
 NASA TELEVISION SCHEDULE
 STS-135
 ISS UTILIZATION LOGISTICS FLIGHT 7 / MPLM "RAFFAELLO"
 REV N
 07/20/11

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
WEDNESDAY, JULY 20						
FD 13						
186	MISSION STATUS BRIEFING	JSC	11/ 20:31	07:00 AM	08:00 AM	12:00
188	STS-135 ASCENT IMAGERY HIGHLIGHTS REPLAY	JSC	11/ 22:31	09:00 AM	10:00 AM	14:00
188	STS-135 ASCENT IMAGERY HIGHLIGHTS REPLAY	JSC	11/ 23:31	10:00 AM	11:00 AM	15:00
189	KU-BAND ANTENNA STOWAGE		11/ 23:50	10:19 AM	11:19 AM	15:19
189	VIDEO FILE	HQ	12/ 00:31	11:00 AM	12:00 PM	16:00
190	ATLANTIS CREW SLEEP BEGINS		12/ 02:00	12:29 PM	01:29 PM	17:29
191	"LAUNCHING OUR DREAMS" VIDEO FEATURE PLAYBACK	JSC	12/ 02:31	01:00 PM	02:00 PM	18:00
192	FLIGHT DAY 13 HIGHLIGHTS (replayed on the hour during crew sleep)	JSC	12/ 03:31	02:00 PM	03:00 PM	19:00
196	ATLANTIS CREW WAKE UP (begins FD 14)		12/ 10:00	08:29 PM	09:29 PM	01:29
197	ATLANTIS DEORBIT PREPARATIONS BEGIN		12/ 13:25	11:54 PM	12:54 AM	04:54

<u>ORBIT</u>	<u>SUBJECT</u>	<u>SITE</u>	<u>MET</u>	<u>CDT</u>	<u>EDT</u>	<u>GMT</u>
THURSDAY, JULY 21						
FD 14						
198	* PAYLOAD BAY DOOR CLOSING		12/ 14:40	01:09 AM	02:09 AM	06:09
200	* ATLANTIS DEORBIT BURN 1st OPPORTUNITY		12/ 17:20	03:49 AM	04:49 AM	08:49
200	MILA C-BAND RADAR ACQUISITION OF ATLANTIS 1st OPPORTUNITY		12/ 18:14	04:43 AM	05:43 AM	09:43
200	* KSC LANDING 1st OPPORTUNITY	KSC	12/ 18:27	04:56 AM	05:56 AM	09:56
200	* ATLANTIS DEORBIT BURN 2ND KSC OPPORTUNITY		12/ 18:56	05:25 AM	06:25 AM	10:25
201	MILA C-BAND RADAR ACQUISITION OF ATLANTIS 2nd KSC OPPORTUNITY		12/ 19:50	06:19 AM	07:19 AM	11:19
201	KSC LANDING 2nd OPPORTUNITY	KSC	12/ 20:03	06:32 AM	07:32 AM	11:32
	ENTRY FLIGHT DIRECTOR TONY CECCACCI SIGN-OFF TO FLIGHT CONTROL TEAM	JSC		~ L+45 MIN.		
	STS-135 MISSION HIGHLIGHTS VIDEO REPLAY (replayed after Entry Flight Control Team Video)	JSC		~ L+2.5 HRS.		
	ENTRY FLIGHT CONTROL TEAM VIDEO REPLAY (replayed after Post-Landing News Conference)	JSC		~ L+3.5 HRS.		
	POST-LANDING NEWS CONFERENCE	KSC		NET L+4 HRS.		
	ATLANTIS TOWBACK & EMPLOYEE APPRECIATION EVENT	KSC		NET L+5:45 HRS.		
	STS-135 CREW NEWS CONFERENCE (may be postponed or cancelled)	KSC		NET L+6 HRS.		
	STS-135 CREW REMARKS TO KSC EMPLOYEES AND NASA	KSC		NET L+6:30 HRS.		

ORBIT

SUBJECT

SITE

MET

CDT

EDT

GMT

FRIDAY, JULY 22

STS-135 CREW RETURN TO ELLINGTON FIELD,
HOUSTON, TX

JSC

4:00PM

5:00PM

ORBIT SUBJECT SITE MET CDT EDT GMT

DEFINITION OF TERMS

AMC: Americom Satellite
CDT: Central Daylight Time
Destiny: U.S. Laboratory on ISS
Dextre: Special Purpose Dextrous Manipulator on ISS
ELC-4: Express Logistics Carrier #4
EMU: Extravehicular Mobility Unit
EOTP Enhanced ORU Temporary Platform
EDT: Eastern Daylight Time
ESP2: External Stowage Platform #2 on ISS
EVA: Extravehicular Activity
FCS: Flight Control System
FD: Flight Day
GMT: Greenwich Mean Time
Harmony: Node 2
HD: High Definition Television
HQ: NASA Headquarters
ISLE: In-suit Light Exercise
ISS: International Space Station
JPL: Jet Propulsion Laboratory
JSC: Johnson Space Center
KSC: Kennedy Space Center
L: Launch or Landing time
LIMO: Live Interview Media Outlet channel
LMC: Lightweight Multipurpose Carrier
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
MISSE: Materials International Space Station Experiment
MMT: Mission Management Team
MS: Mission Specialist
NET: No Earlier Than
OBSS: Orbiter Boom Sensor System
ODS: Orbiter Docking System
OMS: Orbital Maneuvering System
ORU: Orbital Replacement Unit
PAO: Public Affairs office
PDGF: Power and Data Grapple Fixture
RCS: Reaction Control System
R&R: Return and Replace
RRM: Robotics Refueling Mission
RSS: Rotating Servicing Structure
S1: Starboard One truss segment on ISS

<u>ORBIT</u>	<u>SUBJECT</u>	<u>SITE</u>	<u>MET</u>	<u>CDT</u>	<u>EDT</u>	<u>GMT</u>
SRMS:	Shuttle Remote Manipulator System on ATLANTIS					
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					