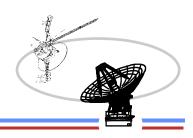
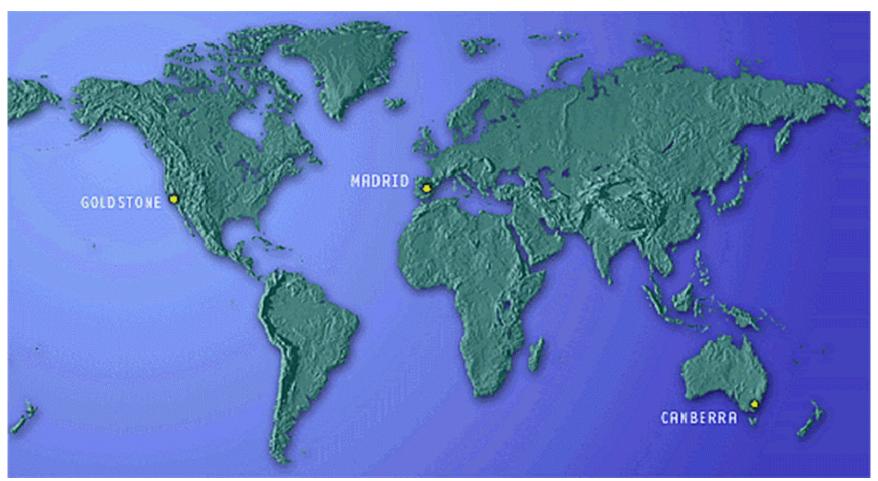


## Resource Allocation Planning Service

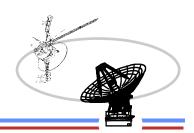


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## **DSN Antenna Downtime Status and Forecast**



## Resource Allocation Planning Service

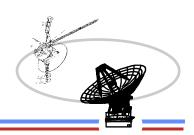


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	Januar	v	Febru	iarv	March	April	May	June	July	August	September	October	November	December
Weeks	1 2 3	_						22 23 24 25 26	27 28 29 30	31 32 33 34				48 49 50 51 52
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	SDU	Te	mpel 🗗	10				THB LOI			P DAWN Ves	ta Arrival	WIND TCM	GRAIL-A/B LOI
	SDU App	roa	ch	SD	U Post Enc Ima	ging DAWI	Vesta Appr	oach	Vesta	Orbit Survey	H	AMO	DAWN Vesta	Orbit LAMO
					N Forced Coast		R Earth Eclip		R Dark Curre		NO TCM CHD			
			rk Curre					unar Eclipse Ch						Leonid
	KEPLN	lont					hly Sci. KI	PLMonthly Sci.	KEPLMont	hly Sci. K	EPL Qtrly. Roll			Monthly Sci.
2011			KEPI	Mont	hly Sci. KEPL			X Drag Pass KE						KEPL Qtrly. Roll
Key					STF HD1490						rag Pass JUNO	) TCM	JUNO HV C	
Project	SOHO			<u> </u>	SOHO Keyho	ole MNVR CL			SOHO Keyh	ole	SOHO Keyho		GSSR Ast 2	
Events			INVR I		TCM SOHO	Keyhole		Ull Post Eclipse			HMP SOHO K			Ast 2003 AK18
	MSG	RΙ	CM/OC	M	NHPC MNVR	OCM GSSR		MSGR TCM	OCM WINL	OT MSC	FR TCM/0CM	GSSR		NHPC MNVR
	NHPC MI	D /	Ĺ			Checkout					Ast 2003 QC10 ELADUS Flyby			SGR TCM/OCM
	ROSE Re			Mana		ost Eclipse	NHF	ROSE DSHM E			R1 MAGROL			NHPC Solar Conj
	KUSL KE	mue	22VOUS 1	VIAITE	ITAN Flyby C		yby VGP2	MAGROL CAS	TITAN Flyby	VGP	ASCAL CAS	ENCEL AD	US Flyby GS	SR Ast 2000 YA
	CASE	) HE	A Flyb				TITAN Flyby	CLUII Pre/Po		VGR1 DT	R PB CAS EN	FLADUS E	IVAV CASTI	TAN Flyhy
	0/101		l (1 Tylo)	y	CLUII Pre/Po:			ost Eclipse ST			AN Flyby	GSSR E	uropa	VGR2 MAGROL
					020111101101		0201111011	D25 Prelimina		view Test - fo	or D35			10112 1111
	D15 P	intl	le Bear	ing					,g	015 Uplink/Tr	ansmitter Calik	ration - Pro	pposed	
					ce -NIB	D24 Ante	enna Contro	ler Replaceme			enna Controlle			ed
GDSCC							rap Protecti					Cable Wra	p Protection	-NIB
			<b>DP</b> S P	ower	Upgrade		-	D2	7 Antenna C	ontroller Rep	lacement		1	
			DP S		ver Upgrade	NMC Inst	tall			nd Install -NIE				
					S Power Upgra			Ca	ble Wrap Pr	otection -NIE	}			
					DPS Power Up									
				_	D45 Uplink/Tr	ansmitter Ca	alibrati <u>on</u>		D4	3 AZ Box Re	olacement			
		L	)45 Hea		hanger Level	Switch Repla								
cnccc	_		CL D-		NMC Install	 	NMC Ins		S Maintena					
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							D54 S	ub Reflector Po	sition Trans	ducer Repla	cement			
						D63 DLM								
						D63 GROUT	ING -NIB			Transmitter (				
										Replacemen				
			<u> </u>		<u> </u>		<u> </u>	<u> </u>		hiller Replac		<u> </u>	<del> </del>	
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Revised:	April 1, 201	1												

- 2011 -

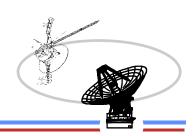




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		2011					
Site	Details	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
DSS 63	Depot Level Maintenance	04/04/2011 00:00	05/08/2011 23:10	35	14 - 18	94	128
DSS 63	Grouting - NIB	04/04/2011 00:00	05/08/2011 23:10	35	14 - 18	94	128
DSS 24	Cable Wrap Protection - NIB	04/11/2011 00:00	04/14/2011 00:00	3	15 - 15	101	104
DSS 24	Antenna Controller Replacement	04/11/2011 00:00	05/15/2011 00:00	34	15 - 19	101	135
SPC 10	NMC Installation	04/15/2011 03:00	04/15/2011 07:00	0	15 - 15	105	105
SPC 40	NMC Installation	05/15/2011 08:55	05/15/2011 11:30	0	19 - 19	135	135
DSS 45	Uplink/Transmitter Cal	05/16/2011 03:05	05/17/2011 15:05	2	20 - 20	136	137
DSS 54	Sub Reflector Position Transducer Replacement	05/17/2011 00:00	05/19/2011 00:00	3	20 - 20	137	139
DSS 45	Heat Exchange Level Switch Replacement	05/17/2011 15:05	05/19/2011 15:05	2	20 - 20	137	139
DSS 34	Sub Reflector Position Transducer Replacement	05/18/2011 20:50	05/19/2011 03:05	0	20 - 20	138	139
DSS 34	Sub Reflector Position Transducer Replacement	05/19/2011 19:30	05/20/2011 04:30	0	20 - 20	139	140
DSS 34	Cable Wrap Protection - NIB	05/23/2011 00:00	05/26/2011 00:00	3	21 - 21	143	146
DSS 34	Antenna Controller Replacement	05/23/2011 00:00	06/20/2011 17:55	29	21 - 25	143	171
DSS 34	Heat Exchange Level Switch Replacement - NIB	05/23/2011 14:00	06/19/2011 02:00	26	21 - 24	143	170
SPC 60	NMC Installation	05/28/2011 16:50	05/28/2011 20:50	0	21 - 21	148	148
DSS 25	Preliminary Design Review Test	05/31/2011 15:45	06/01/2011 01:45	0	22 - 22	151	152
DSS 25	Preliminary Design Review Test	06/01/2011 16:00	06/02/2011 01:00	0	22 - 22	152	153
DSS 25	Preliminary Design Review Test	06/02/2011 15:00	06/03/2011 01:00	0	22 - 22	153	154
DSS 25	Preliminary Design Review Test	06/03/2011 12:15	06/04/2011 22:15	1	22 - 22	154	155



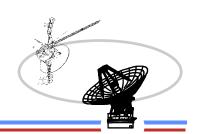


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### **DSN Downtime 2011 (Continued)**

		2011					
DSS 55	Sub Reflector Position Transducer Replacement	06/07/2011 00:00	06/09/2011 00:00	3	23 - 23	158	160
SPC 40	NMC Installation	06/07/2011 02:00	06/07/2011 06:00	0	23 - 23	158	158
DSS 27	Cable Wrap Protection - NIB	06/27/2011 19:15	07/01/2011 19:15	4	26 - 26	178	182
DSS 27	250 Watt S-Band Install - NIB	06/27/2011 19:15	07/24/2011 19:15	27	26 - 29	178	205
DSS 27	Antenna Controller Replacement	06/27/2011 19:15	07/24/2011 19:15	27	26 - 29	178	205
SPC 40	DPS Maintenance	06/30/2011 01:00	06/30/2011 10:50	0	26 - 26	181	181
DSS 65	Uplink/Transmitter Cal	07/04/2011 03:25	07/05/2011 15:25	2	27 - 27	185	186
DSS 65	Chiller Replacement	07/06/2011 03:15	07/06/2011 15:10	0	27 - 27	187	187
DSS 65	Chiller Replacement	07/07/2011 05:00	07/07/2011 17:00	0	27 - 27	188	188
DSS 65	Chiller Replacement	07/18/2011 05:00	07/18/2011 17:00	0	29 - 29	199	199
DSS 65	Chiller Replacement	07/19/2011 05:00	07/19/2011 17:00	0	29 - 29	200	200
SPC 40	DPS Maintenance	07/25/2011 20:00	07/26/2011 04:00	0	30 - 30	206	207
DSS 43	AZ Box Replacement	07/25/2011 22:00	07/28/2011 12:00	3	30 - 30	206	209
SPC 40	DPS Maintenance	08/25/2011 01:00	08/25/2011 13:00	0	34 - 34	237	237
DSS 25	Cable Wrap Protection - NIB - Proposed	10/03/2011 00:00	10/06/2011 00:00	3	40 - 40	276	279
DSS 25	Antenna Controller Replacement - Proposed	10/03/2011 00:00	11/06/2011 00:00	34	40 - 44	276	310
SPC 40	DPS Maintenance	10/13/2011 20:00	10/14/2011 08:00	0	41 - 41	286	287
SPC 40	DPS Maintenance	10/24/2011 20:00	10/25/2011 08:00	0	43 - 43	297	298
DSS 15	Uplink/Transmitter Cal - Proposed	11/07/2011 15:00	11/09/2011 07:00	2	45 - 45	311	313
SPC 40	DPS Maintenance	11/10/2011 20:00	11/11/2011 08:00	0	45 - 45	314	315





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### **Antenna Downtime Status and Forecast**

### The following are downtimes for 2011

□ DSS-15 downtime for Pintle Bearing was completed March 20 in week 11
 □ Elevation Gearbox Replacement was completed
 □ ZDD was performed prior to return to service
 □ Goldstone 12-hour Complex Wide DPS Power Upgrade Downtime
 □ Additional downtimes are being explored for the April – June timeframe
 □ NMC 2 – 4 hour Complex Wide Downtime
 □ Additional time has been scheduled at all complexes
 □ Goldstone NMC Task
 □ Scheduled for April 15 week 15, DOY 105/0300 – 0700
 □ Canberra NMC Task
 □ Scheduled for May 15, week19, DOY 135/0855 – 1130
 □ Scheduled for June 07, week 23, DOY 158/0200 – 0600
 □ Madrid NMC Task
 □ Scheduled for May 28 week 21, DOY 148/1650 – 2050



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### Antenna Downtime Status and Forecast

### Downtimes for 2011 (continued)

- □ DSS-63 downtime for Depot Level Maintenance is scheduled for April 4 May 8, weeks 14 18

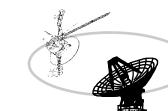
   □ Grouting is scheduled NIB

   □ HEF Uplink and Transmitter Calibration downtime is requested on each antenna for 36 hours in 2011

   □ DSS-45 is scheduled for May 16/17 DOYs 136/137, week 20. Maintenance will be NIB for 8 hours of the downtime
   □ Downtime is scheduled for Heat Exchanger Level Switch Replacement DOYs 137 139 in week 20
   □ DSS-65 is Scheduled for week 27 July 4/5, DOYs 185/186
   □ DSS-15 is proposed for week 45

   □ DSS-65 Chiller replacement is scheduled for July, four 12-hour blocks are requested
   □ Two blocks of consecutive days are scheduled for week 27 DOYs 187 and 188
- □ Two blocks of consecutive days are requested for week 29 DOYs 199 and 200
- □ Canberra request for six 8 12 hour blocks of Complex Wide DSCC Power Substation (DPS) Maintenance Downtime for April November
  - $\square$  Day shift (2000 0800) is requested but not required in weeks 26, 30, 34, 41, 43 and 45
  - □ Weeks 25 and 44 were removed due to conflicts, week 34 was added
  - □ Week 26 is scheduled, DOY 181/0100-1050
  - ☐ There is a possibility that downtimes in weeks 41, 43 and 45 may be affected by GRAIL if the launch slips into week 40.





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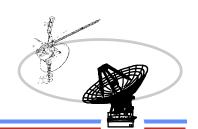
### **Antenna Downtime Status and Forecast**

### Downtimes for 2011 (continued)

BWG Antenna Controller Replacement is requested starting in April
□ DSS-24 is scheduled for April 11 – May 15, weeks 15 – 19
□ DSS-34 is scheduled for May 23 – June 19, weeks 21 – 25,
Additional time was requested, 17 hours and 55 minutes was added which has extended this downtime into week 25
<ul> <li>Heat Exchanger Level Switch Replacement is scheduled NIB ending in week</li> <li>24</li> </ul>
□ DSS-27 is scheduled for June 27 – July 24, weeks 26 – 29
250 Watt S-Band Installation is scheduled NIB
<ul> <li>Downtime will begin after THB LOI support on DOY 178. Additional time has been requested to mitigate the loss of time in week 26</li> </ul>
□ DSS-25 is proposed for October 3 – November 6, weeks 40 – 44
Note: Cable Wrap Protection for each BWG ACR requires 3 days and will be NIB
An analysis has been completed and submitted for this downtime
Additional Antenna Controller Replacements are proposed for 2012

- □ Sub Reflector Position Transducer Replacement is scheduled for May and June
  - DSS 34 is Scheduled for May 18 and 19, DOY138/2050-0305 and DOY139/1930-0430, week 20
  - □ DSS 54 is Scheduled for May 17 19, DOYs 137/0000 139/0000, week 20
  - □ DSS 55 is Scheduled for June 7 9, DOYs 158/0000 160/0000, week 23



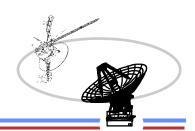


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### Downtimes for 2011 (continued)

- □ DSS-25 downtime is scheduled for DSS-35 design review baseline testing no later than June 1
  - □ Requesting four 10 hour blocks of contiguous testing
  - □ DSS-25 downtime is scheduled May 31 June 3 in week 22
    - □ DOY 151/1545-0145
    - □ DOY 152/1600-0100 (Only 9 hours were available for this DOY)
    - □ DOY 153/1500-0100
    - □ DOY 154/1215-2215
  - ☐ Tracking will be available after testing is complete each day
- □ DSS-43 downtime is requesting 72 hours for Azimuth Databox Replacement
  - ☐ This has been scheduled for July 25 29, DOY 206/2200 209/1200 in week 30

## Resource Allocation Planning Service

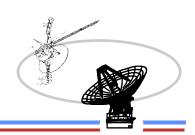


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	January	February	March	April	May	June	July	August	September	October	November	December
Weeks	1 2 3 4	5 6 7 8	9 10 11 12 13	14 15 16 17	18 19 20 21 22		27 28 29 30	31 32 33 34 35	36 37 38 39	40 41 42 43	44 45 46 47 48	49 50 51 52
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	GRAIL A/B I	_OI/OPR/TSF	MSGR TCM/0C	 	MSL T		ENG C/O 2 SL Approach	M\$L EDL		MSL Surface	000	
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2012			UNO D <mark>SM</mark> s DDC		DTR PB	JUNO DS		JUNO DSMs/E	DORs/TCMs	JUNO	Per Maint VO	R2 MAGROL
Key Project	VEX Drag Pa	ark Current	SR Mars CH	IDR Earth Ec	ark Current	CCCD A	st 2005 G021	ark Current	Earth Eclipse	CM CHDR Da	CHDR Le	 
Events	VEX DIAG P	455   655	SK IVIAIS   CF	IDR Earth EC	iipse		Relay	CHUR	Cartii Eciipse	3	CHUR LE	eonia
Liona	SOHO Keyh	ole		SOHO Keyh	ole VGR2 MA		rtolay	SOHO Keyho	le		R2 DTR PB S	OHO Keyhole
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			ROL VGR1 M			Checkout	VEX Drag	Pass VO	R2 MAGROL		VEX Drag P	ass
	NHPC Solar	Conj VGR2	MAGROL  Ast 2000 ET70		OL NHPC MN	IVRI NE		VGR1 MAGRO			AL NHPC M	
	NHPC M	NVR VGR	2 ASCAL CA	S ENCELAD	US Flyby CAS	TITAN Flyhy	GSSF	AST 2002 AIVIS	VGR2 AS		Checkout NHF GSSR Ast 417	
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						ING - Propo						
					D63 70M Tu	ine-up/Calib						
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								D04 Antenna	Controller F		t - Proposed ible Wrap Prote	ection NIR
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:	April 1, 2011											

- 2012 -

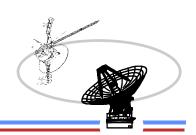




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		2012					
Site	Details	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
DSS 26	Cable Wrap Protection - NIB	03/12/2012 00:00	03/15/2012 00:00	3	11 - 11	72	75
DSS 26	Antenna Controller Replacement - Proposed	03/12/2012 00:00	04/08/2012 00:00	27	11 - 11	72	99
DSS 63	70m Tune-up/Calibration - NIB	05/07/2012 00:00	05/27/2012 00:00	20	19 - 21	128	148
DSS 63	Grouting - Proposed	05/07/2012 00:00	05/27/2012 00:00	20	19 - 21	128	148
DSS 14	70m Tune-up/Calibration - Proposed	05/28/2012 00:00	05/31/2012 00:00	3	22 - 22	149	152
DSS 25	Cable Wrap Protection - NIB	06/11/2012 00:00	06/14/2012 00:00	3	24 - 24	163	166
DSS 43	70m Tune-up/Calibration - NIB	06/11/2012 00:00	06/26/2012 00:00	15	24 - 26	163	178
DSS 43	Grouting - Proposed	06/11/2012 00:00	06/26/2012 00:00	15	24 - 26	163	178
DSS 25	Antenna Controller Replacement - Back-up Plan Proposed	06/11/2012 00:00	07/15/2012 00:00	34	24 - 28	163	197
DSS 54	AZ Track Replacement - Proposed	09/10/2012 00:00	10/28/2012 00:00	48	37 - 43	254	302
DSS 54	Cable Wrap Protection - NIB	10/22/2012 00:00	10/25/2012 00:00	3	43 - 43	296	299
DSS 54	Antenna Controller Replacement - Proposed	10/22/2012 00:00	11/25/2012 00:00	34	43 - 47	296	330





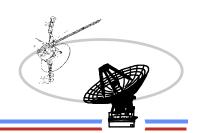
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### Antenna Downtime Status and Forecast

### The following are downtimes for 2012 – 2014

Ц	BWG Antenna Controller Replacement for 2012 – 2013
	□ DSS-26 is proposed for March 12 – April 8, weeks 11 – 14
	□ DSS-25 is proposed for June 11 – July 15, weeks 24 – 28
	This is a backup for 2011 based on GRAIL launch schedule
	□ DSS-54 is proposed for October 22 – November 25, weeks 43 – 47
	□ DSS-55 is proposed for January 14 – February 17, 2013, weeks 03 – 07
	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
	□ 2012 is proposed for May 7 – 27, weeks 19 – 21
	<ul> <li>Tune-up/Calibration is requested NIB to grouting</li> </ul>
	□ 2013 is proposed for September 2 – 17, weeks 36 – 38
	Note: Stand alone Grouting requires 15 days
	DSS-14 downtime for Tune-up/Calibration is requested for May 28 – 31, 2012, week 22
	DSS-43 downtime for Grouting is requested for 2012
	□ Tune-up/Calibration is requested NIB to grouting
	☐ This is proposed for June 11 – June 25, weeks 24 – 26
	···





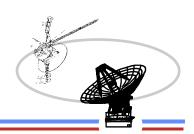
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### Antenna Downtime Status and Forecast

The following are downtimes for 2012 – 2014 (continued)

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
80 kW Facility Preparation will be scheduled NIB March 31 – May 18, weeks14 – 20
DSS-43 HBA Upgrade Downtime is proposed for 2013
□ Proposed for January 7 – August 11, weeks 02 – 32
ZDD will be scheduled prior to return to service
DSS-63 HBA Upgrade Downtime is proposed for 2014
<ul> <li>□ Proposed for March 10 – October 5, weeks 11– 40</li> <li>□ ZDD will be scheduled prior to return to service</li> </ul>

## Resource Allocation Planning Service

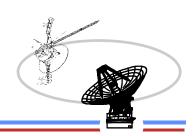


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		January		eh	ruary	A	larch	,	٨	pril		Ma	W	Ė	June			July		ugust	So	ptem	her	0,	ctober		Novemb	her	Decemi	ner
Weeks		2 3 4 5	6	7	2 0				14 15	16 1	7 18	19 20	21 22	2 2			27	28 29 30	31 32	33 34 35	36	37 39	30	40 41	42 43 4	44 4	5 46 47	48 4	9 50 51	52
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Revised:	Apri	11, 2011																												

- 2013 -

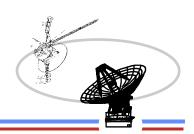




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		2013					
Site	Details	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
DSS 43	HBA Upgrades and Life Extension - Proposed	01/07/2013 00:00	08/11/2013 00:00	216	02 - 32	7	223
DSS 55	Cable Wrap Protection - NIB	01/14/2013 00:00	01/17/2013 00:00	3	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
DSS 24	AZ Track Replacement - Proposed	04/22/2013 00:00	06/30/2013 00:00	69	17 - 26	112	181
DSS 63	Grouting - Proposed	09/02/2013 00:00	09/17/2013 00:00	15	36 - 38	245	260

## Resource Allocation Planning Service

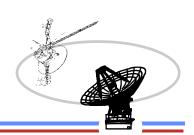


**Jet Propulsion Laboratory California Institute of Technology** 

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- 2014 -





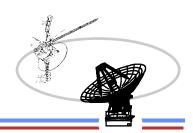
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		2014					
Site	Details	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
DSS 63	HBA Upgrades and Life Extension - Proposed	03/10/2014 00:00	10/05/2014 00:00	209	11 - 40	69	278
DSS 26	80 kW Facility Prep - NIB	03/31/2014 00:00	05/18/2014 00:00	48	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

## (NEA

## Interplanetary Network Directorate (IND) Deep Space Network (DSN)

## Resource Allocation Planning Service

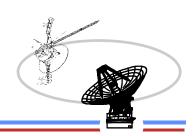


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Revised:	Ap	ril 1, 2	011																					

- 2015 -

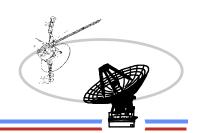




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		2015					
Site	Details	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
SS 25	AZ Track Replacement - Proposed	03/31/2015 00:00	06/07/2015 00:00	68	14 - 23	90	158





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### Antenna Downtime Status and Forecast

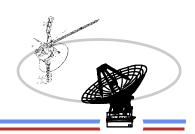
The following are downtimes for 2015 – 2016

- ☐ AZ Track Replacement is requested for DSS-25 and 55
  - $\square$  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

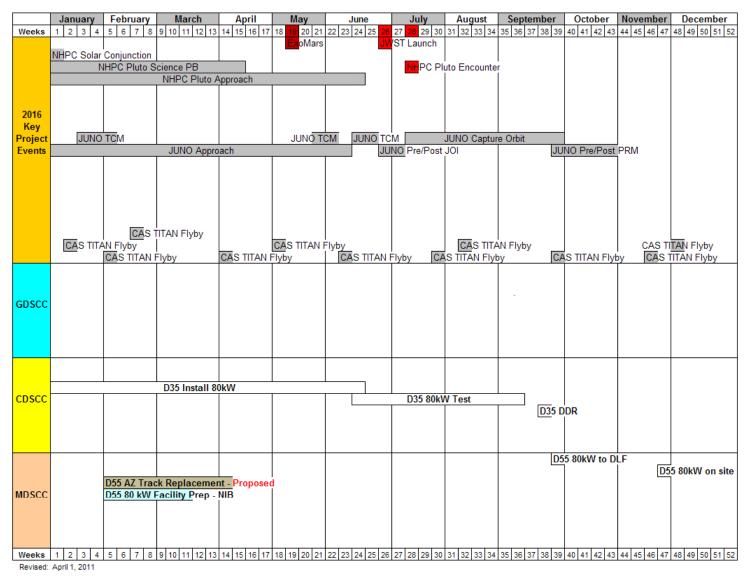
- 2016 -

## Interplanetary Network Directorate (IND) Deep Space Network (DSN)

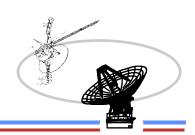
### Resource Allocation Planning Service



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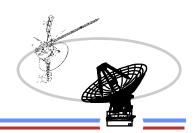
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	2016												
Site	Details	Start	End	Duration (Days)	Weeks	Start DOY	End DOY						
DSS 55	80 kW Facility Prep - NIB	02/01/2016 00:00	03/20/2016 00:00	48	05 - 11	32	80						
DSS 55	AZ Track Replacement - Proposed	02/01/2016 00:00	04/10/2016 00:00	69	05 - 14	32	101						

- 2017 -

## Interplanetary Network Directorate (IND) Deep Space Network (DSN)

## Resource Allocation Planning Service

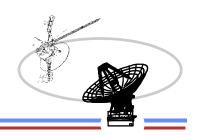


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	January	February	March	April	May	June	July	August	September	October	November	December
Weeks	1 2 3 4	5 6 7 8	9 10 11 12 13	14 15 16 17	18 19 20 21	<b>June</b> 22 23 24 25 26	27 28 29 30	31 32 33 34 35	36 37 38 39	40 41 42 43	November 44 45 46 47 48	49 50 51 52
2017 Key Project Events										JUNO Deorb		
				CAST	ITAN Flyby							
GDSCC												
CDSCC												
MDSCC			D55 Instal	I 80kW			D55 Test	80kW	D5	5 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

Revised: April 1, 2011

### Resource Allocation Planning Service

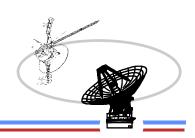


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### Future assets new/upgrades

DSS 	S-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	S-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	6-35 80kW Installation 2016 – A placeholder has been set awaiting dates
DSS dates	S-36 Installation and Operational 2016 – A placeholder has been set awaiting
DSS	S-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

			S-Band		Х-В	and	Ka-E	Band	Ka 2	X-Band	
Complex	Station	Subnet	Down	Up	Down	Up	Down	Up	Na Z	ACQ AID	80kW
10	DSS-27	34HSB	>	<b>~</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10	DSS-24	34B1	<b>&gt;</b>	<b>✓</b>	<b>~</b>	<b>~</b>	N/A	N/A	<b>&gt;</b>	<b>~</b>	N/A
40	DSS-34	34B1	<b>~</b>	<b>~</b>	<b>✓</b>	~	<b>~</b>	N/A	<b>~</b>	<b>~</b>	N/A
60	DSS-54	34B1	~	<b>✓</b>	~	~	<b>✓</b>	N/A	<b>~</b>	<b>✓</b>	N/A
10	DSS-25	34B2	N/A	N/A	~	~	<b>→</b>	12/12/10	N/A	N/A	N/A
10	DSS-26	34B2	N/A	N/A	~	~	<b>→</b>	N/A	N/A	N/A	10/01/15
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	~	~	<b>→</b>	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	>	<b>✓</b>	~	~	N/A	N/A	N/A	N/A	N/A
60	DSS-65	34HEF	>	<b>✓</b>	~	~	N/A	N/A	N/A	N/A	N/A
10	DSS-14	70M	>	<b>~</b>	<b>✓</b>	<b>~</b>	N/A	N/A	N/A	N/A	N/A
40	DSS-43	70M	>	<b>~</b>	<b>✓</b>	~	N/A	N/A	N/A	N/A	N/A
60	DSS-63	70M	>	<b>~</b>	<b>~</b>	<b>&gt;</b>	N/A	N/A	N/A	N/A	N/A

N/A = Capability Not Planned

xx/xx/xx = Capability Date Recently Changed

As of: 6/28/2010

**y** = Capability Exists

\* = To Be Commissioned