



Four Mountains Stand Out Pacific Ocean

They are called the Islands of the Four Mountains. Part of the Aleutian Island chain, these peaks are actually the upper slopes of volcanoes rising from the seafloor: Carlisle, Cleveland, Herbert, and Tana. Standing in one of the most remote reaches of the world, these volcanoes have scarcely been studied. Satellite sensing makes that easier, as this Landsat 8 image from June 2013 shows.

Herbert Island (right) is dominated by a symmetrical stratovolcano that stands in its center. The remote island has scarcely been studied, and there are no records of eruptions there. The 2-kilometer-wide summit caldera include a lake of meltwater, remnants of the snow that covers the peak for most of the year. The straight-down (nadir) satellite view can make it difficult to determine which part of the landscape stands taller than the other, a phenomenon known as relief inversion.

On the next page, you can see how a layer of low clouds and fog obscures the lower elevations of the islands and the sea surface. But these clouds also hint at the complicated airflow patterns around and through the islands.