STATION 3

Hola Silvia/Isabel,
Podeis enviar este mail a Colomban, Eric, Chris, etc... please.
Para contactar conmigo enviar a esta direccion con subjetc: 'For Hugo'

Hi all,
Today (13/0/2009) we have made our first sampling point (Station 3).
Globally, it went fine but unfortunately Margaux was seasick, unable to work.
We have done:
- CTD
- Practically everything of Virus and Bacteria on the subsurface sample (pump).
- 2 net hauls (300µm) one horizontal and one vertical.
- Protists were a bit neglected, but we still made some RNA/DNA samples

We have also tried to make DCM sampling with Nisking bottle and with the pump.
Actually we only have 45m of tube on board, not 60m!
The DCM today was at 85m!
This means that we can not reach the DCM with the tube (the work on the deck was quite complicated as well)
With Nisking bottles we will no have 400L very easily (only 10L at the time)! Moreover, the work in the deck putting the bottles one by one is risky … Another problem is that we are not sure of the depth we sample until we check the CTD profile once the water is on the deck.
I think that the program is quite charged; we started at 11h00 and finished ~21h (almost non stop), only for surface sample.
I know it is only the first sampling but I am pretty sure that the whole program is not achievable in less than (at least) 48h per station.
For this reason I decided to concentrate efforts in the subsurface sample. But for the future, even with a full functional team, we really need to review our pretentions; what can we do:
- Stay longer at a sampling point ???
- Put more scientists on board ???
- Reduce the number of replicates???
- Reduce the number of depths???

For the composition of future crews it seems to me that it is primordial that each of the scientists has competence on one of the domains (prokaryotes/viruses, protists, metazooplankton); It is difficult to imagine that someone who studied the protocol to filter for RNA or DNA will also take care of the bongo's etc… It is just too much the timings are physically impossible in 24h.
I also think that there will be a lot seasick people (at least the first days on board), and we must have a plan B in those cases.

Detailed list of problems detected:
- no balance to prepare the solutions for virus precipitation
- no filters 0.02 for virus qPCR (we did the alternative protocol)
- we are still waiting for some protocols from Gaby

The guys from the TV desperately need some images on the microscope, etc… I could not found how to record movies in the Zeiss we have on board. Could someone confirm that the camera can actually record movie files, please?

Hope this gives you some ideas to discuss.
For the rest, everything is fine with the crew, we saw Wales and dolphins along the way, everybody (but Margaux how is still sick) is happy on board.
We are already heading towards the station 4.
Colombain, any news from Julie???
Cheers
Hugo

STATION 4

Hi all,
We are now approaching the Moroccan coast and we will arrive soon to Tanger.
Yesterday we did the Station 4.
Starting time: 11h00
Finishing time: 23h59
We have done a quite complete sampling program, but only from surface and DCM, except pigments, BGC, virus precipitation, … all the samples are in the -80°C and in the fridge (everything is noted on the log-sheet notebook that we will pass to the next crew).
Yes, I think that we should review the amount of replicates and think about the possibility of splitting the sample after extraction.
A fair distribution of the tasks would be:
1 person for bacteria/viruses;
1 person for protists (by far the longest protocol of all, we might consider to reduce it significantly);
1 person for Girus (the shortest protocol of all) and zooplankton/Niskin (but we did not yet integrated the pigments, …)

IMPORTANT:
We have added new color codes:
Red: viruses
Blue: Bacteria
Yellow: Giruses
Green: Protists

Some detailed problems we encountered:
- We lack of plastic boxes for cryovials
- The filtration system of 47mm falls some times with rolling; we should add clamps
- We did not find tips for the 1-20 µl pipette (we have used the yellow ones, normally used for the 20-200 µl, I am not sure these are appropriated)
- We really should replace liquid nitrogen canisters by something else (in our lab we use women socks, it works really well)
- The water outlets should go directly outside the wet lab, all the water in the soil does not make a clean work environment, and it becomes really dangerous because people start to slide)

I agree with Eric, this is only for tough people. Asking for past experience on big research ships is rubbish… This has nothing to do with working in big research ships…
But undoubtedly an “once in a life time” experience.
Cheers
Hugo