



## **Soil Characteristics and Wind Erodibility: Preliminary Results from January, 2006**

Vic Etyemezian  
and  
Mark Sweeney

Desert Research Institute



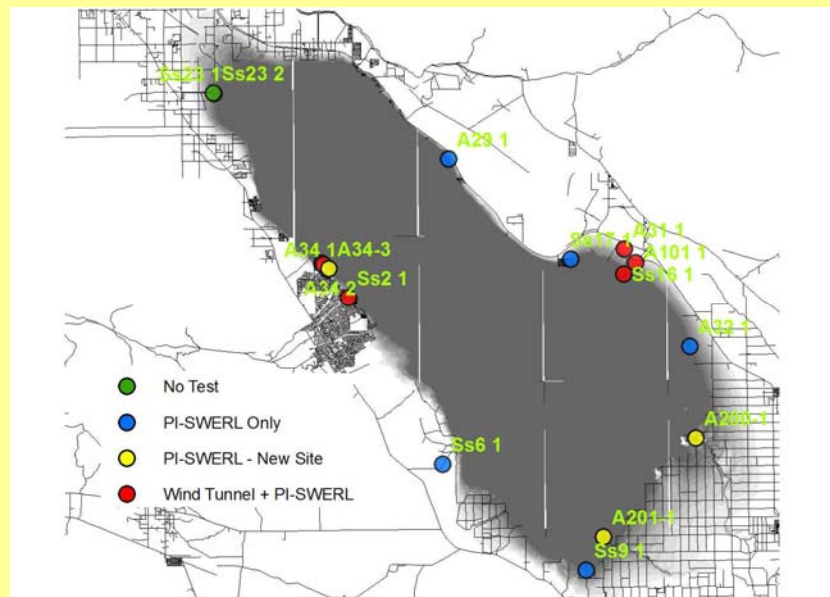
### **Elements of Field Study**

- Conduct on-site wind erodibility/emissivity measurements - ~ 12 sites, 3 different times
- Collect and analyze bulk soil properties
- Document surface crusting conditions by time of year
- Quantify spatial and temporal distribution of parameters related to soil dust emissivity (Playas around the Sea, variations by season)

## Second field Campaign

- First field campaign completed 09/05
- Second field campaign 01/23/06 – 01/27/06
  - Revisited 13 sites from 09/05 Campaign
    - Data collected at 12 sites; 1 site too wet
  - Added 3 sites; 2 at southern shore and 1 near Salton City
    - Additional sites represent fluffed salty playa
  - Collected PI-SWERL and soil characteristics data: crust strength, texture, aggregate sizes, chemistry.

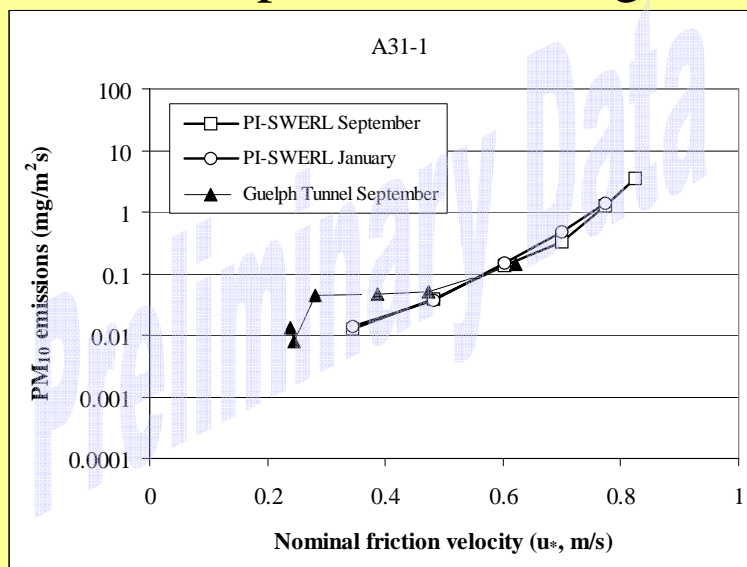
## Sites After 01/06 Field Campaign



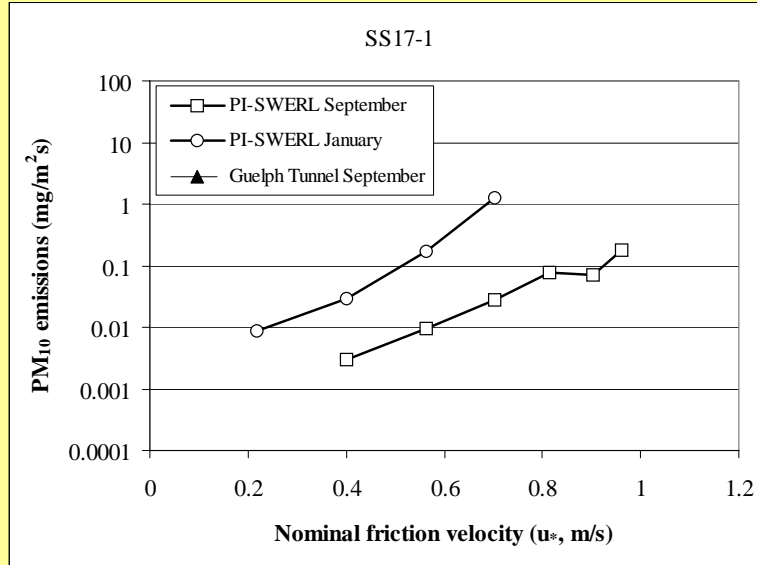
## Preliminary Data from 01/06

- Laboratory Analysis (chemistry, bulk density, moisture content, etc): Partially complete
- Preliminary comparison PI-SWERL data 09/05 and 01/06
- Preliminary comparison crust strength

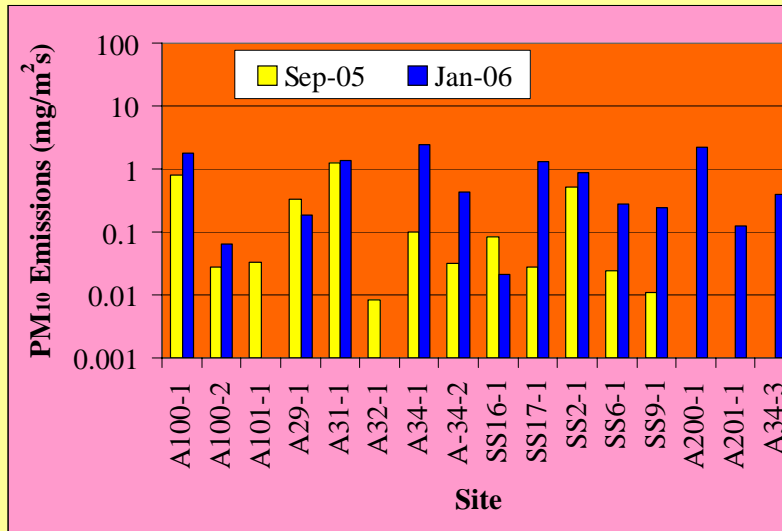
## Example 1: No Change



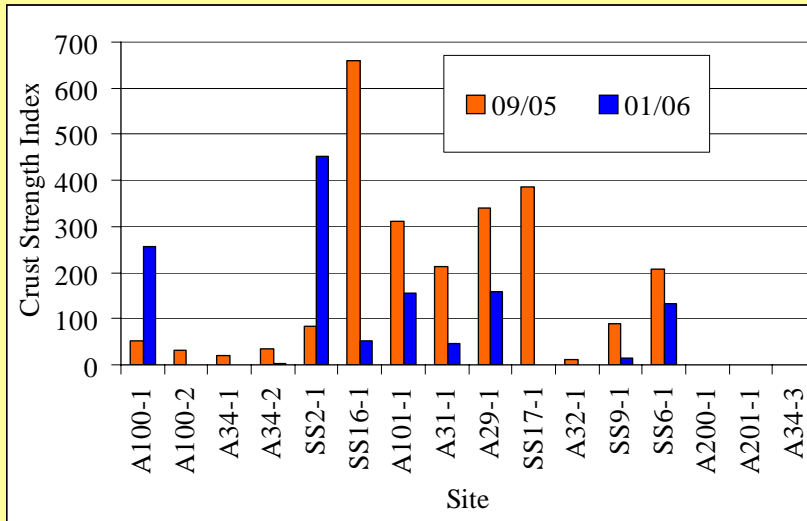
## Example 2: Jan > Sep



In General, January emissions measured by PI-SWERL > September values at same sites



# Crust Strengths



# Appendix

