

Halifax Harbour Water Quality Monitoring Project Weekly Summary #56

Survey Date: 13 July 2005
Nature of Survey: Coliform Survey
Report File (this document): HHWQMP_report056_050713.doc
Data File: HHWQMP_data056_050713.xls

Data Return:
 Profile: 97%
 Bacteria: 96%
 Chemical: na
Overall: 97%

Sample Notes:

Site EE1 missed due to diving operations in the area.

QA/QC samples:

Fecal Coliform (CFU/100ml)

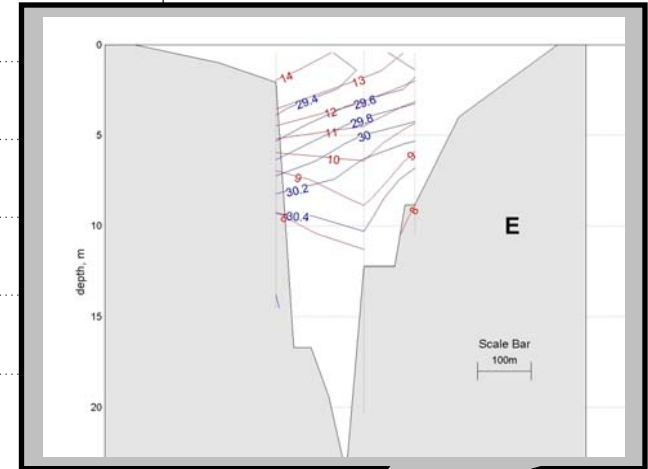
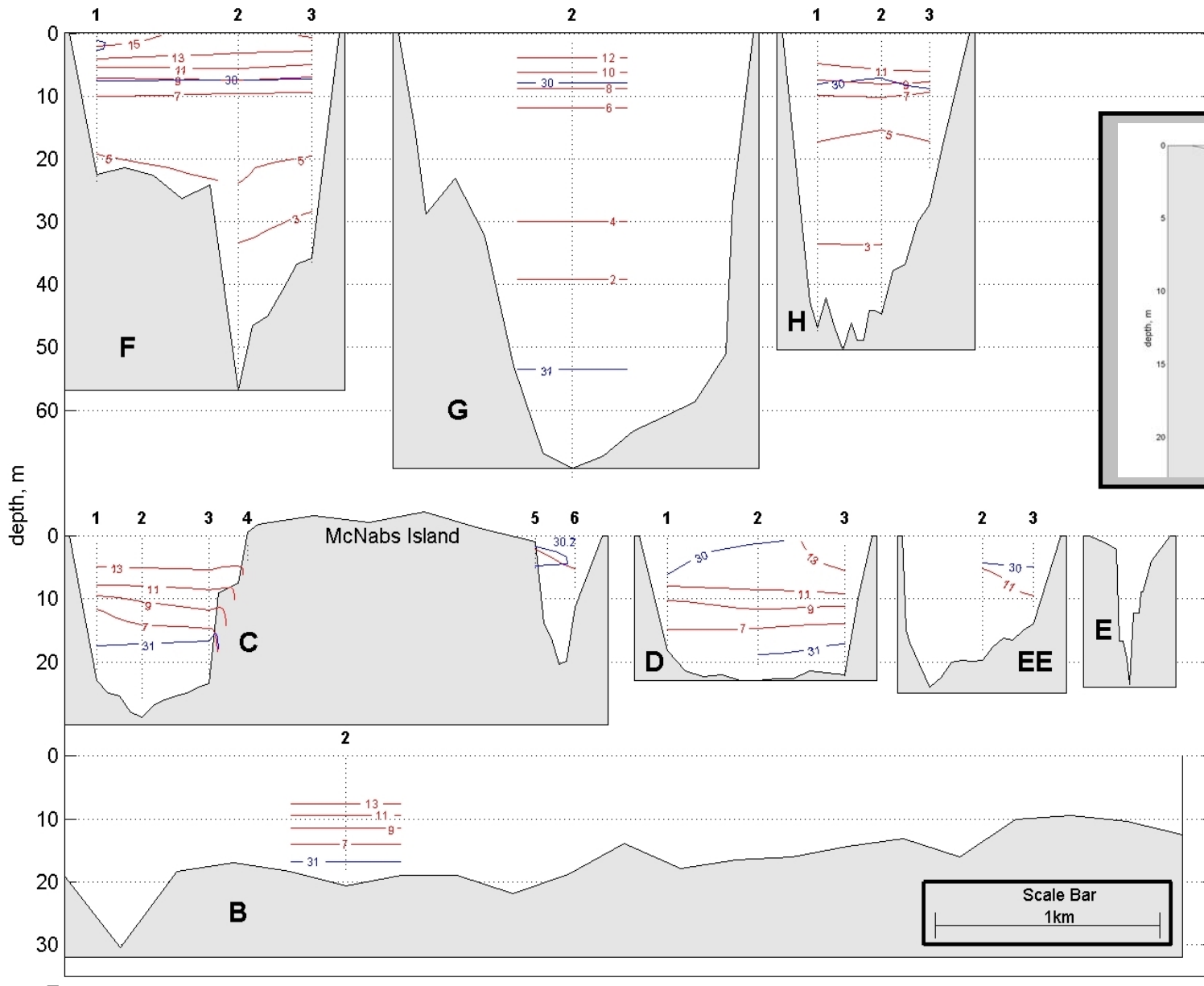
Site	G2-1m	H3-10m	SYC-1m	C3-10m
Reference	0	5	33	0
QA/QC	1	6	26	0

Comments:

Dissolved Oxygen: In general, the Harbour waters meet applicable guidelines, with the normal exception of the deeper waters of Bedford Basin (>40m) where values are below the applicable class SB guideline of 7.0 mg/L. The minimum value at the deepest part of the Basin is now measured at 5.4 mg/L. In addition, this week the profile minimum (7.2 mg/L) at site B2 is below the applicable SA guideline of 8.0 mg/L. Throughout the Harbour the surface waters are slightly depressed compared to the underlying water with maximum values occurring at approximately 8 m in the Basin and 10-15 m elsewhere. Below the maximum, the values are relatively uniform, except in the Basin.

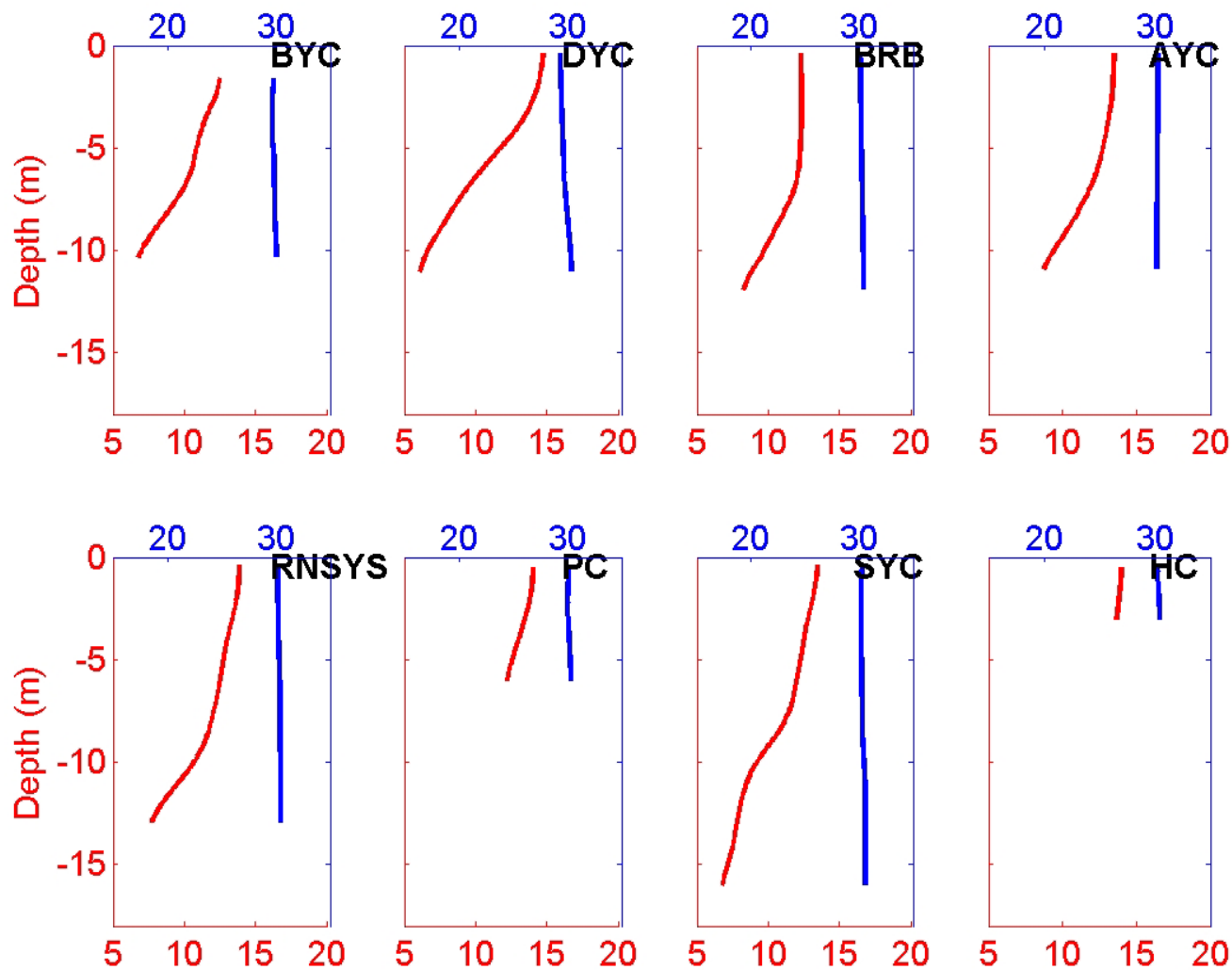
Chlorophyll: The fluorescence values have increased throughout the Harbour since last week. The maximum values are 8-10 mg/m³ at about 10 m in the Basin and about 8 mg/m³ for the rest of the Harbour at depths <10 m.

General: The Harbour has slightly less fresh water in it than last week. The surface water has warmed slightly through most of the Harbour but cooled locally in the north end of the Basin. Overall, the density stratification is slightly less than the previous week. The distribution of bacteria seems to be typical of periods when there is little forcing from freshwater input or wind events, and tides dominate the flushing of the Harbour. The highest concentrations are in the surface samples and are clustered in the Inner Harbour with very low concentrations elsewhere. The levels are higher than in the previous week, probably the result of cloudy conditions in the previous days. The distribution seems displaced up-Harbour somewhat, a situation not obviously explained by wind data and the high and falling tide during sampling.

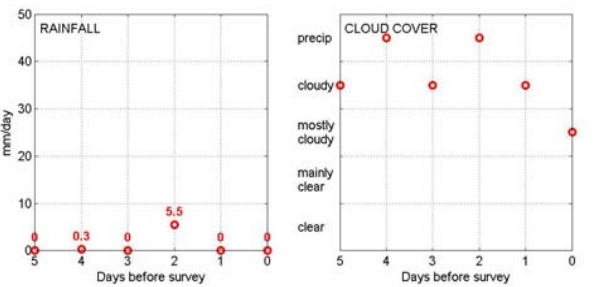
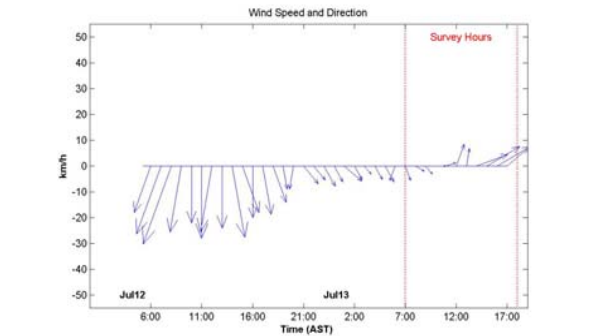
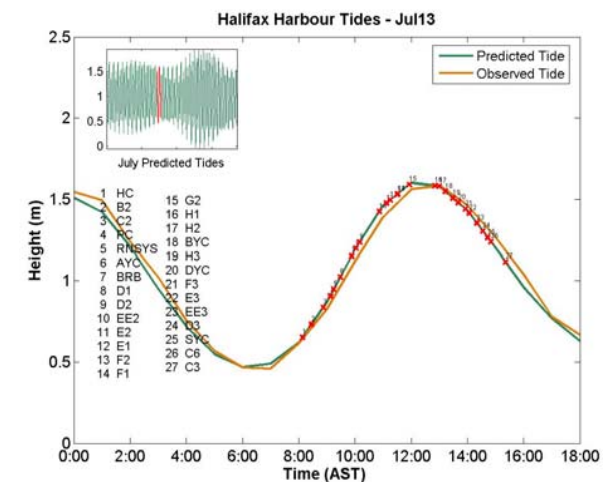
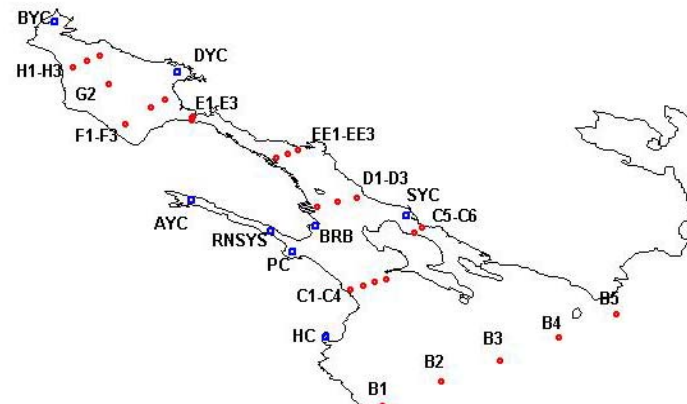


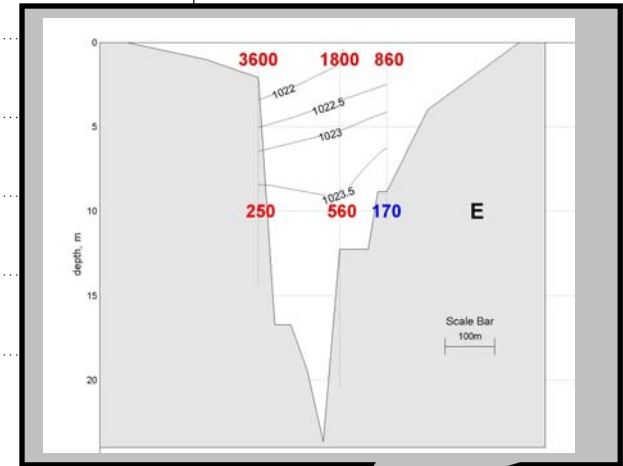
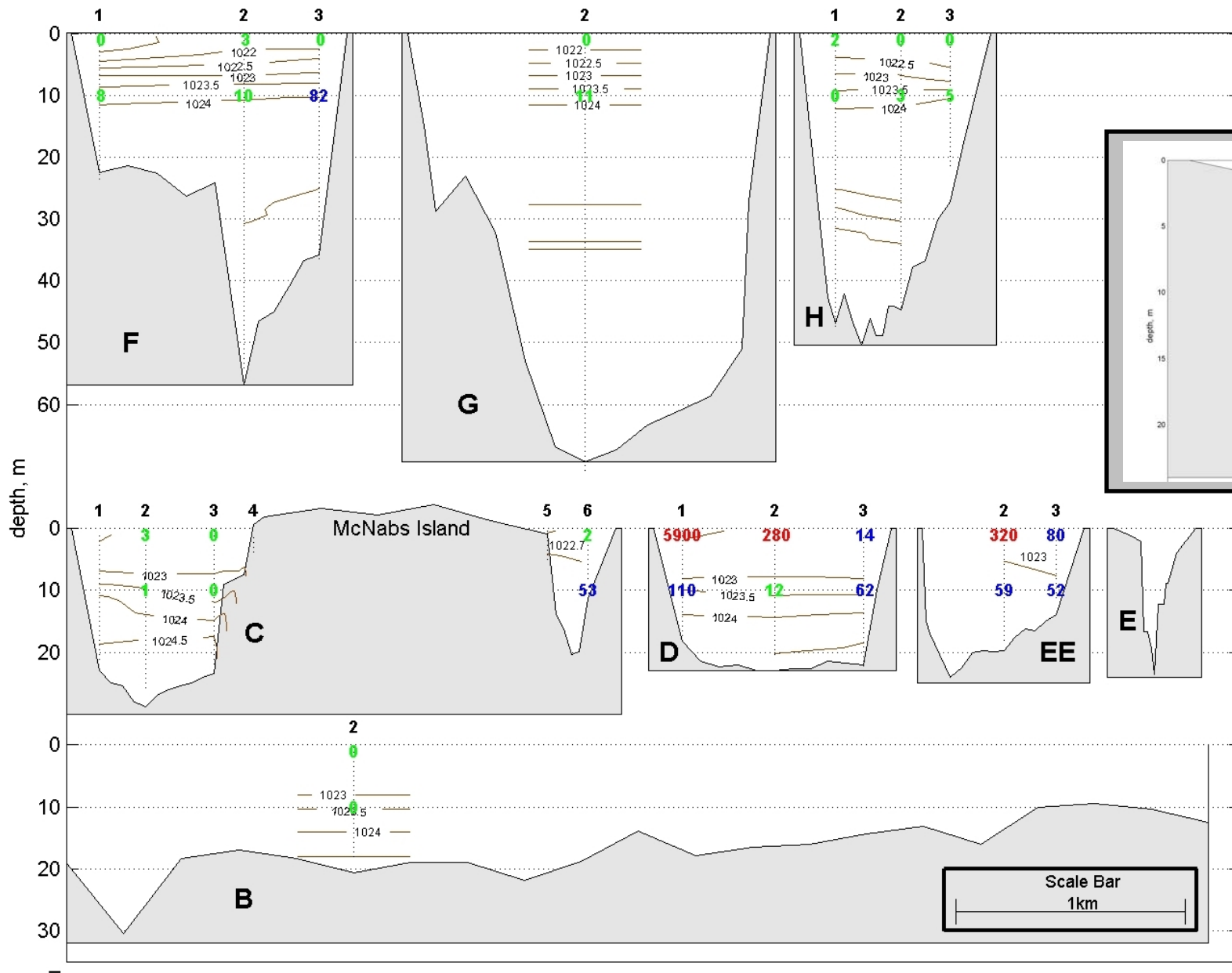
Unless otherwise labeled:
 - salinity contour interval is 1 PSU
 - temperature contour interval is 2°C.

Yacht Clubs



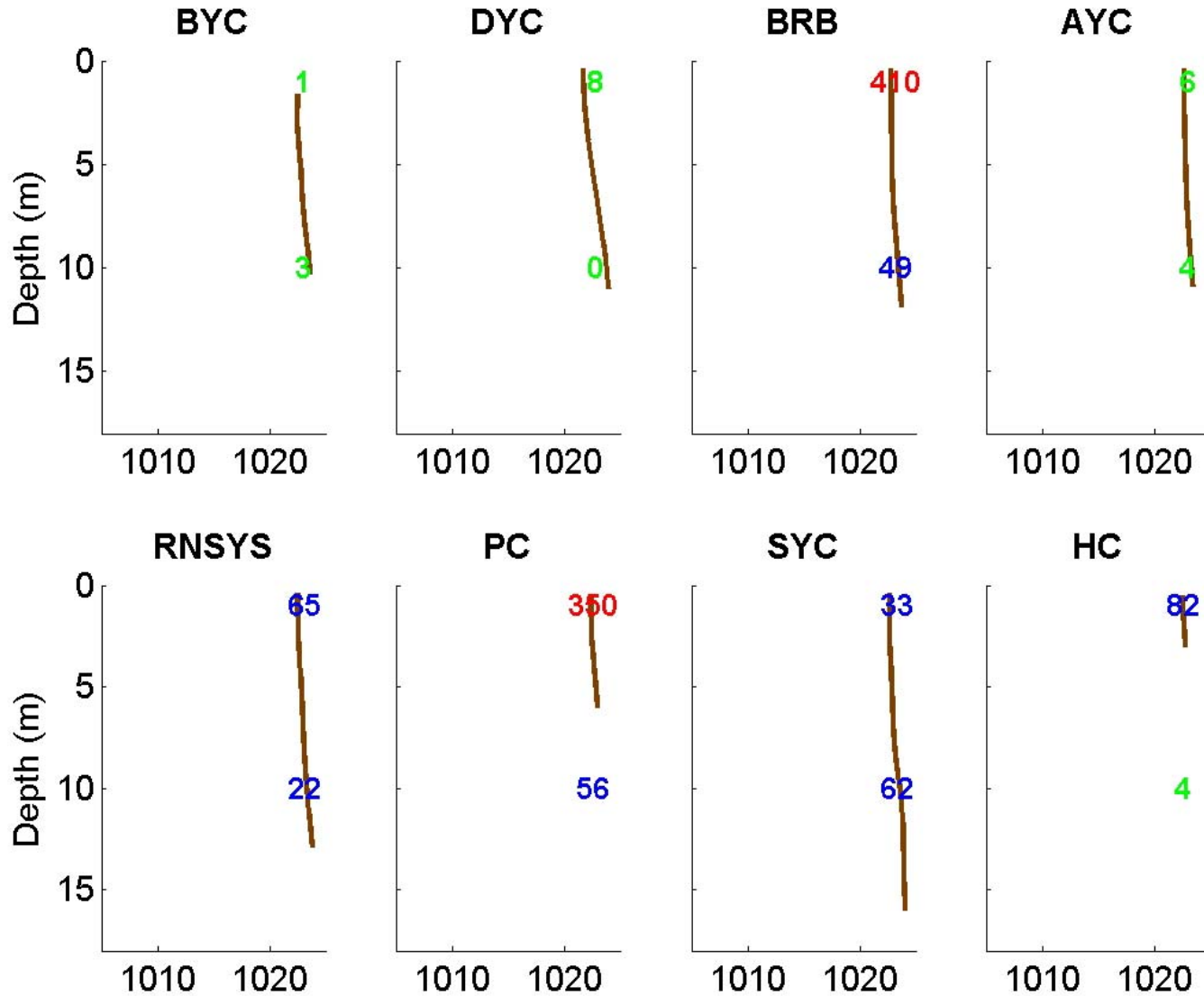
Salinity in PSU Temperature in °C





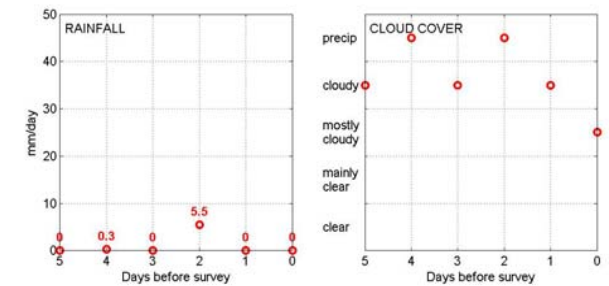
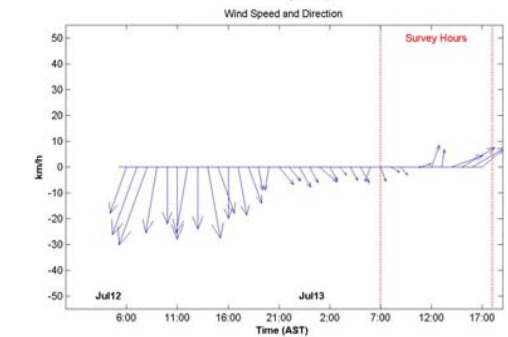
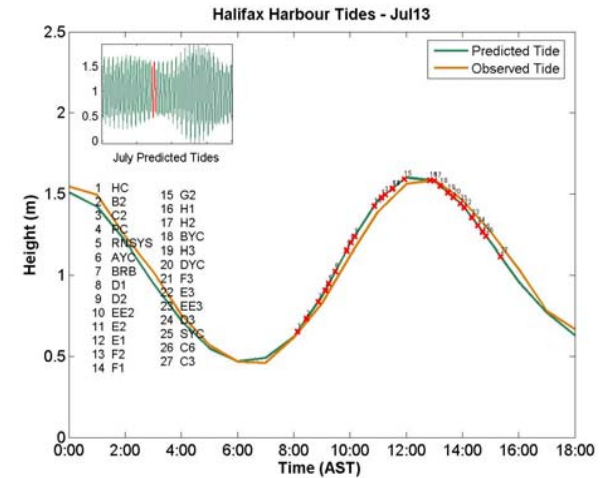
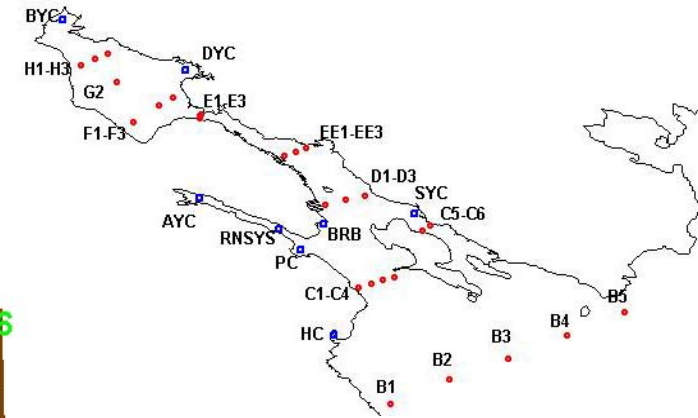
Unless otherwise labeled:
 - **density** contour interval is 0.5 kg/m³

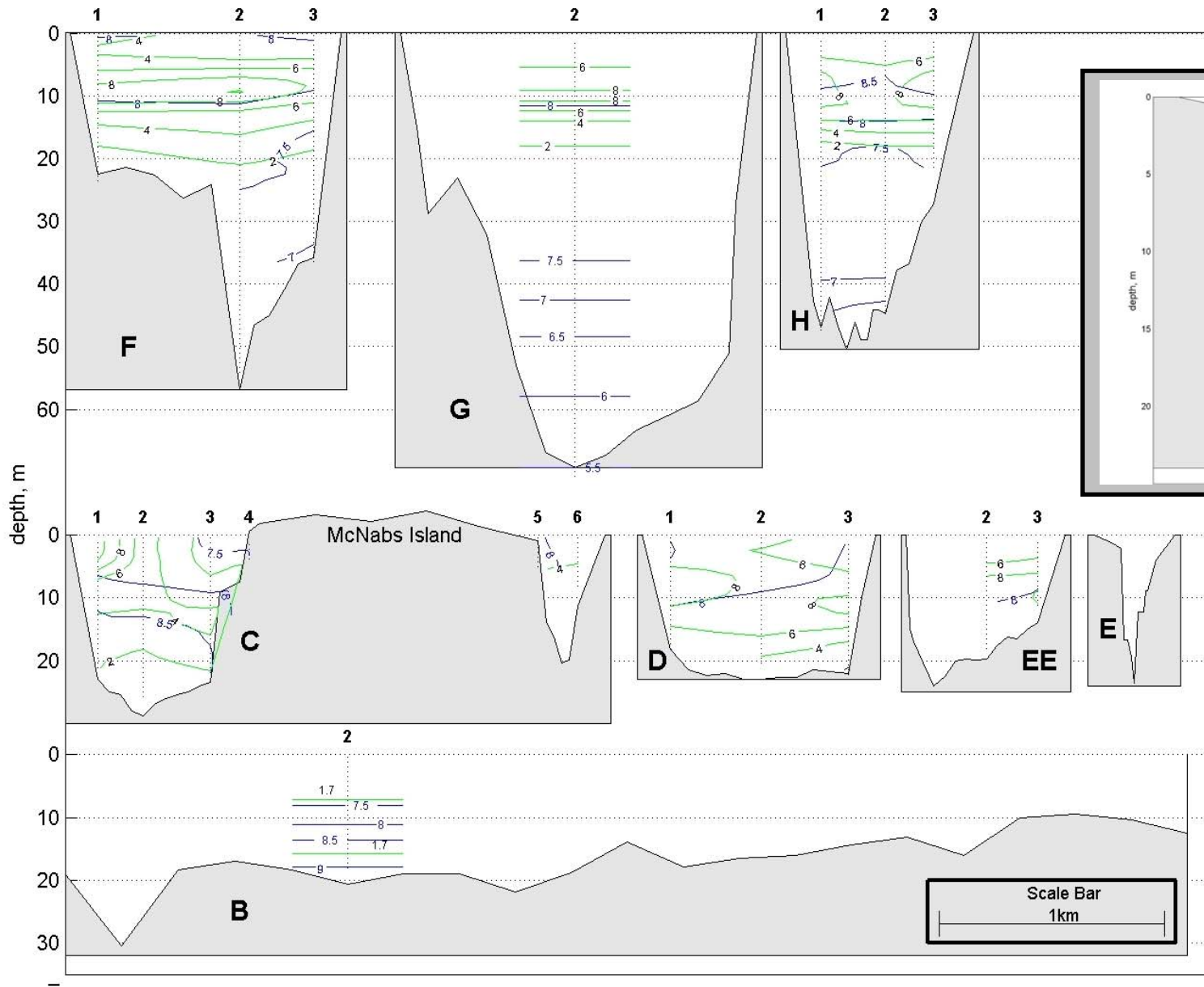
Yacht Clubs



Potential Density in kg/m³

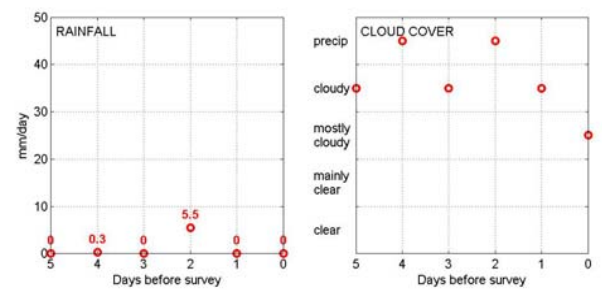
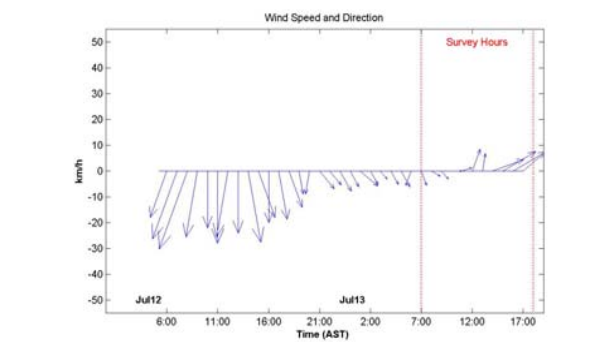
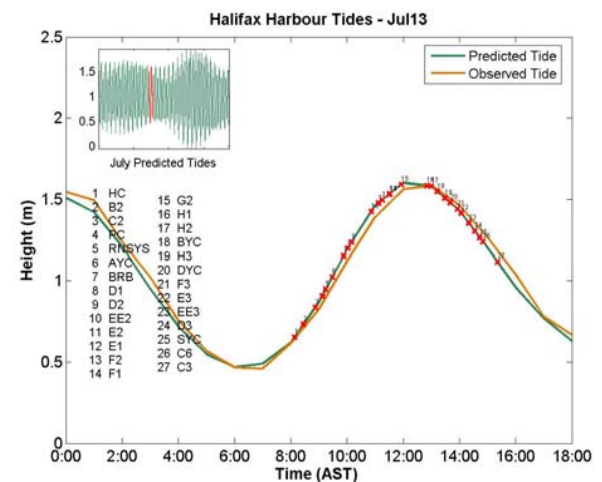
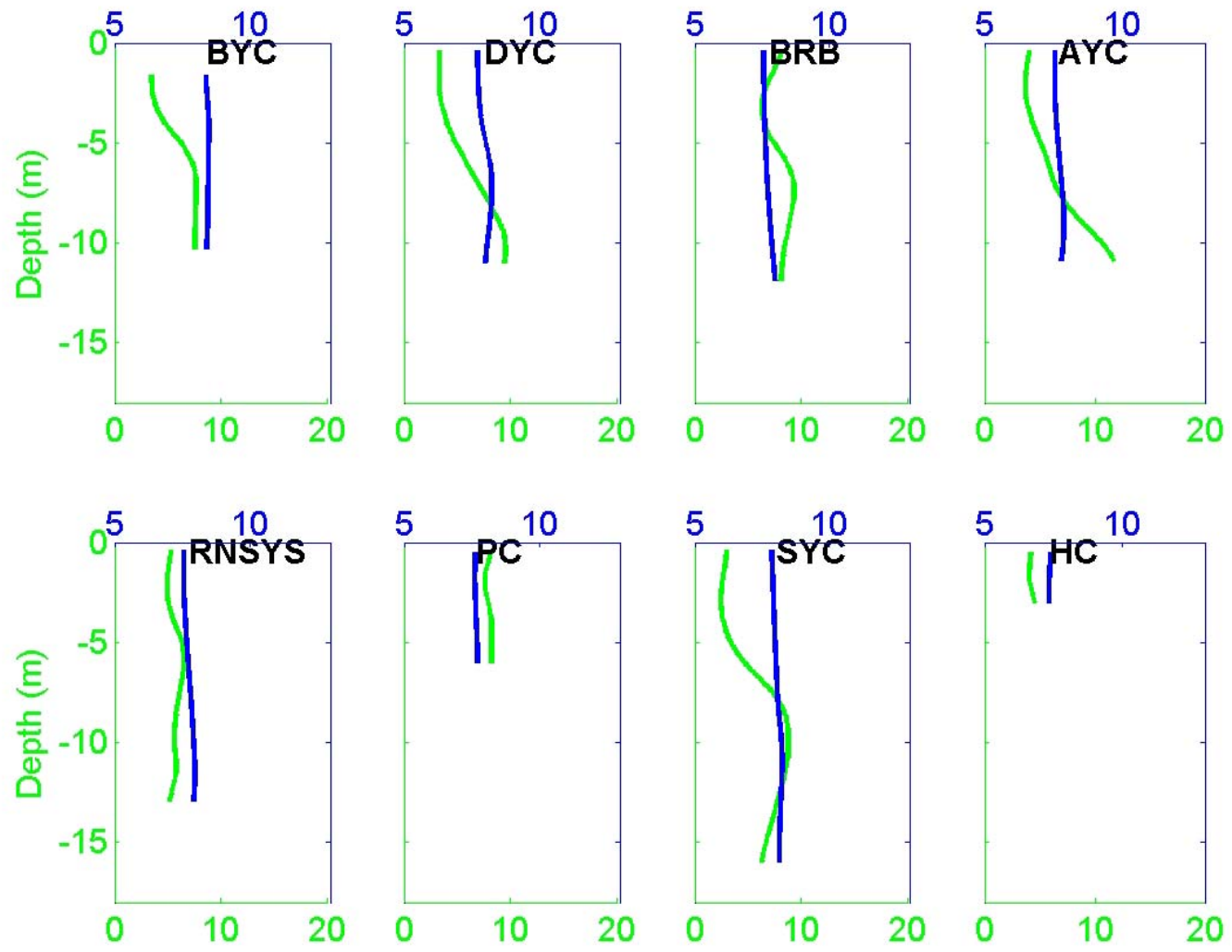
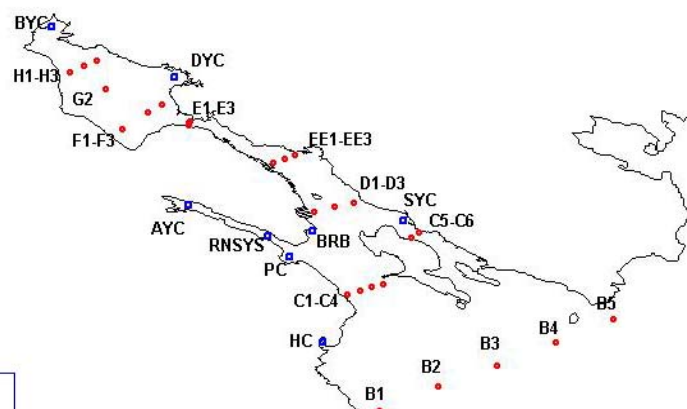
Fecal coliform: **above swimming limit (200 cfu/100mL)**
above shellfish limit (14 cfu/100mL)
 below limits





Unless otherwise labeled:
 - **dissolved oxygen** contour interval is 0.5 mg/L
 - **chlorophyll** contour interval is 2 mg/m³.

Yacht Clubs



DO in mg/L Chlorophyll in mg/m³