1
00:00:00,000 --> 00:00:03,140
[MUSIC]

2
00:00:03,140 --> 00:00:06,680
Every year, climbers travel to the Himalayan
mountains in hopes

3
00:00:06,680 --> 00:00:09,360
of celebrating at the top of the world.

4
00:00:11,220 --> 00:00:14,620
Sometimes referred to our planet's ‘third
pole’, this region

5
00:00:14,620 --> 00:00:18,040
holds some of the world’s most iconic and challenging terrain.

6
00:00:23,720 --> 00:00:26,220
However, this landscape is changing.

7
00:00:26,800 --> 00:00:29,760
Many of the glaciers on popular trekking routes have retreated

8
00:00:29,820 --> 00:00:33,080
and given rise to new and larger glacial lakes.

9
00:00:33,080 --> 00:00:37,720
Which typically form when glacial meltwater
is blocked by ice dams or glacial sediment.

10
00:00:40,700 --> 00:00:43,100
And worldwide, retreating glaciers have led to

11
00:00:43,100 --> 00:00:46,240
an increase in the number and size of these glacial lakes.

12
00:00:48,740 --> 00:00:54,560
Researchers, supported by NASA's High Mountain Asia Program, used new supercomputing abilities

13
00:00:54,560 --> 00:00:57,680
and hundreds of thousands of Landsat satellite images

14
00:00:57,680 --> 00:01:00,760
to catalogue and analyze three decades'

15
00:01:00,760 --> 00:01:05,200
worth of glacial lake boundaries in the first-ever global study of its kind.

16
00:01:07,470 --> 00:01:13,320
The study found that, during that period, global
glacial lake volume increased ~48%.

17
00:01:16,400 --> 00:01:20,540
The analysis concluded that, worldwide,
smaller glacial lakes were growing at a more

18
00:01:20,540 --> 00:01:25,900
rapid pace, and that lakes were occurring at
higher elevations than previously documented.

19
00:01:29,660 --> 00:01:33,660
This new assessment is a critical component
to understanding how these growing lakes may

20
00:01:33,660 --> 00:01:39,360
impact tourism, elevate hazard risk, and affect
infrastructure for the communities living downstream.

21
00:01:41,360 --> 00:01:43,600
And bring us one step closer to understanding