



1
00:00:01,050 --> 00:00:06,670

A first-of-its-kind mission to study a fundamental driver of space weather soon will take flight

2
00:00:06,670 --> 00:00:10,420

from Cape Canaveral Air Force Station in Florida.

3
00:00:10,420 --> 00:00:17,000

NASA's Magnetospheric Multiscale mission, or MMS, consists of a foursome of observatories

4
00:00:17,000 --> 00:00:23,880

that will fly in tight formation to provide a three-dimensional view of magnetic reconnection.

5
00:00:23,880 --> 00:00:29,890

The MMS spacecraft will get a boost into orbit by a powerful United Launch Alliance Atlas

6
00:00:29,890 --> 00:00:31,090

V rocket.

7
00:00:32,329 --> 00:00:38,289

Preparations for the launch began in late October 2014 when MMS was delivered by truck

8
00:00:38,289 --> 00:00:44,249

to the Astrotech payload processing facility in Titusville, Florida, near Kennedy Space Center.

9
00:00:45,429 --> 00:00:52,429

Their protective coverings were removed, revealing two pairs of observatories or "mini-stacks."

10
00:00:52,890 --> 00:00:58,999

The Atlas V booster and Centaur upper stage arrived at Port Canaveral aboard ULA's Delta

11
00:00:58,999 --> 00:01:02,359

Mariner specialized cargo ship December 18.

12
00:01:04,230 --> 00:01:09,220
They were transported to the hangar at the
Atlas V Spaceflight Operations Center at Cape

13
00:01:09,220 --> 00:01:10,820
Canaveral Air Force Station.

14
00:01:12,510 --> 00:01:18,040
Solar array illumination testing on the MMS
spacecraft was wrapped up and the two mini-stacks

15
00:01:18,040 --> 00:01:20,060
were fueled in mid-January.

16
00:01:22,010 --> 00:01:28,260
Assembly of the rocket at Space Launch Complex
41 began February 4 when the first stage was

17
00:01:28,260 --> 00:01:34,370
hoisted into position inside the Vertical
Integration Facility. The rocket's two solid-fuel

18
00:01:34,370 --> 00:01:38,410
motors were installed in the following days.

19
00:01:38,410 --> 00:01:45,350
Up next was the Centaur, added on February
12. Around the same time, the MMS lower stack

20
00:01:45,350 --> 00:01:48,940
was attached to the Atlas V payload adapter.

21
00:01:48,940 --> 00:01:55,940
MMS came together on February 16 with the
build-up of the upper and lower mini-stacks.

22
00:01:57,630 --> 00:02:03,170

At this point the spacecraft were configured for launch, paving the way for encapsulation

23
00:02:03,170 --> 00:02:07,050
inside the two-piece payload fairing on February 23.

24
00:02:08,460 --> 00:02:15,120
Finally, MMS took the last leg of its journey on Earth: an early morning move from Astrotech

25
00:02:15,120 --> 00:02:17,580
to Space Launch Complex 41.