



Space to Ground

1
00:00:06,430 --> 00:00:02,790
foreign

2
00:00:10,190 --> 00:00:06,440
[Music]

3
00:00:12,169 --> 00:00:10,200
ji the 27th SpaceX cargo return I'll

4
00:00:14,209 --> 00:00:12,179
walk in space and celebrating our home

5
00:00:15,890 --> 00:00:14,219
planet it's space to ground the Earth

6
00:00:18,230 --> 00:00:15,900
Day Edition

7
00:00:20,630 --> 00:00:18,240
4 300 pounds of Science and cargo

8
00:00:22,609 --> 00:00:20,640
returned to Earth on Saturday April 15th

9
00:00:24,830 --> 00:00:22,619
aboard spacex's uncrewed Dragon

10
00:00:27,290 --> 00:00:24,840
spacecraft which splashed down off the

11
00:00:29,210 --> 00:00:27,300
coast of Tampa Florida among the science

12
00:00:30,890 --> 00:00:29,220
Frozen dwarf tomatoes that were

13
00:00:32,690 --> 00:00:30,900

harvested will be examined for the

14

00:00:35,270 --> 00:00:32,700

effects of light quality and fertilizer

15

00:00:36,709 --> 00:00:35,280

on fruit production microbial safety and

16

00:00:39,229 --> 00:00:36,719

nutritional value

17

00:00:41,350 --> 00:00:39,239

on Tuesday two Russian cosmonauts took a

18

00:00:43,850 --> 00:00:41,360

walk in space to move a radiator

19

00:00:45,889 --> 00:00:43,860

this was the first of three spacewalks

20

00:00:47,869 --> 00:00:45,899

for Expedition 69 Commander Sergey

21

00:00:50,029 --> 00:00:47,879

prokopiev and flight engineer Dimitri

22

00:00:52,069 --> 00:00:50,039

pedalin who exited the poisk module to

23

00:00:54,590 --> 00:00:52,079

move a radiator from the raspat module

24

00:00:56,569 --> 00:00:54,600

to the Noka science module a pair of

25

00:00:58,549 --> 00:00:56,579

astronauts will exit the hatch on April

26

00:01:01,010 --> 00:00:58,559

28th to prepare the space station for

27

00:01:02,810 --> 00:01:01,020

continued solar array upgrades you can

28

00:01:04,789 --> 00:01:02,820

learn more about the spacewalk during

29

00:01:08,390 --> 00:01:04,799

our preview briefing on Monday April

30

00:01:10,190 --> 00:01:08,400

24th at 2 pm Eastern for all upcoming

31

00:01:12,950 --> 00:01:10,200

spacewalks you can catch live coverage

32

00:01:14,530 --> 00:01:12,960

on NASA TV on the agencies app and on

33

00:01:17,450 --> 00:01:14,540

the website

34

00:01:19,490 --> 00:01:17,460

250 miles above our home planet sits the

35

00:01:21,710 --> 00:01:19,500

International Space Station with 16

36

00:01:23,630 --> 00:01:21,720

sunrises and sunsets a day we have been

37

00:01:25,730 --> 00:01:23,640

able to study our planet from multiple

38

00:01:28,550 --> 00:01:25,740

locations during the day and night

39
00:01:30,230 --> 00:01:28,560
as we celebrate Earth Day on Saturday we

40
00:01:32,149 --> 00:01:30,240
continue to focus on the well-being of

41
00:01:34,429 --> 00:01:32,159
our planet including how humans are

42
00:01:35,870 --> 00:01:34,439
affecting its climate astronauts and

43
00:01:37,850 --> 00:01:35,880
instruments aboard the space station

44
00:01:40,069 --> 00:01:37,860
have the ability to track factors

45
00:01:42,170 --> 00:01:40,079
influencing climate over long periods

46
00:01:43,789 --> 00:01:42,180
and the data gathered helps inform

47
00:01:46,370 --> 00:01:43,799
climate decisions that help us

48
00:01:48,770 --> 00:01:46,380
understand and care for our planet

49
00:01:50,330 --> 00:01:48,780
ecostress an instrument on the exterior

50
00:01:51,889 --> 00:01:50,340
of the space station measures the

51
00:01:54,350 --> 00:01:51,899
temperature on the ground which is

52
00:01:56,630 --> 00:01:54,360
hotter during the day than the air Urban

53
00:01:59,149 --> 00:01:56,640
surfaces like concrete are often much

54
00:02:01,069 --> 00:01:59,159
hotter than a field for example this is

55
00:02:03,170 --> 00:02:01,079
one of the ways Urban heat experts have

56
00:02:04,789 --> 00:02:03,180
noted that extreme temperatures can be

57
00:02:07,069 --> 00:02:04,799
deadly due to an urban heat island

58
00:02:09,050 --> 00:02:07,079
effect this is when temperatures Do not

59
00:02:11,690 --> 00:02:09,060
drop sufficiently at night face to

60
00:02:13,790 --> 00:02:11,700
ground with more than 3.5 million images

61
00:02:16,130 --> 00:02:13,800
of Earth taken by crew from the space

62
00:02:18,050 --> 00:02:16,140
station crew Earth observations is one

63
00:02:20,390 --> 00:02:18,060

of the longest running records of how

64

00:02:22,610 --> 00:02:20,400

our planet changes over time

65

00:02:24,470 --> 00:02:22,620

at the moment the program supports a

66

00:02:26,630 --> 00:02:24,480

number of studies including Urban night

67

00:02:28,309 --> 00:02:26,640

lighting glaciers and volcanoes and

68

00:02:30,050 --> 00:02:28,319

Atmospheric processes affected by

69

00:02:32,030 --> 00:02:30,060

volcanic eruptions

70

00:02:34,190 --> 00:02:32,040

for more on the signs taking place

71

00:02:36,770 --> 00:02:34,200

aboard the space station don't forget to

72

00:02:38,390 --> 00:02:36,780

follow at ISS underscore research that's

73

00:02:40,010 --> 00:02:38,400

space to ground for this week thanks so

74

00:02:41,630 --> 00:02:40,020

much for watching we hope that you have

75

00:02:45,570 --> 00:02:41,640

a happy Earth Day and we'll see you next

76

00:02:45,580 --> 00:02:52,390

[Music]