



1

00:00:00,020 --> 00:00:04,180

Flying low through glacier valleys like these in southeast Greenland

2

00:00:04,200 --> 00:00:08,370

is one way that researchers with NASA's Operation IceBridge

3

00:00:08,390 --> 00:00:12,550

study these massive rivers of ice. In this video

4

00:00:12,570 --> 00:00:16,720

from a camera mounted in the cockpit, we see what IceBridge's pilots see

5

00:00:16,740 --> 00:00:21,260

as they fly the P-3B airborne laboratory over the glacier's main flow line.

6

00:00:21,280 --> 00:00:25,480

While rugged mountains pass by on both sides,

7

00:00:25,500 --> 00:00:29,660

IceBridge scientists use onboard laser, radar and camera instruments

8

00:00:29,680 --> 00:00:33,850

to measure ice surface elevation and thickness and map the shape

9

00:00:33,870 --> 00:00:38,020

of the glacier valley below. The view from the P-3 soon changes

10

00:00:38,040 --> 00:00:42,200

as the glacier empties into a fjord and then the open ocean.

11

00:00:42,220 --> 00:00:46,360

Steep valley walls

12

00:00:46,380 --> 00:00:50,720

and jagged rocks give way to broad horizons, solid and broken sea ice and,

13

00:00:50,740 --> 00:00:54,890

frequently, icebergs that had previously calved,

14

00:00:54,910 --> 00:00:58,920

or broken off, of the glacier.

15

00:00:58,940 --> 00:01:03,050

Returning from the ocean, we see an ice-choked

16

00:01:03,070 --> 00:01:07,190

end abruptly at the calving front of another glacier, and the many

17

00:01:07,210 --> 00:01:11,290

crevasses in the ice that indicate the glacier's flow toward the sea.