

An Overview of the Year of Polar Prediction in the Southern Hemisphere (YOPP-SH)

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The Polar Prediction Project is a 10-yr initiative (2013-2022) sponsored by the World Meteorological Organization (WMO) to facilitate cooperative international research targeted at improved weather and environmental prediction for the polar regions on time scales from hours to seasonal. Its core activity is the Year of Polar Prediction (YOPP) that took place from mid-2017 to mid-2019. In the Southern Hemisphere, YOPP is focused on the Special Observing Period (SOP) from mid-November 2018 to mid-February 2019 when enhanced collection of routine weather observations was undertaken, especially radiosonde ascents and drifting buoy deployments. Observing System Experiments (OSEs) are being undertaken with the Antarctic Mesoscale Prediction System (AMPS) to assess the added forecast skill provided by these enhanced observations. Investigations of the physics schemes used in weather forecast models are being conducted by comparing detailed model output with comprehensive observations at selected locations known as Supersites. The Sea-Ice Prediction Network-South (SIPN-South) has evaluated the sea-ice prediction skill around Antarctica at typical lead times of two to three months for the YOPP-SH SOP. Other activities under YOPP-SH include educational and outreach projects, especially from Italy, and social-science research into enhancing the usability of weather forecasts.