

Date: 10/25/22
Personnel: JG + ST

Plot	Collar No.	Collar Location	Gas analyzer	Chamber ID	Soil Temp (°C)	Water depth	Flux Start Time (System)	Flux End Time (System)	Notes
B260	W1	✓	Picarro	floating 8"	water temp 24.2	14cm	10:56:00	10:59:00	
"	W2	/	"	"	water 24.3	15cm	11:13:00	11:19:00	11:19
"	W3	/	"	"	water 24.3	14cm	11:28:30	11:32:00	
"	W4	/	"	"		14cm	11:57:30	12:01:30	
A260	S1	plot center	Picarro	Ben		0cm	12:29:00	12:30:26	almost no exposed sediment at whole site / area. One S1
									high point near plot center - ground 1-2 large red mangroves. Took sediment measurement at that point.

Weather:

Notes:

System Time: 10:55
Real Time: 13:03
Logging Frequency:

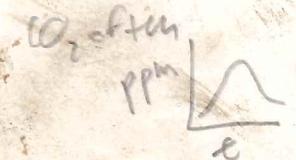
s/Gewirtzman - BLUEFLUX Tree Methane
Flux Data

Date: 10/17/22
Personnel: Ben

Plot	Collar No.	Collar Location	Gas analyzer	Chamber ID	Soil Temp (°C)	Water depth	Flux Start Time (System)	Flux End Time (System)	Notes
5056	9	white mangro by pink root red mangro	Picarro	bubble chamber	27.2	0.7 cm	8:55:47	8:59:00	Standing water ~3ft from tree
	4	red mangro by pink root red mangro			27.1	N/A	9:00:16 09:10	9:12:10	No standing water ~4 ft from tree restarted bc ebullition
	8	red mangro w/ red stuff			27.0	0.5cm	9:18:18 18	9:21:18	half standing water ~5ft from tree
	6	by red mangro red soil			27.0 27.2	N/A	9:19:02 04:10	9:19:16 47:10	restarted due to leak ~10ft from SC1
	7	by red mangro sel w/ dead white mangro			27.1	N/A	9:50:30	9:53:30	Parc water sample adjacent ~16ft from SC1
	3	by dead white & by bare soil			27.0	N/A	11:55:45 11:51:35	11:55:35	~23ft from SC1 adjacent to water ~CO ₂ build sample adjacent to running water
	1	by dead red			26.8	N/A	10:30:40	10:33:40	mfts from SC1 & SC10 some standing water
	5	by dead red w/ blue soil			26.8	yes 1cm	10:56:20	11:00: 11:00:	CO ₂ up and down, big CH ₄ jump adjacent to PW 5 &
	10	~1ft from 37			26.5	N/A	11:06:00	11:09:00	Adjacent to no small red, big black, dead white some standing water
	2	red #2			26.5	N/A	11:13:20 restarted	11:19:16	2ft from 2 CO ₂ dropped towards end L root seen what's up

Weather: cloudy, partly cloudy

System Time: 8:47:38
Real Time: 10:49:—
Logging Frequency:



Notes:

Soil Flux Data

Plot	Collar No.	Collar Location	Gas analyzer	Chamber ID	Soil Temp (°C)	Water depth	Flux Start Time (System)	Flux End Time (System)	Notes
SR55	surface water 1	plot edge (liver)	PICROS	Bloating 8"		9cm	real time 12:50	real time 12:55	
SR55	Surface water 2	plot center	PICROS	Bloating 8"		6cm	real time 13:01	real time 13:05	precipitation around
SR55	surface water 3	plot center inside	PICROS	Bloating 8"		12cm	real time 13:11	real time 13:10	high water at 13:14
SR55	sediment 1	1m from Water edge	LGR2	Ben	23.4	0cm	acetylene line 144230	1444730	
SR55	sediment 2	10m from Water	LGR2	Ben	23.4	1cm	145730	# 150030	
"	sediment 3	20m	LGR2	Ben	23.4	0.5cm	150800	151100	3 less precipitations
"	sediment 4	25m	LGR2	Ben		0cm	151900	152200	
"	sediment 5	30m	LGR2	Ben	23.0	1cm	153030	153300	5 less precipitations
"	sediment 6	40m	LGR2	Ben	22.9	1cm	154530	154830	
"	sediment 7	50m	LGR2	Ben	23.0	0cm	155530/155930		
SR55	sediment 8	36m	LGR2	Ben	22.8	1cm	160945	161245	

Weather:

High tide on arrival. All under 2"

Notes:

7cm of water.

System Time:
Real Time:
Logging Frequency:Acme WiFi
not working
2nd day
batteryswitched to
LGR
1601 9:00pm
1520 real

Adams/Gewirtzman - BLUEFLUX Tree Methane
Soil Flux Data

Date:
Personnel:

10/21/2022

JON + Jessie

Plot	Collar No.	Collar Location	Gas analyzer	Chamber ID	Soil Temp (°C)	Water depth	Flux Start Time (System)	Flux End Time (System)	Notes
SR56	1	near boardwalk	LGR3	Ben	24.2	1 tide going out near 2nd	15:01:30	15:08:00	pneumatophore = 0
SR56	2	by tree 237	LGR3	Ben	23.8		15:14:30	15:17:30	0
SR56	231		LGR3	Ben	24.1		15:23:00	15:26:00	7
SRS 10	221		LGR3	Ben	24.2		15:30:30	15:32:30	21
SR56		near black mangrove litter trap	LGR3	Ben	23.4		15:38:00	15:40:00	10
SR56		black mangroves between plots	LGR3	Ben	23.5		15:45:30	15:47:30	one propagule 49%
SRS 10		black	LGR3	Ben	23.5		15:52:30	15:54:30	40
SR56			LGR3	Ben	23.3		16:00:00	16:02:00	0
SRS 10		near tree 232	LGR3	Ben	23.7		16:08:45	16:11:45	0
SRS 10			LGR3	Ben	23.4		16:15:45	16:17:45	lava root burrow 0

Weather:

System Time: 15:38
Real Time: 3:26 → 15:26
Logging Frequency:

Adams / Gewitteren
water sampling

10/18/22

06

<u>Plot</u>	<u>Measurement</u>	<u>Temp</u>	<u>pH</u>	<u>splond</u>	<u>H2Omg/L</u>	<u>H2O%</u>
FCM30	surface 1	30.54	8.05	47430	4.58	74.5
		29.71	8.07	47670	6.79	77.0
		29.67	8.06	47820	9.84	77.8
porewater 1		30.66	6.88	90890	0.10	2.2
surface 2		30.47	8.12	48720	5.57	90.9
		30.30	8.13	48700	6.29	102.5
		30.43	8.14	48410	7.27	118.8
porewater 2		30.40	6.81	93080	0.14	2.9
surface 3		30.45	8.16	48740	8.03	138.9
		30.44	8.13	48850	6.43	105.7
		30.49	8.19	48840	7.51	122.7
porewater 3		30.47	6.71	85400	0.09	1.9%

Date: 16/15/22

Personnel:

Vivian SJS

Plot	Time	Temp_soil	Temp_pw	DO_pw	Specific Conductivity_pw	Salinity_pw	Temp_surface water	DO_surface water	Specific Conductivity_surface water	Salinity_surface water	Notes
FL90											
FL90											
FL90											

Weather:

Notes:

11:45⁰) System time

FLM30 surface

pH: 8.09

spCon 49150

HDO 5.6

Temp 35.37
11:54

pH: 8.13

49800

spCon

6.00

HDO

34.14

Temp: 34.14
11:55

pH 8.09

spCon 50400

HDO

5.2

34.45

Temp

Date: 10/18/22
Personnel: 21

Soil Flux Data - Water flux!

Weather: overcast

Notes:

System Time: 12:05
Real Time: 2:13
Logging Frequency: 1hz

Date: 10/25/22

Personnel: 56-5T

6H67 sub

Weather:

Notes:

Water Data - BL60

JB/SJT

10/25/22

Type	Temp	pH	salinity	HCO ₃ mg/L	HCO ₃ %ct	Salinity PSU
Surface	22.57	7.70	23540	0.05	0.6%	14.27
surface	23.92	7.58	25570	0.05	0.8%	15.67
surface	23.98	7.51	25560	0.04	0.7%	15.55
pore	25.58	7.27	52400	0.11 24.	1.7%	34.53
pore	25.66	7.33	61200	0.04	0.7%	41.10
pore	25.88	7.24	56390	0.08	1.3%	37.41

SRS5 JDC 221019 Porewater

Pore/Surface #	Sulfide?	Gases?	S-I	Temp	pH	SpCond	HDO ₁₇	HDO ₁₈
221019 Pore 1	✓	✓	✓	21.14	6.82	32030	0.07	110
221020 Pore 2	✓	✓	✓	23.78	6.88	31350	0.07	0.9%
221020 Pore 3	✓	✓	✓	20.94	24.69	6.64	33480	0.06
221020 Pore 4	✓	✓	✓	21.52	24.67	6.72	34300	0.05
Surface 1								

Surface 2

Surface 3

Pore 1 lot Long Distance to edge
25.376992 -8.032329 Sun

SRS6 - JO6 221019

Porewater

3x samples for GHGs

3x samples for sulfide

Manta sample

Temp 23.21

pH 6.94

Sp Cond 41490

TDO 0.05 mg/L

TDO 0.8% sat

Date: 10/17/22

Personnel: FMA

Plot	Time	Temp_soil	Temp_pw	DO_pw	Specific Conductivity_pw	Salinity_pw	Temp_surface water	DO_surface water	Specific Conductivity_surface water	Salinity_surface water	Notes
SRS6	10:39 pm	27.5° 23.0°C	27.5°	-0.1	01734634 20220	22.7 21.7					pH pw 6.92
SRS6											
SRS6											from back side
											PW, SW, from stream near boardwalk
											PW, b/w soil collapse close to boardwalk
											PW 3 next to log road 2 PW red 1 at edge plot
											PW 4 next to 231 Arceulus place between plots
PW7 - between 433 and 286					Stream leading directly to SRS dock						
					SW 10 need to go back						
					to log - look for 15+ thousands #						
PW8 - next to little red #1 & little red #2											soil - twin pneus - by tree #508
PW9 - next to tree #42 & 40											check soil collar has note PW 5

Weather: overcast but bright sun
Notes: warm, not hot, no rain yet

sample
opposite plot
corner from dock
edge/corner of plot
for those from river

$$180 \text{ cm} = 1 \text{ m} = 3 \text{ ft}$$

$$1 \text{ ft} = 33.3 \text{ cm}$$

$$12'' = 33.3 \text{ cm}$$

$$1 = 2.775 \text{ cm}$$

$$12.77 = 1 \text{ cm}$$

$$0.36 = 1 \text{ cm}$$

$$45 \text{ cm} = 16.2''$$

50z
PW next to Red #43 is just at surface level
- H2O bubbly

Sample 1 from front side (but w/ sand instead of hay) after						10/27/22 FMA
	Temp °C	ptl units	Sp Con μS/cm	HDO ms/l	HDO 170.821	Time
PW	27.46	6.71	40910	3.28	49.3	11:05 am
soil	26.73	7.41	22490	4.36	60.0	11:10 am
PW	27.74	6.24	91150	5.22	76.7	11:34 am
soil	27.0		44620	4.37		
B	27.93	10.75	44190	3.15	66.8	11:40 am
PW	27.74	6.66	43480	5.67	47.8	12:15 pm
PW	28.24	6.79	41085	5.81	88.3	12:39 pm
PW	28.74	6.82	40600	4.80	94.6	1:10 pm
PW	28.08	6.77	27650	6.24	82.6	1:31 pm
SW	28.46	7.54	48240	5.14	95.7	1:40 pm
PW	27.8	6.68	30700	5.88	91.2	1:56 pm
SW	27.60	7.07	39810	6.27	98.1	2:01 pm
PW	28.25	7.02	20430	6.61	92.9	2:12 pm
SW	28.04	7.91	42500	4.98	76.6	2:25 pm
PW	28.33	6.73	4217	3.62	4	3:25 pm
SW	28.05	7.93				

Adams/Gewirtzman - BLUEFLUX Tree Methane
Soil Flux Data

WATER

Date: 10/23/2022
Personnel: Jon & Jessie & Samach

Plot	Collar No.	Collar Location	Gas analyzer	Chamber ID	Soil Temp (°C)	Water depth	Flux Start Time (System)	Flux End Time (System)	Notes
CP40	N/A	tree 808 near	LGR 2	floating 8"	26.3	23"	11:28:00	11:31:00	
CP40	N/A	tree near tree 801	LGR 2	floating 8"		23"	11:42:45	11:45:45	
CP40	N/A	near tree 801	LGR 2	floating 8"		23"	11:47:00	11:50:00	
CP40	N/A	slightly outside slightly outside plot to East	LGR 2	floating 8"		23"	12:01:45	12:04:45	
CP40	N/A	slightly outside plot to NE	LGR 2	floating 8"			12:07:00	12:11:00	around pneumatophores

Weather:

Notes:

System Time: 11:30
Real Time: 10:49
Logging Frequency:

some measurements
 CP40 ~~surface~~ ~~water~~
 Measured 10/22/22 in hotel from bottled samples - JG + JP

temp	pH	soCond	TDO	DO %	Salinity	
surface H ₂ O 1	(centrifuged) 13.01	8.05	61380	4.58	57.8	41.29 DO is from bottle
surface H ₂ O 2	12.47	8.13	61500		41.09	
10m H ₂ O 1	13.31	7.47	84878		59.61	
13.32	7.50	86010			60.64	