**14th Observation Coordination Group (OCG-14)**

6-8 June 2023, Cape Town, South Africa

Ship Observations Team

Prepared/submitted by Joel Cabrie and Tamaryn Morris

With respect to global leadership in data and metadata requirements and coordination, the SOT made the official transition from E-SURFMAR metadata to OceanOPS-hosted metadata, and the SOT Metadata task team will continue to refine its work incorporating team and partner feedback. Following SOT-11, in 2021 the SOOPIP completed “XBT Operational Best Practices for Quality Assurance Version 1.0”. Challenges continue with respect to observations in exclusive economic zones (EEZ), and the SOT encourages, and will continue to participate in efforts toward, furthering solution spaces as suggested by the 2020 GOOS Ocean Observations in Areas under National Jurisdiction (OONJ) Workshop.

Turbowin is a user-friendly electronic logbook software developed and maintained as freeware by the Royal Netherlands Meteorological Institute (KNMI) and funded by the European network of National Meteorological Services (EUMETNET) through its Surface Marine Programme (E-SurfMar) and endorsed by the SOT. Turbowin is about 20 years old and does not adhere to current technology standards. A new software version must be developed and requires significant investment that cannot be managed within existing regular contributions.

Expanding the world’s ship observations in space and number, in 2021 all panels showed an increase in observations from the previous year as networks and relationships were gradually rebuilt from COVID-19 impacts. Rebuilding efforts continue at present. Active efforts are in place to pilot the gathering of meteorological and oceanographic data and metadata, and ensuring their quality control, while also starting development of guidance documents on how to submit the quality data and metadata. Industry coordination continues successfully, for example, with Maersk cooperation to enable the installation of automated weather sensors on Maersk-owned vessels, though the SOT is working to ensure quality observations before their entry onto the GTS.

The SOT continues with a diverse Executive Board (EB), and at SOT-12, the SOT approved the slate of volunteers for the SOT EB for term two per the SOT EB terms of reference. In particular, additional, active participants from across the globe are requested in task teams as it can be most efficient for succession planning of panel chair positions to come from experienced task team participants. This will only help the SOT increase its geographical diversity.

A new SOT Chair was appointed, Huai-Min Zhang from the United States. Huai-Min is a supervisory oceanographer at NOAA’s National Centers for Environmental Information (NCEI). Huai-Min’s passion for data and the mission of the SOT makes him an ideal candidate for the SOT Chair.

The SOT will continue to work through the OCG to inform GOOS efforts and to be functionally connected to WMO Technical Commissions. In addition, the SOT has been working hard on a capacity building effort to encourage the development of new national VOS networks. With the process for obtaining equipment being more well known through the SOT and especially the WMO, any future efforts should proceed more smoothly.

At SOT-12, the SOT approved the financial report, which includes the SOT spending plan for the upcoming intersessional period. During the last two intersessional periods, SOT spending was limited due to COVID-19. It is expected that SOT spending will increase during the upcoming intersessional period due to efforts for capacity development and PMO training, and possibly in support of technological advances for SOT initiatives through OceanOPS.

In summary, asks of OCG, and requests for action, support, and guidance, include:

* Promoting WMO functional connections;
* Continuing support for OceanOPS and the SOT Technical Coordinator;
* Continuing advocacy for furthering solution spaces as suggested by the GOOS Ocean Observations in Areas under National Jurisdiction (OONJ) Workshop;
* Promoting SOT (VOS, ASAP, SOOP) in shipping fora where and when the IOC secretariat are invited;
* Supporting the notion that NMHSs participating in the SOT and its panels are strongly recommended to actively join the Turbowin Partner Board to coordinate future Turbowin requirements and to ensure the long-term sustainability of Turbowin through shared responsibility, including funding of the software’s maintenance and development; and,
* As possible, in coordination with the IOC, helping to alleviate indemnification issues for ship riders as part of, and not limited to, SOOP-led efforts.