



1
00:00:10,520 --> 00:00:08,089
sorry radiance is the energy hitting the

2
00:00:12,530 --> 00:00:10,530
Earth from the Sun we have different

3
00:00:14,690 --> 00:00:12,540
kinds of solar irradiance we have heat

4
00:00:16,700 --> 00:00:14,700
solar irradiance which is the infrared

5
00:00:18,740 --> 00:00:16,710
radiation we have the visible light

6
00:00:21,080 --> 00:00:18,750
which is what we can use to see and what

7
00:00:23,000 --> 00:00:21,090
makes plants grow we also have

8
00:00:25,759 --> 00:00:23,010
ultraviolet light which is absorbed by

9
00:00:28,040 --> 00:00:25,769
our ozone layer and we also have x-ray

10
00:00:30,019 --> 00:00:28,050
and extreme ultraviolet which is quite

11
00:00:32,810 --> 00:00:30,029
harmful and thankfully absorbed much

12
00:00:34,819 --> 00:00:32,820
higher up in our atmosphere Eve is the

13
00:00:37,459 --> 00:00:34,829

extreme ultraviolet variability

14

00:00:40,160 --> 00:00:37,469

experiment it will measure the solar

15

00:00:42,049 --> 00:00:40,170

irradiance in the extreme ultraviolet is

16

00:00:43,970 --> 00:00:42,059

very short wavelengths that are absorbed

17

00:00:46,580 --> 00:00:43,980

completely by the Earth's atmosphere and

18

00:00:49,400 --> 00:00:46,590

never make it to the surface they also

19

00:00:51,799 --> 00:00:49,410

are quite deadly and can hurt people and

20

00:00:53,479 --> 00:00:51,809

electronics that are out in space they

21

00:00:55,790 --> 00:00:53,489

cause the atmosphere to heat up and

22

00:00:58,490 --> 00:00:55,800

expand and bring down spacecraft and

23

00:01:01,340 --> 00:00:58,500

also it causes radio communications to

24

00:01:03,229 --> 00:01:01,350

be interfered with Eve will measure the

25

00:01:05,750 --> 00:01:03,239

solar irradiance at these wavelengths

26

00:01:08,300 --> 00:01:05,760

very rapidly about every 10 seconds

27

00:01:10,580 --> 00:01:08,310

allowing us to use that for warning

28

00:01:12,710 --> 00:01:10,590

people about the dangers of flares for

29

00:01:13,700 --> 00:01:12,720

putting them into the models that tell

30

00:01:16,640 --> 00:01:13,710

us what's happening to the atmosphere

31

00:01:19,340 --> 00:01:16,650

and to also allow people that are doing

32

00:01:20,780 --> 00:01:19,350

radio communications and navigation to

33

00:01:22,609 --> 00:01:20,790

know that there could be a problem with