

SCOR Annual meeting -- October 2022

SCOR Working Group #162 for developing an Observing Air-Sea Interactions Strategy (OASIS)

airseaobs.org

Co-Chairs: Meghan Cronin (NOAA, USA), Christa Marandino (GEOMAR, Germany), Sebastiaan Swart (UGOT, Sweden)

Taking a "system-as-a-whole" approach for making surface and boundary layer observations relevant to the Earth's energy, water, and carbon cycles, including their physical, biological, and geological components





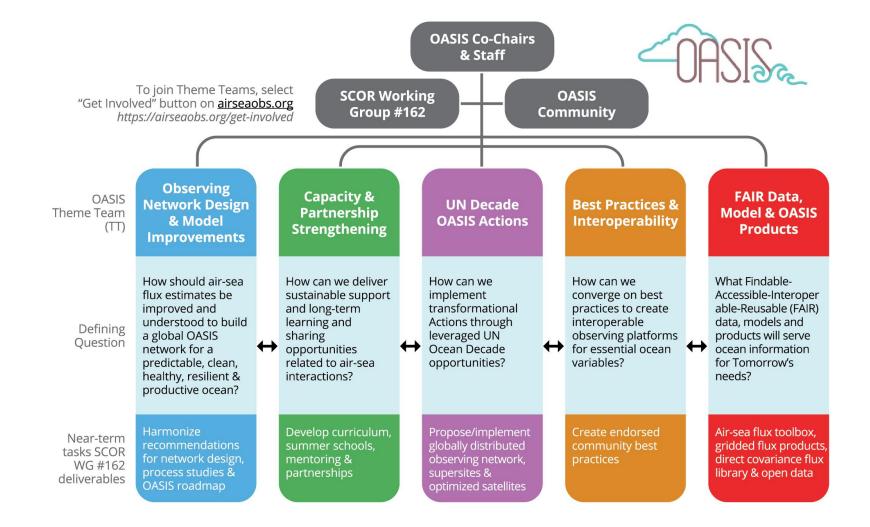




Members of SCOR WG #162 for developing an Observing Air-Sea Interactions Strategy (OASIS)

SCOR WG Member	Institution	Expertise
Meghan Cronin*	NOAA Pacific Marine Environmental Laboratory, US (co-chair)	In situ physical fluxes; OceanSITES; TPOS2020
Sebastiaan Swart*	University of Gothenburg, Sweden (co-chair)	In situ physical & CO2 fluxes; SOFLUX
Christa Marandino*	Geomar, Germany (co-chair)	Trace gas fluxes; SOLAS
R. Venkatesan	National Institute of Ocean Technology, India	In situ physical fluxes; OceanSITES; Capacity Building
Phil Browne ^	ECMWF, UK	Operational Models; Coupled DA
Warren Joubert ^	South African Weather Service, South Africa	Operational Center; BGC; Capacity Building
Ute Schuster	University of Exeter, UK	In situ CO2 fluxes; BGC; SOCONET; AtlantOS;
Nadia Pinardi	University of Bologna, Italy	Numerical ocean forecasting systems; WMO
Shuangling CHEN ^&	Second Institute of Oceanography, China	Satellite CO2 fluxes; BGC
Clarissa Anderson	Scripps Institution of Oceanography, US	Biological oceanography; capacity building; IOOS
Jim Edson	Woods Hole Oceanographic Institution, US	Direct covariance fluxes; parameterizations; technol.
Zhaohui CHEN	Ocean University of China, China	In situ physical fluxes; technology
Juliet Hermes	South African Environmental Observation Network, South Africa	In situ physical fluxes; capacity building; OBPS; OCG
Fabrice Ardhuin	University Brest, CNRS, IRD, Ifremer, LOPS, IUEM, France	Satellite fluxes;
Oscar Alves	Bureau of Meteorology, Australia	Operational models; coupled DA; WGNE
Hiroyuki Tomita	Graduate School of Environmental Science, Hokkaido University, Japan	Satellite fluxes; J-OFURO
Marcel du Plessis^	University of Gothenburg, Sweden	FAIR data, models & OASIS products TT co-lead
Jack Reeves Eyre^	NOAA NCEP Climate Prediction Center US	Best Practices TT co-lead
Francesco Maicu^	University of Bologna, Italy	

* Co-chairs; ^ ECOP; ^&UN Ocean Decade ECOP Co-Lead





SCOR WG #162: 2nd year accomplishments

COMMUNICATION, LINKS TO UN DECADE AND COMMUNITY BUILDING

Regular Working Group telecons: (1) monthly full WG; (2) biweekly co-chair + COL; (3) quarterly open to community (typically 50 participants); Theme Team meetings (~1-2 monthly) that progress the 5 core themes of OASIS

Endorsement as a UN Ocean Decade Programme! UN Ocean Decade Laboratory satellite events: 5 Labs coordinated by OASIS!

UN Ocean Conference in Lisbon, June 2022, Co-Chair Cronin presented OASIS in the <u>high-profile side event</u>: "Our Changing Ocean: Navigating Observations and Building Research-Driven Solutions".

Outreach and communication through website (airseaobs.org), newsletter & slack workspace

AGU Ocean Sciences Meeting - Feb 2022: "OASIS Ocean Shots for 2030" & Townhall: "Get Involved! Observing Air-Sea Interactions Strategy (OASIS) Theme Teams"

SOLAS Open Conference- Sep 2022, Cape Town South Africa- **Strengthening Partnerships between OASIS and the Global South side event; 20 local ECOP's registration fee waived and invited to OASIS Global South ECOP dinner**

Multiple OASIS presentations by co-chairs



SCOR WG #162: 2nd year accomplishments

Improved Earth system (including ecosystem) forecasts for a predicted. clean, accessible healthy, safe &

CLIMATE

A globally distributed in situ air-sea observing network built around an expanded array of time series stations

SPECIFIC PRODUCTS

- Cronin et al. (ICES JMS 2022). Developing an Observing Air-Sea Interactions Strategy (OASIS) for the global oceans. A food for thought article describing goals and visions of OASIS.
- Venkatesan et al. (to be submitted to Oceanography Magazine Oct 15, 2022): Air-Sea Observations for a Safe Ocean with a focus on SIDS. An outcome -OASIS Safe Ocean workshop.
- Riihimaki et al. (In Prep) 'Ocean Surface Radiation **Best Practices'**
- Air-sea flux tool box (in prep)
- Air-sea flux curriculum (first draft used in SOLAS Summer School 2022)

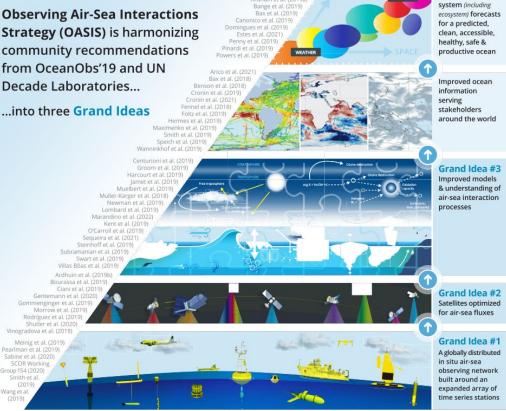


Image: Sarah Battle/NOAA



Several conferences and meeting opportunities are planned for Year 3:

(1) OASIS session at AGU Fall 2022 Science Meeting; OASIS talk at GCOS & DBCP meetings.

(2) The WG continues to seek the right opportunity to meet in person, and is contemplating how this is done to minimize the WG's carbon footprint.

Manuscripts In Prep.:

As OASIS matures, several papers are now in various stages of being prepared, finalised and submitted

- (1) Surface ocean radiation best practise manuscript (Riihimaki et al. in prep),
- (2) USV Community of Practise paper, (Patterson, et al.)

(3) OASIS Synthesis manuscript. SCOR WG #162 (in prep) OASIS Grand Ideas and Recommendations. A synthesis of more than 40 OceanObs19 Community Strategy Papers to help define the 10 year OASIS and its Theme Teams.



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Thank you to SCOR for the continued support of OASIS

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