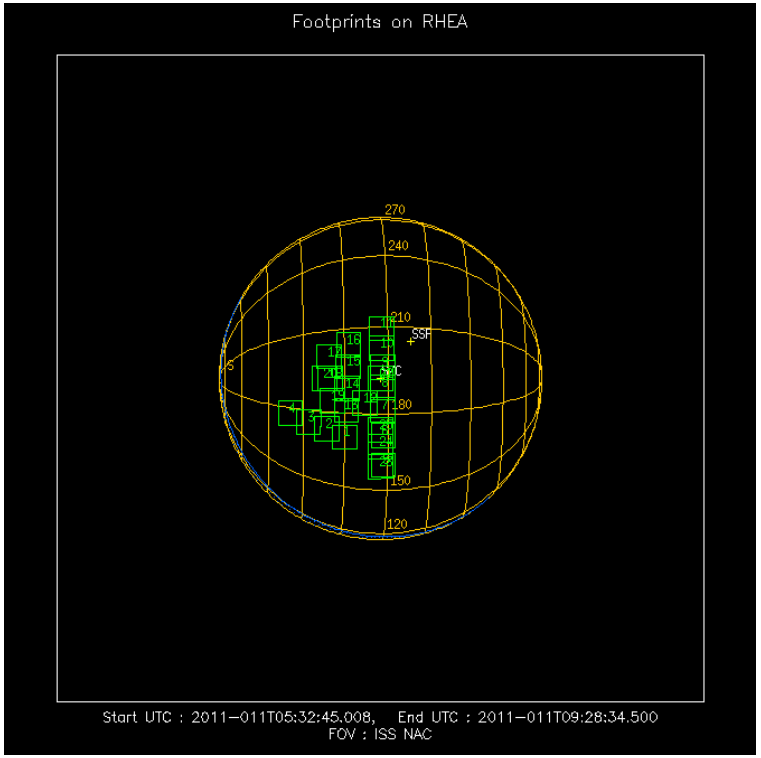
Long waves

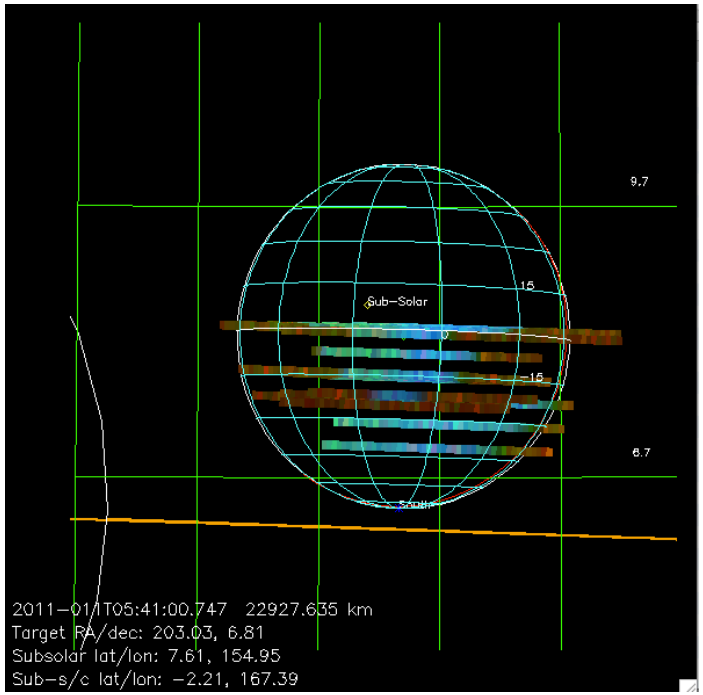


ISS_143RH_RHEA001_PIE

143RH_ICYLON001_ISS
2011-011T05:40

21-part



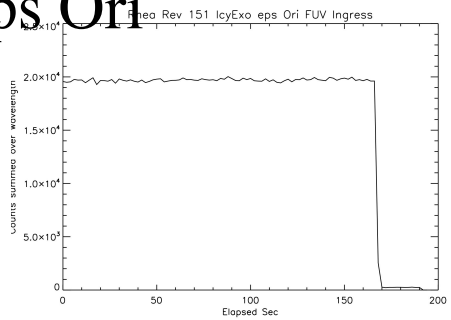


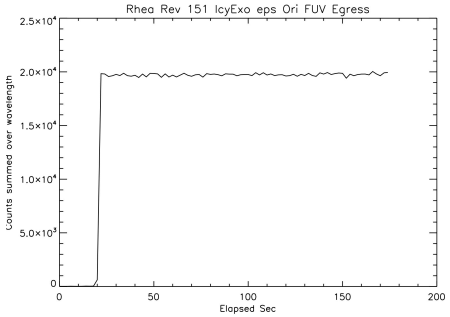
FUV

Ingress

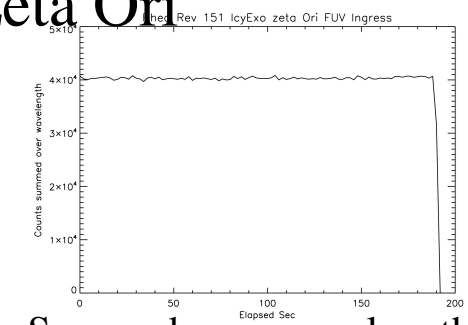
Egress

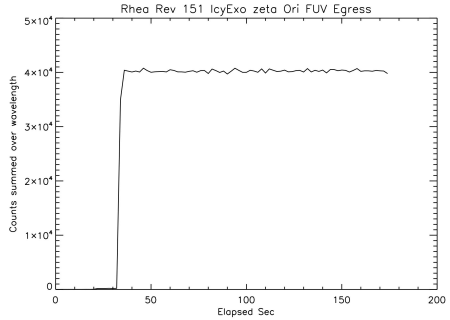
Eps Ori





Zeta Ori





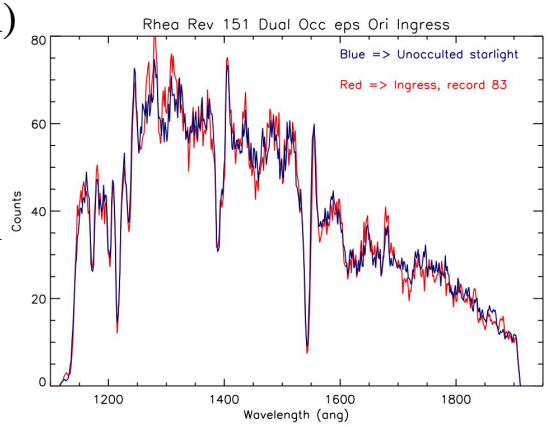
Summed over wavelength

UVIS_151RH_ICYEXO001_PIE
2011-213T20:34
Eps Ori Ingress lat/lon: -21.7 / 351.7
Eps Ori Egress lat/lon: -20.0 / 169.5
Zeta Ori Ingress lat/lon: -20.7 / 350.7
Zeta Ori Egress lat/lon: -28.4 / 168.4
Stars: epsilon Orionis and zeta Orionis

Practice run for Enceladus dual occ - ingress

Spectra of I, I_0 (counts per integration period vs wavelength)

Eps Ori Ingress



Spectra of I, I_0 (counts per integration period vs wavelength)

Zeta Ori Egress

2-part

153RH_ICYLON001_ISS
2011-260T00:27
Alt= 1,158,930 km
Longitude= 203°W
Phase= 23°

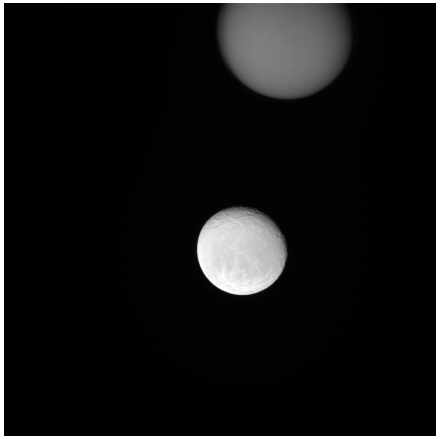
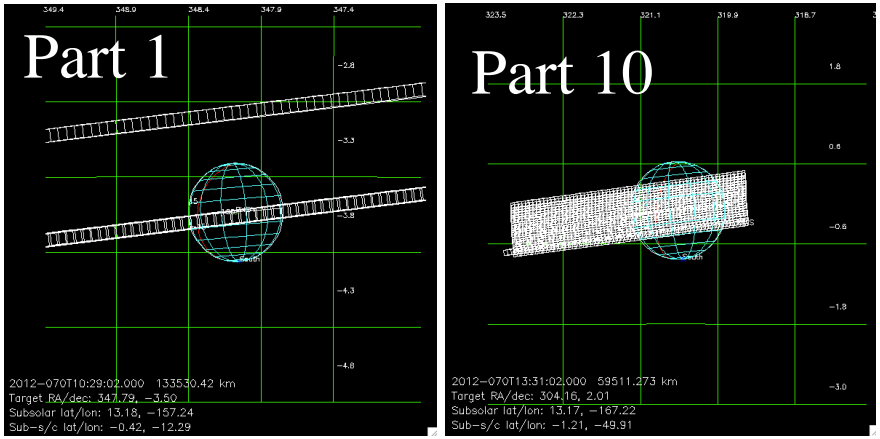
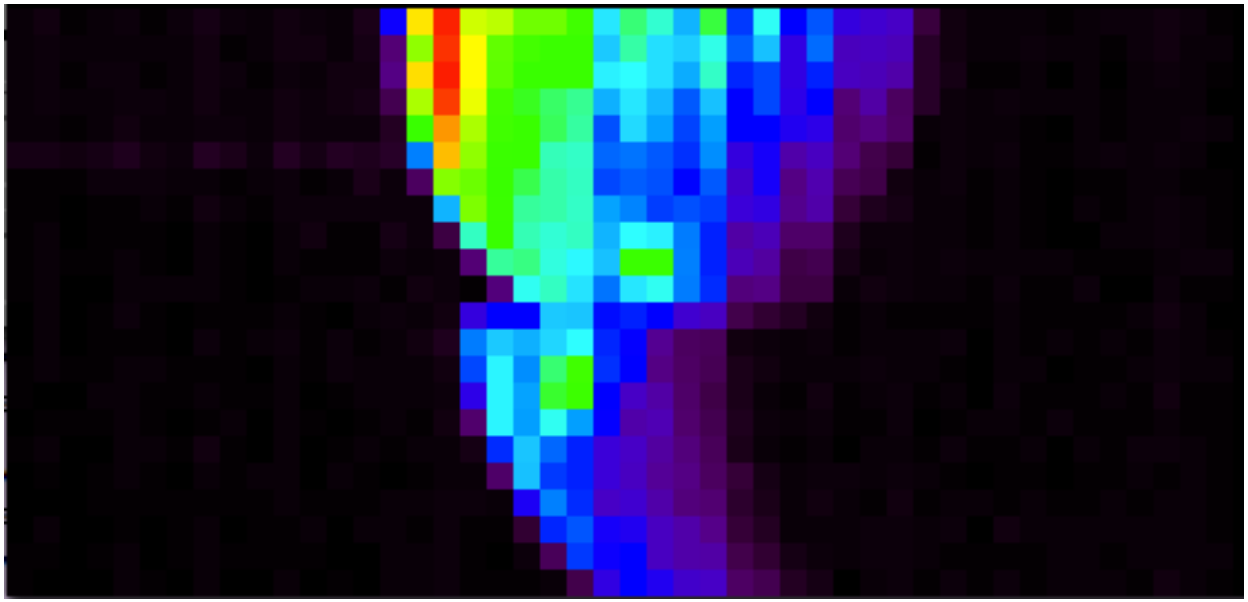


Image at 01:20

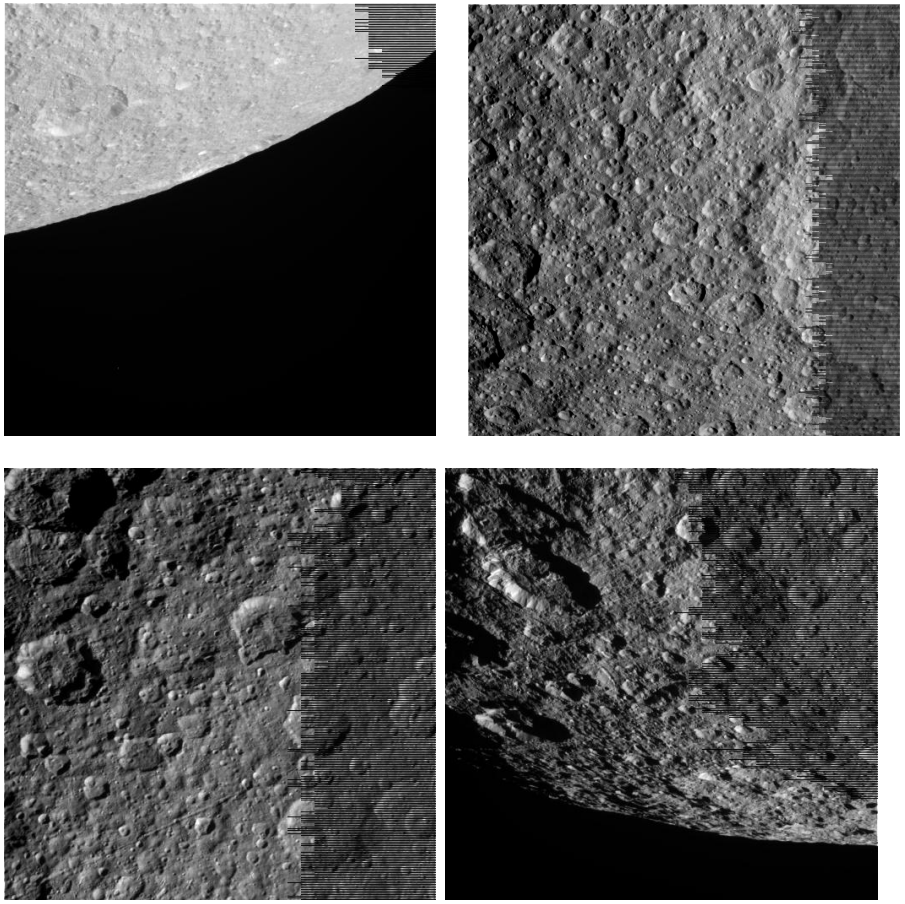
10-part

162RH_ICYLON001_CIRS
2012-070T10:30
Alt= 132,062 km
Longitude= 13°W
Phase= 142.5°

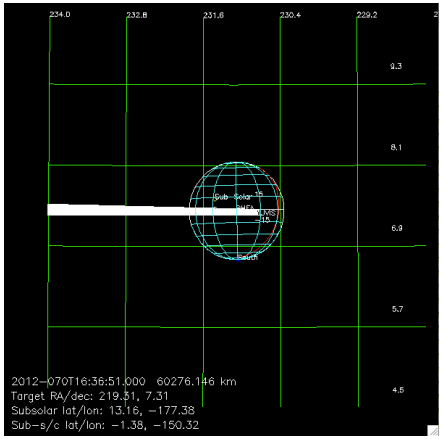




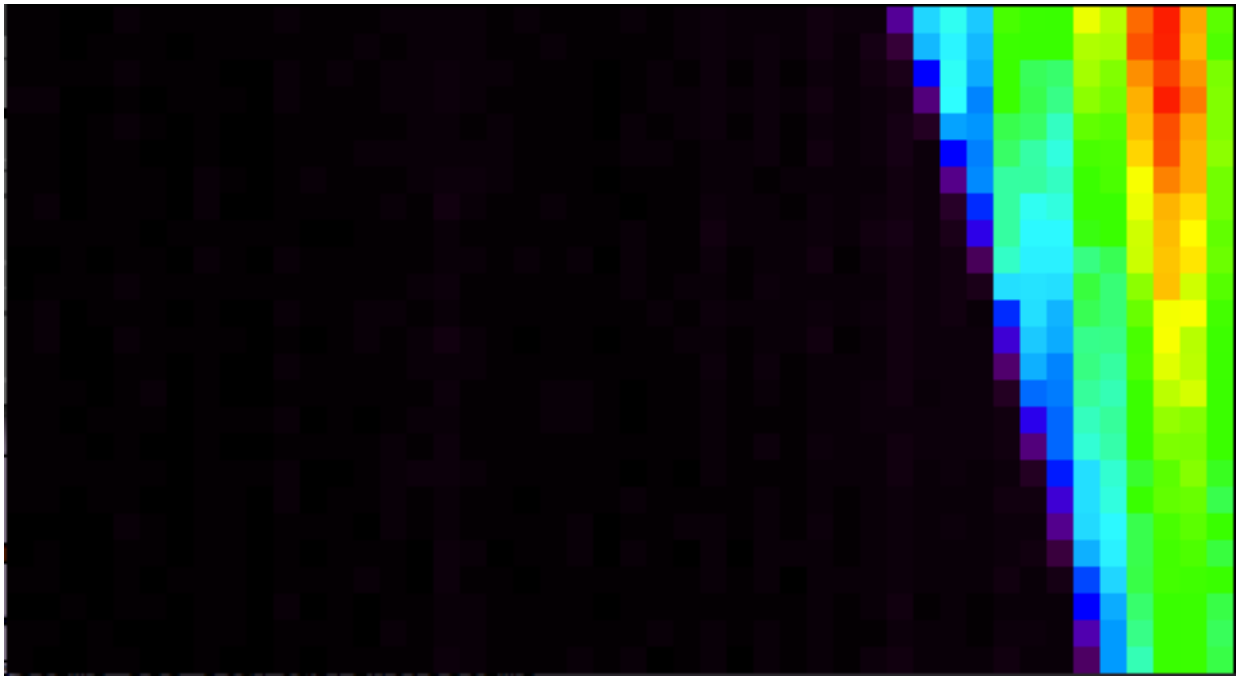
31-part



162RH_ICYMAP001_ISS
2012-070T15:00
Alt= 41879 km
Longitude= 98°W
Phase= 74.5°

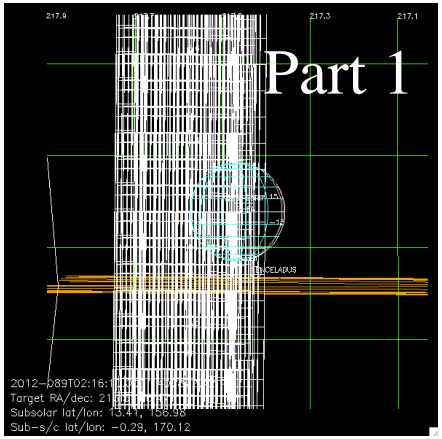


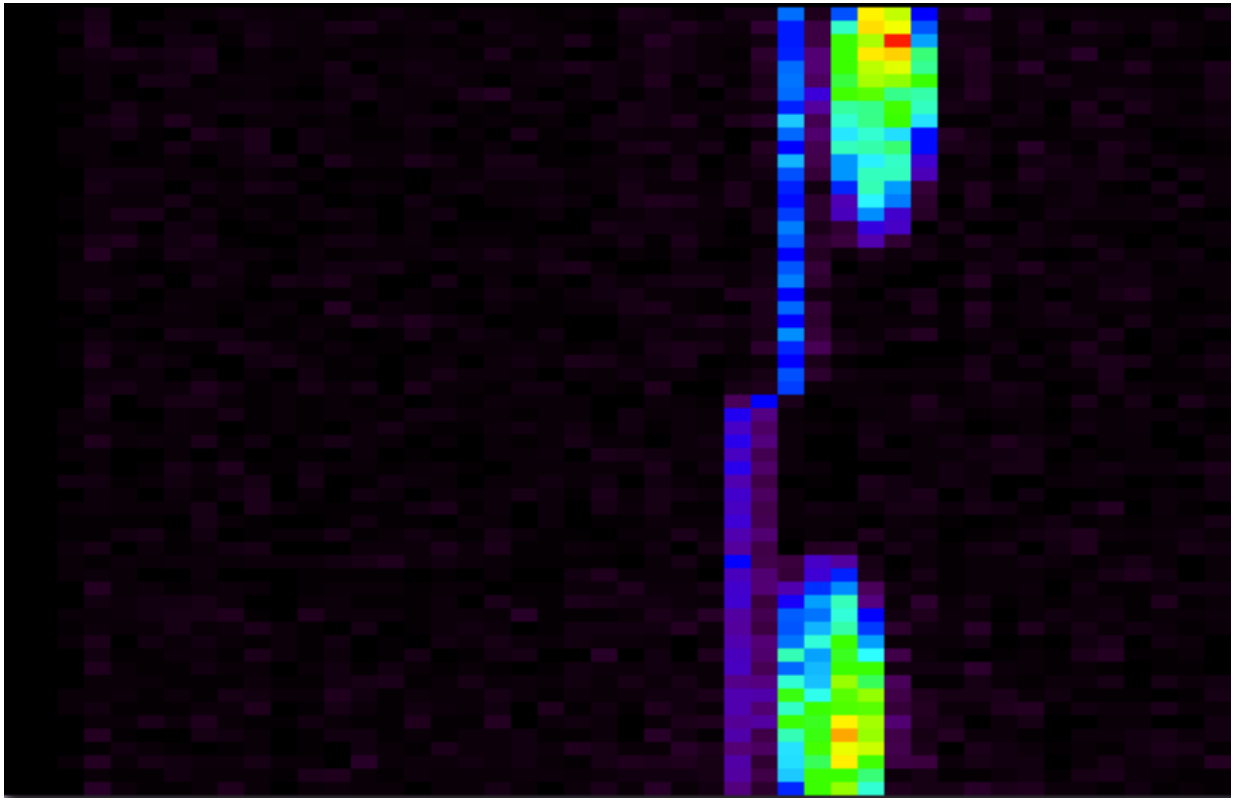
162RH_ICYLON002_ISS
2012-070T16:37
Alt= 67,849 km
Longitude= 158°W
Latitude=1°S
Phase= 25.5°

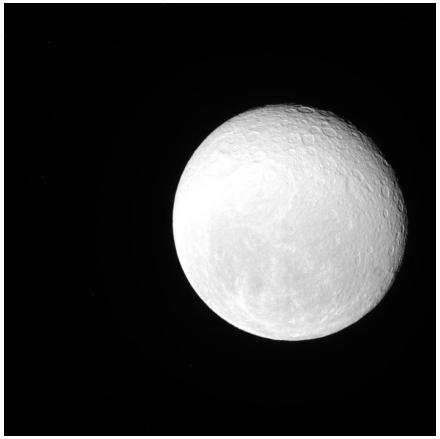


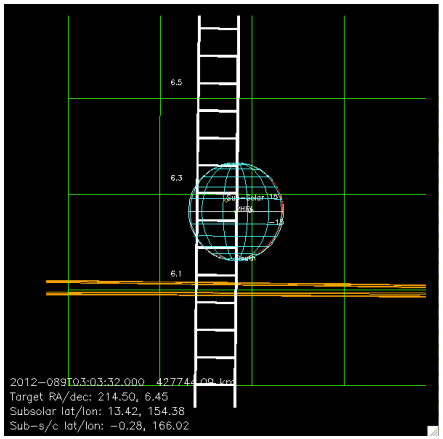
4-part

163RH_ICYMAP001_CIRS
2012-089T02:16
Alt= 406855 km
Longitude= 190°W
Phase= 19°





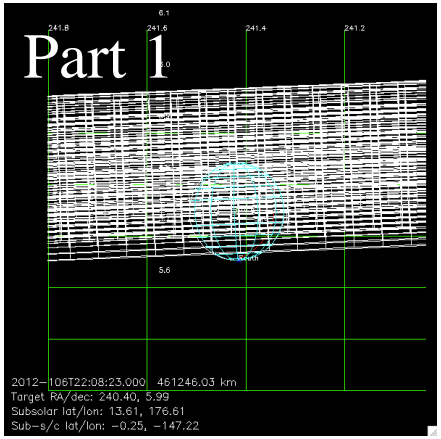


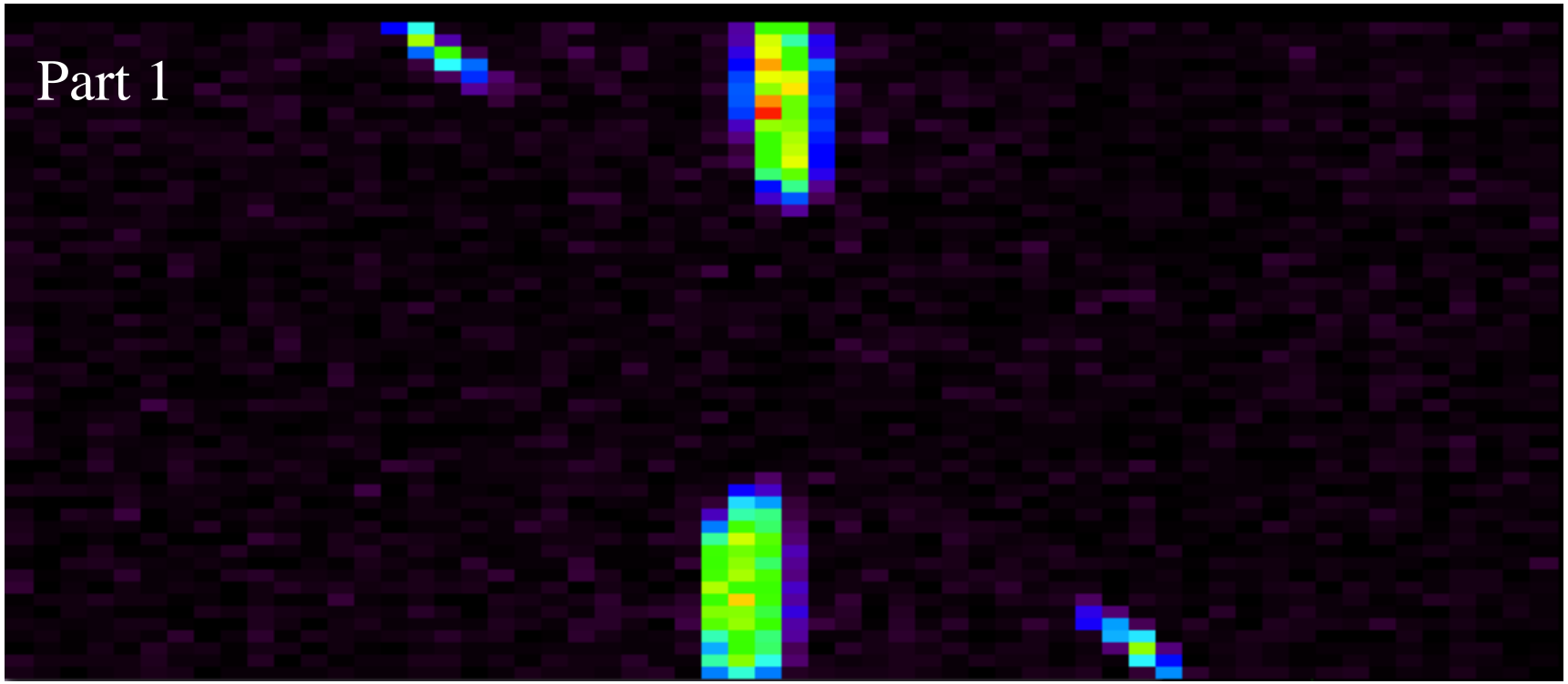


163RH_ICYLON001_ISS
2012-089T03:04
Alt= 427471 km
Longitude= 194°W
Phase= 18°

4-part

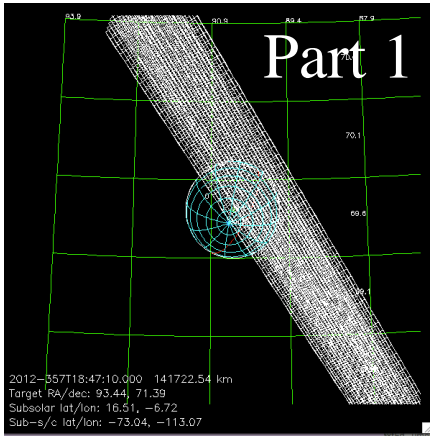
164RH_ICYMAP001_CIRS
2012-106T22:08
Alt= 460528 km
Longitude= 147°W
Phase= 38.8°





2-part

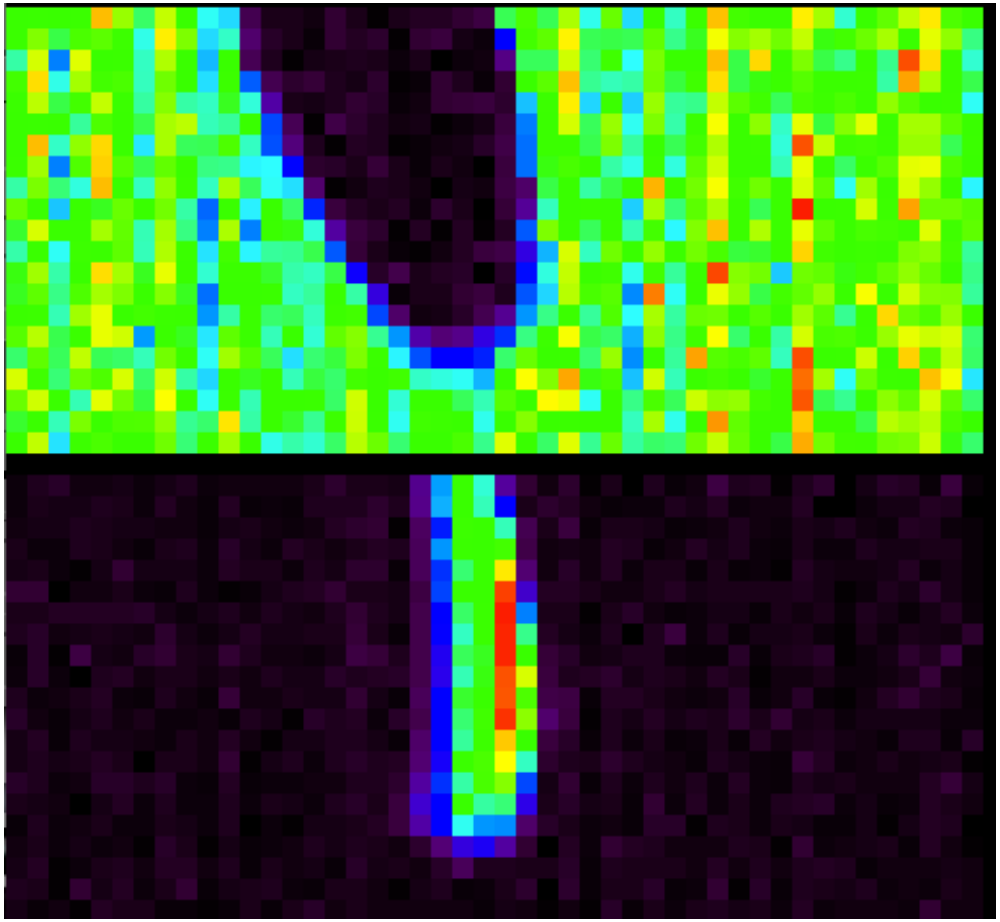
177RH_ICYLON001_CIRS
2012-357T18:48
Alt= 140148 km
Longitude= 113°W
Latitude=73°S
Phase= 110.5°



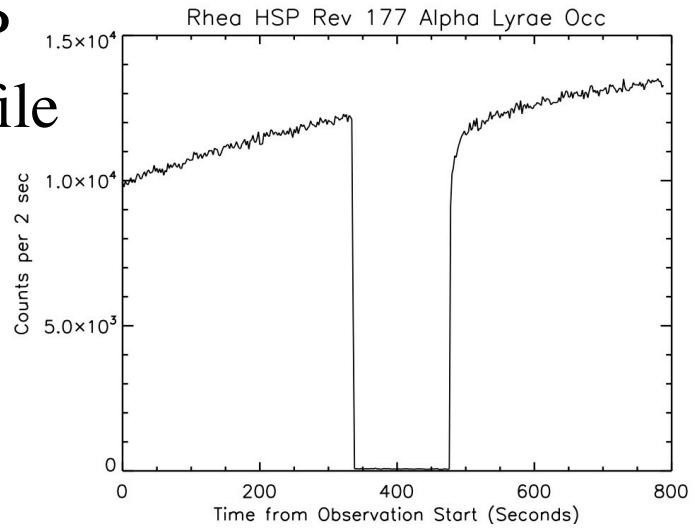
Part 1

Ly-a

Long waves

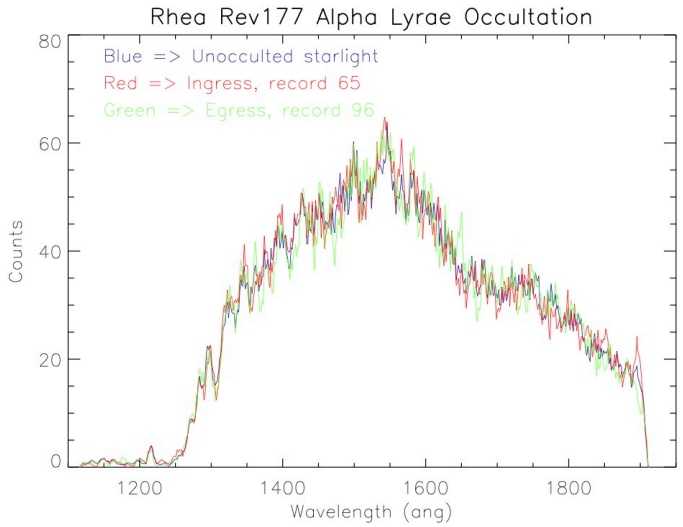


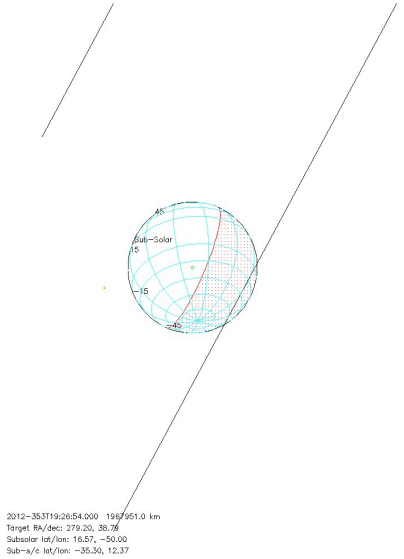
HSP profile



UVIS_177RH_ICYEXO001_PIE
2012-353T18:15
Ingress lat/lon: -4.3 / 80.5
Egress lat/lon: 7 / 252.7
Star: alpha Lyrae

Spectra of I, I_0 (counts per integration period vs wavelength)



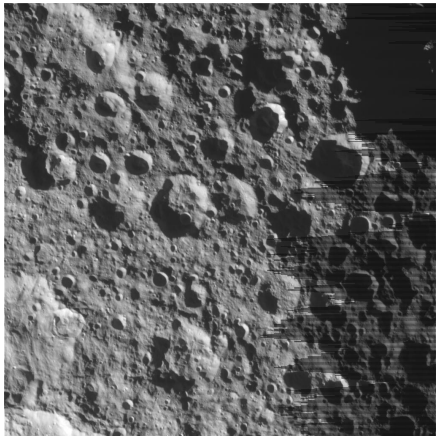


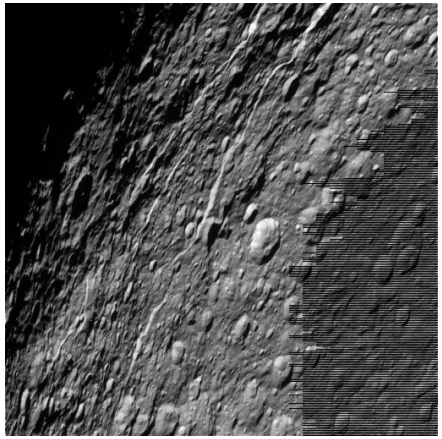
Ingress; Rhea is sub-pixel

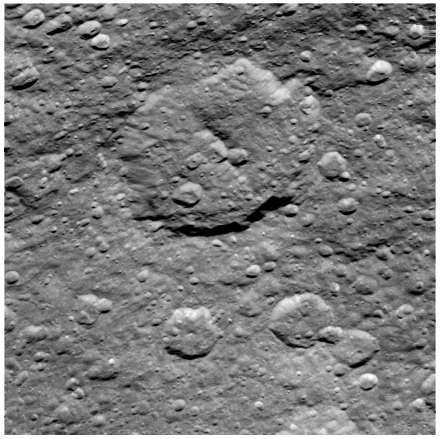
Spectrum of I/I_0
Too noisy to be useful

37-part

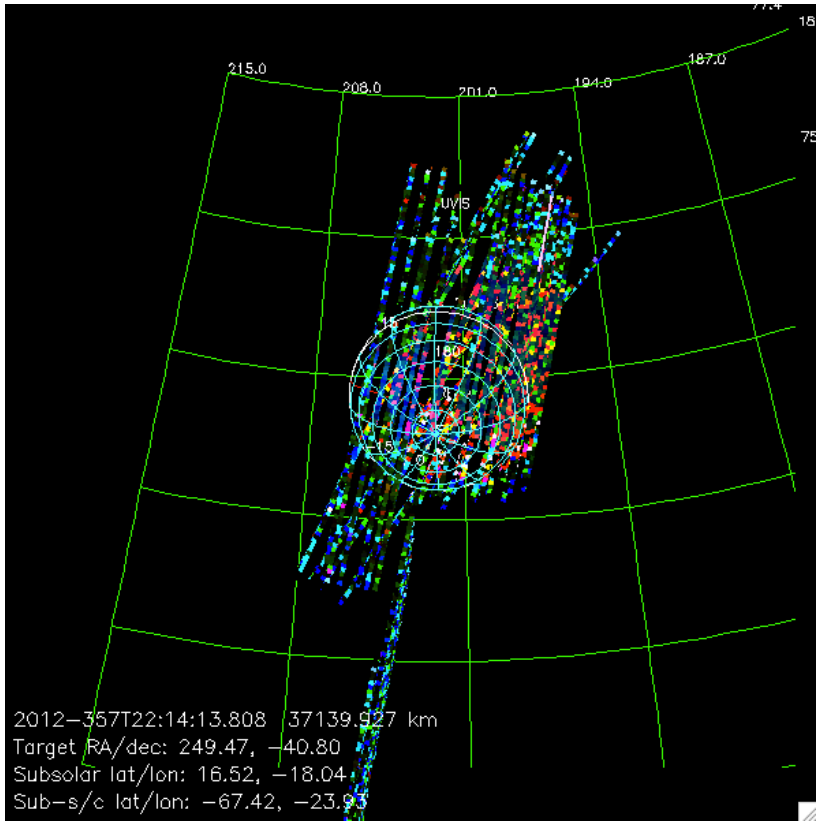
177RH_ICYMAP001_ISS
2012-357T22:13







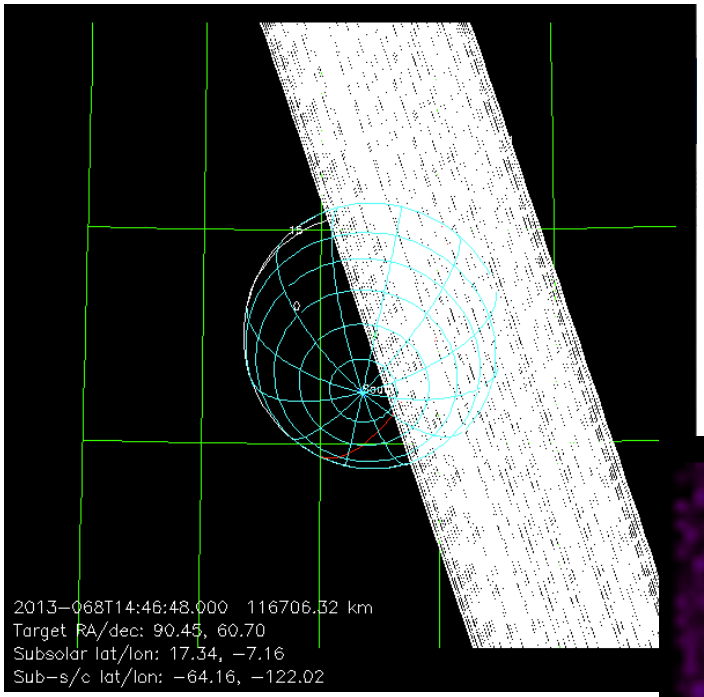
Sub s/c at 25°W; sub-Saturnian-leading illuminated

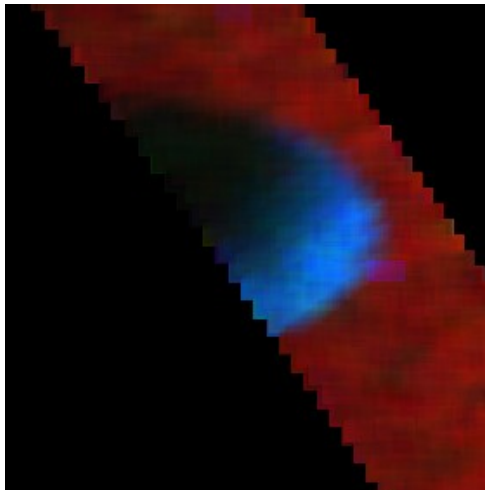


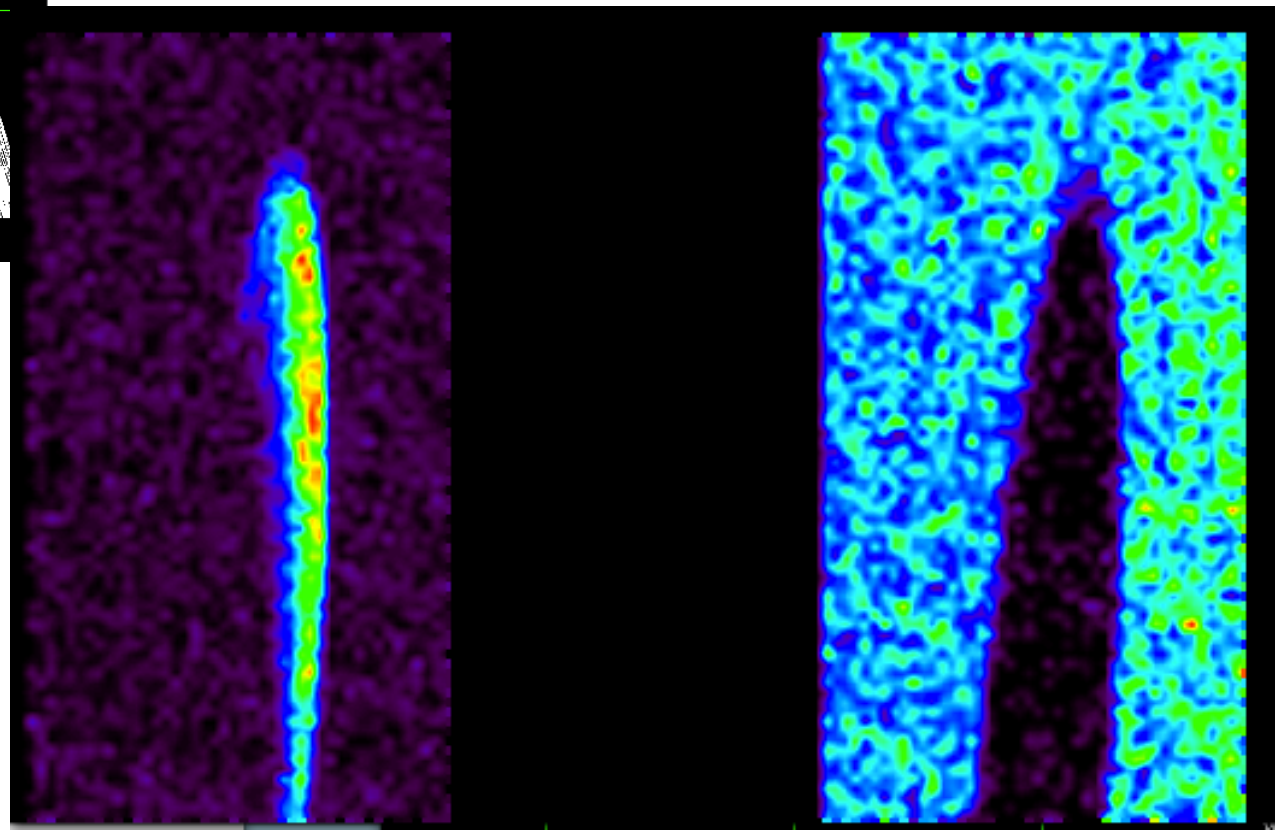
First part

183RH_ICYLON001_CIRS
2013-068T14:47

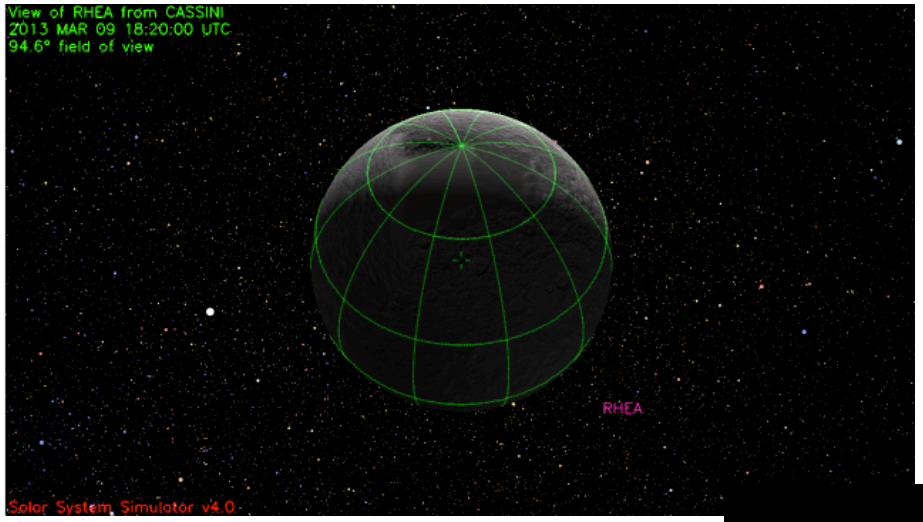
4-part



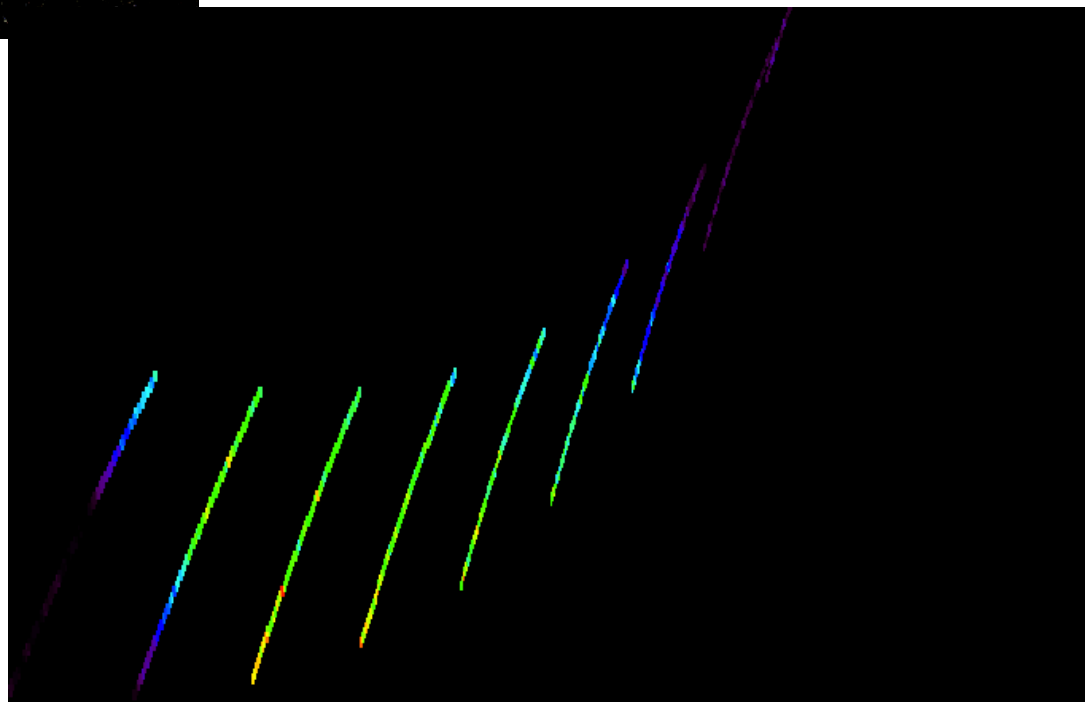




183RH_ICYMAP001_CIRS
2013-068T18:20



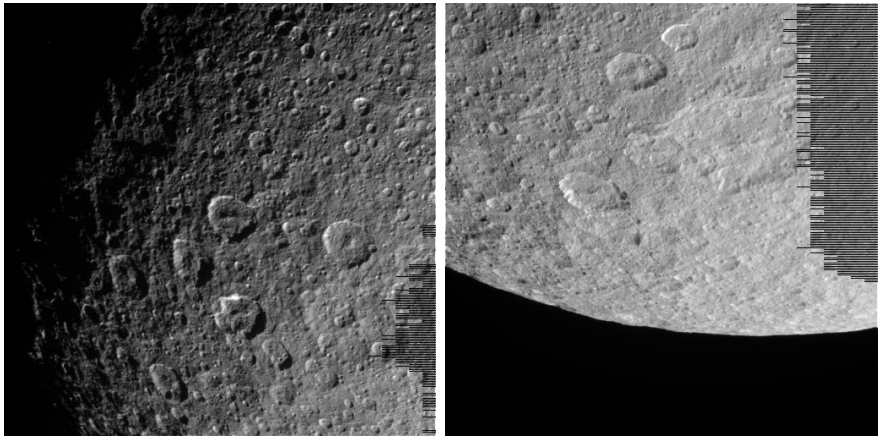
Sub s/c 195°W, 54°N

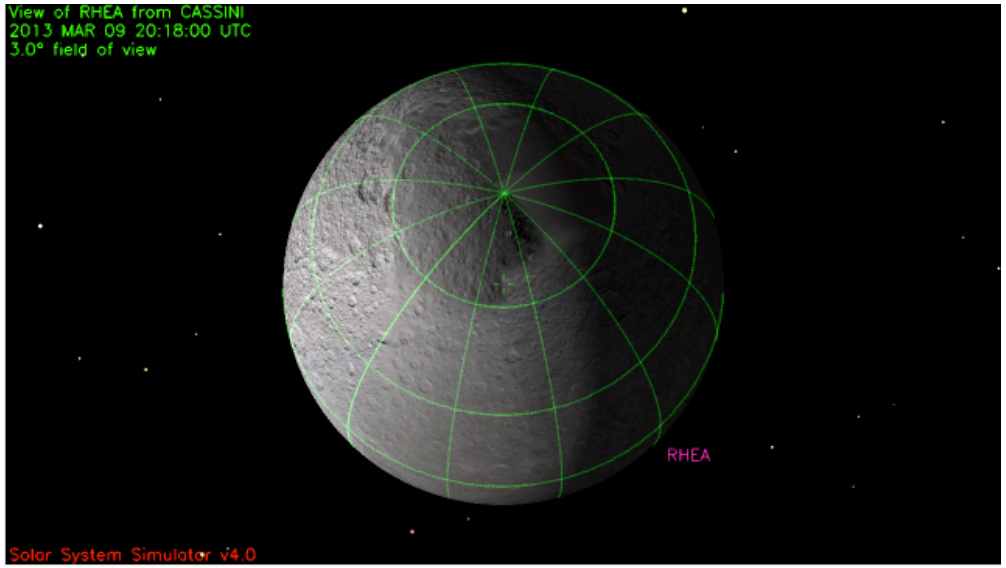


(weird LW image)

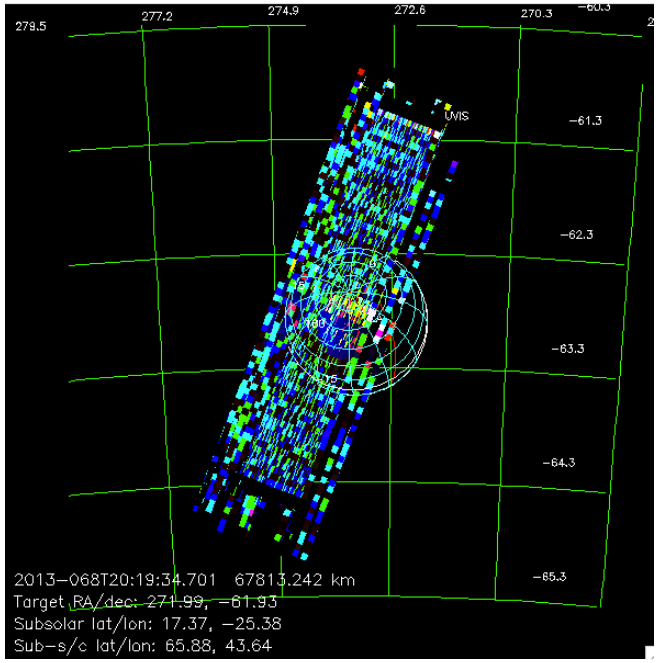
18-part

183RH_ICYMAP002_ISS
2013-068T20:18



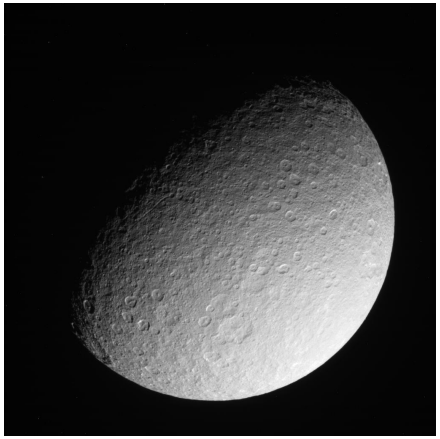


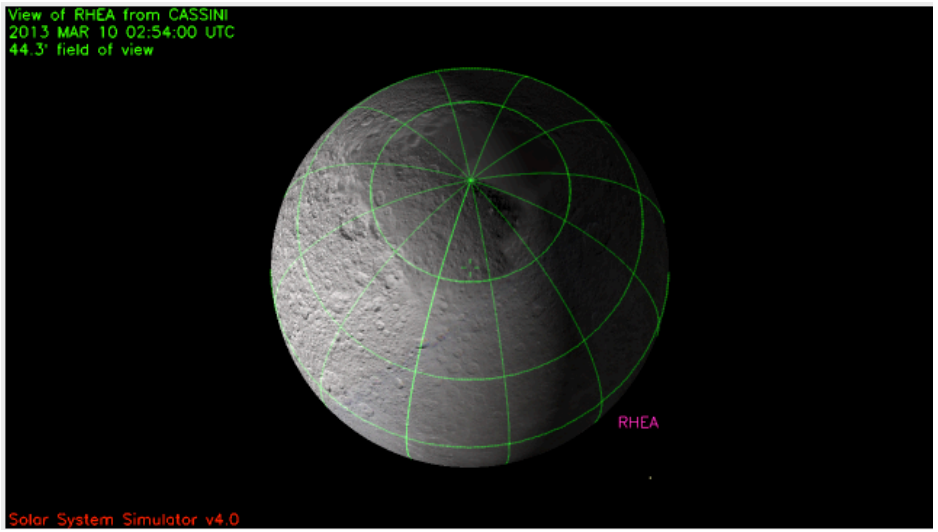
317°W sub-s/c lon
Sub-Saturnian hemisphere illuminated

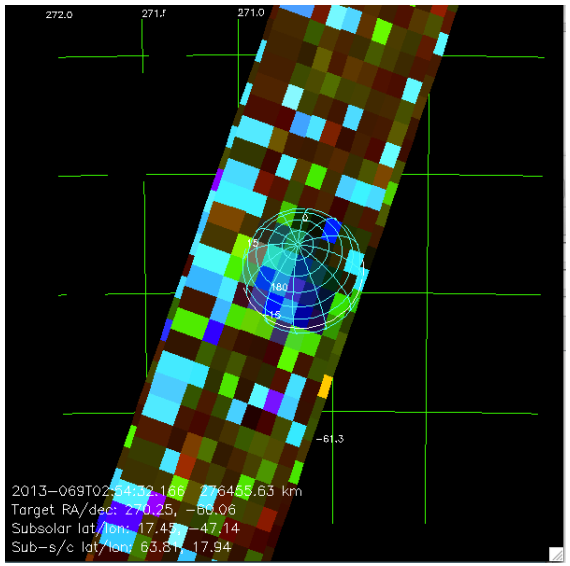


183RH_ICYLON002_ISS
2013-069T02:54

4-part

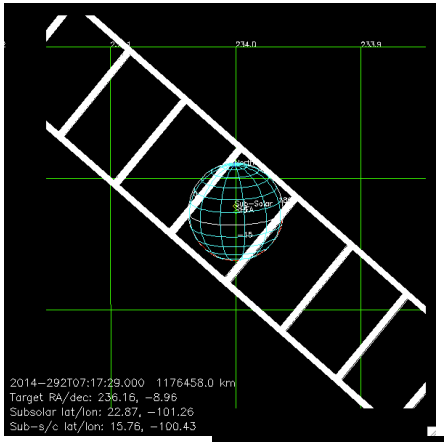


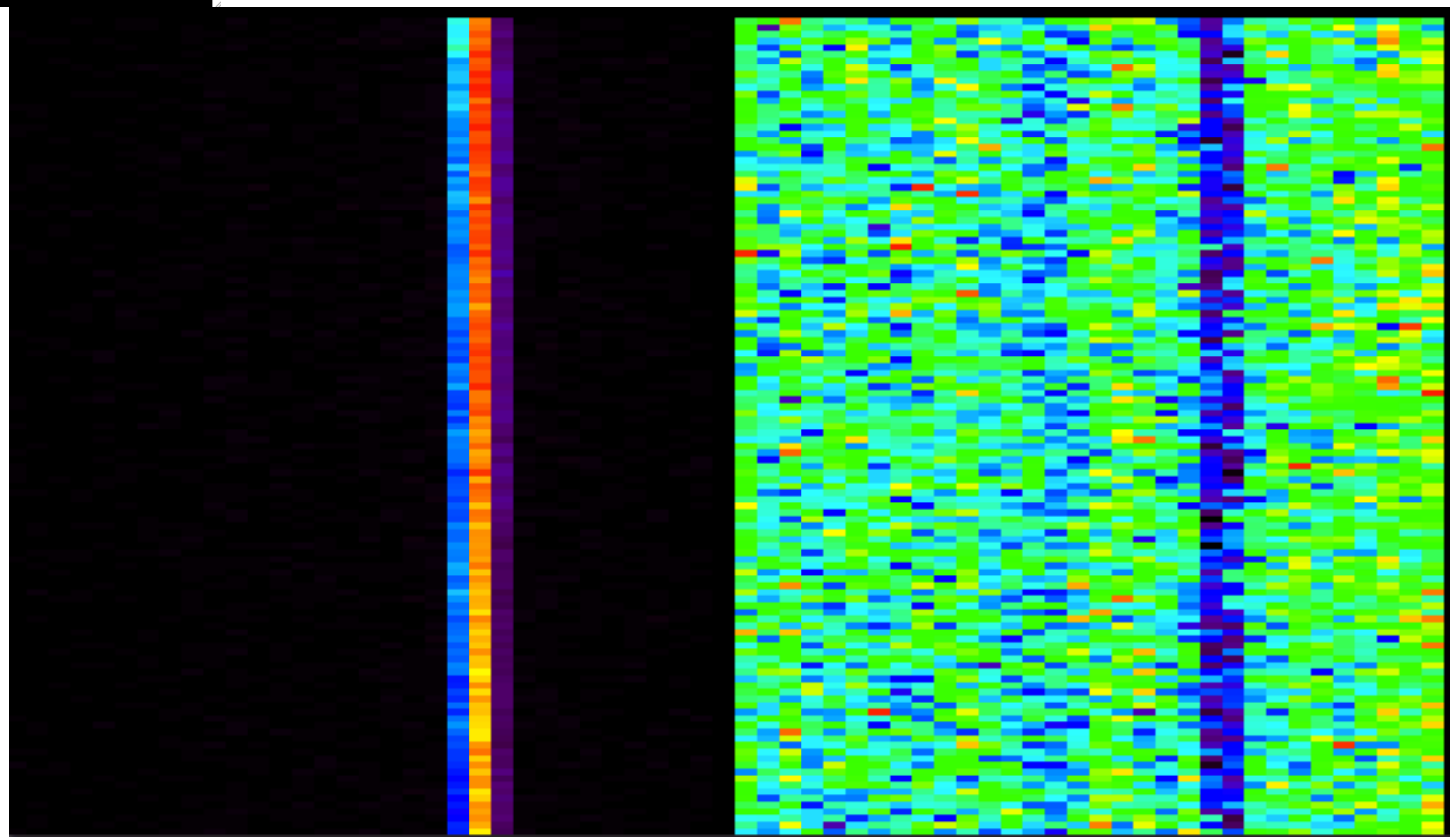




342°W sub-s/c lon
Sub-Saturnian-leading hemisphere illuminated

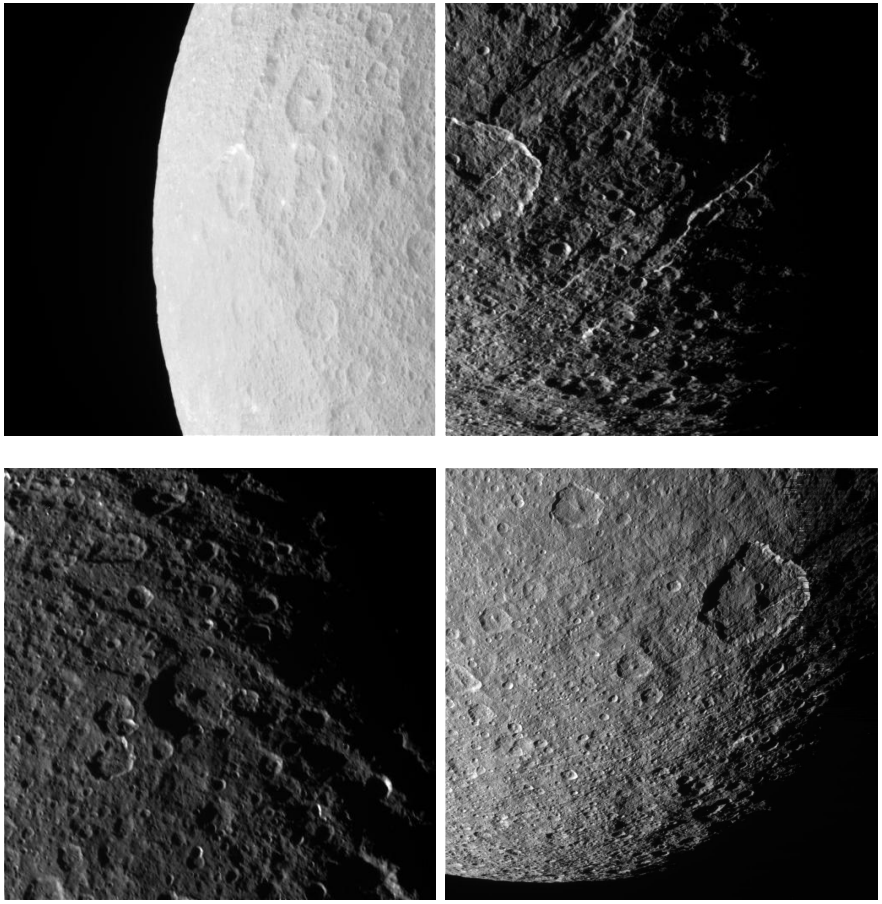
209RH_ICYLON003_PRIME
2014-292T07:18
Alt= 1,174,140 km
Longitude= 100°W
Latitude=15°N
Phase= 7.8°





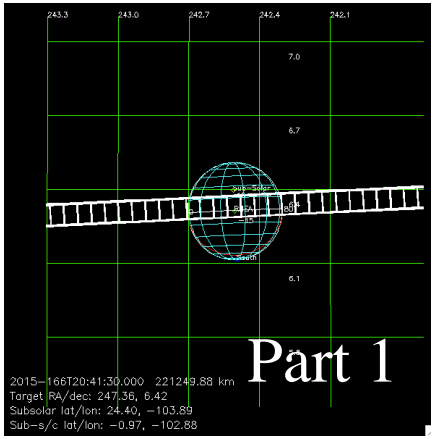
36-part

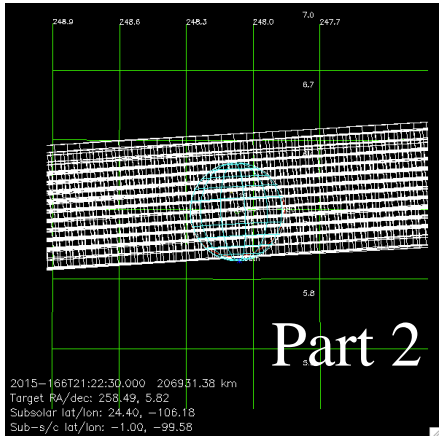
212RH_ICYMAP001_ISS
2015-041T03:15
Alt= 80,067 km -> 54K km
Longitude= 229°W
Phase= 55°

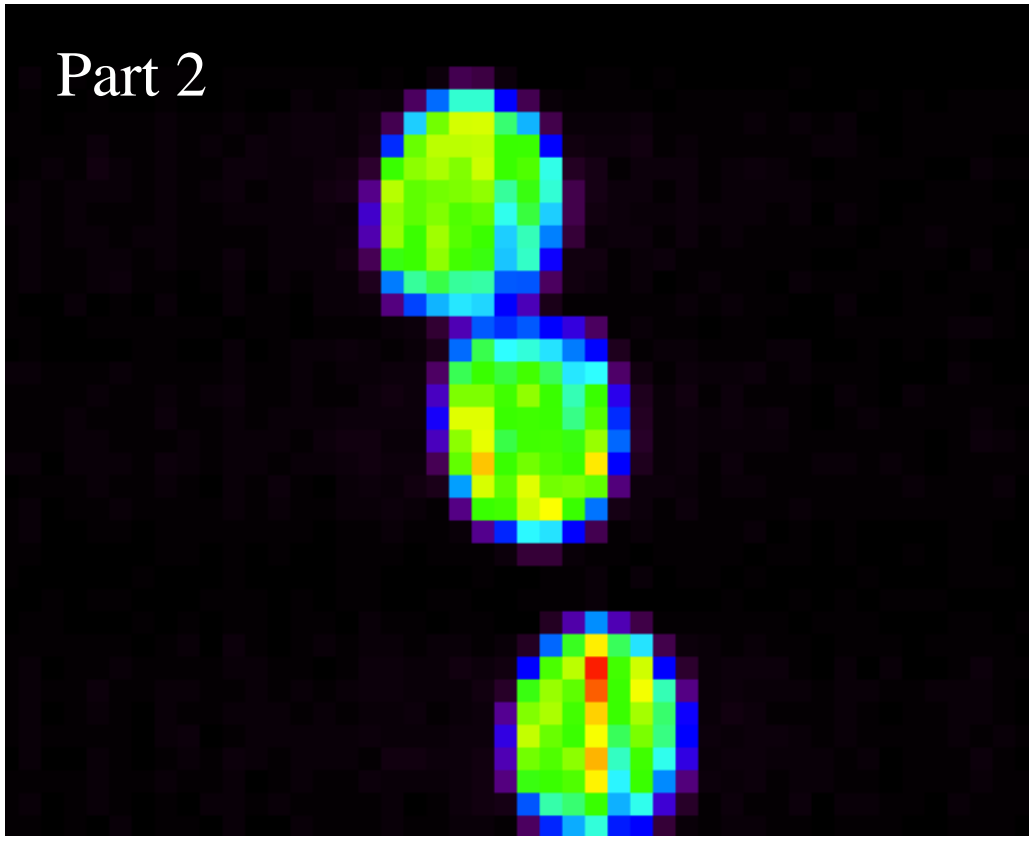


3-part

217RH_ICYLON001_CIRS
2015-166T20:42
Alt= 214,043 km
Longitude= 101°W
Latitude=1°S
Phase= 25.6°

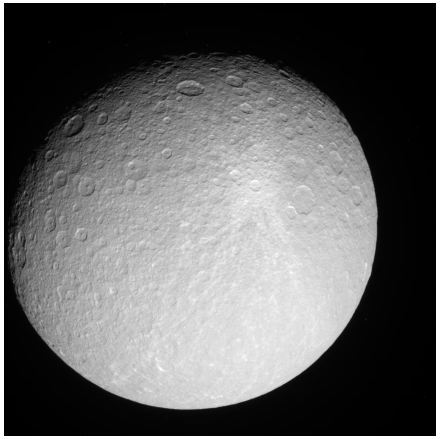


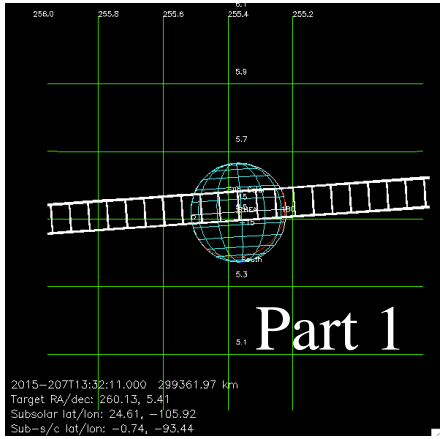


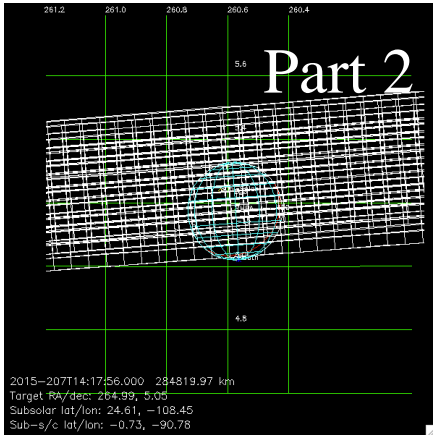


3-part

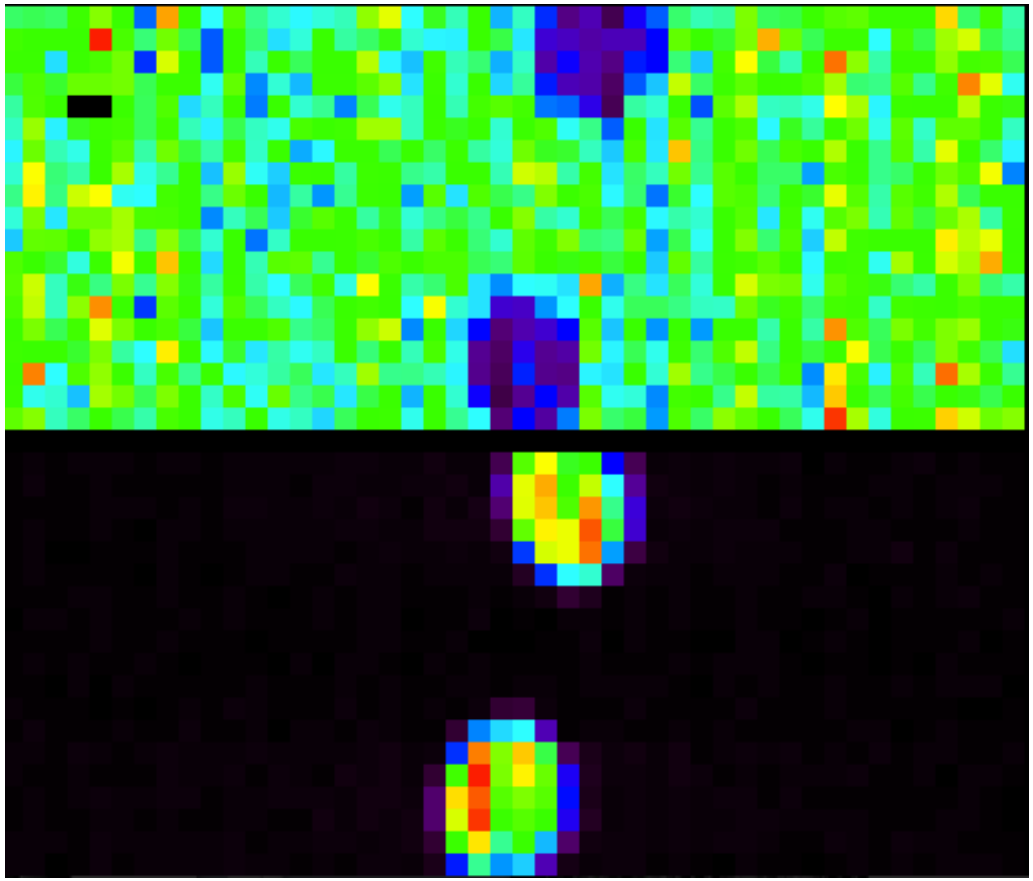
219RH_ICYLON001_ISS
2015-207T13:33
Alt= 291,751 km
Longitude= 92°W
Latitude=0.7°S
Phase= 29°





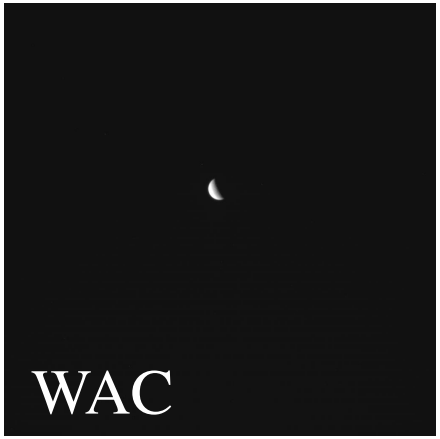


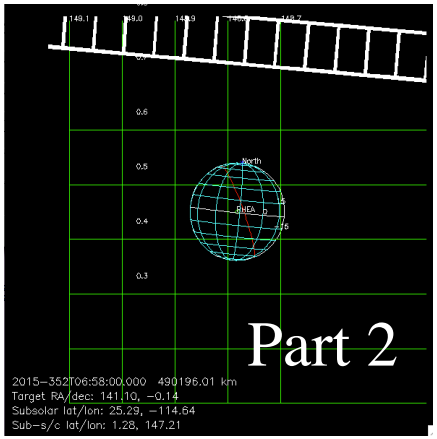
Part 2



4-part

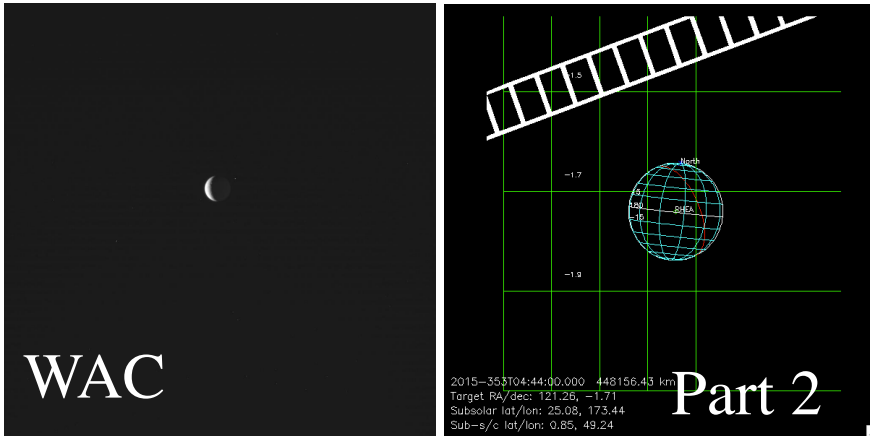
228RH_ICYLON002_CIRS
2015-352T06:39
Alt= 481,057 km
Longitude= 222°W
Latitude=1°N
Phase= 101°





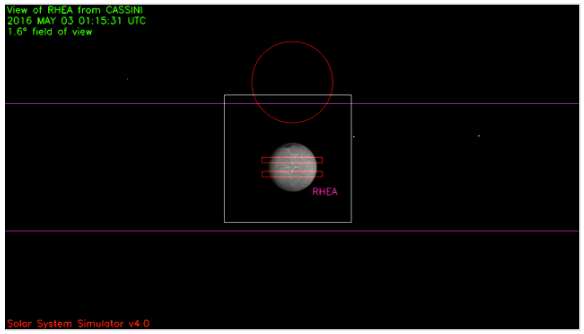
3-part

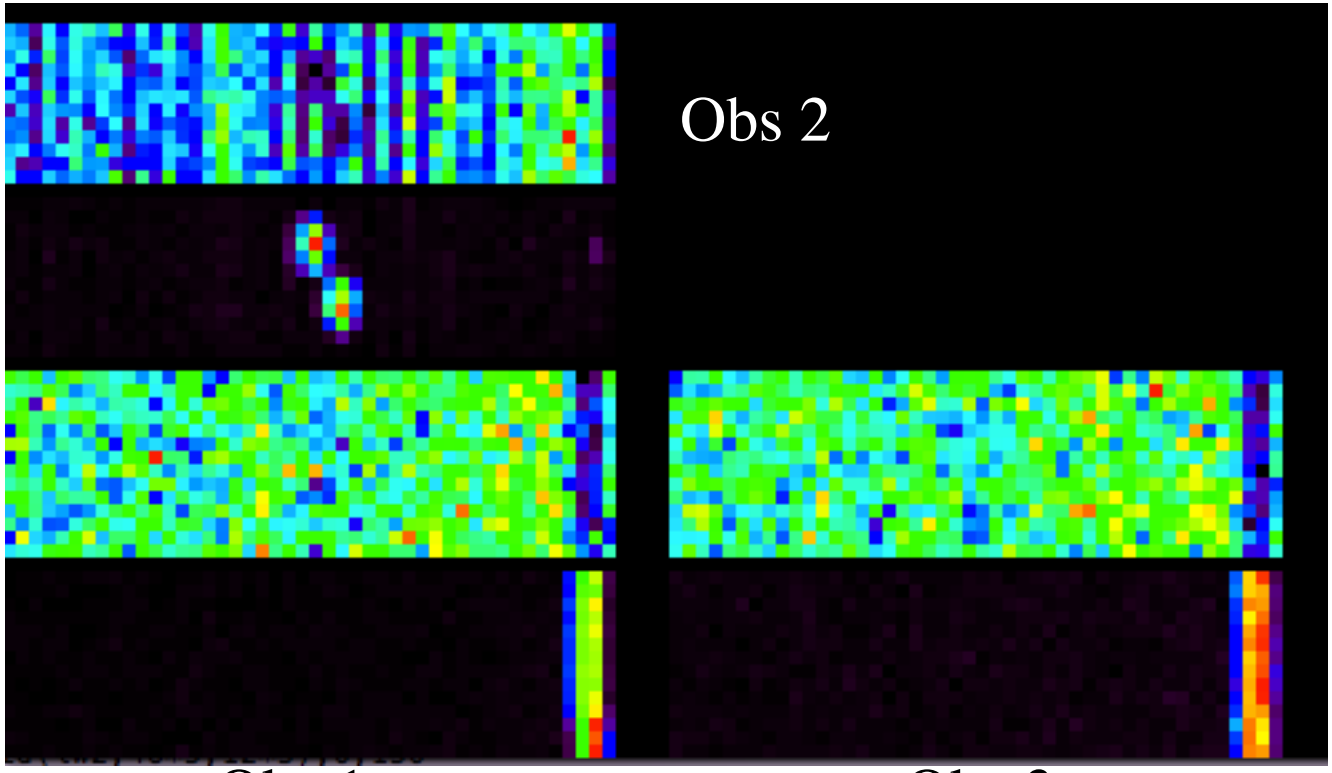
228RH_ICYLON001_CIRS
2015-353T04:23
Alt= 429,513 km
Longitude= 316°W
Latitude=1°N
Phase= 121°



3-part

235RH_ICYLON001_CIRS
2016-124T01:12
Alt= 644,917 km
Longitude= 230°W
Phase= 19.2°





Obs 1

Obs 3

236RH_LOPHASE001_PRIME

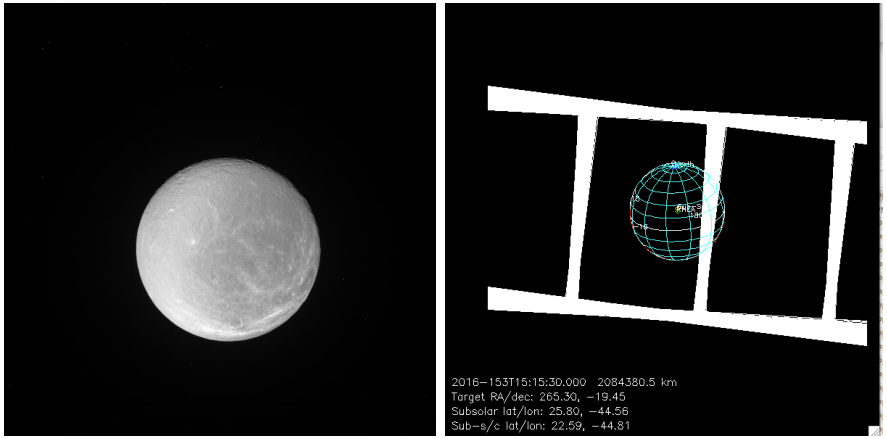
2016-153T15:16

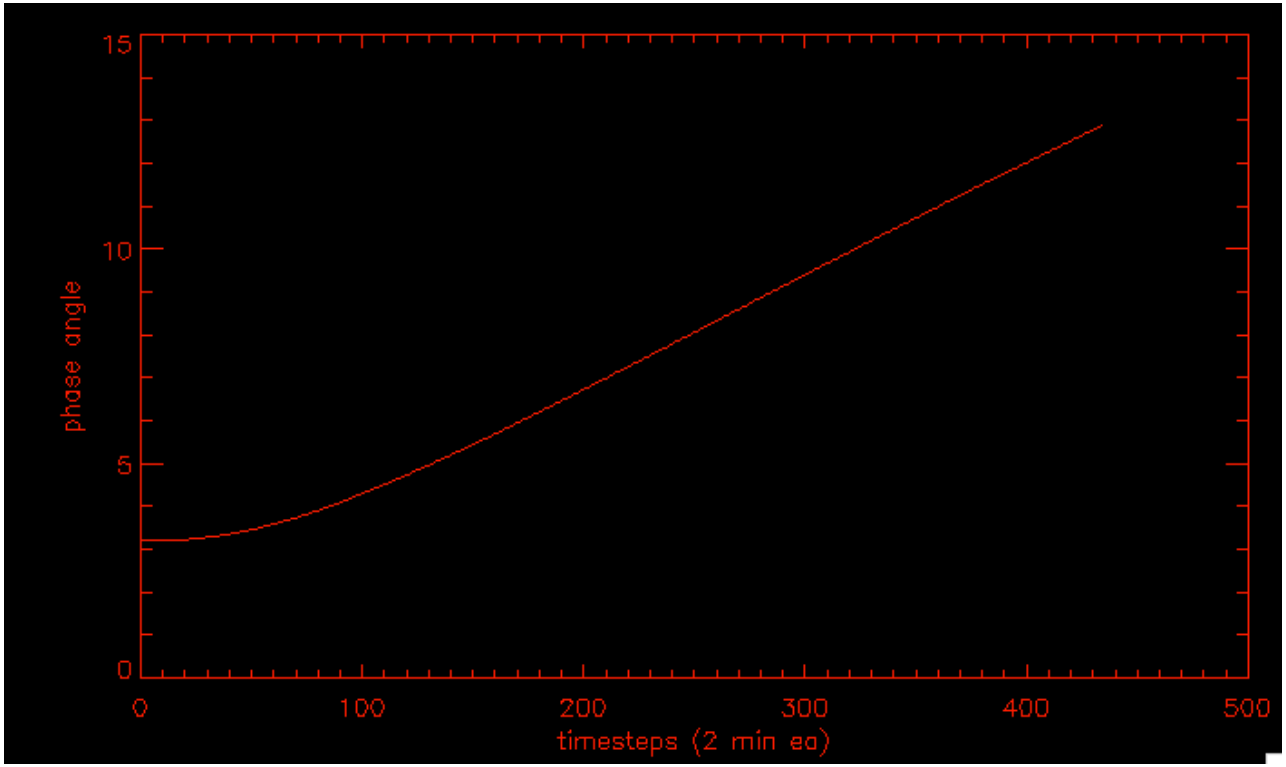
Alt= 1,859,512 km

Longitude= 62°W

Latitude=23°N

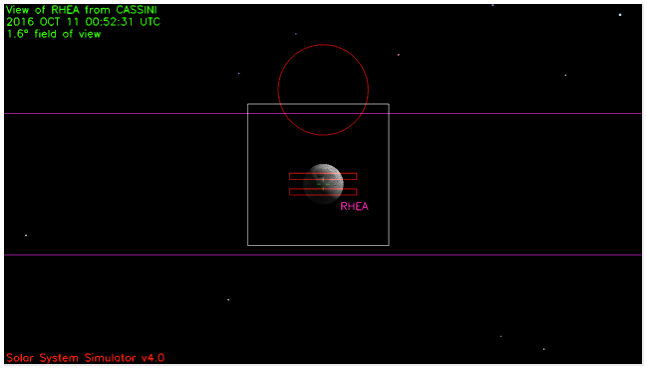
Phase= 7.4°





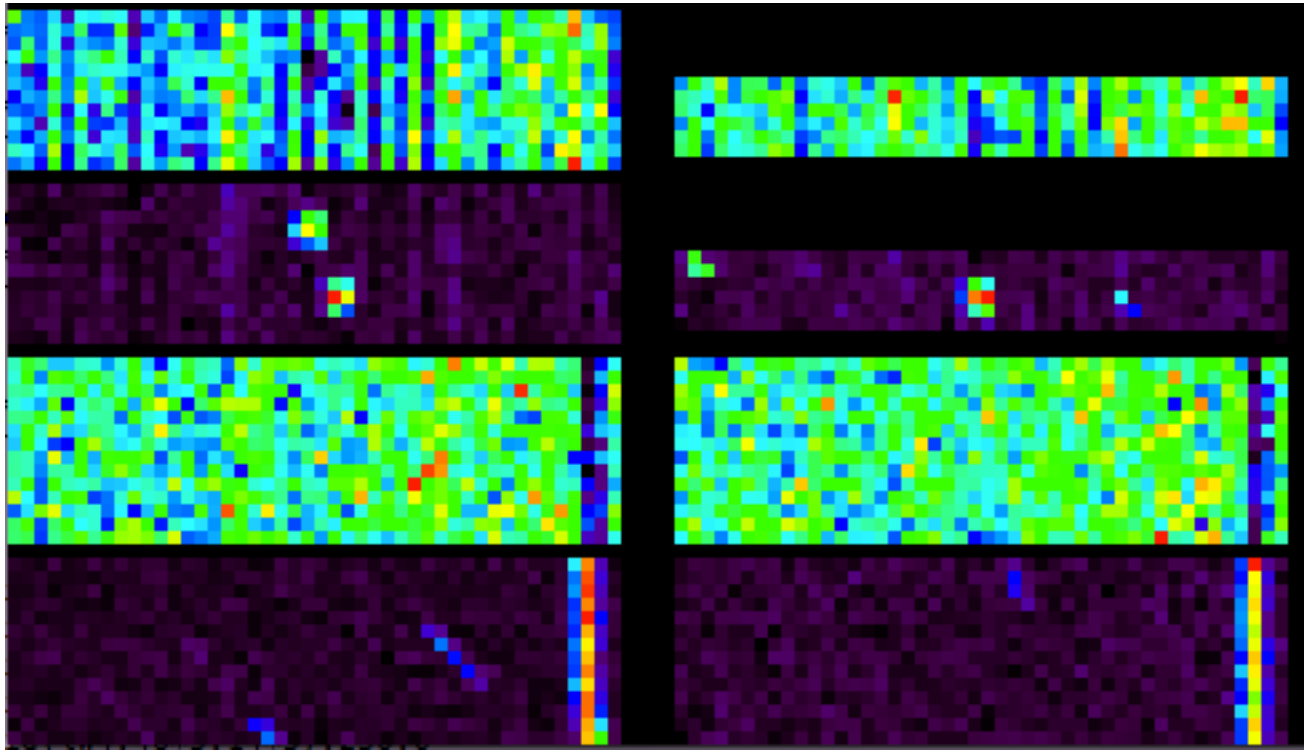
4-part

245RH_ICYLON001_CIRS
2016-285T00:51
Alt= 870,922 km
Longitude= 196°W
Phase= 77.2°



Obs 2

Obs 3

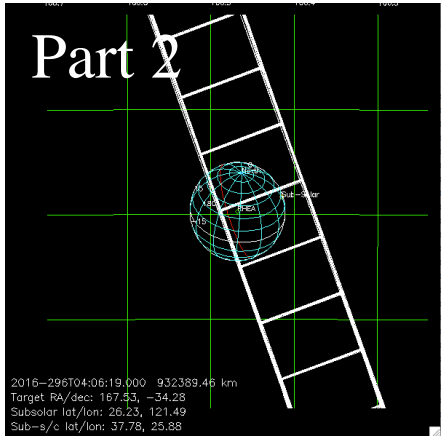


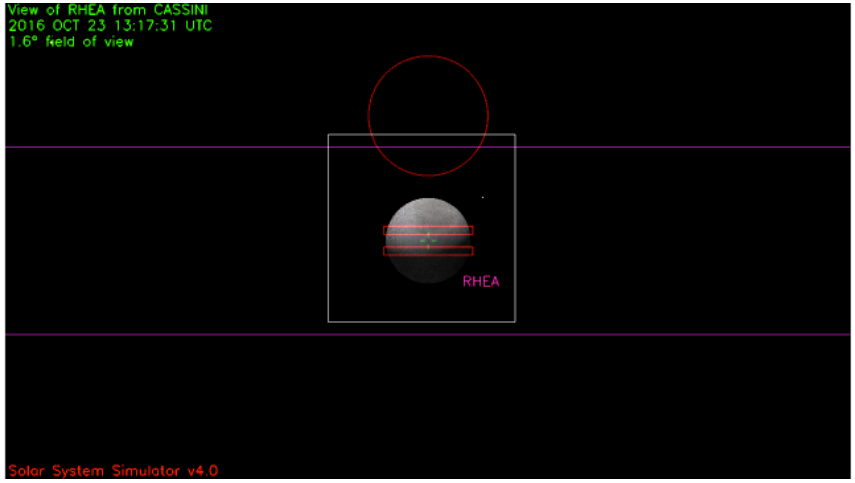
Obs 1

Obs 4

3-part

246RH_ICYLON001_ISS
2016-296T03:52
Alt= 928,918 km
Longitude= 334°W
Latitude=38°N
Phase= 78°



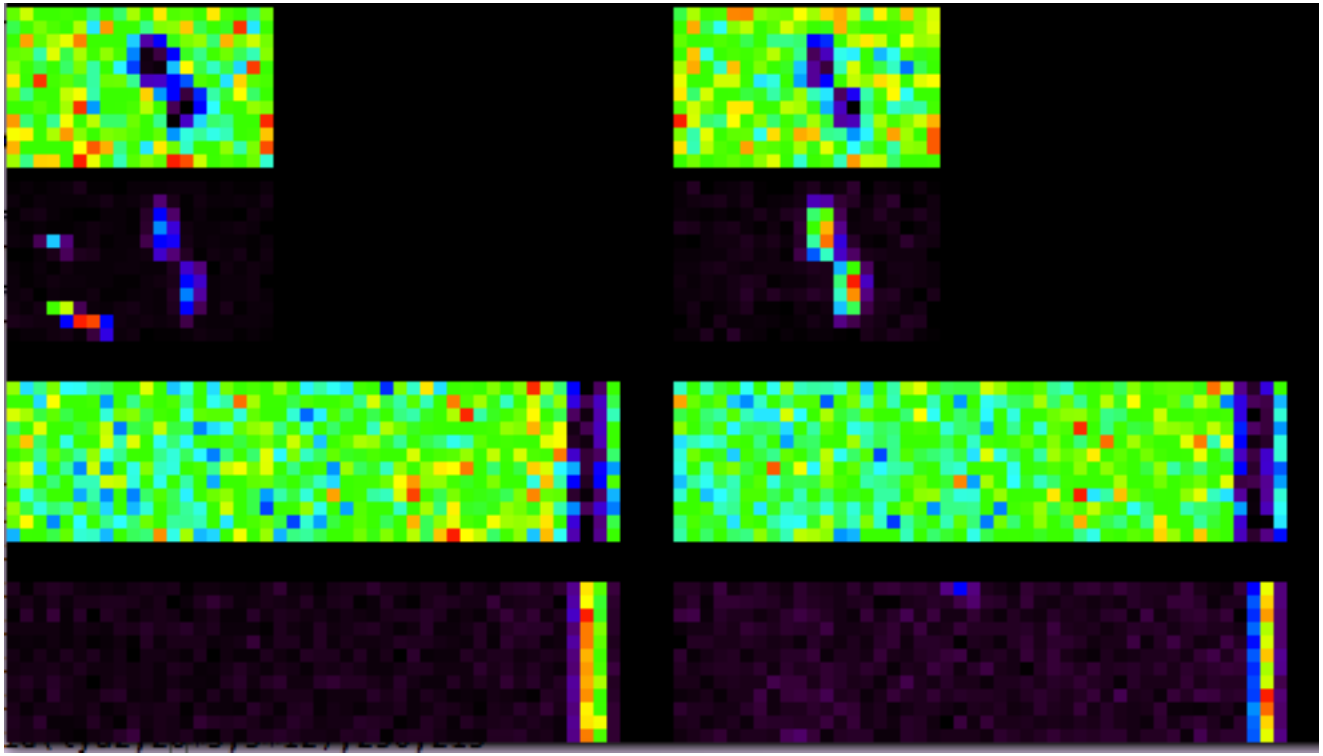


4-part

246RH_ICYLON001_CIRS
2016-297T13:15
Alt= 546,665 km
Longitude= 338°W
Phase= 69.3°

Obs 2

Obs 3



Obs 1

Obs 4

HSP
profile

UVIS_249RH_ICYEXO001_PIE
2016-326T16:00
Ingress lat/lon:
Egress lat/lon:
Star: zeta Orionis

Star was not occulted due to trajectory change

Spectra of I, I_0 (counts per integration period vs wavelength)

Ingress

Spectrum of I/I_0

Egress

6-part

272RH_COMPGLB001_CIRS
2017-121T22:34
Alt=356,145 km
Longitude=223°W
Latitude=60°N
Phase=93°