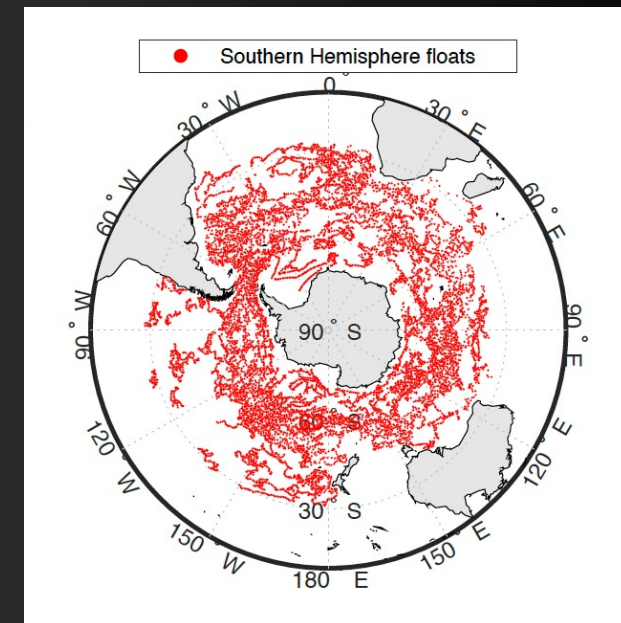
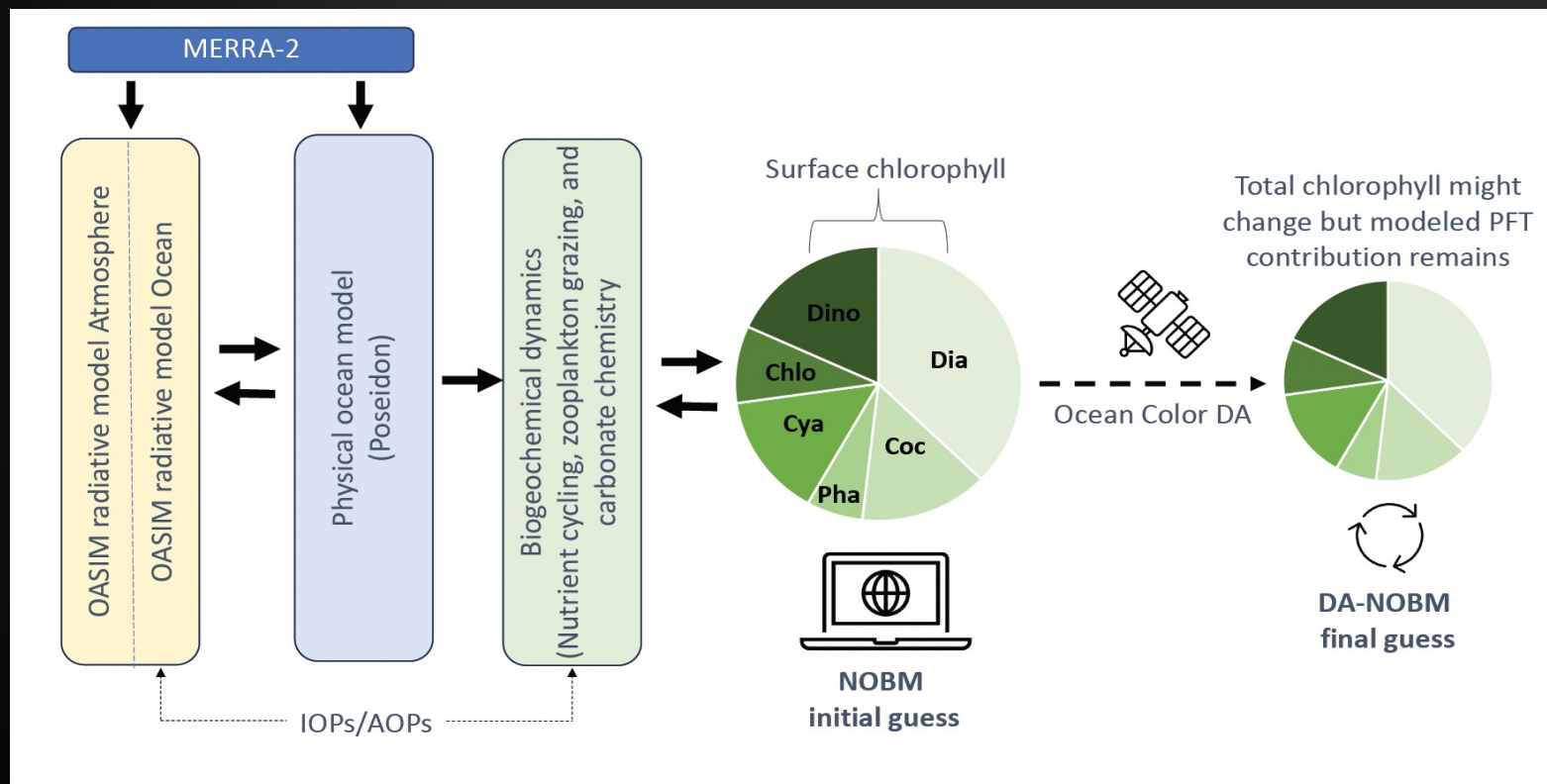


Evaluation of Vertical Patterns in Chlorophyll-A Derived From a Data Assimilating Model of Satellite-Based Ocean Color

The GMAO's NASA Ocean Biogeochemical Model (NOBM) was developed to cover gaps and correct errors in remote sensing ocean data retrievals. Generally done with satellite-based chlorophyll-sensing tools and biogeochemical (BGC) Argo floats, NOBM is an alternative approach for expanding surface remote sensing information to depth by incorporating satellite ocean color observations into numerical models via data assimilation (DA). Analysis shows a generally good agreement between float and model chlorophyll output, with model estimates yielding a slightly higher chlorophyll concentration than floats.



The trajectories of BGC-Argo floats used in this study. NOBM provides estimates of seasonal changes in biomass, which can be compared against independent, non-assimilated measurements from float-based observations.