NASA selects launch contractor for three missions

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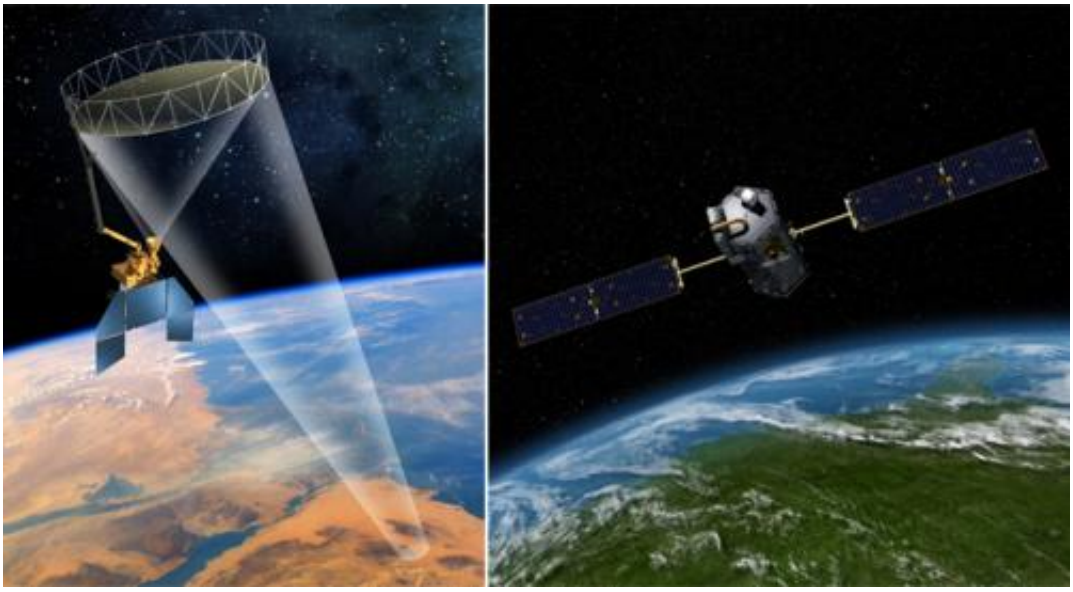

Artist's concepts of NASA's Soil Moisture Active Passive (left) and Orbiting Carbon Observatory 2 (right) spacecraft. Credit: NASA/JPL-Caltech

(Phys.org) -- NASA has selected United Launch Services LLC of Englewood, Colo., to launch the Soil Moisture Active Passive (SMAP), Orbiting Carbon Observatory-2 (OCO-2) and Joint Polar Satellite System-1 (JPSS-1) spacecraft. The spacecraft will launch in October 2014, July 2014 and November 2016, respectively, aboard Delta II rockets from Complex 2 at Vandenberg Air Force Base in California. NASA's Jet Propulsion Laboratory, Pasadena, Calif., manages the SMAP and OCO-2 missions for NASA.

The total value for the SMAP, OCO-2 and JPSS-1 launch services is approximately $412 million. This estimated cost includes the task-ordered launch service for the Delta II plus additional services under other contracts for payload processing, launch vehicle integration, mission-unique launch site ground support and tracking, data and telemetry services.

SMAP will provide global measurements of soil moisture and its freeze-thaw state. These measurements will enhance understanding of processes that link Earth's water, energy and carbon cycles. SMAP will extend current capabilities in weather and climate prediction. SMAP data will be used to develop improved flood prediction and drought monitoring capabilities.

OCO-2 will study and make time-dependent global measurements of atmospheric carbon dioxide. It will provide the first complete picture of human and natural carbon dioxide sources and "sinks," the places where the gas is pulled out of the atmosphere and stored. The observatory's high-resolution measurements will help scientists better understand the processes that regulate atmospheric carbon dioxide.

JPSS-1 is the successor to the Suomi-National Polar Partnership (NPP) spacecraft, which was launched in October 2011 as a joint mission between NASA and the National Oceanic and Atmospheric Administration (NOAA) and operated by the JPSS Program. The JPSS Program is the former National Polar-orbiting Operational Environmental Satellite System Program. The JPSS system includes the satellite's sensors and ground system supporting civil weather, climate measurements and data sharing with other U.S. agencies and international partners.

JPSS-1 will make afternoon observations as it orbits Earth, providing continuity of critical data and imagery observations for accurate weather

forecasting, reliable severe storm outlooks and global measurements of atmospheric and oceanic conditions such as sea surface temperatures and ozone. JPSS-1 will increase the timeliness, accuracy and cost-effectiveness of public warnings and forecasts of weather, climate and other environmental events, reducing the potential loss of human life and property.

NOAA is responsible for the JPSS Program and the JPSS-1 mission. NASA is the program's procurement agent. The agency's Goddard Space Flight Center in Greenbelt, Md., is the lead for acquisition.

NASA's Launch Services Program at Kennedy Space Center is responsible for launch vehicle program management of the SMAP, OCO-2 and JPSS-1 launch services.

For more information about SMAP, visit: smap.jpl.nasa.gov/ . For more information on OCO-2, visit: oco.jpl.nasa.gov/ and www.nasa.gov/mission_pages/oco/main/index.html.

Provided by NASA

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