EARTH Brainstorming session – 2016

Elizabeth⎯Victoria; big long float, tethered buoys, having kids make a model, helping solve the problem of putting a camera on the surface

Eliz⎯Adam’s work…building models. Long stream vs. short stream

Eliz⎯camera imagery as data set

Alia & Olivia⎯fresh water Antarctic diatom database: water temp + conductivity affect diatom productivity, area/location, heterogeneity, native vs. invasive diatoms, USGS stream gage data. “Can you gage it?”

Marc⎯SOCCOM project, intriguing technology, free-floating floats deployed in southern ocean; integrating what’s happening in S. Ocean WRT photosynthesis with world current structure, visualization, missions to deploy = blogs, adopt a float

Jillian⎯connect concepts with reservoir system, design equipment/model for freshwater system, where are fish in the water column, relate to fisheries

Nancy⎯LTER, freshwater LTER, set up own monitoring that lasts over years within the school; project NOAH

Miriam⎯SOCCOM data offshore from Dotson ice sheet, temp/sal readings ahead of glider data to compare

Steven⎯based on archive lessons like Atl vs Pac, look at Arctic vs Antarctic. Similarities and differences

Jayne⎯open project given LTER database, each group study a different LTER and look through data for something that interests them, analyze data and give presentation, some genetics connection (to come)

Jeff⎯Oscar – penguins diet changes silverfish to krill, how does that impact the food web and the other penguin populations, idea of penguins focus on one type of prey

Kathy⎯food web idea, simple food web of the streams, glaciers, and cryoconites (holes). Maybe compare to oscar’s food web info.

Katie⎯gliders, using data from Oscar and bob and travis, look at how gathering data at one point might miss the big picture, like battleship. 2006/2010 glider data, Logan’s genetics, Victoria’s colour data, Adam for statistics. Phew!

Mary Ann + Brenda⎯Adam’s dry valley vs rest of Antarctica, looking at ecosystem issues

Jayne⎯dry valley vs. mars, looking at data to compare, using dry valley as prototype; bob’s link panoply has some astrobiology info

Nancy⎯sea ice is 90 days shorter…ice cube lab to see how melting is affected

Joanna⎯skills: creating case studies, analyzing graphs, looking how scientists work together and communicate

Beth⎯getting a bunch of graphs for kids as a teaser and asking them to explore and interpret and make connections; interpreting graphs; pictures and diagrams and other visuals

Helen⎯STEM/modeling /engineering; density activity using models of floats where they have to change buoyancy, etc.; stomp rockets glider contest

Bob⎯is the ocean changing? CLIVAR/WOSE data set and pick a N-S (P16s) 1992, then get the reoccupation of same line and see how it’s changed in the upper Km of the water column. Changes in O2, total CO2, etc. (can correct CO2 for biology, etc.). Panoply can make some pretty pictures. Pick 5 diff location and grab data.

Donna⎯broad activity where you can give them scientist profiles, separate data profiles…match the scientist with the data, find some local scientists if available