

# Halifax Harbour Water Quality Monitoring Project

## Weekly Report #48

**Survey Date:** 17 May 2005  
**Nature of Survey:** Coliform Survey  
**Report File (this document):** HHWQMP\_report048\_050517.doc  
**Data File:** HHWQMP\_data048\_050517.xls

**Data Return:**  
 Profile: 94%  
 Bacteria: 96%  
 Chemical: na  
**Overall: 95%**

**Sample Notes:**

Site SYC missed due to diving operations in the area.

Site B2 CTD data was missing from the instrument. This is most likely due to a failure to turn the instrument on at all, or perhaps the switch was not slid all the way on.

**QA/QC samples:**

**Fecal Coliform (CFU/100ml)**

Site	B2-1m	PC-1m	H1-10m	F3-1m
Reference	1	620	68	9
QA/QC	0	540	38	14

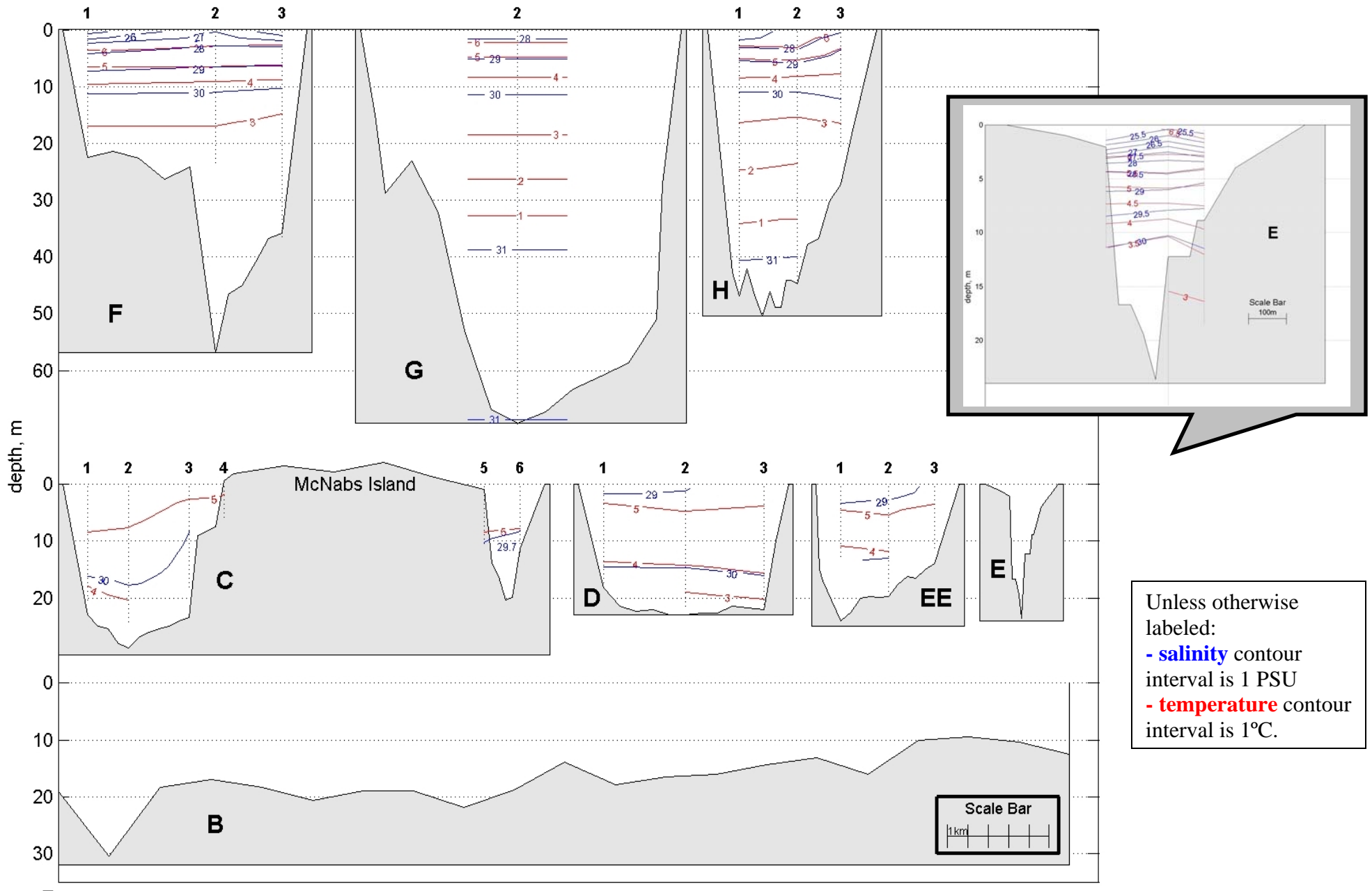
**Comments:**

Dissolved Oxygen: Throughout the Harbour, the dissolved oxygen levels in the surface water (< 20 m) are very vertically uniform. There is a slight trend from the lowest values in the Basin (approx 8.3 mg/L) to the highest values at sections D and C (B data missing) of around 8.8 mg/L. The bottom waters of Bedford Basin are starting to show some oxygen depression, reaching approximately 7.5 mg/L at a depth of 45 m and a minimum of approximately 7 mg/L at the bottom (70m).

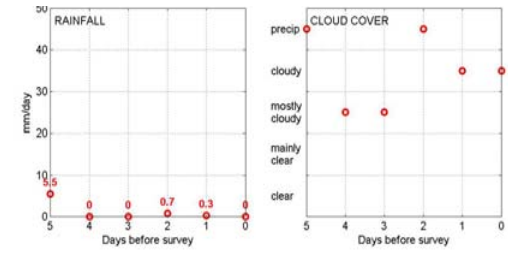
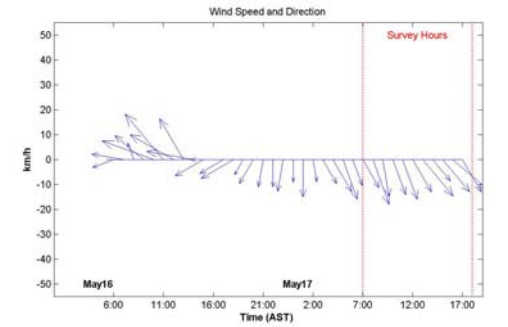
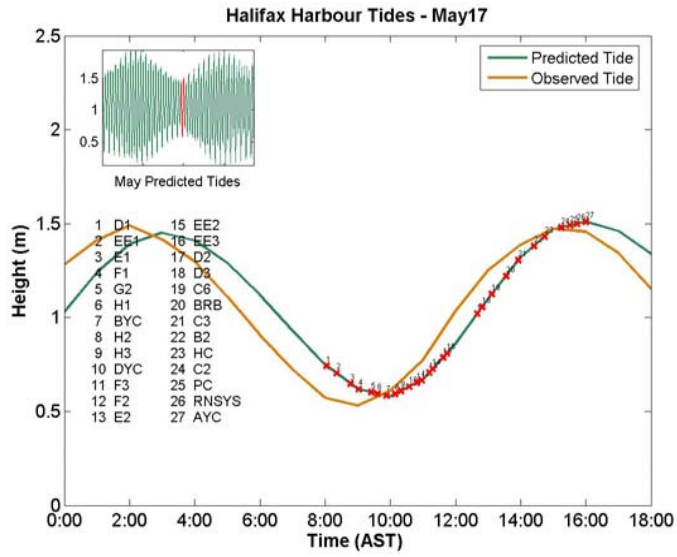
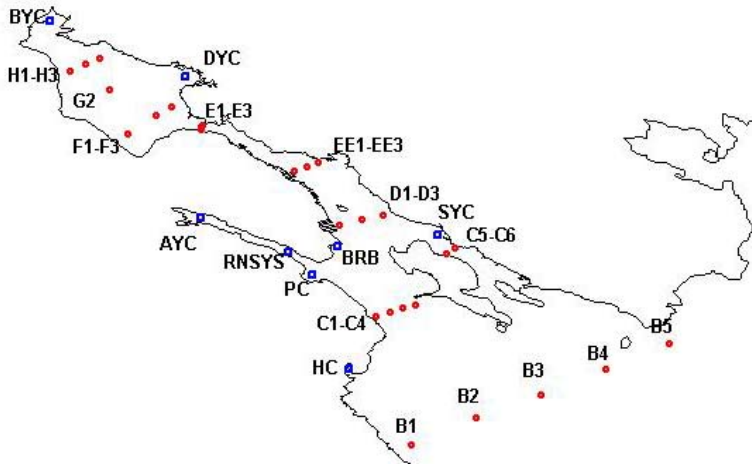
Chlorophyll-a: Chlorophyll-a values are relatively low in the Basin (<3 mg/m<sup>3</sup>). There is an area of somewhat elevated levels (maximum approximately 7 mg/ m<sup>3</sup>) in the inner Harbour (sections EE and E) at a depth of about 5 to 7 m.

General: The large stratification event evident last week has dissipated significantly. There is a lens of slightly fresher water along the western side of Bedford Basin; however, the maximum stratification appears to be at sections E and F. This is possibly due to the effect of local input of fresh water near the Narrows. The fecal coliform levels are quite high in the surface waters of the inner Harbour but do not extend far in either direction. The Basin has resumed the more usual pattern, with higher bacteria levels in the 10 m samples.

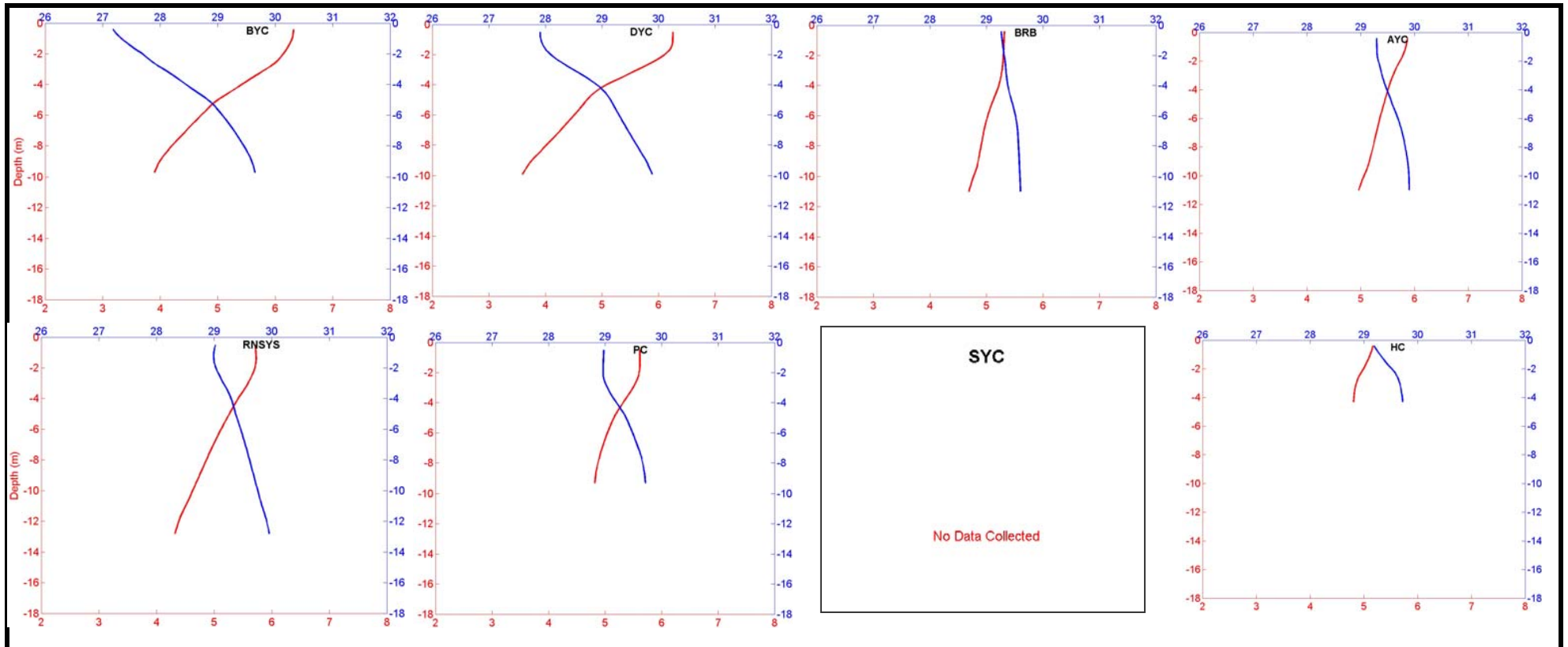
TEMPERATURE-SALINITY CONTOURS



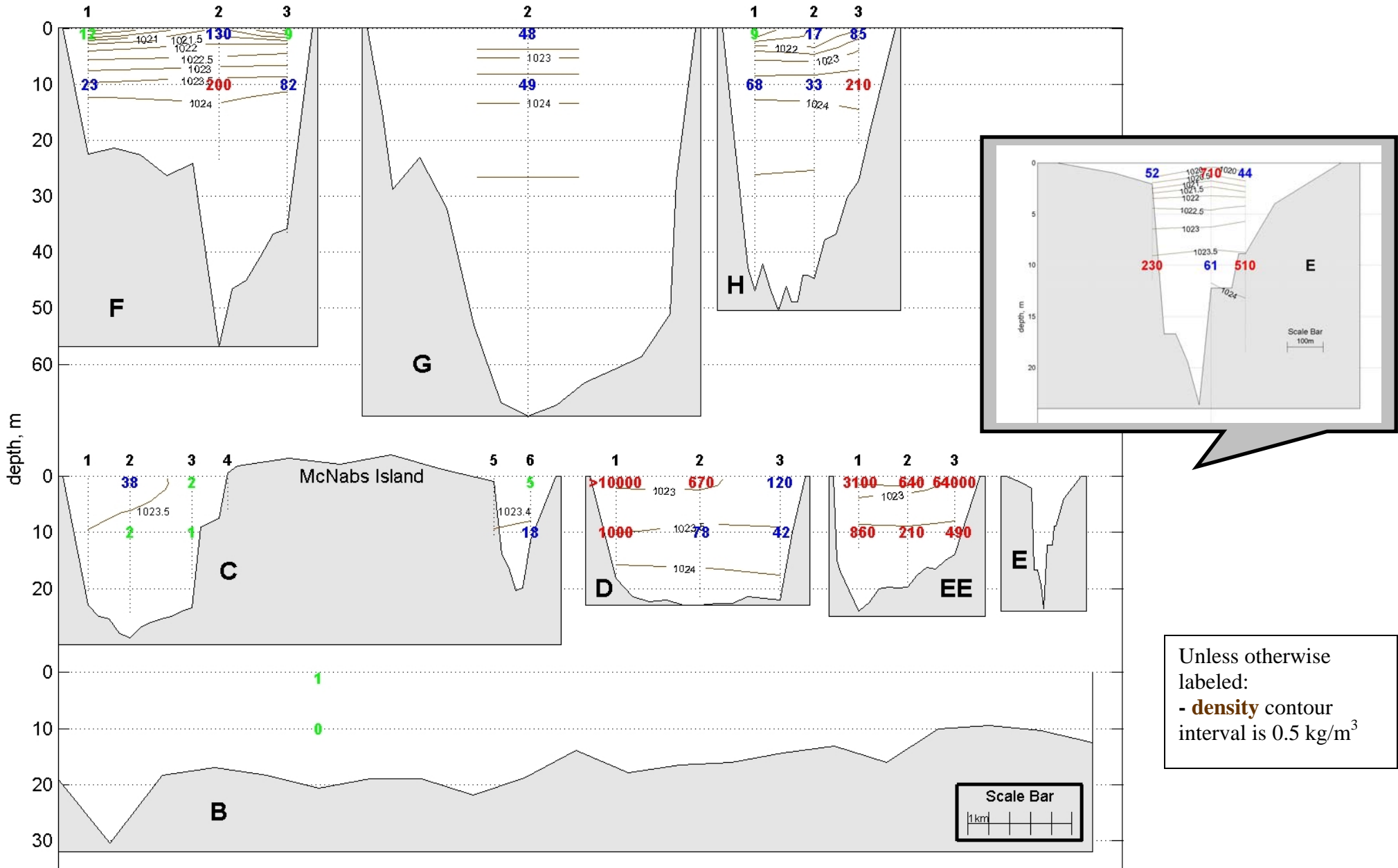
Unless otherwise labeled:  
 - salinity contour interval is 1 PSU  
 - temperature contour interval is 1°C.



## Yacht Clubs

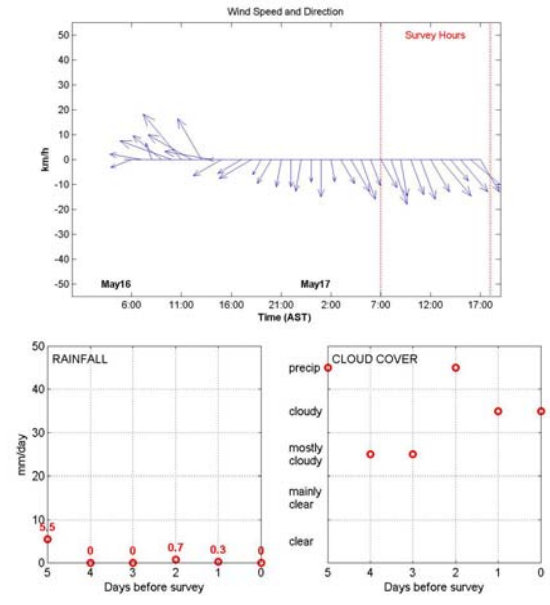
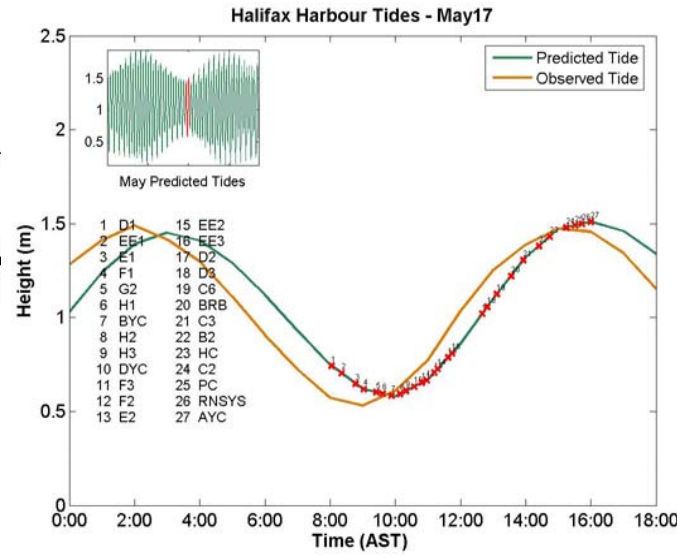
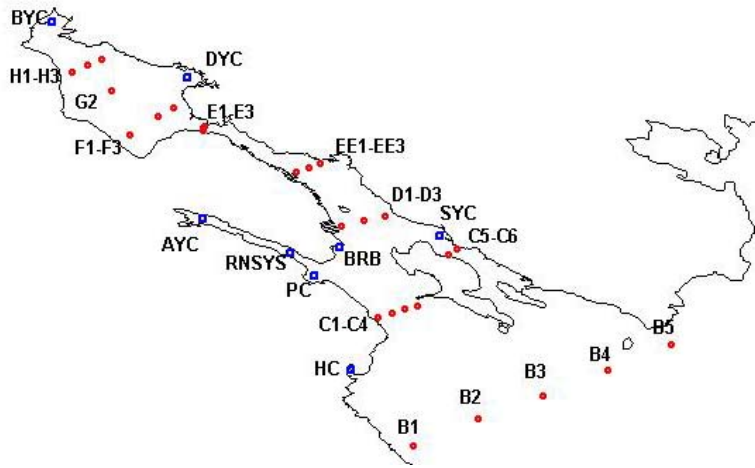


Salinity in PSU      Temperature in °C

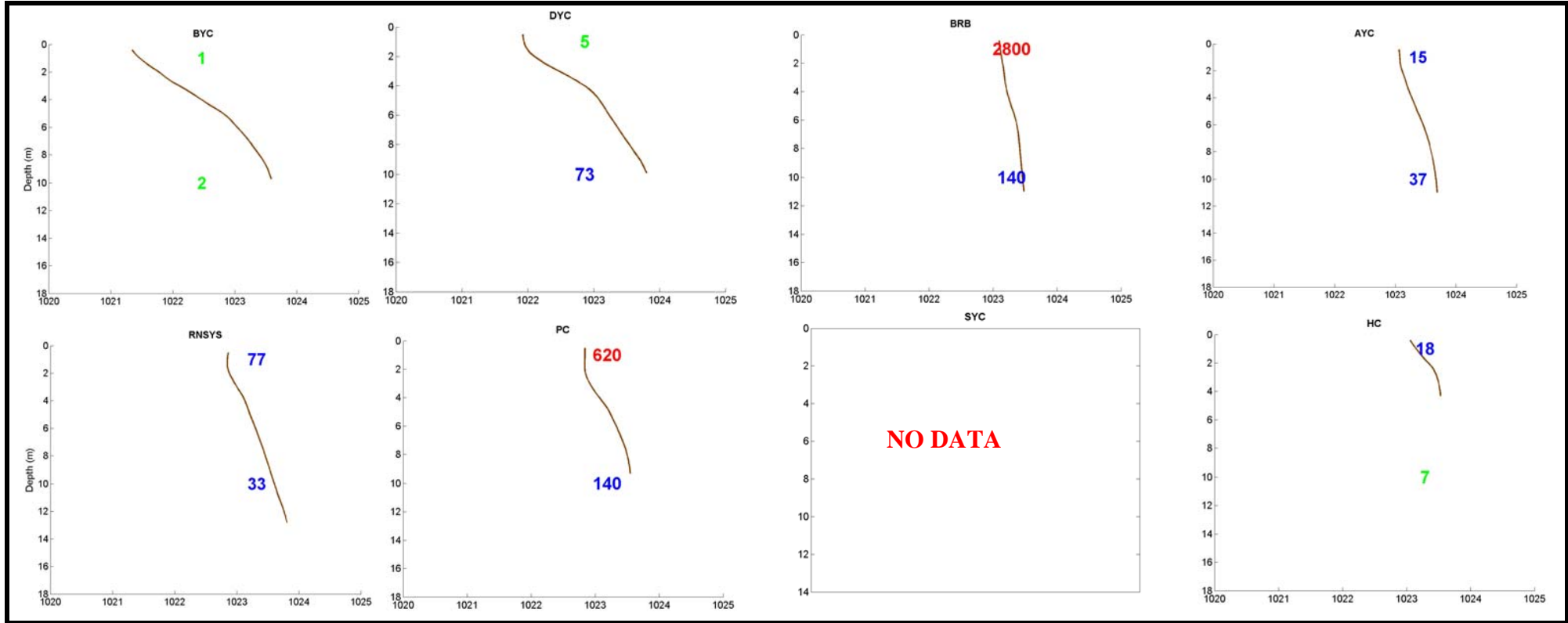


Unless otherwise labeled:  
 - **density** contour interval is 0.5 kg/m<sup>3</sup>

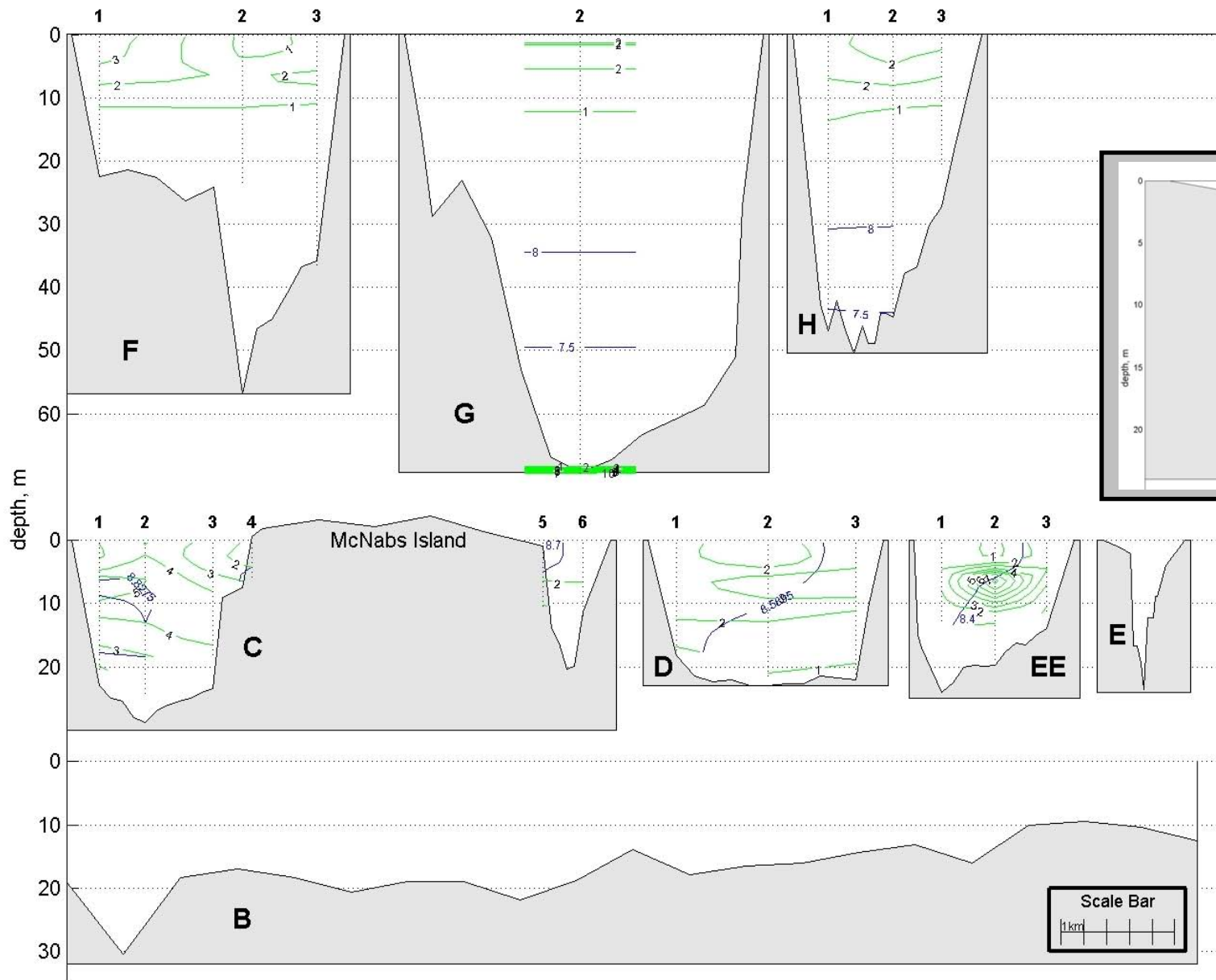
**Density in kg/m<sup>3</sup>**    **Fecal coliform:** **above swimming limit (200 cfu/100mL)**  
**above shellfish limit (14 cfu/100mL)**  
**below limits**



## Yacht Clubs

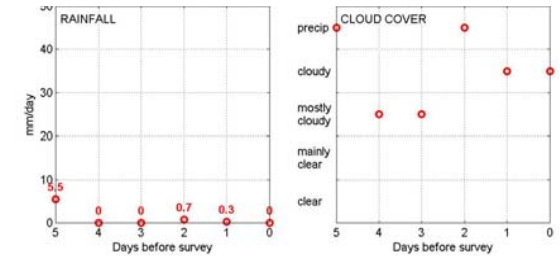
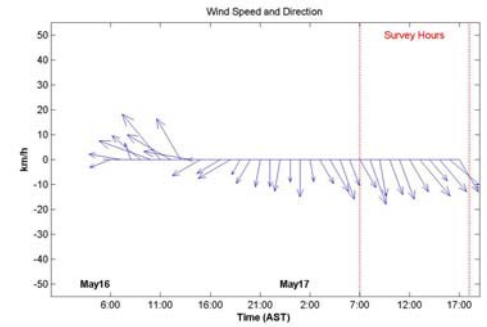
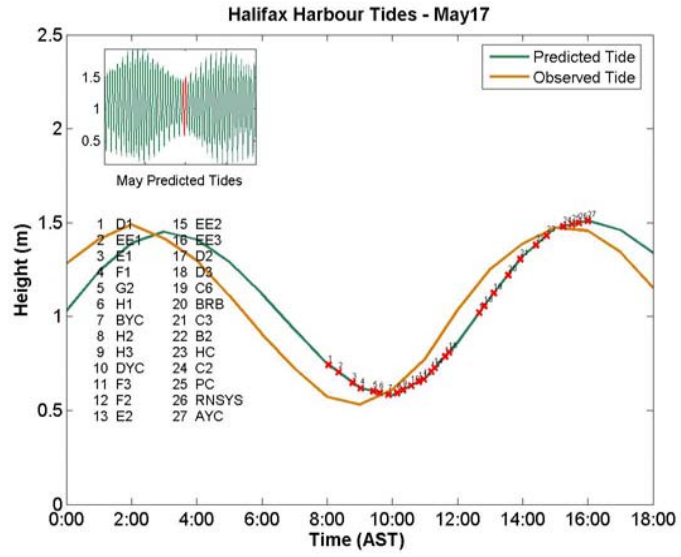
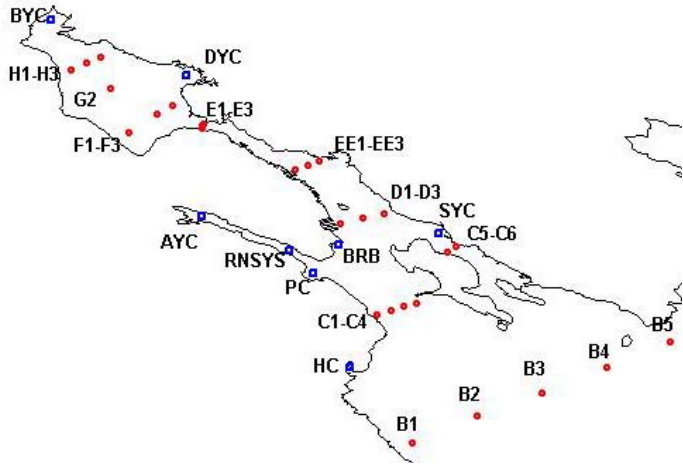


**Density in kg/m<sup>3</sup>**      **Fecal coliform: above swimming limit (200 cfu/100mL)**  
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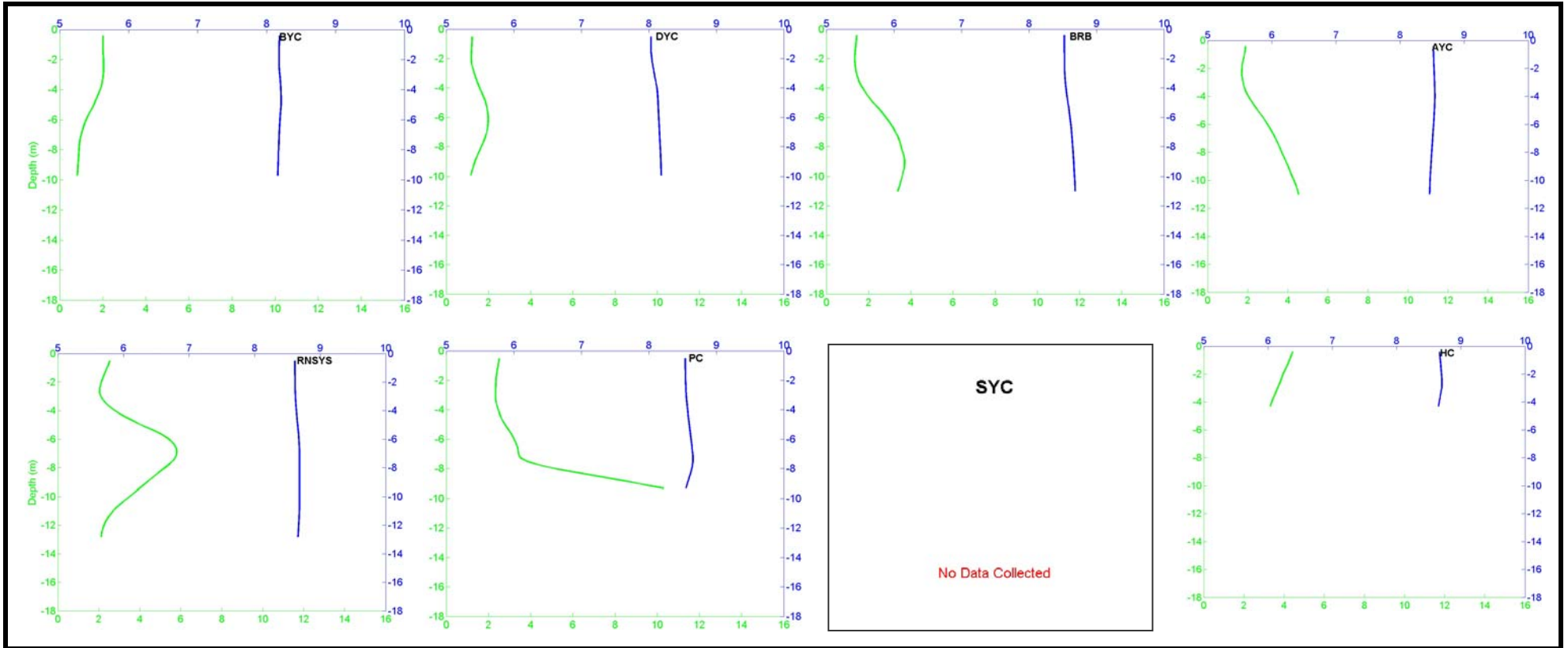


Unless otherwise labeled:  
 - **dissolved oxygen** contour interval is 0.5 mg/L  
 - **chlorophyll** contour interval is 1mg/m<sup>3</sup>.





## Yacht Clubs



DO in mg/L

Chlorophyll in mg/m<sup>3</sup>