Site ID	14CTB 01		
Field Crew	JCB CSA		
Date	4/2 092		
Arrival Time	10:47	Departure Time 11:00	
Latitude	N38.01761	Longitude W075.27509	
Water Depth (m)	1-2 cm		
Handheld GPS used	76S	GPS Waypoint 043	
YSI	—	Camera CGS 992-995	

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	A643		
Occupation Time (min)	5 min		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)	—	Barrel Length (cm)	
Shear Strength (marsh sites only)	—	ITGODS (bottom of weld ≈ top of barrel) (cm)	
Forams (preserved, x2)	—	Recovered Core Length (cm)	
Grain Size	—	Core Catcher Used?	
Stable Isotopes/Metals	—	Distance from GPS	
Distance from GPS	25 cm	Azimuth from GPS	
Azimuth from GPS	W 28 U		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)		Temperature (°C)	
Vegetation Type		Barometric Pressure	
Barrel Length (cm)		Dissolved Oxygen (DO) (%)	
In-the-Ground Inside Depth to Surface (ITGIDS) (cm)		DO (mg/L)	
		Specific Conductance (mS/cm)	
In-the-Ground Outside Depth to Surface (ITGODS) (cm)		Salinity	
		pH (-)	
Recovered Core Length (cm)		ORP (mV)	
Distance from GPS			
Azimuth from GPS			
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

(penetrometer + shear vane on boat)

Marsh edge ~~along~~ facing bay is very "cliffy" or even undercut – 1/2 m + drop off along this entire shoreline

could not get good pix

Photos

pix 4x N → E → S → W

Site ID	14CTB03		
Field Crew	JCB CSA		
Date	4/2 092		
Arrival Time	13:16	Departure Time	13:30
Latitude	N38.04562	Longitude	W075.25781
Water Depth (m)	<1cm		
Handheld GPS used	765	GPS Waypoint	046
YSI		Camera	~~—~~

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	D646		
Occupation Time (min)	5 MIN		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)	1.25	Barrel Length (cm)	
Shear Strength (marsh sites only)	1	ITGODS (bottom of weld ≈ top of barrel) (cm)	
Forams (preserved, x2)	—	Recovered Core Length (cm)	
Grain Size	—	Core Catcher Used?	
Stable Isotopes/Metals	—	Distance from GPS	
Distance from GPS	25cm	Azimuth from GPS	
Azimuth from GPS	NE 65		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)		Temperature (°C)	
Vegetation Type	spartina (?)	Barometric Pressure	
Barrel Length (cm)		Dissolved Oxygen (DO) (%)	
In-the-Ground Inside Depth to Surface		DO (mg/L)	
(ITGIDS) (cm)		Specific Conductance (mS/cm)	
In-the-Ground Outside Depth to Surface		Salinity	
(ITGODS) (cm)		pH (-)	
Recovered Core Length (cm)		ORP (mV)	
Distance from GPS			
Azimuth from GPS			
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

camera on boat
spartina (?) marsh

Photos

Site ID	14CTB04		
Field Crew	JCB CSA		
Date	4/2 092		
Arrival Time	11:57	Departure Time	13:00
Latitude	N38.04765	Longitude	W075.23817
Water Depth (m)	<1cm		
Handheld GPS used	76 S	GPS Waypoint	045
YSI		Camera	cgS DSLR 1003 - 1009

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	C645	~150cm from SET GPS mark	
Occupation Time (min)	30min	NW 230 to SET	
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)	1.5	Barrel Length (cm)	
Shear Strength (marsh sites only)	0.5	ITGODS (bottom of weld ≈ top of barrel) (cm)	
Forams (preserved, x2)	✓	Recovered Core Length (cm)	
Grain Size	✓	Core Catcher Used?	
Stable Isotopes/Metals	✓	Distance from GPS	
Distance from GPS	65 cm	Azimuth from GPS	
Azimuth from GPS	~~SW~~ SW 225		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	backfill
Shear Strength (kg/cm^2)		Temperature (°C)	17.8
Vegetation Type	Spartina (?)	Barometric Pressure	765.1
Barrel Length (cm)	123	Dissolved Oxygen (DO) (%)	6.2
In-the-Ground Inside Depth to Surface (ITGIDS) (cm)	80	DO (mg/L)	0.44
		Specific Conductance (mS/cm)	23.86
In-the-Ground Outside Depth to Surface (ITGODS) (cm)	73	Salinity	14.51
		pH (-)	7.96 -87.1
Recovered Core Length (cm)	46cm	ORP (mV)	94.3
Distance from GPS	120cm		
Azimuth from GPS	E80		
Marsh Auger Core		***Radium Sampling***	
Number of Sections	1	Start Time	
Total Core Length (cm)	45cm	Stop Time	
Distance from GPS	206cm	Total Volume	
Azimuth from GPS	NE45	Approximate Flow Rate	

Notes

thin root mat difficult to get good penetration through sand w/ push core or peat auger

Peat auger 0-6 cm brown to olive brown hemic peat small root fragments
6-36 cm grey sand w/ thin brown to blk org interbeds
36-45cm brown org mud w/ sandy interbeds

Photos

4x N → E → S → W
3x marsh surface + SET
DSLR 2x whole core plus overlapping (zoom) 20cm sections

Site ID	14CTB-05 (+30 replicate) 14CTB30		
Field Crew			
Date	3/28/14 JD087		
Arrival Time	4:05	Departure Time	
Latitude	38.06309	Longitude	75.21001
Water Depth (m)	7cm		
Handheld GPS used	765	GPS Waypoint	~~015~~ 017
YSI		Camera	913-916

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	B317.		
Occupation Time (min)	5		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)	—	Barrel Length (cm)	
Shear Strength (marsh sites only)	—	ITGODS (bottom of weld ≈ top of barrel) (cm)	
Forams (preserved, x2)	✓	Recovered Core Length (cm)	
Grain Size	✓	Core Catcher Used?	
Stable Isotopes/Metals	✓	Distance from GPS	
Distance from GPS	120cm	Azimuth from GPS	
Azimuth from GPS	S		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)		Temperature (°C)	
Vegetation Type		Barometric Pressure	
Barrel Length (cm)		Dissolved Oxygen (DO) (%)	
In-the-Ground Inside Depth to Surface (ITGIDS) (cm)		DO (mg/L)	
		Specific Conductance (mS/cm)	
In-the-Ground Outside Depth to Surface (ITGODS) (cm)		Salinity	
		pH (-)	
Recovered Core Length (cm)		ORP (mV)	
Distance from GPS			
Azimuth from GPS			
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

14CTB05 replicate 14CTB30

Photos

Site ID	14CTB 06		
Field Crew			
Date	3/28/14 JD 087		
Arrival Time	1:35 AM	Departure Time	1:40PM
Latitude	N 38.08804	Longitude	W 075.220886
Water Depth (m)	—		
Handheld GPS used	765	GPS Waypoint	916
YSI		Camera	CGS 906-912

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	A316		
Occupation Time (min)	30		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)		Barrel Length (cm)	117
Shear Strength (marsh sites only)		ITGODS (bottom of weld ≈ top of barrel) (cm)	
Forams (preserved, x2)	✓	Recovered Core Length (cm)	
Grain Size	✓	Core Catcher Used?	
Stable Isotopes/Metals	✓	Distance from GPS	
Distance from GPS	30	Azimuth from GPS	
Azimuth from GPS			
Marsh Push Core		***Water Quality Parameters***	
Pentrometer	0.75	Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)	1.5	Temperature (°C)	
Vegetation Type	spartina	Barometric Pressure	
Barrel Length (cm)	119	Dissolved Oxygen (DO) (%)	
In-the-Ground Inside Depth to Surface	68	DO (mg/L)	
(ITGIDS) (cm)	~~55~~	Specific Conductance (mS/cm)	
In-the-Ground Outside Depth to Surface	55	Salinity	
(ITGODS) (cm)		pH (-)	
Recovered Core Length (cm)	56cm	ORP (mV)	
Distance from GPS	185		
Azimuth from GPS	S~~W~~E 145		
Marsh Auger Core		***Radium Sampling***	
Number of Sections	1	Start Time	
Total Core Length (cm)	0-50cm	Stop Time	
Distance from GPS	277cm	Total Volume	
Azimuth from GPS	W260	Approximate Flow Rate	

Notes

multiple attempts to take marsh push core, most w/ little penetration or no recovery. Final core retrieved filled w/ water + bandaid capped.

no PVC pipe, kept 0-50cm in marsh core auger to take to truck.

68 inside 55 outside

Photos

4x NE ⇒ SW

vest coring

Peat auger – DSLR photos

2x whole core plus zoom in overlapping 20-cm sections

Site ID 14CTB06			
Field Crew			
Date			
Arrival Time		Departure Time	
Latitude		Longitude	
Water Depth (m)			
Handheld GPS used		GPS Waypoint	
YSI		Camera	
Sample Type/Sample	**X, Measure, Time**	**Sample Type/Sample**	**X, Measure, Time**
DGPS Positioning			
GPS Session ID			
Occupation Time (min)			
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)		Barrel Length (cm)	
Shear Strength (marsh sites only)		ITGODS (bottom of weld ≈ top of barrel) (cm)	
Forams (preserved, x2)		Recovered Core Length (cm)	
Grain Size		Core Catcher Used?	
Stable Isotopes/Metals		Distance from GPS	
Distance from GPS		Azimuth from GPS	
Azimuth from GPS			
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)		Temperature (°C)	
Vegetation Type		Barometric Pressure	
Barrel Length (cm)		Dissolved Oxygen (DO) (%)	
In-the-Ground Inside Depth to Surface		DO (mg/L)	
(ITGIDS) (cm)		Specific Conductance (mS/cm)	
In-the-Ground Outside Depth to Surface		Salinity	
(ITGODS) (cm)		pH (-)	
Recovered Core Length (cm)		ORP (mV)	
Distance from GPS			
Azimuth from GPS			
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

Peat auger – core descr.
0–23 cm peat – brownish grey fibrous root mat
23–47 cm peat – brownish grey to dark brown fibric to hemic (?) peat; visible root fragments decrease in size + content down-core

Photos

greyish horizon from 23–26 cm seems to be more clay-rich (?)
47–50 cm peat + clay – brownish peat interbedded with grey clay

Site ID	14CTB07		
Field Crew	JCB CSA AMF NN		
Date	4/2 092		
Arrival Time	14:50	Departure Time	15:03
Latitude	N38.10370	Longitude	W075.20866
Water Depth (m)	5cm		
Handheld GPS used	765	GPS Waypoint	049
YSI	pro plus	Camera	CGS 1112-1116

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	E649		
Occupation Time (min)	5min		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)	1.25	Barrel Length (cm)	
Shear Strength (marsh sites only)	1.25	ITGODS (bottom of weld ≈ top of barrel) (cm)	
Forams (preserved, x2)	—	Recovered Core Length (cm)	
Grain Size	—	Core Catcher Used?	
Stable Isotopes/Metals	—	Distance from GPS	
Distance from GPS	50cm	Azimuth from GPS	
Azimuth from GPS	NE60		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	marsh-standing
Shear Strength (kg/cm^2)		Temperature (°C)	19.1
Vegetation Type	spartina (:)	Barometric Pressure	764.7
Barrel Length (cm)		Dissolved Oxygen (DO) (%)	112.6
In-the-Ground Inside Depth to Surface		DO (mg/L)	10.72
(ITGIDS) (cm)		Specific Conductance (mS/cm)	42.35
In-the-Ground Outside Depth to Surface		Salinity	27.24
(ITGODS) (cm)		pH (-)	7.87 / -81.4
Recovered Core Length (cm)		ORP (mV)	88.8
Distance from GPS			
Azimuth from GPS			
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

Photos

3x N → E → S

1x ESE skiff

1x marsh veg

Site ID	14CTB08		
Field Crew	JCB CSA AME NP		
Date	4/1 09		
Arrival Time	14:39	Departure Time	14:58
Latitude	N38.11203	Longitude	W075.19899
Water Depth (m)			
Handheld GPS used	765	GPS Waypoint	030
YSI	—	Camera	CGS 986-991

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	FS30		
Occupation Time (min)	5 MIN		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)	0.25	Barrel Length (cm)	65 cm
Shear Strength (marsh sites only)		ITGODS (bottom of weld ≈ top of barrel) (cm)	full penetration
Forams (preserved, x2)		Recovered Core Length (cm)	33 cm
Grain Size		Core Catcher Used?	NO
Stable Isotopes/Metals		Distance from GPS	203 cm
Distance from GPS	145 cm	Azimuth from GPS	W 280
Azimuth from GPS	NE ~~30~~ 30		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)		Temperature (°C)	
Vegetation Type		Barometric Pressure	
Barrel Length (cm)		Dissolved Oxygen (DO) (%)	
In-the-Ground Inside Depth to Surface (ITGIDS) (cm)		DO (mg/L)	
		Specific Conductance (mS/cm)	
In-the-Ground Outside Depth to Surface (ITGODS) (cm)		Salinity	
		pH (-)	
Recovered Core Length (cm)		ORP (mV)	
Distance from GPS			
Azimuth from GPS			
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

edge of pond adjacent to sandy overwash
plus sand auger - punched through recovered ~1/2 cm barrel
no standing water on surface - no YSI

sand over peat over sand

Photos

1x skiff
1x overwash
4x N → E → S → SW

Site ID	14CTB09		
Field Crew	JCB CSA AME		
Date	3/27/086		
Arrival Time	11:19	Departure Time	11:30
Latitude	N 38.11246	Longitude	W075.18787
Water Depth (m)			
Handheld GPS used	765	GPS Waypoint	008 844-850
YSI		Camera	CGS

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	A208		
Occupation Time (min)	5min		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)	—	Barrel Length (cm)	65 cm
Shear Strength (marsh sites only)	—	ITGODS (bottom of weld ≈ top of barrel) (cm)	~~37cm~~ 22 cm
Forams (preserved, x2)	✓	Recovered Core Length (cm)	39 cm
Grain Size	✓	Core Catcher Used?	No
Stable Isotopes/Metals	✓	Distance from GPS	150 cm
Distance from GPS	143 cm	Azimuth from GPS	~~N 35°~~ E100°
Azimuth from GPS	SE 135°		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)		Temperature (°C)	
Vegetation Type		Barometric Pressure	
Barrel Length (cm)		Dissolved Oxygen (DO) (%)	
In-the-Ground Inside Depth to Surface		DO (mg/L)	
(ITGIDS) (cm)		Specific Conductance (mS/cm)	
In-the-Ground Outside Depth to Surface		Salinity	
(ITGODS) (cm)		pH (-)	
Recovered Core Length (cm)		ORP (mV)	
Distance from GPS			
Azimuth from GPS			
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

OW fan

SAND AUGER punched through, recovered peat at bottom of core!!!

Photos

N → E → S → W → N

7x pix

Site ID	14CTB10		
Field Crew	JCB CSA AME		
Date	3/27 086		
Arrival Time	11:42	Departure Time	12:05
Latitude	N 38.11285	Longitude	W 075.19109
Water Depth (m)	2-3cm		
Handheld GPS used	965	GPS Waypoint	009
YSI		Camera	CGS 851-854

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	A209		
Occupation Time (min)	5 min		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)	0.75	Barrel Length (cm)	65
Shear Strength (marsh sites only)	1	ITGODS (bottom of weld ≈ top of barrel) (cm)	24
Forams (preserved, x2)	✓	Recovered Core Length (cm)	16 cm
Grain Size	✓	Core Catcher Used?	No
Stable Isotopes/Metals	✓	Distance from GPS	195 cm
Distance from GPS	~~97~~ 190cm	Azimuth from GPS	~~NW 185~~ 235
Azimuth from GPS	NW 300°		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)		Temperature (°C)	
Vegetation Type		Barometric Pressure	
Barrel Length (cm)		Dissolved Oxygen (DO) (%)	
In-the-Ground Inside Depth to Surface		DO (mg/L)	
(ITGIDS) (cm)		Specific Conductance (mS/cm)	
In-the-Ground Outside Depth to Surface		Salinity	
(ITGODS) (cm)		pH (-)	
Recovered Core Length (cm)		ORP (mV)	
Distance from GPS			
Azimuth from GPS			
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

MARSHY SITE - POOR RECOVERY IN SAND AUGER
Replicate = 14CTB81

Photos

4x PIX N → E → S → W

Site ID	14 CTB 11		
Field Crew	JCB CSA AME		
Date	3/30 089		
Arrival Time	9:48	Departure Time	10:31
Latitude	N38.11366	Longitude	W075.19324
Water Depth (m)	3-5cm		
Handheld GPS used	765	GPS Waypoint	019
YSI	pro plus	Camera	cgs 921-928

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	A414		
Occupation Time (min)	30min		
		Sand Gouge Core:	
Surface/Grab			
Pentrometer (marsh sites only)	0.75	Barrel Length (cm)	50 cm
Shear Strength (marsh sites only)		ITGODS (bottom of weld ≈ top of barrel) (cm)	16 cm
Forams (preserved, x2)	✓	Recovered Core Length (cm)	15 cm
Grain Size	✓	Core Catcher Used?	NO
Stable Isotopes/Metals	✓	Distance from GPS	165 cm
Distance from GPS	310cm	Azimuth from GPS	NE40
Azimuth from GPS	S190		
		Water Quality Parameters	
Marsh Push Core			
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)		Temperature (°C)	11.3°
Vegetation Type	spartina (7)	Barometric Pressure	749.2
Barrel Length (cm)	124cm	Dissolved Oxygen (DO) (%)	67.7
In-the-Ground Inside Depth to Surface (ITGIDS) (cm)	88 cm	DO (mg/L)	6.71
		Specific Conductance (mS/cm)	25.34
In-the-Ground Outside Depth to Surface (ITGODS) (cm)	85 cm	Salinity	15.46
		pH (-)	7.45, 58.2
Recovered Core Length (cm)	37 cm	ORP (mV)	-61.0
Distance from GPS	267 cm		
Azimuth from GPS	SE120		
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

very sandy, saturated - poor sand auger recovery
+ marsh push core - very hard to get penetration
no penetration w/ peat auger

Photos

4x pix E → S → W → N
2x "jesus" scott
2x horseshoe crab giant!

Site ID	14CTB12		
Field Crew	JCB CSA AME		
Date	3/27 086		
Arrival Time	14:26	Departure Time	14:50
Latitude	N 38.13010	Longitude	W075.18529
Water Depth (m)	5CM		
Handheld GPS used	765	GPS Waypoint	012
YSI	—	Camera	09S 870-875, 876-877

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	D212		
Occupation Time (min)	5 MIN		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)	~~1~~ 0.5	Barrel Length (cm)	
Shear Strength (marsh sites only)	1	ITGODS (bottom of weld ≈ top of barrel) (cm)	
Forams (preserved, x2)	✓	Recovered Core Length (cm)	
Grain Size	✓	Core Catcher Used?	
Stable Isotopes/Metals	✓	Distance from GPS	
Distance from GPS	175m	Azimuth from GPS	
Azimuth from GPS	SW 210		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)		Temperature (°C)	
Vegetation Type		Barometric Pressure	
Barrel Length (cm)		Dissolved Oxygen (DO) (%)	
In-the-Ground Inside Depth to Surface		DO (mg/L)	
(ITGIDS) (cm)		Specific Conductance (mS/cm)	
In-the-Ground Outside Depth to Surface		Salinity	
(ITGODS) (cm)		pH (-)	
Recovered Core Length (cm)		ORP (mV)	
Distance from GPS			
Azimuth from GPS			
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

MARSH near tidal inlet
pen + shear failed in ~~wet~~ sediment w/ few cm water
shear in veg 1
pen 0.5 in veg

Photos

2X looking SW to tidal channel
4X NE → N → E → SW
2X zoom of marsh grass (spartina?)

Site ID	14 CTB 13		
Field Crew	JCB CSA AMF		
Date	3/30 089		
Arrival Time	14:19	Departure Time	15:00
Latitude	N38.14065	Longitude	W075.18987
Water Depth (m)			
Handheld GPS used	76S	GPS Waypoint	021
YSI	pro plus	Camera	CgS 932-936

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	E421		
Occupation Time (min)	30m.		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)		Barrel Length (cm)	
Shear Strength (marsh sites only)		ITGODS (bottom of weld ≈ top of barrel) (cm)	
Forams (preserved, x2)	✓	Recovered Core Length (cm)	
Grain Size	✓	Core Catcher Used?	
Stable Isotopes/Metals	✓	Distance from GPS	
Distance from GPS	226	Azimuth from GPS	
Azimuth from GPS			
Marsh Push Core		***Water Quality Parameters***	
Pentrometer	1.75	Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm²)	1.5	Temperature (°C)	8.9
Vegetation Type	spartina (?)	Barometric Pressure	750.3
Barrel Length (cm)	125 cm	Dissolved Oxygen (DO) (%)	30.9
In-the-Ground Inside Depth to Surface (ITGIDS) (cm)	82 cm	DO (mg/L)	3.0
	76 cm	Specific Conductance (mS/cm)	40.26
In-the-Ground Outside Depth to Surface (ITGODS) (cm)	76 cm	Salinity	25.55
	69 cm	pH (-)	6.61, -10.3
Recovered Core Length (cm)	44 cm	ORP (mV)	-238.0
Distance from GPS	272		
Azimuth from GPS	ENE 60		
Marsh Auger Core		***Radium Sampling***	
Number of Sections	1	Start Time	
Total Core Length (cm)	45 cm	Stop Time	
Distance from GPS	423	Total Volume	
Azimuth from GPS	ENE 60	Approximate Flow Rate	

Notes

195 cm from SET GPS point (reg tripod) ENE 60 from pt
horses common @ area → trampled in general area
poor penetration — hit sand layer + stop
peat auger 0-13 cm olive brown to brown fibric peat (root mat)
13-40 cm olive brown to grayish brown hemic peat (*)

Photos

plx 4X N → E → S → W
plus 1 SET + USGS GPS

DSLR 2X peat auger plus overlapping 20 cm sections

(*) root fragments decrease in size + content down-core
40-45 cm grayish brown muddy sand, w/ root fragments

Site ID 14CTB14			
Field Crew	JCB CSA		
Date	4/1 092		
Arrival Time	12:25	Departure Time 13:38	
Latitude	N38.15149	Longitude W075.18822	
Water Depth (m)			
Handheld GPS used	76S	GPS Waypoint 029	
YSI	proplus	Camera cgs + DSLR 980–	985

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	E529		
Occupation Time (min)	30 min		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)	0.25	Barrel Length (cm)	65 cm
Shear Strength (marsh sites only)	0.5	ITGODS (bottom of weld ≈ top of barrel) (cm)	~~[illegible]~~ full
Forams (preserved, x2)	—	Recovered Core Length (cm)	20cm
Grain Size	—	Core Catcher Used?	NO
Stable Isotopes/Metals	—	Distance from GPS	153 cm
Distance from GPS	305 cm	Azimuth from GPS	ENE 60
Azimuth from GPS	NW 310 cm		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	backfill
Shear Strength (kg/cm^2)		Temperature (°C)	14.9
Vegetation Type	Spartina (?)	Barometric Pressure	765.8
Barrel Length (cm)	124cm	Dissolved Oxygen (DO) (%)	60.9
In-the-Ground Inside Depth to Surface (ITGIDS) (cm)	76 cm	DO (mg/L)	5.57
	~~[illegible]~~	Specific Conductance (mS/cm)	26.25
In-the-Ground Outside Depth to Surface (ITGODS) (cm)	67 cm	Salinity	16.10
		pH (-)	7.41 | –5.53
Recovered Core Length (cm)	49 1/2 cm	ORP (mV)	71.5
Distance from GPS	91 cm		
Azimuth from GPS	W 260°		
Marsh Auger Core		***Radium Sampling***	
Number of Sections	1	Start Time	
Total Core Length (cm)	43	Stop Time	
Distance from GPS	23 bcm	Total Volume	
Azimuth from GPS	NW 310	Approximate Flow Rate	

Notes

Sand auger full penetration poor recovery
Marsh core penetrated ~~thick~~ sand below root mat
could not get full penetration w/ peat auger
SET GPS mark ~220 SSE 140° from GPS elev
peat auger – 0-7 cm hemic peat w/ small root fragments (brown)
7-23 cm gray sand, a few organics (*)

Photos

5x pix N → E → S
1x close up of second SET (?) across tidal inlet (exclusion SET)

(*) 23-39cm brown to gray mud + sand 1/b
39-43 cm org-rich mud (brownish grey) + gray sand
a few visible root fragments

DSLR 3x whole core plus zoom overlap 20 cm sections

Site ID	14CTB15		
Field Crew	JCB CGA AME		
Date	3/27 086		
Arrival Time	16:28	Departure Time	16:42
Latitude	N 38.15316	Longitude	W 075.17877
Water Depth (m)	1-2cm on surface		
Handheld GPS used	76 S	GPS Waypoint	015
YSI	———	Camera	CGS 892-901

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	E215		
Occupation Time (min)	5 min		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)	0.25	Barrel Length (cm)	65
Shear Strength (marsh sites only)	0.5	ITGODS (bottom of weld ≈ top of barrel) (cm)	14
Forams (preserved, x2)	—	Recovered Core Length (cm)	15.5 cm
Grain Size	—	Core Catcher Used?	No
Stable Isotopes/Metals	—	Distance from GPS	52 cm
Distance from GPS	140 cm	Azimuth from GPS	W 270
Azimuth from GPS	NW 330		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)		Temperature (°C)	
Vegetation Type		Barometric Pressure	
Barrel Length (cm)		Dissolved Oxygen (DO) (%)	
In-the-Ground Inside Depth to Surface		DO (mg/L)	
(ITGIDS) (cm)		Specific Conductance (mS/cm)	
In-the-Ground Outside Depth to Surface		Salinity	
(ITGODS) (cm)		pH (-)	
Recovered Core Length (cm)		ORP (mV)	
Distance from GPS			
Azimuth from GPS			
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

MARSH near tidal inlet
poor recovery of sand auger

Photos

3x SW → W → NW @ tidal inlet

5x N → E → S

2x marsh veg

Site ID	14CTB16		
Field Crew	JCB CSA AME		
Date	3/27 086		
Arrival Time	15:58	Departure Time	16:15
Latitude	N38.15235	Longitude	W075.17607
Water Depth (m)			
Handheld GPS used	765	GPS Waypoint	014
YSI		Camera	CGS 886-890

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	E214		
Occupation Time (min)	5 min		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)	0.25	Barrel Length (cm)	65
Shear Strength (marsh sites only)	0	ITGODS (bottom of weld ≈ top of barrel) (cm)	10
Forams (preserved, x2)	✓	Recovered Core Length (cm)	16 cm
Grain Size	✓	Core Catcher Used?	No
Stable Isotopes/Metals	✓	Distance from GPS	113 cm
Distance from GPS	126 cm	Azimuth from GPS	W 280
Azimuth from GPS	NE 40		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)		Temperature (°C)	
Vegetation Type		Barometric Pressure	
Barrel Length (cm)		Dissolved Oxygen (DO) (%)	
In-the-Ground Inside Depth to Surface (ITGIDS) (cm)		DO (mg/L)	
		Specific Conductance (mS/cm)	
In-the-Ground Outside Depth to Surface (ITGODS) (cm)		Salinity	
		pH (-)	
Recovered Core Length (cm)		ORP (mV)	
Distance from GPS			
Azimuth from GPS			
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

Marshy grass
SAND Auger ~full pen but 16 cm recovery
penetrated sand below organics

Photos

pix 4x N → E → S → W
1x vg (grass)

Site ID 14OTB17			
Field Crew	JCB CSA AME		
Date	3/27 086		
Arrival Time	15:39	Departure Time 15:50	
Latitude	N38.15185	Longitude W075.17361	
Water Depth (m)			
Handheld GPS used	76S	GPS Waypoint 013	
YSI		Camera CGS 881-885	

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	E213		
Occupation Time (min)	5min		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)		Barrel Length (cm)	65 cm
Shear Strength (marsh sites only)		ITGODS (bottom of weld ≈ top of barrel) (cm)	full pen
Forams (preserved, x2)		Recovered Core Length (cm)	36 cm
Grain Size		Core Catcher Used?	NO
Stable Isotopes/Metals		Distance from GPS	73 cm
Distance from GPS	150 cm	Azimuth from GPS	E 90°
Azimuth from GPS	S 170°		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)		Temperature (°C)	
Vegetation Type		Barometric Pressure	
Barrel Length (cm)		Dissolved Oxygen (DO) (%)	
In-the-Ground Inside Depth to Surface		DO (mg/L)	
(ITGIDS) (cm)		Specific Conductance (mS/cm)	
In-the-Ground Outside Depth to Surface		Salinity	
(ITGODS) (cm)		pH (-)	
Recovered Core Length (cm)		ORP (mV)	
Distance from GPS			
Azimuth from GPS			
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

ow fAN w/ some low veg

Photos

4x pix N → E → S → W

1x veg

Site ID	13CTB18		
Field Crew	JCB CSA AME NN		
Date	4/1 09Z		
Arrival Time	11.54	Departure Time	12:05
Latitude	N38.15911	Longitude	W075.18533
Water Depth (m)	—		
Handheld GPS used	76 S	GPS Waypoint	028
YSI	—	Camera	CGS 976-979

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	CS28		
Occupation Time (min)	5min		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)	1.0	Barrel Length (cm)	
Shear Strength (marsh sites only)	1.5	ITGODS (bottom of weld ≈ top of barrel) (cm)	
Forams (preserved, x2)	—	Recovered Core Length (cm)	
Grain Size	—	Core Catcher Used?	
Stable Isotopes/Metals	—	Distance from GPS	
Distance from GPS	20cm	Azimuth from GPS	
Azimuth from GPS	~~NE~~ ESE 120		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)		Temperature (°C)	
Vegetation Type	spartina(?)	Barometric Pressure	
Barrel Length (cm)		Dissolved Oxygen (DO) (%)	
In-the-Ground Inside Depth to Surface (ITGIDS) (cm)		DO (mg/L)	
		Specific Conductance (mS/cm)	
In-the-Ground Outside Depth to Surface (ITGODS) (cm)		Salinity	
		pH (-)	
Recovered Core Length (cm)		ORP (mV)	
Distance from GPS			
Azimuth from GPS			
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

no standing water — no YSI

Photos

4x N → NE → E → SE

Site ID	14CTB19		
Field Crew	JCB CSA AME NN		
Date	4/1 097		
Arrival Time	10:48	Departure Time	10:56
Latitude	N38.17655	Longitude	W075.17895
Water Depth (m)	1-2cm		
Handheld GPS used	76S	GPS Waypoint	027
YSI	pro plus	Camera	cgs 969-975

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	B527		
Occupation Time (min)	5 min		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)	0	Barrel Length (cm)	
Shear Strength (marsh sites only)	0.5	ITGODS (bottom of weld ≈ top of barrel) (cm)	
Forams (preserved, x2)	✓	Recovered Core Length (cm)	
Grain Size	✓	Core Catcher Used?	
Stable Isotopes/Metals	✓	Distance from GPS	
Distance from GPS	86cm	Azimuth from GPS	
Azimuth from GPS	WNW 300		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	standing surface
Shear Strength (kg/cm^2)		Temperature (°C)	15.9
Vegetation Type		Barometric Pressure	767.3
Barrel Length (cm)		Dissolved Oxygen (DO) (%)	133.5
In-the-Ground Inside Depth to Surface		DO (mg/L)	11.3
(ITGIDS) (cm)		Specific Conductance (mS/cm)	39.05
In-the-Ground Outside Depth to Surface		Salinity	24.95
(ITGODS) (cm)		pH (-)	7.82 / -79.1
Recovered Core Length (cm)		ORP (mV)	37.1
Distance from GPS			
Azimuth from GPS			
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

Penetrometer failed
recalibrate YSI tonight? DO seems off
"cliffed" marsh edge

Photos

1x marsh edge looking NE
1x across marsh SE to site
2x close up mars edge
2x close up marsh edge

Site ID	14CTB20	14CTB82	
Field Crew	FCB CSA AME		
Date	3/28/087		
Arrival Time	8:26	Departure Time	
Latitude	N38.20022	Longitude W075.16119	
Water Depth (m)	2-3 cm		
Handheld GPS used	76S	GPS Waypoint 818	
YSI		Camera CJS 917-920	

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	E318		
Occupation Time (min)	5min		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)	0.25	Barrel Length (cm)	
Shear Strength (marsh sites only)	✓	ITGODS (bottom of weld ≈ top of barrel) (cm)	
Forams (preserved, x2)	✓	Recovered Core Length (cm)	
Grain Size	✓	Core Catcher Used?	
Stable Isotopes/Metals	✓	Distance from GPS	
Distance from GPS	185 cm	Azimuth from GPS	
Azimuth from GPS	SE 130		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)		Temperature (°C)	
Vegetation Type		Barometric Pressure	
Barrel Length (cm)		Dissolved Oxygen (DO) (%)	
In-the-Ground Inside Depth to Surface		DO (mg/L)	
(ITGIDS) (cm)		Specific Conductance (mS/cm)	
In-the-Ground Outside Depth to Surface		Salinity	
(ITGODS) (cm)		pH (-)	
Recovered Core Length (cm)		ORP (mV)	
Distance from GPS			
Azimuth from GPS			
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

Juncus marsh

Photos

4x N→E→S→W

Site ID 14CTB21			
Field Crew	JCB CSA AME		
Date 3/26	JD 085		
Arrival Time	13:27	Departure Time	13:34
Latitude	N 39.21221	Longitude	W 075.15327
Water Depth (m)	1-2 cm		
Handheld GPS used 76S		GPS Waypoint	003
YSI	—	Camera	Cgs 805-808

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID			
Occupation Time (min)			
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)	—	Barrel Length (cm)	65
Shear Strength (marsh sites only)	—	ITGODS (bottom of weld ≈ top of barrel) (cm)	50
Forams (preserved, x2)	—	Recovered Core Length (cm)	10
Grain Size	—	Core Catcher Used?	NO
Stable Isotopes/Metals	—	Distance from GPS	
Distance from GPS	290cm	Azimuth from GPS	135cm
Azimuth from GPS	330		10°
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)		Temperature (°C)	
Vegetation Type		Barometric Pressure	
Barrel Length (cm)		Dissolved Oxygen (DO) (%)	
In-the-Ground Inside Depth to Surface (ITGIDS) (cm)		DO (mg/L)	
		Specific Conductance (mS/cm)	
In-the-Ground Outside Depth to Surface (ITGODS) (cm)		Salinity	
		pH (-)	
Recovered Core Length (cm)		ORP (mV)	
Distance from GPS			
Azimuth from GPS			
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

MARSH – ORGANIC / MUCKY
POOR AUGER RECOVERY

Photos

1x FORAMS CB
3x N → E → S from site

Site ID	14CTB 23		
Field Crew	JCB CSA AME		
Date	3/26	JD 085	
Arrival Time	10:37	Departure Time 12:09	
Latitude	N 32.21137	Longitude W 075.15135	
Water Depth (m)	—		
Handheld GPS used	76 S	GPS Waypoint 001	
YSI	—	Camera CGS 789-794	

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	A101		
Occupation Time (min)	5min		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)	—	Barrel Length (cm)	65cm
Shear Strength (marsh sites only)	—	ITGODS (bottom of weld ≈ top of barrel) (cm)	38cm
Forams (preserved, x2)	—	Recovered Core Length (cm)	24cm
Grain Size	—	Core Catcher Used?	No
Stable Isotopes/Metals	—	Distance from GPS	106 cm
Distance from GPS	200 cm	Azimuth from GPS	ESE (110°)
Azimuth from GPS	NNE (40°)		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)		Temperature (°C)	
Vegetation Type		Barometric Pressure	
Barrel Length (cm)		Dissolved Oxygen (DO) (%)	
In-the-Ground Inside Depth to Surface (ITGIDS) (cm)		DO (mg/L)	
		Specific Conductance (mS/cm)	
In-the-Ground Outside Depth to Surface (ITGODS) (cm)		Salinity	
		pH (-)	
Recovered Core Length (cm)		ORP (mV)	
Distance from GPS			
Azimuth from GPS			
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

Photos

1x GPS

5x "PANORAMA" N → E → S

Site ID	14CTB24		
Field Crew	JCB CSA AME		
Date	3/26	JD 085	
Arrival Time	12:20	Departure Time	12:45
Latitude	N 38.21090	Longitude	W 075.14970
Water Depth (m)	—		
Handheld GPS used	765	GPS Waypoint	002
YSI	—	Camera	CGS 795-804

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	A102		
Occupation Time (min)	5 min		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)	—	Barrel Length (cm)	65 cm
Shear Strength (marsh sites only)	—	ITGODS (bottom of weld ≈ top of barrel) (cm)	43 cm
Forams (preserved, x2)	—	Recovered Core Length (cm)	21 cm
Grain Size	—	Core Catcher Used?	NO
Stable Isotopes/Metals	—	Distance from GPS	105 cm
Distance from GPS	300 cm	Azimuth from GPS	S (180°)
Azimuth from GPS	E (90°)		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)		Temperature (°C)	
Vegetation Type		Barometric Pressure	
Barrel Length (cm)		Dissolved Oxygen (DO) (%)	
In-the-Ground Inside Depth to Surface (ITGIDS) (cm)		DO (mg/L)	
		Specific Conductance (mS/cm)	
In-the-Ground Outside Depth to Surface (ITGODS) (cm)		Salinity	
		pH (-)	
Recovered Core Length (cm)		ORP (mV)	
Distance from GPS			
Azimuth from GPS			
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

14CTB24 duplicate 14CTB83

Photos

5x PANORAMA N → E → S (dune field)

5x PANORAMA N → W → S

Site ID	14CTB-25		
Field Crew	AME CSA JCB		
Date	3/30 089		
Arrival Time	11:38	Departure Time	~~1:00~~ 13:00
Latitude	39.14365	Longitude	75.18908
Water Depth (m)	3-5cm		
Handheld GPS used		GPS Waypoint	29
YSI		Camera	929-932

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	C420	~3 M	S 170° to SET GPS mark — barbed wire plus reg tripod
Occupation Time (min)	30 mins		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)	1.25	Barrel Length (cm)	
Shear Strength (marsh sites only)	0.5	ITGODS (bottom of weld ≈ top of barrel) (cm)	
Forams (preserved, x2)	✓	Recovered Core Length (cm)	
Grain Size	✓	Core Catcher Used?	
Stable Isotopes/Metals	✓	Distance from GPS	
Distance from GPS	190 cm	Azimuth from GPS	
Azimuth from GPS	N 65		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm²)		Temperature (°C)	11.5
Vegetation Type		Barometric Pressure	749.4
Barrel Length (cm)	42 / 122	Dissolved Oxygen (DO) (%)	77.7
In-the-Ground Inside Depth to Surface (ITGIDS) (cm)	70 / 85	DO (mg/L)	7.28
In-the-Ground Outside Depth to Surface (ITGODS) (cm)	56 / 76	Specific Conductance (mS/cm)	36.33
Recovered Core Length (cm)	25.5	Salinity	22.92
Distance from GPS	360 cm	pH (-)	7.58, -53.2
Azimuth from GPS	NW 310	ORP (mV)	9.0
Marsh Auger Core		***Radium Sampling***	
Number of Sections	1	Start Time	
Total Core Length (cm)	44	Stop Time	
Distance from GPS	390	Total Volume	
Azimuth from GPS	N350	Approximate Flow Rate	

Notes

Attempted multiple cores. When using piston, only recovered about 1/2 as without

Peat Auger 0-17 cm olive brown fibric root mat
17-29 cm grayish brown hemic peat
29-44 cm gray muddy sand w/ root fragments

Photos

x4 N → E → S → W + flow org (blk) horizons

CORE A 39 cm
B 25.5 cm
> 3 x tried max penetration 39 cm

recovery 25.5 cm core - B (first marsh column)

DSLR 2x whole peat auger plus overlapping 20 cm section

Site ID	14CTB26		
Field Crew	ML CSA JB		
Date	3/27 JD 086		
Arrival Time	10:46	Departure Time	11:00
Latitude	N 38.70993	Longitude	W075.18874
Water Depth (m)			
Handheld GPS used	76S	GPS Waypoint	007
YSI		Camera	CGS 834-843

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	A207		
Occupation Time (min)	5min		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)		Barrel Length (cm)	~~[illegible]~~ 65cm
Shear Strength (marsh sites only)		ITGODS (bottom of weld ≈ top of barrel) (cm)	18cm
Forams (preserved, x2)		Recovered Core Length (cm)	24cm
Grain Size		Core Catcher Used?	NO
Stable Isotopes/Metals		Distance from GPS	~~[illegible]~~ 125cm
Distance from GPS	145cm	Azimuth from GPS	S 170°
Azimuth from GPS	SE 150°		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)		Temperature (°C)	
Vegetation Type		Barometric Pressure	
Barrel Length (cm)		Dissolved Oxygen (DO) (%)	
In-the-Ground Inside Depth to Surface		DO (mg/L)	
(ITGIDS) (cm)		Specific Conductance (mS/cm)	
In-the-Ground Outside Depth to Surface		Salinity	
(ITGODS) (cm)		pH (-)	
Recovered Core Length (cm)		ORP (mV)	
Distance from GPS			
Azimuth from GPS			
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

ON FAN very hard surface
"punched through" w/ sand auger + hit saturated layer but poor recovery
another candidate for trenching?

Photos

"panorama" 5x N → E → S
"panorama" 5x N → W → S

Site ID	HCTB 27		
Field Crew	JCB SSA	AME	
Date	3/27 086		
Arrival Time	13:10	Departure Time	13:20
Latitude	N 38.12067	Longitude	W075.18470
Water Depth (m)			
Handheld GPS used	765	GPS Waypoint	011
YSI		Camera	CGS 864-867 868-869

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	B211		
Occupation Time (min)	5 MIN		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)		Barrel Length (cm)	65 cm
Shear Strength (marsh sites only)		ITGODS (bottom of weld ≈ top of barrel) (cm)	18 cm
Forams (preserved, x2)		Recovered Core Length (cm)	28 cm
Grain Size		Core Catcher Used?	No
Stable Isotopes/Metals		Distance from GPS	68 cm
Distance from GPS	95 cm	Azimuth from GPS	W 265
Azimuth from GPS	S 190 cm		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)		Temperature (°C)	
Vegetation Type		Barometric Pressure	
Barrel Length (cm)		Dissolved Oxygen (DO) (%)	
In-the-Ground Inside Depth to Surface (ITGIDS) (cm)		DO (mg/L)	
		Specific Conductance (mS/cm)	
In-the-Ground Outside Depth to Surface (ITGODS) (cm)		Salinity	
		pH (-)	
Recovered Core Length (cm)		ORP (mV)	
Distance from GPS			
Azimuth from GPS			
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

OW fan

SAND Auger – a few org at bottom but did not penetrate recover peat

Photos

pix 4X N → E → S → W

pix 2X

Site ID	14CTB28		
Field Crew	JCB CSA AMF		
Date	3/27/086		
Arrival Time	12:41	Departure Time	12:55
Latitude	N 38.11799	Longitude	W075.18617
Water Depth (m)			
Handheld GPS used	76S	GPS Waypoint	010
YSI		Camera	cgs 859-863

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	B210		
Occupation Time (min)	5 min		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)	—	Barrel Length (cm)	65
Shear Strength (marsh sites only)	—	ITGODS (bottom of weld ≈ top of barrel) (cm)	~20 cm
Forams (preserved, x2)	—	Recovered Core Length (cm)	28 cm
Grain Size	—	Core Catcher Used?	NO
Stable Isotopes/Metals	—	Distance from GPS	113 cm
Distance from GPS	84cm	Azimuth from GPS	SSE 160°
Azimuth from GPS	SE 125		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)		Temperature (°C)	
Vegetation Type		Barometric Pressure	
Barrel Length (cm)		Dissolved Oxygen (DO) (%)	
In-the-Ground Inside Depth to Surface (ITGIDS) (cm)		DO (mg/L)	
		Specific Conductance (mS/cm)	
In-the-Ground Outside Depth to Surface (ITGODS) (cm)		Salinity	
		pH (-)	
Recovered Core Length (cm)		ORP (mV)	
Distance from GPS			
Azimuth from GPS			
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

Toe of OW FAN

SAND Auger recovered some org-rich @ bottom!

Photos

pix 1x N

pix 4x N → E → S → W

Site ID	14CTB-70		
Field Crew	Scott		
Date	4/3/2014		
Arrival Time	810	Departure Time	830
Latitude	38.04221	Longitude	75.33308
Water Depth (m)	—		
Handheld GPS used	GPSmap 76s	GPS Waypoint	057
YSI	—	Camera	1019-122

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	B75T		
Occupation Time (min)	~10 min		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)		Barrel Length (cm)	
Shear Strength (marsh sites only)		ITGODS (bottom of weld ≈ top of barrel) (cm)	
Forams (preserved, x2)	✓	Recovered Core Length (cm)	
Grain Size	✓	Core Catcher Used?	
Stable Isotopes/Metals	✓	Distance from GPS	
Distance from GPS	~40cm	Azimuth from GPS	
Azimuth from GPS	NE		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer	2.25	Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)	0.75	Temperature (°C)	
Vegetation Type	spartina	Barometric Pressure	
Barrel Length (cm)		Dissolved Oxygen (DO) (%)	
In-the-Ground Inside Depth to Surface (ITGIDS) (cm)		DO (mg/L)	
		Specific Conductance (mS/cm)	
In-the-Ground Outside Depth to Surface (ITGODS) (cm)		Salinity	
		pH (-)	
Recovered Core Length (cm)		ORP (mV)	
Distance from GPS			
Azimuth from GPS			
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

Possible SET site located ~40 ft due East from ROVER
in water ~ 2ft deep

~~labeled 71?~~ used bags for 71
~~[illegible]~~ relabeled to 70

Photos

Site ID	14CTB71		
Field Crew	JCB CSA AMF NN		
Date	4/3 093		
Arrival Time	09:13	Departure Time 10:40	
Latitude	N38.05464	Longitude W075.32333	
Water Depth (m)	—		
Handheld GPS used	765	GPS Waypoint 058	
YSI	—	Camera CGS 1025-1031	DSLR

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	C758		
Occupation Time (min)	30min		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)		Barrel Length (cm)	
Shear Strength (marsh sites only)		ITGODS (bottom of weld ≈ top of barrel) (cm)	
Forams (preserved, x2)	~	Recovered Core Length (cm)	
Grain Size	~	Core Catcher Used?	
Stable Isotopes/Metals	~	Distance from GPS	
Distance from GPS	110	Azimuth from GPS	
Azimuth from GPS			
	W		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer	2.5	Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)	1.25	Temperature (°C)	
Vegetation Type	spartina(?)	Barometric Pressure	
Barrel Length (cm)	122 cm	Dissolved Oxygen (DO) (%)	
In-the-Ground Inside Depth to Surface (ITGIDS) (cm)	55cm	DO (mg/L)	
		Specific Conductance (mS/cm)	
In-the-Ground Outside Depth to Surface (ITGODS) (cm)	17 full penetration	Salinity	
		pH (-)	
Recovered Core Length (cm)	68 cm	ORP (mV)	
Distance from GPS	170cm		
Azimuth from GPS	S		
Marsh Auger Core		***Radium Sampling***	
Number of Sections	4	Start Time	
Total Core Length (cm)	200	Stop Time	
Distance from GPS	198cm	Total Volume	
Azimuth from GPS	S	Approximate Flow Rate	

Notes

Missing sample bags - possibly used 71 for site 70?
relabeled 70 → 71 bags for 70 → 71
peat auger: 0-21 cm reddish brown + gray muddy (clayey) hemic peat w/ root fragments up to 10 cm long
21-28 cm dark grey to blk hemic peat (clayey)
28-50 cm gray to brownish grey hemic peat (clayey)

Photos

DSLR 2x whole section plus overlapping 20cm sections for each 50cm length

pix 5x NE → N → W → S
2x "coring"

Site ID	14CTB71		
Field Crew			
Date			
Arrival Time		Departure Time	
Latitude		Longitude	
Water Depth (m)			
Handheld GPS used		GPS Waypoint	
YSI		Camera	
Sample Type/Sample	**X, Measure, Time**	**Sample Type/Sample**	**X, Measure, Time**
DGPS Positioning			
GPS Session ID			
Occupation Time (min)			
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)		Barrel Length (cm)	
Shear Strength (marsh sites only)		ITGODS (bottom of weld ≈ top of barrel) (cm)	
Forams (preserved, x2)		Recovered Core Length (cm)	
Grain Size		Core Catcher Used?	
Stable Isotopes/Metals		Distance from GPS	
Distance from GPS		Azimuth from GPS	
Azimuth from GPS			
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)		Temperature (°C)	
Vegetation Type		Barometric Pressure	
Barrel Length (cm)		Dissolved Oxygen (DO) (%)	
In-the-Ground Inside Depth to Surface		DO (mg/L)	
(ITGIDS) (cm)		Specific Conductance (mS/cm)	
In-the-Ground Outside Depth to Surface		Salinity	
(ITGODS) (cm)		pH (-)	
Recovered Core Length (cm)		ORP (mV)	
Distance from GPS			
Azimuth from GPS			
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

peat auger (cont)
56-58 cm reddish/brownish gray hemic muddy peat
58-100 cm gray clay w/ root fragments becoming less common down core; brownish coloring from 87-93 cm has more roots/~~org content~~
100-150 cm gray to dark gray clay, w/ a few root fragments + org clast/horizons root content is highest from 100-104 cm
150-200 cm dark gray to gray clay
last dark gray organic (?) horizon ~166 cm
a few org + root fragments 150~181 cm
196 cm
very "soupy" to extract last section

Photos

Site ID	14CTB72		
Field Crew	JCB CSA		
Date	4/3 093		
Arrival Time	10:53	Departure Time	11:15
Latitude	N38.05753	Longitude	W075.35246
Water Depth (m)	—		
Handheld GPS used	76S	GPS Waypoint	059
YSI		Camera	CGS 1032-1059

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	D759		
Occupation Time (min)	5min		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)	1.75	Barrel Length (cm)	
Shear Strength (marsh sites only)	1.5	ITGODS (bottom of weld ≈ top of barrel) (cm)	
Forams (preserved, x2)	—	Recovered Core Length (cm)	
Grain Size	—	Core Catcher Used?	
Stable Isotopes/Metals	—	Distance from GPS	
Distance from GPS	50cm	Azimuth from GPS	
Azimuth from GPS	N350		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)		Temperature (°C)	
Vegetation Type		Barometric Pressure	
Barrel Length (cm)		Dissolved Oxygen (DO) (%)	
In-the-Ground Inside Depth to Surface (ITGIDS) (cm)		DO (mg/L)	
		Specific Conductance (mS/cm)	
In-the-Ground Outside Depth to Surface (ITGODS) (cm)		Salinity	
		pH (-)	
Recovered Core Length (cm)		ORP (mV)	
Distance from GPS			
Azimuth from GPS			
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

~~NE~~ pipeline? nearby straight "channel" in marsh oriented NE 035 to estuary
Spartina (?) + another ~~veg~~ veg (flower?) I don't recognize

Photos

pix 2x "channel"
4x E → S → W → N
2x veg

Site ID	14CTB73		
Field Crew	JCB CSA		
Date	4/3 093		
Arrival Time	11:27	Departure Time	11:37
Latitude	N38.06889	Longitude	W075.36588
Water Depth (m)	1-2 cm		
Handheld GPS used	765	GPS Waypoint	060
YSI	—	Camera	Cgs 1040-1043

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	E760		
Occupation Time (min)	5 MIN		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)	0.75	Barrel Length (cm)	
Shear Strength (marsh sites only)	0.25	ITGODS (bottom of weld ≈ top of barrel) (cm)	
Forams (preserved, x2)	✓	Recovered Core Length (cm)	
Grain Size	—	Core Catcher Used?	
Stable Isotopes/Metals	—	Distance from GPS	
Distance from GPS	40cm	Azimuth from GPS	
Azimuth from GPS	S 180		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)		Temperature (°C)	
Vegetation Type		Barometric Pressure	
Barrel Length (cm)		Dissolved Oxygen (DO) (%)	
In-the-Ground Inside Depth to Surface (ITGIDS) (cm)		DO (mg/L)	
		Specific Conductance (mS/cm)	
In-the-Ground Outside Depth to Surface (ITGODS) (cm)		Salinity	
		pH (-)	
Recovered Core Length (cm)		ORP (mV)	
Distance from GPS			
Azimuth from GPS			
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

forgot replicate sample bag; will take at site 74
Site is adj to channel oriented ~S 195 into
Marsh - deep - dredged for boat access?

Photos

pix 4x N → E → S → W

Site ID	14CTB74	14CTB92	
Field Crew	JCB CSA		
Date	4/3 093		
Arrival Time	11:50	Departure Time 12:00	
Latitude	N38.08017	Longitude W075.35653	
Water Depth (m)	—		
Handheld GPS used	76 S	GPS Waypoint 061	
YSI	—	Camera CGS 1044 - 1048	

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	F761		
Occupation Time (min)	5min		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)	2.5	Barrel Length (cm)	
Shear Strength (marsh sites only)	2.0	ITGODS (bottom of weld ≈ top of barrel) (cm)	
Forams (preserved, x2)	→	Recovered Core Length (cm)	
Grain Size	→	Core Catcher Used?	
Stable Isotopes/Metals	→	Distance from GPS	
Distance from GPS	50 cm	Azimuth from GPS	
Azimuth from GPS	NE 35		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)		Temperature (°C)	
Vegetation Type		Barometric Pressure	
Barrel Length (cm)		Dissolved Oxygen (DO) (%)	
In-the-Ground Inside Depth to Surface (ITGIDS) (cm)		DO (mg/L)	
		Specific Conductance (mS/cm)	
In-the-Ground Outside Depth to Surface (ITGODS) (cm)		Salinity	
		pH (-)	
Recovered Core Length (cm)		ORP (mV)	
Distance from GPS			
Azimuth from GPS			
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

14CTB74 replicate 14CTB92

Photos

PN 4x NE → E → SE → S

1x boat

Site ID	14CTB75		
Field Crew	JCB CSA		
Date	4/3 093		
Arrival Time	12:10	Departure Time	12:25
Latitude	N38.08385	Longitude W075.33617	
Water Depth (m)	<1cm		
Handheld GPS used	76S	GPS Waypoint 062	
YSI	—	Camera CGS 1052-1055	1056-1058

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	G762		
Occupation Time (min)	5 min		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)	1.0	Barrel Length (cm)	
Shear Strength (marsh sites only)	1.0	ITGODS (bottom of weld ≈ top of barrel) (cm)	
Forams (preserved, x2)	—	Recovered Core Length (cm)	
Grain Size	—	Core Catcher Used?	
Stable Isotopes/Metals	—	Distance from GPS	
Distance from GPS	50cm	Azimuth from GPS	
Azimuth from GPS	E100		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)		Temperature (°C)	
Vegetation Type	spartina (?)	Barometric Pressure	
Barrel Length (cm)		Dissolved Oxygen (DO) (%)	
In-the-Ground Inside Depth to Surface (ITGIDS) (cm)		DO (mg/L)	
		Specific Conductance (mS/cm)	
In-the-Ground Outside Depth to Surface (ITGODS) (cm)		Salinity	
		pH (-)	
Recovered Core Length (cm)		ORP (mV)	
Distance from GPS			
Azimuth from GPS			
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

~~Spart~~ private property! no tresspassing!
straight ditches cut into marsh oriented E→W
plus a partial (filled in?) perpendicular but
not crossing

Photos

4x pix N→E→S→W
3x pix ditch E→W, S to partial

Site ID	14CTB76		
Field Crew	JCB CSA		
Date	4/3 093		
Arrival Time	12:37	Departure Time	12:58
Latitude	N38.09017	Longitude	W075.34071
Water Depth (m)	—		
Handheld GPS used	76S	GPS Waypoint	063
YSI	—	Camera	CG3 1061-1064

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	A763		
Occupation Time (min)	5 min		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)	1.0	Barrel Length (cm)	
Shear Strength (marsh sites only)	0.75	ITGODS (bottom of weld ≈ top of barrel) (cm)	
Forams (preserved, x2)	—	Recovered Core Length (cm)	
Grain Size	—	Core Catcher Used?	
Stable Isotopes/Metals	—	Distance from GPS	
Distance from GPS	75cm	Azimuth from GPS	
Azimuth from GPS	SE 155		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)		Temperature (°C)	
Vegetation Type	spartina (?)	Barometric Pressure	
Barrel Length (cm)		Dissolved Oxygen (DO) (%)	
In-the-Ground Inside Depth to Surface (ITGIDS) (cm)		DO (mg/L)	
		Specific Conductance (mS/cm)	
In-the-Ground Outside Depth to Surface (ITGODS) (cm)		Salinity	
		pH (-)	
Recovered Core Length (cm)		ORP (mV)	
Distance from GPS			
Azimuth from GPS			
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

Photos

pix 4x N → E → S → W

Site ID	14CTB77		
Field Crew	JCB CSA AME NN		
Date	4/3 093		
Arrival Time	13:05	Departure Time	13:15
Latitude	N 38.10123	Longitude W075.33424	
Water Depth (m)			
Handheld GPS used	765	GPS Waypoint - 064	
YSI		Camera ngs 1065-1068	

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	I764		
Occupation Time (min)	5 min		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)	2.25	Barrel Length (cm)	
Shear Strength (marsh sites only)	1.0	ITGODS (bottom of weld ≈ top of barrel) (cm)	
Forams (preserved, x2)	—	Recovered Core Length (cm)	
Grain Size	—	Core Catcher Used?	
Stable Isotopes/Metals	—	Distance from GPS	
Distance from GPS	10 cm	Azimuth from GPS	
Azimuth from GPS	SE145		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)		Temperature (°C)	
Vegetation Type		Barometric Pressure	
Barrel Length (cm)		Dissolved Oxygen (DO) (%)	
In-the-Ground Inside Depth to Surface (ITGIDS) (cm)		DO (mg/L)	
		Specific Conductance (mS/cm)	
In-the-Ground Outside Depth to Surface (ITGODS) (cm)		Salinity	
		pH (-)	
Recovered Core Length (cm)		ORP (mV)	
Distance from GPS			
Azimuth from GPS			
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

pipeline (?)(ditch) oriented 030 from estuary w/in 5 m of site

Photos

pix 4x N → E → S → W

Site ID	14CTB79		
Field Crew	JCB CSA AME NN		
Date	4/3 093		
Arrival Time	13:32	Departure Time	13:41
Latitude	N38.10018	Longitude	W075.29815
Water Depth (m)	<1cm		
Handheld GPS used	76S	GPS Waypoint	065
YSI	—	Camera	cgS 1069-1072-1075 DSLR from boat

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	J765		
Occupation Time (min)	5 min		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)	0.75	Barrel Length (cm)	
Shear Strength (marsh sites only)	0.25	ITGODS (bottom of weld ≈ top of barrel) (cm)	
Forams (preserved, x2)	✓	Recovered Core Length (cm)	
Grain Size	✓	Core Catcher Used?	
Stable Isotopes/Metals	✓	Distance from GPS	
Distance from GPS	35cm	Azimuth from GPS	
Azimuth from GPS	ESE 115		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)		Temperature (°C)	
Vegetation Type		Barometric Pressure	
Barrel Length (cm)		Dissolved Oxygen (DO) (%)	
In-the-Ground Inside Depth to Surface (ITGIDS) (cm)		DO (mg/L)	
		Specific Conductance (mS/cm)	
In-the-Ground Outside Depth to Surface (ITGODS) (cm)		Salinity	
		pH (-)	
Recovered Core Length (cm)		ORP (mV)	
Distance from GPS			
Azimuth from GPS			
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

ditch in marsh oriented ~120° from estuary shoreline significantly different here, shallow + gradual w/ shelly "beach"

(skipped site 78 – sketchy private property)

Photos

pix 4x N → E → S → W

1x to boat

2x along ditch to estuary + inland

Site ID	14CTB 81		
Field Crew			
Date	SEE 14CTB10		
Arrival Time		Departure Time	
Latitude		Longitude	
Water Depth (m)			
Handheld GPS used		GPS Waypoint	009
YSI		Camera	

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	A209		
Occupation Time (min)			
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)	0.75	Barrel Length (cm)	65 cm
Shear Strength (marsh sites only)		ITGODS (bottom of weld ≈ top of barrel) (cm)	33 cm
Forams (preserved, x2)		Recovered Core Length (cm)	~~[illegible]~~ 14 cm
Grain Size		Core Catcher Used?	NO
Stable Isotopes/Metals		Distance from GPS	9 cm
Distance from GPS	190	Azimuth from GPS	NE 45
Azimuth from GPS	300		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)		Temperature (°C)	
Vegetation Type		Barometric Pressure	
Barrel Length (cm)		Dissolved Oxygen (DO) (%)	
In-the-Ground Inside Depth to Surface (ITGIDS) (cm)		DO (mg/L)	
		Specific Conductance (mS/cm)	
In-the-Ground Outside Depth to Surface (ITGODS) (cm)		Salinity	
		pH (-)	
Recovered Core Length (cm)		ORP (mV)	
Distance from GPS			
Azimuth from GPS			
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

Replicate @ 14CTB10

Photos

Site ID	14CTB 83 (see 14CTB 24)		
Field Crew			
Date			
Arrival Time		Departure Time	
Latitude		Longitude	
Water Depth (m)			
Handheld GPS used		GPS Waypoint	
YSI		Camera	

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	A102		
Occupation Time (min)	5 min		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)	~~X~~	Barrel Length (cm)	65 cm
Shear Strength (marsh sites only)	—	ITGODS (bottom of weld ≈ top of barrel) (cm)	33 cm
Forams (preserved, x2)	✓	Recovered Core Length (cm)	24.5 cm
Grain Size	✓	Core Catcher Used?	No
Stable Isotopes/Metals	✓	Distance from GPS	170 cm
Distance from GPS	300 cm	Azimuth from GPS	SSE (150°)
Azimuth from GPS	E (91°)		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)		Temperature (°C)	
Vegetation Type		Barometric Pressure	
Barrel Length (cm)		Dissolved Oxygen (DO) (%)	
In-the-Ground Inside Depth to Surface (ITGIDS) (cm)		DO (mg/L)	
		Specific Conductance (mS/cm)	
In-the-Ground Outside Depth to Surface (ITGODS) (cm)		Salinity	
		pH (-)	
Recovered Core Length (cm)		ORP (mV)	
Distance from GPS			
Azimuth from GPS			
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

14CTB24 Duplicate 14CTB-83

Photos

Site ID	14CTB93		
Field Crew	JCB CSA AME		
Date	3/26	085	
Arrival Time	15:46	Departure Time	
Latitude	N 3824451	Longitude	W075. 13503
Water Depth (m)	—		
Handheld GPS used	765	GPS Waypoint	004
YSI	—	Camera	CGS 812-815

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	6104		
Occupation Time (min)	5 m		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)	—	Barrel Length (cm)	65
Shear Strength (marsh sites only)	—	ITGODS (bottom of weld ≈ top of barrel) (cm)	30
Forams (preserved, x2)	—	Recovered Core Length (cm)	28
Grain Size	—	Core Catcher Used?	NO
Stable Isotopes/Metals	—	Distance from GPS	120 cm
Distance from GPS	205cm	Azimuth from GPS	E (90°)
Azimuth from GPS	NNW 340		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)		Temperature (°C)	
Vegetation Type		Barometric Pressure	
Barrel Length (cm)		Dissolved Oxygen (DO) (%)	
In-the-Ground Inside Depth to Surface		DO (mg/L)	
(ITGIDS) (cm)		Specific Conductance (mS/cm)	
In-the-Ground Outside Depth to Surface		Salinity	
(ITGODS) (cm)		pH (-)	
Recovered Core Length (cm)		ORP (mV)	
Distance from GPS			
Azimuth from GPS			
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

OW fan below dunes

Photos

OW ~~fan below dunes~~

Pix x4 N → E → S → W

Site ID	14CJB94		
Field Crew	JCB CSA AME		
Date	3/26 085		
Arrival Time	16:37	Departure Time	16:50
Latitude	N 38.24527	Longitude	W 075 13655
Water Depth (m)	2-3cm		
Handheld GPS used	765	GPS Waypoint	006
YSI	—	Camera	cgs 820-823

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID	B106		
Occupation Time (min)	5m		
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)	~~FAIL~~ 0.75	Barrel Length (cm)	65
Shear Strength (marsh sites only)	FAIL	ITGODS (bottom of weld ≈ top of barrel) (cm)	17
Forams (preserved, x2)	—	Recovered Core Length (cm)	16 cm
Grain Size	—	Core Catcher Used?	NO
Stable Isotopes/Metals	—	Distance from GPS	46
Distance from GPS	210	Azimuth from GPS	W 210
Azimuth from GPS	E 90		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)		Temperature (°C)	
Vegetation Type		Barometric Pressure	
Barrel Length (cm)		Dissolved Oxygen (DO) (%)	
In-the-Ground Inside Depth to Surface (ITGIDS) (cm)		DO (mg/L)	
		Specific Conductance (mS/cm)	
In-the-Ground Outside Depth to Surface (ITGODS) (cm)		Salinity	
		pH (-)	
Recovered Core Length (cm)		ORP (mV)	
Distance from GPS			
Azimuth from GPS			
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

MARSHY - Poor Auger recovery
Shear vane fail - too sucky (0)

Photos

4x N → E → S → W

Site ID 14CTB-95			
Field Crew	JCB CSA AME		
Date	3/26 085		
Arrival Time	16:07	Departure Time 16:25	
Latitude	N 38.24601	Longitude W075.13496	
Water Depth (m)			
Handheld GPS used	765	GPS Waypoint 005	
YSI		Camera CGS 816-819	

Sample Type/Sample	X, Measure, Time	Sample Type/Sample	X, Measure, Time
DGPS Positioning			
GPS Session ID			
Occupation Time (min)			
Surface/Grab		***Sand Gouge Core:***	
Pentrometer (marsh sites only)		Barrel Length (cm)	65
Shear Strength (marsh sites only)		ITGODS (bottom of weld ≈ top of barrel) (cm)	~~[illegible]~~ full
Forams (preserved, x2)	✓	Recovered Core Length (cm)	25cm
Grain Size	✓	Core Catcher Used?	No
Stable Isotopes/Metals	✓	Distance from GPS	220cm
Distance from GPS	95 cm	Azimuth from GPS	155°
Azimuth from GPS	100°		
Marsh Push Core		***Water Quality Parameters***	
Pentrometer		Water Type (Estuary, Marsh, Standing, Marsh Backfill)	
Shear Strength (kg/cm^2)		Temperature (°C)	
Vegetation Type		Barometric Pressure	
Barrel Length (cm)		Dissolved Oxygen (DO) (%)	
In-the-Ground Inside Depth to Surface		DO (mg/L)	
(ITGIDS) (cm)		Specific Conductance (mS/cm)	
In-the-Ground Outside Depth to Surface		Salinity	
(ITGODS) (cm)		pH (-)	
Recovered Core Length (cm)		ORP (mV)	
Distance from GPS			
Azimuth from GPS			
Marsh Auger Core		***Radium Sampling***	
Number of Sections		Start Time	
Total Core Length (cm)		Stop Time	
Distance from GPS		Total Volume	
Azimuth from GPS		Approximate Flow Rate	

Notes

full penetration but "pushed in" fast
tried w/ core catcher no recovery
pushed sed out?

Photos

pix 4x N → E → S → W