

Ocean Visualization
Wednesday, March 9, 2011
10 am Ships View Conference Room

David Caress, Rich Henthorn, Brett Hobson, Steve Rock, Hans Thomas

Schedule

- Multibeam now here
- Cameras arrive about mid-March
- Get software from URI and WHOI over the next week or so
- Start testing camera setup on bench starting mid-March
- Probably we test the multibeam on Ricketts on April 14
 - Mob onto Ricketts week of April 4
- Start assembling tools by May 7 – Larry expects to be doing this much earlier
- At sea June 6-9 on Ventana

Meeting with Teledyne on Thursday

- Will be with George Panastacos LED product manager
- Will be with Doug Lockhard – chief Hydrographer
- Possible collaboration with LED group for strobes
- Brett, Hans and Dave will meet with them

Multibeam has arrived

- Need the projector drawing – may have it
- Need to confirm pinouts
- Need to make handling cradles etc
- Will set up for bench testing in the AUV lab.
- Two host cables here – one to set up for plugging into the Ricketts and the power bottle to be used on Ventana – the other to be set up as deck cable.
- Reson will be loaning us a mounting plate for the arrays – probably need to make additional brackets for mounting arrays.

Camera control software

- Chris Roman will clean some things up and then send code to us through Eric.

Camera Hardware

- Cameras and lenses ordered
- Camera Housings
 - Deep Sea Power and Light wound quoting way too much for 4000 m rated camera housings. We might be able to go with 2000 m rated aluminum housings off the shelf for year one.
 - Alternative would be to stretch the design of an existing MBARI housing and build them here.

- Brett will look at alternatives some more – we will revisit this issue in a week.
- Ken Heller and Craig Dawe did testing of gigE through connectors. They succeeded in getting gigE through mink connectors. We should therefore be able to run with gigE connectivity on Ventana.
- Brett notes that the cameras are capable of 30 Hz, and so we could in principle pursue 3D video. The bottleneck is moving data – the cameras have dual gigE connectors that interleave data. We would have to run four gigE connections to data logging to pull that off. Not a priority for this year, but something we will try out on the bench.
- Camera Triggering
 - Single trigger from multibeam to camera package. Once camera will be master and will apply to other camera and strobes.
 - Need to move multibeam trigger to the host cable.
 - Multibeam trigger is programmable.

Topside data acquisition

- Steve Rock's group will be using Hawkeye
- Will need to borrow or buy a laptop capable of logging data coming on gigE. Need to have eSata or better.
- Dave will be looking for a laptop with fastest possible connection to large hard drive. The 4TB drives we have now have an esata interface, but the Mac laptops do not have esata. We can probably use a current generation HP or other PC laptop.