

THURSDAY 108-109

APRIL 17, 2008 - APRIL 18, 2008

MISSING
IMAGE

CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos

UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7																								
PDT:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0																								
PDT:	APR 17																																																
SPACECRAFT INITIAL CONDITIONS																																																	
SEQ ID::																																																	
TXR PWR::																																																	
ANT::																																																	
TWNC::																																																	
RNG::																																																	
DOR::																																																	
OWLT::																																																	
MOD IND::																																																	
SUBC::																																																	
CDU B/R::																																																	
CODED::																																																	
RNG MOD::																																																	

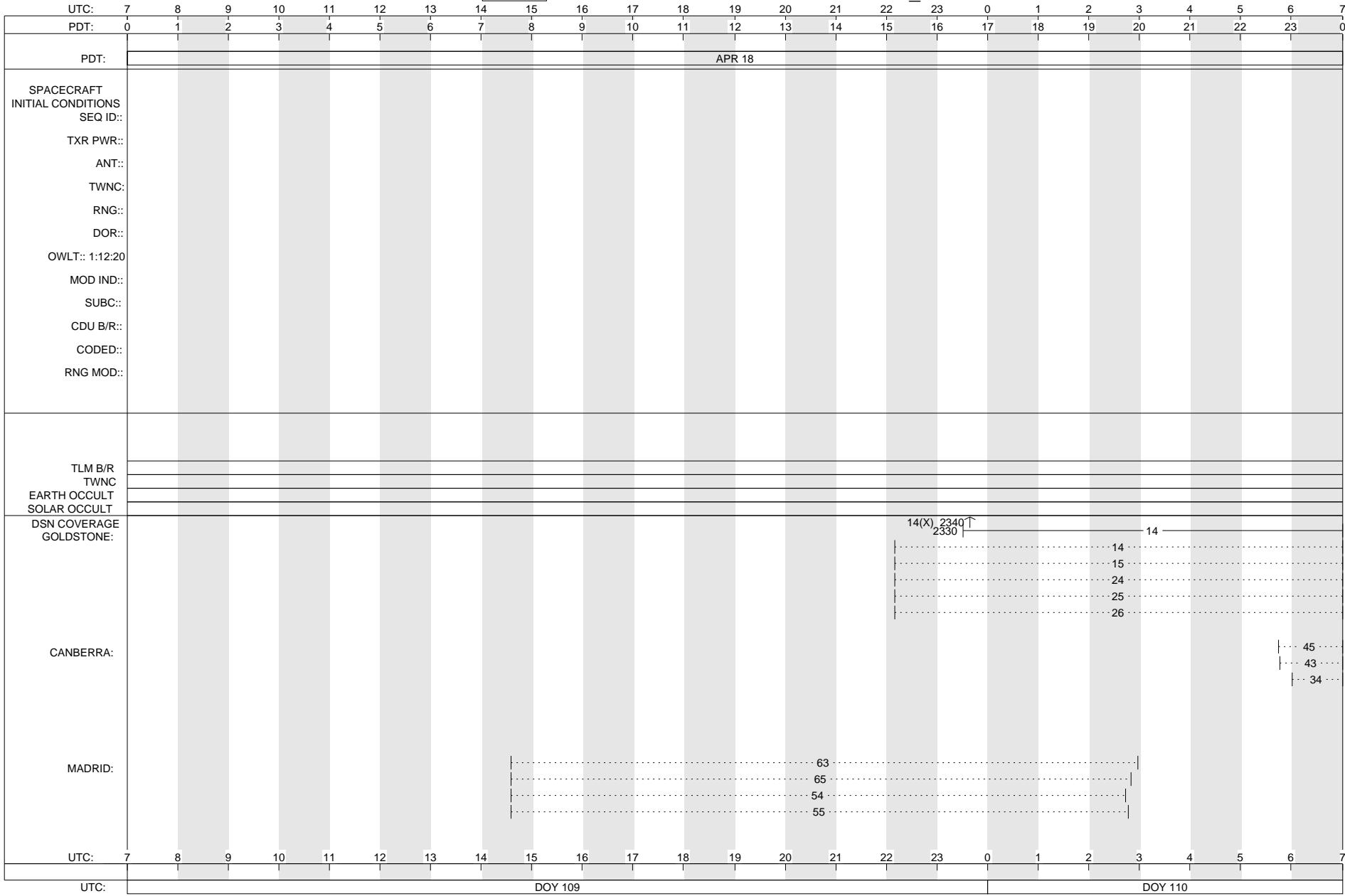
Page 1 of 46

FRIDAY

109-110

APRIL 18, 2008 - APRIL 19, 2008

MISSING
IMAGE

CASSINI SFOS
SOE z0400e_full.soe
SFOS z0400e_full.sfos


ISSUE DATE: 04/15/08

SATURDAY 110-111

APRIL 19, 2008 - APRIL 20, 2008

MISSING
IMAGE

CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos

This figure is a Gantt chart showing the mission timeline from April 18 to April 20, 2011. The x-axis represents time in UTC (0 to 23) and PDT (0 to 23). The y-axis lists various system status and event markers.

Key Events and Notes:

- APR 19:** RINGS REV 65/66 SEGMENT
- 0830 START S40:** Initiated at approximately 0830 UTC on April 19.
- RAM DUMP:** PERFORM RAM & IORAM DUMP THEN PUT TO SLEEP. RATE IS 1055 BPS.
- Engineering Maintenance:** SCO_NOTE: AAC'S PERIODIC ENGINEERING MAINTENANCE (0830-0831 UTC).
- SATURN LIVE IVP UD1 UPLINK PASS:** Occurred between 0830 and 0900 UTC on April 19.
- PEM; BAIL EXE EGA EXE AND BU FRIC TEST:** TURN TO EARTH 0129 (0830-0831 UTC).
- BAIL MAINT:** BAIL MAINT (0830-0831 UTC).
- RWA(3) EXERCISE:** RWA(3) EXERCISE 0514 (0830-0831 UTC).
- SCO_NOTE: AAC'S BIAS:** SCO_NOTE: AAC'S BIAS (0830-0831 UTC).
- RWA BIAS:** RWA BIAS (0830-0831 UTC).
- OPX #1: DFPW_NORMAL TO DFPWPEM:** OPX #1: DFPW_NORMAL TO DFPWPEM (0830-0831 UTC).
- Mod Ind 80.1:** * 0129 MOD IND 80.1 (0830-0831 UTC).
- 0830 142201:** TLM B/R (0830-0831 UTC).
- 0830:** TWNC (0830-0831 UTC).
- 1896:** EARTH OCCULT (0830-0831 UTC).
- OFF:** SOLAR OCCULT (0830-0831 UTC).
- IN VIEW:** IN VIEW (0830-0831 UTC).
- 0129:** 0129 (0830-0831 UTC).
- 35550:** 35550 (0830-0831 UTC).
- DSN COVERAGE GOLDSTONE:** 14, 14, 15, 24, 25, 26 (0830-0831 UTC).
- CANBERRA:** 45, 43, 34 (0830-0831 UTC).
- MADRID:** 63, 65, 54, 55 (0830-0831 UTC).
- 25(X) 0604:** 25(X) 0604 (0830-0831 UTC).
- 25(X) 2340:** 25(X) 2340 (0830-0831 UTC).
- 2330:** 2330 (0830-0831 UTC).
- 25:** 25 (0830-0831 UTC).
- 15:** 15 (0830-0831 UTC).
- 14:** 14 (0830-0831 UTC).
- 24:** 24 (0830-0831 UTC).
- 26:** 26 (0830-0831 UTC).
- 45:** 45 (0830-0831 UTC).
- 43:** 43 (0830-0831 UTC).
- 34:** 34 (0830-0831 UTC).

ISSUE DATE: 04/15/08

SUNDAY

111-112

APRIL 20, 2008 - APRIL 21, 2008

MISSING
IMAGE

CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos

SPACECRAFT INITIAL CONDITIONS SEQ ID:: S040

TXR PWR:: ON

ANT:: HGA **SATURN LIVE IVP UD1 UPLINK PASS**

TWNC:: OFF

RNG:: ON

DOR:: OFF

OWLT:: 1:12:36

MOD IND:: 80.1

SUBC:: HIGH

CDU B/R:: 500

CODED:: K15R1/6

RNG MOD:: LOW

SP_065SA_WAYPTTURN111
CIRS_065RI_SUBMU60MP001
VIMS_065RI_SUBMU60MP002

OPX #2: DFPWPEM TO DFPW_NORMAL
◊ 0829 CARRYOVER PRESENT.
* 0829 MOD IND 68.8

PDT: APR 20

RINGS REVS 65/66 SEGMENT_

VIMS_065RI_SOLAROCC001

INBOUND 119091 KM 2346◊

UVIS_065ST_URALPARA001

CIRS_065RI_TEMPU26HP001

VIMS_065RB_SPOKEHIPH001

VIMS_065ST_RCASOCC001

CIRS_065RI_TEMPL55MP001

DESCENDING RPX 2233◊

PERIAPSIS 0051◊

SATURN LIVE IVP UD1

0729 0829

33180 1896 2117 0117

TLM B/R TWNC EARTH OCCULT SOLAR OCCULT

OFF IN VIEW IN VIEW

DSN COVERAGE GOLDSTONE:

CANBERRA: 45 43 34

MADRID: 63 65 54 55

UTC: 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7

DOY 111

UTC: 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7

DOY 112

Page 4 of 46

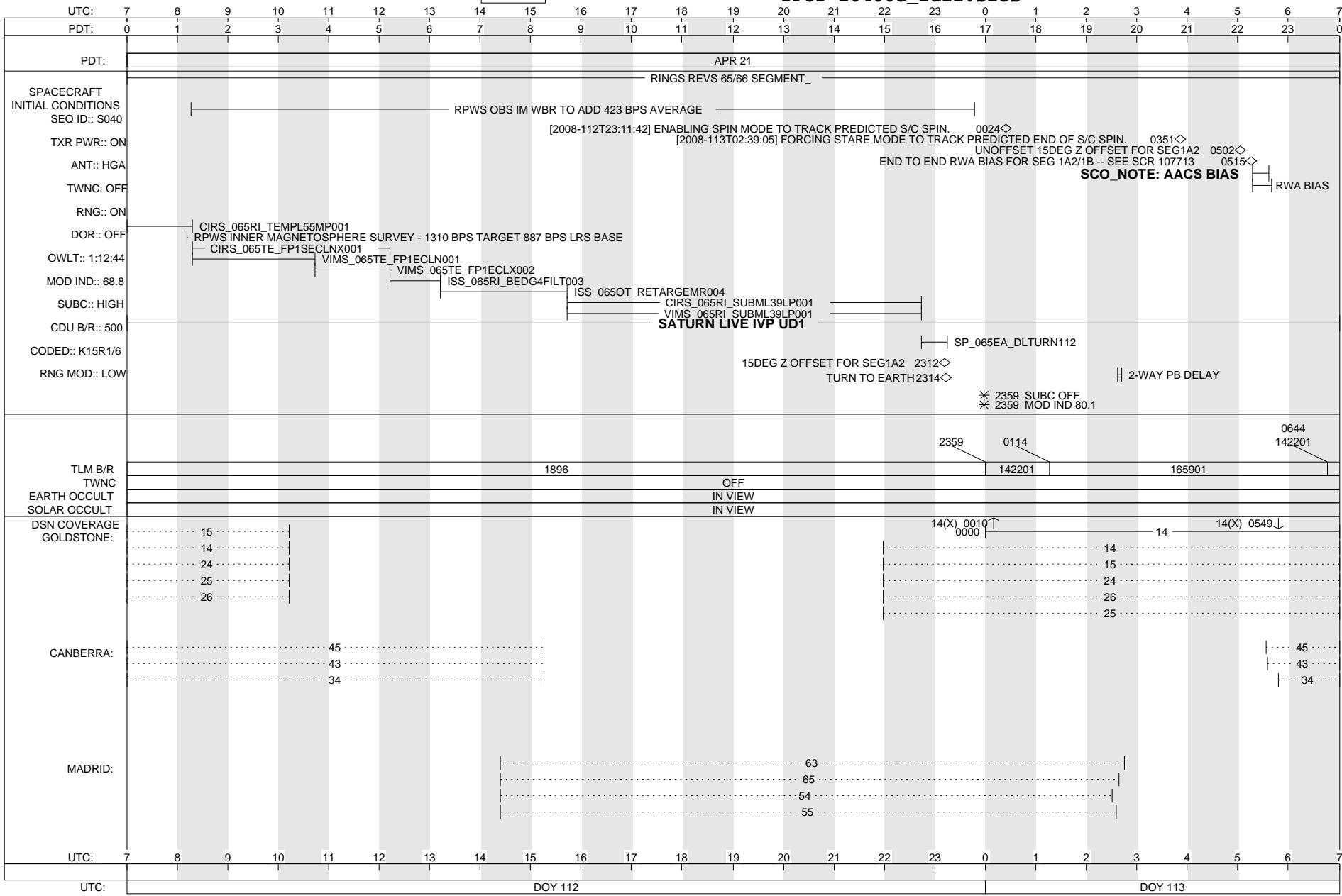
MONDAY 112-113

APRIL 21, 2008 - APRIL 22, 2008

MISSING
IMAGE

CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos

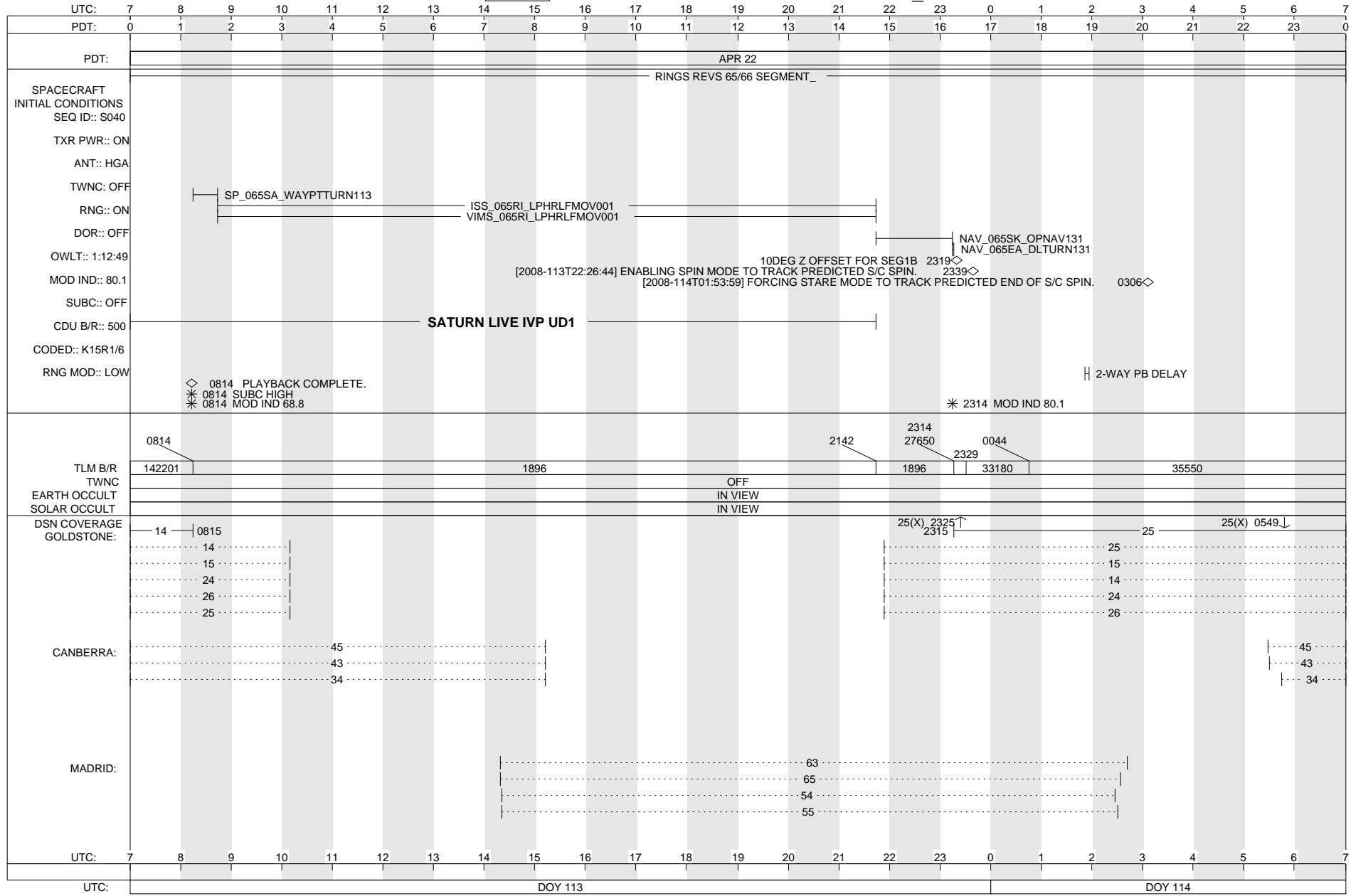


ISSUE DATE: 04/15/08

TUESDAY 113-114

APRIL 22, 2008 - APRIL 23, 2008

MISSING
IMAGE

CASSINI SFOS
SOE z0400e_full.soe
SFOS z0400e_full.sfos


ISSUE DATE: 04/15/08

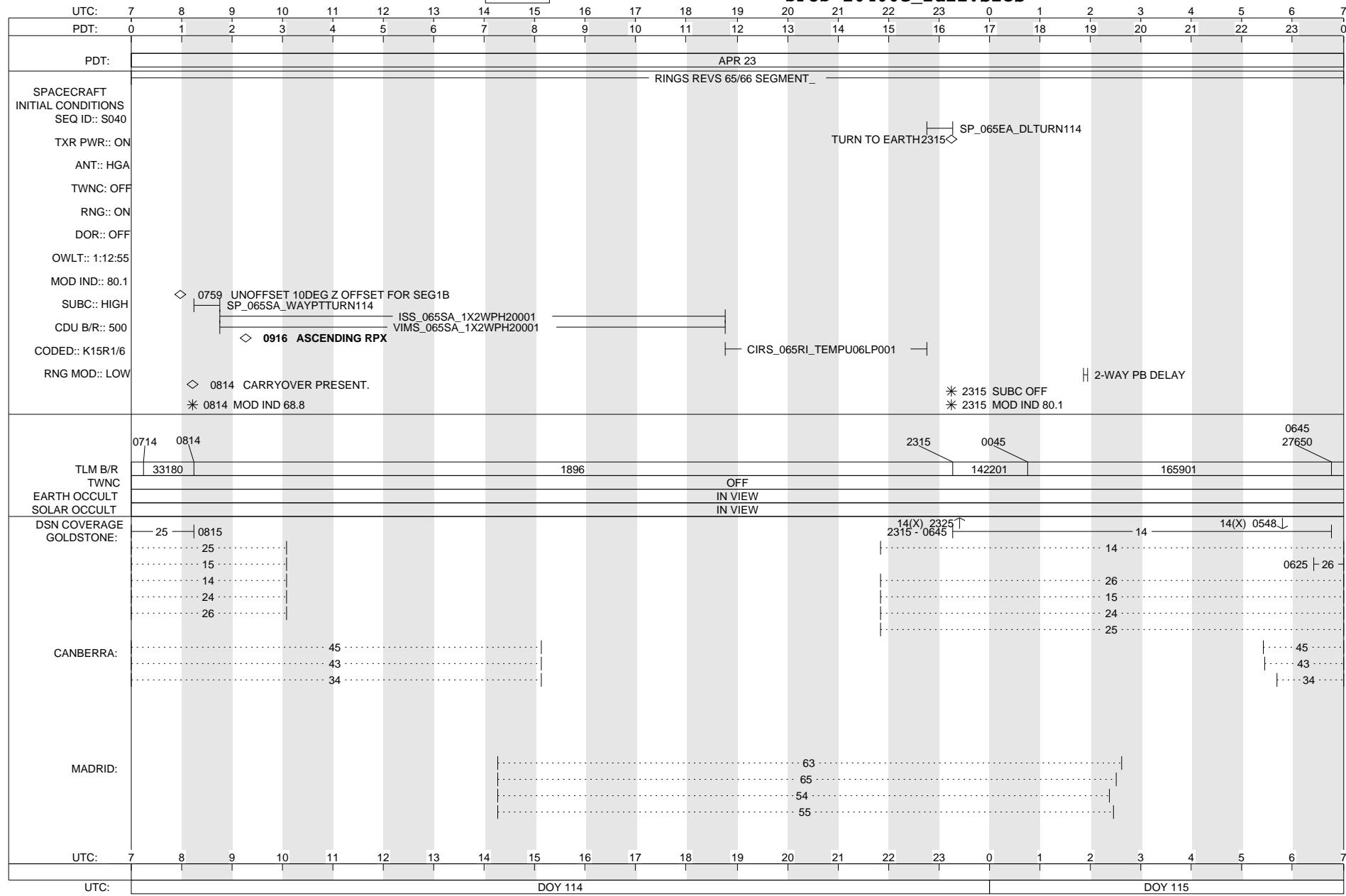
WEDNESDAY 114-115

APRIL 23, 2008 - APRIL 24, 2008

MISSING
IMAGE

CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos



ISSUE DATE: 04/15/08

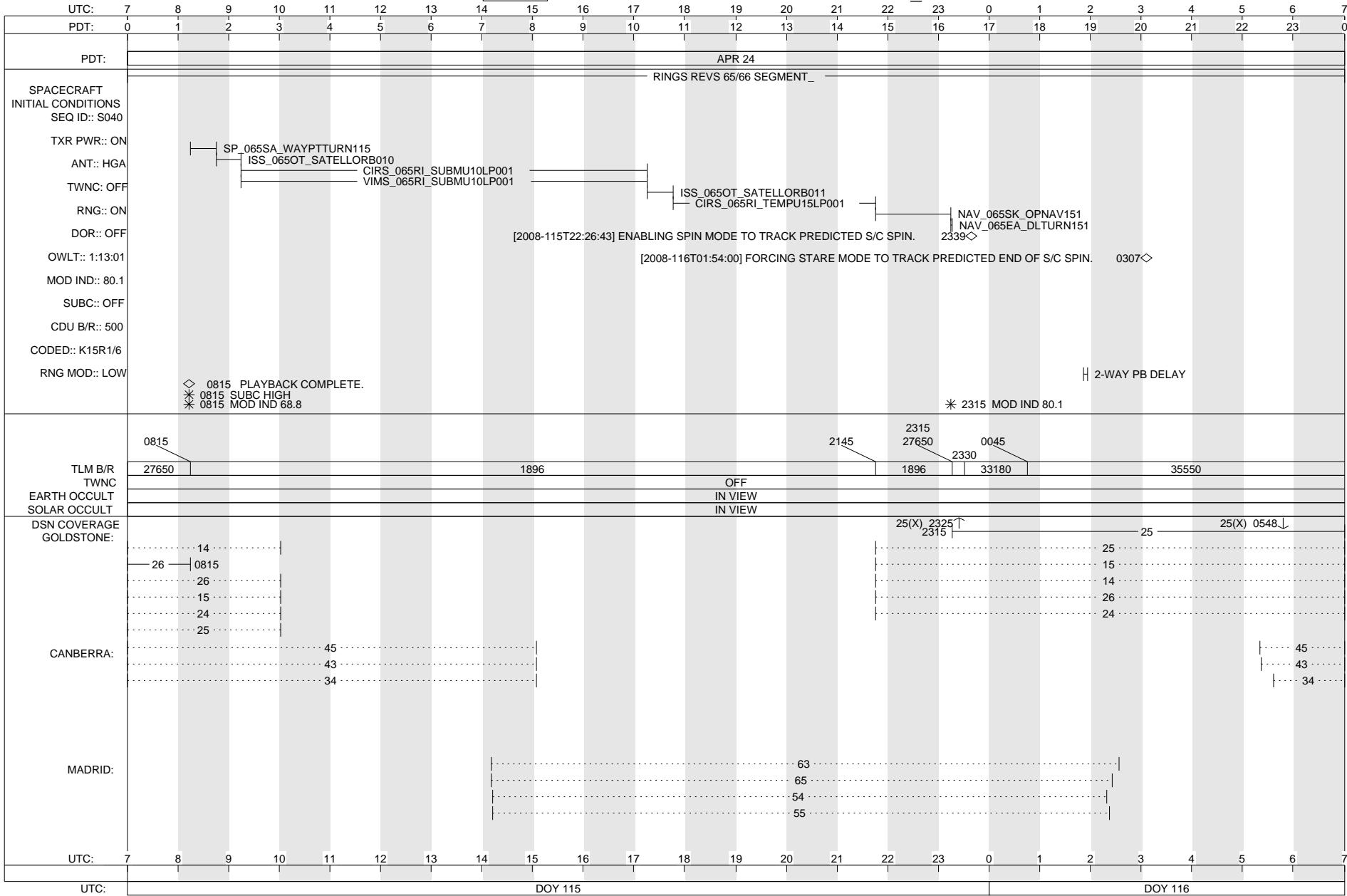
THURSDAY 115-116

APRIL 24, 2008 - APRIL 25, 2008

MISSING
IMAGE

CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos



ISSUE DATE: 04/15/08

FRIDAY

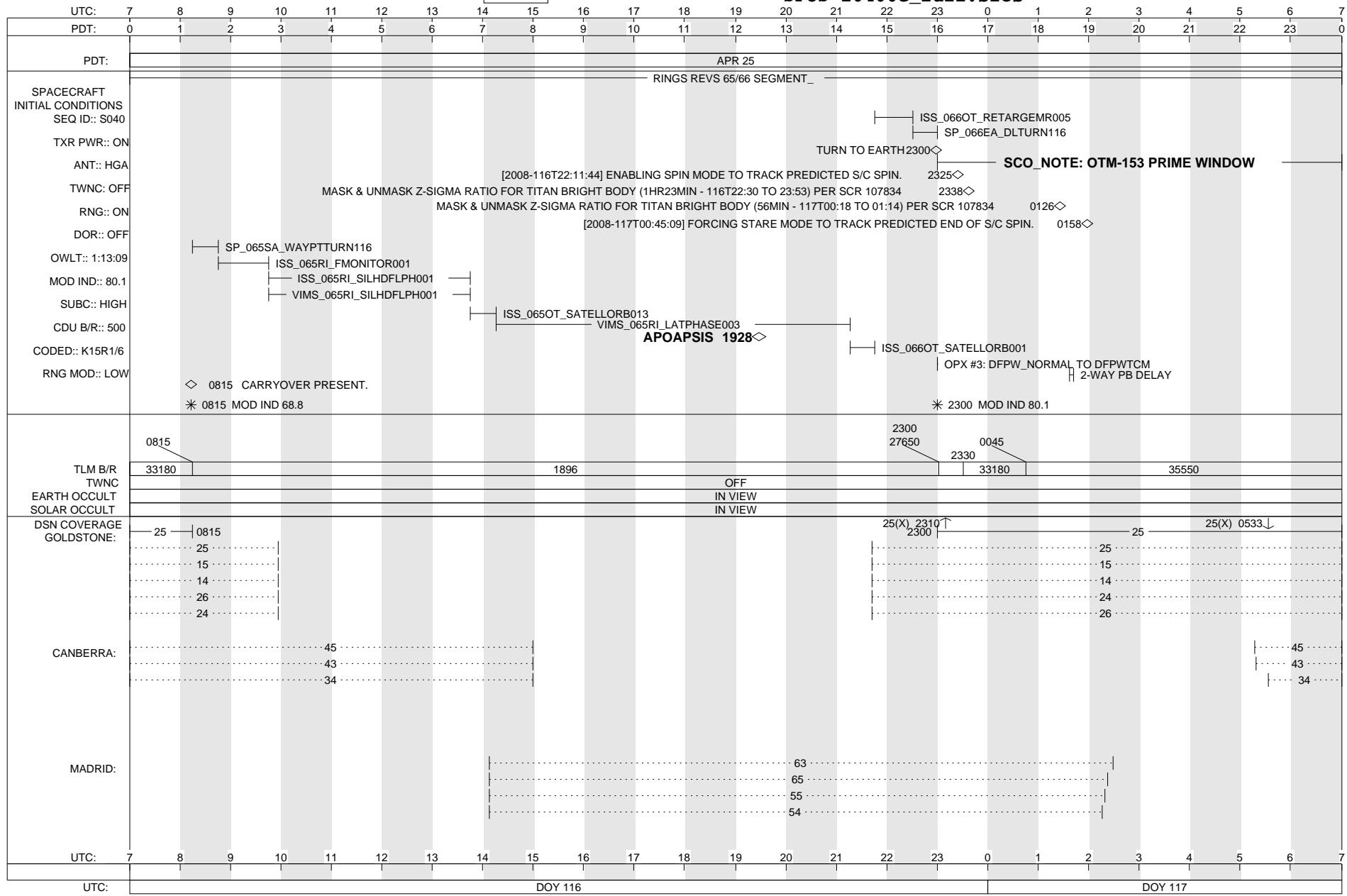
116-117

APRIL 25, 2008 - APRIL 26, 2008

MISSING
IMAGE

CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos

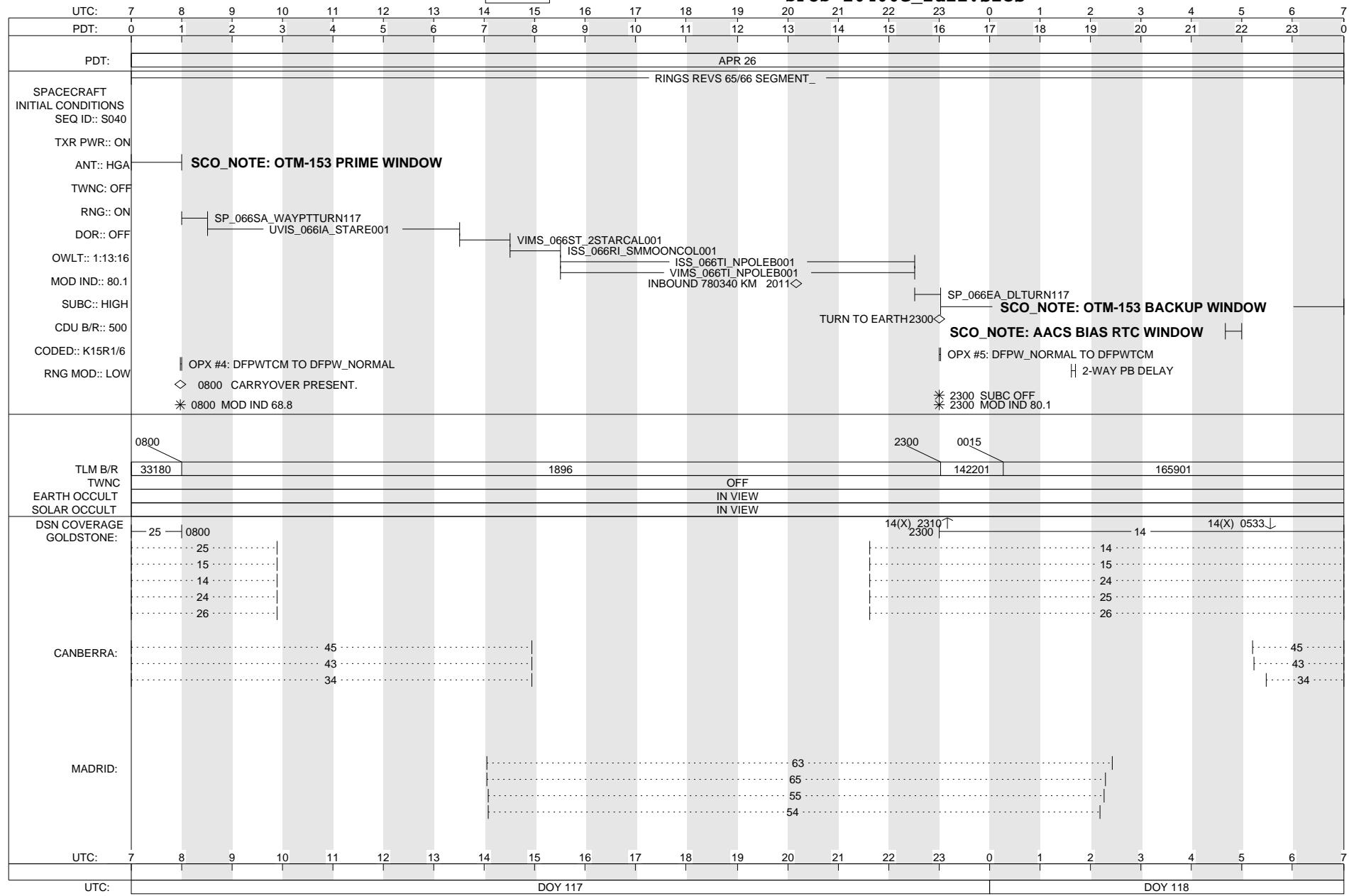


ISSUE DATE: 04/15/08

SATURDAY 117-118

APRIL 26, 2008 - APRIL 27, 2008

MISSING
IMAGE

CASSINI SFOS
SOE z0400e_full.soe
SFOS z0400e_full.sfos


ISSUE DATE: 04/15/08

SUNDAY

118-119

APRIL 27, 2008 - APRIL 28, 2008

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CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos

This timeline diagram illustrates the sequence of events and telemetry for a space mission on April 27, spanning from UTC 7 to 23. The timeline is divided into 24-hour segments, with specific events marked by vertical lines and labeled with their start and end times.

Key Events and Labels:

- PDT:** A label at the top indicating the time zone.
- RINGS REV 65/66 SEGMENT_**: A label for the ring segment.
- CIRS_066TI_COMPMAP021**, **VIMS_066TI_COMPMAP002**: Telemetry events occurring between UTC 8 and 16.
- CIRS_066RI_SUBMU40MP001**: A telemetry event occurring between UTC 16 and 22.
- TURN TO EARTH2259**: An event occurring at UTC 22:59.
- SP_066EA_DLTURN118**: An event occurring at UTC 23:00.
- RSS ACTIVITY: ORT FOR RING OCC.**: A label for the RSS activity period.
- SCO_NOTE: OTM-153 BACKUP WINDOW**: A note for the OTM-153 backup window.
- CDU B/R:: 500**, **OPX #6: DFPWTCM TO DFPW_NORMAL**: CDU and OPX mode changes.
- CODED:: K15R1/6**: Coding mode change.
- RNG MOD:: LOW**: Range mode change.
- 0800 PLAYBACK COMPLETE.**, *** 0800 SUBC HIGH.**, *** 0800 MOD IND 68.8**: Telemetry markers.
- OPX #7: DFPW_NORMAL TO RSSKRWAF**: OPX mode change.
- 2-WAY PB DELAY**: A delay indicator.
- 2259 MOD IND 80.1**: Modulation index change.
- TLM B/R**: Telemetry bus rate.
- 1896**: A specific telemetry value.
- OFF**: A state indicator.
- IN VIEW**: A visibility indicator.
- 0644**, **33180**: Telemetry values.
- EARTH OCCULT**: Earth occultation events.
- SOLAR OCCULT**: Solar occultation events.
- DSN COVERAGE GOLDSTONE:** Coverage status for Goldstone DSN.
- CANBERRA:** Coverage status for Canberra DSN.
- MADRID:** Coverage status for Madrid DSN.
- 26(X) 2310↑**, **2300**, **26**, **26(X) 0532↓**: Specific coverage markers.
- 45**, **43**, **34**: Coverage markers for Canberra.
- 54**, **63**, **65**, **55**: Coverage markers for Madrid.
- 45**, **43**, **34**: Coverage markers for the final segment.
- DOY 118**: Date of Year 118.
- DOY 119**: Date of Year 119.

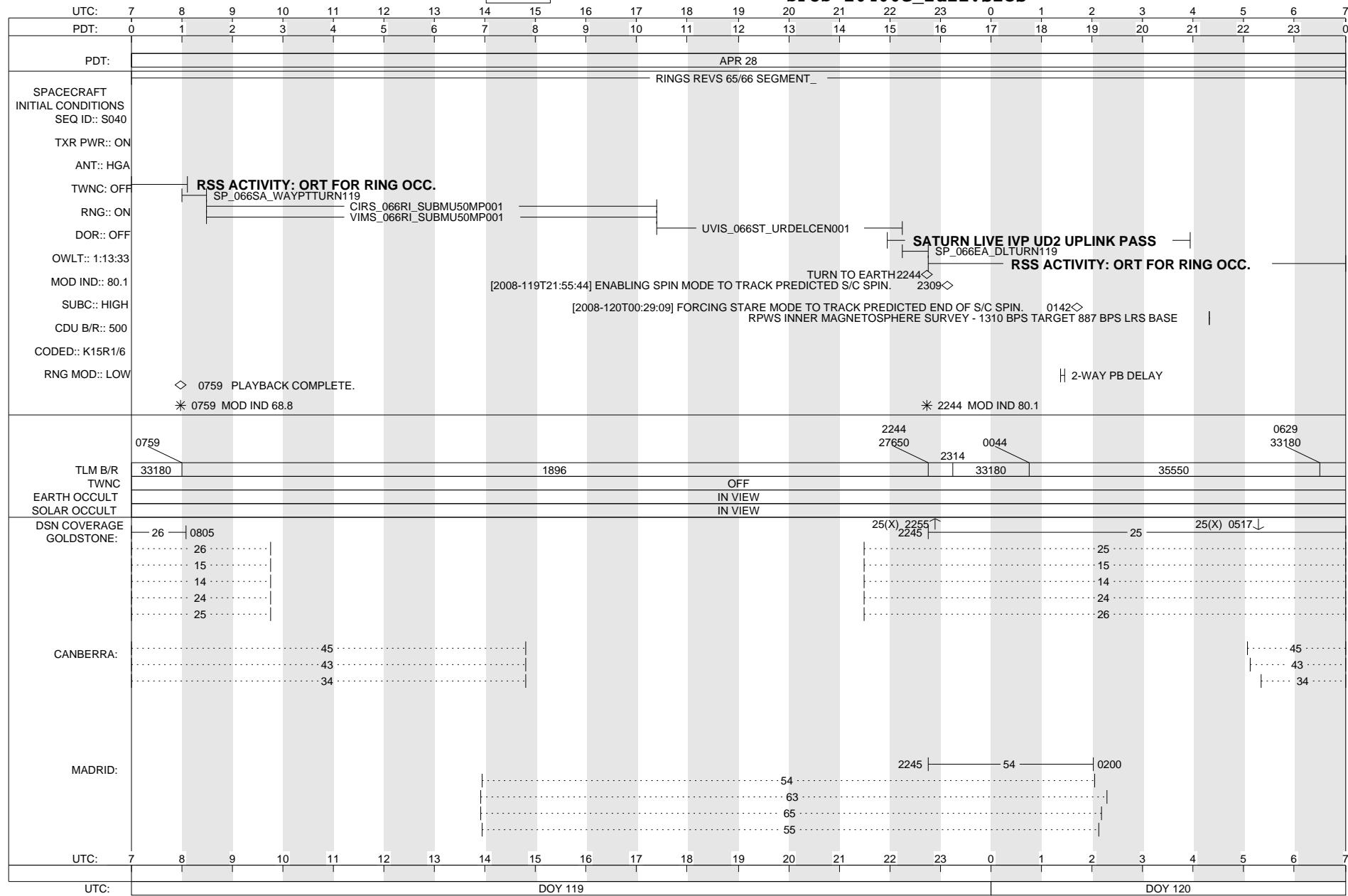
ISSUE DATE: 04/15/08

MONDAY 119-120

APRIL 28, 2008 - APRIL 29, 2008

MISSING
IMAGE

CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos


ISSUE DATE: 04/15/08

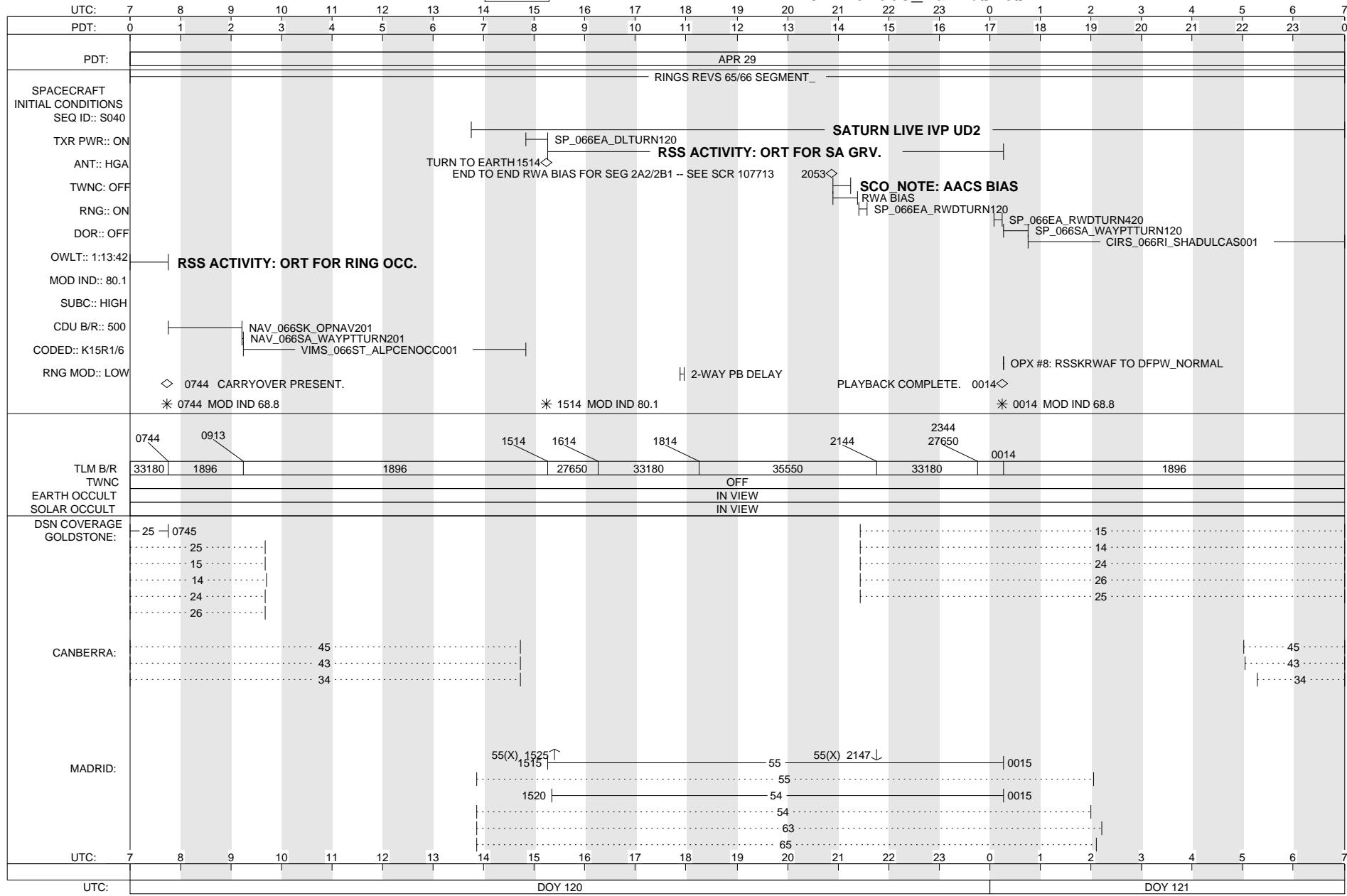
TUESDAY 120-121

APRIL 29, 2008 - APRIL 30, 2008

MISSING
IMAGE

CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos



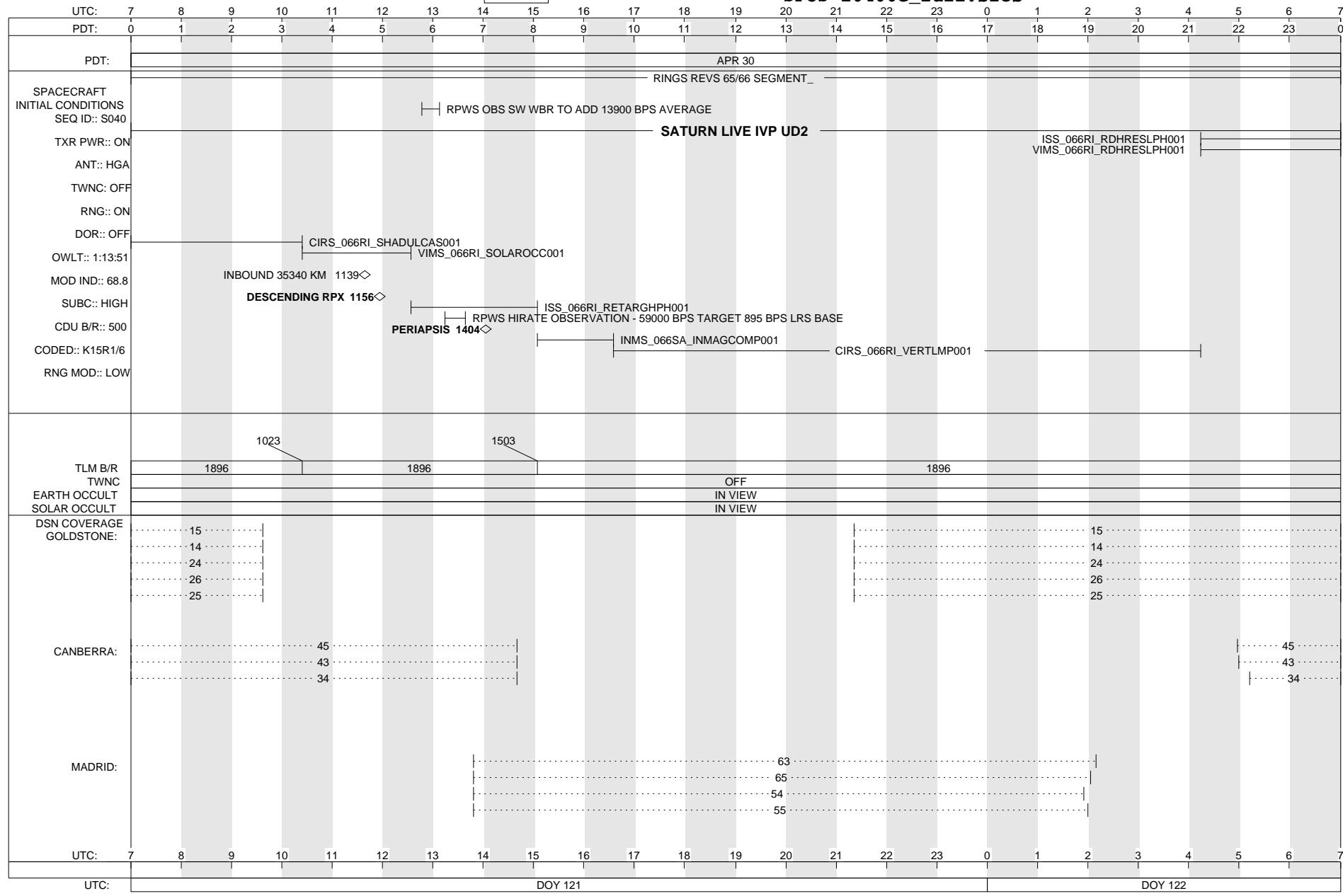
WEDNESDAY 121-122

APRIL 30, 2008 - MAY 1, 2008

MISSING
IMAGE

CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos



ISSUE DATE: 04/15/08

THURSDAY 122-123

MAY 1, 2008 - MAY 2, 2008

MISSING
IMAGE

CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos

PDT:

SPACECRAFT INITIAL CONDITIONS SEQ ID:: S040

TXR PWR:: ON

ANT:: HGA

TWNC:: OFF

RNG:: ON

DOR:: OFF

OWLTT:: 1:13:58

MOD IND:: 68.8

SUBC:: HIGH

CDU B/R:: 500

CODED:: K15R1/6

RNG MOD:: LOW

PDT:

MAY 01

RINGS REVS 65/66 SEGMENT_

SATURN LIVE IVP UD2

ISS_066RI_RDHRESLPH001

VIMS_066RI_RDHRESLPH001

ISS_066RI_SPKHLPLF001

SP_066EA_DLTURN122

30DEG Z OFFSET AT END OF SEG2B1 1511 ◊ TURN TO EARTH 1515 ◊

1539 [2008-122T14:25:42] ENABLING SPIN MODE TO TRACK PREDICTED S/C SPIN.

1907 ◊ UNOFFSET 30DEG Z OFFSET FOR SEG2B1

2039 ◊ END TO END RWA BIAS FOR SEG 2B1/2B2 -- SEE SCR 107713

2054 ◊ SCO_NOTE: AACB BIAS RWA BIAS

SP_066SA_WAYPTTURN122

MAG_066SU_CALROLL001

[2008-122T17:53:05] FORCING STARE MODE TO TRACK PREDICTED END OF S/C SPIN.

MAG SETS THE S/C ROLLING -X TO SUN WITH -30 DEGREE OFFSET ON Z MAG ROLL 5 TIMES AT APPROX 53.25 MIN/ROLL TOTAL

VIMS_066ST_RLEOCC001

1515 SUBC OFF

1515 MOD IND 80.1

2-WAY PB DELAY

PLAYBACK COMPLETE. 0015 ◊

*** 0015 SUBC HIGH**

*** 0015 MOD IND 68.8**

TLM B/R

1896

1515 124426

1600

142201

2345 124426

0015

1896

OFF

EARTH OCCULT

SOLAR OCCULT

15

14

24

26

25

15

14

24

25

26

45

43

34

45

43

34

1515

63(X) 1525 ↑

63

63(X) 2146 ↓

0015

63

65

55

54

UTC:

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7

DOY 122

DOY 123

ISSUE DATE: 04/15/08

FRIDAY

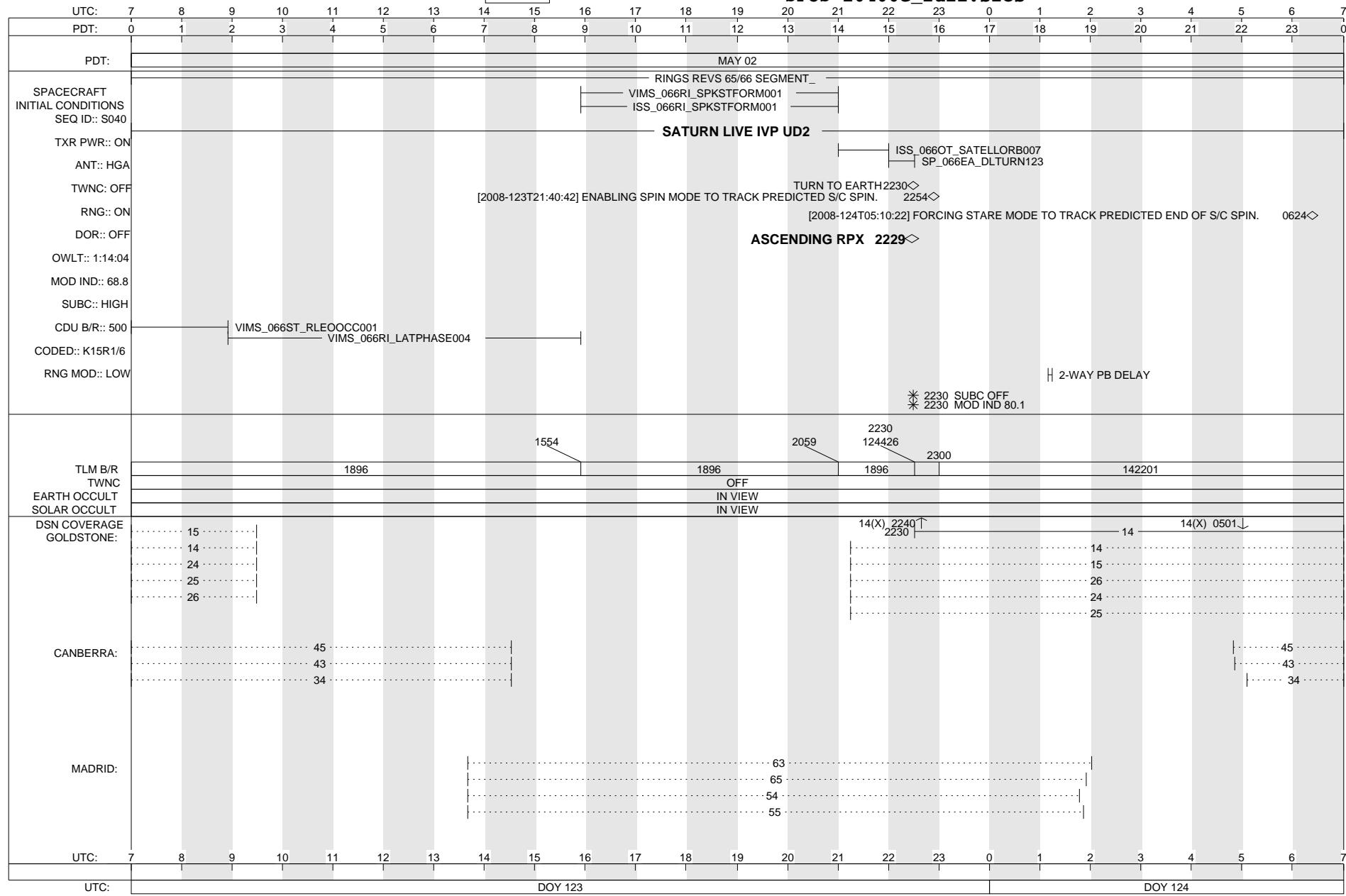
123-124

MAY 2, 2008 - MAY 3, 2008



CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos

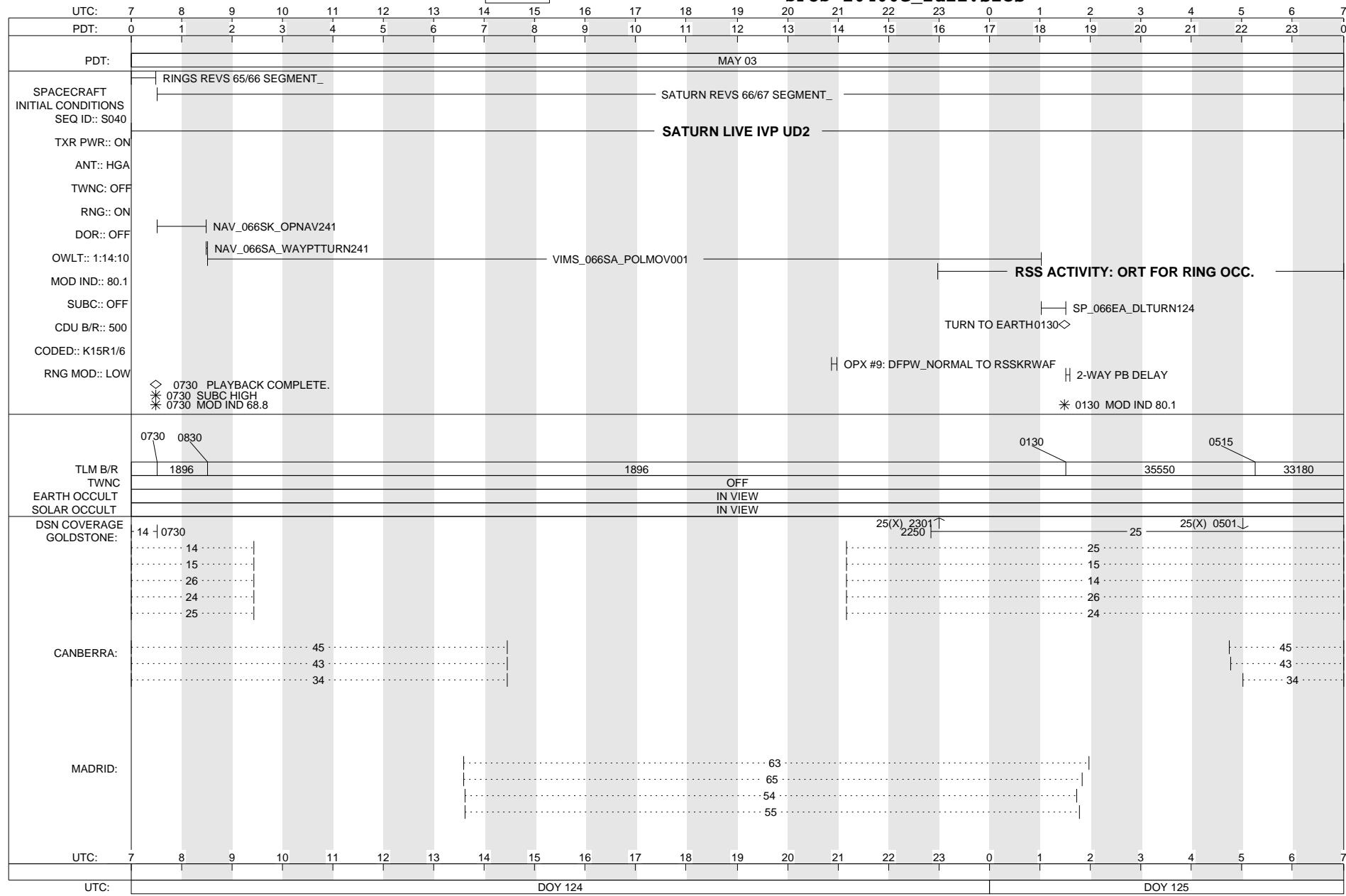


ISSUE DATE: 04/15/08

SATURDAY 124-125

MAY 3, 2008 - MAY 4, 2008

MISSING
IMAGE

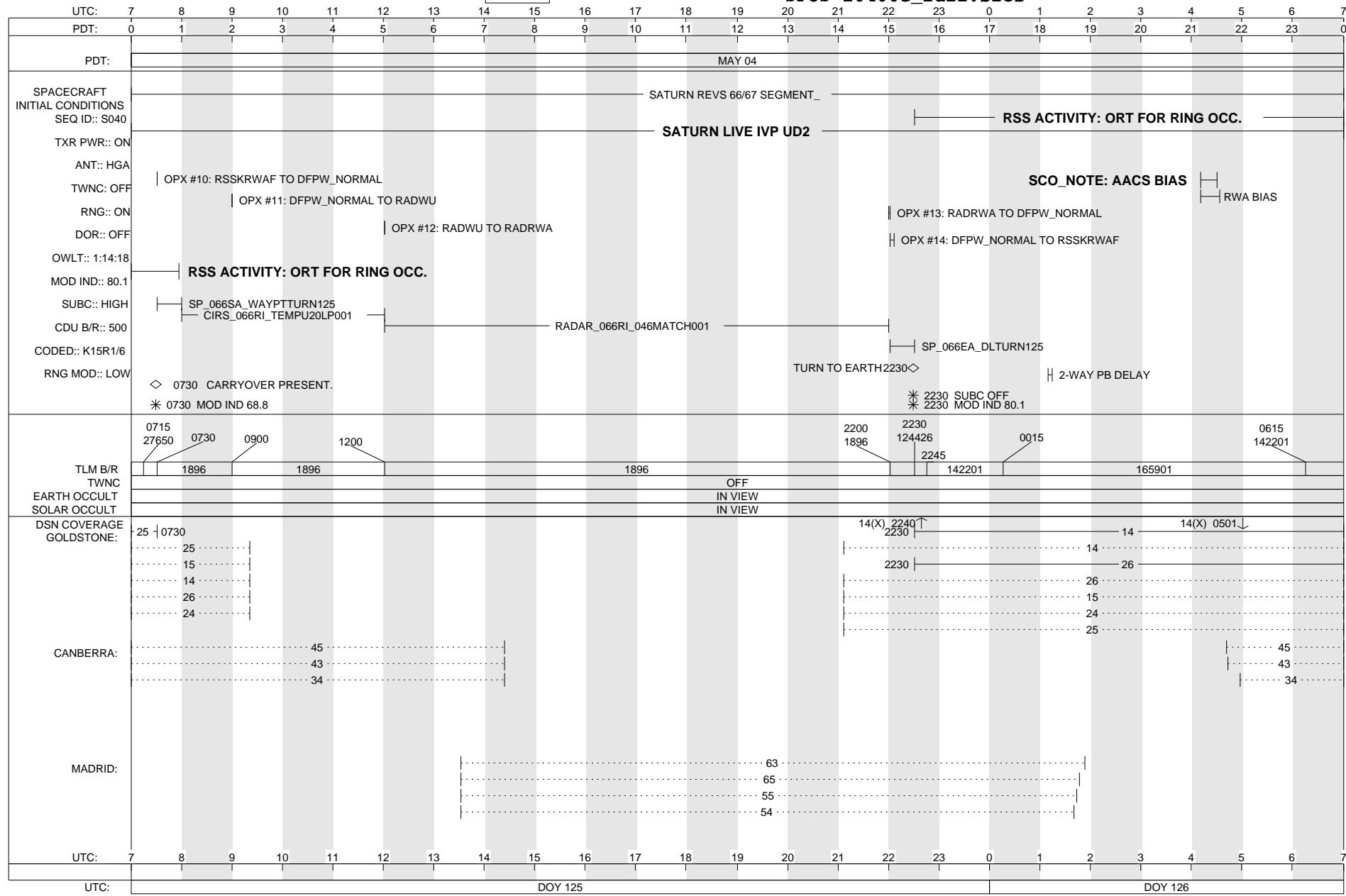
CASSINI SFOS
SOE z0400e_full.soe
SFOS z0400e_full.sfos


SUNDAY

125-126

MAY 4, 2008 - MAY 5, 2008

MISSING
IMAGE

CASSINI SFOS
SOE z0400e_full.soe
SFOS z0400e_full.sfos


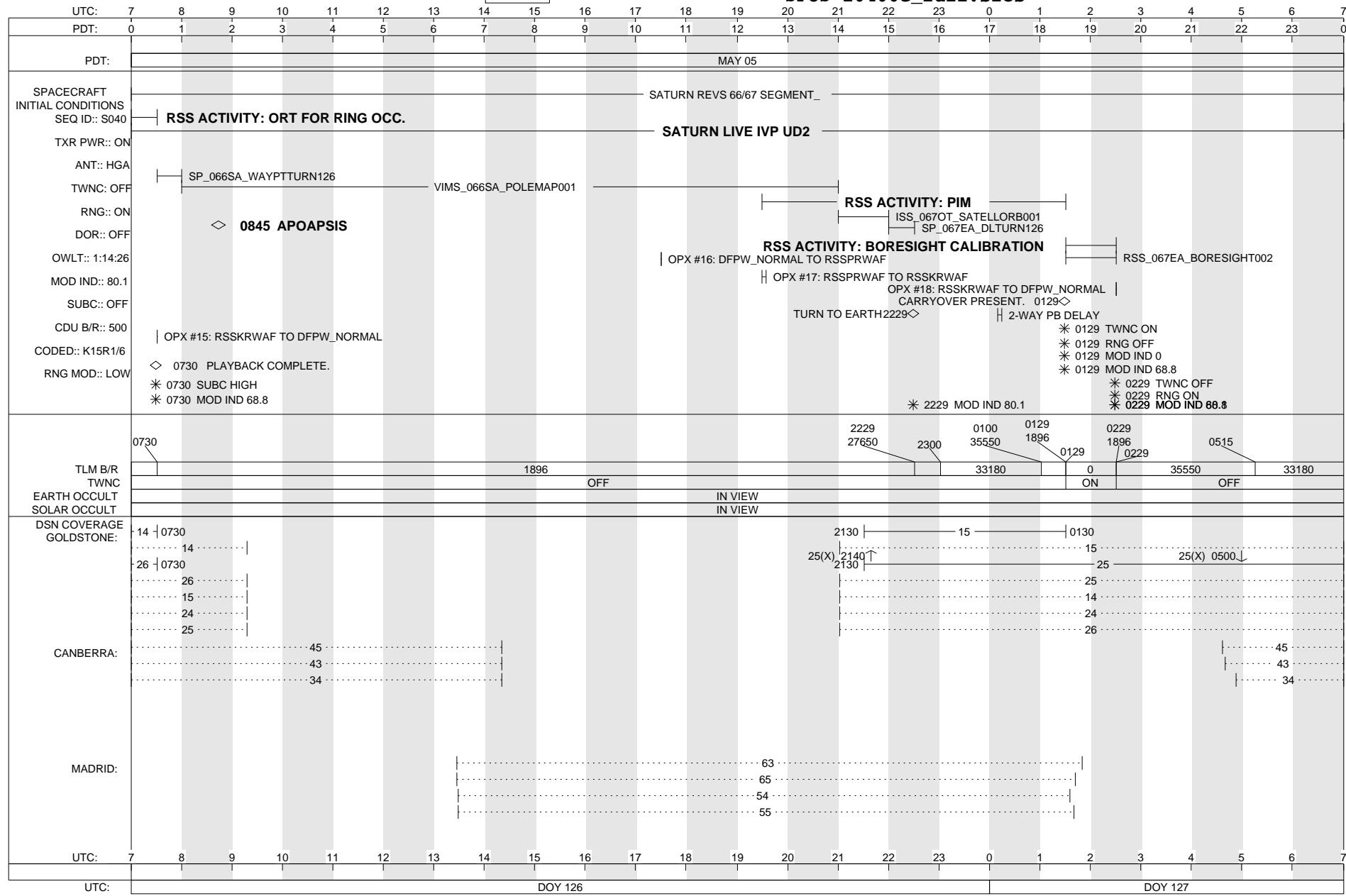
MONDAY 126-127

MAY 5, 2008 - MAY 6, 2008

MISSING
IMAGE

CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos

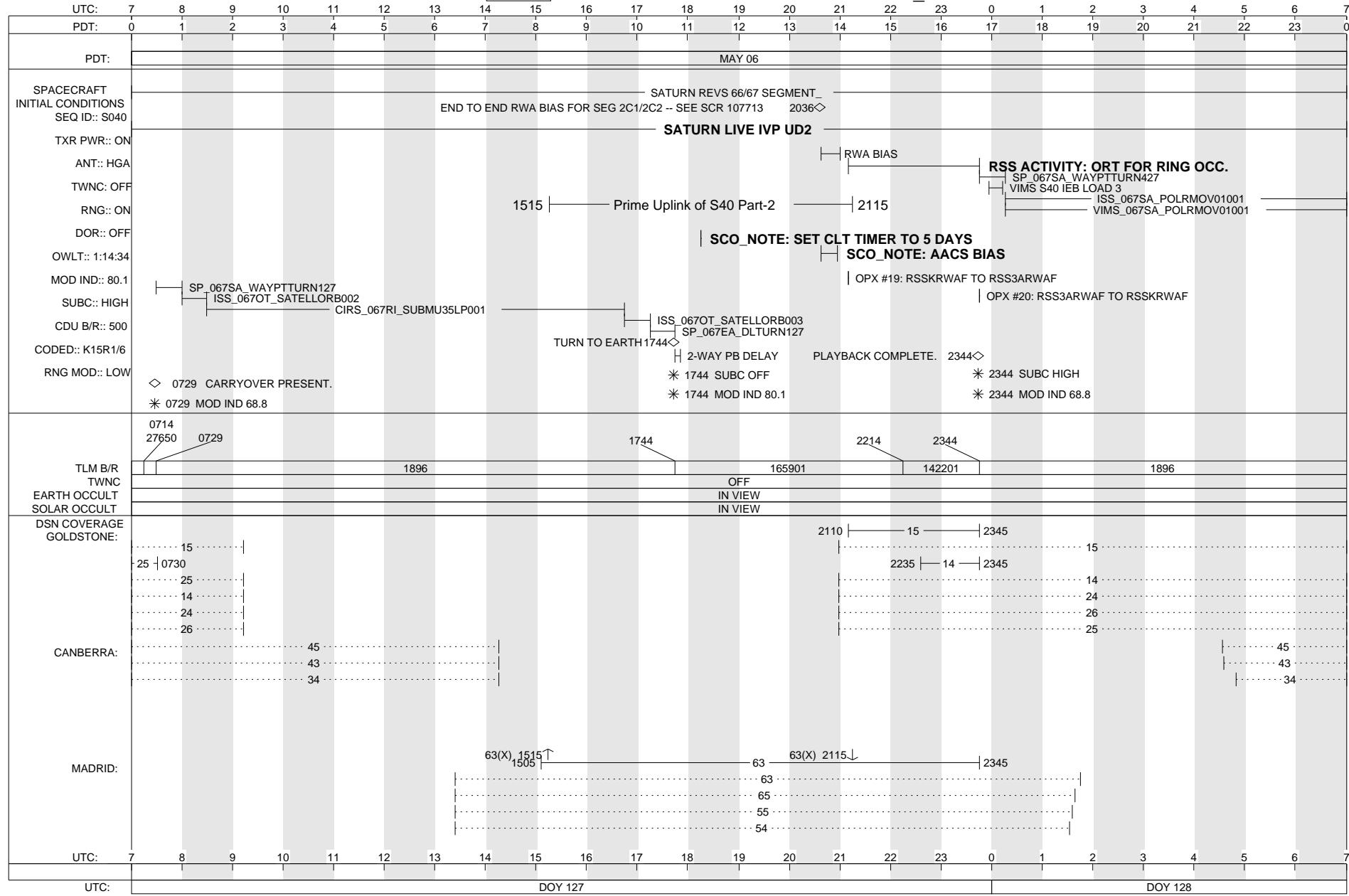


ISSUE DATE: 04/15/08

TUESDAY 127-128

MAY 6, 2008 - MAY 7, 2008

MISSING
IMAGE

CASSINI SFOS
SOE z0400e_full.soe
SFOS z0400e_full.sfos


ISSUE DATE: 04/15/08

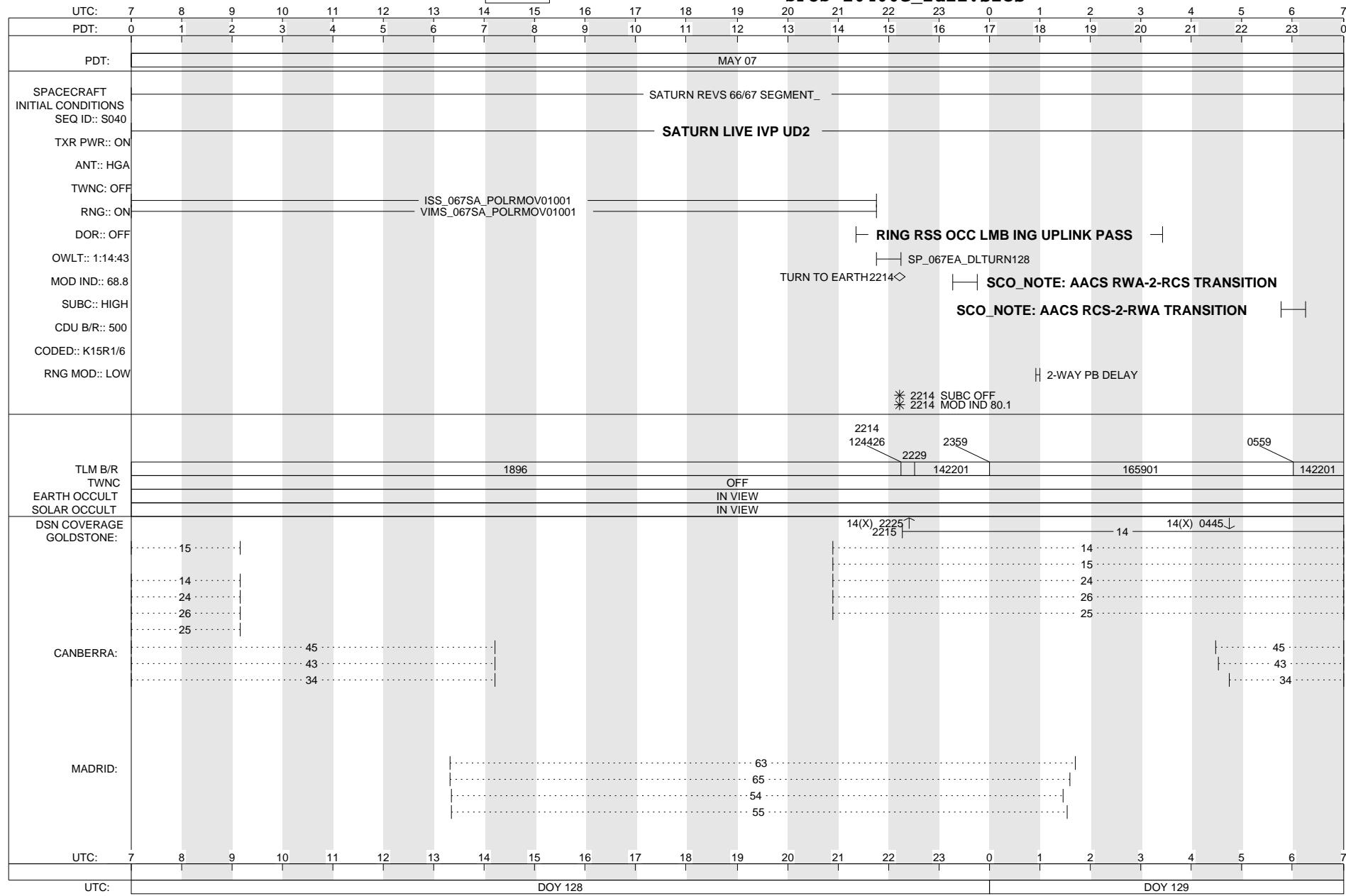
WEDNESDAY 128-129

MAY 7, 2008 - MAY 8, 2008

MISSING
IMAGE

CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos



ISSUE DATE: 04/15/08

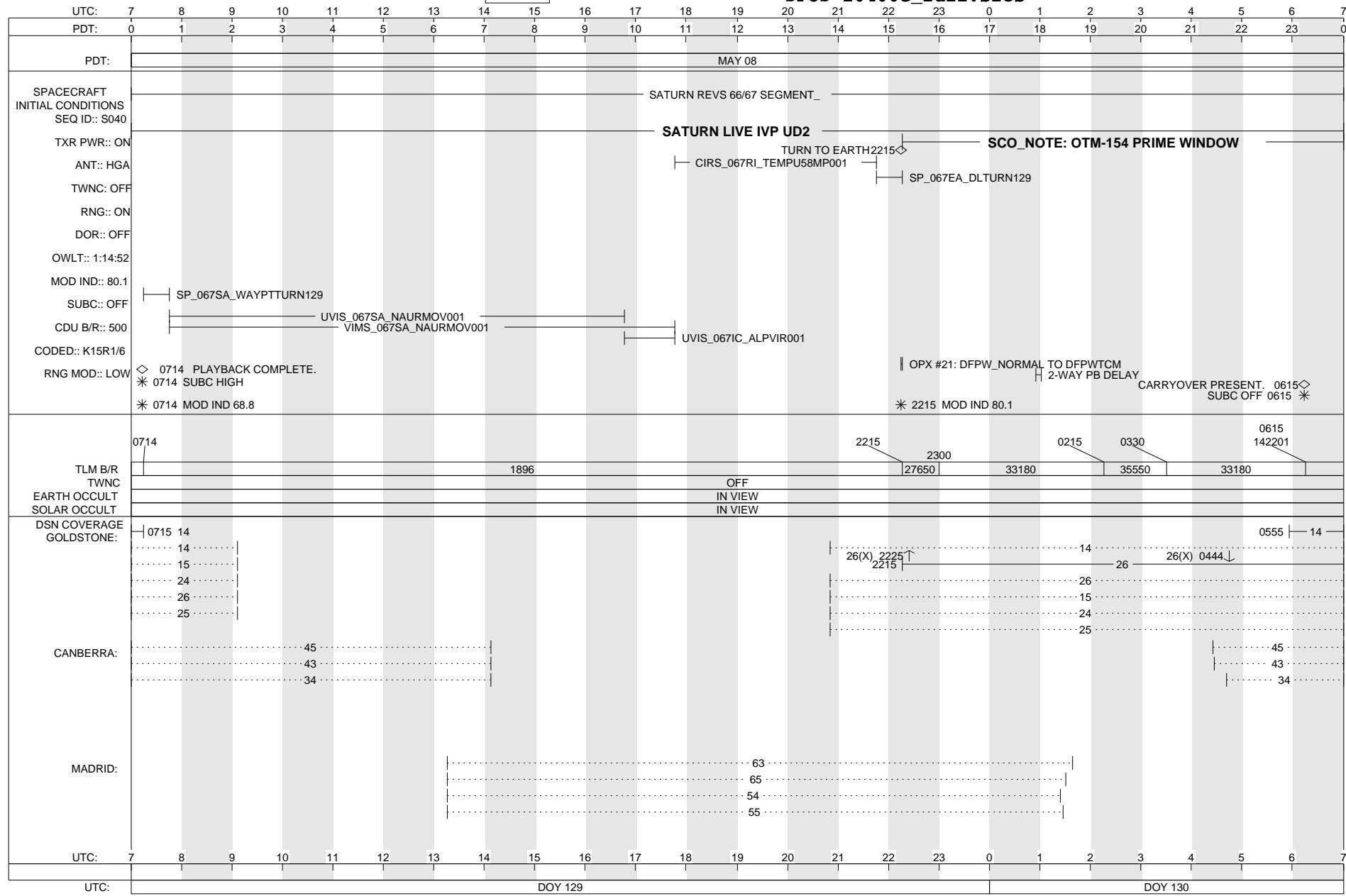
THURSDAY 129-130

MAY 8, 2008 - MAY 9, 2008

MISSING
IMAGE

CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos



ISSUE DATE: 04/15/08

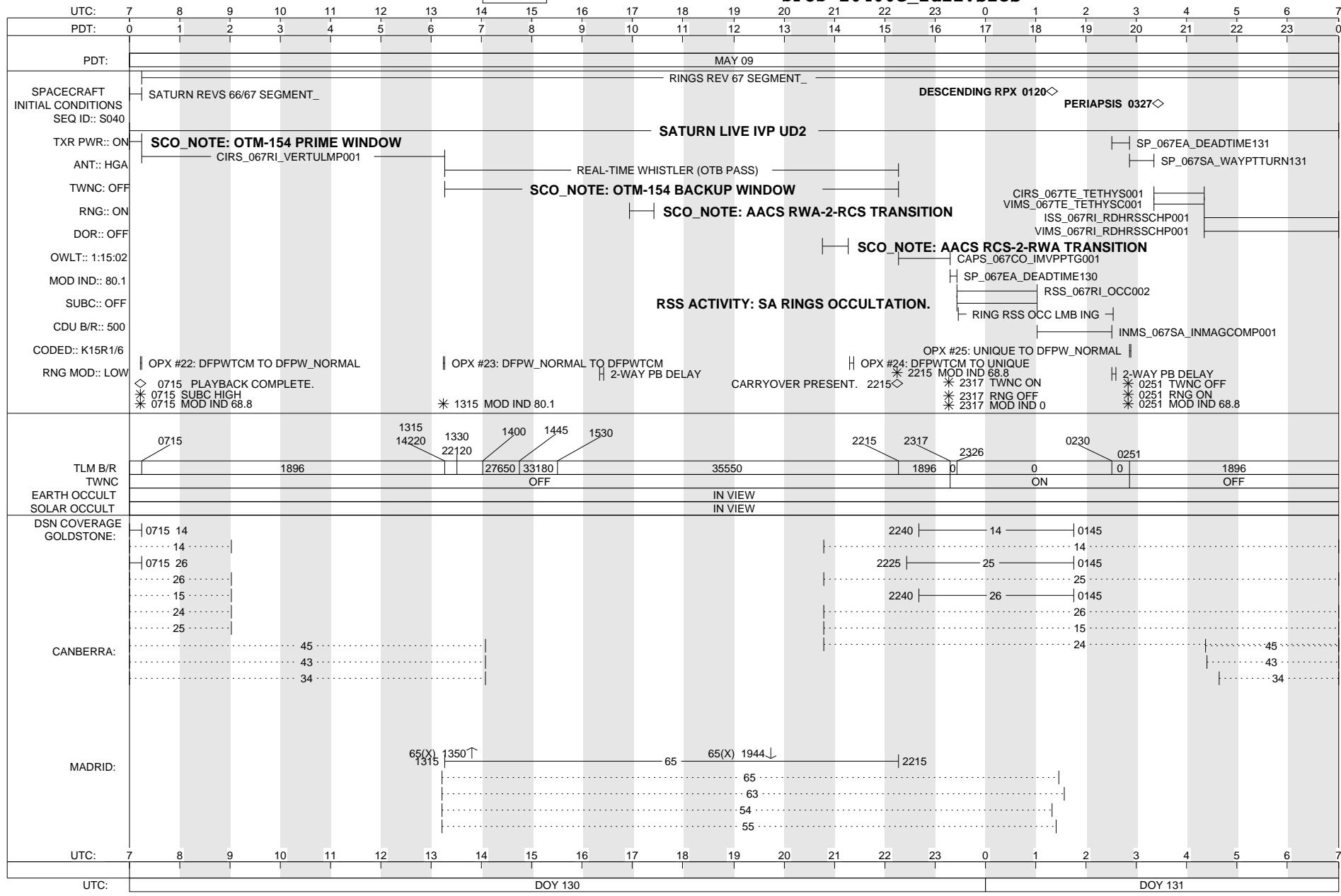
FRIDAY

130-131

MAY 9, 2008 - MAY 10, 2008



CASSINI SFOS

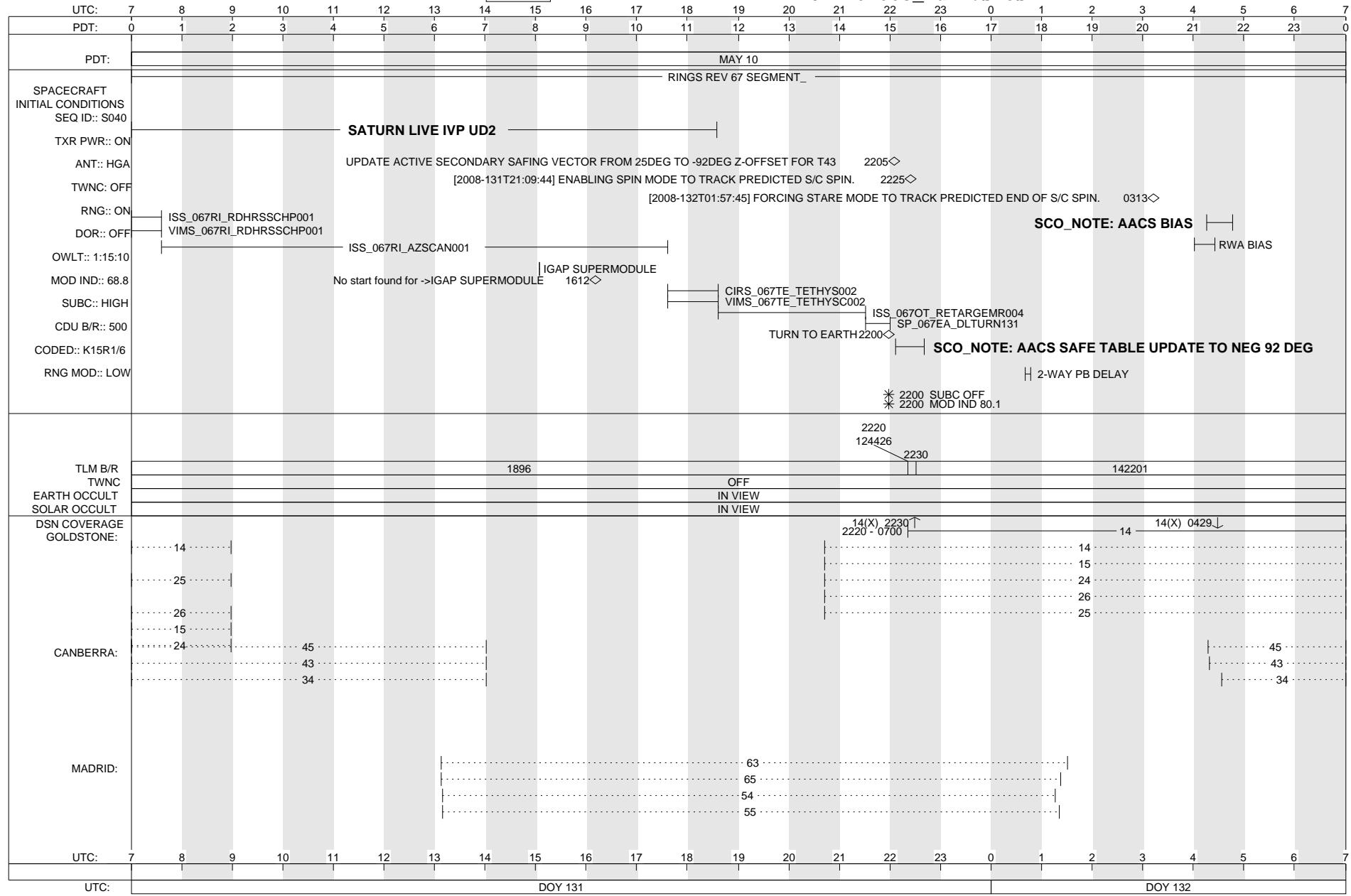
SOE z0400e_full.soe
SFOS z0400e_full.sfos

ISSUE DATE: 04/15/08

SATURDAY 131-132

MAY 10, 2008 - MAY 11, 2008

MISSING
IMAGE

CASSINI SFOS
SOE z0400e_full.soe
SFOS z0400e_full.sfos


ISSUE DATE: 04/15/08

SUNDAY

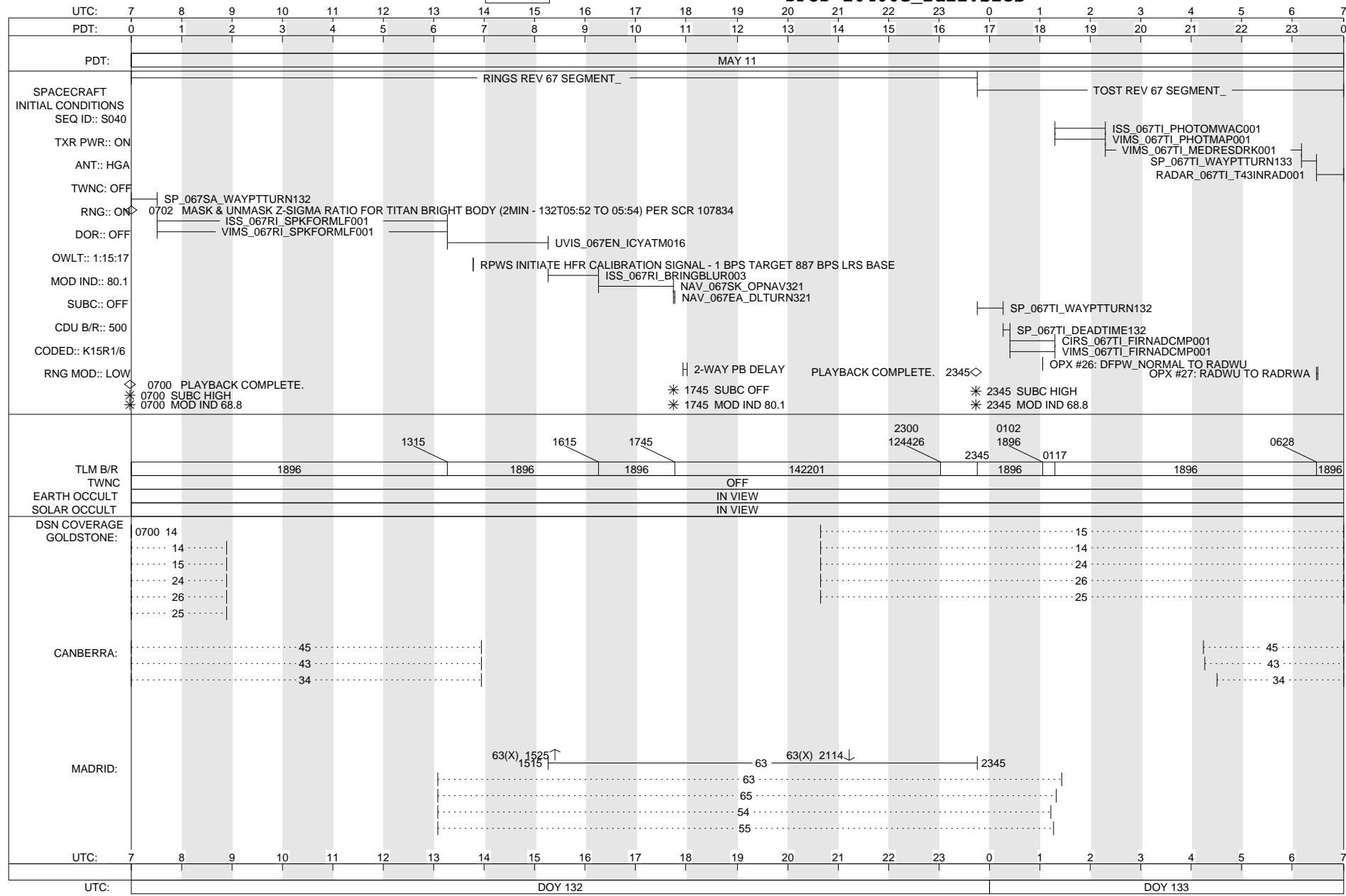
132-133

MAY 11, 2008 - MAY 12, 2008



CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos



ISSUE DATE: 04/15/08

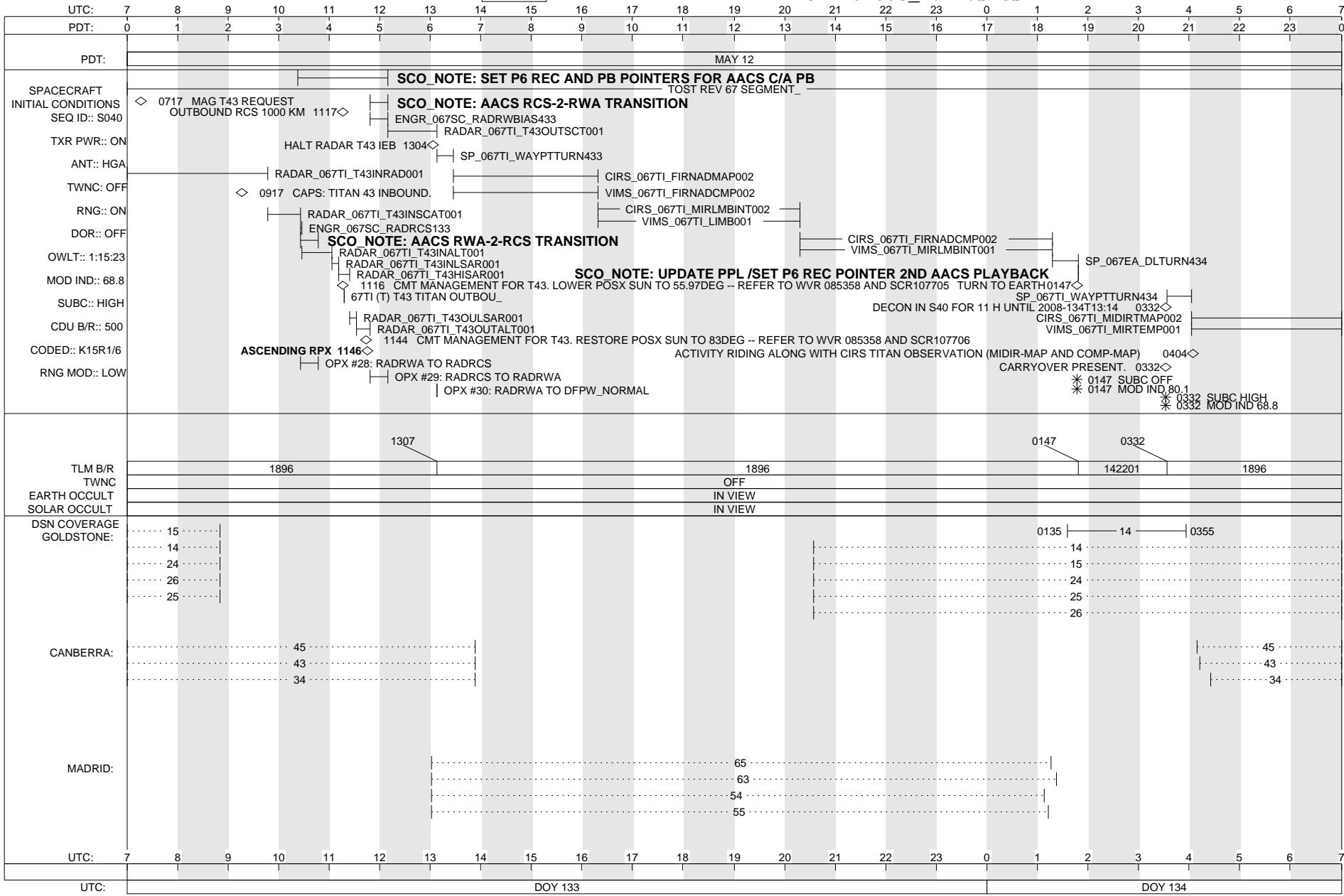
MONDAY 133-134

MAY 12, 2008 - MAY 13, 2008

MISSING
IMAGE

CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos



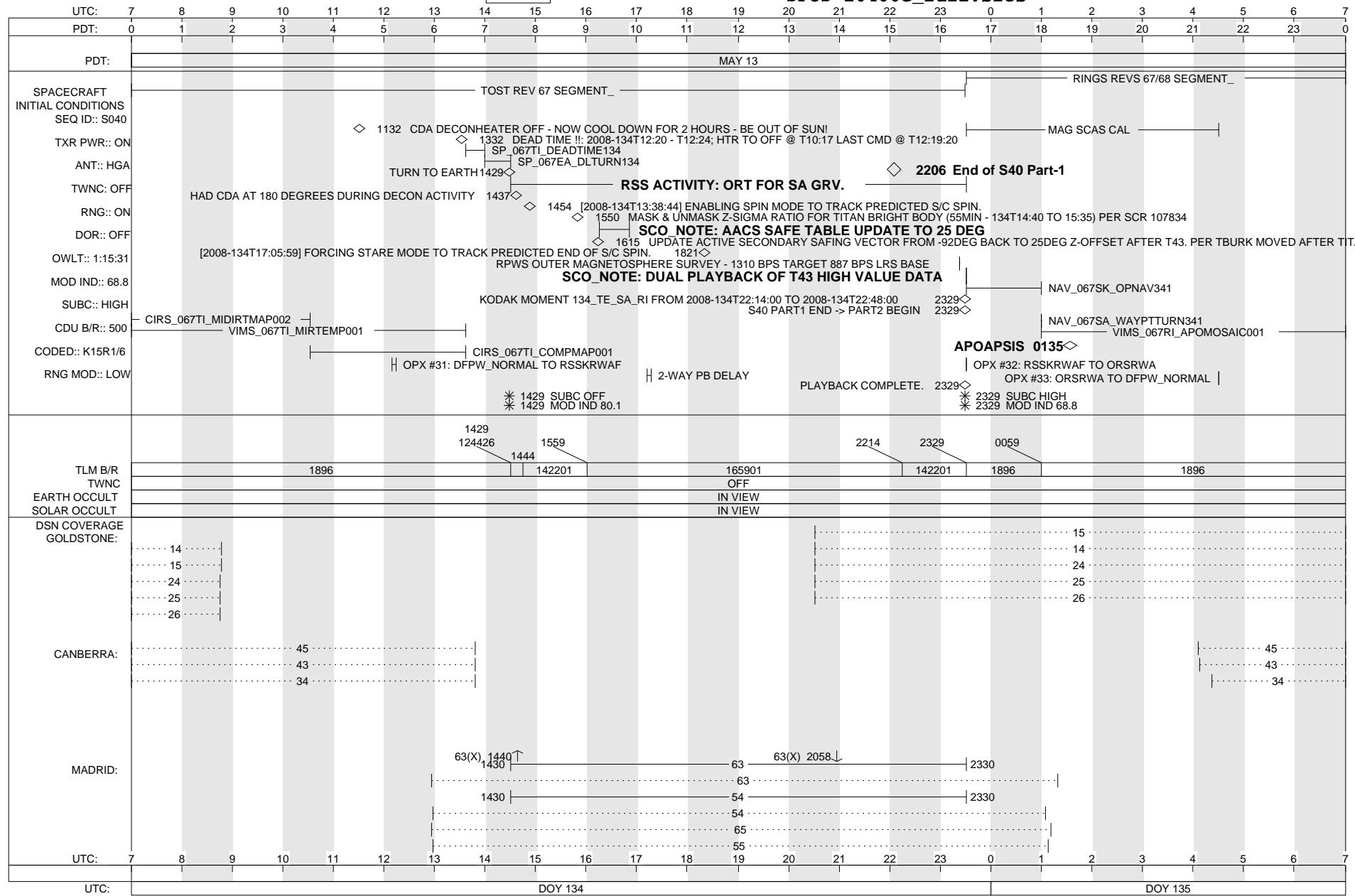
TUESDAY 134-135

MAY 13, 2008 - MAY 14, 2008

MISSING
IMAGE

CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos



ISSUE DATE: 04/15/08

WEDNESDAY 135-136

MAY 14, 2008 - MAY 15, 2008

MISSING
IMAGE

CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos

Spacecraft Initial Conditions SEQ ID:: S040

TXR PWR:: ON

ANT:: HGA

TWNC: OFF

RNG:: ON

DOR:: OFF

OWLTT:: 1:15:39

MOD IND:: 68.8

SUBC:: HIGH

CDU B/R:: 500

CODED:: K15R1/6

RNG MOD:: LOW

PDT:

MAY 14

RINGS REVS 67/68 SEGMENT_

CIRS_068RI_SUBMU20LP001
VIMS_068RI_SUBMU20LP001

CIRS_068RI_TEMPU20LP001

ISS_068RI_WN50303001
SP_068EA_DLTURN135

TURN TO EARTH 2144 ◇

VIMS_067RI_APOMOSAIC001

CARRYOVER PRESENT. 0644 ◇

* 2144 MOD IND 80.1 * 0014 SUBC OFF

* 0444 SUBC HIGH MOD IND 68.8 0644 *

TLM B/R

TWNC

EARTH OCCULT

SOLAR OCCULT

DSN COVERAGE GOLDSTONE:

CANBERRA:

MADRID:

UTC: 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7

DOY 135

UTC: 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7

DOY 136

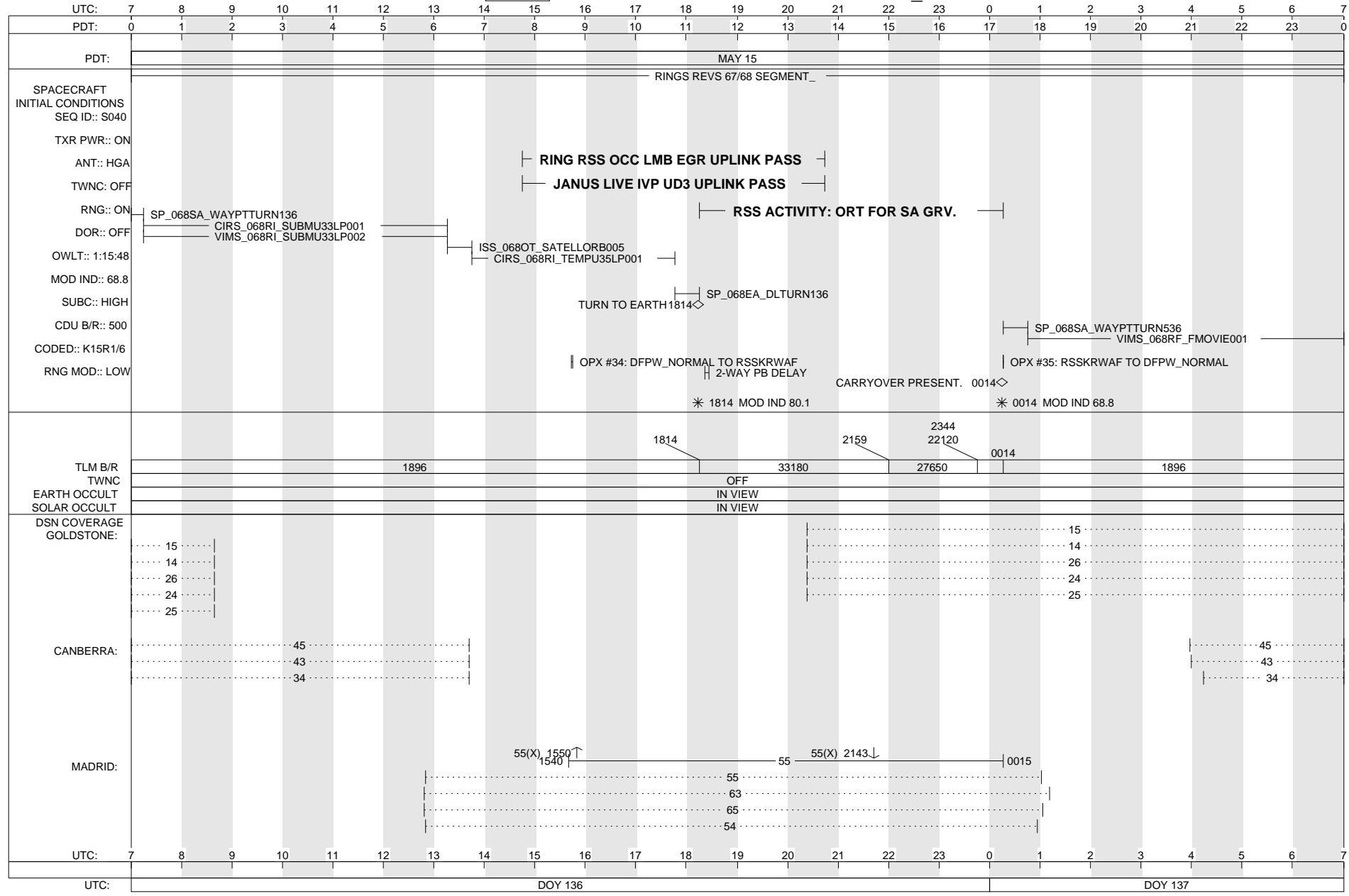
Page 28 of 46

THURSDAY 136-137

MAY 15, 2008 - MAY 16, 2008



CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos

ISSUE DATE: 04/15/08

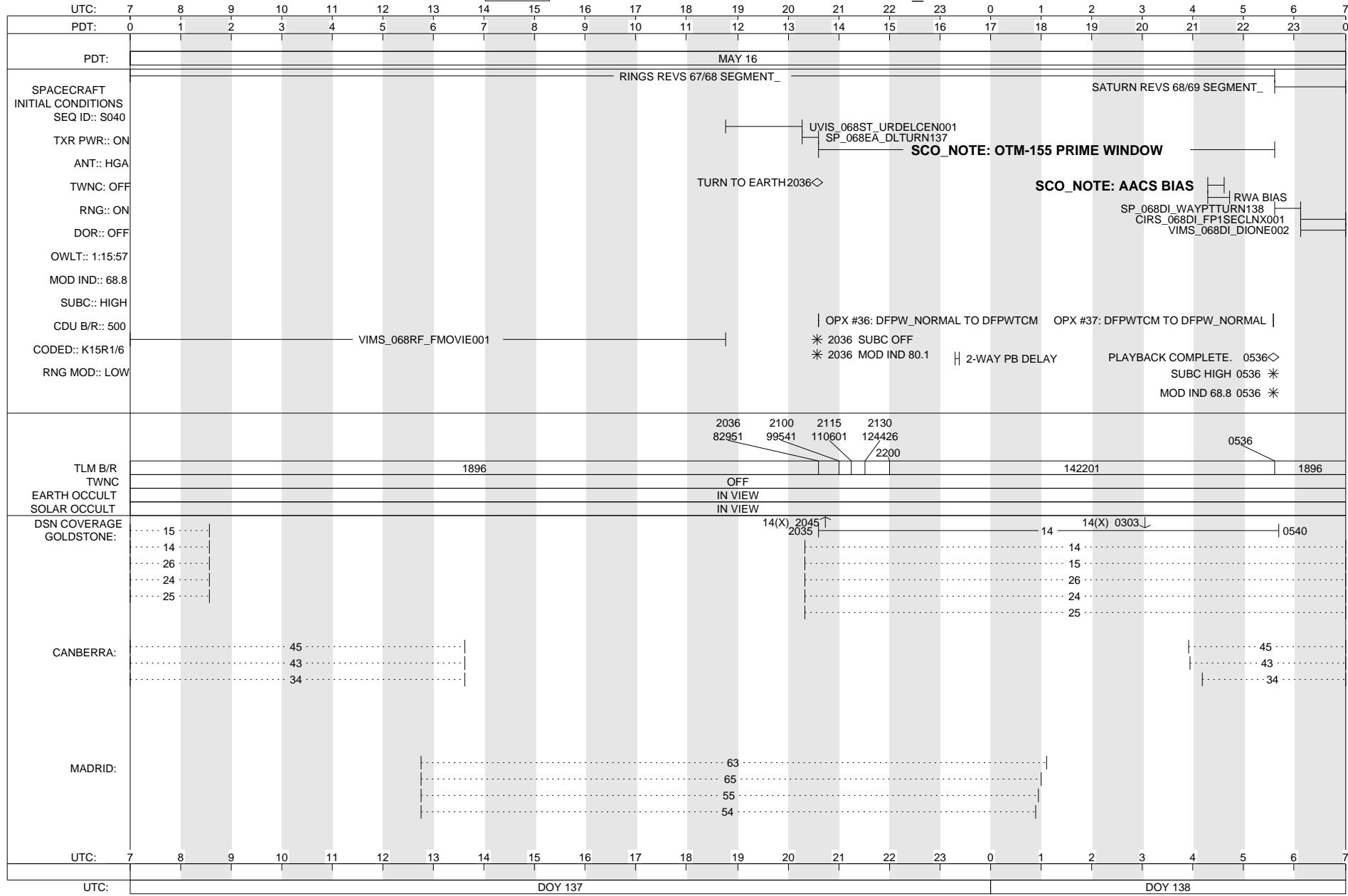
FRIDAY

137-138

MAY 16, 2008 - MAY 17, 2008

MISSING
IMAGE

CASSINI SFOS

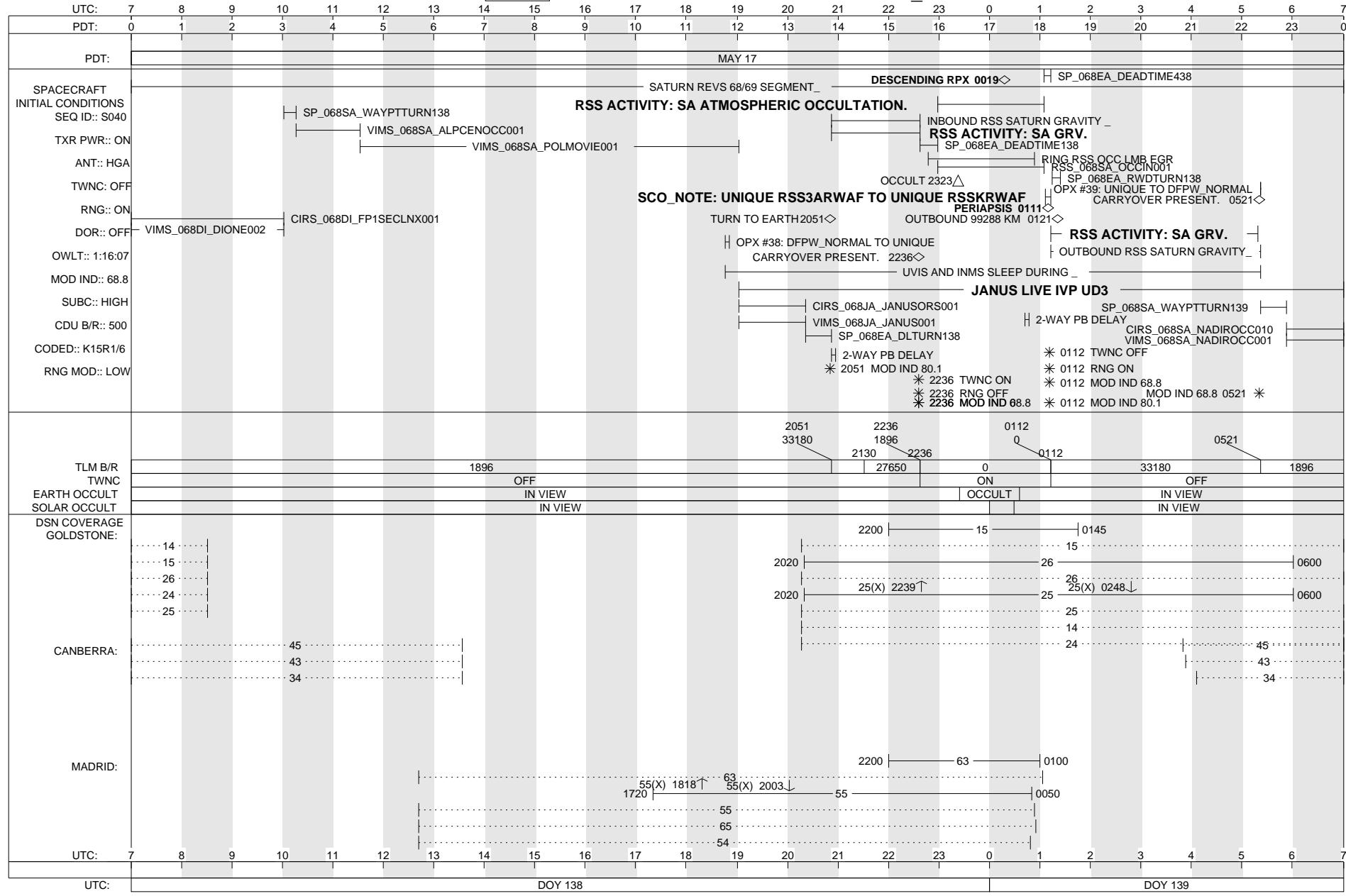
SOE z0400e_full.soe
SFOS z0400e_full.sfos


SATURDAY 138-139

MAY 17, 2008 - MAY 18, 2008

MISSING
IMAGE

CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos


ISSUE DATE: 04/15/08

SUNDAY

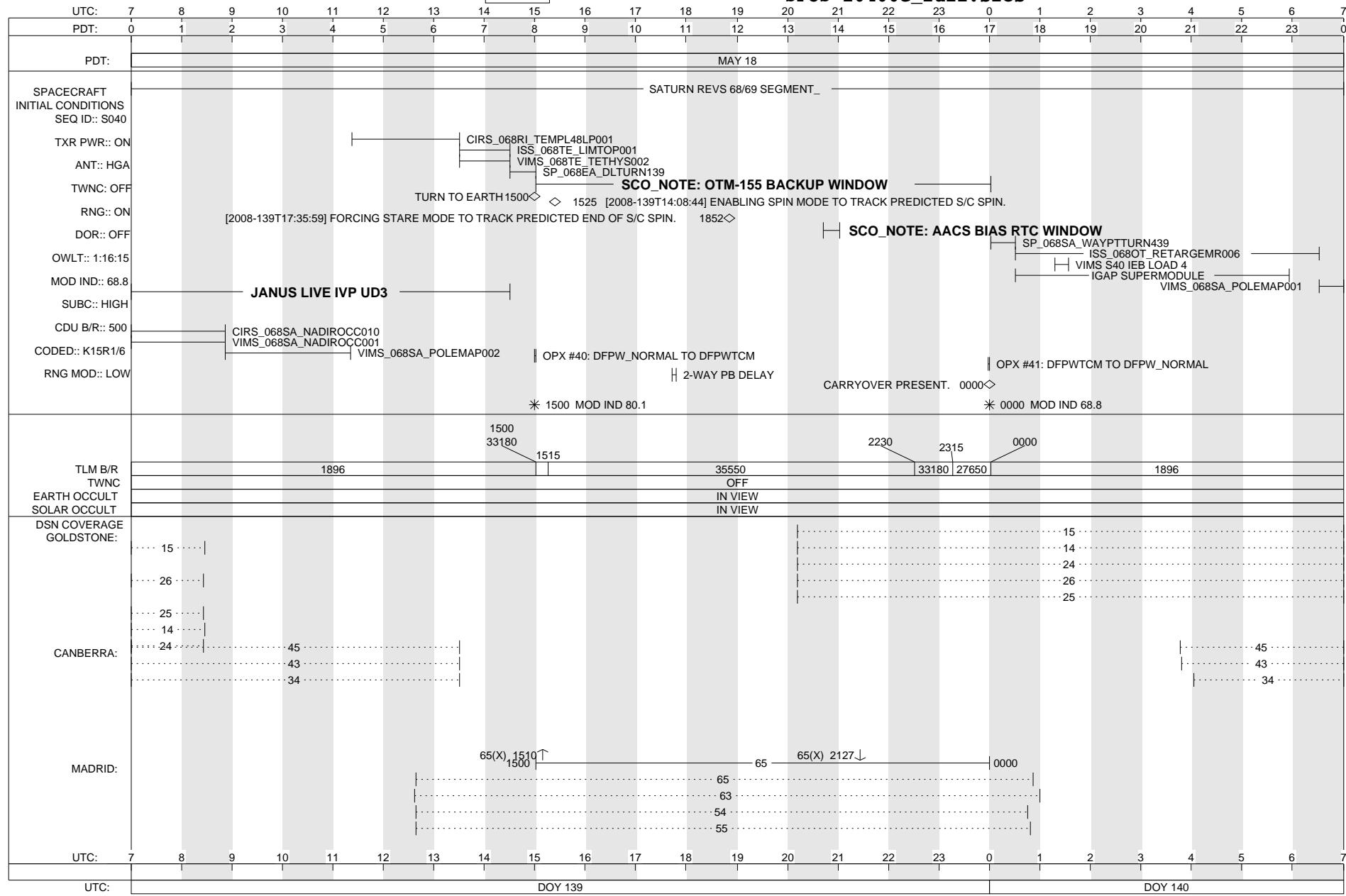
139-140

MAY 18, 2008 - MAY 19, 2008



CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos



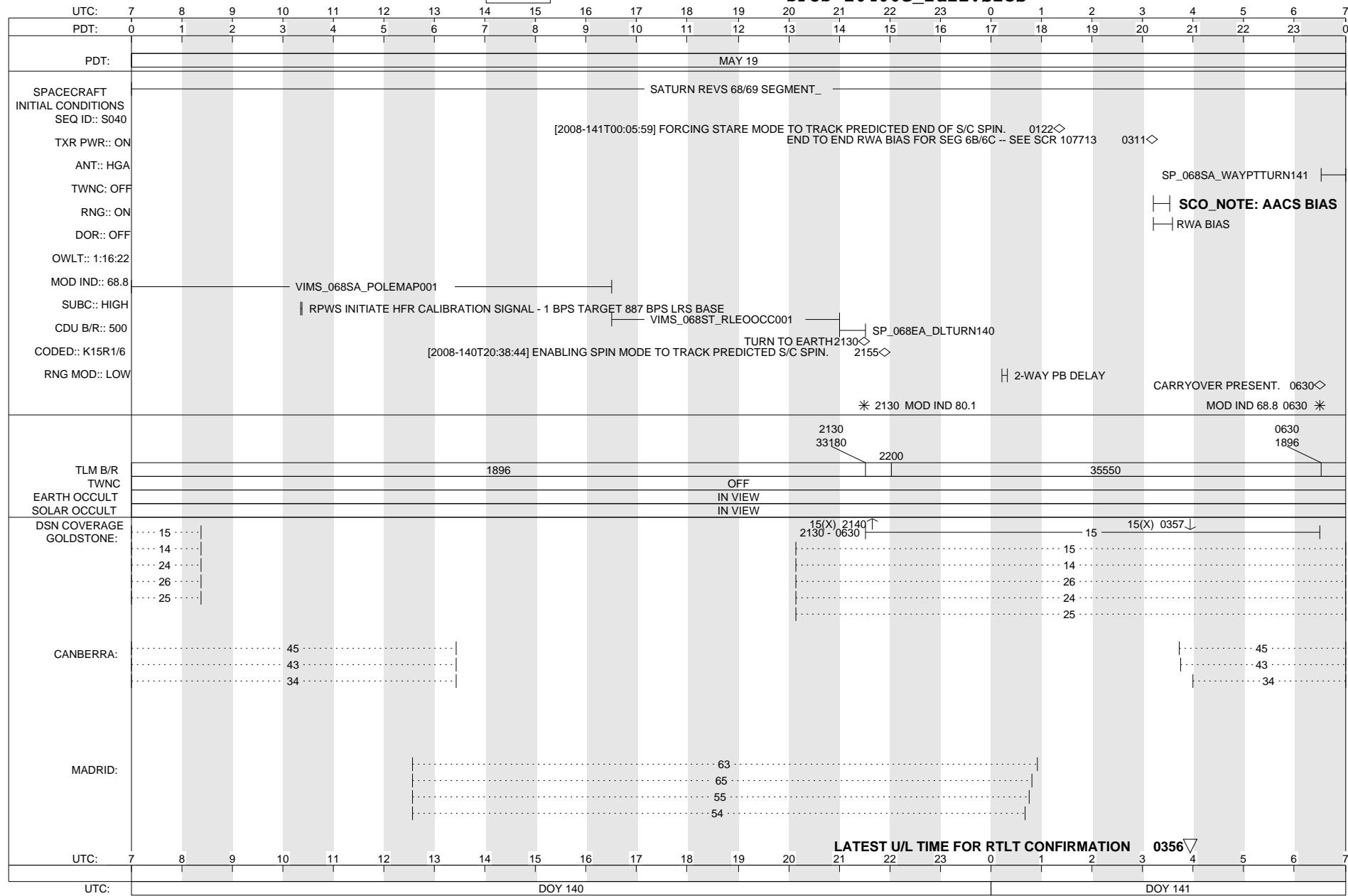
ISSUE DATE: 04/15/08

MONDAY 140-141
MAY 19, 2008 - MAY 20, 2008

MISSING
IMAGE

CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos



ISSUE DATE: 04/15/08

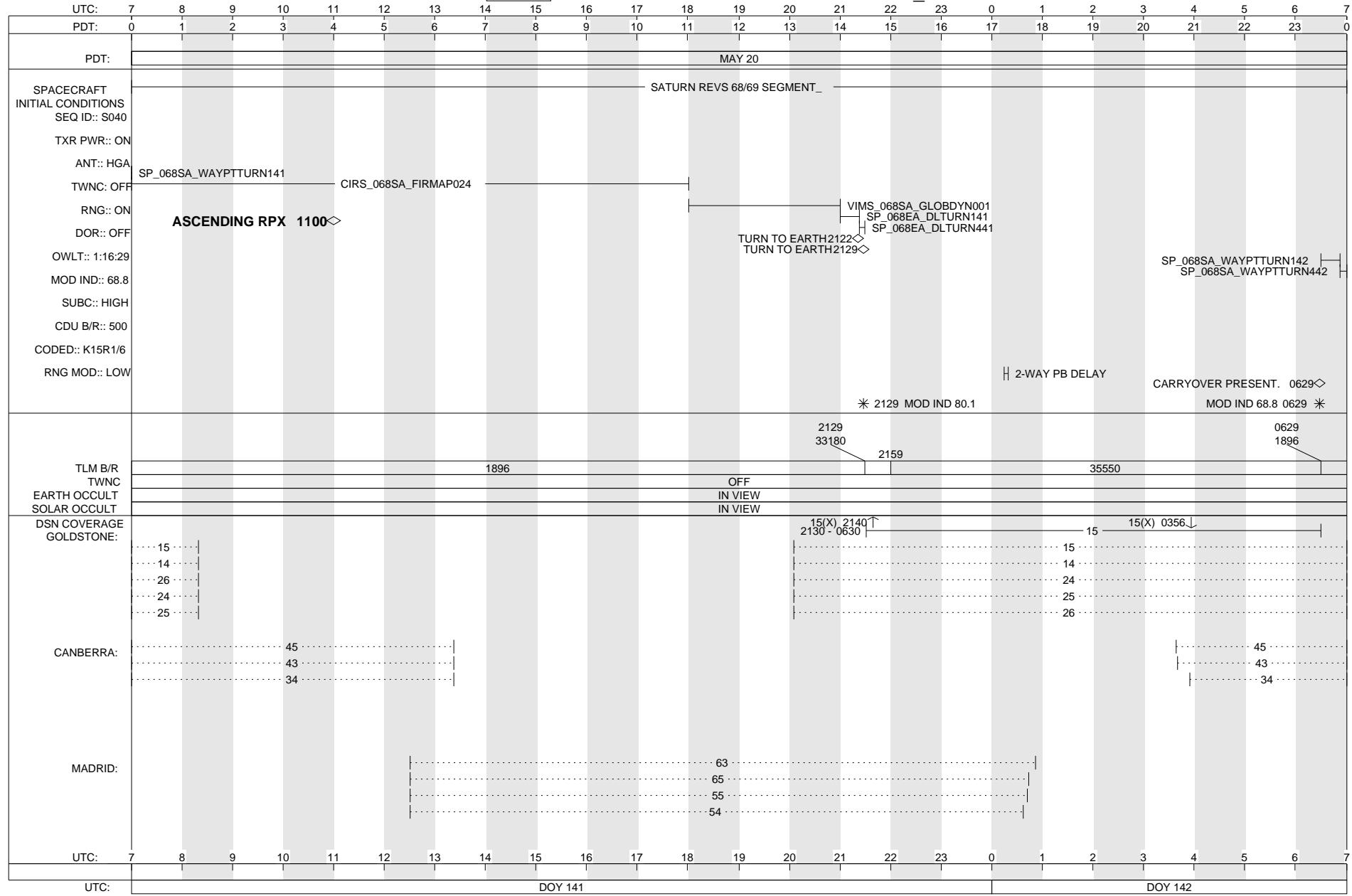
TUESDAY 141-142

MAY 20, 2008 - MAY 21, 2008

MISSING
IMAGE

CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos

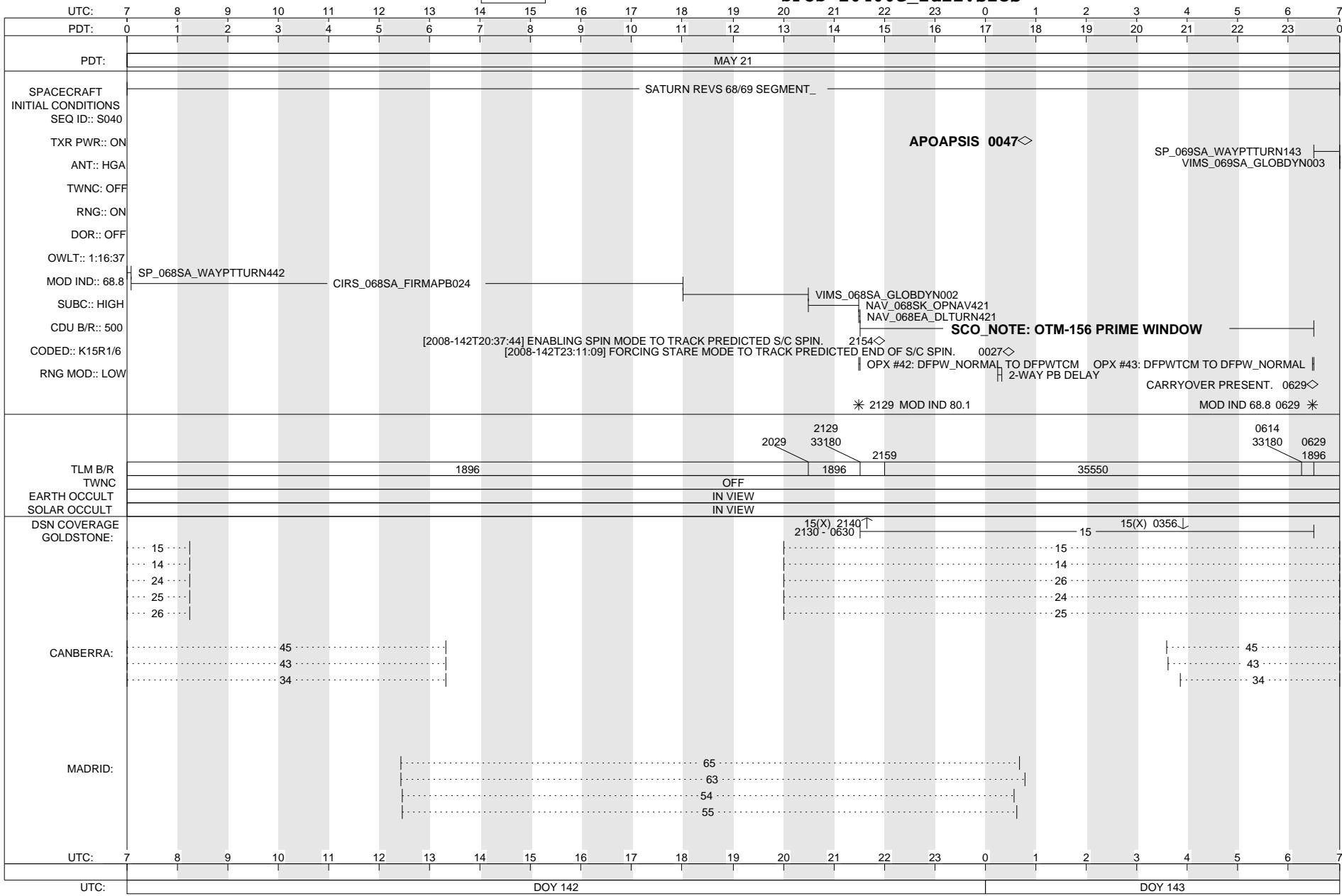


WEDNESDAY 142-143

MAY 21, 2008 - MAY 22, 2008



CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos

ISSUE DATE: 04/15/08

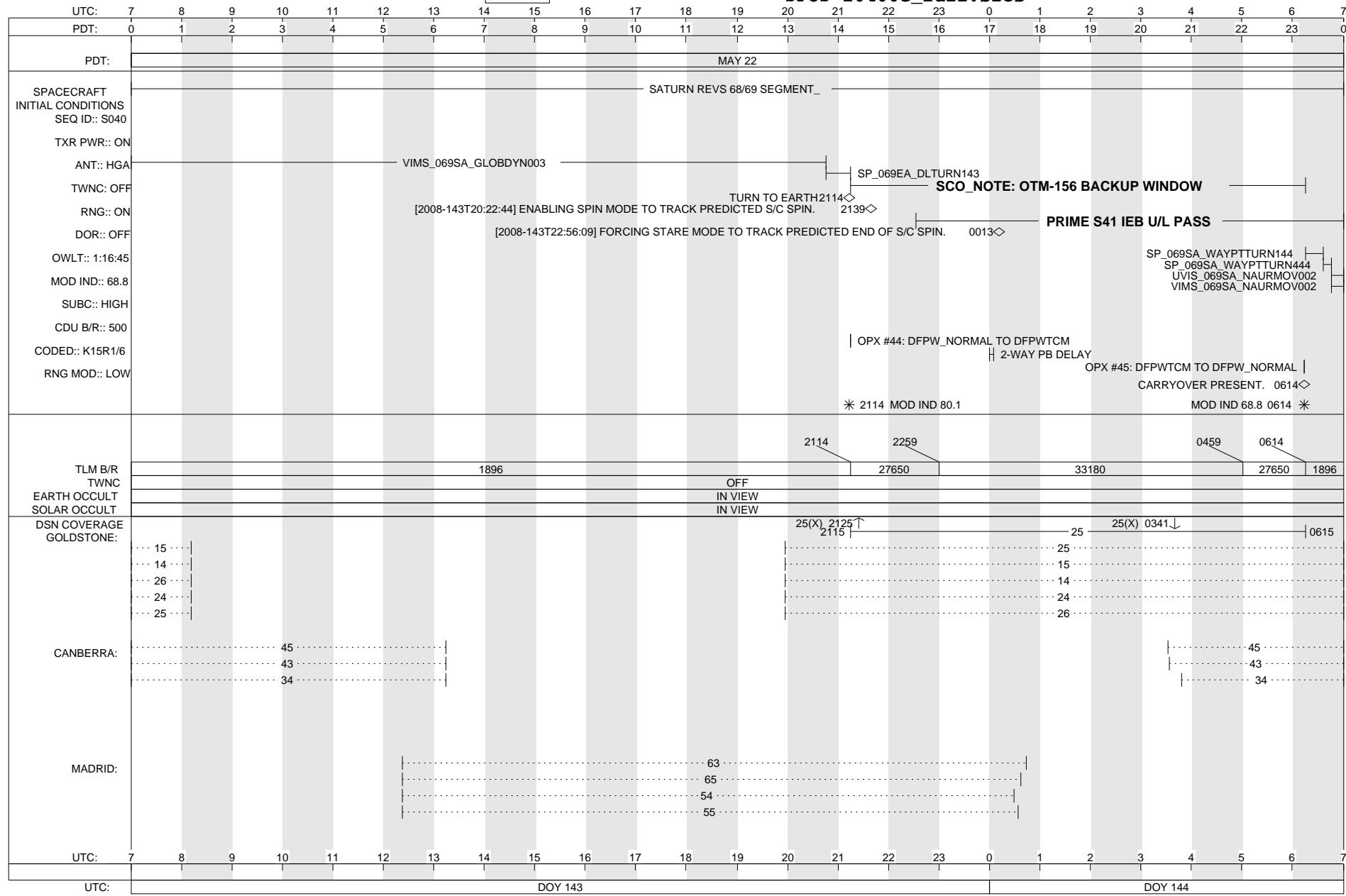
THURSDAY 143-144

MAY 22, 2008 - MAY 23, 2008

MISSING
IMAGE

CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos



ISSUE DATE: 04/15/08

FRIDAY 144-145

MAY 23, 2008 - MAY 24, 2008

MISSING
IMAGE

CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos

ISSUE DATE: 04/15/08

SATURDAY 145-146

MAY 24, 2008 - MAY 25, 2008

MISSING
IMAGE

CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos

Spacecraft INITIAL CONDITIONS SEQ ID:: S040

TXR PWR:: ON

ANT:: HGA

TWNC:: OFF

RNG:: ON

DOR:: OFF

OWLT:: 1:17:03

MOD IND:: 68.8

SUBC:: HIGH

CDU B/R:: 500

CODED:: K15R1/6

RNG MOD:: LOW

PDT: MAY 24

VIMS_069SA_GLOBDYN004

-131DEG Z OFFSET FOR SEG8A ON DOY145 DL 2120

END TO END RWA BIAS FOR SEG 7A/8A OTM157P BG BIAS -- SEE SCR 107713

TURN TO EARTH 2115

SP_069EA_DLTURN145

UN-OFFSET 0540

RWA BIAS 0455

SP_069SA_WAYPTTURN146

VIMS_069SA_GLOBDYN005

OPX #46: DFPW_NORMAL TO DFPWTCM

2-WAY PB DELAY

OPX #47: DFPWTCM TO DFPW_NORMAL

CARRYOVER PRESENT. 0615

MOD IND 68.8 0615 *

MOD IND 68.8 0615 *

2115 33180

2145

35550

0600 33180

0615

1896

OFF

IN VIEW

IN VIEW

15(X) 2125 ↑

15(X) 0340 ↓

15

14

24

25

26

15

14

24

25

26

45

43

34

45

43

34

63

65

54

55

0615

DSN COVERAGE GOLDSTONE:

- 15
- 14
- 24
- 25
- 26

CANBERRA:

- 45
- 43
- 34

MADRID:

- 63
- 65
- 54
- 55

UTC: 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7

DOY 145

DOY 146

ISSUE DATE: 04/15/08

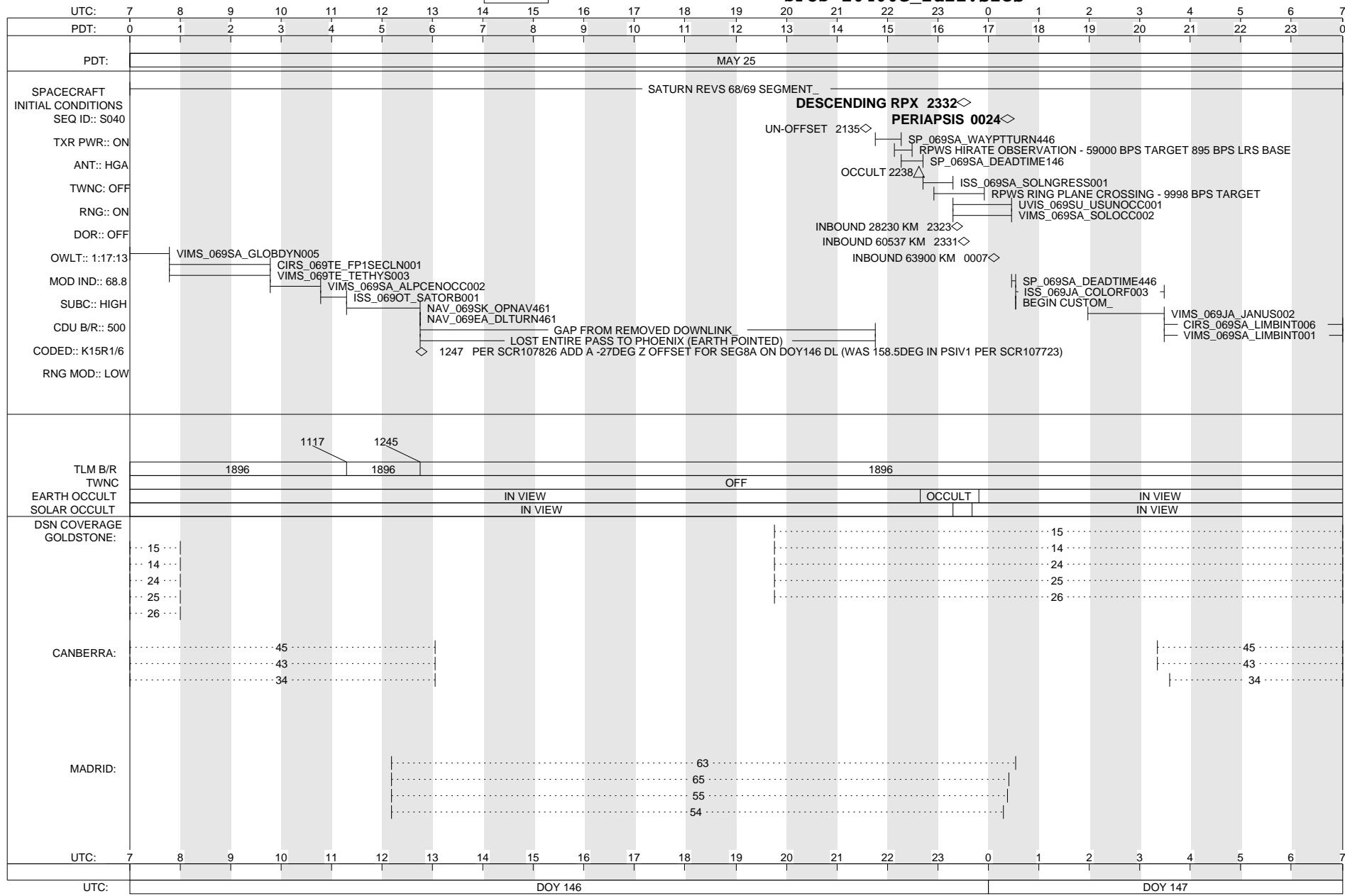
SUNDAY 146-147

MAY 25, 2008 - MAY 26, 2008

MISSING
IMAGE

CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos



ISSUE DATE: 04/15/08

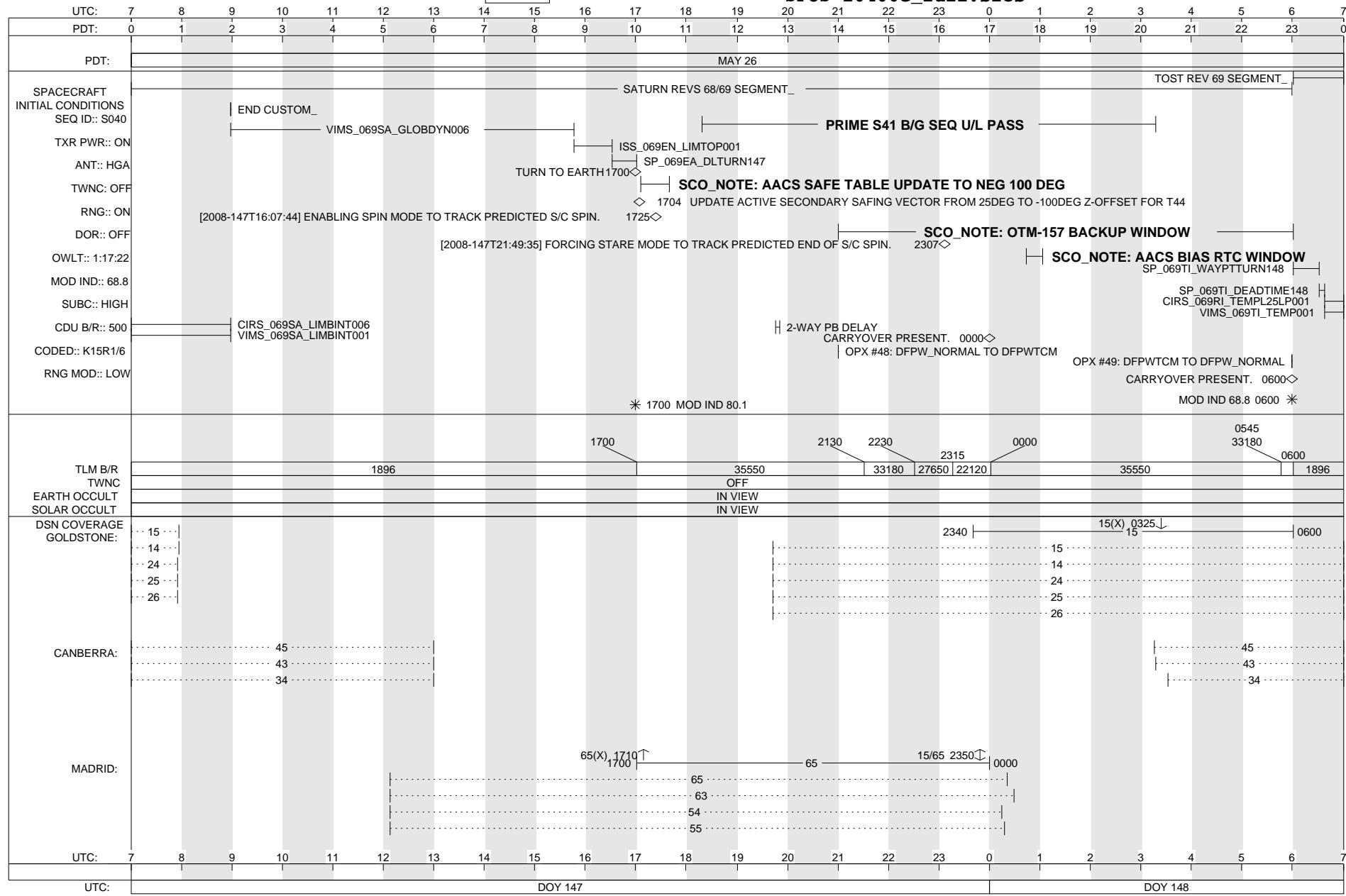
MONDAY 147-148

MAY 26, 2008 - MAY 27, 2008

MISSING
IMAGE

CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos



ISSUE DATE: 04/15/08

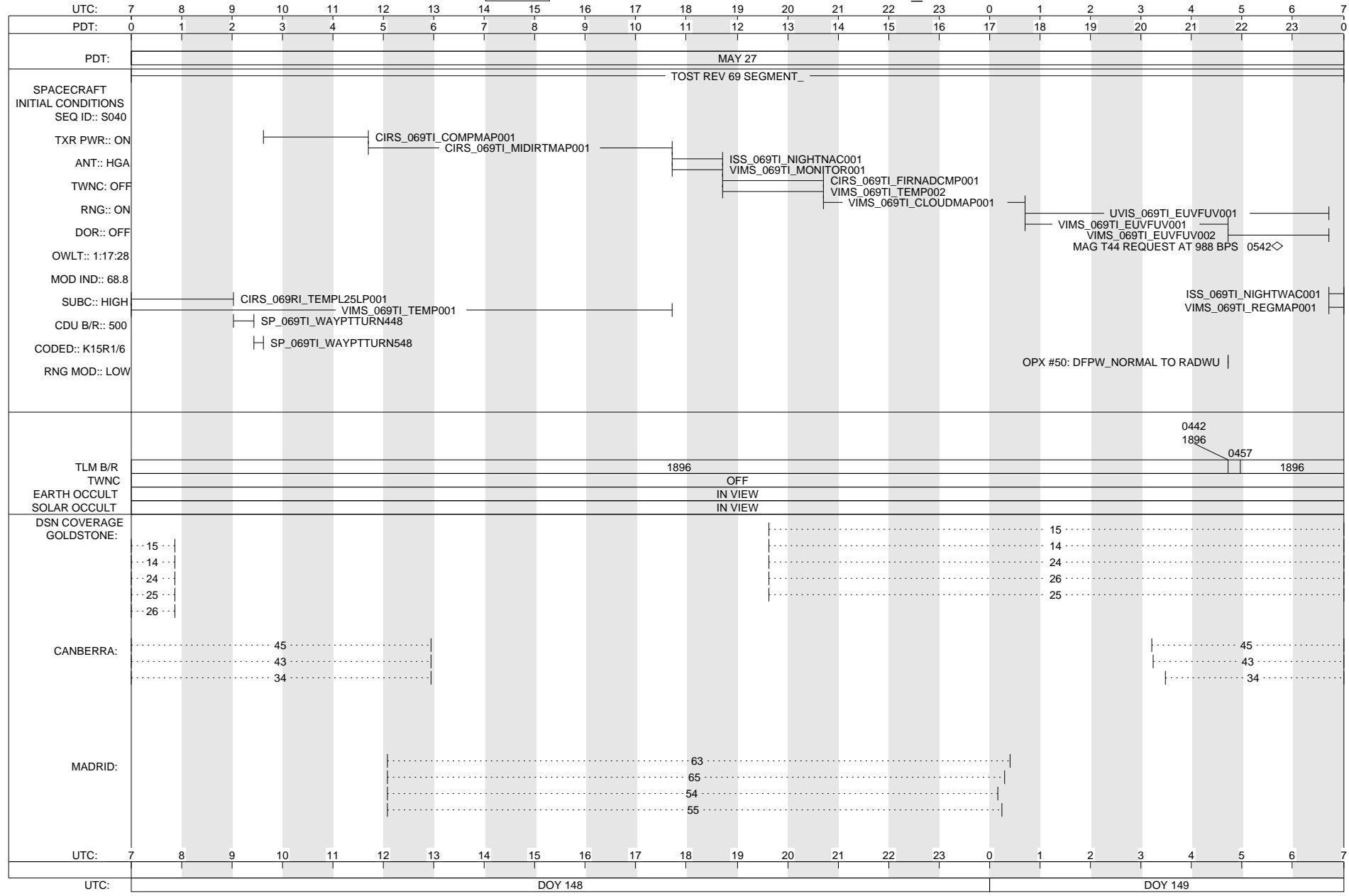
TUESDAY 148-149

MAY 27, 2008 - MAY 28, 2008

MISSING
IMAGE

CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos



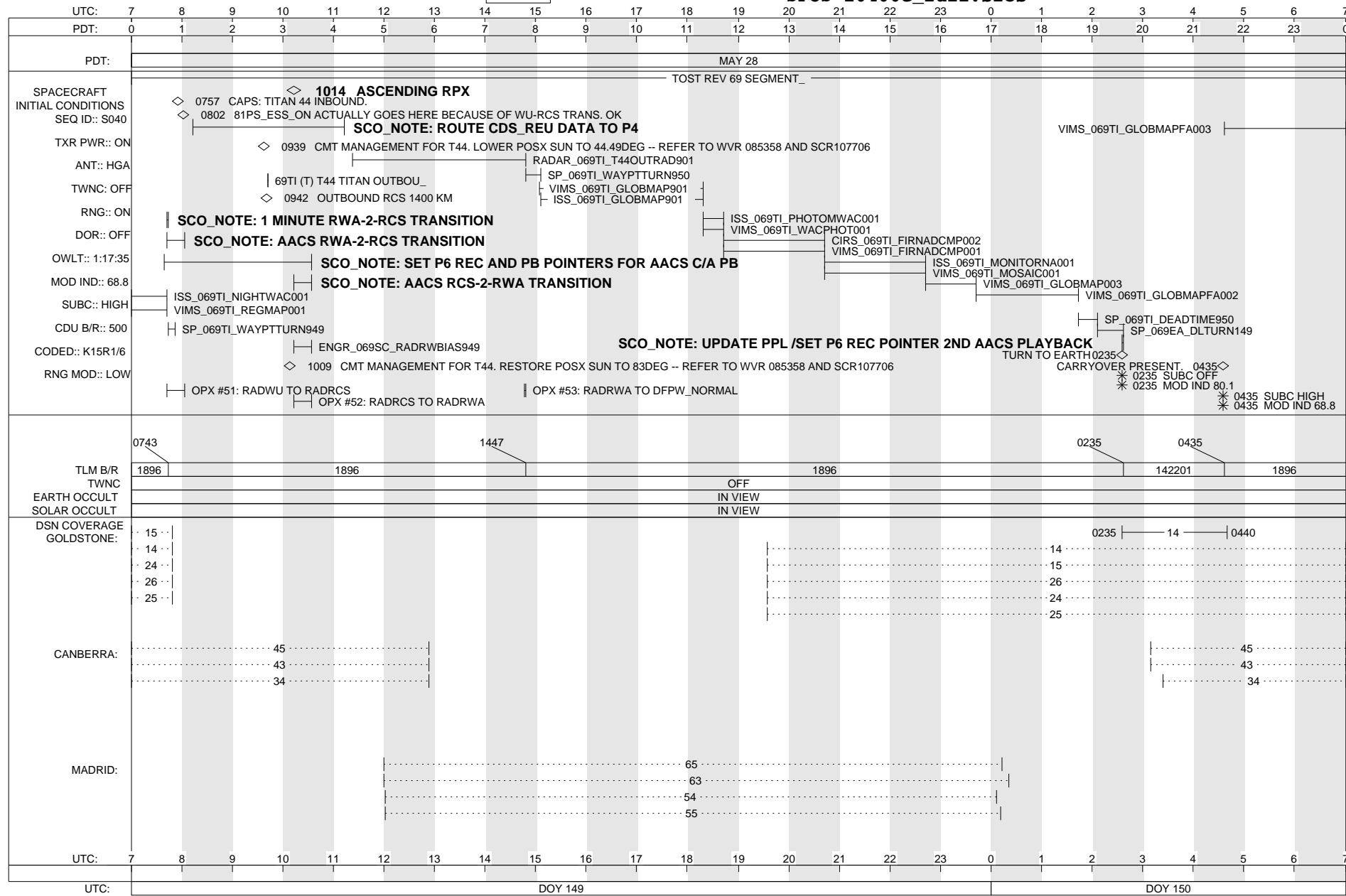
WEDNESDAY 149-150

MAY 28, 2008 - MAY 29, 2008

MISSING
IMAGE

CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos



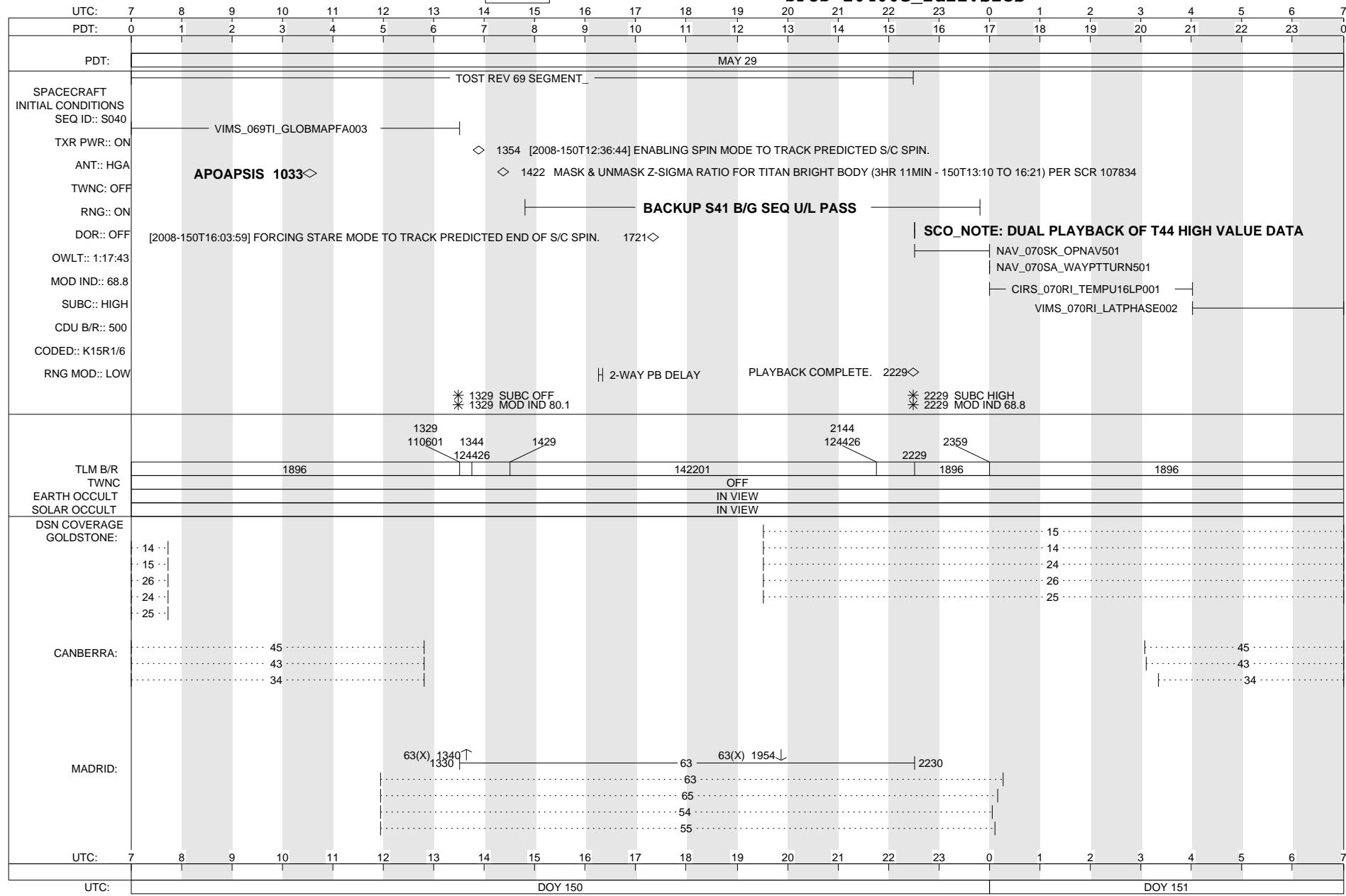
ISSUE DATE: 04/15/08

THURSDAY 150-151

MAY 29, 2008 - MAY 30, 2008



CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos

ISSUE DATE: 04/15/08

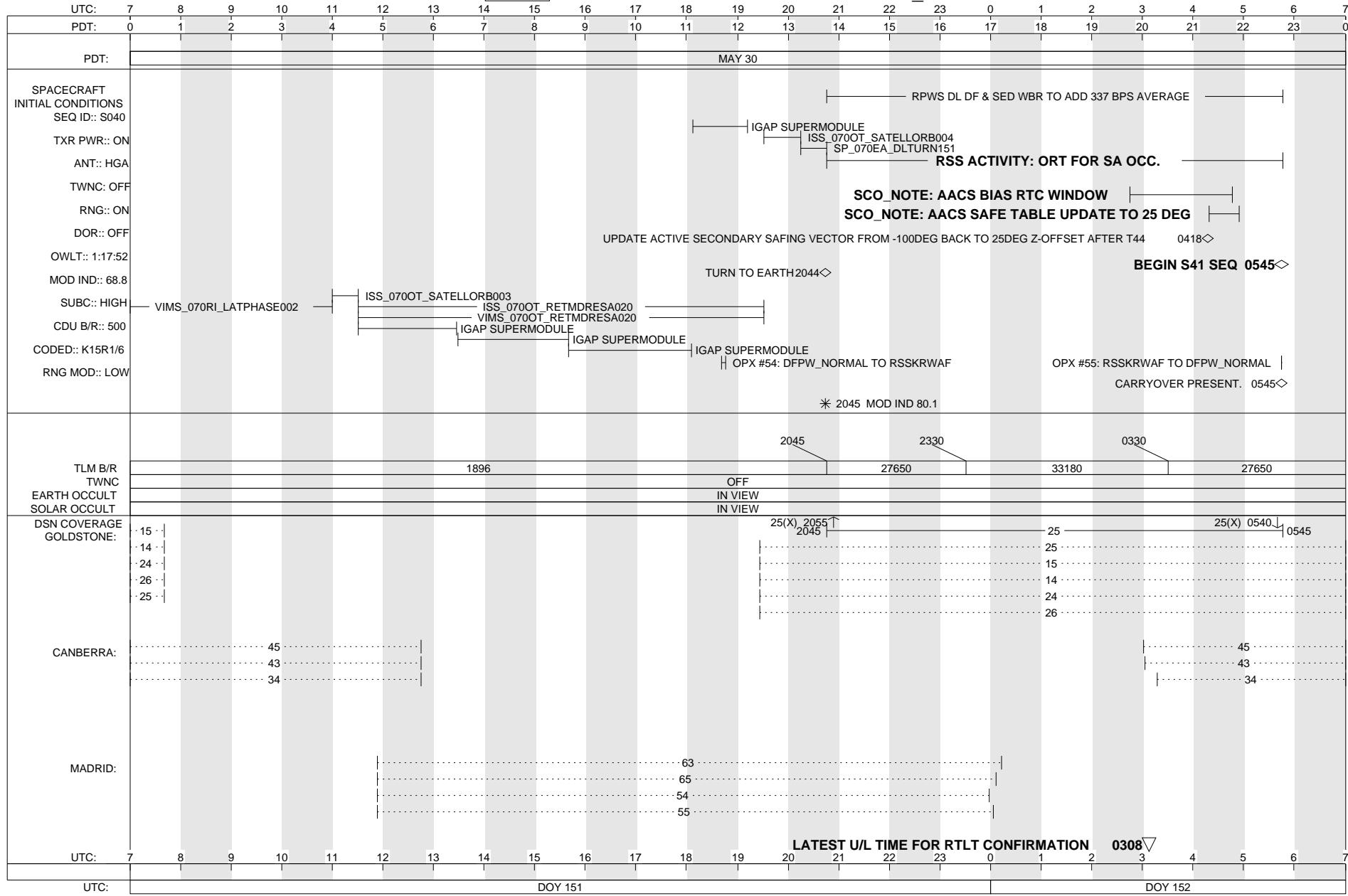
FRIDAY

151-152

MAY 30, 2008 - MAY 31, 2008

MISSING
IMAGE

CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos


ISSUE DATE: 04/15/08

SATURDAY 152-153

MAY 31, 2008 - JUNE 1, 2008

MISSING
IMAGE

CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos

ISSUE DATE: 04/15/08

SUNDAY

153-154

JUNE 1, 2008 - JUNE 2, 2008

MISSING
IMAGE

CASSINI SFOS

SOE z0400e_full.soe
SFOS z0400e_full.sfos

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