

## Halifax Harbour Water Quality Monitoring Project Weekly Summary #13

**Survey Date:** 14 Sep 04  
**Nature of Survey:** Complete Survey  
**Report File (this document):**

**Data File:** HHWQMP\_report013\_040914.doc  
 HHWQMP\_data013\_040914.xls

**Data Return:**

Profile: 100%  
 Bacteria: 100%  
 Chemical: 100%  
**Overall: 100%**

**Data Notes:**

**QA/QC samples:**

Parameter	units	D2 - 10m		H2- 10m	
		reference sample	QA/QC	reference sample	Dup
Ammonia (as N)	mg/L	0.05	<0.05	0.06	0.05
Total Suspended Solids	mg/L	2.0	4.6	3.8	n/a
Boron	ug/L	4000	3600	3600	3600
Lithium	ug/L	160	180	160	160
Manganese	ug/L	22	<20	<20	<20
Strontium	ug/L	6400	6800	6400	6200
Titanium	ug/L	72	74	63	60
Uranium	ug/L	3.6	3.4	3.4	3.3

**Fecal Coliform (CFU/ml)**

Site	D3-10m	D3-10m	D3-1m	D3-1m	D2-1m	D2-10m
Reference	0	0	0	0	0	0
QA/QC	1	5	0	0	0	2

**Regulated parameters with all samples below EQL (non-detectible):**

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

**Detectible non regulated metals**

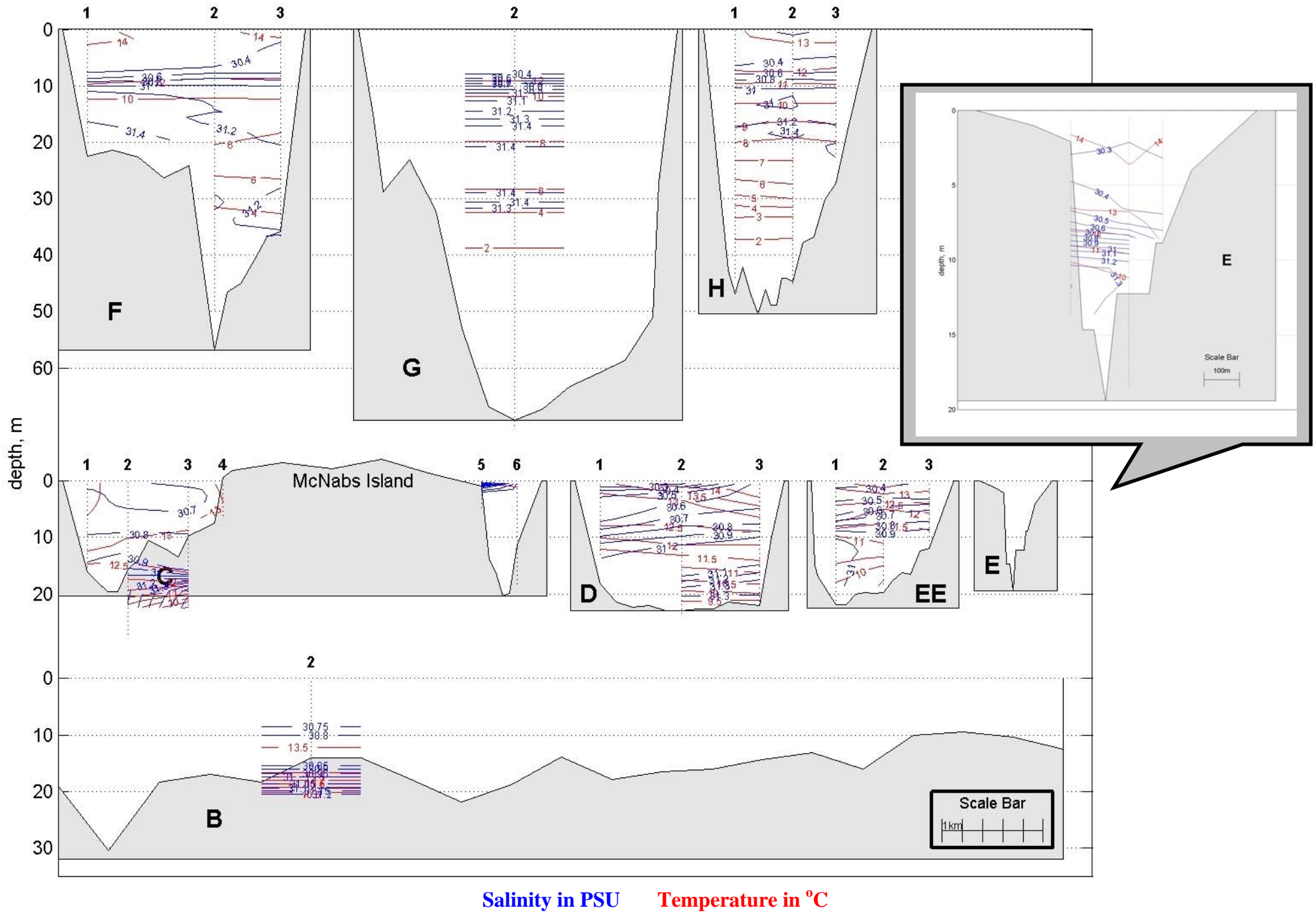
Metal	EQL (µg/L)	Number >EQL	Mean (µg/L)	Range (µg/L)
Boron	500	16	3700	3400-4100
Lithium	20	16	170	160-180
Strontium	50	16	6500	6200-6800
Titanium	20	16	69	60-76
Uranium	1	16	3.3	3-3.6

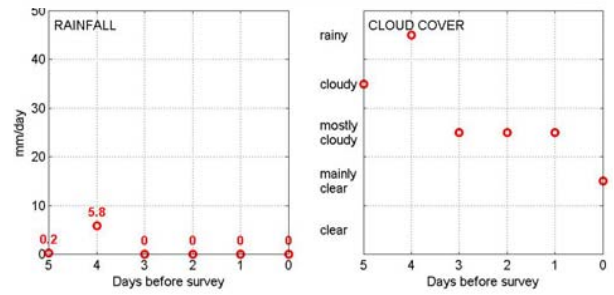
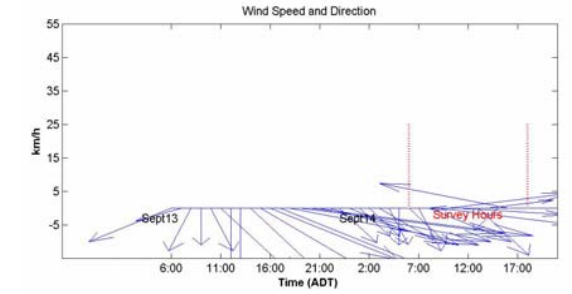
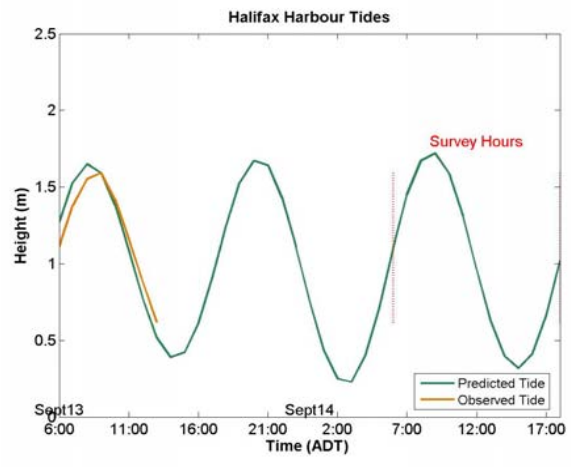
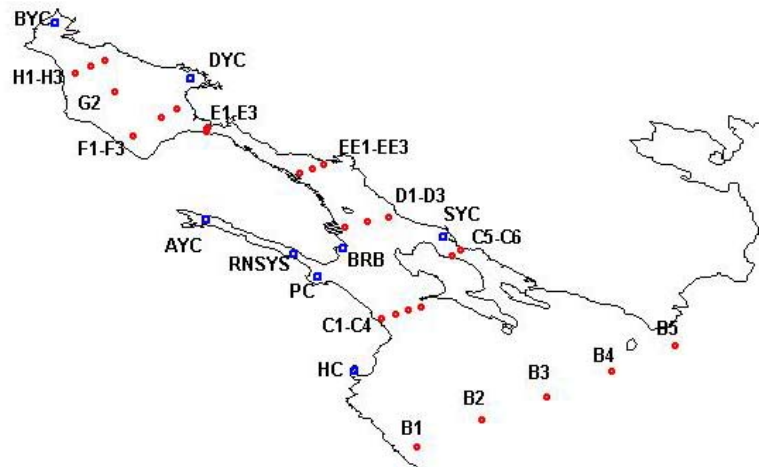
**Comments:**

**Manganese:** Two samples (D2-10m, 22 mg/l and F2-10m, 24 mg/l) demonstrated detectible levels of manganese.

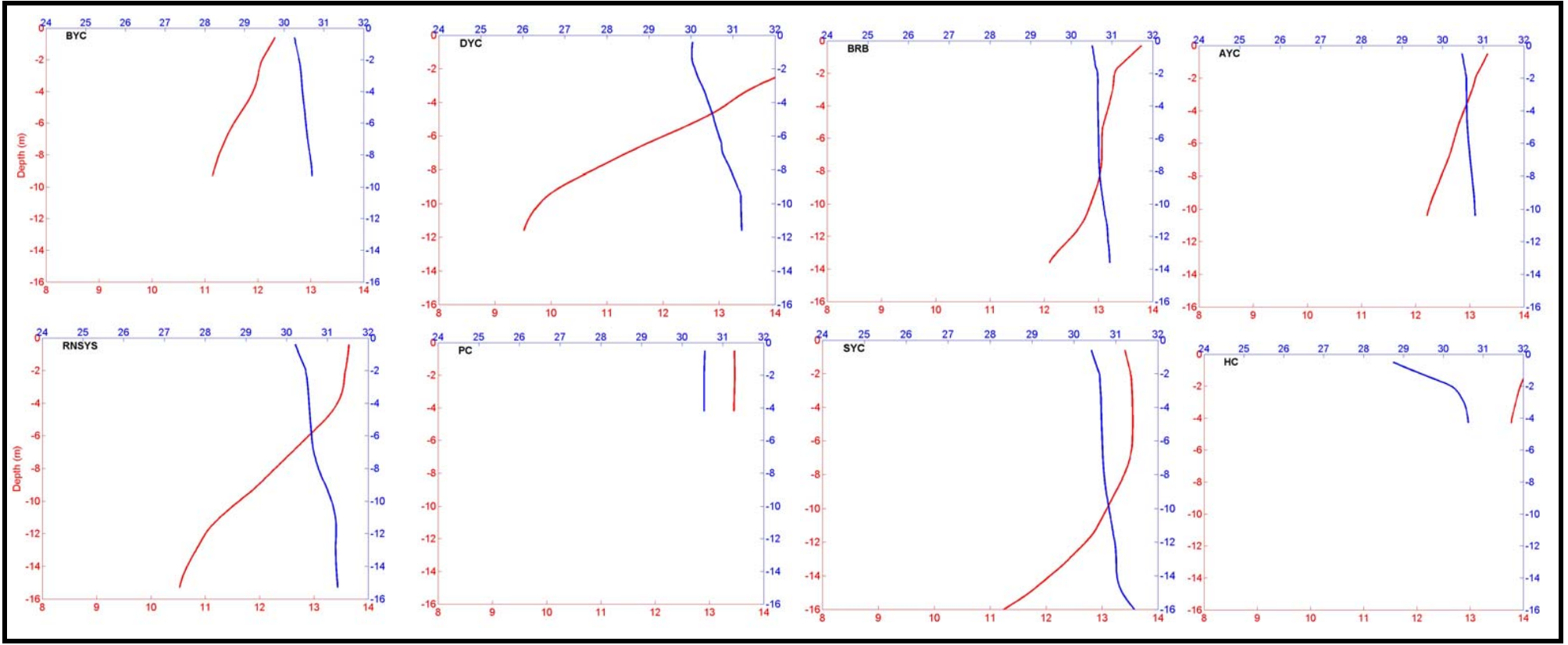
**Dissolved Oxygen:** The apparent lower oxygen values at the surface are likely the result of flow problems in the sensor (See report #12). The dissolved oxygen remains low in the bottom of Bedford Basin. In addition to this the SA criteria (8 mg/l) is violated at 17 m at station B2 (7.2 mg/l)

**Fluorescence:** Values in surface water is approximately 0.6 – 0.7 mg/m<sup>3</sup> everywhere. Inside the harbour, at a depth of about 16 m, values increase to 1-2 mg/m<sup>3</sup>. In the deeper waters of Bedford Basin a maximum of 12 to 18 mg/m<sup>3</sup> occurs at approximately 30 m.

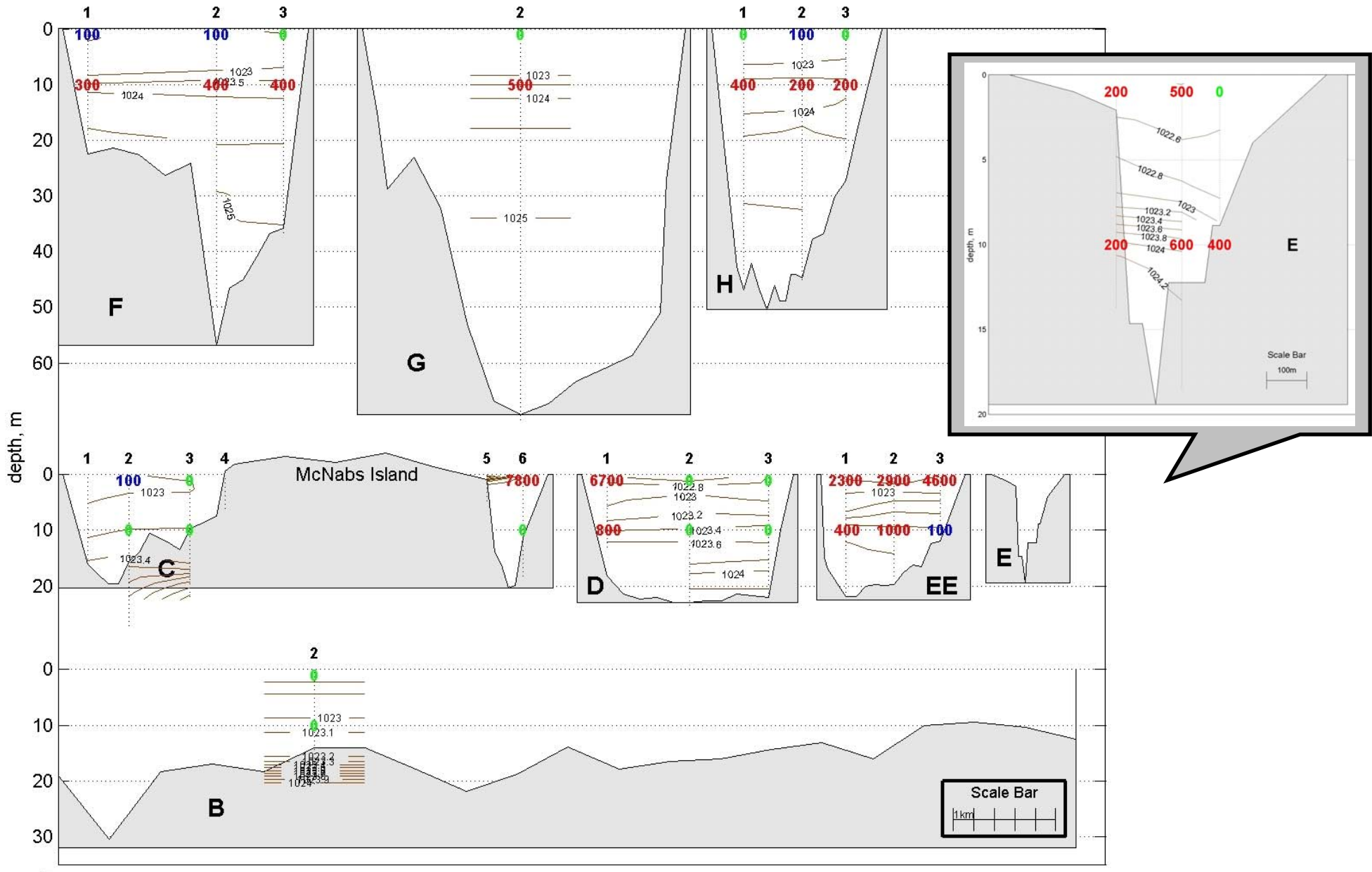


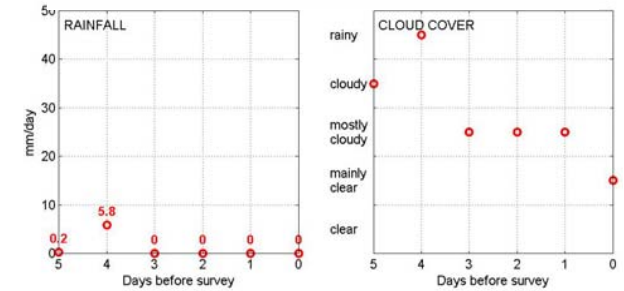
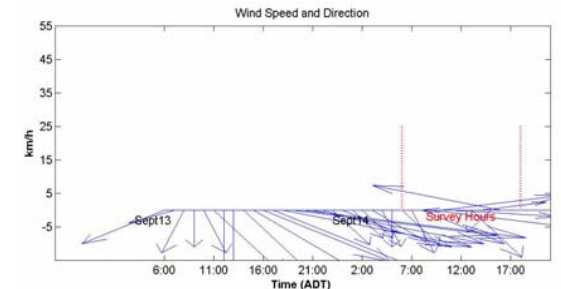
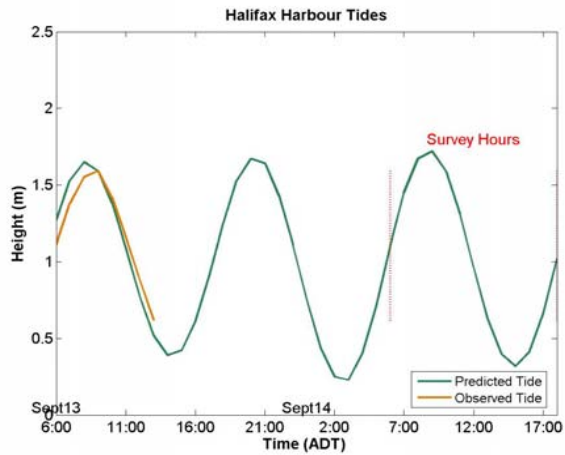
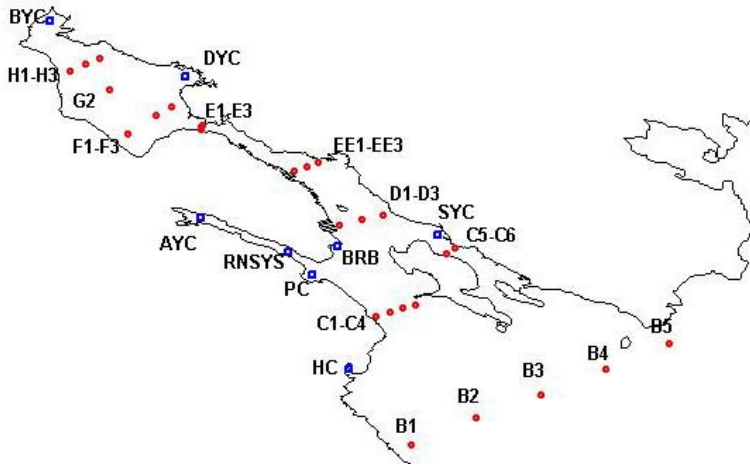


**Yacht Clubs**

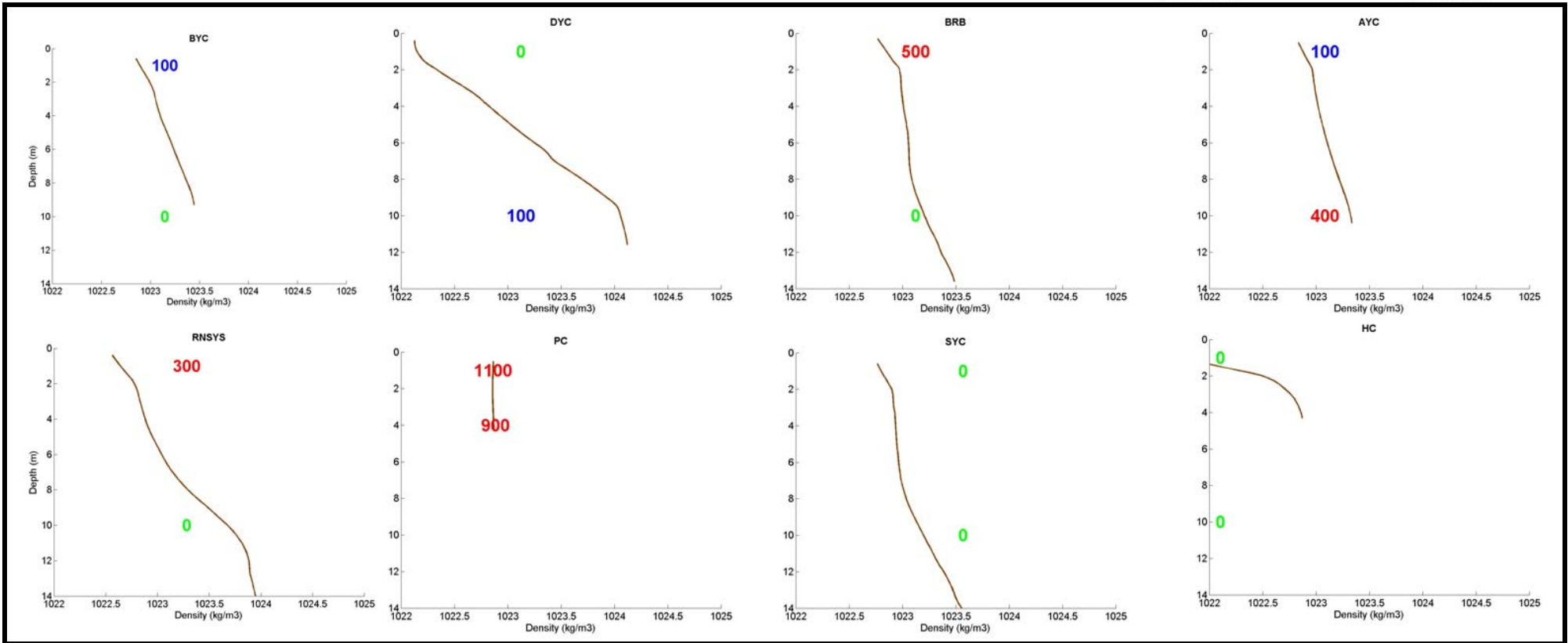


Salinity in PSU      Temperature in °C

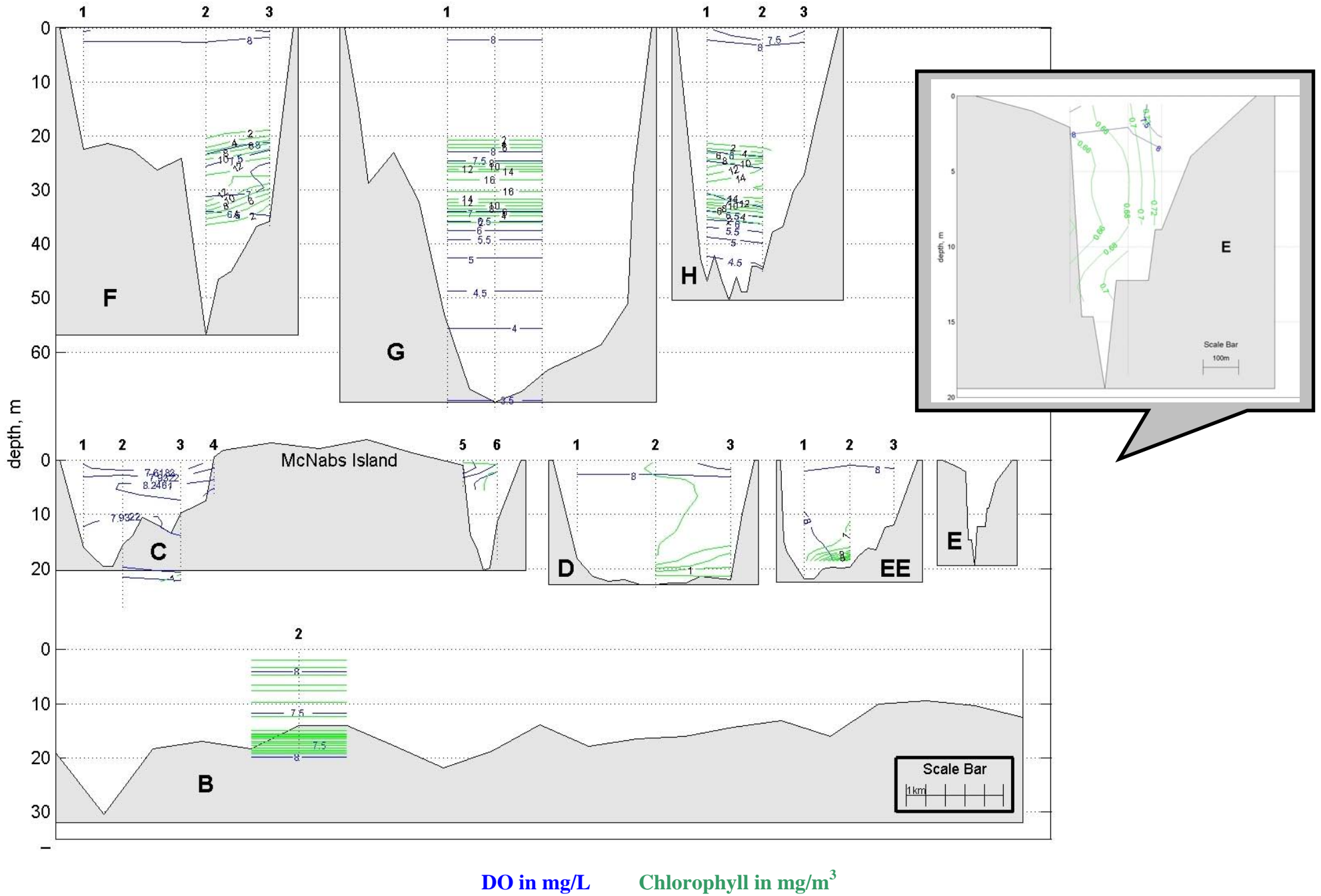


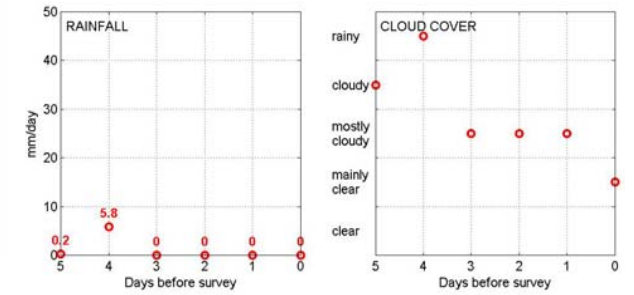
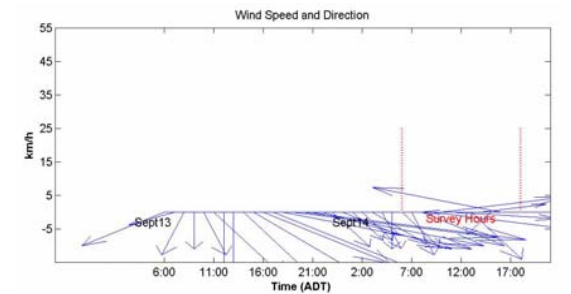
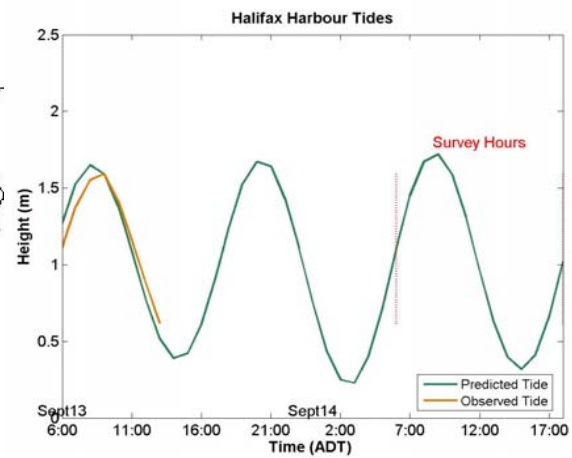
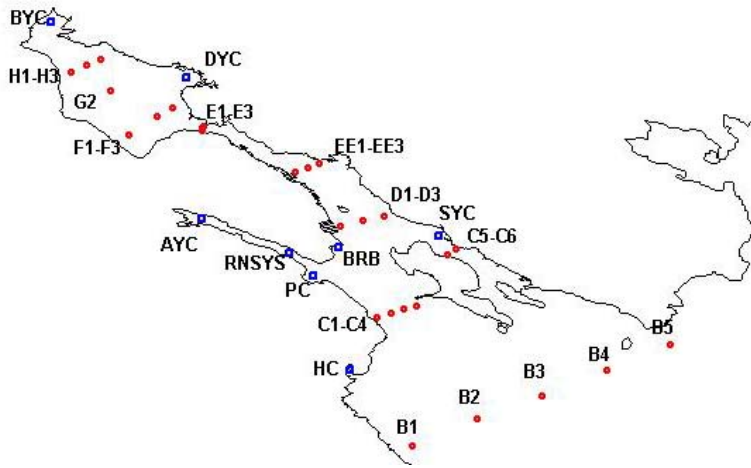


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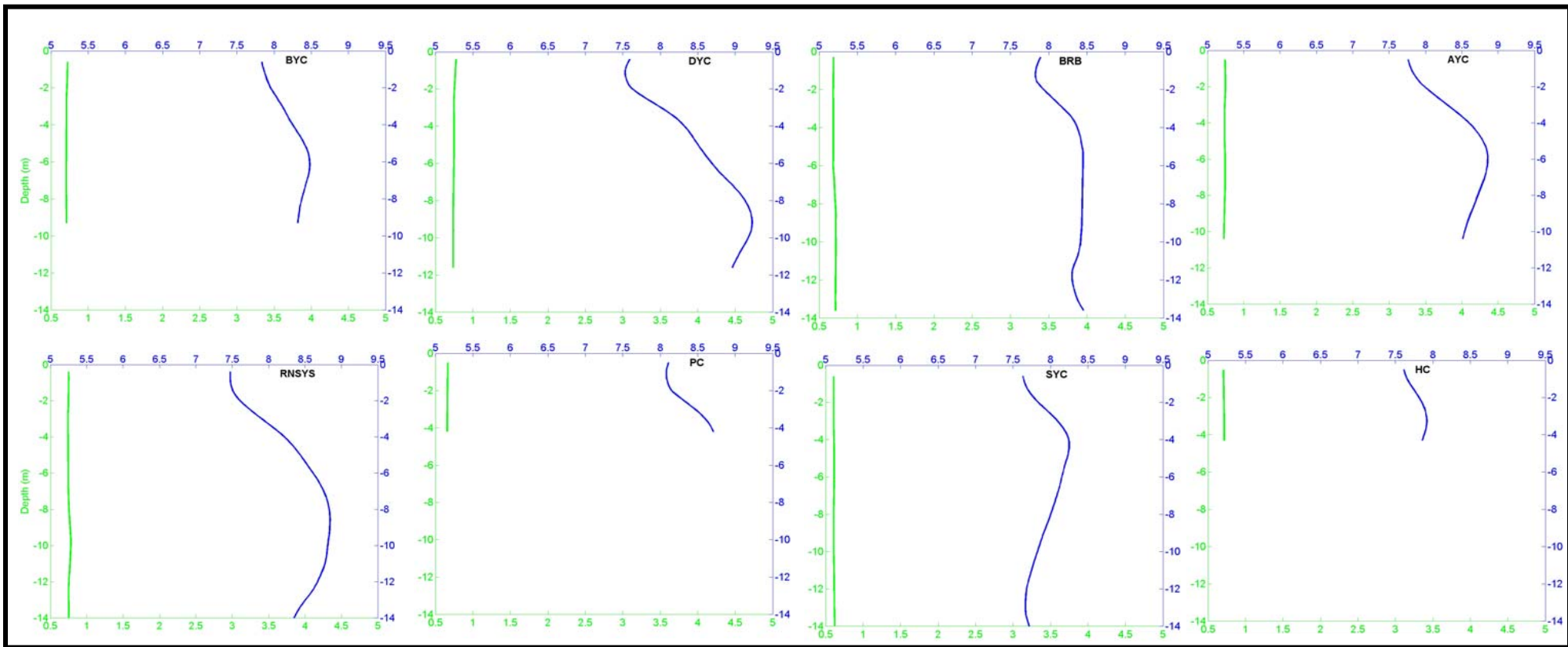


**Density in kg/m<sup>3</sup>**    **Fecal coliform: above swimming limit (200 cfu/100mL)**  
**above shellfish limit (14 cfu/100mL)**  
**below limits**

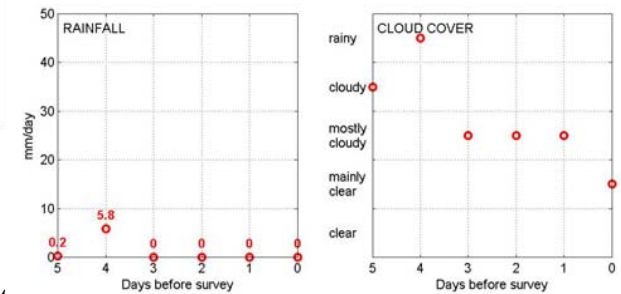
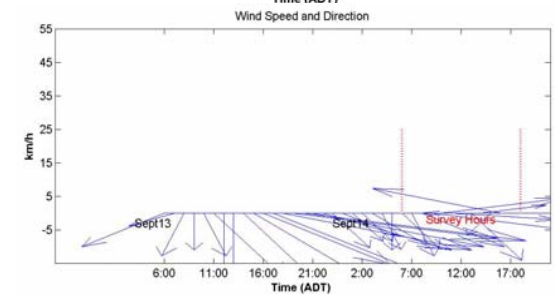
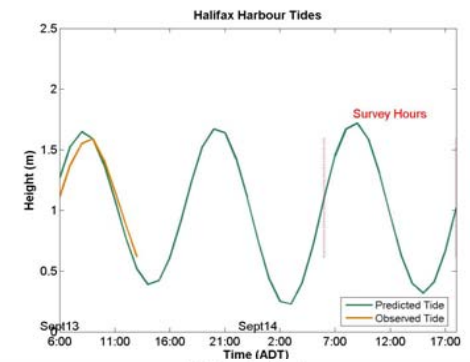
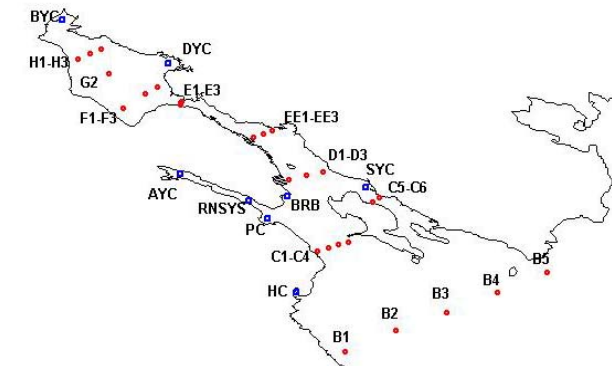
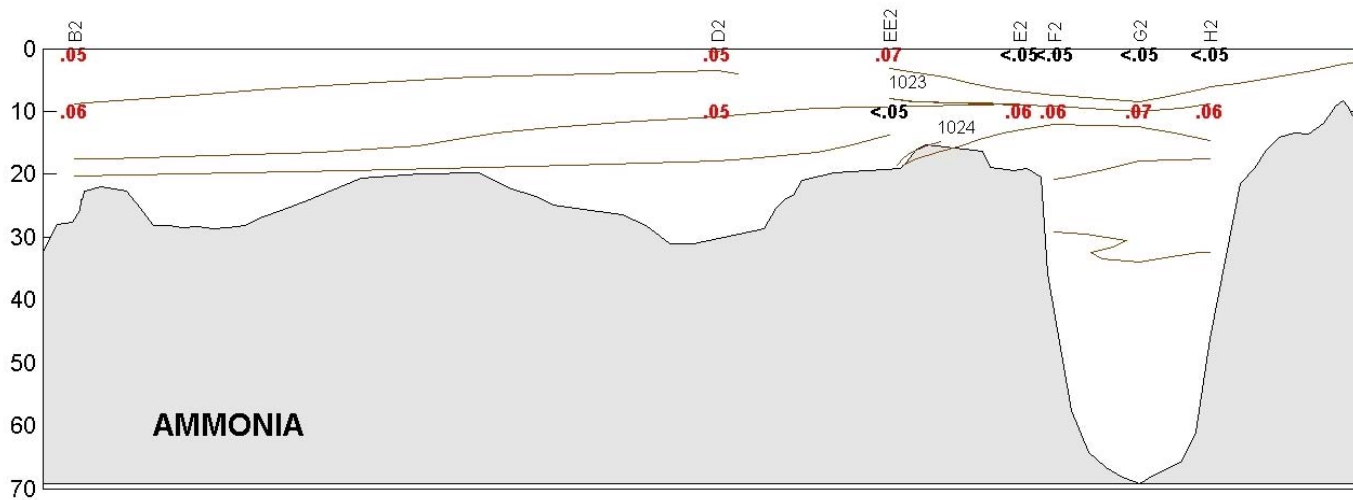
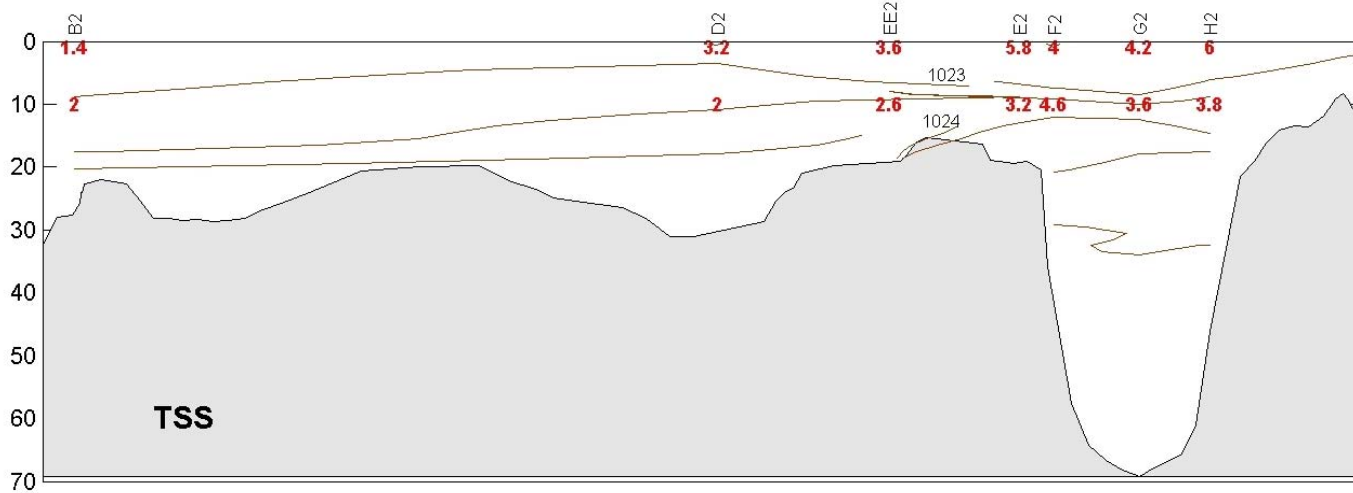




**Yacht Clubs**



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



Density in kg/m<sup>3</sup>

Ammonia in mg/L

TSS in mg/L