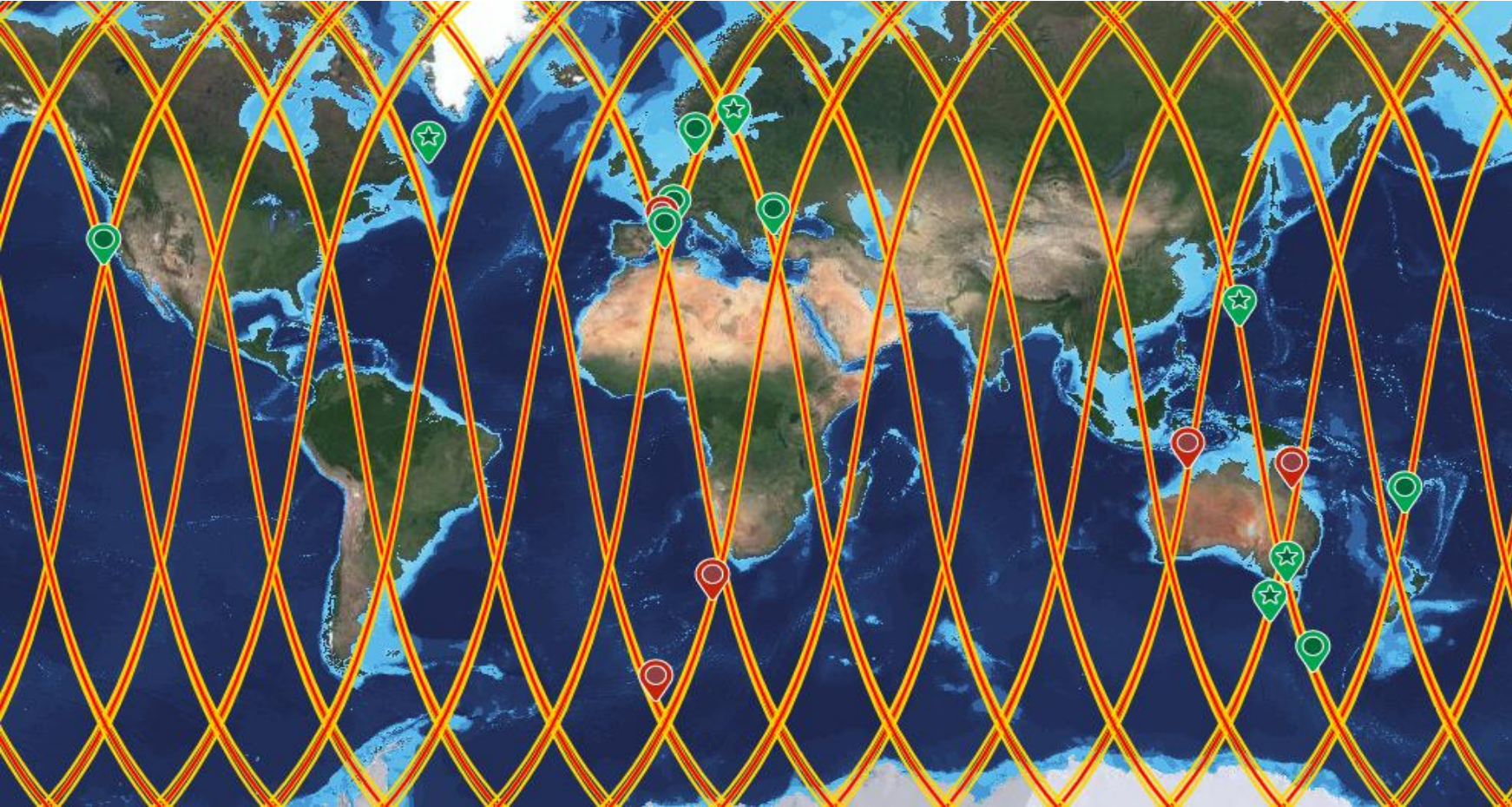


SWOT Adopt-a-Crossover Consortium



Francesco d'Ovidio LOCEAN-IPSL, Paris, France

SWOT Adopt-a-Crossover Consortium

Motivation

Fine-scale dynamics exists in a large number of realization.

A large number of instrumented sites world-wide would help to :

- document experimentally the fine-scale dynamics, by integrating SWOT SSH and concomitant in situ observations
- provide an extensive physical Cal/Val of the SWOT signal

Objectives of the AdAC Consortium

Liaise the SWOT-ST with the international oceanographic community

“Synchronise” existing, incoming campaigns with the SWOT fast sampling/nominal phase

Promote the use of shared protocols for addressing multi-site fine-scale scientific questions

Steering Group

SWOT Adopt-a-Crossover Consortium



From 2019

EXECUTIVE MEMBERS OF THE STEERING GROUP

Francesco d'Ovidio (francesco.dovidio@locean.ipsl.fr), France – FR multi-site

Kyla Drushka (kdrushka@apl.uw.edu), US – US multi-site

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Zhao Jing (jingzhao@ouc.edu.cn), China – Pacific representative

Benoit Legresy (benoit.legresy@csiro.au), Australia – Pacific representative

Rosemary Morrow (rosemary.morrow@legos.obs-mip.fr), France – SWOT ocean lead representative

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Sebastian Swart (sebastiaan.swart@marine.gu.se) – High latitudes representative

Jinbo Wang (jinbo.wang@jpl.nasa.gov), US – Californian site

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Sabrina Speich (sabrina.speich@lmd.ens.fr) – OOPC

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Communications Officer: Tosca Ballerini

SWOT Adopt-a-Crossover Consortium



How to become AdAC member (“adopter”)

- 2-page letter with campaign description
- the application is reviewed by a Steering Member and a recommendation is made
- The recommendation is adopted unless an other Steering Member objects (in that case the Steering Group will vote)

What the Consortium offers

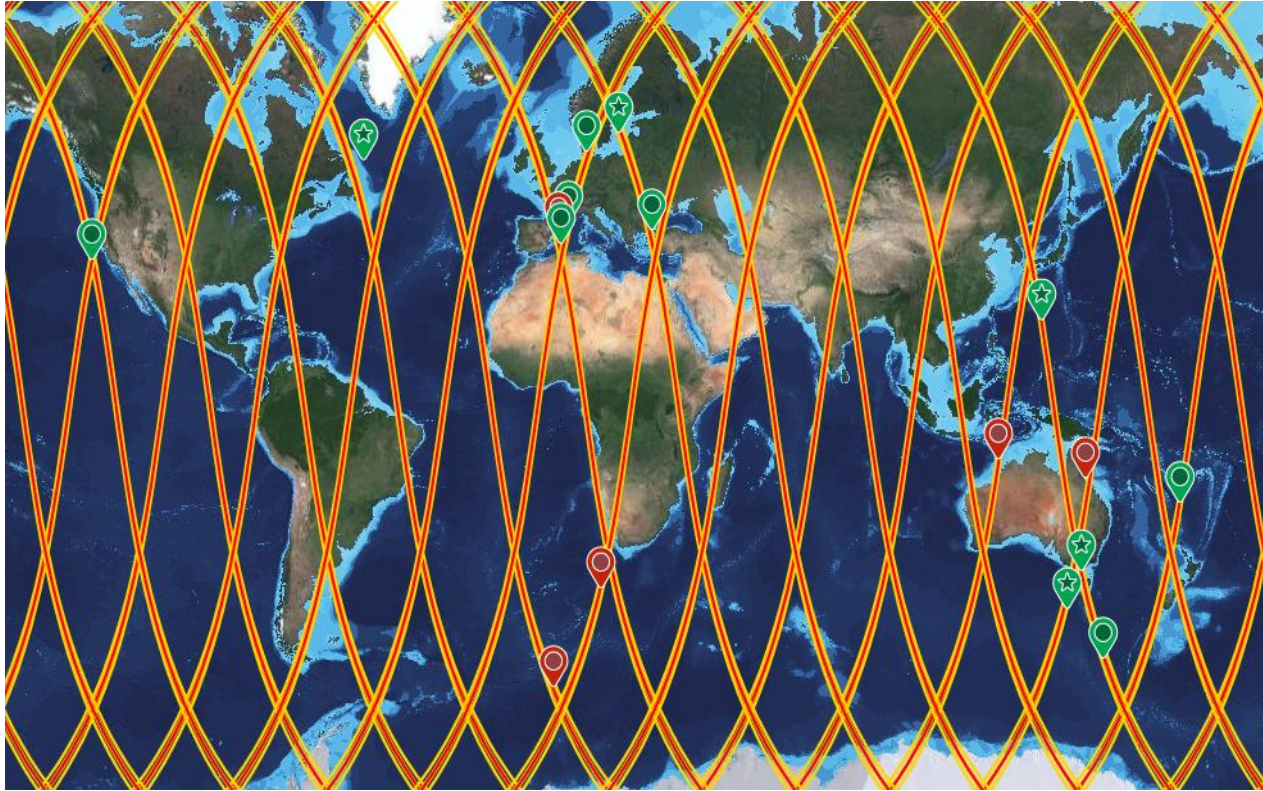
Help with access to SWOT data, and SWOT-ST know-how

Model and multisatellite specific support (see Kyla talk)

A Forum for discussion (webinars,..) and a web site for hosting campaigns

Many items overlap with SWOT Regional Validation WG

SWOT Adopt-a-Crossover Consortium



14 sites (10 SWOT-ST)

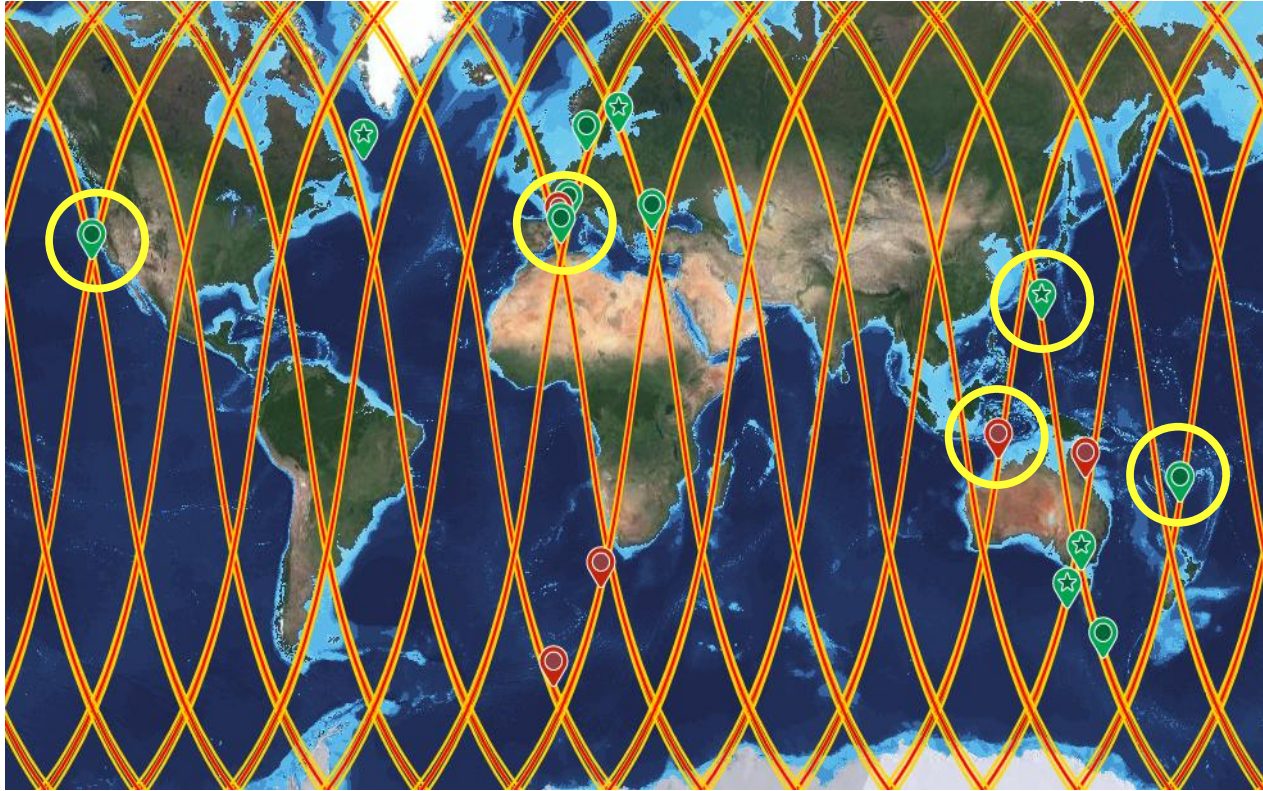
9/14 Confirmed

9/14 ship-based

Confirmed
Not confirmed yet

Ship-based
Infrastructure (mooring, gliders,...)


SWOT Adopt-a-Crossover Consortium



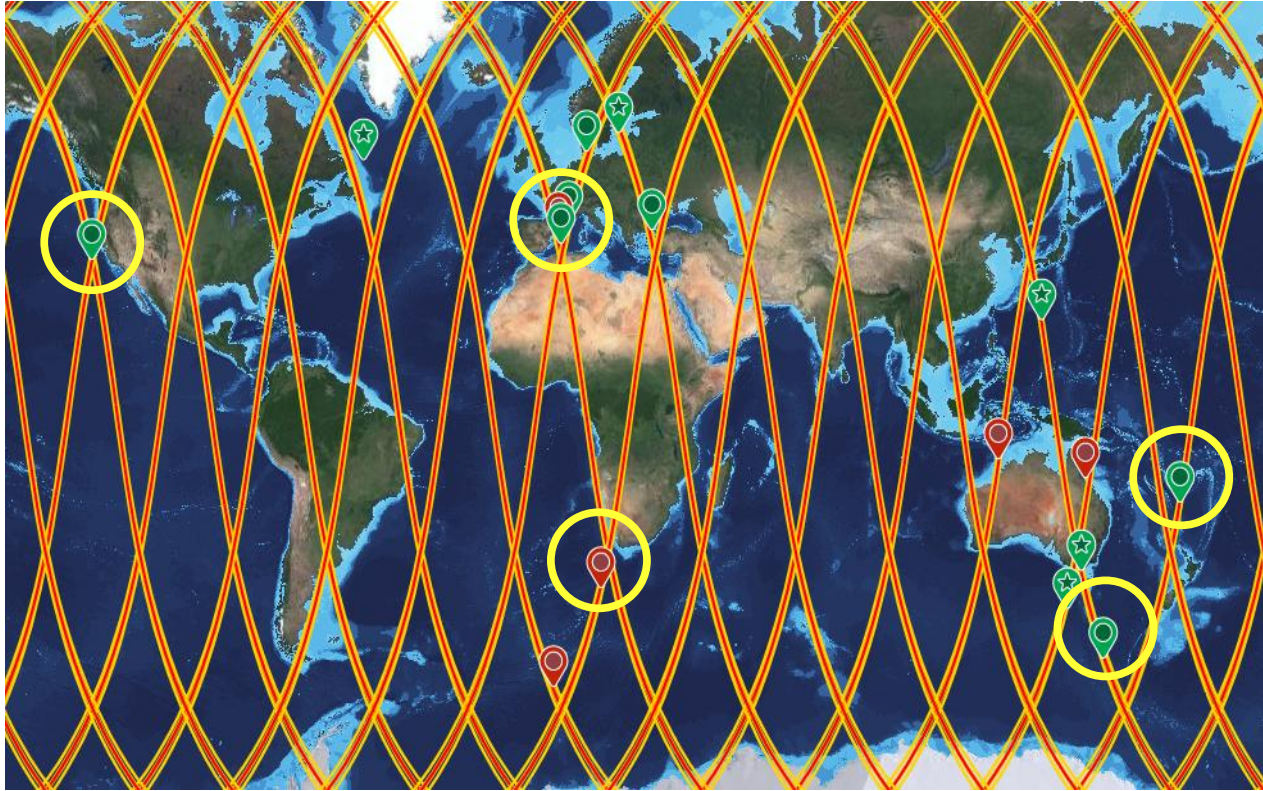
Some scientific questions addresses:

- Balanced vs. unbalanced motion

Confirmed
Not confirmed yet

 Ship-based
Infrastructure (mooring, gliders,...)

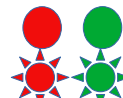
SWOT Adopt-a-Crossover Consortium



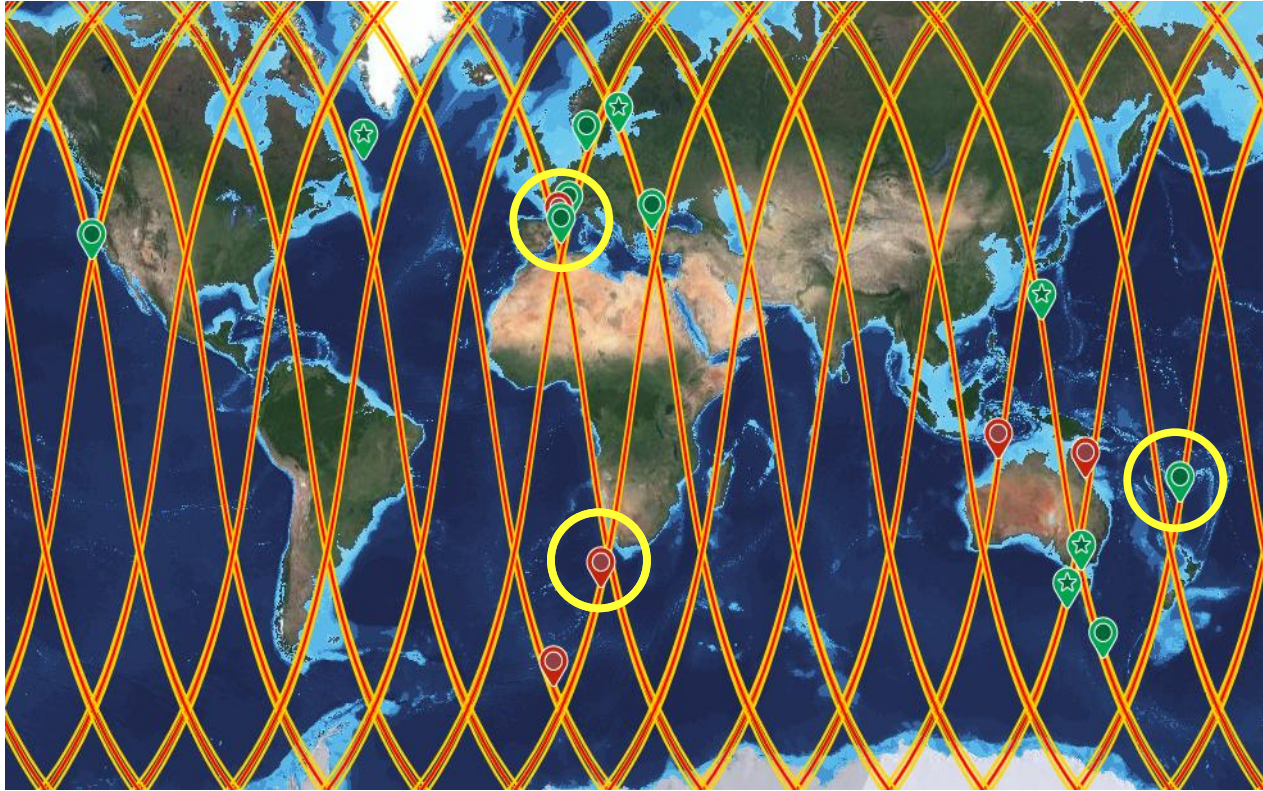
Some scientific questions addresses:

- Balanced vs. unbalanced motion
- Carbon export

Confirmed
Not confirmed yet

 Ship-based
Infrastructure (mooring, gliders,...)

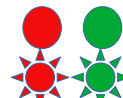
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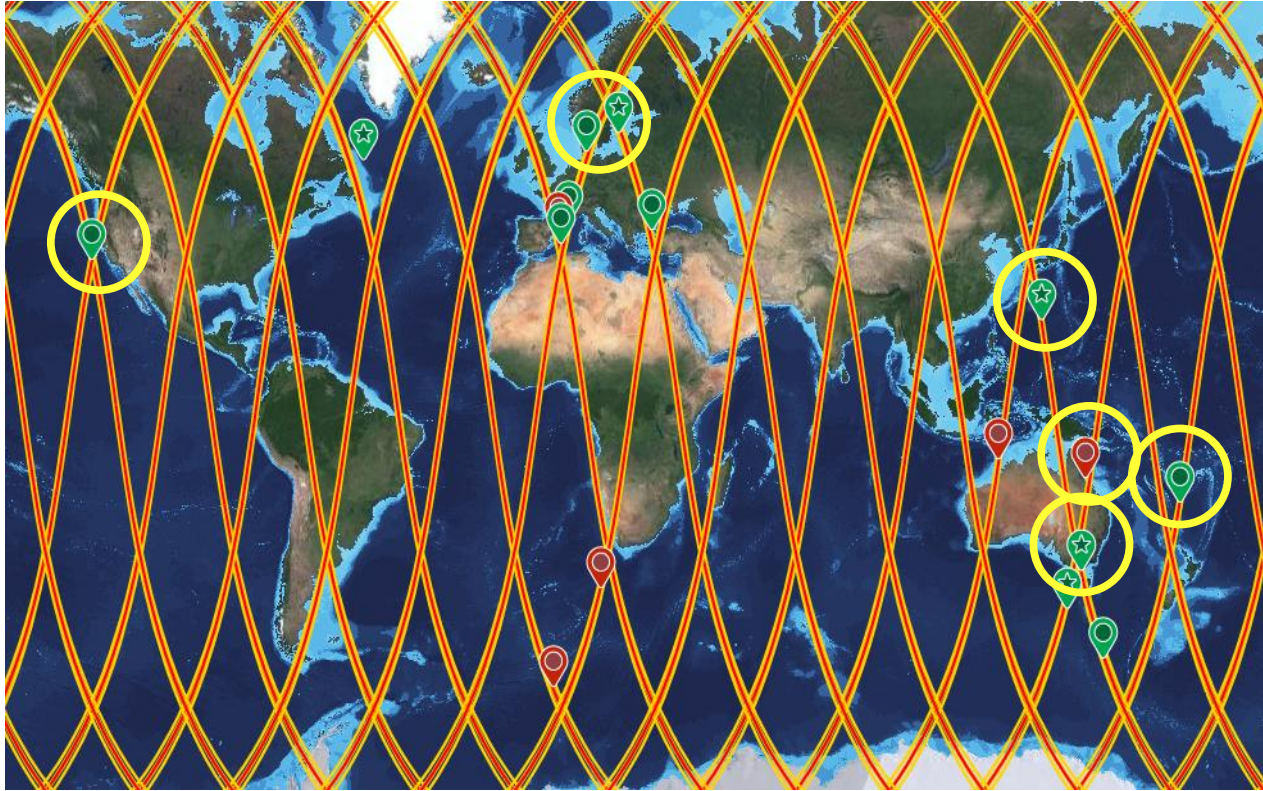
Some scientific questions addresses:

- Balanced vs. unbalanced motion
- Carbon export
- Biodiversity

Confirmed
Not confirmed yet

 Ship-based
Infrastructure (mooring, gliders,...)

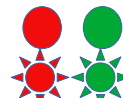
SWOT Adopt-a-Crossover Consortium



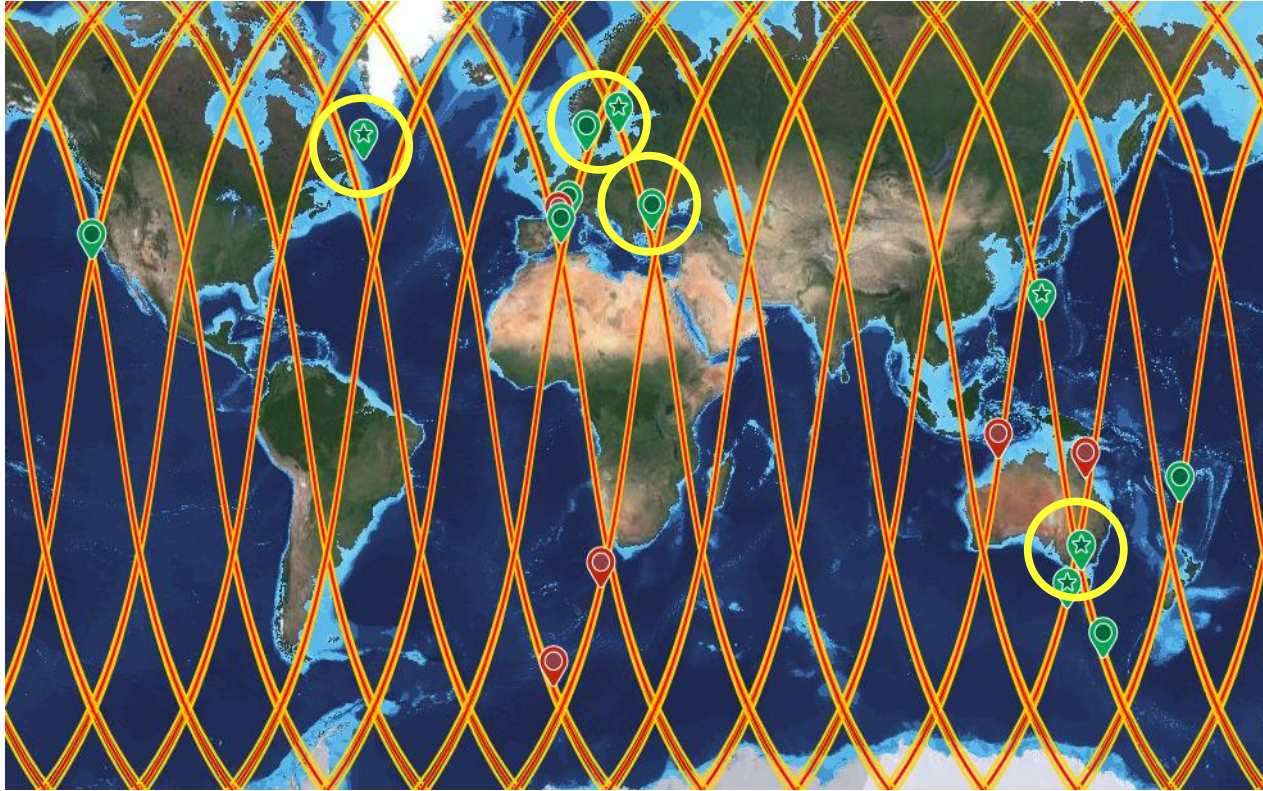
Some scientific questions addresses:

- Balanced vs. unbalanced motion
- Carbon export
- Biodiversity
- Geodesic validation

Confirmed
Not confirmed yet

 Ship-based
Infrastructure (mooring, gliders,...)

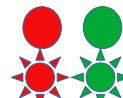
SWOT Adopt-a-Crossover Consortium



Some scientific questions addresses:

- Balanced vs. unbalanced motion
- Carbon export
- Biodiversity
- Geodesic validation
- Marginal seas/transition zones

Confirmed
Not confirmed yet

 Ship-based
Infrastructure (mooring, gliders,...)

Beyond the SWOT-ST

Some ideas for an international (CLIVAR) workshop on fine-scale ocean dynamics

When: May/June 2022

Organizing Committee

- SWOT-WG leads + CLIVAR Ocean Modelling Development Panel

Title: From filaments to climate change: current challenges in fine-scale ocean dynamics

1 the energy cascade in Earth System Models

2 Fine-scales and biodiversity in the global ocean

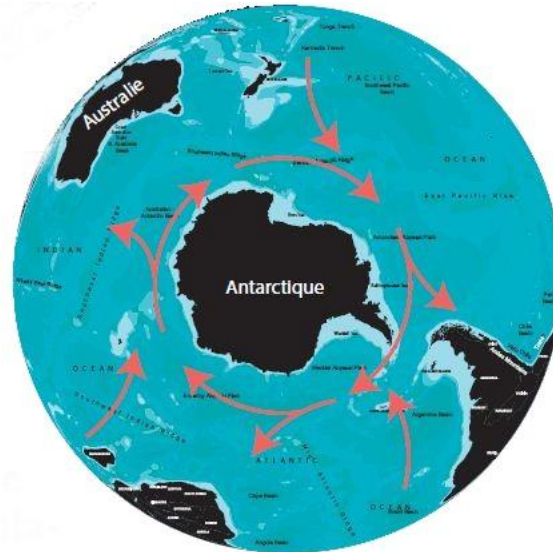
3 an observing network for fine-scale digital twins

4 Outreaching (social sciences?): BBNJ, MPAs,..

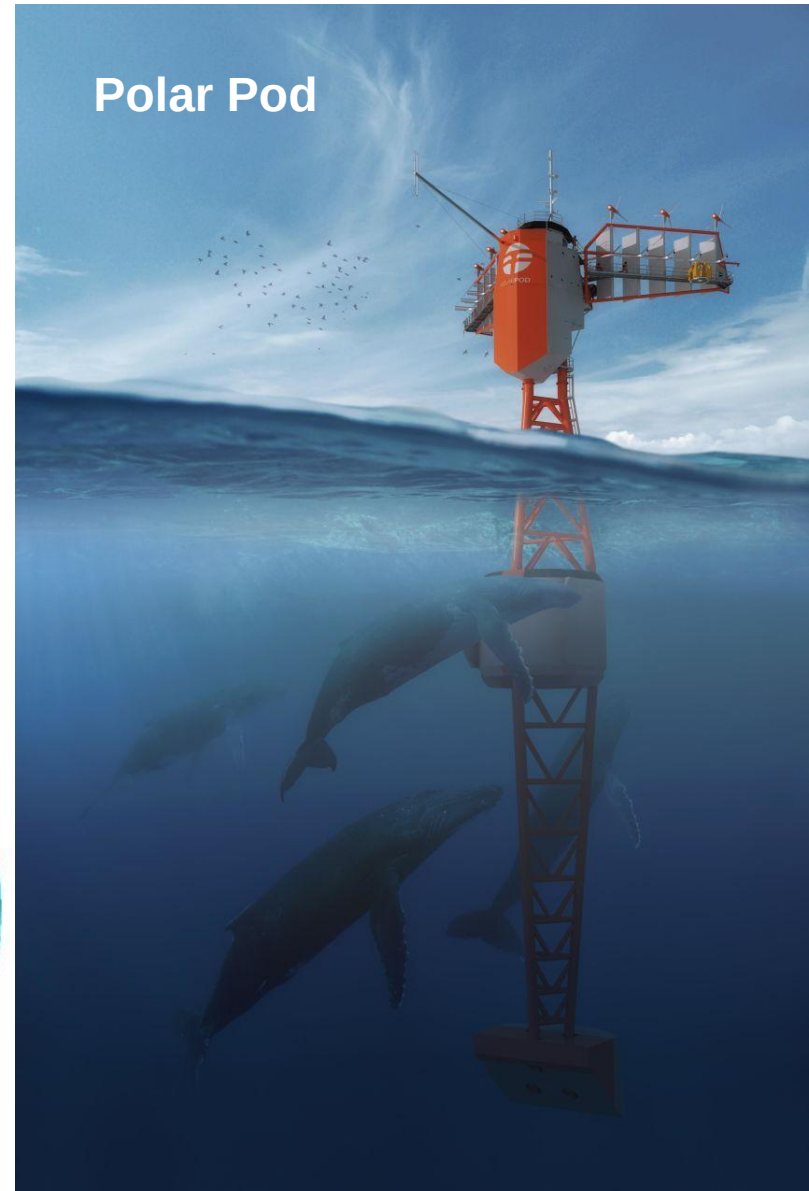
Beyond the SWOT-ST

We aim at joining forces with other major incoming observing systems

- In situ
- Remote sensing



Polar Pod



SWOT Adopt-a-Crossover Consortium

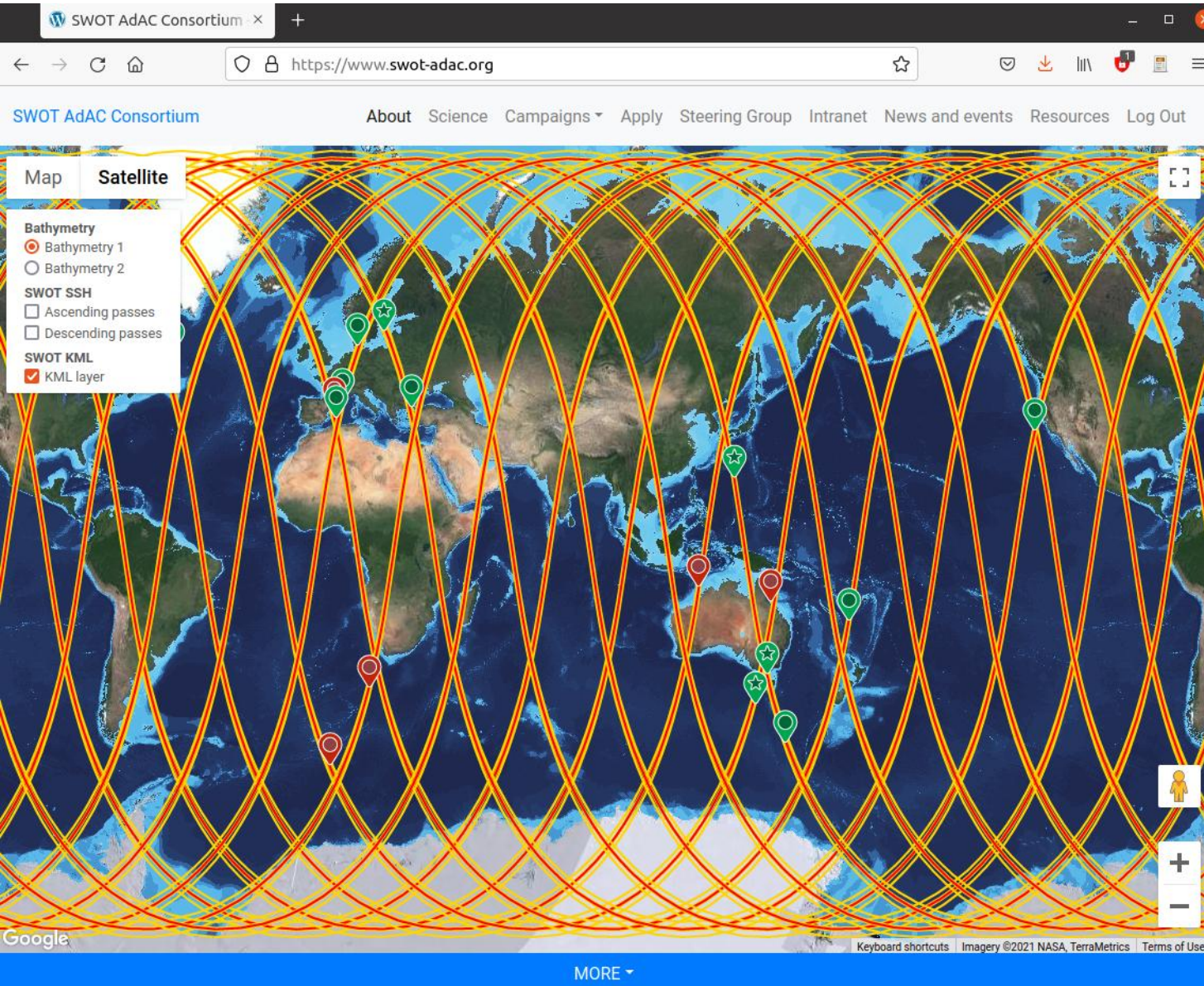


Strengths

- SWOT strong leveraging effect
- Good world-wide coverage
- Many high level campaign studies included
- AdAC website effective showcasing and managing platform for the Consortium

Need some work

- Keeping the momentum up to the SWOT launch – risk of losing adopters
- Sharing protocols, creating multi-site collaborations on common questions has been challenging



Thank you!

For more information:

[Www.swot-adac.org](http://www.swot-adac.org)