1
00:00:00,040 --> 00:00:04,050
[music]

2
00:00:04,070 --> 00:00:08,090
Operation IceBridge is heading back out into the Arctic.

3
00:00:08,110 --> 00:00:12,230
For the next 10 weeks we'll be flying our NASA aircraft over the Arctic sea ice,

4
00:00:12,250 --> 00:00:16,260
over the Greenland Ice sheet, and over some of that ice sheet's most interesting

5
00:00:16,280 --> 00:00:20,270
and dynamic outlet glaciers – Petermann, Helheim, Jacobshavn, and Kangerlussuak.

6
00:00:20,290 --> 00:00:24,280
We'll also be taking a good look at the Canadian Ice Caps,

7
00:00:24,300 --> 00:00:28,290
which like their larger ice sheet counterparts are expected to make

8
00:00:28,310 --> 00:00:32,350
significant contributions to sea level rise.

9
00:00:32,370 --> 00:00:36,530
For the Arctic 2011 Campaign, IceBridge will be flying two different aircraft.

10
00:00:36,550 --> 00:00:40,710
Our PB aircraft will be flying the most sophisticated suite of instruments

11
00:00:40,730 --> 00:00:44,730
that has flown in the polar regions.

12
00:00:44,750 --> 00:00:48,800
The B-200 aircraft will be flying high at 28,000 feet.

13
00:00:48,820 --> 00:00:52,820

It will carry a single laser altimeter that has a large swath width

14
00:00:52,840 --> 00:00:56,870
to monitor large areas of elevation change

15
00:00:56,890 --> 00:01:00,920
in southern Greenland.

16
00:01:00,940 --> 00:01:04,960
Combined these instruments tell us important things about sea ice thickness as well as

17
00:01:04,980 --> 00:01:09,000
changes in the ice sheets and ice dynamics.

18
00:01:09,020 --> 00:01:13,100
As always this mission will continue the NASA elevation

19
00:01:13,120 --> 00:01:17,170
data sets over the polar regions.

20
00:01:17,190 --> 00:01:21,240
They started with ICESat, continue with IceBridge, and will finish with ICESat II

21
00:01:21,260 --> 00:01:25,280
creating a 17-year time series.

22
00:01:25,300 --> 00:01:29,340
This year we will also be tying in more to the CryoSat-2 satellite elevation

23
00:01:29,360 --> 00:01:33,390
measurements that are gathered by our European partners.

24
00:01:33,410 --> 00:01:37,450
We will be doing this by overflying ground validation sites

25
00:01:37,470 --> 00:01:41,640
on both the Greenland ice sheet as well as over Arctic sea ice.