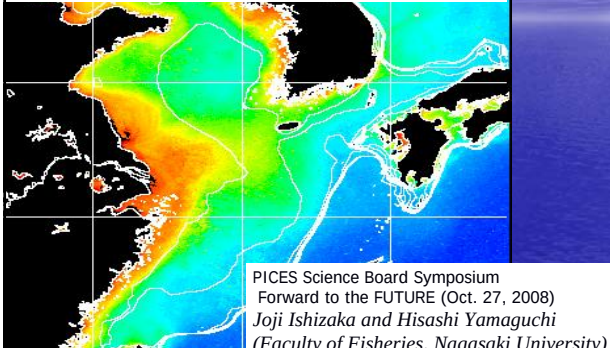


Long term change of primary production in the Yellow Sea and East China Sea



Ocean Color Remote Sensing

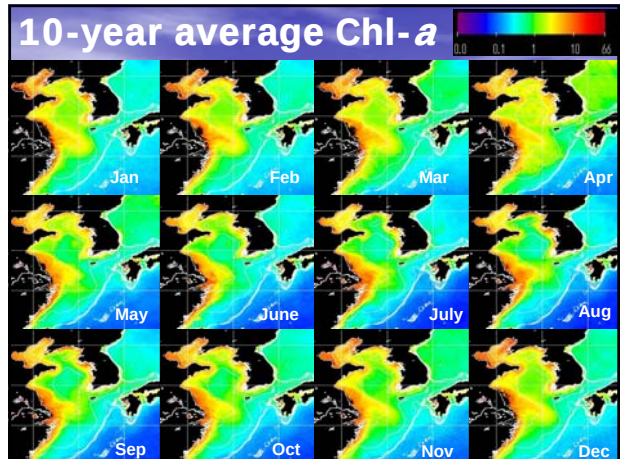
- Only validation method of ecosystem model specifically chl.a spatial distribution
- However, in coastal water,
 - Water: large amount of turbidity and colored dissolved organic matter
 - Atmosphere: yellow dust and anthropogenic absorptive aerosol
 - Shallow chlorophyll maximum

Question:

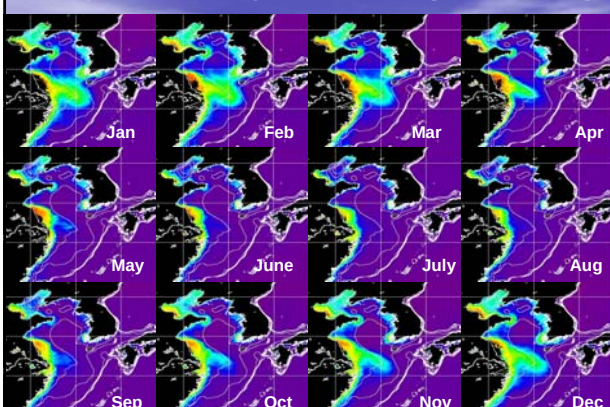
Can we use present satellite data for monitoring marine environment in the East China Sea and Yellow Sea?

- Satellite ocean color data – 10 years (Sea-viewing Wide-Field-of-view Sensor: SeaWiFS)
- Chlorophyll-a – phytoplankton pigment
- Uncertainty – accuracy (sediment, CDOM)

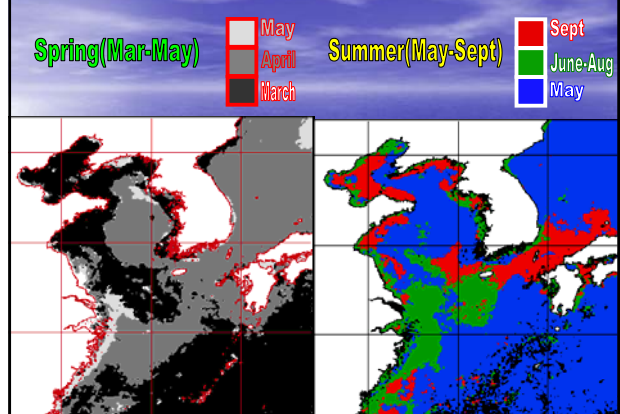
10-year average Chl-a

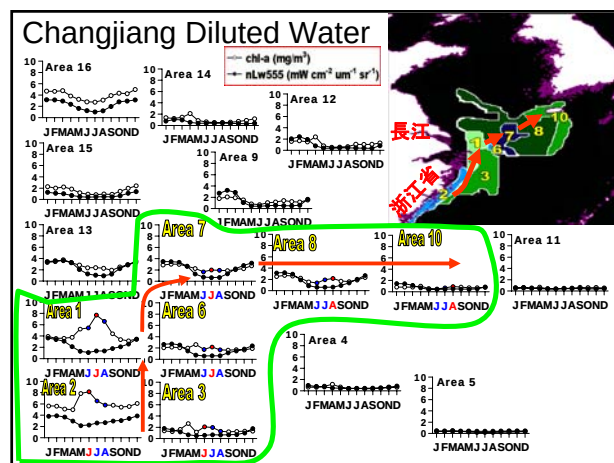
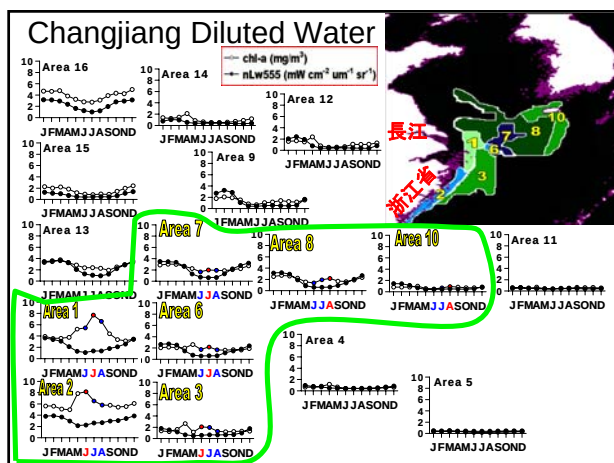
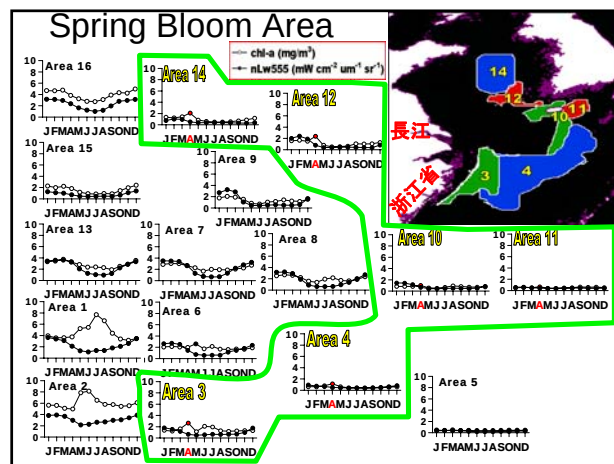
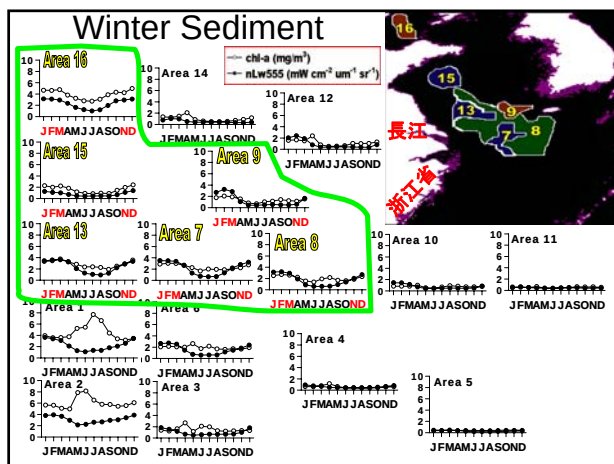
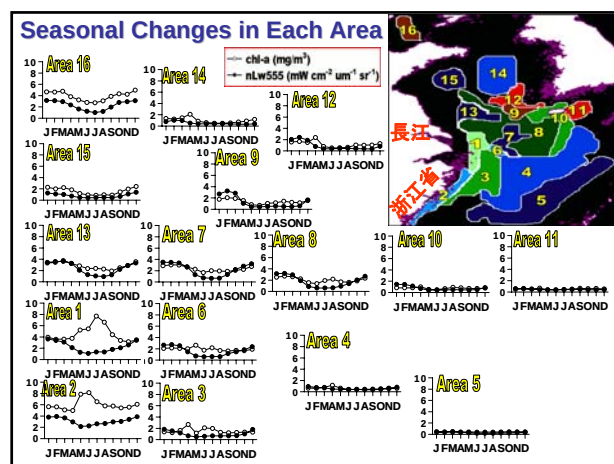
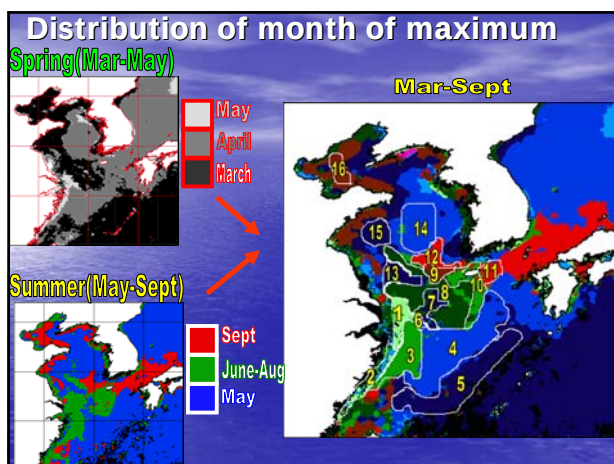


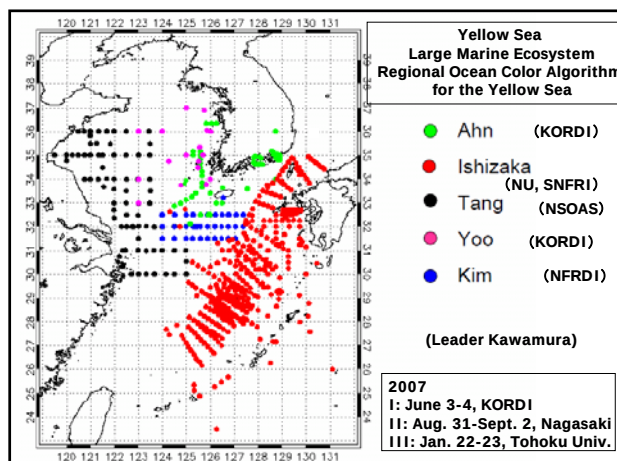
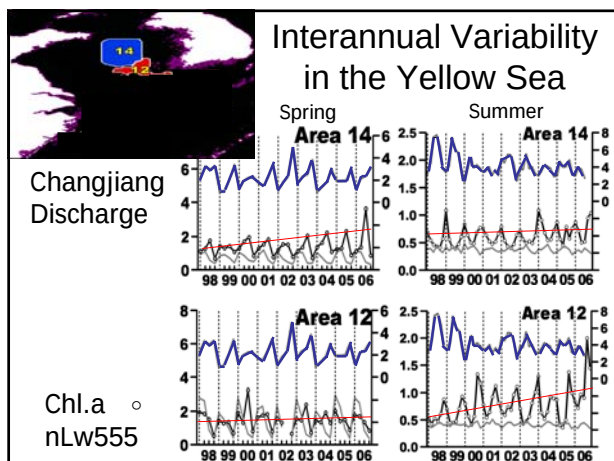
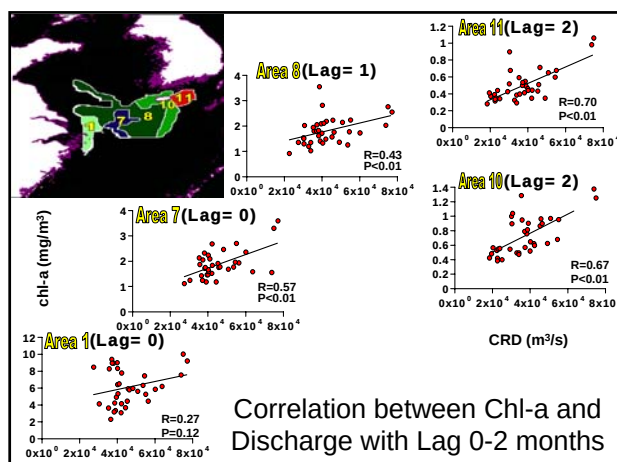
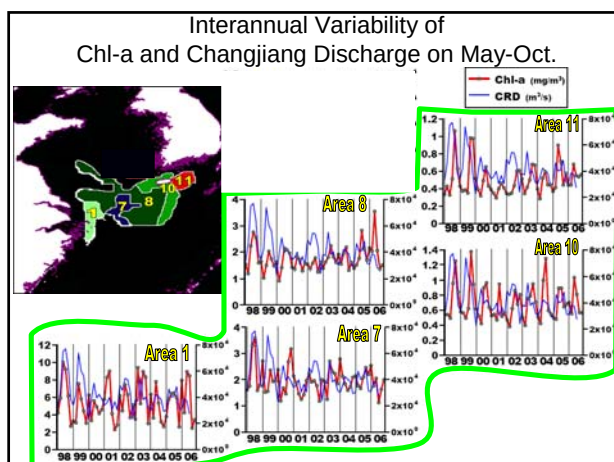
10-year average nLw555 (Sediment)



Distribution of month of maximum







Conclusions

Yes! Satellite : Useful Tool for Monitoring of
Coastal Environment

Discharge of Changjiang : Dominant Factor of
Variation of Summer Satellite Chlorophyll in
the East China Sea.

Magnitude of Spring Bloom : Increasing Last
10 Years in the Yellow Sea – Eutrophication?

International Collaboration : Necessary for
further Development of Accurate Satellite
Data