

Accepted Manuscript

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PII: S1873-9652(16)30098-6

DOI: [10.1016/j.polar.2017.04.003](https://doi.org/10.1016/j.polar.2017.04.003)

Reference: POLAR 343

To appear in: *Polar Science*

Received Date: 18 October 2016

Revised Date: 24 April 2017

Accepted Date: 27 April 2017

Please cite this article as: Gera, A., Mahapatra, D.K., Sharma, K., Prakash, S., Mitra, A.K., Iyengar, G.R., Rajagopal, E.N., Kumar, A., Assessment of marine weather forecasts over the Indian sector of Southern Ocean, *Polar Science* (2017), doi: 10.1016/j.polar.2017.04.003.

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Assessment of Marine Weather forecasts over the Indian Sector of Southern Ocean

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Key words:

- Southern Ocean
- Numerical Weather Prediction
- Westerly winds
- Sub –seasonal Rainfall Variability
- Sub polar low pressure systems

Abstract

The Southern Ocean (SO) is one of the important regions where significant processes and feedbacks of the Earth's climate take place. Expeditions to the SO provide useful data for improving global weather/climate simulations and understanding many processes. Some of the uncertainties in these weather/climate models arise during the first few days of simulation/forecast and do not grow much further. NCMRWF issued real-time five day weather forecasts of mean sea level pressure, surface winds, winds at 500 hPa & 850 hPa and rainfall, daily to NCAOR to provide guidance for their expedition to Indian sector of SO during the austral summer of 2014-2015. Evaluation of the skill of these forecasts indicates possible error growth in the atmospheric model at shorter time scales. The error growth is assessed using the model analysis/reanalysis, satellite data and observations made during the expedition. The observed variability of sub-seasonal rainfall associated with mid-latitude

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