



Resource Allocation Review



Resource Contention

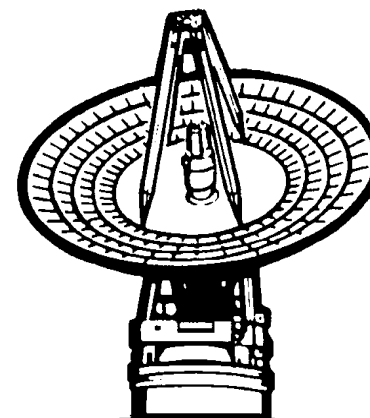
Version 2.1

2004 – 2013

Napoleon Lacey



February 11, 2003

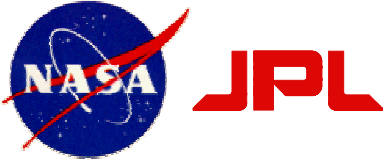


FINAL



Resource Allocation Review Agenda

- ◆ Loading Study
- ◆ Periods of Contention
- ◆ Events, Recommendations and Analysis



Resource Allocation Review Loading Study

- ◆ **Project Changes**
- ◆ **New and Deleted Projects**
- ◆ **Changes in DSN Resource Support Request**
- ◆ **DSN User / Mission Planning Set**
 - Ongoing Projects
 - Advanced Planning Projects
- ◆ **Major DSN Downtimes by Date**
- ◆ **IND Resource Implementation Planning Matrix**



Resource Allocation Review Loading Study

Project Changes Since August 2002 RARB

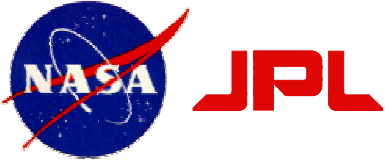
- ◆ **Advanced Composition Explorer**
 - EOEM changed from 01/31/2005 to 09/30/2007

- ◆ **Cluster 2**
 - EOEM changed from 09/19/2005 to 09/30/2007

- ◆ **GOES-N**
 - launch changed from 12/07/2003 to not earlier than 04/01/2004

- ◆ **IMAGE**
 - EOEM changed from 05/30/2004 to 09/30/2007

- ◆ **ISTP - Geotail**
 - EOEM changed from 09/30/2005 to 09/30/2007



Resource Allocation Review Loading Study

Project Changes Since August 2002 RARB

- ◆ **ISTP - Polar**
 - EOEM changed from 09/30/2005 to 09/30/2007

- ◆ **ISTP - SOHO**
 - EOEM changed from 12/30/2005 to 09/30/2007

- ◆ **ISTP - Wind**
 - EOEM changed from 09/30/2005 to 09/30/2007

- ◆ **Kepler**
 - Launch date changed from 10/15/2006 to 10/01/2007
 - EOPM changed from 10/14/2010 to 07/31/2011



Resource Allocation Review Loading Study

Project Changes Since August 2002 RARB

◆ Lunar - A

- Mission is approved and status changed to Ongoing
- Launch changed from 08/09/2003 to 08/14/2004
- EOPM changed from 07/18/2004 to 04/11/2005

◆ Mars CNES MSR Orbiter

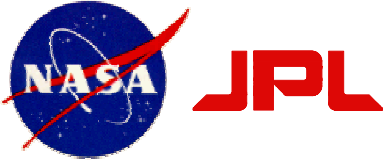
- Launch changed from 10/30/2011 to 11/28/2013
- EOPM changed from 07/22/2014 to 08/21/2016

◆ Mars Global Surveyor

- EOEM changed from 06/01/2004 to 01/03/2008

◆ Mars Odyssey 2001

- EOPM changed from 08/01/2004 to 08/24/2004
- EOEM changed from 09/19/2007 to 05/29/2008



Resource Allocation Review Loading Study

Project Changes Since August 2002 RARB

◆ Mars Reconnaissance Orbiter

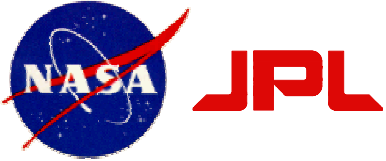
- Mission is approved and status changed to Ongoing
- Launch changed from 08/08/2005 to 08/10/2005
- EOPM changed from 11/26/2008 to 12/31/2010
- EOEM changed from 12/31/2010 to 12/13/2015

◆ Mars Science Laboratory

- Mission name changed from Mars Smart Lander 2009

◆ MUSES-C

- Launch changed from 11/20/2002 to 05/05/2003



Resource Allocation Review Loading Study

Project Changes Since August 2002 RARB

◆ Pioneer 10 ACS

- EOEM changed from 09/30/2008 to 10/01/2004

◆ SELENE

- Project acronym changed from SELN to SELE
- Launch date changed from 07/04/2005 to 07/23/2005

◆ Space Infrared Telescope

- EOEM changed from 09/30/2005 to 09/30/2007

◆ Space Technology 5

- Launch date changed from 07/15/2004 to 11/09/2004
- EOPM changed from 10/15/2004 to 02/27/2005



Resource Allocation Review Loading Study

Project Changes Since August 2002 RARB

- ◆ **Stereo Ahead**
 - Mission was approved and status changed to Ongoing

- ◆ **Stereo Behind**
 - Mission was approved and status changed to Ongoing

- ◆ **Voyager 1**
 - EOEM changed from 12/31/2005 to 09/30/2007

- ◆ **Voyager 2**
 - EOEM changed from 12/31/2005 to 09/30/2007



Resource Allocation Review Loading Study

New Projects Since August 2002 RARB

Project	Acronym	Launch or Start	EOPM	EOEM
Mars Telesat 2009	M09T	10/04/09	08/29/20	TBD
New Horizons	NHPC	01/10/06	03/18/17	TBD
RadioAstron	RADA	03/15/05	06/15/10	TBD



Resource Allocation Review Loading Study

Deleted Projects Since August 2002 RARB

Project	Acronym	Launch or Start	EOPM	EOEM
Comet Nucleus Tour (CONTOUR)	CNTR	07/01/02	09/05/08	TBD
Mars ASI/NASA Marconi Telecommunications Orbiter	M07T	08/23/07	07/18/18	TBD
Mars ASI/NASA Science Orbiter 2009	M09O	10/04/09	08/29/12	TBD
Mars CNES Premier Orbiter 2007	M07P	09/11/07	08/11/08	08/12/10
Rosetta	ROSE	01/13/03	07/10/13	- - -
Solar Probe	SOLP	05/01/10	02/14/14	TBD



Resource Allocation Review Loading Study

Changes in DSN Resource Support Since August 2002 RARB

◆ Goldstone Solar System Radar

- Added Mercury requirements for Goldstone/GBT of three 1.5-hour supports in May - June of 2003.
- Added Mars requirements for Goldstone/GBT of four 1-hour supports in September 2003.
- Added Mercury requirements for Goldstone/Arecibo of six 1-hour supports in September 2003.
- Added Venus requirements for Goldstone/Arecibo of five 1-hour supports in week 37, September 2003.
- Added Venus requirements for Goldstone/GBT of two 1-hour supports per week in April - July of 2004.
- Added Mercury requirements for Goldstone/GBT and DSS-63/Arecibo of three 1.5-hour supports in March 2005.
- Added Mars requirements for DSS-63/Arecibo of ten 1-hour supports in September - November of 2005.



Resource Allocation Review Loading Study

Changes in DSN Resource Support Since August 2002 RARB

◆ Ground Based Radio Astronomy

- Changed DSS-63 Host Country quarterly 24-hour supports to weekly 8-hour supports.

◆ Mars Exploration Rover - A

- Landing site selection narrowed to 3 possibilities: Gusev, Isidis, and Meridiani. Directed to use Gusev site for analysis.

◆ Mars Exploration Rover - B

- Landing site selection narrowed to 3 possibilities: Elysium, Isidis, and Meridiani. Directed to use Meridiani site for analysis.

◆ Mars Odyssey 2001

- Changed extended mission activity from relay to mapping, using 70-meter resources vice 34-meter and pass duration increased 25% to 10 hours per pass.



Resource Allocation Review Loading Study

DSN User / Mission Planning Set - Ongoing / Approved Projects -

Project	Acronym	Launch or Start	EOPM	EOEM
DSN Antenna Calibration	DSN	---	---	---
DSS Maintenance	DSS	---	---	---
European VLBI Network	EVN	---	---	---
Ground Based Radio Astronomy	GBRA	---	---	---
Reference Frame Calibration	DSN	---	---	---
Space Geodesy	SGP	---	---	---
Pioneer 10 ACS	PN10	03/03/72	07/01/97	10/01/04
Voyager 2	VGR2	08/20/77	10/15/89	09/30/07
Voyager 1	VGR1	09/05/77	12/31/80	09/30/07
Goldstone Solar System Radar	GSSR	04/01/85	---	---
Galileo	GLLO	10/18/89	12/07/97	09/21/03
Ulysses	ULYS	10/06/90	09/11/95	09/30/04
ISTP - Geotail	GTL	07/24/92	07/24/95	09/30/07



Resource Allocation Review Loading Study

DSN User / Mission Planning Set (Continued) - Ongoing / Approved Projects -

Project	Acronym	Launch or Start	EOPM	EOEM
ISTP - Wind	WIND	11/01/94	11/01/97	<i>09/30/07</i>
ISTP - SOHO	SOHO	12/02/95	05/02/98	<i>09/30/07</i>
ISTP - Polar	POLR	02/22/96	08/23/97	<i>09/30/07</i>
Gravity Probe-B	GPB	06/01/96	01/01/05	TBD
Mars Global Surveyor	MGS	11/07/96	02/01/01	<i>01/03/08</i>
Advance Composition Explorer	ACE	08/25/97	02/01/01	<i>09/30/07</i>
Cassini	CAS	10/15/97	06/30/08	06/30/10
Nozomi (Planet-B)	NOZO	07/03/98	12/31/05	TBD
Stardust	SDU	02/07/99	01/14/06	---
Chandra X-ray Observatory	CHDR	07/23/99	07/24/09	07/24/14
Imager for Magnetopause-to-Aurora Global Exploration	IMAG	03/25/00	05/30/02	<i>09/30/07</i>
Cluster 2 - S/C #2 (Samba)	CLU2	07/16/00	02/15/03	<i>09/30/07</i>
Cluster 2 - S/C #3 (Rumba)	CLU3	07/16/00	02/15/03	<i>09/30/07</i>



Resource Allocation Review Loading Study

DSN User / Mission Planning Set (Continued) - Ongoing / Approved Projects -

Project	Acronym	Launch or Start	EOPM	EOEM
Cluster 2 - S/C #1 (Salsa)	CLU1	08/09/00	02/15/03	09/30/07
Cluster 2 - S/C #4 (Tango)	CLU4	08/09/00	02/15/03	09/30/07
2001 Mars Odyssey	M01O	04/07/01	08/24/04	05/29/08
Microwave Anisotropy Probe	MAP	06/30/01	10/01/03	10/01/06
Genesis	GNS	08/08/01	09/08/04	---
Mission Enhancement by Ground-based Astronomy	MEGA	02/01/02	12/31/03	---
International Gamma Ray Astrophysics Lab	INTG	10/17/02	12/18/04	12/18/07
Space Infrared Telescope Facility	STF	04/15/03	07/24/08	---
MUSES - C	MUSC	05/05/03	06/05/07	---
Mars Express Orbiter	MEX	05/23/03	02/11/06	08/03/08
Mars Exploration Rover - A	MERA	05/30/03	04/06/04	05/11/04
Mars Exploration Rover - B	MERB	06/25/03	04/27/04	06/15/04
Deep Impact	DIF	01/02/04	08/05/05	---



Resource Allocation Review Loading Study

DSN User / Mission Planning Set (Continued) - Ongoing / Approved Projects -

Project	Acronym	Launch or Start	EOPM	EOEM
Messenger	MSGR	03/10/04	04/06/10	---
<i>Lunar - A</i>	<i>LUNA</i>	<i>08/14/04</i>	<i>04/11/05</i>	<i>---</i>
Space Technology 5	ST5	<i>11/19/04</i>	02/27/05	TBD
<i>RadioAstron</i>	<i>RADA</i>	<i>03/15/05</i>	<i>06/15/10</i>	<i>TBD</i>
<i>Mars Reconnaissance Orbiter</i>	<i>MRO</i>	<i>08/10/05</i>	<i>12/31/10</i>	<i>12/31/15</i>
<i>Stereo Ahead</i>	<i>STA</i>	<i>11/15/05</i>	<i>02/18/08</i>	<i>---</i>
<i>Stereo Behind</i>	<i>STB</i>	<i>11/15/05</i>	<i>02/18/08</i>	<i>---</i>



Resource Allocation Review Loading Study

DSN User / Mission Planning Set (Continued) - Advanced Planning Projects -

Project	Acronym	Launch or Start	EOPM	EOEM
SELENE	<i>SELE</i>	<i>07/23/05</i>	09/30/06	---
<i>New Horizons</i>	<i>NHPC</i>	<i>01/10/06</i>	<i>03/18/17</i>	<i>TBD</i>
Dawn	DAWN	05/27/06	07/26/15	TBD
Mars Competed Scout 2007	M07S	09/04/07	08/19/08	TBD
Kepler	KPLR	<i>10/01/07</i>	<i>07/31/11</i>	TBD
<i>Mars Telesat 2009</i>	<i>M09T</i>	<i>10/04/09</i>	<i>08/29/20</i>	<i>TBD</i>
<i>Mars Science Laboratory 2009</i>	M09L	10/25/09	<i>03/04/12</i>	TBD
<i>Advanced Radio Interferometry between Space and Earth (ARISE)</i>	<i>ARSE</i>	<i>06/15/10</i>	<i>06/15/15</i>	---
VLBI Space Observatory Programme (VSOP-2)	VSP2	06/15/10	06/15/15	---
Mars CNES MSR Lander 2011	M11L	10/30/11	09/10/14	TBD
<i>Mars CNES MSR Orbiter 2013</i>	<i>M13O</i>	<i>11/28/13</i>	<i>08/21/16</i>	TBD



Resource Allocation Review

Loading Study

Major DSN Downtimes by Date

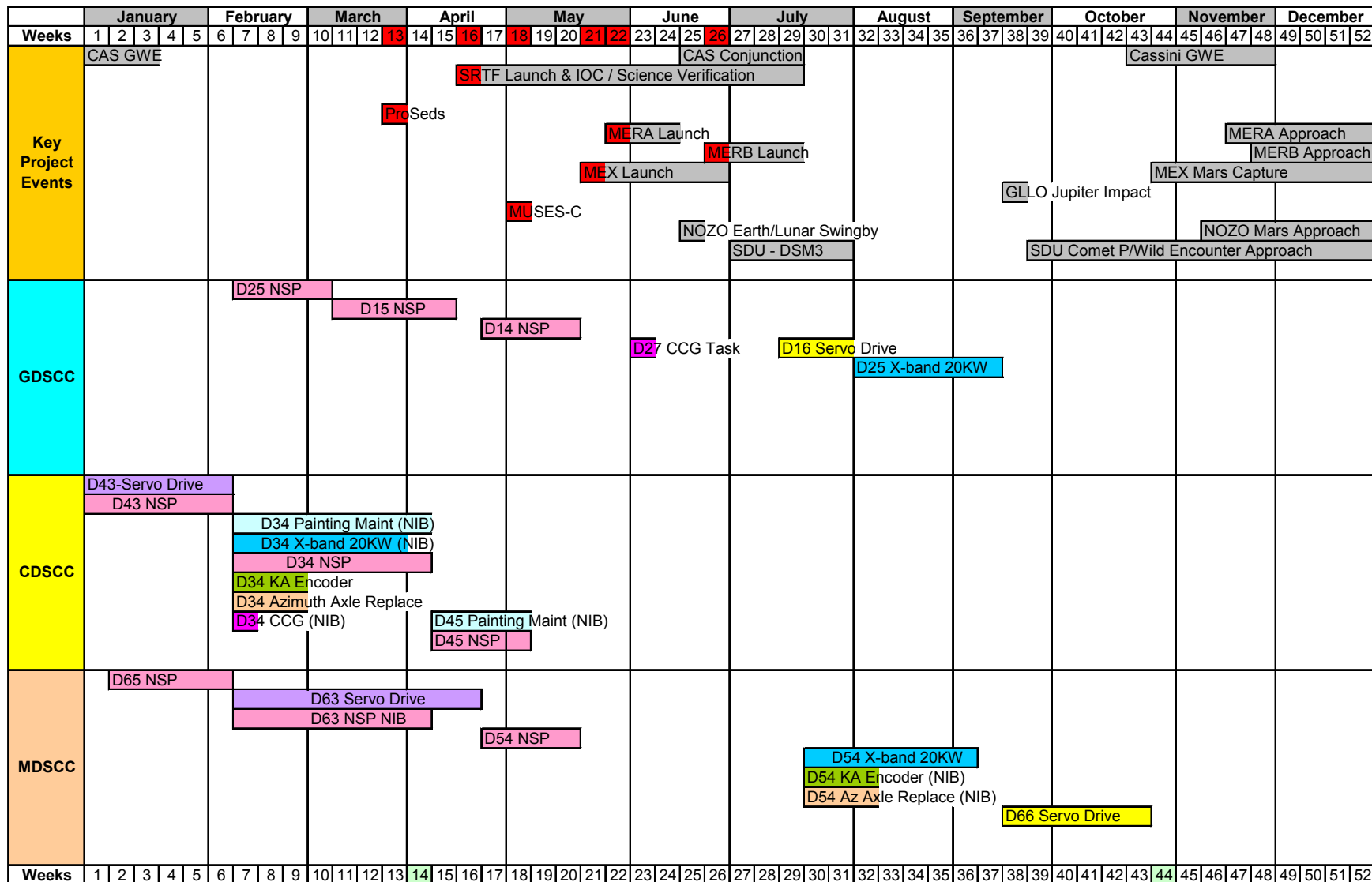
– 2003 –

Site	Description	Start	End	Duration (days)	Week(s)	Start DOY	End DOY
DSS-43	NIB - NSP Implementation	01/02/03	02/09/03	39	01 - 06	002	040
DSS-65	NSP Implementation	01/07/03	02/09/03	34	02 - 06	007	040
DSS-34	NIB - CCG Task	02/10/03	02/16/03	7	07	041	047
DSS-34	NIB - Ka-Band Encoder (Mechanical)	02/10/03	03/02/03	21	07 - 09	041	061
DSS-34	NIB - Azimuth Axle Replacement	02/10/03	03/02/03	21	07 - 09	041	061
DSS-25	NSP Implementation	02/10/03	03/09/03	28	07 - 10	041	068
DSS-63	NIB - NSP Implementation	02/10/03	04/06/03	56	07 - 14	041	096
DSS-34	NSP Implementation	02/10/03	04/06/03	56	07 - 14	041	096
DSS-34	NIB - 20kW X-Band TXR Installation	02/10/03	04/06/03	56	07 - 14	041	096
DSS-34	NIB - Painting Maintenance	02/10/03	04/06/03	56	07 - 14	041	096
DSS-63	70M Servo Drive Replacement	02/10/03	04/20/03	70	07 - 16	041	110
DSS-63	NIB - Bearing Regrout	02/10/03	04/20/03	70	07 - 16	041	110
DSS-15	NSP Implementation	03/10/03	04/09/03	31	11 - 15	069	099
DSS-45	NSP Implementation	04/07/03	05/02/03	26	15 - 18	097	122
DSS-45	NIB - Painting Maintenance	04/07/03	05/02/03	26	15 - 18	097	122
DSS-14	NSP Implementation	04/21/03	05/12/03	22	17 - 20	111	132
DSS-54	NSP Implementation	04/21/03	05/12/03	22	17 - 20	111	132
DSS-27	CCG Task	06/02/03	06/04/03	3	23	153	155
DSS-16	Servo Drive Replacement	07/14/03	08/03/03	21	29 - 31	195	215
DSS-54	NIB - Azimuth Axle Replacement	07/21/03	08/10/03	21	30 - 32	202	222
DSS-54	NIB - Ka-Band Encoder (Mechanical)	07/21/03	09/07/03	49	30 - 36	202	250
DSS-54	20kW X-Band TXR Installation	07/21/03	09/07/03	49	30 - 36	202	250
DSS-25	20kW X-Band TXR Installation	08/04/03	09/14/03	42	32 - 37	216	257
DSS-66	Servo Drive Replacement	09/15/03	10/26/03	42	38 - 43	258	299



Resource Allocation Review Loading Study

Major DSN Downtimes by Date (continued) – 2003 –





Resource Allocation Review Loading Study

Major DSN Downtimes by Date (continued)

– 2004 –

Site	Description	Start	End	Duration (days)	Week(s)	Start DOY	End DOY
DSS-46	Servo Drive Replacement	04/12/04	05/23/04	42	16 - 21	103	144
DSS-15	Antenna Controller Replacement	04/12/04	06/13/04	63	16 - 24	103	165
DSS-14	Antenna Controller Replacement	07/07/04	10/03/04	89	28 - 40	189	277
DSS-14	NIB - USC Installation - proposal	09/20/04	10/03/04	14	39 - 40	264	277
DSS-14	Hydrostatic Bearing - proposal	09/20/04	11/14/04	56	39 - 47	264	326
DSS-45	Antenna Controller Replacement - proposal	10/18/04	12/05/04	49	43 - 49	292	340
DSS-45	NIB - USC Installation - proposal	11/22/04	12/05/04	14	43 - 49	327	340



Resource Allocation Review Loading Study

Major DSN Downtimes by Date (continued)

- 2004 -

	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																																																																							
Key Project Events	Saturn Approach																															CAS SOI																															CAS PRM																															CAS PROBE C/O & REL																														
	DIF Launch														GOES-N Launch														LUNAR-A Launch														DIF Earth F/B																																																																																	
	EDL MERA Surface Ops																					EDL MERB Surface Ops																					MEX MarsCapture											MEX Occultation											MEX Solar Corona											MEX Occult																																																
	MSGR Launch											MSGR Venus Flyby											ST-5 Launch																																																																																																					
	NOZO MOI					SDU Comet Encounter					ULYS Jupiter Encounter					GNS Earth Return & B/U Orbit																																																																																																												
	D15 Antenna Controller																	D14 Antenna Controller																	D14 Hydrostatic Bearing - Proposed																D14 USC - NIB Proposed																																																																									
	D46 Servo Drive																	D45 Antenna Controller - Proposed																D45 USC - NIB Proposed																																																																																										



Resource Allocation Review

Loading Study

Major DSN Downtimes by Date (continued)

– 2005 –

Site	Description	Start	End	Duration (days)	Week(s)	Start DOY	End DOY
<i>DSS-27</i>	<i>USC Installation - proposal</i>	<i>01/10/05</i>	<i>01/23/05</i>	<i>14</i>	<i>02 - 03</i>	<i>010</i>	<i>023</i>
<i>DSS-26</i>	<i>USC Installation - proposal</i>	<i>01/24/05</i>	<i>02/06/05</i>	<i>14</i>	<i>04 - 05</i>	<i>024</i>	<i>037</i>
<i>DSS-65</i>	<i>NIB - USC Installation - proposal</i>	<i>02/21/05</i>	<i>02/27/05</i>	<i>7</i>	<i>08</i>	<i>052</i>	<i>058</i>
DSS-65	Antenna Controller Replacement	02/21/05	04/10/05	49	08 - 14	052	100
<i>DSS-54</i>	<i>USC Installation - proposal</i>	<i>04/11/05</i>	<i>04/17/05</i>	<i>7</i>	<i>15</i>	<i>101</i>	<i>107</i>
<i>DSS-15</i>	<i>USC Installation - proposal</i>	<i>04/11/05</i>	<i>04/24/05</i>	<i>14</i>	<i>15 - 16</i>	<i>101</i>	<i>114</i>
<i>DSS-55</i>	<i>USC Installation - proposal</i>	<i>04/25/05</i>	<i>05/01/05</i>	<i>7</i>	<i>17</i>	<i>115</i>	<i>121</i>
<i>DSS-25</i>	<i>USC Installation - proposal</i>	<i>04/25/05</i>	<i>05/08/05</i>	<i>14</i>	<i>17 - 18</i>	<i>115</i>	<i>128</i>
<i>DSS-34</i>	<i>NIB - USC Installation - proposal</i>	<i>05/02/05</i>	<i>05/15/05</i>	<i>14</i>	<i>18 - 19</i>	<i>122</i>	<i>135</i>
<i>DSS-34</i>	<i>X/X-Ka Band Installation - proposal</i>	<i>05/02/05</i>	<i>06/26/05</i>	<i>56</i>	<i>18 - 25</i>	<i>122</i>	<i>177</i>
<i>DSS-24</i>	<i>USC Installation - proposal</i>	<i>06/27/05</i>	<i>07/03/05</i>	<i>7</i>	<i>26</i>	<i>178</i>	<i>184</i>
<i>DSS-43</i>	<i>NIB - USC Installation - proposal</i>	<i>07/25/05</i>	<i>08/07/05</i>	<i>14</i>	<i>30 - 31</i>	<i>206</i>	<i>219</i>
<i>DSS-43</i>	<i>Antenna Controller Replacement - proposal</i>	<i>07/25/05</i>	<i>09/11/05</i>	<i>49</i>	<i>30 - 36</i>	<i>206</i>	<i>254</i>
<i>DSS-63</i>	<i>NIB - USC Installation - proposal</i>	<i>09/19/05</i>	<i>10/02/05</i>	<i>14</i>	<i>38 - 39</i>	<i>262</i>	<i>275</i>
<i>DSS-63</i>	<i>Antenna Controller Replacement - proposal</i>	<i>09/19/05</i>	<i>11/06/05</i>	<i>49</i>	<i>38 - 44</i>	<i>262</i>	<i>310</i>



Resource Allocation Review Loading Study

Major DSN Downtimes by Date (continued) – 2005 –

	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				
Key Project Events	CAS Probe Entry				DIF Earth F/B				DIF Comet Encounter/Impact					SELE Launch					MRO Launch				STA Launch					STB Launch					MEX Occult					MEX Occult																		
	D27 USC - Proposed				D26 USC - Proposed				D15 USC - Proposed					D25 USC - Proposed					D24 USC - Proposed																																					
									D34 X/X-Ka Band - Proposed					D34 USC - NIB Proposed					D43 Ant Controller - Proposed				D43 USC - NIB Proposed																																	
					D65 Antenna Controller				D65 USC - NIB Proposed					D54 USC - Proposed					D55 USC - Proposed				D63 Antenna Controller - Proposed					D63 USC - NIB Proposed																												



Resource Allocation Review Loading Study

Major DSN Downtimes by Date (continued)

– 2006 –

Site	Description	Start	End	Duration (days)	Week(s)	Start DOY	End DOY
<i>DSS-24</i>	<i>X/X-Ka Band Installation - proposal</i>	<i>09/14/06</i>	<i>10/22/06</i>	<i>49</i>	<i>36 - 42</i>	<i>247</i>	<i>295</i>



Resource Allocation Review Loading Study

Major DSN Downtimes by Date (continued) – 2006 –

	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																																								
Key Project Events	SDU Entry	MRO Approach / MOI	MRO Aerobraking	Prime Science / Solar Conjunction	MRO MAPPING	MEX Solar Corona	MSGR Venus FB2	DAWN Launch	ROSE Flyby	NHPC Launch																																																																																		
																																					D24 X/Ka Band - Proposed																																																							
GDSCC																																																																																												
CDSCC																																																																																												
MDSCC																																																																																												
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																																								



Resource Allocation Review Loading Study

IND Resource Implementation Planning Matrix

Station	Subnet	Delivery Date	S-Band Down	S-Band Up	X-Band Down	X-Band Up	20kW X-Band	Ka-Band Down	Ka-Band Up	NSP
DSS-14	70M	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	TBD	N/A	05/13/03
DSS-15	34HEF	XXXX	XXXX	N/A	XXXX	XXXX	XXXX	TBD	N/A	04/10/03
DSS-16	26M	XXXX	XXXX	XXXX	N/A	N/A	N/A	N/A	N/A	N/A
DSS-24	34BWG1	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	10/01/05	N/A	XXXX
DSS-25	34BWG2	XXXX	N/A	N/A	XXXX	XXXX	09/01/03	XXXX	XXXX	03/09/03
DSS-26	34BWG2	04/02/03	N/A	N/A	04/02/03	04/02/03	04/02/03	04/02/03	N/A	04/02/03
DSS-27	34HSB	XXXX	XXXX	XXXX	N/A	N/A	N/A	N/A	N/A	N/A
DSS-34	34BWG1	XXXX	XXXX	XXXX	XXXX	XXXX	04/07/03	01/01/05	N/A	04/07/03
DSS-43	70M	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	TBD	N/A	02/10/03
DSS-45	34HEF	XXXX	XXXX	N/A	XXXX	XXXX	XXXX	TBD	N/A	05/03/03
DSS-46	26M	XXXX	XXXX	XXXX	N/A	N/A	N/A	N/A	N/A	N/A
DSS-54	34BWG1	XXXX	XXXX	XXXX	XXXX	XXXX	09/08/03	08/01/06	N/A	05/13/03
DSS-55	34BWG2	11/01/03	N/A	N/A	11/01/03	11/01/03	11/01/03	11/01/03	N/A	11/01/03
DSS-63	70M	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	TBD	N/A	04/21/03
DSS-65	34HEF	XXXX	XXXX	N/A	XXXX	XXXX	XXXX	TBD	N/A	02/10/03
DSS-66	26M	XXXX	XXXX	XXXX	N/A	N/A	N/A	N/A	N/A	N/A

XXXX = Capability Currently Exists

N/A = Capability Not Planned

01/16/03



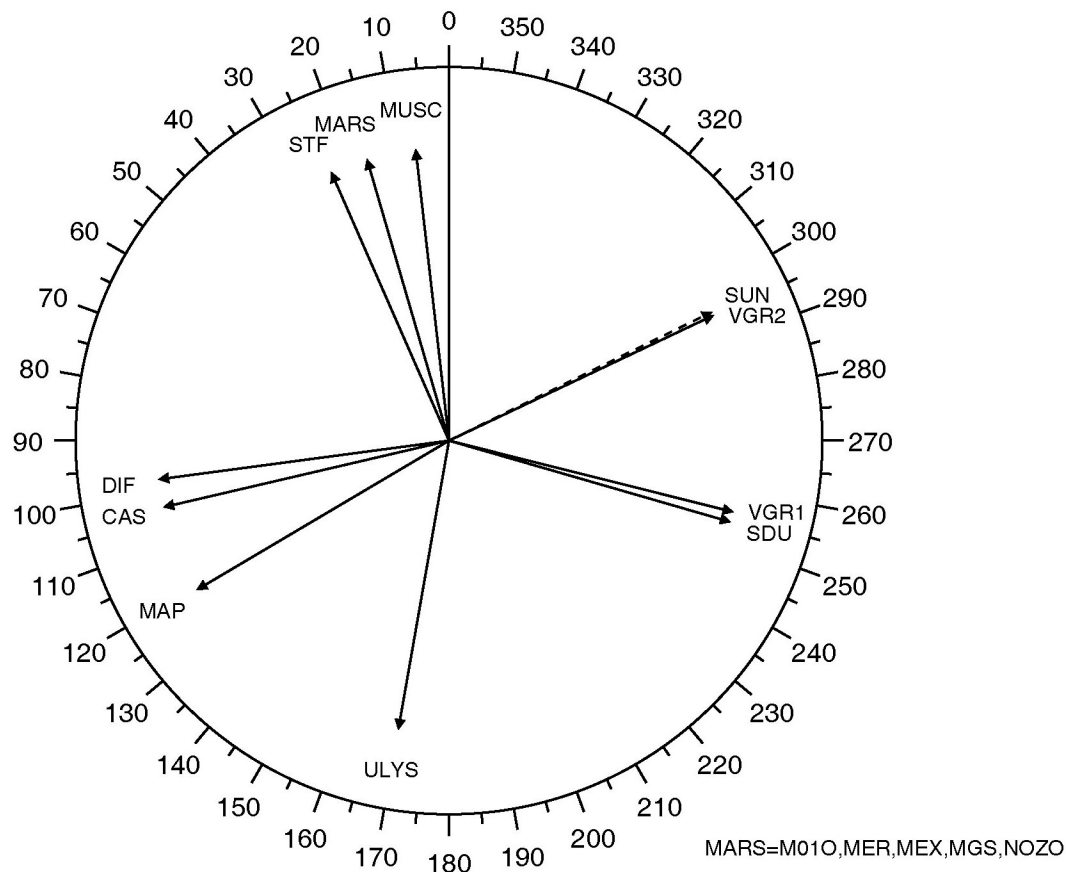
Resource Allocation Review

Periods of Contention

Month	Weeks		
	2004	2005	2006
January	01 - 05	01 - 04	01 - 04
February	06 - 09	05 - 08	05 - 08
March	10 - 13	09 - 13	09 - 13
April	14 - 18	14 - 17	14 - 17
May	19 - 22	18 - 21	18 - 21
June	23 - 26	22 - 26	22 - 26
July	27 - 31	27 - 30	27 - 30
August	32 - 35	31 - 34	31 - 35
September	36 - 40	35 - 39	36 - 39
October	41 - 44	40 - 43	40 - 43
November	45 - 48	44 - 47	44 - 48
December	49 - 53	48 - 52	49 - 52



Resource Allocation Review Spacecraft Right Ascension January 15, 2004



THE SPACECRAFT RIGHT ASCENSION FIGURES SHOW THE POSITIONS OF THE SPACECRAFT IN THE SKY RELATIVE TO EACH OTHER ON THE 15TH OF EACH MONTH FOR THE YEAR INDICATED. RIGHT ASCENSION IS COMMONLY MEASURED IN HOURS, WITH 1 HOUR = 15 DEGREES.

THE ARROW INDICATES THE CENTER OF A SPACECRAFT VIEW FROM EARTH. EXTEND 60 DEGREES ON BOTH SIDES OF THE ARROW TO CALCULATE AN EIGHT (8) HOUR VIEW PERIOD.



Resource Allocation Review Recommendations and Analyses

- ◆ The RARB Red Book makes reference to monthly contention as low, moderate, severe, and extreme. The explanation of these terms is listed below.
 - Projected unsupportable time is expressed as low, moderate, severe, or extreme in the Analysis sections of this document. Projected unsupportable time is an estimate of the amount of requested time, typically in percentage of requirements or modified requirements, that is unsupportable, based on resource availability, other users' requirements, assumed priorities, and viewperiods. The following percentages apply:

Low	= <15%
Moderate	= 15% to 30%
Severe	= 31% to 45%
Extreme	= >45%

Workable is a term used to express a condition wherein the projected unsupportable time is low. This condition occurs when the general forecasting analysis indicates a low percentage of unsupportable time or when RARB agreements have been made to reduce contention to a workable level. Workable essentially means that experience has shown that the remaining contention may be solved during final schedule preparations and negotiations.

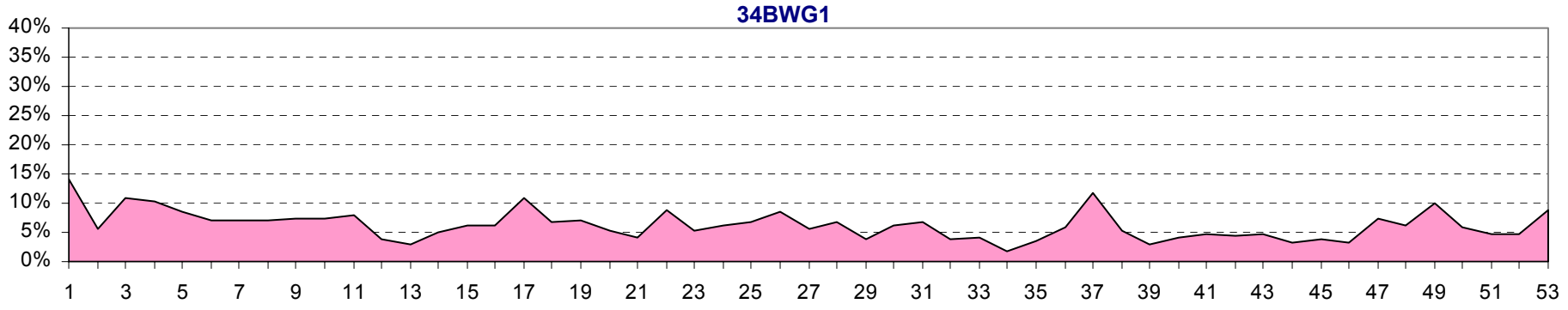
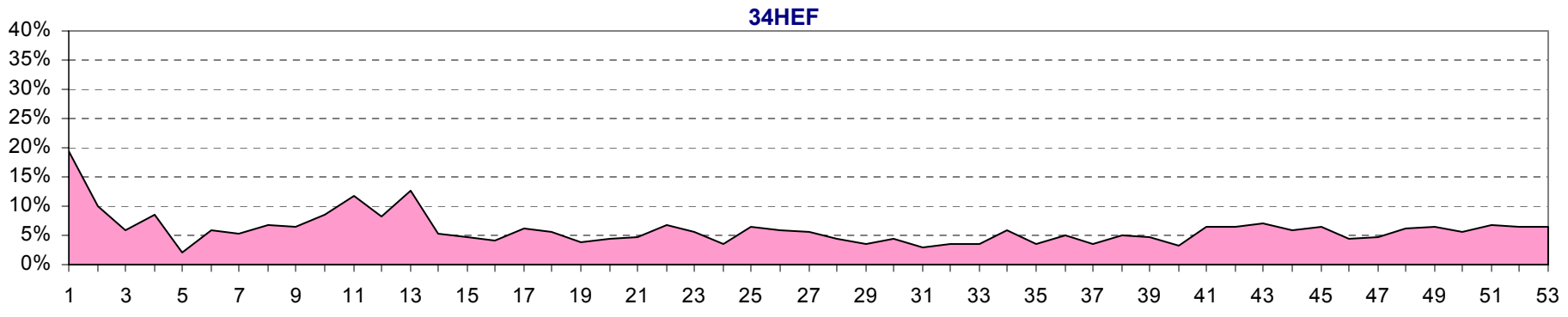
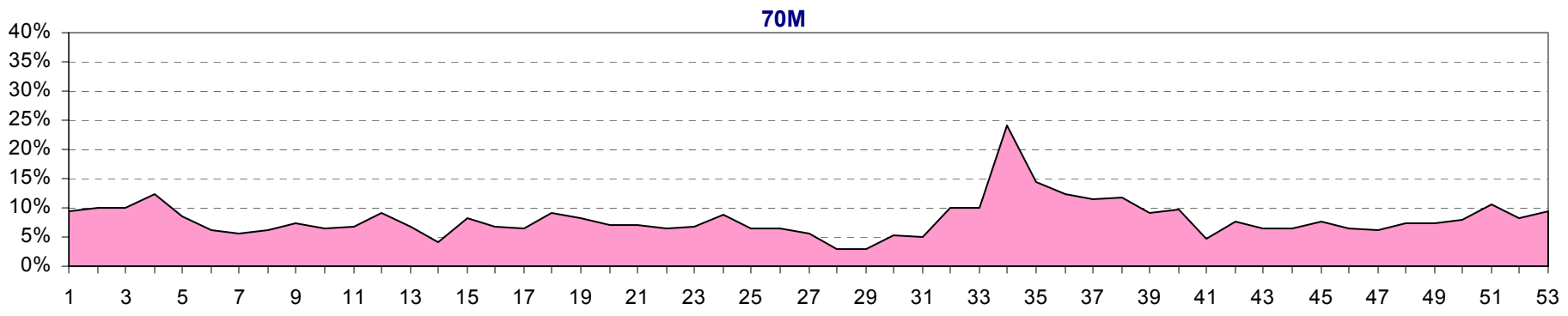


Resource Allocation Review Recommendations and Analyses

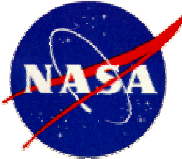
2004 Events, Recommendations and Analyses



Resource Allocation Review Recommendations and Analyses 2004 Weekly Average User Unsupportable Time

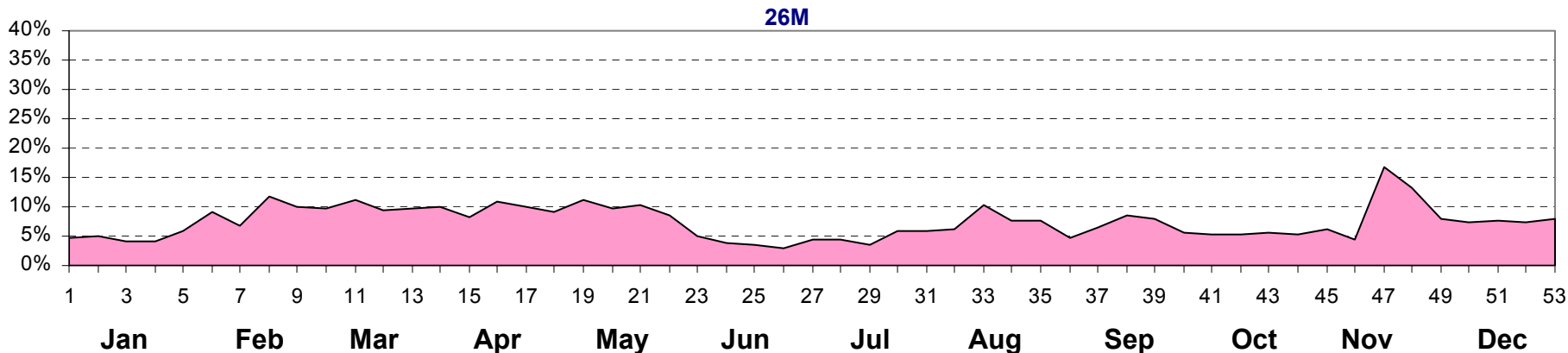
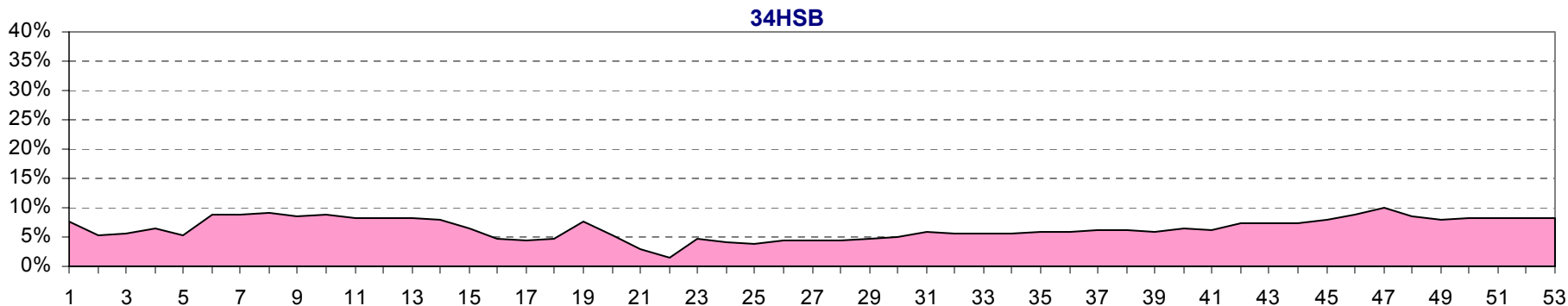
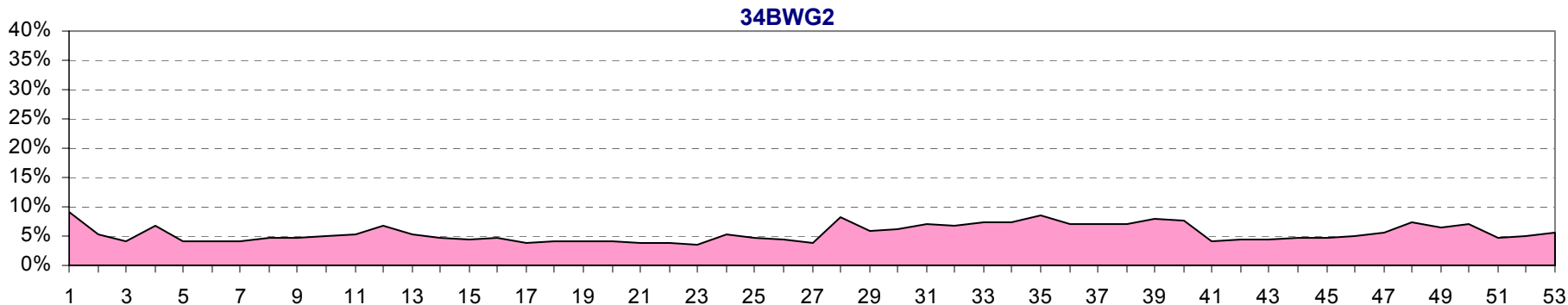


Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec



Resource Allocation Review Recommendations and Analyses

2004 Weekly Average User Unsupportable Time (continued)





Resource Allocation Review Recommendations and Analyses 2004 – January (Weeks 01 - 05)

EVENTS

Cassini approach

Deep Impact launch and initial acquisition in week 01, DOY 002, and launch phase support

Genesis maneuver in week 03 (continuous on DOY 014 and 015)

GSSR Mercury in week 02 and Asteroid 6239 Minos in week 05, DOY 030 - 032

Mars Express capture (approach/MOI), orbital science, and bi-static radar

Mars Odyssey mapping

MERA approach, EDL in week 01, DOY 004, and surface operations (Gusev)

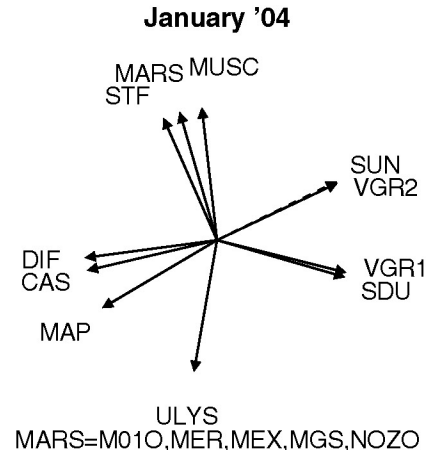
MERB approach, TCM in week 03 (DOY 017), EDL in week 04 (DOY 025), and surface operations (Meridiani)

MGS mapping and TCM in weeks 02 - 03, DOY 005-018

Nozomi MOI and TCM in week 01, DOY 001 and 002

Stardust P/Wild 2 encounter in week 01, DOY 002, and TCM support

Ulysses Jupiter encounter begins in week 04, DOY 022 (continuous support on a best efforts basis)





Resource Allocation Review Recommendations and Analyses 2004 – January (Weeks 01 - 05) (continued)

RECOMMENDATION

- ◆ To resolve intra-Mars Program conflicts, the Multi-mission DSN Allocation and Planning Team has agreed (ref: RARB AI #7) to provide a Mars Program coordinated input to Resource Allocation (Mid-Range) Planning Team of at least one week per week at least 6 months prior to the schedule week. (1, 2, 3, 4)



Resource Allocation Review

Recommendations and Analyses

2004 – January (Weeks 01 - 05) (continued)

ANALYSIS

1. (70M) Moderate unsupportable time is forecast in weeks 02 - 04 due to conflicts within the Mars Program that affects support for Mars Express.
2. (34HEF) Moderate to extreme unsupportable time is forecast in weeks 01 and 04 due to conflicts within the Mars Program that affect support for MERB, MGS and Deep Impact initial acquisition on DOY 002.
3. (34BWG1) Moderate unsupportable time is forecast in weeks 01 - 03 due to conflicts within the Mars Program that affect support for Mars Express, Mars Odyssey, MGS, Nozomi TCM, and Deep Impact initial acquisition on DOY 002.
4. (34BWG2) Moderate unsupportable time is forecast in week 01 due to support for DSS maintenance and conflicts within the Mars Program that affect support for MERA, MERB, Mars Express, MGS, and Mars Odyssey.

Contention levels on the 34HSB and 26M subnets are workable and should resolve during final schedule preparations and negotiations.



Resource Allocation Review

Recommendations and Analyses

2004 – January (Weeks 01 - 05) (continued)

RESOURCE REQUEST

User	Resource	Durations		Calibration		January				
		Ave	Min	Pre	Post	1	2	3	4	5
CAS Approach	DSS-45,25	9.0	8.5	0.50	0.25	3	3	3	3	3
DIF Launch	DSS-34/45/46	6.8	6.8	4.00	0.25	1				
DIF Launch Phase	DSS-15,34,54	8.0	4.0	0.50	0.25	5	9	9		
DIF Launch Phase	DSS-15,34	8.0	4.0	0.50	0.25				9	
DIF Launch Phase	34H	8.0	4.0	0.50	0.25					7
DIF Launch Phase	DSS-15,34	5.0	4.0	0.50	0.25	2				
DIF Launch Phase	DSS-15,54	10.0	4.0	0.50	0.25		8	8		
DIF Launch Phase	DSS-54	6.0	4.0	0.50	0.25				4	
DIF Launch Phase	DSS-54	11.0	4.0	0.50	0.25	1				
DIF Launch Phase	DSS-34	4.0	4.0	0.50	0.25		4	4		
DIF Launch Phase	DSS-26	8.0	4.0	0.50	0.25				4	
DSS Bearing Mntc	DSS-14	8.0	8.0					1		
DSS Bearing Mntc	DSS-43	8.0	8.0			1			1	
DSS Bearing Mntc	DSS-63	8.0	8.0							1
DSS Maintenance	DSS-54	6.0	6.0			1	1	1	1	
DSS Maintenance	DSS-54	4.0	4.0							1
DSS Maintenance	DSS-25	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-55	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-27	6.0	6.0			1	1	1	1	
DSS Maintenance	DSS-27	4.0	4.0							1
DSS Maintenance	DSS-15	8.0	6.0					1		1
DSS Maintenance	DSS-15	6.0	6.0			1	1			
DSS Maintenance	DSS-15	4.0	4.0						1	
DSS Maintenance	DSS-43	8.0	8.0					1		
DSS Maintenance	DSS-45	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-24	8.0	6.0			1	1		1	1
DSS Maintenance	DSS-65	6.0	6.0			1	1	1		1
DSS Maintenance	DSS-65	4.0	4.0						1	
DSS Maintenance	DSS-24	8.0	6.0					1		
DSS Maintenance	DSS-26	8.0	6.0			1	1	1	1	1
						1	2	3	4	5



Resource Allocation Review Recommendations and Analyses 2004 – January (Weeks 01 - 05) (continued)

RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		January				
		Ave	Min	Pre	Post	1	2	3	4	5
DSS Maintenance	DSS-46	4.0	4.0			1	1	1	1	1
DSS Maintenance	DSS-66	4.0	4.0			1	1	1	1	1
DSS Maintenance	DSS-43	8.0	8.0							1
DSS Maintenance	DSS-16	4.0	4.0			1	1	1	1	1
DSS Maintenance	DSS-34	6.0	6.0			1	1		1	1
DSS Maintenance	DSS-34	4.0	4.0					1		
DSS Maintenance	DSS-63	6.0	4.0							1
DSS Maintenance	DSS-63	8.0	8.0			1		1	1	
DSS Maintenance	DSS-14	8.0	8.0			1		1	1	2
DSS Maintenance	DSS-43	8.0	8.0				1			
DSS Maintenance	DSS-63	8.0	8.0				1			
DSS Maintenance	DSS-14	8.0	8.0				1			
GNS	34B1	4.0	4.0	0.50	0.25	3			3	3
GNS	DSS-24,54	4.0	4.0	0.50	0.25		3			
GNS	DSS-24,54	8.0	4.0	0.50	0.25		1	5		
GNS Maneuver	34B1	8.0	4.0	0.50	0.25			6		
GSSR Ast 6239 Mino	DSS-14	5.0	5.0	1.50	0.50					3
GSSR Mercury	DSS-14	4.4	4.4	1.50	0.50		1			
M01O Map/MERA D/L	70M	8.0	4.0	1.50	0.25		7	7	7	7
M01O Map/MERB D/L	70M	8.0	4.0	1.50	0.25					7
M01O Map/MGS Map	DSS-25,34,54	8.0	4.0	2.00	0.25	2				
M01O Mapping	70M	8.0	4.0	0.50	0.25	3	14	6		6
M01O Mapping	70M	6.0	4.0	0.50	0.25	1				
M01O Mapping	DSS-25,34,54	8.0	4.0	0.50	0.25	8		4	12	
M01O Mapping	DSS-25,34,54	6.0	4.0	0.50	0.25			1		
M01O Mapping	DSS-25,34,54	2.0	2.0	0.50	0.25				1	
MERA Approach	DSS-45,65	8.0	4.0	0.50	0.25	6				
MERA Approach/VLBI	DSS-14	10.0	9.0	0.50	0.25	6				
MERA Approach/VLBI	DSS-43,63	7.0	7.0	0.50	0.25	8				
MERA EDL Array	DSS-43/45/34	4.0	4.0	0.50	0.25	1				
						1	2	3	4	5



Resource Allocation Review Recommendations and Analyses 2004 – January (Weeks 01 - 05) (continued)

RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		January				
		Ave	Min	Pre	Post	1	2	3	4	5
MERA EDL Array	DSS-15/24/25/26	4.0	4.0	0.50	0.25	1				
MERA EDL U/L	DSS-14	9.0	4.0	0.50	0.25	1				
MERB Approach	DSS-14,15	8.0	4.0	0.50	0.25			2		
MERB Approach	DSS-43,45	8.0	4.0	0.50	0.25			4		
MERB Approach	DSS-63,65	8.0	4.0	0.50	0.25			2		
MERB Approach	DSS-15,26	8.0	4.0	0.50	0.25		3			
MERB Approach	DSS-45,65	8.0	4.0	0.50	0.25	4	10		2	
MERB Approach	DSS-45	4.0	4.0	0.50	0.25	1				
MERB Approach	DSS-26,34,54	8.0	4.0	0.50	0.25	6				
MERB Approach	DSS-26	8.0	4.0	0.50	0.25	1				
MERB Approach/VLBI	DSS-14	9.0	9.0	0.50	0.25			1	4	
MERB Approach/VLBI	DSS-43	8.0	8.0	0.50	0.25			1	2	
MERB Approach/VLBI	DSS-63	8.0	8.0	0.50	0.25				2	
MERB Approach/VLBI	DSS-15	9.0	9.0	0.50	0.25				3	
MERB Approach/VLBI	DSS-45	8.0	8.0	0.50	0.25	2	2	1	2	
MERB Approach/VLBI	DSS-65	8.0	8.0	0.50	0.25	1	2	2	1	
MERB Approach/VLBI	DSS-15,26	9.0	9.0	0.50	0.25		4	3		
MERB Approach/VLBI	DSS-26	9.0	9.0	0.50	0.25	3				
MERB EDL Array	DSS-43/45/34	4.5	4.0	0.50	0.25				1	
MERB EDL Array	DSS-15/24/25/26	4.5	4.0	0.50	0.25				1	
MERB EDL U/L	DSS-43,63	8.0	4.0	0.50	0.25				4	
MERB TCM	70M	8.0	4.0	0.50	0.25			3		
MEX Capture	DSS-63,55	8.0	4.0	0.50	0.25		7	7		
MEX Capture	DSS-63	8.0	8.0	0.50	0.25				1	
MEX Capture	DSS-63	4.0	4.0	0.50	0.25				1	
MEX Capture	DSS-55	8.0	8.0	0.50	0.25	6			4	
MEX Capture	DSS-55	5.0	5.0	0.50	0.25	1				
MEX Orbital Sci	DSS-24,54	8.0	4.0	0.50	0.25					7
MEX R/S Bi Static	DSS-43	4.0	4.0	0.50	0.25				2	2
MGS Mapping	DSS-34,55	8.0	4.0	0.50	0.25		4			
						1	2	3	4	5



Resource Allocation Review Recommendations and Analyses 2004 – January (Weeks 01 - 05) (continued)

RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		January				
		Ave	Min	Pre	Post	1	2	3	4	5
MGS Mapping	DSS-25	8.0	4.0	0.50	0.25			2		
MGS Mapping	DSS-25,26,45,65	8.0	4.0	0.50	0.25	14				
MGS Mapping	DSS-26,45,65	8.0	4.0	0.50	0.25				14	7
MGS Mapping	DSS-25,26	8.0	4.0	0.50	0.25		2			
MGS Mapping	DSS-26,34,55	8.0	4.0	0.50	0.25					9
MGS Mapping	DSS-26,45,65	6.0	4.0	0.50	0.25				1	
MGS TCM	DSS-34	4.0	4.0	0.50	0.25		4	4		
MGS TCM	DSS-26,55	8.0	4.0	0.50	0.25		6			
MGS TCM	DSS-25,45,65	8.0	4.0	0.50	0.25			6		
NOZO TCM	DSS-24,54	8.0	2.0	0.50	0.25	4				
SDU P/Wild 2	70M	4.0	4.0	0.50	0.25	3				
SDU P/Wild 2	DSS-14	8.0	4.0	0.50	0.25	1				
SDU P/Wild 2	DSS-43	9.0	4.0	0.50	0.25	6				
SDU P/Wild 2	DSS-14,63	6.0	4.0	0.50	0.25	6				
SDU P/Wild 2	DSS-43	12.0	4.0	0.50	0.25		5	2		
SDU P/Wild 2	DSS-14,63	7.0	4.0	0.50	0.25		10	4		
SDU P/Wild 2	DSS-15,65	4.0	4.0	0.50	0.25		2			
SDU TCM	34H	8.0	6.0	0.50	0.25					2
SDU TCM	34H	4.0	4.0	0.50	0.25				14	12
SDU TCM	DSS-15,65	4.0	4.0	0.50	0.25	2		10		
ULYS	DSS-15,24,34	14.0	4.0	0.50	0.25	5				
ULYS	DSS-24	5.0	4.0	0.50	0.25		1	1		
ULYS	DSS-24,34	10.0	4.0	0.50	0.25				3	
ULYS	DSS-54	5.0	4.0	0.50	0.25		1	1		
ULYS	DSS-24	10.0	4.0	0.50	0.25		6	6		
ULYS Jupiter ENC	34B1	8.0	4.0	0.50	0.25				12	21
						1	2	3	4	5



Resource Allocation Review Recommendations and Analyses 2004 – February (Weeks 06 - 09)

EVENTS

Cassini approach

EVN E500 J-M4 in week 08

GBRA RA500 SOC-M4 in week 09

Gravity Probe-B BR088n SOC-M4 in week 06

GSSR Asteroid 6239 Minos in week 06

Mars Odyssey mapping

MERA and MERB surface operations

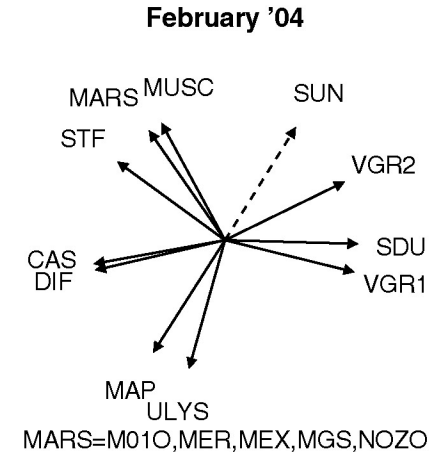
Mars Express orbital science

MGS mapping

Stardust TCM

Ulysses Jupiter encounter

Voyager 1 MAGROL in week 06, DOY 037





Resource Allocation Review Recommendations and Analyses

2004 – February (Weeks 06 - 09) (continued)

RECOMMENDATION

Chandra move 7 passes per week to the 26M and increase supports to 2 hours. (2)

Gravity Probe-B move support to week 11 and reduce request to three 8-hour passes on 70M. (1)

Mars Odyssey mapping/relay accept 4 gaps in 70M support in weeks 06, 07 and 08, and 5 gaps in week 09. Use 34M support to fill gaps: On Mondays 3 hours at DSS-26, on Wednesdays 8 hours at DSS-54,55,65 and on Thursdays 3 hours at DSS-26 and 3 hours at DSS-54,55,65. In week 09 fill an additional 3-hour gap on Friday using DSS-26. (1)

MER depending on landing site selection MSPA Rovers A or B with Mars Odyssey on 34M antennas as defined above. (1)

- ◆ To resolve intra-Mars Program conflicts, the Multi-mission DSN Allocation and Planning Team has agreed (ref: RARB AI #7) to provide a Mars Program coordinated input to Resource Allocation (Mid-Range) Planning Team of at least one week per week at least 6 months prior to the schedule week.



Resource Allocation Review Recommendations and Analyses 2004 – February (Weeks 06 - 09) (continued)

ANALYSIS

1. (70M) Moderate unsupportable time is forecast for DSS maintenance. Contention is due to MER surface operations and Mars Odyssey near continuous support requests that conflict with 5 - 6 periods of daylight preventative maintenance and in week 06 also with support requested for the GSSR Asteroid Minos and Gravity Probe-B events.
2. (34BWG1) Moderate unsupportable time is forecast for Wind during Ulysses Jupiter encounter support. The Ulysses and Wind viewperiod overlap is 100%. Chandra impacts Ulysses and Wind on days when the low Earth orbiter's viewperiods overlaps with the Ulysses and Wind viewperiods.

Contention levels on the 34HEF, 34BWG2, 34HSB, and 26M subnets are workable and should resolve during final schedule preparations and negotiations.



Resource Allocation Review

Recommendations and Analyses

2004 – February (Weeks 06 - 09) (continued)

RESOURCE REQUEST

User	Resource	Durations		Calibration		February			
		Ave	Min	Pre	Post	6	7	8	9
CAS Approach	DSS-45,25	9.0	8.5	0.50	0.25	3	3	3	3
CHDR	34B1	1.0	1.0	0.50	0.25	21	21	21	21
DSS Bearing Mntc	DSS-14	8.0	8.0			1			1
DSS Bearing Mntc	DSS-43	8.0	8.0				1		
DSS Bearing Mntc	DSS-63	8.0	8.0					1	
DSS Maintenance	DSS-54	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-25	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-55	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-27	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-15	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-45	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-24	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-65	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-26	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-46	6.0	6.0			1		1	1
DSS Maintenance	DSS-66	8.0	6.0			1		1	1
DSS Maintenance	DSS-46	4.0	4.0				1		
DSS Maintenance	DSS-66	6.0	6.0				1		
DSS Maintenance	DSS-43	8.0	8.0			1		1	1
DSS Maintenance	DSS-16	8.0	6.0			1		1	1
DSS Maintenance	DSS-16	6.0	6.0				1		
DSS Maintenance	DSS-34	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-63	9.5	8.0			1	1		1
DSS Maintenance	DSS-63	6.0	4.0			1	1	1	1
DSS Maintenance	DSS-14	8.0	8.0			1	2	2	1
DSS Maintenance	DSS-14	6.0	6.0						1
EVN E500 J-M4	DSS-14/63	8.0	8.0	1.50	0.50			3	
GBRA RA500 SOC-M4	DSS-14/63	8.0	6.0	1.50	0.50				3
GPB BR088n SOC-M4	DSS-14	12.0	12.0	1.50	0.50	1			
GPB BR088n SOC-M4	DSS-63	8.0	8.0	1.50	0.50	1			
						6	7	8	9



Resource Allocation Review Recommendations and Analyses 2004 – February (Weeks 06 - 09) (continued)

RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		February			
		Ave	Min	Pre	Post	6	7	8	9
GPB BR088n SOC-M4	DSS-43	6.5	6.5	1.50	0.50	1			
GSSR Ast 6239 Mino	DSS-14	5.0	5.0	1.50	0.50	1			
M01O Map/MERA D/L	70M	8.0	4.0	1.50	0.25	7	7	7	7
M01O Map/MERB D/L	70M	8.0	4.0	1.50	0.25	7	7	7	7
M01O Mapping	70M	8.0	4.0	0.50	0.25	6	6	6	6
MEX Orbital Sci	DSS-24,54	8.0	4.0	0.50	0.25	7	7	7	7
MGS Mapping	DSS-26,45,65	8.0	4.0	0.50	0.25	16	16	16	16
ULYS Jupiter ENC	34B1	8.0	4.0	0.50	0.25	15	15	15	15
ULYS Jupiter ENC	DSS-24,43,54	8.0	4.0	0.50	0.25	6	6	6	6
VGR1	DSS-65	8.0	4.0	0.50	0.25			7	7
VGR1	DSS-25,26	8.0	4.0	0.50	0.25	7	7	7	7
VGR1	DSS-55	4.0	4.0	0.50	0.25	7	7		
VGR1 MAGROL	DSS-15	7.0	4.0	0.75	0.25	1			
VGR1 Routine U/L	70M	2.5	2.5	0.75	0.25	1	1	1	1
WIND	34B1	2.5	2.5	0.50	0.25	7	7	7	7
						6	7	8	9



Resource Allocation Review Recommendations and Analyses 2004 – March (Weeks 10 - 13)

EVENTS

Cassini approach

Genesis maneuver in week 11, DOY 070 and 071

GSSR Mercury in week 12

Mars Odyssey mapping

MERA and MERB surface operations

Mars Express orbital science

MGS mapping

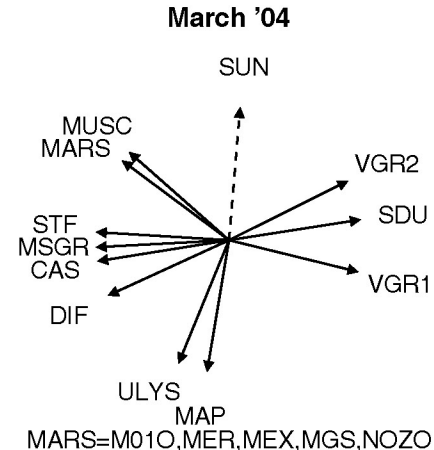
MESSENGER launch in week 11, DOY 070

MUSES-C TCM-1 in week 13

Ulysses Jupiter encounter in weeks 10 and 11 (ends on DOY 071)

Voyager 2 DTR P/B (week 11 DOY 070), ASCAL (week 12 DOY 075), and MAGROL
(week 12 DOY 078)

WIND TCM in week 10





Resource Allocation Review

Recommendations and Analyses

2004 – March (Weeks 10 - 13) (continued)

RECOMMENDATION

Mars Odyssey mapping/relay accept 4 gaps in 70M support in weeks 10 and 13, and 5 gaps in weeks 11 and 12. Use 34M support to fill gaps: On Mondays 3 hours at DSS-26, on Wednesdays 8 hours at DSS-54,55,65 and on Thursdays 3 hours at DSS-26 and 5 hours at DSS-54,55,65. On Tuesday in week 11 use 8 hours at DSS-45,55. In week 12 fill an additional 3-hour gap on Friday using DSS-26. (1)

Mars Express MSPA 7 orbital science passes requested at DSS-24,54 with MGS mapping in weeks 10 and 11. (2)

MGS MSPA 7 DSS-26,45,65 passes with Mars Express orbital science at DSS-24,54 in week 10. In week 11 reduce DSS-25,45,65 request from 16 to 14 passes and MSPA 7 passes with Mars Express orbital science at DSS-24,54. Use DSS-25,65 for the remaining 7 passes (change in week 11 needed to resolve contention on the 34BWG1). (2)

MER depending on landing site selection MSPA Rovers A or B with Mars Odyssey on 34M antennas as defined above. To accommodate GPB move from week 06, reduce one 70M pass per Rover in week 11 to 7 hours. (1)

- ◆ To resolve intra-Mars Program conflicts, the Multi-mission DSN Allocation and Planning Team has agreed (ref: RARB AI #7) to provide a Mars Program coordinated input to Resource Allocation (Mid-Range) Planning Team of at least one week per week at least 6 months prior to the schedule week.



Resource Allocation Review Recommendations and Analyses 2004 – March (Weeks 10 - 13) (continued)

ANALYSIS

1. (70M) Moderate unsupportable time is forecast for DSS maintenance. Contention is due to the MER surface operations and Mars Odyssey near continuous support requests that conflict each week with 5 - 6 periods of daylight preventative maintenance. In week 11, changes to MARS Odyssey and MER support are needed to accommodate the Gravity Probe-B move from week 06.
2. (34BWG1) Moderate to severe unsupportable time is forecast for DSS maintenance and Wind in weeks 10 and 11. Contention in week 10 is due to requirements supporting Mars Express orbital science and Polar. In week 11 contention is due to requirements supporting Genesis maneuver and routine support, Mars Express orbital science, and Ulysses encounter (ends DOY 071).

Contention levels on the 34HEF, 34BWG2, 34HSB, and 26M subnets are workable and should resolve during final schedule preparations and negotiations.



Resource Allocation Review Recommendations and Analyses 2004 – March (Weeks 10 - 13) (continued)

RESOURCE REQUEST

User	Resource	Durations		Calibration		March			
		Ave	Min	Pre	Post	10	11	12	13
CAS Approach	DSS-45,25	9.0	8.5	0.50	0.25	13	3	3	13
DSS Bearing Mntc	DSS-14	8.0	8.0					1	
DSS Bearing Mntc	DSS-43	8.0	8.0			1			1
DSS Bearing Mntc	DSS-63	8.0	8.0				1		
DSS Maintenance	DSS-54	6.0	6.0			1		1	1
DSS Maintenance	DSS-54	4.0	4.0				1		
DSS Maintenance	DSS-25	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-55	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-27	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-15	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-45	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-24	8.0	6.0			1		1	1
DSS Maintenance	DSS-65	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-24	8.0	6.0				1		
DSS Maintenance	DSS-26	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-46	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-66	8.0	6.0				1	1	1
DSS Maintenance	DSS-66	6.0	6.0			1			
DSS Maintenance	DSS-43	8.0	8.0				1	1	
DSS Maintenance	DSS-16	8.0	6.0				1	1	1
DSS Maintenance	DSS-16	6.0	6.0			1			
DSS Maintenance	DSS-34	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-63	9.5	8.0			1		1	1
DSS Maintenance	DSS-63	6.0	4.0			1	1	1	1
DSS Maintenance	DSS-14	8.0	8.0			2	2	2	2
GNS	34B1	4.0	4.0	0.50	0.25	3		3	3
GNS	34B1	8.0	4.0	0.50	0.25	1	5		
GNS Maneuver	DSS-54	4.0	4.0	0.50	0.25		2		
GNS Maneuver	DSS-24,34	8.0	4.0	0.50	0.25		4		
GSSR GODR	DSS-14/15	8.0	4.0	1.50	0.50		1		1
						10	11	12	13



Resource Allocation Review Recommendations and Analyses 2004 – March (Weeks 10 - 13) (continued)

RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		March			
		Ave	Min	Pre	Post	10	11	12	13
GSSR Mercury	DSS-14	3.0	3.0	1.50	0.50			1	
M01O Map/MERA D/L	70M	8.0	4.0	1.50	0.25	7	7	7	7
M01O Map/MERB D/L	70M	8.0	4.0	1.50	0.25	7	7	7	7
M01O Mapping	70M	8.0	4.0	0.50	0.25	6	6	6	6
MEX Orbital Sci	DSS-24,54	8.0	4.0	0.50	0.25	7	7	7	7
MGS Mapping	DSS-26,45,65	8.0	4.0	0.50	0.25	7		16	16
MGS Mapping	DSS-25,45,65	8.0	4.0	0.50	0.25		16		
MGS Mapping	DSS-26,34,65	8.0	4.0	0.50	0.25	9			
MSGR	DSS-26,34,54	8.0	7.0	0.50	0.25			7	5
MSGR Launch	DSS-26,45,55	8.0	7.0	1.00	0.25		9		
MSGR Launch	DSS-26,34,55	8.0	7.0	3.00	0.25		3		
MSGR Launch	DSS-26,34,55	8.0	7.0	0.50	0.25		3		
MUSC TCM-1	DSS-25,34,54	3.0	3.0	0.75	0.25				4
POLR PB	34B1	1.0	0.8	0.50	0.25	12			
POLR PB	26M	1.0	0.8	0.70	0.20	16	28	28	28
POLR RT	34B1	2.0	2.0	0.50	0.25	3			
POLR RT	26M	2.0	2.0	0.70	0.20	4	7	7	7
ULYS	DSS-45,65	5.0	4.0	0.50	0.25		3		
ULYS	DSS-24	5.0	4.0	0.50	0.25		3		
ULYS	DSS-24,34	10.0	4.0	0.50	0.25			5	6
ULYS Datation TST	DSS-24,54	12.0	4.0	2.00	0.25			1	
ULYS Jupiter ENC	34B1	8.0	4.0	0.50	0.25	15	9		
ULYS Jupiter ENC	DSS-24,43,54	8.0	4.0	0.50	0.25	6	3		
VGR2	DSS-43	8.0	4.0	0.50	0.25	2	2		
VGR2	DSS-45	8.0	4.0	0.50	0.25	5	5	7	7
VGR2	DSS-34	8.0	4.0	0.50	0.25			1	
VGR2	DSS-34	4.0	4.0	0.50	0.25			6	
VGR2 ASCAL	DSS-43	2.0	2.0	0.75	0.25			1	
VGR2 DTR P/B	DSS-43	7.4	4.0	0.75	0.25		1		
VGR2 MAGROL	DSS-43	7.0	4.0	0.75	0.25			1	
						10	11	12	13



Resource Allocation Review Recommendations and Analyses 2004 – March (Weeks 10 - 13) (continued)

RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		March			
		Ave	Min	Pre	Post	10	11	12	13
VGR2 Routine U/L	DSS-43	2.5	2.5	0.75	0.25	1	1	1	1
WIND	34B1	2.5	2.5	0.50	0.25	7	7	7	7
WIND TCM	DSS-24	3.0	2.0	0.50	0.25	1			
						10	11	12	13



Resource Allocation Review Recommendations and Analyses 2004 – April (Weeks 14 - 18)

EVENTS

**DSS-15 approved downtime beginning in week 16
(antenna controller replacement)**

**DSS-46 approved downtime beginning in week 16
(servo drive upgrade)**

Cassini approach

Genesis maneuver in week 17, DOY 113 and 114

GOES-N launch, not earlier than April 1

Mars Odyssey mapping

MAP maneuver in week 16

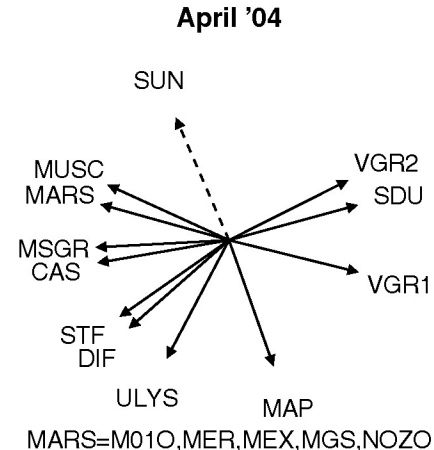
MERA and MERB surface operations

Mars Express orbital science

MGS mapping

MUSES-C TCM-1 in weeks 14 and 15

Voyager 1 DTR array in week 18, DOY 120





Resource Allocation Review Recommendations and Analyses 2004 – April (Weeks 14 - 18) (continued)

RECOMMENDATION

« Genesis » use DSS-24,54 for 5 routine passes in week 17. (2)

Mars Odyssey mapping/relay accept 5 gaps in 70M support in weeks 14, 16 and 17, and 6 gaps in weeks 15 and 18. Use 34M support to fill gaps: On Mondays 1 hour at DSS-26 and 3 hours at DSS-45, on Wednesdays 8 hours at DSS-54,55,65 and on Thursdays 3 hours at DSS-26 and 5 hours at DSS-54,55,65. In weeks 15 and 18 fill an additional 3-hour gap on Friday using DSS-26. (1)

MER depending on landing site selection MSPA Rovers A or B with Mars Odyssey on 34M antennas as defined above. (1)

« SOHO » reduce 9.6 hour passes at DSS-16,34,66 to 6 hours in weeks 17 and 18. (2, 3)

- ◆ To resolve intra-Mars Program conflicts, the Multi-mission DSN Allocation and Planning Team has agreed (ref: RARB AI #7) to provide a Mars Program coordinated input to Resource Allocation (Mid-Range) Planning Team of at least one week per week at least 6 months prior to the schedule week.



Resource Allocation Review Recommendations and Analyses 2004 – April (Weeks 14 - 18) (continued)

ANALYSIS

- 1. (70M) Moderate to severe unsupportable time is forecast for DSS maintenance. Contention is due to the MER surface operations and Mars Odyssey near continuous support requests that conflict each week with 5 - 6 periods of daylight preventative maintenance.**
- 2. (34BWG1) Moderate unsupportable time is forecast at DSS-34 in weeks 17 and 18. Contention is due to SOHO and Polar support that moved to DSS-34 to approve downtime at DSS-46 and requirements supporting DSS maintenance, Genesis, Ulysses, and Wind.**
- 3. (26M) Moderate unsupportable time is forecast at DSS-16 and DSS-66 in weeks 17 and 18 for SOHO and Polar. Contention is due to loading during DSS-46 downtime. Changes in user support are also needed to support the 34BWG1 recommendation.**

Contention levels on the 34HEF, 34BWG2, and 34HSB subnets are workable and should resolve during final schedule preparations and negotiations.



Resource Allocation Review Recommendations and Analyses 2004 – April (Weeks 14 - 18) (continued)

RESOURCE REQUEST

User	Resource	Durations		Calibration		April				
		Ave	Min	Pre	Post	14	15	16	17	18
CAS Approach	DSS-45,25	9.0	8.5	0.50	0.25	4	7	7	7	7
DSS Bearing Mntc	DSS-14	8.0	8.0				1			1
DSS Bearing Mntc	DSS-43	8.0	8.0					1		
DSS Bearing Mntc	DSS-63	8.0	8.0			1			1	
DSS Maintenance	DSS-54	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-25	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-55	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-27	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-15	8.0	6.0			1	1			
DSS Maintenance	DSS-45	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-24	8.0	6.0			1	1	1		1
DSS Maintenance	DSS-65	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-24	8.0	6.0						1	
DSS Maintenance	DSS-26	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-46	6.0	6.0			1				
DSS Maintenance	DSS-66	8.0	6.0			1		1	1	1
DSS Maintenance	DSS-46	4.0	4.0				1			
DSS Maintenance	DSS-66	6.0	6.0				1			
DSS Maintenance	DSS-43	8.0	8.0			1	1		1	1
DSS Maintenance	DSS-16	8.0	6.0			1		1	1	1
DSS Maintenance	DSS-16	6.0	6.0				1			
DSS Maintenance	DSS-34	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-63	9.5	8.0				1	1		1
DSS Maintenance	DSS-63	6.0	4.0			1	1	1	1	1
DSS Maintenance	DSS-14	8.0	8.0			1	2	2	2	2
GNS	34B1	4.0	4.0	0.50	0.25	4	7	7		6
GNS	34B1	8.0	4.0	0.50	0.25	3			3	1
GNS	34B1	6.0	4.0	0.50	0.25				2	
GNS Maneuver	34B1	8.0	4.0	0.50	0.25				6	
M01O Map/MERA D/L	70M	8.0	4.0	1.50	0.25	7	7	7	7	7
						14	15	16	17	18



Resource Allocation Review Recommendations and Analyses 2004 – April (Weeks 14 - 18) (continued)

RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		April				
		Ave	Min	Pre	Post	14	15	16	17	18
M01O Map/MERB D/L	70M	8.0	4.0	1.50	0.25	7	7	7	7	7
M01O Mapping	70M	8.0	4.0	0.50	0.25	6	6	6	6	6
MAP.	70M	0.7	0.6	1.25	0.25	7	7	4	7	7
MAP. Mnvr.	70M	5.0	5.0	1.25	0.25			1		
MAP. Mnvr.	70M	3.0	3.0	1.25	0.25			2		
MEX Orb Sci/MGS	DSS-24,54	8.0	4.0	0.50	0.25	7	7	7	7	7
MGS Mapping	DSS-25,26,45,65	8.0	4.0	0.50	0.25	9	9	9	9	9
MUSC TCM-1	DSS-25,34,54	3.0	3.0	0.75	0.25	4	4			
MUSC TRIM-3	DSS-25,34,54	3.0	3.0	0.75	0.25					1
POLR PB	34B1	1.0	0.8	0.50	0.25		12	12	12	12
POLR PB	26M	1.0	0.8	0.70	0.20	28	16			
POLR PB	DSS-16,27,66	1.0	0.8	0.70	0.20			16	16	16
POLR RT	34B1	2.0	2.0	0.50	0.25		3	3	3	3
POLR RT	26M	2.0	2.0	0.70	0.20	7	4			
POLR RT	DSS-16,27,66	2.0	2.0	0.70	0.20			4	4	4
SOHO	34B1	8.0	6.0	0.50	0.25		2			
SOHO	26M	9.6	6.0	0.70	0.20	7				
SOHO	26M	1.6	1.6	0.70	0.20	14	6			
SOHO	DSS-16,34,66	9.6	6.0	0.70	0.20			7	7	7
SOHO	DSS-16,27,66	1.6	1.6	0.70	0.20			14	14	14
SOHO TSO	34B1	8.0	4.0	0.50	0.25		1			
SOHO TSO	26M	8.0	4.0	0.70	0.20		14			
ULYS	34B1	10.0	4.0	0.50	0.25	7	7	7	7	7
VGR1	DSS-65	4.0	4.0	0.50	0.25				7	7
VGR1	DSS-26,65	8.0	4.0	0.50	0.25	14	14	14		
VGR1	DSS-25,26	8.0	4.0	0.50	0.25				7	7
VGR1	DSS-55	4.0	4.0	0.50	0.25				7	7
VGR1 DTR Array	DSS-14/26	7.4	4.0	0.75	0.25					1
VGR1 Routine U/L	70M	2.5	2.5	0.75	0.25	1	1	1	1	1
WIND	34B1	2.5	2.5	0.50	0.25	7	7	7	7	7
						14	15	16	17	18



Resource Allocation Review Recommendations and Analyses 2004 – May (Weeks 19 - 22)

May '04

EVENTS

DSS-15 approved downtime (antenna controller replacement)

DSS-46 approved downtime ending in week 21
(servo drive upgrade)

Cassini approach and TCM

Deep Impact TCM in week 22

EVN E500 J-M4 quarterly event in week 22

Genesis maneuver in week 22, DOY 146 and 147

Gravity Probe-B BR088n SOC-M4 quarterly epoch in week 19

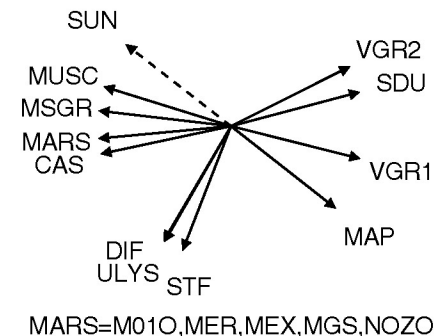
GSSR Venus Radar Speckle Displacement (RSD) and Mercury observation in
week 21

Mars Odyssey mapping

MERA surface operations (ending in week 20, DOY 132)

MERB surface operations

MUSES-C trim maneuvers 3 and 4





Resource Allocation Review Recommendations and Analyses 2004 – May (Weeks 19 - 22) (continued)

EVENTS (continued)

Voyager 1 ASCAL (DOY 125) and MAGROL (DOY 128) in week 19

Wind TCM in week 20

RECOMMENDATION

Mars Odyssey mapping/relay accept 5 gaps in 70M support in weeks 19, 21 and 22, and 7 gaps in week 20. Use 34M support to fill gaps: On Mondays 1 hour at DSS-26 and 1 hour at DSS-45, on Wednesdays 8 hours at DSS-54,55,65 and on Thursdays 1 hour at DSS-26 and 3 hours at DSS-54,55,65. In week 20 on Friday use 1 hour at DSS-26 and 1 hour at DSS-45.

MER depending on landing site selection MSPA Rovers A or B with Mars Odyssey on 34M antennas as defined above.



Resource Allocation Review Recommendations and Analyses 2004 – May (Weeks 19 - 22) (continued)

ANALYSIS

(70M) Unsupportable time is forecast moderate to severe in weeks 19 and 20. DSS maintenance is in contention on Monday, Wednesday and Thursday with Mars Odyssey and MER surface operations, Voyager 1 ASCAL and MAGROL support. In week 20 contention occurs on Monday at DSS-14 and DSS-43 when antenna maintenance conflicts with Mars Odyssey and MER surface operations.

Contention levels on the 34HEF, 34BWG1, 34BWG2, 34HSB, and 26M subnets are workable and should resolve during final schedule preparations and negotiations.



Resource Allocation Review

Recommendations and Analyses

2004 – May (Weeks 19 - 22) (continued)

RESOURCE REQUEST

User	Resource	Durations		Calibration		May			
		Ave	Min	Pre	Post	19	20	21	22
CAS Approach	DSS-45,25	9.0	8.5	0.50	0.25	7	7	7	6
CAS TCM Day	DSS-45,65,25	8.0	4.0	0.50	0.25				3
DIF Cruise	DSS-15,34,54	8.0	4.0	0.50	0.25	1	1	1	
DIF TCM	DSS-15,45,55	8.0	4.0	0.50	0.25				5
DSS Bearing Mntc	DSS-14	8.0	8.0					1	
DSS Bearing Mntc	DSS-43	8.0	8.0			1			1
DSS Bearing Mntc	DSS-63	8.0	8.0				1		
DSS Maintenance	DSS-54	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-25	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-55	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-27	8.0	6.0			1			
DSS Maintenance	DSS-27	6.0	6.0				1	1	1
DSS Maintenance	DSS-45	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-24	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-65	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-26	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-66	8.0	6.0			1	1	1	
DSS Maintenance	DSS-46	4.0	4.0						1
DSS Maintenance	DSS-66	4.0	4.0						1
DSS Maintenance	DSS-43	8.0	8.0				1	1	
DSS Maintenance	DSS-16	8.0	6.0			1	1	1	
DSS Maintenance	DSS-16	4.0	4.0						1
DSS Maintenance	DSS-34	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-63	9.5	8.0			1			
DSS Maintenance	DSS-63	6.0	4.0			1	1	1	1
DSS Maintenance	DSS-63	8.0	8.0					1	1
DSS Maintenance	DSS-14	8.0	8.0			2	2	1	1
DSS Maintenance	DSS-14	6.0	6.0					1	1
EVN E500 J-M4	DSS-14/63	8.0	8.0	1.50	0.50				2
GNS	34B1	4.0	4.0	0.50	0.25	6	6	3	
						19	20	21	22



Resource Allocation Review Recommendations and Analyses 2004 – May (Weeks 19 - 22) (continued)

RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		May			
		Ave	Min	Pre	Post	19	20	21	22
GNS	34B1	8.0	4.0	0.50	0.25	4	4	2	4
GNS Maneuver	34B1	8.0	4.0	0.50	0.25				6
GPB BR088n SOC-M4	DSS-14	12.0	12.0	1.50	0.50	1			
GPB BR088n SOC-M4	DSS-63	8.0	8.0	1.50	0.50	1			
GPB BR088n SOC-M4	DSS-43	6.5	6.5	1.50	0.50	1			
GSSR Mercury	DSS-14	3.0	3.0	1.50	0.50			1	
GSSR Venus RSD	DSS-14	1.0	1.0	1.50	0.50	2	2	2	2
M01O Map/MERA D/L	70M	8.0	4.0	1.50	0.25	7	2		
M01O Map/MERB D/L	70M	8.0	4.0	1.50	0.25	7	7	7	7
M01O Mapping	70M	8.0	4.0	0.50	0.25	6	9	7	7
MEX Orb Sci/MGS	DSS-24,54	8.0	4.0	0.50	0.25	7	7	7	7
MGS Mapping	DSS-25,26,45,65	8.0	4.0	0.50	0.25	9	7	7	7
MGS Mapping	DSS-25,26,45,65	6.0	4.0	0.50	0.25		2		
MUSC TRIM-3	DSS-25,34,54	3.0	3.0	0.75	0.25	4	1		
MUSC TRIM-4	DSS-25,34,54	3.0	3.0	0.75	0.25			1	4
VGR1	DSS-65	4.0	4.0	0.50	0.25	7			
VGR1	DSS-26,65	8.0	4.0	0.50	0.25		14	14	14
VGR1	DSS-25,26	8.0	4.0	0.50	0.25	7			
VGR1	DSS-55	4.0	4.0	0.50	0.25	7			
VGR1 ASCAL	DSS-14	2.0	2.0	0.75	0.25	1			
VGR1 MAGROL	DSS-14	7.0	4.0	0.75	0.25	1			
VGR1 Routine U/L	70M	2.5	2.5	0.75	0.25	1	1	1	1
WIND	34B1	2.5	2.5	0.50	0.25	7	7	7	7
WIND TCM	DSS-24	3.0	2.0	0.50	0.25		1		
						19	20	21	22

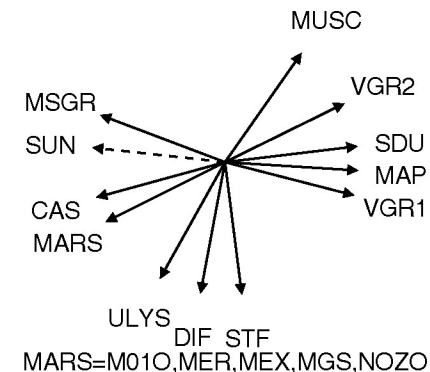


Resource Allocation Review Recommendations and Analyses 2004 – June (Weeks 23 - 26)

June '04

EVENTS

**DSS-15 approved downtime ending in week 24
(antenna controller replacement)**



Cassini approach, TCM in week 25 (DOY 168), and critical sequence in week 26

Deep Impact TCM in weeks 23 - 25

GSSR Asteroid 1998 SF36 in week 25 and 26 and Venus RSD in weeks 23 - 26

Mars Odyssey mapping

MERB surface operations (ending in week 25, DOY 167)

Mars Express orbital science and occultation support in weeks 25 and 26

MGS mapping

MESSENGER Venus flyby 1 in weeks 24 - 26

MUSES-C trim 4 maneuver support in week 23

SOHO HSO continuous support

Voyager 2 MAGROL in week 25, DOY 170



Resource Allocation Review Recommendations and Analyses 2004 – June (Weeks 23 - 26) (continued)

RECOMMENDATION

Chandra move 7 passes to the 26M and increase supports to 2 hours in week 26.

Mars Express reduce 3 of 7 orbital science/occultation passes requested at DSS-24,54 in weeks 25 and 26 from 14.5 hours to 10 hours in duration.

ANALYSIS

(34BWG1) Moderate to severe unsupportable time is forecast in weeks 25 and 26 for Ulysses and Wind. Contention is due to requirements supporting Cassini critical sequence, Chandra routine support, Deep Impact TCM, DSS maintenance, Mars Express orbital science and occultation, and Wind.

Contention levels on the 70M, 34HEF, 34BWG2, 34HSB and 26M subnets are workable and should resolve during final schedule preparations and negotiations.



Resource Allocation Review

Recommendations and Analyses

2004 – June (Weeks 23 - 26) (continued)

RESOURCE REQUEST

User	Resource	Durations		Calibration		June			
		Ave	Min	Pre	Post	23	24	25	26
CAS Approach	DSS-45,25	9.0	8.5	0.50	0.25	7	7	6	
CAS Critical Seq	DSS-15,45,65	8.0	4.0	1.00	0.25				11
CAS Critical Seq	DSS-34,55	8.0	4.0	1.00	0.25				6
CAS TCM Day	DSS-45	4.0	4.0	0.50	0.25				1
CAS TCM Day	DSS-65,55	8.0	4.0	0.50	0.25				1
CAS TCM Day	DSS-25	13.0	4.0	0.50	0.25				1
CHDR	34B1	1.0	1.0	0.50	0.25	21	21	21	21
DIF Cruise	DSS-25,45,55	8.0	4.0	0.50	0.25				3
DIF TCM	DSS-25,34,55	8.0	4.0	0.50	0.25	7	15	7	
DSS Bearing Mntc	DSS-14	8.0	8.0				1		
DSS Bearing Mntc	DSS-43	8.0	8.0					1	
DSS Bearing Mntc	DSS-63	8.0	8.0			1			1
DSS Maintenance	DSS-54	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-25	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-55	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-27	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-15	8.0	6.0					1	1
DSS Maintenance	DSS-45	6.0	6.0				1	1	
DSS Maintenance	DSS-45	5.0	5.0			1			1
DSS Maintenance	DSS-24	8.0	6.0			1	1		
DSS Maintenance	DSS-24	6.0	6.0					1	1
DSS Maintenance	DSS-65	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-26	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-46	4.0	4.0			1	1	1	1
DSS Maintenance	DSS-66	4.0	4.0			1	1	1	1
DSS Maintenance	DSS-43	8.0	8.0			1	1		1
DSS Maintenance	DSS-16	4.0	4.0			1	1	1	1
DSS Maintenance	DSS-34	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-63	9.5	8.0				1	1	
DSS Maintenance	DSS-63	6.0	4.0			1	1	1	1
						23	24	25	26



Resource Allocation Review Recommendations and Analyses 2004 – June (Weeks 23 - 26) (continued)

RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		June			
		Ave	Min	Pre	Post	23	24	25	26
DSS Maintenance	DSS-14	8.0	8.0				2	2	
DSS Maintenance	DSS-14	6.0	6.0			1			1
GSSR Ast 1998 SF36	DSS-14	8.0	8.0	1.50	0.50			4	1
GSSR Ast 1998 SF36	DSS-14	7.0	7.0	1.50	0.50				1
GSSR Venus RSD	DSS-14	1.0	1.0	1.50	0.50	2	2	2	2
M01O Map/MERB D/L	70M	8.0	4.0	1.50	0.25	7	7	2	
M01O Mapping	70M	4.0	4.0	0.50	0.25				3
M01O Mapping	70M	8.0	4.0	0.50	0.25	7		7	
M01O Mapping	DSS-43,63	7.0	4.0	0.50	0.25		5		11
M01O Mapping	DSS-14	4.0	4.0	0.50	0.25		2		
M01O Mapping	DSS-43	4.0	4.0	0.50	0.25		2		
MEX Orb Sci/Occ	DSS-24,54	14.6	4.0	0.50	0.25			7	7
MEX Orbital Sci	DSS-24,54	8.0	4.0	0.50	0.25	7	7		
MGS Mapping	DSS-26,45,65	8.0	4.0	0.50	0.25			10	
MGS Mapping	DSS-25,26,55	8.0	4.0	0.50	0.25				9
MGS Mapping	DSS-26,45,65	8.0	4.0	0.50	0.25	9	9		
MSGR	DSS-26,34,54	8.0	7.0	0.50	0.25	2			
MSGR Venus FB1	DSS-26,34,54	8.0	7.0	1.00	0.25		5	3	3
MSGR Venus FB1	DSS-26,45,65,55	8.0	7.0	1.00	0.25			3	3
MUSC TRIM-4	DSS-25,34,54	3.0	3.0	0.75	0.25	1			
SOHO HSO	DSS-27	8.0	6.0	0.40	0.20	7	7	7	7
SOHO HSO	DSS-46,66	8.0	6.0	0.70	0.20	14	14	14	14
ULYS	DSS-43,63	5.0	4.0	0.50	0.25		6	6	6
ULYS	DSS-24,34	10.0	4.0	0.50	0.25	6			
ULYS	34B1	5.0	4.0	0.50	0.25		6	6	6
VGR2	DSS-43	4.0	4.0	0.50	0.25			7	7
VGR2	DSS-45	4.0	4.0	0.50	0.25	7	7	6	6
VGR2	DSS-34	4.0	4.0	0.50	0.25			7	7
VGR2	DSS-34,43,45	8.0	4.0	0.50	0.25	7	7		
VGR2 MAGROL	DSS-43	7.0	4.0	0.75	0.25				1
						23	24	25	26



Resource Allocation Review Recommendations and Analyses 2004 – June (Weeks 23 - 26) (continued)

RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		June			
		Ave	Min	Pre	Post	23	24	25	26
VGR2 Routine U/L	DSS-43	2.5	2.5	0.75	0.25	1	1	1	1
WIND	34B1	2.5	2.5	0.50	0.25	7	7	7	7
						23	24	25	26



Resource Allocation Review Recommendations and Analyses 2004 – July (Weeks 27 - 31)

July '04

EVENTS

**DSS-14 approved downtime beginning in week 28
(antenna controller replacement)**

Cassini critical sequencing in week 27 and SOI (DOY 183 and 184)

Genesis maneuver in week 27, DOY 182 and 183

Gravity Probe-B BR088n SOC-M4 quarterly epoch in week 28

GSSR Venus RSD in weeks 27 and 28

MAP maneuver in week 31

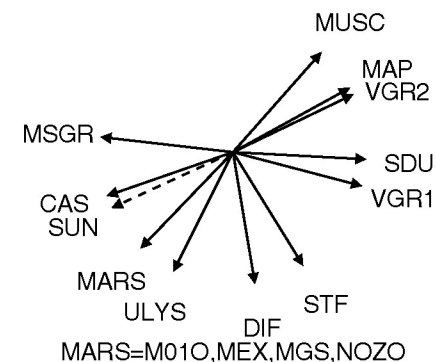
Mars Express orbital science and occultation support in weeks 27 and 28

Mars Odyssey mapping

MESSENGER Venus flyby in weeks 27 and 28

SOHO HSO continuous support

Wind TCM in week 30





Resource Allocation Review Recommendations and Analyses 2004 – July (Weeks 27 - 31) (continued)

RECOMMENDATION

Chandra move 7 passes per week to the 26M and increase supports to 2 hours in weeks 27 and 28.

ANALYSIS

(34BWG1) Moderate unsupportable time is forecast at DSS-24 and DSS-54 for Wind in weeks 27 and 28. Contention is due to requirements supporting Chandra, Mars Express orbital science and occultation, and Wind.

Contention levels on the 70M, 34HEF, 34BWG2, 34HSB and 26M subnets are workable and should resolve during final schedule preparations and negotiations.



Resource Allocation Review

Recommendations and Analyses

2004 – July (Weeks 27 - 31) (continued)

RESOURCE REQUEST

User	Resource	Durations		Calibration		July				
		Ave	Min	Pre	Post	27	28	29	30	31
CAS Critical Seq	DSS-15,45,65	8.0	4.0	1.00	0.25	9				
CAS SOI	70M	8.0	4.0	0.50	0.25	6				
CAS Tour	DSS-65,25	9.0	4.0	0.50	0.25	2	7	7	7	7
CHDR	34B1	1.0	1.0	0.50	0.25	21	21	21	21	21
DSS Bearing Mntc	DSS-43	8.0	8.0				1			1
DSS Maintenance	DSS-54	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-25	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-55	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-27	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-15	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-45	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-24	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-65	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-26	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-46	6.0	6.0						1	1
DSS Maintenance	DSS-66	8.0	6.0						1	1
DSS Maintenance	DSS-46	4.0	4.0			1	1	1		
DSS Maintenance	DSS-66	4.0	4.0			1	1	1		
DSS Maintenance	DSS-43	8.0	8.0			1		1	1	
DSS Maintenance	DSS-16	8.0	6.0						1	1
DSS Maintenance	DSS-16	4.0	4.0			1	1	1		
DSS Maintenance	DSS-34	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-63	9.5	8.0			1				
DSS Maintenance	DSS-14	8.0	8.0			1				
DSS Maintenance	DSS-63	8.0	8.0				1	1	1	1
GNS	34B1	4.0	4.0	0.50	0.25		4	2	4	4
GNS	34B1	8.0	4.0	0.50	0.25	5		5		
GNS Maneuver	34B1	8.0	4.0	0.50	0.25	6				
GPB BR088n SOC-M4	DSS-14	12.0	12.0	1.50	0.50		1			
GPB BR088n SOC-M4	DSS-63	8.0	8.0	1.50	0.50		1			
						27	28	29	30	31



Resource Allocation Review Recommendations and Analyses 2004 – July (Weeks 27 - 31) (continued)

RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		July				
		Ave	Min	Pre	Post	27	28	29	30	31
GPB BR088n SOC-M4	DSS-43	6.5	6.5	1.50	0.50		1			
GSSR Venus RSD	DSS-14	1.0	1.0	1.50	0.50	2	2			
M01O Map/MEX R/S	DSS-63	7.0	4.0	2.00	0.25			1	1	1
M01O Mapping	70M	7.0	4.0	0.50	0.25	9				
M01O Mapping	70M	4.0	4.0	0.50	0.25	3				
M01O Mapping	DSS-43,63	7.0	4.0	0.50	0.25		9			
M01O Mapping	DSS-43,63	8.0	4.0	0.50	0.25			7	10	10
M01O Mapping	DSS-43,63	5.0	4.0	0.50	0.25		1	2	1	1
M01O Mapping	DSS-45,65	7.0	4.0	0.50	0.25		2	2	2	2
M01O Mapping	34H	7.0	4.0	0.50	0.25	2	2			
MAP.	70M	0.7	0.6	1.25	0.25	7	2			
MAP.	DSS-43,63	0.7	0.6	1.25	0.25		5	7	7	4
MAP. Mnvr.	DSS-43,63	3.0	3.0	1.25	0.25					1
MAP. Mnvr.	DSS-43,63	5.0	4.0	1.25	0.25					2
MEX Orb Sci/Occ	DSS-24,54	14.6	4.0	0.50	0.25	7	7			
MEX Orbital Sci	DSS-24,54	8.0	4.0	0.50	0.25			7	7	7
MSGR	DSS-26,34	8.0	7.0	0.50	0.25			3	2	3
MSGR Venus FB1	DSS-26,45,65	8.0	7.0	1.00	0.25	7	4			
SOHO HSO	DSS-27	8.0	6.0	0.40	0.20	7	7	7	7	7
SOHO HSO	DSS-46,66	8.0	6.0	0.70	0.20	14	14	14	14	14
WIND	DSS-24,54	2.5	2.5	0.50	0.25	7	7	7	7	7
WIND Pre-Maneuver	DSS-34	2.0	2.0	0.50	0.25		1	1		
WIND TCM	DSS-24	3.0	2.0	0.50	0.25				1	
						27	28	29	30	31



Resource Allocation Review Recommendations and Analyses 2004 – August (Weeks 32 - 35)

EVENTS

DSS-14 approved downtime (antenna controller replacement)

Genesis maneuvers and Earth return beginning in week 33

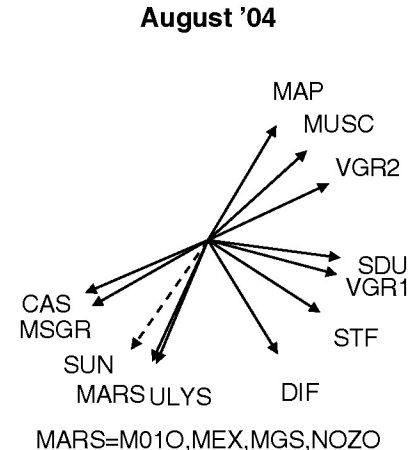
Lunar-A LEOP, launch in week 33, DOY 227

Mars Express orbital science and solar corona beginning in week 34

Mars Odyssey prime mission mapping ending in week 35, DOY 237

SOHO HSO continuous support

Voyager 1 MAGROL in week 32, DOY 220





Resource Allocation Review Recommendations and Analyses 2004 – August (Weeks 32 - 35) (continued)

RECOMMENDATION

Mars Express reduce 2 of 7 passes/week requested at DSS-63 to 6 hours in weeks 34 and 35.

Mars Odyssey move 1 pass to DSS-45 and 2 passes to DSS-55 of the 14 passes requested at DSS-43,63 in week 33. Of the 14 passes requested at DSS-43,63 in week 34, move 1 pass to DSS-45, 7 passes to DSS-25,26,55 and support the remaining 6 passes at DSS-43. Support the six 7-10 hour passes requested in week 35 at DSS-43 only.



Resource Allocation Review Recommendations and Analyses 2004 – August (Weeks 32 - 35) (continued)

ANALYSIS

(70M) Moderate to severe unsupportable time is forecast at DSS-43 and DSS-63 for DSS maintenance in weeks 33 - 35 and for Mars Odyssey mapping and Mars Express orbital science and solar corona in weeks 34 and 35. Contention is due to the Mars Odyssey mapping request for 8 hours of support daily from both complexes until EOPM, the Mars Express request for daily support at DSS-63, and the support required for antenna maintenance. DSS-14 is down in these weeks and the Mars and maintenance viewperiod overlap is above 85%.

Contention levels on the 34HEF, 34BWG1, 34BWG2, 34HSB and 26M subnets are workable and should resolve during final schedule preparations and negotiations.



Resource Allocation Review Recommendations and Analyses 2004 – August (Weeks 32 - 35) (continued)

RESOURCE REQUEST

User	Resource	Durations		Calibration		August			
		Ave	Min	Pre	Post	32	33	34	35
DSS Bearing Mntc	DSS-43	8.0	8.0					1	
DSS Bearing Mntc	DSS-63	8.0	8.0			1			
DSS Bearing Mntc	DSS-63	6.0	6.0						1
DSS Maintenance	DSS-54	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-25	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-55	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-27	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-15	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-45	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-24	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-65	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-26	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-46	6.0	6.0			1			
DSS Maintenance	DSS-66	8.0	6.0			1			
DSS Maintenance	DSS-46	4.0	4.0				1	1	1
DSS Maintenance	DSS-66	4.0	4.0				1	1	1
DSS Maintenance	DSS-43	8.0	8.0			1	1		1
DSS Maintenance	DSS-16	8.0	6.0			1		1	1
DSS Maintenance	DSS-16	6.0	6.0				1		
DSS Maintenance	DSS-34	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-63	9.5	8.0				1		
DSS Maintenance	DSS-63	6.0	4.0			1	1	2	1
GNS	34B1	4.0	4.0	0.50	0.25	2			
GNS	34B1	8.0	4.0	0.50	0.25	3			
GNS Earth Return	34B1	7.5	4.0	0.50	0.25		5	7	6
GNS Maneuver	34B1	7.0	4.0	0.50	0.25		6		3
LUNA LEOP/PHASE	DSS-16,66	6.0	6.0	0.70	0.20		7	7	7
M01O Map/MGS Map	34H	10.0	4.0	0.50	0.25				3
M01O Mapping	DSS-43,63	7.0	4.0	0.50	0.25	14	14	14	4
M01O Mapping	DSS-43,63	10.0	4.0	0.50	0.25				2
						32	33	34	35



Resource Allocation Review Recommendations and Analyses 2004 – August (Weeks 32 - 35) (continued)

RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		August			
		Ave	Min	Pre	Post	32	33	34	35
MEX Orb Sci/SolCor	DSS-63	8.0	4.0	0.50	0.25			7	7
MEX Orbital Sci	DSS-24,54	8.0	4.0	0.50	0.25	7	7		
SOHO HSO	DSS-27	8.0	6.0	0.40	0.20	7	7	7	7
SOHO HSO	DSS-46,66	8.0	6.0	0.70	0.20	14	14	14	14
VGR1	DSS-43,63	4.0	4.0	0.50	0.25	7	7		
VGR1	DSS-43,55	4.0	4.0	0.50	0.25			7	7
VGR1	DSS-65	4.0	4.0	0.50	0.25			7	
VGR1	DSS-26	8.0	4.0	0.50	0.25	7	7	7	7
VGR1 MAGROL	DSS-63	7.0	4.0	0.75	0.25	1			
VGR1 Routine U/L	DSS-43,63	2.5	2.5	0.75	0.25	1	1	1	1
						32	33	34	35



Resource Allocation Review Recommendations and Analyses 2004 – September (Weeks 36 - 40)

EVENTS

DSS-14 approved downtime ending in week 40
(antenna controller replacement)

DSS-14 proposed additional downtime beginning in week 39
(hydrostatic bearing replacement), NIB to ACR in weeks 39 - 40

EVN E500 J-M4 quarterly event in week 37

Genesis Earth return, TCM, and backup orbit support

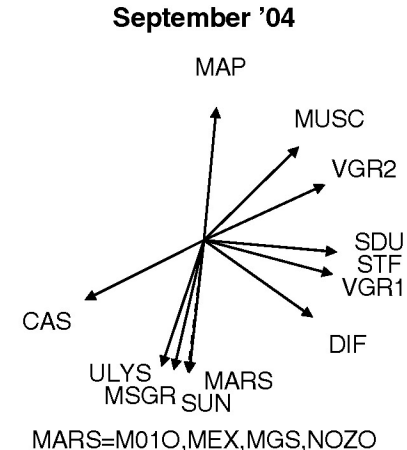
Lunar-A LEOP

Mars Express orbital science and solar corona

Stardust TCM support

Voyager 1 MAGROL in week 38

Voyager 2 DTR P/B in week 37, and ASCAL and MAGROL in week 38





Resource Allocation Review Recommendations and Analyses

2004 – September (Weeks 36 - 40) (continued)

RECOMMENDATION

Mars Express change 2 - 3 DSS-63 orbital science/solar corona passes to use two to three 4-hour passes at DSS-25,26 to support orbital science and two to three 4-hour passes at DSS-63 to support solar corona.

ANALYSIS

(70M) Moderate to severe unsupportable time is forecast at DSS-63 for DSN antenna calibrations in week 38, DSS maintenance, EVN E500 J-M4 in week 37, GBRA RA500 SOC M-4 and M-wave spectroscopy in week 36, and Mars Express orbital science and solar corona. Contention is due to Mars Express viewperiod overlap with the maintenance viewperiod.

Contention levels on the 34HEF, 34BWG1, 34BWG2, 34HSB, and 26M subnets are workable and should resolve during final schedule preparations and negotiations.



Resource Allocation Review Recommendations and Analyses

2004 – September (Weeks 36 - 40) (continued)

RESOURCE REQUEST

User	Resource	Durations		Calibration		September				
		Ave	Min	Pre	Post	36	37	38	39	40
DSN Antenna Cal	DSS-43	8.0	4.5				1			
DSN Antenna Cal	DSS-63	8.0	4.5					1		
DSN Antenna Cal	DSS-65	8.0	4.5			1				
DSN Antenna Cal	DSS-34	8.0	4.5			1				
DSN Antenna Cal	DSS-54	8.0	4.5				1			
DSN Antenna Cal	DSS-25	8.0	4.5						1	
DSN Antenna Cal	DSS-26	8.0	4.5				1			
DSN Antenna Cal	DSS-55	8.0	4.5						1	
DSS Bearing Mntc	DSS-43	8.0	8.0				1			1
DSS Bearing Mntc	DSS-63	6.0	6.0					1		
DSS Maintenance	DSS-54	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-25	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-55	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-27	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-15	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-45	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-24	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-65	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-26	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-46	6.0	6.0					1	1	1
DSS Maintenance	DSS-66	8.0	6.0					1	1	1
DSS Maintenance	DSS-46	4.0	4.0			1	1			
DSS Maintenance	DSS-66	4.0	4.0			1				
DSS Maintenance	DSS-66	6.0	6.0				1			
DSS Maintenance	DSS-43	8.0	8.0			1		1	1	
DSS Maintenance	DSS-16	8.0	6.0			1		1	1	1
DSS Maintenance	DSS-16	6.0	6.0				1			
DSS Maintenance	DSS-34	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-63	6.0	4.0			2	2	1	2	2
EVN E500 J-M4	DSS-63	8.0	8.0	1.50	0.50		2			
						36	37	38	39	40



Resource Allocation Review Recommendations and Analyses

2004 – September (Weeks 36 - 40) (continued)

RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		September				
		Ave	Min	Pre	Post	36	37	38	39	40
GBRA Host Country	DSS-45	12.0	12.0	0.75	0.25		1			
GBRA M-Wave Spect	DSS-43,63	9.0	4.0	0.50	0.50	2				
GBRA M-Wave Spect	DSS-43	4.0	4.0	0.50	0.50		1	1	1	1
GBRA M-Wave Spect	DSS-63	4.0	4.0	0.50	0.50		1	1	1	1
GBRA RA500 SOC-M4	DSS-63	8.0	6.0	1.50	0.50	3				
GBRA VLBA SOC-M4	DSS-63	8.0	8.0	1.50	0.50					1
GNS Backup Orbit	34B1	8.0	4.0	0.50	0.25					3
GNS Backup Orbit	DSS-34	15.0	4.0	0.50	0.25		4			
GNS Backup Orbit	DSS-34	13.0	4.0	0.50	0.25			7		
GNS Backup Orbit	DSS-24,54	4.0	4.0	0.50	0.25			14	14	12
GNS Backup Orbit	DSS-34	10.0	4.0	0.50	0.25				7	6
GNS Earth Return	DSS-24,54	4.0	4.0	0.50	0.25		2			
GNS Earth Return	34B1	7.5	4.0	0.50	0.25	18	3			
GNS Earth Return	DSS-34	11.0	4.0	0.50	0.25		1			
GNS Earth Return	DSS-54	6.0	4.0	0.50	0.25		1			
GNS Earth Return	DSS-24	7.0	4.0	0.50	0.25		1			
GNS Maneuver	34B1	7.0	4.0	0.50	0.25	3	3			
LUNA LEOP/PHASE	DSS-16,66	6.0	6.0	0.70	0.20	7	7	7	7	7
MEX Orb Sci/SolCor	DSS-63	8.0	4.0	0.50	0.25	7	7	7	7	
MEX Orb Sci/SolCor	DSS-63	7.6	4.0	0.50	0.25					7
SDU TCM	34H	8.0	6.0	0.50	0.25					2
SDU TCM	34H	4.0	4.0	0.50	0.25	2	2	6	14	12
VGR1	DSS-25,26	8.0	4.0	0.50	0.25	6	6	5	6	6
VGR1	DSS-55	4.0	4.0	0.50	0.25	7	7	7	7	7
VGR1	DSS-55	8.0	4.0	0.50	0.25	1	1	1	1	1
VGR1 MAGROL	DSS-63	7.0	4.0	0.75	0.25			1		
VGR1 Routine U/L	DSS-43,63	2.5	2.5	0.75	0.25	1	1	1	1	1
VGR2	DSS-43,45	8.0	4.0	0.50	0.25	7	6	6	7	7
VGR2 ASCAL	DSS-43	2.0	2.0	0.75	0.25			1		
VGR2 DTR P/B	DSS-43	7.4	4.0	0.75	0.25		1			
						36	37	38	39	40



Resource Allocation Review Recommendations and Analyses

2004 – September (Weeks 36 - 40) (continued)

RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		September				
		Ave	Min	Pre	Post	36	37	38	39	40
VGR2 MAGROL	DSS-43	7.0	4.0	0.75	0.25			1		
VGR2 Routine U/L	DSS-43	2.5	2.5	0.75	0.25	1	1	1	1	1
						36	37	38	39	40



Resource Allocation Review Recommendations and Analyses 2004 – October (Weeks 41 - 44)

EVENTS

DSS-14 proposed downtime (hydrostatic bearing replacement)

Genesis backup orbit support

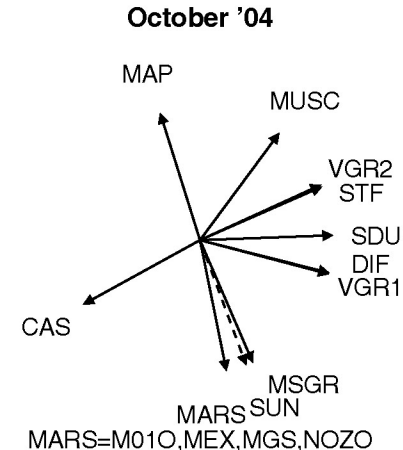
GSSR Asteroid Toutatis B observation in week 41

Mars Express orbital science and solar corona support

Stardust TCM support

Voyager 1 DTR array in week 44, DOY 301

Wind TCM support in week 43





Resource Allocation Review Recommendations and Analyses

2004 – October (Weeks 41 - 44) (continued)

RECOMMENDATION

DSS-14 downtime proposal. Project/user supports re-allocated to other DSS resources to accommodate the requested downtime: MAP, Mars Odyssey and Voyager 1. Deleted Toutatis B support in week 41.

Mars Express change 2 - 3 DSS-63 orbital science/solar corona passes to use two to three 4-hour passes at DSS-25,26 to support orbital science and two to three 4-hour passes at DSS-63 to support solar corona.

« **Voyager 1** » delete DTR array in week 44 and track the event using DSS-15. Plan a DTR P/B pass at DSS-14 to replay data in week 48.

ANALYSIS

(70M) The proposed downtime at DSS-14 causes contention with GSSR Toutatis-B observation, GBRA M-wave spectroscopy and planet radio astronomy, MAP routine support, Mars Express orbital science and solar corona support, Mars Odyssey mapping, and Voyager 1 routine U/L.

Contention levels on the 34HEF, 34BWG1, 34BWG2, 34HSB, and 26M subnets are workable and should resolve during final schedule preparations and negotiations.



Resource Allocation Review Recommendations and Analyses 2004 – October (Weeks 41 - 44) (continued)

RESOURCE REQUEST

User	Resource	Durations		Calibration		October			
		Ave	Min	Pre	Post	41	42	43	44
DSS Bearing Mntc	DSS-14	8.0	8.0				1		
DSS Bearing Mntc	DSS-43	8.0	8.0					1	
DSS Bearing Mntc	DSS-63	6.0	6.0			1			1
DSS Maintenance	DSS-54	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-25	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-55	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-27	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-15	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-45	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-24	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-65	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-26	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-46	6.0	6.0				1	1	1
DSS Maintenance	DSS-66	8.0	6.0				1	1	1
DSS Maintenance	DSS-46	4.0	4.0			1			
DSS Maintenance	DSS-66	6.0	6.0			1			
DSS Maintenance	DSS-43	8.0	8.0			1	1		1
DSS Maintenance	DSS-16	8.0	6.0				1	1	1
DSS Maintenance	DSS-16	6.0	6.0			1			
DSS Maintenance	DSS-34	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-63	6.0	4.0			1	2	2	1
DSS Maintenance	DSS-14	8.0	8.0				1	1	1
DSS Maintenance	DSS-14	4.0	4.0				1	1	1
DSS Maintenance	DSS-14	8.0	8.0			2			
GBRA Host Country	DSS-43	8.0	8.0	0.75	0.25		3		
GBRA Host Country	DSS-63	9.0	4.0					1	
GBRA Host Country	DSS-63	8.0	4.0			3			
GBRA Host Country	DSS-45	12.0	12.0	0.75	0.25			1	
GBRA M-Wave Spect	DSS-43,63	9.0	4.0	0.50	0.50				2
GBRA M-Wave Spect	DSS-43	4.0	4.0	0.50	0.50	1	1		
						41	42	43	44



Resource Allocation Review Recommendations and Analyses 2004 – October (Weeks 41 - 44) (continued)

RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		October			
		Ave	Min	Pre	Post	41	42	43	44
GBRA M-Wave Spect	DSS-63	4.0	4.0	0.50	0.50	1	1		
GBRA M-Wave Spect	DSS-43	9.0	4.0	0.50	0.50			1	
GNS Backup Orbit	34B1	8.0	4.0	0.50	0.25	21	21	21	6
M01O Map/MGS Map	34B1	10.0	4.0	0.50	0.25	3	2	2	3
M01O Mapping	DSS-43	10.0	4.0	0.50	0.25	4	5	5	4
MAP.	DSS-43,63	0.7	0.6	1.25	0.25	7	7	7	7
MEX Orb Sci/SolCor	DSS-14,63	8.0	4.0	0.50	0.25	7	7	7	7
MEX R/S Bi Static	DSS-43	4.0	4.0	0.50	0.25	1	1	1	1
SDU TCM	34H	4.0	4.0	0.50	0.25	14	10	2	2
VGR1	DSS-65	4.0	4.0	0.50	0.25	7	7		
VGR1	DSS-26,65	8.0	4.0	0.50	0.25			14	14
VGR1	DSS-26	8.0	4.0	0.50	0.25	7	7		
VGR1 Routine U/L	DSS-43,63	2.5	2.5	0.75	0.25	1	1	1	1
WIND	34B1	2.5	2.5	0.50	0.25	7	7	7	7
WIND TCM	DSS-24	3.0	2.0	0.50	0.25			1	
						41	42	43	44



Resource Allocation Review Recommendations and Analyses 2004 – November (Weeks 45 - 48)

EVENTS

**DSS-14 proposed downtime ending in week 47
(hydrostatic bearing replacement)**

EVN E-500 M-J4 quarterly event in week 46

Gravity Probe-B BRO88n SOC-M4 quarterly epoch in week 48

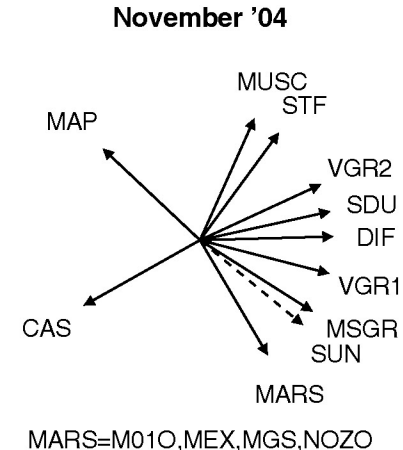
GSSR Mercury observation in week 48

MAP maneuver in week 46

Mars Express orbital science and solar corona in weeks 45 - 47

ST5 launch in week 47 on DOY 324

Voyager 1 ASCAL, DOY 307, and MAGROL, DOY 310 in week 45





Resource Allocation Review Recommendations and Analyses

2004 – November (Weeks 45 - 48) (continued)

RECOMMENDATION

DSS-14 downtime proposal. Project/user supports re-allocated to other DSS resources to accommodate the requested downtime: Cassini, DSN, EVN, GBRA, Mars Odyssey, MAP, and Voyager 1 routine U/L.

Mars Express change 2 - 3 DSS-63 orbital science/solar corona passes to use two to three 4-hour passes at DSS-25,26 to support orbital science and two to three 4-hour passes at DSS-63 to support solar corona in weeks 45 - 47. (1)



Resource Allocation Review Recommendations and Analyses

2004 – November (Weeks 45 - 48) (continued)

ANALYSIS

1. (70M) Moderate unsupportable time is forecast for DSS maintenance in weeks 45, 46 and 48, and for Voyager 1 in week 45. Contention is due to support requested for Mars Odyssey mapping, Mars Express orbital science and solar corona, and Gravity Probe-B. DSS-14 downtime is proposed for hydrostatic bearing replacement in weeks 45 - 47. The downtime is in contention with EVN E500 JM-4, GBRA M-wave spectroscopy, planet radio astronomy, and VLBA SOC M-4, Mars Express orbital science and solar corona, and Voyager 1 ASCAL.
2. (26M) Moderate to severe unsupportable time is forecast for ACE, DSS maintenance, SOHO and ST5 in weeks 47 and 48. Contention is due to requirements supporting the ST5 launch. Analysis is on hold until updated ST5 viewperiods are received for the November 19, 2004 launch.

Contention levels on the 34HEF, 34BWG1, 34BWG2, and 34HSB subnets are workable and should resolve during final schedule preparations and negotiations.



Resource Allocation Review Recommendations and Analyses

2004 – November (Weeks 45 - 48) (continued)

RESOURCE REQUEST

User	Resource	Durations		Calibration		November			
		Ave	Min	Pre	Post	45	46	47	48
ACE.	DSS-27	3.5	3.5	0.40	0.20	6	6	6	6
ACE.	26M	3.5	3.5	0.70	0.20	1	1	1	1
ACE.	26M	1.0	1.0	0.70	0.20	6	6	6	6
CAS Tour	DSS-14,63	9.0	4.0	0.50	0.25				2
CAS Tour	DSS-43,63	9.0	4.0	0.50	0.25	3	3	2	
CAS Tour	DSS-65,25	9.0	4.0	0.50	0.25	6	5	5	4
DSS Bearing Mntc	DSS-14	8.0	8.0			1			
DSS Bearing Mntc	DSS-43	8.0	8.0				1		
DSS Bearing Mntc	DSS-63	6.0	6.0					1	
DSS Maintenance	DSS-54	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-25	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-55	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-27	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-15	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-45	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-24	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-65	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-26	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-46	6.0	6.0				1	1	1
DSS Maintenance	DSS-66	8.0	6.0				1	1	1
DSS Maintenance	DSS-46	4.0	4.0			1			
DSS Maintenance	DSS-66	6.0	6.0			1			
DSS Maintenance	DSS-43	8.0	8.0			1		1	1
DSS Maintenance	DSS-16	8.0	6.0				1	1	1
DSS Maintenance	DSS-16	6.0	6.0			1			
DSS Maintenance	DSS-34	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-63	9.5	8.0						1
DSS Maintenance	DSS-63	6.0	4.0			2	2	1	1
DSS Maintenance	DSS-14	8.0	8.0			1	1	1	2
DSS Maintenance	DSS-14	4.0	4.0			1	1	1	
						45	46	47	48



Resource Allocation Review Recommendations and Analyses

2004 – November (Weeks 45 - 48) (continued)

RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		November			
		Ave	Min	Pre	Post	45	46	47	48
EVN E500 J-M4	DSS-63	8.0	8.0	1.50	0.50		2		
GBRA Host Country	DSS-63	9.0	4.0			1		1	
GBRA M-Wave Spect	70M	9.0	4.0	0.50	0.50				3
GBRA M-Wave Spect	DSS-43,63	9.0	4.0	0.50	0.50		2		
GBRA M-Wave Spect	DSS-43	9.0	4.0	0.50	0.50	1		1	
GBRA RA500 SOC-M4	DSS-14\63	24.0	24.0	1.50	0.50				1
GBRA VLBA SOC-M4	DSS-63	8.0	8.0	1.50	0.50	1			
GPB BR088n SOC-M4	DSS-14	12.0	12.0	1.50	0.50				1
GPB BR088n SOC-M4	DSS-63	8.0	8.0	1.50	0.50				1
GPB BR088n SOC-M4	DSS-43	6.5	6.5	1.50	0.50				1
GSSR Mercury	DSS-14	4.4	4.4	1.50	0.50				1
M01O Map/MGS Map	70M	10.0	4.0	0.50	0.25				2
M01O Map/MGS Map	34B1	10.0	4.0	0.50	0.25	2	2	3	
M01O Mapping	70M	10.0	4.0	0.50	0.25				5
M01O Mapping	DSS-43	10.0	4.0	0.50	0.25	5	5	4	
MAP.	DSS-43,63	0.7	0.6	1.25	0.25	7	4	7	7
MAP. Mnvr.	DSS-43,63	3.0	3.0	1.25	0.25		2		
MAP. Mnvr.	DSS-43,63	5.0	4.0	1.25	0.25		1		
MEX Orb Sci/SolCor	DSS-14,63	8.0	4.0	0.50	0.25	7	7	7	
MEX Orbital Sci	DSS-24,55	8.0	4.0	0.50	0.25				7
MEX R/S Bi Static	DSS-43	4.0	4.0	0.50	0.25	1	1	1	1
SOHO	34B1	8.0	6.0	0.50	0.25	2			
SOHO	26M	9.6	6.0	0.70	0.20		7	7	7
SOHO	26M	1.6	1.6	0.70	0.20	6	14	14	14
SOHO TSO	34B1	8.0	4.0	0.50	0.25	1			
SOHO TSO	26M	8.0	4.0	0.70	0.20	14			
ST5 launch	DSS-24,26	8.2	8.2	3.00	0.25				1
ST5 launch	DSS-34	7.0	7.0	0.50	0.25				1
ST5 launch	DSS-16	8.2	8.2	3.00	0.25				1
ST5 launch	DSS-46	7.0	7.0	0.50	0.25				1
						45	46	47	48



Resource Allocation Review Recommendations and Analyses

2004 – November (Weeks 45 - 48) (continued)

RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		November			
		Ave	Min	Pre	Post	45	46	47	48
ST5 Phase A	DSS-24,25	1.5	1.5	0.50	0.25			11	11
ST5 Phase A	DSS-34	1.5	1.5	0.50	0.25			2	5
ST5 Phase A	DSS-16	1.5	1.5	0.50	0.25			8	11
ST5 Phase A	DSS-46	1.5	1.5	0.50	0.25			2	5
ST5 Phase B	DSS-24,25	1.0	1.0	0.50	0.25			6	6
ST5 Phase B	DSS-34	1.0	1.0	0.50	0.25			2	2
ST5 Phase B	DSS-16	1.0	1.0	0.50	0.25			6	6
ST5 Phase B	DSS-46	1.0	1.0	0.50	0.25			2	2
VGR1	DSS-65	4.0	4.0	0.50	0.25		7	7	
VGR1	DSS-65	8.0	4.0	0.50	0.25				7
VGR1	DSS-26,65	8.0	4.0	0.50	0.25	14			
VGR1	DSS-26	8.0	4.0	0.50	0.25		7	7	
VGR1	DSS-25,26	4.0	4.0	0.50	0.25				7
VGR1 ASCAL	DSS-15	2.0	2.0	0.75	0.25	1			
VGR1 DTR P/B	DSS-14	7.4	4.0	0.75	0.25				1
VGR1 MAGROL	DSS-63,15	4.0	4.0	0.75	0.25	2			
VGR1 Routine U/L	70M	2.5	2.5	0.75	0.25				1
VGR1 Routine U/L	DSS-43,63	2.5	2.5	0.75	0.25	1	1	1	
						45	46	47	48



Resource Allocation Review Recommendations and Analyses 2004 – December (Weeks 49 - 53)

EVENTS

Cassini probe target TCM, critical sequence U/L, and probe C/O and release support beginning in week 50

Deep Impact TCM in week 49, and Earth flyby support beginning in week 50

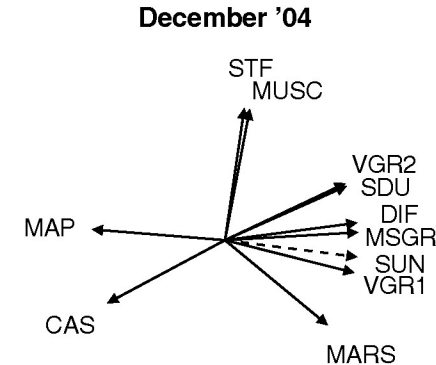
Lunar-A TCM support in weeks 49 and 50

Mars Express orbital science and occultation

RECOMMENDATION

Mars Express reduce the number of orbital science/occultation passes planned at DSS-24,55 in weeks 52 and 53 from 7 to 5 and MSPA 2 orbital science passes with MGS mapping/beta supplement at DSS-26,45,65 and plan two 4-hour occultation passes at DSS-24.

« MGS » MSPA 2 mapping/beta supplement passes with Mars Express in weeks 52 and 53.



MARS=M01O,MEX,MGS,NOZO



Resource Allocation Review Recommendations and Analyses

2004 – December (Weeks 49 - 53) (continued)

ANALYSIS

(34BWG1) Moderate unsupportable time is forecast in weeks 52 and 53 for Mars Express orbital science/occultation and Wind support. Contention is due to requests supporting Deep Impact Earth flyby, and DSS maintenance. The missions' viewperiods overlap is >80%.

Contention levels on the 70M, 34HEF, 34BWG1 in weeks 49 - 51, 34BWG2, 34HSB, and 26M subnets are workable and should resolve during final schedule preparations and negotiations.



Resource Allocation Review Recommendations and Analyses

2004 – December (Weeks 49 - 53) (continued)

RESOURCE REQUEST

User	Resource	Durations		Calibration		December				
		Ave	Min	Pre	Post	49	50	51	52	53
CAS Probe CO/Rel	DSS-45,65,25	8.0	4.0	0.50	0.25		1	16	21	21
CAS Tour	DSS-14,63	9.0	4.0	0.50	0.25	2				
CAS Tour	DSS-65,25	9.0	4.0	0.50	0.25	6	7			
DIF Earth FB	DSS-15	8.0	4.0	0.50	0.25		5			
DIF Earth FB	DSS-45,65,34,55	8.0	4.0	0.50	0.25		10			
DIF Earth FB	DSS-15,34,54	8.0	4.0	0.50	0.25			7	7	15
DIF TCM	DSS-25,34,55	8.0	4.0	0.50	0.25	7				
DSS Bearing Mntc	DSS-14	8.0	8.0					1		
DSS Bearing Mntc	DSS-43	8.0	8.0			1			1	1
DSS Bearing Mntc	DSS-63	8.0	8.0				1			
DSS Maintenance	DSS-54	6.0	6.0			1	1	1		
DSS Maintenance	DSS-54	4.0	4.0						1	1
DSS Maintenance	DSS-25	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-55	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-27	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-15	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-45	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-24	8.0	6.0			1	1	1		
DSS Maintenance	DSS-65	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-24	4.0	4.0						1	1
DSS Maintenance	DSS-26	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-46	6.0	6.0				1	1	1	1
DSS Maintenance	DSS-66	8.0	6.0				1	1	1	1
DSS Maintenance	DSS-46	4.0	4.0			1				
DSS Maintenance	DSS-66	6.0	6.0			1				
DSS Maintenance	DSS-43	8.0	8.0				1	1		
DSS Maintenance	DSS-16	8.0	6.0				1	1	1	1
DSS Maintenance	DSS-16	6.0	6.0			1				
DSS Maintenance	DSS-34	6.0	6.0			1	1	1		
DSS Maintenance	DSS-34	4.0	4.0						1	1
						49	50	51	52	53



Resource Allocation Review Recommendations and Analyses

2004 – December (Weeks 49 - 53) (continued)

RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		December				
		Ave	Min	Pre	Post	49	50	51	52	53
DSS Maintenance	DSS-63	9.5	8.0			1		1	1	1
DSS Maintenance	DSS-63	6.0	4.0			1	1	1	1	1
DSS Maintenance	DSS-14	8.0	8.0			2	2	2	2	2
LUNA WSB	DSS-24,54	8.0	6.0	0.50	0.25			2		2
LUNA WSB DDOR	DSS-24,54	1.0	1.0	0.50	0.25				2	
LUNA WSB TCM	DSS-24,54	8.0	6.0	0.50	0.25	9	9			
MEX Orb Sci/Occ	DSS-24,55	11.1	4.0	0.50	0.25				7	7
MEX Orbital Sci	DSS-24,55	8.0	4.0	0.50	0.25	7		7		
MEX Orbital Sci	DSS-25,55	8.0	4.0	0.50	0.25		7			
MEX R/S Bi Static	DSS-43	4.0	4.0	0.50	0.25	1	1	1	1	1
MGS Map/Beta Sup	DSS-26,45,65	14.0	4.0	0.50	0.25	7	7	7	7	7
WIND	34B1	2.5	2.5	0.50	0.25	7		7	7	
WIND	DSS-24,54	2.5	2.5	0.50	0.25		3			
WIND	DSS-34	2.5	2.5	0.50	0.25		4			
WIND	DSS-24	2.5	2.5	0.50	0.25					4
WIND	DSS-34,54	2.5	2.5	0.50	0.25					3
						49	50	51	52	53

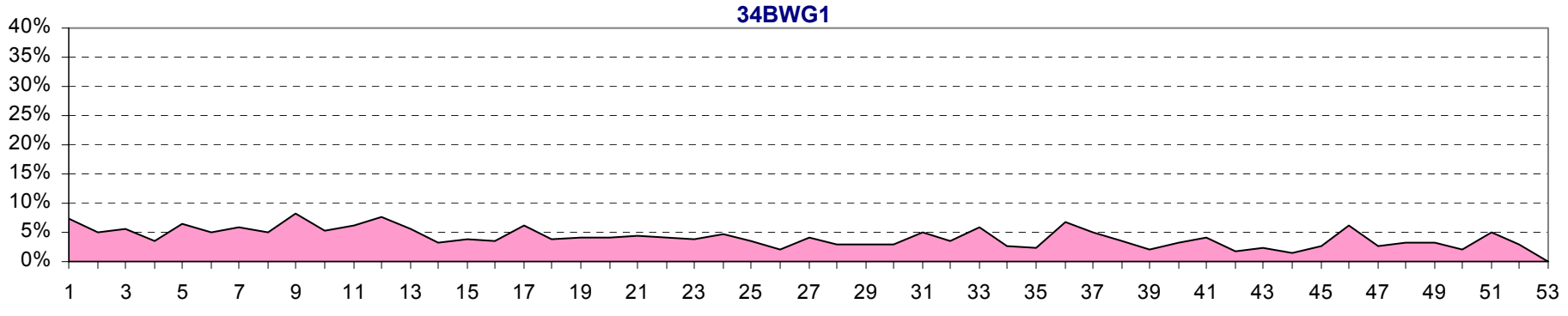
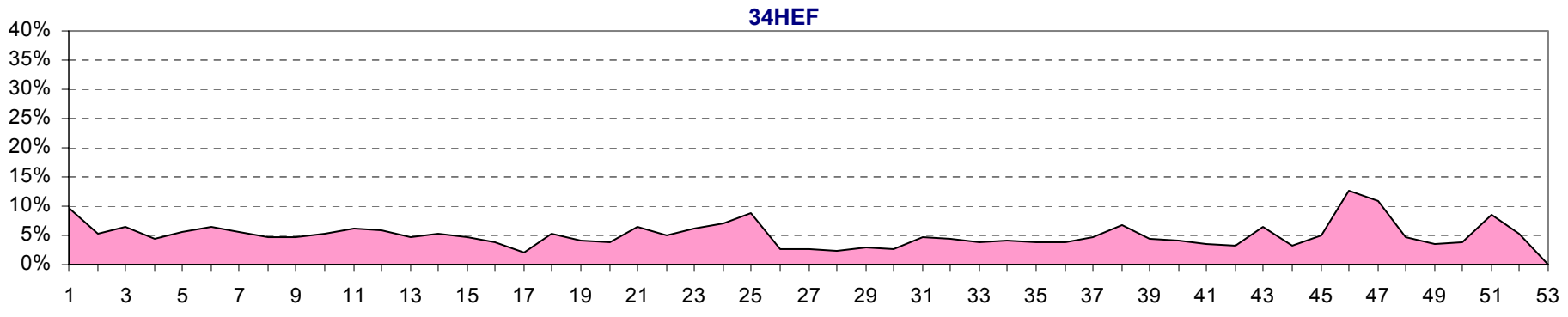
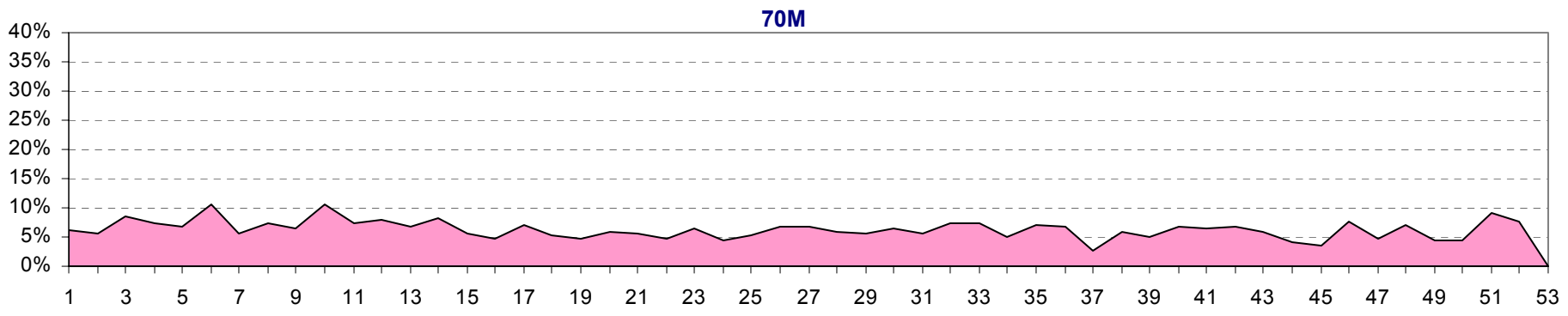


Resource Allocation Review Recommendations and Analyses

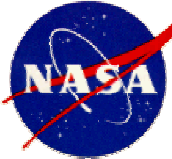
2005 Events, Recommendations and Analyses



Resource Allocation Review Recommendations and Analyses 2005 Weekly Average User Unsupportable Time

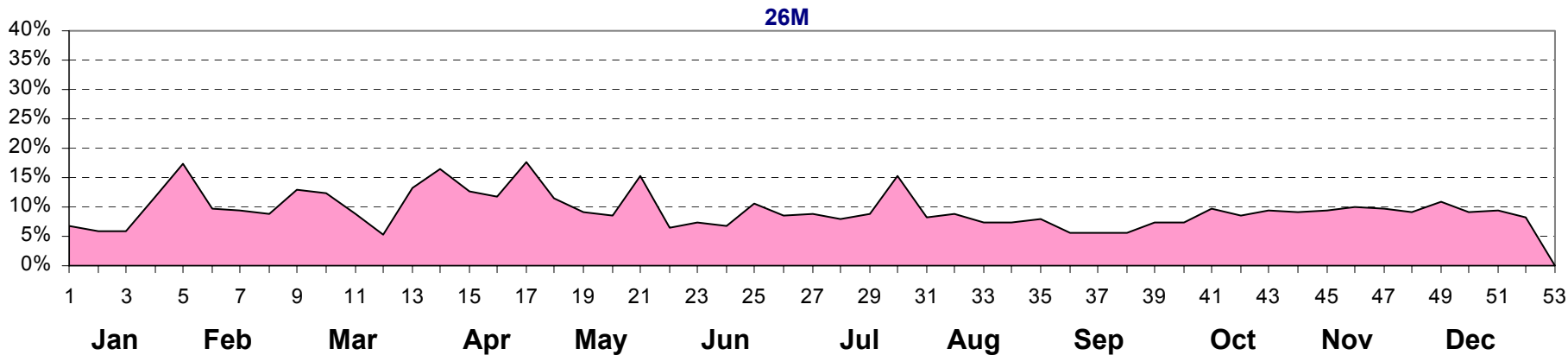
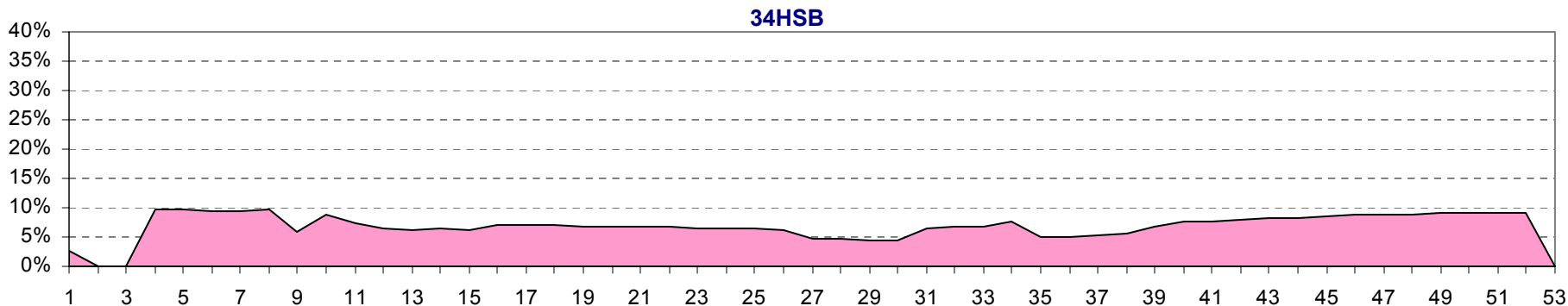
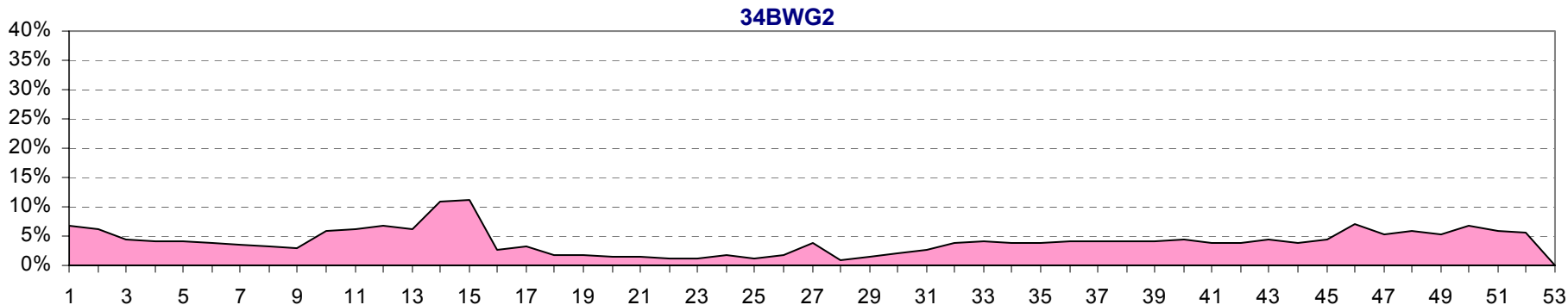


Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec



Resource Allocation Review Recommendations and Analyses

2005 Weekly Average User Unsupportable Time (continued)





Resource Allocation Review Recommendations and Analyses 2005 – January (Weeks 01 - 04)

EVENTS

DSS-26 downtime proposal for Microwave Subsystem Controller (USC) implementation beginning in week 04

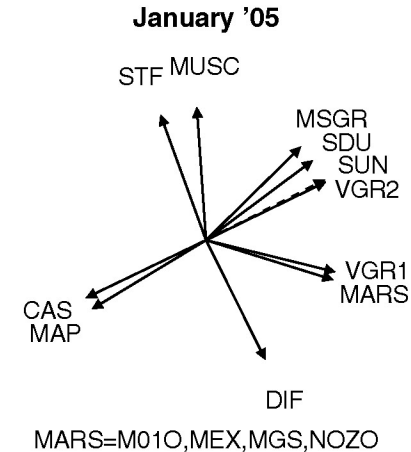
DSS-27 downtime proposal for Microwave Subsystem Controller (USC) implementation in weeks 02 and 03

Cassini probe entry in weeks 01 and 02

Deep Impact Earth flyby in weeks 01 - 03

Mars Express orbital science/occultation in weeks 03 and 04

Wind TCM maneuver in week 02





Resource Allocation Review

Recommendations and Analyses

2005 – January (Weeks 01 - 04) (continued)

RECOMMENDATION

DSS-26 downtime proposal. Project/user supports re-allocated to other DSS resources to accommodate the requested downtime: Cassini, MESSENGER and Voyager 1. (1)

DSS-27 downtime proposal. Project/user supports re-allocated to other DSS resources to accommodate the requested downtime: ACE and Cluster 2 SSO. (2)

DSS reduce DSS-27 maintenance from eight to six hours in week 01. (3)

ANALYSIS

1. (34BWG2) DSS-26 Downtime Proposal in week 04 for USC is in contention with Cassini Tour and MESSENGER.
2. (34HSB) Moderate contention with DSS Maintenance in week 01. ACE is in contention with USC Downtime Proposal in weeks 02 and 03.
3. (26M) Moderate contention with ACE, DSS Maintenance, SOHO TSO and Polar in week 01.



Resource Allocation Review Recommendations and Analyses 2005 – January (Weeks 01 - 04) (continued)

RESOURCE REQUEST

User	Resource	Durations		Calibration		January			
		Ave	Min	Pre	Post	1	2	3	4
ACE.	DSS-27	3.5	3.5	0.40	0.20				7
ACE.	DSS-46,34	1.0	1.0	0.70	0.20				4
ACE.	DSS-16,66	1.0	1.0	0.70	0.20				3
ACE.	26M	3.5	3.5	0.40	0.20	7	7	7	
CAS Probe Entry	DSS-45	8.0	4.0	0.50	0.25	7	5		
CAS Probe Entry	DSS-25,65	9.0	4.0	0.50	0.25	14	12		
CAS Tour	DSS-14,63	9.0	4.0	0.50	0.25		3	1	2
CAS Tour	DSS-14/25,63/65	9.0	4.0	0.50	0.25		1		
CAS Tour	ISS-15,24,25,26,54,55,65	9.0	8.5	0.50	0.25			6	9
CLU2 1/2/3/4 SSO	DSS-16/27/24/15	2.0	2.0	0.50	0.25	2			2
CLU2 1/2/3/4 SSO	DSS-46/34/45/43	2.0	2.0	0.50	0.25	1	1	1	1
CLU2 1/2/3/4 SSO	DSS-16/24/15	2.0	2.0	0.50	0.25		2	2	
CLU4 1/2/3/4 MSO	DSS-46/34/45/43	1.5	1.0	0.50	0.25				1
DIF Cruise	DSS-15,34,54	8.0	4.0	0.50	0.25				2
DIF Earth FB	DSS-15,45,65	8.0	4.0	0.50	0.25	11	11	7	
DSS Bearing Mntc	DSS-14	8.0	8.0				1		
DSS Bearing Mntc	DSS-43	8.0	8.0					1	
DSS Bearing Mntc	DSS-63	8.0	8.0			1			1
DSS Maintenance	DSS-54	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-25	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-55	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-27	8.0	6.0			1			1
DSS Maintenance	DSS-15	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-45	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-24	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-65	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-26	8.0	6.0			1	1	1	
DSS Maintenance	DSS-46	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-66	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-43	8.0	8.0			1	1		1
						1	2	3	4



Resource Allocation Review Recommendations and Analyses 2005 – January (Weeks 01 - 04) (continued)

RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		January			
		Ave	Min	Pre	Post	1	2	3	4
DSS Maintenance	DSS-16	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-34	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-63	9.5	8.0				1	1	
DSS Maintenance	DSS-63	6.0	4.0			1	1	1	1
DSS Maintenance	DSS-14	8.0	8.0			2	2	2	2
MEX Orb Sci/Occ	DSS-14,63	10.8	4.0	0.50	0.25			4	4
MEX Orb Sci/Occ	DSS-24,54	10.8	4.0	0.50	0.25			3	3
MEX R/S Bi Static	DSS-43	4.0	4.0	0.50	0.25	1	1	1	1
MSGR	DSS-24,34,54	8.0	7.0	1.00	0.25				2
MSGR	DSS-26,34,54	8.0	7.0	1.00	0.25	2	2	2	
POLR PB	34B1	1.0	0.8	0.70	0.20	28	28	28	
POLR PB	26M	1.0	0.8	0.70	0.20				28
POLR RT	34B1	2.0	2.0	0.70	0.20	7	7	7	
POLR RT	26M	2.0	2.0	0.70	0.20				7
SOHO	26M	9.6	4.0	0.70	0.20		7	7	7
SOHO	26M	8.0	4.0	0.70	0.20	2			
SOHO	26M	1.6	1.6	0.70	0.20	6	14	14	14
SOHO TSO	34B1	8.0	4.0	0.70	0.20	5			
SOHO TSO	26M	8.0	4.0	0.70	0.20	10			
VGR1	DSS-26	8.0	4.0	0.50	0.25			7	
VGR1	DSS-55	8.0	4.0	0.50	0.25			7	7
VGR1	DSS-25	8.0	4.0	0.50	0.25				7
VGR1	DSS-26	4.0	4.0	0.50	0.25	7	7		
VGR1	DSS-55	4.0	4.0	0.50	0.25	7	7		
VGR1 Routine U/L	70M	2.5	2.5	0.75	0.25	1	1	1	1
WIND	34B1	2.5	2.5	0.50	0.25	7	7	7	7
WIND TCM	DSS-24	3.0	2.0	0.50	0.25		1		
						1	2	3	4



Resource Allocation Review Recommendations and Analyses 2005 – February (Weeks 05 – 08)

EVENTS

DSS-26 downtime proposal for Microwave Subsystem Controller (USC) ending in week 05

DSS-65 approved downtime for Antenna Controller Replacement beginning in week 08

Lunar-A LOI in weeks 06 and 07

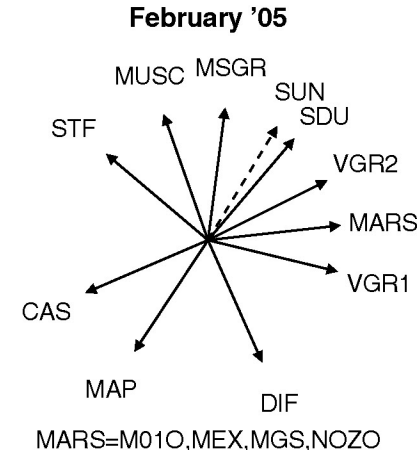
Voyager 1 MAGROL in Week 05, DOY 035

RECOMMENDATION

DSS-26 downtime proposal. Project/user supports re-allocated to other DSS resources to accommodate the requested downtime: Cassini and MESSENGER.

ANALYSIS

(34BWG2) DSS-26 downtime proposal in week 05 for Microwave Subsystem Controller (USC) is in contention with Cassini tour and MESSENGER.





Resource Allocation Review Recommendations and Analyses 2005 – February (Weeks 05 – 08)

RESOURCE REQUEST

User	Resource	Durations		Calibration		February			
		Ave	Min	Pre	Post	5	6	7	8
CAS Tour	DSS-14,63	9.0	4.0	0.50	0.25	2	2	5	
CAS Tour	DSS-14/25,63/65	9.0	4.0	0.50	0.25		1		
CAS Tour	DSS-14/25,63/55	9.0	4.0	0.50	0.25			1	
CAS Tour	ISS-15,24,25,26,54,55,65	9.0	8.5	0.50	0.25	3	4		
CAS Tour	DSS-15,24,25,26,54,55	9.0	8.5	0.50	0.25			3	7
DSS Bearing Mntc	DSS-14	8.0	8.0			1			1
DSS Bearing Mntc	DSS-43	8.0	8.0				1		
DSS Bearing Mntc	DSS-63	8.0	8.0					1	
DSS Maintenance	DSS-54	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-25	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-55	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-27	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-15	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-45	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-24	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-65	6.0	6.0			1	1	1	
DSS Maintenance	DSS-26	8.0	6.0				1	1	1
DSS Maintenance	DSS-46	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-66	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-43	8.0	8.0			1		1	1
DSS Maintenance	DSS-16	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-34	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-63	9.5	8.0			1	1		1
DSS Maintenance	DSS-63	6.0	4.0			1	1	1	1
DSS Maintenance	DSS-14	8.0	8.0			2	2	2	2
LUNA LOI	DSS-24,54	8.0	6.0	0.50	0.25		7	7	
LUNA LUNAR OPS	DSS-16,66	8.0	6.0	0.70	0.20				7
LUNA WSB DDOR	DSS-24,54	1.0	1.0	0.50	0.25	2			
MSGR	DSS-24,34,54	8.0	7.0	1.00	0.25	2			
MSGR	DSS-26,34,54	8.0	7.0	1.00	0.25		2	2	2
						5	6	7	8



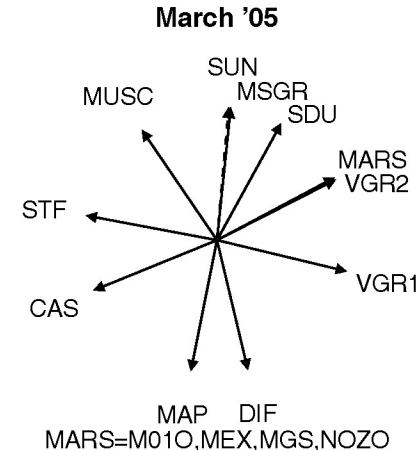
Resource Allocation Review Recommendations and Analyses 2005 – February (Weeks 05 – 08)

RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		February			
		Ave	Min	Pre	Post	5	6	7	8
VGR1	DSS-26	8.0	4.0	0.50	0.25		7	7	7
VGR1	DSS-55	8.0	4.0	0.50	0.25	7	7	7	7
VGR1	DSS-25	8.0	4.0	0.50	0.25	6			
VGR1 MAGROL	DSS-14	7.0	7.0	0.75	0.25	1			
VGR1 Routine U/L	70M	2.5	2.5	0.75	0.25	1	1	1	1
						5	6	7	8



Resource Allocation Review Recommendations and Analyses 2005 – March (Weeks 09 - 13)



EVENTS

GSSR Asteroid 1998WT in weeks 09 and 10

MAP Maneuver in week 11

Voyager 2 DTR playback in week 10, DOY 068

RECOMMENDATION

RFC reduce support from 24 hours to 12 hours in weeks 11 and 12. (1)

Space Geodesy delete support in week 10. (1)

SOHO reduce two 8-hour passes in TSO weeks 09 and 13 to 6 hours, and reduce seven 9.6-hour passes to 6 hours in weeks 10 - 12. (2)

ANALYSIS

1. (34HEF) Moderate contention with MGS beta supplement and Space Geodesy in week 10, and RFC CAT M&E in weeks 11 and 12.
2. (26M) Moderate contention with ACE, Lunar-A, and SOHO.



Resource Allocation Review Recommendations and Analyses 2005 – March (Weeks 09 - 13) (continued)

RESOURCE REQUEST

User	Resource	Durations		Calibration		March				
		Ave	Min	Pre	Post	9	10	11	12	13
ACE.	DSS-27	3.5	3.5	0.40	0.20	7	7	7	7	7
ACE.	DSS-46,34	1.0	1.0	0.70	0.20	4	4	4	4	4
ACE.	DSS-16,66	1.0	1.0	0.70	0.20	3	3	3	3	3
DSS Bearing Mntc	DSS-14	8.0	8.0					1		
DSS Bearing Mntc	DSS-43	8.0	8.0			1			1	
DSS Bearing Mntc	DSS-63	8.0	8.0				1			1
DSS Maintenance	DSS-54	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-25	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-55	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-27	8.0	6.0				1	1	1	1
DSS Maintenance	DSS-27	6.0	6.0			1				
DSS Maintenance	DSS-15	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-45	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-24	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-26	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-46	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-66	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-43	8.0	8.0				1	1		1
DSS Maintenance	DSS-16	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-34	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-63	9.5	8.0			1		1	1	
DSS Maintenance	DSS-63	6.0	4.0			1	1	1	1	1
DSS Maintenance	DSS-14	8.0	8.0			2	2	2	2	2
GSSR Ast 1998WT	DSS-14	10.0	5.0	1.50	0.50	1	3			
GSSR GODR	DSS-14/15	8.0	4.0	1.50	0.50	1		1		1
GSSR Mer RSD GBT	DSS-14	1.5	1.0	1.50	0.50				1	1
LUNA LUNAR OPS	DSS-16,66	8.0	6.0	0.70	0.20	7	7	7	7	7
MAP.	70M	0.7	0.6	1.25	0.25	7	7	4	7	7
MAP. Mnvr.	70M	5.0	5.0	1.25	0.25			1		
MAP. Mnvr.	70M	3.0	3.0	1.25	0.25			2		
						9	10	11	12	13



Resource Allocation Review Recommendations and Analyses 2005 – March (Weeks 09 - 13) (continued)

RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		March				
		Ave	Min	Pre	Post	9	10	11	12	13
MGS Map/Beta Sup	DSS-15,45,63	14.0	4.0	0.50	0.25	7	7	7	7	7
MGS Map/Beta Sup	34B1	10.0	4.0	0.50	0.25	3	2	2	3	2
RFC CAT M&E D-M4	15\45,15\65	24.0	12.0	1.50	0.50			1	1	
RFC Clock Syn D-M4	DSS-14\63	4.0	4.0	1.50	0.50	1		1		1
SGP Crust Dyn H-M4	DSS-15	24.0	24.0	1.50	0.50					1
SGP Crust Dyn W-M4	DSS-45	24.0	24.0	1.50	0.50		1			
SOHO	26M	9.6	4.0	0.70	0.20		7	7	7	
SOHO	26M	8.0	4.0	0.70	0.20	2				2
SOHO	26M	1.6	1.6	0.70	0.20	6	14	14	14	6
SOHO TSO	26M	8.0	4.0	0.70	0.20	15				15
VGR2	DSS-43,45	8.0	8.0	0.50	0.25	7	7	7	7	7
VGR2 DTR P/B	DSS-43	7.4	7.4	0.75	0.25		1			
VGR2 Routine U/L	DSS-43	2.5	2.5	0.75	0.25	1	1	1	1	1
						9	10	11	12	13



Resource Allocation Review Recommendations and Analyses 2005 – April (Weeks 14 - 17)

EVENTS

DSS-15 downtime proposal for Microwave Subsystem Controller (USC) implementation in weeks 15 and 16

DSS-25 downtime proposal for Microwave Subsystem Controller (USC) implementation in week 17

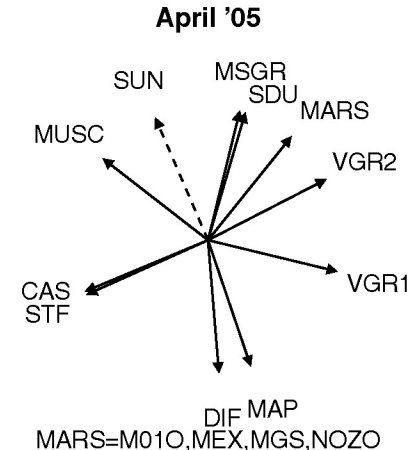
DSS-54 downtime proposal for Microwave Subsystem Controller (USC) implementation in week 15

DSS-55 downtime proposal for Microwave Subsystem Controller (USC) implementation in week 17

Deep Impact TCM in weeks 15 - 17

Voyager 1 DTR array in week 17, DOY 118

Wind TCM maneuver in week 15





Resource Allocation Review

Recommendations and Analyses

2005 – April (Weeks 14 - 17) (continued)

RECOMMENDATION

DSS-15 downtime proposal. Project/user supports re-allocated to other DSS resources to accommodate the requested downtime: GSSR, RFC, and Space Geodesy. (1)

DSS-25 downtime proposal. Project/user supports re-allocated to other DSS resources to accommodate the requested downtime: Cassini. (3)

DSS-54 downtime proposal. Project/user supports re-allocated to other DSS resources to accommodate the requested downtime: Cassini tour, Deep Impact, IMAGE, Mars Express orbital science, MESSENGER, MGS mapping/beta supplement, MUSES-C rendezvous, and Wind. (2)

DSS-55 downtime proposal. Project/user supports re-allocated to other DSS resources to accommodate the requested downtime: Voyager 1. (4)

Chandra move 7 passes per week to DSS-66 and increase supports to 2 hours, and change 34BWG1 supports to DSS-24,34. (2)

DSS delete DSS-15 maintenance support in week 17. (1)



Resource Allocation Review Recommendations and Analyses 2005 – April (Weeks 14 - 17) (continued)

ANALYSIS

1. (34HEF) DSS-15 downtime proposal for Microwave Subsystem Controller (USC) is in contention with GSSR GODR and RFC Clock Sync support in week 15, and Cluster 2 MSO and Space Geodesy support in week 16. Severe contention at DSS-15 with DSS maintenance, MGS, and Voyager 1 DTR in week 17.
2. (34BWG1) DSS-54 downtime proposal for Microwave Subsystem Controller (USC) is in contention with Cassini tour, Chandra, Deep Impact, IMAGE, Mars Express orbital science, MGS mapping/beta supplement, MESSENGER, MUSES-C rendezvous, and Wind in week 15.
3. (34BWG2) DSS-25 downtime proposal for Microwave Subsystem Controller (USC) is in contention with Cassini in week 17.
4. (34BWG2) DSS-55 downtime proposal for Microwave Subsystem Controller (USC) is in contention with Voyager 1 in week 17.



Resource Allocation Review

Recommendations and Analyses

2005 – April (Weeks 14 - 17) (continued)

RESOURCE REQUEST

User	Resource	Durations		Calibration		April			
		Ave	Min	Pre	Post	14	15	16	17
CAS Tour	DSS-14,63	9.0	4.0	0.50	0.25	2	3	2	1
CAS Tour	DSS-14/25,63/65	9.0	4.0	0.50	0.25		2		
CAS Tour	ISS-15,24,25,26,54,55,65	9.0	8.5	0.50	0.25			6	5
CAS Tour	DSS-15,24,25,26,54,55	9.0	8.5	0.50	0.25	5			
CAS Tour	DSS-15,24,26,54,65	9.0	8.5	0.50	0.25				5
CAS Tour	DSS-24,25,26,55	9.0	8.5	0.50	0.25		1		
CHDR	34B1	1.0	1.0	0.50	0.25	21		21	21
CHDR	DSS-24,34	1.0	1.0	0.50	0.25		14		
CHDR	DSS-66	2.0	1.0	0.50	0.25		7		
CLU2 1/2/3/4 SSO	DSS-16/27/24/15	2.0	2.0	0.50	0.25	2			2
CLU2 1/2/3/4 SSO	DSS-46/34/45/43	2.0	2.0	0.50	0.25	1	1	1	1
CLU2 1/2/3/4 SSO	DSS-16/27/24	2.0	2.0	0.50	0.25		2	2	
CLU4 1/2/3/4 MSO	DSS-16/27/24	1.5	1.0	0.50	0.25			1	
DIF Cruise	DSS-15,34,54	8.0	4.0	0.50	0.25	1			
DIF Cruise	DSS-26,34,65	8.0	4.0	0.50	0.25		1		
DIF TCM	DSS-15,34,54	8.0	4.0	0.50	0.25				7
DIF TCM	DSS-26,34,54	8.0	4.0	0.50	0.25			4	
DSS Bearing Mntc	DSS-14	8.0	8.0			1			1
DSS Bearing Mntc	DSS-43	8.0	8.0				1		
DSS Bearing Mntc	DSS-63	8.0	8.0					1	
DSS Maintenance	DSS-54	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-25	8.0	6.0			1	1	1	
DSS Maintenance	DSS-55	6.0	6.0			1	1	1	
DSS Maintenance	DSS-27	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-15	8.0	6.0			1			
DSS Maintenance	DSS-45	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-24	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-65	6.0	6.0				1	1	1
DSS Maintenance	DSS-26	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-46	6.0	6.0			1	1	1	1
						14	15	16	17



Resource Allocation Review Recommendations and Analyses 2005 – April (Weeks 14 - 17) (continued)

RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		April			
		Ave	Min	Pre	Post	14	15	16	17
DSS Maintenance	DSS-66	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-43	8.0	8.0			1		1	1
DSS Maintenance	DSS-16	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-34	6.0	6.0			1	1	1	
DSS Maintenance	DSS-63	9.5	8.0			1	1		1
DSS Maintenance	DSS-63	6.0	4.0			1	1	1	1
DSS Maintenance	DSS-14	8.0	8.0			2	2	2	2
GSSR Mer RSD GBT	DSS-14	1.5	1.0	1.50	0.50	1			
IMAG	34B1	0.8	0.8	1.00	0.25	13		13	13
IMAG	34B1	1.5	1.5	1.00	0.25	1		1	1
IMAG	34B1,34H,26M	0.8	0.8	1.00	0.25		13		
IMAG	34B1,34H,26M	1.5	1.5	1.00	0.25		1		
MEX Orbital Sci	DSS-24,54	6.0	4.0	0.50	0.25			7	7
MEX Orbital Sci	DSS-24,55	6.0	4.0	0.50	0.25	7			
MEX Orbital Sci	DSS-26,55	6.0	4.0	0.50	0.25	7	7		
MEX R/S Bi Static	DSS-43	4.0	4.0	0.50	0.25	1	1	1	1
MGS Map/Beta Sup	34H	14.0	4.0	0.50	0.25		7	7	
MGS Map/Beta Sup	DSS-15,45,63	14.0	4.0	0.50	0.25	7			
MGS Map/Beta Sup	34H	14.0	4.0	0.50	0.25				4
MGS Map/Beta Sup	34B1	10.0	4.0	0.50	0.25	2		2	2
MGS Map/Beta Sup	DSS-24,34,55	10.0	4.0	0.50	0.25		3		
MGS Map/Beta Sup	34B1	14.0	4.0	0.50	0.25				3
MSGR	DSS-26,34,54	8.0	7.0	1.00	0.25	2		2	2
MSGR	DSS-26,34,65	8.0	7.0	1.00	0.25		2		
MUSC Rendezvous	DSS-25,34,54	4.0	4.0	0.75	0.25	1		1	1
MUSC Rendezvous	DSS-25,34,65	4.0	4.0	0.75	0.25		1		
RFC Clock Syn D-M4	DSS-14\63	4.0	4.0	1.50	0.50		1		
RFC Clock Syn D-M4	DSS-15\65	4.0	4.0	1.50	0.50				1
SGP Crust Dyn W-M4	DSS-45	24.0	24.0	1.50	0.50	1			
VGR1	DSS-63	8.0	4.0	0.50	0.25				7
						14	15	16	17



Resource Allocation Review Recommendations and Analyses 2005 – April (Weeks 14 - 17) (continued)

RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		April			
		Ave	Min	Pre	Post	14	15	16	17
VGR1	DSS-26	8.0	4.0	0.50	0.25	5	7	7	6
VGR1	DSS-55	8.0	4.0	0.50	0.25	5	7	7	
VGR1 DTR Array	DSS-14/15	7.4	7.4	0.75	0.25				1
VGR1 Routine U/L	70M	2.5	2.5	0.75	0.25	1	1	1	1
WIND	34B1	2.5	2.5	0.50	0.25	7		7	7
WIND	DSS-24,34	2.5	2.5	0.50	0.25		7		
WIND TCM	DSS-24	3.0	2.0	0.50	0.25		1		
						14	15	16	17



Resource Allocation Review Recommendations and Analyses 2005 – May (Weeks 18 - 21)

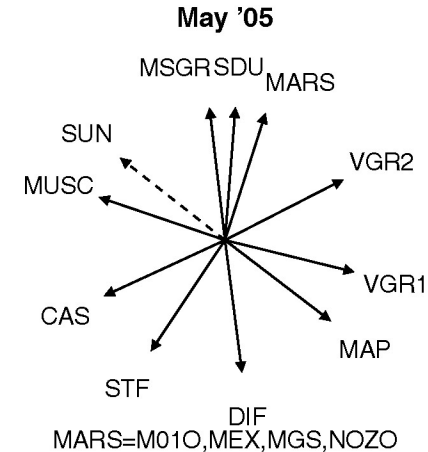
EVENTS

DSS-25 downtime proposal for Microwave Subsystem Controller (USC) implementation ending in week 18

DSS-34 downtime proposal for X/X-Ka Band

Deep Impact TCM in weeks 18 - 20, and comet approach in week 21

Voyager 1 ASCAL in week 18, DOY 123 and MAGROL in week 18, DOY 126



RECOMMENDATION

DSS-25 downtime proposal. Project/user supports re-allocated to other DSS resources to accommodate the requested downtime: Cassini and MUSES-C. (2)

DSS-34 downtime proposal. Project/user supports re-allocated to other DSS resources to accommodate the requested downtime: Deep Impact, IMAGE, and MGS. (1)

Chandra move 7 passes per week to DSS-46 and increase supports to 2 hours, and change 34BWG1 supports to DSS-24,54. (1)



Resource Allocation Review Recommendations and Analyses 2005 – May (Weeks 18 - 21) (continued)

ANALYSIS

1. (34BWG1) DSS-34 downtime proposal for X/X-Ka Band is in contention with ACE, Chandra, IMAGE, and MGS support supplement; Deep Impact TCM in weeks 18 - 20 and comet approach support in week 21.
2. (34BWG2) DSS-25 downtime proposal for X/X-Ka Band is in contention with Cassini and MUSES-C in week 18.



Resource Allocation Review

Recommendations and Analyses

2005 – May (Weeks 18 - 21) (continued)

RESOURCE REQUEST

User	Resource	Durations		Calibration		May			
		Ave	Min	Pre	Post	18	19	20	21
ACE.	DSS-27	3.5	3.5	0.40	0.20	7	7	7	7
ACE.	26M	1.0	1.0	0.40	0.20	7	7	7	7
CAS Tour	DSS-14,63	9.0	4.0	0.50	0.25	4	1	1	2
CAS Tour	DSS-14/25,63/65	9.0	4.0	0.50	0.25			1	
CAS Tour	ISS-15,24,25,26,54,55,65	9.0	8.5	0.50	0.25		7	3	7
CAS Tour	DSS-15,24,26,54,55,65	9.0	8.5	0.50	0.25	6			
CHDR	26M	2.0	1.0	0.50	0.25	7	7	7	7
DIF Comet App	DSS-15,45,54	8.0	4.0	0.50	0.25				4
DIF TCM	DSS-15,45,54	8.0	4.0	0.50	0.25	15	7	4	
DSS Bearing Mntc	DSS-14	8.0	8.0					1	
DSS Bearing Mntc	DSS-43	8.0	8.0			1			1
DSS Bearing Mntc	DSS-63	8.0	8.0				1		
DSS Maintenance	DSS-54	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-25	8.0	6.0				1	1	1
DSS Maintenance	DSS-55	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-27	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-15	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-45	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-24	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-65	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-26	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-46	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-66	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-43	8.0	8.0				1	1	
DSS Maintenance	DSS-16	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-63	9.5	8.0			1		1	1
DSS Maintenance	DSS-63	6.0	4.0			1	1	1	1
DSS Maintenance	DSS-14	8.0	8.0			2	2	2	2
IMAG	34H,34B1,26M	0.8	0.8	1.00	0.25	13	13	13	13
IMAG	34H,34B1,26M	1.5	1.5	1.00	0.25	1	1	1	1
						18	19	20	21



Resource Allocation Review Recommendations and Analyses 2005 – May (Weeks 18 - 21) (continued)

RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		May			
		Ave	Min	Pre	Post	18	19	20	21
MGS Map/Beta Sup	34H	14.0	4.0	0.50	0.25	7	7	7	7
MGS Map/Beta Sup	DSS-24,45,54	10.0	4.0	0.50	0.25	3	2	2	3
MUSC Rendezvous	DSS-25,45,54	4.0	4.0	0.75	0.25		1	1	1
MUSC Rendezvous	DSS-26,34,54	4.0	4.0	0.75	0.25	1			
VGR1	DSS-26	8.0	4.0	0.50	0.25	6	7	7	7
VGR1	DSS-55	8.0	4.0	0.50	0.25	7	7	7	7
VGR1 ASCAL	DSS-14	2.0	2.0	0.75	0.25	1			
VGR1 MAGROL	DSS-14	7.0	7.0	0.75	0.25	1			
VGR1 Routine U/L	70M	2.5	2.5	0.75	0.25	1	1	1	1
						18	19	20	21



Resource Allocation Review Recommendations and Analyses 2005 – June (Weeks 22 - 26)

EVENTS

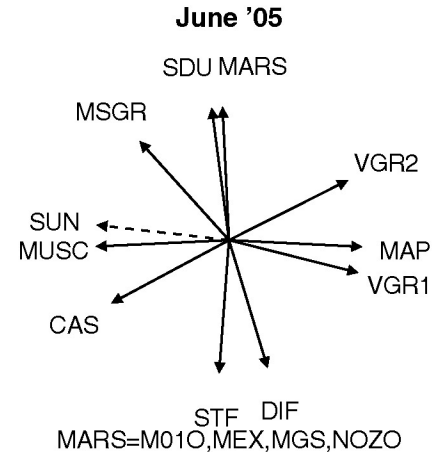
DSS-24 downtime proposal for Microwave Subsystem Controller (USC) beginning in week 26

DSS-34 downtime proposal for X/X-Ka Band ending in week 25

Deep Impact comet approach in weeks 22 - 25 and comet encounter in week 26

MUSES-C rendezvous in week 22 and trim maneuvers in weeks 23 and 24

SOHO HSO continuous support beginning in week 26





Resource Allocation Review

Recommendations and Analyses

2005 – June (Weeks 22 - 26) (continued)

RECOMMENDATION

DSS-24 downtime proposal. Project/user supports re-allocated to other DSS resources to accommodate the requested downtime: IMAGE, and Wind. (1)

DSS-34 downtime proposal. Project/user supports re-allocated to other DSS resources to accommodate the requested downtime: ACE, Deep Impact, IMAGE, MGS, MESSENGER, MUSES-C, and Wind. (2)

Chandra move 7 passes per week to DSS-46 and change 34BWG1 supports to DSS-24,54 in weeks 22 - 25, move 7 passes to DSS-16 and change 34BWG1 supports to DSS-34,54 in week 26, and increase 26M supports to 2 hours. (1, 2)

« Cluster 2 » delete DSS-34 from SSO requirement in weeks 22 - 25 and delete DSS-24 SSO requirement in week 26. (1, 2)

ANALYSIS

1. (34BWG1) DSS-24 downtime proposal for USC is in contention with Cassini tour, Chandra, IMAGE, and Wind in week 26.
2. (34BWG1) DSS-34 downtime proposal for X/X-Ka Band is in contention with Chandra, Deep Impact comet approach, IMAGE, MGS mapping/beta supplement, MESSENGER, and Wind in weeks 22 - 25, and MUSES-C rendezvous in week 22 and trim maneuver in weeks 23 and 24.



Resource Allocation Review

Recommendations and Analyses

2005 – June (Weeks 22 - 26) (continued)

RESOURCE REQUEST

User	Resource	Durations		Calibration		June				
		Ave	Min	Pre	Post	22	23	24	25	26
ACE.	DSS-27	3.5	3.5	0.40	0.20	7	7	7	7	7
ACE.	DSS-46,34	1.0	1.0	0.70	0.20					4
ACE.	DSS-16,66	1.0	1.0	0.70	0.20					3
ACE.	26M	1.0	1.0	0.40	0.20	7	7	7	7	
CAS Tour	DSS-14,63	9.0	4.0	0.50	0.25		2	2	2	4
CAS Tour	DSS-14/25,63/65	9.0	4.0	0.50	0.25		1		2	
CAS Tour	ISS-15,24,25,26,54,55,65	9.0	8.5	0.50	0.25	6	2	6	2	3
CHDR	26M	2.0	1.0	0.50	0.25	7	7	7	7	
CLU2 1/2/3/4 SSO	DSS-16/27/24/15	2.0	2.0	0.50	0.25	2	2	2	2	
CLU2 1/2/3/4 SSO	DSS-46/34/45/43	2.0	2.0	0.50	0.25					1
CLU2 1/2/3/4 SSO	DSS-16/27/15	2.0	2.0	0.50	0.25					2
CLU4 1/2/3/4 MSO	DSS-16/27/24/15	1.5	1.0	0.50	0.25			1		
DIF Comet App	DSS-15,45,54	8.0	4.0	0.50	0.25	5	7	7	7	
DIF Comet Enc	70M	8.0	4.0	0.50	0.25					6
DIF Comet Enc	DSS-15,34,54	8.0	4.0	0.50	0.25					15
DSS Bearing Mntc	DSS-14	8.0	8.0				1			1
DSS Bearing Mntc	DSS-43	8.0	8.0					1		
DSS Bearing Mntc	DSS-63	8.0	8.0			1			1	
DSS Maintenance	DSS-54	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-25	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-55	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-27	8.0	6.0			1	1	1	1	
DSS Maintenance	DSS-27	6.0	6.0							1
DSS Maintenance	DSS-15	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-45	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-24	8.0	6.0			1	1	1	1	
DSS Maintenance	DSS-65	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-26	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-46	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-66	8.0	6.0			1	1	1	1	1
						22	23	24	25	26



Resource Allocation Review Recommendations and Analyses 2005 – June (Weeks 22 - 26) (continued)

RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		June				
		Ave	Min	Pre	Post	22	23	24	25	26
DSS Maintenance	DSS-43	8.0	8.0			1	1		1	1
DSS Maintenance	DSS-16	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-34	6.0	6.0						1	1
DSS Maintenance	DSS-63	9.5	8.0				1	1		1
DSS Maintenance	DSS-63	6.0	4.0			1	1	1	1	1
DSS Maintenance	DSS-14	8.0	8.0			2	2	2	2	2
IMAG	34H,34B1,26M	0.8	0.8	1.00	0.25	13	13	13	13	
IMAG	34H,34B1,26M	1.5	1.5	1.00	0.25	1	1	1	1	
IMAG	34B1	0.8	0.8	1.00	0.25					13
IMAG	34B1	1.5	1.5	1.00	0.25					1
MGS Map/Beta Sup	34H	14.0	4.0	0.50	0.25	7	7	7	7	7
MGS Map/Beta Sup	34B1	10.0	4.0	0.50	0.25					2
MGS Map/Beta Sup	DSS-24,45,54	10.0	4.0	0.50	0.25	2	2	3	2	
MSGR	DSS-26,34,54	8.0	7.0	1.00	0.25					2
MSGR	DSS-26,45,54	8.0	7.0	1.00	0.25	2	2	2	2	
MUSC Mission Phase	DSS-25,34,54	8.0	8.0	0.75	0.25			2		
MUSC Rendezvous	DSS-25,34,54	4.0	4.0	0.75	0.25	1				
MUSC TRIM-5	DSS-25,34,54	3.0	3.0	0.75	0.25		4	2		
SOHO	26M	9.6	4.0	0.70	0.20	7	7	7		
SOHO	26M	8.0	4.0	0.70	0.20				2	
SOHO	26M	1.6	1.6	0.70	0.20	14	14	14	6	
SOHO HSO	DSS-27	8.0	6.0	0.40	0.20					7
SOHO HSO	DSS-46,66	8.0	4.0	0.70	0.20					14
SOHO TSO	26M	8.0	4.0	0.70	0.20				15	
WIND	34B1	2.5	2.5	0.50	0.25					7
WIND	DSS-24,54	2.5	2.5	0.50	0.25	7	7	7	7	
						22	23	24	25	26



Resource Allocation Review Recommendations and Analyses 2005 – July (Weeks 27 - 30)

EVENTS

**DSS-43 downtime proposal for Antenna Controller Replacement
beginning in week 30**

Deep Impact comet encounter 70M support and comet impact in week 27, DOY 185

MAP maneuver in week 27

SELENE launch in week 29, DOY 204

SOHO HSO continuous support

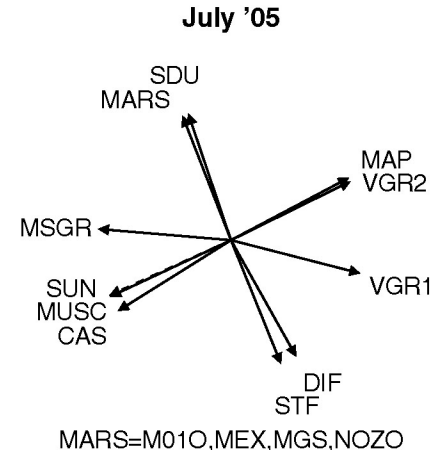
Wind TCM maneuver in week 28

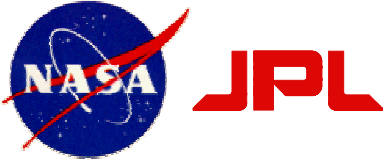
RECOMMENDATION

DSS-43 downtime proposal. Project/user supports re-allocated to other DSS resources to accommodate the requested downtime: MAP, Mars Odyssey, SIRTf, and Voyager 2.

Mars Express delete R/S bi-static supports at DSS-43 in week 30.

« Voyager 2 » change routine uplink at DSS-43 to DSS-34 BLF in week 30.





Resource Allocation Review Recommendations and Analyses 2005 – July (Weeks 27 - 30) (continued)

ANALYSIS

(70M) DSS-43 downtime proposal for Antenna Controller Replacement is in contention with MAP, Mars Express R/S bi-static, Mars Odyssey mapping, SIRTf, and Voyager 2 uplink in week 30.



Resource Allocation Review

Recommendations and Analyses

2005 – July (Weeks 27 - 30) (continued)

RESOURCE REQUEST

User	Resource	Durations		Calibration		July			
		Ave	Min	Pre	Post	27	28	29	30
DIF Comet Enc	70M	8.0	4.0	0.50	0.25	4			
DIF Impact	DSS-14,43	4.0	4.0	0.50	0.25	1			
DIF Impact	DSS-15/24/25/26	8.0	4.0	0.50	0.25	1			
DIF Playback	DSS-15,34,54	8.0	4.0	0.50	0.25	2	1	1	1
DSS Bearing Mntc	DSS-14	8.0	8.0					1	
DSS Bearing Mntc	DSS-43	8.0	8.0			1			1
DSS Bearing Mntc	DSS-63	8.0	8.0				1		
DSS Maintenance	DSS-54	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-25	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-55	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-27	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-15	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-45	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-24	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-65	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-26	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-46	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-66	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-43	8.0	8.0				1	1	
DSS Maintenance	DSS-16	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-34	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-63	9.5	8.0			1		1	1
DSS Maintenance	DSS-63	6.0	4.0			1	1	1	1
DSS Maintenance	DSS-14	8.0	8.0			2	2	2	2
M01O Mapping	70M	10.0	4.0	0.50	0.25	7	7	7	
M01O Mapping	DSS-14,34,63	10.0	4.0	0.50	0.25				7
MAP.	70M	0.7	0.6	1.25	0.25	4	7	7	
MAP.	DSS-14,63	0.7	0.6	1.25	0.25				7
MAP. Mnvr.	70M	5.0	5.0	1.25	0.25	1			
MAP. Mnvr.	70M	3.0	3.0	1.25	0.25	2			
						27	28	29	30



Resource Allocation Review Recommendations and Analyses 2005 – July (Weeks 27 - 30) (continued)

RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		July			
		Ave	Min	Pre	Post	27	28	29	30
MEX Orbital Sci	DSS-24,54	6.0	4.0	0.50	0.25	7	7	7	7
MEX R/S Bi Static	DSS-43	4.0	4.0	0.50	0.25	1	1	1	
MEX R/S Bi Static	DSS-34	4.0	4.0	0.50	0.25				1
SELE Launch	26M,34B1	4.0	4.0	0.70	0.25			3	
SELE LOI/CIRC	DSS-16,66	4.0	4.0	0.50	0.25			3	21
SOHO HSO	DSS-27	8.0	6.0	0.40	0.20	7	7	7	7
SOHO HSO	DSS-46,66	8.0	4.0	0.70	0.20	14	14	14	14
STF	70M	1.0	1.0	0.50	0.25	14	14	14	
STF	DSS-14,45,63	1.0	1.0	0.50	0.25				14
VGR2	DSS-43,45	16.0	8.0	0.50	0.25	6	6	6	
VGR2	DSS-43,45	8.0	8.0	0.50	0.25	1	1	1	
VGR2	DSS-34,45	8.0	8.0	0.50	0.25				7
VGR2 Routine U/L	DSS-43	2.5	2.5	0.75	0.25	1	1	1	
VGR2 Routine U/L	DSS-34	2.5	2.5	0.75	0.25				1
WIND	34B1	2.5	2.5	0.50	0.25	7	7	7	7
WIND TCM	DSS-24	3.0	2.0	0.50	0.25		1		
						27	28	29	30



Resource Allocation Review Recommendations and Analyses 2005 – August (Weeks 31 - 34)

EVENTS

DSS-43 downtime proposal for Antenna Controller Replacement

GSSR Asteroid 1992UY4 in week 31

Mars Reconnaissance Orbiter launch (August 10) and launch support in weeks 32 - 34 and TCM in week 34

SOHO HSO continuous

Voyager 1 MAGROL in week 31, DOY 218

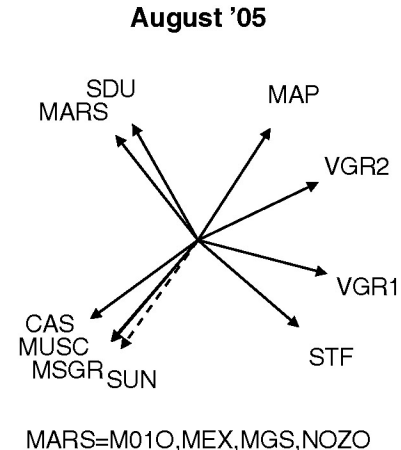
RECOMMENDATION

DSS-43 downtime proposal. Project/user supports re-allocated to other DSS resources to accommodate the requested downtime: MAP, Mars Odyssey, and SIRTF. (1)

DSS reduce DSS-16 and DSS-66 maintenance to 6-hours in weeks 31 and 32. (2)

Mars Express delete R/S bi-static supports at DSS-43. (1)

« Voyager 2 » change routine uplink at DSS-43 to DSS-34 BLF. (1)





Resource Allocation Review Recommendations and Analyses 2005 – August (Weeks 31 - 34) (continued)

ANALYSIS

1. (70M) DSS-43 downtime proposal for Antenna Controller Replacement is in contention with MAP, Mars Express R/S bi-static, Mars Odyssey mapping, SIRTf, and Voyager 2 uplink.
2. (26M) Moderate contention exists on the 26M subnet in weeks 31 and 32 with ACE, SOHO HSO continuous, SELENE LOI, and DSS maintenance.



Resource Allocation Review Recommendations and Analyses 2005 – August (Weeks 31 - 34) (continued)

RESOURCE REQUEST

User	Resource	Durations		Calibration		August			
		Ave	Min	Pre	Post	31	32	33	34
ACE.	DSS-34,54	1.0	1.0	0.70	0.20	3	7		
ACE.	DSS-27	3.5	3.5	0.40	0.20	7	7	7	7
ACE.	DSS-46,34	1.0	1.0	0.70	0.20	4		4	4
ACE.	DSS-16,66	1.0	1.0	0.70	0.20			3	3
DSS Bearing Mntc	DSS-14	8.0	8.0				1		
DSS Bearing Mntc	DSS-43	8.0	8.0					1	
DSS Bearing Mntc	DSS-63	8.0	8.0			1			1
DSS Maintenance	DSS-54	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-25	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-55	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-27	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-15	8.0	6.0			1			
DSS Maintenance	DSS-15	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-45	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-24	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-65	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-26	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-46	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-66	8.0	6.0					1	1
DSS Maintenance	DSS-66	6.0	6.0			1	1		
DSS Maintenance	DSS-43	8.0	8.0			1	1		1
DSS Maintenance	DSS-16	8.0	6.0					1	1
DSS Maintenance	DSS-16	6.0	6.0			1	1		
DSS Maintenance	DSS-34	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-63	9.5	8.0				1	1	
DSS Maintenance	DSS-63	6.0	4.0			1	1	1	1
DSS Maintenance	DSS-14	8.0	8.0			2	2	2	2
GSSR Ast 1992UY4	DSS-14	6.0	6.0	1.50	0.50	4			
GSSR Ast 1992UY4	DSS-14	4.0	4.0	1.50	0.50	1			
M01O Mapping	DSS-14,34,63	10.0	4.0	0.50	0.25		7	7	7
						31	32	33	34



Resource Allocation Review Recommendations and Analyses 2005 – August (Weeks 31 - 34) (continued)

RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		August			
		Ave	Min	Pre	Post	31	32	33	34
M01O Mapping	34B2	10.0	4.0	0.50	0.25	7			
MAP.	DSS-14,63	0.7	0.6	1.25	0.25	7	7	7	7
MEX Orbital Sci	DSS-24,54	6.0	4.0	0.50	0.25	7	7	7	7
MEX R/S Bi Static	DSS-34	4.0	4.0	0.50	0.25	1	1	1	1
MRO Launch	34H	8.0	4.0	0.50	0.25			15	18
MRO Launch	34H	8.0	4.0	3.00	0.25		3		
MRO Launch	34H	8.0	4.0	0.50	0.25		12	6	
MRO Launch	DSS-46	8.0	4.0	3.00	0.25		1		
MRO TCM	34H	8.0	4.0	0.50	0.25				3
SELE LOI/CIRC	DSS-16,66	4.0	4.0	0.50	0.25	17	8		
SELE OCM	DSS-16,66	4.0	4.0	0.50	0.25			6	6
SOHO HSO	DSS-27	8.0	6.0	0.40	0.20	7	7	7	7
SOHO HSO	DSS-46,66	8.0	4.0	0.70	0.20	14	14	14	14
STF	DSS-14,45,63	1.0	1.0	0.50	0.25	14	14	14	14
VGR1	DSS-26	8.0	4.0	0.50	0.25	6	7	7	7
VGR1	DSS-55	8.0	4.0	0.50	0.25	7	7	7	7
VGR1 MAGROL	DSS-14	7.0	7.0	0.75	0.25	1			
VGR1 Routine U/L	DSS-14,63	2.5	2.5	0.75	0.25	1	1	1	1
VGR2	DSS-34,45	8.0	8.0	0.50	0.25	7	7	7	7
VGR2 Routine U/L	DSS-34	2.5	2.5	0.75	0.25	1	1	1	1
						31	32	33	34



Resource Allocation Review Recommendations and Analyses 2005 – September (Weeks 35 - 39)

EVENTS

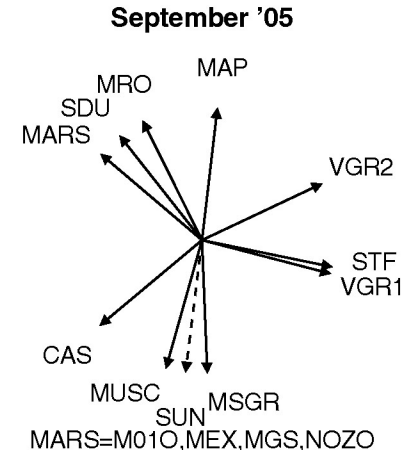
DSS-43 downtime proposal for Antenna Controller Replacement ending in week 36

DSS-63 downtime proposal for Antenna Controller Replacement beginning in week 38

Mars Reconnaissance Orbiter post launch support in weeks 35 and 36

SOHO HSO continuous support ending in week 38

Voyager 2 DTR playback in week 36, DOY 250





Resource Allocation Review Recommendations and Analyses

2005 – September (Weeks 35 - 39) (continued)

RECOMMENDATION

DSS-43 downtime proposal. Project/user supports re-allocated to other DSS resources to accommodate the requested downtime: MAP, Mars Odyssey, SIRTf, and Voyager 2. (1)

DSS-63 downtime proposal. Project/user supports re-allocated to other DSS resources to accommodate the requested downtime: MAP, Mars Odyssey, SIRTf, and Voyager 1. (2)

« Cluster 2 » remove DSS-43 from SSO and MSO supports in week 36. (1)

« GSSR » delete Mars RSD Arecibo support in week 39. (2)

Mars Express delete R/S bi-static supports at DSS-43 in weeks 35 and 36. (1)

« Voyager 2 » change routine uplink at DSS-43 to DSS-34 BLF in week 35 and 36, and change requested DSS-43 DTR playback support to DSS-34 in week 36. (1)



Resource Allocation Review Recommendations and Analyses

2005 – September (Weeks 35 - 39) (continued)

ANALYSIS

1. (70M) DSS-43 downtime proposal for Antenna Controller Replacement is in contention with MAP, Mars Express R/S bi-static, Mars Odyssey mapping, SIRTF, Voyager 2 uplink in weeks 35 and 36, and Cluster 2 SSO and MSO and Voyager 2 DTR playback in week 36.
2. (70M) DSS-63 downtime proposal for Antenna Controller Replacement is in contention with MAP, Mars Odyssey Mapping, SIRTF, and Voyager 1 routine uplink in weeks 38 and 39, and GSSR Mars RSD Arecibo in week 39.



Resource Allocation Review Recommendations and Analyses

2005 – September (Weeks 35 - 39) (continued)

RESOURCE REQUEST

User	Resource	Durations		Calibration		September				
		Ave	Min	Pre	Post	35	36	37	38	39
CLU2 1/2/3/4 SSO	DSS-16/27/24/15	2.0	2.0	0.50	0.25	2	2	2	2	2
CLU2 1/2/3/4 SSO	DSS-46/34/45	2.0	2.0	0.50	0.25	1				
CLU2 1/2/3/4 SSO	DSS-46/34/45	2.0	2.0	0.50	0.25		1	1	1	1
CLU4 1/2/3/4 MSO	DSS-46/34/45	1.5	1.0	0.50	0.25		1			
DSS Bearing Mntc	DSS-14	8.0	8.0			1			1	
DSS Bearing Mntc	DSS-43	8.0	8.0				1			1
DSS Bearing Mntc	DSS-63	8.0	8.0					1		
DSS Maintenance	DSS-54	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-25	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-55	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-27	8.0	6.0							1
DSS Maintenance	DSS-27	6.0	6.0			1	1	1	1	
DSS Maintenance	DSS-15	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-45	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-24	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-65	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-26	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-46	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-66	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-43	8.0	8.0			1		1	1	
DSS Maintenance	DSS-16	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-34	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-63	9.5	8.0			1	1		1	1
DSS Maintenance	DSS-63	6.0	4.0			1	1	1	1	1
DSS Maintenance	DSS-14	8.0	8.0			2	2	2	2	2
GSSR GODR	DSS-14/15	8.0	4.0	1.50	0.50					1
M01O Map/MGS Map	DSS-14,34,63	10.0	4.0	0.50	0.25		3			
M01O Mapping	70M	10.0	4.0	0.50	0.25			7		
M01O Mapping	DSS-14,34,63	10.0	4.0	0.50	0.25	7				
M01O Mapping	DSS-14,43,65	10.0	4.0	0.50	0.25				7	7
						35	36	37	38	39



Resource Allocation Review Recommendations and Analyses

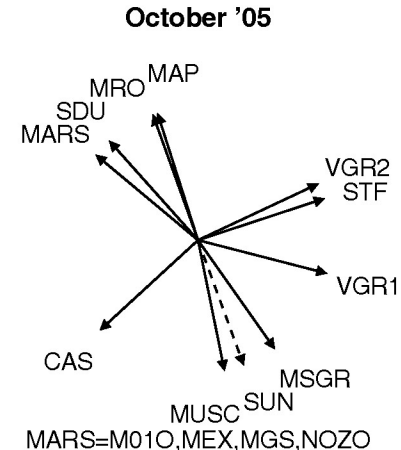
2005 – September (Weeks 35 - 39) (continued)

RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		September						
		Ave	Min	Pre	Post	35	36	37	38	39		
M01O Mapping	DSS-14,34,63	10.0	4.0	0.50	0.25	4						
MAP.	70M	0.7	0.6	1.25	0.25	7						
MAP.	DSS-14,63	0.7	0.6	1.25	0.25	7	7					
MAP.	DSS-14,43	0.7	0.6	1.25	0.25					7	7	
MEX Orbital Sci	DSS-24,54	6.0	4.0	0.50	0.25	7	7	7	7	7		
MEX R/S Bi Static	DSS-43	4.0	4.0	0.50	0.25					1	1	1
MEX R/S Bi Static	DSS-34	4.0	4.0	0.50	0.25	1	1					
MRO	34H	8.0	4.0	0.50	0.25			2	6	6	6	
MRO Cruise Ka	DSS-26,34,55	8.0	4.0	0.50	0.25			1	1	1	1	
MRO DDOR	34B1	1.0	1.0	0.50	0.25					1	1	
MRO Launch	34H	8.0	4.0	0.50	0.25	21	12					
SOHO	26M	1.6	1.6	0.70	0.20						14	
SOHO	26M	9.6	4.0	0.70	0.20						7	
SOHO HSO	DSS-27	8.0	6.0	0.40	0.20	7	7	7	7			
SOHO HSO	DSS-46,66	8.0	4.0	0.70	0.20	14	14	14	14			
STF	70M	1.0	1.0	0.50	0.25						14	
STF	DSS-14,45,63	1.0	1.0	0.50	0.25	14	14					
STF	DSS-14,43,65	1.0	1.0	0.50	0.25					14	14	
VGR1	DSS-26	8.0	4.0	0.50	0.25	7	7	7	6	7		
VGR1	DSS-55	8.0	4.0	0.50	0.25	7	7	7	7	7		
VGR1 MAGROL	DSS-14	7.0	7.0	0.75	0.25						1	
VGR1 Routine U/L	70M	2.5	2.5	0.75	0.25						1	
VGR1 Routine U/L	DSS-14,63	2.5	2.5	0.75	0.25	1	1					
VGR1 Routine U/L	DSS-14,43	2.5	2.5	0.75	0.25					1	1	
VGR2	DSS-43,45	16.0	8.0	0.50	0.25					6	6	6
VGR2	DSS-43,45	8.0	8.0	0.50	0.25				1	1	1	
VGR2	DSS-34,45	8.0	8.0	0.50	0.25	7	6					
VGR2 DTR P/B	DSS-34	7.4	7.4	0.75	0.25						1	
VGR2 Routine U/L	DSS-43	2.5	2.5	0.75	0.25					1	1	1
VGR2 Routine U/L	DSS-34	2.5	2.5	0.75	0.25	1	1					
						35	36	37	38	39		



Resource Allocation Review Recommendations and Analyses 2005 – October (Weeks 40 - 43)



EVENTS

DSS-63 downtime proposal for Antenna Controller Replacement

GSSR Mars RSD at DSS-63/Arecibo

MAP maneuver in week 43

Stardust TCM support in weeks 42 and 43

Voyager 1 DTR array playback at DSS-14/15 in week 43, DOY 299

RECOMMENDATION

DSS-63 downtime proposal. Project/user supports re-allocated to other DSS resources to accommodate the requested downtime: Cassini, GBRA, GSSR, MAP, Mars Odyssey, Nozomi, SIRTf, and Voyager 1.

GBRA change VLBA support at DSS-14\63 to DSS-14 only, and delete weekly Host Country supports.

« GSSR » delete Mars RSD Arecibo DSS-63 support.



Resource Allocation Review Recommendations and Analyses 2005 – October (Weeks 40 - 43) (continued)

ANALYSIS

(70M) DSS-63 downtime proposal for Antenna Controller Replacement is in contention with GBRA Host Country, M-Wave Spect, and New Proposals, GSSR Mars RSD Arecibo, MAP, Mars Odyssey, Nozomi R/S, SIRTf, and Voyager 1 uplink; Cassini in weeks 40 and 41, GBRA VLBA at DSS-14\63 in week 40, and MAP maneuver in week 43.



Resource Allocation Review Recommendations and Analyses 2005 – October (Weeks 40 - 43) (continued)

RESOURCE REQUEST

User	Resource	Durations		Calibration		October			
		Ave	Min	Pre	Post	40	41	42	43
CAS Tour	DSS-14	9.0	4.0	0.50	0.25	1	1		
CAS Tour	ISS-15,24,25,26,54,55,65	9.0	8.5	0.50	0.25	6	5	7	6
DSS Bearing Mntc	DSS-14	8.0	8.0				1		
DSS Bearing Mntc	DSS-43	8.0	8.0					1	
DSS Bearing Mntc	DSS-63	8.0	8.0			1			1
DSS Maintenance	DSS-54	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-25	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-55	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-27	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-15	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-45	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-24	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-65	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-26	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-46	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-66	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-43	8.0	8.0			1	1		1
DSS Maintenance	DSS-16	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-34	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-63	9.5	8.0				1	1	
DSS Maintenance	DSS-63	6.0	4.0			1	1	1	1
DSS Maintenance	DSS-14	8.0	8.0			2	2	2	2
GBRA Host Country	DSS-43	24.0	8.0	0.75	0.25			1	
GBRA Host Country	DSS-45	12.0	12.0	0.75	0.25				1
GBRA M-Wave Spect	DSS-14,43	9.0	4.0	0.50	0.50	2	2	2	2
GBRA New Proposals	DSS-14,43	9.0	4.0	0.50	0.30	1	1	1	1
GBRA Planet R/Ast	DSS-14	9.0	4.0	0.75	0.50	1	1	1	1
GBRA VLBA SOC-M4	DSS-14	8.0	8.0	1.50	0.50	1			
GSSR GODR	DSS-14/15	8.0	4.0	1.50	0.50	1		1	
GSSR Mars	DSS-14/25	7.0	4.0	1.50	0.50	2	2	2	2
						40	41	42	43



Resource Allocation Review Recommendations and Analyses 2005 – October (Weeks 40 - 43) (continued)

RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		October			
		Ave	Min	Pre	Post	40	41	42	43
M01O Mapping	DSS-14,43,65	10.0	4.0	0.50	0.25	7			7
M01O Mapping	DSS-14,43,55	10.0	4.0	0.50	0.25		7	7	
MAP.	DSS-14,43	0.7	0.6	1.25	0.25	7	7	7	4
MAP. Mnvr.	DSS-14,43	5.0	5.0	1.25	0.25				1
MAP. Mnvr.	DSS-14,43	3.0	3.0	1.25	0.25				2
NOZO RS	DSS-14,65	3.0	2.0	0.50	0.25	3	3	3	3
SDU	34H	6.0	4.0	0.50	0.25	1	1		
SDU TCM	DSS-25,34,54	4.0	4.0	0.50	0.25			2	2
STF	DSS-14,43,65	1.0	1.0	0.50	0.25	14	14	14	14
VGR1	DSS-26	8.0	4.0	0.50	0.25	7	7	7	6
VGR1	DSS-55	8.0	4.0	0.50	0.25	7	7	7	7
VGR1 DTR Array	DSS-14/15	7.4	7.4	0.75	0.25				1
VGR1 Routine U/L	DSS-14,43	2.5	2.5	0.75	0.25	1	1	1	1
						40	41	42	43



Resource Allocation Review Recommendations and Analyses 2005 – November (Weeks 44 - 47)

EVENTS

DSS-63 Downtime proposal for Antenna Controller Replacement ending in week 44

Cassini tour

GBRA RA500 SOC-M4 24-hour quarterly event at DSS-14\63 in week 44

GSSR Mars RSD at DSS-63/Arecibo

Mars Reconnaissance Orbiter TCM in weeks 44 and 45

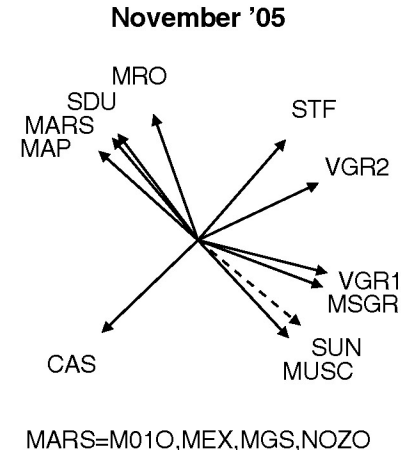
MUSES-C Asteroid departure in week 46, DOY 319

Stardust TCM support in week 46

Stereo Ahead launch in week 46, DOY 319, launch support in weeks 46 and 47, and maneuver in week 47

Stereo Behind launch in week 46, DOY 319, launch support in weeks 46 and 47, and maneuver in week 47

Voyager 1 ASCAL in week 44, DOY 305 and MAGROL in week 44, DOY 308





Resource Allocation Review Recommendations and Analyses

2005 – November (Weeks 44 - 47) (continued)

RECOMMENDATION

DSS-63 downtime proposal. Project/user supports re-allocated to other DSS resources to accommodate the requested downtime: GBRA, GSSR, MAP, Mars Odyssey, Nozomi, SIRTF, and Voyager 1. (1)

DSS delete antenna bearing maintenance at DSS-14 in week 44. (1)

« GSSR » Mars RSD Arecibo delete support in week 44. (1)

« Mars Global Surveyor » reduce 3 of 7 14-hour supports to 10-hours and MSPA with Mars Odyssey on the 70M. (2)

ANALYSIS

1. (70M) Severe contention exists at DSS-14 with Voyager 1 ASCAL support and antenna bearing maintenance in week 44.
2. (34HEF) Moderate contention on the 34HEF antennas exists with Mars Global Surveyor, Mars Reconnaissance Orbiter, Stardust TCM and Stereo-B Launch in week 46.

Contention levels on the 34BWG1, 34BWG2, 34HSB, and 26M subnets are workable and should resolve during final schedule preparations and negotiations.



Resource Allocation Review Recommendations and Analyses

2005 – November (Weeks 44 - 47) (continued)

RESOURCE REQUEST

User	Resource	Durations		Calibration		November			
		Ave	Min	Pre	Post	44	45	46	47
CAS Tour	ISS-15,24,25,26,54,55,65	9.0	8.5	0.50	0.25	7	7	8	7
DSS Bearing Mntc	DSS-14	8.0	8.0			1			1
DSS Bearing Mntc	DSS-43	8.0	8.0				1		
DSS Bearing Mntc	DSS-63	8.0	8.0					1	
DSS Maintenance	DSS-54	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-25	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-55	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-27	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-15	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-45	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-24	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-65	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-26	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-46	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-66	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-43	8.0	8.0			1		1	1
DSS Maintenance	DSS-16	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-34	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-63	9.5	8.0			1	1		1
DSS Maintenance	DSS-63	6.0	4.0			1	1	1	1
DSS Maintenance	DSS-14	8.0	8.0			1	2	1	2
GBRA Host Country	DSS-63	8.0	4.0						1
GBRA M-Wave Spect	70M	9.0	4.0	0.50	0.50		2	1	2
GBRA M-Wave Spect	DSS-14,43	9.0	4.0	0.50	0.50	2			
GBRA New Proposals	70M	9.0	4.0	0.50	0.30		1		1
GBRA New Proposals	DSS-14,43	9.0	4.0	0.50	0.30	1			
GBRA Planet R/Ast	DSS-14	9.0	4.0	0.75	0.50	1	1	1	1
GBRA RA500 SOC-M4	DSS-14/63	24.0	24.0	1.50	0.50		1		
GBRA VLBA SOC-M4	DSS-14/63	8.0	8.0	1.50	0.50	1			
GSSR GODR	DSS-14/15	8.0	4.0	1.50	0.50	1		1	
						44	45	46	47



Resource Allocation Review Recommendations and Analyses

2005 – November (Weeks 44 - 47) (continued)

RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		November			
		Ave	Min	Pre	Post	44	45	46	47
GSSR Mar RSD ACBO	DSS-63	1.0	1.0	1.50	0.50		2	2	2
GSSR Mars	DSS-14/25	7.0	4.0	1.50	0.50	2	2	2	
MGS Map/Beta Sup	70M	10.0	4.0	0.50	0.25			1	
MGS Map/Beta Sup	34H	14.0	4.0	0.50	0.25			7	7
MGS Map/Beta Sup	34B1	10.0	4.0	0.50	0.25				2
MGS Map/Beta Sup	DSS-34,45,43	9.3	4.0	0.50	0.25	2	3		
MGS Map/Beta Sup	34B2	14.0	4.0	0.50	0.25	7	7		
MRO	34H	8.0	4.0	0.50	0.25	4	2	6	6
MRO Cruise Ka	DSS-26,34,55	8.0	4.0	0.50	0.25	1	1		1
MRO Cruise Ka	DSS-26,55	8.0	4.0	0.50	0.25			1	
MRO DDOR	34B1	1.0	1.0	0.50	0.25	1	1	1	1
MRO TCM	34H	8.0	4.0	0.50	0.25	6	12		
SDU TCM	DSS-15,65	8.0	4.0	0.50	0.25			2	
SDU TCM	DSS-15,34,65	4.0	4.0	0.50	0.25			12	
SDU TCM	DSS-25,34,54	4.0	4.0	0.50	0.25	10	14		14
STA. Launch	DSS-24,34,55	8.0	7.0	0.50	0.25			15	
STA. Launch	DSS-25,34,55	8.0	7.0	0.50	0.25				3
STA. Launch	DSS-25,34,55	8.0	4.0	3.00	0.25			3	
STA. Maneuver	DSS-25,34,55	8.0	4.0	0.50	0.25				3
STA. Phasing	DSS-25,34,55	3.0	3.0	0.50	0.25				5
STB Launch	DSS-26,45,54	8.0	7.0	0.50	0.25			3	
STB Launch	DSS-26,45,54	8.0	7.0	0.50	0.25			15	
STB Launch	DSS-26,45,65	8.0	7.0	0.50	0.25				3
STB Maneuver	DSS-26,45,65	8.0	4.0	0.50	0.25				3
STB Phasing	DSS-26,34,54	3.0	3.0	0.50	0.25				5
VGR1	DSS-15,65	8.0	4.0	0.50	0.25			2	
VGR1	DSS-26	8.0	4.0	0.50	0.25	6	7	3	7
VGR1	DSS-55	8.0	4.0	0.50	0.25	7	7	6	7
VGR1	DSS-25	8.0	4.0	0.50	0.25			3	
VGR1 ASCAL	DSS-14	2.0	2.0	0.75	0.25	1			
						44	45	46	47



Resource Allocation Review Recommendations and Analyses

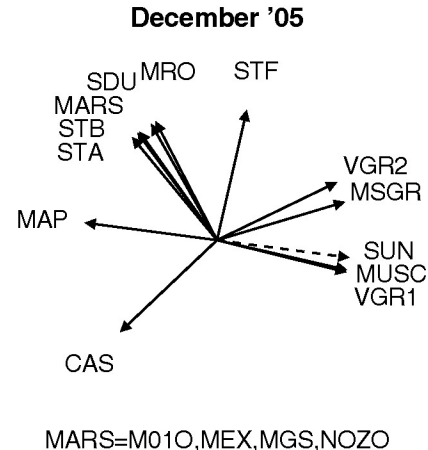
2005 – November (Weeks 44 - 47) (continued)

RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		November			
		Ave	Min	Pre	Post	44	45	46	47
VGR1 MAGROL	DSS-14	7.0	7.0	0.75	0.25	1			
VGR1 Routine U/L	70M	2.5	2.5	0.75	0.25		1	1	1
VGR1 Routine U/L	DSS-14,43	2.5	2.5	0.75	0.25	1			
						44	45	46	47



Resource Allocation Review Recommendations and Analyses 2005 – December (Weeks 48 - 52)



EVENTS

Cassini tour

GSSR Mars RSD at DSS-63/Arecibo ending in week 48

Mars Express Occultation in weeks 48 - 51

Mars Reconnaissance Orbiter TCM in weeks 48 and 49

Stardust TCM in weeks 48 and 52, Earth entry support beginning in week 52

Stereo Ahead maneuver and phasing support

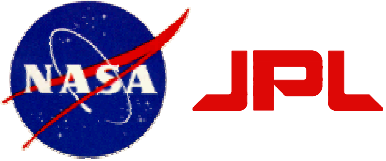
Stereo Behind maneuver and phasing support

RECOMMENDATION

None.

ANALYSIS

Contention level is workable and should resolve during final schedule preparations and negotiations.

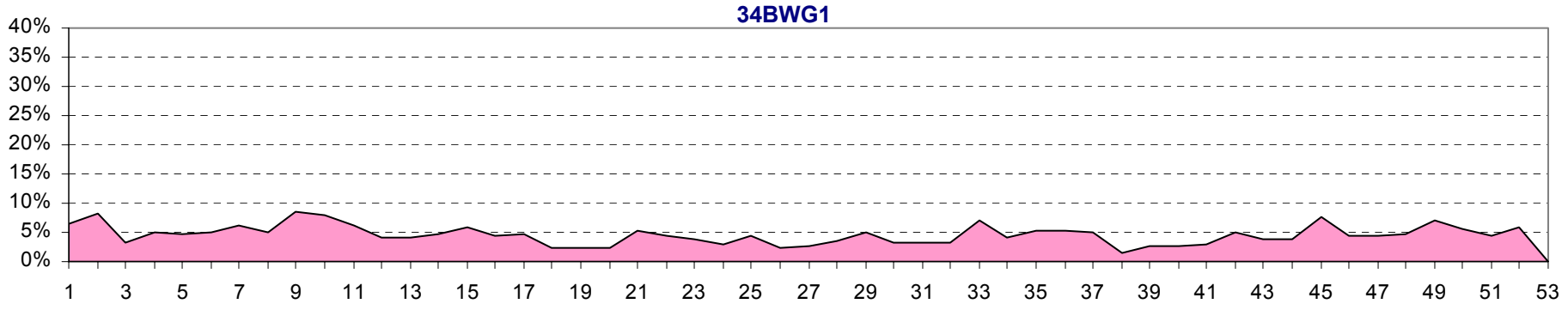
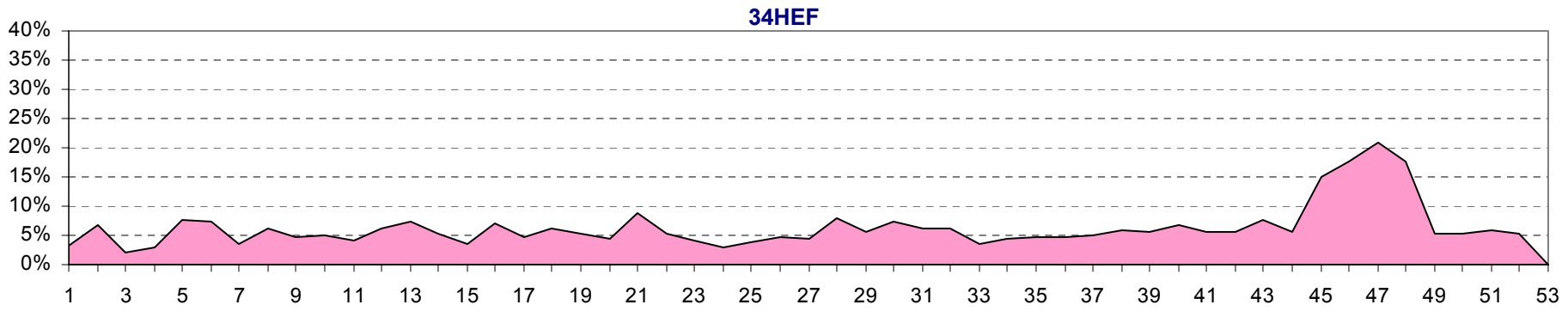
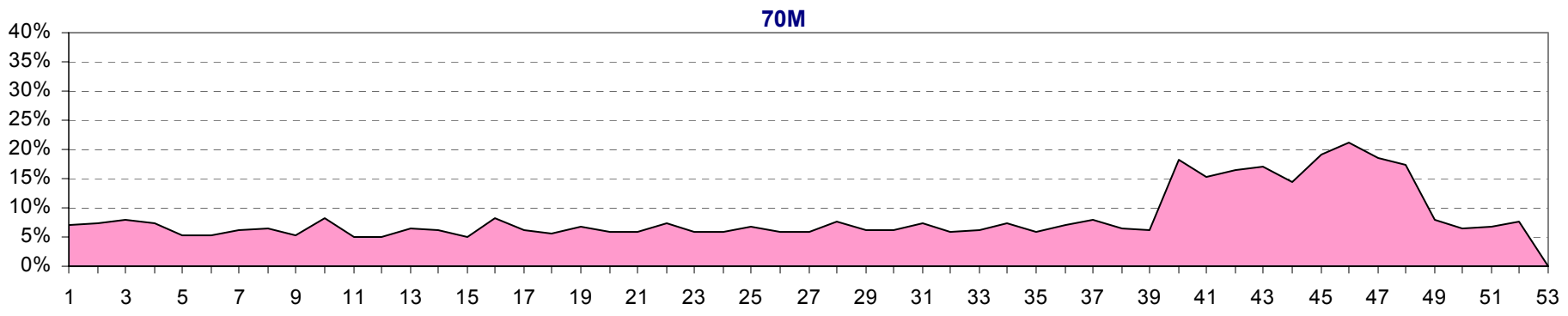


Resource Allocation Review Recommendations and Analyses

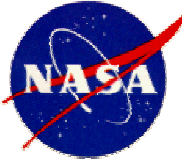
2006 Events, Recommendations and Analyses



Resource Allocation Review Recommendations and Analyses 2006 Weekly Average User Unsupportable Time

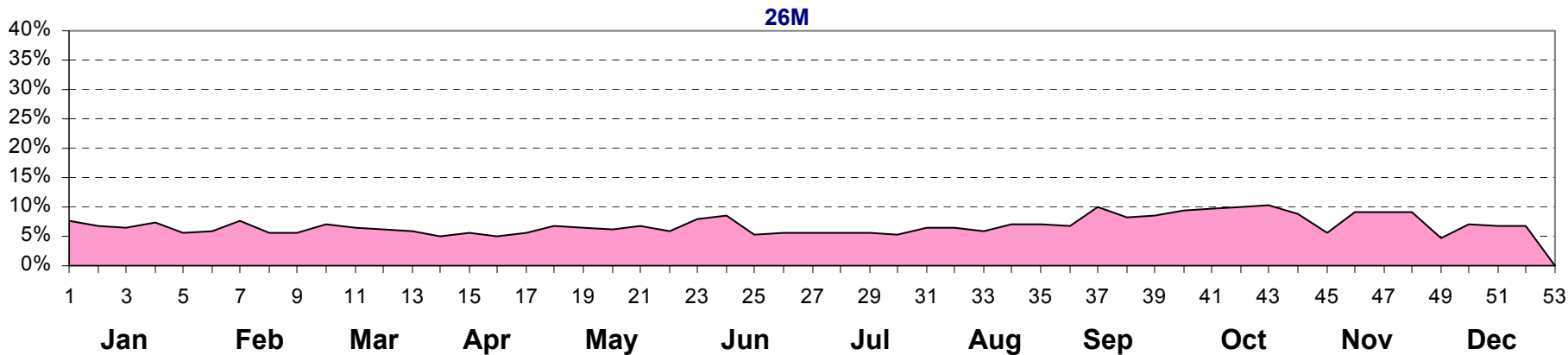
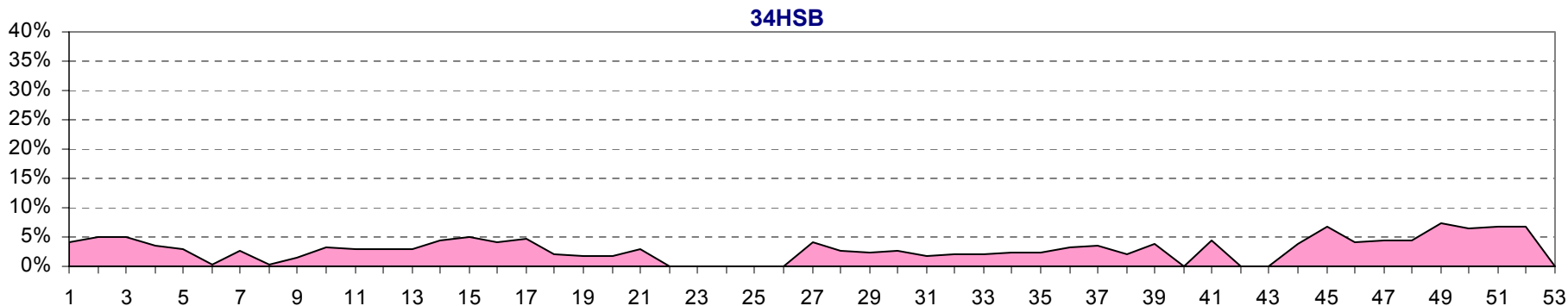
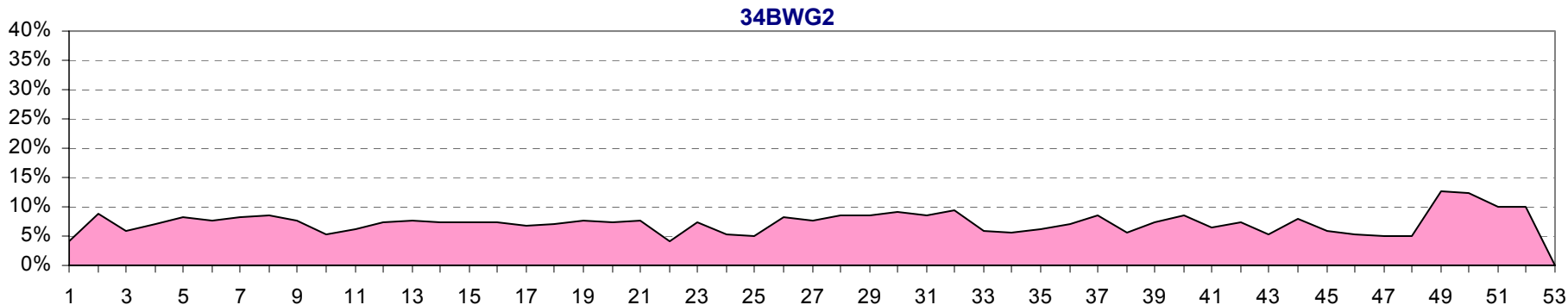


Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec



Resource Allocation Review Recommendations and Analyses

2006 Weekly Average User Unsupportable Time (continued)





Resource Allocation Review Recommendations and Analyses 2006 – January (Weeks 01 - 04)

EVENTS

Cassini tour

Mars Reconnaissance Orbiter approach, DDOR in weeks 03 - 04
and TCM-3 in week 04, DOY 029

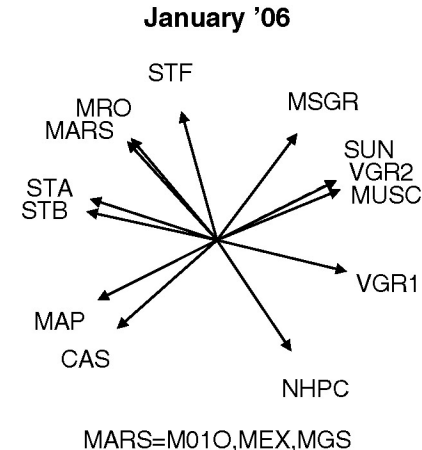
MUSES-C TCM-3 beginning in week 04, DOY 023

New Horizons launch and initial acquisition in week 02, DOY 010 and LEOP
continuous support in week 02, DOY 011 - 016

Stardust Earth re-entry support in weeks 01 - 02 and TCM and recovery on DOY 014

Stereo Ahead phasing support and maneuver in weeks 01 and 04, DOY 005 and 027

Stereo Behind phasing support in week 01, maneuver in week 01, DOY 005, and
prime science support beginning in week 02, DOY 010





Resource Allocation Review Recommendations and Analyses

2006 – January (Weeks 01 - 04) (continued)

RECOMMENDATION

« DSS » reduce maintenance at DSS-24 from 8 hours to 6 hours and at DSS-34 and DSS-54 from 6 hours to 4 hours in week 02. Increase maintenance at DSS-34 and DSS-54 from 6 hours to 8 hours in weeks 03 and 04.

Chandra move 11 passes per week in weeks 01 and 02 to the 26M and increase supports to 2 hours and change remaining 34BWG1 supports to DSS-24,54.

ANALYSIS

(34BWG1) The projected unsupportable time on the 34BWG1 in weeks 01 and 02 is moderate. The forecast unsupportable time for DSS maintenance in week 02 is moderate due to 100% viewperiod overlap with Chandra and Wind and 25% with Stardust TCM support Stereo Ahead and Behind (at DSS-34) in week 02.

Contention levels on the 70M, 34HEF, 34BWG2, 34HSB, and 26M subnets are workable and should resolve during final schedule preparations and negotiations.



Resource Allocation Review

Recommendations and Analyses

2006 – January (Weeks 01 - 04) (continued)

RESOURCE REQUEST

User	Resource	Durations		Calibration		January			
		Ave	Min	Pre	Post	1	2	3	4
CAS Tour	DSS-14,63	9.0	4.0	0.50	0.25		1	1	
CAS Tour	25,55,65	9.0	8.5	0.50	0.25	7		6	8
CAS Tour	25,54,63	9.0	8.5	0.50	0.25		5		
CHDR	34B1	1.0	1.0	0.50	0.25	21	21	21	21
DSS Bearing Mntc	DSS-14	8.0	8.0			1			1
DSS Bearing Mntc	DSS-43	8.0	8.0				1		
DSS Bearing Mntc	DSS-63	8.0	8.0					1	
DSS Maintenance	DSS-54	6.0	6.0			1		1	1
DSS Maintenance	DSS-25	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-55	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-27	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-15	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-45	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-24	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-65	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-26	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-46	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-66	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-43	8.0	8.0			1		1	1
DSS Maintenance	DSS-16	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-34	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-63	9.5	8.0			1	1		1
DSS Maintenance	DSS-63	6.0	4.0			1	1	1	1
DSS Maintenance	DSS-14	8.0	8.0			2	2	2	2
MRO	DSS-15,43,55	8.0	4.0	0.50	0.25	6			
MRO Approach	DSS-15,34,55	8.0	4.0	0.50	0.25		6	6	
MRO Approach	DSS-15,45,55	8.0	4.0	0.50	0.25		6	6	5
MRO Approach	DSS-15,43,55	8.0	4.0	0.50	0.25		7	7	
MRO Approach/DDOR	DSS-15	9.0	4.0	0.50	0.25		1	1	2
MRO Approach/DDOR	DSS-45,55	8.0	4.0	0.50	0.25			1	2
						1	2	3	4



Resource Allocation Review Recommendations and Analyses 2006 – January (Weeks 01 - 04) (continued)

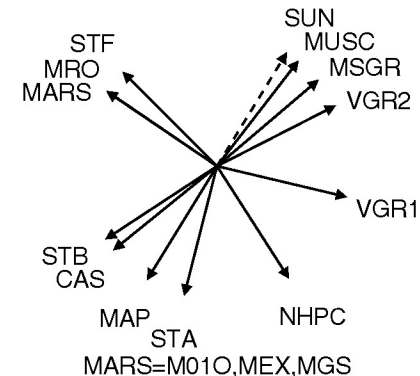
RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		January			
		Ave	Min	Pre	Post	1	2	3	4
MRO Approach/DDOR	DSS-55	8.0	4.0	0.50	0.25		1		
MRO Cruise Ka	34B1	8.0	4.0	0.50	0.25	1			
MRO DDOR	34B1	1.0	1.0	0.50	0.25	1			
MRO TCM	DSS-15,45,55	8.0	4.0	0.50	0.25				12
MUSC TCM-3	DSS-25,34,54	3.0	3.0	0.75	0.25				2
NHPC Early Ops	34B1	8.0	4.0	0.50	0.25		15	3	
NHPC Early Ops	34B1	7.0	4.0	0.50	0.25			6	7
NHPC Lnch/Init Acq	34B1	8.0	8.0	3.00	0.25		3		
SDU Entry	DSS-25,45,65	8.0	8.0	0.50	0.25	12			
SDU Entry	DSS-25,26,45,65	8.0	8.0	0.50	0.25		10		
SDU TCM	DSS-25,45,65	8.0	4.0	0.50	0.25		3		
SDU TCM	DSS-25,45,65	8.0	4.0	0.50	0.25		3		
STA. Maneuver	DSS-26,34,54	8.0	4.0	0.50	0.25	3			3
STA. Phasing	DSS-15,34,55	3.0	3.0	0.50	0.25		7		
STA. Phasing	DSS-25,34,55	3.0	3.0	0.50	0.25	6		7	6
STB Maneuver	DSS-26,45,43,54	8.0	4.0	0.50	0.25	2			
STB Maneuver	DSS-26,45,34,54	8.0	4.0	0.50	0.25	1			
STB Phasing	DSS-26,34,54	2.0	1.0	0.50	0.25	6			
STB Prime Science	DSS-26,34,54	3.5	3.0	0.50	0.25		7	7	7
WIND	34B1	2.5	2.5	0.50	0.25		5		
WIND	DSS-24,54	2.5	2.5	0.50	0.25	7	2	7	7
						1	2	3	4



Resource Allocation Review Recommendations and Analyses 2006 – February (Weeks 05 - 08)

February '06



EVENTS

Cassini tour

GBRA RA500 SOC-M4 24-hour quarterly event at DSS-14\63
in week 06

MAP maneuver in week 07

Mars Reconnaissance Orbiter approach, DDOR and TCM-3 in week 05

MUSES-C TCM-3 in weeks 05 - 07

New Horizons LEOP

SOHO HSO

Stereo Ahead phasing support through week 07 and prime science support
beginning in week 07

Stereo Behind prime science

Voyager 1 MAGROL in week 05, DOY 034



Resource Allocation Review Recommendations and Analyses

2006 – February (Weeks 05 - 08) (continued)

RECOMMENDATION

None.

ANALYSIS

Contention level is workable and should resolve during final schedule preparations and negotiations.



Resource Allocation Review Recommendations and Analyses 2006 – March (Weeks 09 - 13)

EVENTS

Cassini tour

Mars Reconnaissance Orbiter approach and TCM-4 in week 09, DOY 059, TCM-5 and MOI in week 10, DOY 068 and 069, and aerobraking beginning in week 11

MESSENGER Venus flyby beginning in week 09, DOY 058

SOHO HSO

Stereo Ahead and Stereo Behind prime science

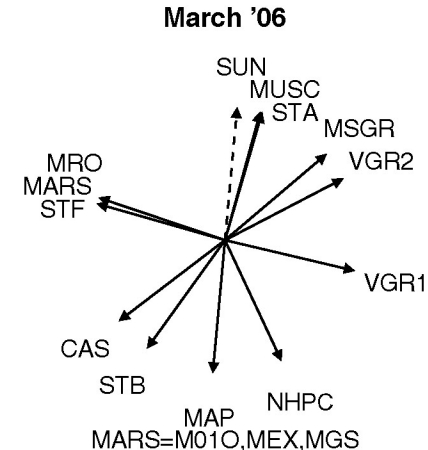
VGR 2 DTR playback in week 10, DOY 067 at DSS-43

RECOMMENDATION

None.

ANALYSIS

Contention level is workable and should resolve during final schedule preparations and negotiations.





Resource Allocation Review Recommendations and Analyses 2006 – April (Weeks 14 - 17)

EVENTS

Cassini tour

Mars Reconnaissance Orbiter aerobraking

Stereo Ahead prime science

Stereo Behind prime science

SOHO HSO

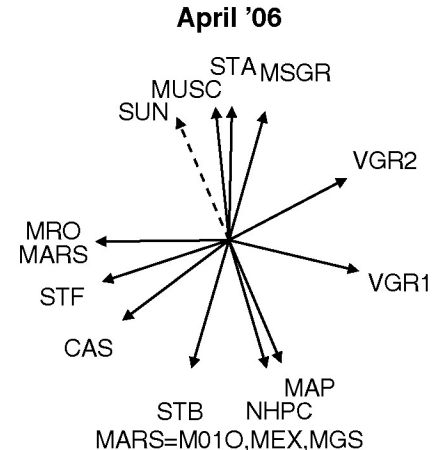
Voyager 1 DTR array playback at DSS-14/15 in week 17, DOY 117

RECOMMENDATION

None.

ANALYSIS

Contention level is workable and should resolve during final schedule preparations and negotiations.





Resource Allocation Review Recommendations and Analyses 2006 – May (Weeks 18 - 21)

EVENTS

Cassini tour

Dawn launch and initial acquisition in week 21, DOY 147

GBRA RA500 SOC-M4 24-hour quarterly epoch at DSS-14\63
in week 21

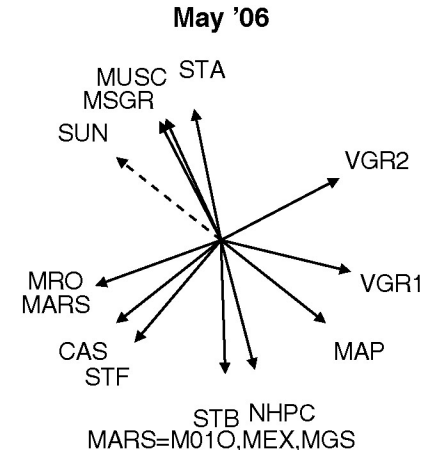
Mars Reconnaissance Orbiter aerobraking

RECOMMENDATION

None.

ANALYSIS

Contention level is workable and should resolve during final schedule preparations
and negotiations.





Resource Allocation Review Recommendations and Analyses 2006 – June (Weeks 22 - 26)

EVENTS

Cassini tour

Dawn launch support through week 24

EVN E500 J-M4 24 hour quarterly event at DSS-14\63 in week 22

MAP maneuver in week 23

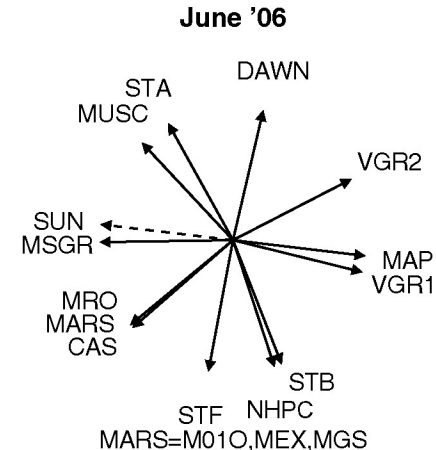
Mars Reconnaissance Orbiter aerobraking continuous support

RadioAstron start of DSN support on the 70M subnet in week 24

SELENE OCM in weeks 23 - 24, DOY 156 - 169

Stereo Ahead prime science

Stereo Behind prime science





Resource Allocation Review Recommendations and Analyses 2006 – June (Weeks 22 - 26) (continued)

RECOMMENDATION

« DSS » reduce DSS-14 routine maintenance from two 8-hour supports to one 8-hour support, and reduce DSS-25 and DSS-26 maintenance from 8-hours to 6-hours in week 22. (1)

EVN reduce support from two 16-hour supports to two 8-hour supports in week 22 and add two 8-hour supports in week 23. (1)

« GSSR » GODR delete simultaneous support in week 22, reduce support in weeks 24 and 26 from 8 hours to 4 hours and delete GSSR Mercury support in week 25. (1, 2)



Resource Allocation Review Recommendations and Analyses 2006 – June (Weeks 22 - 26) (continued)

ANALYSIS

1. (70M) The projected unsupportable time is moderate for DSS bearing and routine maintenance in weeks 22, 25, and 26 due to the Mars Missions viewperiod overlap into the daylight maintenance viewperiod, EVN 16-hour simultaneous supports at DSS-14\63, GSSR GODR simultaneous supports at DSS-14/15, and GSSR Mercury support at DSS-14.
2. (34HEF) The projected unsupportable time is moderate to severe for this period. The contention level is caused by the Mars Reconnaissance Orbiter viewperiod overlap with the DSS daylight view. Mars Reconnaissance Orbiter is requesting continuous support for aerobreaking, GSSR GODR request simultaneous supports at DSS-14/15, RFC CAT M&E 24-hour simultaneous support, Space Geodesy 24-hour support, and Voyager 2's viewperiod constraint at Canberra.

Contention levels on the 34BWG1, 34BWG2, 34HSB, and 26M subnets are workable and should resolve during final schedule preparations and negotiations.



Resource Allocation Review

Recommendations and Analyses

2006 – June (Weeks 22 - 26) (continued)

RESOURCE REQUEST

User	Resource	Durations		Calibration		June				
		Ave	Min	Pre	Post	22	23	24	25	26
CAS Tour	ISS-15,24,25,26,54,55,65	9.0	8.5	0.50	0.25	7	7	7	7	6
DAWN Cruise	34H	8.0	4.0	0.50	0.25			2	7	5
DAWN Cruise	34H	4.0	4.0	0.50	0.25					2
DAWN Launch Supt	34H	8.0	4.0	0.50	0.25	17	7	5		
DSS Bearing Mntc	DSS-14	8.0	8.0			1			1	
DSS Bearing Mntc	DSS-43	8.0	8.0				1			1
DSS Bearing Mntc	DSS-63	8.0	8.0					1		
DSS Maintenance	DSS-54	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-25	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-55	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-15	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-45	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-24	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-65	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-26	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-46	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-66	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-43	8.0	8.0			1		1	1	
DSS Maintenance	DSS-16	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-34	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-63	9.5	8.0			1	1		1	1
DSS Maintenance	DSS-63	6.0	4.0			1	1	1	1	1
DSS Maintenance	DSS-14	8.0	8.0			2	2	2	2	2
EVN Calib	DSS-63	3.0	3.0	1.50	0.50	1				
EVN E500 J-M4	DSS-14/63	16.0	12.0	1.50	0.50	2				
GSSR GODR	DSS-14/15	8.0	4.0	1.50	0.50	1		1		1
GSSR Mercury	DSS-14	5.2	5.2	1.50	0.50		1	2	1	2
M01O Map/MGS Map	70M	10.0	4.0	0.50	0.25	3			3	3
M01O Mapping	70M	10.0	4.0	0.50	0.25	4	7	7	4	4
MAP.	70M	0.7	0.6	1.25	0.25	7	4	7	7	7
						22	23	24	25	26



Resource Allocation Review Recommendations and Analyses 2006 – June (Weeks 22 - 26) (continued)

RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		June				
		Ave	Min	Pre	Post	22	23	24	25	26
MAP. Mnv.	70M	5.0	4.0	1.25	0.25		1			
MAP. Mnv.	70M	3.0	3.0	1.25	0.25		2			
MEX R/S Bi Static	DSS-43	4.0	4.0	0.50	0.25	1	1	1	1	1
MGS Mapping	70M,34B1	10.0	4.0	0.50	0.25	3	9	9	7	6
MGS Mapping	34B1	10.0	4.0	0.50	0.25	4				
MRO Aerobraking	DSS-15,45,55	8.0	4.0	0.50	0.25	7	11	7	7	21
MRO Aerobraking	34B2,34B1	8.0	4.0	0.50	0.25	14	10	7	7	
RFC CAT M&E D-M4	15\45,15\65	24.0	12.0	1.50	0.50		1	1		
RFC Clock Syn D-M4	DSS-15\65	4.0	4.0	1.50	0.50		1		1	
SELE OCM	DSS-66,16	4.0	4.0	0.70	0.25		12	12		
SGP Crust Dyn B-M4	DSS-65	24.0	24.0	1.50	0.50					1
SGP Crust Dyn H-M4	DSS-15	24.0	24.0	1.50	0.50		1			
SGP Crust Dyn W-M4	DSS-45	24.0	24.0	1.50	0.50	1			1	
STA. Prime Science	DSS-26,34,55	3.5	3.0	0.50	0.25	7	7	7	7	7
STB Prime Science	DSS-26,34,54	3.5	3.0	0.50	0.25	7	7	7	7	7
SVLB RADA	70M	8.0	4.0	1.50	0.50			8	8	8
VGR2	DSS-43,45,34	16.0	8.0	0.50	0.25		6	6		
VGR2	DSS-43,45	8.0	8.0	0.50	0.25		1	1		
VGR2	DSS-43,45,34	8.0	8.0	0.50	0.25	7			7	7
VGR2 Routine U/L	DSS-43	2.5	2.5	0.75	0.25	1	1	1	1	1
						22	23	24	25	26



Resource Allocation Review Recommendations and Analyses 2006 – July (Weeks 27 - 30)

EVENTS

Cassini tour

Mars Reconnaissance Orbiter aerobraking continuous support

MUSES-C TCM-4 support in weeks 28 - 30

Stereo Ahead prime science

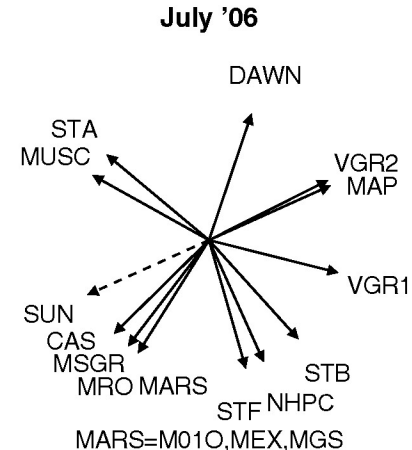
Stereo Behind prime science

RECOMMENDATION

None.

ANALYSIS

Contention level is workable and should resolve during final schedule preparations and negotiations.





Resource Allocation Review Recommendations and Analyses 2006 – August (Weeks 31 - 35)

EVENTS

Cassini tour

Mars Reconnaissance Orbiter aerobraking continuous support

MUSES-C TCM-4 support in weeks 28 - 30

Stereo Ahead prime science

Stereo Behind prime science

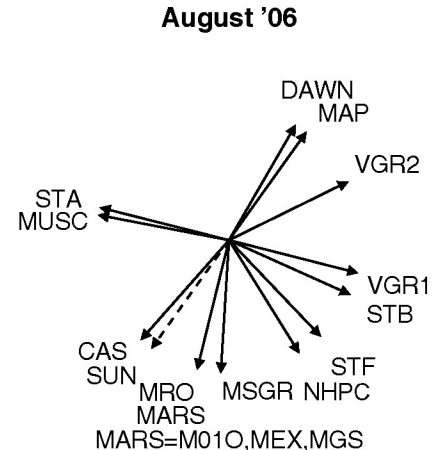
Voyager 1 MAGROL maneuver in week 31, DOY 217

RECOMMENDATION

None.

ANALYSIS

Contention level is workable and should resolve during final schedule preparations and negotiations.





Resource Allocation Review Recommendations and Analyses 2006 – September (Weeks 36 - 39)

EVENTS

DSS-24 downtime proposal for X/X-Ka Band installation

Cassini tour

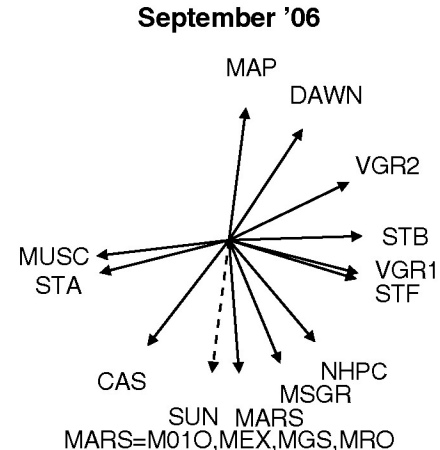
MAP OEM in week 39, DOY 274

Mars Reconnaissance Orbiter aerobraking ending in week 37, DOY 256 and transition to prime science in week 37, DOY 257

Stereo Ahead prime science

Stereo Behind prime science

Voyager 2 DTR playback in week 36, DOY 249





Resource Allocation Review Recommendations and Analyses

2006 – September (Weeks 36 - 39) (continued)

RECOMMENDATION

DSS-24 downtime proposal. Projects/user supports re-allocated to other DSS resources to accommodate the requested downtime: ACE, Cassini, IMAGE, New Horizons, and SOHO. (2)

Chandra move 7 passes per week to DSS-16 and increase support to 2 hours, and change 34BWG1 supports to DSS-34,54. (2)

« Cluster 2 » delete requirement for DSS-24 for SSO and MSO supports. (2)

« DSS » delete 1 routine 8-hour maintenance at DSS-14 and one 6-hour at DSS-63. (1)



Resource Allocation Review Recommendations and Analyses

2006 – September (Weeks 36 - 39) (continued)

ANALYSIS

1. (70M) The projected unsupportable time is moderate for DSS maintenance due to viewperiod overlap with Cassini and Mars Missions.
2. (34BWG1) The projected unsupportable time is moderate due to viewperiod overlap with Cassini, Mars Missions, New Horizons, and Stereo Ahead and Behind. The proposed downtime for DSS-24 for X/X-Ka band installation places an extra load onto DSS-34 and DSS-54.

Contention levels on the 34HEF, 34BWG2, 34HSB and 26M subnets are workable and should resolve during final schedule preparations and negotiations.



Resource Allocation Review Recommendations and Analyses

2006 – September (Weeks 36 - 39) (continued)

RESOURCE REQUEST

User	Resource	Durations		Calibration		September			
		Ave	Min	Pre	Post	36	37	38	39
CAS Tour	DSS-14/25,63/65	9.0	4.0	0.50	0.25	2		1	1
CAS Tour	25,55,65	9.0	8.5	0.50	0.25	4	6	5	6
CHDR	DSS-34,54	1.0	1.0	0.50	0.25	14	14	14	14
CHDR	DSS-16,27	2.0	2.0	0.70	0.20	7	7	7	7
CLU2 1/2/3/4 SSO	DSS-16/27/24/15	2.0	2.0	0.50	0.25	2	2	2	2
CLU2 1/2/3/4 SSO	DSS-46/34/45/43	2.0	2.0	0.50	0.25	1	1	1	1
DSS Bearing Mntc	DSS-14	8.0	8.0				1		
DSS Bearing Mntc	DSS-43	8.0	8.0					1	
DSS Bearing Mntc	DSS-63	8.0	8.0			1			1
DSS Maintenance	DSS-54	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-25	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-55	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-27	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-15	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-45	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-65	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-26	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-46	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-66	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-43	8.0	8.0			1	1		1
DSS Maintenance	DSS-16	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-34	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-63	9.5	8.0				1	1	
DSS Maintenance	DSS-63	6.0	4.0			1	1	1	1
DSS Maintenance	DSS-14	8.0	8.0			2	2	2	2
M01O Map/MGS Map	70M	10.0	4.0	0.50	0.25	3	3		3
M01O Map/MGS Map	34H	10.0	4.0	0.50	0.25			3	
M01O Mapping	70M	10.0	4.0	0.50	0.25	4	4	4	4
MAP.	70M	0.7	0.6	1.25	0.25	7	7	7	7
MEX R/S Bi Static	DSS-43	4.0	4.0	0.50	0.25	1	1	1	1
						36	37	38	39



Resource Allocation Review Recommendations and Analyses

2006 – September (Weeks 36 - 39) (continued)

RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		September			
		Ave	Min	Pre	Post	36	37	38	39
MGS Mapping	70M,DSS-54	5.0	4.0	0.50	0.25	6	7	6	3
MGS Mapping	34H,34B2	5.0	4.0	0.50	0.25	6	7	6	3
MGS Mapping	34H	10.0	4.0	0.50	0.25				3
MRO Aerobraking	70M	8.0	4.0	0.50	0.25		1		
MRO Aerobraking	DSS-15,45,55	8.0	4.0	0.50	0.25	15	7		
MRO Aerobraking	DSS-25,34,54	8.0	4.0	0.50	0.25	6	1		
MRO Tran Prime Sci	DSS-15,45,55	8.0	4.0	0.50	0.25		8	14	14
NHPC Cruise	DSS-34,54	7.0	4.0	0.50	0.25	2	2	2	2
STA. Prime Science	DSS-26,34,55	3.5	3.0	0.50	0.25	7	7	7	7
STB Prime Science	DSS-26,34,54	3.5	3.0	0.50	0.25	7	7	7	7
VGR2	DSS-43,45,34	8.0	8.0	0.50	0.25	7	7	7	7
VGR2 DTR P/B	DSS-43	7.4	7.4	0.75	0.25	1			
VGR2 Routine U/L	DSS-43	2.5	2.5	0.75	0.25	1	1	1	1
						36	37	38	39



Resource Allocation Review Recommendations and Analyses 2006 – October (Weeks 40 - 43)

EVENTS

DSS-24 downtime proposal for X/X-Ka Band installation ending in week 42, DOY 295

Cassini tour

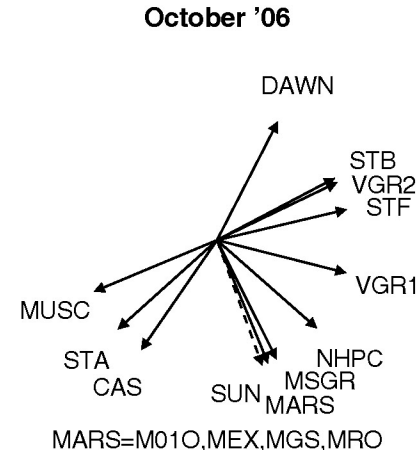
Mars Express R/S solar corona

Mars Reconnaissance Orbiter transition to prime science ending in week 40, DOY 279, prime science and solar conjunction beginning on DOY 280

Stereo Ahead prime science

Stereo Behind prime science

Voyager 1 MAGROL in week 40, DOY 275 at DSS-14, and DTR array playback at DSS-14/15 in week 43, DOY 298 - 299





Resource Allocation Review Recommendations and Analyses

2006 – October (Weeks 40 - 43) (continued)

RECOMMENDATION

DSS-24 downtime proposal. Projects/user supports re-allocated to other DSS resources to accommodate the requested downtime. ACE, Cassini, IMAGE, New Horizons, and SOHO.

Chandra move 7 passes per week to DSS-16 and increase supports to 2 hours, and change 34BWG1 supports to DSS-34,54 in weeks 40 - 42. (2)

« Cluster 2 » delete requirement for DSS-24 for SSO and MSO supports. (2)

GBRA change Host Country at DSS-43 to three 8-hour supports in week 42. (1)

Mars Express delete one 10-hour pass per week. Reduce 3 passes from 10 hours to 6.5 hours at DSS-14,63 in weeks 40 and 43, and reduce 2 passes from 10 hours to 6.5 hours at DSS-14,63 in weeks 41 and 42. (1)

Mars Odyssey reduce one 10-hour pass per week to two 4-hour passes at DSS-14,63. MSPA four 10-hour standalone passes with MGS at DSS-43,34HEF in weeks 40 and 41. (1, 2)

« MGS » MSPA 4 passes per week with Mars Odyssey at DSS-43,34HEF in weeks 40 and 41. (1, 2)

RFC Cat M&E move support from week 42 to week 46. (2)

« Space Geodesy » move support from week 42 to week 45. (2)



Resource Allocation Review Recommendations and Analyses 2006 – October (Weeks 40 - 43) (continued)

ANALYSIS

1. (70M) The projected unsupportable time is severe for DSS maintenance and Mars Express R/S solar corona support due to viewperiod overlap with Cassini, Mars Odyssey, and MGS.
2. (34BWG1) The projected unsupportable time is moderate for DSS maintenance due to viewperiod overlap with Cassini, MGS, New Horizons, and Stereo Ahead and Behind, compounded by the proposed downtime for DSS-24 for X/X-Ka band installation in weeks 40 - 42.

Contention levels on the 34HEF, 34BWG2, 34HSB and 26M subnets are workable and should resolve during final schedule preparations and negotiations.



Resource Allocation Review Recommendations and Analyses 2006 – October (Weeks 40 - 43) (continued)

RESOURCE REQUEST

User	Resource	Durations		Calibration		October			
		Ave	Min	Pre	Post	40	41	42	43
CAS Tour	DSS-14/25,63/65	9.0	4.0	0.50	0.25		2		2
CAS Tour	25,55,65	9.0	8.5	0.50	0.25	7	4	7	3
CHDR	34B1	1.0	1.0	0.50	0.25				21
CHDR	DSS-34,54	1.0	1.0	0.50	0.25	21	21	21	
CLU2 1/2/3/4 SSO	DSS-16/27/24/15	2.0	2.0	0.50	0.25	2	2	2	2
CLU2 1/2/3/4 SSO	DSS-46/34/45/43	2.0	2.0	0.50	0.25	1	1	1	1
CLU4 1/2/3/4 MSO	DSS-16/27/24/15	1.5	1.0	0.50	0.25				1
CLU4 1/2/3/4 MSO	DSS-46/34/45/43	1.5	1.0	0.50	0.25	1			
DSS Bearing Mntc	DSS-14	8.0	8.0			1			1
DSS Bearing Mntc	DSS-43	8.0	8.0				1		
DSS Bearing Mntc	DSS-63	8.0	8.0					1	
DSS Maintenance	DSS-54	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-25	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-55	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-27	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-15	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-45	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-24	8.0	6.0						1
DSS Maintenance	DSS-65	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-26	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-46	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-66	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-43	8.0	8.0			1		1	1
DSS Maintenance	DSS-16	8.0	6.0			1	1	1	1
DSS Maintenance	DSS-34	6.0	6.0			1	1	1	1
DSS Maintenance	DSS-63	9.5	8.0			1	1		1
DSS Maintenance	DSS-63	6.0	4.0			1	1	1	1
DSS Maintenance	DSS-14	8.0	8.0			2	2	2	2
GBRA Host Country	DSS-43	24.0	8.0	0.75	0.25			1	
GBRA Host Country	DSS-63	8.0	4.0			1	1	1	1
						40	41	42	43



Resource Allocation Review Recommendations and Analyses 2006 – October (Weeks 40 - 43) (continued)

RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		October			
		Ave	Min	Pre	Post	40	41	42	43
GBRA M-Wave Spect	70M	9.0	4.0	0.50	0.50	2	2	2	2
GBRA New Proposals	70M	9.0	4.0	0.50	0.50	1	1	1	1
GBRA Planet R/Ast	DSS-14	9.0	4.0	0.75	0.50	1	1	1	1
M01O Mapping	DSS-43	10.0	4.0	0.50	0.25	7	7	7	7
MEX R/S Bi Static	DSS-43	4.0	4.0	0.50	0.25	1	1	1	1
MEX R/S Solar Cor	DSS-14,63	10.0	4.0	0.50	0.25	7	7	7	7
MGS Map/Beta Sup	34H	14.0	4.0	0.50	0.25		1	7	7
MGS Map/Beta Sup	34B1	10.0	4.0	0.50	0.25				3
MGS Map/Beta Sup	DSS-34,54	10.0	4.0	0.50	0.25			2	
MGS Map/Beta Sup	54,34H,34B2	10.0	4.0	0.50	0.25		1		
MGS Mapping	70M,34B2	10.0	4.0	0.50	0.25	3			
MGS Mapping	34H	10.0	4.0	0.50	0.25	7	7		
MRO Solar Conjunction	DSS-15,45,55	8.0	4.0	0.50	0.25	2	7	7	7
MRO Tran Prime Sci	DSS-15,45,55	8.0	4.0	0.50	0.25	10			
NHPC Cruise	34B1	7.0	4.0	0.50	0.25				2
NHPC Cruise	DSS-34,54	7.0	4.0	0.50	0.25	2	2	2	
RFC CAT M&E D-M4	15\45,15\65	24.0	12.0	1.50	0.50			1	
RFC Clock Syn D-M4	DSS-15\65	4.0	4.0	1.50	0.50		1		1
SGP Crust Dyn B-M4	DSS-65	24.0	24.0	1.50	0.50			1	
SGP Crust Dyn W-M4	DSS-45	24.0	24.0	1.50	0.50				1
STA. Prime Science	DSS-26,34,55	3.5	3.0	0.50	0.25	7	7	7	7
STB Prime Science	DSS-26,34,54	3.5	3.0	0.50	0.25	7	7	7	7
VGR1	DSS-14,63	6.0	4.0	0.50	0.25	2			
VGR1	15,65,54	6.0	4.0	0.50	0.25	5			
VGR1	DSS-26	6.0	4.0	0.50	0.25	4	7	7	6
VGR1	DSS-55	6.0	4.0	0.50	0.25	4	7	7	7
VGR1 DTR Array	DSS-14/15	7.4	7.4	0.75	0.25				1
VGR1 Routine U/L	DSS-14,63	2.5	2.5	0.75	0.25	1	1	1	1
						40	41	42	43



Resource Allocation Review Recommendations and Analyses 2006 – November (Weeks 44 - 48)

EVENTS

Cassini tour

EVN E500 J-M4 24 hour quarterly event at DSS-14\63 in week 46

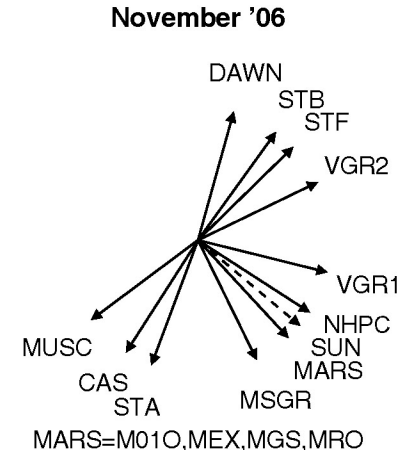
GBRA RA500 SOC-M4 24-hour quarterly event at DSS-14\63 in week 45

Mars Express R/S solar corona

Mars Reconnaissance Orbiter solar conjunction ending in week 45, DOY 310, prime science, and cruise Ka-band operations demo beginning in week 45

Stereo Ahead and Stereo Behind prime science

Voyager 1 ASCAL and MAGROL in week 44, DOY 304 and 307





Resource Allocation Review Recommendations and Analyses

2006 – November (Weeks 44 - 48) (continued)

RECOMMENDATION

EVN change support from two 16-hour passes to three 12-hour passes and move one each to weeks 45 - 47.

GBRA RA500 SOC-M4 change support from one 24-hour pass to three 8-hour passes.

Mars Express delete one support per week. Reduce 2 passes from 10 hours to 5.5 hours at DSS-14,63 in weeks 44, 45, 47, and 48, and reduce 3 passes from 10 hours to 5.5 hours at DSS-14,63 in week 46.

Mars Odyssey reduce three passes per week from 10 hours to 8 hours and MSPA with Mars Reconnaissance Orbiter at DSS-43, adding two 4-hour stand-alone passes at DSS-14,63 for reduced time, and MSPA one 10-hour pass per week with MGS on 34HEF in weeks 45 - 48.

Mars Reconnaissance Orbiter MSPA 3 passes per week with Mars Odyssey at DSS-43 in weeks 45 - 48.

« MGS » MSPA one 10-hour pass per week with Mars Odyssey in weeks 45 - 48.



Resource Allocation Review Recommendations and Analyses

2006 – November (Weeks 44 - 48) (continued)

ANALYSIS

(70M) The projected unsupportable time is severe for DSS maintenance and Mars Express R/S solar corona support due to viewperiod overlap with Cassini, Mars Odyssey, and Mars Reconnaissance Orbiter.

Contention levels on the 34HEF, 34BWG1, 34BWG2, 34HSB, and 26M subnets are workable and should resolve during final schedule preparations and negotiations.



Resource Allocation Review Recommendations and Analyses

2006 – November (Weeks 44 - 48) (continued)

RESOURCE REQUEST

User	Resource	Durations		Calibration		November				
		Ave	Min	Pre	Post	44	45	46	47	48
CAS Tour	DSS-14/25,63/65	9.0	4.0	0.50	0.25		1		1	1
CAS Tour	25,55,65	9.0	8.5	0.50	0.25	7	6	7	5	6
DSS Bearing Mntc	DSS-14	8.0	8.0					1		
DSS Bearing Mntc	DSS-43	8.0	8.0			1			1	
DSS Bearing Mntc	DSS-63	8.0	8.0				1			1
DSS Maintenance	DSS-54	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-25	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-55	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-27	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-15	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-45	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-24	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-65	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-26	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-46	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-66	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-43	8.0	8.0				1	1		1
DSS Maintenance	DSS-16	8.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-34	6.0	6.0			1	1	1	1	1
DSS Maintenance	DSS-63	9.5	8.0			1		1	1	
DSS Maintenance	DSS-63	6.0	4.0			1	1	1	1	1
DSS Maintenance	DSS-14	8.0	8.0			2	2	2	2	2
EVN Calib	DSS-63	3.0	3.0	1.50	0.50			1		
EVN E500 J-M4	DSS-14/63	16.0	12.0	1.50	0.50			2		
GBRA Host Country	DSS-63	8.0	4.0			1	1	1	1	1
GBRA Host Country	DSS-45	8.0	8.0	0.75	0.25	1				
GBRA M-Wave Spect	70M	9.0	4.0	0.50	0.50	2	2	2	2	2
GBRA New Proposals	70M	9.0	4.0	0.50	0.50	1	1	1	1	1
GBRA Planet R/Ast	DSS-14	9.0	4.0	0.75	0.50	1	1	1	1	1
GBRA RA500 SOC-M4	DSS-14/63	24.0	24.0	1.50	0.50		1			
						44	45	46	47	48



Resource Allocation Review Recommendations and Analyses

2006 – November (Weeks 44 - 48) (continued)

RESOURCE REQUEST (continued)

User	Resource	Durations		Calibration		November				
		Ave	Min	Pre	Post	44	45	46	47	48
GBRA VLBA SOC-M4	DSS-14,63	10.0	8.0	1.50	0.50	1				
M01O Map/MGS Map	34H	10.0	4.0	0.50	0.25	1				
M01O Mapping	DSS-43	10.0	4.0	0.50	0.25	6	7	7	7	7
MEX R/S Bi Static	DSS-43	4.0	4.0	0.50	0.25	1	1	1	1	1
MEX R/S Solar Cor	DSS-14,63	10.0	4.0	0.50	0.25	7	7	7	7	7
MGS Map/Beta Sup	34H	14.0	4.0	0.50	0.25	6	7	7	7	7
MGS Map/Beta Sup	34B1	10.0	4.0	0.50	0.25	2	2	3	2	2
MRO Ka Ops Demo	DSS-24,34,55	8.0	4.0	0.50	0.25		2	2	2	2
MRO Prime Science	70M	8.0	4.0	0.50	0.25		3	3	3	3
MRO Prime Science	34H	8.0	4.0	0.50	0.25		10	14	14	14
MRO Solar Conjun	DSS-15,45,55	8.0	4.0	0.50	0.25	7	2			
STA. Prime Science	DSS-26,34,55	3.5	3.0	0.50	0.25	7	7	7	7	7
STB Prime Science	DSS-26,34,54	3.5	3.0	0.50	0.25	7	7	7	7	7
VGR1	DSS-26	6.0	4.0	0.50	0.25	6	7	7	7	7
VGR1	DSS-55	6.0	4.0	0.50	0.25	7	7	7	7	7
VGR1 ASCAL	DSS-14	2.0	2.0	0.75	0.25	1				
VGR1 MAGROL	DSS-14	7.0	7.0	0.75	0.25	1				
VGR1 Routine U/L	DSS-14,63	2.5	2.5	0.75	0.25	1	1	1	1	1
						44	45	46	47	48



Resource Allocation Review Recommendations and Analyses 2006 – December (Weeks 49 - 52)

EVENTS

Cassini tour

Mars Reconnaissance Orbiter prime science and cruise Ka-band operations demo

Stereo Ahead prime science

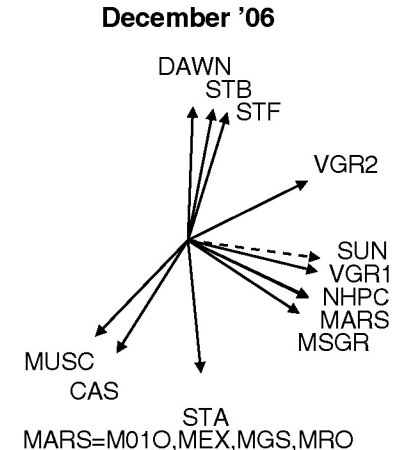
Stereo Behind prime science

RECOMMENDATION

None.

ANALYSIS

Contention level is workable and should resolve during final schedule preparations and negotiations.





Resource Allocation Review

Glossary and Definition of Terms

#

26M	26-meter diameter antenna (DSS-16, 46, and 66)
34(HEF)	34-meter diameter high efficiency antenna (DSS 15, 45, and 65)
34BWG1	34-meter diameter beam waveguide antenna (DSS 24, 34, and 54)
34BWG2	34-meter diameter beam waveguide antenna (DSS 25, 26, and 55)
34HSB	34-meter diameter high-speed beam antenna (DSS-27)
34M	34-meter diameter antenna
70M	70-meter diameter antenna (DSS 14, 43, and 63)

A

ACBO	Arecibo Observatory
ACE	Advance Composition Explorer Mission
ACR	Antenna Controller Replacement
AOS	Acquisition of Signal
ARC	Ames Research Center (NASA, Moffett Field, California)
ARSE	Advanced Radio Interferometry between Space and Earth (ARISE) Mission
ASCAL	Antenna and Sun Sensor Calibration
ASI	Agenzia Spaziale Italiana (Italian Space Agency)
AVE	Average
AXAF	Advanced X-ray Astrophysics Facility
AZ-EL	Azimuth-Elevation Axis; (type of antenna mount)

B

BER	Bit Error Rate
BLF	Baseline Frequency Check
BOT	Beginning Of Track
BWG	Beam Waveguide (antenna)

C

C/O	Checkout
CAS	Cassini Mission
CAT M&E	CATalog Maintenance and Enhancement program
C-Band	Radio frequency band operating at approximately 3.90 to 6.20 gigahertz
CDSCC	Canberra Deep Space Communication Complex (Australia)
CHDR	Chandra X-ray Observatory Mission
CIRC	Circular Orbit
CLK SYNC	CLOCK SYNChronization
CLOCK SYNC	CLOCK SYNChronization
CLU1	Cluster 2 - S/C #1 (Salsa) Mission

CLU2	Cluster 2 - S/C #2 (Samba) Mission
CLU3	Cluster 2 - S/C #3 (Rumba) Mission
CLU4	Cluster 2 - S/C #4 (Tango) Mission
CNES	Centre National d'Etudes Spatiales (France's National Center for Space Studies)
CNTR	Comet Nucleus Tour Mission
CONTOUR	Comet Nucleus Tour Mission
CSIRO	Commonwealth Scientific and Industrial Research Organization (Australia)
CSOC	Consolidated Space Operations Contract

D

D/L	Downlink
Dawn	Dawn Mission
Delta-DOD	Delta Differential One-Way Doppler (VLBI data type)
DDOR	Delta Differential One-way Ranging
Delta-DOR	Delta Differential One-way Ranging
DEMO	DEMONstration activity
DIF	Deep Impact Mission
DOY	Day Of Year
DSCC	Deep Space Communications Complex
DSMS	Deep Space Mission System
DSN	Deep Space Network
DSS	Deep Space Station
DTE	Direct-to-Earth
DTF-21	Development and Test Facility
DTR	Digital Tape Recorder

E

EDL	Entry, Descent, and Landing
EGA	Earth Gravity Assist (maneuver)
ENC	Encounter
EOEM	End Of Extended Mission
EOM	End of Mission
EOPM	End Of Prime Mission
EOT	End Of Track
ERT	Earth-Received Time
ESA	European Space Agency
ESOC	European Space Operations Center (Darmstadt, West Germany)
EVN	European VLBI Network



Resource Allocation Review

Glossary and Definition of Terms

G

GBRA	Ground Based Radio Astronomy
GBT	GreenBank Telescope
GDS	Ground Data System
GDSCC	Goldstone Deep Space Communications Complex (California)
GEO	Geo-synchronous Earth Orbiter
GLL or GLLO	Galileo Mission
GMT	Greenwich Mean Time
GNS	Genesis Mission
GODR	Goldstone Orbital Debris Radar
GPB	Gravity Probe B Mission
GSSR	Goldstone Solar System Radar Mission
GTL	ISTP - Geotail Mission
GW	Gravity Wave
GWE	Gravity Wave Experiment

H

HALCA	Highly Advanced Laboratory for Communications and Astronomy mission
HEF	High-efficiency (antenna)
HEO	High-Earth Orbiter; Highly Elliptical Orbiter
HGA	High Gain Antenna
HSB	High Speed Bandwidth (antenna)
HSO	Helioseismology Observations (SOHO)

I

IMAG	Imager for Magnetopause-to-Aurora Global Exploration Mission
IND	Interplanetary Network Directorate
INTG	International Gamma Ray Astrophysics Lab (INTEGRAL) Mission
IOC	In-Orbit Checkout
ISAS	Japan's Institute of Space and Astronautical Science
ISTP	International Solar-Terrestrial Physics Program

J

JOI	Jupiter Orbit Insertion
JPL	Jet Propulsion Laboratory
JSC	Johnson Space Center (NASA, Houston, Texas)

K

Ka-Band	Radio frequency band operating at approximately 27 to 40 gigahertz
KPLR	Kepler Mission
Ku-Band	Radio frequency band operating at approximately 12 to 18 gigahertz

L

LEO	Low Earth Orbiter
LEOP	Launch and Early Orbit Phase
LGA	Low-Gain Antenna
LOI	Lunar Orbit Insertion
LOS	Loss Of Signal
LUNA	Lunar - A Mission

M

M-Wave Spect	GBRA Microwave Spectroscopy
M01O	2001 Mars Odyssey Mission
M07O	Mars CNES Premier Orbiter 2007 mission
M07S	Mars Competed Scout 2007 Mission
M07T	Mars ASI/NASA Marconi Telecommunications Orbiter 2007 Mission
M09L	Mars Science Laboratory 2009 Mission
M09O	Mars ASI/NASA Science Orbiter 2009 Mission
M09P	Mars CNES Premier Orbiter 2009 Mission
M11L	Mars CNES MSR Lander 2011 Mission
M11O	Mars CNES MSR Orbiter 2011 Mission
M13O	Mars CNES MSR Orbiter 2013 Mission
MAGROL	Magnetometer Roll Maneuvers
MAP	Microwave Anisotropy Probe Mission
MEGA	Mission Enhancement by Ground-based Astronomy
MERA	Mars Exploration Rover - A Mission
MERB	Mars Exploration Rover - B Mission
MESSENGER	MERcury Surface Space ENvironment GEochemistry, and Ranging Mission
MEX	Mars Express Orbiter Mission
MGS	Mars Global Surveyor Mission
MOI	Mars Orbit Insertion
MRO	Mars Reconnaissance Orbiter Mission
MRR	Mission Requirements Request
MSGR	MESSENGER Mission



Resource Allocation Review

Glossary and Definition of Terms

M (Continued)

MSPA Multiple Spacecraft Per Antenna
 MUSC MUSES - C Mission
 MUSES Mu Space Engineering Spacecraft

N

N/A or NA Not Available; also Not Applicable
 NASA National Aeronautics and Space Administration
 NASDA National Space Development Agency (Japan)
 NEAR Near-Earth Asteroid Rendezvous Mission
 NHRZ New Horizons Mission
 NIB Non-Interference Basis
 NOPE Network Operations Project Engineer
 NOZO Nozomi (Planet-B) Mission
 NRAO National Radio Astronomy Observatory
 NSP Network Simplification Program
 NSS Network Support Subsystem

O

OCM Orbit Correction Maneuver
 ORT Operation Readiness Test
 OTM Orbit Trim Maneuver
 OVT Operational Verification Test
 OWLT One-Way Light Time

P

PAT Performance Acceptance Test
 PEX Pluto Express Mission
 PIT Project Interface Test
 PLNB Planet-B mission
 PN10 Pioneer 10 ACS Mission
 POLR ISTP - Polar Mission
 Post Post-calibration
 Pre Pre-calibration

R

RA Right Ascension
 RADA RadioAstron Mission
 RAPT Resource Allocation Planning Team
 RARB Resource Allocation Review Board

RASA Radio Astronomy / Special Activities
 RNG Range (or Ranging) System
 ROSE Rosetta Mission
 RS or R/S Radio Science
 RSD Radar Speckle Displacement (GSSR)
 RTLT Round-Trip Light Time

S

S/C Spacecraft
 S-Band Radio frequency band operating at approximately 1700 to 300 megahertz
 SDU Stardust Mission
 SELE Selene Mission
 SELENE SELenological and ENgineering Explorer mission
 SGP Space Geodesy Program Mission
 SIRD Support Instrumentation Requirements Document
 SOE Sequence Of Events
 SOHO ISTP - Solar Heliospheric Observatory Mission
 SOI Saturn Orbit Insertion
 SOLP Solar Probe Mission
 SSO Single Spacecraft Operations
 ST5 Space Technology 5 Mission
 STA Stereo Ahead Mission
 STB Stereo Behind Mission
 STF Space Infrared Telescope Facility Mission
 SVLBI Space Very Long Baseline Interferometry

T

TBA To Be Announced
 TBD To Be Determined (or Defined)
 TBS To Be Supplied
 TCM Trajectory Correction Maneuver
 TMOD Telecommunications and Mission Operations Directorate
 TSO Temporal Solar Observations (SOHO)

U

U/L Uplink
 ULYS/ULS Ulysses Mission
 USC Microwave Subsystem Controller
 UTC Universal Time Coordinated same as Greenwich Mean Time



Resource Allocation Review Glossary and Definition of Terms

V

VGR1	Voyager 1 Mission
VGR2	Voyager 2 Mission
VLBA	Very Long Baseline Array
VLBI	Very Long Baseline Interferometry
VSP2	VLBI Space Observatory Programme (VSOP-2) Mission

W

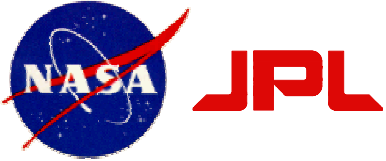
WCB	Wide Channel Bandwidth
WIND	ISTP - Wind Mission

X

X-Band	Radio frequency band operating at approximately 8 to 12 gigahertz
XMT	Transmit
XMTR	Transmitter

Z

Z or Zulu	Military name for Greenwich Meant Time
-----------	--



Resource Allocation Review Supplemental Material

May be found on the RAPSOWWW Homepage at:

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

- ◆ **Ongoing Users Negotiated Requirements**
Individual User Loading Profiles
- ◆ **Resource Allocation Review Board Information**
Supplemental Yearly Information containing
Major Events Timeline
User Loading Profiles
Monthly Subnet Support Projection