



SPACE TO GROUND

1
00:00:07,779 --> 00:00:03,670
a new sensation on space to ground to

2
00:00:10,540 --> 00:00:07,789
space walks in two weeks check welcome

3
00:00:12,670 --> 00:00:10,550
to space to ground I'm Dan Huot to NASA

4
00:00:15,460 --> 00:00:12,680
astronauts just completed their second

5
00:00:18,279 --> 00:00:15,470
spacewalk in as many weeks Jeff Williams

6
00:00:20,019 --> 00:00:18,289
and Kate Rubin spent six hours and 48

7
00:00:22,659 --> 00:00:20,029
minutes working in the vacuum of space

8
00:00:24,999 --> 00:00:22,669
on Thursday completing all of their

9
00:00:27,579 --> 00:00:25,009
primary tasks and several guetta heads

10
00:00:29,380 --> 00:00:27,589
the pair retracted a backup thermal

11
00:00:31,630 --> 00:00:29,390
control radiator that had previously

12
00:00:34,270 --> 00:00:31,640
been deployed as part of an effort to

13
00:00:36,490 --> 00:00:34,280

isolate an ammonia coolant leak they

14

00:00:39,040 --> 00:00:36,500

also installed too high definition

15

00:00:41,049 --> 00:00:39,050

cameras that will provide new striking

16

00:00:43,180 --> 00:00:41,059

views of the earth and activities

17

00:00:44,709 --> 00:00:43,190

outside the station including the

18

00:00:47,919 --> 00:00:44,719

comings and goings of visiting

19

00:00:50,229 --> 00:00:47,929

spacecraft history was made this past

20

00:00:52,509 --> 00:00:50,239

weekend when DNA was successfully

21

00:00:55,720 --> 00:00:52,519

sequenced in space by the first time

22

00:00:57,849 --> 00:00:55,730

ever nasa astronaut Kate Rubens did a

23

00:00:59,979 --> 00:00:57,859

successful test of the biomolecule

24

00:01:02,290 --> 00:00:59,989

sequencer device demonstrating that

25

00:01:04,479 --> 00:01:02,300

sequencing DNA is possible in an

26

00:01:07,060 --> 00:01:04,489

orbiting spacecraft with a way to

27

00:01:09,969 --> 00:01:07,070

sequence DNA in space astronauts could

28

00:01:11,859 --> 00:01:09,979

diagnose an illness or identify microbes

29

00:01:13,480 --> 00:01:11,869

growing in the station and determine

30

00:01:16,630 --> 00:01:13,490

whether or not they represent a health

31

00:01:18,789 --> 00:01:16,640

threat looking further a space-based DNA

32

00:01:20,770 --> 00:01:18,799

sequencer could be an important tool to

33

00:01:22,810 --> 00:01:20,780

help protect astronaut health during

34

00:01:24,999 --> 00:01:22,820

long-duration missions on the journey to

35

00:01:26,980 --> 00:01:25,009

Mars and future explorers could also

36

00:01:29,859 --> 00:01:26,990

potentially use the technology to

37

00:01:32,440 --> 00:01:29,869

identify DNA base life-forms beyond

38

00:01:35,170 --> 00:01:32,450

Earth this week the station had a

39

00:01:38,319 --> 00:01:35,180

bird's-eye view of not one not two but

40

00:01:40,690 --> 00:01:38,329

three hurricanes cameras outside the

41

00:01:43,539 --> 00:01:40,700

station captured views of three powerful

42

00:01:46,389 --> 00:01:43,549

tropical weather systems from over 250

43

00:01:48,639 --> 00:01:46,399

miles above on Tuesday first it passed

44

00:01:51,639 --> 00:01:48,649

over the Pacific where hurricane Lester

45

00:01:54,100 --> 00:01:51,649

was packing winds of 125 miles an hour

46

00:01:57,099 --> 00:01:54,110

and right behind it was hurricane battle

47

00:01:59,200 --> 00:01:57,109

in with winds in excess of 130 miles an

48

00:02:01,510 --> 00:01:59,210

hour and then a few hours later the

49

00:02:03,520 --> 00:02:01,520

station flew over hurricane Gaston in

50

00:02:07,029 --> 00:02:03,530

the open Atlantic still churning along

51

00:02:08,859 --> 00:02:07,039

with winds over 100 miles an hour keep

52

00:02:11,140 --> 00:02:08,869

sending us your questions using the

53

00:02:12,300 --> 00:02:11,150

hashtag space-to-ground we'll see you