

12-13, 14, 17 May 2008

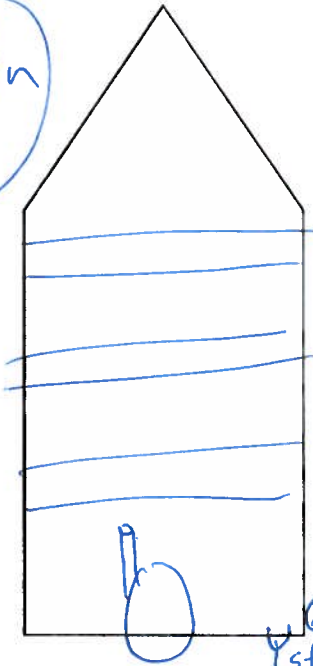
SYSTEM SETUP:



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

ship layout and notes:

Terrapin
15m



See other notes on
50m streamer
page

⊗ gps antenna
streamer

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 (Wtsc Sting) (AGI Sting - >13 May)

version of acquisition software: ?

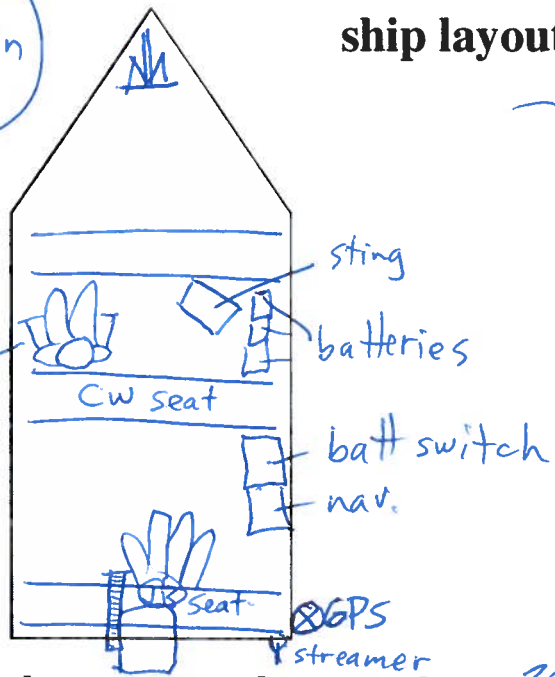
electrode array configuration (ie dipole-dipole): dipole-dipole

Northport Harbor
and Manhasset Bay

14-~~14~~¹⁷ May 2008, Long Island Bays
John Bratton, Chuck Worley, VeeAnn Cross

SYSTEM SETUP:

Terrapin
50 m



ship layout and notes: R/V Terrapin Cross
- began work in Northport Harbor on 12 May 2008 w/ WHSC Sting Box and new 15-m streamer, problems w/ Sting, got loaner shipped from AGI and shipped ours back; all 50-m data

fathometer transducer depth: ~30 cm

draft offset entered in GPS? yes no

streamer length: 50 m (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!!!): -15 m (GPS antenna @ same point)

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: Marine DD.cmd (marinedd.cmd)

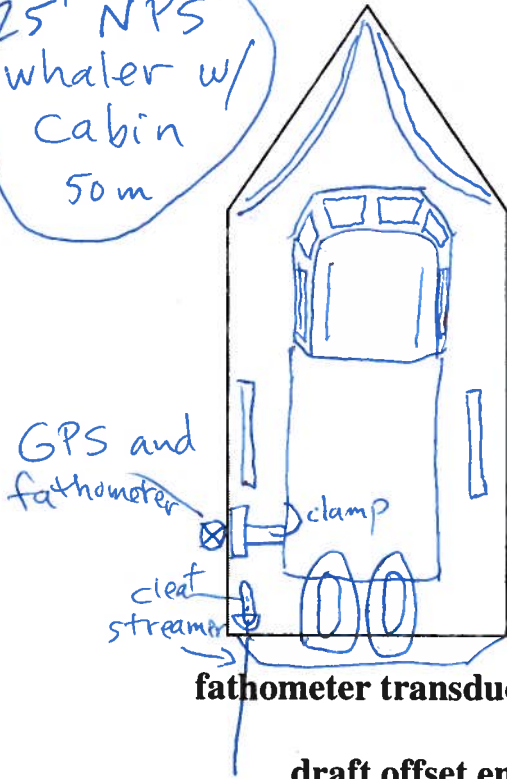
version of acquisition software: ?

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

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
50m



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: ?

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

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

1.5 scaling factor.

50 m streamer

- 15.0 m shackles

5 m scaling factor



NORTHPORT

15m

5-14-08

L33F1	Boats Hse - BAD?
L33F2	Boats Hse - AGAIN
L34F1	✓ Rice Paddy lawn Hse
L35F1	✓ ugly Hse - chimney
L36F1	Apt - Hse No. of - Is Inlet. BEST low - rocky
L36F2	Redo of L36F1
L37F1	Channel between Post Is.
L38F1	Glancing blow in inlet
L39F1	Short inlet

50m

L40F1	S → N TO TOWN DOCK inside → outside
L41F1	S → N TOWN DOCK → PORT ²¹⁰⁻²¹⁵
L42F1	S → N zigzag
L43F1	S → N E → W
L44F1	W → E ZZ
L45F1	E → W from (AMP PCZO to Airplane house)
L46F1	W → E Airplane Hse to yacht club
L47F1	E → W yacht club → Vandy Pier
L48F1	N → S into harbor West
L49F1	S → N IN TO OUT of HARBOR ^{side}
L50F1	E → W Across Bay
L51F1	

MARASSETT BAY

SDM

5/15/08 MBYC

L52 F1 LOUSE - shore

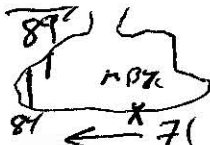
- L53 F1 Across whar entrance.
L54 F1 Kings Pt → inner harbor
L54 F2 Battery dock - switched
L55 F1 End of Bay out to other side
L56 F1 By town dock to ^{west} other side
L57 F1 WEST SIDE → Anne hsc
L58 F1 Plane Barn → other side
L59 F1 other side → TOWN PARK @ park
L60 F1 TOWN KANAL → other side
L61 F1 other side → yacht club - Pt. Wash
L62 F1 Pt. Wash YC → stationary YC other side
L63 F1 stationary YC → EAST SIDE
L64 F1 East side → COWDER
L65 F1

5/16/08 MB7C

L66F1
L67F1
L68F1
L69F1
L70F1

50m Rain
out channel → marshes

5/17/08 SAT



(1240)

L 71 FI	M BYC Boat Laundry
L 72 FI	M BYC Flag Pole
L 73 FI	2 Flags
L 74 FI	pwyc
L 75 FI	pwyc
L 76 FI	Bch
L 77 FI	BCH - Private Sign
L 78 FI	fresh H ₂ O creek/bridge
L 79 FI	Rock Hse fancy windows
L 80 FI	Tall Chinese on H ₂ O
L 81 FI	Weeds / BOAT FIRE
L 82 FI	weeds / concrete ramp
L 83 FI	weeds
↑ L 84 FI	Across heel of Bay
L 85 FI	Zig Zag at heel of bay
	to Bulk head
L 86 FI	Zig Zag Bulk head
L 87 FI	" " far end
L 88 FI	from heel → weed opposite side
↓ L 89 FI	other side of Bay Flag Pole
L 90 FI	rock break wall
(2.10) L 91 FI	Beach / repair hse
L 92 FI	beach / Boat hse w/ slate roof
L 93 FI	Dig Brick hse / Take on Beach
L 94 FI	canal in seawall

5/17/08 15m steamer
L95FI Pebbles/Trash Deck

L96FI other side of ^{core} channel Deck
L97FI beach head of core
L98FI next to Airplane hangar
L99FI Bod Bob's
L100FI Capt East Deck
L101FI TOWNS Dock/BT ramp
L102FI ASSOC PIER
L103FI CONDO Bulkhead
L104FI beach w/ osprey nest
L105FI Boat Basin in slip
L106FI Marina next to Staff shop
L107FI TOWNS beach
L108FI TOWNS Hrbr Master Hse - corner
L109FI Louies
L110FI

5/19/88

50m stream

5.0/-16.0

L120F1

Low Batt

L120F2

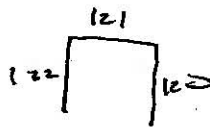
restart Low Batt

L120F3

restart

L121

L122



5/20/08

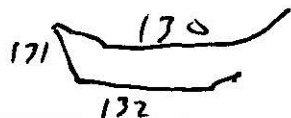
50m stamer.

	<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	rested 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 Dotted Low (middle of Ch)
- L131F1 ~~East~~ West End DIAG TO STATION
South/middle line
- L132F1 mount shallows heading
East.
- L132F2 Hdg East - Low back

50m

5/22/08

Local Time

L133F1

F2

F3



0905

out Hkvr

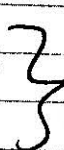
L134F1

L134F2

F3

F4

F5



WEST along shore.

Batt Δ

Batt Δ

} Along shore

L135F1

Diag

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

Scale: 1 square = _____

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
RN 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 = _____

Northport SGD
#08007 Day #2

07:00 - meet at hotel lobby,
discuss sampling plans,
coordinate gear

07:45 - JB/CW/VC leave for
Northport, swap
batteries for charging

09:45 - head out on water
w/ 15-m streamer to
run short transects
down E. shore, very
windy

10:45 - trouble shooting problems
with GPS signal to
Super Sting box

11:30 - grounding problem
isolated and fixed,
back on the water

12:00 - 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

17:00 - back at Britannia Y.C.,
unloading gear

18:00 - helping piezometer
crew break down eqpt.

~19:00 - leave for hotel

JFB

Scale: 1 square = _____

#08007 Northport SGD
Day #3

- 07:00 - meet at hotel,
coordinate sampling
plans, d/c to do
Ra times series w/
Stony Brook boat
- 09:00 - Set up scaffolds at
piezo site and begin
gw sampling
- 10:00 - CW gets loaner sting @ hotel
- 13:30 - start CRP surveys
with loaner sting box,
15-m transects down
E. shore
- 13:45 - end Line 3.3 @ Vanderbilt
Boathouse; work down
west shore w/ 15-m
streamer transects to
stopping pt. from yesterday
- 14:45 - To Britannia Y.C. to change
streamers out
- 15:30 - 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~~

~ 18:00 - end CRP surveys for
Northport, back to piezo
transect site to help
break down gear, including
geophysical gear of CR's

~ 19:30 - 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. Washing. ton

1100 - check in at Manhasset Bay Yacht Club (MBYC), coordinate arrangements with dockmaster (Pete) and person at dock house (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 = _____

Manhasset/Northport SGD
#08007 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

JFB

Scale: 1 square = _____

Manhasset JGD

#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
floating docks -
fresh

Scale: 1 square = _____

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
3m 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
Bilecki, and Jordan
Rafael (boat driver),
VC setting up navigation
system, CW setting
up survey gear.

1000 - gear on board, nav.
charts downloaded,
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

JFB

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

Tues., 20 May 2008

JR/KK - NPS

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 Sailor's 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
Nicoll 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 ^{#00}
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

Weds, 21 May 2008

VC on shore

60s, PC, H breeze

JR/KK - NPS

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 2009
- VC heading home 50s, cloudy,
NPS driver = SW wind
Fernando Villalba
Also 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 = _____