

Halifax Harbour Water Quality Monitoring Project

Weekly Summary #92

Survey Date: 21 March 2006
Nature of Survey: Coliform Survey
Report File (this document): HHWQMP_report092_060321.doc
Data File: HHWQMP_data092_060321.xls

Data Return:

Profile: 100%
 Bacteria: 100%
 Chemical: na
Overall: 100%

Sample Notes:

The CTD exhibited unusual behaviour during stabilization at stations BYC, H3 and DYC. These sites were sampled consecutively but there was not a recognizable cause of the problem. The CTD data from these sites is questionable. The data is included in both the report and data files, but should be used advisedly.

QA/QC samples:

Fecal Coliform (CFU/100ml)

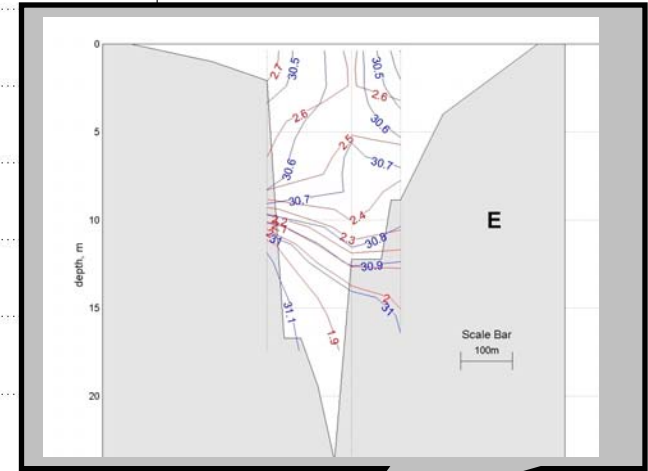
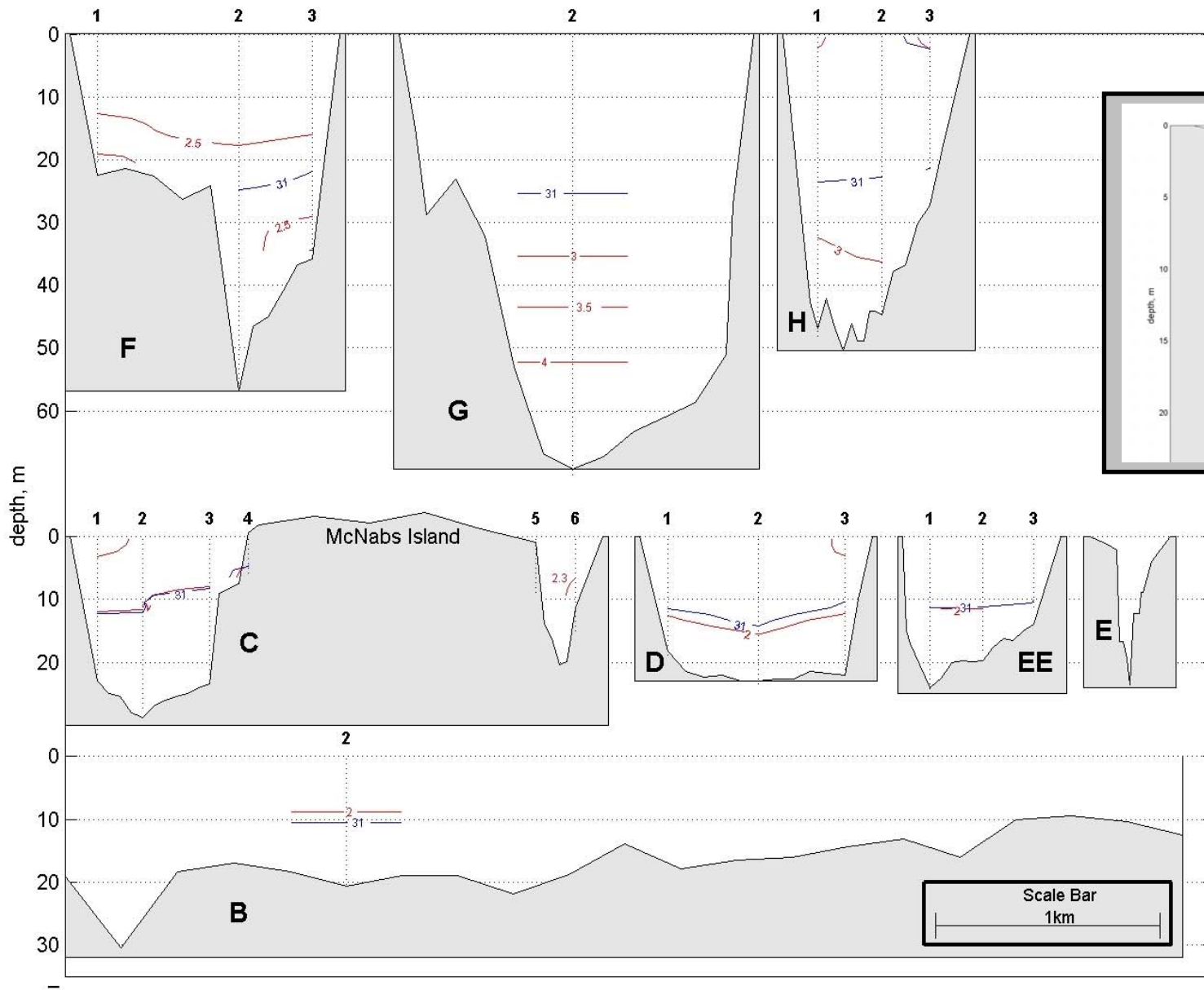
Site	G2-10m	BYC-1m	B2-1m	PC-1m
Reference	77	7	0	3
QA/QC	61	3	2	7

Comments:

General: There has been no appreciable precipitation during the previous week and the Harbour remains relatively un-stratified throughout. The salinity and temperature are relatively unchanged from last week though the water column is slightly cooler, consistent with the generally below freezing air temperatures of the previous week. The fecal coliform distribution is quite typical. The maximum values are slightly lower than last week but the distribution is broader, implying more current/flushing than last week. The vertical distribution is typical with higher values in near surface samples in most of the harbour, but higher in the 10m samples in the Basin.

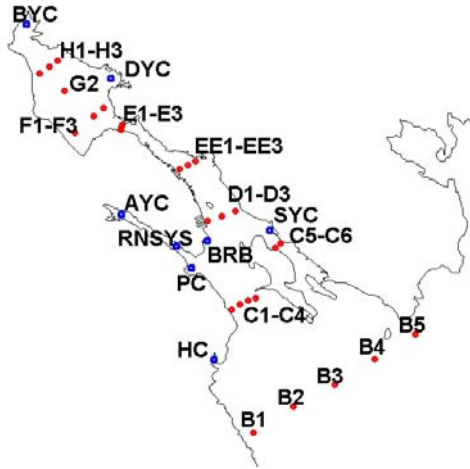
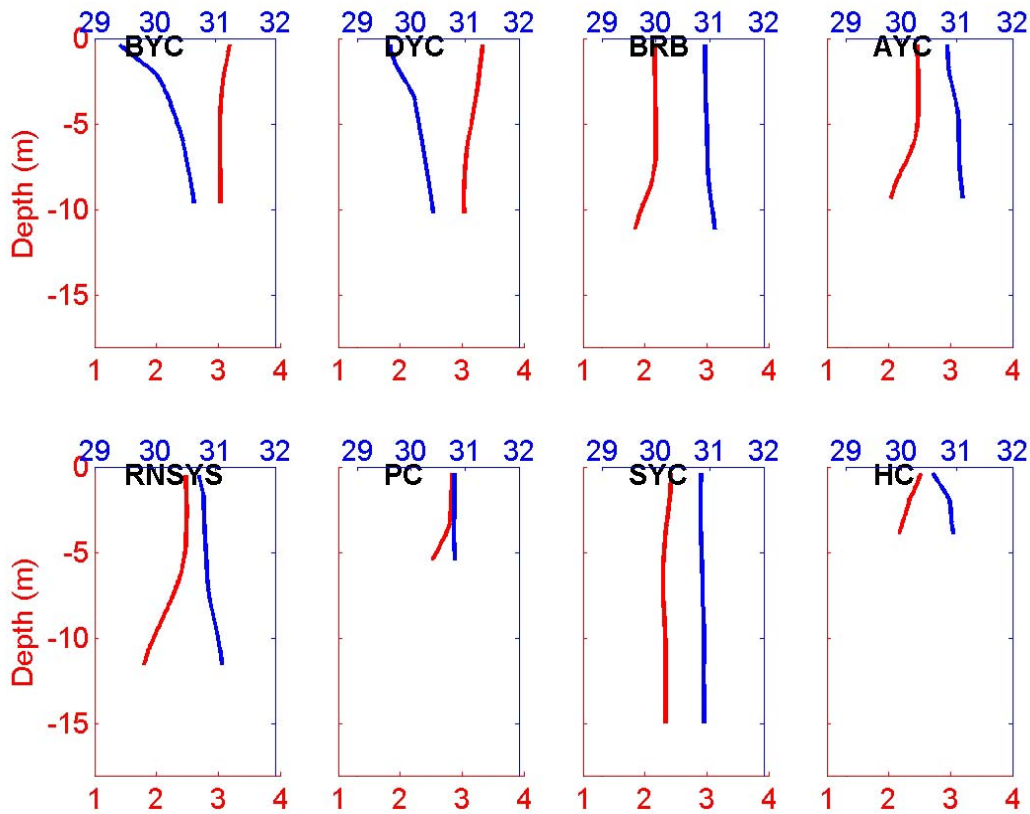
Fluorescence: The phytoplankton bloom evident in the harbour over previous weeks appears to be abating somewhat. The highest values of about 10 – 16 mg/m³ occur just below 10 m throughout the harbour. The secchi disk measurements are consistently about 4-5 m everywhere.

Dissolved Oxygen: The DO distribution is unremarkable. The data indicate that the surface values everywhere in the Harbour are between 9 and 10 mg/L. The DO values in the bottom water in the Basin are relatively unchanged from last week at just over 3.5 mg/L. The Basin deep water represents the only values below the applicable use-specific guidelines this week. The DO data is not ground-truthed and absolute values are questionable (see DO discussion in QR#1).



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

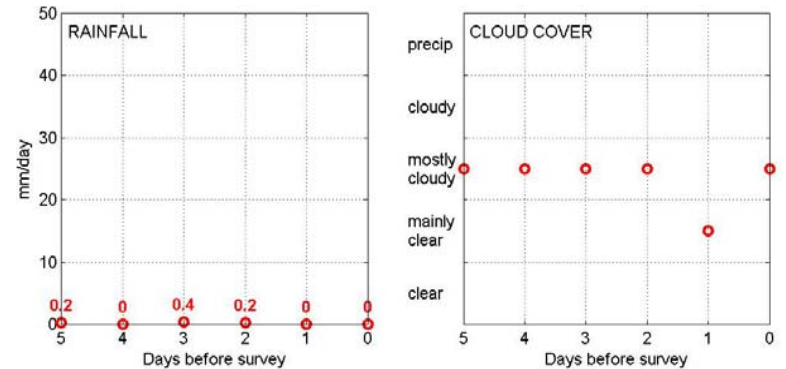
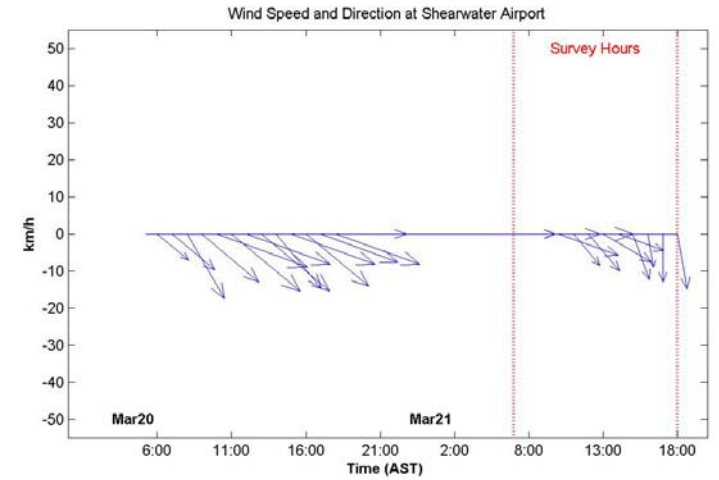
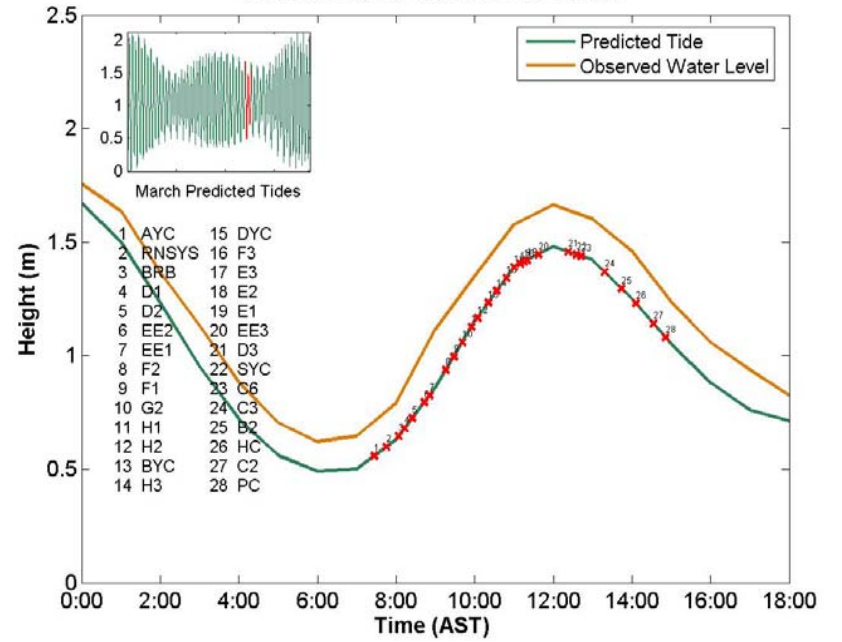
Yacht Clubs

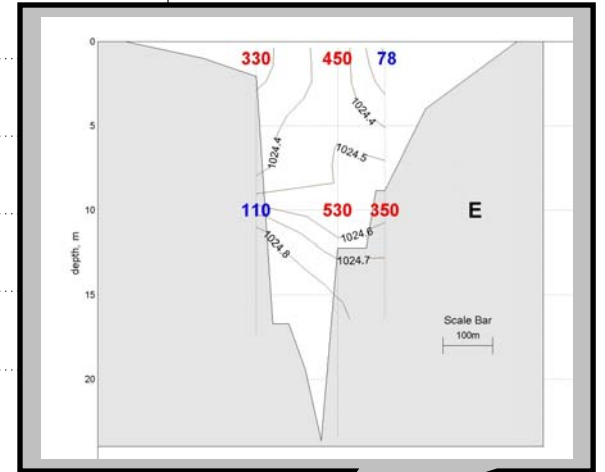
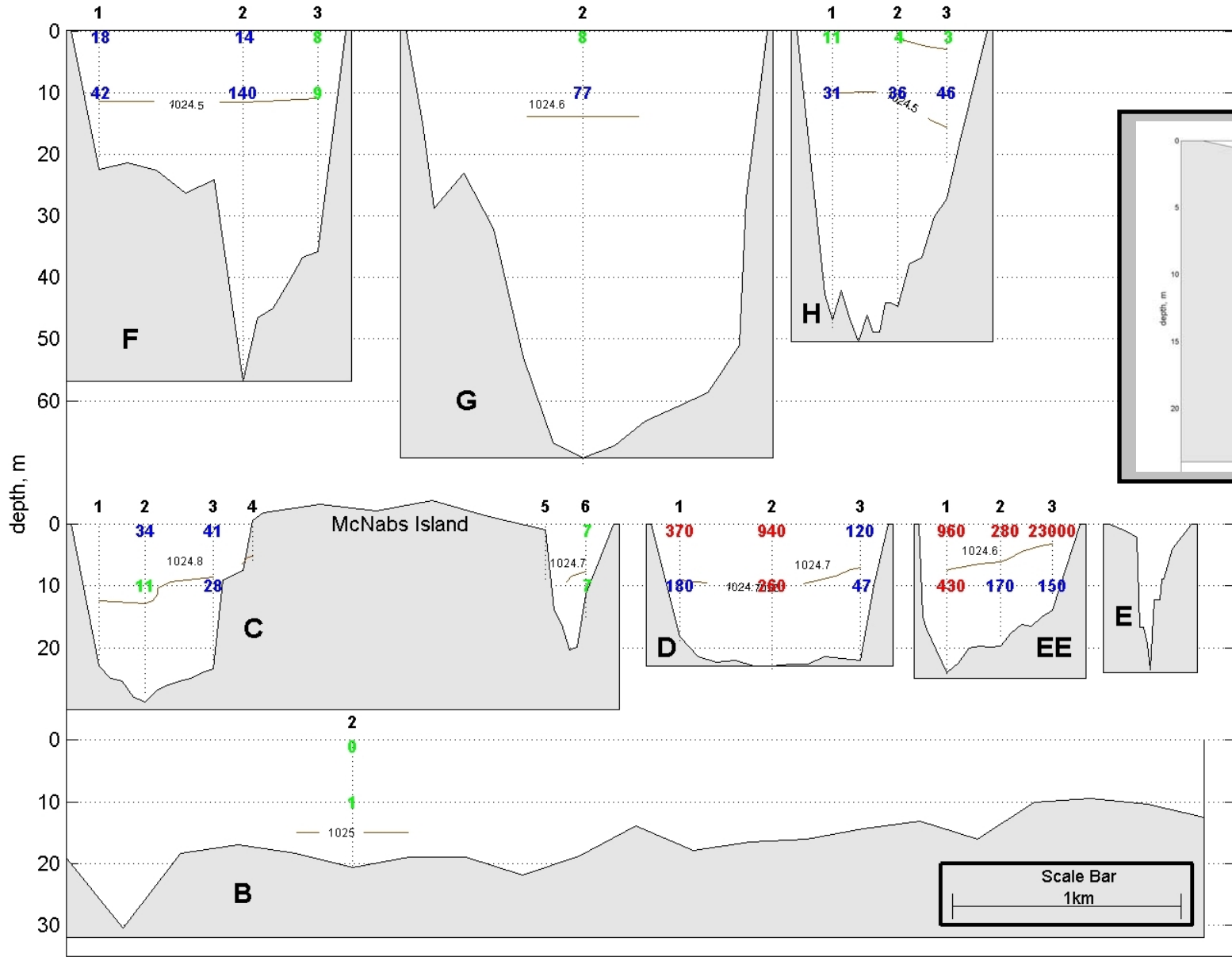


Salinity in PSU Temperature in °C

Weather data collected at the Shearwater Airport

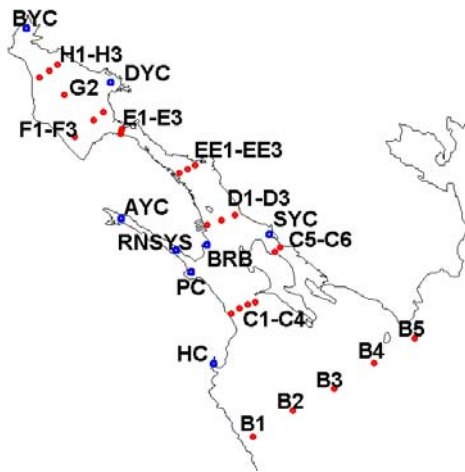
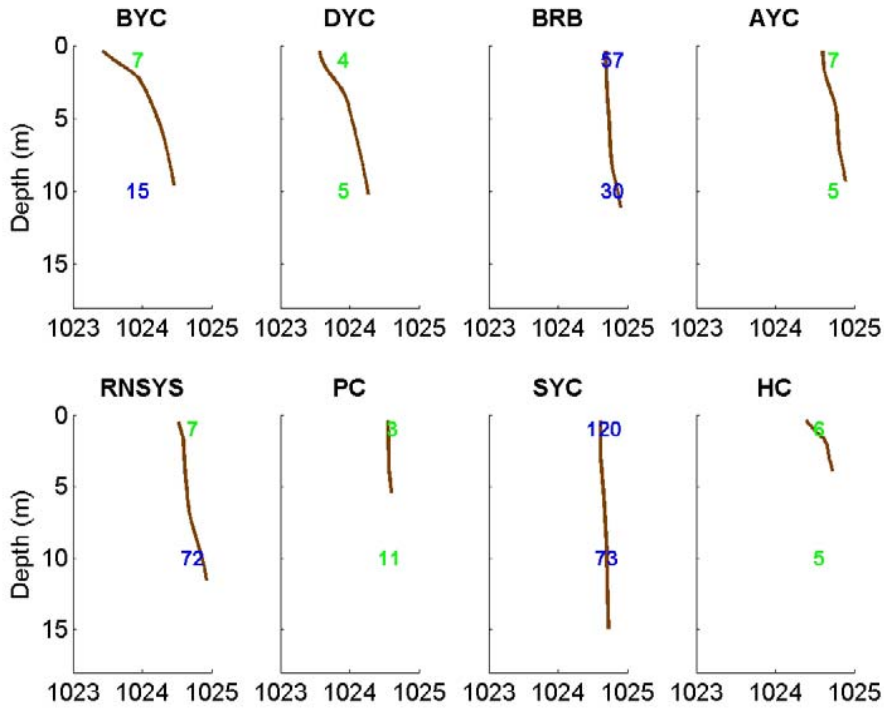
Halifax Harbour Water Level - Mar21





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

Yacht Clubs

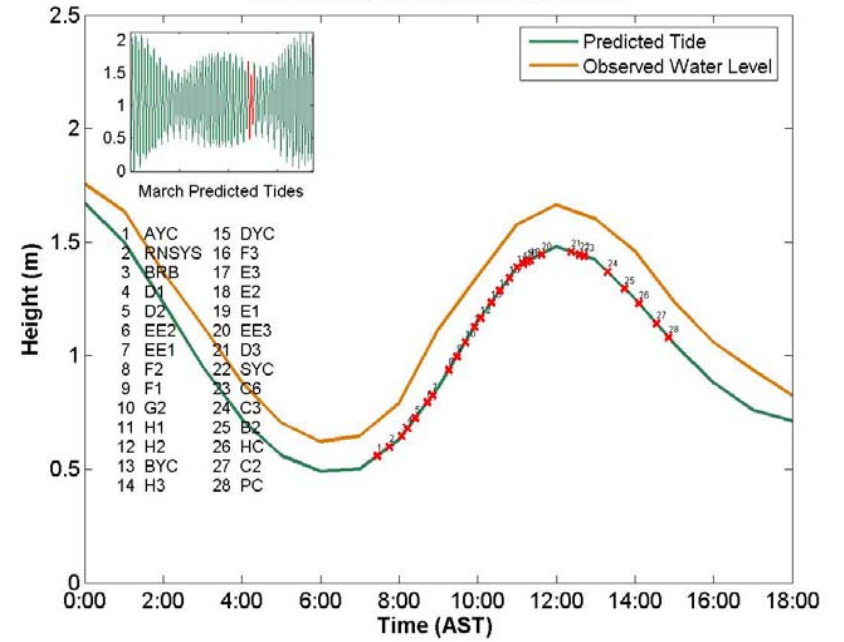


Weather data collected at the Shearwater Airport

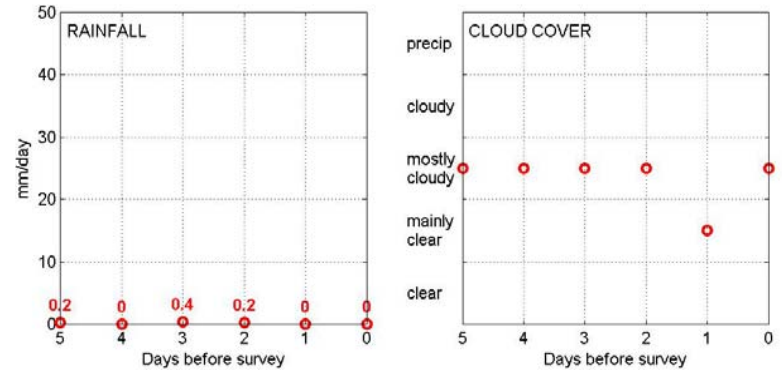
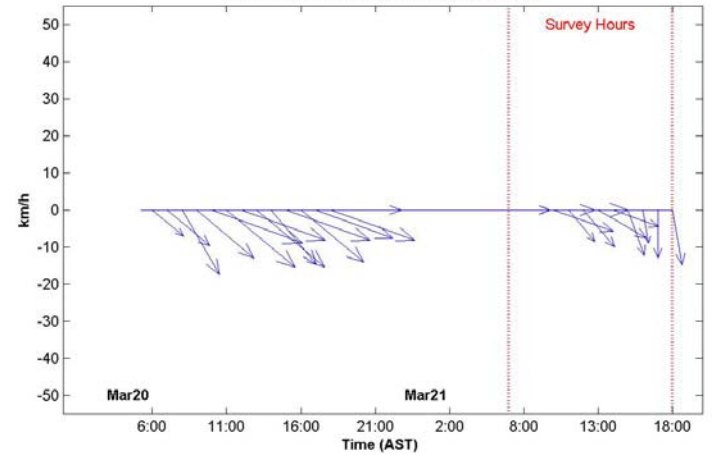
Potential Density in kg/m^3

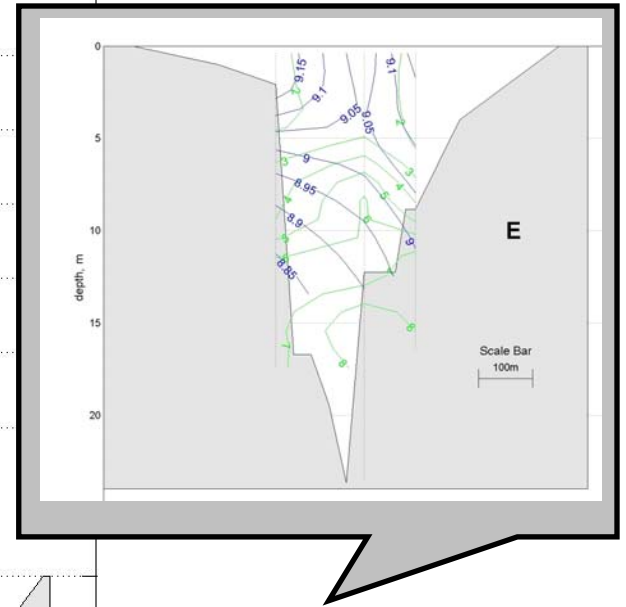
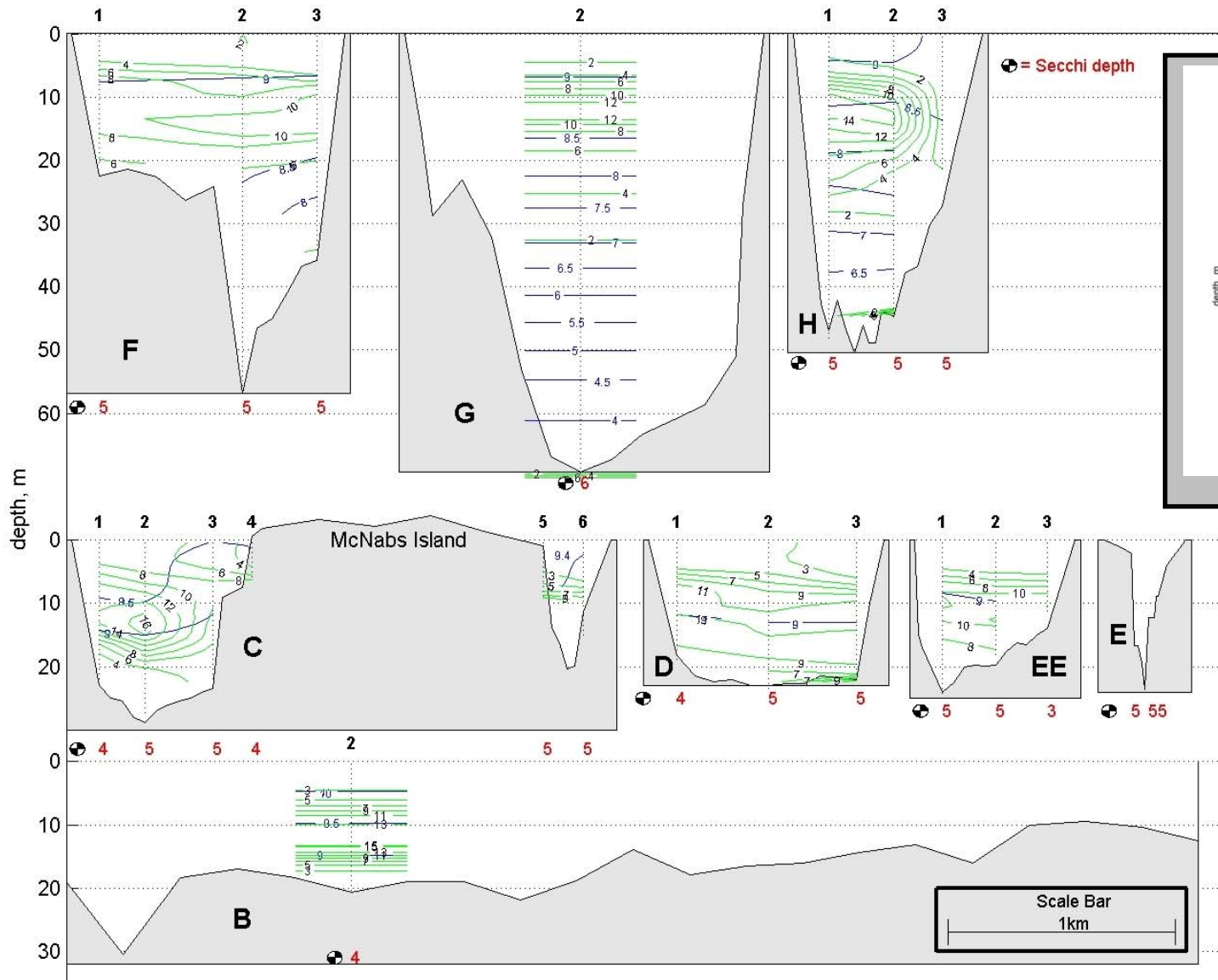
Fecal coliform: above swimming limit (200 cfu/100mL)
 above shellfish limit (14 cfu/100mL)
 below limits

Halifax Harbour Water Level - Mar21



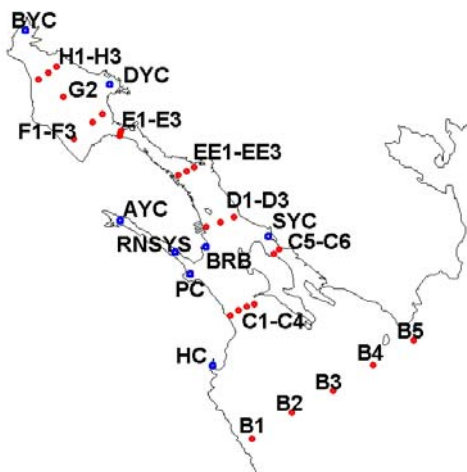
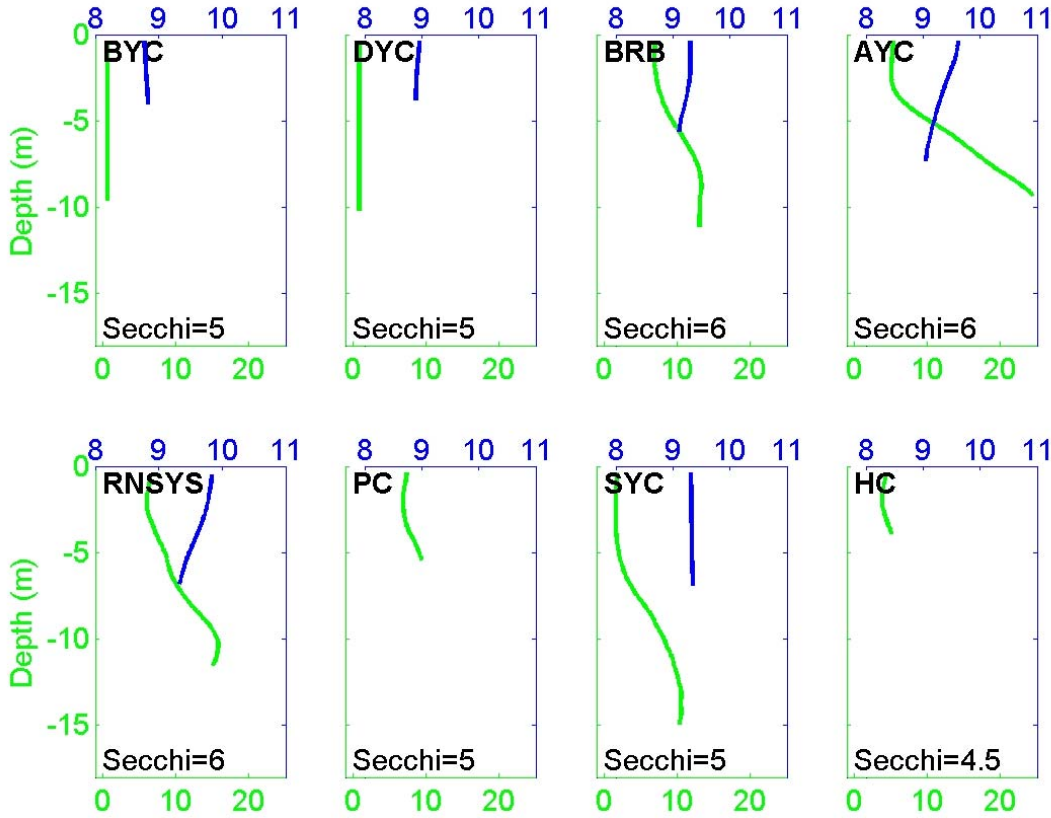
Wind Speed and Direction at Shearwater Airport





Unless otherwise labeled:
 - **dissolved oxygen** contour interval is 1 mg/L
 - **chlorophyll** contour interval is 2 mg/m³.

Yacht Clubs



DO in mg/L

Chlorophyll in mg/m³

Weather data collected at the Shearwater Airport

Halifax Harbour Water Level - Mar21

