

Special Studies

GeoGateway's Special Studies tab comprises of listed products for demonstration purposes.

The study includes wildfire burn areas and debris flows imaged with UAVSAR following the Southern California 2018 Woolsey Fire shown in figure (2) below; and the 2017 Montecito, California fire, in figure (4) below. See *Donnellan et al. 2018* for more information on the Montecito, CA fire.



Figure 1: Woolsey Fire (figure adapted from courtesy of Wally Skalij from the Los Angeles Times)

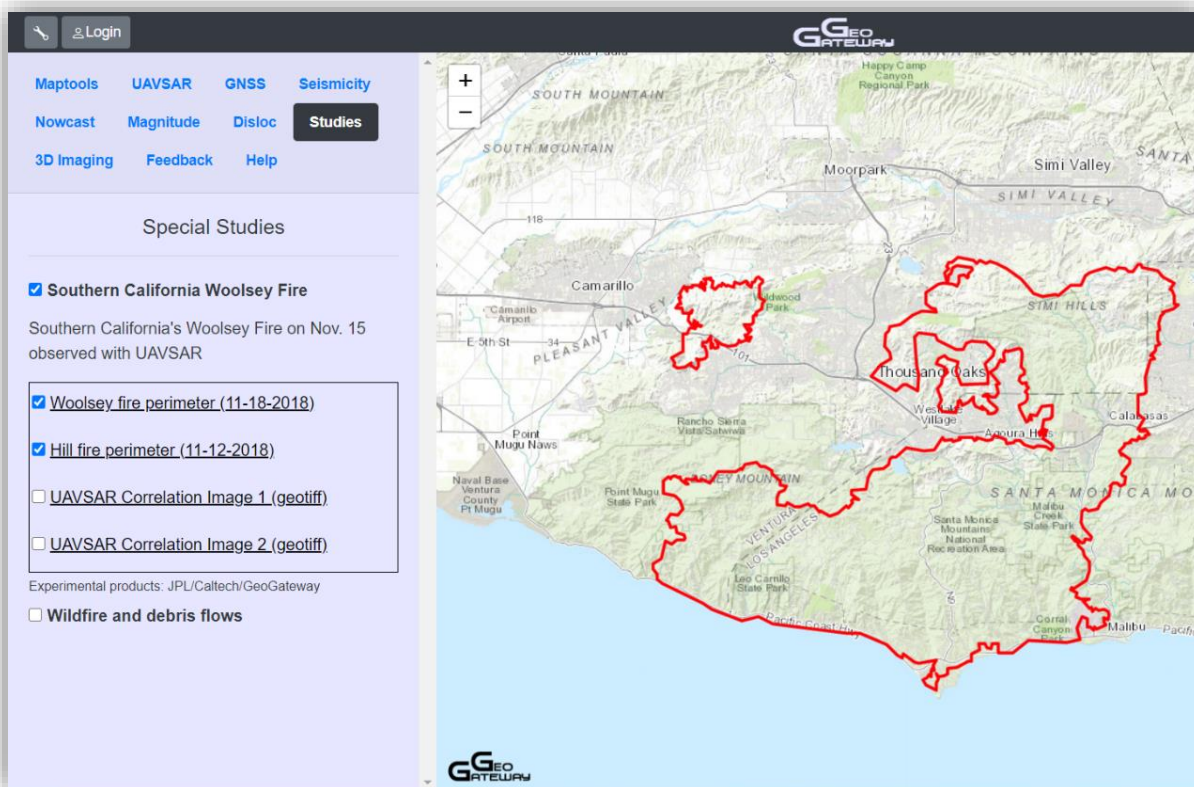
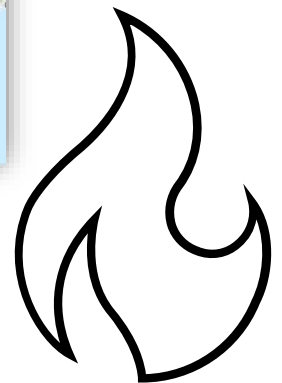


Figure 1(a): Woolsey Fire and Hill fire perimeter



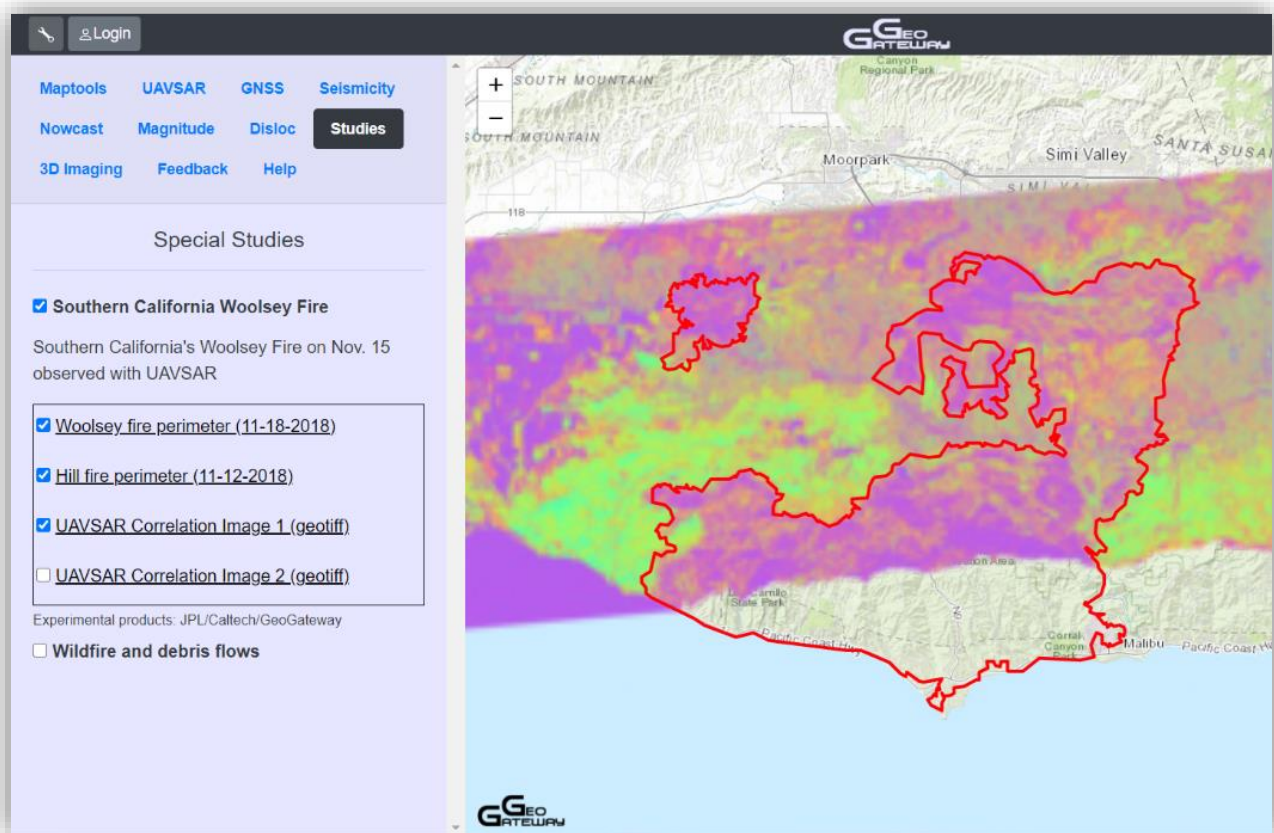


Figure 2(b): UAVSAR correlation image (1) of Woolsey fire. UAVSAR can see through smoke, clouds, and the dark of night.

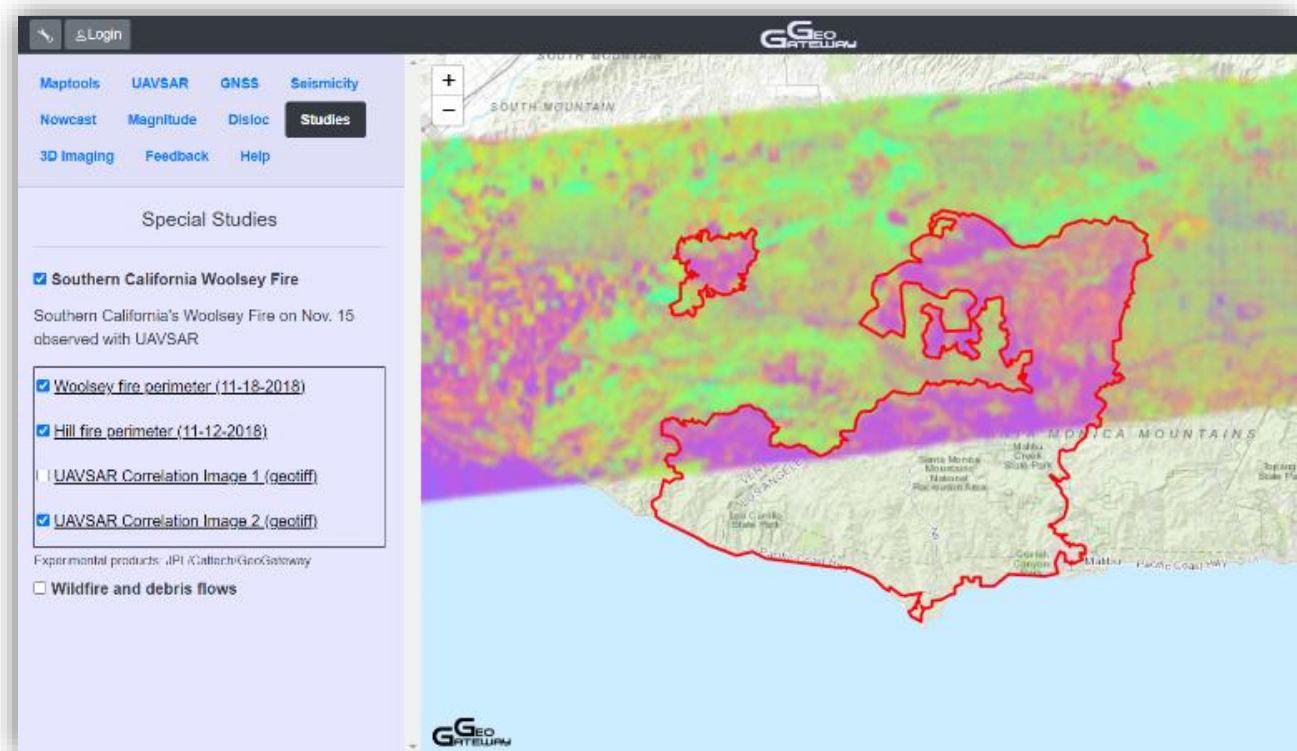


Figure 2(c): UAVSAR correlation image (2) of Woolsey fire.



Figure 3: Debris flow on Highway 101 following the Thomas Fire in Montecito (figure adapted from courtesy of Trevor Hughes, USA TODAY)

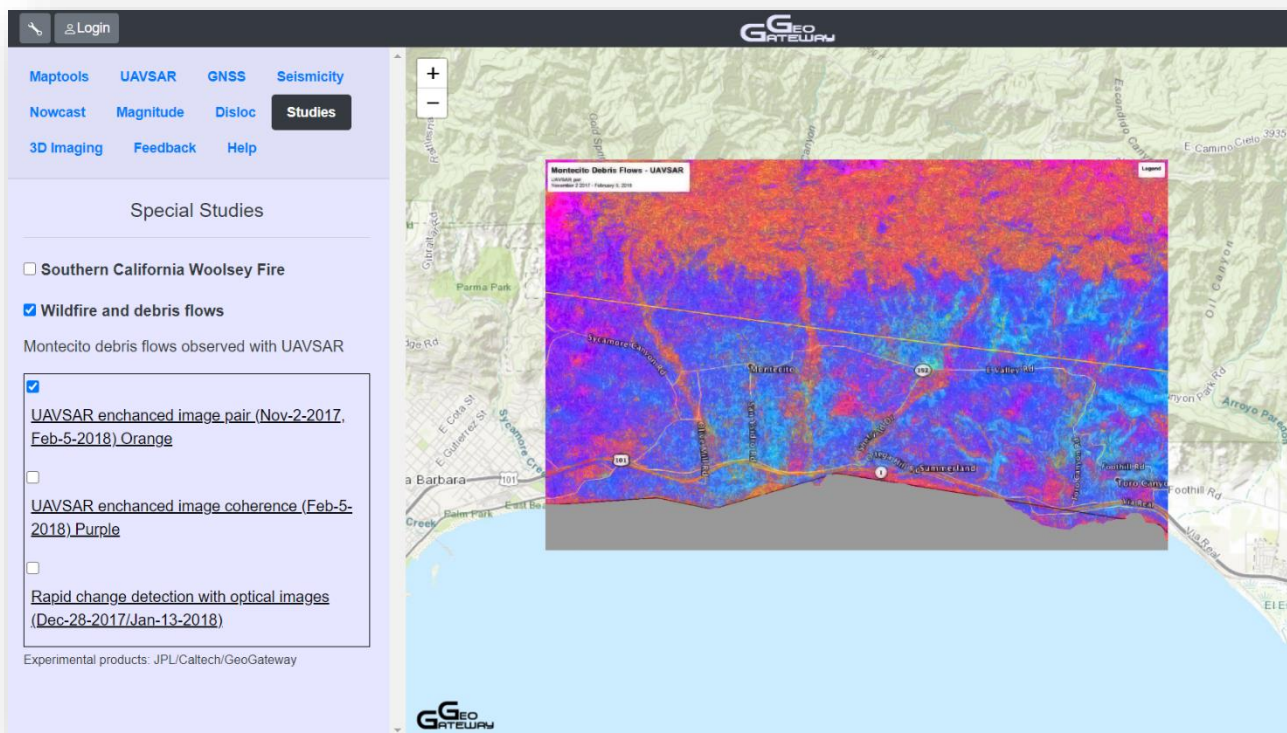


Figure 4(a): The image displays UAVSAR high-resolution interferogram that has been despeckled, converted to four colors and contrast increased. Orange represents the disturbed areas, and debris flows can be seen extending from the fire scar south of the



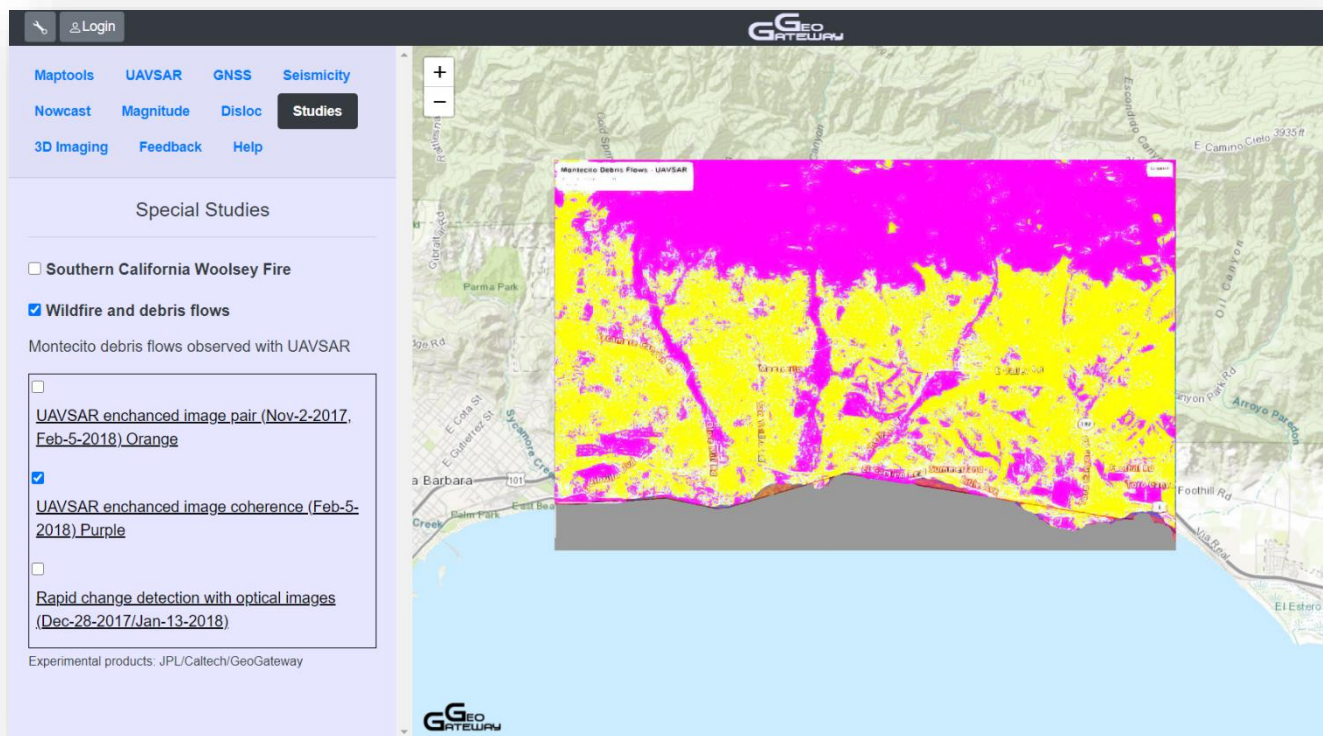


Figure 4(b): The image displays UAVSAR high-resolution correlation image that has been despeckled, converted to two colors and contrast increased. Purple represents the disturbed areas and are decorrelated, and debris flows can be seen extending from the fire scar.

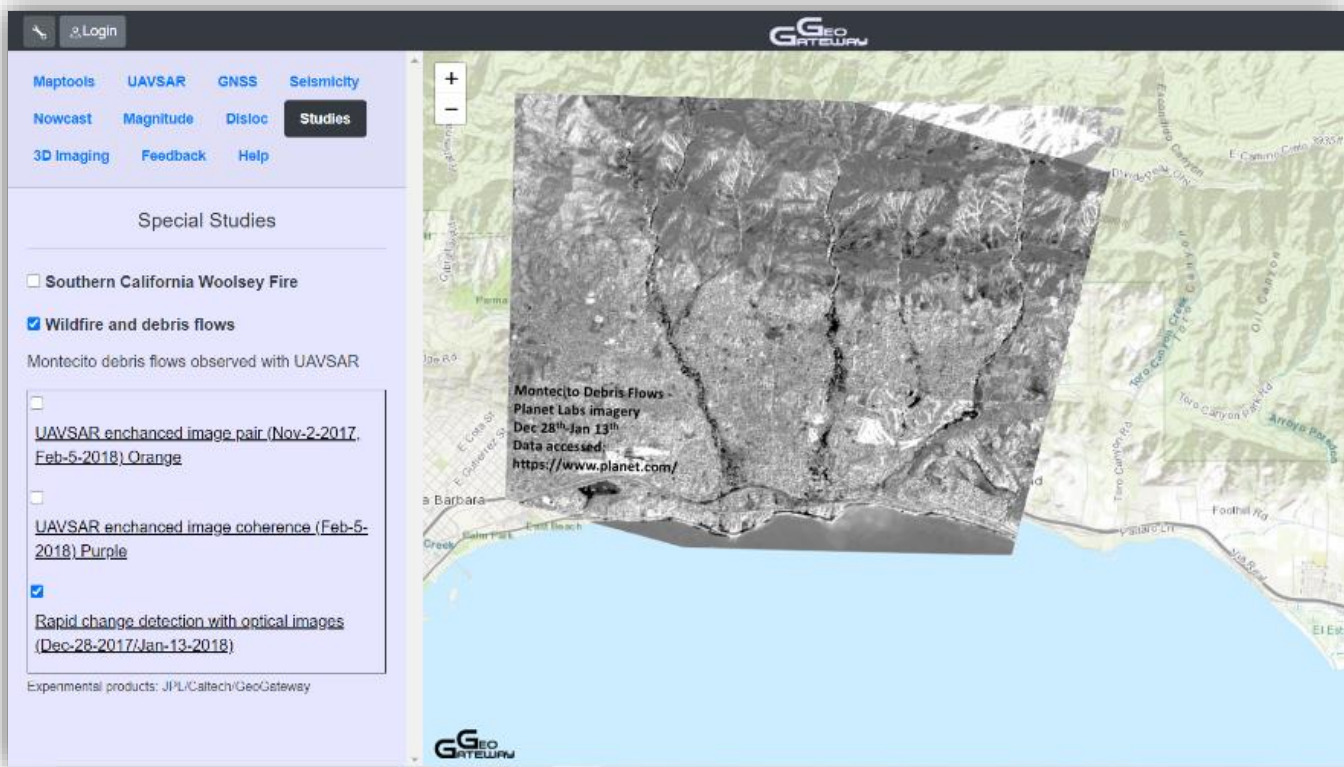


Figure 4(c): Montecito debris flow optical image.