

Folger Passage

Folger Discussion

Here's the place to post your ideas, questions and comments about science projects in Folger Passage. *(Just click Add Comment below.)*

Breakout Session Attendees

- Amalis Riera (whales - hydrophones)
- John Ford (whales - hydrophones)
- Harald Wauk (whales - hydrophones)
- Michel Andre (hydroacoustics)
- Ron Schouten (DMAS)
- Darryl Biddouck (DMAS)
- Ann Gargett (turbulence)
- Yan Chen (DMAS)
- Ron Tanasichuk (euphausiid/fish productivity; Rapporteur)
- Sally Leys (sessile animal biology - absent)
- Rich Pawlowicz (physical oceanography - absent)

Discussion of Existing Experiments

Interactions/conflicts between instruments

Interactions/conflicts between instruments - Biosonics echo sounder and hydrophone; John and Rich have discussed; Rich will work with NEPTUNE next week to reduce power output of 38 kHz transducer; missed one duty cycle with day on and day off which is less desirable for John; move the hydrophone to 100 m away from the sonar; John's could stay on all the time but not get useful data when the Biosonics is operating; Michel's algorithm can still extract data extract but this audio would not be amenable for public consumption; John is concerned that 38 Khz transducer may affect animal distributions; Michel suggested that Rich should investigate what the targets in his hydro-acoustic data are; Biosonics could be turned off for a period to develop a control for whales distributions to test how the Biosonics affects whale movements with implications for live streaming, however this may be confounded by natural seasonal variations in distributions

Scheduling to minimize interference

DMAS: data formats, download/presentations needs

Live audio streaming from hydrophones; Michel will discuss streaming of audio from the Barkley Canyon Axis with Benoit; audio file downloading issues will be resolved soon

Access to Doppler data is frustrating; pre-screening function would be useful; DMAS is working on the issue

DMAS is working with Computing Science Department at Uvic about general issues with respect to camera control and defining pre-sets for the camera; DMAS is doing anticipatory work to deal with the video data

Streaming data: needs, formats, search tools, annotation

John wants to stream live audio to the web; DMAS would have to compress audio into MP3's; Michel says the technology exists; the crowd-sourcing methodology is developing but Michel's methodology may render crowd-sourcing obsolete; crowd-sourcing should still be retained because it will allow for human interaction; Michel says an alarm service is being introduced into their system to alert individuals to specific signals (eg. Killer whale calls)

Obstacles

No vertical profilers and no fluorimeters (transmissometers are not specific enough)

Changes in instrument configurations

Changes in instruments locations

Relocate hydrophones

Future Recommendations for Existing Experiments

Changes to instrument deployment/operation

Anne requests that Dopplers be on gimbaled or adjustable mounts so that turbulence can be measured as well; also ultimately requests 5-beam Dopplers so that vertical velocity can be measured; turbulence crucial to biology and sediment resuspension

New instruments that would add to current experiment

Additional hydrophone array to provide directionality and range information

Add 3 component acoustic velocimeter to measure turbulence