Minutes of the GSOP Panel online meeting 4th October 2021

Attendance: Peter Oke (co-chair), Steve Jayne (co-chair), Hindumathi Palanisamy, Aneesh Subramanian, Mathieu Belbeoch, Francois Counillon, Lijing Cheng, Shuhei Masuda, Louis Clement, Nathalie Zilberman, Uwe Send.

Actions

- 1. Send file with suggestions for updating the ToR of the panel (Peter, 10th October)
- 2. Nathalie to be proposed as new panel co-chair for 2022 replacing Steve (*Peter, Steve, 30th November*)
- **3.** Members to think of names that can be proposed to replace the ones rotating off at the end of this year **(All, by next teleconference)**
- 4. Panel members are encouraged to consider how they would like to collaborate. Some ideas were briefly discussed, and will be considered more fully at future meetings. A summary of the discussion is below. Panel members are asked to please offer additions, and refinement to this list. In general terms, we acknowledged that our options for collaboration include:
 - a. Think together running workshops
 - b. Work together specific projects that employ different techniques to address share problems
 - c. Review together white papers to review, assess, and identify opportunities and gaps.
 - d. Plan together establish best practice
- 5. Two or three presentations will be planned for the next teleconference Lijing (on the LAH EPESC), Peter (on understanding Argo data), Nathalie (on Deep Argo open questions) (Lijing, Peter, Nathalie next teleconference)
- 6. The panel will meet again before during the first week of November a doodle pool will be sent (Jose, 8th October)
- 7. Annual report is due (Peter, Steve, and Jose will draft)

1. GSOP Terms of Reference

Panel members are encouraged to consider our ToRs as we plan how we will work together. Peter suggests that the essence of the *science-based points in our terms of reference are:*

- 1. ... for the synthesis of global ocean, atmosphere and coupled climate information.
- 2. ... provide evidence ... to help sustain, evolve and optimise the global ocean observing system ...
- 3. Develop metrics to evaluate ocean and coupled syntheses, to promote the utility of synthesis products for climate applications ...
- 4. Provide strategic advice and direction ... related to production of climate quality global ocean synthesis products.

2. Membership

The panel discussed the possibility to identify a new co-chair substituting Steve Jayne who should rotate off according to the recommendation from the CLIVAR SSG. Nathalie was

suggested and She has accepted, She will be proposed together with the panel membership proposal to be prepared by the end of November.

The open call for candidatures will close on 23rd October and after that the Panel members will discuss again, based on the Panel indications and the self-candidatures, all members are encouraged to propose candidates, note that WCRP is keen in having ECS as members of our groups.

The survey Peter conducted earlier this year identified that our panel is quite well balanced, in terms of domain expertise. But we are weakest in atmospheric science. Perhaps a new member with an atmospheric, or coupled, background would be beneficial.

3. Working together

Some new ideas for working together were discussed. These include:

- OneArgo (leads, Nathalie, Peter)
 - Need to demonstrate utility and impact of Deep Argo, guidance on vertical resolution on ascent to support operational applications, and vertical resolution in BBL (how deep?) (Perhaps **Nathalie** can say more about this next meeting)
 - Consider white paper to discuss needs of different applications (operational vs seasonal vs climate) (perhaps Francois can offer suggestions for this)
 - Work with OceanOPS to establish performance indicators, based on the science needs of our applications (perhaps **Mathieu** can offer suggestions for this)
 - ➤ BGC Argo what variable is most important for constraining BGC reanalyses and forecasts. (Perhaps **Matt** can offer suggestions for this)
 - ➤ Need to ensure that data-users don't mis-use data (**Peter** will present something on this next meeting)
- SynObs (lead: Yosuke)
 - Yosuke and Peter are setting up a multi-system Observing System Experiment to assess the impact of RT and DM Argo data (participants are welcome)
- OceanSites (lead: Uwe)
 - Many time-series demonstrate that deep ocean properties are poor, particularly for salinity. What data are best for validating and testing the skill of assimilating models including deep, coastal, upper-ocean etc. (perhaps **Uwe** can more clearly articulate this at a future meeting)

Some ongoing activities include:

- Participation in ocean heat content assessment efforts led by Karina von Schuckman for the WMO Annual Climate Report
- Participation to the IQuOD meetings representing reanalysis requirements and endorsement of IQuOD activities, in particular working with the group for the definition of the observation uncertainty
- Lijing engaged in the LHA on interannual-milenial climate variability, including observational uncertainty and limitations of models. (Lijing will present something on this next meeting)

4. Annual report

The co-chairs will prepare the report based on the activities and foreseen plans discussed during the latest meetings.

Members should send Papers related to GSOP for the bibliography for the last year, in order to prepare the yearly report.

