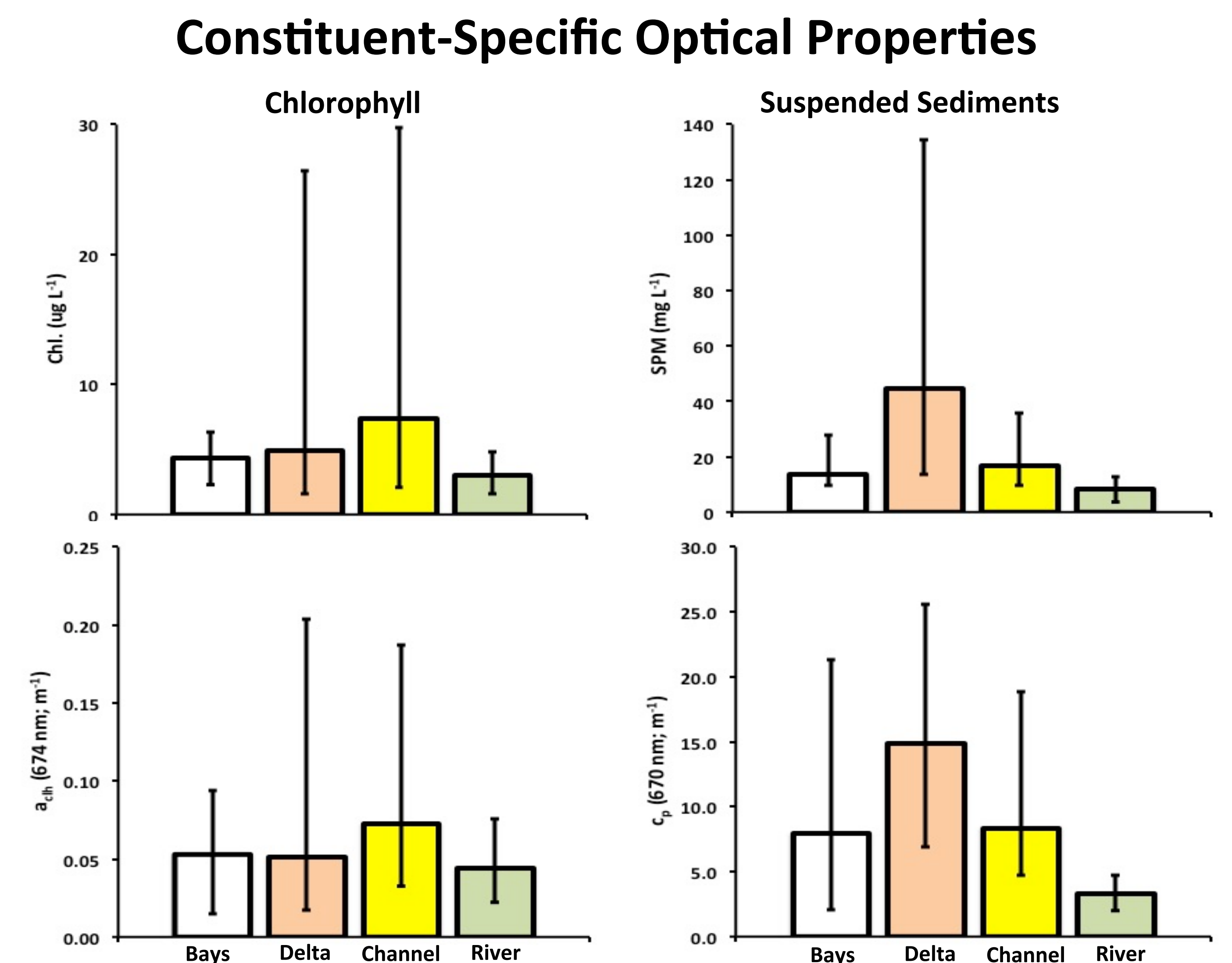
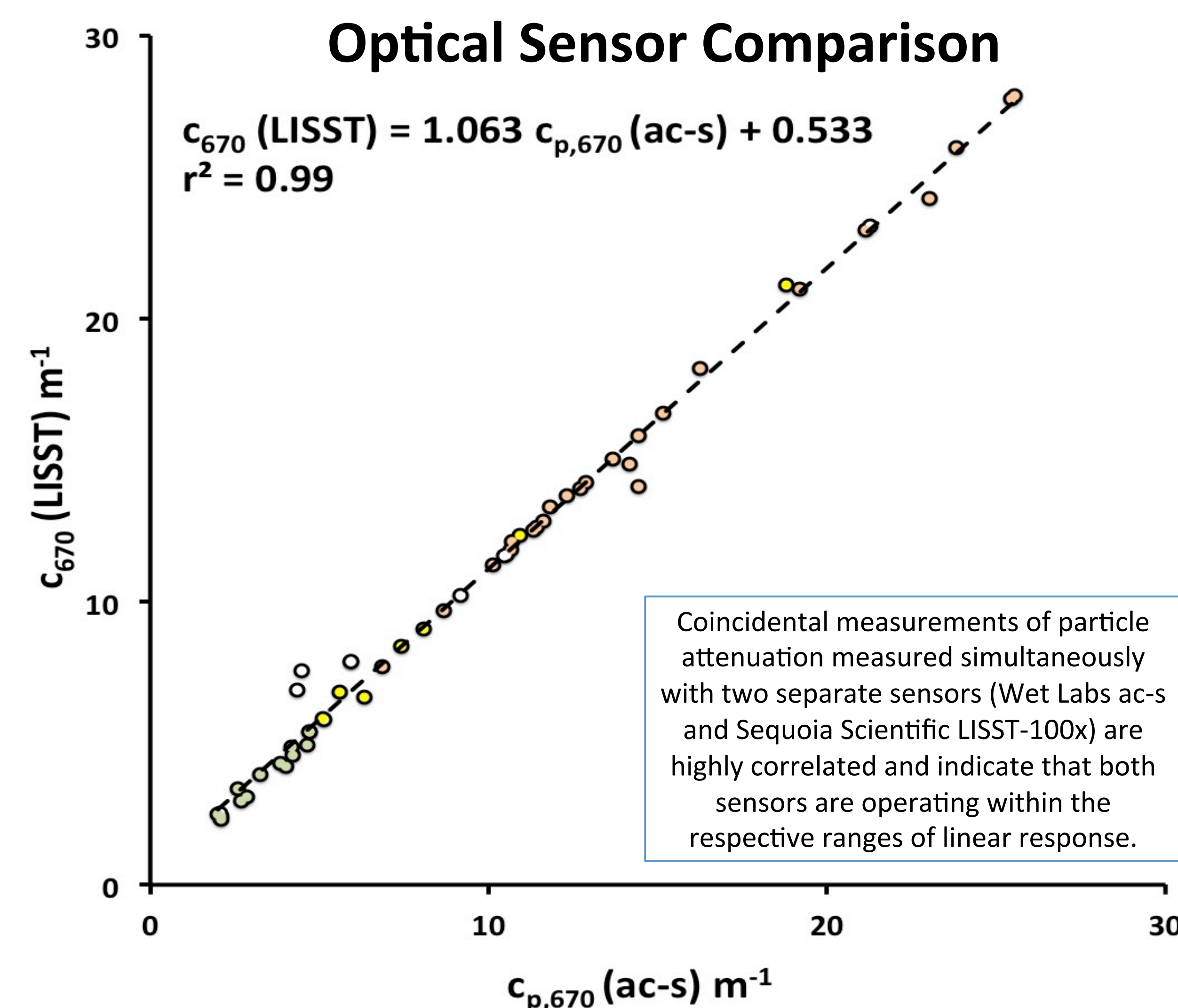
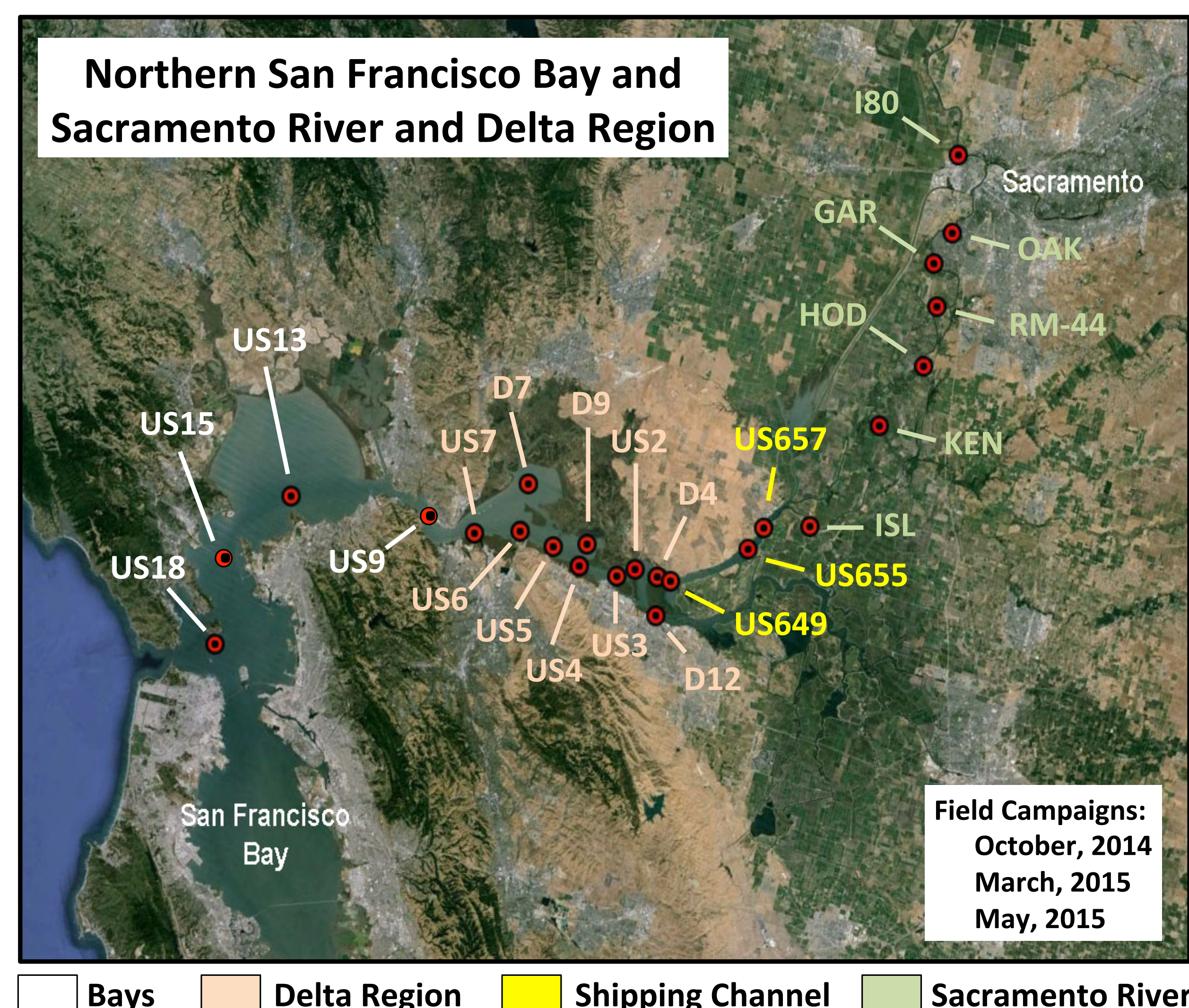


Suspended and Dissolved Matter in the Sacramento River and Delta Region Under Drought Conditions

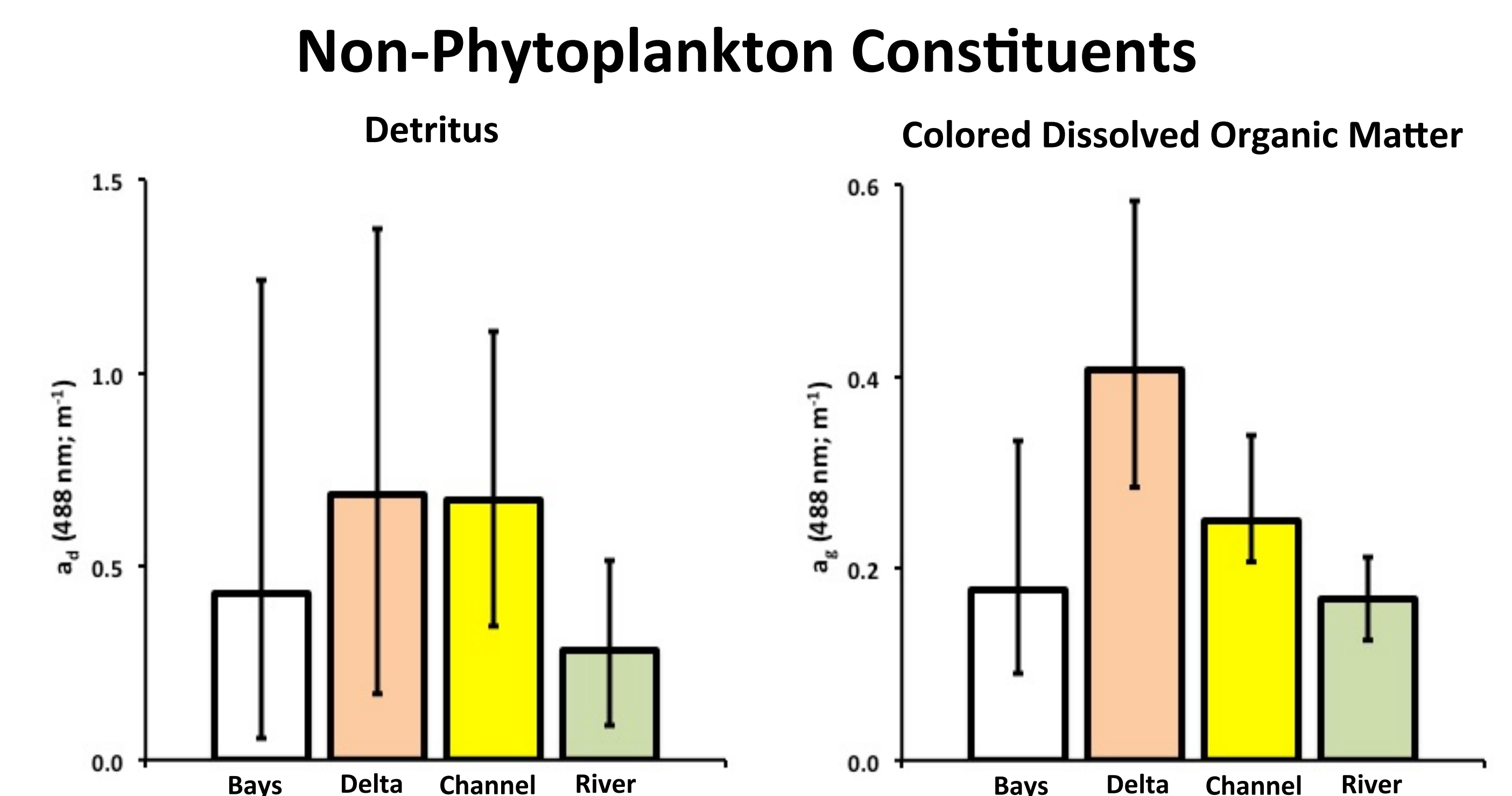
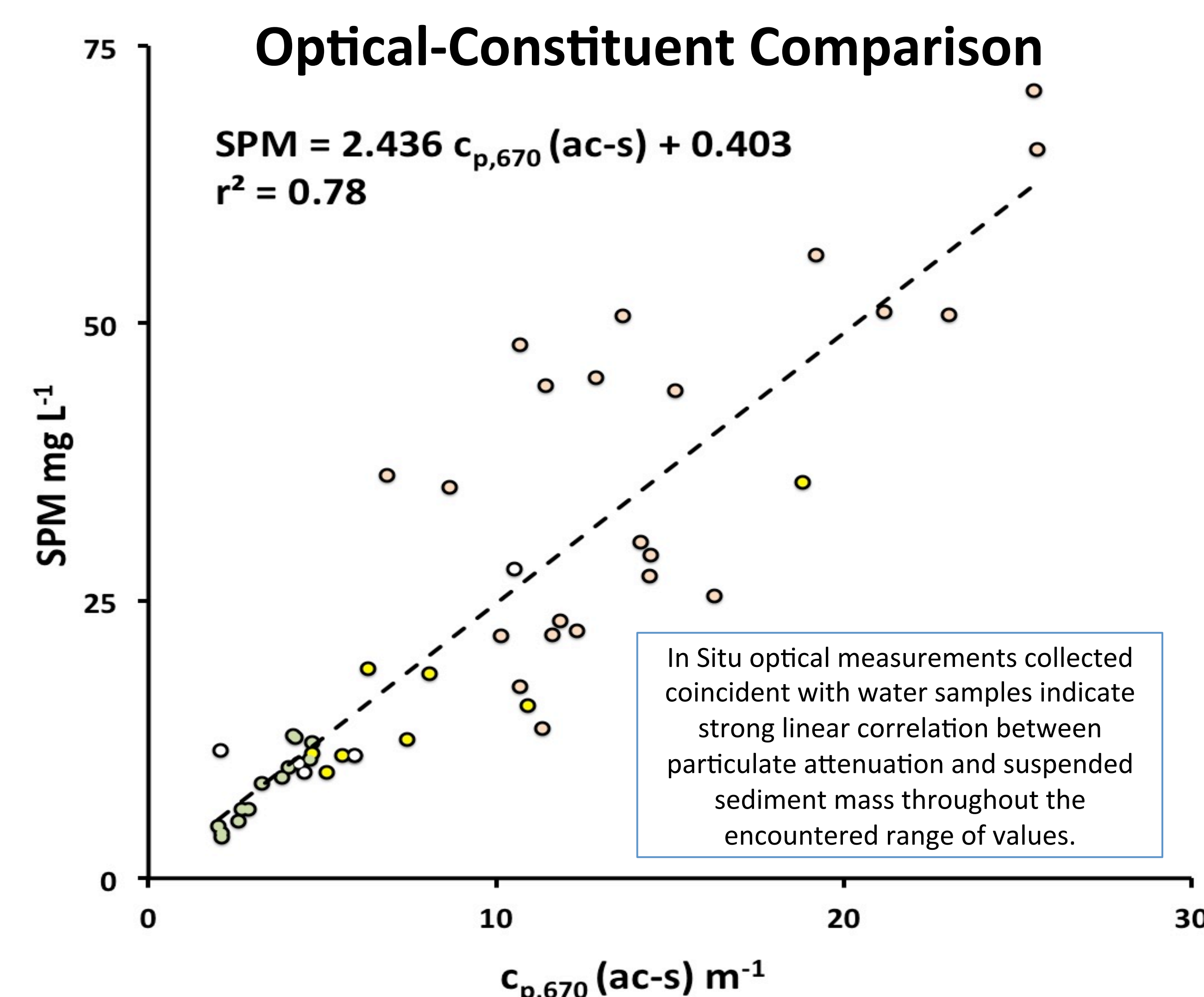
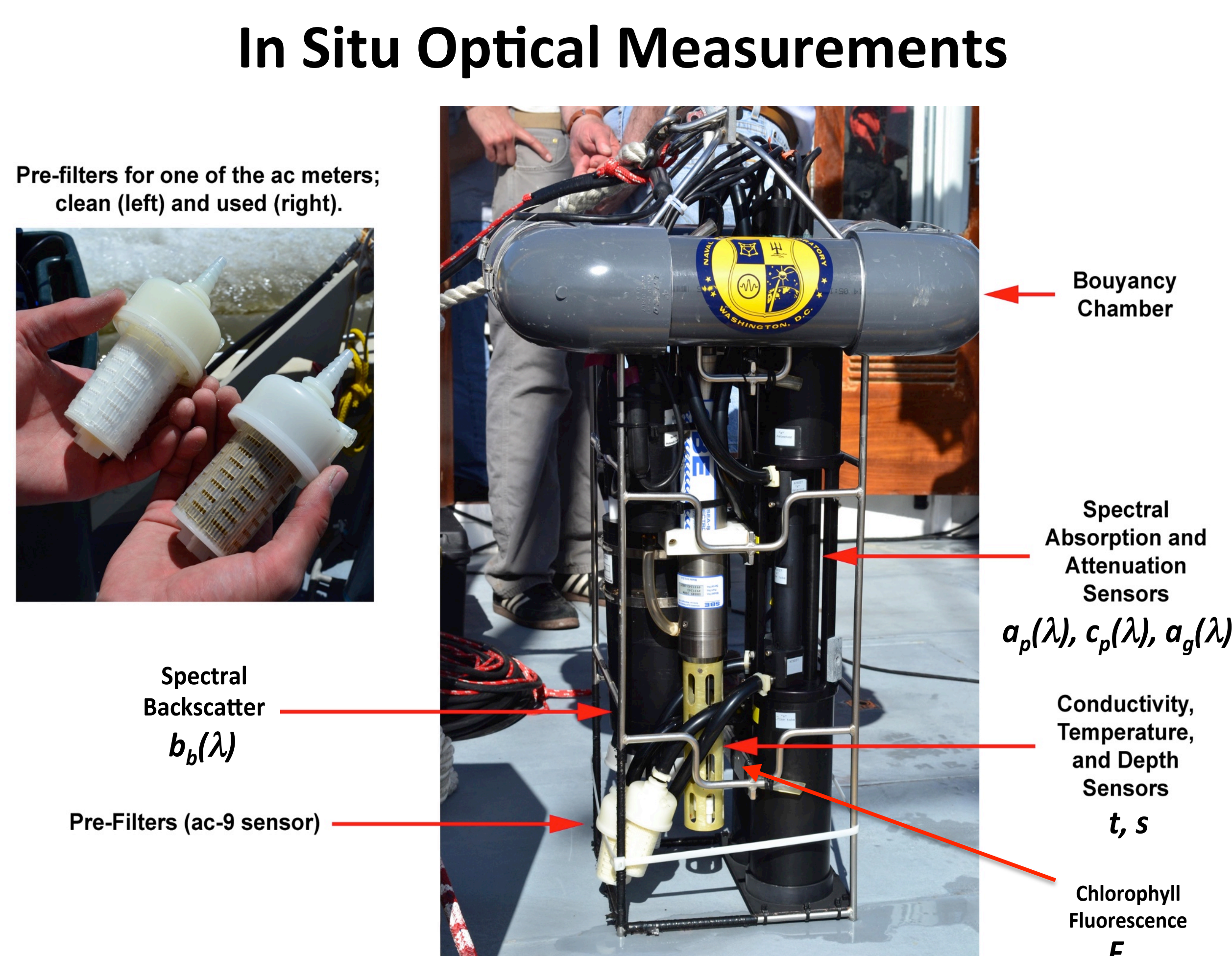
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- Highest concentration of chlorophyll was found in the shipping channel.
- Highest concentration of suspended sediment was found in the delta region.
- Low phytoplankton biomass and turbidity was found in the Sacramento River.



- Absorption attributed to detritus is nearly 2X that of CDOM.
- Highest detritus and CDOM absorption was found in the delta region.
- Lowest detritus and CDOM absorption was found in the Sacramento river.

Conclusions:

- The study area offers a challenging optical environment for in situ sensors designed for much clearer water. However, strong agreement between sensors and expected relationships between optical signals and water sample analyses indicate that high quality measurements are possible.
- Four optical regimes are defined; Bays (San Francisco Bay and San Pablo Bay), the Sacramento River Delta, the Sacramento River Shipping Channel, and the Sacramento River proper. Each have distinct ranges in suspended sediment and chlorophyll concentration and absorption due to detritus and colored dissolved organic matter (CDOM).
- The highest concentration of chlorophyll as well as spatial and temporal variability are shown in the shipping channel and adjacent delta region while lowest values characterize the Sacramento River.
- The highest concentration and variability of suspended sediment and detritus are shown within the delta region while lowest values characterize the Sacramento River.