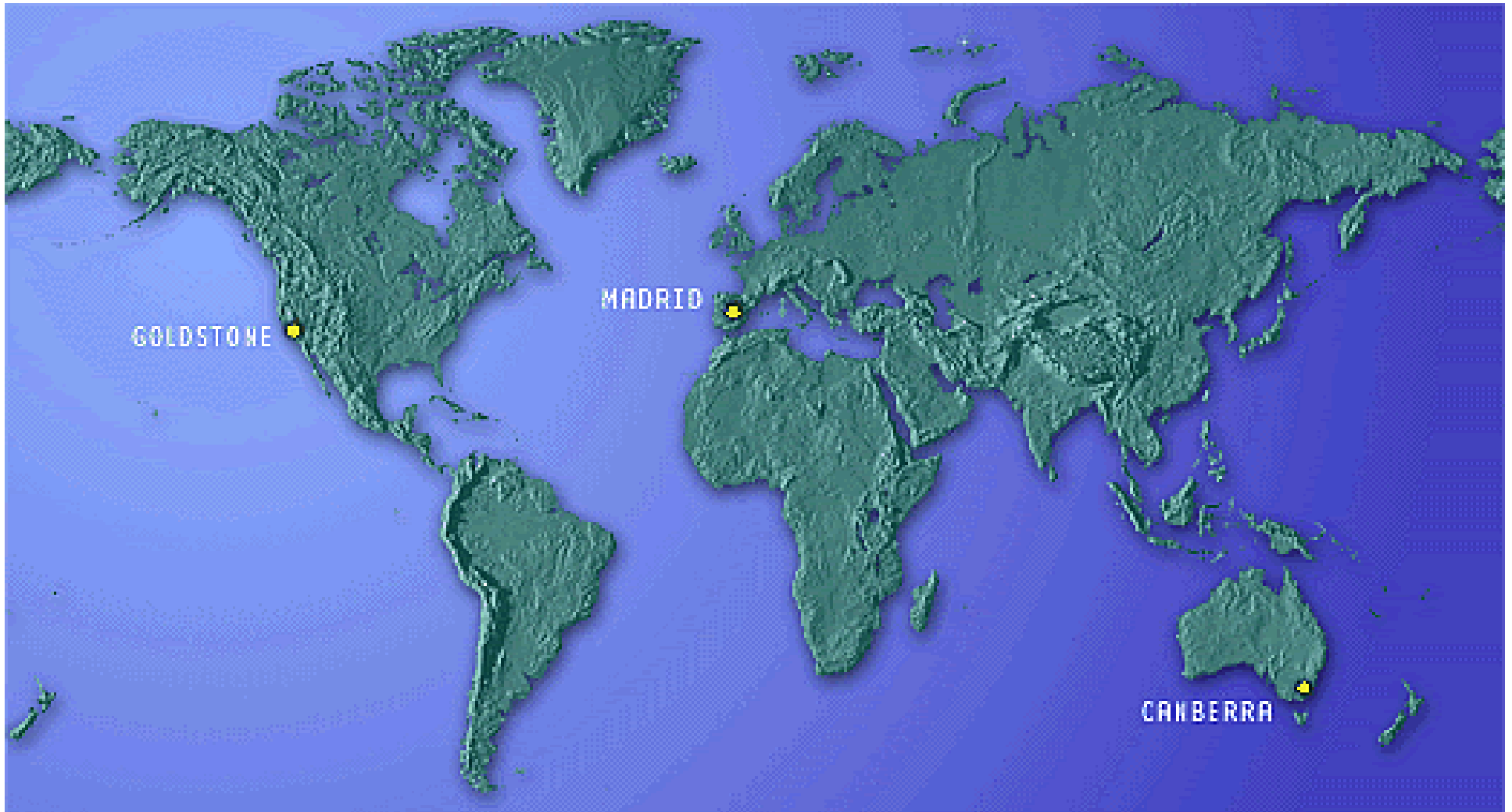


DSN Antenna Downtime Status and Forecast



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

Antenna Downtime Status and Forecast

The following are downtimes for 2009 and 2010

- ❑ DSS-43 downtime for Life Extension and Depot Level Maintenance is scheduled for January 5 through April 12, 2009, weeks 2 – 15
 - ❑ DTRR approved the start of the downtime.
- ❑ DSS-14 3-day Grouting is planned for April of 2009 week 16.
 - ❑ Scheduled for DOYs 107 - 109.
 - ❑ All conflicts are cleared.
- ❑ Complex preventative maintenance “Echo Tie-Line Electrical Maintenance” is being requested for
 - ❑ Requesting time in week 21 however a majority of the projects cannot relinquish time on DOY requested, will look at another DOY.
- ❑ DSS-63 downtime for EI Bearing Replacement and Depot Level Maintenance (including grouting) is scheduled for May 4 through June 28, 2009, weeks 19 - 26.
 - ❑ All supports have been moved to other antenna during this downtime.
 - ❑ Additional time will be added to the 2011 downtime.
- ❑ SPC-60 downtime for UPS installation in preparation for DCD testing.
 - ❑ Requesting 12 hours in the mid June time frame prior to DCD testing starting in July.
 - ❑ Can do evenings but would prefer day shift Monday through Friday.
 - ❑ Proposal sent to projects and is being negotiated. Need to stay out of the DSS-54 & -65 maintenance.
- ❑ DSS-54 downtime for Ka-Band Phase 2 is scheduled for June 29 through September 27, 2009, weeks 27 – 39.
 - ❑ This downtime must end prior to the end of the fiscal year.
- ❑ Complex corrective maintenance “G86/G81 Transfer Switch Electrical Maintenance”
 - ❑ Will look for time after the Echo Tie-Line has been scheduled..

Antenna Downtime Status and Forecast

The following are downtimes for 2009 and 2010 (cont'd)

- ❑ DSS-54 downtime for ACQ AID installation is scheduled for September 30-October 4 and October 7-11, 2009, weeks 40 & 41.
 - ❑ DSS-55 & -65 maintenance is scheduled for first 2 days of each week and station has agreed to work around these maintenance days.
 - ❑ Conflicts will be resolved at the conflict negotiation meeting.
- ❑ DSS-14 downtime for Life Extension and Depot Level Maintenance will start October 3, 2009 and end May 2, 2010 weeks 40-17
 - ❑ This downtime is proposed to move to 2010, weeks 10-40, March 8 through October 10, 2010.
- ❑ DSS-14 3-day Grouting is planned for July and October of 2009 weeks 30 & 44.
 - ❑ With the shift of the Life Extension and Depot Level Maintenance to 2010, 2 additional grouting periods will be needed in 2009
 - ❑ Scheduled for DOYs 202-204
 - ❑ Scheduled for DOYs 300-302
 - ❑ Still a few conflicts to be resolved at conflict negotiation meeting.
- ❑ DSS-24 downtime for painting is scheduled August 31 through September 25, 2009, weeks 36 – 43
 - ❑ All supports have been moved to other antenna during this downtime.
 - ❑ There will be complete 24/7 downtime for the first 4 weeks and dayshift downtime (1400-0200) for the remaining weeks.
 - ❑ Depot Level Maintenance will be scheduled the first 4 weeks of this downtime.
- ❑ DSS-15 downtime for Pintle Bearing is scheduled for November 2, 2009 through January 10, 2010, weeks 45 - 01.
 - ❑ Downtime extended to compensate for the holidays.
 - ❑ DSS 15 Elevation Gearbox Replacement will be scheduled NIB in weeks 45 & 46.
- ❑ DSS-34 downtime for Azimuth Track Replacement is scheduled February 1 through April 11, 2010, weeks 5 – 14.
 - ❑ This also includes M1-5 Mirror Alignment and M5 Support Ring Replacement.

Antenna Downtime Status and Forecast

The following are downtimes for 2009 through 2010

- ❑ DSS-65 downtime for Life Extension Elevation is scheduled for August 2 through October 3, 2010, weeks 31 - 39.
 - ❑ All supports have been moved to other antenna during this downtime.

- ❑ DSS-25 downtime for Ka U/L is scheduled for November 8 through December 12, 2010 weeks 31 – 34.
 - ❑ An additional week has been added to compensate for the holiday.
 - ❑ Depot Level Maintenance will be scheduled during this downtime.

Antenna Downtime Status and Forecast

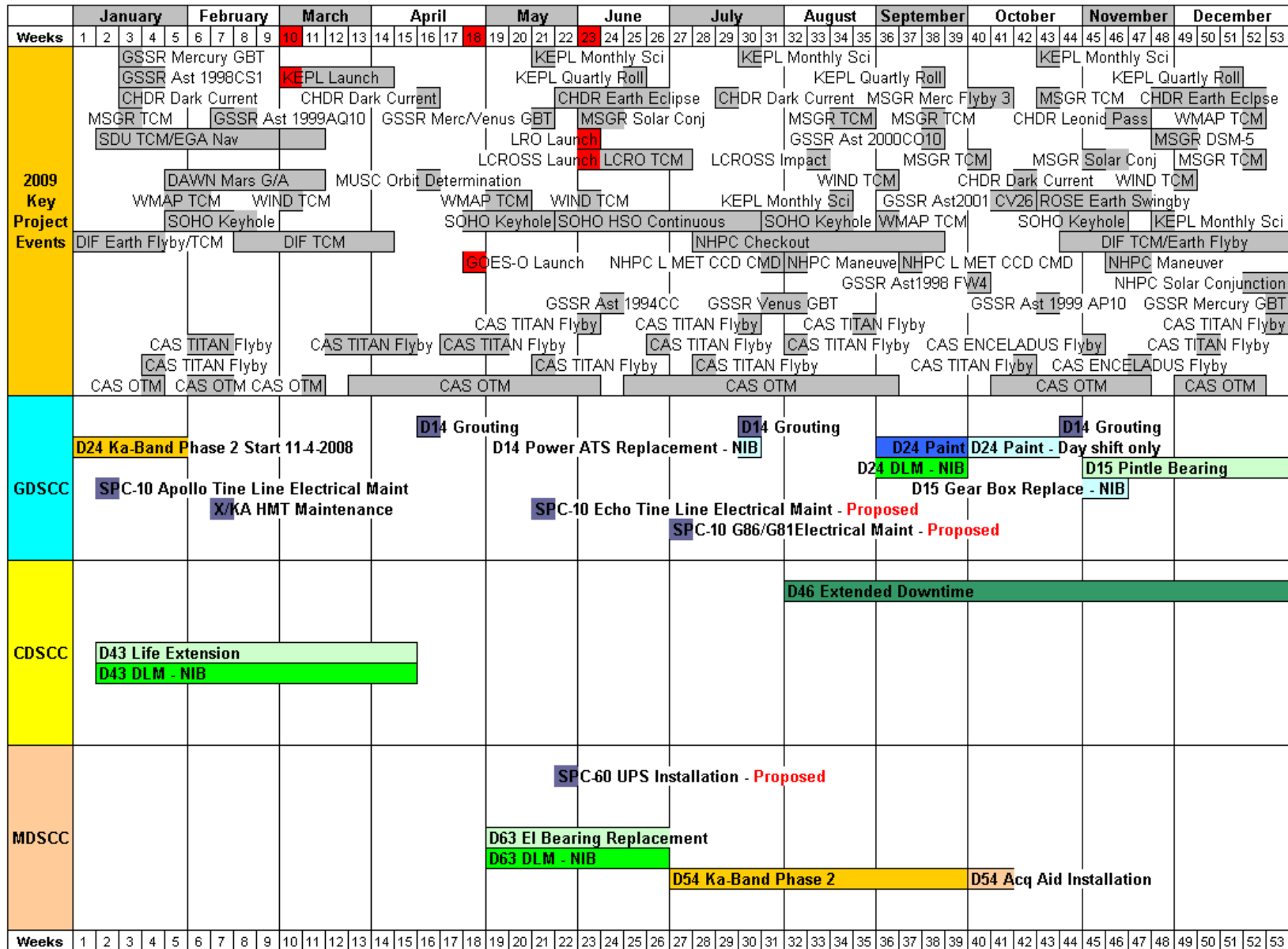
The following are downtimes for 2011 through 2013 (cont'd)

- ❑ As a result of the reduction of downtime for DSS-43 & DSS-63 in 2008 & 2009, it is requested to recover that time in 2011 and 2012, local spring, summer or fall after DSS-14 RTS.
 - ❑ DSS-63 is proposed for mid April through the end of September, 2011 weeks 16 – 39.
 - ❑ DSS-43 is proposed for February through May of 2012, weeks 5 – 22.

- ❑ BWG Antenna Controller Replacement is being requested starting in mid-April of 2011.
 - ❑ Duration of the first antenna at each complex should be 4 weeks
 - ❑ Duration of the second and subsequent antennas at each complex should be 3 weeks
 - ❑ All BWG antenna at a complex should be completed before moving to the next complex
 - ❑ Preferred first complex is GDSCC with DSS-24 being the first antenna and DSS-27 being the second antenna
 - ❑ Preferred first downtime at MDSCC should be DSS-54
 - ❑ Highly prefer that DSS-24 be completed prior to JUNO and MSL launches.
 - ❑ Tentative dates have been posted to the Gantt charts.

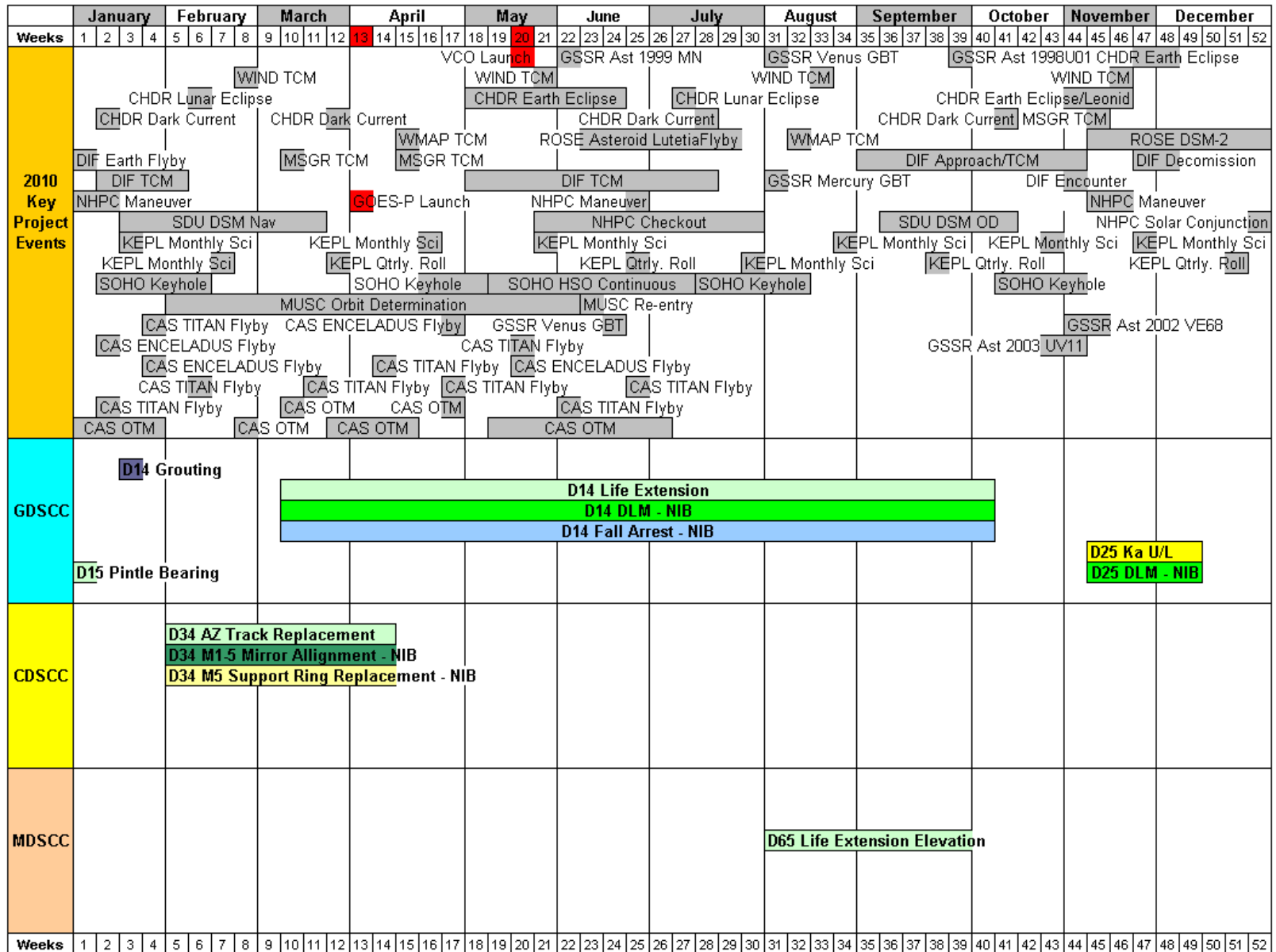
- ❑ AZ Track Replacement is needed for DSS-24, 54, 25, 26 and 55 starting in 2012 in the spring and fall. Propose the following sequence.
 - ❑ DSS-24 be scheduled for February 27 through May 6, 2012, weeks 9 – 18.
 - ❑ DSS-54 be scheduled for September 3 through November 11, 2012, weeks 36-45.
 - ❑ DSS-25 be scheduled for February 25 through May 5, 2013, weeks, 9 – 18.
 - ❑ DSS-26 be scheduled for September 2 through November 10, 2013, weeks 36-45.
 - ❑ DSS-55 be scheduled for March 3 through May 11, 2014, weeks 10 - 19.

Antenna Downtime Status and Forecast 2009



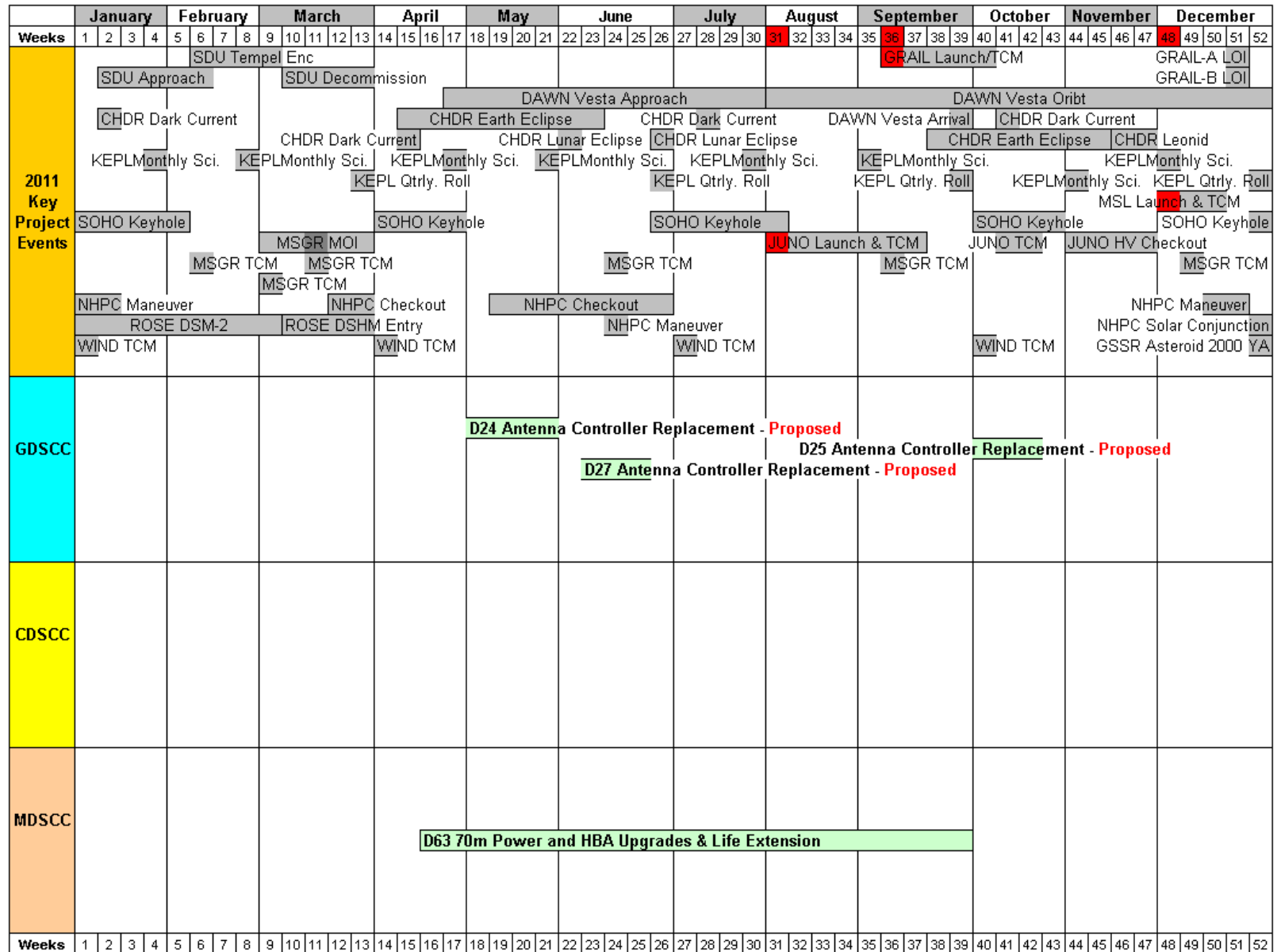
Revised: April 6, 2009

Antenna Downtime Status and Forecast 2010



Revised: April 6, 2009

Antenna Downtime Proposed Moves 2011



Revised: April 6, 2009

Antenna Downtime Status and Forecast 2012

	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
2012 Key Project Events	DAWN Vesta Orbit														DAWN Vesta Depart				DAWN Ceres Thrust PB and TV																																	
	WIND TCM				GSSR Ast 2000 ET70				WIND TCM								WIND TCM				KEPL Qtrly. Roll				WIND TCM																											
					KEPL Monthly Sci.				KEPL Qtrly. Roll				KEPL Monthly Sci.				KEPL Qtrly. Roll				KEPL Monthly Sci.				KEPL Monthly Sci.				GSSR Ast 2007 PA8																							
					KEPL Monthly Sci.								KEPL Monthly Sci.												KEPL Monthly Sci.																											
					GSSR Ast Eros				JUNO DSMs DDOR								JUNO DSMs DDOR				JUNO DSMs/DDORs/TCMs				JUNO Per Maint																											
	JUNO Cruise																																																			
	CHDR Dark Current								CHDR Dark Current								CHDR Dark Current								CHDR Dark Current																											
					GSSR Mars				CHDR Earth Eclipse								GSSR Ast 2005 G021				CHDR Earth Eclipse								CHDR Leonid																							
	MRO Relay																																																			
	GRAIL A LOI/OPR/TSF												NHPC DDOR				NHPC DDOR												GSSR Ast 1998 ST49																							
	GRAIL B LOI/OPR/TSF																NHPC Maneuver				GSSR Ast 2002 AM31								GSSR Ast 4179 Tout																							
					GSSR Ast 1991 VK				GRAIL A/B Science																																											
					NHPC Beacon				NHPC Beacon				NHPC Checkout								NHPC Beacon																															
	NHPC Solar Conjunction												MSL INST Checkout 2								MSL EDL/TCM				NHPC Solar Conjunction																											
													MSL FSW Update								MSL Approach																															
					MSL TCM				MSL FS Checkout 2								MSL TCM								MSL Surface Ops																											
																									MRO MSL Relay																											
GDSCC					D24 AZ Track Replacement - Proposed																																															
					D26 Antenna Controller Replacement - Proposed																																															
CDSCC																																																				
					D43 70m Power and HBA Upgrades																																															
MDSCC																																																				
																													D54 AZ Track Replacement - Proposed																							

Revised: April 6, 2009

Antenna Downtime Status and Forecast 2013

	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
2013 Key Project Events	DAWN Ceres Coasting																																																			
	DAWN Ceres Thrst PB/TV																																																			
	CHDR Dark Current									CHDR Dark Current								JWST Launch								CHDR Dark Current								CHDR Dark Current																		
						CHDR Earth Eclipse								CHDR Dark Current								CHDR Earth Eclipse								CHDR Leonid																						
	JUNO Cruise																					JUNO Cruise								JUNO EFB				JUNO Cruise																		
																						JUNO ME Flush								JUNO TCM																						
	MRO MSL Relay																																																			
	NHPC Solar Conjunction																																																			
	NHPC Checkout																																																			
	NHPC DDOR																		NHPC DDOR																		NHPC Beacon															
NHPC Maneuver																																																				
GDSCC											D25 AZ Track Replacement - Proposed																						D26 AZ Track Replacement - Proposed																			
CDSCC																																																				
MDSCC	D54 Antenna Controller Replacement - Proposed																						D55 Antenna Controller Replacement - Proposed																				D54 AZ Track Replacement - Proposed									

Revised: April 6, 2009

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
10	DSS-27	34HSB	✓	✓	N/A	N/A	N/A	N/A	N/A
10	DSS-24	34B1	✓	✓	✓	✓	N/A	N/A	TBD
40	DSS-34	34B1	✓	✓	✓	✓	✓	N/A	TBD
60	DSS-54	34B1	✓	✓	✓	✓	✓	N/A	09/27/09
10	DSS-25	34B2	N/A	N/A	✓	✓	✓	08/29/10	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	✓	✓	✓	✓	N/A	N/A	N/A
60	DSS-65	34HEF	✓	✓	✓	✓	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: 03/02/09
 ✓✓✓ = Capability Recently Exists ✓ = Capability Exists * = To Be Decommissioned