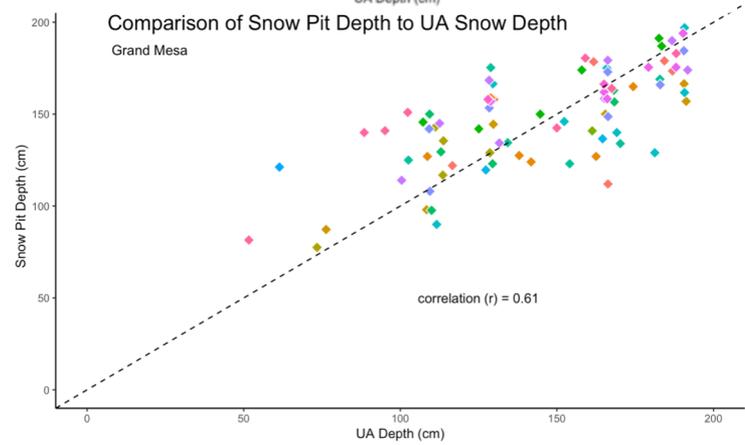
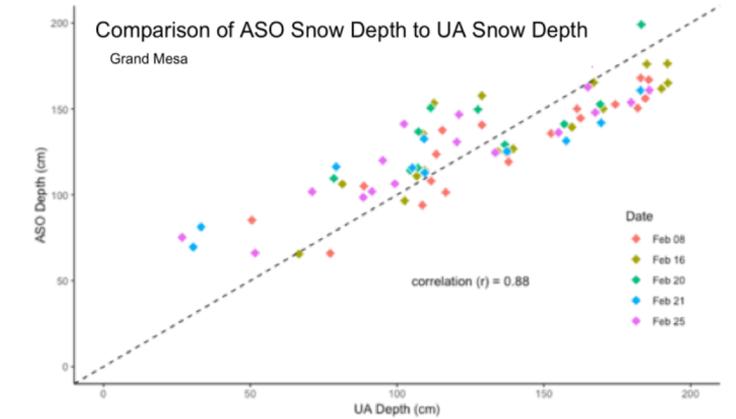
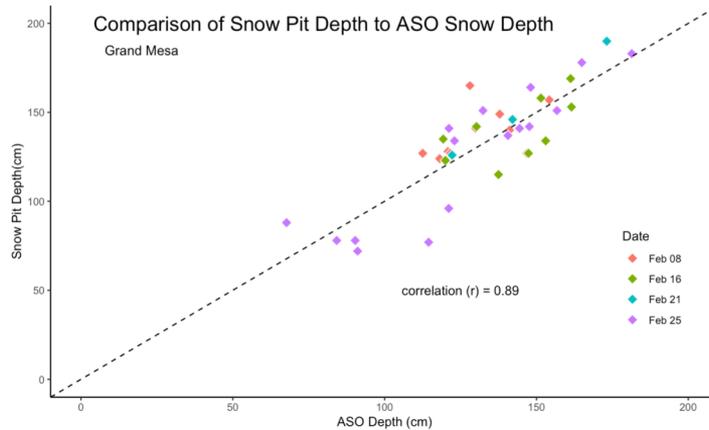


# Gridded SWE and Snow Depth from the University of Arizona

## How can this data benefit SnowEx missions?

### 1. Validation

- Useful for direct comparison to SnowEx measurements of snow depth and SWE

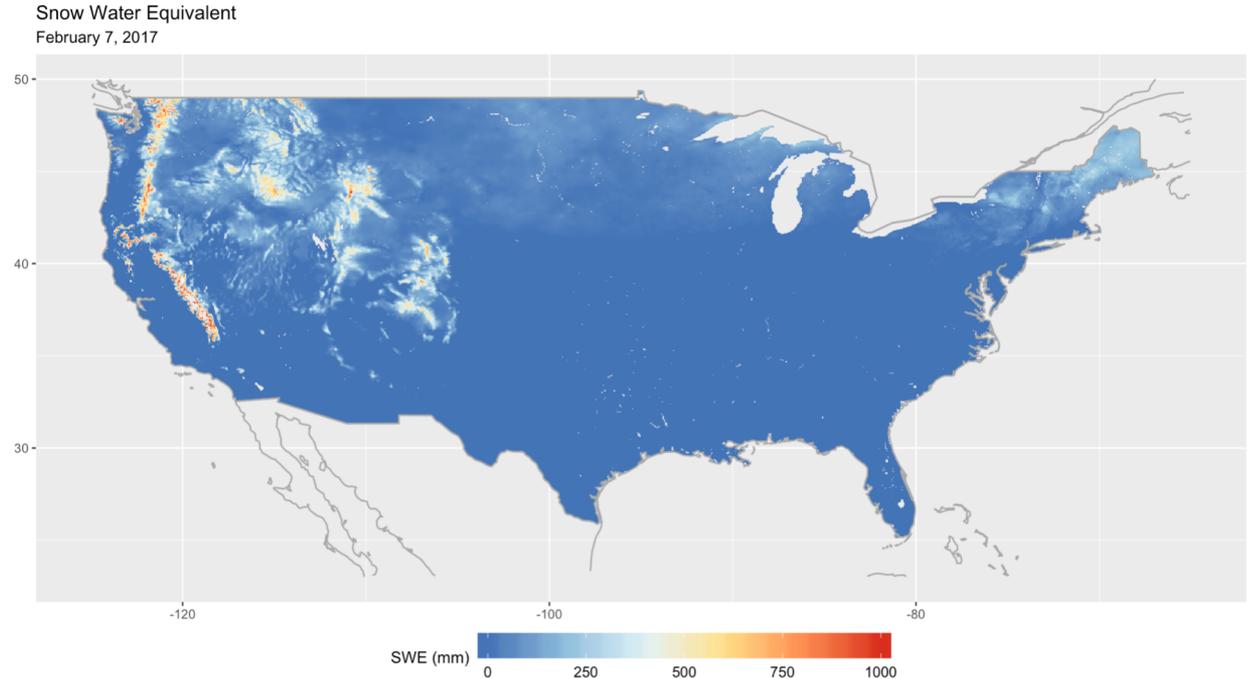


# Gridded SWE and Snow Depth from the University of Arizona

## How can this data benefit SnowEx missions?

### 2. Planning

- Data available for the entire conterminous United States
- Spatial extent of UA data makes it a powerful tool for site selection of SnowEx missions

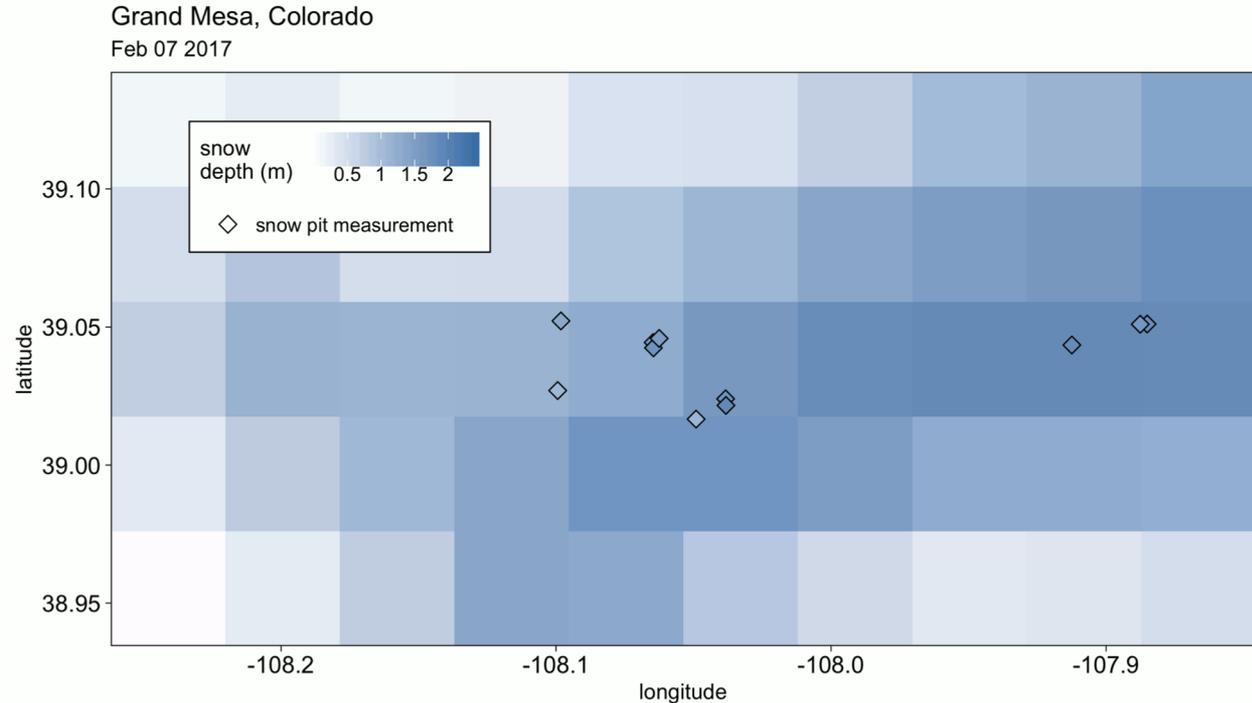


# Gridded SWE and Snow Depth from the University of Arizona

## How can this data benefit SnowEx missions?

### 3. Understanding

- Daily data available from 10/1/1981 to 9/30/2017
- 4 km x 4 km resolution
- High resolution data is useful for understanding the spatial and temporal variability of study site



# Can snowpack data help us understand wildfires?

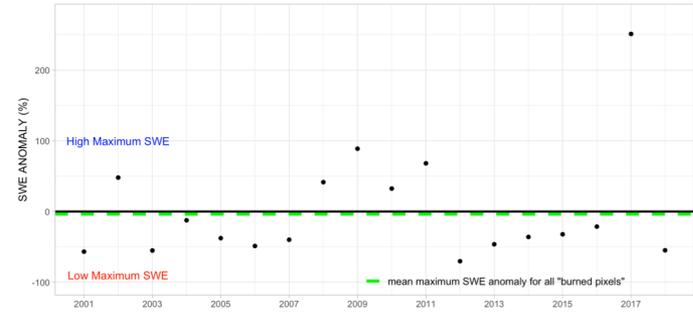
**Understanding winter and spring snowpack evolution may give us insight into climatic conditions leading to wildfires:**

Overall, burned areas (**MODIS**) tend to have negative SWE anomalies (**UA SWE**). Wildfires occurring in areas with positive SWE anomalies may be explained by vegetation growth (**MODIS**), precipitation, temperature, and/or soil moisture (**NLDAS**).

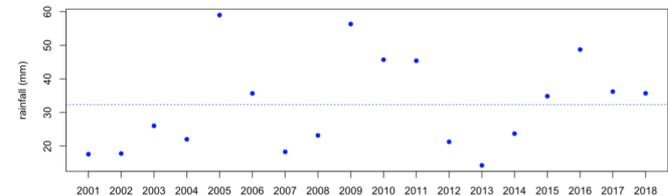
Madeleine Holland  
Graduate Student | University of Arizona  
Advisor: Dr. Xubin Zeng



Mean Maximum SWE Anomaly for Burned Areas



Spring Rainfall



Spring Temperature

