

A polarimetric Synthetic Aperture Radar (SAR) image of the Aleutian Islands in Alaska. The image shows a complex terrain with a prominent volcanic caldera on the left side, likely Mount Okmok. The terrain is rendered in shades of green, yellow, and red, indicating different surface properties and topography. The surrounding ocean is dark blue. The image is presented in a false-color format to highlight specific features.

NASA/JPL's UAVSAR

Uninhabited Aerial Vehicle Synthetic Aperture Radar (SAR)

Polarimetric SAR image of Alaska's Aleutian Islands (August 11, 2011)

Umnak is the third largest island in the Aleutian archipelago and its volcanic caldera on Mount Okmok contains the only field of geysers in Alaska.

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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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JPL 400-1539 9/13

