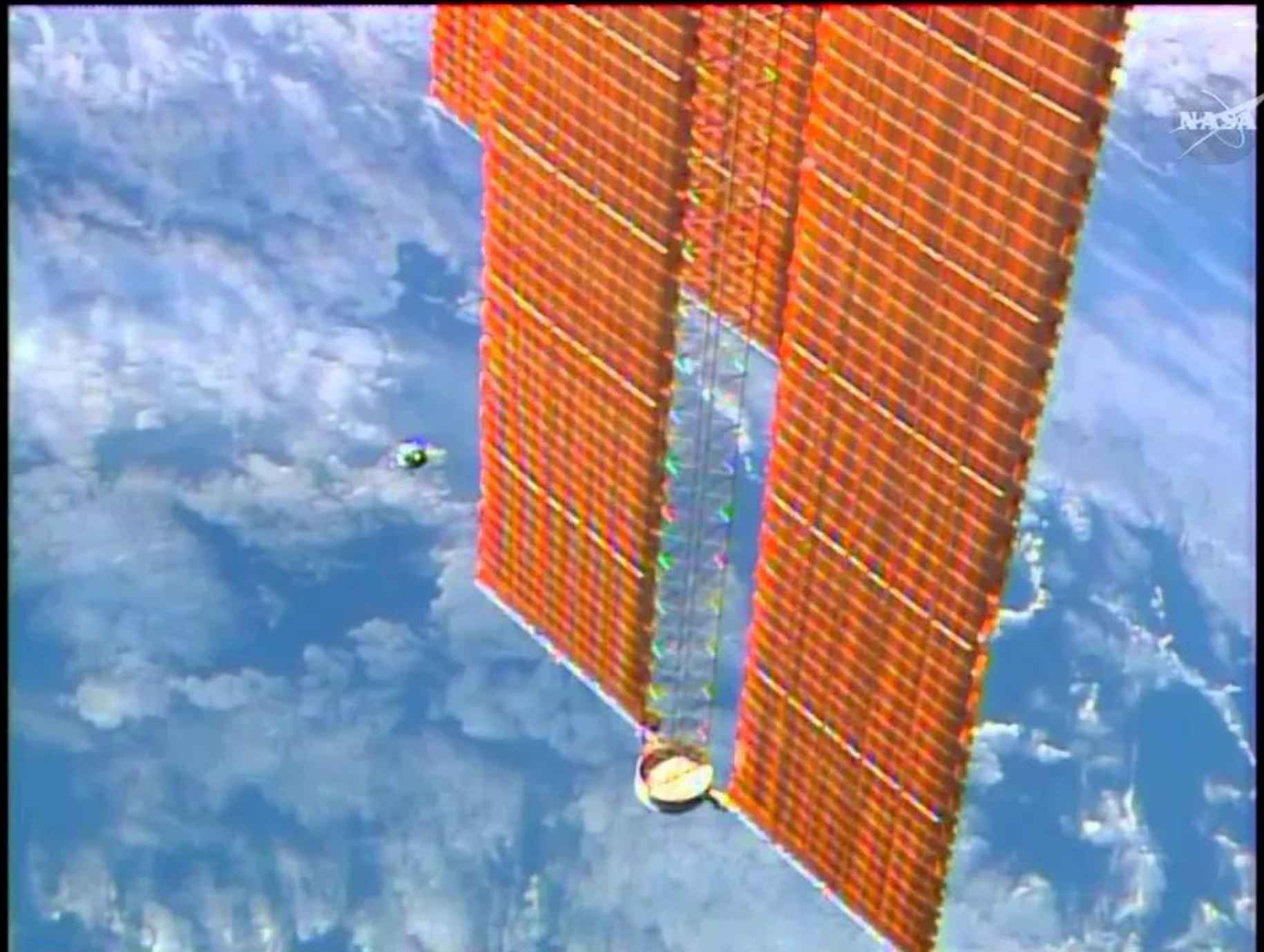
NASA

1
00:00:10,470 --> 00:00:07,190
the international space station has long

2
00:00:11,910 --> 00:00:10,480
been used as an earth observing platform

3
00:00:13,830 --> 00:00:11,920
but a new tool will be heading to the

4
00:00:15,430 --> 00:00:13,840
space station next year to study

5
00:00:17,830 --> 00:00:15,440
something important to all of us the

6
00:00:19,910 --> 00:00:17,840
earth's ozone my colleague lori miggs at

7
00:00:22,150 --> 00:00:19,920
the marshall space flight center caught

8
00:00:26,230 --> 00:00:22,160
up with the mission operations manager

9
00:00:28,390 --> 00:00:26,240
at langley research center to learn more

10
00:00:30,630 --> 00:00:28,400
sage 3 is actually monitoring the

11
00:00:32,150 --> 00:00:30,640
changes in the ozone and the ozone is

12
00:00:34,950 --> 00:00:32,160
very important to us because it's used

13
00:00:37,030 --> 00:00:34,960

as pretty much a sunscreen for the earth

14
00:00:39,670 --> 00:00:37,040
and it has been depleting

15
00:00:41,869 --> 00:00:39,680
and it is starting to recover so sage

16
00:00:44,549 --> 00:00:41,879
iii has been monitoring the ozone since

17
00:00:46,150 --> 00:00:44,559
1979 so we've had an amazing record of

18
00:00:48,069 --> 00:00:46,160
this

19
00:00:49,670 --> 00:00:48,079
of the changes of the ozone and the

20
00:00:51,510 --> 00:00:49,680
ozone is so important because like i

21
00:00:53,590 --> 00:00:51,520
said it is a sunscreen kind of for the

22
00:00:56,310 --> 00:00:53,600
earth and it protects us and without

23
00:00:58,790 --> 00:00:56,320
that we get harmful to the crops harmful

24
00:01:01,590 --> 00:00:58,800
to humans we get larger instances of

25
00:01:04,229 --> 00:01:01,600
cataracts of cancer so to be able to

26
00:01:07,109 --> 00:01:04,239
monitor and see the changes in the ozone

27
00:01:08,550 --> 00:01:07,119
is beneficial for humans

28
00:01:11,590 --> 00:01:08,560
all around

29
00:01:13,590 --> 00:01:11,600
iss is great for us because of its orbit

30
00:01:14,870 --> 00:01:13,600
we actually get a monitor

31
00:01:17,990 --> 00:01:14,880
different latitudes and different

32
00:01:20,070 --> 00:01:18,000
longitudes uh due to its orbit so we can

33
00:01:22,550 --> 00:01:20,080
monitor all the way up to about 76

34
00:01:24,469 --> 00:01:22,560
degrees in latitude and longitude

35
00:01:27,030 --> 00:01:24,479
and so it gives us a really nice

36
00:01:29,670 --> 00:01:27,040
sampling and the whole earth on a yearly

37
00:01:31,109 --> 00:01:29,680
daily monthly basis so what up until the

38
00:01:32,710 --> 00:01:31,119

launch point what are we doing now still

39
00:01:34,789 --> 00:01:32,720
just more testing until we get ready to

40
00:01:36,630 --> 00:01:34,799
launch we are still doing more testing

41
00:01:38,789 --> 00:01:36,640
um and we are starting to actually put

42
00:01:40,950 --> 00:01:38,799
all these we have several different kind

43
00:01:42,389 --> 00:01:40,960
of experiments and instruments on this

44
00:01:44,230 --> 00:01:42,399
payload we have a contamination

45
00:01:46,950 --> 00:01:44,240
monitoring package which will be able to

46
00:01:49,910 --> 00:01:46,960
tell us how kind of dirty the atmosphere

47
00:01:51,670 --> 00:01:49,920
in the area of iss is as launch vehicles

48
00:01:53,749 --> 00:01:51,680
come and dock and undock they have

49
00:01:55,910 --> 00:01:53,759
plumes so we'll be able to characterize

50
00:01:57,990 --> 00:01:55,920
that and make sure that if it gets too

51
00:01:59,510 --> 00:01:58,000
much contamination we can actually stow

52
00:02:01,270 --> 00:01:59,520
the instrument so we have a

53
00:02:03,350 --> 00:02:01,280
contamination monitor package we have a

54
00:02:06,389 --> 00:02:03,360
disturbance monitoring package which

55
00:02:08,630 --> 00:02:06,399
actually you know if is very big and

56
00:02:10,630 --> 00:02:08,640
kind of you know fluctuates depending on

57
00:02:12,710 --> 00:02:10,640
thermal environments the astronauts

58
00:02:15,190 --> 00:02:12,720
themselves walking about or pushing

59
00:02:17,190 --> 00:02:15,200
about so that tells us also if you know

60
00:02:19,270 --> 00:02:17,200
if there's too much disturbance we not

61
00:02:21,670 --> 00:02:19,280
may not be able to use that data

62
00:02:22,790 --> 00:02:21,680
and then we have several other

63
00:02:24,790 --> 00:02:22,800

computers

64
00:02:27,110 --> 00:02:24,800
so we're now putting all of these small

65
00:02:29,430 --> 00:02:27,120
computers all these small instruments

66
00:02:31,509 --> 00:02:29,440
all putting them onto the same palette

67
00:02:33,509 --> 00:02:31,519
and then we'll do the same environmental

68
00:02:36,869 --> 00:02:33,519
testing again of making sure the whole