

Workshop Charge



- ◆ Identify strategy for defining “minimally acceptable scientifically viable mission”
 - *Define your process and studies needed to answer it by the end of FY12*
 - ✓ Atmosphere endorses their current STM
 - ✓ Ocean knows what key trades to focus on
- ◆ Summarize recent accomplishments for input into workshop report
 - ✓ WG leads please send 1-2 page written summaries to Laura and Jay by ??
- ◆ Identify any reasons the atmosphere and ocean components must be on the same satellite: Eliminate co-dependent instrument **requirements** while identifying benefits to be **demonstrated** when observations do overlap
 - ✓ No co-dependent requirements identified.
- ◆ Roadmap: identify specific priorities for both near-term (within next 2 years) and longer term science and mission studies
 - *Express/refine minimum desired overlap criteria*
 - ✓ Atmo: all STM products coincident with each other. No required overlap with ocean measurements.
 - ✓ Ocean: no overlap with atmosphere measurements required
 - *Define draft data products and latencies*
 - ✓ Atmo: to be written this year
 - ✓ Ocean: already have a draft
 - *Develop draft survey metrics for science value assessment*
 - ✓ Have a volunteer to lead this (Jessica Neu) working with partners
- ◆ Time permitting, develop draft mission success criteria

Level-1 Requirements



- ◆ Specific needs for Level-1 Requirements Document: only a few more things needed for now
 - *Define data products and latencies*
 - ~~Overlap/coincidence criteria: between ocean and atmo instruments~~
Achieved during this workshop
 - *Ancillary data*
 - Cloud detection requirements and approach for gases and aerosols
 - Other GOES products? (fire detections, clouds for photolysis constraints)
 - Temperature & water vapor profiles? Cloud track winds?

Next Steps



One opening statement from this workshop:

- ◆ GEO-CAPE has not been accelerated because of certain **perceptions**, which are barriers. Are these perceptions accurate, can we alter them?
 - *It's a monolith. Big and expensive.*
 - *Benefit, or urgency, is not as high as other missions (perhaps because its role in an integrated National plan has not yet been **embraced**?)*

Developments during this workshop:

- ✓ We are developing a new paradigm for geostationary Earth science and applications: constellations rather than large observatories!
 - *The DS correctly identified the need (and capabilities) for GEO observations for AQ and OC over the Americas*
 - *The DS didn't emphasize an important trend: other nations around the globe are proceeding with similar missions over their regions*
 - *A GEO constellation is defined simply by the orbital longitudes of each satellite. High time-resolved observations can now be achieved near-globally through international constellations.*
 - *Everyone loves the A-Train! Need a clever name: Geo-Train, Geo-Cloud...*
- ✓ *What will the data products from GEOCAPE look like? Will visual demonstrations help potential users assess value? Put a days' (or weeks or ...) worth of simulated data products in the hands of potential users and let them evaluate utility.*