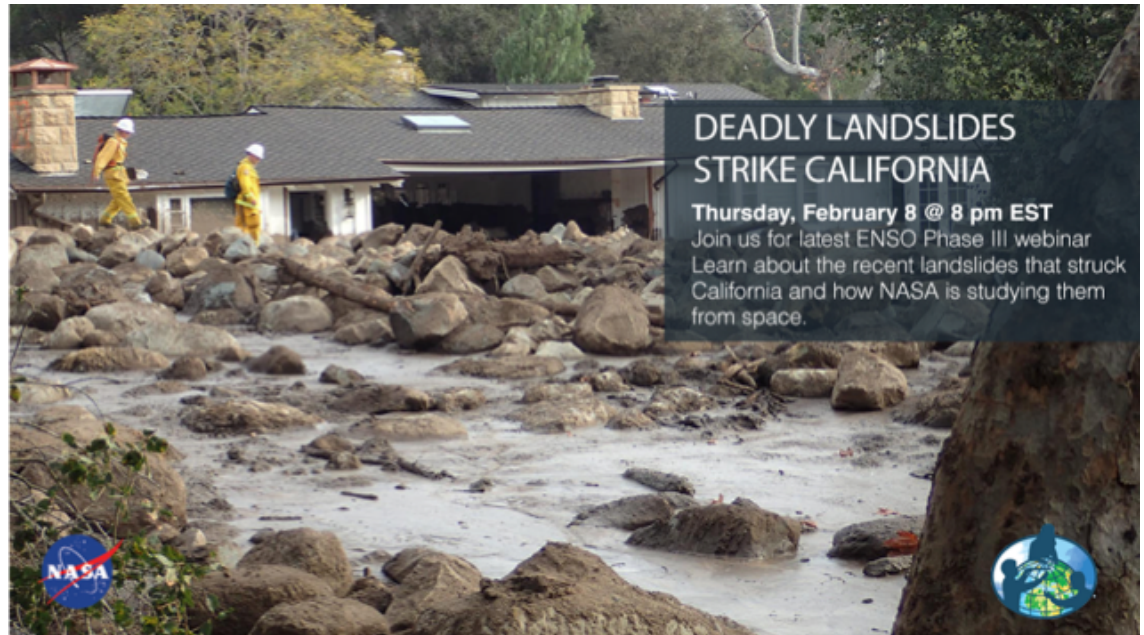


The ENSO Field Measurement Campaign Phase  
III:  
Water in Our Environment  
WEBINAR #6- Feb. 8<sup>th</sup>, 2018



# Spotlight on LANDSLIDES

Overarching guiding question is *“What is the impact of water- both above and below ground- on our environment?”*

Intense amounts of precipitation can impact the environment in many ways. Last month we looked at the impact of flooding and drought on Southeast Asia.

Tonight we will focus on landslides- which are often caused by intense precipitation.

## Dr. Tom Farr- from JPL in California



He received his BS and MS degrees from Caltech, and a PhD from the University of Washington, all in Geology. After a short time as an engineering geologist, he joined the Radar Sciences Group at the Jet Propulsion Laboratory, where he has been since 1975. At JPL, he helped develop the first geologic applications of imaging radar using aircraft, satellites, and the Space Shuttle.

He was the Deputy Project Scientist on the Shuttle Radar Topography Mission in 2000 as well as the lead air-to-ground payload communicator. He has been a science investigator on European and Japanese satellite programs and has studied the geology of Mars, Venus, and recently Saturn's moon Titan. His current projects include piecing together the history of water in the Sahara and monitoring of subsidence in the Central Valley of California with orbital radar. He has participated in or led geological expeditions to Tibet, northwestern China, the Egyptian Sahara, and our local deserts, including geology training of Shuttle astronauts.



# Dr. Dalia Kirschbaum- GSFC in Maryland



She is a Research Physical Scientist in the Hydrological Sciences Lab at NASA Goddard Space Flight Center, Greenbelt, MD. Her research interests center on rainfall-triggered landslide modeling, focusing on applying remotely sensed surface and precipitation information to landslide hazard models at multiple spatial and temporal scales. Her current research focuses on advancing a regional landslide hazard and forecasting system with more quantitative and deterministic models to improve landslide hazard assessment.

She has also developed a web-based interface for visualization of landslide hazard and remote sensing products for improved situational awareness of landslide hazards and reported events. Dr. Kirschbaum is also the Global Precipitation Measurement (GPM) Mission Associate Deputy Project Scientist for Applications. In this role, she provides scientific support for applications research and activities. Dr. Kirschbaum is also a Disaster Response Coordinator for the agency, working with other NASA centers as well as domestic and international partners to bring satellite data and products to bear during natural hazard events to improve situational awareness and inform decision making. Dr. Kirschbaum received her M.S. and Ph.D. in Earth and Environmental Sciences from Columbia University with a focus in Natural Hazards and Remote Sensing. She received her A.B. in Geosciences from Princeton University.

# Collaboration Station





# Real-life events = Teachable Moments



What GLOBE observations, protocols, and activities might you use to have your students explore the impact of water on their environment with regard to landslides/mudslides?

Here are a few resources: <https://www.globe.gov/>



**DEADLY LANDSLIDES  
STRIKE CALIFORNIA**

**Thursday, February 8 @ 8 pm EST**  
Join us for latest ENSO Phase III webinar  
Learn about the recent landslides that struck  
California and how NASA is studying them  
from space.

