

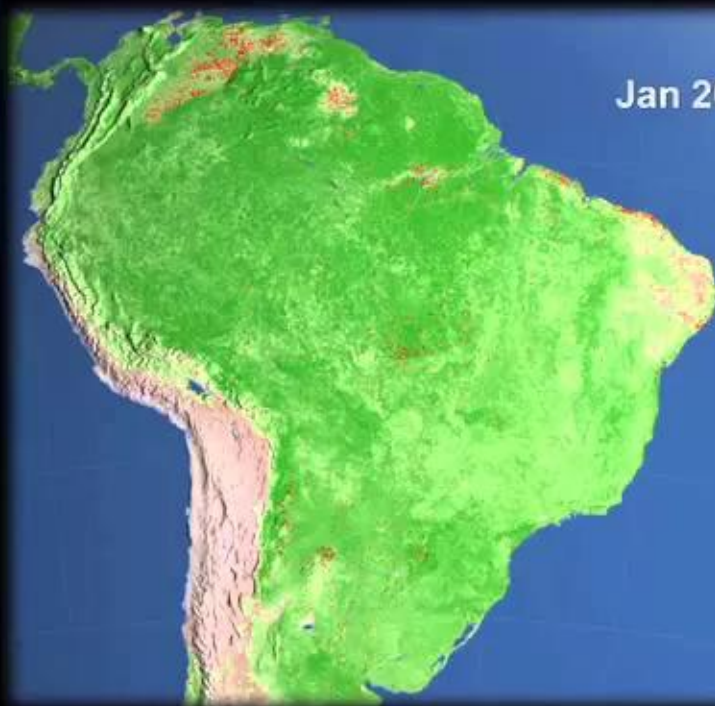
Jan 2005



Jan 2010



Jan 2007



1
00:00:00,000 --> 00:00:07,430

[Music]

2
00:00:07,450 --> 00:00:14,120

So the approach that we took was to look carefully at sea surface temperatures in the Atlantic and in the Pacific

3
00:00:14,140 --> 00:00:20,990

and to relate those to patterns of fires observed by NASA satellites over the last decade. And what we found was

4
00:00:21,010 --> 00:00:24,360

sea surface temperatures in the Pacific and in the Atlantic

5
00:00:24,380 --> 00:00:33,400

provide an early warning of the intensity or severity of the fire season in many important fire regions in South America

6
00:00:33,420 --> 00:00:36,830

Specifically, during years where sea surface temperatures were warmer,

7
00:00:36,850 --> 00:00:42,380

we found greater rates of fire activity about six months later during the peak fire season.

8
00:00:42,400 --> 00:00:46,280

So for example in 2005, 2007 and 2010,

9
00:00:46,300 --> 00:00:58,430

these were years where the Pacific and the North Atlantic were anomalously warm and approximately six months

10
00:00:58,450 --> 00:01:01,970

Our empirical model that we developed actually enables for

11
00:01:01,990 --> 00:01:09,080

predictions of fire activity with about a four-to-six month lead-time in many important fire regions in South America

12
00:01:09,100 --> 00:01:17,440

This is important because fires in South America contribute to forest degradation and carbon losses that contribute