



1
00:00:06,950 --> 00:00:04,630
hi i'm bob ben chadler i'm a scientist

2
00:00:09,110 --> 00:00:06,960
at nasa's goddard space flight center i

3
00:00:11,190 --> 00:00:09,120
study ice i'm a glaciologist and i've

4
00:00:19,910 --> 00:00:11,200
been doing it here for almost 30 years

5
00:00:24,070 --> 00:00:21,670
west antarctica

6
00:00:26,790 --> 00:00:24,080
pine island glacier drains into an ice

7
00:00:28,950 --> 00:00:26,800
shelf and the satellite data tell us

8
00:00:31,589 --> 00:00:28,960
that's the spot that's the spot where

9
00:00:34,069 --> 00:00:31,599
the ice is thinning very rapidly it's

10
00:00:36,630 --> 00:00:34,079
doubled at speed in less than 10 years

11
00:00:39,830 --> 00:00:36,640
right now it's moving a foot an hour

12
00:00:41,830 --> 00:00:39,840
this ice is racing into the ocean

13
00:00:43,510 --> 00:00:41,840

faster and faster and we need to know

14

00:00:46,630 --> 00:00:43,520

why

15

00:00:50,869 --> 00:00:49,190

two months ago i was able to stand on

16

00:00:52,790 --> 00:00:50,879

the ice shelf

17

00:00:54,549 --> 00:00:52,800

there was debate in our community you

18

00:00:56,790 --> 00:00:54,559

can't even land on the ice shelf it's

19

00:00:58,630 --> 00:00:56,800

too heavily crevassed but again with

20

00:01:01,029 --> 00:00:58,640

satellite imagery we were able to

21

00:01:03,270 --> 00:01:01,039

identify a spot that we thought we could

22

00:01:05,270 --> 00:01:03,280

land and we did

23

00:01:07,510 --> 00:01:05,280

we're in the sweet spot on the ice shelf

24

00:01:09,270 --> 00:01:07,520

about the only place you can land

25

00:01:11,510 --> 00:01:09,280

that was the good news the bad news was

26

00:01:12,789 --> 00:01:11,520

the surface was so hard that the

27

00:01:16,630 --> 00:01:12,799

airplane

28

00:01:19,109 --> 00:01:16,640

again and again and again with with

29

00:01:24,149 --> 00:01:19,119

heavy cargo lows so we couldn't put our

30

00:01:27,510 --> 00:01:25,910

because we couldn't land on the ice

31

00:01:29,190 --> 00:01:27,520

shelf what we were going to do we still

32

00:01:31,350 --> 00:01:29,200

had some instruments we set these

33

00:01:34,149 --> 00:01:31,360

instruments up as close to the ice shelf

34

00:01:36,149 --> 00:01:34,159

as we could an automatic weather station

35

00:01:38,550 --> 00:01:36,159

fairly complex it took us about three

36

00:01:40,310 --> 00:01:38,560

days to set it all up but it's there

37

00:01:42,630 --> 00:01:40,320

it's working it's going to operate we

38

00:01:44,870 --> 00:01:42,640

hope all the way through the the dark

39

00:01:47,190 --> 00:01:44,880

cold antarctic winter helping us to

40

00:01:49,109 --> 00:01:47,200

prepare for the next time we're going to

41

00:01:52,310 --> 00:01:49,119

go to the ice shelf

42

00:01:54,550 --> 00:01:52,320

we also set up some two gps receivers

43

00:01:57,590 --> 00:01:54,560

that tell us how fast the ice is going

44

00:02:00,789 --> 00:01:57,600

and if there are any changes that also

45

00:02:03,510 --> 00:02:00,799

bones its data back by a satellite phone

46

00:02:05,590 --> 00:02:03,520

so we can receive these data right now

47

00:02:08,550 --> 00:02:05,600

in as we prepare for the next field

48

00:02:10,309 --> 00:02:08,560

season

49

00:02:13,030 --> 00:02:10,319

we'll go back we'll go back with