MetOcean Data Systems

Clifton Flint – 2014 Polar Technology Conference

MetOcean

Company Profile

- Founded 1983 -- Dartmouth, NS, Canada -- 30+ Years of Expertise !
- 50+ Employees / 40,000 sq. ft. Facility / ISO 9001 Quality System / NATO Security Clearances
- Design and Develop Remote Data Acquisition + Telemetry Systems / Products + Services
- Extensive International Design, Development & Manufacturing Experience

MetOcean

Client Focus

- Scientists and Researchers (BODC, IOS, WHOI, SCRIPPS)
- Navy and Coast Guards (USCG, CCG, DND, RAN, AMSA)
- Survey, Oil and Gas, Off-Shore (BP, Exxon, Shell, OSRL)
- Meteorologists and Oceanographers (UK Met-O, Meteo-France, EC)
- Government Institutions and Commercial Fisheries (NMFS, DFO)

Traditional MetOcean Polar Products

ICE BEACON

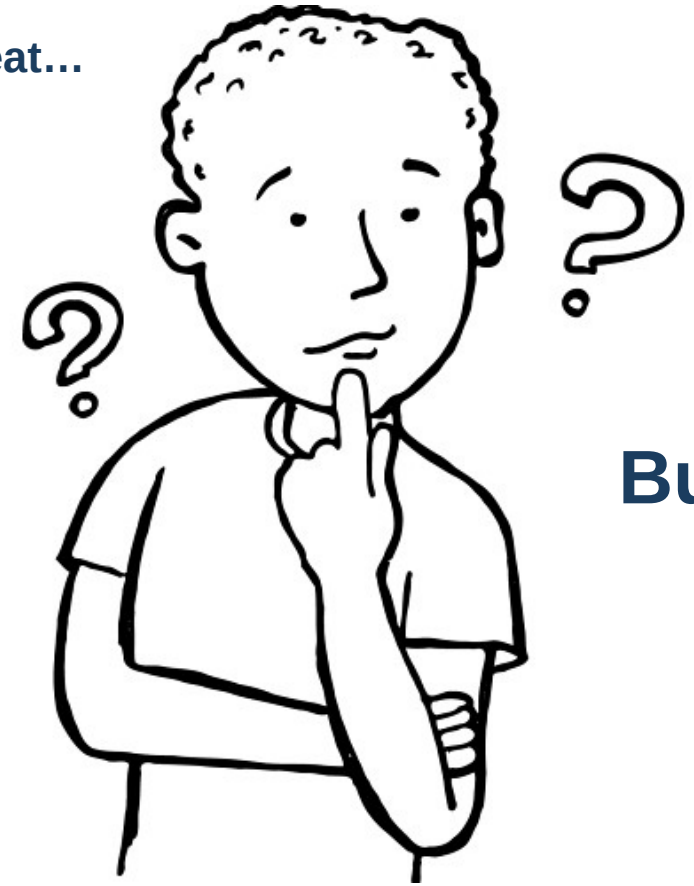
PAWS

IMB

POPS

CALIB

Okay… Great…



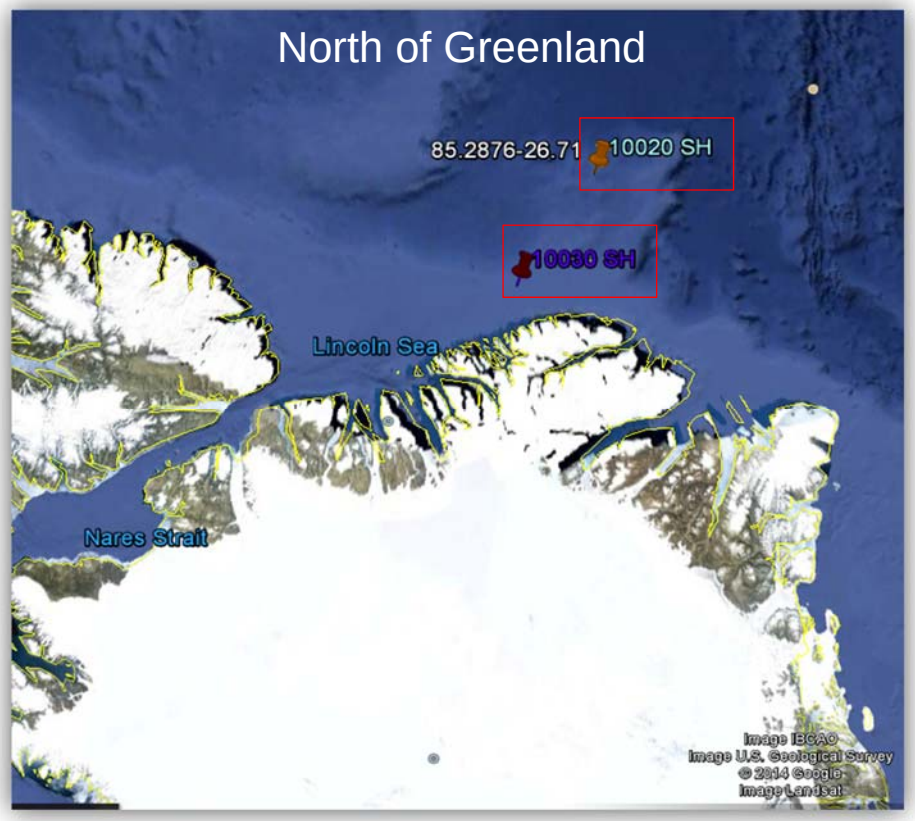
But what's NEW at MetOcean?

Snow Beacon – 2012 Prototype

- In 2012 – The Snow Beacon was developed and designed in cooperation with the Alfred Wagner Institute of Germany.
- (13) Prototype units were manufactured and deployed into the field over a one year period.
- Feature a standard met Instrumentation suite (AT,BP,GPS) including Iridium satellite telemetry and Lithium batteries
- (4) Ultra Sonic Sensors to measure Snow Depth.
- What did we learn along the way?

Snow Beacon – The next generation!

- Ruggedized guy wires with longer ice screws
- Reinforced machined parts and tubing
- Enhanced controller, not susceptible to static discharge
- Integrated sensors with temperature compensated algorithms
- (2) Enhanced Snow Beacons presently being deployed!
- **<u>Goal</u>** : 12 months of operation.



Radiation Beacon

Stasis Project – Study of the solar energy through seasonal Arctic ice.

Developed the ‘Radiation Beacon’ in cooperation with Norwegian Polar Institute.

Rugged platform featuring standard Met instrumentation suite (AT,BP,GPS) Iridium telemetry and lithium batteries.

Three Pyranometers Apogee used:

(2) Are located on the surface arm; one directed towards the sky, one directed towards the ice.

(1) Located on sub surface mechanical arm, directed upwards towards the ice.

Goal :12 months of continuous operation, or until crushing ice takes its toll…Deployment of initial (5) units slated for early 2015!

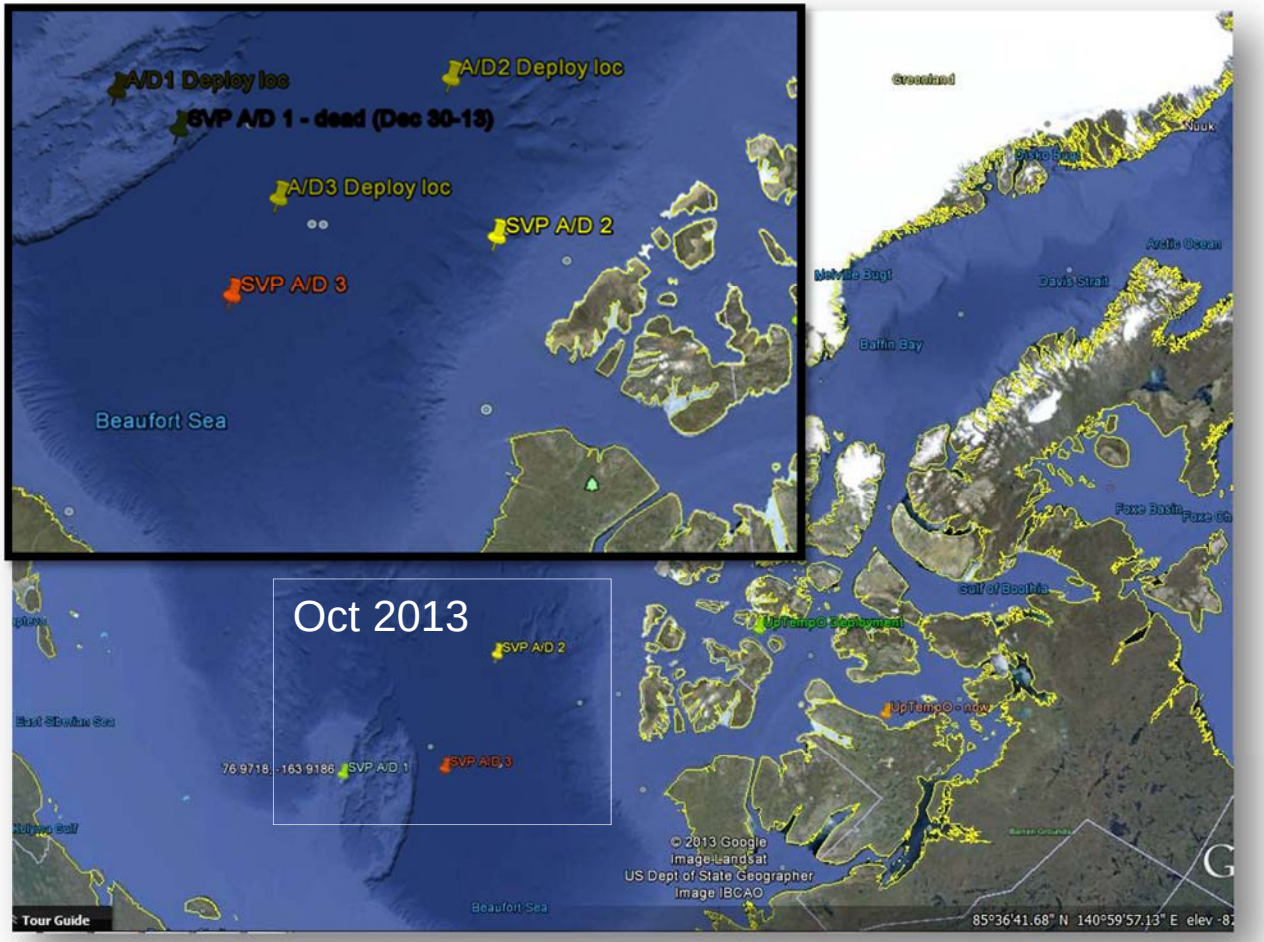
SVP – Air Deployed

Developed in cooperation with Environment Canada.

The Air Deployable Polar iSVP is a LOW COST buoyant, ruggedized, expendable, bi-directional mini weather station and marker buoy.

Designed to survive multi-year ice, its standard configuration is equipped with GPS, BP, SST, and AT sensors.

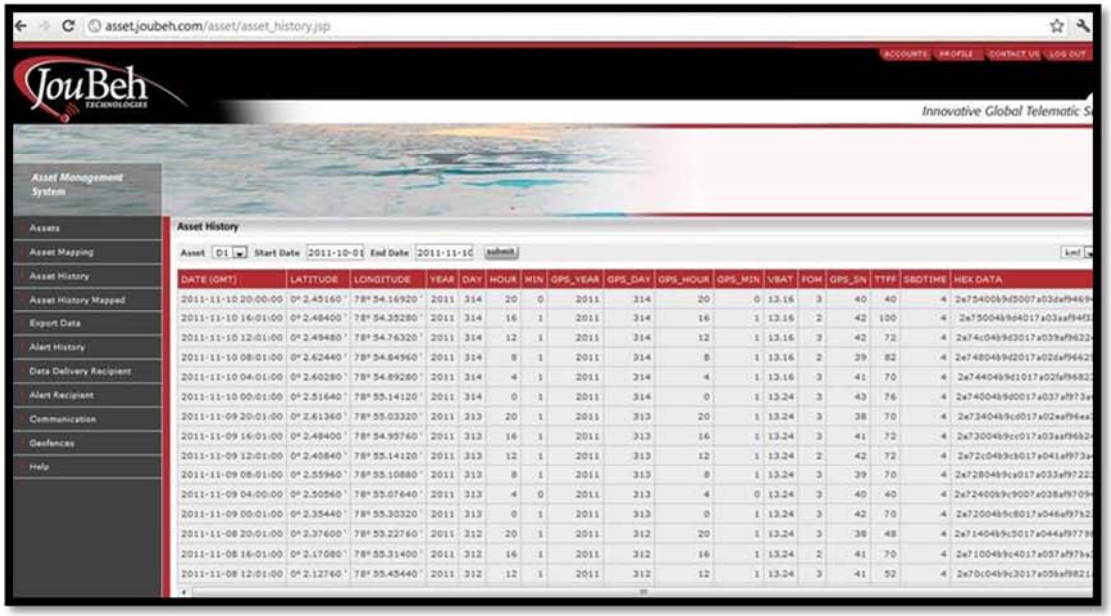
Goal : Survive 18 Months

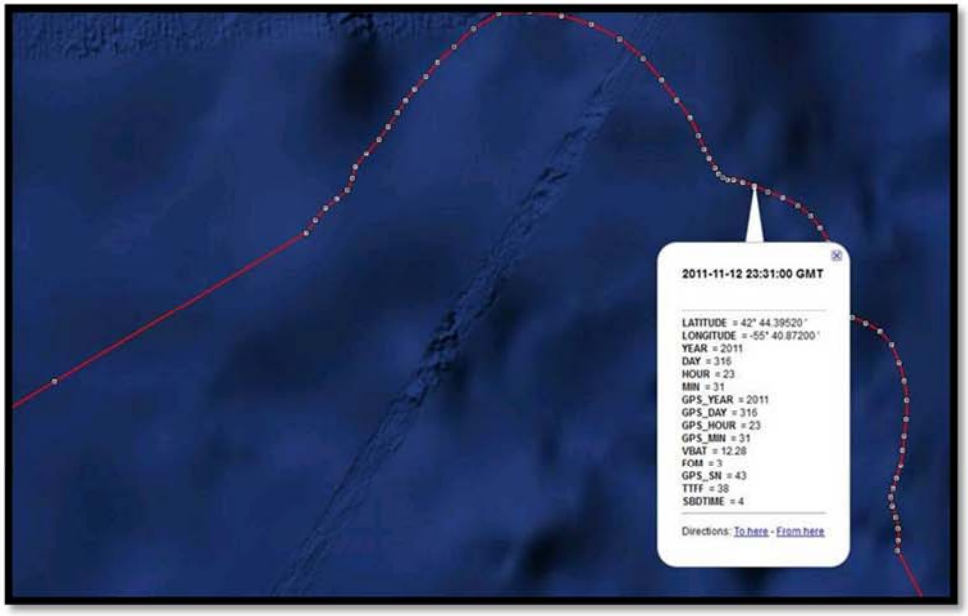


North of Beaufort Sea

Iridium Satellite Telemetry

Enhance the user experience!





- Exceptional support and service available - 24hrs / day!
- Preferred Iridium service plans and telemetry rates
- User friendly software tailored for real time management of MetOcean devices

JouBeh TECHNOLOGIES

iridium Everywhere

Questions?

Always interested in partnership opportunities to develop new and enhance existing products…

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