

# **An overview of Terrestrial-Aquatic Interfaces**

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# TERRESTRIAL ECOSYSTEMS



**EXPERIMENTS**

**MODELS**

**OBSERVATIONS**



**Temperate Forest**



**Northern Peatlands**



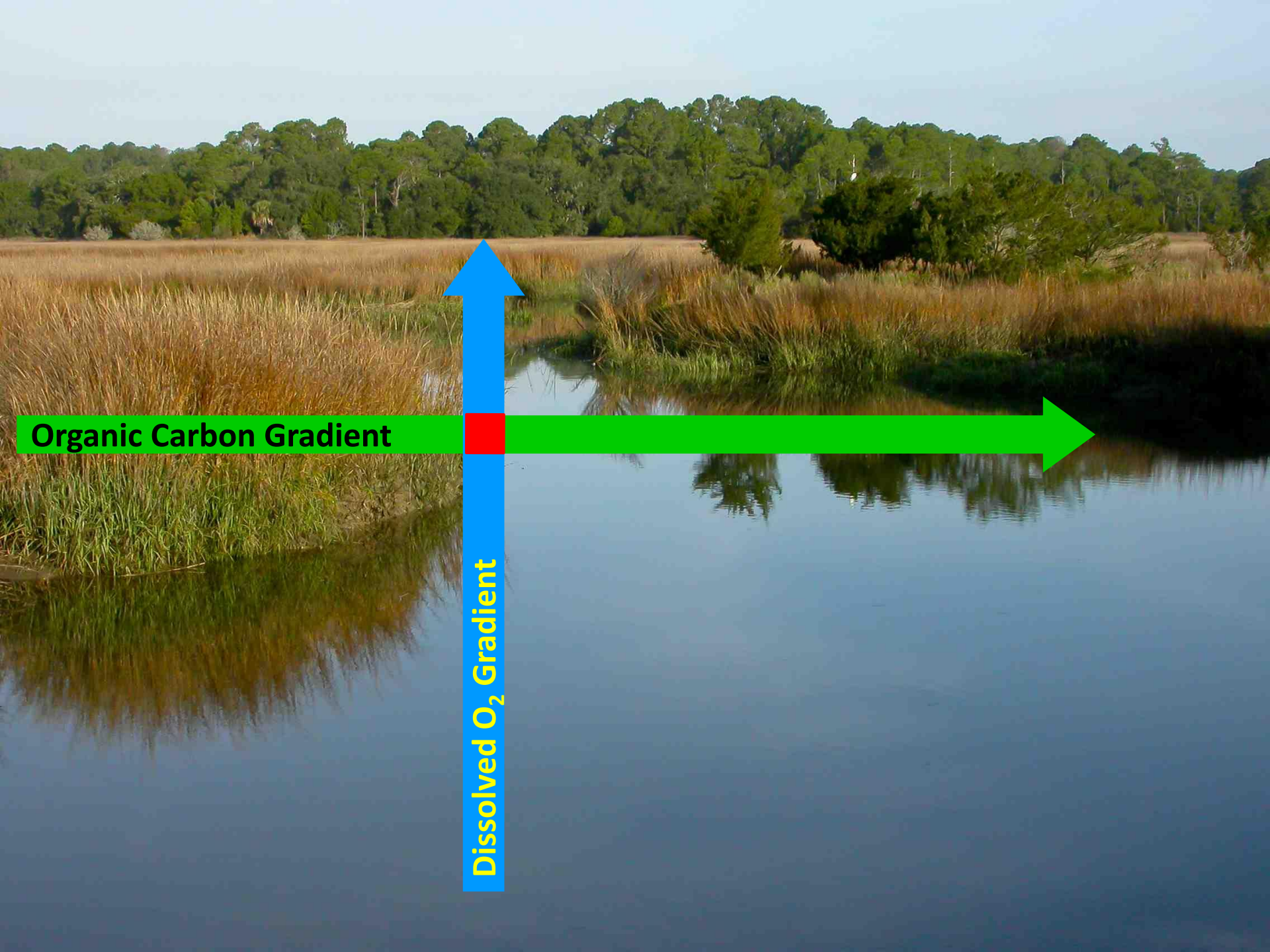
**Arctic Terrestrial**



**Tropical Forest**



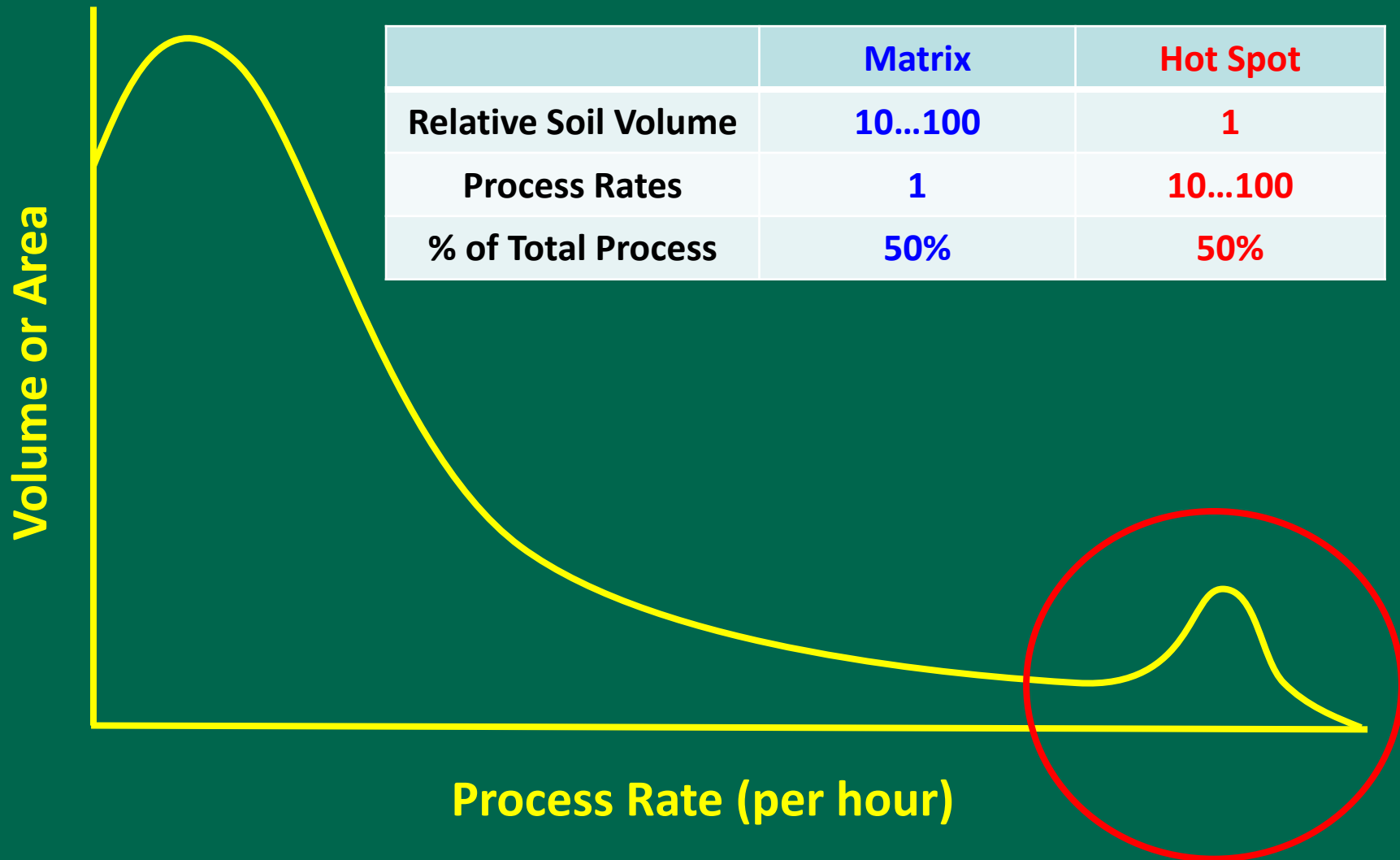




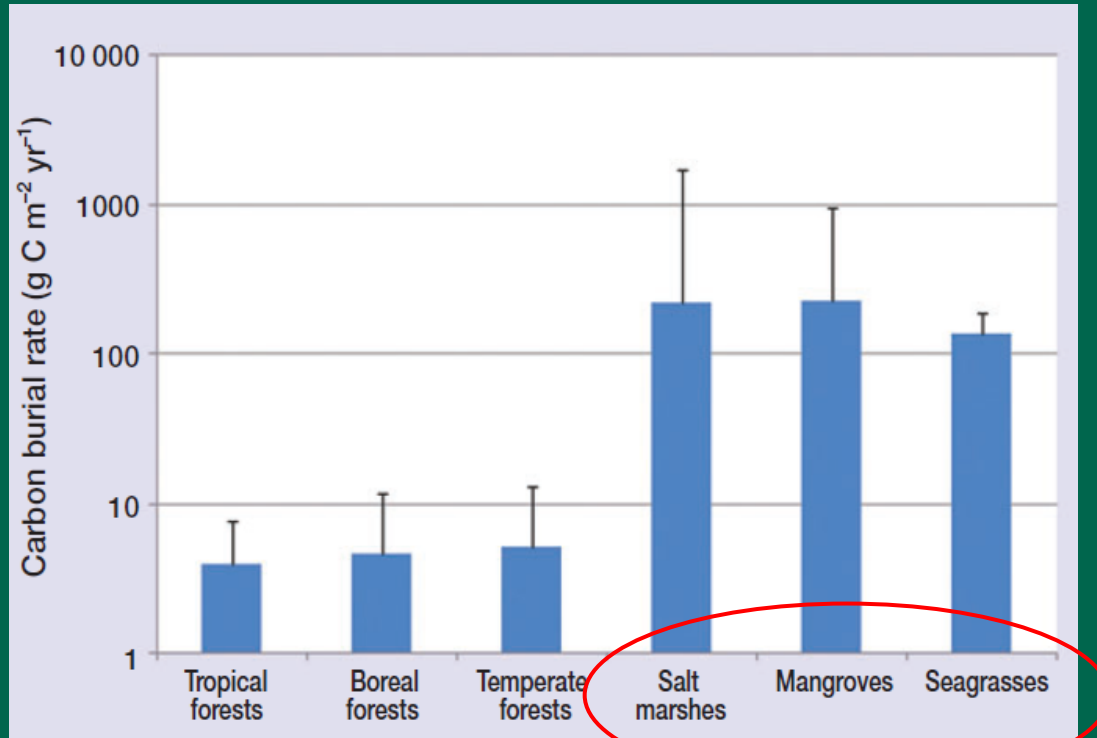
**Organic Carbon Gradient**

**Dissolved O<sub>2</sub> Gradient**

# Hot Spots and Hot Moments



# Coastal Wetland Carbon Hot Spots



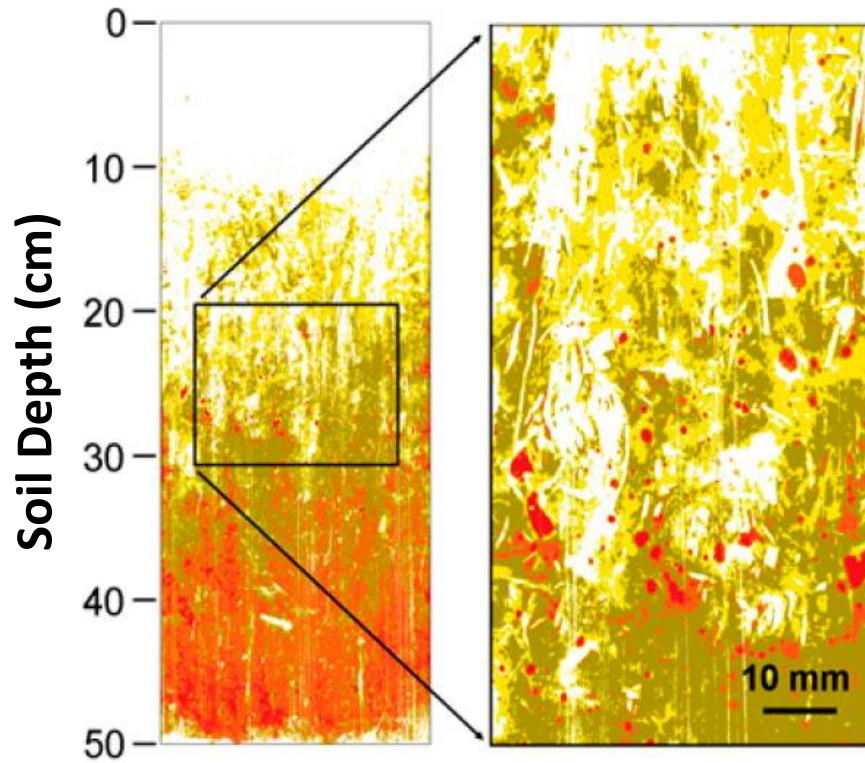


# Scales of Heterogeneity

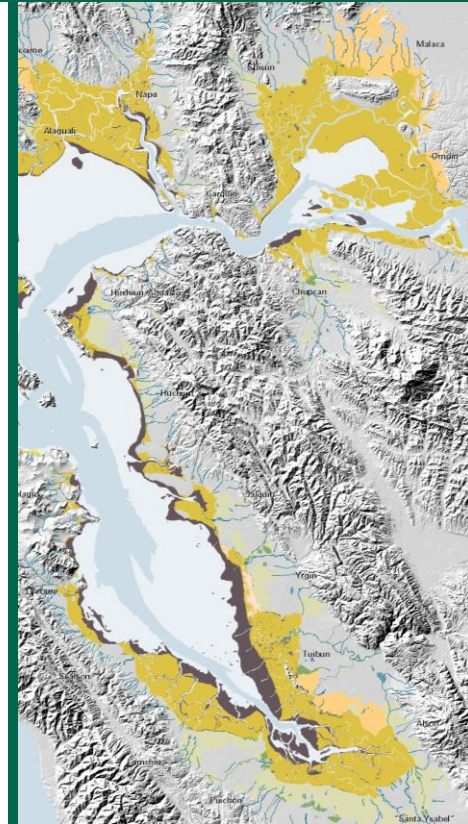
## Soil Aggregate



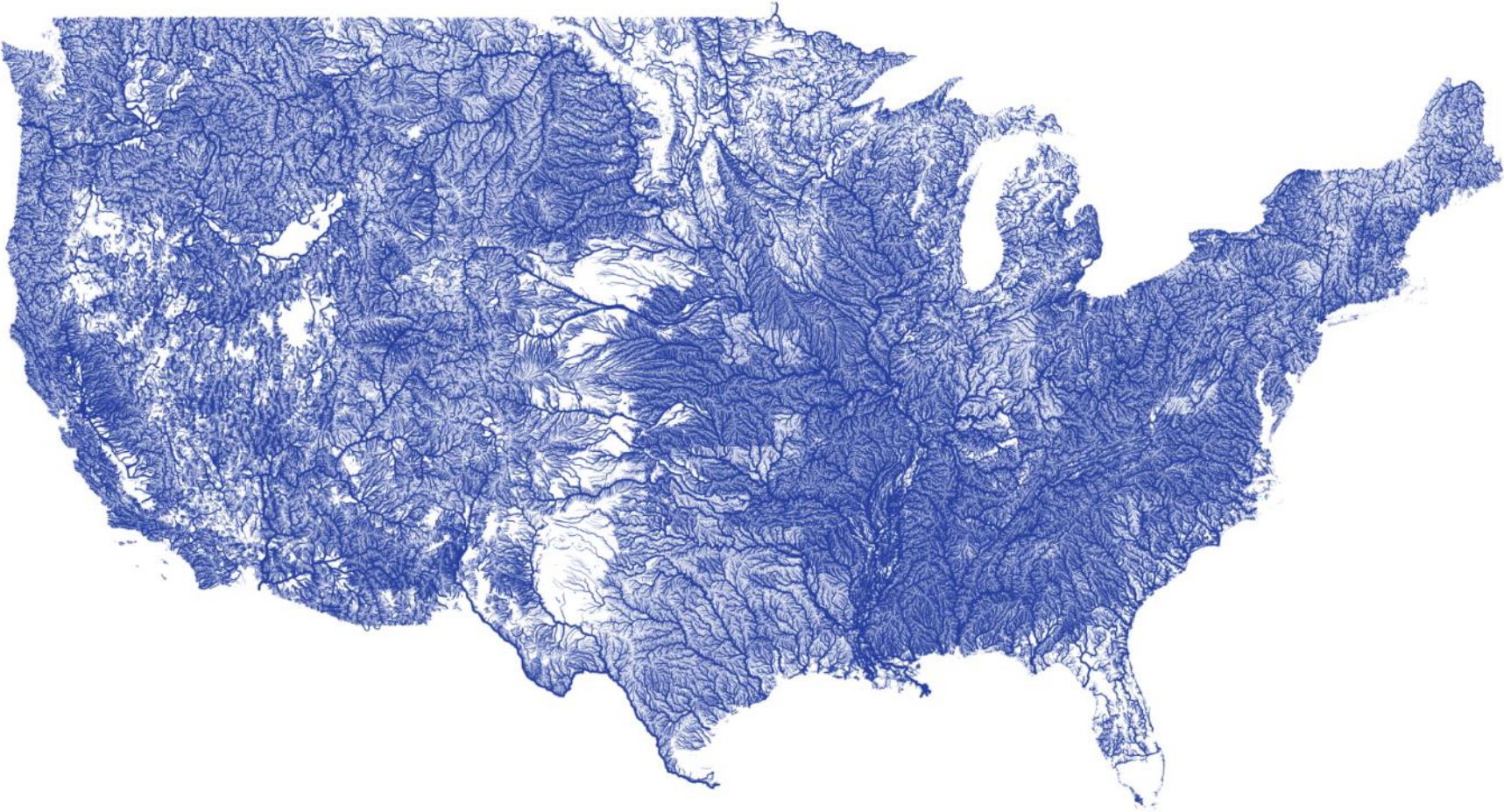
## Soil Profile



## Soil Landscape



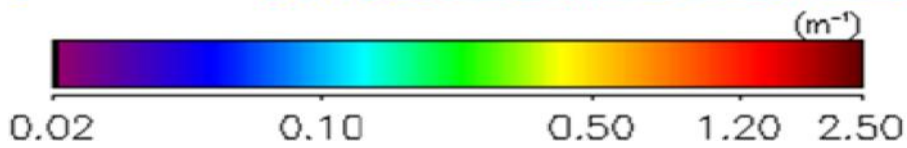
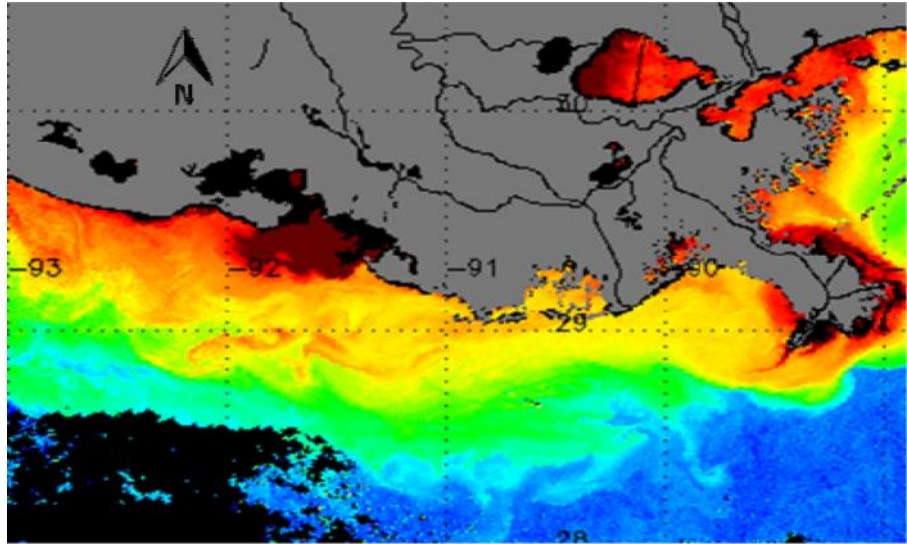
# US River and Estuary Network



22.29°N 127.83°W

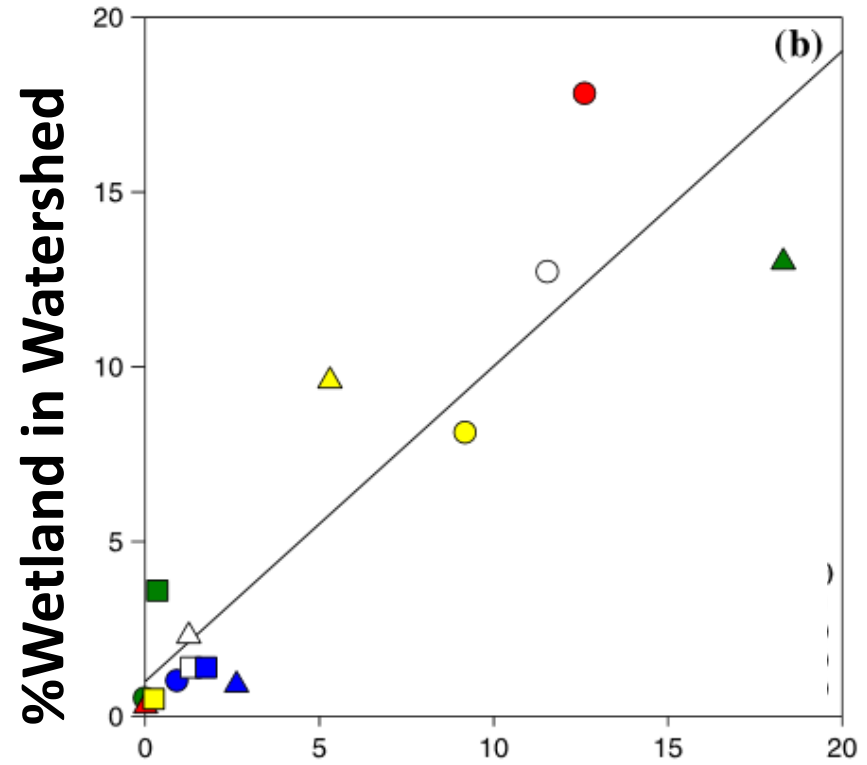


# Intra-System Transport



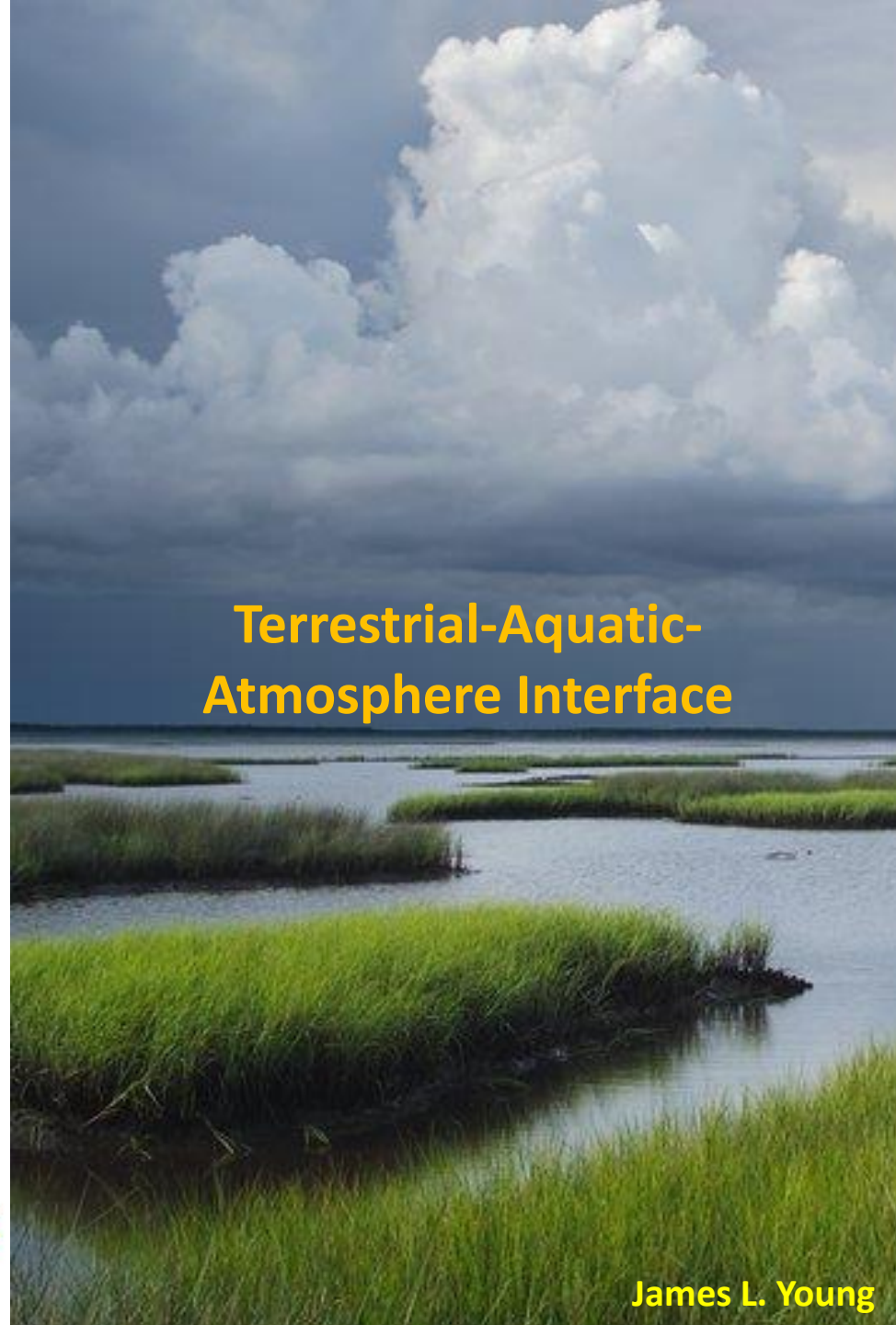
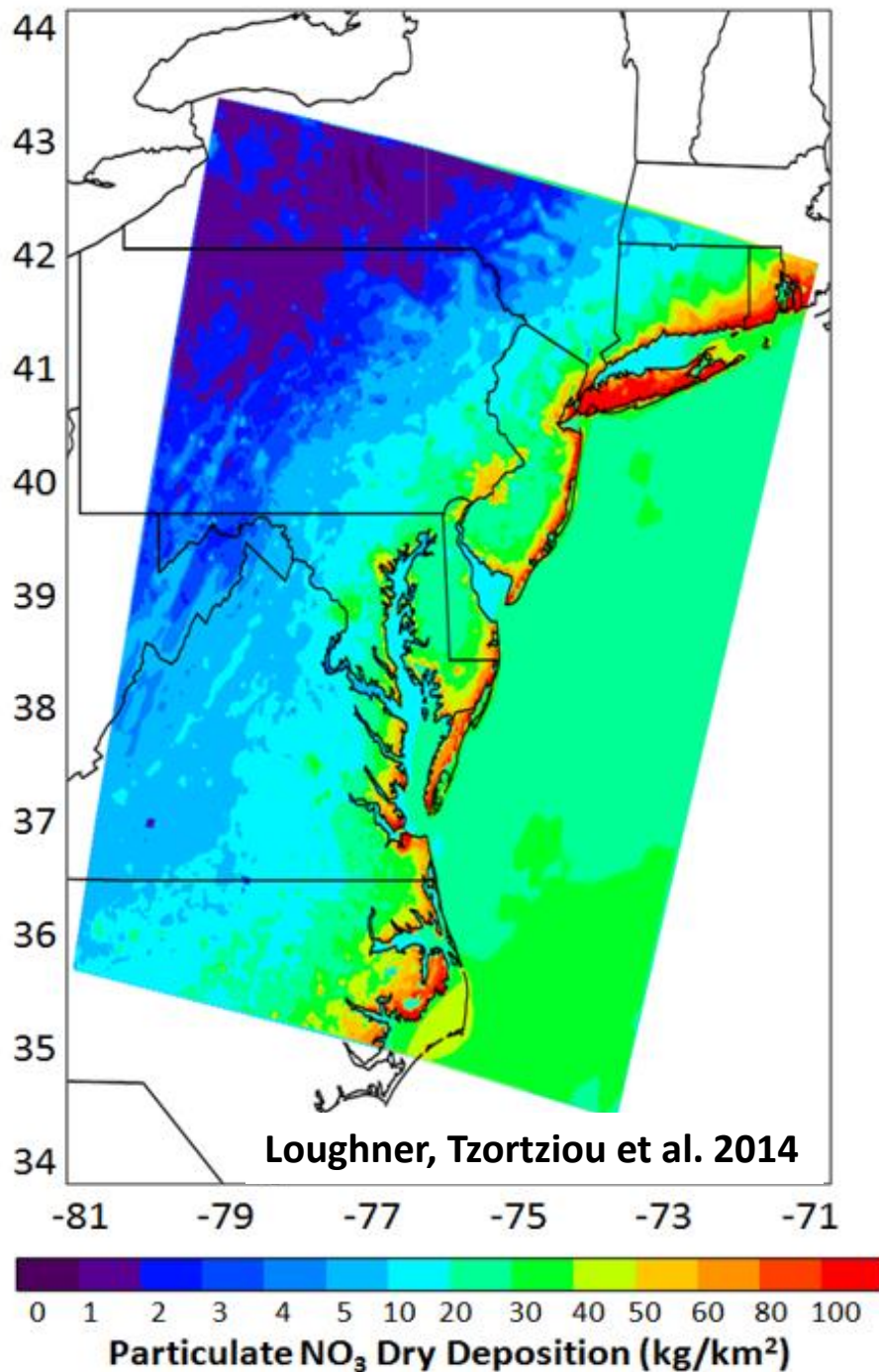
Surface CDOM ( $\alpha_{\text{CDOM}} 412$ )

Tehrani et al. 2014



CDOM Yield (per year)

Spencer et al. 2013



## Terrestrial-Aquatic- Atmosphere Interface



Lets Have Fun

