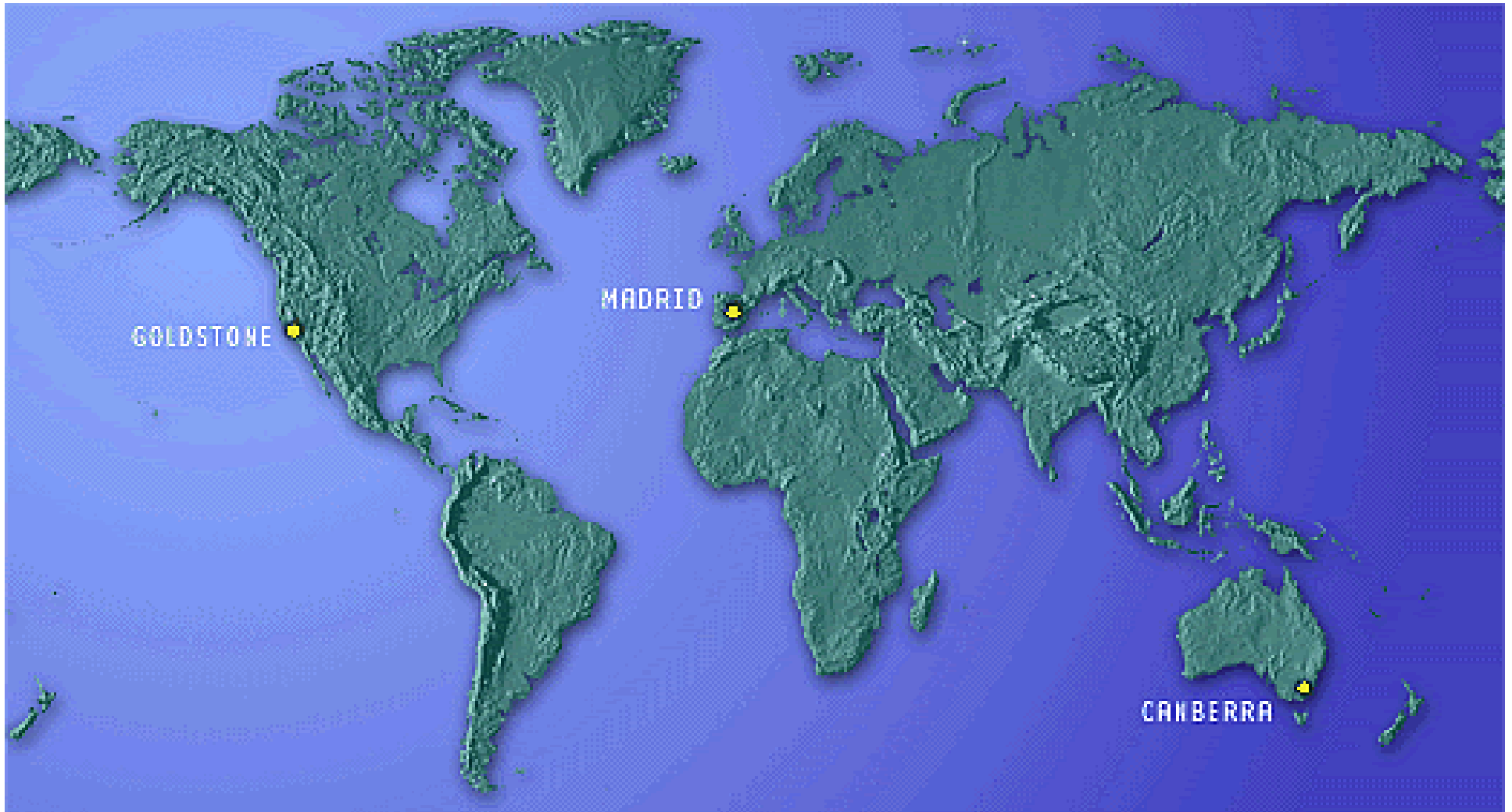


DSN Antenna Downtime Status and Forecast



<http://rapweb.jpl.nasa.gov/planning>

Antenna Downtime Status and Forecast

The following downtimes for 2008.

- ❑ SPC-40 is requesting complex downtime for A Station Power Grid.
 - ❑ Week 40 DOY 273 2200-0400 scheduled
- ❑ DSS-34 Ka-Band Phase 2 downtime beginning in week 29 has scheduled an additional 4 weeks to complete the task and will end in week 43.
 - ❑ Engineering Demos have been scheduled starting in week 39 (22 September)
 - ❑ Cassini has requested a non-committed support in week 42.
- ❑ DSS-55 downtime for Paint Repair is scheduled for September, weeks 36 - 41.
 - ❑ Weeks 39-41 the antenna is available from 1800-0800.
- ❑ DSS-14 Grouting is scheduled November, weeks 47 & 48.
 - ❑ This grouting period will run in parallel with the DSS-24 downtime for Ka-Band Phase 2 in weeks 47 & 48, DOYs 226/0315-331/0045.
 - ❑ All projects have agreed to delete or move their supports.
- ❑ DSS-54 downtime for ACQ Aid Installation is scheduled for October, weeks 42 and 43 of 2008.
 - ❑ Due to Cassini critical support, the proposed downtime DOYs will be 287 – 290 and 295 – 298. The NOPE will schedule TERRA supports for testing.
- ❑ DSS-24 TXR Motor Generator Repair
 - ❑ This 24 hour downtime will be scheduled for November 3, 2008 just prior to the DSS-24 Ka-Band Phase 2 downtime
- ❑ DSS-24 Ka-Band Phase 2 downtime is scheduled to start in week 45 of 2008 through week 5 of 2009.
 - ❑ This downtime will start November 4 to allow for a 24 hour downtime for TXR Motor Generator repair on November 3, 2008
 - ❑ Antenna calibrations will be during the 1st half of January and demo tracks during the 2nd half of January.
 - ❑ This downtime will end January 31, 2009 of week 5.

Antenna Downtime Status and Forecast

Downtime request for 2008

The following proposals for downtime are requested by GDSCC.

- ❑ Complex preventative maintenance “G91 2400V Switchgear Electrical Maintenance”
 - ❑ Has been scheduled for week 40, DOY 275/1730-0330.
- ❑ Complex preventative maintenance “Apollo Tie-Line Electrical Maintenance”
 - ❑ Has been proposed for week 49 DOY 339/1600-0600.
- ❑ Complex preventative maintenance “Echo Tie-Line Electrical Maintenance” has been moved to start after the Apollo Tie-Line Electrical Maintenance.
 - ❑ This can be moved to early CY 2009, proposed for week 7
- ❑ Complex corrective maintenance “G86/G81 Transfer Switch Electrical Maintenance”
 - ❑ Has been moved to start NET week 4 of 2009.
- ❑ Requesting 60 eight hour daylight time for DSS-14 Fall Arrest Downtime.
 - ❑ Proposing to schedule this downtime during Life Extension scheduled for 2009.

Additional time is being requested – these request have been postponed the NET 2009, week 26.

- ❑ Two 8 hour complex downtimes for cutover, final connection and testing of the new G86 Substation, Mars Site.
- ❑ Fourteen 4 hour periods between July 2009 and January 2010 for testing of G86 Substation, Mars Site.

Antenna Downtime Status and Forecast

The following proposals for antenna downtimes are requested.

- ❑ **MDSCC Annual Antenna Inspections at DSS-54 and -55, -63, -65, as follows:**
 - ❑ DSS-55 is scheduled for DOY 294/0645-1445 week 43
 - ❑ DSS-54 is scheduled for DOY 295/0600-1400 week 43 during ACQ AID Installation
 - ❑ DSS-63 is scheduled for DOY 296/0600-1400 week 43
 - ❑ DSS-65 is scheduled for DOY 298/0600-1440 week 43

- ❑ **HEF Transmitter Manifold Installation at DSS-15, -45 and -65 between July, 2008 and June 2009 not to be scheduled concurrently with DSS-15 being scheduled first. This is a 4 day downtime period.**
 - ❑ This installation has been put on hold.

- ❑ **Request 7 consecutive days for HEF Servo – Installation and test of Rev D board either at DSS-15 or DSS-45.**
 - ❑ Put on hold at this time, but can be scheduled after the DSS-24 Ka-Band Phase 2 and as late as September 2009

- ❑ **Request to add a 20kW Transmitter Upgrade NIB to DSS-14 Bearing Regrout in November.**
 - ❑ This will be scheduled during the DSS-14 Grouting scheduled for weeks 47 & 48, DOYs 226/0315 – 331/0045.

- ❑ **DSS-15 Elevation Gearbox Replacement pending.**
 - ❑ Need 14 consecutive days for gearbox replacement, servo tuning, testing and performance verification. Dates not yet confirmed.

- ❑ **Request Complex-TLAN downtime for SPC-10, -40, -60 for NMC S/W Integration and Test**
 - ❑ Request 8 hours between 7/27/2009 and 11/06/2009

- ❑ **Request SPC-10 8 hour complex downtime to install NMC S/W.**
 - ❑ Request 09/08/2009 and 10/05/2009

- ❑ **Request complex downtime for NMC S/W Acceptance test for SPC-10, -40, -60.**
 - ❑ Request 8 hour blocks from 11/7/2009 through 02/05/2010

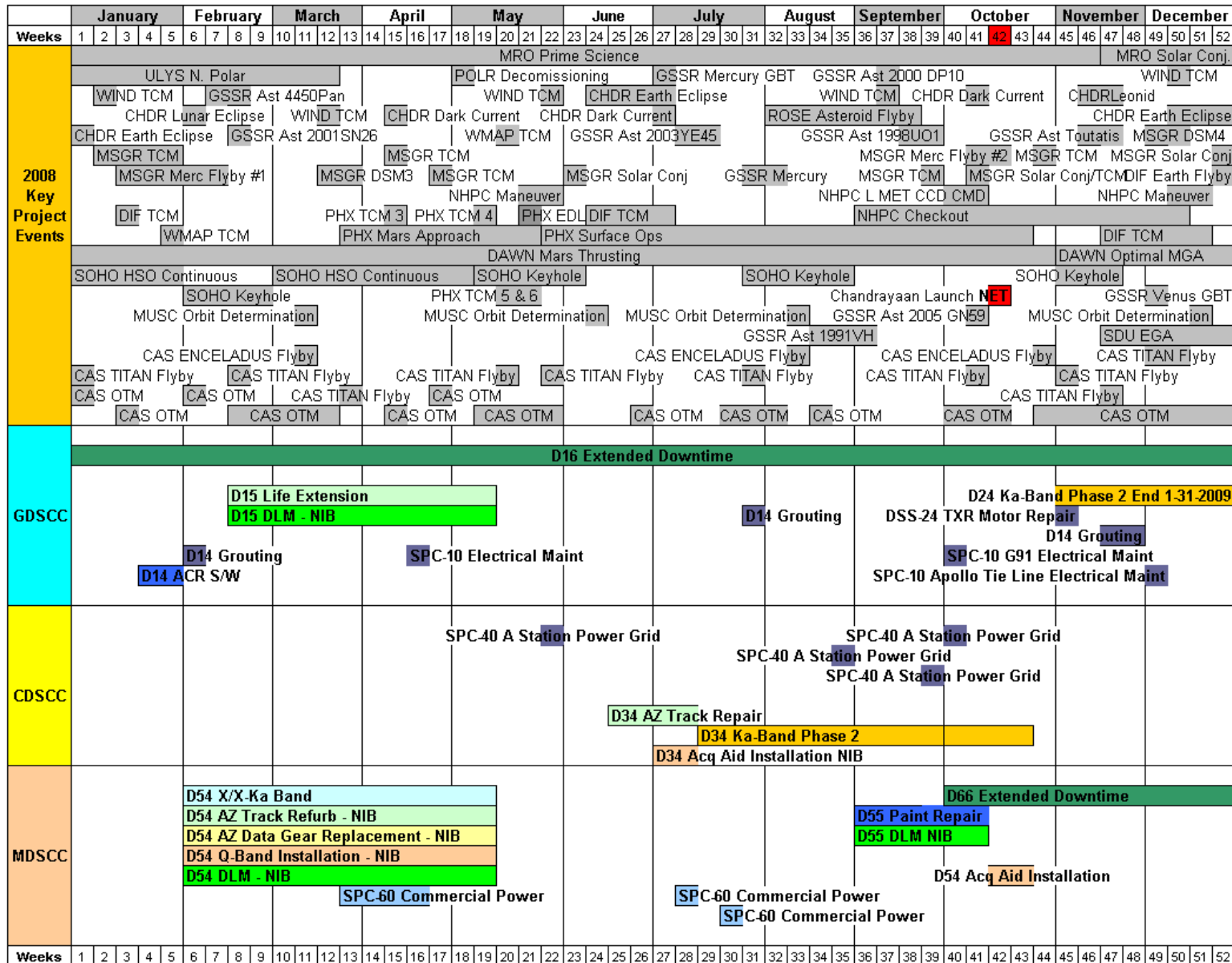
- ❑ **Request NMC S/W Soak Testing**
 - ❑ Request 8 hours of downtime for SPC-10 in mid February 2010, SPC-40 in mid March 2010 and SPC-60 in mid April 2010.
 - ❑ The soak testing will start with SPC-10 first, followed by either SPC-40 or SPC-60 depending on the available schedule.

Antenna Downtime Status and Forecast

The following downtimes are for 2009 – 2010

- ❑ DSS-43 downtime for Life Extension and Depot Level Maintenance will start January 5, 2009 and end April 12, 2009, weeks 2 – 15
- ❑ DSS-63 downtime for Life Extension has been will start May 4, through August 2, 2009, weeks 19 - 31.
- ❑ DSS-24 downtime for painting will be moved to another time frame due to Kepler launch date of NET April 10, 2009.
 - ❑ Analysis will be done to find an appropriate time to schedule this activity
 - ❑ There will be complete 24/7 downtime for the first 3 weeks and dayshift downtime (1400-0200) for the remaining weeks.
 - ❑ Depot Level Maintenance will be scheduled during this downtime.
- ❑ DSS-34 downtime for Azimuth Track Replacement has been proposed for 2010, local summer.
 - ❑ It is proposed to start the first week in February and end the second week of April 2010.
 - ❑ This was moved for a Cassini requested support.
- ❑ DSS-65 downtime for Life Extension Elevation has been proposed for weeks 31 - 41 in 2010.
- ❑ As a result of the reduction of downtime for DSS-43 & DSS-63 in 2008 & 2009, it is requested to recover that time in 2010, local spring, summer or fall after DSS-14 RTS.
 - ❑ DSS-43 is proposed for November 2010 thru February 2011 just prior to Messenger MOI.
 - ❑ DSS-63 is proposed for April through June of 2011 just after Messenger MOI.
- ❑ DSS-15 downtime for Pintle Bearing has been proposed for May 3, through June 27, 2010, weeks 18 - 25.

Antenna Downtime Status and Forecast 2008



Revised: August 29, 2008

Antenna Downtime Status and Forecast 2009

	January					February				March					April					May					June					July					August					September					October					November					December				
Weeks	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53						
2009 Key Project Events	GSSR Mercury GBT					GSSR Ast 1998CS1				CHDR Dark Current					GSSR Merc/Venus GBT					KEPL Quarterly Roll					KEPL Monthly Sci					KEPL Monthly Sci					KEPL Monthly Sci					MSL Launch & TCM					KEPL Quarterly Roll														
	MSGR TCM					GSSR Ast 1999AQ10				CHDR Earth Eclipse					MSGR Solar Conj					MSGR TCM					MSGR TCM					MSGR Merc Flyby 3					MSL F/S C/O 1					CHDR Earth Eclipse																			
	SDU TCM/EGA Nav					GSSR Ast 2000CO10				MSGR TCM					MSGR TCM					MSGR TCM					MSGR TCM					MSGR TCM					MSGR TCM					MSGR TCM																			
	GOES-O Launch					DAWN Mars G/A				MUSC Orbit Determination					LCRO Impact					WIND TCM					WIND TCM					GSSR Ast 2001					CV26					ROSE Earth Swingby																			
	WMAP TCM					SOHO Keyhole				WMAP TCM					WIND TCM					GSSR Ast 2001					SOHO Keyhole					WMAP TCM					SOHO Keyhole					KEPL Monthly Sci																			
	DIF Earth Flyby/TCM					DIF TCM				SOHO Keyhole					SOHO HSO Continuous					SOHO Keyhole					WMAP TCM					GTL EOM					DIF TCM/Earth Flyby																								
	LCROSS Launch					LCROSS TCM				NHPC L MET CCD CMD					NHPC L MET CCD CMD					NHPC L MET CCD CMD					NHPC L MET CCD CMD					NHPC L MET CCD CMD					NHPC L MET CCD CMD																								
	CAS TITAN Flyby					CAS TITAN Flyby				CAS TITAN Flyby					CAS TITAN Flyby					CAS TITAN Flyby					CAS TITAN Flyby					CAS TITAN Flyby					CAS TITAN Flyby					CAS TITAN Flyby																			
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	CAS OTM					CAS OTM				CAS OTM					CAS OTM					CAS OTM					CAS OTM					CAS OTM					CAS OTM					CAS OTM																			
	D16 Extended Downtime																																																										
	GDSCC	D24 Ka-Band Phase 2 Start 11-4-2008					SPC-10 Echo Tine Line Electrical Maint				D14 Grouting					D24 Painting					D24 DLM - NIB					SPC-10 NMC S/W Integration & Test - Proposed					SPC-10 NMC Load Testing - Proposed					D14 Life Extension - Proposed End 05-02-2010					NIB - D14 DLM																		
		SPC-10 G86/G81 Electrical Maint																								SPC-10 NMC Load Testing - Proposed					SPC-10 NMC Acceptance Testing - Proposed																												
	CDSCC	D46 Extended Downtime																																																									
		D43 Life Extension					D43 DLM - NIB																								SPC-40 NMC S/W Integration & Test - Proposed					SPC-40 NMC Acceptance Testing - Proposed																							
MDSCC	D66 Extended Downtime																																																										
Weeks	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53						

Revised: August 29, 2008

Antenna Downtime Status and Forecast 2011

	January				February				March				April				May				June				July				August				September				October				November				December							
Weeks	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
2011 Key Project Events	SDU Approach				SDU Tempel Enc				SDU Decommission				DAWN Instrument CO				DAWN Vesta Approach				DAWN Vesta Orbit				GRAIL Launch/TCM				JUNO Launch & TCM				JUNO TCM				JUNO HV Checkout				GSSR Asteroid 2000 YA											
	CHDR Dark Current				CHDR Dark Current				CHDR Earth Eclipse				CHDR Lunar Eclipse				CHDR Dark Current				DAWN Vesta Arrival				CHDR Dark Current				CHDR Earth Eclipse				CHDR Leonid																			
	KEPL Monthly Sci.				KEPL Monthly Sci.				KEPL Monthly Sci.				KEPL Monthly Sci.				KEPL Monthly Sci.				KEPL Monthly Sci.				KEPL Monthly Sci.				KEPL Monthly Sci.				KEPL Monthly Sci.																			
	KEPL Qtrly. Roll				KEPL Qtrly. Roll				KEPL Qtrly. Roll				KEPL Qtrly. Roll				KEPL Qtrly. Roll				KEPL Qtrly. Roll				KEPL Qtrly. Roll				KEPL Qtrly. Roll																							
	SOHO Keyhole				SOHO Keyhole				SOHO Keyhole				SOHO Keyhole				SOHO Keyhole				SOHO Keyhole				SOHO Keyhole				SOHO Keyhole																							
	MSGR TCM				MSGR MOI				MSGR Solar Conjunction				MSGR TCM				MSGR TCM				MSGR TCM				MSGR TCM				MSGR TCM																							
	NHPC Maneuver				NHPC Checkout				NHPC Checkout				NHPC Checkout				NHPC Checkout				NHPC Checkout				NHPC Checkout				NHPC Checkout																							
	ROSE DSM-2				ROSE DSHM Entry				ROSE DSHM Entry				ROSE DSHM Entry				ROSE DSHM Entry				ROSE DSHM Entry				ROSE DSHM Entry				ROSE DSHM Entry																							
	WIND TCM				WIND TCM				WIND TCM				WIND TCM				WIND TCM				WIND TCM				WIND TCM				WIND TCM																							
	WIND TCM				WIND TCM				WIND TCM				WIND TCM				WIND TCM				WIND TCM				WIND TCM				WIND TCM																							
GDSCC	D16 Extended Downtime																																																			
CDSCC	D46 Extended Downtime																																																			
	D43 70m Power and HBA Upgrades - Proposed																																																			
MDSCC	D66 Extended Downtime																																																			
	D63 70m Power and HBA Upgrades - Proposed																																																			
Weeks	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52

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Antenna Downtime Status and Forecast

DSN Resource Implementation Planning Matrix by Subnet

Complex	Station	Subnet	S-Band		X-Band		Ka-Band		Ka Phase 2
			Down	Up	Down	Up	Down	Up	
40	DSS-46	26M*	✓	✓	N/A	N/A	N/A	N/A	N/A
60	DSS-66	26M*	✓	✓	N/A	N/A	N/A	N/A	N/A
10	DSS-27	34HSB	✓	✓	N/A	N/A	N/A	N/A	N/A
10	DSS-24	34B1	✓	✓	✓	✓	N/A	N/A	01/18/09
40	DSS-34	34B1	✓	✓	✓	✓	✓	N/A	10/25/08
60	DSS-54	34B1	✓	✓	✓	✓	04/15/08	N/A	12/31/10
10	DSS-25	34B2	N/A	N/A	✓	✓	✓	08/01/10	N/A
10	DSS-26	34B2	N/A	N/A	✓	✓	✓	N/A	N/A
60	DSS-55	34B2	N/A	N/A	✓	✓	✓	N/A	N/A
10	DSS-15	34HEF	✓	N/A	✓	✓	N/A	N/A	N/A
40	DSS-45	34HEF	✓	07/31/08	✓	✓	N/A	N/A	N/A
60	DSS-65	34HEF	✓	07/31/08	✓	✓	N/A	N/A	N/A
10	DSS-14	70M	✓	✓	✓	✓	N/A	N/A	N/A
40	DSS-43	70M	✓	✓	✓	✓	N/A	N/A	N/A
60	DSS-63	70M	✓	✓	✓	✓	N/A	N/A	N/A

N/A = Capability Not Planned xx/xx/xx = Capability Date Recently Changed As of: 07/22/08
 ✓✓✓ = Capability Recently Exists ✓ = Capability Exists * = To Be Decommissioned