



EAST

SOUTH

1

00:00:00,420 --> 00:00:05,920

NASA is sending a new Earth-research spacecraft into orbit to measure and map the moisture

2

00:00:05,920 --> 00:00:08,330

within our planet's soil.

3

00:00:08,330 --> 00:00:14,000

The Soil Moisture Active Passive mission will use remote-sensing instruments to create global

4

00:00:14,000 --> 00:00:19,850

maps of Earth's soil moisture – helping us better understand water and carbon cycles.

5

00:00:19,850 --> 00:00:25,630

SMAP will get a boost into polar orbit aboard a United Launch Alliance Delta II rocket launching

6

00:00:25,630 --> 00:00:28,510

from Vandenberg Air Force Base in California.

7

00:00:29,580 --> 00:00:35,960

The first stage of the Delta II pulled into Building 836 on July 23, 2014.

8

00:00:36,520 --> 00:00:41,460

It was offloaded and moved to the Horizontal Processing Facility at the launch site.

9

00:00:41,469 --> 00:00:46,359

On August 4, 2014, the first stage moved out to the Mobile Service Tower at Space Launch

10

00:00:46,359 --> 00:00:52,139

Complex 2. A crane lifted the booster into the vertical position, then the interstage

11

00:00:52,139 --> 00:00:54,959

adapter was installed on the top.

12
00:00:54,959 --> 00:01:00,209
The rocket's three solid rocket motors were attached to the first stage on August 18,

13
00:01:00,209 --> 00:01:03,159
and two days later, the booster was topped with the second stage.

14
00:01:04,280 --> 00:01:10,260
Once inside Astrotech, SMAP was put through a series of inspections and tests to ensure it's ready

15
00:01:10,270 --> 00:01:13,640
to perform during its three-year mission.

16
00:01:13,640 --> 00:01:18,320
The spacecraft wrapped up its preflight processing in mid-November.

17
00:01:18,320 --> 00:01:23,880
Final preparations began in the new year. SMAP was joined to its launch vehicle hardware

18
00:01:23,880 --> 00:01:29,729
on January 7, and during the following days, it was bagged in a protective cover and placed

19
00:01:29,729 --> 00:01:33,749
into a canister for the move to Space Launch Complex 2.

20
00:01:33,749 --> 00:01:38,960
The observatory was transferred to the launch complex and hoisted into place atop the Delta

21
00:01:38,960 --> 00:01:44,200
II rocket on January 13, and secured inside the protective payload fairing

22
00:01:44,200 --> 00:01:45,220

later the next week.