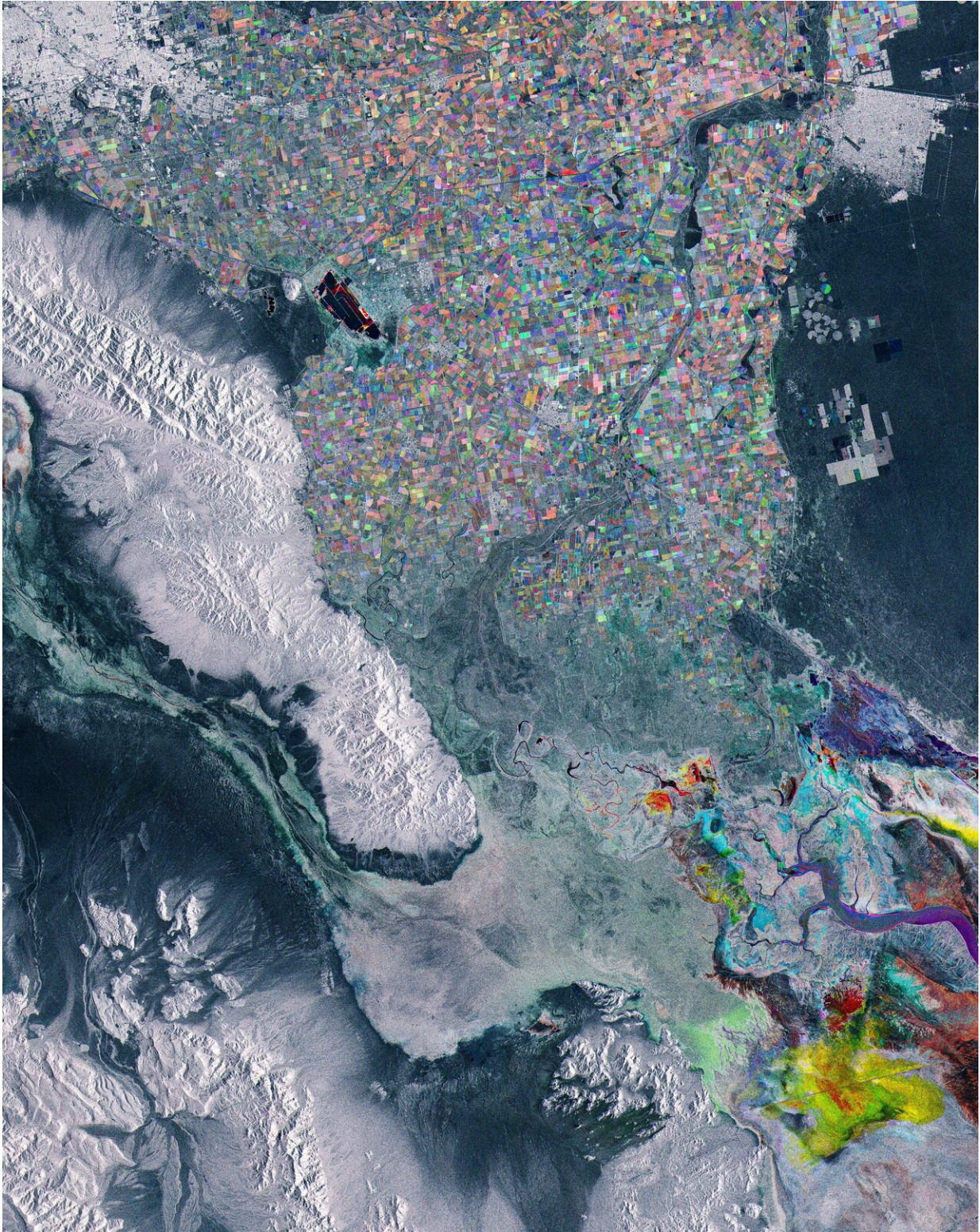


Image: Baja California

September 13 2019



Credit: contains modified Copernicus Sentinel data (2019), processed by ESA

This Copernicus Sentinel-1 image takes us just south of the US border, to the region of Baja California in northwest Mexico. Its capital city, Mexicali, is visible top left of the image.

This false color image contains three separate images overlaid on top of each other. Captured on 30 April, 12 May and 17 June, the different colors represent changes that occurred on the ground.

The Colorado River, which forms the border between Baja California and Sonora, can be seen cutting through the rich and colorful patchwork of agricultural land at the top right of the image, before it fans out and splits into multiple streams. Flowing for over 2300 km, the Colorado River rises in the central Rocky Mountains in Colorado, flows through the Grand Canyon before crossing the Mexican border and emptying into the Gulf of California, also known as the Sea of Cortez.

The Colorado River delta once covered a large area of land and, owing to its nutrients carried downstream, supported a large population of plant and bird life. However today, water that flows is trapped by dams and is used for residential use, [electricity generation](#) as well as crop irrigation for the nearby Imperial Valley and Mexicali Valley. The reduction in flow by dams and diversions traps the majority of the river's sediments before they reach the Gulf of California, impacting [water quality](#).

Copernicus Sentinel-1 is a two-satellite mission, each carrying a radar instrument that can see through clouds and rain. As a constellation of two satellites orbiting 180° apart, the mission can repeat observations every six days, which is also useful for monitoring evolving situations.

Provided by European Space Agency

Citation: Image: Baja California (2019, September 13) retrieved 20 April 2024 from

<https://phys.org/news/2019-09-image-baja-california.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.