

**Developments in the Technocean
SVP- Barometer Drifter**

*Jeffrey Wingenroth
Henry White*

*Technocean, Inc.
Cape Coral, Florida
USA*



Developments in the Technocean SVP-Barometer Drifter

Data Buoy Cooperation Panel
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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



GPS ArgoDrifter

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



Drogue Delivery



Major SVP- B Drifter Developments

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



Barometric Pressure Sensor

- Integrated a Honeywell HPB-200 pressure sensor. Sensor adapted from military/aerospace applications for civilian use
- Production units feature:
 - Operating Temp. range: -40 to +85° C
 - +/- .4 hPa maximum error
 - stability of .25 hPa / year
- Probable cost increase in Dec. 2000



Barometer Port

- Modified the Barometer Port to extend life
- Monolithic construction (no “O” rings)
- Includes inhibitor valve to reduce amount of water reaching the GORTEX - facilitates testing for watertight integrity
- GORTEX oriented vertically so that water runs off and out of the port

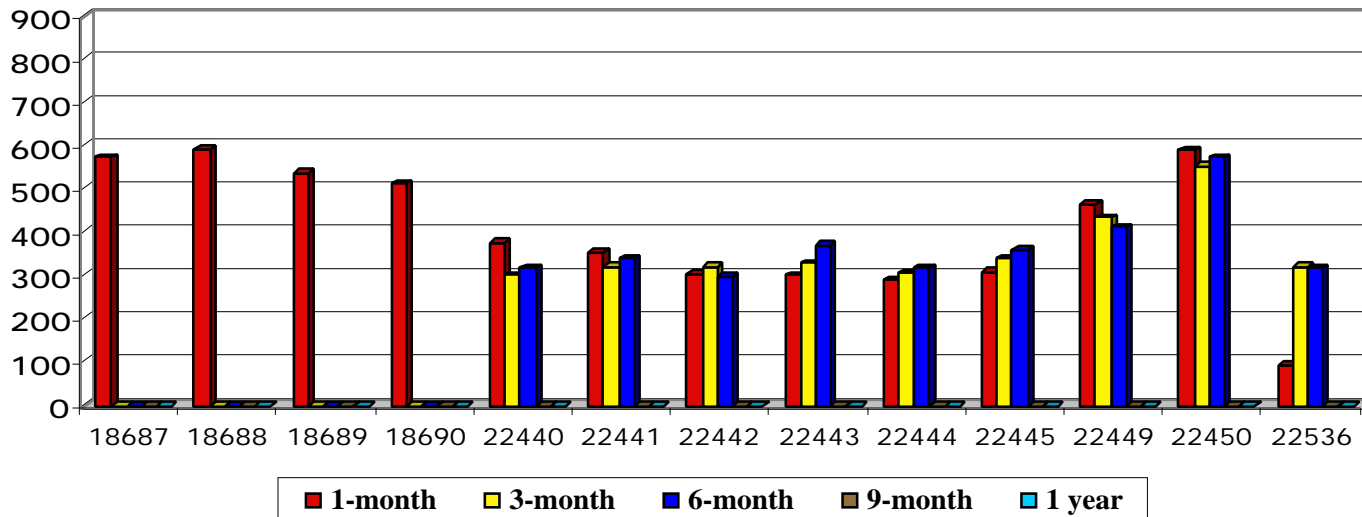
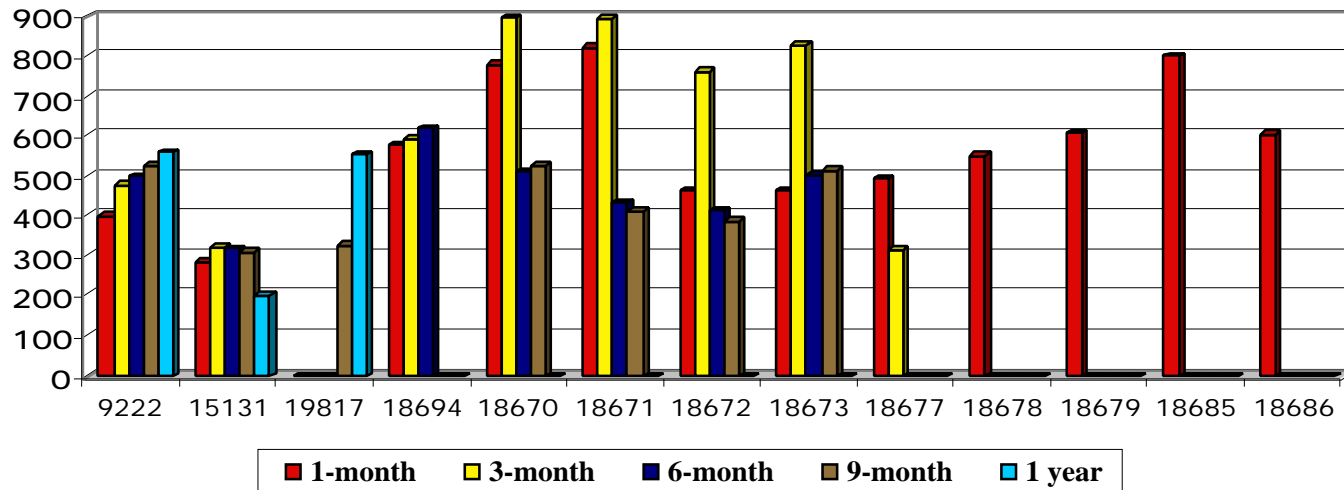


Modified Electronics

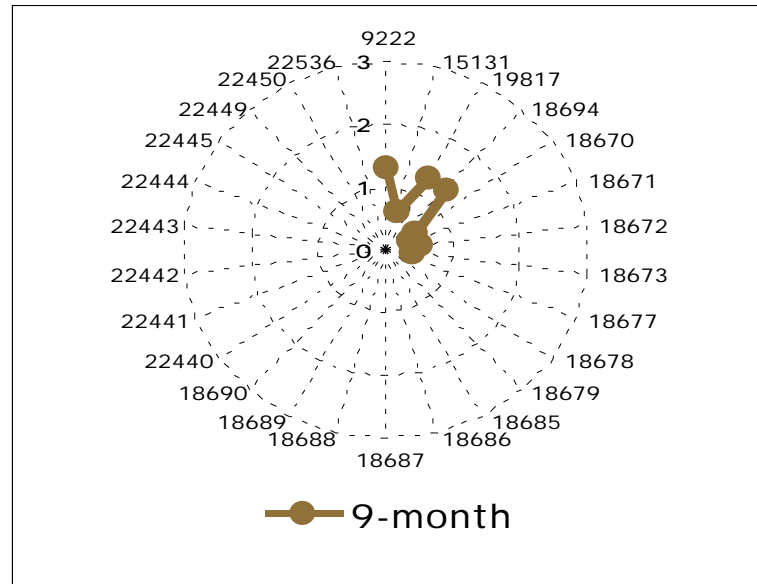
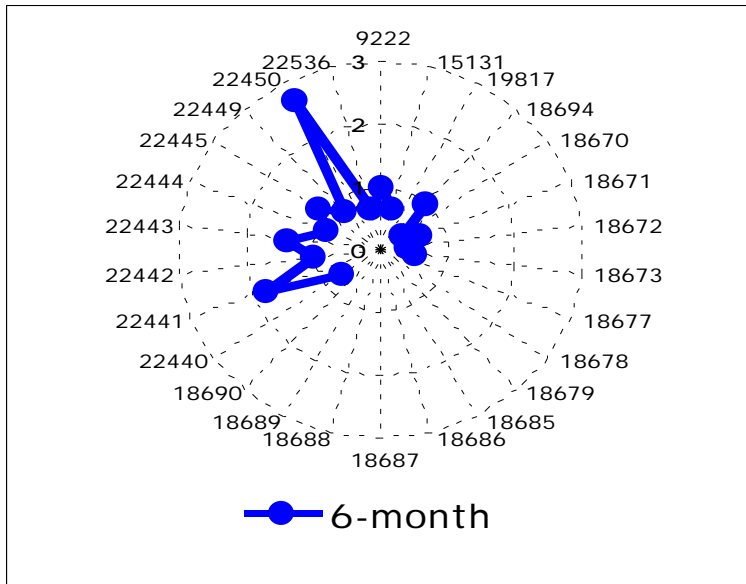
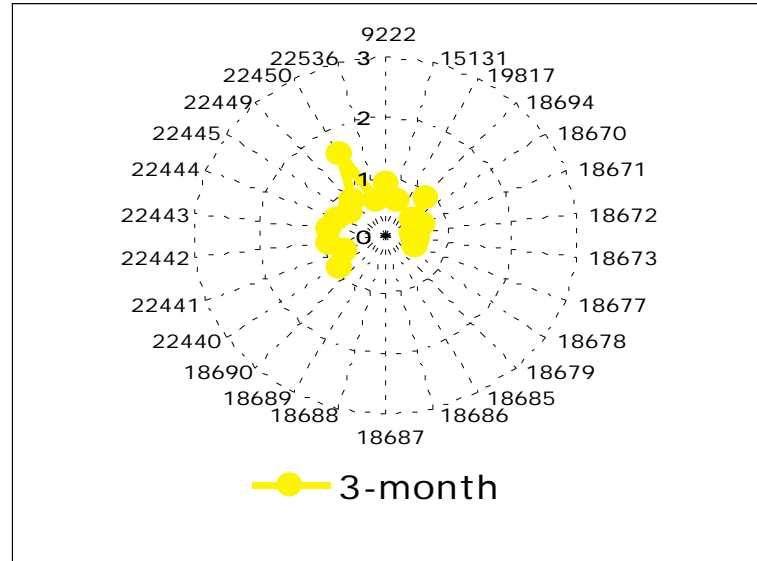
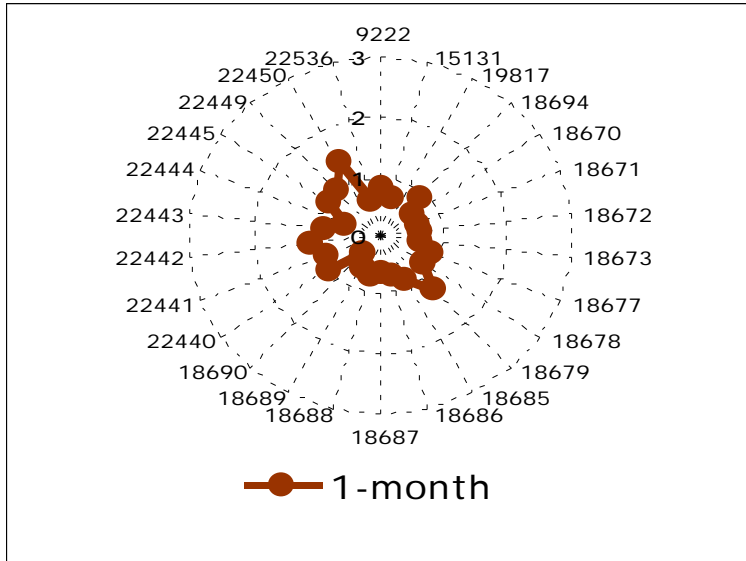
- Technocean Mac-1 controller certified by Argos in 1998
- Incorporates software for sampling, de-spiking, etc.
- Enables in-house modifications to s/w code, data formats, new sensor integration, GPS integration, troubleshooting, etc.
- Reduced power consumption



Number of Obs (ECMWF)



Standard Deviation(ECMWF)



RMS (ECMWF)

