

Observing Air-Sea Interactions Strategy (OASIS) is harmonizing community recommendations from OceanObs'19 and UN Decade Laboratories...

...into three Grand Ideas

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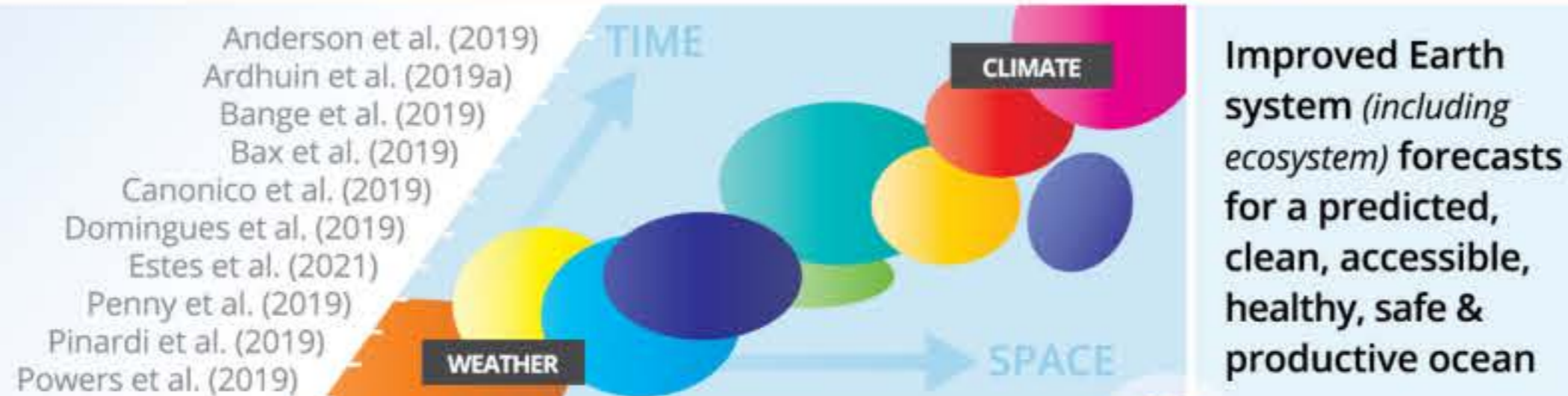
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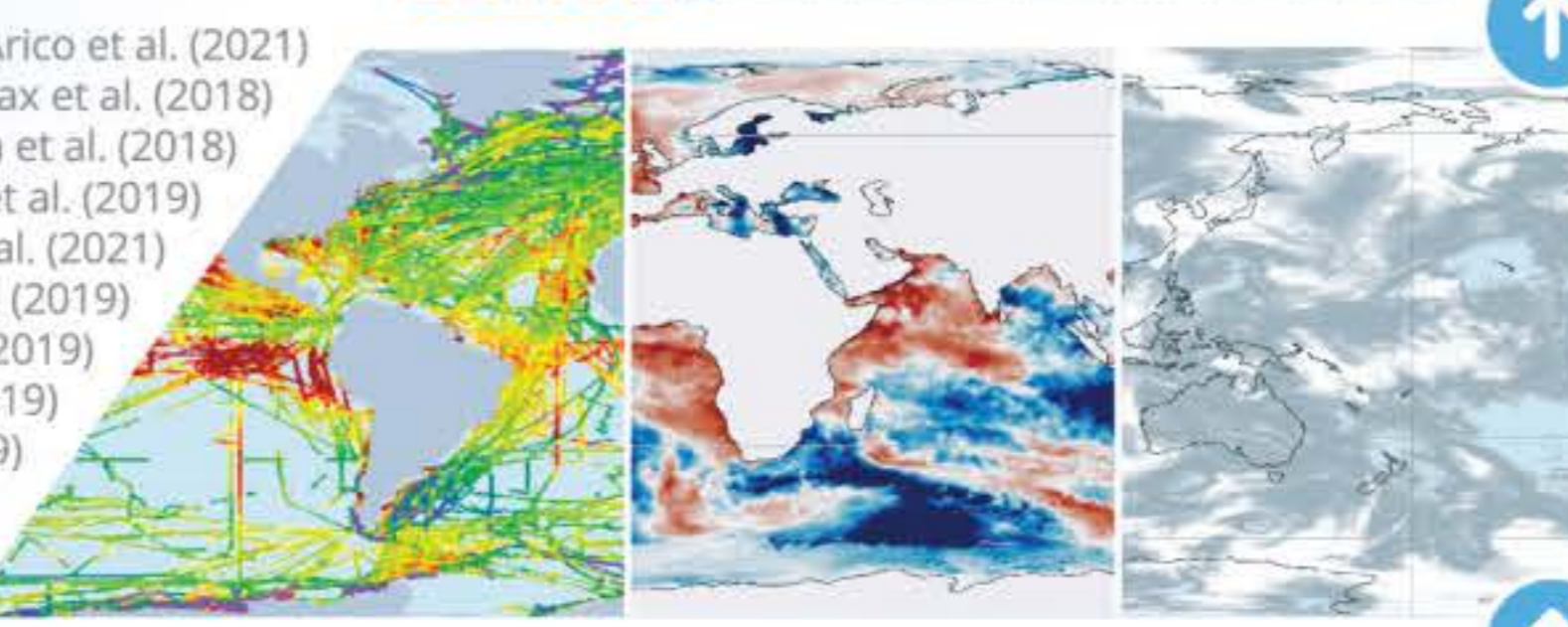
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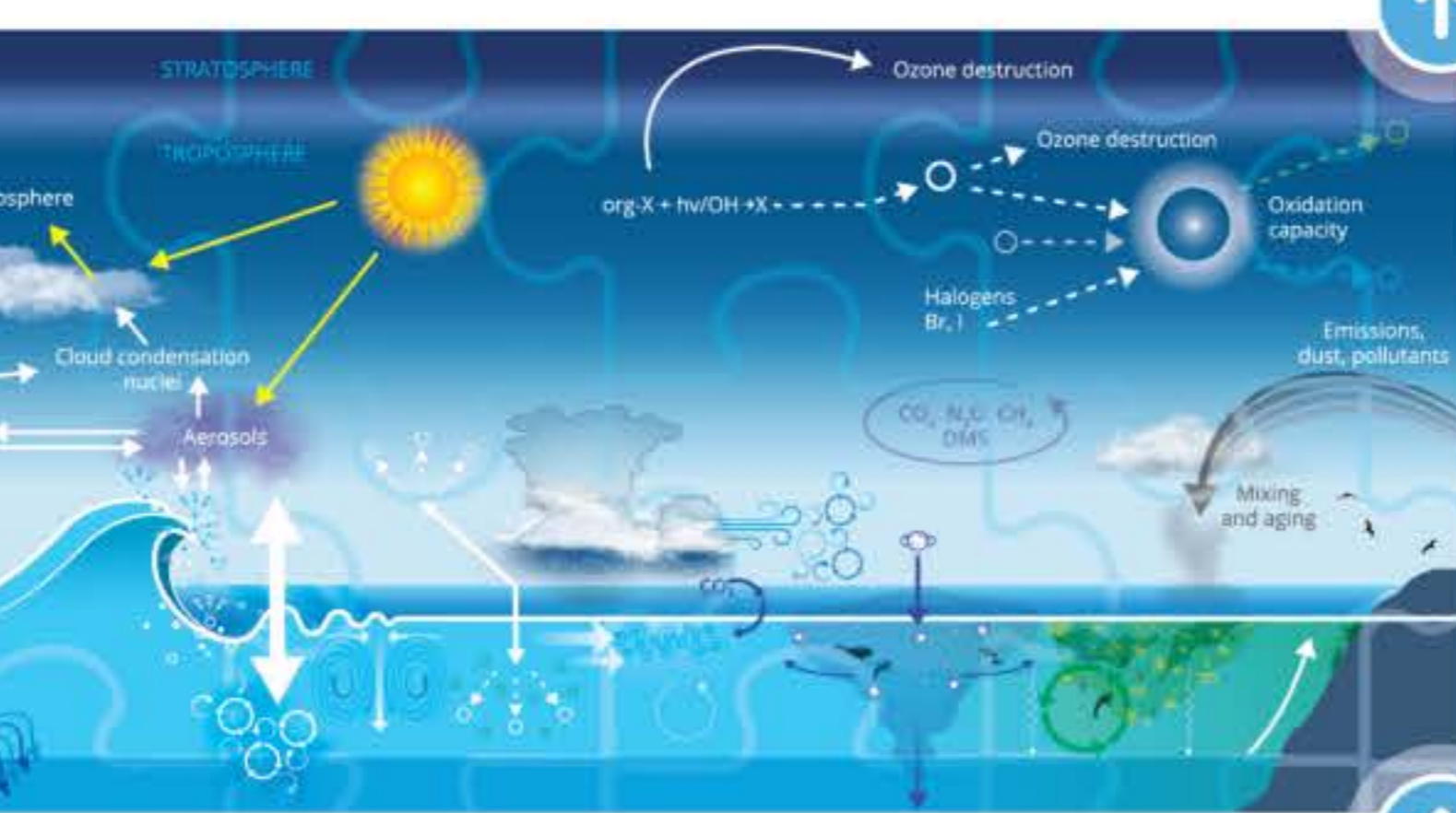
Image: Sarah Battle/NOAA



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



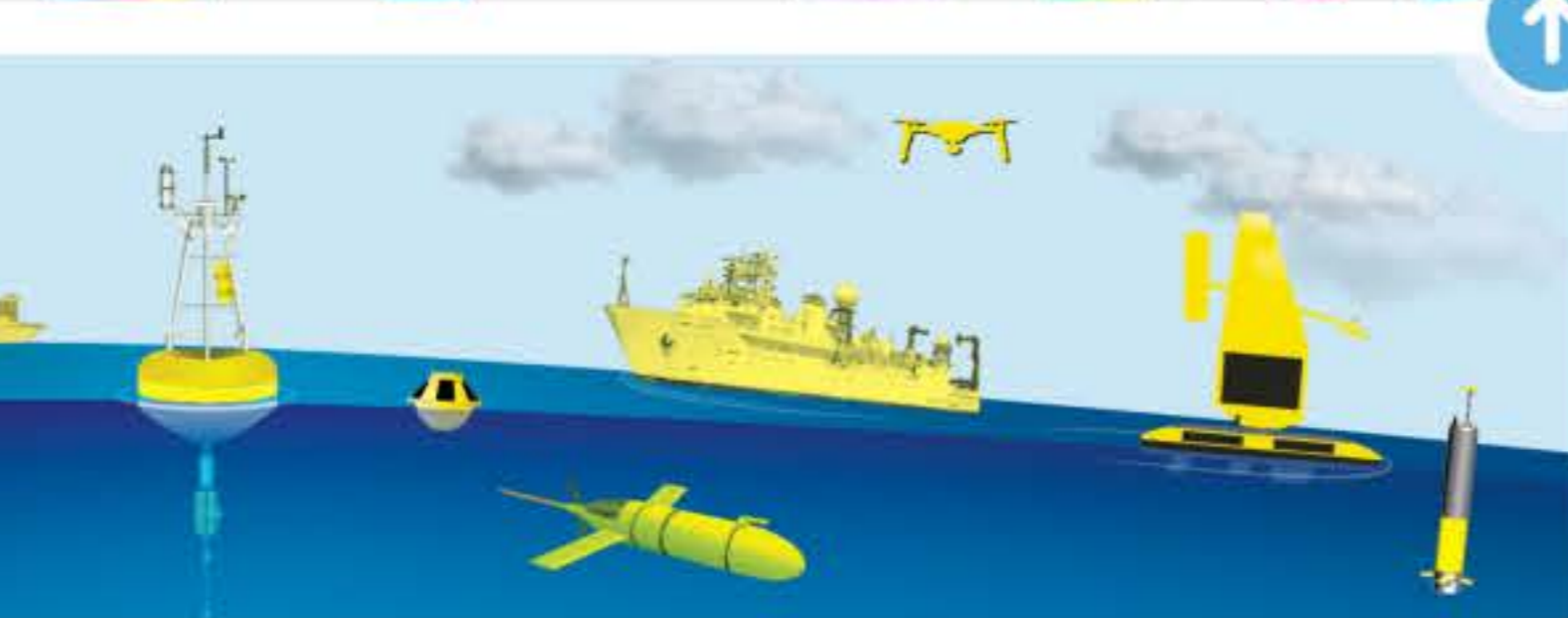
Improved ocean information serving stakeholders around the world



Grand Idea #3 Improved models & understanding of air-sea interaction processes



Grand Idea #2 Satellites optimized for air-sea fluxes



Grand Idea #1 A globally distributed in situ air-sea observing network built around an expanded array of time series stations

visit: airseobs.org

Developing an Observing Air-Sea Interactions Strategy (OASIS) for the global ocean to serve the global community

The Observing Air-Sea Interactions Strategy (OASIS) seeks to create a sea change in observations of air-sea interactions, working to develop a practical, integrated approach for observing air-sea interactions globally for improved Earth system forecasts, CO₂ uptake assessments called for by the Paris Agreement, and invaluable surface ocean information for decision makers. OASIS uses a community approach to harmonize observational strategies through capacity development and leveraging of multi-disciplinary activities, providing knowledge to promote healthy oceans and the blue economy. Our "Theory of Change" relies upon leveraged multi-disciplinary activities, partnerships and capacity strengthening to develop three interlinked Grand Ideas: #1 a globally distributed network of mobile air-sea observing platforms built around an expanded array of long-term time series stations; #2 a satellite network, with high spatial and temporal resolution, optimized for measuring air-sea fluxes; and #3 improved representation of air-sea coupling in a hierarchy of Earth system models. Through OASIS, we hope that the world gains a better understanding of the delicate balances that govern weather, climate, the carbon cycle, and the ocean environment, and a better understanding of how to maintain these balances for the benefit of all. To get involved in OASIS activities and help promote a predicted, safe, clean, healthy, resilient, accessible, and productive ocean, visit <https://airseobs.org/get-involved>



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"Best practices are all about efficient sharing of information and learning. Collaboration and community are central. OASIS can be a focal point in this, bringing together air-sea interaction practitioners from around the world."

-- Jack Reeves Eyre, Former Theme Team ECOP co-lead

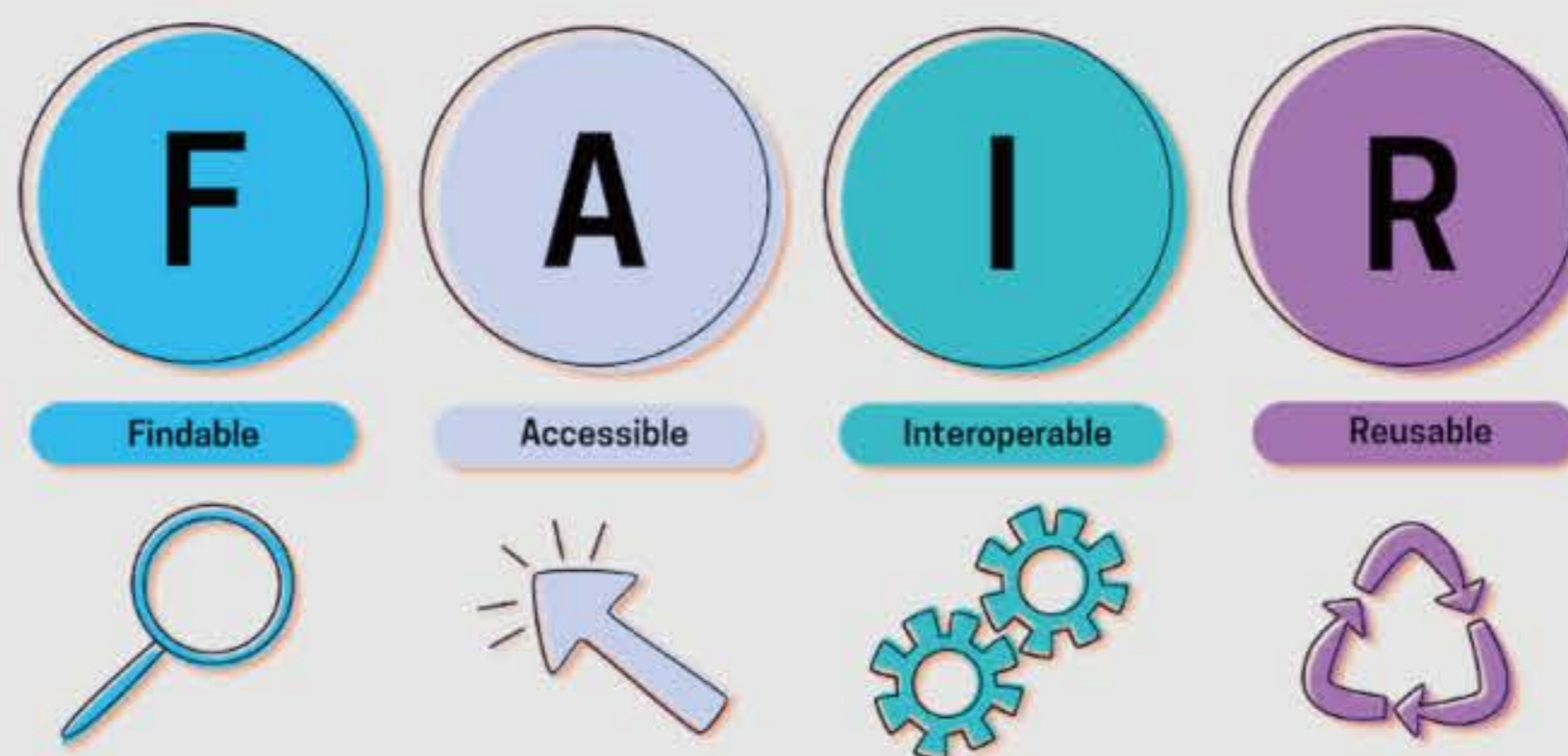
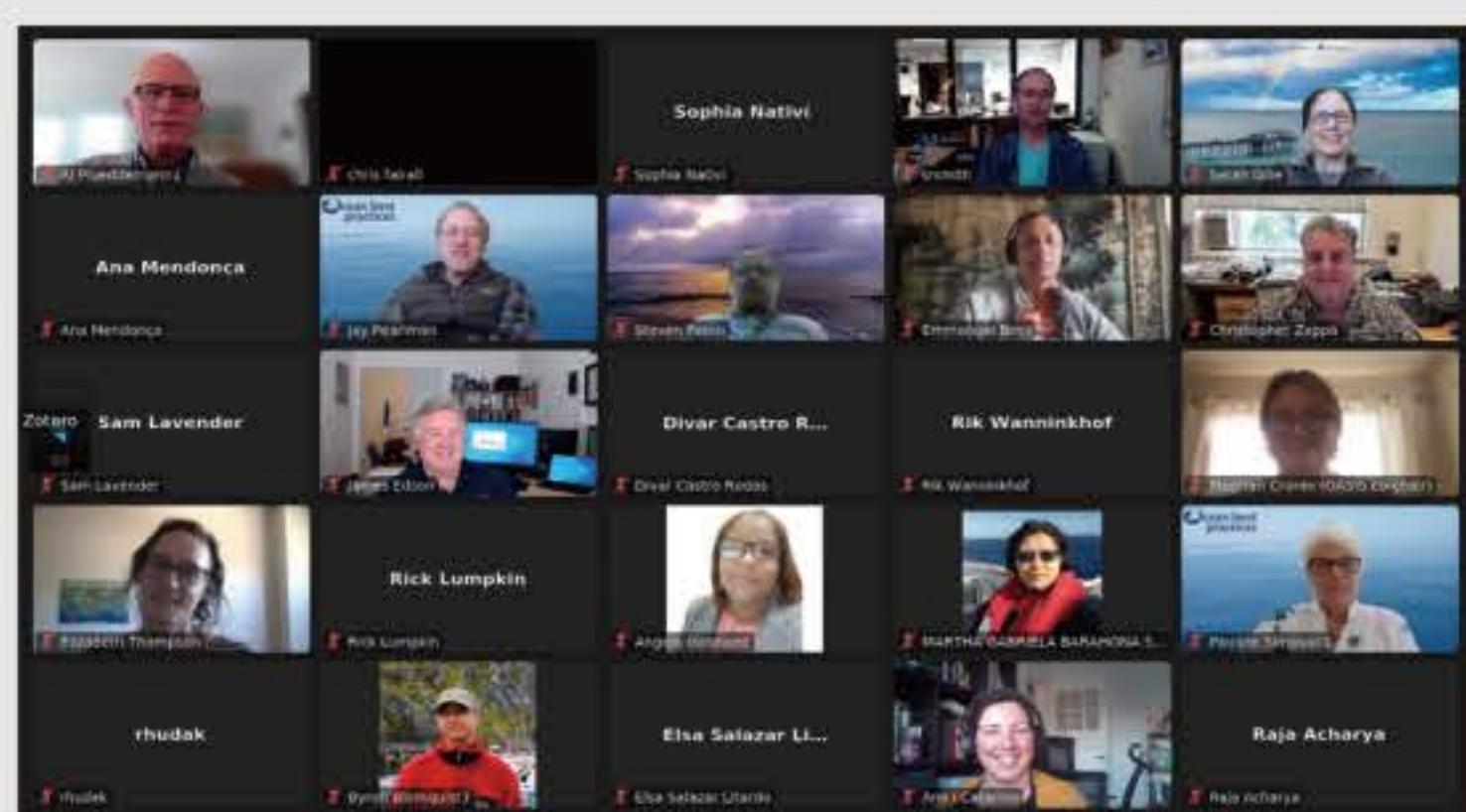


Image: Medium article "Making Data FAIR"

"Our aim is to tackle the grand challenge of standardising air-sea flux terminology, making flux data products and open source code findable and accessible, and elevating the visibility from observation to user data."

-- Marcel du Plessis
 Theme Team ECOP co-lead



Theory of Change

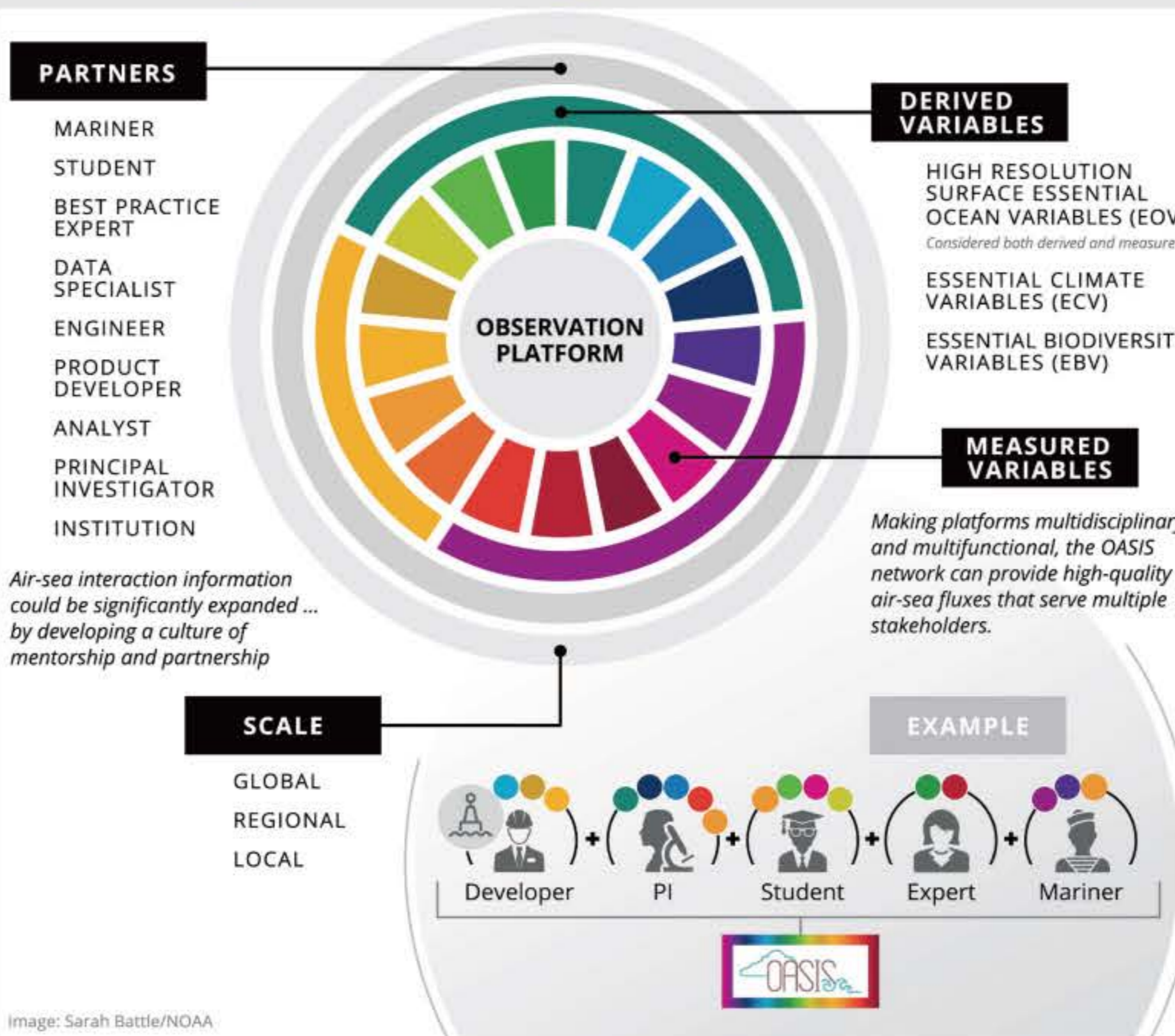


Image: Sarah Battle/NOAA

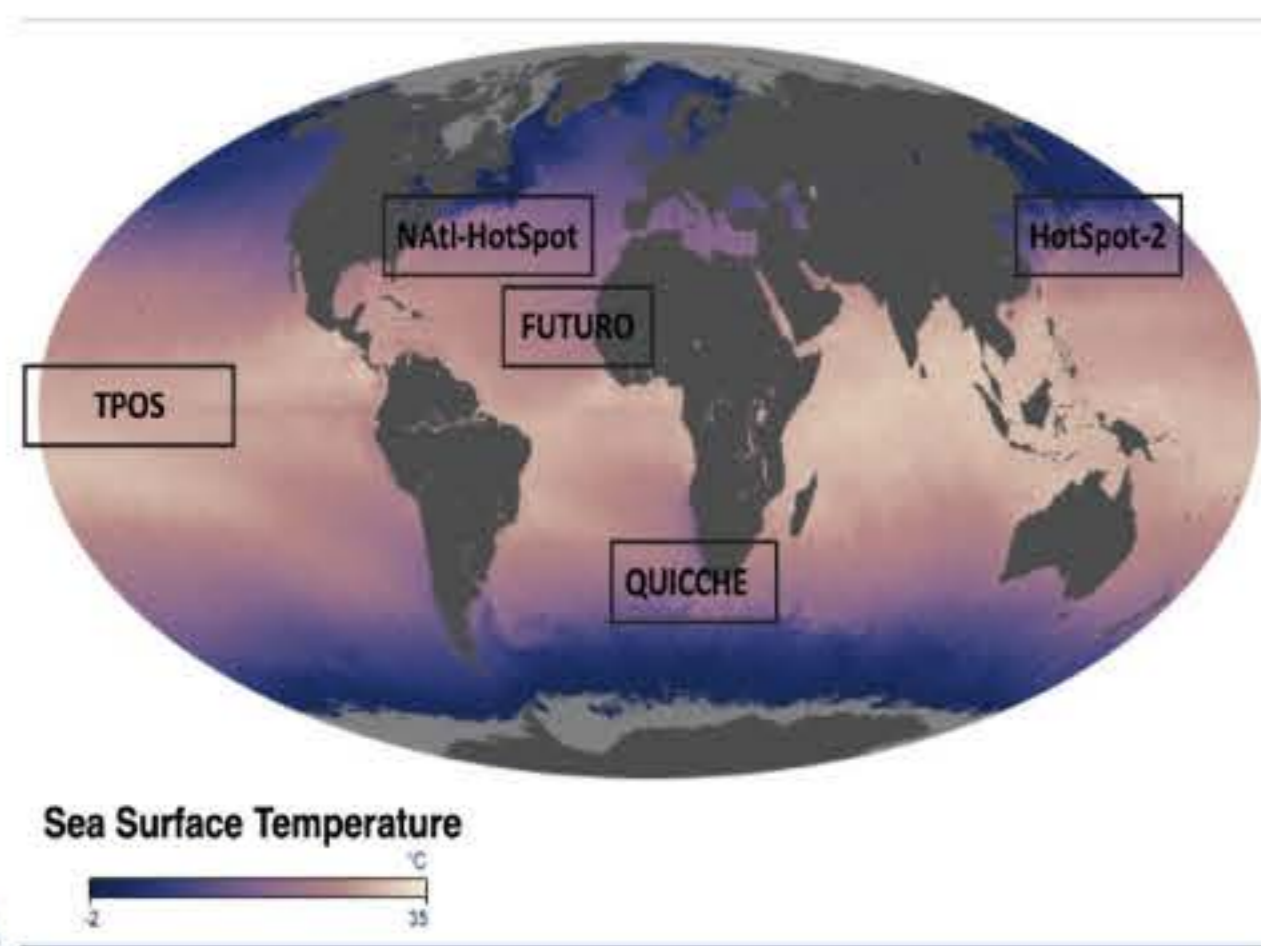
"A Safe Ocean for Small Island Developing States is just one of many societally relevant outcomes of a holistic OASIS strategy"

From Venkatesan et al. (2022) "Air-Sea Observations for a Safe Ocean, with focus on Small Island Developing States"



"OASIS-relevant process studies, which ensure interoperability of observations, & model improvements, are being planned by several international groups around the world in key regions of the global ocean, offering opportunities for multidisciplinary research and data sharing." -- Charles Addey
 Theme Team ECOP co-lead

OASIS-relevant (potential) future Process Studies



Monthly USV Webinar Series for developing the CoP for the USV Network for GOOS is building community -- Contact Ruth Patterson
ruth.patterson@cdu.edu.au
<https://airseobs.org/resources/webinars>



Uncrewed Surface Vehicle Network for a remote, data-limited Global Ocean Observing System

Update on an emerging network for OCG

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13th Observations Coordination Group (OCG) Annual Meeting - 2 June 2022