

Launch madness at Wallops in March - '5 in 5'

March 5 2012



The map of the mid-Atlantic region of the US shows the projected area where the rockets may be visible while the motors are burning through flight. It also shows the flight profile of each of the five rockets. Credit: Credit: NASA/Wallops

Launch madness will hit the east coast in March as NASA launches five rockets in approximately five minutes to study the high-altitude jet stream from its Wallops Flight Facility in Virginia.

The Anomalous Transport Rocket Experiment (ATREX) is a Heliophysics [sounding rocket](#) mission that will gather information needed to better understand the process responsible for the high-altitude jet stream located 60 to 65 miles above the surface of the Earth.

The high-altitude jet stream is higher than the one commonly reported in [weather forecasts](#). The winds found in this upper jet stream typically have speeds of 200 to well over 300 mph and create rapid transport from

the Earth's mid latitudes to the polar regions. This jet stream is located in the same region where strong electrical currents occur in the ionosphere. It is therefore a region with a lot of electrical turbulence, of the type that can adversely affect satellite and [radio communications](#).

The sounding rockets being used for the mission are two Terrier-Improved Malemutes , two Terrier-Improved Orions and one Terrier-Oriole.

The five rockets will release a chemical tracer that will form milky, white tracer clouds that allow scientists and the public to "see" the winds in space. In addition, two of the rockets will have instrumented payloads, to measure the pressure and temperature in the atmosphere at the height of the high-speed winds.

Provided by NASA's Goddard Space Flight Center

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