



1
00:00:00,050 --> 00:00:05,190
Farming data from space: where water flows and crops grow

2
00:00:05,210 --> 00:00:11,310
NASA's fleet of satellites helps scientists track water use from space.

3
00:00:11,330 --> 00:00:17,430
This allows scientists to see how irrigation changes over the years,

4
00:00:19,700 --> 00:00:24,020
calculate how much water is used to irrigate crops,

5
00:00:25,340 --> 00:00:27,380
Scientists can even monitor changes in rain

6
00:00:27,400 --> 00:00:29,480
snowfall,

7
00:00:29,500 --> 00:00:31,980
and soil moisture

8
00:00:32,000 --> 00:00:37,490
to estimate how our water supply shifts from year to year.

9
00:00:39,810 --> 00:00:45,480
This information helps farmers grow more crops with less water.

10
00:00:48,860 --> 00:00:53,380
With Landsat's 48 years of agricultural data, scientists can predict yield for crops like

11
00:00:53,400 --> 00:00:54,980
Cotton

12
00:00:55,000 --> 00:00:56,880
Rice

13
00:00:56,900 --> 00:00:59,080

Soy

14

00:00:59,100 --> 00:01:00,180

Corn

15

00:01:00,200 --> 00:01:03,980

Wheat

16

00:01:05,400 --> 00:01:12,130

Even though the Landsat satellites orbit 438 miles above the Earth,

17

00:01:12,150 --> 00:01:19,980

farmers can analyze individual fields to figure out when crops will be ready to harvest.

18

00:01:20,000 --> 00:01:21,630

Red areas peak early,

19

00:01:21,650 --> 00:01:23,830

blue areas peak late.

20

00:01:26,810 --> 00:01:29,480

With Landsat data, we can learn about the Earth