SCOR WG #168: 4D-BGC Year 2, Meeting 1 (M2.1) April 29, 2025 – Vienna, Austria Meeting Summary

In-Person Participants: Jon Sharp, Raphaëlle Sauzède, Peter Landschützer, Andrea Rochner, Tobias Ehmen, Jens Müller, Xiaogang Xing, Alexandre Mignot, Haimanti Biswas, Nicolas Mayot, Rodrigo Kerr, Quentin Hyvernat, Neill Mackay, Arianna Olivelli, Catherine Schmechtig, Dan Burt

Virtual Participants: Henry Bittig, Siv Lauvset, Katherine Turner, Testsuichi Fujiki, Louise Delaigue, Takamitsu Ito, Zhankun Wang, Juan Du

Summary: SCOR Working Group 168 met in Vienna, Austria, during the week of April 28th to May 2nd in association with the 2025 EGU General Assembly. The main meeting was held on the afternoon of April 29th, with 16 in-person attendees and 8 virtual attendees. After introductions around the room, Raphaëlle and Jon presented a brief overview of the group's recent achievements, including the launch of our data product webpage, ongoing progress in an approximately monthly webinar series, updates to the working group webpage and mailing list, and developments with the dissolved oxygen mapping intercomparison project (DOMIP, led by Taka Ito) relevant to the WG. We then heard science talks from Tobias Ehmen, Jens Mueller, Dan Burt, Alexandre Mignot, and Nicolas Mayot showcasing relevant work on the development or use of 4D-BGC products. Concerning capacity building activities, we discussed an opportunity to give lectures during a workshop that will be organized by Haimanti Biswas in India in late 2026 or early 2027. We also discussed holding a future in-person group meeting associated with the Ocean Sciences Meeting in Glasgow next year, and decided that the WG would propose to host a session at OSM as well. Finally, we discussed our progress in writing a synthesis paper to review the current state of 4D-BGC data products, and how these new products might be used to address gaps in our understanding of ocean processes. The WG then held an informal dinner on Tuesday evening, where we discussed some of these issues further and got to know each other more as a group. On Thursday, May 1st, the group met for some additional discussion. In particular, we talked about our plans for organizing 4D-BGC product mapping intercomparison experiments focused on synthetic datasets extracted from ocean models, similar to the activities of SOCOMv2. We also dove further into discussion about the synthesis paper the WG is writing, including how to best organize the paper, which specific types of data products to focus on, and how to allocate writing tasks for the paper. Overall, Meeting 2.1 was successful in bringing new faces into the WG, allowing for in-depth discussion of the group's initiatives, and sparking new ideas for ways in which the WG can contribute to the oceanographic community.