

Appendix L: Potential New Tasks, Action Items, or Issues to Address

APPENDIX L: POTENTIAL NEW TASKS, ACTION ITEMS, OR ISSUES TO ADDRESS

1. Create an international group or task team of Southern Ocean ice modelers for the express purpose of collaborating on model development. The group should commit to meeting several times a year (virtually) and sharing their experiences and developments.
2. Examine how the ice service providers in the Southern Ocean can collaborate and focus areas of expertise/geographic regions to support each other so that we provide the best coverage across the entire Southern Ocean? Higher frequency, larger geography
3. Look at how to produce a circumpolar “limit of all known ice” in the Southern Ocean as a collaboration among the ice services involved. (Ref SOLAKI)
4. Examine ways to improve and standardize the availability of ice observations from operators back to the ice services – user engagement, VOS, training, communications.
5. Engage with intermediate service providers (e.g. ocean routing companies, fleet operations centres) to determine how best to ensure that they are providing our high-quality authoritative data to their end users.
6. Develop and publicize Ice Service product specifications
 - a. E.g. what is the minimum size iceberg that can be detected by satellite and indicated on ice service products
7. Investigate further refinement, standardization, and public availability of IIP’s iceberg density product. – adoption by other services?
8. Develop standard iceberg model assessment measures – skill scores – to evaluate model improvements in a comparable manner across services
9. Establish a task team to participate in the MSC 96 review of Polaris as a risk assessment tool – particularly its applicability to Antarctic ice conditions
10. Develop better iceberg deterioration models
11. Define roles and responsibilities – national ice services v. Polar View v. operators/mariners
 - a. Whose responsibility is it to detect the smallest iceberg? Is it the national ice agency or is it the operator (captain/navigator of the ship)? The national ice agencies have the responsibility of providing an overview of ice conditions in the area of responsibility. However, a vessel has a responsibility to navigate safely, which includes carrying out observations for icebergs.
12. Task team to engage with users to brainstorm the development of new products increase the information content of ice products including the risk due to sea ice and/or icebergs. Specifically, not more charts but something new.
13. Investigate how to produce and standardize forecast ice charts, including drift information.

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14. Investigate how to produce and standardize risk assessment products including other parameters such as swell/wave heights in the vicinity of sea ice and icebergs
15. Consider a closer collaboration between the ice services and Polar View:
 - a. Merge the Ice Logistics Portal into Polar View?
 - b. Process for validating new products made available on Polar View?
 - c. Polaris evaluation?
 - d. Sharing ice observations?
16. Develop e-learning modules on the geophysics of icebergs, sea ice or other topics (Cathy Geiger)
17. Try to get more frequent ice information for the Ross and Weddell Seas.
18. Recommended - ESA Phi-Week is next week 20 Sept to 02 Oct. Φ -week is the annual Earth Observation event organised by ESA-EOP. It focuses on innovation in Earth Observation, and showcases the latest achievements in Earth Observation science, technology and applications. On Wednesday 30th Sept Andrew Fleming will be talking about Polar TEP.