OSTST and the Future of Satellite Altimetry

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Role of OSTST

 Promotes remote sensing science in support of improved altimetry products

"Measurement team"

• Supports natural science research highlighting uses of altimetry in earth sciences

"Ocean Science team"

• Forum to bring together international satellite altimetry community

"Altimetry constellation team"

Changing environment

- New subjects: Needed evolution of the "splinter topics"
 - Mean Sea Level Error budget,
 - SAR modes, wide-swath remote sensing
 - Advances in processing thanks to coastal altimetry,
 - 60-day signal in TP series
- Growing importance of "third-party" missions
 - Data access
 - Multi-mission intercomparison
 - Ways to make recommendations

Link to CEOS

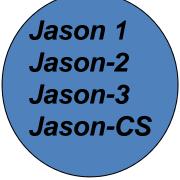
CEOS 101: Committee on Earth Observation Satellites. International body funded in 1984. Today 29 members (space agencies) + associates Aims at:

- 1. optimizing benefits of space-borne Earth observations through cooperation between agencies
- 2. serving as a focal point for international coordination of space-related Earth observation activities;
- 3. exchanging policy and technical information to encourage complementarity and compatibility of systems
- Within CEOS, "Virtual constellations" are the "specialized" sub-groups "atmospheric composition", "precipitation", "land imaging", "OSVW"...

Possibility to "apply" to CEOS to take this task of OST-VC (currently co-led by NASA and EUMETSAT): would bring immediate "international flavor"

The idea is to take commitment in addition to our traditional goals.

OSTST as **CEOS** Virtual Constellation



Already within the scope of OSTST work Agencies directly funding activities: **NASA, CNES** Agencies involvment: EUMETSAT, NOAA, ESA

Cryosat-2 Sentinel-3 AltiKA/SARAL Hy-2 ICESat-2 SWOT

All have a link with the agencies listed above, so inclusion should be possible

Evolutions needed in practice

Direct funding comes from 2 agencies, not all agencies NASA ROSES CNES TOSCA

- => Per se not a problem if it does not prevent participation of other countries, which seems to be the case in this room
- => However currently the definition of an OSTST PI is somewhat linked to those calls

Other structures exist for "technical" discussions on other missions (ESL/QWG at ESA)

- => We believe that such discussions in a multi-mission frame are good (e.g. Cryosat talks "bloom" this year will certainly have an impact on the way we look at Jason data)
- => Up to each agency to define how they take into account OSTST in its own structures

Probably need to revise the structure of OSTST (e.g. only 1 or 2 lead scientists, with a committee to help, and then a larger opening to the community)

Proposed new OSTST

- (1) Keep the name (and the meetings) !
- (2) Truly embrace all the altimetry missions
- (3) Re-define focus topics
 - need a small group of volunteers to help on that
 - TP/Jason series as the backbone
 - OSTST meetings to reflect those choices, and open to the whole community
- (4) Get official "virtual constellation" label from CEOS (// GHRSST)
- (5) Then at agency levels we will work out how can we support (fund) the OSTST on the long term
 - Note: upcoming OSTST AO maintained

DISCUSSION QUESTIONS

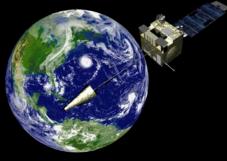
Can we truly "internationalize" the OSTST?

Can OSTST adopt the CEOS Virtual Constellation for Ocean Surface Topography?

Will the future OSTST have better access to OST data as a result of its organization?

Primary Objectives of CEOS

- 1. To optimize benefits of space-borne Earth observations through:
 - Cooperation of its Members in mission planning
 - Development of compatible data products, formats, services, applications, and policies;
- 2. To serve as a focal point for international coordination of space-related Earth observation activities;
- 3. To exchange policy and technical information to encourage complementarity and compatibility of observation and data exchange systems.



CESS Committee on Earth Observation Satellites



CEOS Virtual Constellations for GEO

- CEOS Virtual Constellations for GEO demonstrate the value of collaborative partnerships in addressing key observational gaps and bridging multiple GEO Societal Benefit Areas while maintaining the independence of individual contributions
- Focus dialogue from "all topics/all agencies" to smaller, more specialized groups
- Guidance for design and development of future systems to meet the broad spectrum of EO requirements
 - Avoid duplication and overlap in EO efforts
 - Close information gaps for GEO SBAs
 - Establish and sustain global EO coverage and data availability



Proposed Future Constellation: Sea Surface Temperature

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CE Committee on Earth Observation Satellites

