



**Space**to**Ground**

1  
00:00:07,030 --> 00:00:05,030  
houston station on space to ground

2  
00:00:09,750 --> 00:00:07,040  
welcome to space to ground i'm kayla

3  
00:00:11,669 --> 00:00:09,760  
lafrance with a full crew compliment on

4  
00:00:14,549 --> 00:00:11,679  
board the space station the orbiting

5  
00:00:17,109 --> 00:00:14,559  
laboratory is as busy as ever

6  
00:00:20,390 --> 00:00:17,119  
earlier this week ross cosmos cosmonauts

7  
00:00:22,310 --> 00:00:20,400  
oleg artemyev and denise motve concluded

8  
00:00:24,390 --> 00:00:22,320  
the 249th

9  
00:00:27,990 --> 00:00:24,400  
spacewalk in support of the orbiting

10  
00:00:30,470 --> 00:00:28,000  
laboratory the duo spent 6 hours and 37

11  
00:00:32,709 --> 00:00:30,480  
minutes on their eva and completed their

12  
00:00:35,430 --> 00:00:32,719  
major objectives which included the

13  
00:00:37,910 --> 00:00:35,440

installation of handrails onto nyoka's

14

00:00:40,549 --> 00:00:37,920

external shell and of a control panel

15

00:00:43,510 --> 00:00:40,559

for the new european robotic arm the

16

00:00:45,670 --> 00:00:43,520

european robotic arm is a 37 foot long

17

00:00:47,670 --> 00:00:45,680

manipulator system mounted to the

18

00:00:49,990 --> 00:00:47,680

recently arrived multi-purpose

19

00:00:52,389 --> 00:00:50,000

laboratory module and will be used to

20

00:00:54,630 --> 00:00:52,399

move space walkers and payloads around

21

00:00:56,470 --> 00:00:54,640

the russian segment of the station

22

00:00:58,950 --> 00:00:56,480

during the next russian spacewalk

23

00:01:01,349 --> 00:00:58,960

scheduled for thursday april 28th the

24

00:01:04,469 --> 00:01:01,359

spacewalkers will continue their work to

25

00:01:07,429 --> 00:01:04,479

ready the new robotic arm for service

26

00:01:09,429 --> 00:01:07,439

friday april 22nd is earth day and one

27

00:01:11,990 --> 00:01:09,439

of the best ways to study our home

28

00:01:14,230 --> 00:01:12,000

planet is off of it the international

29

00:01:16,469 --> 00:01:14,240

space station offers a unique vantage

30

00:01:18,789 --> 00:01:16,479

point for study in earth for more than

31

00:01:20,950 --> 00:01:18,799

200 miles above it

32

00:01:23,270 --> 00:01:20,960

multiple earth observing instruments are

33

00:01:26,469 --> 00:01:23,280

mounted on the exterior of the station's

34

00:01:28,950 --> 00:01:26,479

modules including a limb full of cameras

35

00:01:31,190 --> 00:01:28,960

science observers and tools that hang

36

00:01:33,670 --> 00:01:31,200

off the edge of the station's japanese

37

00:01:35,990 --> 00:01:33,680

experiment module we're studying the

38

00:01:38,630 --> 00:01:36,000

role of plants in the carbon cycle

39

00:01:41,190 --> 00:01:38,640

tracking the ozone and the total energy

40

00:01:43,429 --> 00:01:41,200

flowing into earth from the sun

41

00:01:45,749 --> 00:01:43,439

this research is advancing numerous

42

00:01:47,910 --> 00:01:45,759

climate records and models

43

00:01:50,069 --> 00:01:47,920

earth orbiting cubesats are also

44

00:01:52,710 --> 00:01:50,079

regularly deployed from the station's

45

00:01:54,550 --> 00:01:52,720

airlock crews spend time each week

46

00:01:57,429 --> 00:01:54,560

taking photos of the planet from the

47

00:02:00,149 --> 00:01:57,439

orbiting labs windows and the astronauts

48

00:02:02,389 --> 00:02:00,159

even conduct earth science experiments

49

00:02:04,550 --> 00:02:02,399

all of this work provides insight into

50

00:02:07,429 --> 00:02:04,560

the climate of our home and how we might

51

00:02:09,749 --> 00:02:07,439

prepare for coming changes

52

00:02:12,070 --> 00:02:09,759

we also invite you to view the season 2

53

00:02:12,949 --> 00:02:12,080

premiere of the nasa series down to

54

00:02:15,190 --> 00:02:12,959

earth

55

00:02:17,589 --> 00:02:15,200

astronaut sunny williams kicks off the

56

00:02:20,949 --> 00:02:17,599

new season with a conversation about

57

00:02:22,550 --> 00:02:20,959

viewing our home planet from 250 miles

58

00:02:24,949 --> 00:02:22,560

above

59

00:02:27,270 --> 00:02:24,959

earlier this week the members of crew 4

60

00:02:29,750 --> 00:02:27,280

landed at nasa's kennedy space center

61

00:02:31,430 --> 00:02:29,760

ahead of their upcoming launch

62

00:02:33,509 --> 00:02:31,440

the crew will continue their final

63

00:02:36,710 --> 00:02:33,519

preparation for their mission which will

64

00:02:38,869 --> 00:02:36,720

be nasa and spacex fourth crew rotation

65

00:02:41,430 --> 00:02:38,879

mission of the spacex crew dragon

66

00:02:44,229 --> 00:02:41,440

spacecraft to the space station nasa

67

00:02:46,309 --> 00:02:44,239

astronauts lindgren heinz watkins and

68

00:02:48,550 --> 00:02:46,319

esa astronaut christopher reddy are

69

00:02:51,750 --> 00:02:48,560

scheduled to launch from launch complex

70

00:02:54,229 --> 00:02:51,760

39a at the kennedy space center if you

71

00:02:56,869 --> 00:02:54,239

want to watch any of nasa's full live

72

00:02:58,869 --> 00:02:56,879

coverage of upcoming events in space and

73

00:03:01,670 --> 00:02:58,879

on the ground head over to nasa

74

00:03:02,869 --> 00:03:01,680

television the nasa app or the agency's

75

00:03:04,710 --> 00:03:02,879

website

76

00:03:06,470 --> 00:03:04,720

that space to ground for this week