

Modeler-SAB call meeting notes

5 January 2010 0900-1000 AK time

In attendance: Francis Wiese; Ivonne Ortiz; Enrique Curchitser; Nick Bond; Georgina Gibson; Al Hermann; Andre Punt; Franz Mueter; Marc Mangel; Will Satterthwaite; Kerim Aydin; Tom Van Pelt; Bill Wiseman; Mike Sigler; Carin Ashjian; Jeffrey Napp; Jackie Grebmeier. Rapporteur: Tom Van Pelt.

Agenda:

1. NPZ model and benthos field data interaction (Gibson) – Jackie Grebmeier and David Shull have been asked to join to help out
2. Follow ups from the Dec modeling meeting, specifically sub-task lists which are due 5 Jan (Wiese)

Notes:

1. Following up on one of the mid-term tasks identified at the December 10-11 meeting in Seattle, Georgina Gibson is looking for information to improve initial benthos conditions in the NPZ model. For the 'benthic box' GG thinking about using averaged numbers for each of the 'regions' we're currently defining, but wonders whether it's doable to increase resolution of initial conditions by using Grebmeier data in addition to earlier OCSEAP/PROBES data from SE Bering.

Jackie Grebmeier agrees that it's a good idea to use existing data to layer onto the ROMS grid to provide more realistic initial conditions. Can use carbon content numbers to normalize the standard detritus value that Georgina is using (i.e. where carbon content doubles, double the detritus number) which also coincides with sediment grain size where finer grain has a higher content of organic carbon and viceversa (Jackie please confirm we got it right) .

Next subtopic on this was the question of splitting infauna and epifauna within the 'benthic box'. GG is hearing from fish folks that they want a separate epifauna box, given that they're prey for fish. But model so far has infauna and epifauna binned, and GG never intended to capture epifauna separately in her model. JG notes that infauna and epifauna don't scale together, since infauna are sessile and epifauna cluster and move. Kerim Aydin noted it's a primary issue for cod; half to two-thirds of their diet is epifauna. Also that fish have a limiting, density-dependent relationship with epifauna but not infauna. Current FEAST has a single benthic box. Team agreed that FEAST will take this on; probably by adding an epifauna box with a simple rate equation that can be tinkered with to get reasonable correspondence to epifauna measurements. GG will provide a box and FEAST will wire it in; GG won't need to worry about whether it goes to crab or cod. This will add time on the months scale. KA and

team will bring this into their prioritization, looking for a place to fit it in or at least acknowledge it if no time is available to handle. If it is added it will happen after April 2010.

Next subtopic was seasonality and metric for benthic validation in NPZ; again, GG asking JG about extent of data. Began the discussion about available data and also about preferred metrics to use for validation; need more time to discuss so GG and JG will follow up after the phone call.

2. Enrique Curchitser emailed two figures showing vertical and planar views of cold pool ROMS model outputs; wants to produce bottom temp outputs in several years with divergent conditions. Franz Mueter and Mike Sigler noted that summer bottom temps have all been mapped and are available in ASCII and/or NetCDF format through AFSC and PMEL; FM followed up during the call by emailing files and links. MS noted that the current figure shows a funny-looking 'boot' of the cold pool extending south, rather than SE into Bristol Bay as is consistently seen in field observations. EC will work on this.

Al Hermann is expecting some speedup in performance in their processing cluster within a month or so; upgrading communication among nodes.

Francis Wiese reviewed the task list identified in Ivonne Ortiz's notes from the 10-11 December meeting in Seattle. Have not heard any edits or corrections therefore assume that all participants understand and agree to the timeline and task lists. For short-term tasks and schedules, have received some as requested but still waiting on a few.

JG will draw northern regions onto the region map by hand and will send to Ivonne; Angie Grieg who is doing the GIS version will convert the hand-drawn boundaries into georeferenced boundaries. Some discussion about Norton Sound; is it part of the modeling work? IO points out that current inclusion of Norton Sound is mainly part of process to justify excluding it from final modeling work—very interesting place but basically out of the scope of our effort for now.