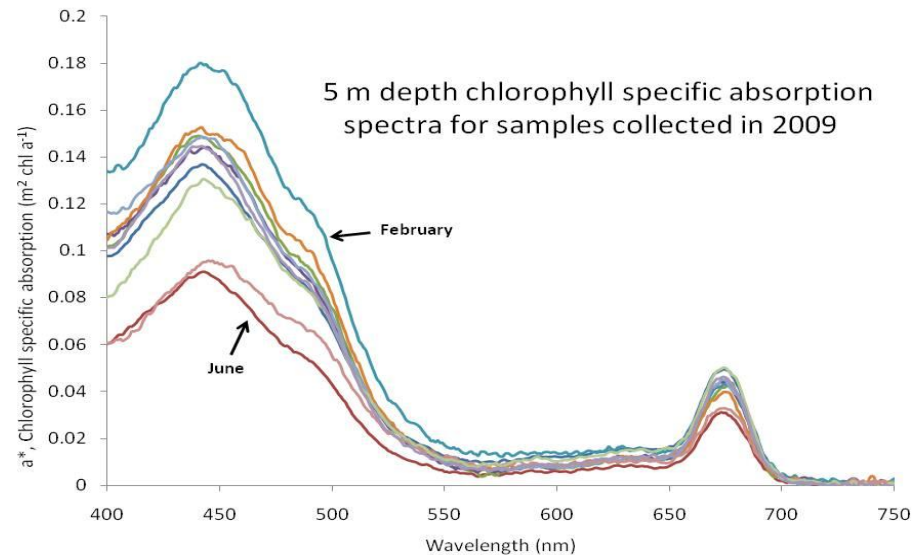


Effects of variability in chlorophyll specific absorption in remote sensing retrieval



Long-term changes in chlorophyll concentration in the North Pacific subtropical gyre derived from satellite observations are attributed to a decrease in phytoplankton biomass. Chlorophyll specific absorption allows us to assess how the physiological state of phytoplankton affects the retrieval of biomass based on chlorophyll.



In this region, the observed variability in particle pigment absorption per unit chlorophyll has the same magnitude as the variability in chlorophyll concentration derived from ocean color algorithms. Based on these results, the limit of detection of chlorophyll a by ocean color algorithms in the North Pacific subtropical gyre is approximately 0.06 mg m^{-3} .

Website http://omel_test.coas.oregonstate.edu/home/index.shtml

(Courtesy of
RM Letelier)

Cooperative Institute for Oceanographic Satellite Studies