SVP-Barometer Drifter Performance

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Technocean, Inc.

- One of the first manufacturers of satellite-tracked Lagrangian drifting buoys (began in 1983)
- Early participant in the construction of SVP and SVP-B drifters



Drogue Delivery



GPS ArgoDrifter

 Currently involved in the design and construction of various drifting buoy types integrating environmental sensors and GPS with Argos

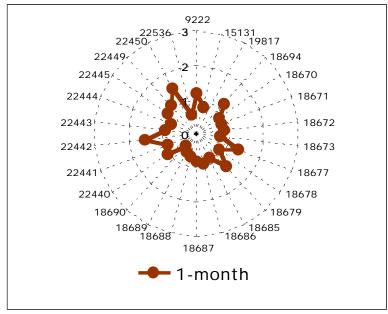


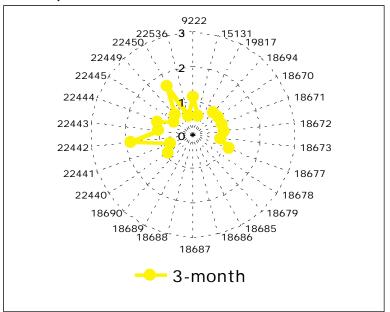
Major SVP-B Drifter Developments

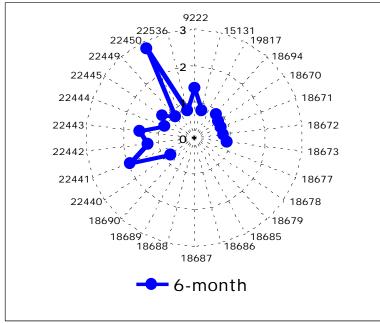
- New barometric pressure sensor
- Redesigned barometer port
- Modified electronics

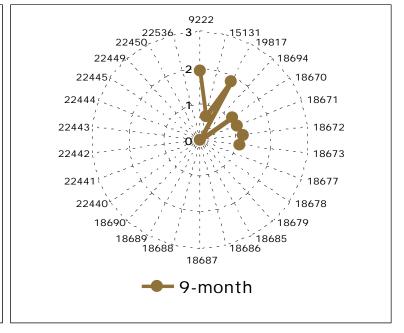


RMS (ECMWF)







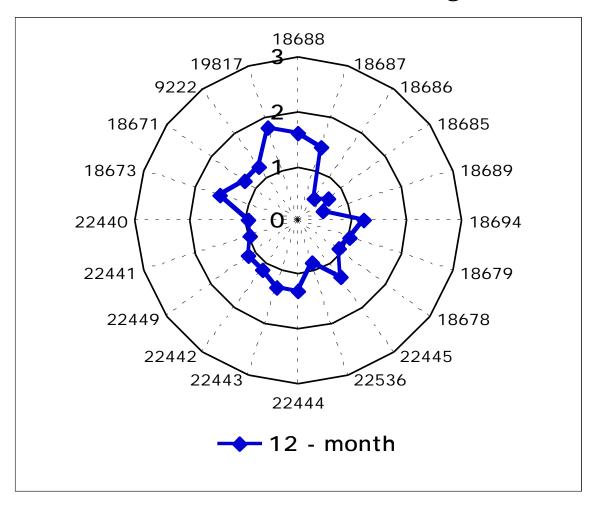


Current Study Objectives

- Review Technocean New Generation SVP-B rms performance after 12 months
- Examine SVP-B longevity (in terms of AP data)
- Compare with other commercial SVP-Bs



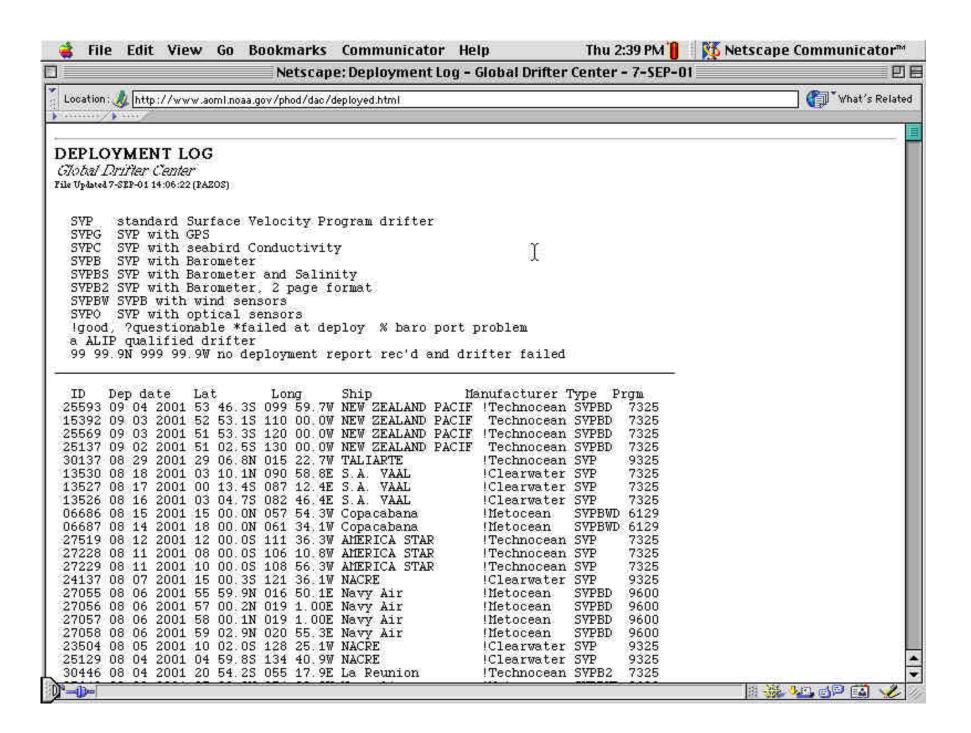
Technocean New Generation SVP-B RMS Values at 12 month Age



SVP- B Longevity Data Sources

- Publicly available websites
- Global Drifter Center Deployment Log (thanks AOML!)
 http://www.aoml.noaa.gov/phod/dac/deployed.html
 Indicates start of buoy life
- Buoy-QC Statistics (thanks Meteo-France!)
 http://www.shom.fr/meteo/qctools/faq.htm
 Indicates when AP data are removed from GTS ie., Useful life of SVP-B as AP data source ends

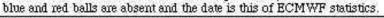


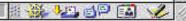


Blacklist for AP

When is the buoy blacklist for AP updated?

The blacklist is updated as soon as monthly statistics carried out by ECMWF are took in account. As far as ECMWF provides them twice a month, the blacklist is updated with the same frequency. The date which appears on the left side of the list is the date of the most recent data received at Meteo-France. A old date means the AP values are no more transmitted on the GTS. For a few platforms, the data are not received (or not checked) at CMM. In these cases,





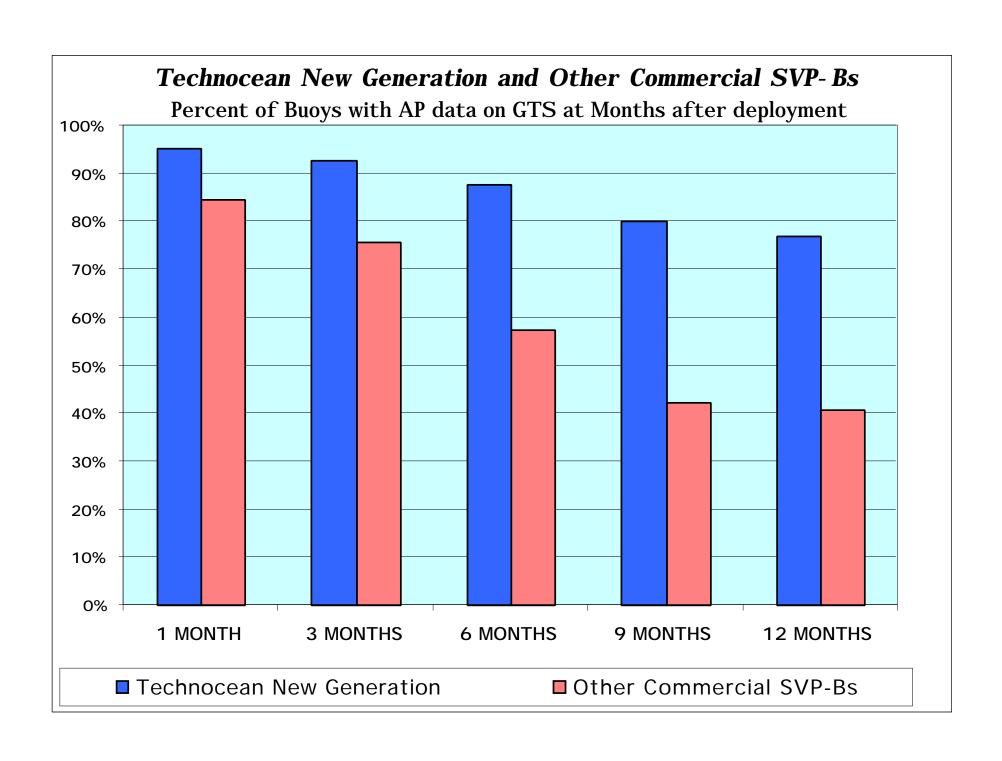


Reasons Buoy AP Data Are Removed from GTS

(or never placed on after buoy deployment)

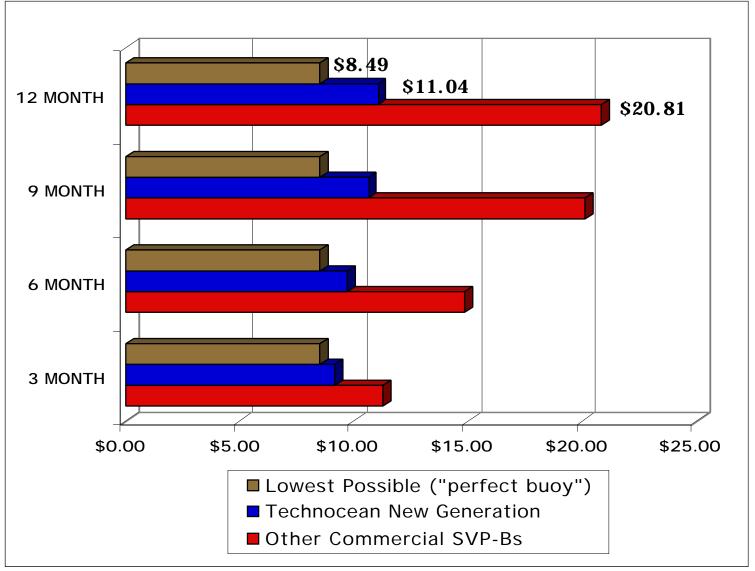
- Sensor Failure (usually due to drift over time)
- Buoy Damage resulting from Shipment or Deployment
- Groundings
- Manufacturing Defect
- Unknown (human activity, ice, ?????)





Technocean New Generation and Other Commercial SVP-Bs

Cost of "data-day" at Months after deployment - buoy cost \$3,100



- for buoys deployed between Jan. 1, 2000 and Aug. 31, 2001
- "data-day" is one day of AP data on the GTS