Space Details

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Home

This page last changed on Jun 11, 2013 by mage.

This is the home page for the Summer Interns space.

Schedule

Refer to the Summer Intern Calendar (Zimbra Public Folders)

Weekly Updates (Please Report by noon Thursday)

- 13-June-2013
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This page last changed on Aug 01, 2013 by clairelm.

Comments

This week was a data analysis week. I looked at the density and spatial coverage of Paradiopatra patch over time as well as the patch sizes over time. I am now looking at the association from a statistical point of view. The small number of patches make the statistic non significant for most of it. My project will help desgin future sampling to investigate Paradiopatra patches ecology over time at Station M.

Posted by clairelm at Aug 01, 2013.

The benchtop prototype is finally assembled! Gene and I have a couple of things to check before pressurizing it, but I am hoping we can have the system running under full pressure very soon. I haven't been able to work in the test tank as planned because putting the test tank prototype back together took a little bit longer than expected. Hopefully I will have time to get around to it today.

Posted by nsohn at Aug 01, 2013.

This week I have been reading up on some of the background software that make the STOQS application work. Mainly I've been reading more in depth on how databases are designed and why they are designed certain ways. I've also been looking into django and learning the basic of how it works.

Also I have been working on my paper and presentation and have finished a draft of both of them.

Posted by drolicheck at Aug 01, 2013.

This week I've continued to analyze data and to work on some figures for the final project. I've been thinking a lot about the context in which I want to frame our work, which has involved review of associated literature and chatting with my mentor/other lab members. This has helped me pick out figures and decide how to present them in the paper/presentation. I've been working on a draft of the write-up as well.

Posted by ajaffe at Aug 01, 2013.

Just been plugging away on pieces of the presentation and paper little by little. I'm also still working on my project--it really is never ending. Definitely ran into an issue earlier this week, but I think I've fixed it for the most part, so I can take up where I left off. Still looking at transmissions. I have some more data to look at from the 'AUV guys' on the electric motors MBARI has used in the past. Not much to share this week, but still super busy.

Posted by bailey at Aug 01, 2013.

After doing some modifications that my mentor suggested to my project, I've been writing the final paper all week. I'm almost done with it, so I hope to review it this weekend and then send it to my mentors next week. This way they'll have enough time to review it too.
After that I'll start working on the presentation 'cause I think that once the paper is done it will be easier to prepare the ppt with all the figures I've used on the paper, just modifying them a little bit.

Posted by opallares at Aug 01, 2013.

This week I have been knee deep in R code! Apparently excel does not like to graph more than 1000 observations. It has been good to refresh my memory of all the R code I learned in school. It has taken a bit of time to get the code done for 13 species and 9 different time periods (that is a lot of graphs!).
I think I will be able to finish my length histograms for this this morning. Then I am going to map by biomass points in GIS before I go at R again to get my biomass stuff done. This weekend I need to step it up on my presentation...Well, back to work!

Posted by lclary at Aug 01, 2013.

Hey hey! This week has been a bit sluggish. A pressure cell snafu has delayed my project a bit. The pressure cell puts lab samples under high pressure. We are using the cell along with a circulating water bath to simulate pressure and temperature conditions we observed during the ROV dives. We will analyze samples of methane, decane, and methane saturated decane through a small sapphire window in the cell using what else...the laser Raman! These lab samples will serve as references to compare with *in situ* collected data. Reference data will allow me to isolate the methane signal from the methane saturated decane we observed during the ROV dives. The methane signal will tell me the fraction and rate of release of methane (this is what we're after!).

Aside from my pressure cell problems, I've been starting to put together my presentation for our final talk. I'm hoping to have a completed talk by our practice presentations next week. I'm also working with my mentors on drafting an abstract for a poster session during the AGU Fall Meeting to share some of results of our work beyond MBARI (Yay for sharing science!).

Posted by wsauthoff at Aug 01, 2013.

My main focus for this week was DATA COLLECTION! Meaning, running my urchins in the three Y-mazes (pH 7.2, 7.5 and 7.8) to observe their response towards a flow of either kelp-sensed water vs. plain seawater or if they are indecisive (they don't move). Next week will involve analyzing the results!

I had a big, scary hiccup on Tuesday morning with my urchins! I came into the seawater room to perform my morning urchin check-up and discovered a tank full of urchins (tank @ pH 7.8) with NO flow of water into their tank (no oxygen input)! To my dismay, they were all in a motionless pile, where normally they are climbing along the tank walls. I discovered the tube enabling water flow (oxygen flow) had fill out over night!

Good news is that they are slowing recovering, but unfortunately their impairment will have to be taken into consideration in my data analysis.

I have now incorporated an additional step in my experiment to perform an "upside down health test" for each urchin before running them. This simply involves placing the urchin upside down and timing how long it takes for them to flip back over. This will help determine if their health affects their response towards kelp-sensed water flow vs. plain seawater flow within the Y-mazes. As for the impaired urchins (tank @ pH 7.8), the health test determines if any one of those urchins is healthy enough to run. In other words, if they don't flip back over within about 10 minutes, I will not use them due to the potential impact the accident from Tuesday had on them.

Nevertheless, data collection is proceeding, and as of right now going smoothly!

Posted by khart at Aug 01, 2013.

This week has been great for progress on my project. It started with the wonderful realization that we still have another full week before presentations and turning in our papers. I revived some of my cultures--I had let some of them get past their max growth (at which point their fluorescence values plummet and bacteria begin to take over the happy growth conditions), so I moved some into new happy growth media before that happened. This is good because it means I can run healthy cultures on my two instruments - the ECO Puck and the LISST-100, which both saw improvements in bench top set up this week. Denis helped with my ECO Puck design by creating a new, more optically-black (we think) design that I ran dark counts and two of my four cultures on this week. I am going to plot out the data for comparison between my older and newer set up. I had help from John Ryan and Denis on setting up the LISST-100 with the software package that Heather shared from a previous meeting with John. Shoot that reminds me, I wonder if I will have time to access and run some Pseudo-nitzschia samples...that would be cool. It may not happen in the next week and a half. I also helped with my mentor's project proposal for next year, in that I helped Thomas put together a budget by way of telling him what I need for this project to sustain beyond this summer. I probably should have told him to include salary for a research tech in the proposal...
This place is so cool, if you want to test something you can easily order the parts you need and build it, or start a new project with really cool instruments and make it happen.

Goals for the next day and a half: put together my presentation, work on my paper, analyze data! Maybe run another set of samples tomorrow if I can verify that everything is copacetic with my LISST-100 set up. Oh and run calibration beads on the two instruments. And run a sample with flow cytometry data as well. Order sea salts..oh the shopping list, how it grows.

Posted by dwyse at Aug 01, 2013.

This week has been a lot of writing and organizing to make sure all the page content flows smoothly. I've spent a little time in the video lab listening to and watching parts of the dives. I've also been piecing together my paper and presentation. Things are coming along slowly, so I'll probably come here this weekend to make sure things keep progressing.

Posted by nmcmiller at Aug 01, 2013.

Oh no, it happened again. I plan to post around 11 and then too much happens around here to remember to do so, like whales feeding right outside and meeting a former fascinating intern, and talking to my fabulous mentor about our upcoming weeklong expediton out to sea with the Peter Brewer sea floor chemistry crew! Yipeeeee!

This week I have been very busy creating the methane mounds illustration. It would be nice to have it completed today but it is looking like it will be tomorrow.

I emailed what I have so far to the sea floor chemistry crew but haven't received feedback yet due to this being a very busy for them with their 2014 proposals and all. I hope I will only have to make minor changes and nothing major at this point.

I will make my presentation this weekend and next week finish up my iceberg illustration.

Posted by klance at Aug 01, 2013.

I have been working to finalize a testing protocol using the newly attached diffusion cell on my instrument. We had planned on deploying it last Thursday but we had to postpone it to Monday, which got postponed to Tuesday, which got postponed one more time to next Tuesday. I was having issues with getting the sensitivity dialed in, getting the sample into the flow cell and a few plumbing issues. Yesterday was my mentors last day at MBARI and a few of us had planned on taking him out for a beer after work, but he left before we could surprise him so that was a bit disappointing. After I got the testing protocol finalized I began catching up on data processing and outlining my paper. I'm also catching up on the many journal articles I want to cite. My last goal is to have my python scripts polished into a fully deployable beta stage that I can use on Tuesdays session. Seeing the humpbacks this morning was pretty cool and is just one more thing I'll miss after the internship. This time has gone too fast.

Posted by aleitholf at Aug 01, 2013.

I have been finishing graphs and doing some statistics for my data. Just when I think I'm done, I look back at the plots and notice that something's missing, so I have to re-plot them, or re-do statistics to check if I'm doing it right. They're done so far, and description is almost finished. Introduction is done as well, and I'm still working on mat & methods, because as there's so much equations involved, I'm trying to make it as less boring as possible. I have a meeting with Francisco at 15h, to discuss some results and I think the rest of the paper. I'll propose a title for the presentation and if he's ok with it, then I'll e-mail it to Linda. I think I'll start working on the powerpoint on the weekend, or between Monday and Tuesday.

Busy week, I can't believe we have only two weeks left

Posted by albacv at Aug 01, 2013.

Lots of writing. Very slow going. Everything is taking longer than I thought it would, so ill be here this weekend probably. I'm hoping consistency will pay off because I can't quite see the light at the end of the tunnel yet. I think this confluence update would have been a lot more optimistic had I written it this morning. It was nice to see some engineering projects yesterday afternoon!

Posted by bburford at Aug 01, 2013.

I'm finally running experiments! But they are taking forever, but I'm hoping to finish up this weekend, then run the molecular analysis next week, then data analysis over the weekend just in time for the presentation.
I've got drafts of my paper and presentation, but the results section is just going to have to wait.

Some late nights ahead, but it'll come together

Posted by hfbennett at Aug 01, 2013.

This week was good. I finally got my project together and now I am doing runs under the water by simply putting the whole module on the test tank. I am still working on some functionality issues and the radio communications are not done. I have been also working on my paper which is almost ready, I need to work a little bit more on it. Next step is to finish up the radio communications, finish my paper and start working on the presentation.

Posted by muzcategui at Aug 02, 2013.

Took my break, and now back to Matlab! Got 2/3 of what I need to defend my argument, and the more statistical work I do the better (but that's if time permits). A sneak preview, When backscatter sensor data are plotted against fluorescence you can observe what are lithogenic, non-living material and what are living material. Within the living, you can vaguely distinguish between diatom communities from other planktonic organisms. I've got a, pretty simple power point frame for my presentation and it will take shape into something good; I hope. The paper is on the same boat as well. I've been given the privilege to be independent and explore on my own, and it definitely has its ups and downs. I think I've spent the bulk of time chasing so many things that were interesting and intriguing to me, but couldn't find something to grasp on for this project; but hey, finally got something for the presentation =)

Posted by vg at Aug 06, 2013.

02-August-2012

This page last changed on Apr 29, 2013 by kgomes.

I'm starting my confluence post early because I will most definitely forget it this week...

It's very frustrating when biology does things you don't expect it to, or when you finally figure out that the method you've been planning on using isn't the best way to answer your question(s). I have been working with a new culture in which the females have all suddenly become gravid and the singles floating around are all males, which is a problem since so far, I have used a more-or-less consistent ratio of males:females without eggs for my work. It might not matter now since I'm also changing my approach to better address the question of how non-target genetic material changes what signal I am getting from my copepods in culture. I sort of wish I had talked to more people at the beginning of my project, but at least things are making a little more sense now.

Have to also figure out if something funny is happening with the prongs I am using in lab. Consistency has been decreasing, which is not good.

More later.

03-July-2013

This page last changed on Jul 03, 2013 by lclary.

Although this has been a short week, I finally feel like things are coming together on my project. I was able to obtain the preliminary conversion rates for my holothuroids! This allows me to convert my length measurements into a mass which then can be used to estimate population biomass. I am meeting with Christine Huffard today to go into detail about extracting my data from VARS and using software to change the measurement point made in VARS to the actual sizes being seen (makes the measurements based on the known 29cm of the sizing lasers). With thousands of observations already, I have decided that I need to stop collecting data in the middle of next week. I think I am going to come in during the holiday to get a little extra data collected as well. Overall, I think my project is progressing well.

Comments

This week has been very short and Monday wasn't too productive with all of the meetings and NASA interns. However, it was very nice to meet them! I am bummed I couldn't go out to dinner, but I hear that they are coming back for the Hopkins and MBA BBQ, so that would be nice. As far as my project is concerned, I think that it is coming along well. I am now counting *Nanomia bijuga*, a Siphonophore, which is completely unrelated to my Cephalopod study organism! Why you might ask? The plot thickens! Tune in for your answer next week on the thrilling weekly updates of Ben Burford.

Posted by bburford at Jul 03, 2013.

As of Monday morning my internship has taken on a whole new level of excitement. The Princeton journal *Discovery: Research at Princeton* is writing an article on Ken Johnson's C-SOBOM profiling float project and they have requested permission to use my illustration to accompany the article. I have been given the green light for this project and my deadline is July 10, one week from today! So I have put everything else on hold while I frantically complete this illustration. I have had a couple of meetings with Hans Jannasch, the lead engineer, who has graciously provided me with 3-D drawings of the float and positioned them in the perspective I need using the program Solid Works.

I am also organizing the 2013 intern T-shirt design. Everyone seems excited by this project and a couple of people have come up with great design options. There are multiple artists in our group which makes this extra fun and gives us the opportunity to make an interesting collaboration. In next Monday's meeting we will hopefully all decide on the final design concept.

Posted by klance at Jul 03, 2013.

Hi All, this week has been exciting to say the least. Monday and Tuesday were daylong cruise aboard RV *Rachel Carson* with the ROV *Ventana.* Bailey joined us on Monday's cruise, which turned out to have a number of technical glitches that interfered with the communications between the ROV and the control room. The ROV had to be surfaced to test connections and problem solve. Alba joined us on Tuesday, which went much more smoothly. We had no comms problems and got all our test data. I now have spectral data to analyze! That means I'll be learning to use Grams (a spectral analysis software) and Matlab very soon. Most of today will be spent demobilizing equipment from the ROV.

Meeting the NASA interns at Dinner on Monday was fun. I like hearing about all types of scientific research. And space related research is particularly enthralling so hearing about their projects was exciting to say the least. Funny enough, I applied to intern at NASA this summer. If any of the marine sciences folks in this group are interested in the interning with NASA, there are many ocean-related intern projects as part of the NASA Develop program (http://develop.larc.nasa.gov/projects.html). I encourage you to apply next year if you're interested.

Posted by wsauthoff at Jul 03, 2013.

While short, this week has probably been one of the busiest so far for me.

Monday and Tuesday, I finally got the LISST-100x off the AUV and hooked up to my laptop with copious help from John Ryan. The few baseline measurements I've run look promising, and I'm hoping to get a few more background measurements in today before I start running my experiments. Yesterday, I also talked to Hans about getting the LISST-HOLO, a holographic imaging system for larger plankton, set up, so I hope to start working with that soon as well. Jim is also talking to someone else about another

holographic system which is more sensitive, but I'm starting to wonder if I'll have enough time to do much with this last system while still completing a full experiment. I am also working up comparative data from the LOPC on Dorado and the SHA molecular analysis from the last four years, in the hope that we can get a better understanding of the accuracy and resolution of the LOPC data. On the biology side of things, I've gotten probes made up for hopefully any organism we could hope to test, as well as setting up all reagents and instruments for optimal use once I start running samples.

Outside the lab... meeting the NASA interns was great, it was cool to see the level of enthusiasm they had for their job, as well as their excitement in seeing what we do. I'm looking forward to seeing them again at the Hopkins BBQ. It was also great to have the CV workshop on Monday, especially considerations when applying for positions internationally.

Posted by hfbennett at Jul 03, 2013.

What happened since last Thursday?
Well, it has been very straightforward: watch videos and more videos, and so on....Linda has come up with some deadlines and it will be tight to gather all the data on time. Sp really I have been glued to the computer screen of the video lab. I should have most of the data from 2006 to 2012 by the end of this week. However, there are some videos that are not clear in terms of what can be used as quantitative data and as Linda is on holidays, I will have to discuss that with her next week. So it is likely that I will spend next week watching those videos.

Posted by clairelm at Jul 03, 2013.

A short week, but an exciting one nonetheless - I've started to look at some quantitative measurements of our midwater data, examining correlations between taxa over space and time and attempting to glean trends that we can pursue with more pointed tests. We've delved into some new graphics that are useful for visualizing taxa abundances over large amounts of time, including a particularly nifty seasonality plot with by-year layers since 1989. Today I'll be heading down to the video lab to examine some of the extreme records showing up in our data, a trip to the source of the VARS database that I don't get to make too often. In addition, we got to meet some of the NASA interns, had a CV workshop, and have some started some prep for our 6-day Western Flyer Cruise next week!

Posted by ajaffe at Jul 03, 2013.

FEA Simulations for the pressure housing are finally done! (Again.) I had a couple of concerns about how some alignment bolts in the assembly may have been taking too much of the axial load, but Gene and I have figured out how to avoid that problem. We are still waiting on the steel shipment to come in from Ryerson, so I've been keeping myself busy with other projects. I finished writing a labview module in anticipation for the pump efficiency tests that I should be running, and I've wired most of the sensors that I will need for as well. I am still waiting on one converter for a high precision position transducer, but aside from that most things are ready to go! Today I will switch gears a little bit and start working on a particle counter that uses the coulter principle.

Posted by nsohn at Jul 03, 2013.

This week I counted phytoplankton, and counted, and counted some more, last week I used a hemacytometer for the tiny guys, and this week a Sedgewick counter for my dense population of Heterosigma akashiwo, a 18-34 um phytoplankton. I actually found that procedure extremely tedious and frustrating, as I trust the flow cytometer to give accurate counts, but the person I have been working with on plankton counting has strongly suggested it's best to have a human count in the mix in addition to the multiple sensor counts I'll have for each population by the end of the experiment. So, it's been pretty frustrating/physically tiring sitting still that long on a single task.

Oh I impressed my mentor with my initial bench-top tests of the ECO puck sensor. Project validated! Ok not so much, but it's still great to both be stoked on the same data sets. Today I am ordering optical black out materials to reduce noise from the sensor for bench-top testing.

Oh my babies are growing up nicely, too! Two of the generations have crashed, but the other 12 are where they should be growth-wise, which makes me feel better about spending my weekends coming into the lab to measure their growth.

Posted by dwyse at Jul 03, 2013.

Although a short week, it was very busy and productive! Monday was spent dividing up my urchins (Allocentrotrus fragilis) into containers with different pH water flows. The containers are divided equally amongst four different pH levels provided via tanks in the Sea-room with tubing running into each urchin container. The urchins will be ready to experiment with this coming Monday, after a week's worth of acclimation.

Before this glorious Wednesday is over, I will have my four Y-mazes constructed and ready to use Monday to perform my experiment. I will also have obtained a good idea on water flow rates through my mazes in relation with my urchins and a familiarity with their response to kelp. Flow rate in the Y-mazes will be determined using colored dye injected into the water flow through a long PVC tube (same material I used for my Y-mazes) and measuring the front, created by the dye, with a flow meter.

Posted by khart at Jul 03, 2013.

Its been a short but productive week, I have solved some of the errors I was running into last week. I figured out how to produce a couple more useful graphs using pgbench-tools. Now I've started to run more pgbench test so I have more data to put into the graphs. I will also be starting to run some of the pgbench test on different machines, pgtest and the new Kraken server. Along with this I will continue to read more into system admin tools and stats produced by the pgbench test.

Meeting the NASA interns was awesome, they are working on some really interesting project. I did find it funny that I understand more about their projects then I do about some of our projects. Sadly I wasn't able to go to the dinner, so I didn't get to talk to them a lot but I look forward to talking to more of them at the BBQ.

Posted by drolicheck at Jul 03, 2013.

This has been a short week but very productive. I finished porting all the serial tests to TCP/IP communication, from the PUCK test tool that MBARI developed to the new PUCK v1.4 test tool.

By now all the tests are working except all related with memory access, 'cause I had some problems with memory read/write operations and this didn't allowed me to follow working on it.

Actually all PUCK host memory problems are solved and I have started again to work with memory tests. I'm on 50% of the tests that must be done to detect PUCK v1.4 compliance, although this last tests are going to take much more time to be programmed due to I've never worked with this kind of utilities (Zeroconf, walking 1's and 0's test).

In other terms, on Monday we had the meeting with NASA interns. It was really interesting 'cause we could talk with them about our projects and hearing about their ones. In my case it was awesome, because most of their work is based on electrical and telecommunications engineering and I was really interested on all that issues!

Posted by opallares at Jul 03, 2013.

This week I finished the write-up for the GOC intro page, and am working on the formatting and media portions. I am looking at different web pages for inspiration, and checking out the source codes for their interactive components. The tutorials are ongoing, but I'm starting to understand and apply the lessons as I work on the site. I can understand how people spend hours upon hours working through code, but Dreamweaver is nice because I can almost automatically see the changes I'm making. I also visited the video lab for footage from the expedition. I am interested in making short clips that explain some of the oceanic processes that may be confusing to the general public. I'll choose a few of those today and start scripting.

Otherwise, going to dinner with the NASA interns was fun, and I look forward to seeing them again at the BBQ! Also, I am getting some great ideas about the kid's booth at Open House, and am still looking for volunteers!

Posted by nmcmiller at Jul 03, 2013.

This week has been short and not so productive for me. Monday's weekly meeting took up most of the morning, and then we had the meeting with the NASA interns. In between I think I checked some calculations and compared them to others Monique was doing. Turns out I'm missing denitrification

values in my model, so now I'm reading a paper that hopefully will explain what am I supposed to do! On Tuesday I went on the R/V Rachel Carson with Wilson, and after he explained his project to me about three times, I think I finally got it. It was pretty cool to see the raman laser in action; we got to see some fishes and jellies in the ROV images, but not too much because Wilson's mentors were zooming in the tube were they were measuring the absorbance of the laser in the decane or water. Also, as previous experiences have not turned out very well, I had the brilliant idea to not take half, but one pill of bonine the night before and another one that morning before the cruise, so you can imagine my condition. Even though I fell asleep 1000 times in the control room, Wilson was not able to take a picture of me in such a deplorable state. Today I'm finishing reading the paper I started on monday, and I want to re-do calculations and re-check if I'm missing anything.

I liked meeting the NASA interns; I had no idea a project like this existed, so I'm considering applying for it in the future. Dinner went well and I was able to chat with the ones around me. As they outnumber us, I suppose it will be on next week's BBQ were I'll get to know the rest of them.

Posted by albacv at Jul 03, 2013.

This week has been a bit hectic since it's so short.

I started off the week by mixing up reagents I was running low on. I began trying to determine the detection limit of our method and so far it looks like the single digit nano-molar concentrations we had been hoping for will be possible. We still need to check again with freshly made standards but the results are promising. I've spent the past 2 days collecting data on the temperature dependence characteristics of our reaction/equipment and writing python scripts to process all of the data. I ran into many issues getting python and it's libraries to do what I want but I am finally able to automate much of the processing. Miguel offered some input on basic programming techniques and it was helpful having someone to bounce ideas off of. Later this afternoon I plan on running some of the sea water collected from M2 near the surface. This water should have very low ammonia concentrations in it and will ultimately serve as a standard/carrier fluid for our experiments.

Posted by aleitholf at Jul 03, 2013.

Well, I dont know if to call this weekend productive or not. I finish putting together the second prototype which uses another kind of sensor. This sensor is the Telaire 6615, this sensor is better than the K33 ELG that I was using before; it does not let any air to enter unless it is going inside the tubing system. Right now I am trying to make the Teflon AF tubing to equilibrate the carbon dioxide level. I was able to equilibrate the Co2 levels just on an air atmosphere; however when I try to do it underwater it does not go so well. If somebody could teach me a lesson or two on that could be fantastic because this is not my area of expertise.

In addition during this weekend I will try to work on the loading code from memory, the radio communications between the sensor and the base, and finally the user interface that will allow people with no programming skills to actually start running the sensor without any problem.

In addtion i have to add that meeting the NASA interns was pretty awesome. I wish we could go to their facilities one day

Posted by muzcategui at Jul 03, 2013.

Though this was a short week, it was very productive! To begin I think I found my life calling. I was out on the Rachel Carson on Monday and absolutely didn't want to get off! I love it out there! I went with Peter Brewer and Wilson!!! and I got to see some troubleshooting and work done with the Raman Laser. Got filled in by Wilson and it seems that they fixed some problems there were having with the Laser and had a much smoother day of testing on Tuesday. It was my first time seeing the Ventana deployed and due to circumstances I got to see it twice in one day! SOOO cool! Saw some squid and some dolphins.

I met the NASA interns only briefly while out to dinner, but I'm looking forward to meeting them again and maybe discussing projects. Needless to say I think I enjoy it here at MBARI wayyyyyyyy better, but spending a good portion of my childhood as a space enthusiast I understand their love!

As far as my project goes... guess what--~~>still doing calculations. But we are at the point were I'm creating a bunch of graphs having to do with thrust and power and velocities and messing with numbers~~

~~to see where the sweet spot is! Next week we will be looking at motors (gas and electical~~-have a pretty sweet idea floating around, but I'll share that later if it works) and propellers and batteries and all the fun stuff.

Posted by bailey at Jul 03, 2013.

Oh god, I've missed the deadline for Confluence updates by a lot. Nonetheless, these are my updates. Although it was a short week, I've organized my plots to transect similarities so that I could analyze them easily. My concatenation of the LRAUV data has not been fruitful, and Monique has been out of town so I'm looking forward to get that over with. I have read couple of papers regarding physical-biological coupling in Monterey Bay, that way I have more information about physical seasonal properties and the biological variations that go along with it. I have noticed a prominent trend in backscatter and nitrate fluctuations and shelf slope variations in the Northern side of Monterey canyon; about from Watsonville to Santa Cruz area. My next take would be to do some concrete analysis, like spectra density and EOF.

The NASA interns were cool, and I felt pretty excited when explaining why we love the Ocean as much as they love space.

Posted by vg at Jul 07, 2013.

04-August-2011

This page last changed on Apr 29, 2013 by kgomes.

05-July-2012

This page last changed on Apr 29, 2013 by kgomes.

It's Thursday.

07-July-2011

This page last changed on Apr 29, 2013 by kgomes.

Weekly updates for July 7th

08-August-2013

This page last changed on Aug 08, 2013 by clairelm.

Comments

Well, a busy week that can be quickly summed up: I analysed data, did graphs and work on the presentation.

And of course there was the seminar yesterday that was awsome. Danielle was such a good speaker, it was very interesting.

I go back to my presentation now ....

Posted by clairelm at Aug 08, 2013.

Wow the last confluence! That reminds me... I really need to get faster at writing papers. I Have received positive feedback on my paper so far, the data analysis is kind of frustrating, and my presentation is coming along. Despite the long days and continual stress, I am enjoying myself and finding motivation in the prospect of presenting my work to my lab group, family, friends, and the folks at MBARI!

Posted by bburford at Aug 08, 2013.

EVERYTHING is wrapping up!! This week I have been busy making graphs for biomass much like I made the ones last week for size distribution. I also dabbled with plotting my data in GIS. I was hoping to be able to spot any patterns in my data between the distribution of smaller sizes (juveniles) and larger sizes (adults). There are just so many observations that are very close together that it is unclear as to if there is a pattern. I think I will do more with my data in GIS after the internship. The main focus yesterday and today is on my presentation. I made a lot of progress yesterday on it and I think I should have it just about done today! Then I will continue on my paper...

Posted by lclary at Aug 08, 2013.

Two of my illustrations are finished. I am working on final revisions of the third one and I hope to be finished today.

Then I can add it to my presentation.

Almost all the T shirts have been picked up and I have received a lot of really nice feedback for our design. Way to go everyone!

And then there is my paper...

OK, I gotta go!

Posted by klance at Aug 08, 2013.

This week I've focused on getting my paper and presentation finished up so I'll have little to worry about next week.

Time sure does go by fast when you're working hard and having fun. Sad to know that there is only about a week left of this amazing experience.

Well, back to my paper and presentation.

Posted by drolicheck at Aug 08, 2013.

Heyo! I got some unfortunate news this morning. Turns out some of my pressure cell experiments have to be redone because we used bunk pressure data and neither my mentors or I caught it at the time. Looks like I'll be working up to the wire on this project...sigh. Aside from that, I'm really sad this internship is ending. It has been great in so many respects! I can't wait to hear everyone's presentation next week.

Posted by wsauthoff at Aug 08, 2013.

I've been staying pretty busy, trying to tie up some last things on my project and getting the presentation all together and the paper is somewhat taking a back burner until this weekend. I've been trying to choose a propeller suitable for both flight modes, which has been a pretty frustrating search so far. I'm hoping to hear back from my mentor today about some possible companies MBARI has used in the past (that are reliable and efficient.) We are trying to avoid custom made components to reduce the price of this vehicle--and the world of internet and propeller manufacturers is a large amount of information to search through.

I can echo the sentiments of how sad it is that the internship is coming to a close. I've had a great experience here this summer and met some really awesome people who I hope to stay in touch with...

and I'm excited to see where we all end up and what we do. ONE WEEK guys! We can do it!

Posted by bailey at Aug 08, 2013.

YES WE CAN BAILEY!

I can't believe it's our last confluence!!! This summer has flown by... I turned in the first version of my paper to my mentor, but haven't received feedback yet. There was a lab meeting yesterday and I had to present next weeks slides to all my group, which was good to see how I was running on time and what things have to be improved. What's left of the week and next week, I'll probably spend between the presentation and/or the paper, depending on the revisions I get.

I just want to say it's been a really fun summer and a great experience to be interning at MBARI. I can't wait to see and listen to everyone's presentation next week!

Posted by albacv at Aug 08, 2013.

Data collection of *Strongylocentrotus fragilis* behavioral response to Ocean acidification stimulations ended this Monday. This week has involved working on my power point presentation for NEXT WEEK (aaaaaahhhhh!), writing my paper, analyzing my results and creating graphs.

Tuesday, Bailey and I assisted on the Rachel Carson Cruise with Jim Barry's lab. We retrieved a Sediment Trap at approximately 1300m, and checked on an on-going project at 200m looking at Urchin growth. This project included 6 cages (~ 5 x 5 ft.) settled on the ocean floor. Three cages were inserted with urchins and three cages with no urchins, representing the controls. The project was started in September 2011. Investigating the cages, they were covered in biodiversity including marine organisms such as, spot prawns, octopi, urchins, sea cucumbers, 5 different species of sea stars (i.e. Basket sea star), and rock fish.

Also, out on the Carson, we were lucky to see a very active breaching humpback whale and several adults! An awesome Day!

This morning, Todd Walsh generously took time out of his busy schedule to photograph my experimental area, urchins in the Y-mazes, as well as me in data collection action. The images will be very helpful in presenting my work and the methodology of my experiment.

This week has been especially good with the Sunshine!

Posted by khart at Aug 08, 2013.

I've been finishing the paper and the power point this week, and I received a good feedback from my mentors about the paper. Everything seems to go on time, so I'm glad about it, and I will start preparing some notes for the presentation of next week.

In spite of everything is going pretty good, I feel sad because I can't believe that this is the last week. It's been an awesome experience that will be impossible to forget, I hope being able to stay in touch with all of you.

PD: Remember to sit scattered throughout the Pacific forum on Wednesday

Thank you!!!!

Posted by opallares at Aug 08, 2013.

This week I've been working on my audio and video, and making sure my presentation is in order. The paper is on a temporary hold as I get things figured out. It's amazing how fast everything is going this week!

Posted by nmcmiller at Aug 08, 2013.

I am finishing my lab work this week and am wrapping up data analysis while working on my presentation and paper. Hard to believe the program is almost over, but I'm already looking at what's next in my thesis. Gotta stay focused to finsih this project before adding more work

Posted by dwyse at Aug 08, 2013.

Busybusybusy... mostly been working in the Vrijenhoek lab this week, running my samples for molecular analysis. Also tackling the beast that is the bug-ridden batch processing software for the LISST-HOLO. So much left to do and so little time, can't believe the summer's almost over.

Posted by hfbennett at Aug 08, 2013.

The last confluence update! Like everyone else, this week has been taken up by last minute data reshuffling, figure finalization, and paper writing/presentation making! Things are going well and I'm looking forward to presenting next week. Over and out!

Posted by ajaffe at Aug 08, 2013.

Ahhhhhhhhhhhhhhhhhhhh last confluenceeeee.

This week has been a little bit stressful to me. I am still collecting data on the test tank. The plan is to leave in there for 12 hours and then tomorrow take it out to the bay to do some real sampling. Nevertheless, the module has its own mood and seems to not like me. Lets see what happens.

Also I think finally the radio communication system is almost done, unfortunately I wont know until I tested on the real module. Other than that, I am almost done with paper and presentation, just need to include some data from whatever results come out of the CO2 sensing module. I am crossing my fingers.

Posted by muzcategui at Aug 08, 2013.

I have been so productive this week! I built a position controller for my benchtop prototype, finished my hydrodynamic model of the float, got some preliminary estimations for the added mass and drag coefficients, reassembled the heavy spring casing for the benchtop simulation, wrote tons of matlab scripts to process efficiency data, collected efficiency data, and started working on a powerpoint. While I've finished all of the work I set out to do at the beginning of the summer, there still are so many things left that I want to do... Some of it will have to wait because my mentor has been gone all week, but I'm hoping that early next week I will have some time to finish up one or two more tests.

Posted by nsohn at Aug 08, 2013.

So much to do so little time!

This week I collected data from the slough off the MLML small boats dock. I've been crunching the data that I had and making sure that my methods were field ready. The method we used was new and I am unable to use any of the scripts I had written previously, though now that I have a decent understanding of python getting it to do what I want shouldn't take too long. I just have to figure out what I need it to do...

After getting all the samples run Tuesday, I worked a little bit on my slides and added some text to my materials and methods. It's gonna be an interesting weekend, with long nights. Wednesday was a mixed blessing, it was great to stand on the stage in the Pacific forum to make sure all the text and contrasts were readable from the back. I had a blast talking to Dr. Lee, she had such a great perspective on science. I was really interested in her outreach and blogging activities I would really like to incorporate some of the learning/teaching concepts she talked about in the outreach I do. Even though I'm not an ecological behaviorist her talk was entertaining and engaging. The only downside to yesterday was all the breaks kept me from making as much progress on my project as I would have liked.

Today was another day of head banging and journal searching. The temperature correction I was using to adjust my data wasn't giving us numbers that made sense so Josh and I went back and analyzed it step by step. We found an error in the formula and then spent the afternoon figuring out the correct way to do it. He made the major break-through that made it possible. So I should be able to fix my scripts, write new ones, process all the data, and begin drawing conclusions about the application of my method.

Good luck this weekend guys!

Posted by aleitholf at Aug 08, 2013.

Was focusing on more papers to cite, and provide more scientific insight to what I am interested in (which was long-term and high frequency measurements in Monterey bay). ANOVA is pretty tricky, and I have not completely mastered it and I'm hoping I'll get a better grasp on it. Apart from that, I've started adding a sentence or two for the slides as the day goes by and it seems it taking its shape now. Have a great weekend guys!

AAaaaand..I didn't miss the confluence update for this week! wohoo!

Posted by vg at Aug 08, 2013.

08-July-2010

This page last changed on Apr 29, 2013 by kgomes.

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09-August-2012

This page last changed on Apr 29, 2013 by kgomes.

EYYY!!!

My last confluence and I am going to be the first one. When it started and George told us that the last couple os weeks were crazies weeks, I thought that it will not happen to me cause I will planning it very well. But I was wrong and George was right.
My project is almost done, so now I am writing my final project. On friday, my mentor (Mike McCann) give the chance to share with him his project update, and I could present my project too. It was very nice, cause the ask me some question and now I am getting feedback for people who has started to use the tool that I have write. It's so exciting for me to know that some MBARI staff is using a code wrote for me. Another important date was yesterday, cause I present my PhD project in MBARI and we sent an abstract about my project to the American Geophysical Union's 45th annual Fall Meeting.
Now I am a little sad, cause I feel very good in here (MBARI, Monterey, California, USA) and my family too, and now I the program end. But it has been a really good experience that I have enjoyed a lot working and having a lot of fun at the same time.
Thanks to George and Linda for help us a lot, take care of us and offer us so many fun things to do, to all the intern, you all are very very nice and have been my little family during this time, to all the MBARI staff to be so friendly and help me in every little problem that I have had, specially Erich Rienecker, he is so friendly, thanks to him my family and me have had a very nice house, car, seat, and a very nice time on it. And the last thanks, but not less import, to my mentor Mike McCann to make all the thing very easy to me, be so nice, and help me so much to have a very good experience during my internship.

Have I said that I have enjoyed it a lot?????

11-August-2011

This page last changed on Apr 29, 2013 by kgomes.

woohoo - heading down the homestretch now! last week!! last confluence update. Titles due Friday - and I'll see you Monday morning in the Harbor View Conference room at 9 am.

11-July-2013

This page last changed on Jul 11, 2013 by albacv.

Comments

During the last week, I watched ROV videos! I will be done tonight!!! So Monday Linda and I will retrieve the data from VARS (the annotation software) and I will start playing with data,. I also had several discussions with Linda on how we can deal with fauna associated with my tube mats, I also have been introduced to old camera sled pictures and I am going to look at some of these pictures to enlarge my time-series data set. We also had two meetings about the Open House, We will be in Ken lab tent (Climate change tet) with mini ROV, plane with camera, data and pictures from the cold and Sta. M video transect (Larissa is doing a poster on megafauna and I am doing a poster on infauna).

Posted by clairelm at Jul 11, 2013.

This week progress is definitely being made! I have finished the data collection of holothuroids from the 2012 transects. Now I am going back to older dives to obtain a little more data over the breadth of the study. I am starting to get excited about the analysis and conversions that I am going to start next week. I think having biomass estimates of these populations will add a compelling part of the story of deep sea populations. There is just so much we just don't know about the deep sea organisms! I have definitely come up with hundreds of questions that I want to know about...about their larval cycles, nutrient uptake, morphology, and even their associations...but their is definitely a gap in knowledge when it comes to the deep sea.

On another note, Claire and I have attended several meetings with the Smith Lab about Open House. It is very funny to see just how competitive this lab is when it comes to open house...I would tell you what we are doing, but I think it is akin to classified information at this point.

Cheers to another week!

Posted by lclary at Jul 11, 2013.

I've been inching closer to actually running experiments this week, finally! We've gotten the LISST-HOLO off of the Dorado AUV, and I am in the process of learning the software for it, though am still awaiting the arrival of the ethernet cord that will complete the picture. I've also been setting up my copepod and Pseudonitzschia cultures so I can start running experiments as soon as possible. Thankfully a test run of the probes for both these groups found very similar signal strength and variation, so hopefully I won't have to correct for that. I also determined that isolating the nauplii from my cultures is uselessly time consuming at the moment, and can hopefully be abandoned in favor of working with the more easily isolated adults.
I'm also still slowly chipping away at the five years of data from the LOPC and corresponding SHA analyses to look at any correlation between the data sets.

Looking forward to the bbq at Hopkins tonight!

Posted by hfbennett at Jul 11, 2013.

Hey Fellow Interns! I've had a great week (I think I say that every week, I love it here!). The majority of the week has been spent analyzing spectral data gathered on last week's cruises. I am using a software program to make baseline corrections because the intensity of the Raman laser can fluctuate during data acquisition. From there, I'm using the same software to do integrations of spectral peaks of the compounds of interest. This process is somewhat time consuming because the two chemical species of interest, decane and methane, have overlapping characteristic spectral peaks. Separating the two involves a deconvolution process in the GRAMS software. I'll learning a similar deconvolution process in MATLAB today. I'm excited to learn some basics about MATLAB. I know it is skill that will come in handy in the future.

Posted by wsauthoff at Jul 11, 2013.

Hey guys! I have to agree with Wilson on this one... I sure love it here. Only problem is it goes by too fast! I have almost finished collecting my data for the part of my project that deals with the juvenile

Chiroteuthis calyx and *Nanomia bijuga* behavioral comparison and now I am back to looking at the juvenile's behaviors. My list of behaviors is getting more complete and I am trying to figure out how I will quantify their behaviors and reveal novel information about this species. The three things that I have on my list for my project will be to examine the aforementioned comparison (almost done), compare adult and juvenile behaviors (getting there), and determine the typical threat response of most juveniles and offer some insight as to why they do what they do (getting there). Most of my lab is out of town and the post doc, Henk-Jan, just left, so it's just me and my lab mate for now!

Posted by bburford at Jul 11, 2013.

Its pretty crazy to think that we are almost finished with week 5. I pretty much finished with calculations at this point for this part of design, but have just been spending the week manipulating numbers to try and determine the flight envelope for the air flight portion.With a series of graphs I have been looking at the climb/takeoff performance and the steady flight performance and have been focusing on determining the impact that small changes in the overall weight will have as well as the affect of velocities on required power. This was going smoothly until I realized that values weren't matching up. I tend to not use xcel very often, but for the amount/type of data and numbers I'm looking at its the most useful, but right now it is being very temperamental, so I've being trying to fix those problems.

Bill hasn't been here this week, so I'm looking forward to Monday to discuss some of the information we are looking at. Before he left for the week, we discussed some potential ideas for the motor and based upon the specs for power, we thing we can used just a go kart motor for propulsion and have thrown the idea around of designing a hybrid motor for the AUV, which I think is pretty cool! So we'll see when I talk to him again!

Looking forward to the BBQ tonight, as well as, Arreyo seco on saturday!

Posted by bailey at Jul 11, 2013.

Week 5 holy cow!

Well, sadly Ken Johnson's C-SOBOM collaborative float project with Princeton lost its NSF funding. Just like that-Poof its gone. So my opportunity to have Princeton publish my illustration also went Poof! Sad, but Hello real world. I will still do Ken's illustration I just don't know the details at this point.

OK so moving on, I completed a second draft of Ken Smith's Iceberg illustration and I have received good feedback and recommended changes. They have also requested to use what I have so far as a poster in their Open House booth. That will be fun.

And this week has also been full of Intern T-shirt madness! (madness in a good way).

We have all come together to make a decision on the design. It will be a colaborative effort between myself, Nick, and Ben. So hopefully it will be amazing and make everyone happy.

Posted by klance at Jul 11, 2013.

Hello guys let me just tell you something to release some pressure 50% done, it is going so fast :'(

This week has not been the greatest so far, I start the week by getting my sensor wet, so I had to change he sensors and recalibrating using some Serial communication commands. That process took me around day and half. On Wednesday I could finally restart the experiments in equilibration of the Teflon AF tubing in water. So far, what Patrick Ken and I have discovered is that the Teflon AF tubing is not equilibrating pretty well on low CO2 concentrations. it takes too long to equilibrate and it does not quite get to the point we want. Nevertheless, for high concentrations of CO2 it does a pretty good job. More experimenting needs to be done in order to get to a point where we can equilibrate the Teflon AF tubing with any CO2 concentration.

Changing topics, I am almost done with the radio communications for the node (sensor with micro controller) and the base station. After doing that in my free time I will try to work on the user interface so it will be easy for an user to program the sensor. I have to learn a little bit of Lab View to do that but I know it is a powerful tool that will become handy in the future, so I probably should learn it pretty well.

Posted by muzcategui at Jul 11, 2013.

Week 5! * Begins humming favorite Bon Jovi song to sing along with during marathons... *

This week has been productive but not as stressful as the past couple. I think this is a good sign that things are coming together to begin running my experiments with calibration beads and the actual organisms. I am awaiting one piece of my project (black out material) before I can make definitive statements about size distributions of my monocultures. I have also worked a bit more on my paper, which I've been neglecting thoroughly for the past week and a half. Must stay on top of writing and taking notes so my final paper comes together nicely.

I also met with 2/3 of my thesis committee earlier this week and we chiseled away at my 4 questions and have focused things a bit, which is thrilling. I have to re-write some of my proposal because of that conversation, mostly background and methods, but the good news is that this internship project will still be a large part of my thesis work. I'm happy about that.

Upcoming: Local marine science interns social BBQ, kickin it with the interns in Arroyo this weekend, intern BBQ on Wed, and my first Rachel Carson cruise on Thursday. I'll be helping with what I can set up for open house before I leave after work next Thursday. If you guys know of anyone needing help before open house then let me know, I'd like to do what I can since I will be in Virginia as a bridesmaid that weekend. I'm bummed to miss the open house this year, but will be thinking of you guys.

Posted by dwyse at Jul 11, 2013.

Early this week, I spent time on working with the "old" sea urchins and observing their response when used in the Y-maze experiment. The Y-maze contains two inlets (cues) for the urchin to decide between, 1) inlet with flowing kelp water and 2) inlet with ambient pH water. We expected the urchins to crawl-up the kelp inlet, in search for food. Our expectations were proven correct!

This week my mentors and I also officially set-up the Y-mazes in sea-water room A! Set-up involved placing the large Y-mazes safely on the ground, insuring equal water flow and accurate pH concentrations to each inlet, LOTS of tubing organization allowing water to flow to the mazes, camera set-up to view urchin progression, and set-up of kelp buckets for each Y-maze. We have three Y-mazes set-up for three pH levels (7.2, 7.5, and 7.8). Acclimated urchins in their specific pH levels (prepared from last week) will be tested in these Y-mazes to observe if there will be a difference in their response to food when exposed to lower pH waters.

The goal for next week: Collect a WHOLE BUNCH more urchins on the Rachel Carson cruise on Wednesday! This means a lot more experimentations, hence data collections! The more the better.

Posted by khart at Jul 11, 2013.

It's good to see everyone else's projects progressing.

I've spent the past week or so trying to get reproducible results with varying degrees of success. Late Monday morning my mentor brought up the possibility of tagging along another CTD cruise with Tim and Marguerite to M2. Shortly after we got confirmation with them my instrument stopped co-operating. As it turns out affter days of trouble shooting and banging my head on the desk my lack of reproducible results stems from an improper dilution I made on day 1 that I have been using since and just recently ran out of. This required me to make a new standard that *was* diluted properly, only I didn't realize the old one had been made wrong. So I thought I was going insane for a short while. After realizing my busch league error and quintuple checking all of my subsequent dilutions things have been going great. It's looking like I will be able to get the results close to what we were hoping for, and after Monday I will have blue water field data to analyze .

My quest to automate the data processing has been fruitful as well. I have gotten python to graph most of the things I need and am no focusing on formatting and otherwise beautifying the graphs. I also had a short discussion with Josh Plant(another of my mentors, who works in the background) today that gave me some hints to help handle the data easier. I will be furiously working on finalizing testing protocols and preparing supplies for our cruise Monday. It looks like it will be a +5 day week for me, but the work is fun now that things are going well again.

Keep an eye out for me on the video feed Monday.

Posted by aleitholf at Jul 11, 2013.

Here's my confluence update, I would like to point out for Andrew that I have not shanked myself yet. (I spent about half an hour removing high strength tubing from the bench top pressure testing system so

I can rework the hydraulics). Besides from that, today has been pretty productive. I built a new simulink model for estimating the added mass of the test tank prototype profiling float, and I've put together some equations for estimating the drag coefficient. Wayne is working with the test tank model right now, so I probably have about a week before I can perform those tests. I also rewired the MTS position sensor that we use to measure the external bellows extension and I have verified that it works.

This week I have also started writing up my report and worked with Gene and Ginger on a particle counter based on the Coulter principle. We've run into some small problems with getting consistent detections. Hopefully we can make progress on that soon!

Posted by nsohn at Jul 11, 2013.

It's hard to believe we're finishing week 5! This week I've been working on an animation about methane hydrates, which I'll be adding audio for soon. I've been looking at videos and images that will be good to use on the site, and scripting/labeling for those as well. The VARS annotations have been extremely helpful for pinpointing certain indicators of the chemical activity specific for this expedition leg. I also hope to speak with Edward Peltzer today to get his input about the expedition and my ideas for the site.

Also, I'm headed to Hawaii next week!!! I'm super excited about the EARTH Conference, and the opportunity to learn from all the people that will be there. Also, I hear it's beautiful and warm which I'm really looking forward to . This week I've been getting prepared for Open House next Saturday (the day we fly back!). The children's booth is going to be a ton of fun....I can already tell by the boxes that are invading my office space! Next week if going to be a whirlwind of activity, but I'm definitely looking forward to it!

Posted by nmcmiller at Jul 11, 2013.

This week I could finish all the compliance tool test, and now I'm working on the device auto discovering on the network. This means that I have to apply Apple zeroconf browser to my app. developed in c language and be able to integrate it in only one running program. This way when a user executes the test tool, doesn't need to search for its IP and port, he only needs to know what is the instrument functionality or its name. This way it won't be necessary any knowledge of networking in order to execute and understand this PUCK v1.4 appplication

Also, today we have the bbq with MBA, Hopkins and NASA interns, which I'm sure it will be a good opportunity to know more about their projects and to have a REALLY REALLY GOOD TIME...

Posted by opallares at Jul 11, 2013.

This week I've worked on trying to figure out what setting changes would shift when the TPS was dropping off in a graph I produced. The first settings that I thought would cause the desired change, failed to produce any noticeable difference. Then after doing some more reading I found a different setting to change, which so far has produced the desired change. Along with this I've been working on learning what iostat and vmstat outputs can tell me about were, if any, bottleneck is happening.

The seminar this week was very interesting to me, since I'm thinking about going into the field of AI in the future. Projects like the one Michael Benjamin describe

I found the seminar this week very interesting, mainly because I'm planning on going to the field of AI in the future. Working on AI in the realm of uuvs is something I have been thinking about more since coming to MBARI and getting to see a project in that area was very informative.

Also tonight is the BBQ with the other interns and I'm really looking forward to finding out what other projects people are working on. This will also be a great change to do some networking, which is always a great thing.

Posted by drolicheck at Jul 11, 2013.

Ok. So you've got to be kidding me. Half way through? Uh-oh... Seriously, this is like we're in some kind of time capsule, were time is going way faster here than anywhere else.

Anyway... On Monday, I was doing graphs for the paper and I ran into some results I didn't understand. I had already included denitrification values into our model, but there were some constants I didn't get. So

I had to talk to Monique about that. And also, I was redoing some calculations that didn't match Reiko's (another researcher that works in Francisco's group). Monday ended up with neither of us knowing where we had got those results from, and having to look at Matlab scripts to work it out. On Tuesday we got a clue, and on Wednesday we realized no more calculations had to me redone; we were just mixing things up. So graphs are already made and I put together a paper outline for Francisco to see what we have and what we're missing. I have to read papers to put together an intro for next week.

In other matters, I'll be working with Nettie, Bailey and VG in the children's booth for open house. I'll have to dig up my drawing skills!

And I am also looking forward for tonight's BBQ; it'll be fun. And I am also very excited for our weekend's adventure to Arroyo Seco!!! Iujuuu!!!

Posted by albacv at Jul 11, 2013.

I have done quite some reading about topography influence on physical and biological properties of shelf and deep waters. My focus has been all over the place, because it's the coast and there are a myriad of interesting relationships going on. I had a meeting with my advisor from Moss Landing, and we spoke about things I should focus on, things to pay attention to and what not. There are some backscatter that did not have correlation with chlorophyll fluorescence, and this either meant it was cross-shore, on shore transport of dead plankton, lithogenic material or resuspension of benthic sediment. With trends that seem to change cross-shelf, I would be looking on excursions of these mass of material and try to figure out their origin, and estimate the hot spots. Like I mentioned there are a lot of interesting patterns that I was able to note down and plot, but with the half-way mark already passed I am going to pick one and focus on it.

Posted by vg at Jul 11, 2013.

The cruise has been a great experience so far, and also has really allowed me to connect the dots between my project at MBARI and the actual organisms we're studying. The last few days, between the ROV footage and samples , have allowed me to gain a better conception of what these data actually describe - what does it mean for an animal to appear in our database as an observation? Seeing exactly how this data is collected, along with some time behind the annotation station myself, has given me a new perspective on the data that one can only get in the field. We've seen all kinds of cool bioluminescence, ctenos, jellies, and cephalopods out here - having a blast! Also really fun are the trawls I've been doing - a sort of grab bag of interesting mesopelagic gelatinous zooplankton, crustaceans, and fish.

Posted by ajaffe at Jul 14, 2013.

12-July-2012

This page last changed on Apr 29, 2013 by kgomes.

Halfway point!

13-June-2013

This page last changed on Jun 13, 2013 by khart.

Comments

woohoo!
you're in the right place to post your first weeks' update. How are things going? what are you doing? what is working and what isn't working? thoughts? concerns? put up whatever you want and we'll discuss these updates and much more on Monday at our meeting.

Posted by mage at Jun 11, 2013.

Things are going well. My mentor Nancy Barr has given me two and possibly three projects to work on: Iceberg AUV with Ken Smith, Brett Hobson, Alana Sherman, and Steve Rock. They are all very excited to have me on board to illustrate their research on free-drifting icebergs in the Southern Ocean; Seafloor Chemistry with Peter Brewer, Ed Peltzer, and Peter Walz. We are formulating our ideas based on their Laser Raman spectroscopy of methane and sulfate cold water seeps; and Global Floats by Ken Johnson. I really hope there is time to work on all three projects as I find all of them equally fascinating and challenging.
If any of you are involved with any of the above projects I would certainly welcome your insight.
Thank you.

Posted by klance at Jun 12, 2013.

After one day of induction, I was trained by Dr. Linda Kuhnz on VARS software to annotate ROV images taken at Station M (4,000 m). The aim of my project is to look at the distribution, frequency, size and habitat of Paradiopatra (Annelida:Polychaeta:Onuphidae) tube worm patches from 2006 to 2012. This second day was also the opportunity to get familiar with the Deep Sea Guide and set up all computer settings. Wednesday, the project started. I looked at the four first tapes for my project, getting familiar with my tube worm patches, looking what features I should annotate. In the meantime I have started reading related papers on Station M.

Posted by clairelm at Jun 13, 2013.

This week has been primarily meeting with my mentors, both Jim Bellingham who is overseeing the entire project, and my more day to day mentor, Julio Harvey, of the Vrijenhoek Lab.
With Julio I am working on the methods for the sandwich hybridization assay (SHA) to detect target organisms by their rRNA. So far it's mostly been training lab methods and safety, as well as preparing the probes and reagents needed. We're hoping tomorrow to start running a plate with actual samples in it.
While I haven't worked much with Jim this week, we have been discussing some of the potential ideas to test on AUV sensory system. I may be working with the laser optical plankton counter (L-OPC) and comparing it to the molecular probe testing done with Julio.
Both projects will involve working with copepod and possibly barnacle nauplii cultures, and eventually using whole water samples. Specific experiments haven't been pinned down yet, but I'm hoping to figure that out in the next day or so.

So far, so good, and I'm looking forward to joining Jim Barry's group on the Carson cruise Monday.

Posted by hfbennett at Jun 13, 2013.

This week has been highly productive for me, and I've learned some new lab/culturing techniques for my project, so it's been really exciting. The part about productivity is a bit of a pun, in that I hope my algal monocultures take off and grow. I have been working with Sebastian Sudek in the Worden lab, getting oriented to the ins and outs and using their lab equipment to create culture media. I also learned to use the autoclave the other day, that was neat. Yesterday we added five strains of phytoplankton of interest to my culture media and set them up with favorable light intensities in the incubator. We also set up and tested the fluorometer yesterday, and set up a test for bacterial growth in the culture media. Today I will get a refresher on DAPI staining, and we'll take a look at how the monocultures are coming along. Next week I will begin measuring growth at the same time every day or couple of days. I'm really enjoying

this project and spending time in a lab getting my monocultures ready to test on the vehicle sensors. My project plan builds off my data analysis project from last year, characterizing plankton communities using multiple sensor data from the AUVs. The project this summer is to create monocultures representative of the range of sizes/species of algae we see in the bay, and run them on some of the sensors from the AUVs. The challenge will be to ensure we have pure, healthy monocultures, and to set up a system where we can run the lab samples through the sensors in a way that can most effectively reproduce conditions encountered by the vehicle in situ. I'll keep you guys posted on how it comes along! The latter half of the summer I anticipate to be more data analysis heavy, integrating the data sets to answer my thesis questions.

Oh yeah, I also got to go out on the R/V John Martin with Kendra, Nick, and two teams deploying/ retrieving wave gliders on loan to MBARI from Liquid Robotics. That was really cool to see and learn about. We also saw a bunch of dolphins, which was just delightful. One of the cool things about this trip is the wave glider was deployed just before the Dorado AUV (my favorite AUV, don't tell the LRAUV folks) was deployed off the Carson, and as I understand it the goal is for the glider to detect a front and track it, and then to tellthe AUV to get in there and collect more data with its larger suite of oceanographic instruments. I would love to get out on a Carson cruise to help with a Dorado deployment. Did I mention we got to see Julie Packard christen the boat last summer during MBARI's 25th anniversary celebration? That was really cool.

Finally, I almost have the intern blog ready to share with you all, it just needs a bit more style modifications and then I'll share it with any and all who are interested in sharing their summer intern experiences.

Posted by dwyse at Jun 13, 2013.

In addition to general intern orientation, this week consisted mainly of familiarizing myself with the resources and databases utilized by the Haddock Lab. I was given a tour of the VARS system and its database, which I will be later using to analyze temporal, seasonal, and environmental effects upon diversity and abundance of midwater zooplankton and invertebrates. I have begun to examine automatically generated plots of ROV data for a series of potentially interesting taxa provided by Dr. Haddock. I am in the process of familiarizing myself with the Deep Sea Guide and a series of Python scripts that allow flexible data retrieval from the VARS database. I hope to narrow down our focus to a few particular taxa next week, when we can begin retrieving/considering actual ROV data. My time at MBARI has been great so far, and I'm looking forward to learning more as the weeks go on!

Posted by ajaffe at Jun 13, 2013.

First week at MBARI, as an intern under Jim Barry, was absolutely AMAZING! With the guidance and help from Jim Barry, Patrick Whaling, Kurt Buck and Chris Lovera, I learned an abundance of new and valuable knowledge related to the marine world. Future projects I will be potentially working on this summer include testing and observing the response of small marine organisms to Ocean acidification. Specifically, I will be observing physiological and/or behavioral effects relating to hypoxia, differing pH levels and/or respiration and pCO2. This week we collected intertidal crabs (*Hemigrapsus* and *Pachygrapsus*) from the Monterey Bay area and Elk Horn Slough (Kirby Park). These little guys will potentially be the organisms I may be observing for my project.

Posted by khart at Jun 13, 2013.

Things are going great. I've been helping set up the new database server I'll be working on and I've started playing with some of the software I'll be using on the server once it's up an running. Along with that I've talked with my mentor, Mike McCann, about some of the details of what I will be doing and could be doing this summer. Since the server has a lot of things that tie into it I have quite a few option for things to work on.
One other cool thing I wanted to throw up here is that I suggested the name Kraken for the new server and it was chosen to be the servers name.

Posted by drolicheck at Jun 13, 2013.

Things are going well. I returned from the week-long midwater ecology research cruise with my mentor, Bruce Robison, on the Western Flyer Monday evening. What a great experience! Although I have never been on a research vessel before, I found that I quickly adapted to the daily schedule and tried my best to be a sponge and soak it all in. It was so cool to be surrounded by and learn from experts in the field of

midwater ecology! While on board, I spent my time helping with loading and unloading the ROV, Sorting through and dissecting animals, observing and participating in the collection and observation of midwater animals in the control room during dives, finishing schoolwork (as I left school two weeks early to go on the cruise), fishing for squid, hanging out with the crew and scientists, helping anyone who would let me with their data collection, observing birds and marine mammals, and (most importantly) spending a lot of time discussing and investigating possible research topics for this summer with the scientists on the boat. I cannot thank Bruce and the rest of the midwater lab enough for this wonderful experience! Aside from that, I have been playing catch-up with getting situated here on dry land, as I missed the orientation day (and meeting all of you guys :/). I think my project will revolve around the behavior of adult and juvenile *Chiroteuthis calyx* squid, most likely examining their color change, postures, inking, and mimicry.

Posted by bburford at Jun 13, 2013.

Things are going well. This has been an introduction week. First day, an introduction to my mentors and all the utilities needed to work in MBARI and the second day, an introduction to my project.
I've been discussing with my mentor Tom O'Reilly and my co-mentors Kent Headley and Duane Edgington, the main goal of my project here, and how to start working on it.
On this week Tom has been quite busy with wave glider deployment on Wednesday, so Kent helped me a little bit more with my doubts and problems on these first days. He also explained me the main projects that they are developing actually.
Today that I have a little more knowledge of my work on MBARI and I have started working on it, I will do another meeting with my mentors, at lunch time, in order to discuss about my principal doubts on the project.

Posted by opallares at Jun 13, 2013.

This first week as and MBARI intern has been really amazing! The first day was a little tiring from all the talks, but that just lets you know were you're standing and all the stuff that has to be done by the end of the week. VG and I were sharing a place, but then we got transfered downstairs in building B; now we don't know what to do with so much space!

I met with my mentor Francisco Chavez on monday and then again on tuesday to discuss where my project will go. We've decided to continue the work we started a while ago, and finish it. We have CO2 fluxes all along the western coast of the Americas, from Canada to Chile gathering the first 100km offshore. We will try to explain the flux pattern based on preformed nitrate values on three different scenarios.

On the other hand, I'll meet with Monique Messié, who works with Francisco too, and I'll try to learn some of the Matlab stuff she's so great at.

Oh, and I have also been checking out the Canyon Head, 'cause there's so much stuff to see!!! I'll try to modify my web page later in the day.

Posted by albacv at Jun 13, 2013.

So far this week with MBARI and the other interns has be great! My mentor has been gone all week, so I've pretty much been on my own. I was able to come in a few days last week to figure out the scope of my project and the things I need to do to start it. I'll be working with Bill Kirkwood on his Shearwater project. Shearwater is a new AUV design that will have aerial capabilities enabling it to fly out from a facility to a target area and land in order to submerge and conduct testing.Specifically, this summer I will be focusing on the development of the propulsion system. I was able to do a lot of research last week on some technologies that we are thinking about for this design and have been focusing on the calculations needed to determine overall power needed for both hydrodynamic and aerodynamic flight modes. Once I have this information I can start looking at propulsion options for both modes.

I'm looking forward to Bill being back on Monday, so we can discuss things now that I've had time to wrap my head around this project.

Posted by bailey at Jun 13, 2013.

This has been an exciting and information filled week! My mentor, Connor, and I started by discussing potential projects I could be involved in. These include updating the aquarium exhibit "Mysteries of the Deep", planning the Open House social media component, and of course, the Earth Conference in July!

I began by reading MBARI's Strategic Plan other documents about the institution's collaboration with the aquarium. It gave me a better idea of MBARI's view and goals in terms of education and outreach, as well as the differences and similarities between our objectives and aquarium objectives. I spent much time talking to my office mate Nancy who is a wealth of knowledge about the different projects in the department. She has been amazing about letting me spout my ideas, and directing me to those who have the expertise in particular subjects. I was exploring an idea about interactive lesson plans for teachers so I talked to George. I walked out with information about a newly developed national curriculum, inspirational education success stories, and a cool iPad app called Ocean Science. I connected with Connor again today, showed her my ideas, and am developing some new ones!

Posted by nmcmiller at Jun 13, 2013.

Orientation was amazing, the tour was the highlight to be honest. It still feels like a labyrinth but I am sure I will be able to find my away around. On day one I was given a tour by my mentor, Dr.Francisco Chavez on the AUVs and LRAUVs, their specification, limitations and the various sensors and equipment on them. Like Alba mentioned, we now have a large desk space and it is a little overwhelming. I had some account hiccup on the first day of my attempt to access Atlas, and I had my account locked for more than 3 times; eventually I got in towards end of the day. I needed to get a Physical Oceanography data analysis text book from the library at MLML, so on the way I brought Alba there and gave her a small tour around the lab (hope she had fun).

My mentor introduced me to Mike McCann and Steven Haddock to talk about AUV and LRAUV data sets, and the possible data trends I can find in them.For the first part of my project I am cataloging the AUV and LRAUV data from 2003 to 2012 (for now), to narrow them to the months of September-October and look for patterns in backscatter. I am hoping while going through those data sets I will develop thought process that link certain variables.

Have a good weekend guys!

Posted by vg at Jun 13, 2013.

Since orientation, Gene and I have jumped right into defining a project for the summer, and started some initial design work. I will be working on redesigning a ballast engine and controller for a coastal profiling float. My primary focus for the first two weeks is to quickly address some design flaws in the existing model, and fabricate a new pressure housing for the benchtop model. After that I will look into modeling relationships between pump efficiency and pressure, and use these results to update the mechanical model for the system.

Posted by nsohn at Jun 13, 2013.

This week has been mostly trying to figure out how the Co2 sensor works, all the programming that is behind it in order for it to work. My mentor and I got it to transmit data and measure temperature, Co2 concentration, and RH. In addition I mostly did some research on how the microcontroller that we are using works. We put the clock of the circuit together and make it run to give measurements of time.

The next task will be making the Co2 to give measurements every certain amount of time. And after that hooking it up with the microcontroller and periodically setting up the clock, the external memory and the relays.

Posted by muzcategui at Jun 14, 2013.

Afer getting settled into the lab I began working on a fluorimeter in order to use it for micro- to nanomolar concentrations of ammonia. We had issues with the sensor being maxed out on all solutions but have resolved this problem. After reading a number of journal articles on ammonia fluorimetry we will be focusing on creating protocols. A side goal is to use a 6-way injection valve to increase reproducability and utilizing python to streamline data logging, ideally offering real-time graphical output.
Patrick and I went on the slough Thursday in order to change batteies, download data, and collect water sampled from LO1.
Next week we aim to have calibration curves created for the current fluorimeter set-up. We will also be tagging along with a cruise on Thursday.

Posted by aleitholf at Jun 14, 2013.

Monday's Orientation was an exciting day. It was exhilarating to see some of MBARI's newest equipment being tested, see some of the deep water video footage in the video lab, and listen to Stephan's research presentation on pore fluid flow, a topic somewhat related to the project I'll be working this summer. I met with my primary mentor, Peter Brewer, my secondary mentor, Ed Peltzer, and the Brewer lab tech, Peter Walz. They showed me around the lab. The Brewer lab was representative of interdisciplinary nature of MBARI as it looked like half a chemistry lab and half a machine shop. I saw the Raman spectrometer equipment that is loaded onto the ROV sleigh. I helped Peter with some calibration and trouble shooting work (by help I mean I was an extra set of hands!).
I had to return to UC Davis the remainder of this week to take final exams. Since finishing Thursday evening, I've been reading a number of journal articles on Raman spectroscopy. I'll be graduating this Sunday and returning to MBARI on Monday morning. I'm looking forward to hearing updates from the other interns at our weekly meeting.

Posted by wsauthoff at Jun 15, 2013.

Added by Larissa Clary , last edited by Larissa Clary on Jun 13, 2013 - posted in next week's update
Labels: (None) EDIT

What a whirlwind of a week! Between the orientation, seminars, and starting my project there has not been time to actually grasp just how amazing it is to be working at MBARI. I definitely appreciate how helpful everyone has been towards the interns. I know I could not have made it through this week without all the smiling faces. I think Claire and I ran Linda ragged with all of our questions yesterday!
I have started looking at and measuring holothuroids (those are sea cucumbers for those who do not know) using the VARS annotation system. For my project, I am going to be determining distributions and the biomass of these holothuroid populations at Station M. Due to the long time series of data at Station M (this is a 4000 m deep site), I am going to attempt to detect changes in the distributions and biomass over time. There is definitely a lot to do in 9 weeks but I always like a good challenge.

Add Comment

Posted by mage at Jun 16, 2013.

14-July-2011

This page last changed on Apr 29, 2013 by kgomes.

This has been a week of good progress asI finished and tested a prototype version of my key for deep cydippid ctenophores. Over the past few days I have expanded upon this base by adding images in both the stomadael and tentacular place, to provide a visual method to verify the classification.

I have also merged my key with a table of characters that Steve created for the described species. My aim for the rest of the time here is to gather the same level of morphological detail for the described species so that they can be fully integrated into the key. Hopefully I will have time to perform a similar process for the undescribed deep lobate ctenophores also, rounding out the key and bringing it closer to completion.

14-June-2012

This page last changed on Apr 29, 2013 by kgomes.

I am testing this

15-July-2010

This page last changed on Apr 29, 2013 by kgomes.

16-June-2011

This page last changed on Apr 29, 2013 by kgomes.

Please leave your notes here (what did you do this week and what will you do next week)?

17-June-2010

This page last changed on Apr 29, 2013 by kgomes.

To add your update, add a comment. Things to put in your update: What you did this week, what you think you are going to do next week, what is going well or isn't going well and, for this first update, what you would like to get from your 10 weeks here at MBARI.

24-June-2010

This page last changed on Apr 29, 2013 by kgomes.

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01-July-2010

This page last changed on Apr 29, 2013 by kgomes.

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18-July-2013

This page last changed on Jul 18, 2013 by clairelm.

Comments

This week has been busy! I finished my ROV dive watching last week. I have worked on a plan to look at older data taken by camera sled and prioritize what would be more useful to do and how we could compare that to ROV data. Then I spent time with Linda "standardising" annotations (in particular for the numerous maybes). We define several criteria. I am quickly going back to my annotations to make them consistent. I should be finished by tomorrow. In the meantime, I did a poster for the climate change stand on tiny infauna living within the sediment of the seafloor for the Open House (with such a great help from Kelly ... thanks again!!!) and chopped vegetables for the BBQ greek salad for 5 hours.

Posted by clairelm at Jul 18, 2013.

This week has been busy. It started with me reading a paper that my mentor wants VG and me to discuss/review with him now that he's back from Barcelona. I also started reading another one about alkalinity values... I think I can use it for the introduction and discussion of my paper. I also wrote down the materials and methods section for my paper and I'll try to finish the introduction between today and tomorrow.

BBQ was a huge success! I didn't get much work done in the morning, since I started chopping tomatoes with Claire at 8 and didn't stop making skewers until almost noon! During BBQ I got some people signed up for intern t-shirts, and so far I have 62 orders!

For today I have scheduled a 15.30h meeting with the BOG, it's their monthly meeting so I'm hoping to see my mentor after two weeks!

On other things: I'm planning on going to the California Academy of Sciences tonight, it's the Deep Sea Nightlife event and Dr. Sylvia Earle will be there! Also, looking forward to Open House on Saturday!

Posted by albacv at Jul 18, 2013.

This week began with putting the finishing touches on the T shirt design and sending it to the printer only to find out I had to change all the colors. The T shirt project became huge but it was a good learning experience for me. I have never made a t shirt and I never really paid attention to two color design processes since I figured with advancements in printing these days everything can be multi color. I was wrong and it was good for me to learn. Plus, it was a good experience for art direction if ever I find myself in that position.

Alana Sherman asked if they could use what I had so far for my Iceberg illustration as a poster in the open house Climate Change booth. I decided what I had wasn't good enough and altered it a bit so I feel comfortable with it being on display.

Claire asked if I could do a little illustration of seafloor infauna for her open house poster for the Climate Change booth and of course, I was more than delighted to do so. Thanks Claire! Nancy, my mentor, was delighted to hear that I added another illustration project for MBARI (she found out after the fact).

I will be providing coloring book pages for Nettie in the open house kids area which will be line work of some of the technology that I included in the T shirt.

And finally, Ken Johnson told me that NSF is now giving the C-SOBOM project (Southern Ocean global floats) a little bit of money to proceed. Ken is giving a talk at WHOI on Monday and would like to have what I have so far of the illustration for his presentation (This seems to be a reoccurring theme). So he has given me until midnight on Sunday to work my magic. Considering Open House is on Saturday my time is quite limited.

It has been a very busy week...and still is.

Oh Yeah, and there was the BBQ too. I chopped peppers and onions for two hours, which is nothing compared to what some others did. Great job to everyone!

Posted by klance at Jul 18, 2013.

I hit the ground running this week after not really stopping last week. Over the weekend I finalized sampling protocols for my fluorometer, created calibration curves, and dismantled the entire setup. Monday morning my mentor and I loaded all of our equipment, spare parts, laptops, and 5 liters of reagents into the *Rachel Carson*'s wet lab. I spent the first portion of the cruise assembling our equipment and jockeying for bench space in the lab. By the time I finished up I had just enough time to grab a snack and realize I had left all the check standard in a fridge in the lab, then we were at C1. I was able to dilute a standard from one Patrick had brought for his experiment in between sample injections. At M1 I was still running samples through most of the CTD cast, finishing just in time to fill more sample bottles from a fresh rosette. M2 was a similar story except this time I had enough time to grab another snack before I began running samples. We were running samples all the way back to the dock and finished up as all the mooring lines were tied off. We brought everything back into the Chemical sensors lab and got it reassembled and began running a post calibration curve to make sure things hadn't changed too much.

The rest of the week has been tied up in soldering together a shield for the arduino we've been using. This will provide a more robust and permanent solution to our instrument interface. Previously everything had been populating a prototyping breadboard. Grilling all of the kebabs and pineapple for the BBQ was pretty fun, Ben had a great system worked out with timing flips and kebab swaps. Things were a bit hectic at times, but it seemed all the attendees were satisfied with the results. Currently I am working on getting python scripts written to correct for temperature dependence of my method and then I will have to run standards at a range of temperatures so I can feed data into the scripts and have a correction factor that allows my data to be compared regardless of the actual temperature it's been run at.

Posted by aleitholf at Jul 18, 2013.

This week has been kind of busy for me. My mentor gave me a temperature and humidity sensor that I had to adapt to the whole module. Finally started testing the efficiency in the timing of the pump. In few words, what is the best amount of time that I should be pumping in order to get good readings taking into consideration that the whole module has to be low power consumption.

The software part of the module is almost done, I need to work more on the radio communications for the module in order to make the module user friendly. I dont need to do that but it will be a nice thing to do, so I am going to go for it.

After I am done with the pumping time, next step is to think about the water tight housing for the module. I will have to reassemble the whole module in order to fit it in the water tight housing, but that will be ok. Hopefully I will be done with the pumping time today and I can start to think about the housing. Need to hurry up a little bit though days are flying :'(

Posted by muzcategui at Jul 18, 2013.

I've got my hands full of URCHINS! Aboard the Rachel Carson on Wednesday, the crew helped me collect 220 "Fragile Sea Urchins" (*Stongylocentrotus fragilis*)! Bailey was a HUGE help in the control room, taking frame shots of the deep- sea urchins, and transporting the fat guys (about 4 inches in diameter) out of and into buckets and coolers. We spotted hundreds of urchins, ratfish, sea cucumbers, sea stars and even a whale bone. It was very interesting to observe the urchins natural habitat, as well as feeding behavior. We found mounds of urchins munching down on algae. Fortunately, while collecting, we were able to collect a few strands of the algae, which after speaking with Conner, we identified as *Cystoseira osmundacea*, "Beaded Brown Beauty".

The next two weeks will involve gradually acclimating the urchins to certain pH levels and, sadly, starving them to enforce hunger and ready to run them through the three Y-Maze treatments. Data collection time!

I want to THANK all the interns and BBQ Czars who put so much work into the BBQ this week! I heard great feedback!!! I'm sorry Bailey and I could not have been there to help!

Let's make this Open House 2013 epic! AND drive safely with all the traffic this weekend!

Posted by khart at Jul 18, 2013.

Unfortunately this week my project has hit a little bit of a snag. The water jet that we were planning to use to cut some of the steel parts for my pressure housing broke, so it will be a couple of days before things can start rolling again. In the meantime I have put quite a bit of work into assembling all of the

hydraulic components of the benchtop simulator and making brackets for components to bolt directly onto the test apparatus. I finally got checked out in the project shop (many thanks to Mike Parker!!), so I've had quite a bit of fun in there as well. I was actually surprised to learn that some of the things that I've been doing for years are actually not good for the machine!

Hopefully by next week I will have the benchtop simulator complete and I can start collecting some data...

Posted by nsohn at Jul 18, 2013.

This week has really gone by fast. Things are starting to get tedious as I construct my behavioral ethogram. I am trying my best to be as thorough as possible while numerous distractions try their very best to thwart my progress. Things are coming together, though, and if I do everything well I could become the world expert on the behavior of *Chiroteuthis calyx* (one of the benefits of working in a very obscure and unexplored field). I can't thank the members of my lab and my mentor enough for their continued support and help. They are all way busier than me, but still find the time to sit down with me and help. On another note, there is a fire that just started burning out in my neck of the woods by Tassajara Hot Springs and I very much hope that it will be put out soon!

Posted by bburford at Jul 18, 2013.

This week has flew by between my project work, the BBQ and a day on the Rachel Carson. For my project I got to run some test on the new server, Kraken, and the results are great. On Kraken we are not seeing a TPS drop off until around 7000 clients, with the TPS before the drop being around 37000. This is a big increase over pgtest where we saw a TPS drop off at around 150 clients, with the TPS before the drop being around 8500. Also for my project I changed the way information is store in the log files so the files can be read by a log analyzer called pgfouine. With pgfouine we can make the log analyzer information into a html format and look at the information from anywhere, instead of having to go onto the server to do it.

To all the interns the BBQ was awesome, fun and tasted amazing. Although kabobs were a lot of work, I think they came out really well and it seemed like everyone liked them.

Going on the Rachel Carson was an awesome experience, even if I didn't feel the greatest the whole time. Getting to be a part of the "treasure hunt" was exciting and we ended up seeing lots of wildlife. The coolest thing being a large squid we got to see before placing the new bed in the canyon. Also I think the other interns saw an Orca, sadly I missed it. Overall it was a great experience and I hope I get a chance to go back out there.

Posted by drolicheck at Jul 18, 2013.

This week has been a little bit of everything: fun, crazy, productive, and frustrating at times. My mentor came back Monday and we met to discuss future plans since he will be leaving in a week for vacation... I think 3 weeks. But great news is I have most of the information I need to start choosing engines and motors, clutches and all that sorts of stuff. Anyone walking past my desk would see me looking at motorcycles, jet skis and go karts. We spoke about my presentation and I have a layout for that and just need to keep filling in bits and pieces. It's nice to be moving along in the design and starting to look at actual parts that could be viable for the AUV.

Yesterday I went out on the Rachel Carson with Kendra; I won't go into detail, but it was a blast! Definitely fun to play with urchins all day and help out! We collected 220 urchins and recovered the BRS that had been out for a month. Unfortunately all the but one of the urchins died that was in it, and oh boy did those things smell horrible! I did end up soaking wet though when we went to gather kelp from the beach. (I'm sure the front office people had quite the show with us running around in the water in rubber boots and rolled up jeans.)

Looking forward to this weekend with the Open House (NETTIE will kill me if I forgot some supplies for the kids craft area, and on that note, her sunny pictures about going snorkeling in Hawaii are making me incredibly jealous!) and then Laguna Seca on Sunday for the Moto Grand Prix!

Posted by bailey at Jul 18, 2013.

Another very busy week getting the LISST-HOLO set up to run experiments and trying to overcome lots of silly little snags like maintaining water motion in the chamber and preventing the stampede of

copepods off the filter. But I'm starting to actually run organisms through my system! I'm slogging through the holographs now, and hopefully can finish optimizing the batch processing of the holograms by the end of the week... or at least a point where I can focus on running more experiments. The molecular analysis will have to wait, but thankfully my samples can safely be stored in liquid nitrogen until I'm ready.
I've also been getting a better handle on the correlation between LOPC and SHA data, with my analyses from 2009 showing similar results to other analyses from those cruises. There's a bit of missing data in these sets that I will try to track down, but I suspect this project may be an ongoing one past my time here as an intern.

I also got to help out at the Aquarium's Young Women in Science program, which was amazing. A great day out boogie boarding and seeing the huge smiles on the girls' faces was priceless. For those of you women who haven't done this yet, I really encourage you to sign up for the next day in the beginning of August if you can spare a few hours. The BBQ this week was great, thanks to all of you who did so much work! I'm looking forward to Open House this weekend, I'm working at the AUV booths as well as hopefully wandering to take pictures for a bit as well.

Posted by hfbennett at Jul 18, 2013.

My goodness how this week has flown by...
I had a productive couple of days, and will look over some of my data this weekend as I travel to and from Virginia. I ran some samples of my smallest bugs (Micromonas and Ostreococcus) on the ECO puck, and did some backscatter/noise testing on the ECO puck using filtered ASW. On Monday I will run this test again with another batch of fASW, and Test Tank water, for comparison between Wed and Mon, and between the fASW and the Test Tank water.

Today I went out on the Carson for the first time, that was a really cool experience. Oh yeah, I SAW AN ORCA!! After living here for almost two years and spending so munch time on/in the ocean, it is super exciting that I finally had a chance to see one in the wild. We also saw a huge squid at the bottom when the pilots were deploying the second BEDS instrument. When we returned I made some new culture strains so they will hopefully be happy this weekend.

I have recieved many thanks from MBARI staff for hosting a delicious BBQ, I am very grateful to be sharing this internship with so many motivated and helpful people.

I'll miss you all this weekend at the Open House, it was so much fun last year and so cool to see the place transform into an event that reaches out to 4000-5000 of our friends and neighbors in just a couple of hours. You all are going to have a blast, I'll look forward to catching up when I return Sunday evening.

Posted by dwyse at Jul 18, 2013.

Yikes! How time flies. I barely even noticed the time today because it was just as busy as the rest of the week. I have been bouncing back and forth between data and open house projects. I was extremely excited this week to get updated biomass conversion data for most of my sea cumbers. This means that I can start extracting all of my measurements from VARS and converting lengths to estimated biomasses. I think this is going to be an interesting link in the time series data from station M.

The BBQ was a lot of work this week... but it is definitely fun to see everyone enjoy the fruits of our labor. I am looking forward to what next week brings (including kayaking!!!)

Posted by lclary at Jul 18, 2013.

Having returned from the cruise monday night, this week has been short indeed! Much of Tuesday was spent unpacking the Flyer and loading samples/equipment back into the then empty Haddock Lab. With affairs back in order, I could turn my attention back to my dataset - we've at last got the dataset in a form with which we can really clamp down on the analysis. As some may know, not all ROV time is equal, and finding the right way to normalize it can be quite the trick. Having reduced our data down to presence/absence, we've refined some of our correlation and time series tests are exploring some further options that help to illustrate population trends over time.

Posted by ajaffe at Jul 18, 2013.

Hi All. Apologies for the belated update! This week has been much different for me from the initial few weeks. We now have acquired data from the cruises, so this week has been A LOT of analysis. I'm using

a spectral analysis software program and MATLAB for spectral analyses of the laser data. This is my first time using MATLAB or any programing software for that matter. I'm extraordinarily thankful to my patient mentor, Ed Peltzer, for giving me the basics of the program and to Alba for teaching me from a introductory MATLAB course she took in Spain (Alba's the best!). I have written the code that will analyze all the spectral scans, and now I just need to apply the code to all the data we acquired. I'm really looking forward to seeing the results of the data! Until next week...

Non research happenings: 1) The BBQ was a smash! So much good feedback (pun intended). Nice job, team! 2) Alba and I went to the California Academy of Sciences Deep Sea Nightlife last night. We got to see the famous oceanographer, Dr. Sylvia Earle, give an inspiring talk, see an ROV (it had nothing on *Ventana*) and see lots of aquaria...overall a fun night!

Posted by wsauthoff at Jul 19, 2013.

Hi, I'm a little bit late too, sorry guys! This week it's been really awesome, because I went for first time to the Rachel Carson, where we could control the camera of the ROV in order to look for the benthic instrument that we had to recover. We saw there a big squid and an Orca so it seems that it was a good cruise to be on.

The BBQ was fun and really gratifying 'cause everybody thanked us! so good job guys heheeh

In other terms, I'm really advanced on my project planning. Finally I have the whole PUCK system working, and now it's time to tune all the parts of the test tool, in order to make them more efficient and able to detect failures on itself. Next week I have a meeting with my mentors to specify how do they prefer the final paper and how the GUI of the test tool should be.
After two weeks going a little bit after my scheduled planning, I've done good improvements this week that allowed me to be on time again.

Posted by opallares at Jul 19, 2013.

Wow, crazy week. Sounds like you are all running on all cylinders (obscure american reference meaning working really hard). Thank you for posting. You can see wat Nettie and I have been up to if you go to www.mbari.org/earth and find the schedule for 2013. Nice to see you all at the open house! I am sitting in Atlanta waiting for my connection to Mobile. Two redeye flights in a row, i am a litte tired. Have a great week and i will see you next monday. Hae fun kayaking.

Posted by mage at Jul 21, 2013.

I have been slacking on Confluence updates =(This week has been pretty much, programming (as with other weeks) and figuring out the right data set among the myriad of data and formats. I decided to skip the LRAUV data set(the concatenation itself is time consuming). So I have ventured into getting the rights plots to support my hypothesis.

Posted by vg at Jul 27, 2013.

19-July-2012

This page last changed on Apr 29, 2013 by kgomes.

20-June-2013

This page last changed on Jun 20, 2013 by mage.

Comments

I had two main goals this week: doing more literature research on 1) Paradiopatra species. The idea is to better understand the ecology of these species in perviously described ecosystems and see how we can apply this knowledge to this study or help us better define the hypotheses of this study 2) on deep-sea sponges that are often found within these patches. In particular, one of our hypothesis is that sponges may favor the apparition of Paradiopatra patch or be linked to one of its functions. The second part of my work has been to decide how to annotate my Paradiopatra patch (what features would be interesting for further analyses) and what other specimens may be interesting to annotate along side to better understand Paradiopatra ecology. I have seen 15 hours so far and I have started measurement of the patch size.

Posted by clairelm at Jun 20, 2013.

I started out the week with one of my favorite things in the world...going out on the boat! I went for a day trip on the R/V Rachel Carson. I have worked with ROVs before, but it was amazing to see the Ventana in action. The sheer size of this rov is something to behold. Then, add all the mechanical arms and functions to the equation and you have an amazing feet of engineering. I was able to sit in the control box while the rov was being used. Kendra and I were even able to help when the Ventana collected samples of Allocentrotus fragilis urchins. We remained in the control box while we brought those samples back to the deployed Benthic Sampler where they will undergo carbon dioxide experiments.

Tuesday made for a pretty exciting day with the Day of Engineering, Science, and Technology events. I watched quite a few of the talks. It was a great way to get a sample of everything going on at MBARI. I like the fact that the scientists at MBARI are very interested in making their research and ingenuity available for a larger audience. Thus making their research address large-scale, global issues rather than just the Monterey region.

As for my project, I have already started collecting size data from video transects at Station M. I am hoping to have my data collected by the end of next week. This is perhaps too ambitious given the amount of dives I need to go through, but I want to have more time for my analysis. I am going to be converting the length data to biomass. The goal is to determine the biomass and in turn the food consumption rates. Eventually, we want to be able to make some predictions on what may happen to deep sea communities as carbon levels (and in turn, primary productivity) changes since the deep ocean is fueled by organic matter coming from the surface of the ocean.

Cheers to another week!

Posted by lclary at Jun 20, 2013.

This week saw continued fine-tuning of our VARS database retrieval scripts and continued familiarization with the resources and species associated with our proposed midwater ecology/population dynamics study. More exciting though, was the collection of an actual ROV dataset, with about 900 midwater dives from Doc Ricketts, Ventana, and Tiburon combined. This dataset contains over two million annotations and spans over 20 years in time - so we've got plenty to work with! Most of this week so far has involved cleaning up this dataset, filtering it for particularly interesting taxa, and beginning to work on some basic data visualizations so that we can identify interesting midwater taxa to focus our attention on. I've been working a lot with R to generate plots that allow examination of taxonomic trends over spatial and temporal axes. A productive and exciting week 2, and not without a few computer crashes along the way!

Posted by ajaffe at Jun 20, 2013.

My main goal for this week was/is to read up on how to use pgbench and learn how to use the results from pgbench to make configuration changes. Since the pgbench tool uses a few other tools, like pg_buffercache, within its execution I also had to read up on those tools. I did have a minor setback yesterday when I broke the virtual machine I was using and had to spend some time getting the new one to the same point the old one was at. I think this was a good thing to happen now though, since it's early in the internship and it made me start taking snapshots of my VM, so I will be ready if it happens again.

Aside from my project, getting to partack in the DOEST event was great. I enjoyed seeing some of the research that is currently going on at MBARI and talking to some of the MBARI board members and staff is always fun. Although I know I need to work on my networking skills since I'm not that social of a person.

Posted by drolicheck at Jun 20, 2013.

I got to start the week with Miguel, Larissa, Kendra, and Nettie out on the Rachel Carson, and it was a beautiful day on the bay. The Barry lab was deploying the benthic respirometer system (BRS) at 200m, adding urchins to the chambers, and bringing a few urchins up to the surface for further analysis. The dexterity of the arm is amazing to see, from picking up urchins to shooing off a particularly sessile rock fish to closing the BRS chambers. It's easy to forget how much life is on the seafloor even in the absence of light, and the abundance and diversity of macrofauna is fascinating.
Besides enjoying the ship time, I also collected whole water samples by bucket and several surface zooplankton tows with an 3m, 80 um net. These samples are for some possible work with the sandwich hybridization assay (SHA) that I've been learning.

Tuesday's DOEST talks and reception were an interesting way to get an overview of some of the research currently being done at MBARI. I attended quite a few talks during the day, and also enjoyed hearing the board's questions. The reception was a great way to practice meeting people, and while I did have some good conversations with both MBARI researchers and Packard representatives, I feel like networking is a skill I still need to work on.

Yesterday, I spent the morning running an SHA protocol from start to finish on two samples of Harpacticoid copepods that I isolated from culture last week. I feel that I am getting to the point where I could run the entire assay with only a few questions to confirm the protocol or best way to do a step, which is great as I suspect I'll be spending a lot of time on it this summer.
I also filtered the whole seawater from Monday's cruise to make filtered seawater, which is very useful in working with live organisms, as well as using for creating a control against which to test environmental background.

Going forward, I plan to look at the net tow samples from Monday's cruise. Julio Harvey has developed probes for annelid worms as well as the larvae of some crabs, so I will hopefully be able to isolate some of these from the net tows to test the probes on. These probes have been tested on laboratory cultures, not natural samples, so I'm hoping to find enough to work with.
In terms of the AUVs, we're waiting for the L-OPC or the LISST-100 to be made available independent of the AUV body so that we can start running known quantities of copepods through both the in situ system as well as the SHA molecular technique. Hopefully we'll be able to do that soon, as I'm becoming more confident with the SHA technique and I'm looking forward working with the in situ sensing systems.

Posted by hfbennett at Jun 20, 2013.

So far this week has been pretty productive, but definitely not without its frustrating moments. My goal this week was to 1)continue reading literature based upon WIG (wing in ground effect) crafts and 2) get through my calculations for power needed for both modes of the craft. I've had some fun trying to determine the affect of ground effect on lift and drag in comparison to 'regular' flight. The AUV is designed to fly only about half its wingspan above the surface of the water, so about 2 meters--this creates an air cushion that reduces drag and increases lift. This step is incredibly important for determining the potential propulsion configurations and whether or not the same propulsion system will be sufficient for both air and water.

I'll hopefully start looking at efficiencies of different propellers tomorrow and the start of next week.. As I begin to add components, I'll add to a weight and balance spreadsheet for the entire vehicle. It's been really nice having Bill back this week so we can discuss potential ideas. These have included such things as having the aircraft flip over for when its in the water and looking at ways for the AUV to take off from the water on its return flight.

On a lighter note, I really enjoyed the DOEST!! I feel like I've been so focused just on what I've been working on and its awesome to hear about some of the other MBARI projects. The scope of what MBARI is doing really is inspiring. This was also a great chance to meet some very interesting people and work on networking. Bill was a great wingman who took me around to meet a lot of the board members.

Posted by bailey at Jun 20, 2013.

This week has been mainly a literature search for background information on my (and related) study organism. I am mostly trying to get all of the sources/info I need for my introduction, methods,

discussion, and data analysis. Since my mentor has been busy this week with the conferences, I will find out later today if my topic will be approved by meeting with the members of my lab and my mentor and discussing the aspects of my project. There will most likely be some adjustments made to it, but hopefully the work I have put into it this week will not go to waste. This week I have been in contact with some of the other people doing research in this field and I don't think that I will be stepping on anyone's toes as a behavioral ethogram for this species has never been done before!

It was great to go to DOEST and see some of the research going on here at MBARI and have it explained to me in a manner that I can understand! I also enjoyed meeting some of the board members and attending Anela's seminar. I am really looking forward to going out to sea again next week!

Posted by bburford at Jun 20, 2013.

I started this week looking at some Matlab scripts from last year, and remembering what we had done. There is a potential other project which is to replicate what we're doing in the Pacific, for the Atlantic. So I have been modifying last years scripts with some improvements and some setbacks, most of which are due to the fact that Matlab keeps on doing strange things and won't select the data I'm asking him to . I'm meeting this afternoon with Monique Messié, who works with Francisco too, and knows her way around Matlab wayyyyyyyy better than I do. I'll show her what I've done, what I think the problems are, and see if we can solve this together. So hopefully, by tomorrow (finger's crossed), I'll have at least being able to creat a mask for the Atlantic and select the pixel nearest to the eastern coast, which is were I'll select the data from in later steps.

In other more exciting news... I went to some of the conferences of DOEST on tuesday. I really liked the ROV videos showing what they do on the sea floor: collecting invertebrates and putting them in the benthic chambers. It looked very interesting! Hopefully I can go on another cruise that does something similar... I would really want to be in the control room and do what Larissa and Kendra did on monday!

Back to the project: for next week I have to get together with my mentor and other members from the BOG group, discuss the results that we have so far, and see if we need to do some recalculations (or not) so that I can start describing these results and try to figure out what they mean and how I can explain them. Francisco also wants to get together with VG and me to review/discuss a paper; this will be an interesting and useful tool, just in case we get a paper to review someday.

No more (for now)... new reports on monday!

Posted by albacv at Jun 20, 2013.

I started off week 2 participating on the R/V Rachel Carson Cruise early Monday morning! While on the cruise, a Benthic Respirator System (BRS) was deployed! The BRS is a magnificent AUV capable of testing on marine organisms in response to different pH levels (CO_2 injection from an air tight bag, attached to the BRS. Using the Ventana ROV, the crew was able to explore the benthic seafloor in search of Strongylocentrotus (or Allocentrotus) fragilis to be used in the BRS. The urchins were initially difficult to find, but thanks to Jim Barry and the crew, soon hundreds were found at 220m. It was extremely interesting to see how many there were and their mass aggregations.

Furthermore, Tuesday was DOEST! It was an opportune day to meet the faces of MBARI, including the Board of Directors, researchers and staff. Once again, MBARI blew my mind with the amazing scientific work that is and will be performed! All speakers were extremely intriguing in their work. Personally, I took a great interest in the XFOCE project and Jim Barry's Benthic and midwater respiration studies.

Speaking of benthic respiration studies, this week I was able to progress in the design and steps needed for my project. I will be looking at behavioral and physiological responses from S. fragilis (urchins collected from Monday) when prompted by kelp stipes (giant seaweed they feed on) and/or affinity to each other, while exposed to different pH levels. Next week, I will be working on building the Y-flumes that will be used to perform my experiments.

While working in the Benthic and Ecology lab this week, I have spent much time familiarizing and researching scientific papers in relation to my project. Also, I have been trained on the pH spectrophotometer, Alkalinity analyzer (TitroLine 7000) and the CO_2/H_2O Analyzer (by this Friday).

Posted by khart at Jun 20, 2013.

After several meetings, lots of reseach: reading journal articles and expedition logs, looking at all the framegrab images available for each expedition, Google searches, and video lab visits; my main goal

for the week was to complete not one but two sketches, one for each of my first two projects, and to send them off for feedback. So far, I have emailed off the first sketch to the Iceberg AUV team, Ken Smith's crew. And next will be to complete the Seafloor chemistry sketch which will be sent out tomorrow morning.

The DOEST seminars were very interesting, and due to Ken Johnson's talk on his upcoming global float project it is now imparitive that I do the third illustration. I met Ken after his talk and he said there was a lot of interest in an illustration for this project, specifically from Princeton. With all of the international attention on this project I would be foolish to turn this opportunity down just because I wanted to get some sleep at some point during this internship. So Nancy Barr, my mentor, and I have a meeting with Ken on Friday.

This week has been very busy for me as developing sketches is, a lot of times, the most difficult part of the process. But next week is going to be a whole lot of fun. I am going out on the Rachel Carson on Monday, and then we go to the aquarium Wednesday. Oh, I just realized I will miss our fabulous cookie break-how sad-but I will be at sea with Ben looking for mid-water critters!

Posted by klance at Jun 20, 2013.

This week I continued my work growing up my algal monocultures to ultimately run on the ECO puck and LISST-100 sensors. I was trained on the Accuri flow cytometer by Jian, which I will also use to determine size distributions and fluorescence of my five strains of phytoplankton. I have made a lot of progress in the biological side of my experiment, but am still working on my experimental bench-top set up, which was the original plan for this week. Today I've run a crash course in optics and reflective properties of seawater and particles of various sizes by way of literature searches. I feel like I'm learning a ton but still need to track down a couple equations to properly set up the experiment and get some preliminary results. I feel behind schedule in this respect, so hopefully I can make up some of the time by reading and working on my paper on my flights to/from Washington. My plan next week is to dive right into DAPI staining and quantify the fluorescence values I've been taking (converting to cells/mL), and begin running the filtered artificial sea water (ASW), glass beads and ultimately the algal cultures on the bath-stlye (ECO puck) and flow-through (LISST) systems.

Oh I got my webpage set up! I promise I will get you guys the blog info soon. Maybe that will be my Fri morning flight plan - write the welcome blog post.

Fun stuff I did this week...the Surfing Squirrels won our first game, that was rad. I went surfing yesterday with some of the interns too, it was windy but a lot of fun.

Interns host the cookie break next Monday! I can't wait.

Posted by dwyse at Jun 20, 2013.

This week is going well thus far. Going out on the R/V *Rachel Carson* was a great experience! It was interesting to see the ROV in flight, and to hear the communication amongst the pilot, scientists, and members of the crew during navigation. The DOEST presentations were fantastic. It was nice to get details on the different projects I've been hearing about since I arrived. Listening to the questions from the board members, and speaking with a few of them during the reception was another highlight of the week!

I've narrowed my project focus, and am now investigating the Gulf of California (GOC) 2012 Expedition. Specifically, I will be designing a web page for the fourth leg of the expedition which investigated deep-sea chemistry. I reviewed the MBARI Style Guides which outline the standards used to convey information both internally and externally. I'll be practicing incorporating that format into my writing. For now, I am drafting an outline of the webpage and a summary of the content. I'll review those with Connor when she returns next week. An additional component of my project is to seek out educators and learn their perspectives on the use of scientific media in classrooms, which educational tools they view as most effective, and what resource developments would they like to see in the future. I've come up with a set of questions, and hopefully the answers I receive will help guide my project!

Posted by nmcmiller at Jun 20, 2013.

This week I've been reading all the programming code used to implement PUCK protocol on Luminary micro controller that my mentor gave to me. I've detected which parts have to be modified, in order to make this code PUCK protocol v.1.4 compliance, and I've started working on it.

After a couple of days without being able to solve functionality bugs, I've just solved them. So I have made a lot of progress with the micro controller program, and I'm close to have it working properly with the CTD.

Furthermore I went to some DOEST seminars on Tuesday, which I found really interesting, although I would like to assist to the wave glider demonstrations on building B. I look forward to go on a glider mission to the sea and be able to sea how it works.

Now it's time to start reading information about how was made the previous test tool for PUCK v.1.3, in order to port this tool to TCP/IP stack, and this way be able to develop the PUCK protocol system and its testing tool which is the goal of my internship.

Posted by opallares at Jun 20, 2013.

I've managed to sort all the data (well AUV/CTD data for now) that I needed to run some of the visualization I wanted, and I successfully did not mess it up. With some of the sensor data on the AUV I plotted a 3-D plot of one variable (say temperature) that contain long-lat and depth properties on the bathymetry of Monterey bay. Since this worked, and I am content with myself compared to last week I am going to set a threshold for depth so that I can study boundary layers close to bottom. Once Matlab cooperates with me, I should have a visual comparison on how with bathymetry, that variable behaves;but we already know that with changing depth it gets colder, higher nitrate levels etc. However for future study it will help show within the mission transect which particular area has an interesting pattern even within a scale of 24 hours.

We had the DOEST event on Tuesday, and I tried to attend most of the talks and they were excellent; inclusive of how to present their science to an audience that not necessarily have their field of expertise pertaining to the speakers'. At 4 o'clock when the social event took place, some of the interns and I gathered contemplating on who to start the conversation with, and with much surprise Julie Packard came up and initiated a conversation with us. I am not sure about the rest, but I was trembling with humility and to an extent fear. It was great to have the homebrew share their elixir of courage, some amazing stout, wheat beer and pale ales.

Posted by vg at Jun 20, 2013.

In my first few days at MBARI, I've become better acquainted with my mentor's collaborators: Ed Peltzer and Peter Walz. I feel like I've gotten a lot done this week alone. I've been introduced with the experiments I'll be helping conduct. I have a better idea of scientific questions my project seeks to answer. The scientific questions are interesting and important! I'm looking forward to sharing more during the next weekly intern meeting.

Additionally I've been reading related scientific literature papers and set up an Endnote folder for my references (something I suggest for others to do!). I started the methods and introduction section of my paper. I've been documenting the fabrication process of the ROV attachment arm that will be used to conduct the experiments with pictures and video to share in the presentation, paper and possibly the blog that Diane is working on.

Posted by wsauthoff at Jun 20, 2013.

This week has been very good. The co2 snesor is running and working. In addition I was able to attach the clock and memory to it. So basically what I have right now is a sensing device of Co2, temperature, and RH which allows me to do real time measuring and store all the data on a 256kBytes memory.

The next step of the project is to program the module to work in ultra low consumption mode (sleep mode) for a controlled period of time; until it has to turn on and start doing measurements. Also program the module in a way that when it finds the base station, which will be connected in a computer, to send all the data stored into memory via wireless.

Posted by muzcategui at Jun 20, 2013.

We had a lot of activities this week. Somehow, I did manage to squeeze in some work in between. After many hours wrestling with solidwork's FEA analysis tools I have nearly finished a design for reinforcing the pressure housing on the benchtop ballast engine. I just received some quotes for steel bar stock. All I have left for this portion of the project is to order raw materials, and send drawings to the lovely

people over in the shop! Hopefully I can send over the drawings tomorrow morning. Tomorrow I'm going to switch gears and start wiring up the RS-232 connected DC motor as well as force and pressure transducers which run through a Ni-DAQ. My goal is to have the motor and transducers up and running by the middle of next week!

Posted by nsohn at Jun 20, 2013.

This week I was able to plumb a 6-way injection valve onto the fluorometer as well as hook up a peristaltic pump and heater block to the sample and carrier. lines. I was also able to get timings down so I could get repeatable sample volumes in order to create a standard curve. This curve will ultimately enable us to calculate the concentration of ammonia in the sample. While DOEST was going on I went to a variety of talks in the morning that I found really interesting. At the reception I was able to talk to a few of the board members and representatives from the Packard Foundation. Everyone was very nice and interested in how I found out about the internship. The amount of knowledge contained in the area outside of Pacific forum was staggering. In between talks and meeting board members I began working with lower concentration standards and changing the emission wavelength we were observing. Since the ammonia levels we are trying to detect should be very small we are able to look at emission wavelengths closer to the ideal emission peak of ammonia. Bubbles within the instrument created noisy data but after they cleared I was able to get usable data and get the instrument zeroed for lower concentration samples. Wednesday was spent troubleshooting issues within the instrument and oversights by me. I began having issues with flow going the wrong direction after I changed tubing diameters and then a minor catastrophe when a line ruptured at the pump. I also realized after Patrick brought up some doubts to me that I had miss-typed a formula in excel that I was basing my calculations off of. The error was corrected and to assure ourselves that the numbers were good we collected empirical data on flow rates for the different tubing we were using. Today Patrick and I went out with Tim and Margarit on their monthly CTD cruise on the *Rachel Carson*. We assisted them and another researcher Mia with their work and then collected some low-nutrient sea water to use as standards in the chemical sensors lab. In addition to aiding with sample collection and processing from the rosette we made an attempt to locate a BEDS sensor that had lost communication with the monitoring network. The *Carson* made a single pass over the last known location but the acoustic boom was unable to get a signal lock during this I helped communicate between the bridge and the ROV control room. The weather was a little rough on the way out the M2 and got us a bit uncomfortable but all in all the cruise was a success. Tomorrow I aim to add more tubing to the Fluorometer setup so that we get the required residence time in the heater block for each sample. This will allow for rapid sample injection and processing.

Posted by aleitholf at Jun 20, 2013.

21-July-2011

This page last changed on Apr 29, 2013 by kgomes.

21-June-2012

This page last changed on Apr 29, 2013 by kgomes.

How was your week?

22-July-2010

This page last changed on Apr 29, 2013 by kgomes.

23-June-2011

This page last changed on Apr 29, 2013 by kgomes.

25-July-2013

This page last changed on Jul 25, 2013 by bburford.

Comments

I had a great and productive time this week while being out to sea. On Monday, my lab gave me control over the ROV for most of the day and I was able to guide the pilot to several *Chiroteuthis*and observe some great behaviors and conduct *in situ* experiments by removing the tail of the juveniles and observing subsequent behavior. On Tuesday, the aquarium linked up with us while giving a deep sea presentation and my lab gave me the radio and let me do the talking to the audience in the auditorium. I was so excited that I really forgot to say a lot of things, but hopefully I made some sense and was entertaining in some way. Also, on the motor back to Moss Landing, I saw my first large, mesopelagic shark while I was talking on the phone with someone from the deck. It was probably just a blue shark, but exciting nevertheless. Back in the lab I am still working on my ethogram, but I am almost done and would like to finish today so enough with this! Bye!

Posted by bburford at Jul 25, 2013.

This week was nice (kayaking was very good, thanks again)! So I now have my data set and I am starting playing with them. Paradiopatra tube worm patch are not very abundant and it is challenging to give inetrpretation. I will now study more the associations of animal within the pacth over time. I am also back reading to discuss more my results. I hope to have more conclusions next week.

Posted by clairelm at Jul 25, 2013.

This has been a busy week, but then aren't they all busy weeks! Monday's kayaking adventure left us all buzzing and tired. It was so nice to get out on the water though and see some otters rafting together. I stopped data collection on Monday which left me with approximately 6,000 observations to use which is awesome. I have already converted the pixel measurements taken in VARS to the actual length measurements. I still need to look at the differences between time periods and species...lots of work there. I am starting analysis on these data today so hopefully I can have some results early next week. Crissy, Linda, Claire and I have been going back and forth on how to handle the Canadian Grid aspect of using the ROV video...more to come on that later.

Posted by lclary at Jul 25, 2013.

This week we got the STOQS application installed on Kraken and begin to produce some long queries with the application and view the logs of those queries using pgfouine. Although we are seeing increases in responsiveness, we are not see as much of an increase as expected. Which means either some configuration is not working as expected or that the application responses main factor is not the database but some other part of the application. The later is probably the issues since there is a lot more going on inside the STOQS application then just retrieving the data from the database.

Currently we have been running these test on the spinning disk part of Kraken and thought we would see more of an increase in performance once we switched from using the spinning disk to using the FuisonIO card, this card is a solid state drive that connects directly to the PCI slot. However, when we switched over to the FusionIO card yesterday and ran the same load as we first ran on the spinning disk, there was little difference. The load was working faster but only around a second or two faster compared to the spinning disk. Now we are starting to look into why this is, since we thought we would an increase of at least a few seconds.

I have also been working on my paper this week, which I haven't made the most progress on but feel I'm at a good point for where I am in my project.

On a none project related note. Kayaking was awesome, thank you for giving us the opportunity to do that it was a ton of fun.

Posted by drolicheck at Jul 25, 2013.

I've been running trial batches of copepods through the LISST-HOLO this week, and encountering some frustrating road blocks from the tubing not fitting to lack of detection to the pesky things crawling off

my filter! Next try is a horizontal system that will hopefully slow things down enough for the particles to register with the HOLO. I'm looking forward to having John Ryan back around next week to help me with understanding how it samples in situ, as I can get really good results using a static sample chamber. I'm starting to feel a bit worried about the lack of time and how much I have left to do, but hopefully once the system is working my actual experiments won't take too long.
I've also been digging around in the LOPC data, but there are so many files that appear not to have been processed, it's hard to get a feel for specific experiments. I'm talking with Mike McCann about making those available.

Kayaking on Monday was great, thanks for organizing that!
I've also been sailing with Thomas Hoover in the Wednesday Night Races out of the Monterey Yacht Club, which has been great. There's often room on spectator boats if anyone just wants to get out on the water!

Posted by hfbennett at Jul 25, 2013.

I started out this week meeting with my mentor about whats left for me to do for my project; honestly it seems never ending, but I'll get it finished- -We discussed my presentation and created a layout for it that seems informative enough and that he or I could use for future presentations. It's just a matter of filling in the missing pieces now. As far as choosing motors, we've looked at few that included (I believe I mentioned this last week) the PRD Fireball go Kart engine and the Kawasaki KLR650 engine and am researching a potential diesel engine. I'm creating a trade study to look at these potentials to determine which will work better for this system. For propulsion through the water we are looking at already existing motors that are being used by the existing AUVs. Bill and I decided that these would be a great option because MBARI has already done so much testing and design for these and have proven to work great for AUVs. I've received some useful information from people who worked on the previous AUV designs and now am just trying to determine what all the values mean and matching a motor for my system. These include looking at efficiencies and power output and shaft size and optimum rpm. Not going to lie: this is continuously a learning experience. Today has been pretty rough with trying to remember where I am; whether I'm looking at sea or air operations and staring at spreadsheets of number doesn't help

Kayaking was a great way to start the week with having a shortened weekend and all, but the open house was really fun! Looking forward to relaxing this weekend and cranking out some of my paper and enjoying some beach time.

Posted by bailey at Jul 25, 2013.

This week I officially started my experiment with "true" trials! The process for each trial has been somewhat challenging. For the most part, the urchins travel down the mazes towards the kelp sensed flow, as expected. However, select urchins don't respond and hence stay still where initially inserted (outflow area) of the treatment.

Chris Lovera has been helping immensely with figuring out WHY the urchins may be responding this way. We found there has been some glitches with inconsistent water flow between the treatments and the three tanks we are using (Tank #1, #2 and #3). We observed air bubbles forming within the tubing. Thus, we think we are having issues with not having enough water available within the whole water system. Because there is a lack of water available for the treatments, oxygen concentration may vary, causing a different response from the urchins.

Nevertheless, I am learning a variety of behavioral responses from the urchins. No direct correlation between the treatments and the acclimated urchins assigned to pH levels (7.2, 7.5 and 7.8) can be determined yet. More trials are in line! Workin this weekend! Whooo!

Posted by khart at Jul 25, 2013.

Heyo! This week has felt a lot more productive than last week, mainly because I'm getting to know MATLAB (thanks Alba!). I've nearly completed my script (non-MATLAB users read a string of commands for analyzing and plotting data) and exported all my spectral data so that it's ready for processing in MATLAB. I've also finished up the introduction and materials & methods sections of my final paper and will be sending the draft to my mentor, Peter Brewer, for review because he will be out of the office for a good part of August. I've also been working with Peter Walz to get a pressure cell functioning so that we can use the laser Raman to get a spectral sample of some reference decane oil (without methane

saturated in it) at the same pressure/temperature conditions during the ROV cruise. This reference spectra will allow us to compare samples taken *in situ* to the reference to quantify the rate of degassing of methane from the decane oil.

Outside of my research project: Open House was wonderful! My mom and one of my brothers came up to the area for the weekend. It was great to have them see firsthand the amazing internship I'm a part of! Kayaking in the Elkhorn Slough on Monday was the bomb dot com! Really enjoyed the intern bonding aspect and learning the natural history of the slough from our two kayaking guides. Thanks Linda for organizing!

Posted by wsauthoff at Jul 25, 2013.

Open house was a lot of fun, being across from the squid provided lots of amusement/horror when things got slow at our booth. We had some really good questions from the attendees, the best of them coming from a kid who couldn't have been much older than 10. I'm convinced if we gave him a parts bin and schematics he could have built Patrick's ammonium float by himself.

This week has been more method development. We added a gas diffusion block to the system and changed a couple reagents to allow us to look at water from the slough without having to worry about background fluorescence from dissolved organic carbon or plankton. This isn't necessary for open ocean water, though in high plankton concentrations it could be helpful. I had to re-plumb a lot of the instrument in order to get the diffusion block and 4th reagent line to work, this wasn't terribly difficult but hunting for the correct fittings takes forever. The longer lines and characteristics of the diffusion block required adjustment to the data acquisition and processing methodologies; it took me longer than it should have to figure out why my scripts weren't finding accurate peak heights on the new data.

Last Friday we had planned on sampling off the dock today while the tide came in and peaked but we haven't been able to get things co-ordinated with the small boats dock so it looks like we will have to sample next week. The only reason for today was the wider tide swing, but the tides next week are decent too. Still collecting data has kind of gotten me worried about writing this paper. I know I have enough material to discuss and go into painful detail for my method protocol, but the time frame has got me concerned. I forsee long nights in my future but I imagine I won't be alone.

Posted by aleitholf at Jul 25, 2013.

Oh my, I was so caught up in work... so I'm late.

At Open House I was a part of the Information booth and I had the opportunity to greet guests and have some interesting conversations with several. Most were so thankful that MBARI opens its doors like that. One woman told me it was her favorite thing to do out of the whole year and she must have said thank you about 12 times.

I also wandered around and took pictures for the website. That was fun and gave me an excuse to really get in there at all the booths to see what was going on. I loved the dock and the machine shop! And the fish and squid printing was priceless. This one little girl ran off leaving her mother holding her painted dead fish. I wanted so badly to take her picture as she called after her daughter with a look of concern and disgust on her face all at once, but I figured she would rather not be memorialized that way.

Kayaking on Monday. Super fun and so hard to get back to work in the afternoon.

This week I am focusing on my methane mounds illustration. Last Friday I met with Victoria Orphan. She explained the geobiology of the mounds to me and offered a solution to visually explain the chemistry by way of the microbes in the sediment. Today I met with Ed Peltzer to combine his thoughts with hers and now everyone wins. Victoria will also be able to use my illustration and most importantly she said she will contact me in the future now that she knows an illustrator who "understands this stuff".

Many thanks to Alba and Diane for the T shirt coordination. Alba collected 112 orders and we emailed that info off to the printer today. Success!

Posted by klance at Jul 25, 2013.

I finished all the work proposed by my mentor for the internship by this week, so next Monday I will have a meeting with him in order to demonstrate how is it working. He has suggested me to include my program to the program that they did for the serial communication, this way the end user can select if it's a serial or a IP connection and the PUCK test tool should be completely compliant with both versions.

I haven't thought on the possibility of unify both programs, but probably it won't be so much time to put them together and I will be able to finish it on time. So it's a good idea to try to make a test tool completely compliant with all PUCK versions, what I think will be useful for PUCK instrument manufacturers.

On Monday I had a meeting with Kent and Tom in order to talk how do they want the final paper structure. After discussing which kind of paper is the best for this work (tutorial, step by step set-up etc...) I started writing as they suggested me to do it, this way we will have enough time to revise the final paper presentation.

In other terms last week we had the MBARI Open house, I stayed almost the whole day on the MOD ticket table, with Miguel, Wilson and Dylan. It was a really good time, because everybody was really grateful about our job and on the same time we were enjoying what we were doing. So what else could we ask for?

Posted by opallares at Jul 25, 2013.

On Monday, I went on a cruise of the Midwater lab. It was awesome! I had a really really really good time! First we collected Nanomia for the MRS (which I learned was the Midwater Respirometer System) and we left it out on the mooring; they picked it up the next day. Then we went hunting for Ben's squid, which was fun! He was trying to describe behaviors and change of colors in the body or tail once he detached the tail from the body. We saw baby Humboldt squids, a baby red octopus, some jellyfishes, fishes, a comb jelly, and I asked Bruce a hundred thousand questions, which he seemed happy to answer.

I also have spent the rest of the week collecting money for t-shirts! We finally made the order this morning for a total of 112 t-shirts! So that's that.

And then I also started to learn how to use Sigma Plot, a very useful tool for plotting data. I got a little tutorial from Reiko on Tuesday, and did some plots for my presentation/paper. I've also had to go back to my equations because I didn't remember some calculations and was, again, getting mixed up. But that's solved too. So hopefully I'll be able to finish figures today, and start describing results tomorrow. We'll see how that goes.

Posted by albacv at Jul 25, 2013.

Yikes, sorry I'm late!
For starters, Open House was a great time!! I am so grateful for everyone who took part in making everything such a success! It was nice to see everyone's faces floating around and engaging with our visitors. Special shout-out to all those who helped with the children's and social media booths! I'm pretty sure I was running on pure adrenaline and you all got me through!

It has been yet another busy week! Kayaking on Monday was amazing (a nice arm workout as well!). I finally got access to the Spartan software which allowed me to show the crystallization of the hydrate. That made my morning I spoke with Ed Peltzer who gave me maps of expedition. I was able to make rollover images on the map to show the specific sampling locations. Now I'm figuring out how to edit the .mov files and post them directly into Dreamweaver. I'm keeping in mind ways to tie in the MBARI resources as well as connect this page to our social media pages. All the pieces look like they are coming together which I am thrilled about! I'll be here this weekend to make sure the train keeps rolling. I participated to the WATCH panel today which was, again, a great experience, and we laughed at how the kids drilled each other after their presentations.

Posted by nmcmiller at Jul 25, 2013.

Another great week here at MBARI. I've preoccupied myself this week with visualization of our CTD data, which is recorded alongside every VARS annotation in the database. This can be useful for explaining trends in biological data over longer periods of time - ie, el nino or the like. I'm currently working with my mentor to get that into a state suitable for analysis. Meanwhile, I've been spending some time generating figures for the presentation in R, which can be a lot of complicated syntax. However, I'm happy with the stuff we have and hope to finalize that next week. Still more analyses and other work to be done, but I can see it all coming together!

Posted by ajaffe at Jul 25, 2013.

This was a really good week at MBARI. The electronics of my final module are done, it is fully operational. What I am doing right now is trying to build the housing for the whole module (with a lot of help). I am still trying to figure out how to make it super lowe power consumption, which I cannot still accomplish. After putting the module in the housing, all what I have to do is making the sensor more user friendly, and I will be done .

Posted by muzcategui at Jul 25, 2013.

This week has been productive albeit short. We went kayaking on Monday and saw an otter hauled out with a baby in the pickleweed, that was really cool. The end of the day Mon through Thurs I ran more tests using the ECO puck, and have begun analyzing data from my filtered ASW. I also have dark counts values, so I can convert all the count values to useful information (concentration). My plan next is to run some samples in the fASW and compare the background from the filtered vs unfiltered samples.

I can't believe the summer is coming to a close soon, next week I'm getting the LISST-100 together and hopefully getting some particle size distribution values. Then it's data analysis, writing, and presentation time!

Posted by dwyse at Jul 26, 2013.

Met with mentor to go over my updates and things to focus on(there are so many interesting things, yet time is a factor). Matlab has not been cooperative with me, in terms of having dimension mismatches. I think I'm getting there to produce my supporting figures (clue...it has to do with upwelling). I will be off the Buffalo for a friend's wedding, and I have been stocking up on the data sets so I could work on them while I'm there (no choice, I've gotta pull this through), and the weekend is not going to look pretty. Have a good weekend guys!

Posted by vg at Jul 27, 2013.

I finally got my benchtop engine simulator running! The stainless steel clips that I am going to use to secure the pressure vessel are not quite done, but I've been able to do some basic testing safely by removing the springs from the piston I use to simulate pressure. I have all of the sensors that I need up and running, and I am almost done implementing a PID controller that should regulate the position of the bellows. This may come in handy next week when I will need the bellows position to be constant for my added mass testing of the test tank prototype. Things that I have left on my agenda include finishing up my PID control, evaluating pump efficiency as a function of pressure and bus current, and estimating the added mass and drag coefficients of the test tank prototype. If I have time after that (haha) I will work on the coulter counter that Gene and Ginger have started on.

Posted by nsohn at Jul 28, 2013.

26-July-2012

This page last changed on Apr 29, 2013 by kgomes.

I've spent most of this week out of the office. Since the aluminum plate arrived from Lusk on Tuesday, I've spent most of my time in the machine shop, laying out hole locations, drilling holes, and deburring edges. The 12 fill in plates are done, and now I'm working on the submerged plate itself. That is proving to be much tougher than I originally anticipated. I'm planning on spending the rest of today using a portable electromagnetic drill press to get through the A36 steel that a standard hand drill just can't handle. If all goes according to plan, the plate will be ready for testing in the test tank by the end of next week. Remaining tasks to complete before testing include: creating a new bridal for the plate (since our last one snapped), moving all the testing equipment (HPU, accumulator, manifold, valve, and hydraulic ram) to the test tank room, making a new mounting bracket for the string pot so we can measure the linear position of the hydraulic ram, and creating some bumpers for the corners of the submerged plate to protect the inner wall of the test tank.

27-June-2013

This page last changed on Jun 30, 2013 by mage.

Comments

I spent this last week in the video lab looking at more videos taken at Station M. We redefined slightly the project by deciding to look at patches that occurs in transect only and so that will give quantitative data. I also look at all sponges occurring in these transect to try to detect the formation of patches. Apart from being in the video lab, I am still reading papers finding hard to have information on the natural history of Paradiopatra polychates which will make more difficult to understand the ecological role of these patches at Station M. I am looking at related genus to see if we can transpose some information to Paradiopatra.
And Ken and his team came back from the cruise at Station M. They collected some polychaete samples for me so I will have a look under a microscope. I will look if they all belong to the same species and compare it with species previously collected at the station. I have a quick look at the specimen and it seems that other animals use their tube to grow which is very interesting for our habitat study. I did not get the sediments associated with the specimens as I hoped for to look at macrofauna association. But it is something that should be done in the future.
Larissa and I had several meeting with Ken and Linda to update them on the projects. Also Ken told us we were going to be busy at the Open Day so even if we do not know yet what we will do, it seems we will have plenty on our plates!

Posted by clairelm at Jun 27, 2013.

I was successful in getting the motor and sensors wired up, I just need to get the go-ahead from my mentor to fire everything up. Since the bar stock we ordered have not showed up yet, I can't really work on integrating the motor to the actual benchtop assembly. The other notable event from this week for me was sitting in the design review for the Coastal Profiling Float project. It ended up being a very valuable experience; it was very instructive to see what kinds of questions need to be addressed both from the scientific and engineering side before moving ahead on a project, and it was very helpful to learn more about what design reviews generally involve.

Next week my plan is to get the motor attached to the benchtop assembly, and hopefully start to run some efficiency tests. In terms of open house, I haven't been assigned to any particular project, though the chem sensor lab has not totally worked out what they are planning to do...

Posted by nsohn at Jun 27, 2013.

This weekend has been mostly good. I have been able to get all the parts working together so now I completely have a sensor that can measure CO2, temperature and humidity and store those values of data in memory. In addition, I built the whole circuit of the sensor and integrated it into a protoboard. The idea is to have the sensor to run independently (meaning without the use of a computer), so for that I had to integrate batteries into the circuit and a level shifter which just regulates the level of the voltage to a certain amount.

next challenges are to equalize the carbon dioxide into Teflon AF tubing which will go through the air pump and then to the carbon dioxide which will make the measurements of carbon dioxide underwater. In addition I have to setup the radio communications between the node and a base station so the node can pass all the information that is on memory to a computer where the data will be analyze it.

Posted by muzcategui at Jun 27, 2013.

Monday was spent calculating flow rates at the new pump speed and then optimizing/troubleshooting peak resolution with the new timings. I ran into many issues with bubbles forming in the line which created inconsistent readings as well as hid data in the noise. I also ran into issues with the hose on my pump failing during an attempted standard curve. The tubing was quickly replaced but time was lost since the curve was not useful. At the end of the day I learned the protocol for creating our working reagent.

After a consulting my mentor and the manual for our flow sensor we placed a back pressure valve on the fluorometer output. This creates resistance to flow and an increase in pressure within all of the lines. The reason for doing this is to minimize the formation of bubbles within the tubing and various fittings. After we installed it I got the most beautiful set of peaks for our standards. It made my day. I spent the remainder of the day processing the data into various graphs and calibration curves.

The behind the scenes tour of the Monterey Bay Aquarium was really cool. Seeing the open sea tank from above was great even without watching the sardines get fed. We also stayed to watch Linda's talk in the auditorium. I read python manuals until the speaker Emily Carrington gave a very interesting talk about her research into Byssal threads. I went into the talk not expecting to be as interested as I was. Her approach and study of the material science aspect of biology was quite intriguing though. I really enjoyed her talk. As the end of the day approached I was able to get into the lab and make some headway on my project. Using python's matplotlib, csv, and numpy libraries I was able to process stored voltage data and convert it into a series of graphs displaying each sample and the injection/detection reproducibility. While the data capture side of my project is not as automated as we want it to be it's nice to finally have good data to work with and the ability to get the data stored on the computer.

EDIT: I forgot to mention my mentor has said I will have a task with them on open house day.

Posted by aleitholf at Jun 27, 2013.

This week I've been looking into how pgbench-tools test work. I ran into some problems with this because the test I run from within pgbench-tools was taking a long time compared to other pgbench test I run last week. I tried to figure out if this is normal by looking deeper into the code the test runs, the documentation of pgbench-tools and then by doing some google searches. I found some useful information but not a definitive answer, until I accidentally ran the test when the postgresql-9.1 service was stopped. When I did this I got to see how many actions this test was trying to do, it was doing a lot of actions which is why it takes around 3 hours to complete. Now I need to figurer out why some errors are happening when the test is ran, that are causing the results to display differently then expected.

I have no current assignment for open house, my mentor normally helps with parking.

Posted by drolicheck at Jun 27, 2013.

I have spent the better part of this week collecting measurement data on my holothuroids at Station M. I have also sent our species list out to someone who can provide ratios of biomass based on a sea cucumber's length. Hopefully, this will help me in a couple weeks when I start doing analyses.

The behind the scenes tour at the aquarium was very interesting. I thought that I may not get very much out of it because I am a volunteer there already, but I was wrong! I really enjoyed being able to see all the inner workings of the protein skimmers, pipes and tanks. When I lived down in southern California, I was an aquarium manager in charge of those types of workings on a much smaller scale. It was amazing to see all the mechanics scaled up to accommodate an aquarium the size of the Monterey Bay Aquarium.

This week was also filled with various meetings about my particular project and Station M in general. It looks like I am going to start splitting my time between taking measurements of sea cucumbers and creating a new ArcGIS project to display some of these data from Station M. This will be a great way for me to brush up on my GIS since I have not used in a little over a year!

As Clair and I asked Ken about what we are going to do for Open House, he gave a little chuckle. Let's just say it sounds like we are going to be very busy at the Smith Lab booth...

Posted by lclary at Jun 27, 2013.

This week, I've continued to work on visualizations for a package of krill-eating taxa that might illustrate some interesting seasonal or periodic trends. Plotting and data manipulation in R has been the name of the game, and I've got a preliminary look at how these taxa have behaved spatio-temporally over the last 25 years! We've been working on normalizing our data - not all ROV time is equal - which has required some reconfiguring of the dataset.

I also was able to join the Haddock Lab on a Rachel Carson cruise yesterday - a great experience which I can't wait to repeat! We performed a midwater observation/collection dive at one of the stations - I spend the majority of the day in the control room, watching as the team collected ctenophores and maneuvered the ROV. We picked up a number of samples that will be used here in the lab later for molecular analyses.

Next week, I'll continue to work on our data visualizations, looking at how best to illustrate long term trends with such a massive dataset, while still being readable. No easy task! Preparations for our week long flyer cruise will most likely begin then too.

Re: open house, I'm currently signed up to help with the Jelly Watch table.

Posted by ajaffe at Jun 27, 2013.

Hi All,

My week has been great! Another productive week on the fabrication front. Peter Walz and I (90% Peter, 10% me) finished fabricating the swing arm that will attach to ROV *Ventana* during our two one-day cruises this coming Monday and Tuesday. Bailey and Alba will be joining us (on Monday and Tuesday respectively) and I'm excited to tell them about my project and witness the Raman laser in action in the field. Peter W. and I (same ratio as earlier described) changed out the housing on the Raman laser to match the depth and temperature range it will be operating at during the upcoming dives. I learned the laser calibration and operation protocols that we'll be using at sea. I got at tutorial on HoloGRAMS, the software I'll use to do spectral analyses post-cruise and generate figures for the internship paper and presentation (and maybe research conferences?). We also prepped the hydraulic accumulator, which will hold a oil/gas mixture that will be the focus of our experiment. Most of today and tomorrow (Friday) will be spent mobilizing for the cruise by installing the spectrometer tool sled, affixing the fabricated swingarm, testing the hydraulic manipulator functions, calibrating the Raman laser, etcetera.

Outside of my project, I'll be participating in the Land Use Proposal panel today. This side project will be interesting for me because I have a background in considering similar environmental issues in many of my undergraduate courses. And the Behind the Scenes tour at the Aquarium was an exciting day! It was amazing to see all the technology that goes into maintaining the exhibits with all the filtration systems and numerous sensors. I also like how much the aquarium is focused on educating about fisheries sustainability and marine preservation. The ocean plastics exhibit and the Seafood Watch wall really caught my attention. Linda's talk on deep sea biology was also fascinating! George also took a few of us still around to the John Hopkins Marine Station down the street. It was amazing to see the number of oceanographic institutions in this area. It made me even more excited to start graduate studies this fall at UC Santa Cruz. I know there will be numerous opportunities for collaboration in this geographic area.

The Brewer lab has nothing planned for MBARI Open House, so I am free to assist where needed.

Posted by wsauthoff at Jun 27, 2013.

I've been continuing with calculations for the power required for the over all functionality of the AUV and pretty much reorganizing my calculations and troubleshooting in areas where values seem to not be correct. As Bill put it, I'm trying to scale the world down into one little box with a couple of different options for motors instead of looking at a ridiculous amount of options. Based upon calculations, I've generated some graphs that allow me to look at such things as the impact of propulsion due to hotel compared to the power consumption and well as the power consumption compared to the length of missions. This data is important to determine optimal power, velocities and the correct hotel power of the vehicle. Hotel being everything else but the propulsion system... such as any instrumentation that will be used in the vehicle.

I had a blast yesterday at the behind the scenes tour of the aquarium and I definitely felt like a child again! I could spend all day in there, but being able to see what goes on to make such a great experience at the aquarium was really neat. We also made a quick trip to Hopkins and got to check out the library and a gentleman there was kind enough to show us a collection of whale baleen.

Next Monday I'll be joining Peter Walz and Wilson on the Rachel Carson and am stoked to go out to sea!

Oh and I'll be working for Nettie during the open house...

Posted by bailey at Jun 27, 2013.

This week has been very interesting in that there has been a lot of variation in what I have done. Monday and Tuesday I been spent out to sea with the midwater lab deploying and retrieving the MRS, conducting transects, and general hunting. We were able to collect one juvenile Chiroteuthis and had another generously provided for us by the Haddock lab. While out to sea, the aquarium featured us in a deep sea presentation by projecting the live feed from the Ventana (while I was operating the camera!) during the presentation and talking to us via the radio in front of the audience. It was great to have Kelly and VGjoin us out at sea as well! It was all very exciting, and since I have been in the video lab and trying to keep my Chiros alive (which I'd better go and check). I will be with my lab group for open house. The aquarium was also very cool!

Posted by bburford at Jun 27, 2013.

This week started off having an interesting, beneficial lunch meeting with Anela Choy, George Matsumoto and Alba. I obtained valuable knowledge that I am sure will be helpful in my scientific career and graduate school. By the end of Monday, the supplies for my Y-maze were delivered to my office! Whool!

The rest of the week included various conversations with my mentors about the design and function of my project. We were able to knock-out most of the "twicks" involving determining my Y-maze dimensions, water flow in the wet rooms, figuring how to include my stimuli (food) and limiting contamination factors, eta. I now have a well set-up Y-maze! Today, I will acclimate my Urchins into different pH waters to prepare them for further experimentation and their sensory response to acidic waters in relation to their attraction toward food (kelp stipes). Next week involves construction of three more Y-Mazes in building D and taking-up a lot of room in the wet-rooms! Watch-out
This week also included an adventurous "behind the scenes" tour at the Monterey Bay Aquarium and visiting the Hopkins Marine Station. All I could think about at the Aquarium was wanting to dive-down into those huge pools! It was amazing to see the "magic" that operates everything for the well beings of the marine animals, from enormous pumps to many filters and working hands.

This week's seminar was in particular very interesting as well! Emily Carrington's presentation, and obvious passion for her science, was inspiring to lesson to and jogged some further ideas in regards to my project.

Looking forward to another weekend exploring the cities, beaches and MANY activities in Cali! Watch out San Francisco, the 2013 interns are coming to visit!

MBARI Open House: I believe I will be assisting on informing visitors about the BRS project within my lab. If this is untrue, I will be sure to notify Linda!

Posted by khart at Jun 27, 2013.

This has been a half play half work week for me. Monday I accompanied Ben on the Rachel Carson. What a thrilling experience! On deck I was amazed with the large flocks of Black Footed Albatross and a Humpback whale surfaced right next to the ship! In the control room it was quite exciting "hunting" for Nanomia sp. for Bruce Robison's respiration chamber and then watching the ROV pilots hang it on the mooring. After that we hunted for Ben's Chiroteuthis sp. which was like a thrilling high speed chase, although the motion of the boat and the dark room made me want to fall asleep...I didn't though, I watched every bit of marine snow fly by.

Then on Wednesday we had the behind the scenes aquarium tour which was so cool. I took a lot of pictures that I haven't had time to look at yet but I will post them of fb when I do.

As for work I have been developing my sketches for Ken Johnson's C-SOBOM float project in the Southern Ocean. I just had a meeting with him, and like the other two crews I am working with, he was very easy to please. He said he was very excited with what I had to show him. Working as an illustrator is so gratifying when I make my "client" visibly happy. So, so far so good with all three sketches being approved with some minor adjustments or additions. I am ready to make my second drafts of all three projects with more definition.

During Open House I will be working with the ITD department at the information booth and at some point I will wander around and take pictures of people enjoying themselves for Kim Fulton-Bennett's photo archive.

Posted by klance at Jun 27, 2013.

This week I've been working on a combination of tools and content. I am learning HTML, CSS, and some of the Dreamweaver capabilities through online tutorials. I am continuing to work on the write-up and page layout for the GOC introduction page. I'm starting to identify some important concepts that will need explanation (particularly some of the chemistry and geology), and researching background information on the expedition that will be important to include.

Wednesday was an excellent day with both the behind-the-scenes tour of the aquarium and YWIS. Boogie boarding with the girls and other mentors was a blast! We even got a special lesson on the baleen in different species of whale while visiting the library at Hopkins.

For the Open House, I'm involved in two projects. I'm taking lead for the children's booth, and am planning to brainstorm with last year's coordinators on Monday. I've already heard from a few people who are interested in helping (including Bailey). I'll be helping with the social media booth as well, which

I just found out will be partnering with the Jellywatch booth (hello Alex). We have been tasked with recruiting interns; so, if you don't yet have something to do, please volunteer with us! Just shoot me an email

Email: nmcmiller@mbari.org

Posted by nmcmiller at Jun 27, 2013.

My how this week has flown by. I have made progress on the biology side of my project, but really need more hours in the day to get the bench top set up for my ECO puck/LISST-100 experiment going. At the end of last week I met with Jim and Denis about a possible flow-through system, and this week I seem to be adding new pieces to my project. Today I discussed culturing options from here through next week with Sebastian. It turns out that a social life is not conducive to growing phytoplankton...as I will need to come in tomorrow and at least one other day this weekend to continue monitoring their growth.

I ran another DAPI stain this week and visualized some of my plankton, both for photography and top be sure the samples are pure monocultures. Today I am counting cells on the hemacytometer to compare against the counts that Sebastian obtained from the flow cytometer for my Micromonas sample this morning. Someday soon (next week?!) I will have my bench top set up ready and can perform all of my methods in a single day, then I'll have tons of data to compare. I have to keep reminding myself of the end-goal so I can stay focused and not think of more pieces to add to the puzzle.

I'm in a wedding on Open House weekend, have a blast everyone!

Posted by dwyse at Jun 27, 2013.

This week I have been manually looking at figures to watch for interesting, or rather peculiar patterns in parameters. I have been recording all of them, and categorizing them to their respective transect so that it wouldn't seem to be all over the place and wouldn't misjudge the results based on the pattern; not knowing they belong to different location on the bay. I should be done with this today, and hopefully start venturing in data concatenation of LRAUV data, also looking at couple of glider data from CenCOOS. I went on the Rachael Carson trip with Ben, and it was great; got to see the 3715th dive of the Ventana and chilled out in the control room. Although I sort of dozed of couple times, not because it was boring but the seats were really comfortable. Dylan, Nettie,Alba, Wilson and I were in the land watch panel today, and to be honest it was a great experience. Those students put so much effort to procure all their resources in 5 hours total and proceeded to advocate their part of the argument. Some of them have never presented in public, and they did an amazing job for first timers. It might be a little selfish of me to volunteer again, but guys>>READ THIS

VOLUNTEER FOR THE LAND WATCH PANEL, it is pretty awesome.

Have a great weekend guys, cheers.

P.S. BOG won't have a booth for the open house, so Alba and I will be available to volunteer wherever we are needed

Posted by vg at Jun 27, 2013.

This week started with lunch on monday with Anela Choy, Kendra and George. We talked about grad school, transition from a masters to PhD, life in Hawaii and all the clichés surrounding it, PhD comics, and life after PhD. The "what are you planning to do after you finish your PhD" question came up, with the typical answer as well (from Anela and myself).

I've met with my mentor several times this week, since he's going to be gone for two weeks starting on sunday. We refined some equations, calculations, and redid graphs. I've decided to park the Atlantic thing for a while, since I'll definitely won't have time for that now. Either I concentrate on the initial stuff or I won't finish anything at all (it's thursday, and I really don't now where the other three days of the week went). I'm putting together the graphs I have for now, and I'm starting to write the materials and methods section of my paper.

The behind the scenes at the Aquarium was amazing!!! I love it there, it's all so well conditioned, organized and explained. I couldn't have imagined that each exhibit needs at least 3 years of work before the actual exhibit becomes a reality. I loved the feeding of the open ocean tank! And I really liked the behind the scenes of the jellys. The YWIS boogie boarding activity was very fun as well, looking out for

the little girls out in the ocean enjoying themselves. And today I went to the land watch panel, were I got to hear the talks of some high school kids from Watsonville. I really like this on-the-side activities, they make you reach out into the public to make it a win-win situation: you gain from the people you're teaching or listening to, and you give a little bit of your experiences to the people around you. So cool!

Plus, I got two free bags in two days! And breakfast! And pizza! And lunch on monday! Yay!

Oh, and Francisco hasn't said anything about Open House... I guess I'm free?

Posted by albacv at Jun 27, 2013.

I have finished programming the microcontroler with PUCK protocol v1.4, and today it has been tested by my mentors and me executing simple command lines. Now it's time to start developing a program capable of executing all this simple command lines, and this way be able to test PUCK compliance with only one software API developed in C programming. I have started working on this development, and I've done a preliminary draft of the flowchart that it should follow in order to test v1.4 compliance. Next week I will start with the main functions described on this flowchart, thereby I would have a base program to follow working on it.

On Wednesday I went to MBA, to "behind the scenes" visit. We were able to see how the aquarium manage the water distribution systems and how they maintain in perfect state, and feed most of the marine animals on there.

I have no current assignment for Open House

Posted by opallares at Jun 27, 2013.

Busy week this week. We finally got one of the imaging systems, the LISST-100x off the AUV, so will hopefully start benchtop work with that soon. I've also been looking at some of the past LOPC and SHA data to see if there are any correlations, as this could help a lot with determining how sensitive and accurate the method are. I've also been making a batch of new capture probes for SHA, including some for mussels, barnacles, and a variety of copepod groups. We're also hoping to start using Pseudo-nitzchia australis with zooplankton to test the confounding factor large clumping/chain forming particles will have on the optical and molecular signals from a sample.
Outside the laboratory, the behind the scenes at the aquarium was really cool, between getting to see the open sea anchovies fed and the filter room down below. I also had a lovely lunch with the seminar speaker who threw out some cool ideas that I will probably incorporate into my thesis in the fall.

For open house, I am planning to help with a microscope displaying plankton with one of my mentors. Another great week, and things are just getting busier.

Posted by hfbennett at Jun 28, 2013.

28-July-2011

This page last changed on Apr 29, 2013 by kgomes.

Wow.. Week 7 is upon us! Linda and George are taking off, but please do post your update as we hope to be able to check in from afar. There will not be an intern meeting on Monday Aug 1. George will be back on Weds sometime - not sure when I'll get into work. Have a good week.

28-June-2012

This page last changed on Apr 29, 2013 by kgomes.

test

29-July-2010

-

05-August-2010

This page last changed on Apr 29, 2013 by kgomes.

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12-August-2010

This page last changed on Apr 29, 2013 by kgomes.

-

30-June-2011

This page last changed on Apr 29, 2013 by kgomes.

The last week has been really interesting, and as usual very fast paced!
This Week:

- Read about Ocean Acidification
- Plotted pH and O2 mooring data and looked for a correlation with physical parameters
- Researched aquaculture companies in the CenCOOS region, and data platforms near the farms.
- Designed a survey for shellfish growers at next weeks workshop.

Next Week:

Attend a workshop on ocean acidification and shellfish growing. Ask lots of questions, and meet lots of people. Take careful and complete notes!

Activities

This page last changed on Apr 29, 2013 by kgomes.

Use this page to post information about after-hours activities

• June -August - Films in the Forest (http://www.foresttheaterguild.org/index.cfm/films.htm)
• June 17th - Center for Ocean Solutions seminar down in Monterey - "Suing the Service: litigation strategy to end the No Otter Zone"
• June 21st - kayaking with Monterey Bay Aquarium and students from Pajaro Valley High School - part of the Watsonville Area Teens Conserving Habitats (WATCH). 930-1130 followed by a short presentation by you at MBARI. Need four - so far: Rebecca, Hana
• June 25th - Tim Thomas - "The Last Whale Hunt and Other Fishy Storees"; Pacific Grove
• July 18th - Moss Landing Antique Street Fair (http://www.monterey- bay.net/ml/special_events/street_fair.html)
• July 23rd - 31st - Pacific Grove's Feast of Lanterns (http://www.feast-of-lanterns.org)
• August 5-8th - Steinbeck Festival (www.steinbeck.org)

Films in the Forest

This page last changed on Apr 29, 2013 by kgomes.

Films begin at dusk, and no film is longer than 2 hours. The theater opens at 6:30pm if you care to picnic. Admission is $6.00 for adults and children under 10 are free. Movies are subject to change without notice. Come early; a pillow is recommended for the hard bench, and dress warmly. The concession stand is open through intermission serving popcorn, desserts and beverages hot and cold. All profits benefit the Forest Theater Guild and The Michel Willey Youth Scholarship Fund. The Forest Theater is a non smoking facility, absolutely.

The 2010 Films in The Forest Program is a labor of love of Susan Willey & Megan Terry. The Guild wishes to acknowledge both Susan & Megan for their leadership, support and commitment to the success of the Forest Theater Guild. A portion of the proceeds of this program shall contribute to the Michel Willey Youth Scholarships.

Please visit the Films in the Forest website at www.filmsintheforest-carmel.org.

Tuesday, June 15
THE JAZZ SINGER sponsored by Visions Graphic Design & The Doggie Gazette

Wednesday, June 16
SLEEPER sponsored by The Beach Crowd

Thursday, June 17
CASINO ROYALE sponsored by Forest Theater Guild

Tuesday, June 22
VICKY CHRISTINA BARCELONA sponsored by Inns-by-the-Sea

Wednesday, June 23
CITY SLICKERS sponsored by Blue Adobe Mortgage

Thursday, June 24
LA CAGE AUX FOLLES sponsored by Wells Fargo Home Mortgage

Tuesday, June 29
REVENGE OF THE PINK PANTHER sponsored by Carmel Kiwanis

Wednesday, June 30
MOONSTRUCK sponsored by Kelly Productions

Tuesday, July 6
GOLDFINGER sponsored by Pine Inn

Wednesday, July 7
OCEAN'S 11 sponsored by Friends-of-Film

Thursday, July 8
MEN IN BLACK sponsored by Bank of America Home Loans

Tuesday, July 13
THE PRESENT surf documentary sponsored by Liquid Surf Shop

Wednesday, July 14
BEETLEJUICE sponsored by The Beach Crowd

Thursday, July 15
SHAPED local premiere of a documentary by Walter Georis sponsored by Carmel Valley Art Center

Tuesday, July 20
HAROLD AND MAUDE sponsored by Holly's Noir Night

Wednesday, July 21
MAMMA MIA sponsored by Keller-Williams Realty

Thursday, July 22
SHREK sponsored by Pebble Beach Company

Tuesday, July 27
HOTEL FOR DOGS sponsored by Diggidy Dog and Carmel Drug Store

Wednesday, July 28
MICHAEL JACKSON'S "THIS IS IT" sponsored by Carmel Stamp & Coin Shop

Thursday, July 29
ARTHUR sponsored by J. Lohr Winery

BBQ

This page last changed on Jul 01, 2013 by dwyse.

Test

News

This page last changed on Apr 29, 2013 by kgomes.

This page can be used to post information that might be of interest to all interns.
Please begin each entry with the posting date.

-

Opportunities to Go to Sea

This page last changed on Apr 29, 2013 by kgomes.

If you are interested in getting out on one of the ships, you may be able to go on one of the following dates. More dates will be added, so keep an eye on this page! Let George or Linda know if you are interested (as far ahead as possible).

• June 17th - Melissa, Spencer, and Hank - need to be at dock by 0630
• June 18th - Point Lobos - Chaffey; Roman and Katie
• June 22nd - Point Lobos - Rebecca
• June 24th - Point Lobos trip: Aaron and John
• July 1st - Benthic ROV Cruise (six spots available); contact Linda or George if you are interested. Hana, Bartolome, Daniel, Sara, Katherine, Matthew

- July 1st - Zephyr - Sandeep

still need to get on the boat:

Isobel, Sandeep, Christopher

Before going out to sea (ask Linda if you have questions; there is some on her desk near the phone):
Dimenhydrinate (50 mg) - same thing as Triptone or Dramamine: 0.5 to 1 tablet before you go to bed

In the morning:
Another 0.5 to 1 tablet as soon as you get up (this needs time to work - if you wait until you are on the boat, it is way too late) along with 1 caffeine tablet.
Eat something bland like bananas , graham crackers, saltines, Ensure
NO coffee or juice (too much acid)

Four hours later (depending on how you feel - if it is very calm out there, you might be able to skip this)
Another 0.5 to 1 tablet, and 1 caffeine tablet
Eat something bland like bananas , graham crackers, saltines, Ensure
NO coffee or juice (too much acid)

Schedule

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• MBARI closed: June 18; July 2, 5, 6, 16, 30; Aug. 13.
• June 14th - MBARI interns arrive and start their program
• June 14th - Summer Intern Cookie Break
• June 15th - MBARI Blood Drive
• June 16th - Glenn Chen Seminar
• June 17th - Center for Ocean Solutions Policy Seminar
• June 21st - Kayaking with MBA. 9-1130
• June 21st - Intern Meeting 0830-1030 in Tank View Conference Room
• June 21st - Project update. Josi Taylor
• June 28th - Proposal Workshop 11-12 in Pacific Forum, Linda in San Francisco
• June 29-30 - Day of Science, Engineering, and Technology/ MBARI Board meeting
• July 5th and 6th - MBARI holidays
• July 7th - Ari Shapiro Seminar
• July 11-16 - George out of the office
• July 12th - Project Update. David Clague. Submarine Volcanism
• July 19th - Project Update. Gene Massion. McSTAR, Linda in Washington DC (19-21st) for Deep-sea coral workshop
• July 21st - Interns host BBQ, Mark Abbott Seminar
• July 28th - Dijanna Smotherman Seminar
• July 31st - MBARI Picnic
• August 1st - MBARI Golf Tournament
• August 2nd - Project Update. Andreas Hofmann. Anthropogenic Ocean Acidification
• August 4th - Amber Mace Seminar
• August 14th - MBARI OPEN HOUSE
• August 18th - MBARI Intern Symposium at MBARI

DOEST Agenda

This page last changed on Apr 29, 2013 by kgomes.

looks better in the attached pdf

AGENDA
Day of Engineering, Science
and Technology
Tuesday, June 29, 2010
8:45 a.m. - 4:00 p.m.
Pacific Forum (except as noted)

Theme: Looking to the Future
Time Title Presenter(s)
8:15 - 8:45 Breakfast
8:45 - 9:00 Introduction Chris Scholin
President and CEO
MBARI Pushing the Envelope
9:00 - 9:30 Controlled, Agile and Novel Observing
Network (CANON) Francisco
Chavez
Senior Scientist
9:30 - 10:00 Vision for the technologies
of the future
Jim Bellingham
Chief Technologist
10:00 -10:30 Data from the depths around the clock
(MARS)
Craig Dawe
Technical Support Manager/
MARS Manager
10:30 - 11:00 BREAK
11:00 -11:30 The ocean in a high CO2 world,
from deep to shallow
Peter Brewer
Senior Scientist
11:30 - 12:00 How do we observe biogeochemical
cycles at the global scale in a
changing world?
Ken Johnson
Senior Scientist
12:00 - 1:00 LUNCH - Pacific Forum
Persistent Presence
1:00 - 1:30 Group 1 (Test Tank)
Long Range AUV
CANON Field tools
Moored ESP
Group 2 (Building D High Bay)
Benthic Imaging AUV
MBARI new vessel designs
Brian Kieft
Software
Engineer
Thomas
Hoover
Instrumentation
Engineer
ESP Team
Brett
Hobson
Mechanical
Engineer
Keith
Raybould

Chief Operations
Officer
1:30 - 2:00 Group1 and 2 switch
2:00 - 2:30 BREAK - Walk back to the Pacific Forum
A Look Forward
2:30 - 3:00 Extending an autonomous presence
(wave-powered buoys
and AUV docking)
Andy Hamilton
Systems Engineer
3:00 - 3:30 Ocean visualization
Dave Caress
Software Engineer
Brian Schlining
Software Engineer
Brett Hobson
Mechanical Engineer
3:30 - 4:00 Exploration and discovery: careful
plans and serendipity
Bob Vrijenhoek
Senior Scientist
4:00 - 6:00 Allhands reception in Atrium
Posters in the Pacific Forum
? Sediment traps and ROV operations under
icebergs
? High-Resolution AUV Mapping Reveals
Structural Details of Submarine Inflated Lava
Flows
? Topography within the axial channels of
Monterey and Soquel Canyons
? Development of a High-Resolution Shallow
Seismic Refraction Tomography System at
the Monterey Bay Aquarium Research
Institute
? Distinctive Fine-Scale Morphology of Hydrate
Ridge
? Fine-Scale Morphology of Gas-Rich Sites on
the Cascadia Margin Near Bullseye Vent
? Fine-Scale Morphology of West Mata Volcano
and the Northeast Lau Spreading Center, Lau
Basin from AUV Multibeam Surveys
? Connecting an Ocean-Bottom Seismometer
to a Seafloor Cabled Observatory: A
Prototype System in Monterey Bay
? Development of in situ Respirometers for
Ocean Acidification Studies
? Time series analysis of six whale-fall
communities in Monterey Canyon
? Cataloguing biodiversity in the deep-sea:
tools, techniques, and challenges
? Remote Detection of Marine Microbes and
Functional Genes Using the ESP
? Brett Hobson
? Dave Clague
? Eve Lundsten
? Rich Henthorn
? Charlie Paull
? Hans Thomas
? Dave Caress
? Paul McGill
? Michael Risi, Craig Okuda,
Bob Herlien
? Kyra Schlining
? Nancy Jacobsen Stout

? ESP Team member

This Week

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WEEK TEN
9 am Test Tank

I. Review, preview, and updates

- Presentations: easiest to use Tempest/PacificForum for your presentations - check to make sure that they work.
- Future: Addresses and updates
- Presentations: easiest to use Tempest/PacificForum for your presentations - check to make sure that they work.
- Pronounciations?

II. Individual updates

- ? Check confluence for updates MISSING: ROMAN, JOHN, IZZY, AARON

III. Past events

- A. August 10th - Katie Lodes (10 am)
- B. AUGUST 14TH - MBARI OPEN HOUSE

IV. Upcoming events (see MBARI calendars and/or intern calender)

- A. Moving out
- B. Inventory
- C. Departing - rides?
    - Sandeep
- D. Intern T-shirts
- E. 2 hard copies, 1 electronic copy (my tempbox), id card, key card, evaluation....
- F. INTERN SYMPOSIUM

V. Seminars coming up

- B. August 17th - John Horne (1 pm)
-     - George will be leaving early most of this week (rehearsals)

4th August 2011

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