Global trends in ocean phytoplankton: a new assessment using revised ocean color data

Background:

- Observing long term trends in ocean color data requires consistency among successive missions, since the lifetime of each is finite and is crucial to our understanding of global ocean biology variability and trends.

Analysis:

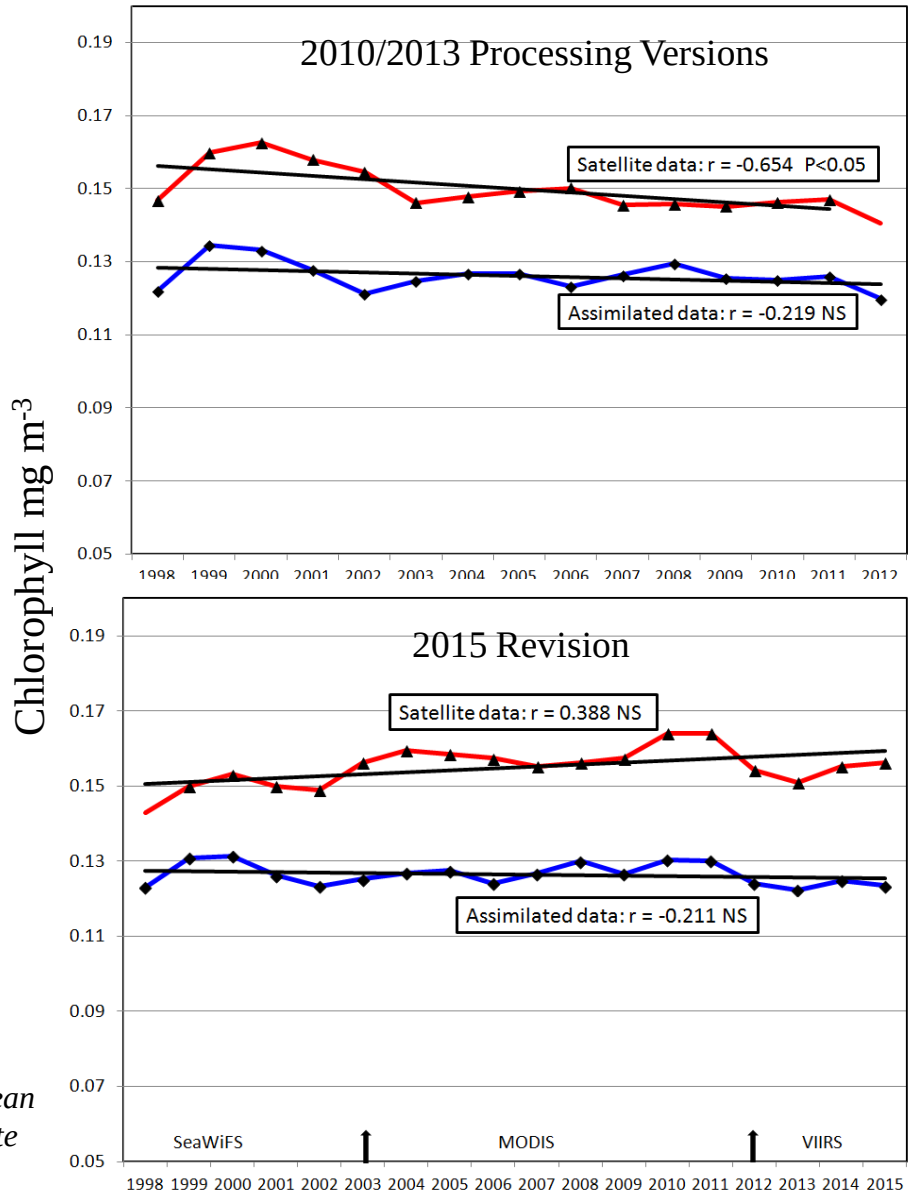
- The NASA Ocean Biogeochemical Model (NOBM), data assimilation, and a bias-correction methodology were combined to produce global and regional trends in ocean chlorophyll for the period 1998-2015

Findings:

- Global trends from satellites alone were different depending upon the processing version used. Assimilated, bias-corrected data were stable regardless of processing version

Significance:

- These findings suggest that the assimilated, bias-corrected data is stable and independent of processing approaches, suggesting its capability for global trend detection.



Gregg, W.W., C.S. Rousseaux, and B.A. Franz, 2017. Global trends in ocean phytoplankton: a new assessment using revised ocean colour data. Remote Sensing Letters 8: 1102-1111. doi.org/10.1080/2150704X.2017.1354263.