

Halifax Harbour Water Quality Monitoring Project Weekly Summary #31

Survey Date: 19 Jan 05
Nature of Survey: Complete Survey
Report File (this document): HHWQMP_report031_050119.doc
Data File: HHWQMP_data031_050119.xls

Data Return:

Profile: 97%
 Bacteria: 96%
 Chemical: 100%
Overall: 98%

Sample Notes:

Site G2 – The CTD was raised too high out of the water during instrument stabilization. The pump lost prime, causing the top 15 m of DO data to be bad. The other profile parameters are also affected but to a lesser extent.

Site DYC was not sampled due to ice.

QA/QC samples:

Chemical Analysis		F2 – 1m		E2- 10m	
		reference sample	Dup	reference sample	QA/QC
Detectable Parameter	units				
Total Suspended Solids	mg/L	7.4	4.3	6.4	2.7
Boron	ug/L	4200	4000	3900	3700
Lithium	ug/L	180	180	180	180
Strontium	ug/L	6000	5900	6100	6100
Titanium	ug/L	56	62	53	56
Uranium	ug/L	2.8	2.7	2.8	2.7

Fecal Coliform (CFU/100ml)

Site	BRB-1m	EE1-10m	H1-10m	H3-10m	E2-1m
Reference	610	210	51	41	380
QA/QC	640	220	41	1	260

Regulated parameters with all samples below detection (<EQL)

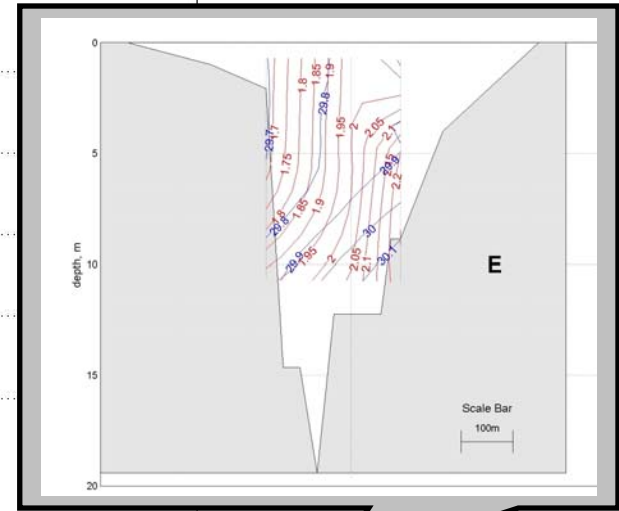
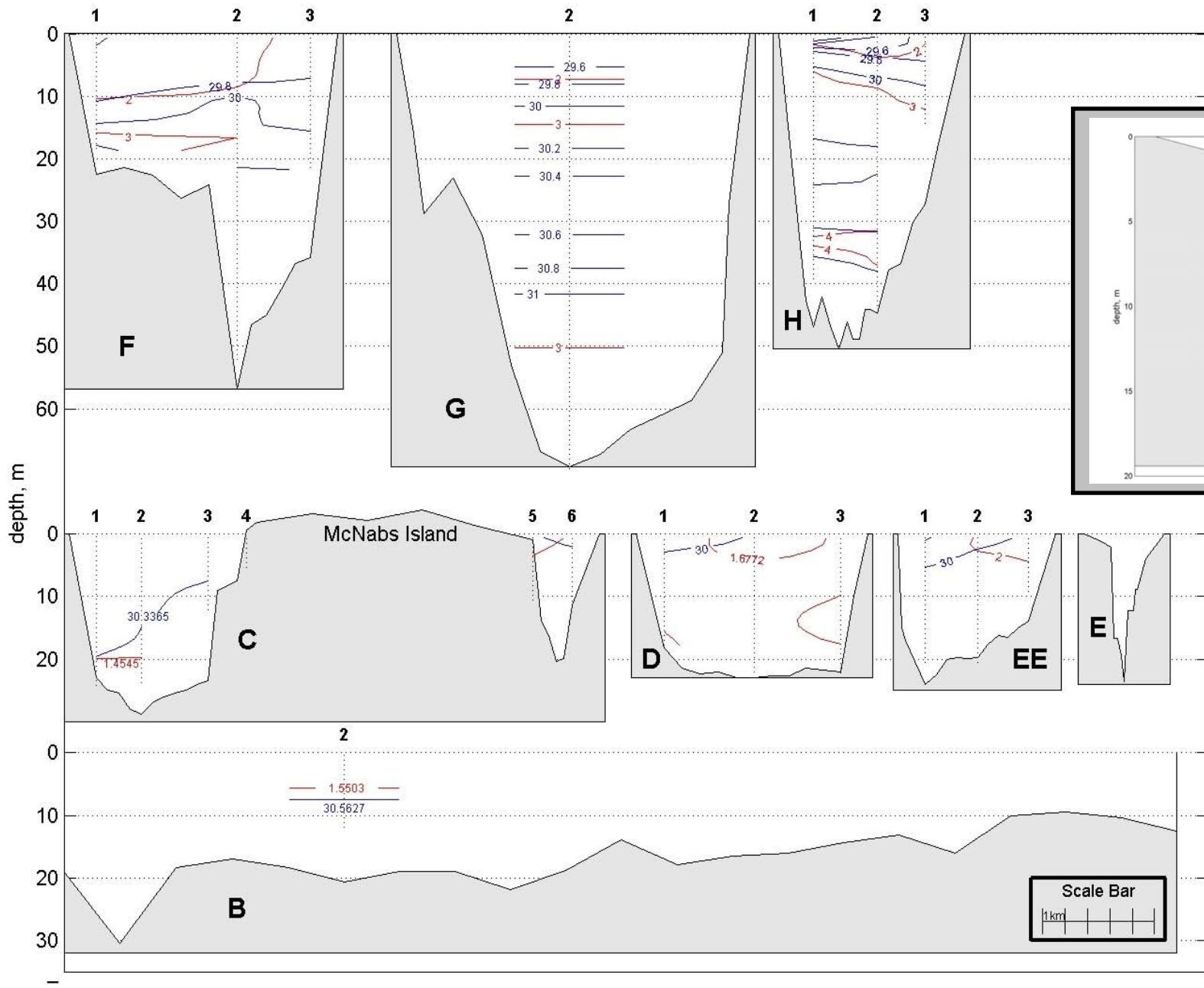
Parameter	EQL(µg/L)	Parameter	EQL(µg/L)	Parameter	EQL(mg/L)
Cadmium	3	Manganese	20	Oil and Grease	5
Chromium	20	Nickel	20	CBOD ₅	5
Copper	20	Zinc	50		
Lead	5				

Detectable non regulated metals

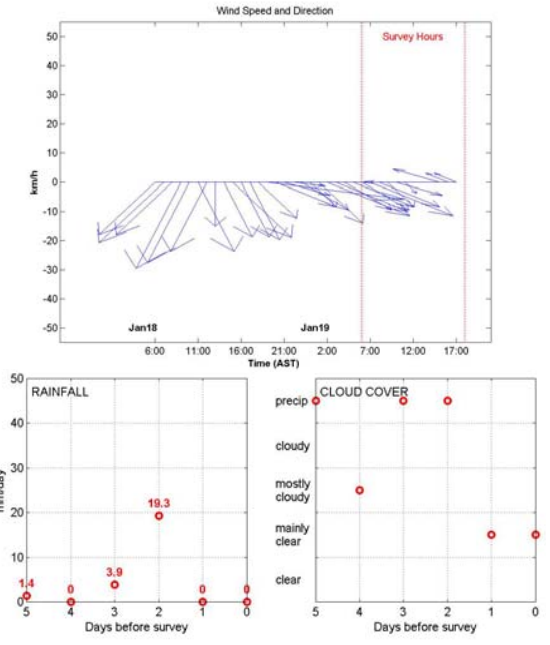
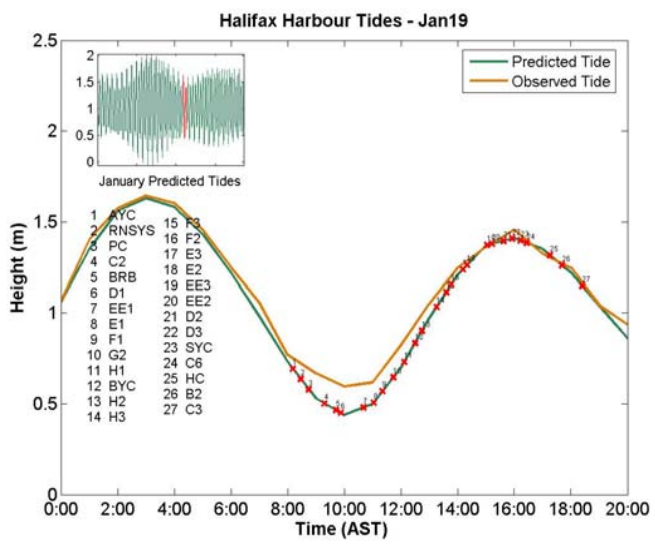
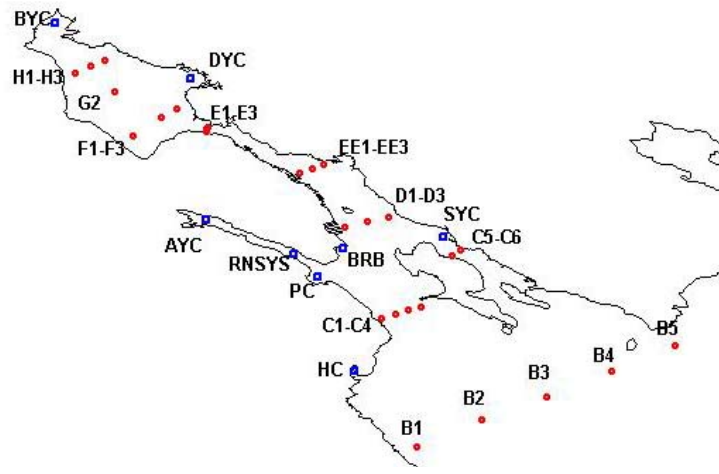
Metal	EQL (µg/L)	Number >EQL	Mean (µg/L)	Range (µg/L)
Boron	500	16	3938	3700-4200
Lithium	20	16	178	170-190
Strontium	50	16	6088	5800-6200
Titanium	20	16	57	48-64
Uranium	1	16	2.8	2.7-3.1

Comments:

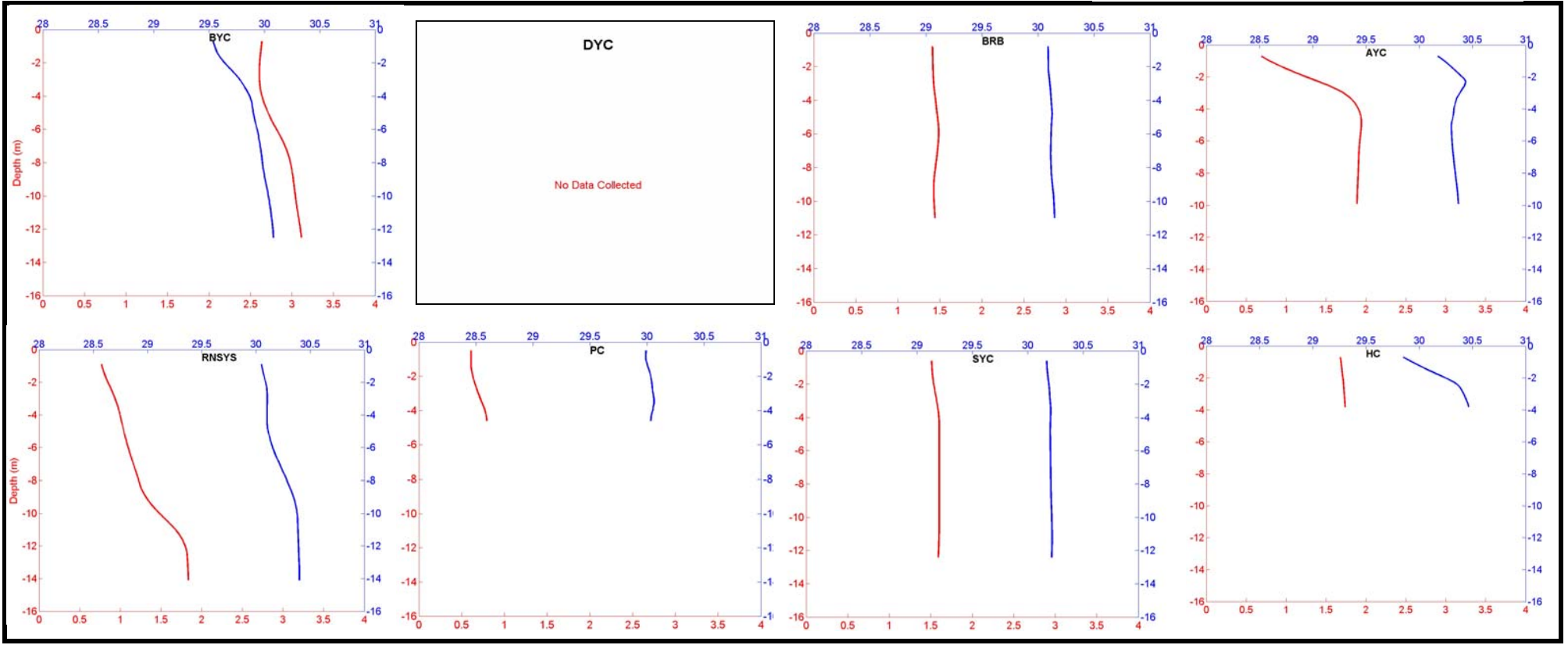
1. Dissolved Oxygen: The dissolved oxygen continues to drop in the deepest waters of Bedford Basin (~ 0.9 mg/l). The Basin bottom water (>38 m) represents the only guideline exceedance in the harbour (< 7 mg/L).
2. In general the Harbour, with the exception of Bedford Basin, is vertically uniform in all parameters.



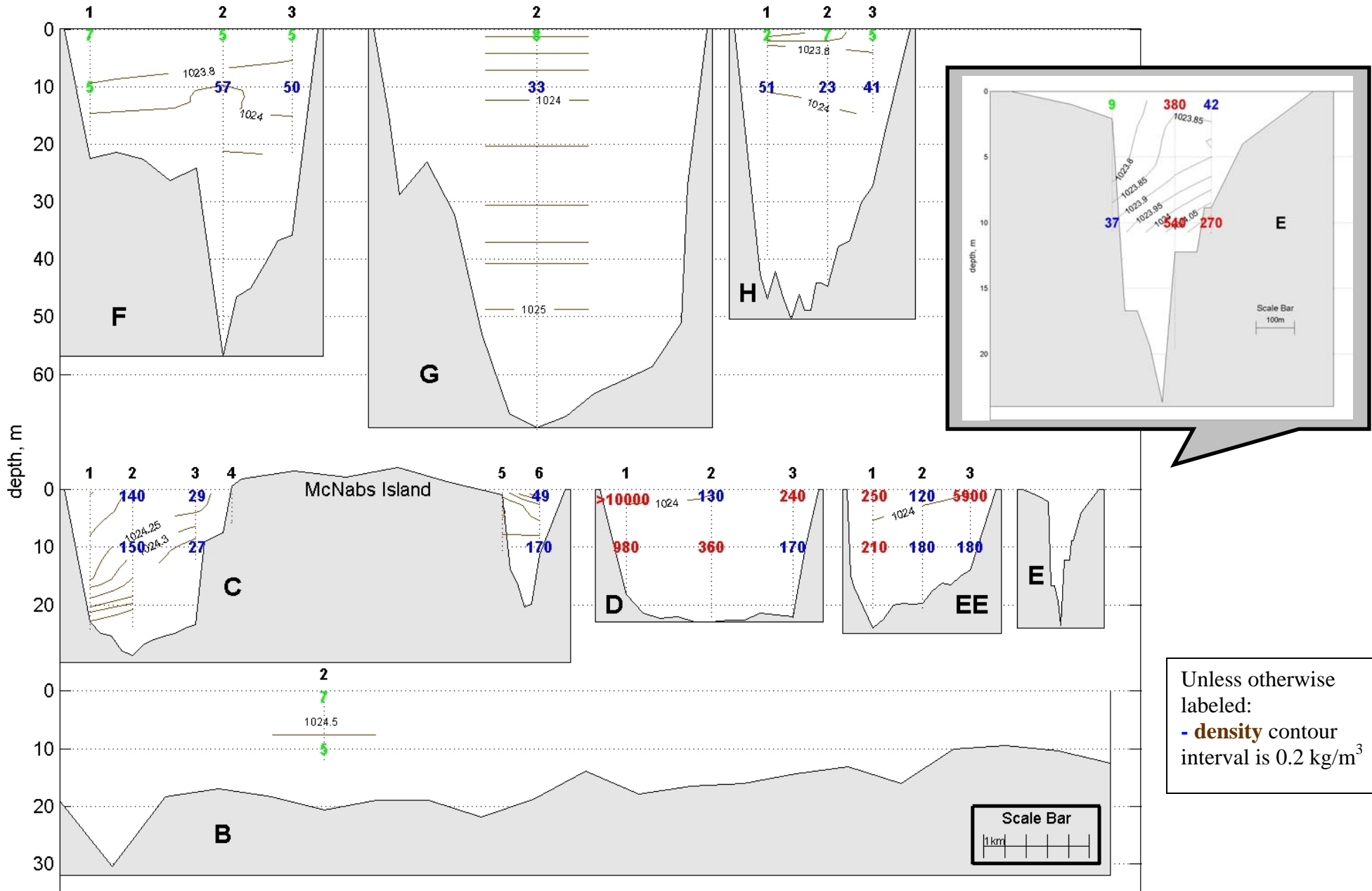
Unless otherwise labeled:
 - **salinity** contour interval is 0.2 PSU
 - **temperature** contour interval is 1°C.



Yacht Clubs



Salinity in PSU Temperature in °C



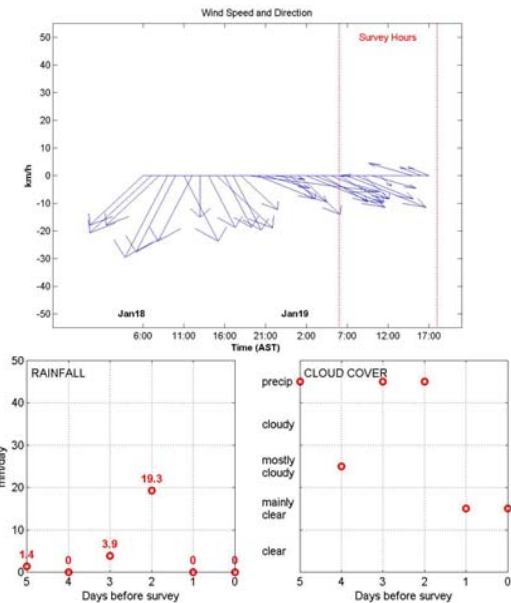
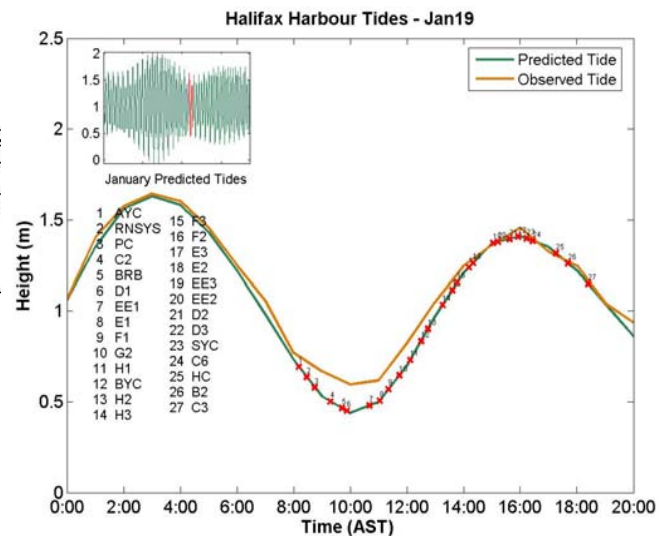
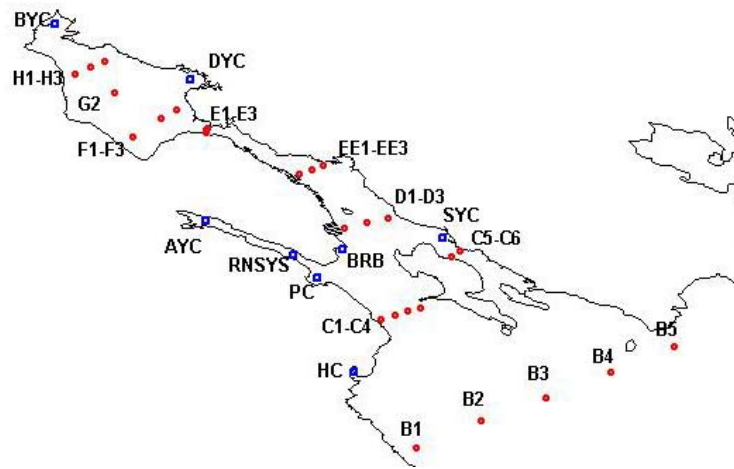
Unless otherwise labeled:
 - density contour interval is 0.2 kg/m³

Density in kg/m³

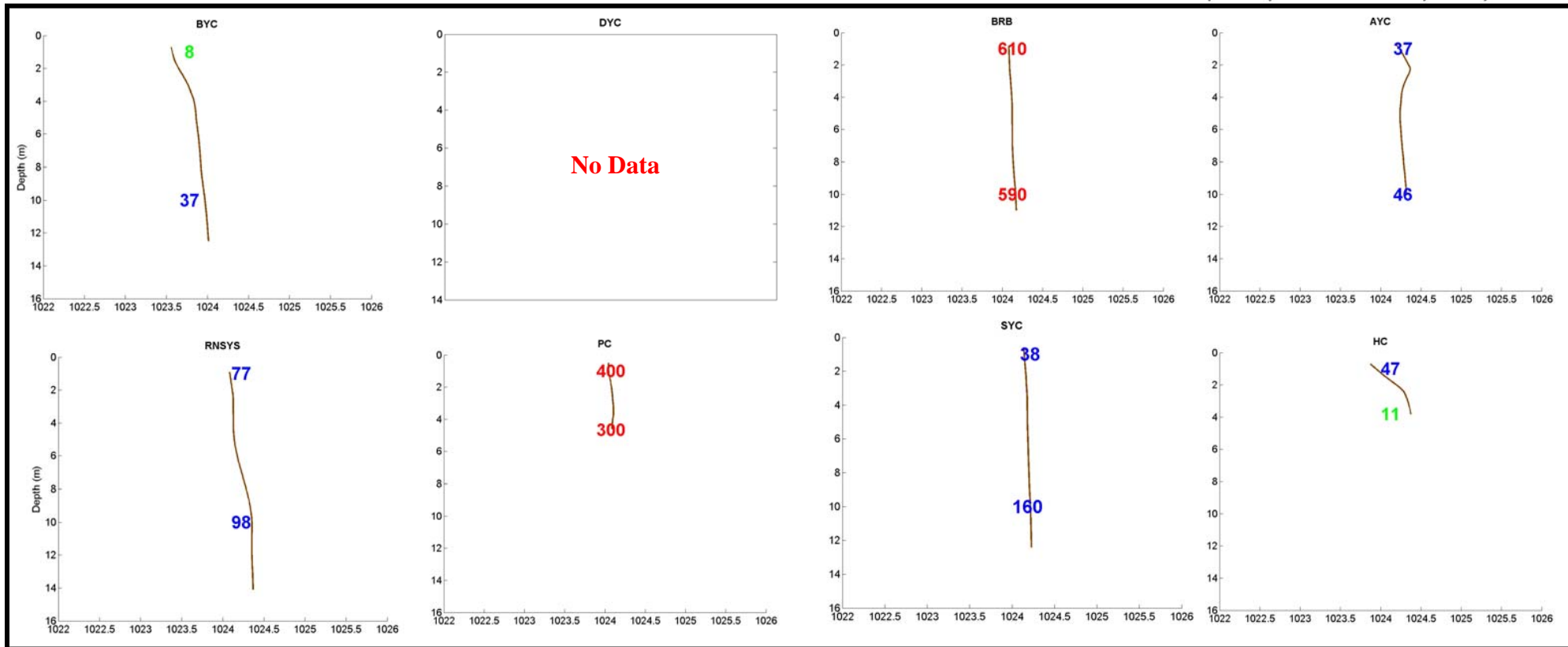
Fecal coliform: below limits

above shellfish limit (14 cfu/100mL)

above swimming limit (200 cfu/100mL)



Yacht Clubs

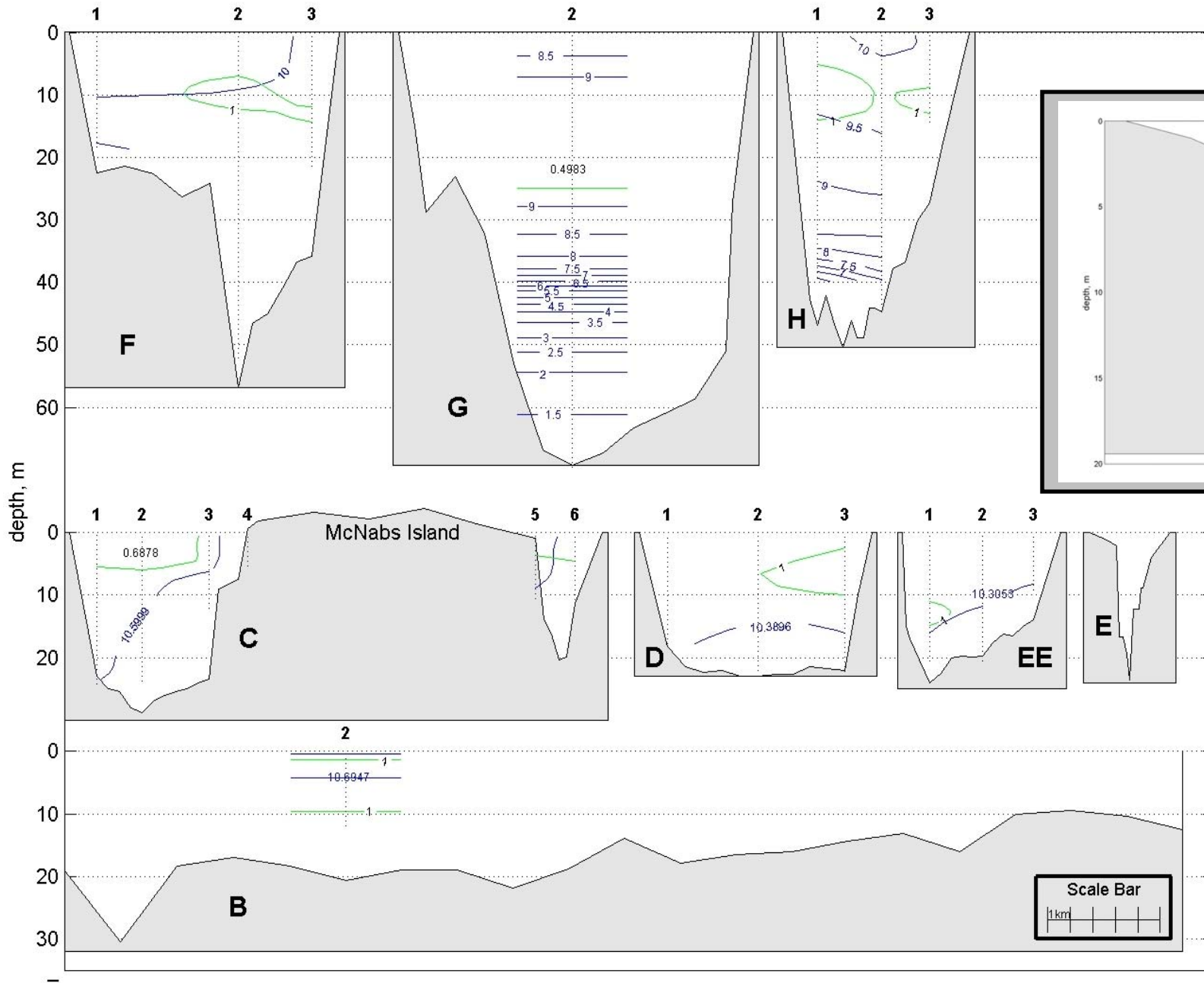


Density in kg/m³

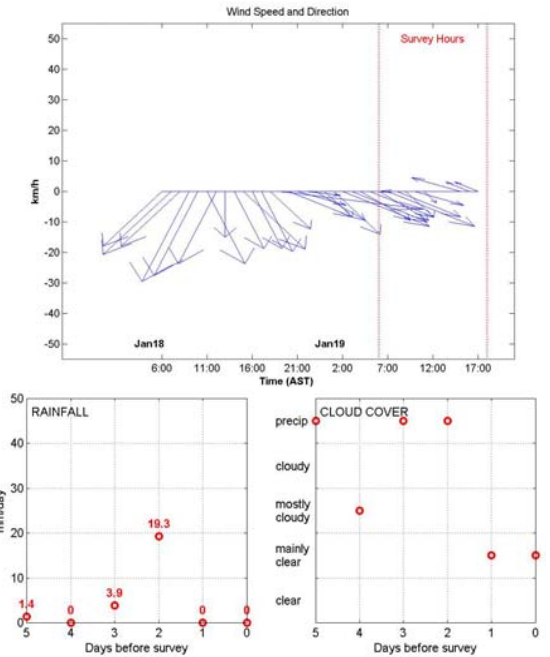
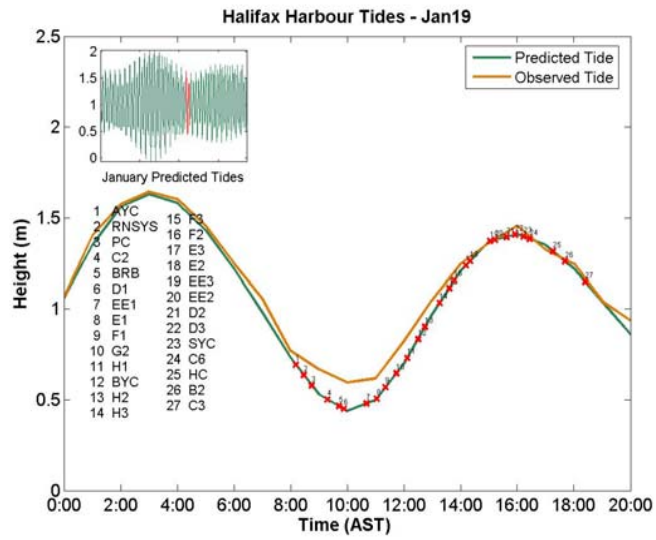
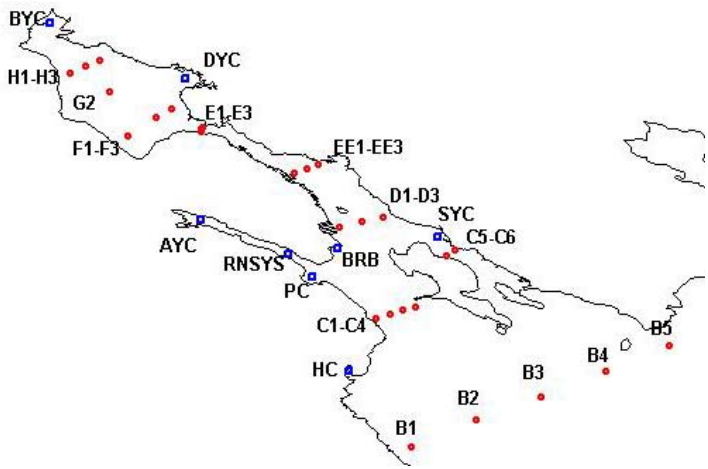
Fecal coliform: below limits

above shellfish limit (14 cfu/100mL)

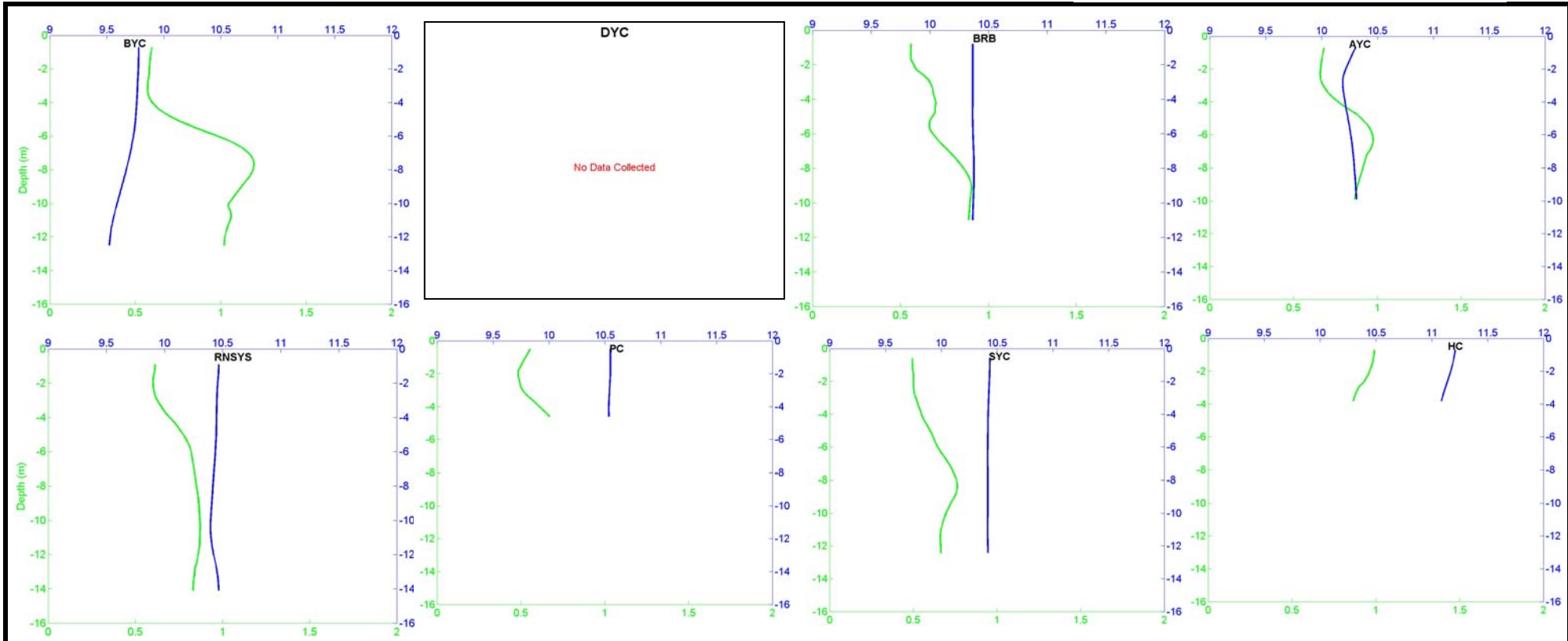
above swimming limit (200 cfu/100mL)



Unless otherwise labeled:
 - **dissolved oxygen** contour interval is 0.5 mg/L
 - **chlorophyll** contour interval is 1mg/m³.

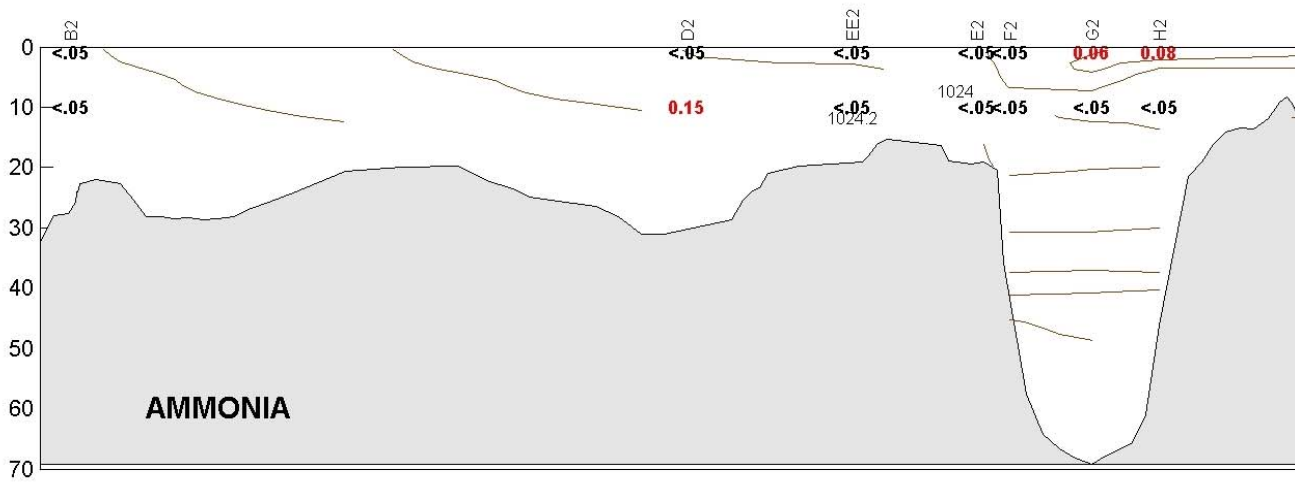
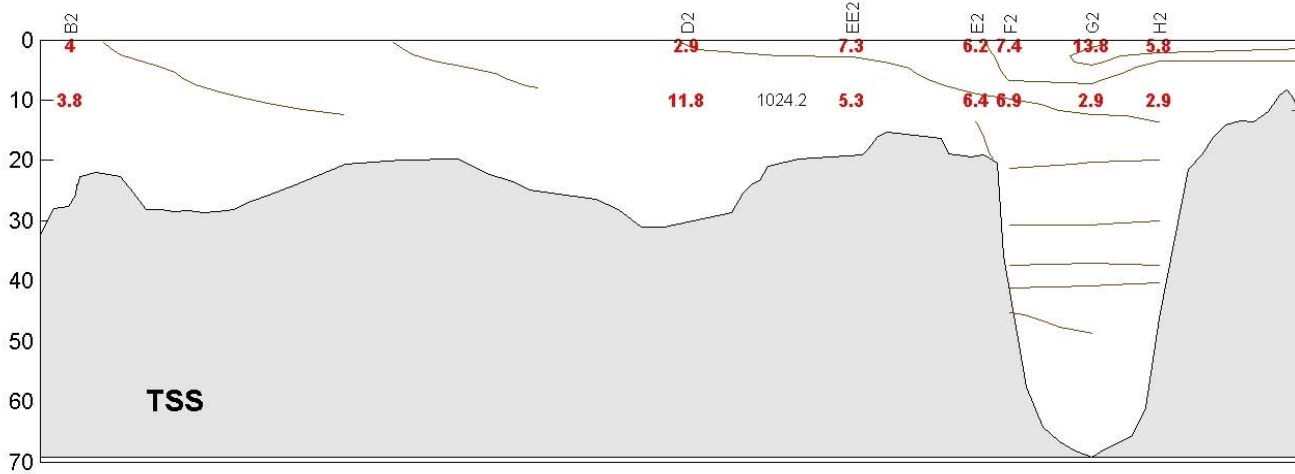


Yacht Clubs



DO in mg/L Chlorophyll in mg/m³

CHEMISTRY



Density in kg/m³

Ammonia in mg/L

TSS in mg/L

