



1
00:00:05,670 --> 00:00:04,150
you know there's this big unknown you're

2
00:00:07,909 --> 00:00:05,680
headed out into this

3
00:00:08,950 --> 00:00:07,919
alien landscape that's just completely

4
00:00:10,950 --> 00:00:08,960
hostile

5
00:00:14,470 --> 00:00:10,960
to you and you know if you didn't have

6
00:00:18,060 --> 00:00:14,480
nice ship and extremely warm clothes

7
00:00:18,070 --> 00:00:21,349
[Music]

8
00:00:26,390 --> 00:00:23,750
mosaic as a whole it's a year-long

9
00:00:28,710 --> 00:00:26,400
drifting expedition so it's involves

10
00:00:32,150 --> 00:00:28,720
people from 20 different nations about

11
00:00:35,510 --> 00:00:32,160
600 scientists it's a huge massive

12
00:00:37,670 --> 00:00:35,520
effort meant to study the arctic as a

13
00:00:40,790 --> 00:00:37,680

system not just the ice but things like

14
00:00:43,190 --> 00:00:40,800
the atmosphere the ocean biogeochemistry

15
00:00:44,389 --> 00:00:43,200
all kinds of things in a way that allows

16
00:00:47,910 --> 00:00:44,399
us to look at what's happening

17
00:00:54,950 --> 00:00:51,510
so we left tromso on september 20th

18
00:00:55,910 --> 00:00:54,960
took us 10 days or so between leaving

19
00:00:57,350 --> 00:00:55,920
port

20
00:00:58,869 --> 00:00:57,360
sailing out picking up some

21
00:01:01,110 --> 00:00:58,879
instrumentation

22
00:01:06,870 --> 00:01:01,120
and then starting to sail into the ice

23
00:01:11,350 --> 00:01:09,670
it was really difficult to find the flow

24
00:01:13,429 --> 00:01:11,360
because we needed ice that was thick

25
00:01:15,350 --> 00:01:13,439
enough to support all our equipment some

26

00:01:16,950 --> 00:01:15,360

some of it's very heavy and to do this

27

00:01:18,469 --> 00:01:16,960

safely and actually one of the big

28

00:01:20,310 --> 00:01:18,479

surprises to me

29

00:01:22,390 --> 00:01:20,320

and a lot of people on board was just

30

00:01:24,950 --> 00:01:22,400

how thin the ice was you get out on the

31

00:01:28,710 --> 00:01:24,960

ice but it's dangerous it's an alien

32

00:01:31,350 --> 00:01:28,720

landscape it's cold there's bears

33

00:01:35,109 --> 00:01:31,360

the polar bear situation was

34

00:01:38,789 --> 00:01:35,119

really interesting uh

35

00:01:41,670 --> 00:01:38,799

yeah and kind of terrifying

36

00:01:43,510 --> 00:01:41,680

when we are out on the ice and we were

37

00:01:45,670 --> 00:01:43,520

setting things up taking measurements

38

00:01:49,030 --> 00:01:45,680

the bears did come back two times when i

39

00:01:51,109 --> 00:01:49,040

was there and there there they came to

40

00:01:53,190 --> 00:01:51,119

our camp and they were doing things like

41

00:01:54,710 --> 00:01:53,200

messing with the equipment and and going

42

00:01:56,149 --> 00:01:54,720

through our site so there it was

43

00:01:57,910 --> 00:01:56,159

different because they're they're

44

00:01:59,830 --> 00:01:57,920

they're more on the turf that we had set

45

00:02:01,830 --> 00:01:59,840

up you know this is our turf now and now

46

00:02:07,990 --> 00:02:01,840

they're they're coming in and i could

47

00:02:11,910 --> 00:02:10,469

so we were very isolated on the the

48

00:02:12,949 --> 00:02:11,920

polar stern and

49

00:02:19,350 --> 00:02:12,959

we

50

00:02:21,190 --> 00:02:19,360

kilobytes a message

51
00:02:22,869 --> 00:02:21,200
it was a big change for me and a lot of

52
00:02:24,710 --> 00:02:22,879
people a lot of people

53
00:02:26,470 --> 00:02:24,720
said you know after a week or so i

54
00:02:27,830 --> 00:02:26,480
didn't miss it anymore i was one of

55
00:02:29,510 --> 00:02:27,840
those people i

56
00:02:32,229 --> 00:02:29,520
really appreciated

57
00:02:38,550 --> 00:02:32,239
being a bit more isolated for a while

58
00:02:42,710 --> 00:02:40,470
doing field work like this

59
00:02:45,030 --> 00:02:42,720
brought me right there to the ice

60
00:02:46,309 --> 00:02:45,040
when i do my research i use data like

61
00:02:48,550 --> 00:02:46,319
this from

62
00:02:50,309 --> 00:02:48,560
the the data that's taken up close on

63
00:02:51,910 --> 00:02:50,319

the ice sometimes that's the only way to

64

00:02:53,830 --> 00:02:51,920

get information on the ice things like

65

00:02:56,630 --> 00:02:53,840

how dense is the ice or how dense is the

66

00:02:58,869 --> 00:02:56,640

snow you can't do this remotely

67

00:03:01,190 --> 00:02:58,879

but we can use this to do calibration

68

00:03:02,790 --> 00:03:01,200

and validation of icesat-2 over the

69

00:03:05,190 --> 00:03:02,800

course of the year so this is valuable

70

00:03:07,910 --> 00:03:05,200

for improving the the retrieval

71

00:03:09,830 --> 00:03:07,920

techniques that we use for iceset 2.

72

00:03:11,750 --> 00:03:09,840

for me to be on the ground and get that

73

00:03:14,309 --> 00:03:11,760

different look at the the ice and the

74

00:03:17,750 --> 00:03:14,319

surface it just helps me as a scientist

75

00:03:18,470 --> 00:03:17,760

come up with new ideas and to inspire me

76

00:03:20,470 --> 00:03:18,480

to

77

00:03:22,710 --> 00:03:20,480

use the data that i have and then think