SWOT Applications Focus

Suggested pillars;
- <u>Hydrology</u>:
    - developing world water problems (water supply, health)
    - food security (flooding & drought)
- <u>Oceanography</u>:
    - coastal circulation, impacts
    - marine operations, open ocean issues
- <u>Climate</u>:
    - regional capabilities
    - coastal impacts
    - agricultural impacts

SWOT Applications Splinter Agenda

SDT member summaries;

G. Schuman; Zambezi River Basin project, large scale flood
   inundation

Y. Chao; Ocean-to-estuary/river proposed work

S. Biancamaria; Transboundary basins management, assessing
   water managers needs two disparate basins

C. Michailovsky; AirSWOT Applications data product/model
   development project

F. Hossain; Operational satellite-base flood forecasting system

A. Kurapov; Eddies and coastal jets in subpolar seas

Discussion: questions/comments;

- Call for ideas for near-term, mid-term, and long term priorities
- Identify what data products, models are currently being used
- Discrimination between users; commercial, NGO's,
  Government, etc
- What applications are viable based on data latency
  considerations

Applications Working Group/Splinter Summary

➔Heard from SDT member application connections (Great place to start)
➔Framed some issues:
--Impact on existing models (Global Lake, Hydroshed)

--Impact directly on decision makers (new models or direct observations)

--Data latency is an applications issue; barrier to some, not all

--Possibly experimental data (better latency) is 'feasible' on a fork of data processing that is not currently in the requirements

--What impacts could it have in flood models; if this info is important to flood forecasting community, what would it take to get there from the data we will get?

--If not in current requirements, simulate after the fact?

Applications Working Group/Splinter Summary

--Global dataset will have major impact on hydrology - actual river center lines, will still provide critical info on model forecast capabilities

--What products would have significant impacts on models running now? Do we need to id those operational models (models that applied users use, not just scientists), inventory them? baseline them?

--Some projects are discovery investigations of hydrology information value to bathymetric (e.g. Temporal needs, ground truth needs)

--SSH temporal variation impact in coastal regions (e.g. SST, navigation/ hazards)

--Transboundary basin management (sees need for water management training and higher level products (input into their models))

--Incorporate SWOT (synthetic) data into application model(s) to discover capability and value

Applications Working Group/Splinter Summary

- Joint NASA/CNES Applications Plan
- Early Adopter announcement will bring out new ideas