
 NASA TELEVISION SCHEDULE
 STS-131 / ISS 19A
 LEONARDO MULTIPURPOSE LOGISTICS MODULE

REV H
 4/11/10

NASA TV (Public, Education, Media Channels and occasional 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 5:21am CT (6:21am ET) on Monday, April 5th, 2010.
 An asterisk (*) denotes changes made to the previous revision to the television schedule.

ORBIT	SUBJECT	SITE	MET	CDT	EDT	GMT
SUNDAY, APRIL 11						
FD 7 / FD 8						
105	ISS FLIGHT DIRECTOR UPDATE REPLAY	JSC	06/ 15:09	08:30 PM	09:30 PM	01:30
105	DISCOVERY / ISS CREW WAKE UP (begins FD 8)		06/ 15:30	08:51 PM	09:51 PM	01:51
107	CREW OFF DUTY PERIOD BEGINS		06/ 18:30	11:51 PM	12:51 AM	04:51
MONDAY, APRIL 12						
FD 8 / FD 9						
111	* JAXA PAO EVENT	ISS Ku	07/ 00:20	05:41 AM	06:41 AM	10:41
111	MPLM TRANSFERS RESUME		07/ 00:30	05:51 AM	06:51 AM	10:51
112	INTERPRETED REPLAY OF JAXA PAO EVENT	JSC	07/ 01:39	07:00 AM	08:00 AM	12:00
113	EVA #3 PROCEDURE REVIEW		07/ 03:25	08:46 AM	09:46 AM	13:46
114	ABC WORLD NEWS / MSNBC / FOX NEWS CHANNEL / KUSA-TV LIVE INTERVIEWS	ISS Ku	07/ 05:15	10:36 AM	11:36 AM	15:36
114	MISSION STATUS BRIEFING	JSC	07/ 05:54	11:15 AM	12:15 PM	16:15

<u>ORBIT</u>	<u>SUBJECT</u>	<u>SITE</u>	<u>MET</u>	<u>CDT</u>	<u>EDT</u>	<u>GMT</u>
115	EVA # 3 CAMPOUT BEGINS (Mastracchio and Anderson)		07/ 06:25	11:46 AM	12:46 PM	16:46
116	ISS CREW SLEEP BEGINS		07/ 07:30	12:51 PM	01:51 PM	17:51
116	DISCOVERY CREW SLEEP BEGINS		07/ 08:00	01:21 PM	02:21 PM	18:21
117	FLIGHT DAY 8 HIGHLIGHTS (replayed on the hour during crew sleep)	JSC	07/ 08:39	02:00 PM	03:00 PM	19:00
117	VIDEO FILE	HQ	07/ 09:39	03:00 PM	04:00 PM	20:00
119	HIGH DEFINITION FLIGHT DAY 8 CREW HIGHLIGHTS (if available; on the NASA-TV HDTV Channel; replays at 7:00pm CT and 8:00pm CT)	JSC	07/ 11:39	05:00 PM	06:00 PM	22:00
119	ISS FLIGHT DIRECTOR UPDATE	JSC	07/ 12:39	06:00 PM	07:00 PM	23:00
121	ISS FLIGHT DIRECTOR UPDATE REPLAY	JSC	07/ 15:39	09:00 PM	10:00 PM	02:00
121	DISCOVERY / ISS CREW WAKE UP (begins FD 9)		07/ 16:00	09:21 PM	10:21 PM	02:21
122	EVA #3 PREPARATIONS RESUME		07/ 16:35	09:56 PM	10:56 PM	02:56
123	DISCOVERY / ISS TRANSFERS RESUME		07/ 18:20	11:41 PM	12:41 AM	04:41

TUESDAY, APRIL 13

FD 9 / FD 10

124	SSRMS REMOVES OLD ATA FROM MBS		07/ 19:55	01:16 AM	02:16 AM	06:16
125	EVA #3 BEGINS (Mastracchio and Anderson)		07/ 20:50	02:11 AM	03:11 AM	07:11
125	AGB REMOVAL FROM OLD ATA		07/ 21:05	02:26 AM	03:26 AM	07:26
126	SSRMS INSTALLS OLD ATA IN DISCOVERY'S PAYLOAD BAY		07/ 22:05	03:26 AM	04:26 AM	08:26
127	LWAPA RETRIEVAL FROM COLUMBUS & INSTALL IN DISCOVERY'S PAYLOAD BAY		07/ 23:50	05:11 AM	06:11 AM	10:11
127	CLPA #1 INSTALL ON SPDM/ CAMERA PORT #13 LIGHT REMOVAL / REPLACEMENT		08/ 00:20	05:41 AM	06:41 AM	10:41

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129	EVA #3 ENDS			08/ 03:20	08:41 AM	09:41 AM	13:41
131	MISSION STATUS BRIEFING	JSC		08/ 05:39	11:00 AM	12:00 PM	16:00
132	ISS CREW SLEEP BEGINS			08/ 08:30	01:51 PM	02:51 PM	18:51
133	DISCOVERY CREW SLEEP BEGINS			08/ 09:00	02:21 PM	03:21 PM	19:21
133	FLIGHT DAY 9 HIGHLIGHTS (replayed on the hour during crew sleep)	JSC		08/ 09:39	03:00 PM	04:00 PM	20:00
134	VIDEO FILE	HQ		08/ 10:39	04:00 PM	05:00 PM	21:00
135	HIGH DEFINITION FLIGHT DAY 10 CREW HIGHLIGHTS (if available; on the NASA-TV HDTV Channel; replays at 9:00pm CT and 10:00pm CT)	JSC		08/ 12:39	06:00 PM	07:00 PM	23:00
136	ISS FLIGHT DIRECTOR UPDATE	JSC		08/ 13:39	07:00 PM	08:00 PM	00:00
138	ISS FLIGHT DIRECTOR UPDATE REPLAY	JSC		08/ 16:39	10:00 PM	11:00 PM	03:00
138	DISCOVERY / ISS CREW WAKE UP (begins FD 10)			08/ 17:00	10:21 PM	11:21 PM	03:21
WEDNESDAY, APRIL 14							
FD 10 / FD 11							
140	DISCOVERY / ISS TRANSFERS RESUME			08/ 20:00	01:21 AM	02:21 AM	06:21
141	HARMONY CBM CONTROL PANEL ASSEMBLY INSTALL			08/ 21:20	02:41 AM	03:41 AM	07:41
143	JOINT CREW NEWS CONFERENCE	ISS Ku		09/ 01:05	06:26 AM	07:26 AM	11:26
144	CREW OFF DUTY PERIOD			09/ 01:50	07:11 AM	08:11 AM	12:11
145	INTERPRETED REPLAY OF JOINT CREW NEWS CONFERENCE	JSC		09/ 04:09	09:30 AM	10:30 AM	14:30
146	ISS FLIGHT DIRECTOR UPDATE			09/ 05:24	10:45 AM	11:45 AM	15:45
147	EASTERN GUILFORD HIGH SCHOOL IN GIBSONVILLE, N.C. EDUCATIONAL EVENT	ISS Ku		09/ 06:45	12:06 PM	01:06 PM	17:06

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148	ISS FLIGHT DIRECTOR UPDATE REPLAY	JSC	09/	07:39	01:00 PM	02:00 PM	18:00
149	ISS CREW SLEEP BEGINS		09/	09:30	02:51 PM	03:51 PM	19:51
149	DISCOVERY CREW SLEEP BEGINS		09/	10:00	03:21 PM	04:21 PM	20:21
150	FLIGHT DAY 10 HIGHLIGHTS (replayed on the hour during crew sleep)	JSC	09/	10:39	04:00 PM	05:00 PM	21:00
150	VIDEO FILE	HQ	09/	11:39	05:00 PM	06:00 PM	22:00
151	HIGH DEFINITION FLIGHT DAY 10 CREW HIGHLIGHTS (if available; on the NASA-TV HDTV Channel; replays at 9:00pm CT and 10:00pm CT)	JSC	09/	12:39	06:00 PM	07:00 PM	23:00
152	ISS FLIGHT DIRECTOR UPDATE	JSC	09/	13:39	07:00 PM	08:00 PM	00:00
154	ISS FLIGHT DIRECTOR UPDATE REPLAY	JSC	09/	17:39	11:00 PM	12:00 AM	04:00
154	DISCOVERY / ISS CREW WAKE UP (begins FD 11)		09/	18:00	11:21 PM	12:21 AM	04:21
THURSDAY, APRIL 15							
FD 11 / FD 12							
156	MPLM EGRESS	JSC	09/	20:30	01:51 AM	02:51 AM	06:51
159	SSRMS GRAPPLES MPLM	JSC	10/	01:05	06:26 AM	07:26 AM	11:26
160	SSRMS UNINSTALLS MPLM & BERTHS IN DISCOVERY'S PAYLOAD BAY	JSC	10/	02:20	07:41 AM	08:41 AM	12:41
161	MISSION STATUS BRIEFING	JSC	10/	03:39	09:00 AM	10:00 AM	14:00
164	ISS CREW SLEEP BEGINS		10/	09:30	02:51 PM	03:51 PM	19:51
165	DISCOVERY CREW SLEEP BEGINS		10/	10:00	03:21 PM	04:21 PM	20:21
165	FLIGHT DAY 11 HIGHLIGHTS (replayed on the hour during crew sleep)	JSC	10/	10:39	04:00 PM	05:00 PM	21:00

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166	VIDEO FILE	HQ	10/	11:39	05:00 PM	06:00 PM	22:00
167	HIGH DEFINITION FLIGHT DAY 11 CREW HIGHLIGHTS (if available; on the NASA-TV HDTV Channel; replays at 9:00pm CT and 10:00pm CT)	JSC	10/	12:39	06:00 PM	07:00 PM	23:00
167	ISS FLIGHT DIRECTOR UPDATE	JSC	10/	13:39	07:00 PM	08:00 PM	00:00
170	ISS FLIGHT DIRECTOR UPDATE REPLAY	JSC	10/	17:39	11:00 PM	12:00 AM	04:00
170	DISCOVERY / ISS CREW WAKE UP (begins FD 12)		10/	18:00	11:21 PM	12:21 AM	04:21
FRIDAY, APRIL 16							
FD 12 / FD 13							
172	LATE INSPECTION OF DISCOVERY'S TPS		10/	21:15	02:36 AM	03:36 AM	07:36
176	FIRST NATIONAL CHAMPIONSHIP FROM ATLANTA, GA (NASA TV Education Channel #102 only)	AMES	11/	02:39	08:00 AM	09:00 AM	13:00
176	MISSION STATUS BRIEFING	JSC	11/	03:39	09:00 AM	10:00 AM	14:00
178	OBSS BERTH		11/	05:25	10:46 AM	11:46 AM	15:46
180	ISS CREW SLEEP BEGINS		11/	09:30	02:51 PM	03:51 PM	19:51
181	DISCOVERY CREW SLEEP BEGINS		11/	10:00	03:21 PM	04:21 PM	20:21
181	FLIGHT DAY 12 HIGHLIGHTS (replayed on the hour during crew sleep)	JSC	11/	10:39	04:00 PM	05:00 PM	21:00
182	VIDEO FILE	HQ	11/	11:39	05:00 PM	06:00 PM	22:00
182	HIGH DEFINITION FLIGHT DAY 12 CREW HIGHLIGHTS (if available; on the NASA-TV HDTV Channel; replays at 9:00pm CT and 10:00pm CT)	JSC	11/	12:39	06:00 PM	07:00 PM	23:00
186	DISCOVERY/ISS CREW WAKE UP (begins FD 13)		11/	18:00	11:21 PM	12:21 AM	04:21

ORBIT	SUBJECT	SITE	MET	CDT	EDT	GMT
SATURDAY, APRIL 17						
FD 13 / FD 14						
190	FAREWELL AND HATCH CLOSURE		11/ 23:55	05:16 AM	06:16 AM	10:16
191	DISCOVERY UNDOCKS FROM ISS		12/ 02:31	07:52 AM	08:52 AM	12:52
192	FIRST NATIONAL CHAMPIONSHIP FROM ATLANTA, GA (NASA TV Education Channel #102 only)	AMES	12/ 02:39	08:00 AM	09:00 AM	13:00
192	DISCOVERY FLYAROUND OF ISS BEGINS		12/ 02:56	08:17 AM	09:17 AM	13:17
192	DISCOVERY FINAL SEPARATION FROM ISS		12/ 04:14	09:35 AM	10:35 AM	14:35
193	MISSION STATUS BRIEFING	JSC	12/ 04:39	10:00 AM	11:00 AM	15:00
195	MMT BRIEFING	JSC	12/ 07:39	01:00 PM	02:00 PM	18:00
196	DISCOVERY CREW SLEEP BEGINS		12/ 10:00	03:21 PM	04:21 PM	20:21
197	FLIGHT DAY 13 HIGHLIGHTS (replayed on the hour during crew sleep)	JSC	12/ 10:39	04:00 PM	05:00 PM	21:00
202	DISCOVERY CREW WAKE UP (begins FD 14)		12/ 18:00	11:21 PM	12:21 AM	04:21
SUNDAY, APRIL 18						
FD 14 / FD 15						
204	CABIN STOWAGE		12/ 21:00	02:21 AM	03:21 AM	07:21
204	FCS CHECKOUT		12/ 21:20	02:41 AM	03:41 AM	07:41
205	RCS HOT-FIRE TEST		12/ 22:30	03:51 AM	04:51 AM	08:51
206	WBZ RADIO / ASSOCIATED PRESS / KEZI-TV LIVE INTERVIEWS (audio only)		13/ 01:15	06:36 AM	07:36 AM	11:36
208	MISSION STATUS BRIEFING	JSC	13/ 04:09	09:30 AM	10:30 AM	14:30
210	KU ANTENNA STOW		13/ 06:50	12:11 PM	01:11 PM	17:11
212	DISCOVERY CREW SLEEP BEGINS		13/ 10:00	03:21 PM	04:21 PM	20:21

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213	FLIGHT DAY 14 HIGHLIGHTS (replayed on the hour during crew sleep)	JSC	13/ 10:39	04:00 PM	05:00 PM	21:00
217	DISCOVERY CREW WAKE UP (begins FD 15)		13/ 18:00	11:21 PM	12:21 AM	04:21
MONDAY, APRIL 19						
FD 15						
220	DEORBIT PREPARATIONS BEGIN		13/ 21:30	02:51 AM	03:51 AM	07:51
221	PAYLOAD BAY DOOR CLOSING		13/ 22:50	04:11 AM	05:11 AM	09:11
222	DISCOVERY DEORBIT BURN		14/ 01:30	06:51 AM	07:51 AM	11:51
223	MILA C-BAND RADAR ACQUISITION OF DISCOVERY		14/ 02:19	07:40 AM	08:40 AM	12:40
223	DISCOVERY LANDING	KSC	14/ 02:32	07:53 AM	08:53 AM	12:53
	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-131 MISSION HIGHLIGHTS VIDEO REPLAY (replayed after Entry Flight Control Team Video)	JSC		~ L+3.5 HRS.		
	STS-131 POST-LANDING CREW NEWS CONFERENCE (CDR and available crewmembers)	JSC		~ L+4.5 HRS.		

ORBIT SUBJECT SITE MET CDT EDT GMT

DEFINITION OF TERMS

AGB: Adjustable Grapple Bar
AMC: Americom Satellite
AMES: Ames Research Center, California
ATA: Ammonia Tank Assembly
BAIK: Baikonur Cosmodrome, Kazakhstan
CBM: Common Berthing Mechanism
CETA: Crew Equipment & Translation Aid
CLPA: Camera Light Pan Tilt Assembly
CST: Central Standard Time
Destiny: U.S. Laboratory on ISS
EMU: Extravehicular Mobility Unit
ESP: External Stowage Platform
EST: Eastern Standard Time
EVA: Extravehicular Activity
FCS: Flight Control System
FD: Flight Day
FGB: Fixed Grapple Bar
FHRC: Flex Hose Rotary Coupler
FIRST: For Inspiration and Recognition of Science and Technology
GMT: Greenwich Mean Time
Harmony: Node 2 on ISS
HD: High Definition Television
HQ: NASA Headquarters
ISP: Integrated Stowage Platform
ISS: International Space Station
JAXA: Japan Aerospace Exploration Agency
JEF: JPM Exposed Facility (experiment pallet on Kibo)
JPM: Japanese Pressurized Module (Kibo)
JSC: Johnson Space Center
KSC: Kennedy Space Center
L: Launch or Landing time
LIMO: Live Interview Media Outlet channel
LTA: Launch-to-Activation
LWAPA: Light Weight Adapter Plate Assembly
MBS: Mobile Base System on ISS truss
MCC-M: Mission Control, Moscow
MECO: Main Engine Cut-Off
MET: Mission Elapsed Time, which begins at the moment of launch and is read: DAYS/HOURS:MINUTES. LAUNCH=00/00:00
MILA Merritt Island, Florida Tracking Station
MLI: Multi Layer Insulation
MMOD: Micro Meteoroid Orbital Debris
MMT: Mission Management Team

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MPAC/SEED:	Micro-Particles Capture/Space Environment Exposure Device					
MS:	Mission Specialist					
MSFC:	Marshall Space Flight Center, Huntsville, AL					
NET:	No Earlier Than					
OBSS:	Orbiter Boom Sensor System					
ODS:	Orbiter Docking System					
OGS:	Oxygen Generation System on ISS					
OMS:	Orbital Maneuvering System					
ORU:	Orbital Replacement Unit					
OTP:	ORU and Tool Platform					
PAO:	Public Affairs office					
PMA 3:	Pressurized Mating Adapter 3 on ISS					
RCS:	Reaction Control System					
RGA:	Rate Gyro Assembly					
RMS:	Remote Manipulator System on DISCOVERY					
RPM:	Rendezvous Pitch Maneuver					
SPDM:	Special Purpose Dextrous Manipulator (Dextre)					
SSRMS:	Space Station Remote Manipulator System (Canadarm2 ISS Robotic Arm)					
STS:	Space Transportation System					
TI:	Terminal Initiation Rendezvous Maneuver					
TDRE, W:	Tracking and Data Relay Satellite, East and West Longitudes					
TPS:	Thermal Protection System					
Tranquility:	Node 3 on ISS					
Unity:	Node 1 on ISS					
VTR:	Videotape Recorder					
WLE:	Wing Leading Edge					
WORF:	Window Observational Research Facility					
WRS:	Water Recovery System on ISS					
ZSR:	Zero-gravity Stowage Rack					