

RVTEC 2009 – UHDAS/ADCP

- **UHDAS** Goals
 - Flexible (inputs), simple (to run), reliable, robust
 - Enable remote troubleshooting
 - Data, raw and **processed**: optimize
 - Good real-time output
 - Minimal effort to “touch up”
 - Accessible documentation
 - Recover from problems

UHDAS Installations

- 11 UNOLS ships
- 2 polar ships
- 3 NOAA ships
- 1 “other” ship

Installation status since last RVTEC

- 7 upgrades (Ubuntu 8.04, “Hardy Heron”)
- 3 touchups (minor UH software upgrades)

- N.B.Palmer: new OS38

- New Installations
 - New Horizon
 - Endeavor
 - Atlantic Explorer

New Installation: New Horizon

- Science request: add Triggering option
- Ashtech

New Installation: Endeavor

- Endeavor
 - Fleet Broadband
 - Ashtech (ADU2 + ADU5)
 - Needy Scientist found a bug (WH300 processing)
 - Fix was applied within a month
 - Award for “most GPS feeds”

New Installation: Atlantic Explorer

- Science request
- Fleet broadband
- Challenging installation
 - Electrical interference
 - Poor range (instrument placement in well?)
 - Acoustically noisy (fairing? window?)

Minor problems

- High-maintenance scientists
- Bug fixed (wh300 processing)
- Attitude
 - Ashtech (most)
 - Phins (Atlantis)
 - Phins (Knorr)
 - POSMV (Ka`imimoana, Knorr)

Major Problems (time-consuming)

- Wecoma: deck unit failed (subtle)
- Knorr: strange (electric?) interference
- Atlantic Explorer (ongoing)
 - Electrical interference
 - Acoustic noise
 - Poor range

Improvements since last RVTEC

- All web plots done in Python
- All processing plots and calib in Python
- Better troubleshooting in email
- Significant improvements in
 - Raw (nmea and adcp) data reading
 - Documentation ([new format](#))

New Request: ADCP metadata

- Instrument complement
- Location and drawings of installations
- Ancillary instruments (GPS, headings)
- Photos
- Other info:
 - Cable run
 - Window
 - Plumbing
 - Dry-backed? Change adcp while floating?

Continuing Request

- Keep us in the loop regarding
 - New ADCP (requires configuration, calibration)
 - Changes in serial feeds
 - New attitude devices

Final request

Send your needy scientists
to Jules