FLOOD ANALYSIS OF THE THOMAS FLOODS USING NASA DATA

NASA/SSAI

Greenbelt, Maryland, USA By Byron Peters and Ross Bagwell

This analysis is a follow-on to the Thomas Fire analysis presented by Ross Bagwell ("Fire Analysis of the Thomas Fire in California Using NASA Data in a GIS"). The Thomas Fire and heavy rains a month later led to the historic flooding. The maps tell the story using National Aeronautic and Space Administration (NASA) Earth Observing System data in concert with Santa Clara County data.

CONTACT

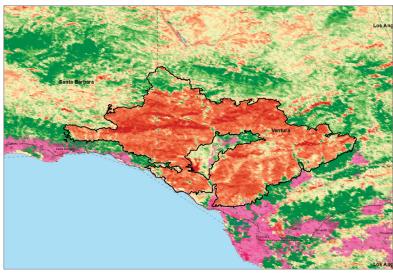
Byron Peters Byron.V.Peters@nasa.gov

SOFTWARE

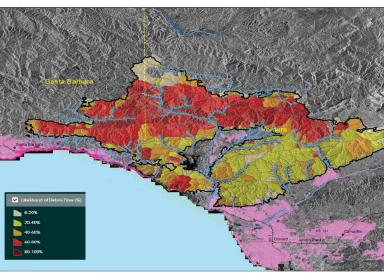
ArcGIS Desktop 10.6

DATA SOURCES

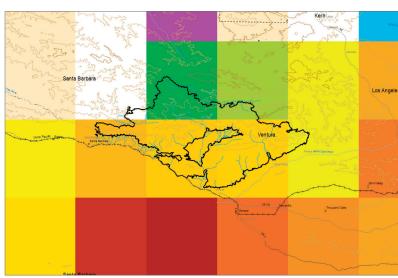
NASA Land Processes Distributed Active Archive Center, NASA Alaska Satellite Facility Distributed Active Archive Center, Santa Clara County, NASA Distributed Active Archive Centers



Enhanced Vegetation Index (EVI)



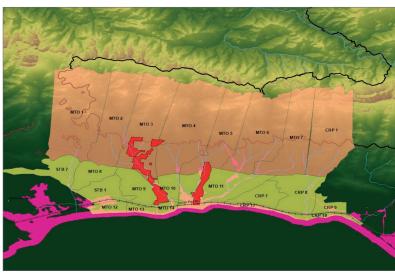
Copernicus Sentinel-1A Synthetic Aperture Radar (SAR) data



GPM Microwave Imager (GMI)

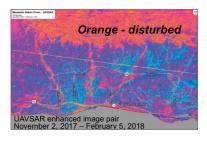


NASA Global Digital Elevation Model (GDEM)

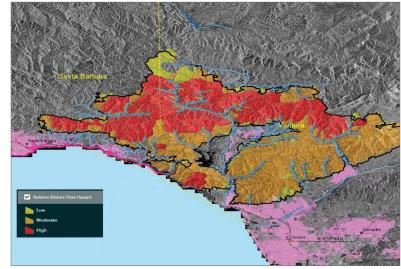


Zooming in closer to the Santa Barbara area within the NASA GDEM

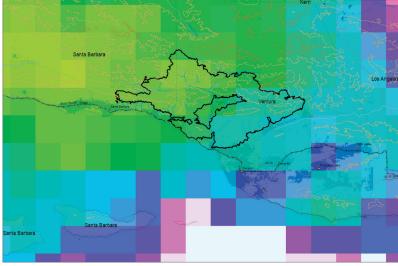




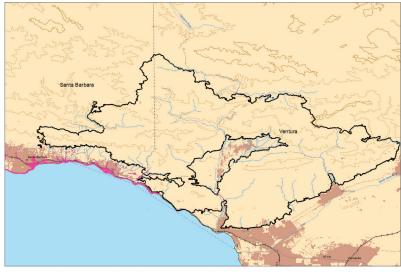




Copernicus Sentinel-1A Synthetic Aperture Radar (SAR) data



NASA IMERG data



Thomas Fire burn scar outline with major contour lines



NASA Soil Moisture Active Passive (SMAP) data