



1  
00:00:02,290 --> 00:00:03,940  
New NASA satellite images

2  
00:00:03,960 --> 00:00:06,020  
provide a dramatic view from space

3  
00:00:06,040 --> 00:00:07,970  
of Brazil's ongoing drought.

4  
00:00:08,830 --> 00:00:12,000  
Scientists have observed changes to Brazil's water levels

5  
00:00:12,020 --> 00:00:16,270  
using NASA's GRACE satellites since their launch in 2002.

6  
00:00:16,930 --> 00:00:19,970  
This data visualization created from satellite measurements

7  
00:00:19,990 --> 00:00:23,440  
shows how Brazil's water levels have varied over time.

8  
00:00:23,460 --> 00:00:27,980  
Red and orange are areas with water losses; blues are gains.

9  
00:00:28,370 --> 00:00:30,710  
Current losses are centered in eastern Brazil,

10  
00:00:30,730 --> 00:00:35,420  
home to two of the country's largest cities: Sao Paulo and Rio de Janeiro.

11  
00:00:36,500 --> 00:00:41,180  
Eastern Brazil has been on this recent roller coaster of dry and wet periods.

12  
00:00:41,200 --> 00:00:45,070  
GRACE satellite data shows a dry period in the early 2000s,

13  
00:00:45,090 --> 00:00:46,910

followed by a wet period,

14

00:00:46,930 --> 00:00:50,720

and then another dry period that has led to the current drought.

15

00:00:51,390 --> 00:00:52,350

Among other factors,

16

00:00:52,370 --> 00:00:56,770

lack of rainfall has contributed to the dry conditions in eastern Brazil.

17

00:00:56,790 --> 00:01:01,110

Since 2012, eastern Brazil has experienced water losses

18

00:01:01,130 --> 00:01:04,120

averaging 28 trillion gallons per year.

19

00:01:04,140 --> 00:01:07,310

The prolonged drought has not only lead to these losses,

20

00:01:07,330 --> 00:01:11,640

but it has disrupted many of the country's electricity and water resources.

21

00:01:11,930 --> 00:01:14,370

Brazil has an extensive network of rivers

22

00:01:14,390 --> 00:01:16,350

that feed into reservoirs and dams,

23

00:01:16,370 --> 00:01:18,970

which generate more than 75 percent

24

00:01:18,990 --> 00:01:21,340

of the country's electrical power supply.

25

00:01:22,060 --> 00:01:23,880

A number of Brazil's reservoirs have reached

26

00:01:23,900 --> 00:01:27,180

their lowest water levels since 2005,

27

00:01:27,200 --> 00:01:31,900

including Itaipu, one of the world's largest hydroelectric power stations.

28

00:01:31,920 --> 00:01:34,970

Using satellites, we'll continue to monitor the region