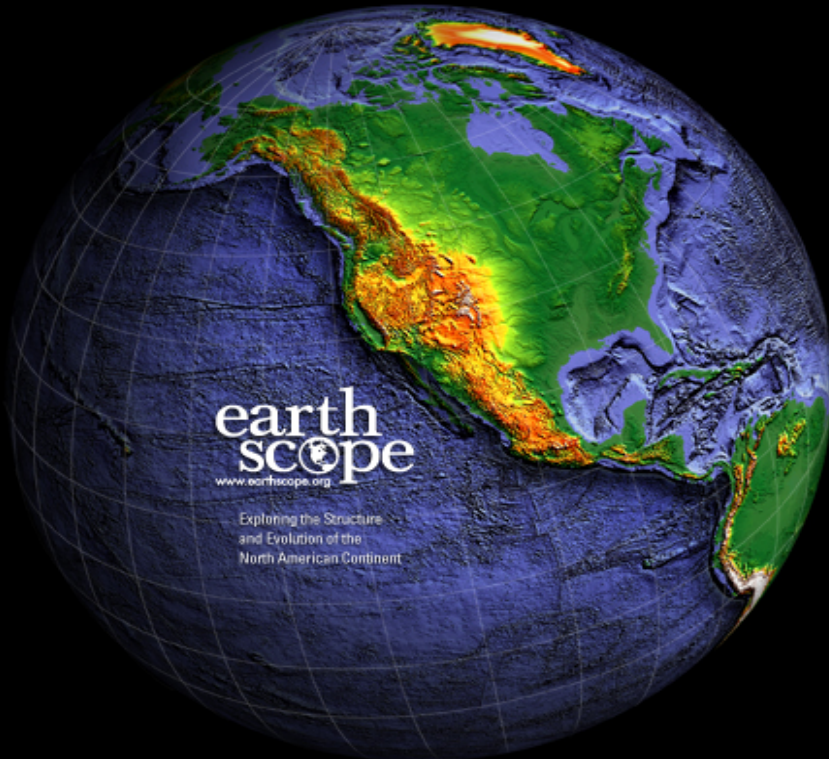


How Are You Oriented?

We don't judge....



Bob Busby
&
Jeremy Miner

**IRIS Instrumentation Services
Technical Interchange Meeting
April 27-28, 2015
Albuquerque, New Mexico**

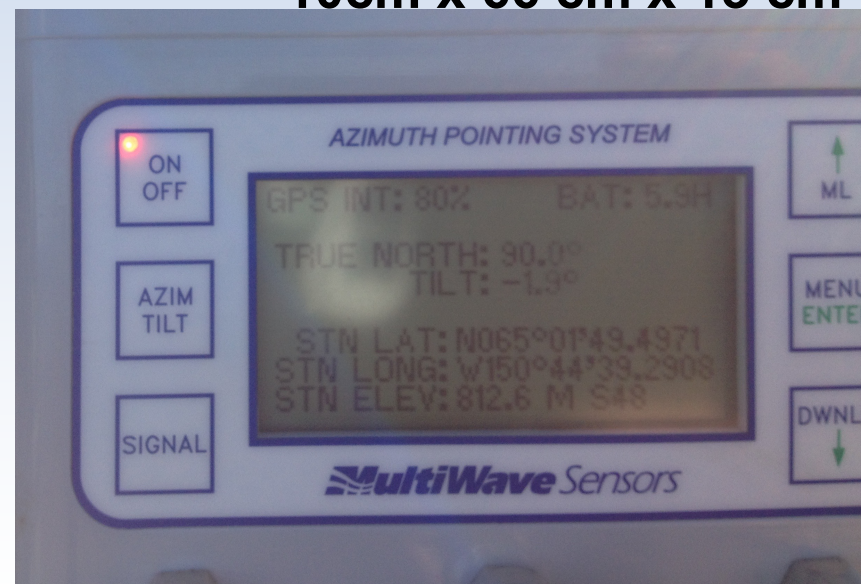
- L48 TA Orientation
- Modifications from year 1
- Modifications for year 2 and beyond

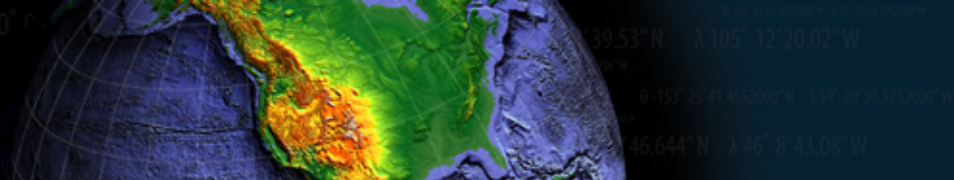


- **Performance**
- Azimuth accuracy: $<0.2^\circ$ if GPS integrity is 80% or better
- 0.2° to 0.5° if GPS integrity is 50% to 80%
- 0.5° to 1.0° if GPS integrity is 30% to 50%
- 1.0° to 2.0° if GPS integrity is 30% or below
- Tilt accuracy: $\pm 0.2^\circ$ ($\pm 0.1^\circ$ typical)
- GPS positional accuracy: Sub meter (with SBAS): 60cm (2 ft) or better
- 2.5 m (8 ft) when SBAS not available



10cm x 66 cm x 13 cm



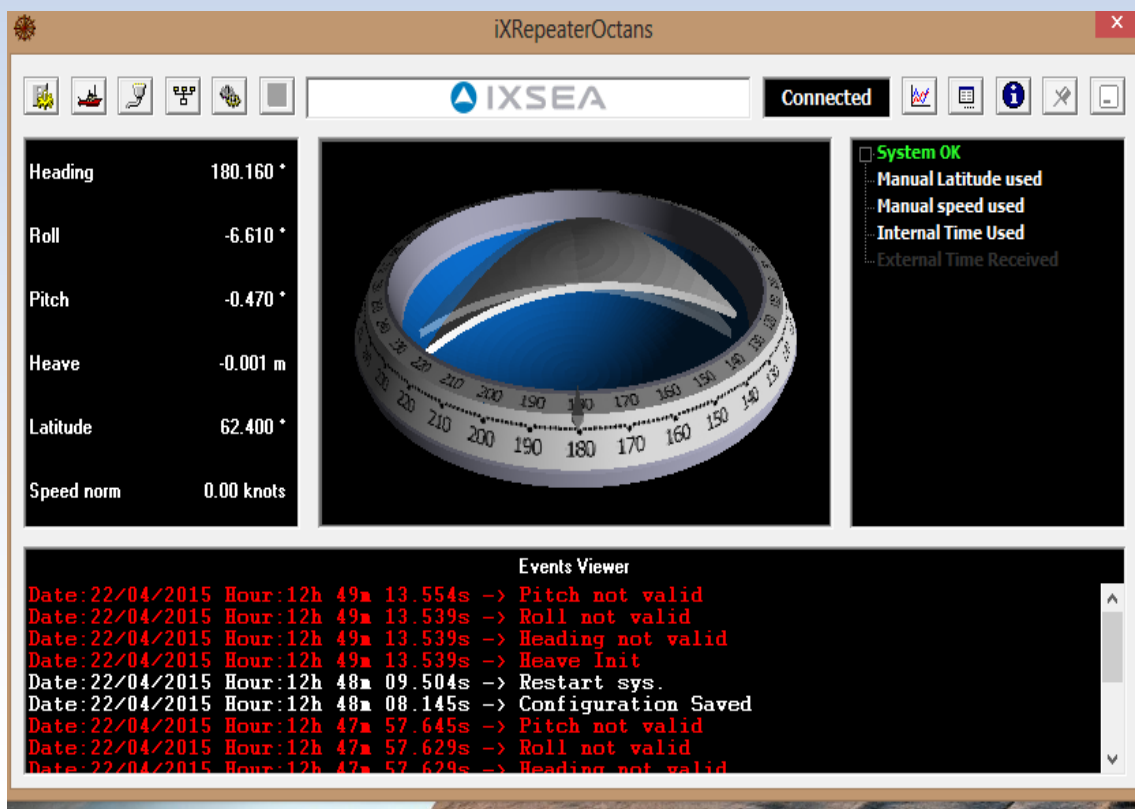


Performance

- Azimuth accuracy 0.1°
- Roll & Pitch 0.01°
- Real-time heave 2.5°



27cm x 13 cm x 15 cm



High Accuracy for Such a Small Sensor:

- **0.2° Roll and Pitch** over 360°
- **1° Heading** (Internal Magnetometers)
- **10 cm Real-time Heave**, adjusted to the wave period

Can operate autonomously or be set as a slave to the OCTANS

4.6cm x 4.5 cm x 2.4 cm



Evolving Methods

