
 NASA TELEVISION SCHEDULE
 STS-135
 ISS UTILIZATION LOGISTICS FLIGHT 7 / MPLM "RAFFAELLO"
 REV D
 07/11/11

NASA TV (Public, Education, Media Channels and HD programming) Digital Satellite C-Band Downlink coordinates for continental North America, Alaska and Hawaii:
 Satellite = AMC 3 / Transponder = 15C / 87 Degrees West / DVB-S, 4:2:0 / Downlink Frequency = 4000 Mhz / Downlink Polarity = Horizontal / FEC = 3/4 / Data Rate =
 38.860 MHz / Symbol Rate = 28.1115. Clients actively participating in Standard-Definition on-orbit interviews, interactive press briefings and satellite interviews must use the
 LIMO Channel: Satellite = AMC 3 / Transponder = 9C / 87 degrees West / DVB-S, 4:2:0 / Downlink Frequency = 3865.5 Mhz / Downlink Polarity = Horizontal / FEC = 3/4 /
 Data Rate = 6.0 Mbps / Symbol rate = 4.3404 Msps. A Digital Video Broadcast compliant Integrated Receiver Decoder is required for reception. Mission Audio is available
 at: <http://www.nasa.gov/ntv>.

ALL TIMES SUBJECT TO CHANGE

This TV schedule is available via the Internet. The address is: <http://www.nasa.gov/shuttletv>
 Launch occurred at 10:29am CT (11:29am ET) on Friday, July 8th, 2011.
 An asterisk (*) denotes changes made to the previous revision to the television schedule.

ORBIT	SUBJECT	SITE	MET	CDT	EDT	GMT
MONDAY, JULY 11						
FD 4						
41	ISS FLIGHT DIRECTOR UPDATE	JSC	02/ 14:16	12:45 AM	01:45 AM	05:45
42	ISS FLIGHT DIRECTOR UPDATE REPLAY	JSC	02/ 15:06	01:35 AM	02:35 AM	06:35
42	ATLANTIS / ISS CREW WAKE UP (begins FD 4)		02/ 15:30	01:59 AM	02:59 AM	06:59
44	SSRMS GRAPPLES MPLM		02/ 17:40	04:09 AM	05:09 AM	09:09
44	SSRMS UNBERTHS MPLM FROM ATLANTIS		02/ 18:10	04:39 AM	05:39 AM	09:39
44	* ATLANTIS / ISS TRANSFERS BEGIN		02/ 18:10	04:39 AM	05:39 AM	09:39
45	SSRMS INSTALLS MPLM ONTO HARMONY		02/ 19:30	05:59 AM	06:59 AM	10:59
47	MISSION STATUS BRIEFING	JSC	02/ 22:01	08:30 AM	09:30 AM	13:30
48	MPLM ACTIVATION BEGINS		03/ 23:55	10:24 AM	11:24 AM	15:24
49	MPLM INGRESS		03/ 02:10	12:39 PM	01:39 PM	17:39
50	EVA # 1 PROCEDURE REVIEW		03/ 03:30	01:59 PM	02:59 PM	18:59

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51	MMT BRIEFING	JSC	03/	04:31	03:00 PM	04:00 PM	20:00
52	VIDEO FILE	HQ	03/	05:31	04:00 PM	05:00 PM	21:00
53	ISS CREW SLEEP BEGINS		03/	07:00	05:29 PM	06:29 PM	22:29
53	ATLANTIS CREW SLEEP BEGINS		03/	07:30	05:59 PM	06:59 PM	22:59
54	FLIGHT DAY 4 HIGHLIGHTS (replayed on the hour during crew sleep)	JSC	03/	09:31	08:00 PM	09:00 PM	01:00
56	"LAUNCHING OUR DREAMS" VIDEO FEATURE PLAYBACK	JSC	03/	11:31	10:00 PM	11:00 PM	03:00
TUESDAY, JULY 12							
FD 5							
57	ISS FLIGHT DIRECTOR UPDATE	JSC	03/	14:16	12:45 AM	01:45 AM	05:45
58	ISS FLIGHT DIRECTOR UPDATE REPLAY	JSC	03/	15:06	01:35 AM	02:35 AM	06:35
58	ATLANTIS / ISS CREW WAKE UP (begins FD 5)		03/	15:30	01:59 AM	02:59 AM	06:59
59	EVA # 1 ISLE METHOD PREPARATIONS RESUME		03/	16:45	03:14 AM	04:14 AM	08:14
60	MPLM TRANSFERS BEGIN		03/	17:55	04:24 AM	05:24 AM	09:24
60	* ZSR TRANSFER TO ISS		03/	18:25	04:54 AM	05:54 AM	09:54
60	EVA # 1 ISLE PREBREATHE BEGINS (Fossum and Garan)		03/	19:05	05:34 AM	06:34 AM	10:34
62	EVA # 1 BEGINS (Fossum and Garan)		03/	21:15	07:44 AM	08:44 AM	12:44
62	FAILED PUMP MODULE RETRIEVAL FROM ESP-2		03/	22:15	08:44 AM	09:44 AM	13:44
63	FAILED PUMP MODULE TRANSFER TO LMC IN ATLANTIS' PAYLOAD BAY		03/	22:45	09:14 AM	10:14 AM	14:14
64	RRM REMOVAL FROM ATLANTIS' PAYLOAD BAY		03/	23:45	10:14 AM	11:14 AM	15:14
64	RRM TRANSFER TO ENHANCED DEXTRE ORU TEMPORARY PLATFORM		04/	00:05	10:34 AM	11:34 AM	15:34

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64	* MISSE INSTALLATION ON ELC-2		04/ 00:55	11:24 AM	12:24 PM	16:24
65	* ZARYA PDGF TROUBLESHOOTING		04/ 01:40	12:09 PM	01:09 PM	17:09
65	* PMA 3 COVER INSTALLATION		04/ 02:15	12:44 PM	01:44 PM	17:44
66	EVA #1 ENDS		04/ 03:45	02:14 PM	03:14 PM	19:14
67	MISSION STATUS BRIEFING	JSC	04/ 05:01	03:30 PM	04:30 PM	20:30
68	ISS CREW SLEEP BEGINS		04/ 06:30	04:59 PM	05:59 PM	21:59
68	ATLANTIS CREW SLEEP BEGINS		04/ 07:00	05:29 PM	06:29 PM	22:29
69	VIDEO FILE	HQ	04/ 07:31	06:00 PM	07:00 PM	23:00
69	FLIGHT DAY 5 HIGHLIGHTS (replayed on the hour during crew sleep)	JSC	04/ 08:31	07:00 PM	08:00 PM	00:00
71	"LAUNCHING OUR DREAMS" VIDEO FEATURE PLAYBACK	JSC	04/ 10:31	09:00 PM	10:00 PM	02:00
72	ISS FLIGHT DIRECTOR UPDATE	JSC	04/ 13:16	11:45 PM	12:45 AM	04:45
WEDNESDAY, JULY 13						
FD 6						
73	ISS FLIGHT DIRECTOR UPDATE REPLAY	JSC	04/ 14:16	12:45 AM	01:45 AM	05:45
73	ATLANTIS / ISS CREW WAKE UP (begins FD 6)		04/ 15:00	01:29 AM	02:29 AM	06:29
75	ATLANTIS / ISS TRANSFERS RESUME		04/ 17:00	03:29 AM	04:29 AM	08:29
80	WBMG-TV, Binghamton, NY / WICZ-TV, Binghamton, NY / KGO-TV, San Francisco, CA LIVE INTERVIEWS	ISS Ku	05/ 01:35	12:04 PM	01:04 PM	17:04
81	CREW DOWNLINK OF "FACE IN SPACE" TRIBUTE	ISS Ku	05/ 01:55	12:24 PM	01:24 PM	17:24
82	VIDEO FILE	HQ	05/ 03:31	02:00 PM	03:00 PM	19:00
83	ISS CREW SLEEP BEGINS		05/ 05:30	03:59 PM	04:59 PM	20:59

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83	MISSION STATUS BRIEFING	JSC		05/ 05:31	04:00 PM	05:00 PM	21:00
83	ATLANTIS CREW SLEEP BEGINS			05/ 06:00	04:29 PM	05:29 PM	21:29
84	"LAUNCHING OUR DREAMS" VIDEO FEATURE PLAYBACK	JSC		05/ 06:31	05:00 PM	06:00 PM	22:00
84	FLIGHT DAY 6 HIGHLIGHTS (replayed on the hour during crew sleep)	JSC		05/ 07:31	06:00 PM	07:00 PM	23:00
86	"THE SPACE SHUTTLE" NARRATED BY WILLIAM SHATNER	HQ		05/ 10:31	09:00 PM	10:00 PM	02:00
88	ISS FLIGHT DIRECTOR UPDATE	JSC		05/ 13:16	11:45 PM	12:45 AM	04:45
THURSDAY, JULY 14							
FD 7/ FD 8							
88	ATLANTIS / ISS CREW WAKE UP (begins FD 7)			05/ 14:00	12:29 AM	01:29 AM	05:29
89	ISS FLIGHT DIRECTOR UPDATE REPLAY	JSC		05/ 14:16	12:45 AM	01:45 AM	05:45
90	MPLM TRANSFERS RESUME			05/ 16:35	03:04 AM	04:04 AM	08:04
92	WBBM-TV, Chicago, IL / KTVI-TV St. Louis, MO / KSDK-TV St. Louis, MO LIVE INTERVIEWS	ISS Ku		05/ 19:30	05:59 AM	06:59 AM	10:59
94	FOX News Radio / KTVU-TV, Oakland, CA / WTXF-TV, Philadelphia, PA LIVE INTERVIEWS	ISS Ku		05/ 21:55	08:24 AM	09:24 AM	13:24
94	ATLANTIS / ISS CREW OFF DUTY PERIOD			05/ 22:15	08:44 AM	09:44 AM	13:44
95	VIDEO FILE	HQ		06/ 00:31	11:00 AM	12:00 PM	16:00
98	ISS CREW SLEEP BEGINS			06/ 04:30	02:59 PM	03:59 PM	19:59
98	ATLANTIS CREW SLEEP BEGINS			06/ 05:00	03:29 PM	04:29 PM	20:29
99	MISSION STATUS BRIEFING	JSC		06/ 05:31	04:00 PM	05:00 PM	21:00

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99	FLIGHT DAY 7 HIGHLIGHTS (replayed on the hour during crew sleep)	JSC	06/ 06:31	05:00 PM	06:00 PM	22:00
101	"THE SPACE SHUTTLE" NARRATED BY WILLIAM SHATNER	HQ	06/ 09:31	08:00 PM	09:00 PM	01:00
102	"LAUNCHING OUR DREAMS" VIDEO FEATURE PLAYBACK	JSC	06/ 11:31	10:00 PM	11:00 PM	03:00
103	ATLANTIS / ISS CREW WAKE UP (begins FD 8)		06/ 13:00	11:29 PM	12:29 AM	04:29
104	ISS FLIGHT DIRECTOR UPDATE	JSC	06/ 13:16	11:45 PM	12:45 AM	04:45
FRIDAY, JULY 15						
FD 8 / FD 9						
105	MPLM TRANSFERS RESUME		06/ 15:10	01:39 AM	02:39 AM	06:39
107	CBS Radio / KYW-TV, Philadelphia, PA / Associated Press LIVE INTERVIEWS	ISS Ku	06/ 19:15	05:44 AM	06:44 AM	10:44
108	REUTERS / ABC Radio / WPVI-TV, Philadelphia, PA LIVE INTERVIEWS	ISS Ku	06/ 20:35	07:04 AM	08:04 AM	12:04
109	JOINT CREW NEWS CONFERENCE	ISS Ku	06/ 21:55	08:24 AM	09:24 AM	13:24
110	INTERPRETED REPLAY OF JOINT CREW NEWS CONFERENCE	JSC	06/ 23:31	10:00 AM	11:00 AM	15:00
111	VIDEO FILE	HQ	07/ 00:31	11:00 AM	12:00 PM	16:00
113	ISS CREW SLEEP BEGINS		07/ 03:30	01:59 PM	02:59 PM	18:59
113	ATLANTIS CREW SLEEP BEGINS		07/ 04:00	02:29 PM	03:29 PM	19:29
113	MISSION STATUS BRIEFING	JSC	07/ 04:31	03:00 PM	04:00 PM	20:00
114	FLIGHT DAY 8 HIGHLIGHTS (replayed on the hour during crew sleep)	JSC	07/ 05:31	04:00 PM	05:00 PM	21:00

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116	"THE SPACE SHUTTLE" NARRATED BY WILLIAM SHATNER	HQ		07/ 08:31	07:00 PM	08:00 PM	00:00
117	"LAUNCHING OUR DREAMS" VIDEO FEATURE PLAYBACK	JSC		07/ 10:31	09:00 PM	10:00 PM	02:00
118	ATLANTIS / ISS CREW WAKE UP (begins FD 9)			07/ 12:00	10:29 PM	11:29 PM	03:29
119	ISS FLIGHT DIRECTOR UPDATE	JSC		07/ 12:16	10:45 PM	11:45 PM	03:45
SATURDAY, JULY 16							
FD 9 / FD 10							
120	MPLM TRANSFERS RESUME			07/ 14:20	12:49 AM	01:49 AM	05:49
124	NASA EXPLORER SCHOOLS EDUCATIONAL EVENT	ISS Ku		07/ 20:10	06:39 AM	07:39 AM	11:39
125	ATLANTIS / ISS CREW OFF DUTY PERIOD			07/ 21:45	08:14 AM	09:14 AM	13:14
128	ISS CREW SLEEP BEGINS			08/ 03:00	01:29 PM	02:29 PM	18:29
128	ATLANTIS CREW SLEEP BEGINS			08/ 03:30	01:59 PM	02:59 PM	18:59
129	MISSION STATUS BRIEFING	JSC		08/ 04:01	02:30 PM	03:30 PM	19:30
130	FLIGHT DAY 9 HIGHLIGHTS (replayed on the hour during crew sleep)	JSC		08/ 05:31	04:00 PM	05:00 PM	21:00
132	"THE SPACE SHUTTLE" NARRATED BY WILLIAM SHATNER	HQ		08/ 08:31	07:00 PM	08:00 PM	00:00
133	"LAUNCHING OUR DREAMS" VIDEO FEATURE PLAYBACK	JSC		08/ 10:31	09:00 PM	10:00 PM	02:00
134	ATLANTIS / ISS CREW WAKE UP (begins FD 10)			08/ 11:30	09:59 PM	10:59 PM	02:59
134	ISS FLIGHT DIRECTOR UPDATE	JSC		08/ 12:01	10:30 PM	11:30 PM	03:30

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SUNDAY, JULY 17						
FD 10 / FD 11						
135	MPLM EGRESS		08/ 13:50	12:19 AM	01:19 AM	05:19
136	MPLM VESTIBULE DEMATING		08/ 14:25	12:54 AM	01:54 AM	05:54
137	MPLM VESTIBULE DEPRESSURIZATION		08/ 15:55	02:24 AM	03:24 AM	07:24
138	SSRMS GRAPPLES MPLM		08/ 18:35	05:04 AM	06:04 AM	10:04
139	SSRMS UNBERTHS MPLM FROM ISS & INSTALLS IN ATLANTIS' PAYLOAD BAY		08/ 19:50	06:19 AM	07:19 AM	11:19
140	MISSION STATUS BRIEFING	JSC	08/ 21:01	07:30 AM	08:30 AM	12:30
141	ATLANTIS / ISS FAREWELL AND HATCH CLOSURE		08/ 22:20	08:49 AM	09:49 AM	13:49
141	CENTERLINE CAMERA INSTALLATION		08/ 23:10	09:39 AM	10:39 AM	14:39
142	RENDEZVOUS TOOLS CHECKOUT		08/ 23:50	10:19 AM	11:19 AM	15:19
143	ISS CREW SLEEP BEGINS		08/ 02:30	12:59 PM	01:59 PM	17:59
144	ATLANTIS CREW SLEEP BEGINS		09/ 03:00	01:29 PM	02:29 PM	18:29
144	"LAUNCHING OUR DREAMS" VIDEO FEATURE PLAYBACK	JSC	09/ 03:31	02:00 PM	03:00 PM	19:00
145	FLIGHT DAY 10 HIGHLIGHTS (replayed on the hour during crew sleep)	JSC	09/ 04:31	03:00 PM	04:00 PM	20:00
149	ATLANTIS / ISS CREW WAKE UP (begins FD 11)		09/ 11:00	09:29 PM	10:29 PM	02:29
MONDAY, JULY 18						
FD 11 / FD 12						
151	ATLANTIS UNDOCKS FROM ISS		09/ 14:25	12:54 AM	01:54 AM	05:54
151	ATLANTIS FLYAROUND OF ISS BEGINS		09/ 14:55	01:24 AM	02:24 AM	06:24
152	ATLANTIS FINAL SEPARATION FROM ISS		09/ 15:47	02:16 AM	03:16 AM	07:16
154	RMS / OBSS LATE INSPECTION OF ATLANTIS' TPS		09/ 18:30	04:59 AM	05:59 AM	09:59

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155	MISSION STATUS BRIEFING	JSC	09/ 20:31	07:00 AM	08:00 AM	12:00
157	OBSS BERTH		09/ 22:45	09:14 AM	10:14 AM	14:14
157	SHUTTLE VTR PLAYBACK OF UNDOCKING		10/ 00:15	10:44 AM	11:44 AM	15:44
158	MMT BRIEFING	JSC	10/ 01:31	12:00 PM	01:00 PM	17:00
159	ATLANTIS CREW SLEEP BEGINS		10/ 03:00	01:29 PM	02:29 PM	18:29
160	VIDEO FILE	HQ	10/ 03:31	02:00 PM	03:00 PM	19:00
160	FLIGHT DAY 11 HIGHLIGHTS (replayed on the hour during crew sleep)	JSC	10/ 04:31	03:00 PM	04:00 PM	20:00
164	"LAUNCHING OUR DREAMS" VIDEO FEATURE PLAYBACK	JSC	10/ 09:31	08:00 PM	09:00 PM	01:00
165	ATLANTIS CREW WAKE UP (begins FD 12)		10/ 11:00	09:29 PM	10:29 PM	02:29
TUESDAY, JULY 19						
FD 12 / FD 13						
166	FCS CHECKOUT		10/ 14:00	12:29 AM	01:29 AM	05:29
168	PICOSAT DEPLOYMENT		10/ 15:45	02:14 AM	03:14 AM	07:14
168	RCS HOT-FIRE TEST		10/ 15:55	02:24 AM	03:24 AM	07:24
168	CABIN STOWAGE BEGINS		10/ 16:35	03:04 AM	04:04 AM	08:04
169	ABC News / CBS News / CNN / FOX News / NBC News LIVE INTERVIEWS	TDRE	10/ 18:25	04:54 AM	05:54 AM	09:54
171	MISSION STATUS BRIEFING	JSC	10/ 20:31	07:00 AM	08:00 AM	12:00
173	VIDEO FILE	HQ	11/ 00:31	11:00 AM	12:00 PM	16:00
173	KU-BAND ANTENNA STOWAGE		11/ 00:40	11:09 AM	12:09 PM	16:09
175	ATLANTIS CREW SLEEP BEGINS		11/ 03:00	01:29 PM	02:29 PM	18:29

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175	"LAUNCHING OUR DREAMS" VIDEO FEATURE PLAYBACK	JSC	11/ 03:31	02:00 PM	03:00 PM	19:00
176	FLIGHT DAY 12 HIGHLIGHTS (replayed on the hour during crew sleep)	JSC	11/ 04:31	03:00 PM	04:00 PM	20:00
180	ATLANTIS CREW WAKE UP (begins FD 13)		11/ 11:00	09:29 PM	10:29 PM	02:29
WEDNESDAY, JULY 20						
FD 13						
183	ATLANTIS DEORBIT PREPARATIONS BEGIN		11/ 14:25	12:54 AM	01:54 AM	05:54
183	PAYLOAD BAY DOOR CLOSING		11/ 15:49	02:18 AM	03:18 AM	07:18
185	ATLANTIS DEORBIT BURN		11/ 18:29	04:58 AM	05:58 AM	09:58
185	MILA C-BAND RADAR ACQUISITION OF ATLANTIS		11/ 19:20	05:49 AM	06:49 AM	10:49
186	KSC LANDING	KSC	11/ 19:33	06:02 AM	07:02 AM	11:02
*	ENTRY FLIGHT DIRECTOR TONY CECCACCI SIGN-OFF TO FLIGHT CONTROL TEAM	JSC		~ L+45 MIN.		
	POST-LANDING NEWS CONFERENCE	KSC		NET L+2 HRS.		
	ENTRY FLIGHT CONTROL TEAM VIDEO REPLAY (replayed after Post-Landing News Conference)	JSC		~ L+3 HRS.		
	STS-135 MISSION HIGHLIGHTS VIDEO REPLAY (replayed after Entry Flight Control Team Video)	JSC		~ L+3.5 HRS.		
	STS-135 CREW NEWS CONFERENCE (may be postponed or cancelled)	KSC		NET L+4.5 HRS.		
	ATLANTIS TOWBACK & EMPLOYEE APPRECIATION EVENT	KSC		NET L+5.5 HRS.		

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SSRMS:	Space Station Remote Manipulator System (Canadarm2 ISS Robotic Arm)					
STBD:	Starboard					
STS:	Space Transportation System					
TI:	Terminal Initiation Rendezvous Maneuver					
TDRE, W:	Tracking and Data Relay Satellite, East and West Longitudes					
TPS:	Thermal Protection System					
Unity:	Connecting Node 1 on International Space Station					
VTR:	Videotape Recorder					
ZSR:	Zero-G Stowage Rack					