



Southern Ocean Satellite Data Needs

An initiative of:

- The Southern Ocean Observing System,
- The Scientific Committee on Antarctic Research,
- CliC – Climate and Cryosphere

Why?

The needs of the Southern Ocean oceanographic community are not as clearly articulated to the data providers as for the Northern Hemisphere.

It is difficult to identify avenues to vocalise these requirements to the data providers, and to have input in the strategic development and planning of future missions.



Final Topics

- Sea-Ice
- SST
- Sea Level/Sea Surface height
- Ocean-Atmospheric flux
- Marine Microbes:
 - Primary Production
 - Chlorophyll
 - Biogeochemistry
- Marine mammals
- Terrestrial Cryosphere connections
- Sea surface salinity
- Importance of coincident data

Ocean Colour

Three major requirements of the Southern Ocean ocean colour community are:

- develop capacity for the ongoing collection of calibration and verification data (e.g., Chl and other pigments, algal groups, phytoplankton photo-physiology, spectral and radiative measurements).
- the need for simpler access to regional Southern Ocean products once they have been developed and verified.
- Better higher spectral range and resolution in future satellite sensors.

Full Details

Resulting publication:

Pope, A., P. Wagner, R. Johnson, J.D. Shutler, J. Baeseman & L. Newman (*in review*), “Community Review of Southern Ocean Satellite Data Needs,” *Antarctic Science*.

Current Draft:

<https://docs.google.com/document/d/1oCXwPU8ykGYv9h4W0i5IzIqWpcpF0m4JX6MRP6BjEJs/edit>

Thank you...

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