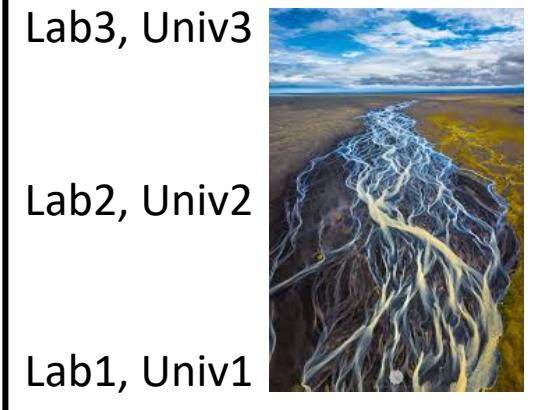


Arctic Aquatic C Cycle: Integration Soils to Coast

Elliott and Adams (LANL, TAMU) with
Jayasinghe, Wiegand (NMT, UTenn)
Kumar, Piliouras, Clement-Kinney, Gibson, others (Labs)



Strategy

Pedology then Network to Sea

Initialize detrital molecular structures

River microbes-reactions

Estuarine flocculation, delta process

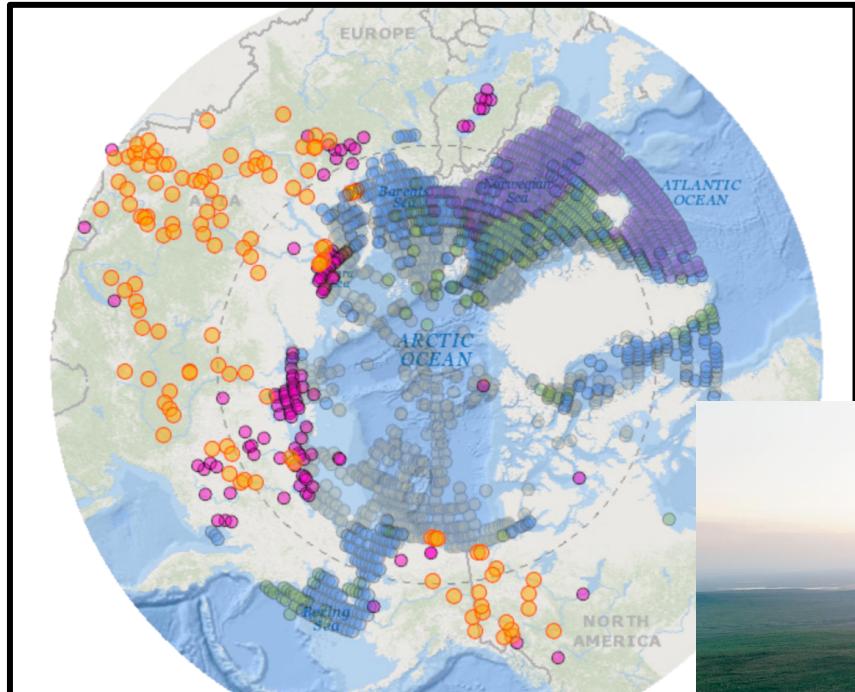
Plume dilution then...

Estimate Ocean Biophysical Effects

CDOM, solids, surfactants influence:

Light, gases, heat, momentum, aer...

Clustering: CDOM from peat or tundra

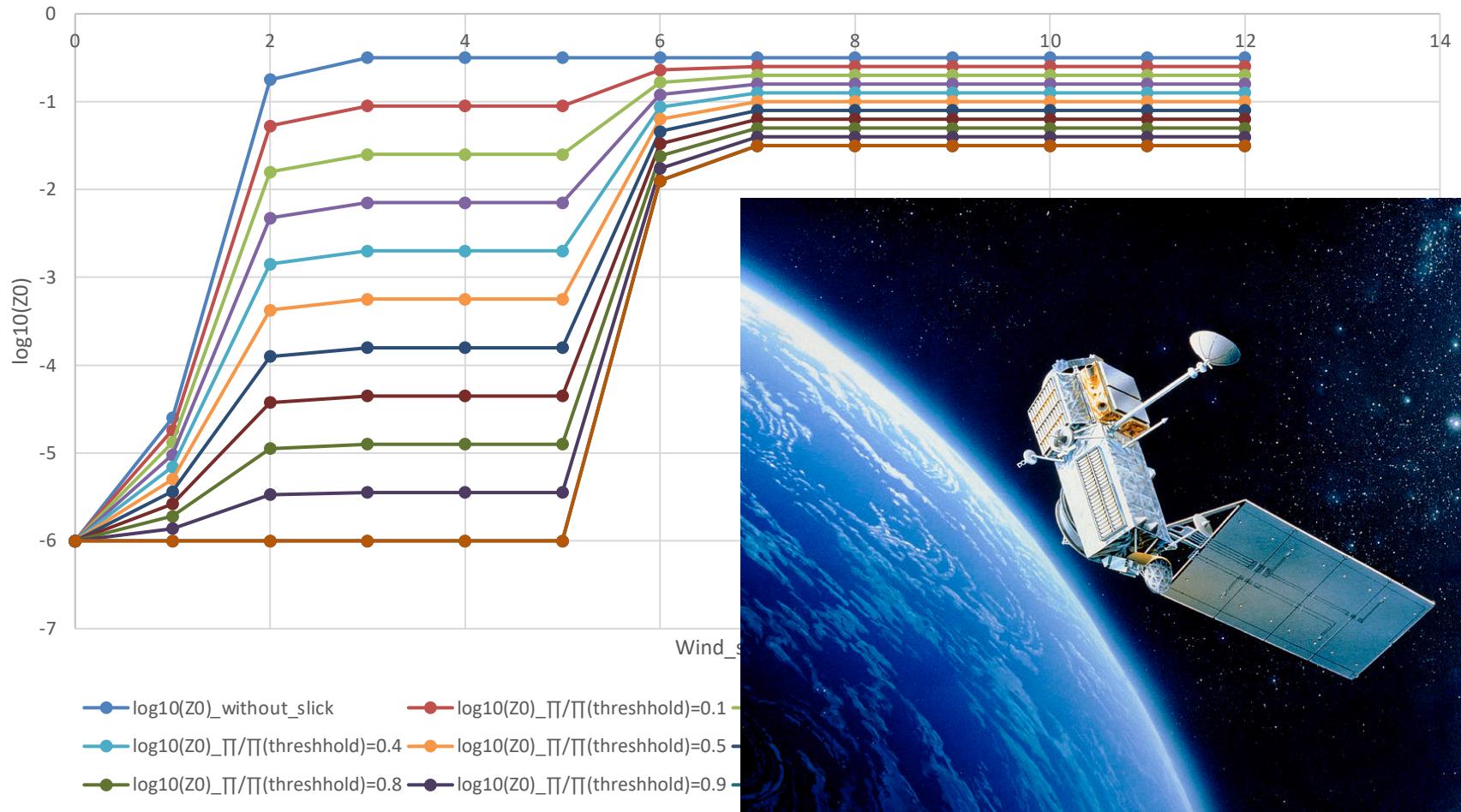


Thomas Wiegand, UTenn
Forrest Hoffman, ORNL



Centimeter Ripples: Plumes + Altimetry

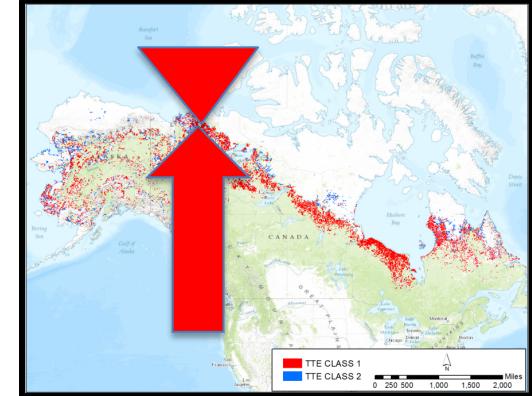
Plot of $\log_{10}(Z_0)$ vs wind_speed



Amadini's proteins with TOPEX experts UNH

Arctic Aquatic C Cycle: Terrestrial Shifts Talk to Sea

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MODIS Tree Line

Hans Jenny Soil Chem Tracking
*Aging, migration of ecotones
Alter active layer & permafrost*

Test Biophysics in Ocean Codes
*CDOM-TSM offline
Heat, biology, slicks, more*

Marry HILAT to Rubisco –Target Processes
Regional Bayesian Benchmarking