Sediment and shelf-basin exchange fluxes

Wide-ranging conversations, but several general priorities emerged:

- Use available resources for what they are best at: models, satellite, and in situ observations

    - Use and/or develop models to constrain physical transports

    - Target field and satellite observations to areas of high variability to constrain fluxes through focused studies (models can help!)

    - Synthesis and data mining of existing field and satellite data

    - Nested models to address different temporal and spatial scales

- Accountability in data management, submission, sharing (e.g. higher-resolution version of GLODAP for coastal oceans)

- Funding to support data mining and synthesis!

Sediment and shelf-basin exchange fluxes

Changes most affecting these flux predictions => specific needs:

- Changes in frequency and magnitude of storms, and the magnitude and composition of resulting events

    - Need for geostationary satellites

    - Sustained monitoring of inputs (e.g. river networks)

    - Combination of satellite and in situ sensors to address surface and benthic fluxes

- Changes in temperature and ocean O_2 concentrations on rates of C transformations in coastal oceans and related biogeochemical processes (e.g. denitrification)

- Land/coastal use changes affecting erosion, etc.

- Others?