

Human Influence on Global Droughts Goes Back 100 Years

Tree Ring



Dry year

Wet year

1

00:00:00,520 --> 00:00:04,010

Ancient trees are revealing new findings about human-caused drought

2

00:00:05,580 --> 00:00:10,650

NASA has only been studying soil moisture from space since 1980

3

00:00:12,020 --> 00:00:14,370

Which meant that scientists needed an older,

4

00:00:14,370 --> 00:00:17,710

but reliable record to understand our past climate

5

00:00:18,500 --> 00:00:23,340

Researchers can use tree data to map droughts as far back as 1400

6

00:00:23,340 --> 00:00:25,930

The result?

7

00:00:25,930 --> 00:00:28,770

We now know that greenhouse gases caused by humans

8

00:00:28,770 --> 00:00:32,860

have been affecting global drought since the early 20th century

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00:00:32,860 --> 00:00:35,190

How do we know?

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00:00:35,190 --> 00:00:38,490

Tree ring data is amazingly accurate

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00:00:38,490 --> 00:00:46,570

The rings are thinner in years when it's dry and may not grow at all in stressful conditions like drought

12

00:00:48,590 --> 00:00:57,340

Look Closer: Signal for human-caused climate change

13

00:00:58,680 --> 00:01:02,300

This is the first study to provide historical evidence connecting human-generated emissions

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00:01:02,300 --> 00:01:06,190

and drought at near-global scales between 1900 and 2005.

15

00:01:07,000 --> 00:01:10,610

Together, modern soil moisture measurements and tree ring-based records