New Products: SMAP Level 1 Radiometer Imagery Now Available through GIBS

NASA's Global Imagery Browse Services (GIBS) is your source for visualized radiometer data products from NASA's Soil Moisture Active Passive (SMAP) mission. Four Level 1 global radiometer products recently have been added to the list of Worldview active layers and can be overlain on the Worldview base image with the click of a button:

- Uncorrected Brightness Temperature
- Uncorrected Brightness Temperature Radio Frequency Interference (RFI)
- Uncorrected Brightness Temperature Quality Assurance (QA)
- Faraday Rotation Angle

All of these products are available in fore and aft views. Uncorrected Brightness Temperature products also are available in H and V polarization. Imagery for these products is available back to July 30, 2015, and is being forward processed. Earlier dates will be added when generated by SMAP's Science Data System (**Figure 1**).

Figure 1: The underlying SMAP image data can be downloaded from NASA's National Snow and Ice Data Center (NSIDC) Distributed Active Archive Center (DAAC) by clicking the Worldview "Download Data" button. Image courtesy of NASA Worldview.

SMAP launched on January 31, 2015, on a three-year mission to provide global soil moisture and freeze/thaw data. The satellite carries two instruments—an active radar and a passive radiometer. SMAP radiometer data have been processed to map microwave emissions from Earth's surface, which are expressed as brightness temperatures in degrees Kelvin. SMAP's radar began regular operations on April 13, but stopped transmitting on July 7 due to an anomaly that is still being investigated by the SMAP team at NASA's JPL.