

# DRY ICE

**Do Relationships Yield? Isotopes in Contrasting Environments**  
*Question: How does the isotopic signal change in a dry vs wet soil?*

## SOIL WATER

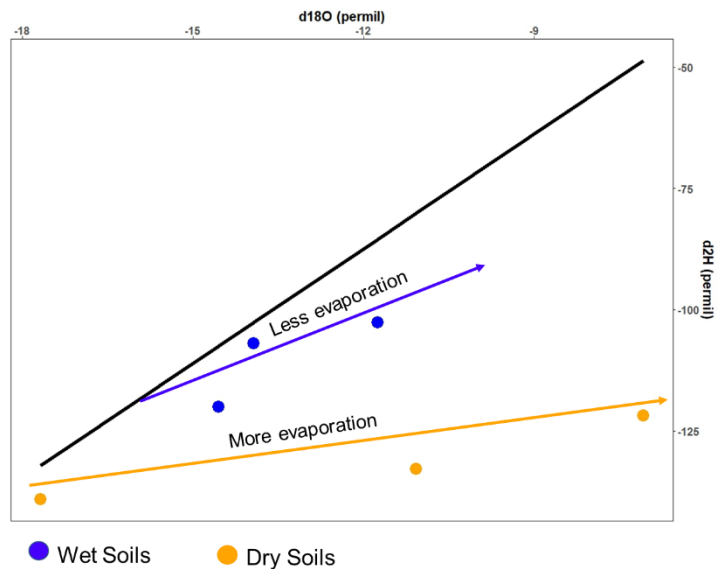
### **Hypothesis**

Evaporation will make both sites enriched in  $\delta^2\text{H}$  and  $\delta^{18}\text{O}$ . The dry soils will be more enriched.

### **Interpretation**

Wet Soil: Enriched, mixing of water sources may dampen signal

Dry Soil: High evaporation leads to more enrichment



## SOIL CARBON AND NITROGEN

### **Hypothesis**

Both C and N will more enriched with depth with wet soil having more enrichment due biological processing.

### **Interpretation**

#### Carbon

Wet Soil: Leaching/flushing may dampen changes in  $\delta^{13}\text{C}$

Dry Soil: More depletion may be due to water stress in plant sources

#### Nitrogen

Wet Soil: Down-profile pattern may be due to enrichment

Dry Soil: Down-profile pattern is as expected.

