Software Development

Gustavo Jorge Goni NOAA/AOML Miami, FL Gustavo.Goni@noaa.gov



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Collaborators: Janet Roseli, Paul Chinn, Ulises Rivero, Pedro Pena (NOAA/AOML), Alex Papij (Turo Technology)

Software Development

CSIRO XBT card integrated to SEAS.

TSG SEAS is fully functional/operational since Oleander (AX32, NYC to Bermuda) cruise in April 2007.

Iridium transmissions using SEAS continue under test.

Selection of different probe types (Deep Blue, Fast Deep, T-5s, etc).

Display of bathymetry.

Signal strength.

Increase information in log file.



CISRO Devil Hardware

CISRO Devil Hardware now fully integrated into AmverSeas



Simple switch between Sippican and CISRO Devil with the flick of a software switch.

Simple controller easy integration into AmverSeas. Integration future changes should require minimal effort.

Sippican comparison:
Smaller size.
Approx \$2500 in Savings.
Simple controller software.



Iridium Input of GPS

Reduces need for additional GPS.

Successful on last 3 HD AX-10 (NYC-PR) XBT cruises.

Reads antenna signal strength to determine if transmition acceptable. Increases transmission cost savings by reducing failed transmissions.



XBT Graph Bottom Depth

Displays bottom depth for entire ocean using Etopo 5 (12th degree).



New XBT Alarm Window

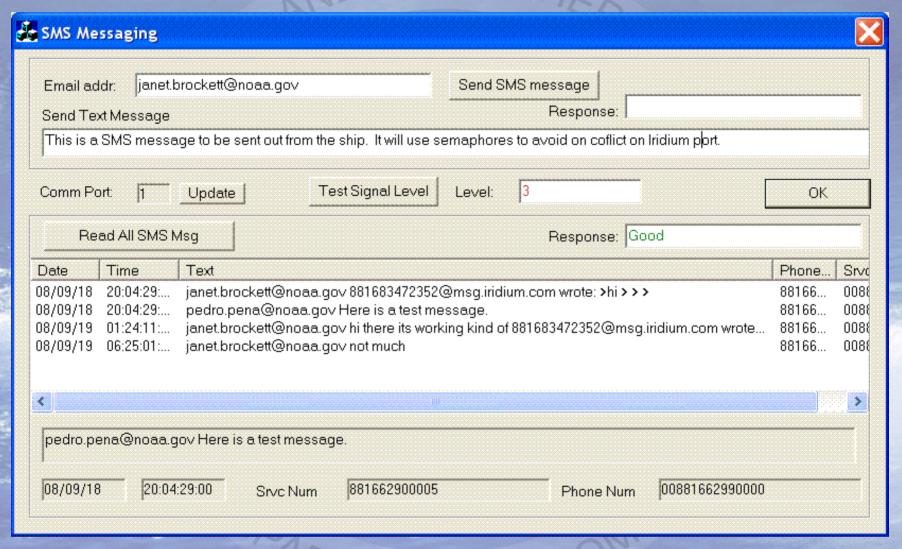
Includes GPS Alarm – data not changing

Alarm Dialog				X
GPS O	Good GPS	Until Drop	Reset	Close Reset All Alarms & Audio Alarm On/Off
Auto Launcher Empty Dead Reckon Alarm Too Long Between Drops	00:02:41 Good GPS 00:02:31	Since Empty Since GPS Bad Since Last Drop	Reset Reset Reset	# Err Alarm Description, see XBTAlarms.txt 1 18 Drop 63 Scheduled but Auto Launcher Not Engaged!!
Questionable Profile? Reset No Splash Detect Reset Move window to bottom of screen. Cannot access or close this window, while other pop-up dialogs are open (except Launch Status). Please select other pop-up and then close it, to access this dialog.			Verbose Error Messages: Reset	

New XBT Log

Create XBT profile log that is in the format used for ship reports. Includes binary file name, position and time. Has an edit feature that pops up after a drop for notes about that drop.

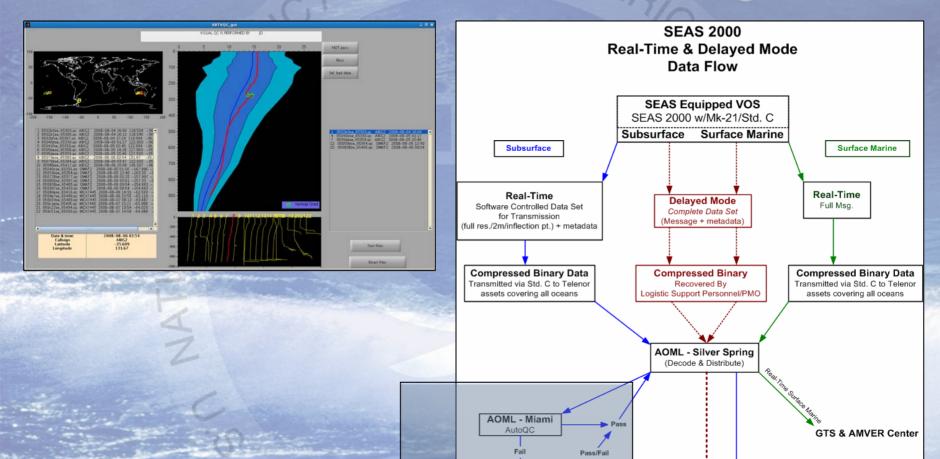
SMS Messaging Service



Features: Free messaging. Small message length



Visual and Automatic QC



AOML-Silver Spring
Visual QC
(accept/reject)



Pass Bathy record to GTS
Pass/Fail Archive record to NODC

Complete Data Set to NCDC Complete Data Set to NODC

Future work

Improve metadata information in the profiles in XBT and TSG operations, such as transect and profile numbers.

Improve check of signal strength in TSG.

Fully implement lock of system.

