

IS POLAR ICE MELTING?



1
00:00:01,501 --> 00:00:03,603
Is polar ice melting?

2
00:00:07,707 --> 00:00:06,943
NASA

3
00:00:08,141 --> 00:00:10,377
The simple and straightforward answer is yes.

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00:00:10,377 --> 00:00:11,978
It is, in fact, melting.

5
00:00:11,978 --> 00:00:14,047
But it's a bit more complicated than that.

6
00:00:14,080 --> 00:00:19,586
You can think of ice sheets or Antarctica
and Greenland as a bathtub full of water.

7
00:00:19,619 --> 00:00:23,590
And we want to know how much is going into
that bathtub and how much is coming out.

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00:00:23,590 --> 00:00:27,527
So, for instance, snow falling over
the ice sheet is like running the faucet.

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00:00:27,560 --> 00:00:30,563
You turn on the faucet,
it fills up with water, and then melting

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00:00:30,563 --> 00:00:34,367
when you get a warm atmosphere
or a warm ocean, it's opening up the drain

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00:00:34,367 --> 00:00:36,903
and letting water out. So it's not just about melting.

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00:00:37,137 --> 00:00:40,840

It's also about how much snow falls
and what the balance is there.

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00:00:40,840 --> 00:00:46,880

At NASA, we are able to monitor both Antarctica
and Greenland really easily from space.

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00:00:47,213 --> 00:00:49,215

And we have satellite lasers

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00:00:49,215 --> 00:00:52,452

that actually measure the thickness of the ice through time.

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00:00:52,452 --> 00:00:56,022

And so we can actually monitor where the ice sheets

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00:00:56,022 --> 00:00:59,426

are thinning and most rapidly losing mass into the ocean.

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00:00:59,459 --> 00:01:02,295

So, is polar ice melting? The answer is yes.

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00:01:02,295 --> 00:01:06,599

And at present it is the number one contributor to sea level rise.

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00:01:06,800 --> 00:01:09,035

And that's why NASA has scientists like myself

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00:01:09,035 --> 00:01:12,605

studying the relationship between ice sheets and sea level every day.