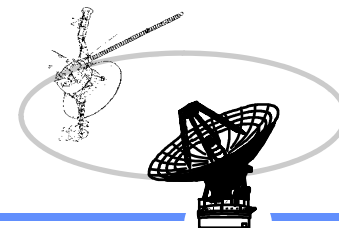


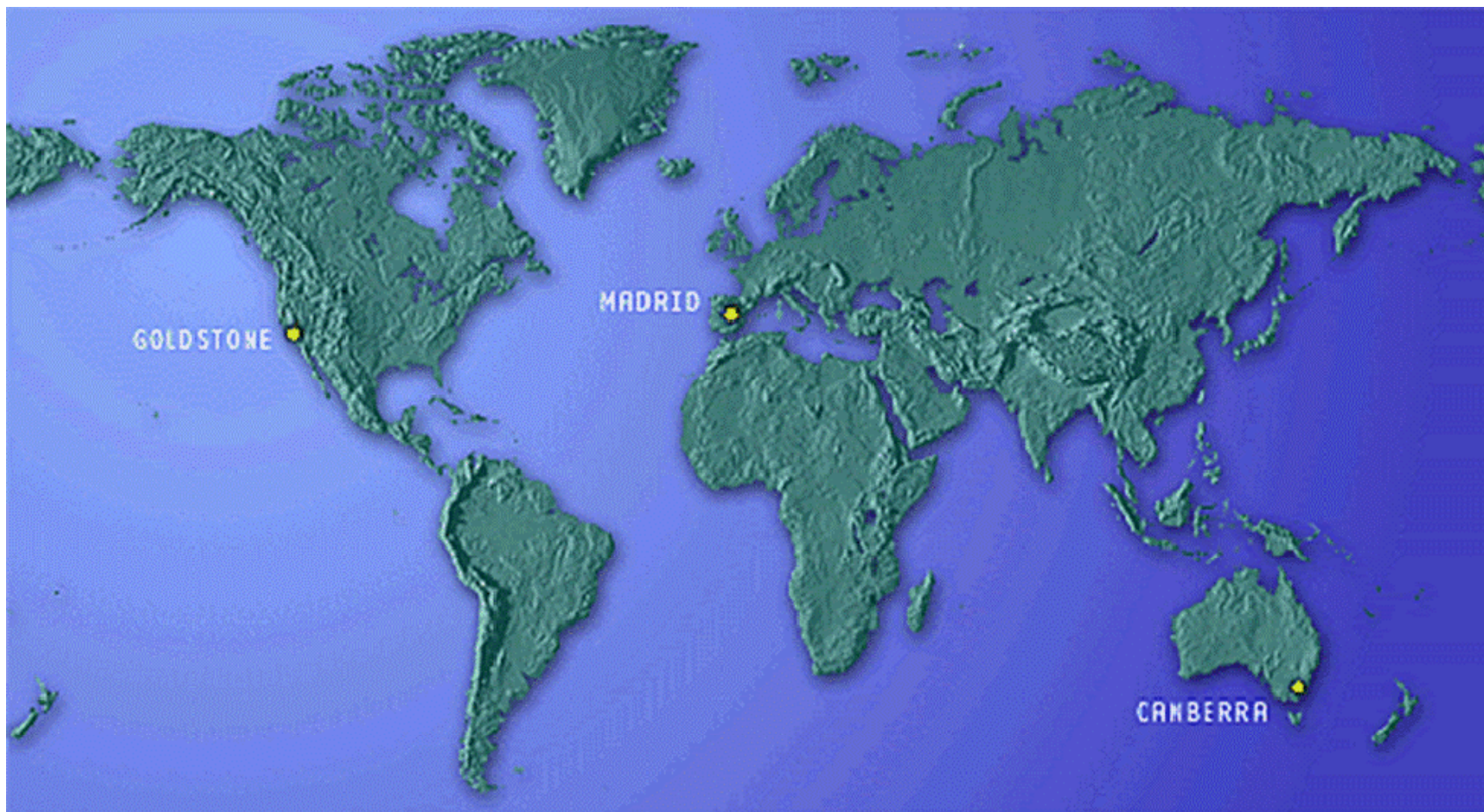


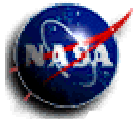
Interplanetary Network Directorate (IND)  
Deep Space Network (DSN)  
Resource Allocation Planning Service



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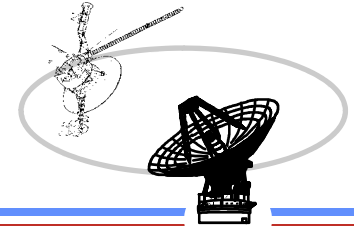
## DSN Antenna Downtime Status and Forecast





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	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 Tempel Enc		MSGR MOI		DAWN FSW		July 1 ACP Begins		THC LOI		JUNO TCM	
	SDU Approach		SDU Post Enc Imaging		DAWN Vesta Approach		Vesta Orbit Survey		HAMO		DAWN Vesta Orbit LAMO	
	CHDR DC		DAWN Forced Coast		CHDR Earth Eclipse		CHDR DC		KEPLMS		CHDR SOSA	
	KEPLMS		LRO LE		CHDR LE		CHDR LE		KEPLMS		CHDR Earth Eclipse	
	SOHO Keyhole		SOHO Keyhole MNVR		CLUII Post Eclipse		LRO LE		WIND TCM		SOHO Keyhole MNVR	
	SOHO MNVR		WIND TCM		SOHO Keyhole		MSGR TCM/OCM		GSSR COMET HMP		MSGR TCM/OCM	
	MSGR TCM/OCM		MSGR TCM/OCM		GSSR Ast 2009 BD		MSGR TCM/OCM		GSSR Ast 2003 QC10		GSSR Ast 1996 FG3	
	NHPC MNVR		VGR1 DTR PB		NHPC Checkout		STF HD147506		CAS Saturn OCC		NHPC Hibernation Exit	
	ROSE Rendezvous Maneuver		NHPC CO		ROSE DSHM Entry		VGR1 DTR PB		CAS ENCELADUS		NHPC C/O	
	CAS RHEA		CLUII Post Eclipse		CAS TITAN		CLUII Pre/Post Eclipse		VGR1 DTR PB		CAS ENCELADUS	

Key Project Events Legend:

- Level 1
- Level 2
- Level 3
- All Others

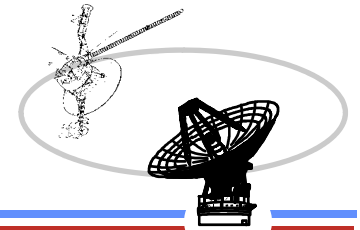
- 2011 -

	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											
GDSCC	D15 Pintle Bearing		D15 Gear Box Replace -NIB		D24 Antenna Controller Replacement		D25 Preliminary Design Review Test - for D35		D15 Uplink/Transmitter Calibration		D26 RF Pattern Testing	
	DPS Power Upgrade		DPS Power Upgrade		NMC Install		NMC Install		D27 Antenna Controller Replacement		D26 RF Pattern Testing	
	DPS Power Upgrade		DPS Power Upgrade		NMC Install		NMC Install		250 Watt S-Band Install -NIB		Cable Wrap Protection -NIB	
CDSCC	D45 Uplink/Transmitter Calibration		D45 Heat Exchanger Level Switch Replacement		D34 Sub Reflector Position Transducer Replacement		DPS Maintenance		D43 AZ Box Replacement		DPS Maintenance	
	NMC Install		D34 Antenna Controller Replacement		NMC Install		DPS Maintenance		DPS Maintenance		DPS Maintenance	
	D34 Heat Exchanger Level Switch Replacement - NIB		Cable Wrap Protection -NIB		DPS Maintenance		DPS Maintenance		DPS Maintenance		DPS Maintenance	
MDSCC	NMC Install		NMC Install		NMC Install		NMC Install		D55 Sub Reflector Position Transducer Replacement		D63 Heat Exchanger	
	D63 DLM		D63 GROUING -NIB		D54 Sub Reflector Position Transducer Replacement		D54 BWG PLC Test		D65 Chiller Replacement		D65 Heat Exchanger Level Switch Replacement - NIB	
	D65 Uplink/Transmitter Calibration		D65 Uplink/Transmitter Calibration		D65 Uplink/Transmitter Calibration		D65 Uplink/Transmitter Calibration		D65 Uplink/Transmitter Calibration		D65 Uplink/Transmitter Calibration	

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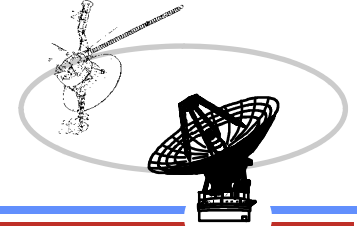
## DSN Downtime 2011

2011							
Site	Details	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
SPC 40	DPS Maintenance	11/10/2011 17:45	11/11/2011 04:30	0	45 - 45	314	315



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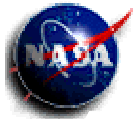
# Interplanetary Network Directorate (IND) Deep Space Network (DSN) Resource Allocation Planning Service



## Antenna Downtime Status and Forecast

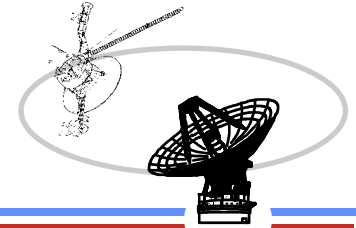
The following are downtimes for 2011

- ❑ 34HEF Uplink and Transmitter Calibration downtime was requested on DSS-15 for 36 hours in 2011. DSS-65 and DSS-45 were completed.
  - ❑ DSS-15 – completed in week 42
  
- ❑ Canberra requested six 8 – 12 hour blocks of Complex Wide DSCC Power Substation (DPS) Maintenance Downtime for April – November
  - ❑ The remaining downtimes are completed/scheduled for the following weeks
    - ❑ Week 41 – completed
    - ❑ Week 43 – completed
    - ❑ Week 45, November 10, DOY 314/1745 – 315/0430 – on schedule
  
- ❑ DSS-26 RF Pattern Testing was requested for July and September
  - ❑ Was completed in week 40
  
- ❑ DSS-63 Heat Exchanger Replacement downtime was requested for 2011
  - ❑ DSS-63 needs downtime due to a heat exchanger leak. Downtime was completed in week 42. However, there is a small possibility for re-work due to a dimension that was off. The vendor will be contacted, if needed, re-work could potentially be done during the Feb. downtime.



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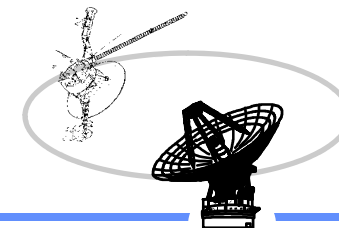
- 2012 -

	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	JUNO TCM		MSL INST C/O 1		MSL TCM		MSL FSW Update		MSL ENG C/O 1		MSL TCM		
	GRAIL A/B PRM						MSL TCM		MSL ENG C/O 2		MSL EDL		
	VEX Drag Pass		MSGR TCM/OCM				MSL Approach		MSL Surface Ops				
	DAWN Vesta Orbit				DAWN Vesta Depart				DAWN Ceres Thrust				
	GSSR Ast 1991 VK		GRAIL A/B Science				DAWN Ceres Thrust				DAWN Forced Coast		
	KEPL MS		KEPL MS		KEPL QR/MS		KEPL MS		KEPL MS		KEPL QR/MS		KEPL MS
	WIND TCM				WIND TCM		WIND TCM		JUNO DSM		KEPL MS		VEX Drag Pass
	GSSR Ast Eros		JUNO DSMs DDOR		VGR1 DTR PB		VEX Drag Pass		JUNO TCM		JUNO Per Maint		GSSR Ast 2007 PA8
	CHDR DC		CHDR DC		CHDR DC		CHDR DC		CHDR DC		CHDR DC		CHDR Leonid
	SOHO MNVR		GSSR Mars		CHDR Earth Eclipse		GSSR Ast 2005 G021		CHDR Earth Eclipse		WIND TCM		
	MRO Relay												
	SOHO Keyhole		SOHO Keyhole		GSSR Ast 1998 HE3		SOHO Keyhole		SOHO Keyhole		SOHO Keyhole		SOHO Keyhole
	NHPC Hibernation Re-Entry		SOHO MNVR		NHPC TCM		SOHO MNVR		MRO MSL Relay		SOHO MNVR		NHPC Solar Conj
	NHPC Hibernation Exit				NHPC Checkout						NHPC Hibernation Re-Entry		NHPC Solar Conj
	NHPC Solar Conj				NHPC Hibernation Exit		NHPC MNVR				NHPC Checkout		NHPC Solar Conj
NHPC Checkout		GSSR Ast 2000 ET70		NHPC S/W Load		NHPC Hibernation Re-Entry				NHPC MNVR		VGR1 DTR PB	
NHPC MNVR				CAS TITAN		GSSR Ast 2002 AM31		VGR1 DTR PB		NHPC Hibernation Exit		NHPC Solar Conj	
CAS TITAN		CAS TITAN		CAS ENCELADUS		CAS TITAN		CAS TITAN		GSSR Ast 1998 ST49		GSSR Ast 4179 Tout	
CAS TITAN		CAS ENCELADUS		CAS ENCELADUS						CAS TITAN		CAS TITAN	
Key Project Events Legend: Level 1 (Red), Level 2 (Yellow), Level 3 (Orange), All Others (Grey)													
GDSCC			D15 TXR Manifold Upgrade		DPS Maintenance - Proposed		D26 Antenna Controller Replacement		Cable Wrap Protection-NIB		D25 Antenna Controller Replacement		
			DPS Maintenance - Proposed		DPS Maintenance - Proposed		Cable Wrap Protection-NIB		DPS Maintenance - Proposed		DPS Maintenance - Proposed		
			70M Tune-up/Calibration - Proposed		D14 Plug Seal Replacement - NIB		DPS Maintenance - Proposed		DPS Maintenance - Proposed		DPS Maintenance - Proposed		
CDSCC			D43 70M Tune-up/Calibration		DPS Power Upgrade		D45 Waterload Replacement - Proposed		D45 TXR Manifold Upgrade - NIB		Powerhouse Downtime - Proposed		
							Powerhouse Downtime - Proposed		Powerhouse Downtime - Proposed		Powerhouse Downtime - Proposed		
									D43 Antenna Prep Phase 1				
MDSCC			D63 GROUTING - Proposed		D63 70M Tune-up/Calibration - NIB		D65 Waterload Replacement - Proposed		D65 TXR Manifold Upgrade - NIB				
											D54 AZ Track Replacement - Proposed		
											D54 Antenna Controller Replacement - 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											

Revised: October 27, 2011



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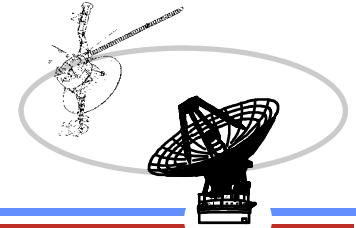


## DSN Downtime 2012

2012							
Site	Details	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
DSS 43	70m Tune-up/Calibration	02/06/2012 19:00	02/12/2012 07:00	6	06 - 06	37	43
SPC 40	DPS Maintenance - Proposed	02/08/2012 20:00	02/09/2012 08:00	1	06 - 06	39	40
DSS 63	70m Tune-up/Calibration - NIB	02/20/2012 10:00	03/11/2012 17:00	20	08 - 10	51	71
DSS 63	Grouting	02/20/2012 10:00	03/11/2012 17:00	20	08 - 10	51	71
DSS 15	TXR Manifold Upgrade	03/05/2012 14:00	03/07/2012 01:00	1	10 - 10	65	67
DSS 15	TXR Manifold Upgrade	03/07/2012 14:00	03/08/2012 01:00	0	10 - 10	67	68
SPC 10	DPS Maintenance - Proposed	03/07/2012 14:00	03/08/2012 02:00	0	10 - 10	67	68
DSS 15	TXR Manifold Upgrade	03/08/2012 14:00	03/09/2012 01:00	0	10 - 10	68	69
DSS 15	TXR Manifold Upgrade	03/08/2012 14:00	03/09/2012 01:00	0	10 - 10	68	69
DSS 14	70m Tune-up/Calibration - Proposed	03/12/2012 14:00	04/01/2012 01:00	19	11 - 13	72	92
DSS 14	Plug Seal Replacement - NIB	03/12/2012 14:00	04/01/2012 01:00	19	11 - 13	72	92
DSS 26	Cable Wrap Protection - NIB	04/02/2012 13:00	04/05/2012 05:00	3	14 - 14	93	96
DSS 26	Antenna Controller Replacement	04/02/2012 13:00	04/29/2012 01:00	26	14 - 17	93	120
SPC 10	DPS Maintenance - Proposed	04/04/2012 14:00	04/05/2012 02:00	0	14 - 14	95	96
DSS 45	TXR Manifold Upgrade - NIB	04/29/2012 20:00	05/03/2012 06:00	3	17 - 18	120	124
DSS 45	Water Load Replacement - Proposed	04/29/2012 20:00	05/03/2012 06:00	3	17 - 18	120	124
DSS 45	TXR Manifold Upgrade - NIB	05/03/2012 20:00	05/04/2012 06:00	0	18 - 18	124	125
DSS 45	Water Load Replacement - Proposed	05/03/2012 20:00	05/04/2012 06:00	0	18 - 18	124	125
DSS 45	TXR Manifold Upgrade - NIB	05/04/2012 20:00	05/05/2012 06:00	0	18 - 18	125	126
DSS 45	Water Load Replacement - Proposed	05/04/2012 20:00	05/05/2012 06:00	0	18 - 18	125	126
DSS 45	TXR Manifold Upgrade - NIB	05/05/2012 20:00	05/06/2012 06:00	0	18 - 18	126	127
DSS 45	Water Load Replacement - Proposed	05/05/2012 20:00	05/06/2012 06:00	0	18 - 18	126	127



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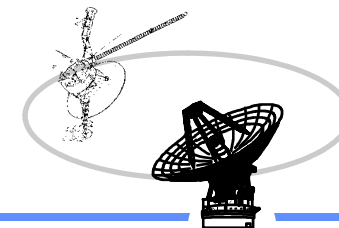


## DSN Downtime 2012

2012 (cont.)							
DSS 45	TXR Manifold Upgrade - NIB	05/06/2012 20:00	05/07/2012 06:00	0	18 - 19	127	128
DSS 45	Water Load Replacement - Proposed	05/06/2012 20:00	05/07/2012 06:00	0	18 - 19	127	128
SPC 10	DPS Maintenance - Proposed	05/08/2012 14:00	05/09/2012 02:00	0	19 - 19	129	130
DSS 65	TXR Manifold Upgrade - NIB	05/14/2012 05:00	05/17/2012 17:00	4	20 - 20	135	138
DSS 65	Water Load Replacement - Proposed	05/14/2012 05:00	05/17/2012 17:00	4	20 - 20	135	138
DSS 65	TXR Manifold Upgrade - NIB	05/18/2012 05:00	05/18/2012 17:00	0	20 - 20	139	139
DSS 65	Water Load Replacement - Proposed	05/18/2012 05:00	05/18/2012 17:00	0	20 - 20	139	139
DSS 65	TXR Manifold Upgrade -	05/19/2012 05:00	05/19/2012 17:00	0	20 - 20	140	140
DSS 65	Water Load Replacement - Proposed	05/19/2012 05:00	05/19/2012 17:00	0	20 - 20	140	140
DSS 65	TXR Manifold Upgrade - NIB	05/20/2012 05:00	05/20/2012 17:00	0	20 - 20	141	141
DSS 65	Water Load Replacement - Proposed	05/20/2012 05:00	05/20/2012 17:00	0	20 - 20	141	141
SPC 40	Powerhouse Commission - Proposed	05/28/2012 20:00	05/28/2012 23:00	0	22 - 22	149	149
SPC 40	Powerhouse Commission - Proposed	05/29/2012 20:00	05/29/2012 23:00	0	22 - 22	150	150
SPC 40	Powerhouse Commission - Proposed	05/30/2012 20:00	05/30/2012 23:00	0	22 - 22	151	151
SPC 40	Powerhouse Commission - Proposed	05/31/2012 20:00	05/31/2012 23:00	0	22 - 22	152	152
DSS 25	Cable Wrap Protection - NIB	06/11/2012 00:00	06/14/2012 00:00	3	24 - 24	163	166
DSS 25	Antenna Controller Replacement	06/11/2012 00:00	07/15/2012 00:00	34	24 - 28	163	197
SPC 10	DPS Maintenance - Proposed	06/13/2012 14:00	06/14/2012 02:00	0	24 - 24	165	166
SPC 10	DPS Maintenance - Proposed	07/12/2012 14:00	07/13/2012 02:00	0	28 - 28	194	195
SPC 40	Powerhouse Commission - Proposed	09/03/2012 20:00	09/03/2012 23:00	0	36 - 36	247	247
SPC 40	Powerhouse Commission - Proposed	09/04/2012 20:00	09/04/2012 23:00	0	36 - 36	248	248
SPC 40	Powerhouse Commission - Proposed	09/05/2012 20:00	09/05/2012 23:00	0	36 - 36	249	249
SPC 40	Powerhouse Commission - Proposed	09/06/2012 20:00	09/06/2012 23:00	0	36 - 36	250	250



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## DSN Downtime 2012

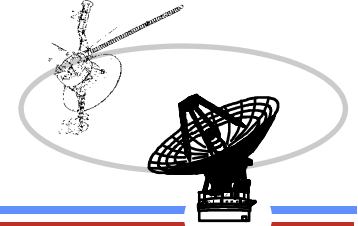
2012 (cont.)							
SPC 40	Powerhouse Commission - Proposed	09/07/2012 20:00	09/07/2012 23:00	0	36 - 36	251	251
DSS 54	AZ Track Replacement - Proposed	09/10/2012 00:00	10/28/2012 00:00	48	37 - 43	254	302
DSS 43	HBA Upgrades and Life Extension Phase 1 - Proposed	09/10/2012 00:00	10/29/2012 00:00	49	37 - 44	254	303
SPC 10	DPS Maintenance - Proposed	09/12/2012 14:00	09/13/2012 02:00	0	37 - 37	256	257
SPC 40	Powerhouse Commission - Proposed	09/18/2012 20:00	09/18/2012 23:00	0	38 - 38	262	262
SPC 40	Powerhouse Commission - Proposed	09/19/2012 20:00	09/19/2012 23:00	0	38 - 38	263	263
SPC 40	Powerhouse Commission - Proposed	09/20/2012 20:00	09/20/2012 23:00	0	38 - 38	264	264
DSS 54	Antenna Controller Replacement - Proposed	10/22/2012 00:00	11/25/2012 00:00	34	43 - 47	296	330





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# Interplanetary Network Directorate (IND) Deep Space Network (DSN) Resource Allocation Planning Service



## Antenna Downtime Status and Forecast

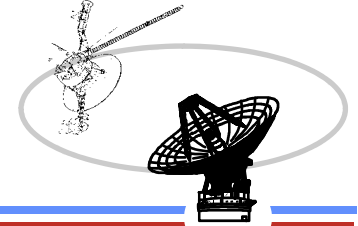
The following are downtimes for 2012 – 2014

- ❑ DSS-15 Downtime for TXR Manifold Upgrade is requested
  - ❑ One week of downtime is requested for January – May time frame
  - ❑ Downtime is **scheduled** for March 5 – 9, week 10, 1400 – 0000, DOY 065 – 069
    - ❑ **The first two days of downtime there will be no tracking. The last three days will be downlink only tracking off shift**
- ❑ Goldstone requests six 8 – 12 hour blocks of Complex Wide DSCC Power Substation (DPS) Maintenance Downtime for March – November of 2012
  - ❑ Downtimes are proposed for the following weeks – prime shift hours are preferred, however, off shift hours are acceptable
    - ❑ March 7, week 10 - **proposal was sent out, GRAIL has issues with placement**
    - ❑ April 4, week 14
    - ❑ May 8, week 19
    - ❑ June 13, week 24
    - ❑ July 12, week 28
    - ❑ September 12, week 37
- ❑ **DSS-65 and DSS-45 request 7 days of downtime in 2012 for Waterload Replacement with TXR Manifold Replacement NIB for both tasks**
  - ❑ **DSS-45 is proposed for May, week 18**
  - ❑ **DSS-65 is proposed for May, week 20**
  - ❑ **The first three days of downtime there will be no tracking. The last four days will be downlink only tracking off shift**



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## Interplanetary Network Directorate (IND) Deep Space Network (DSN) Resource Allocation Planning Service



### Antenna Downtime Status and Forecast

The following are downtimes for 2012 – 2014 (continued)

- ❑ SPC-40 request 12 blocks of 3 hour complex downtime for Power House Commission
  - ❑ Four days, 3 hours in May, week 22
  - ❑ Five days, 3 hours in September, week 36
  - ❑ Three days, 3 hours in September, week 38

- ❑ BWG Antenna Controller Replacement for 2012 – 2013
  - ❑ DSS-26 is scheduled for April 2 – 29, 2012, weeks 14 – 17, DOY 093/1300 – 120/0100
  - ❑ DSS-25 is scheduled for June 11 – July 15, 2012, weeks 24 – 28, DOY 163/0000 – 197/0000
  - ❑ DSS-54 is proposed for October 22 – November 25, 2012, weeks 43 – 47, DOY 296/0000 – 330/0000
  - ❑ DSS-55 is proposed for January 14 – February 17, 2013, weeks 03 – 07, DOY 014/0000 – 048/0000

Note: Cable Wrap Protection for each BWG ACR requires 3 days and will be NIB

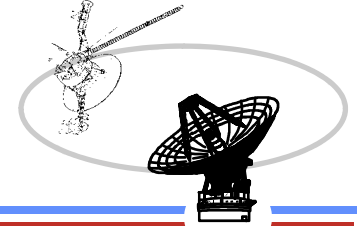
- ❑ DSS-63 downtime for Grouting is requested once per year
  - ❑ Scheduled for February 20 – March 11, 2012, weeks 08 – 10, DOY 051/1000 – 071/1700
    - ❑ Tune-up/Calibration is scheduled NIB to grouting
    - ❑ Will begin at 1000 vice 0600 to accommodate CAS
  - ❑ An additional grouting is proposed for September 2 – 17, 2013, weeks 36 – 38, DOY 245/0000 – 260/0000

Note: Stand alone Grouting requires 15 days



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## Antenna Downtime Status and Forecast

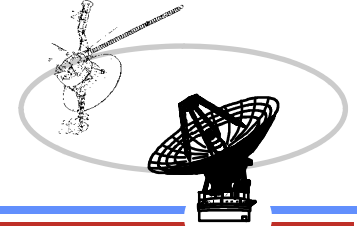
The following are downtimes for 2012 – 2014 (continued)

- ❑ DSS-43 downtime for Tune-up/Calibration is requested for 2012
  - ❑ Scheduled for February 6 – 12, week 06, DOY 037/1900 – 043/0700
  - ❑ An additional SPC-40 DPS 8-12 hour power task is **scheduled** for week 06, DOY 039/2000 – 040/0800
    - ❑ Initially requested for December 2011, but due to contention/high level activities, it is proposed for February 2012
  
- ❑ DSS-14 downtime for Tune-up/Calibration and Plug Seal Replacement is requested for 2012
  - ❑ Tune-up/Calibration and Plug Seal Replacement is proposed for March 12 – April 1 weeks 11 – 13, DOY 072/1400 – 092/0100. May possibly begin on DOY 075 begin after GSSR events
    - ❑ 20 days of downtime is requested to complete the task
  
- ❑ AZ Track Replacement is requested for DSS-54, 24 and 26 beginning in the fall of 2012. The following sequence is proposed
  - ❑ DSS-54 is proposed for September 10 – October 28, 2012, weeks 37 – 43
  - ❑ DSS-24 is proposed for April 22 – June 30, 2013, weeks 17 – 26
  - ❑ 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



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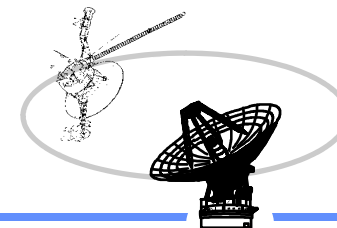
## Antenna Downtime Status and Forecast

The following are downtimes for 2012 – 2014 (continued)

- ❑ Madrid requests six 8 – 12 hour blocks of Complex Wide DSCC Power Substation (DPS) Maintenance Downtime for January – June of 2013
  - ❑ Downtimes are proposed for the following weeks – prime shift hours are requested
    - ❑ January 23, week 04
    - ❑ February 27, week 09
    - ❑ March 27, week 13
    - ❑ April 24, week 17
    - ❑ May 29, week 22
    - ❑ June 26, week 26
  
- ❑ DSS-43 HBA Upgrade and Life Extension downtime is proposed for 2012 – 2013
  - ❑ Phase 1 antenna prep is proposed for 7 weeks (37-43 or 42-48) in late 2012.
    - ❑ JUNO DSM week 36, project suggest DSM2 + 30d later (on or about 10/04/12)
    - ❑ CAS has high priority RSS ring occultation on DOY 315, week 45.
      - ❑ Project responses are currently under review
  - ❑ Phase 2 antenna upgrade is scheduled for January 7 – July 15, weeks 02 – 28 of 2013
    - ❑ Maser replacement in weeks 09 – 17 will be NIB
  - ❑ ZDD will be scheduled prior to return to service
  
- ❑ DSS-15 Maser Replacement is requested for 2013
  - ❑ Proposed for July 8 – September 2, weeks 28 – 35
  
- ❑ 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



# Interplanetary Network Directorate (IND) Deep Space Network (DSN) Resource Allocation Planning Service



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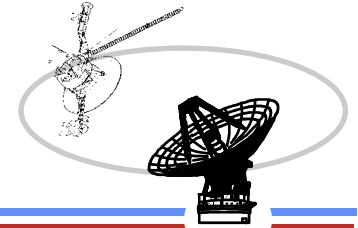
- 2013 -

	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	VGR2 Proof of Performance																	LADEE Launch				VGR2 Solstice																MAVEN Launch														
																						DAWN Ceres Thrst PB/TV												MAVEN TCM																		
	WIND TCM					DAWN Forced Coast				WIND TCM								WIND TCM				WIND TCM				DAWN Ceres Coasting																										
	CHDR DC		SOHO Keyhole			CHDR Earth Eclipse				CHDR DC								CHDR DC				CHDR Earth Eclipse				WIND TCM				DAWN Forced Coast																						
	NHPC S/W Load					NHPC Hibernation Re-Entry												JUNO ME Flush				JUNO EFB DDOR				JUNO EFB				NHPC Hibernation Re-Entry																						
																		MRO MSL Relay				MSL Surface Ops																														
	NHPC Solar Conjunction					NHPC Hibernation Exit								NHPC Checkout				NHPC Hibernation Exit				NHPC Hibernation Re-Entry				NHPC Checkout																										
	NHPC Checkout					NHPC MNVR								NHPC S/W Load				NHPC Maneuver				GSSR Ast 2005 WK4				GSSR Ast 1998 FW4				NHPC Solar Conjunction																						
	GSSR Ast 2002 AY1					GSSR Ast APOISIS				CAS RHEA Flyby				CAS TITAN Flyby				CAS TITAN Flyby				CAS TITAN Flyby				GSSR Ast 1998 ML14				CAS TITAN Flyby																						
						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																																		
																										D15 Maser Replacement - Proposed																										
CDSCC																		D43 HBA Upgrades & Life Extension Phase 2 - Proposed				D43 Maser Replacement - NIB												D35 Modkit Inventory/Installation/Checkout				D35 Subsystem Acceptance Testing				D35 Systems Integration Testing										
MDSCC	D55 Antenna Controller Replacement - Proposed					D55 Cable Wrap Protection - NIB																								D63 GROUTING - Proposed																						
						DPS Maintenance - Proposed				DPS Maintenance - Proposed				DPS Maintenance - Proposed				DPS Maintenance - Proposed																																		
						DPS Maintenance - Proposed				DPS Maintenance - Proposed				DPS Maintenance - Proposed				DPS Maintenance - Proposed																																		
						DPS Maintenance - Proposed				DPS Maintenance - Proposed				DPS Maintenance - Proposed				DPS Maintenance - Proposed																																		

Revised: October 27, 2011



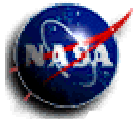
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 Resource Allocation Planning Service



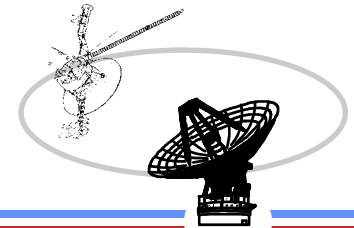
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## DSN Downtime 2013

2013							
Site	Details	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
DSS 43	HBA Upgrades and Life Extension Phase 2	01/07/2013 00:00	07/15/2013 00:00	189	02 - 29	7	196
DSS 55	Cable Wrap Protection - NIB	01/14/2013 00:00	01/17/2013 00:00	3	03 - 03	14	17
DSS 55	Antenna Controller Replacement - Proposed	01/14/2013 00:00	02/17/2013 00:00	34	03 - 07	14	48
SPC 60	DPS Maintenance - Proposed	01/23/2013 05:00	01/23/2013 17:00	0	04 - 04	23	23
DSS 43	Maser Replacement - NIB	02/25/2013 05:00	04/25/2013 17:00	60	17-Sep	56	115
SPC 60	DPS Maintenance - Proposed	02/27/2013 05:00	02/27/2013 17:00	0	9-Sep	58	58
SPC 60	DPS Maintenance - Proposed	03/27/2013 05:00	03/27/2013 17:00	0	13 - 13	86	86
DSS 24	AZ Track Replacement - Proposed	04/22/2013 00:00	06/30/2013 00:00	69	17 - 26	112	181
SPC 60	DPS Maintenance - Proposed	04/24/2013 05:00	04/24/2013 17:00	0	17 - 17	114	114
SPC 60	DPS Maintenance - Proposed	05/29/2013 05:00	05/29/2013 17:00	0	22 - 22	149	149
SPC 60	DPS Maintenance - Proposed	06/26/2013 05:00	06/26/2013 17:00	0	26 - 26	177	177
DSS 15	Maser Replacement - Proposed	07/08/2013 14:00	09/07/2013 01:00	60	28 - 36	189	250
DSS 63	Grouting - Proposed	09/02/2013 00:00	09/17/2013 00:00	15	36 - 38	245	260

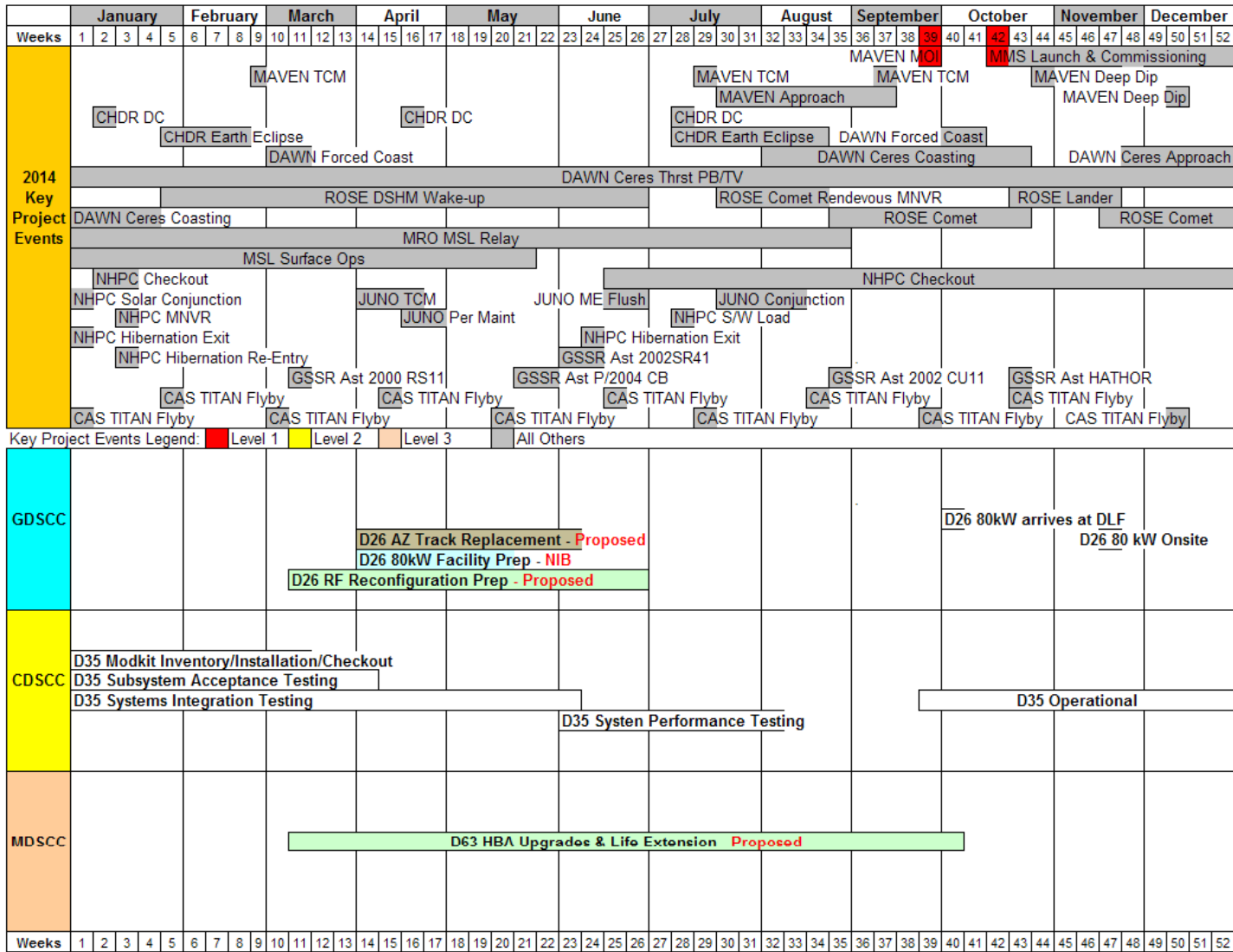


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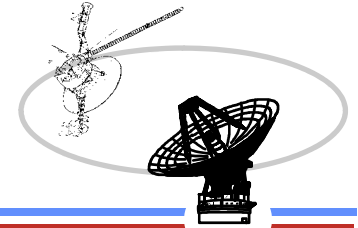
**- 2014 -**



Revised: September 29, 2011



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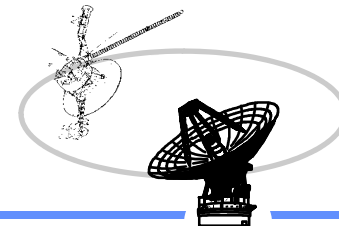
## DSN Downtime 2014

2014							
Site	Details	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
DSS 26	RF Reconfiguration Prep - Proposed	03/10/2014 00:00	06/30/2014 00:00	112	11 - 27	69	181
DSS 63	HBA Upgrades and Life Extension - Proposed	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





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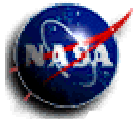


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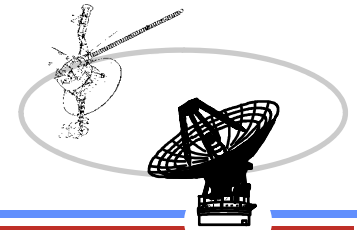
**- 2015 -**

	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
<b>2015 Key Project Events</b>	MMS Commissioning				NHPC Pluto Approach				NHPC MNVR				NHPC Pluto Encounter				NHPC Pluto Science PB				NHPC Checkout																																
	NHPC Solar Conjunction				MAVEN Deep Dip				MAVEN Deep Dip				MAVEN Conjunction				NHPC Solar Conjunction																																				
	DAWN Ceres Orbit				DAWN Ceres Approach				JUNO Per Maint				JUNO JOI DDOR				JUNO ME Flush				JUNO Conjunction				JUNO Early Approach																												
	CAS TITAN Flyby				CAS TITAN Flyby				CAS TITAN Flyby				CAS TITAN Flyby				CAS TITAN Flyby				CAS TITAN Flyby				CAS ENCELADUS Flyby																												
	GSSR Ast 2004 BL86				GSSR Ast ICARUS				GSSR Ast 1999 JD6				GSSR Ast 1994 AW1				GSSR Ast 2003 RB				GSSR Ast 1998 WT24																																
	GSSR Ast 2003 SD220				CAS DIONE Flyby				CAS DIONE Flyby				CAS DIONE Flyby				CAS ENCELADUS Flyby				CAS ENCELADUS Flyby																																
	MMS Phase 1 Maneuver				ROSE Comet				MMS Phase 1 Maneuver				MMS Phase 1 Maneuver				MMS Phase 1 Maneuver				MMS Phase 1 Maneuver																																
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Key Project Events Legend: Level 1				Key Project Events Legend: Level 2				Key Project Events Legend: Level 3				Key Project Events Legend: All Others				Key Project Events Legend: All Others				Key Project Events Legend: All Others																																	
<b>GDSCC</b>	D26 Install 80kW				D26 Install 80kW				D26 Install 80kW				D26 Install 80kW				D26 Test 80kW				D26 Test 80kW				D26 80kW DDR																												
	D25 AZ Track Replacement - Proposed				D25 AZ Track Replacement - Proposed				D25 AZ Track Replacement - Proposed				D25 AZ Track Replacement - Proposed				D25 AZ Track Replacement - Proposed				D25 AZ Track Replacement - Proposed																																
<b>CDSCC</b>	D35 80kW Arrives to DLF				D35 80kW Arrives to DLF				D35 80kW Arrives to DLF				D35 80kW Arrives to DLF				D35 80kW Arrives to DLF				D35 80kW Arrives to DLF				D35 80kW Arrives to DLF																												
	D35 80kW Onsite				D35 80kW Onsite				D35 80kW Onsite				D35 80kW Onsite				D35 80kW Onsite				D35 80kW Onsite				D35 80kW Onsite																												
<b>MDSCC</b>																																																					
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: September 29, 2011



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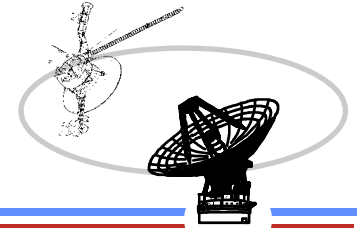
## DSN Downtime 2015

2015							
Site	Details	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
DSS 25	AZ Track Replacement - Proposed	03/31/2015 00:00	06/07/2015 00:00	68	14 - 23	90	158



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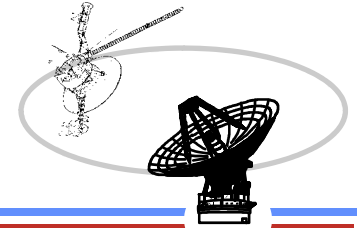
## Antenna Downtime Status and Forecast

The following are downtimes for 2015 – 2016

- ❑ AZ Track Replacement is requested for DSS-25 and 55
  - ❑ DSS-25 is proposed for March 31 – June 7, 2015, weeks 14 – 23
  - ❑ 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



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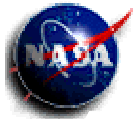
**- 2016 -**

	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
2016 Key Project Events	ExoMars		NHPC Solar Conjunction				NHPC Pluto Science PB				NHPC Kuiper Belt Approach				MMS Phase 1 Maneuver				MMS Phase 2a1				MMS Phase 2a2				MMS Phase 2b Maneuver				ORX Launch																					
	JUNO Approach				JUNO TCM				JUNO Approach				JUNO TCM				JUNO Capture Orbit				JUNO Orbit Ops				JUNO PRM				JUNO Gravity Sci																							
	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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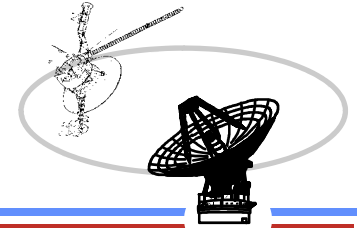
Key Project Events Legend: ■ Level 1 ■ Level 2 ■ Level 3 ■ All Others

GDSCC																																																				
CDSCC	D35 Install 80kW																										D35 80kW Test																									
																																							D35 DDR													
MDSCC							D55 AZ Track Replacement - Proposed																						D55 80kW on site																							
							D55 80 kW Facility Prep NIB																																													
							D55 RF Reconfiguration Prep - 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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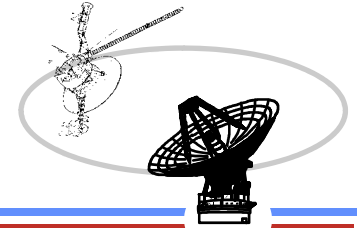
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## DSN Downtime 2016

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



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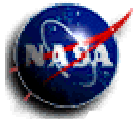


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**- 2017 -**

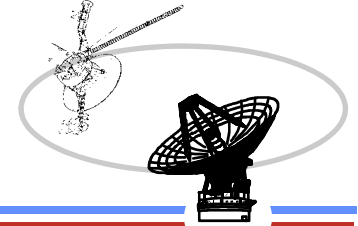
	January				February				March				April				May				June				July				August				September				October				November				December																																						
Weeks	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52																															
2017 Key Project Events					MMS Disposal MMS Phase 2b Maneuver																																																																														
	JUNO Orbit Ops/Gravity Sci																																								JUNO Deorbit																																										
CAS TITAN Flyby																																																																																			
Key Project Events Legend: <span style="color: red;">■</span> Level 1 <span style="color: yellow;">■</span> Level 2 <span style="color: orange;">■</span> Level 3 <span style="color: grey;">■</span> All Others																																																																																			
GDSCC																																																																																			
CDSCC																																																																																			
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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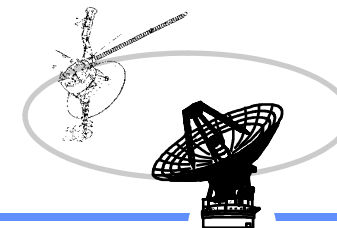


## Future assets new/upgrades

- ❑ 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



# Interplanetary Network Directorate (IND) Deep Space Network (DSN) Resource Allocation Planning Service



## 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	✓	✓	✓	05/17/11	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: 8/4/2011

✓ ✓ ✓ = Capability Recently Exists

✓ = Capability Exists

\* = To Be Commissioned