



Capability Statement

Metocean Data Collection for Port Expansion

Client : Transnet Capital Projects



REQUIREMENTS

- Assessment of the impacts associated with construction of the container berth in Ben Schoeman Dock in the Port of Cape Town, on the marine ecology in the Table Bay region.
- Environmental monitoring of sediment and water quality characteristics at the dredge site at the Ben Schoeman Dock, as well as at the dredge spoil dump site further offshore.

WORK DONE

- Two year monitoring program collecting metocean data for the port development at the old Durban airport
- Live data download and hosting
- Monthly metocean data collection
- Monthly maintenance and servicing of equipment, increasing efficiency on each service visit
- Monthly data report
- Monthly service report
- Routine client feedback including design engineer engagement with longshore sediment movement.

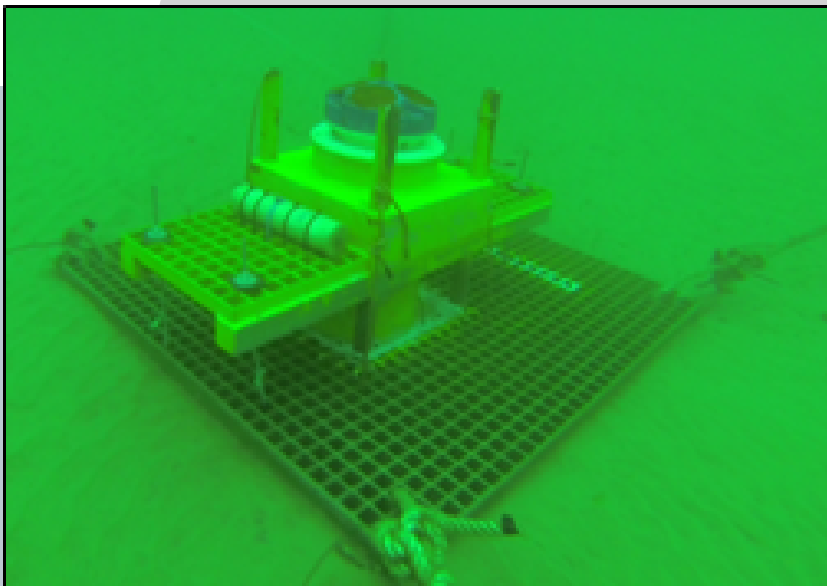
SURVEY DESIGN

Metocean Data collection including:

- ADCP (Current, spectra and wave data)(-15, -30m)
- Water Quality string (turbidity, salinity, temperature) (-1m, -5m, -10m, -15m and -30m)
- Moored Offshore weather station (wind speed and direction)
- Land based weather station (wind speed and direction)
- Near real-time data uploading onto online host server.
- Sediment sampling
- Data processing and Quality Control in Matlab

OUTCOMES:

- Strict in-house instrumentation verification procedures on all equipment prior to deployment.
- Strict deployment and recovery procedures to ensure traceability of data quality.
- Ability to send live data feed from in situ sensors directly to clients desktop in near real-time.



“MetOcean Data Collection and processing for harbour engineering design phase”