NASA's MMS spacecraft begin pre-launch activities in Florida

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A NASA truck carrying the last two of four MMS spacecraft arrives at Astrotech Space Operations in Florida. All four spacecraft will undergo pre-launch tests before being stacked inside an Atlas V launch vehicle fairing. Credit: NASA

NASA's second mini-stack of two Magnetospheric Multiscale, or MMS, observatories arrived Nov. 12, 2014, in Florida to begin launch preparations. All four MMS observatories will go through a host of pre-launch activities.

In the coming months, engineers at Astrotech will conduct extensive final testing, fueling, remove protective covers from the 100 sensors and stack all four spacecraft prior to placing them inside the nose cone of the launch vehicle. The spacecraft stack will be transported to the Atlas launch complex about 10 days before liftoff.

MMS is scheduled for launch on March 12, 2015 from Cape Canaveral Air Force Station, Florida, on an Atlas V 421 launch vehicle.

MMS will help solve the mystery of how magnetic fields around Earth connect and disconnect, explosively releasing energy via a process called magnetic reconnection. This mission will provide the first three-dimensional views of this fundamental process that occurs throughout our universe.

During its two-year prime mission, key sensors on each of the four MMS spacecraft will take measurements of the space environment 100 times faster than any previous mission, providing much needed data about how magnetic reconnection works in near-Earth space.

MMS is the fourth mission in NASA's Solar Terrestrial Probes, or STP, program.

Provided by NASA