

Montana Tech Public Lecture Series



Presented by:

**Montana
Bureau of
Mines &
Geology**

**The Office of
Research**

**School of
Mines &
Engineering**

**College of
Letters
Sciences, &
Professional
Studies**

**Highlands
College**

**The Biology
Department**

Sigma Xi

Contact:

Paige Payne
406-496-4102
Montana Tech
1300 W. Park St.
Butte, MT 59701

Earth Deformation Caused by Surface Mass Loading



Hilary Martens

University of Montana

4:00 pm January 10, 2019
Natural Resources Building
Room 128

Or attend online at <https://zoom.us/j/6243345561>

What causes the shape of the Earth to change over time? Some of the more familiar causes include earthquakes, volcanic eruptions, landslides, and lunar gravity. But did you know that movements of air, ocean, and fresh-water masses also distort the rocks beneath our feet? This presentation will explore new methods for measuring and modeling Earth deformation caused by the redistribution of surface fluids. Applications range from probing the density structure of ancient cratons to tracking the depletion of groundwater reservoirs during periods of drought.

Hilary is an Assistant Professor in Geophysics at the University of Montana in Missoula. She is a UM alumna and Missoula native, and has also studied in England and California. Her research interests include the interactions between the solid Earth and its fluid envelopes, Montana earthquakes, and the geophysical environments of other planets in our Solar System.

This lecture is free and open to the public.

Visitor Parking Available behind the Natural Resources Building