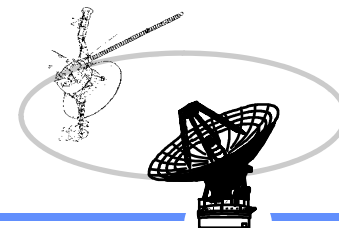


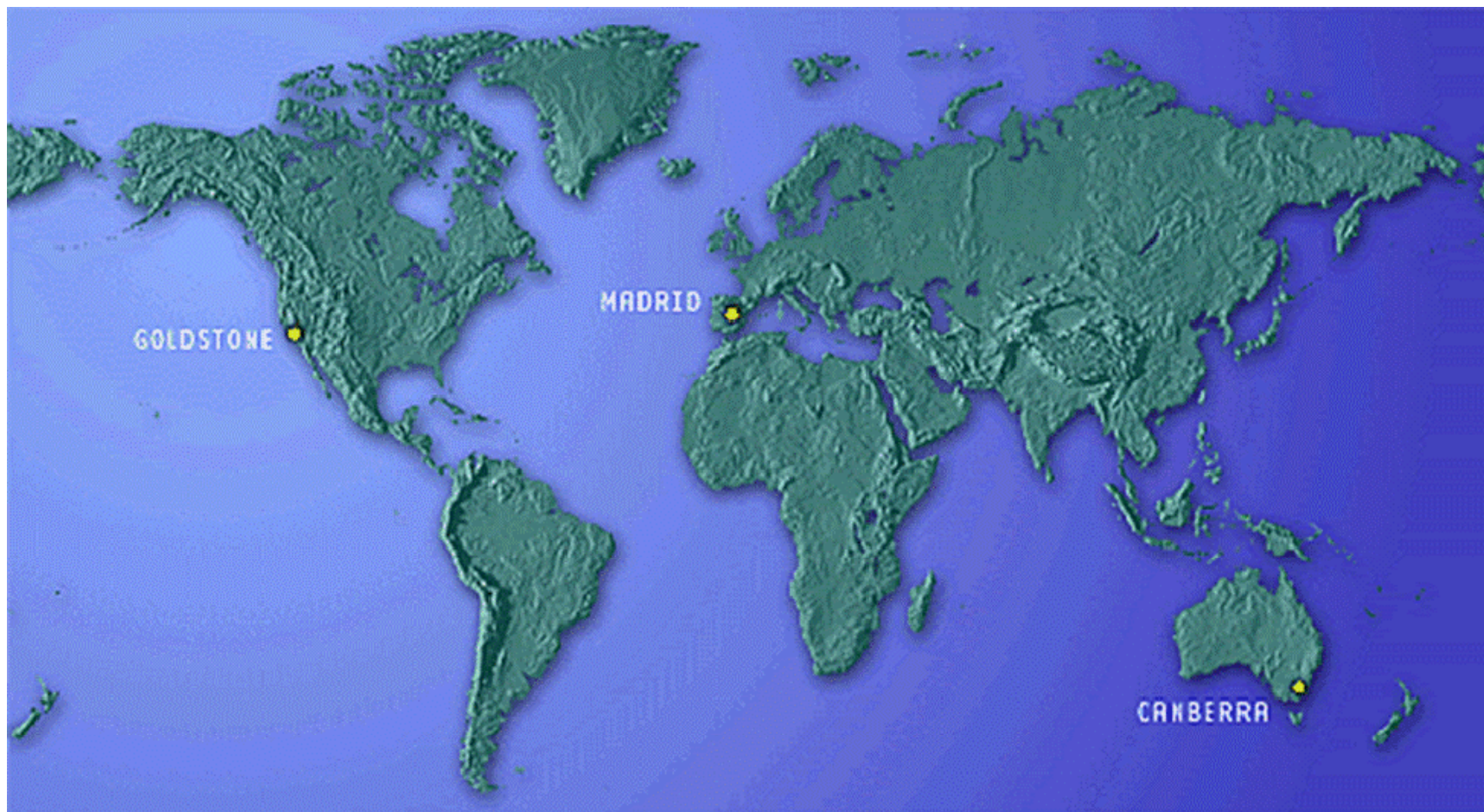


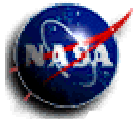
Interplanetary Network Directorate (IND)
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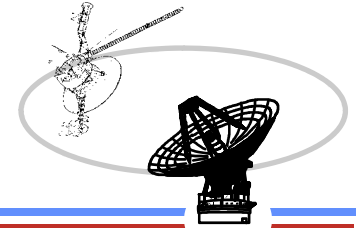
DSN Antenna Downtime Status and Forecast



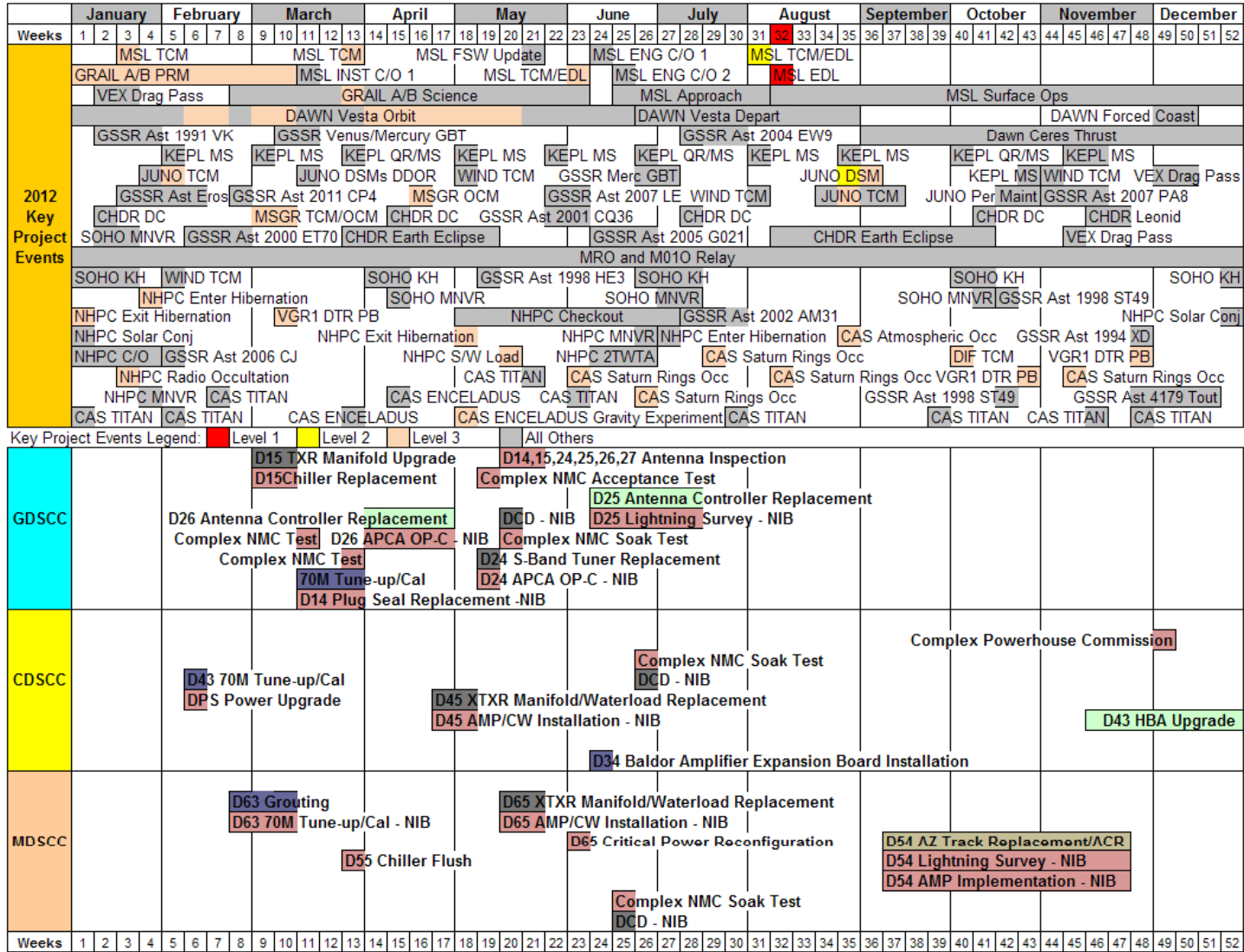


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- 2012 -

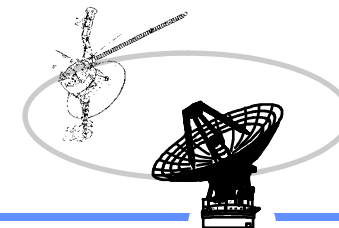


Revised: April 26, 2012



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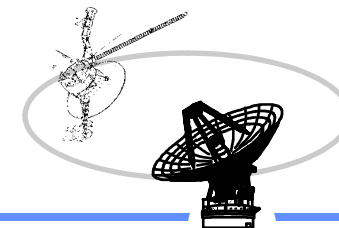


DSN Downtime 2012

2012							
Site	Details	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
DSS 45	AMP/CW Installation - NIB	04/27/2012 20:00	05/08/2012 06:20	10	17 - 19	118	129
DSS 45	XTXR Manifold/Waterload Replacement	04/27/2012 20:00	05/08/2012 06:20	10	17 - 19	118	129
DSS 24	APCA OP-C - NIB	05/07/2012 13:10	05/10/2012 01:55	3	19 - 19	128	131
DSS 24	S-Band Tuner Replacement	05/07/2012 13:10	05/10/2012 01:55	3	19 - 19	128	131
SPC 10	NMC D2.2 Acceptance Testing	05/08/2012 09:00	05/08/2012 15:00	0	19 - 19	129	129
DSS 14	Antenna Inspection	05/14/2012 15:00	05/15/2012 06:00	1	20 - 20	135	136
DSS 26	Antenna Inspection	05/15/2012 15:00	05/16/2012 06:00	1	20 - 20	136	137
DSS 65	AMP/CW Installation - NIB	05/16/2012 08:40	05/27/2012 00:40	11	20 - 21	137	148
DSS 65	XTXR Manifold/Waterload Replacement	05/16/2012 08:40	05/27/2012 00:40	11	20 - 21	137	148
DSS 25	Antenna Inspection	05/16/2012 15:00	05/17/2012 06:00	1	20 - 20	137	138
DSS 15	Antenna Inspection	05/17/2012 15:00	05/18/2012 06:00	1	20 - 20	138	139
DSS 27	Antenna Inspection	05/18/2012 15:00	05/18/2012 23:00	0	20 - 20	139	139
GCF 20	DCD 229	05/20/2012 07:30	05/20/2012 13:15	0	20 - 20	141	141
SPC 10	DCD 229 - NIB	05/20/2012 07:30	05/20/2012 13:15	0	20 - 20	141	141
SPC 10	NMC D2.2 SOAK	05/20/2012 07:30	05/20/2012 15:15	0	20 - 20	141	141
DSS 14	Antenna Inspection	05/21/2012 15:00	05/21/2012 23:00	0	21 - 21	142	142
DSS 26	Antenna Inspection	05/22/2012 15:00	05/22/2012 23:00	0	21 - 21	143	143
DSS 24	Antenna Inspection	05/23/2012 15:00	05/24/2012 06:00	1	21 - 21	144	145
DSS 15	Antenna Inspection	05/24/2012 15:00	05/24/2012 23:00	0	21 - 21	145	145
DSS 27	Antenna Inspection	05/25/2012 14:00	05/25/2012 21:00	0	21 - 21	146	146
DSS 65	Critical Power Reconfiguration	06/07/2012 02:35	06/08/2012 16:30	2	23 - 23	159	160
DSS 25	Antenna Controller Replacement	06/11/2012 13:00	07/15/2012 01:00	34	24 - 28	163	197



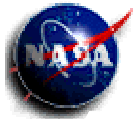
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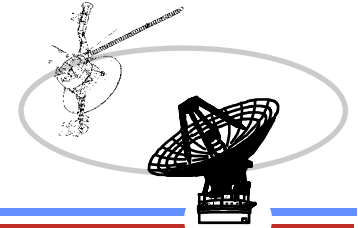
DSN Downtime 2012

2012							
DSS 25	Lightning Survey - NIB	06/11/2012 13:00	07/15/2012 01:00	34	24 - 28	163	197
DSS 34	AMP Installation	06/13/2012 22:00	06/16/2012 06:25	2	24 - 24	165	168
SPC 60	DCD 229 - NIB	06/23/2012 21:25	06/24/2012 03:25	0	25 - 25	175	176
SPC 60	NMC D2.2 SOAK	06/23/2012 21:25	06/24/2012 03:25	0	25 - 25	175	176
SPC 40	DCD 229 - NIB	06/27/2012 23:10	06/28/2012 05:10	0	26 - 26	179	180
SPC 40	NMC D2.2 SOAK	06/27/2012 23:10	06/28/2012 05:10	0	26 - 26	179	180
DSS 54	AMP Installation - NIB	09/10/2012 05:00	11/25/2012 18:00	77	37 - 47	254	330
DSS 54	AZ TRK/ACR Replacement	09/10/2012 05:00	11/25/2012 18:00	77	37 - 47	254	330
DSS 54	Lightning Survey - NIB	09/10/2012 05:00	11/25/2012 18:00	77	37 - 47	254	330
DSS 43	HBA Upgrade and Life Extension	11/12/2012 19:00	06/10/2013 07:00	210	46 - 24	317	161
SPC 40	Powerhouse Commission	12/04/2012 04:15	12/04/2012 07:15	0	49 - 49	339	339
SPC 40	Powerhouse Commission	12/04/2012 21:00	12/05/2012 00:00	0	49 - 49	339	340
SPC 40	Powerhouse Commission	12/05/2012 21:00	12/06/2012 00:00	0	49 - 49	340	341
SPC 40	Powerhouse Commission	12/06/2012 21:00	12/07/2012 00:00	0	49 - 49	341	342



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Antenna Downtime Status and Forecast

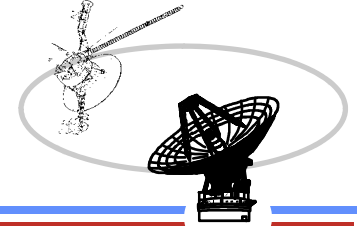
The following are downtimes for 2012

- ❑ SPC-10, 40 and 60 requested 4 – 6 hour complex wide downtime for NMC D2.2 Test and SOAK in 2012
 - ❑ SPC-10 acceptance testing is scheduled in week 19 and SOAK in week 20
 - ❑ Data Capture and Delivery (DCD 229) will be scheduled NIB to SOAK in week 20, the NOCC will also be down during this time frame, all data at the complexes will be recorded and sent later.
 - ❑ SPC-60 SOAK is scheduled for week 25
 - ❑ Data Capture and Delivery (DCD 229) will be scheduled NIB
 - ❑ SPC-40 SOAK is scheduled for week 26
 - ❑ Data Capture and Delivery (DCD 229) will be scheduled NIB
- ❑ DSS-45 and DSS-65 requested 10 days of downtime in 2012 for Waterload and XTXR Manifold Replacement .
 - ❑ DSS-45 is in progress scheduled for April 27 – May 8, weeks 17 – 19
 - ❑ DSS-45 had additional downtime hours added for adequate testing of the Antenna Servo Amplifier
 - ❑ DSS-65 is scheduled for May 16 – 26, weeks 20 and 21
 - ❑ ECR 11.0070 (Baldor amplifier expansion board installation) and ECR 10.0014 (Cable Wrap Protection) implementation will be NIB



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Antenna Downtime Status and Forecast

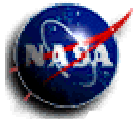
The following are downtimes for 2012 (continued)

- DSS-24 S-Band Tuner Replacement downtime requested
 - Three and ½ days scheduled for May 7 – 10, week 19
 - APCA OP-C will be NIB

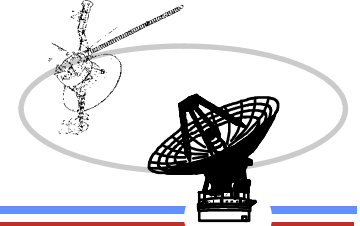
- SPC-10 request a 24 hour downtime on each antenna for inspection
 - Antennas include DSS-14, 15, 24, 25, 26 and 27
 - Week 20 inspection times are proposed for 8 hours NIB to maintenance plus 8 hours swing shift ,except for DSS-24, (only 8 hours NIB to maintenance)
 - Week 21 inspection times are proposed for 8 hours NIB to maintenance except DSS-24, (8 hours NIB to maintenance plus 8 hours swing shift)

- DSS-34 requests downtime for ECR 11.0070 Baldor amplifier expansion board installation
 - Scheduled for June 13 – 16, week 24

- BWG Antenna Controller Replacement
 - DSS-26 Returned to service early on DOY117/0100, off-shift tracking only until DOY 119**
 - APCA OP-C was scheduled NIB
 - DSS-25 is scheduled for June 11 – July 15, 2012, weeks 24 – 28
 - Lightning Survey will be NIB
 - DSS-54 ACR and AZ Track Replacement is scheduled for September 10 – November 25, 2012, weeks 37 – 47
 - Lightning Survey will be NIB
 - ECR 11.0070 (Baldor amplifier expansion board installation) will be NIB



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Antenna Downtime Status and Forecast

The following are downtimes for 2012 (continued)

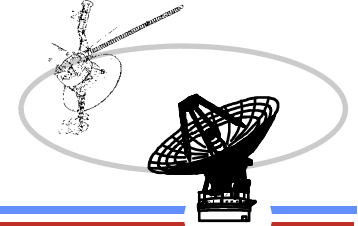
- SPC-40 requests 4 blocks of 3 hour complex downtime for Power House Commission in. The following week is scheduled
 - Four days, 3 hours in December, week 49

- DSS-43 HBA Upgrade and Life Extension downtime is scheduled
 - DSS-43 HBA Upgrade downtime is scheduled as one continuous downtime for week 46 of 2012 to week 23 of 2013
 - S-Band Maser Replacement will be NIB



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Antenna Downtime Status and Forecast

The following are downtimes for 2013 – 2014

- ❑ SPC-60 requests six 10 hour blocks of Complex Wide Downtime for Power Cutover from January – June of 2013
 - ❑ Downtimes are proposed for the following weeks – prime shift hours are requested.
 - ❑ Weeks 04, 09,13,17,22,26

- ❑ SPC-10 requests four 12-hour blocks of Complex Wide downtime for G86 Power Cutover and two 12-hour blocks of downtime for Power Robustness in 2013
 - ❑ G86 Power cutover downtimes are proposed for the following weeks – night hours are acceptable.
 - ❑ weeks 14, 19, 24, 31
 - ❑ Power robustness downtimes could potentially co-exist with G86 power cutover. Requested for July timeframe.

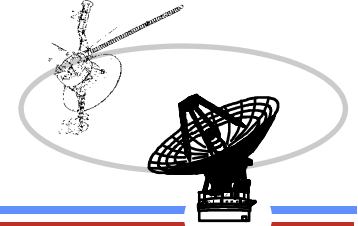
- ❑ SPC-10 requests one 6 – 8 hour complex wide downtime for NMC Automated Link Build (ALB)
 - ❑ Proposed for March 21, 2013, week 12

- ❑ BWG Antenna Controller Replacement for 2013
 - ❑ DSS-55 is proposed for February 18 – March 25, weeks 08 – 13
 - ❑ ECR 11.0070 (Baldor amplifier expansion board installation) will be NIB



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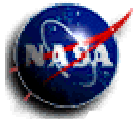
The following are downtimes for 2013 – 2014 (continued)

- ❑ SPC-40 request 8 blocks of 3 hour complex downtime for Power House Commission in 2013. The following weeks are proposed
 - ❑ Five blocks, 3 hours in April, week 16
 - ❑ Three blocks, 3 hours in April/May, week 18

- ❑ AZ Track Replacement downtime is requested for DSS-24 and DSS-26
 - ❑ DSS-24 is proposed for March 25 – June 3, 2013, weeks 13 – 22
 - ❑ DSS-26 is proposed for March 31 – June 8, 2014, weeks 14 – 23
 - ❑ Reconfiguration Prep is proposed for March 10 – June 30, weeks 11 - 26
 - ❑ 80 kW Facility Preparation will be scheduled NIB March 31 – May 18, weeks 14 – 20

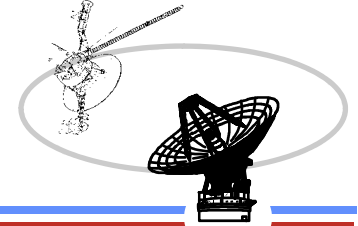
- ❑ SPC-40 request a 24 hour downtime on each antenna for inspection in 2013
 - ❑ Antennas include DSS- 34, 43 and 45
 - ❑ Week 23 inspection times are proposed for 8 hours NIB to maintenance plus 8 hours swing shift – **Except DSS-43 which will be done during HBA downtime**
 - ❑ Week 24 inspection times are proposed for 8 hours NIB to maintenance

- ❑ **DSS-15 requests downtime for ECR 11.0070 Baldor amplifier expansion board installation in 2013**
 - ❑ **Proposed for week 24**



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The following are downtimes for 2013 – 2014 (continued)

DSS-63 downtime for Grouting 2013

- Proposed for **July 15 – August 2, weeks 29 – 31**
 - Note: Stand alone Grouting typically requires 15 days, **however, 3 additional days have been requested**

- DSS-15 Maser Replacement is requested for 2013
 - Seventy seven days are proposed for August 12, – November 4, weeks 33– 44

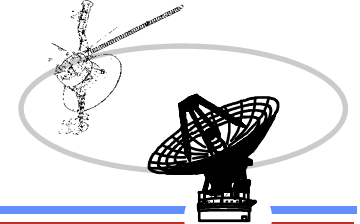
- DSS-63 HBA Upgrade and Life Extension downtime is proposed for 2014
 - Proposed for March 10 – October 5, weeks 11– 40
 - ZDD will be scheduled prior to return to service

- SPC-60 request a 24 hour downtime on each antenna for inspection in 2014
 - Antennas include DSS-54, 55, 63 and 65
 - Week **40** inspection times are proposed for 8 hours NIB to maintenance plus 8 hours swing shift – **Except DSS-63 which will be done during HBA downtime**
 - Week **41** inspection times are proposed for 8 hours NIB to maintenance



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- 2013 -

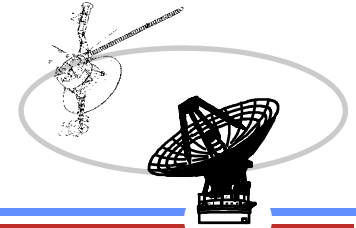
	January					February					March					April					May					June					July					August					September					October					November					December				
Weeks	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52								
2013 Key Project Events	GSSR Ast 2002 AY1					GSSR Ast 1993 UC					LADEE PRM-1,2,3					LADEE LOA/LOI					GSSR Ast 2007 CN26					MAVEN Launch					MAVEN TCM																													
	GSSR Ast APOPHIS					GSSR Ast 2005 NZ6					GSSR Ast 2001 PJ9					DAWN Ceres Thrst PB/TV					DAWN Ceres Coasting																																							
	WIND TCM					GSSR Ast Camillo					WIND TCM					GSSR Ast 1998 QE2					GSSR Ast 2005 WK4					WIND TCM					DAWN Ceres Coasting																													
	CHDR DC					CHDR DC					CHDR DC					VGR2 Solstice					CHDR DC					CHDR DC					CHDR DC																													
	SOHO Keyhole					CHDR Earth Eclipse					CHDR Earth Eclipse					JUNO TCM					CHDR Leonid					CHDR Leonid																																		
	NHPC Hibernation Re-Entry					NHPC S/W Load					JUNO ME Flush					JUNO EFB DDOR					JUNO EFB					NHPC Hibernation Re-Entry																																		
	NHPC Solar Conjunction					NHPC Hibernation Exit					NHPC Hibernation Exit					NHPC 2TWTA					NHPC Hibernation Re-Entry					NHPC Hibernation Exit																																		
	NHPC Checkout					NHPC MNVR					CAS TITAN Flyby					NHPC S/W Load					NHPC Enc Rehearsal					NHPC Maneuver					NHPC MNVR																													
	CAS Saturn Rings Occ					CAS Saturn Rings Occ					CAS RHEA Flyby					CAS TITAN Flyby					CAS TITAN Flyby					GSSR Ast 1999 CF9					GSSR Ast 2002 QA22					GSSR Ast 2001 AV43																								
	CAS Saturn Atmospheric Occ					CAS TITAN Flyby					CAS TITAN Flyby					CAS TITAN Flyby					CAS TITAN Flyby					CAS TITAN Flyby					CAS TITAN Flyby																													
	CAS Saturn Rings Occ					CAS TITAN Flyby					CAS TITAN Flyby					CAS TITAN Flyby					CAS TITAN Flyby					CAS TITAN Flyby					CAS TITAN Flyby																													
	Key Project Events Legend:					Level 1					Level 2					Level 3					All Others																																							
GDSCC						D24 AZ Track Replacement - Proposed					Complex NMC Automated Link Build - Proposed					Complex Wide Power Cutover - Proposed					D15 Maser Replacement - Proposed																																							
						Complex Wide Power Cutover - Proposed					Complex Wide Power Cutover - Proposed					Complex Wide Power Cutover - Proposed					Complex Wide Power Cutover - Proposed					Complex Wide Power Cutover - Proposed																																		
CDSCC						D15 AMP Installation - Proposed					Complex Wide Powerhouse Commission - Proposed					Complex Wide Powerhouse Commission - Proposed					D35 Modkit Inventory/Installation/Checkout					D35 Subsystem Acceptance Testing					D35 Systems Integration Testing																													
						D43 HBA Upgrade					D34, 45 Antenna Inspection - Proposed					D43 Maser Replacement - NIB					D43 Antenna Inspection - NIB					VGR2 Proof of Performance																																		
MDSCC						D55 Antenna Controller Replacement - Proposed					D55 AMP Installation - NIB					Complex Wide Power Cutover - Proposed					D63 GROUTING - Proposed																																							
						Complex Wide Power Cutover - Proposed					Complex Wide Power Cutover - Proposed					Complex Wide Power Cutover - Proposed					Complex Wide Power Cutover - Proposed																																							
						Complex Wide Power Cutover - Proposed					Complex Wide Power Cutover - Proposed					Complex Wide Power Cutover - Proposed					Complex Wide Power Cutover - Proposed																																							

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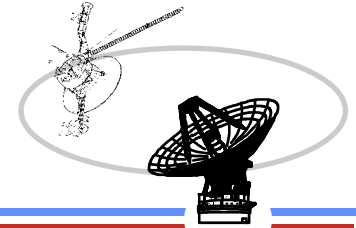
DSN Downtime 2013

2013							
Site	Details	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
DSS 54	Complex Power Cutover - Proposed	01/23/2013 05:00	01/23/2013 17:00	0	04 - 04	23	23
DSS 55	Complex Power Cutover - Proposed	01/23/2013 05:00	01/23/2013 17:00	0	04 - 04	23	23
DSS 63	Complex Power Cutover - Proposed	01/23/2013 05:00	01/23/2013 17:00	0	04 - 04	23	23
DSS 65	Complex Power Cutover - Proposed	01/23/2013 05:00	01/23/2013 17:00	0	04 - 04	23	23
DSS 55	AMP Installation - NIB	02/18/2013 00:00	03/25/2013 00:00	35	08 - 13	49	84
DSS 55	Antenna Controller Replacement - Proposed	02/18/2013 00:00	03/25/2013 00:00	35	08 - 13	49	84
DSS 43	Maser Replacement - NIB	02/25/2013 05:00	04/25/2013 17:00	60	09 - 17	56	115
DSS 54	Complex Power Cutover - Proposed	02/27/2013 05:00	02/27/2013 17:00	0	09 - 09	58	58
DSS 55	Complex Power Cutover - Proposed	02/27/2013 05:00	02/27/2013 17:00	0	09 - 09	58	58
DSS 63	Complex Power Cutover - Proposed	02/27/2013 05:00	02/27/2013 17:00	0	09 - 09	58	58
DSS 65	Complex Power Cutover - Proposed	02/27/2013 05:00	02/27/2013 17:00	0	09 - 09	58	58
SPC 10	NMC Automated Link Build - Proposed	03/21/2013 00:00	03/21/2013 06:00	0	12 - 12	80	80
DSS 24	AZ Track Replacement - Proposed	03/25/2013 00:00	06/03/2013 00:00	70	13 - 23	84	154
DSS 54	Complex Power Cutover - Proposed	03/27/2013 05:00	03/27/2013 17:00	0	13 - 13	86	86
DSS 55	Complex Power Cutover - Proposed	03/27/2013 05:00	03/27/2013 17:00	0	13 - 13	86	86
DSS 63	Complex Power Cutover - Proposed	03/27/2013 05:00	03/27/2013 17:00	0	13 - 13	86	86
DSS 65	Complex Power Cutover - Proposed	03/27/2013 05:00	03/27/2013 17:00	0	13 - 13	86	86
SPC 10	Complex Power Cutover - Proposed	04/01/2013 15:00	04/02/2013 01:00	0	14 - 14	91	92
SPC 40	Powerhouse Commission - Proposed	04/15/2013 21:00	04/16/2013 00:00	0	16 - 16	105	106
SPC 40	Powerhouse Commission - Proposed	04/16/2013 21:00	04/17/2013 00:00	0	16 - 16	106	107
SPC 40	Powerhouse Commission - Proposed	04/17/2013 21:00	04/18/2013 00:00	0	16 - 16	107	108
SPC 40	Powerhouse Commission - Proposed	04/18/2013 21:00	04/19/2013 00:00	0	16 - 16	108	109
SPC 40	Powerhouse Commission - Proposed	04/19/2013 21:00	04/20/2013 00:00	0	16 - 16	109	110
DSS 54	Complex Power Cutover - Proposed	04/24/2013 05:00	04/24/2013 17:00	0	17 - 17	114	114



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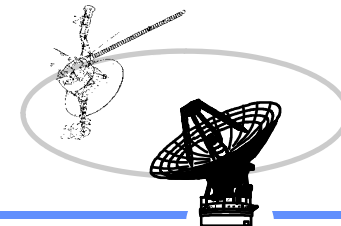


DSN Downtime 2013

2013							
DSS 55	Complex Power Cutover - Proposed	04/24/2013 05:00	04/24/2013 17:00	0	17 - 17	114	114
DSS 63	Complex Power Cutover - Proposed	04/24/2013 05:00	04/24/2013 17:00	0	17 - 17	114	114
DSS 65	Complex Power Cutover - Proposed	04/24/2013 05:00	04/24/2013 17:00	0	17 - 17	114	114
SPC 40	Powerhouse Commission - Proposed	04/29/2013 21:00	04/30/2013 00:00	0	18 - 18	119	120
SPC 40	Powerhouse Commission - Proposed	04/30/2013 21:00	05/01/2013 00:00	0	18 - 18	120	121
SPC 40	Powerhouse Commission - Proposed	05/01/2013 21:00	05/02/2013 00:00	0	18 - 18	121	122
SPC 10	Complex Power Cutover - Proposed	05/06/2013 15:00	05/07/2013 01:00	0	19 - 19	126	127
DSS 54	Complex Power Cutover - Proposed	05/29/2013 05:00	05/29/2013 17:00	0	22 - 22	149	149
DSS 55	Complex Power Cutover - Proposed	05/29/2013 05:00	05/29/2013 17:00	0	22 - 22	149	149
DSS 63	Complex Power Cutover - Proposed	05/29/2013 05:00	05/29/2013 17:00	0	22 - 22	149	149
DSS 65	Complex Power Cutover - Proposed	05/29/2013 05:00	05/29/2013 17:00	0	22 - 22	149	149
DSS 43	Antenna Inspection - Proposed	06/03/2013 22:00	06/04/2013 14:00	1	23 - 23	154	155
DSS 34	Antenna Inspection - Proposed	06/04/2013 22:00	06/05/2013 14:00	1	23 - 23	155	156
DSS 45	Antenna Inspection - Proposed	06/05/2013 22:00	06/06/2013 14:00	1	23 - 23	156	157
SPC 10	Complex Power Cutover - Proposed	06/10/2013 15:00	06/11/2013 01:00	0	24 - 24	161	162
DSS 34	Antenna Inspection - Proposed	06/11/2013 22:00	06/12/2013 06:00	0	24 - 24	162	163
DSS 45	Antenna Inspection - Proposed	06/12/2013 22:00	06/13/2013 06:00	0	24 - 24	163	164
DSS 15	AMP Installation - Proposed	06/13/2013 06:00	06/16/2013 00:00	3	24 - 24	164	167
DSS 54	Complex Power Cutover - Proposed	06/27/2013 05:00	06/27/2013 17:00	0	26 - 26	178	178
DSS 55	Complex Power Cutover - Proposed	06/27/2013 05:00	06/27/2013 17:00	0	26 - 26	178	178
DSS 63	Complex Power Cutover - Proposed	06/27/2013 05:00	06/27/2013 17:00	0	26 - 26	178	178
DSS 65	Complex Power Cutover - Proposed	06/27/2013 05:00	06/27/2013 17:00	0	26 - 26	178	178
DSS 63	Grouting - Proposed	07/15/2013 00:00	08/02/2013 00:00	18	29 - 31	196	214
SPC 10	Complex Power Cutover - Proposed	07/29/2013 15:00	07/30/2013 01:00	0	31 - 31	210	211
DSS 15	Maser Replacement - Proposed	08/12/2013 14:00	11/04/2013 01:00	83	33 - 45	224	308

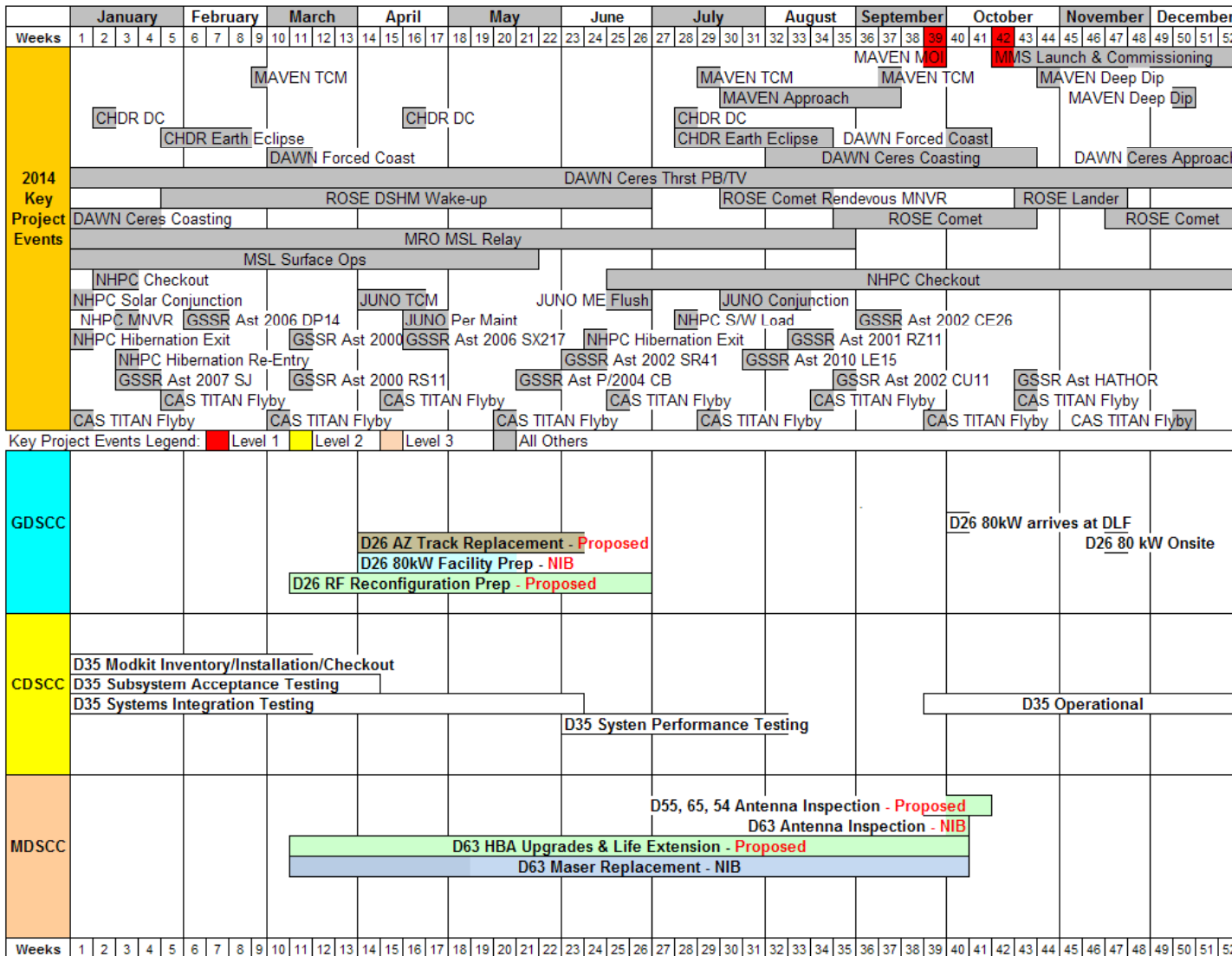


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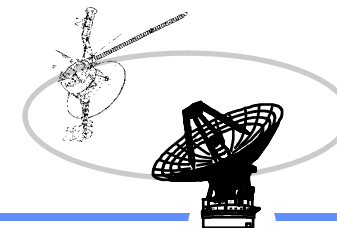
- 2014 -



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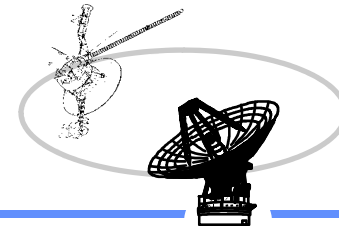
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DSN Downtime 2014

2014							
Site	Details	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
DSS 26	RF Reconfiguration Prep - Proposed	03/10/2014 00:00	06/29/2014 00:00	111	11 - 26	69	180
DSS 63	HBA Upgrades and Life Extension - Proposed	03/10/2014 00:00	10/05/2014 00:00	209	11 - 40	69	278
DSS 63	S-Band Maser Replacement - NIB	03/10/2014 00:00	10/05/2014 00:00	209	11 - 40	69	278
DSS 26	80 kW Facility Prep - NIB	03/31/2014 00:00	05/18/2014 00:00	48	14 - 20	90	138
DSS 26	AZ Track Replacement - Proposed	03/31/2014 00:00	06/08/2014 00:00	69	14 - 23	90	159
DSS 55	Antenna Inspection - Proposed	09/29/2014 07:00	09/29/2014 23:00	1	40 - 40	272	272
DSS 65	Antenna Inspection - Proposed	09/30/2014 07:00	09/30/2014 23:00	1	40 - 40	273	273
DSS 63	Antenna Inspection - Proposed	10/01/2014 07:00	10/01/2014 23:00	1	40 - 40	274	274
DSS 54	Antenna Inspection - Proposed	10/03/2014 07:00	10/03/2014 23:00	1	40 - 40	276	276
DSS 55	Antenna Inspection - Proposed	10/06/2014 07:00	10/06/2014 16:30	0	41 - 41	279	279
DSS 65	Antenna Inspection - Proposed	10/07/2014 07:00	10/07/2014 16:30	0	41 - 41	280	280
DSS 54	Antenna Inspection - Proposed	10/10/2014 07:00	10/10/2014 16:30	0	41 - 41	283	283

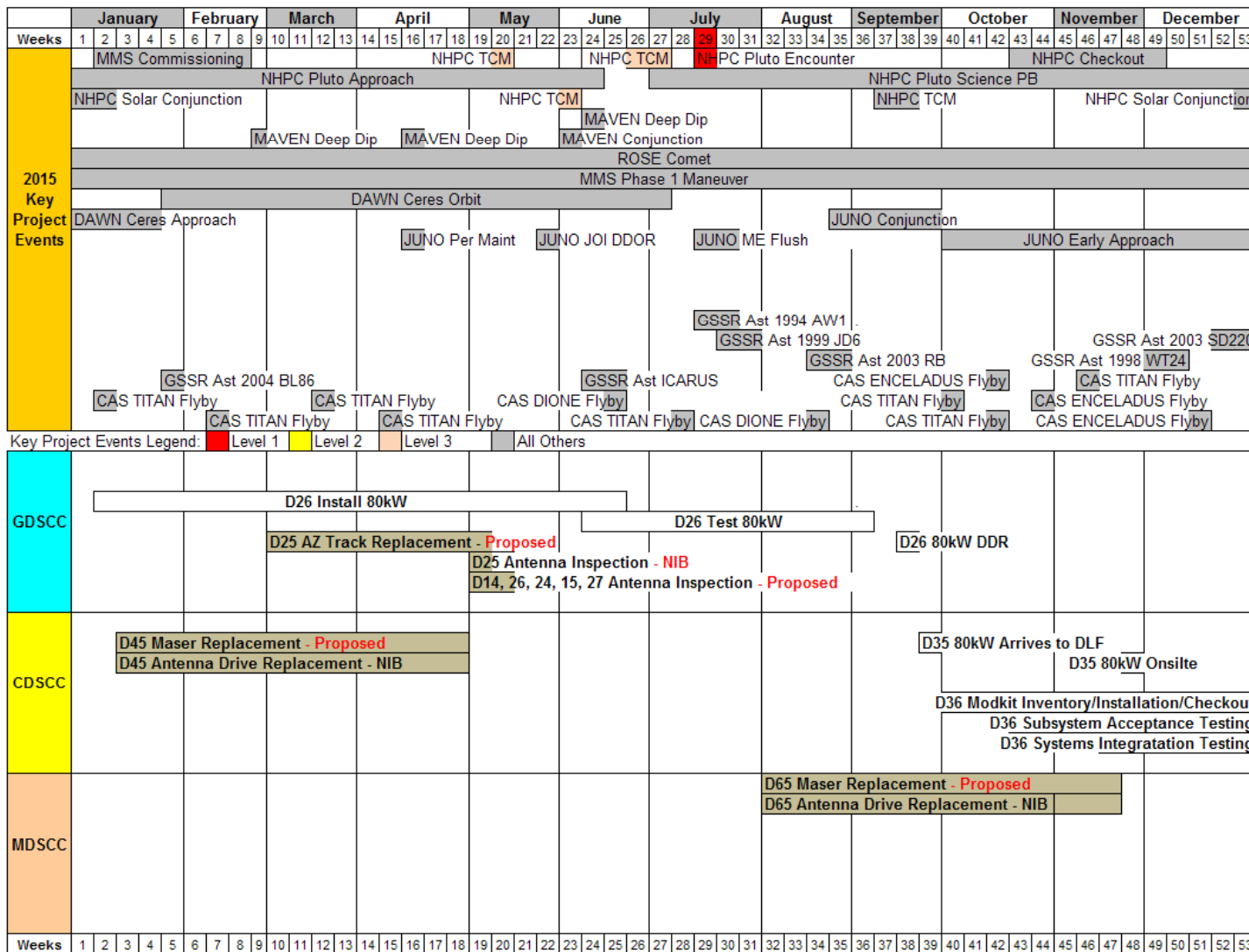


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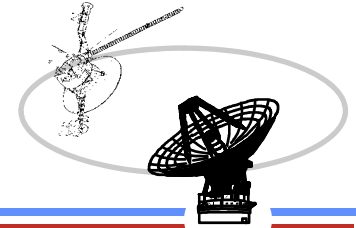
- 2015 -



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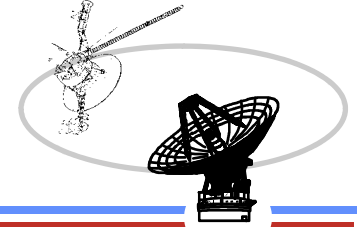
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DSN Downtime 2015

2015							
Site	Details	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
DSS 45	Antenna Drive Replacement - NIB	01/12/2015 00.:00	04/06/2015 00:00	84	05 - 15	12	96
DSS 45	Maser Replacement - Proposed	01/12/2015 00.:00	04/06/2015 00:00	84	05 - 15	12	96
DSS 25	AZ Track Replacement - Proposed	03/31/2015 00.:00	06/07/2015 00:00	68	14 - 23	90	158
DSS 14	Antenna Inspection - Proposed	05/04/2015 15.:00	05/05/2015 06:00	1	19 - 19	124	125
DSS 26	Antenna Inspection - Proposed	05/05/2015 15.:00	05/06/2015 06:00	1	19 - 19	125	126
DSS 25	Antenna Inspection - NIB	05/06/2015 15.:00	05/07/2015 06:00	1	19 - 19	126	127
DSS 15	Antenna Inspection - Proposed	05/07/2015 15.:00	05/08/2015 06:00	1	19 - 19	127	128
DSS 27	Antenna Inspection - Proposed	05/08/2015 14.:00	05/08/2015 23:00	0	19 - 19	128	128
DSS 14	Antenna Inspection - Proposed	05/11/2015 14.:00	05/11/2015 23:00	0	20 - 20	131	131
DSS 26	Antenna Inspection - Proposed	05/12/2015 14.:00	05/12/2015 23:00	0	20 - 20	132	132
DSS 24	Antenna Inspection - Proposed	05/13/2015 15.:00	05/14/2015 06:00	1	20 - 20	133	134
DSS 15	Antenna Inspection - Proposed	05/14/2015 14.:00	05/14/2015 23:00	0	20 - 20	134	134
DSS 27	Antenna Inspection - Proposed	05/15/2015 14.:00	05/15/2015 23:00	0	20 - 20	135	135
DSS 65	Antenna Drive Replacement - NIB	08/03/2015 00.:00	11/23/2015 00:00	112	32 - 48	215	327
DSS 65	Maser Replacement - Proposed	08/03/2015 00.:00	11/23/2015 00:00	112	32 - 48	215	327



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Antenna Downtime Status and Forecast

The following are downtimes for 2015 – 2016

- ❑ Maser Replacement has been requested for 2015
 - ❑ DSS-45 is proposed for weeks 03 – 18
 - ❑ DSS-65 is proposed for weeks 32 – 47
 - ❑ Antenna Drive Replacement will be NIB to both downtimes

- ❑ AZ Track Replacement is requested for DSS-25 and DSS-55
 - ❑ DSS-25 is proposed for March 2 – May 11, 2015, weeks 10 – 19
 - ❑ DSS-55 is proposed for February 1 – April 10, 2016, weeks 05 – 14
 - ❑ 80 kW Facility Preparation is scheduled NIB for February 1 – March 20, weeks 05 – 11
 - ❑ Reconfiguration Prep is proposed for February 1 – May 23, weeks 05 – 20

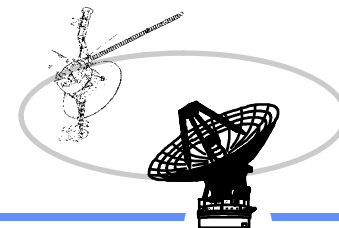
- ❑ SPC-10 request a 24 hour downtime on each antenna for inspection in 2015
 - ❑ Antennas include DSS-14, 15, 24, 25, 26 and 27
 - ❑ Week 19 inspection times are proposed for 8 hours NIB to maintenance plus 8 hours swing shift , – Except DSS-25 which will be done during AZ Track Replacement
 - ❑ Week 20 inspection times are proposed for 8 hours NIB to maintenance

- ❑ DSS-15 Antenna Drive Replacement requested for 2016
 - ❑ Proposed for July 18 – September 12, weeks 29 – 36

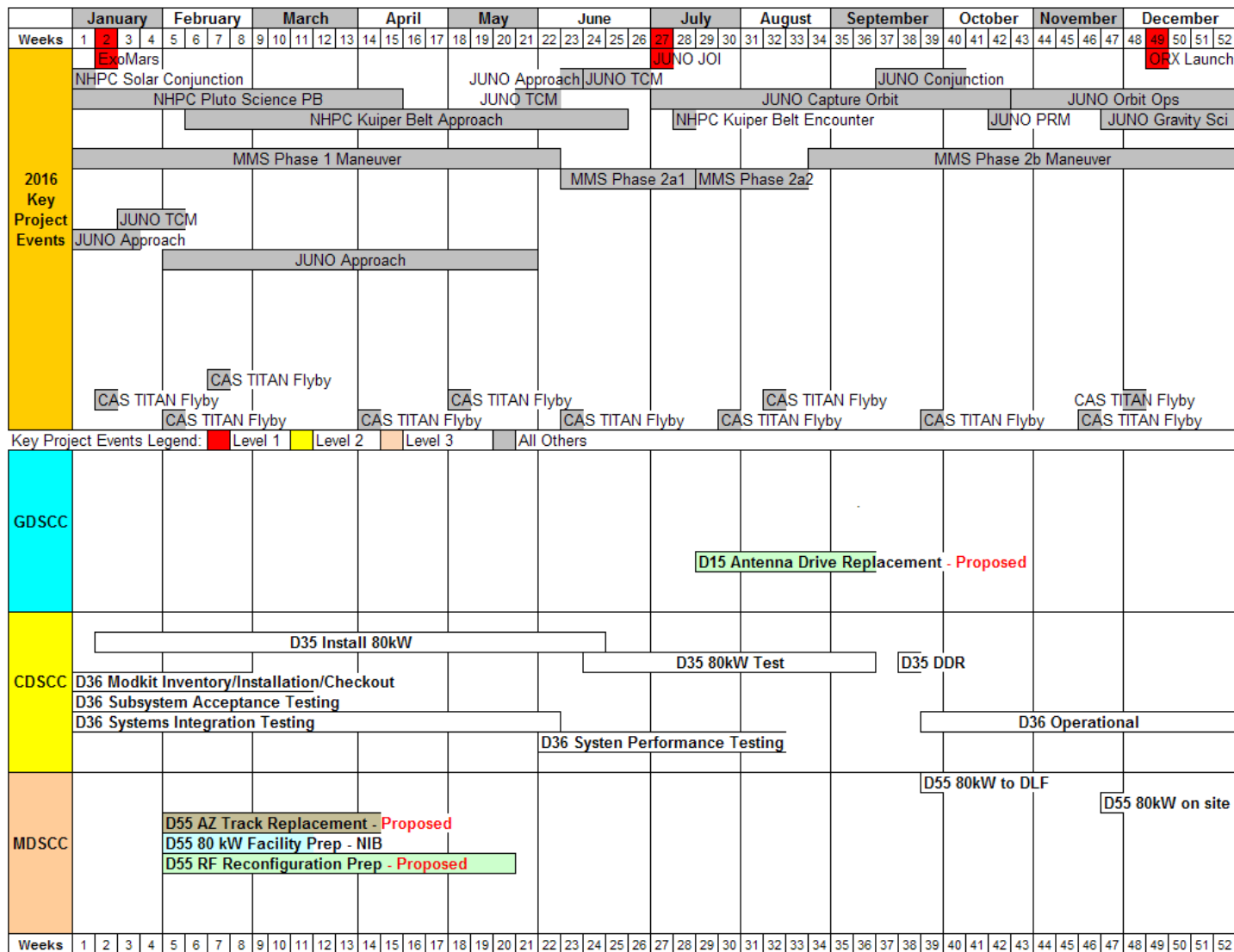


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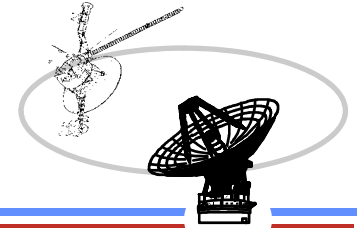
- 2016 -



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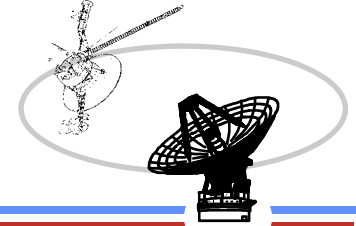
DSN Downtime 2016

2016							
Site	Details	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
DSS 55	80 kW Facility Prep - NIB	02/01/2016 00:00	03/20/2016 00:00	48	05 - 11	32	80
DSS 55	AZ Track Replacement - Proposed	02/01/2016 00:00	04/10/2016 00:00	69	05 - 14	32	101
DSS 55	RF Reconfiguration Prep - Proposed	02/01/2016 00:00	05/23/2016 00:00	112	05 - 20	32	144
DSS 15	Antenna Drive Replacement - Proposed	07/11/2016 00:00	09/07/2016 00:00	58	28 - 36	193	251



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- 2017 -

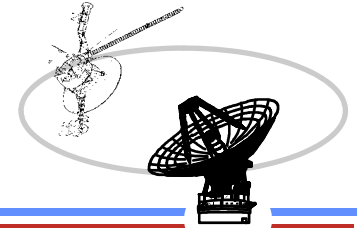
	January				February				March				April				May				June				July				August				September				October				November				December															
Weeks	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52								
2017 Key Project Events	MMS Phase 2b Maneuver								MMS Disposal								JUNO Orbit Ops/Gravity Sci																																								JUNO Deorbit			
	CAS TITAN Flyby																																																											
	Key Project Events Legend: ■ Level 1 ■ Level 2 ■ Level 3 ■ All Others																																																											
GDSCC																																																												
CDSCC																																					D36 80kW Arrives to DLF				D36 80kW Onsite																			
MDSCC									D55 Install 80kW																D55 Test 80kW																D55 DDR																			
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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Future assets new/upgrades

- ❑ DSS-35 Installation and Operational 2013 – 2014
 - ❑ Modkit Installation October 1, 2013 – March 14, 2014 weeks 40 – 11
 - ❑ Acceptance Testing November 22, 2013 – April 4, 2014, weeks 47 – 14
 - ❑ System Integration Testing December 17, 2013 – June 2, 2014 weeks 51 – 23
 - ❑ Operations Systems Performance Testing June 2, 2014 – August 15, 2014, weeks 23 – 33
 - ❑ Operational September 26, 2014

- ❑ DSS-26 80kW Installation 2014 – 2015
 - ❑ 80kW arrive at DLF October, 2014, week 40
 - ❑ 80kW arrive on-site November, 2014, week 47
 - ❑ 80kW install January – June, 2015, weeks 02 – 25
 - ❑ 80 kW test June – September, 2015, weeks 24 – 36
 - ❑ DDR September, 2015, week 38

- ❑ DSS-35 80kW Installation 2016 – A placeholder has been set awaiting dates

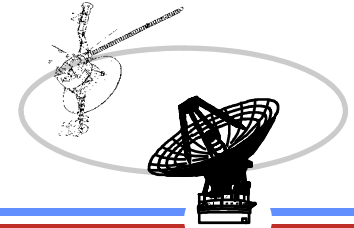
- ❑ DSS-36 Installation and Operational 2016 – A placeholder has been set awaiting dates

- ❑ DSS-55 80kW Installation 2016 – 2017
 - ❑ 80kW Facility Prep – February 2016, weeks 05 – 10
 - ❑ 80kW at DLF September, 2016, week 39
 - ❑ 80kW on-site November, 2016, week 47
 - ❑ 80kW install January – June, 2017, weeks 01 – 24
 - ❑ 80kW test June – September, 2017, weeks 24 – 37
 - ❑ DDR September, 2017, week 39



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Antenna Downtime Status and Forecast

Complex	Station	Subnet	S-Band		X-Band		Ka-Band		Ka Phase 2	X-Band ACQ AID	80KW
			Down	Up	Down	Up	Down	Up			
10	DSS-27	34HSB	✓	✓	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10	DSS-24	34B1	✓	✓	✓	✓	N/A	N/A	✓	✓	N/A
40	DSS-34	34B1	✓	✓	✓	✓	✓	N/A	✓	✓	N/A
60	DSS-54	34B1	✓	✓	✓	✓	✓	N/A	✓	✓	N/A
10	DSS-25	34B2	N/A	N/A	✓	✓	✓	✓	N/A	N/A	10/01/15
10	DSS-26	34B2	N/A	N/A	✓	✓	✓	N/A	N/A	N/A	N/A
40	DSS-35*	34B2	N/A	N/A	11/01/14	11/01/14	11/01/14	N/A	N/A	N/A	11/01/16
40	DSS-36*	34B2	N/A	N/A	11/01/16	11/01/16	11/01/16	N/A	N/A	N/A	N/A
60	DSS-55	34B2	N/A	N/A	✓	✓	✓	N/A	N/A	N/A	10/01/17
10	DSS-15	34HEF	✓	N/A	✓	✓	N/A	N/A	N/A	N/A	N/A
40	DSS-45	34HEF	✓	✓	✓	✓	N/A	N/A	N/A	N/A	N/A
60	DSS-65	34HEF	✓	✓	✓	✓	N/A	N/A	N/A	N/A	N/A
10	DSS-14	70M	✓	✓	✓	✓	N/A	N/A	N/A	N/A	N/A
40	DSS-43	70M	✓	✓	✓	✓	N/A	N/A	N/A	N/A	N/A
60	DSS-63	70M	✓	✓	✓	✓	N/A	N/A	N/A	N/A	N/A

N/A = Capability Not Planned

xx/xx/xx = Capability Date Recently Changed

As of: 1/5/2012

✓ ✓ ✓ = Capability Recently Exists

✓ = Capability Exists

* = To Be Commissioned