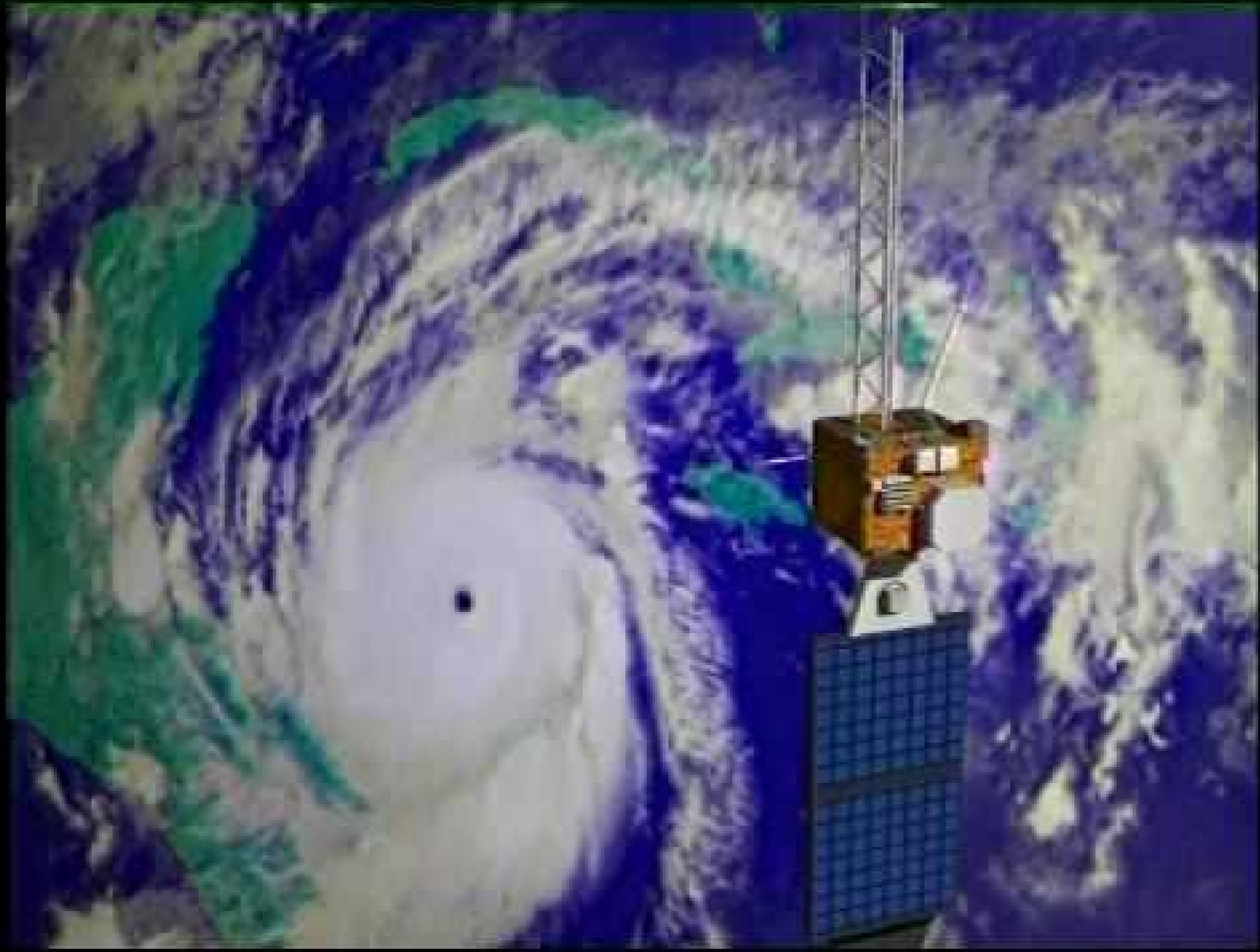

1
00:00:23,210 --> 00:00:20,720
for hundreds of millions of people

2
00:00:25,900 --> 00:00:23,220
throughout the world tropical rain

3
00:00:29,210 --> 00:00:25,910
systems are a life-sustaining resource

4
00:00:32,089 --> 00:00:29,220
but these systems can turn violent and

5
00:00:35,690 --> 00:00:32,099
dangerous spawning deadly storms and

6
00:00:39,560 --> 00:00:35,700
related natural disasters since its

7
00:00:42,139 --> 00:00:39,570
launch in 1997 the tropical rainfall

8
00:00:45,100 --> 00:00:42,149
measuring mission or travel satellite

9
00:00:47,750 --> 00:00:45,110
has become the world's most widely used

10
00:00:50,750 --> 00:00:47,760
space-based resource for measuring

11
00:00:52,840 --> 00:00:50,760
Earth's precipitation a key to

12
00:00:55,959 --> 00:00:52,850
understanding how weather effects and

13
00:00:58,520 --> 00:00:55,969

changes life here on our planet

14
00:01:03,470 --> 00:00:58,530
understanding the Earth's climate and

15
00:01:06,370 --> 00:01:03,480
how it responds to change relies on what

16
00:01:10,789 --> 00:01:06,380
we know about how atmospheric moisture

17
00:01:14,240 --> 00:01:10,799
clouds latent heating and large-scale

18
00:01:17,600 --> 00:01:14,250
atmospheric and oceanic circulation vary

19
00:01:20,780 --> 00:01:17,610
with changing climate conditions the

20
00:01:23,840 --> 00:01:20,790
physical process that links these key

21
00:01:26,179 --> 00:01:23,850
climate elements is precipitation the

22
00:01:29,120 --> 00:01:26,189
first satellite with a rain radar and

23
00:01:32,390 --> 00:01:29,130
microwave imager combination trim

24
00:01:34,910 --> 00:01:32,400
produces data used to verify and improve

25
00:01:37,010 --> 00:01:34,920
meteorological computer models so

26
00:01:40,520 --> 00:01:37,020
important to forecasters and

27
00:01:43,130 --> 00:01:40,530
climatologists across the globe in fact

28
00:01:45,980 --> 00:01:43,140
trim has become the reference standard

29
00:01:48,170 --> 00:01:45,990
by which rain is measured from space you

30
00:01:50,870 --> 00:01:48,180
may not have crim up there but you may

31
00:01:53,929 --> 00:01:50,880
have some other satellite up there when

32
00:01:56,060 --> 00:01:53,939
it is raining now this satellite is

33
00:01:57,950 --> 00:01:56,070
producing calibrated information because

34
00:02:00,920 --> 00:01:57,960
its calibration is based upon crimped

35
00:02:02,630 --> 00:02:00,930
trims data have proven invaluable for

36
00:02:04,670 --> 00:02:02,640
not only predicting the track and

37
00:02:07,999 --> 00:02:04,680
intensity of tropical storms and

38
00:02:10,430 --> 00:02:08,009

hurricanes but also for forecasting the

39
00:02:11,460 --> 00:02:10,440
deadly floods and landslides they can

40
00:02:14,490 --> 00:02:11,470
cause in our

41
00:02:17,250 --> 00:02:14,500
the other on Noah but many other

42
00:02:22,260 --> 00:02:17,260
agencies around the world are using this

43
00:02:24,780 --> 00:02:22,270
data to do a better job of forecasting

44
00:02:27,030 --> 00:02:24,790
data from trem are used to fix the

45
00:02:31,770 --> 00:02:27,040
location and intensity of tropical

46
00:02:34,320 --> 00:02:31,780
storms more than 600 times each year to

47
00:02:36,390 --> 00:02:34,330
learn more about trap follow its up to

48
00:02:39,000 --> 00:02:36,400
date tracking of a tropical storm or

49
00:02:43,800 --> 00:02:39,010
perhaps monitor the threat of landslides

50
00:02:48,000 --> 00:02:43,810
and floods around the globe go to ww na