1
00:00:05,090 --> 00:00:10,250
[Michael Studinger] I'm Michael Stundinger and I'm the

2
00:00:10,270 --> 00:00:15,300
project scientist for Operation IceBridge.

3
00:00:15,320 --> 00:00:20,440
[music] In the particular upcoming campaign, we will focus on

4
00:00:20,460 --> 00:00:25,630
measuring ice surface elevations over Antarctica with a laser scanner

5
00:00:25,650 --> 00:00:30,740
we have mounted on the DC-8 aircraft. And we will also look into measuring

6
00:00:30,760 --> 00:00:35,930
the surface elevation and surface characteristics of the sea ice that surrounds

7
00:00:35,950 --> 00:00:41,000
Antarctica and the Southern Ocean. Since we have this opportunity with a big aircraft

8
00:00:41,020 --> 00:00:46,130
that can carry many different instruments that not only measure the ice surface

9
00:00:46,150 --> 00:00:51,320
but we have also ice-penetrating radar instruments on the aircraft that

10
00:00:51,340 --> 00:00:56,420
allow us to actually look through the ice and find out how thick the ice is over the interior of Antarctica.

11
00:00:56,440 --> 00:01:01,610
This is something we need to know in great detail in order to

12
00:01:01,630 --> 00:01:06,670
have better ice sheet models that will allow us to characterize how much sea level

13
00:01:06,690 --> 00:01:11,810

will rise in the next decades.

14
00:01:11,830 --> 00:01:16,990
About the time we started flying in Antarctica last year in October, ICESat

15
00:01:17,010 --> 00:01:22,100
stopped collecting data. The follow-up mission, ICESat-II, will launch

16
00:01:22,120 --> 00:01:27,280
in 2015. In order to fill this gap, NASA

17
00:01:27,300 --> 00:01:32,350
has launched Operation IceBridge. We're looking back through ten years

18
00:01:32,370 --> 00:01:37,490
of weather history to come up with a certain estimate of how many flights, depending on