



Space to Ground

1
00:00:06,869 --> 00:00:05,030
houston station on space to ground

2
00:00:07,990 --> 00:00:06,879
welcome to space to ground i'm schnickel

3
00:00:10,470 --> 00:00:08,000
vereen

4
00:00:13,030 --> 00:00:10,480
on tuesday march 15th nasa astronauts

5
00:00:15,030 --> 00:00:13,040
kayla baron and rasha atari will venture

6
00:00:17,830 --> 00:00:15,040
outside the orbiting outpost to perform

7
00:00:20,390 --> 00:00:17,840
irosa 3a power channel preparations

8
00:00:22,950 --> 00:00:20,400
irosa or iss rollout solar array

9
00:00:24,390 --> 00:00:22,960
upgrades have been ongoing since 2020

10
00:00:26,310 --> 00:00:24,400
baron and chary will install the

11
00:00:27,990 --> 00:00:26,320
modification kit in preparation for the

12
00:00:29,589 --> 00:00:28,000
new solar array

13
00:00:31,669 --> 00:00:29,599

the international space station has

14

00:00:33,670 --> 00:00:31,679

eight power channels each fed with

15

00:00:35,750 --> 00:00:33,680

electrical power generated from one

16

00:00:38,630 --> 00:00:35,760

solar array wing extending from the

17

00:00:40,389 --> 00:00:38,640

station's truss backbone the original

18

00:00:43,750 --> 00:00:40,399

solar panels launched on four space

19

00:00:45,910 --> 00:00:43,760

shuttle missions from 2000 to 2009

20

00:00:48,470 --> 00:00:45,920

as expected the solar panel efficiency

21

00:00:50,310 --> 00:00:48,480

has degraded over time nasa is upgrading

22

00:00:52,310 --> 00:00:50,320

the space station's power system with

23

00:00:54,229 --> 00:00:52,320

the new rollout solar arrays which will

24

00:00:56,950 --> 00:00:54,239

partially cover six of the station's

25

00:00:59,270 --> 00:00:56,960

eight original solar panels when all six

26
00:01:01,029 --> 00:00:59,280
irosa units are deployed on the station

27
00:01:04,869 --> 00:01:01,039
the power system will be capable of

28
00:01:06,630 --> 00:01:04,879
generating 215 kilowatts of electricity

29
00:01:08,630 --> 00:01:06,640
back inside the station this week the

30
00:01:10,630 --> 00:01:08,640
science continued with cameras that

31
00:01:12,390 --> 00:01:10,640
could save your crops

32
00:01:14,390 --> 00:01:12,400
imagine if farmers could get advanced

33
00:01:16,630 --> 00:01:14,400
warnings of water stress in their crops

34
00:01:19,030 --> 00:01:16,640
alerting them to changes in crop health

35
00:01:20,630 --> 00:01:19,040
days to weeks before they become visible

36
00:01:22,550 --> 00:01:20,640
they would be able to head off those

37
00:01:25,190 --> 00:01:22,560
issues and decrease chances of crop

38
00:01:27,670 --> 00:01:25,200

losses a new experiment heading outside

39

00:01:29,590 --> 00:01:27,680

the space station aims to do just that

40

00:01:31,910 --> 00:01:29,600

nasa flight engineer kayla barron

41

00:01:34,230 --> 00:01:31,920

installed the long wave infrared sensing

42

00:01:36,550 --> 00:01:34,240

demonstrator or lissar on the nanorex

43

00:01:38,469 --> 00:01:36,560

external platform this week the cube

44

00:01:40,149 --> 00:01:38,479

satellite will reside on the exposed

45

00:01:42,630 --> 00:01:40,159

facility of the japanese experiment

46

00:01:44,550 --> 00:01:42,640

module for several months it will test a

47

00:01:46,469 --> 00:01:44,560

thermal infrared sensor for taking

48

00:01:48,870 --> 00:01:46,479

precise measurements of earth's surface

49

00:01:50,710 --> 00:01:48,880

temperature and monitor water resources

50

00:01:52,550 --> 00:01:50,720

this testing is a first step on the path

51
00:01:54,230 --> 00:01:52,560
to launching constellations of small

52
00:01:56,709 --> 00:01:54,240
satellites that could take measurements

53
00:01:58,389 --> 00:01:56,719
around the entire globe every day this

54
00:02:01,270 --> 00:01:58,399
knowledge could help farmers achieve

55
00:02:02,789 --> 00:02:01,280
more yield and better quality crops

56
00:02:07,460 --> 00:02:02,799
that's space to ground thanks for