

SYSTEM SETUP:

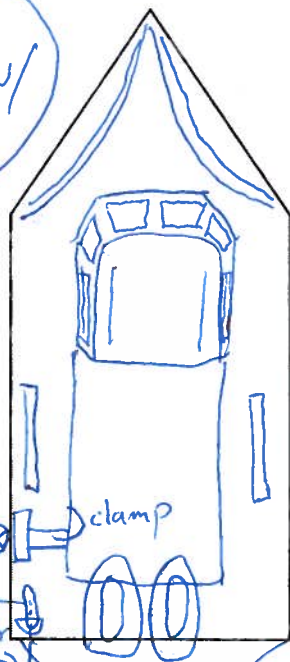
19-22 May 2008 Great South Bay,
Fire Island National Seashore

ship layout and notes:

Bratton, Worley, Cross

National Park Service boat
operated by NPS employees

25' NPS
whaler w/
cabin
50 m



fathometer transducer depth: will measure - 30 cm

draft offset entered in GPS? yes no

streamer length: 50 m

UTC/Local time offset: -4 hrs

Start x (negative distance between cable connection point and first electrode - will be negative value!!!): 16 m (15 m + 1 m connection vs. antenna offset)

Scaling factor (in acquisition software): 5

(if command file has electrode spacing correct, this should be 1. If the cmd file spaces electrodes at 1m, this value will probably be 5 or 10)

command file used: marinedd.cmd

version of acquisition software: 7

electrode array configuration (ie dipole-dipole): dipole-dipole

15m streamer
- 2.0m Shackle to
1st elect.

1.5 scaling factor.

50m streamer

- 15.0m shackles

5m scaling factor

#



5/19/88

50m stream

5.0/-16.0

L120F1

Low Batt

L120F2

restart Low Batt

L120F3

restart

L121

L122



5/20/08

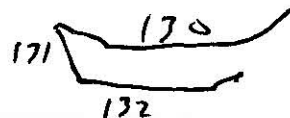
50m stamer.

	<u>EST</u>	
L124F1	0914	→ E
L124F2	0942	Butt Low
L125F1	1046	→ S
L126F1	1105	→ W
L127F1	1128	→ W LONG
L128F1	1503	
L129F1	1605	Home
L129F2	1627	restart Butt Low
" F3	1631	Butt Low
" F4	1651	Butt Low

stopped @ 1654

40.69658	40 41.79
73.16688	73 10.01

5/21/08
50m streamer



- L130F1 far East end → west end
- L130F2 Ditch Low (center of Ch)
- L121F1 ~~East~~ West End DIA6 to station
South by side line
- L132F1 around shallows heading
East.
- L132F2 Hdg East - Low Bank

50m

5/22/08

Local Time

L133F1

F2

F3

0905

out Hbr

L134F1

L134F2

F3

F4

F5

West along shore.

Batt Δ

Batt Δ

} Along shore

L135F1

Dirig 1115

L136F1

L136F2

Going ~~west~~ North

Batt Δ

L137F1

Going South

Day #1

Long Island SGD
Field Activity #08007

(Day #8
for

KK team)

Northport Harbor,
Manhasset Bay, +
Great South Bay

0645 - John Bratton, Chuck Worley,
Adrian Green, Vee Ann
Cross meet in N. Falmouth
and leave for Bridgeport
Ferry (3 vehicles)

1100 - Leave on ferry for
Port Jefferson, Long
Island Sound very
rough

~1145 - arrive Port Jeff, rte
25A to Northport,

~1245 arr. Britannia Yacht Club,
get lunch, meet other
crew (Kroeger, Crusius, Casso,
Erban, Baldwin) @
James St. piezometer
transect site, set up
scaffold

Mon, 12 May 2008

JB, AG, CW, VC travel
meet SB, LE, KK, JC, MC

cold,
windy,
cloudy

~1500 - back to Britannia
(south end of harbor),
set up CRP gear in
R/V Terrapin

1645 - set out in Terrapin
(CW + JB) to test
CRP gear, ran several
short transects w/
new 15-m streamer
at piezometer site,
close to high tide,
terminated at beach

~1800 - back at Britannia,
offload gear, head to
hotel (Hampton Inn, Commack)

~1930 - dinner, then got
distributed sampling
coordinates from SB + LE
for VC to plot, CW
charged batteries, VC
processed initial CRP data

Scale: 1 square = _____

Scale: 1 square = _____

Northport SGD
 08007 Day #2

- 0700- meet at hotel lobby,
 discuss sampling plans,
 coordinate gear
- 0745 - JB/CW/VC leave for
 Northport, swap
 batteries for charging
- 0945 - head out on water
 w/ 15-m streamer to
 run short transects
 down E. shore, very
 windy
- 1045 - trouble shooting problems
 with GPS signal to
 Super Sting box
- 1130 - grounding problem
 isolated and fixed,
 back on the water
- 1200 - GPS acting up again,
 back to pier to fix
 JC crew prepping
 radon raft for launch

Scale: 1 square = _____

JB, CW, VC - CRP Tues, 13 May 2008

JC/LE/SB/AG@ Sunny, cool
 piezo transect, (50s to 60s),
 KK heading home strong N wind
 w/ samples; C. Ruppel
 + student in P.M. (Ruth
 from
 Stony
 Brook)

Tracking #
 735607223230
 10:30 FedEx arr.

- More problems w/ Sting Box in
 PM - contacted manufacturer
 (AGI), and arranged for loaner
 to be FedExed to hotel
- 1700 - back at Britannia Y.C.,
 unloading gear
- 1800 - helping piezometer
 crew break down eqpt.
- ~1900 - leave for hotel

JFB

Scale: 1 square = _____

#08007 Northport SGD
Day #3

- 0700 - meet at hotel,
coordinate sampling
plans, LC to do
Ra times series w/
Stony Brook boat
- 0900 - Set up scaffolds at
piezo site and begin
gw sampling
- 1000 - CW gets loaner Sting @ hotel
- 1330 - Start CRP surveys
with loaner sting box,
15-m transects down
E. shore
- 1345 - end Line 3.3 @ Vanderbilt
Boathouse, work down
west shore w/ 15-m
streamer transects to
stopping pt. from yesterday
- 1445 - To Britannia Y.C. to change
streamers out
- 1530 - Resume CRP surveys
w/ 50-m streamer

Scale: 1 square = _____

JB/CW/VC - CRP Weds, 14 May 2008
JC/AG/MC/SB/LE - piezos
CR + student - stationary resistivity

~~440 - turn at King's Point to
S. after crossing mouth of
bay, start line 54~~

~ 1800 - end CRP surveys for
Northport, back to Piezo
transect site to help
break down gear, including
geophysical gear of CR's

~ 1930 - leave site for hotel,
boat at Northport Yacht Club

JFB

Scale: 1 square = _____

Manhasset SGD

#08007

Day #4

0700 - meet @ hotel, make plans for piezo sampling and changing CRP location to Manhasset Bay (Port Washington)

0830 - pick up trailer @ Britannia Y.C., go to Northport Y.C. + pull Terrapin, drive to Pt. Washington

1100 - check in at Manhasset Bay Yacht Club (MBYC), coordinate arrangements with dockmaster (Pete) and person at dockhouse (Hugh), launch boat at public ramp, set up gear, lunch, coordinate w/ Bay Constable (Mal)

Scale: 1 square = _____

JFB/CW

Thurs., 15 May 2008

JC, AG, MC, at piezos

VC/LE/SB leave in AM

1345 - begin surveying w/ 50-m streamer @ South end of bay, along NE shore

1440 - turn S. @ King's Pt. after crossing mouth of bay, start line 54

1515 - turn at bottom of bay, start line 55 along E. shore toward north

1630 - start line 58 @ seaplane hangar headed across, w

1830 - finish surveying for the day, back at MBYC

JFB

Scale: 1 square = _____

#08007

Manhasset/Northport SGD

Day #5

~0730 - head out for breakfast
and start surveying w/
50-m streamer, finish
last several lines

~1200 - Northport crew arrives
w/ two vehicles and
gear to offload @
MBYC; requests assistance
with breaking down
scaffold, piezos, and raft
@ Northport; JB/CW pull
boat and return to
Northport

~1400 - launch boat at Northport
Yacht Club and start
pulling offshore piezo
and scaffold; break
down radon raft and
pull anchors, load
gear into trailer, pull
boat, kayak lashed in
boat

Scale: 1 square = _____

JB/CW

Fri., 16 May 2008

@ Northport =

cool, windy,

JC/AG/MC

Rain all day

~1830 - return to Pt. Washington
and MBYC with full
crew and all gear,
done for the day

JB

Scale: 1 square = _____

Manhasset SGD
#08007 Day #6

0700 - discuss plans,
move gear, launch
boat

0945 - cast off for AM perp.
surveys w/ 15-m
streamer along
E shore; JC crew
setting up for new
piezo transect at
MBYC

~1100 - working S. end of bay
and W. shore with
perpendicular 15-m
transect, then across
mouth to NE/E shores

~1500 - back at MBYC, end
CRP work, strip boat,
begin piezo sampling
at MBYC (JB/CW @ site
near bulkhead), set up
scaffold for access
at high tide; JC set
up Rn time series, piezos on

Scale: 1 square =

floating docks -
fresh

JB/CW

Sat., 17 May 2008

JC/AG/MC on shore

Sunny to PC,

LE/SB return late PM.

windy

1600-1800 - collect gw screening
samples with piezo to
3 m depth, water all
brackish, help break down
gear for the day.

1900 - done for day.

JFB

Scale: 1 square =

#08007

Manhasset SGD

Day #7

0800 - continue working on
piezo sampling at
MBYC; JB working w/
AG; JC w/ MC; SB + LE
running Rn + Ra samples;
CW troubleshooting
CRP gear and cleaning
out vehicle

~1200 - JB/AG have collected
samples @ 1, 2, 4 m,
salinity decreasing
gradually; continue
sampling down to fresh

~1400 - rain starts, continue
sampling, discuss
sampling for age tracers

~1745 - finish 7th sample
at bulkhead (7m) salinity
down to 0.2; clear gear

1900 - VC + KK arrive;
drop KK, JB w/ VC to
New hotel to meet CW

~2000 - check in @ La Quinta

Scale: 1 square = _____

JB/JC/CW/AG/MC/SB/LE

Sun., 18 May 2008

KK/VC arrive

~ 7:00 PM

- sunny, warm in AM

- rainy in PM,

stopped raining

~ 5:00 PM

JB

Scale: 1 square = _____

Great South Bay SGD
#08007 Day #8 (1st F/15 day)

0730 - meet at hotel lobby
(La Quinta - MacArthur Airport,
Bohemia, NY), leave
for Patchogue

0815 - arrive National Park
Service Facility in
Patchogue, meet with
Patti Rafferty, Mike
Billecki, and Jordan
Rafael (boat driver),
VC setting up navigation
system, CW setting
up survey gear.

1000 - gear on board, nav.
charts down loaded,
loading survey line files
onto nav. laptop, then
lunch and water run.

~1215 - cast off

1230 - start line 120, S. across
bay from Patchogue to
Watch Hill

1335 - end of line, turn E.

Scale: 1 square = _____

JB/CW/VC

Mon, 19 May 2008

Back in Manhasset.

clear, sunny,

Bay: JC/KK/MC/LE/AG/SB

cool (50s),

strong W wind

1335 - running along Fire Island
start line #121, less rough

~1400 - turn N. for another
crossing, line #122

~1445 - end line #122, very
rough, caught a line
in prop., pulled in
streamer, end surveys
for the day

1500 - back to Patchogue, unloading
gear, processed data
and transferred new
data to VC, filled
out boat data sheets
for last several boat
setups (Terrapin 50-m
+ 15-m and NPS 50-m).

1700 - leave NPS site for the
day

JB

Scale: 1 square = _____

Great South Bay SGD
#08007 Day #9 (2nd F115 Day)

0800- Arrive at NPS facility,
meet Jordan and new
driver, Katie Kerr (Kaetlyn)
will run along Long Island
shore to E in AM, then
back to W along Fire
Island

0915- start first line (#124)
across Patchogue River mouth

1000- rounding Howell's Pt.
into Bellport Bay

1045- End of line @ Wertheim
NWR, turn S. along
E. end of bay, start
line #125

1105- End line, turn up channel
to NW along channel,
start line #126

1110- passing John Boyle Island,

1125- end line #126, start
#127 headed W,
turn @ red buoy #6

Scale: 1 square = _____

JB/CW/VC

JR/KK - NPS

Tues., 20 May 2008

overcast, 50s,
med SW wind

1150- passing Bellport
Beach channel

1220- battery died on laptop
with navigation chart,
no inverter, using
paper charts and CRP
Lowrance/handheld
Garmin for nav.

1250- passing Watch Hill channel,
several shellfishermen
raking clams from boats

1345- passing the Pines

1405- passing Sailors Haven

1500- end of line at Fire Island
Light, turn N up West
Channel for line #128

1600- turn at Bayshore
buoy, start line #129
back toward Patchogue (E)

1655- batteries dead, end
line off beach at
Nicol Pt., end line,
pull streamer

1815- offload gear leave NPS

JFB

Scale: 1 square = _____

Great South Bay SGD
#08007 Day #10 (3rd F115 day)

- ~0730 - leave hotel for NPS
0800 - arrive NPS, meet JR
and KK
0900 - cast off, transit to
E. end of bay to begin
axial survey lines
0940 - start E-W line ~
1/3 of the way across
bay from Long Island,
#130
10:15 - deviated from
course around ¹⁰⁰
Howell's Pt. mid-bay
1045 - passing Patchogue, ^{water} sample
11:08 - slow for crossing
sailboat, wind/seas
picking up
1330 - end line, turn S.
to pick up next W to
E line, line to SE
= #131

sample salinity = 25.10

Scale: 1 square = _____ measured in lab on 27 May
w/ YSI sonde

JB/CW

VC on shore

JR/KK - NPS

Weds, 21 May 2008

60s, PC, H breeze

out of SW

PM showers forecast

13:55 - start W-E line

14:10 - aground, deflected line
to N, then veered back

~16:30 - end of W-E line
near Watch Hill, crossed
19 May transect line and
20 May F115-parallel line
close to end of line,
also switched batteries
for sting box; pulled
streamer, transit to
Patchogue NPS marine
facility

17:15 - gear off loaded,
leave site

JFB

Scale: 1 square = _____

Great South Bay SGD
#08007 Day #11 (4th GSB day)

- 0800 - meet at NPS docks,
same boat, new driver,
FS from WRD coming
along today
- 0900 - cast off, run first
line out of channel,
then shore-parallel
line to W to join
end of last line
from 20 May
- 1115 - turn at end of
line #134 for crossing
to SE to Fire Island
(line #135)
- 1200 - turn @ Point O' Woods
for another crossing
(S-N, line #136)
- 1215 - lost Hy-Pak nav. due
to dead battery on
handheld GPS = deviation
in course
- 1240 - squall line with
lightning

Scale: 1 square = _____

JB/CW

Thurs., 22 May 2008

VC heading home 50s, cloudy,
NPS driver = SW wind

Fernando Villalba

Abo Fred Stumm, WRD-Coram

1250 - End of crossing line,
shut down surveying
and transit to next
crossing line (N-S)

1310 - start line at Green
Harbor (#137)

1345 - end of line at Cherry
Grove, turn back
toward Patchogue
(line #138)

1510 - End line at Patchogue
(brief heavy rain on
crossing), strip boat,
pack up gear

1545 - leave NPS docks,
return to hotel and
check out, leave for home

1700 - board ferry @ Port Jefferson

2130 - arrive home

END OF FIELD
ACTIVITY #08007

Scale: 1 square = _____

#08037

Great South Bay SGD Second Field Effort

Day #1

Long Island
Short resistivity
streamer surveys out
of Patchogue NPS (NY)
docks (15 m)

0630 - J. Bratton & C. Worley
leave N. Falmouth
w/ USGS pickup +
R/V Terrapin

1030 - ferry departs Bridgeport

1135 - arrive Patchogue
NPS docks

1430 - cast off, test gear,
work west toward
Bayport/Newport St.
site; set scaling
factor to 1.5

1500 - troubleshooting @
NPS, errors on super-

JB + CW

~60°F, PC,

med NE wind (24)

Mon. 22 SEPT 2008

Line #

SOL

EOL

1.5 scaling factor

L1F1

1946

1952

2 cycles

L2F1

1959

2008

1 cycles

end @ 2-story white
house just west of

Patchogue River, start in 2m
of H₂O

end @ east end of public
beach middle of peninsula
west of next inlet

Default = Marine Settings
cycles = 1 (per Jason Phone)

L3F1

2030

2036

inshore

L4F1

2038

2044

offshore

L5F1

2045

2050

in

L6F1

2053

2058

off

L7F1

2059/2102

2104

in

 Δ Batt

L8F1

2106

2108

H

L9F1

2113

2120

H

9/22/08

Line#	SSL	ESL	
L10FI	2122	2131	FP

FA# 08037 | GSB SGD Day#2
CRP 15-m working
east of Patchogue 9/23/08

0730- leave hotel, get lunch stuff

0815- @ NPS basin, set up,
spoke w/ VeeAnn Cross
re: 9/22 data - look good

0850- cast off

LOCAL TIME

L11FI	1158	1201	L
L12FI	1202	1207	L
L13FI	1208	1213	Diag
L14FI	1214	1219	L
L15FI	1220	1224	Diag
L16FI	1225	1230	L
L17F2	1232	1237	Diag
L18FI	1239	1243	L

12:30- nice beach pierzo site/park

@ 40.7425° N, 72.95790° W

JB/CW

23 Sept 08

Sunny, 60s, (25)
NE mod wind

Line#	SSL	Local time	NE mod wind	ESL
L19FI	1245	1252	Diag	
L20FI	1253	1301	L	
L21FI	1305	1311	Diag	
L22FI	1312	1318	L	
L22F2	1320	1323	L	
L23FI	1324	1329	Diag	
L23F2	1330	1332	"	
L24FI	1333	1340	L in	
L25FI	1341	1347	L out	
L26FI	1348	1351	L in	
L27FI	1353	1356	L out	
L28FI	1357	1403	L in	
L29FI	1405	1408	L out	
L30FI	1410	1412	L in	
L31FI	1414	1420	FP N	
L32FI	1421	1425	FP S	
L33F2	1426	1431	FP N	
L34FI	1431	1438	FP S	
L35FI	1441	1445	L in	
L36FI	1446	1452	Diag	
L37FI	1454	1500	L in	
L38FI	1501	1507	Diag	
L39FI	1508	1513	L in	

FA#08037

TIME LOCAL

Line#	SOL	EOL	
L40FI	1515	1520	Diag
*L41FI	1521	1525	Lin
*Redo of L41FI			
L42FI	1527	1534	Diag
L43FI	1535	1540	Lin
L44FI	1541	1545	Diag
L45FI	1545	1549	Lin

EOD

1615 - Back @ NPS docks

1630 - leave for the day

END
23 Sept 08

JFB

(26)

JB/CW

FA#08037

27 Sept 08

Sunny 60s

NE 10-15 KTS wind

Watch Hill, FI

surveys to west

TIME = UTC

Line	SOL	EOL	
L46FI	1420	1426	Lin
L47FI	1427	1434	Diag
L48FI	1435	1442	Diag
L49FI	1445	1449	Lin
L50FI	1450	1455	Lin
L51FI	1456	1503	Diag
L52FI	1504	1509	Lin
L53FI	1510	1518	Diag
Hr SAND - kept logging			
L54FI	1519	1525	Lin
L55FI	1526	1530	Diag
L56FI	1532	1536	Lin
L57FI	1541	1550	Diag
L58FI	1551	1555	Lin
L59FI	1556	1605	Diag
L60FI	1608	1615	Lin
L61FI	1615	1626	Diag
L62FI	1628	1633	Lin
Tallisman / Barrett Bch.			
L63FI	1635	1651	Diag

FA # 08037

24 Sept 08

WILDERNESS AREA - Smith Pt.

LINE	SOL	EOL	
L65F1	1919	1931	Hebr. I
* L66F1	1932	1945	DIAG
L67F1	1946	1952	L
L68F1	1953	2001	Diag/Hosp Island
L69F1	2002	2011	L OLD INLET

EOD

- Back to Patchogue to charge batteries, etc.

~ 1730 - Leave NPS shop.

Note: John Crusius,
Adrian Green,
+ Wally Brooks
arrived in PM and
scouted Newport St.
& Roe Ave. prezo
sites

PM - reviewed 9/22-9/23
processed CRP data.

(27)

25 Sept 08

Grt S. Bay CRP

overcast, 50s,
light E wind

Day # 4

Plan to finish CRP today
on W. end of Fire Island
and around Heckscher S.P.,
JC/AG/WB sampling @ Newport

0715 - leave hotel for NPS shop,
load batteries, drive to
Robert Moses State Pk.

0845 - too rough to launch,
head to Heckscher S.P. PK in
East Islip, survey to west
TIME = UTC

LINE	SOL	EOL	
L70F1	1345	1354	OUT BT Basin into Bay
L71F1	1358	1404	L TO B L
L72F1	1406	1411	HP to B L
L73F1	1412	1415	L in
L74F2	1417	1424	HP to shore
L75F1	1425	1432	Diag
L76F1	1433	1437	L Boat Ramp
L77F1	1438	1443	Diag
L78F1	1444	1448	L in

#08037

<u>Line</u>	<u>SOL</u>	<u>EOL</u>	
L81FI	1500	1505	Diag
L82FI	1505	1509	Lin
L83FI	<u>EOD</u>		

1140 - depart Heckscher
St. Pk. after pulling
Terrapin out, go get
gas for truck and
boat

Help other crew
for rest of day
and AM of
26 Sept., then
return to
Falmouth.

(28)



12-13, 14, 17 May 2008

SYSTEM SETUP:

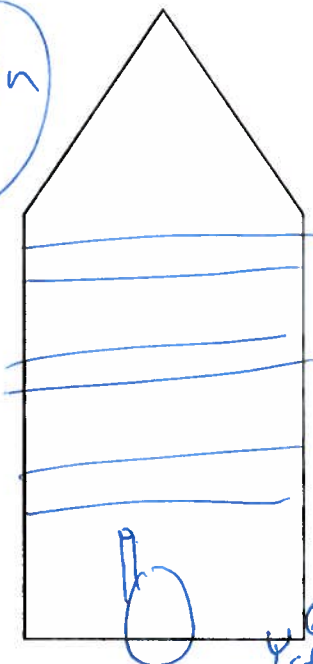
~~18~~

Long Island Bays: Northport
Harbor and Manhasset Bay
Bratton, Worley, Cross
R/V Terrapin

ship layout and notes:

R/V Terrapin

Terrapin
15m



See other notes on
50m streamer
page

fathometer transducer depth: ~ 30 cm

draft offset entered in GPS? ~~yes~~ no

streamer length: 15m (1.5-m electrode spacing)
sources: graphite, receivers(8):stainless

UTC/Local time offset: -4 hrs

Start x (negative distance between cable connection point and first electrode - will be negative value!!!): -2 m

Scaling factor (in acquisition software): 1.5
(if command file has electrode spacing correct, this should be 1. If the cmd file spaces electrodes at 1m, this value will probably be 5 or 10)

command file used: arraydd5m.cmd, marinedd.cmd
12-13 May (WHS Sting) (AGI Sting - >13 May)

version of acquisition software: ?

electrode array configuration (ie dipole-dipole): dipole-dipole