



1

00:00:00,080 --> 00:00:04,220

[music] Buried under a mile of ice,

2

00:00:04,240 --> 00:00:08,240

it's never been seen by human eyes.

3

00:00:08,260 --> 00:00:12,270

But using ice-penetrating radar, scientists have discovered a giant canyon

4

00:00:12,290 --> 00:00:16,280

carved into Greenland's bedrock.

5

00:00:16,300 --> 00:00:20,290

More than 400 miles long and up to a half mile deep, shown here as the dark brown groove

6

00:00:20,310 --> 00:00:24,290

in the center of the island, the canyon is thought to pre-date

7

00:00:24,310 --> 00:00:28,340

Greenland's massive ice sheet.

8

00:00:28,360 --> 00:00:32,350

The hidden feature was discovered by a team led by the University of Bristol,

9

00:00:32,370 --> 00:00:36,360

using radar data from a number of airborne campaigns from

10

00:00:36,380 --> 00:00:40,550

the United Kingdom and Germany, and a NASA mission

11

00:00:40,570 --> 00:00:44,600

called Operation IceBridge, which surveys this region with

12

00:00:44,620 --> 00:00:48,600

a range of different instruments every year to monitor changes in the Greenland Ice Sheet.

13

00:00:48,620 --> 00:00:52,640

From the interior of Greenland,

14  
00:00:52,660 --> 00:00:56,650  
the canyon snakes around up to the fjord of the

15  
00:00:56,670 --> 00:01:00,740  
Petermann Glacier on the northern coast, and researchers suspect it may

16  
00:01:00,760 --> 00:01:04,740  
play a major role in transporting melt water below the ice