Homework 1 – 'Playing with ODV and Google Earth'

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Homework is due Monday, May 16, Submitted electronically to emmanuel.boss@maine.edu

On the class web site you will find 4 CTD files collected by SMS303 in 2006 in the Damariscotta river together with a log file (you played with the data from 9/13/2010 in class, which is also on the class's web site.).

Answer the following two questions:

- 1. How are the data consistent with other estuaries based on the lectures you have heard on Thursday?
- 2. Compare the distributions of temperature, salinity and density between 9/13/2006 and 9/18/2010.

To do so:

- 1. Use Google Earth to map the stations in the Estuary (you can use another software for mapping if you prefer).
- 2. Prepare a text file with the 2006 data, similar to that which you got for 2010.
- 3. Plot transects for both years.

Feel free to work on the homework in groups. HOWEVER, each student should submit an INDIVIDUAL homework, in his/her own voice. Identical homework will result in decrease in grade.

Homework should include: A map figure with stations on it. Figures of property transects with overlaid contours (make sure to add units to plots). Analysis of similarities and differences in distribution (e.g. North to South and surface to depth gradients, average property values).

Homework should be not longer than 5 pages.