



**DBCP Capacity Building Workshop on Ocean Observations for
Operational Services in the Indian Ocean Region**

National Reports

South African Weather Service

**05 - 07 August 2025
Hyderabad, India**

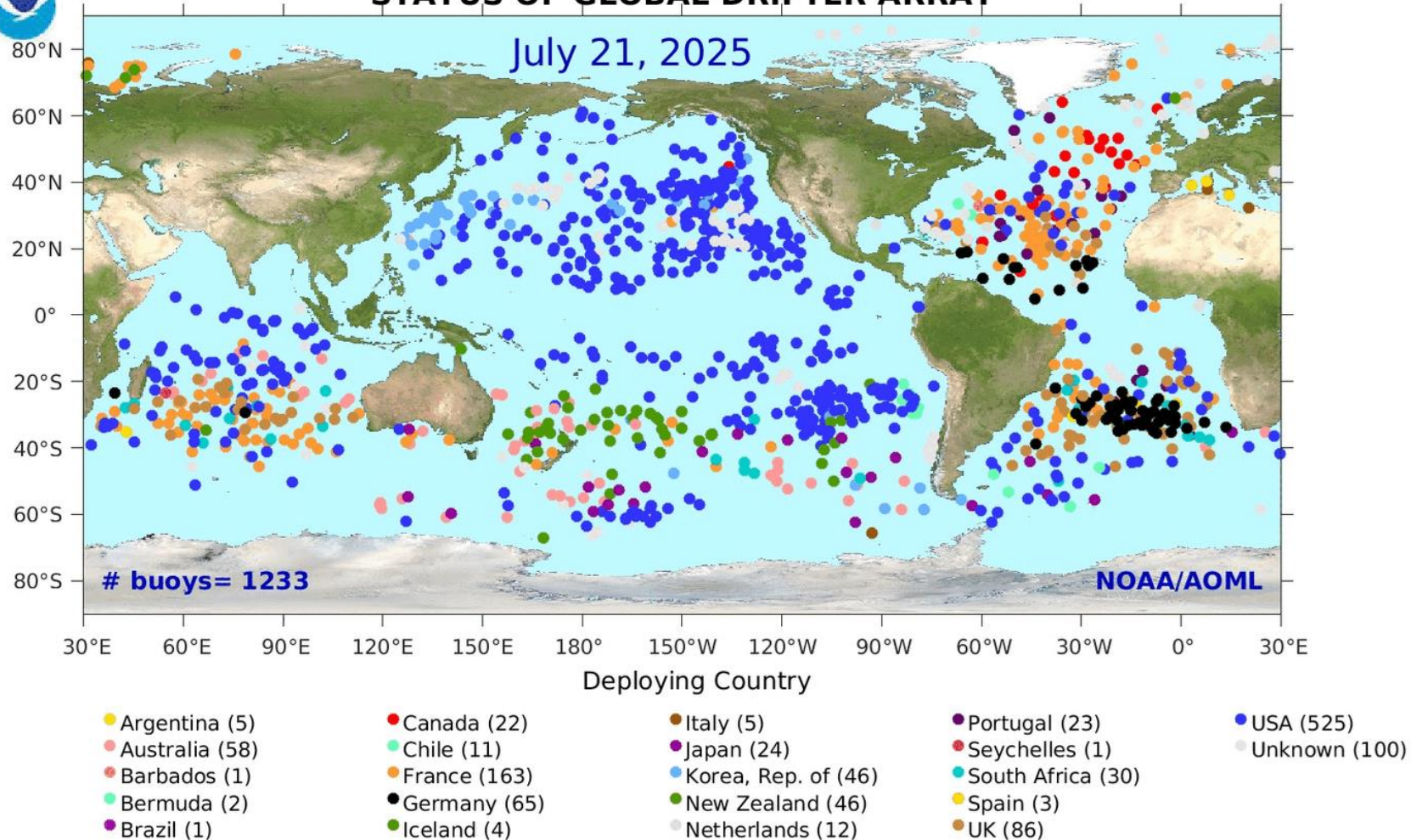


1. Marine Observation and Data Management

- Data Buoy Corporation Panel (DBCP)
 - Drifters – SAWS (NOAA's Global Drifter Program (GDP))
 - Monitoring buoys (Tristan da Cunha)
 - SVP (GDP Buoys for operations)
 - Sea ice buoys to monitor sea ice movement (not active it was deployed more than 4 years ago).
- Ship Observation Team (SOT)
 - VOS – SAWS
 - ASAP – SAWS
- South African National Antarctica Program (SANAP)
 - Antarctica, Marion, Gough
 - Automatic weather station and manual observations
 - Upper air ascents (Marion and Gough)
 - Manual SST



STATUS OF GLOBAL DRIFTER ARRAY



Currently, there are 30 drifters in the ocean deployed by South Africa under the GDP.



Existing Forecasting Capacities

South Africa is responsible for **METAREA VII SOLAS forecasting**, providing information to mariners from north of Angola to the Antarctic shelf, from the Greenwich Meridian to east of Madagascar.

The South African Weather Service (SAWS) Marine unit in recent years launched a coupled, operational wave and storm surge forecasting model.



The aim of the SAWS Wave and Storm Surge (SWaSS) platform is to provide accurate, high-resolution coastal forecasts for the entire South African coastline.



PARAMETERS:

- Sea surface elevation
- Significant Wave Height
- Mean wave period
- Relative peak wave period
- Mean wave direction



Produced in-house by a team of four Model Support Marine Scientist under marine research and development



2. Gaps and Needs for Observation /Forecasting

- No buoy deployments since 2023 due to lack of stock; waiting on a delayed shipment from NOAA.
- Limited coverage in the Southern Ocean, South Atlantic, and Indian Ocean is due to infrequent ship routes and no or limited stock of buoys.
- Lack of integration between drifting buoy data and forecasting models in SAWS operational systems. (Buoy data was previously used for shipping charts but is not currently).

THANK YOU