1
00:00:06,710 --> 00:00:04,630
[Music]

2
00:00:09,190 --> 00:00:06,720
sentinel 6 micro fry lake will provide

3
00:00:10,950 --> 00:00:09,200
important information in producing our

4
00:00:13,470 --> 00:00:10,960
daily weather forecast

5
00:00:14,709 --> 00:00:13,480
so how does this work the data from the

6
00:00:16,390 --> 00:00:14,719
gnssro

7
00:00:18,630 --> 00:00:16,400
that stands for global navigation

8
00:00:20,710 --> 00:00:18,640
satellite system and radio occultation

9
00:00:22,310 --> 00:00:20,720
the new instrument on board is ingested

10
00:00:24,470 --> 00:00:22,320
into the weather models that can

11
00:00:26,870 --> 00:00:24,480
help us with our weather forecasting and

12
00:00:28,470 --> 00:00:26,880
our warnings to help protect the public

13
00:00:30,230 --> 00:00:28,480

this mission will use a special

14
00:00:33,030 --> 00:00:30,240
technique called radio occupation

15
00:00:35,190 --> 00:00:33,040
which measures tiny changes in the radio

16
00:00:37,030 --> 00:00:35,200
signals broadcast by gps and other

17
00:00:39,350 --> 00:00:37,040
navigation satellites

18
00:00:41,270 --> 00:00:39,360
the gnssr instrument essentially

19
00:00:42,950 --> 00:00:41,280
measures the time delay

20
00:00:44,950 --> 00:00:42,960
of the radio signals as it goes through

21
00:00:47,350 --> 00:00:44,960
different layers of the atmosphere

22
00:00:49,350 --> 00:00:47,360
so this allows us to unravel the

23
00:00:51,350 --> 00:00:49,360
temperature and moisture content of the

24
00:00:53,189 --> 00:00:51,360
atmosphere layer by layer

25
00:00:55,350 --> 00:00:53,199
most of the weather that we experience

26
00:00:57,350 --> 00:00:55,360
comes from our west over the ocean

27
00:00:59,189 --> 00:00:57,360
that lacks conventional observations

28
00:01:01,590 --> 00:00:59,199
like what we have over land

29
00:01:02,229 --> 00:01:01,600
the gnssro will help address these

30
00:01:03,910 --> 00:01:02,239
challenges

31
00:01:05,750 --> 00:01:03,920
by providing us very important

32
00:01:06,469 --> 00:01:05,760
temperature moisture information over

33
00:01:08,070 --> 00:01:06,479
the ocean

34
00:01:09,910 --> 00:01:08,080
that will help our forecast here on the

35
00:01:12,149 --> 00:01:09,920
west coast

36
00:01:13,830 --> 00:01:12,159
studying the entire atmosphere from the

37
00:01:14,710 --> 00:01:13,840
surface all the way up to the

38
00:01:17,429 --> 00:01:14,720

stratosphere

39
00:01:18,310 --> 00:01:17,439
is important for us to improve our

40
00:01:20,390 --> 00:01:18,320
understanding of

41
00:01:22,350 --> 00:01:20,400
our weather and climate change we're

42
00:01:23,670 --> 00:01:22,360
very excited with the data that the

43
00:01:25,270 --> 00:01:23,680
gnssro

44
00:01:27,510 --> 00:01:25,280
will provide for these weather models

45
00:01:29,429 --> 00:01:27,520
that will ultimately help improve our

46
00:01:30,550 --> 00:01:29,439
forecasts and warnings to help protect

47
00:01:32,310 --> 00:01:30,560
the public

48
00:01:33,590 --> 00:01:32,320
we are excited about san jose's new

49
00:01:35,510 --> 00:01:33,600
capabilities

50
00:01:37,030 --> 00:01:35,520
make sure to watch central six

51
00:01:38,950 --> 00:01:37,040
microfiber launch