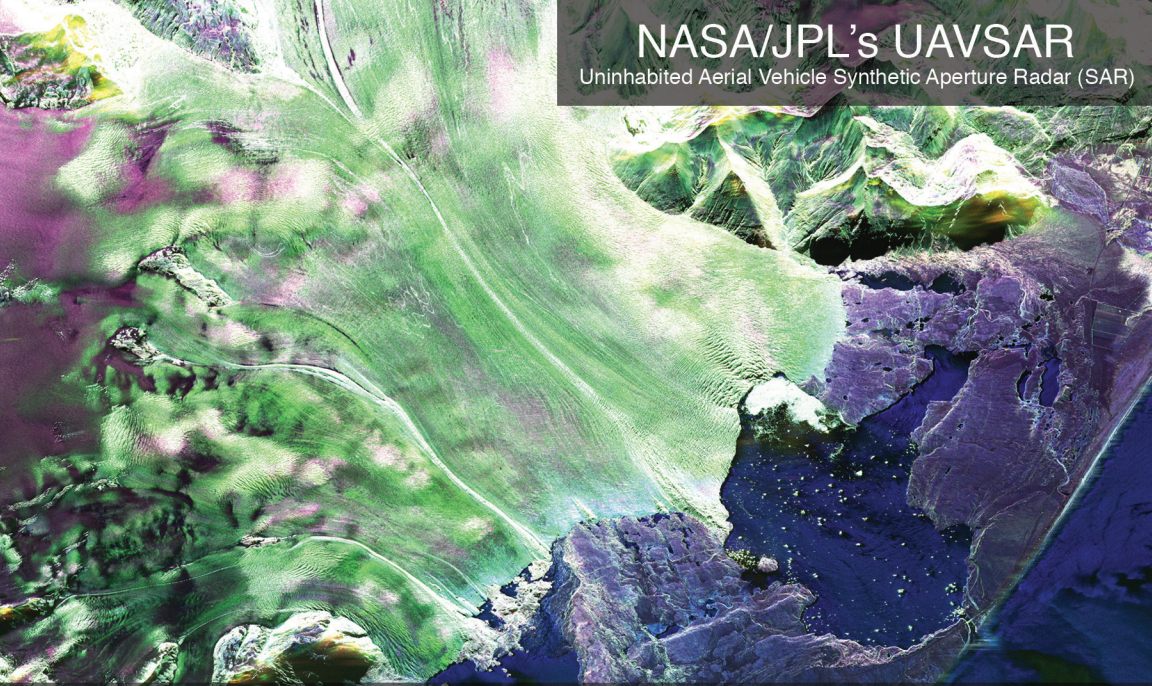
NASA/JPL's UAVSAR

Uninhabited Aerial Vehicle Synthetic Aperture Radar (SAR)



Polarimetric SAR image of Iceland's Vatnajökull Glacier (June 3, 2012)

Vatnajökull is the largest ice cap in Europe by volume, with an average ice thickness of 400 meters. Like many glaciers of Iceland, Vatnajökull has several volcanoes under it.

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Space Administration

UAVSAR is an airborne testbed to evaluate the tools and technologies for future space-based radars, such as those planned for a NASA mission currently in formulation called the Deformation, Ecosystem Structure, and Dynamics of Ice, or DESDynI.

UAVSAR is an imaging radar system that currently flies on the NASA Gulfstream III aircraft operated by NASA's Dryden Flight Research Center. Earthquakes, volcanoes, soil moisture changes, vegetation characteristics, and glaciers are among the subjects that NASA scientists are using UAVSAR data to study. Recently, the system has been upgraded to support imaging at both shorter (Ka-band) and longer (P-band) wavelengths than the current L-band (23 cm wavelength) system. Future upgrades include modifications for flight aboard a Global Hawk UAV.

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UAVSAR Website:
http://uavsar.jpl.nasa.gov

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