

1. Plattsmouth, U.S.A., 2023-03-21. Data: Sentinel-2.



2. Plattsmouth, U.S.A., 2019-03-31. The valley around the Platte and the Missouri rivers is flooded, only a few infrastructure elements such as highways and dams remain dry. Data: Sentinel-2.

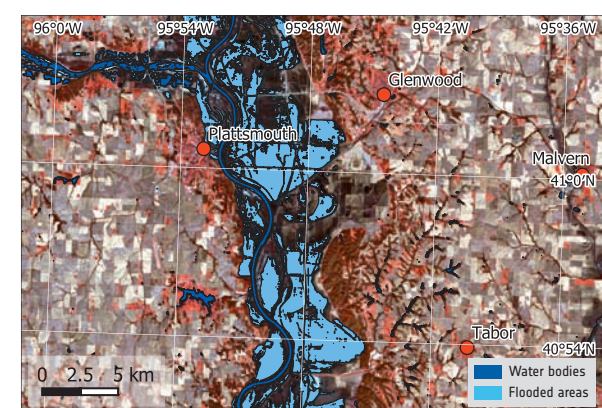
### Plattsmouth, U.S.A.

The 2019 flooding around Plattsmouth, Nebraska, was a catastrophic event that brought immense devastation to the region. Triggered by a combination of factors, including heavy rainfall and snowmelt, the flooding inundated homes, farms, and infrastructure along the Missouri River.

Climate change played a role in this event, as rising global temperatures are leading to more extreme weather patterns, with heavier precipitation and increased risk of flooding. In the case of Plattsmouth, the area experienced record-breaking rainfall, with some areas receiving over 50 cm of rain in a single month. This excessive rainfall, combined with the saturated ground from earlier precipitation, overwhelmed the river's capacity to contain water.

The flooding affected over 2,000 homes and forced the evacuation of nearly 1,000 people in the Plattsmouth area. It caused millions of dollars in damages to homes, infrastructure, and agriculture, disrupting the lives of countless residents.

Satellite images captured the dramatic expansion of the floodwaters, which swallowed entire communities and vast swaths of farmland. Moreover, the data allow for accurately estimating the affected areas and the damage caused by the flood.



3. False-colour infrared image of Plattsmouth, 2019-03-31. Overlay: water surfaces derived from satellite data. Data: Sentinel-2.



4. View of Plattsmouth during the flood.