

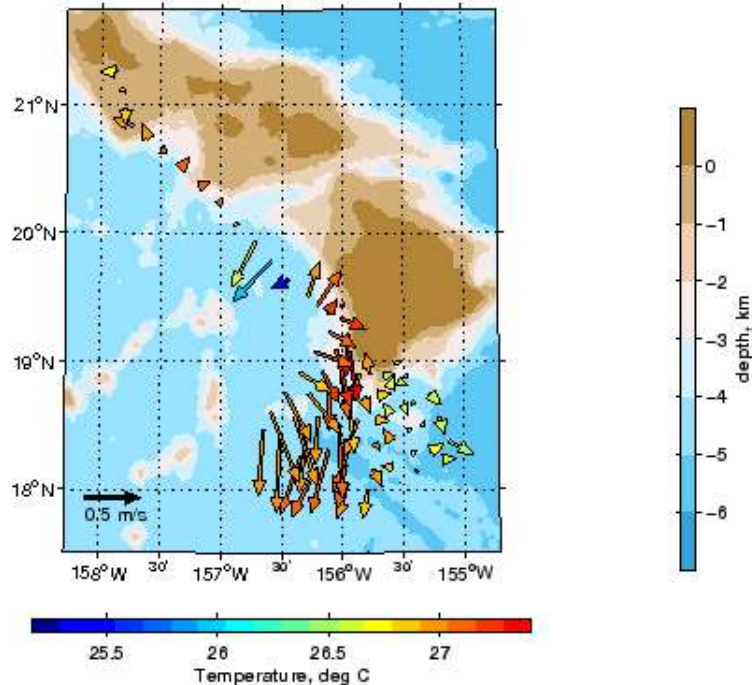
University of Hawaii
ADCP data acquisition and processing
“UHDAS”



-
- linux computer
 - using C, Matlab, Python
 - simple gui
 - flexible data acquisition system
 - builds on CODAS processing
 - open source
 - suitable for NODC submission
 - works with all common RDI models
 - works with 1-2 (or more) ADCPs
 - serial data shared between instruments
 - sends daily email with status and data

Daily email contains status and data

km0518 os38bb (2005/10/19 14:47:36 to 2005/10/22 14:47:17 UTC), 100–150m



Uses:

- Education
- Public Relations
- Outreach
- Ocean Observing
- Monitoring (of the instrument and the acquisition system)

http://currents.soest.hawaii.edu/uhdas_fromships.html

AT SEA

Access to raw and processed data

- Windows shares (Samba)
- NFS export
- shipboard web (Thursday show-n-tell)
 - data and figures
 - documentation for processing
 - processing programs
 - calibrations

Single-ping data:

- signal return (bioacoustics)
- data quality (bubbles, ice, bottom depth)
- instrument comparisons

Processed data:

- dynamic sampling schemes
- following drifting instrumentation
- interpreting science during the cruise

Next UHDAS goals:

- better documentation for installation and post-processing of at-sea data
- better packaging for installation
- additional single-ping editing options

Longer-term goals

- Completely “open source” (no license fees: no Matlab)

Problems and challenges:

- permission to release processed data
- gps-derived heading devices
 - what is an acceptable heading source?
 - eg. Furuno gps gyro: no comparison yet

