

Seychelles Test Drive

Anse Aux Pins Phase-2 Report



Phase-1 Dates- 08th Oct 2024



Route Name: Mahe

District Name: Anse Aux Pins

Region: East (SE)

Island: Mahé

Drive Test Distance: 14.27 kms

Drive Test Duration: 01 hours,01 minutes,55 seconds

Phase-2 Dates- 22nd Oct 2024



Route Name: Mahe

District Name: Anse Aux Pins

Region: East (SE)

Island: Mahé

Drive Test Distance: 13.67 kms

Drive Test Duration: 01 hours,01 minutes,45 seconds

Phase-1**Short Call Findings:**

- The Call Setup Success Rate for Airtel is (100.00%), while for Operator CWS it is (100.00%).
- The Call Setup Time for Airtel is (5.85s), while for Operator CWS it is (7.01s)

Long Call Findings :

- The Call Retainability for Airtel is (100.00%), while for CWS it is (100.00%).
- The MOS quality observed for Airtel is (3.08), and for CWS, it is (3.47).

Phase-2**Short Call Findings:**

- The Call Setup Success Rate for Airtel is (98.72%), while for Operator CWS it is (100.00%).
- The Call Setup Time for Airtel is (5.87s), while for Operator CWS it is (8.77s)

Long Call Findings :

- The Call Retainability for Airtel is (100.00%), while for CWS it is (100.00%).
- The MOS quality observed for Airtel is (3.17), and for CWS, it is (3.39).

Phase-1

4G Preferred Data Findings:

- Airtel SFTP DL is (13.26 Mbps), while SFTP UL is (6.72 Mbps), CWS SFTP DL is (6.98 Mbps), while SFTP UL is (3.97 Mbps)
- Airtel HTTP DL is (17.58 Mbps), HTTP Capacity DL is (29.35 Mbps) ,HTTP UL is (11.06 Mbps) , and HTTP Capacity UL is (22.96 Mbps).
- CWS HTTP DL is (8.54 Mbps), HTTP Capacity DL is (27.30 Mbps) ,HTTP UL is (7.71Mbps) , and HTTP Capacity UL is (27.11 Mbps).
- On live web page testing for browsing, www.shein.com took (6.79s), www.nbs.gov.sc took (17.75s), and www.sbc.sc took (21.12s) on Airtel.
- On live web page testing for browsing, www.shein.com took (5.90s), www.nbs.gov.sc took (16.31s), and www.sbc.sc took (18.27s) on CWS.
- On static browsing, Kepler Webpage took (4.11s), and Kepler Mobile took (1.69s) on Airtel.
- On static browsing, Kepler Webpage took (4.69s), and Kepler Mobile took (2.81s) on CWS.
- YouTube average resolution in Airtel is (1049.04) pixels.
- YouTube average resolution in CWS is (1034.55) pixels.
- Airtel scored 42.52% in Carrier Aggregation (CA).
- CWS scored 52.86% in Carrier Aggregation (CA).

Phase-2

4G Preferred Data Findings:

- Airtel SFTP DL is (13.92 Mbps), while SFTP UL is (6.12 Mbps), CWS SFTP DL is (8.18 Mbps), while SFTP UL is (3.92 Mbps)
- Airtel HTTP DL is (19.25 Mbps), HTTP Capacity DL is (34.02 Mbps) ,HTTP UL is (9.56 Mbps) , and HTTP Capacity UL is (20.20 Mbps).
- CWS HTTP DL is (9.58 Mbps), HTTP Capacity DL is (26.46 Mbps) ,HTTP UL is (6.16 Mbps) , and HTTP Capacity UL is (12.10 Mbps).
- On live web page testing for browsing, www.shein.com took (7.44s), www.nbs.gov.sc took (17.46s), and www.sbc.sc took (16.25s) on Airtel.
- On live web page testing for browsing, www.shein.com took (5.01s), www.nbs.gov.sc took (15.88s), and www.sbc.sc took (15.13s) on CWS.
- On static browsing, Kepler Webpage took (4.38s), and Kepler Mobile took (1.69s) on Airtel.
- On static browsing, Kepler Webpage took (4.52s), and Kepler Mobile took (2.69s) on CWS.
- YouTube average resolution in Airtel is (1023.82) pixels.
- YouTube average resolution in CWS is (1080.00) pixels.
- Airtel scored 42.64% in Carrier Aggregation (CA).
- CWS scored 54.72% in Carrier Aggregation (CA).

Phase-1

3G Preferred Data Test Findings:

- Airtel SFTP DL is (4.48 Mbps), while SFTP UL is (1.54 Mbps), CWS SFTP DL is (3.37 Mbps), while SFTP UL is (1.02 Mbps)
- Airtel HTTP DL is (4.99 Mbps), HTTP Capacity DL is (6.72 Mbps) ,HTTP UL is (2.17 Mbps) , and HTTP Capacity UL is (4.31 Mbps).
- CWS HTTP DL is (3.10 Mbps), HTTP Capacity DL is (6.59 Mbps) ,HTTP UL is (1.95 Mbps) , and HTTP Capacity UL is (4.36 Mbps).
- On live web page testing for browsing, www.shein.com took (11.98s), www.nbs.gov.sc took (12.67s), and www.sbc.sc took (11.01s) on Airtel.
- On live web page testing for browsing, www.shein.com took (9.48s), www.nbs.gov.sc took (8.09s), and www.sbc.sc took (9.10s) on CWS.
- On static browsing, Kepler Webpage took (5.94s), and Kepler Mobile took (1.67s) on Airtel.
- On static browsing, Kepler Webpage took (5.45s), and Kepler Mobile took (2.45s) on CWS.
- YouTube average resolution in Airtel is (951.54) pixels.
- YouTube average resolution in CWS is (1038.10) pixels.

Phase-2

3G Preferred Data Test Findings:

- Airtel SFTP DL is (3.66 Mbps), while SFTP UL is (1.58 Mbps), CWS SFTP DL is (2.17 Mbps), while SFTP UL is (1.17 Mbps)
- Airtel HTTP DL is (4.62 Mbps), HTTP Capacity DL is (4.96 Mbps) ,HTTP UL is (2.26 Mbps) , and HTTP Capacity UL is (4.43 Mbps).
- CWS HTTP DL is (3.00 Mbps), HTTP Capacity DL is (5.48 Mbps) ,HTTP UL is (2.05 Mbps) , and HTTP Capacity UL is (3.77 Mbps).
- On live web page testing for browsing, www.shein.com took (9.87s), www.nbs.gov.sc took (12.36s), and www.sbc.sc took (13.30s) on Airtel.
- On live web page testing for browsing, www.shein.com took (9.30s), www.nbs.gov.sc took (11.85s), and www.sbc.sc took (15.33s) on CWS.
- On static browsing, Kepler Webpage took (3.74s), and Kepler Mobile took (2.36s) on Airtel.
- On static browsing, Kepler Webpage took (5.93s), and Kepler Mobile took (2.73s) on CWS.
- YouTube average resolution in Airtel is (1019.18) pixels.
- YouTube average resolution in CWS is (911.64) pixels.

Short Call	
Call Duration	10 Seconds
Setup and Release phase	30 seconds
Minimum pause between calls	30 seconds

Long Call	
Call Duration	120 Seconds
Setup and Release phase	30 seconds
Minimum between calls	30 seconds

DATA	Test Type and Timeout	Technology 3G Preferred	Technology 4G Preferred
POP always on. ICMP PAYLOAD PING 800 BYTES			
1	FILE TRANSFER DOWNLOAD 135s	FTP DL (3MB) wait 10s	FTP DL (5MB) wait 10s
2	FILE TRANSFER UPLOAD 135s	FTP UL (1MB) wait 10s	FTP UL (3MB) wait 10s
3	FILE TRANSFER DOWNLOAD 135s	HTTP Get (3MB) wait 10s	HTTP Get (5MB) wait 10s
4	FILE TRANSFER UPLOAD 135s	HTTP Put (1MB) wait 10s	HTTP Put (3MB) wait 10s
5	ICMP PING 32 BYTES	Ping (32 bytes) *5 wait 10s	Ping (32 bytes) *5 wait 10s
6	YOUTUBE STREAMING 95 seconds	Video: YouTube 60sec wait 10s	Video: YouTube 60sec wait 10s
7	KEPLER WEB BROWSING 45s	HTTPS Browsing: Kepler wait 10s	HTTPS Browsing: Kepler wait 10s
8	LIVE WEB BROWSING 45s	www.shein.com, www.nbs.gov.sc, www.sbc.sc wait 10s	www.shein.com, www.nbs.gov.sc, www.sbc.sc wait 10s
9	KEPLER MOBILE WEB BROWSING 45s	HTTPS Browsing: Kepler Mobile wait 10s	HTTPS Browsing: Kepler Mobile wait 10s
10	ICMP PING 32 BYTES	Ping (32 bytes) 5 www.google.com wait 10s	Ping (32 bytes) 5 www.google.com wait 10s
11	FILE TRANSFER-CAPACITY DOWNLOAD 10s fixed duration	HTTP Get (500MB) Multiple files wait 10s	HTTP Get (500MB) Multiple files wait 10s
12	FILE TRANSFER-CAPACITY UPLOAD 10s fixed duration	HTTP Put (500MB)-Multiple Files wait 10s	HTTP Put (500MB)-Multiple Files wait 10s

VOICE TEST KPI STATISTICS (Short Call)

Phase-1

Short Call Statistics		
Short Call Scenario	Operator 1	Operator 2
Voice KPIs	Airtel	CWS
Call Attempt	81	78
Call Failed	0	0
Call Connected	81	78
CSSR[%]	100.00	100.00
USCSR[%]	0.00	0.00
CST [s] Alerting	5.85	7.01
CST [s]Connected	6.11	7.20

CSSR= Call Setup Success rate
 USCSR=Unsuccessful call setup ratio
 CST=Call setup time
 Call Setup Success Ratio >97%
 CRR= Call retainability ratio
 DCR=Dropped-call rate
 MOS=Mean Opinion Score
 Drop Call Ratio<2

Call Setup Time (s)	Operators		Rank	
	Airtel	CWS	Airtel	CWS
Overall CST (until ringing/alerting)	5.85	7.01	1	2
CS calls CST (until ringing/alerting)	5.12	6.63	1	2
CSFB calls CST (until ringing/alerting)	6.06	7.01	1	2
Overall CST (until Connect/Connect Acknowledge)	6.11	7.20	1	2
CS calls CST (until Connect/Connect Acknowledge)	5.42	6.71	1	2
CSFB calls CST (until Connect/Connect Acknowledge)	6.31	7.21	1	2

Phase-2

Short Call Statistics		
Short Call Scenario	Operator 1	Operator 2
Voice KPIs	Airtel	CWS
Call Attempt	78	72
Call Failed	1	0
Call Connected	77	72
CSSR[%]	98.72	100.00
USCSR[%]	1.28	0.00
CST [s] Alerting	5.87	8.77
CST [s]Connected	6.17	8.93

Call Setup Time (s)	Operators		Rank	
	Airtel	CWS	Airtel	CWS
Overall CST (until ringing/alerting)	5.87	8.77	1	2
CS calls CST (until ringing/alerting)	5.38	6.56	1	2
CSFB calls CST (until ringing/alerting)	5.92	8.83	1	2
Overall CST (until Connect/Connect Acknowledge)	6.17	8.93	1	2
CS calls CST (until Connect/Connect Acknowledge)	5.74	6.69	1	2
CSFB calls CST (until Connect/Connect Acknowledge)	6.21	8.99	1	2

Phase-1

Long Call Statistics				
Long Call Scenario	Operator 1		Operator 2	
Voice KPIs	Airtel	CWS		
Call Connected	21	21		
Call Dropped	0	0		
Call Completed	21	21		
CRR[%]	100.00	100.00		
DCR[%]	0.00	0.00		
MOS	3.08	3.47		
	Airtel short call	CWS short call	Airtel long call	CWS long call
CSFB Calls	63	77	17	21
CS Calls	18	1	4	0
Handover Statistics		Airtel MO	CWS MO	
Handover Attempt		10	74	
Handover Failure		1	0	
Handover Success		9	74	
HOSR %		90.00	100.00	

Phase-2

Long Call Statistics				
Long Call Scenario	Operator 1		Operator 2	
Voice KPIs	Airtel	CWS		
Call Connected	20	18		
Call Dropped	0	0		
Call Completed	20	18		
CRR[%]	100.00	100.00		
DCR[%]	0.00	0.00		
MOS	3.17	3.39		
	Airtel short call	CWS short call	Airtel long call	CWS long call
CSFB Calls	71	70	17	17
CS Calls	7	2	3	1
Handover Statistics		Airtel MO	CWS MO	
Handover Attempt		11	32	
Handover Failure		0	0	
Handover Success		11	32	
HOSR %		100.00	100.00	

DATA TEST KPI STATISTICS(4G Preferred)

DATA Scenario		Phase-1				Phase-2			
		Airtel 4G	CWS 4G	Airtel 4G (Rank)	CWS 4G (Rank)	Airtel 4G	CWS 4G	Airtel 4G (Rank)	CWS 4G (Rank)
FILE TRANSFER	SFTP DL (Mbps)	13.26	6.98	1	2	13.92	8.18	1	2
	SFTP UL(Mbps)	6.72	3.97	1	2	6.12	3.92	1	2
	HTTP DL(Mbps)	17.58	8.54	1	2	19.25	9.58	1	2
	HTTP UL(Mbps)	11.06	7.71	1	2	9.56	6.16	1	2
	HTTP Capacity DL(Mbps)	29.35	27.3	1	2	34.02	26.46	1	2
	HTTP Capacity UL(Mbps)	22.96	27.11	2	1	20.20	12.10	1	2
BROWSER	Overall Browser DL Time (s)	10.5	9.56	2	1	9.44	8.75	2	1
	Kepler Webpage DL Time (s)	4.11	4.69	1	2	4.38	4.52	1	2
	Mobile Kepler Webpage DL Time (s)	1.69	2.81	1	2	1.69	2.69	1	2
	www.shein.com Webpage DL Time (s)	6.79	5.9	2	1	7.44	5.01	2	1
	www.nbs.gov.sc Webpage DL Time (s)	17.75	16.31	2	1	17.46	15.88	2	1
	www.sbc.sc Webpage DL Time (s)	21.12	18.27	2	1	16.25	15.13	2	1
LATENCY	Avg Latency (ms)	278.18	264.14	2	1	267.67	196.93	2	1
	Median Latency (ms)	391	225	2	1	196	194	2	1
YOUTUBE	YouTube Access Time (s)	5.53	1.57	2	1	5.24	1.62	2	1
	YouTube Average Resolution (pixels)	1049.04	1034.55	1	2	1023.82	1080.00	2	1
	YouTube Success Ratio [%]	91.67	100.00	2	1	92.31	100.00	2	1

Phase-1

Test Type	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
SFTP DL	Success	10	12	90.91	100.00
	Failure	1	0	9.09	0.00
SFTP UL	Success	11	12	91.67	100.00
	Failure	1	0	8.33	0.00
HTTP DL	Success	12	12	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP UL	Success	12	12	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity DL	Success	12	11	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity UL	Success	10	11	83.33	100.00
	Failure	2	0	16.67	0.00

Phase-2

Test Type	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
SFTP DL	Success	13	10	100.00	100.00
	Failure	0	0	0.00	0.00
SFTP UL	Success	13	9	100.00	90.00
	Failure	0	1	0.00	10.00
HTTP DL	Success	13	10	100.00	90.91
	Failure	0	1	0.00	9.09
HTTP UL	Success	13	12	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity DL	Success	12	11	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity UL	Success	12	11	100.00	100.00
	Failure	0	0	0.00	0.00

Phase-1

Web Page	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
Kepler	Success	10	12	83.33	100.00
	Failure	2	0	16.67	0.00
Mobile Kepler	Success	12	11	100.00	91.67
	Failure	0	1	0.00	8.33
www.shein.com	Success	12	12	100.00	100.00
	Failure	0	0	0.00	0.00
www.nbs.gov.sc	Success	12	12	100.00	100.00
	Failure	0	0	0.00	0.00
www.sbc.sc	Success	12	11	100.00	91.67
	Failure	0	1	0.00	8.33

Phase-2

Web Page	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
Kepler	Success	12	11	100.00	100.00
	Failure	0	0	0.00	0.00
Mobile Kepler	Success	12	10	100.00	100.00
	Failure	0	0	0.00	0.00
www.shein.com	Success	12	11	100.00	100.00
	Failure	0	0	0.00	0.00
www.nbs.gov.sc	Success	12	11	100.00	100.00
	Failure	0	0	0.00	0.00
www.sbc.sc	Success	12	11	100.00	100.00
	Failure	0	0	0.00	0.00

Phase-1

	Latency KPIs	Airtel 4G	CWS 4G
Overall Latency	Sample Count [32 bytes]	23	23
	Average Latency [ms]	268.30	248.48
	Median Latency [ms]	387	216
	Ping session status: Successful	23	23
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00
	www.google.com	Average Latency [ms]	404.17
Median Latency [ms]		400	165
Ping session status: Successful		12	11
Ping session status: Failed [Socket error]		0	0
Ping session status: Failed [Protocol error timeout]		0	0
Packet Loss<1%		0.00	0.00
102.133.176.104	Average Latency [ms]	120.09	305.50
	Median Latency [ms]	120	326
	Ping session status: Successful	11	12
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00

Phase-2

	Latency KPIs	Airtel 4G	CWS 4G
Overall Latency	Sample Count [32 bytes]	24	23
	Average Latency [ms]	281.67	196.52
	Median Latency [ms]	393	195
	Ping session status: Successful	24	23
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	1	0
	Packet Loss<1%	4.00	0.00
	www.google.com	Average Latency [ms]	404.75
Median Latency [ms]		400	174
Ping session status: Successful		12	11
Ping session status: Failed [Socket error]		0	0
Ping session status: Failed [Protocol error timeout]		0	0
Packet Loss<1%		0.00	0.00
102.133.176.104	Average Latency [ms]	158.58	220.25
	Median Latency [ms]	121	226
	Ping session status: Successful	12	12
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	1	0
	Packet Loss<1%	7.69	0.00

Phase-1

LTE YOUTUBE Success Ratio		
KPIs	Airtel 4G	CWS 4G
Attempt(Count)	12	12
Success(Count)	11	12
Failure(Count)	1	0
YouTube Access Time (s)	5.53	1.57
YouTube Average Resolution (pixels)	1049.04	1034.55
YouTube Success Ratio [%]	91.67	100.00

Phase-2

LTE YOUTUBE Success Ratio		
KPIs	Airtel 4G	CWS 4G
Attempt(Count)	13	12
Success(Count)	12	12
Failure(Count)	1	0
YouTube Access Time (s)	5.24	1.62
YouTube Average Resolution (pixels)	1023.82	1080.00
YouTube Success Ratio [%]	92.31	100.00

DATA TEST KPI STATISTICS (3G Preferred)

DATA Scenario		Phase-1				Phase-2			
		Airtel 3G	CWS 3G	Airtel 3G (Rank)	CWS 3G (Rank)	Airtel 3G	CWS 3G	Airtel 3G (Rank)	CWS 3G (Rank)
FILE TRANSFER	SFTP DL (Mbps)	4.48	3.37	1	2	3.66	2.17	1	2
	SFTP UL(Mbps)	1.54	1.02	1	2	1.58	1.17	1	2
	HTTP DL(Mbps)	4.99	3.1	1	2	4.62	3.00	1	2
	HTTP UL(Mbps)	2.17	1.95	1	2	2.26	2.05	1	2
	HTTP Capacity DL(Mbps)	6.72	6.59	1	2	4.96	5.48	2	1
	HTTP Capacity UL(Mbps)	4.31	4.36	2	1	4.43	3.77	1	2
BROWSER	Overall Browser DL Time (s)	8.65	7.01	2	1	8.36	8.86	1	2
	Kepler Webpage DL Time (s)	5.94	5.45	2	1	3.74	5.93	1	2
	Mobile Kepler Webpage DL Time (s)	1.67	2.45	1	2	2.36	2.73	1	2
	www.shein.com Webpage DL Time (s)	11.98	9.48	2	1	9.87	9.30	2	1
	www.nbs.gov.sc Webpage DL Time (s)	12.67	8.09	2	1	12.36	11.85	2	1
	www.sbc.sc Webpage DL Time (s)	11.01	9.1	2	1	13.30	15.33	1	2
LATENCY	Avg Latency (ms)	287.18	192.98	2	1	291.24	204.17	2	1
	Median Latency (ms)	400	198	2	1	392	196	2	1
YOUTUBE	YouTube Access Time (s)	3.32	8.74	1	2	5.99	9.51	1	2
	YouTube Average Resolution (pixels)	951.54	1038.1	2	1	1019.18	911.64	1	2
	YouTube Success Ratio [%]	100.00	70.00	1	2	100.00	77.78	1	2

Phase-1

Test Type	Status	Airtel 3G	CWS 3G	Airtel 3G (%)	CWS 3G (%)
SFTP DL	Success	11	9	100.00	100.00
	Failure	0	0	0.00	0.00
SFTP UL	Success	11	9	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP DL	Success	10	9	100.00	90.00
	Failure	0	1	0.00	10.00
HTTP UL	Success	11	7	100.00	70.00
	Failure	0	3	0.00	30.00
HTTP Capacity DL	Success	10	10	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity UL	Success	10	9	100.00	90.00
	Failure	0	1	0.00	10.00

Phase-2

Test Type	Status	Airtel 3G	CWS 3G	Airtel 3G (%)	CWS 3G (%)
SFTP DL	Success	9	5	100.00	100.00
	Failure	0	0	0.00	0.00
SFTP UL	Success	9	6	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP DL	Success	10	7	100.00	87.50
	Failure	0	1	0.00	12.50
HTTP UL	Success	10	8	100.00	88.89
	Failure	0	1	0.00	11.11
HTTP Capacity DL	Success	9	8	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity UL	Success	9	7	100.00	87.50
	Failure	0	1	0.00	12.50

Phase-1

Web Page	Status	Airtel 3G	CWS 3G	Airtel 3G(%)	CWS 3G (%)
Kepler	Success	10	9	100.00	90.00
	Failure	0	1	0.00	10.00
Mobile Kepler	Success	10	8	100.00	80.00
	Failure	0	2	0.00	20.00
www.shein.com	Success	10	9	100.00	90.00
	Failure	0	1	0.00	10.00
www.nbs.gov.sc	Success	10	9	100.00	100.00
	Failure	0	0	0.00	0.00
www.sbc.sc	Success	10	9	100.00	90.00
	Failure	0	1	0.00	10.00

Phase-2

Web Page	Status	Airtel 3G	CWS 3G	Airtel 3G(%)	CWS 3G (%)
Kepler	Success	10	8	100.00	88.89
	Failure	0	1	0.00	11.11
Mobile Kepler	Success	9	8	100.00	88.89
	Failure	0	1	0.00	11.11
www.shein.com	Success	10	8	100.00	88.89
	Failure	0	1	0.00	11.11
www.nbs.gov.sc	Success	9	8	100.00	100.00
	Failure	0	0	0.00	0.00
www.sbc.sc	Success	10	7	100.00	77.78
	Failure	0	2	0.00	22.22

Phase-1

	Latency KPIs	Airtel 3G	CWS 3G
Overall Latency	Sample Count [32 bytes]	13	18
	Average Latency [ms]	395.23	196.33
	Median Latency [ms]	405	199
	Ping session status: Successful	13	18
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	8	0
	Packet Loss<1%	38.10	0.00
www.google.com	Average Latency [ms]	406.20	186.90
	Median Latency [ms]	405	154
	Ping session status: Successful	10	10
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00
102.133.176.104	Average Latency [ms]	358.67	208.13
	Median Latency [ms]	206	209
	Ping session status: Successful	3	8
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	8	0
	Packet Loss<1%	72.73	0.00

Phase-2

	Latency KPIs	Airtel 3G	CWS 3G
Overall Latency	Sample Count [32 bytes]	18	15
	Average Latency [ms]	275.44	230.47
	Median Latency [ms]	324	199
	Ping session status: Successful	18	15
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00
www.google.com	Average Latency [ms]	413.11	156.13
	Median Latency [ms]	410	140
	Ping session status: Successful	9	8
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00
102.133.176.104	Average Latency [ms]	137.78	315.43
	Median Latency [ms]	120	215
	Ping session status: Successful	9	7
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00

Phase-1

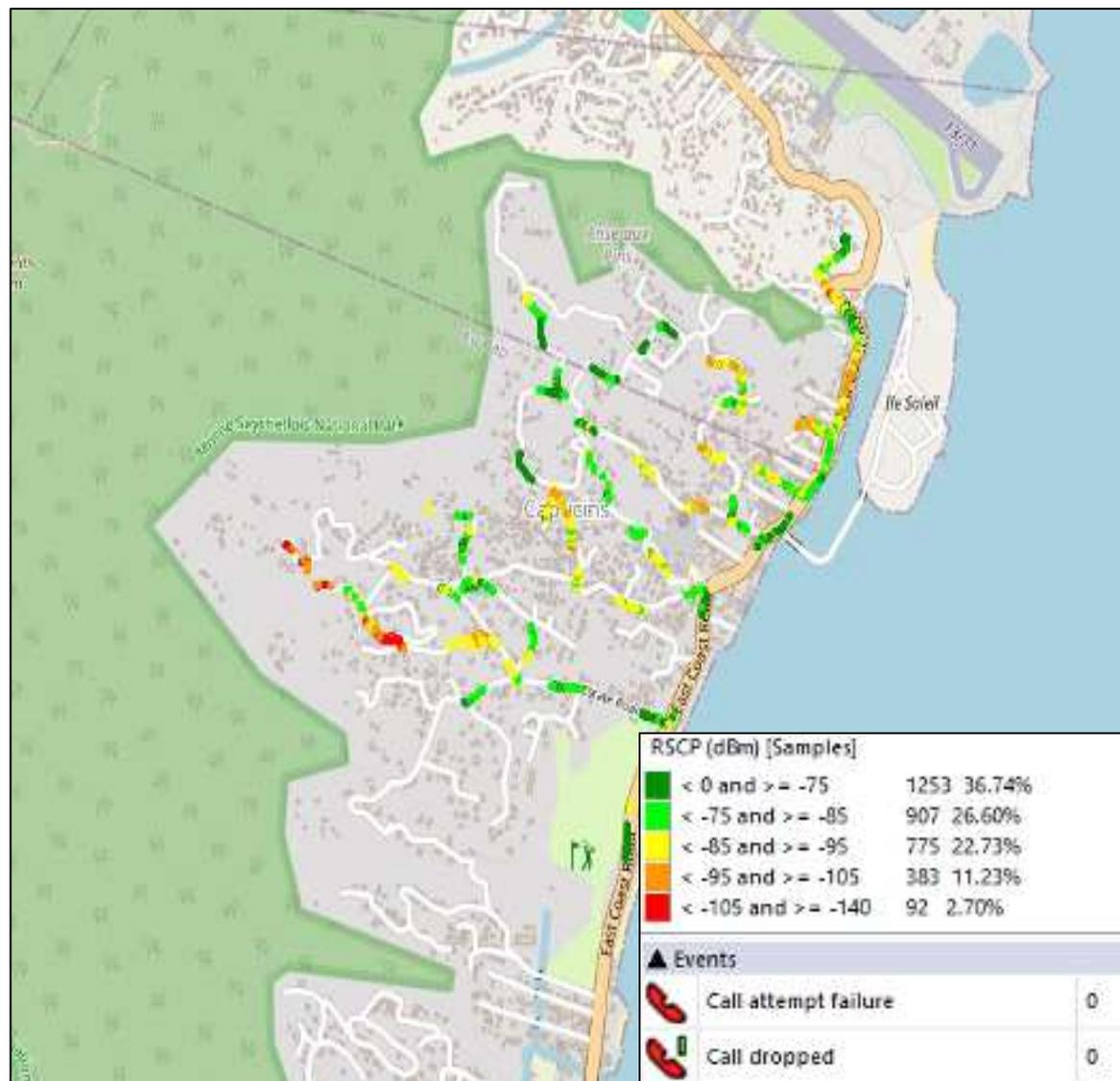
UMTS YOUTUBE Success Ratio		
KPIs	Airtel 3G	CWS 3G
Attempt(Count)	11	10
Success(Count)	11	7
Failure(Count)	0	3
YouTube Access Time (s)	3.32	8.74
YouTube Average Resolution (pixels)	951.54	1038.10
YouTube Success Ratio [%]	100.00	70.00

Phase-2

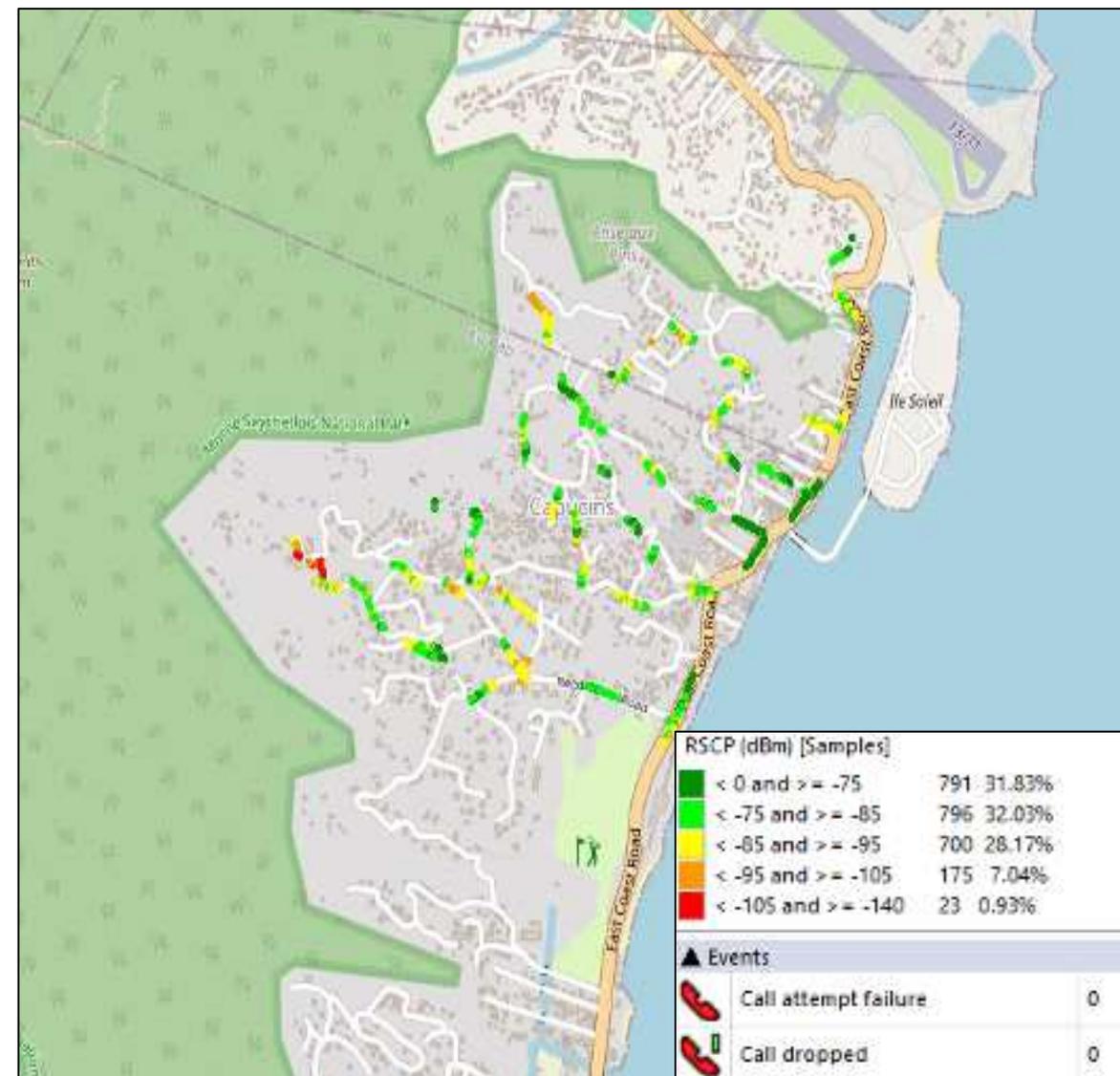
UMTS YOUTUBE Success Ratio		
KPIs	Airtel 3G	CWS 3G
Attempt(Count)	10	9
Success(Count)	10	9
Failure(Count)	0	0
YouTube Access Time (s)	5.99	9.51
YouTube Average Resolution (pixels)	1019.18	911.64
YouTube Success Ratio [%]	100.00	77.78

Voice Call Events

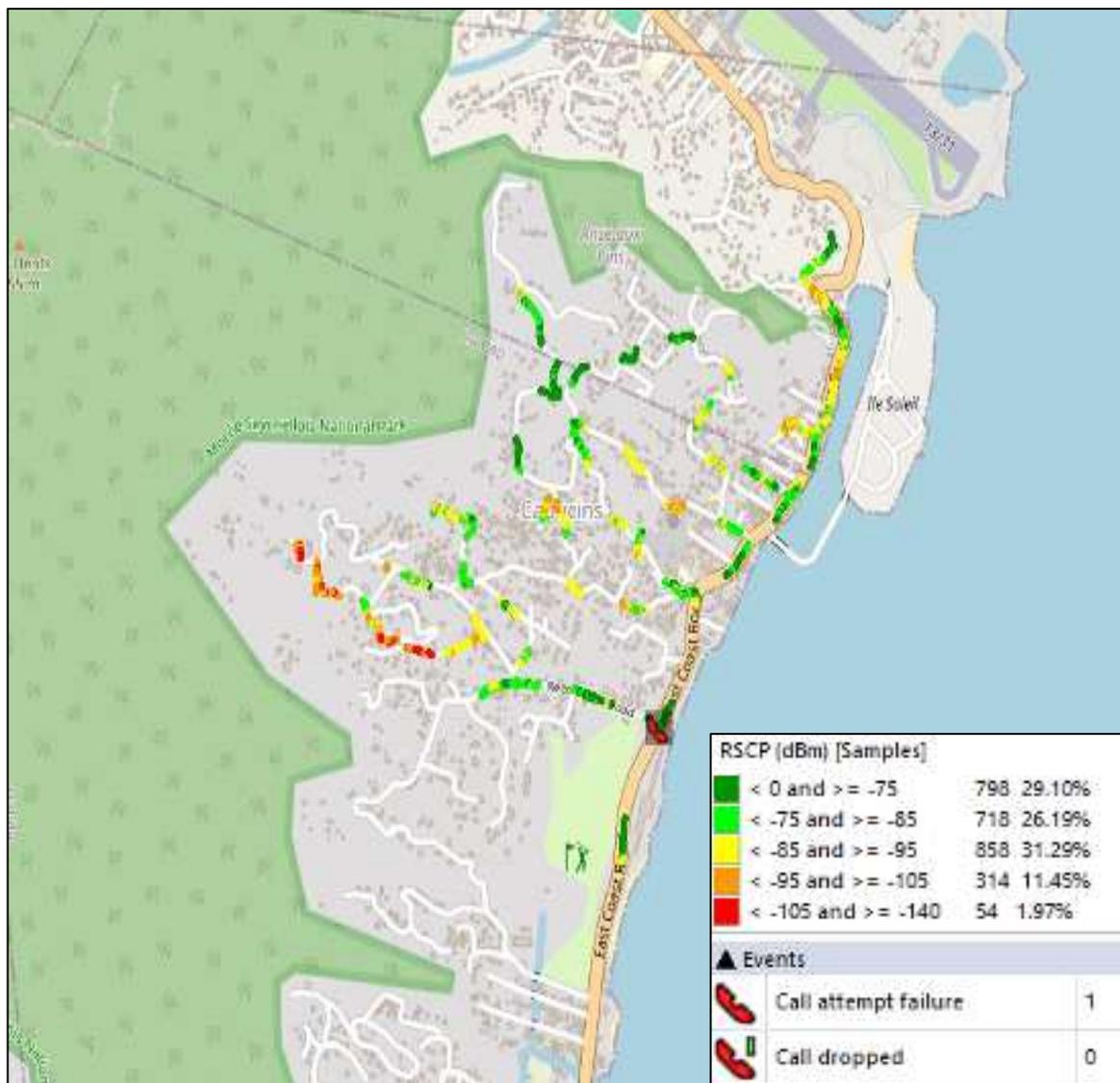
Airtel SC MO



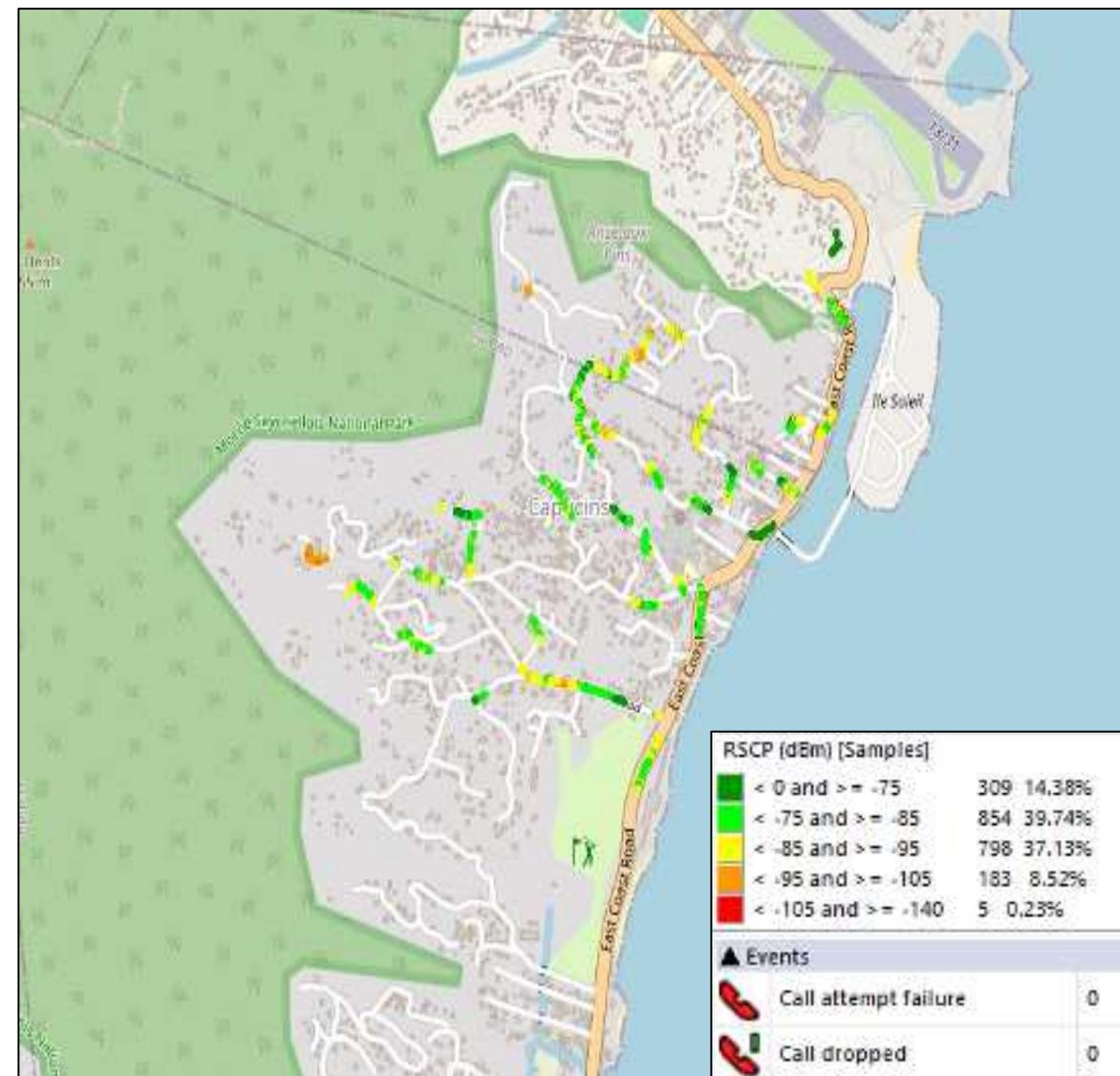
CWS SC MO



Airtel SC MO



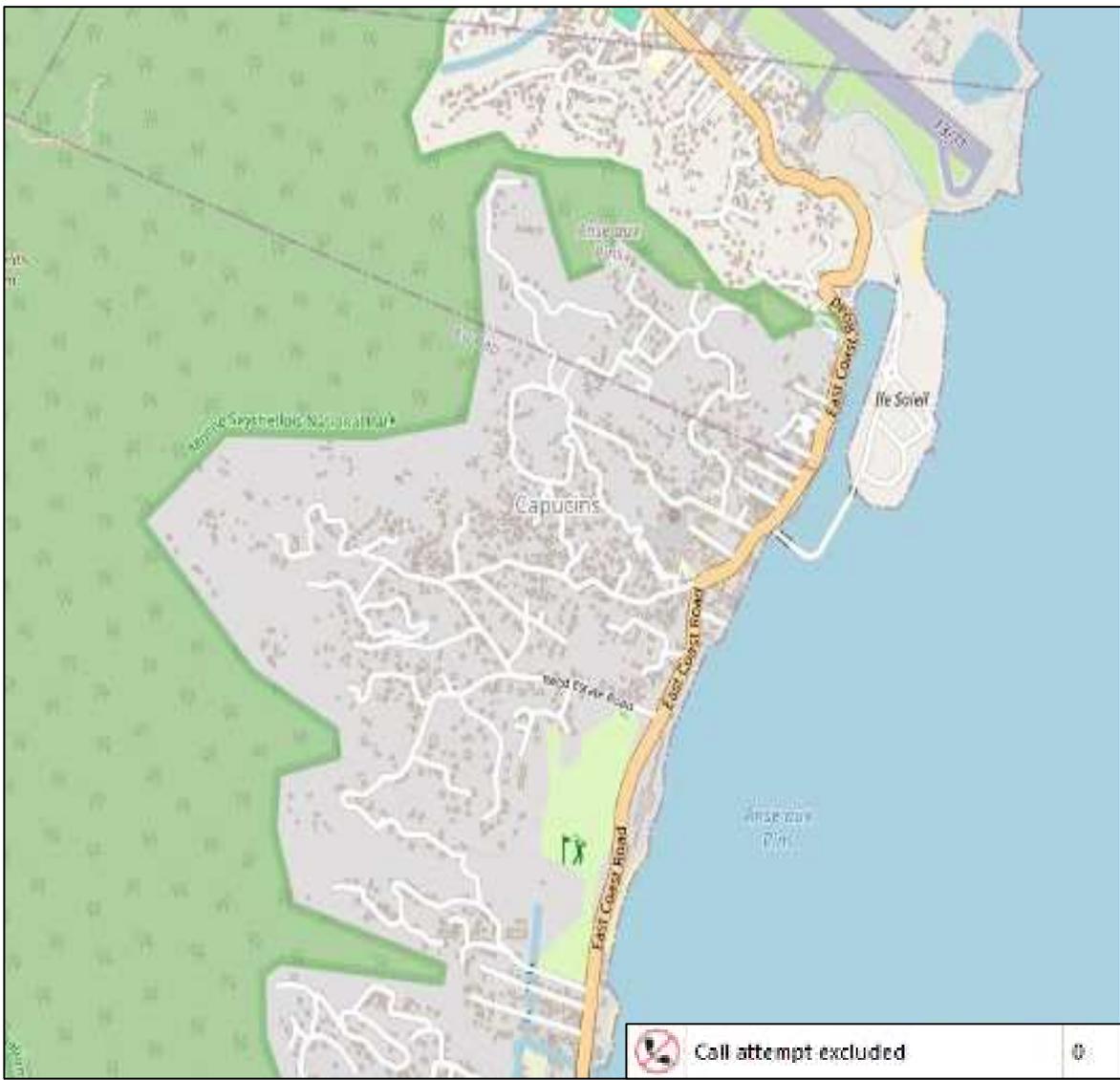
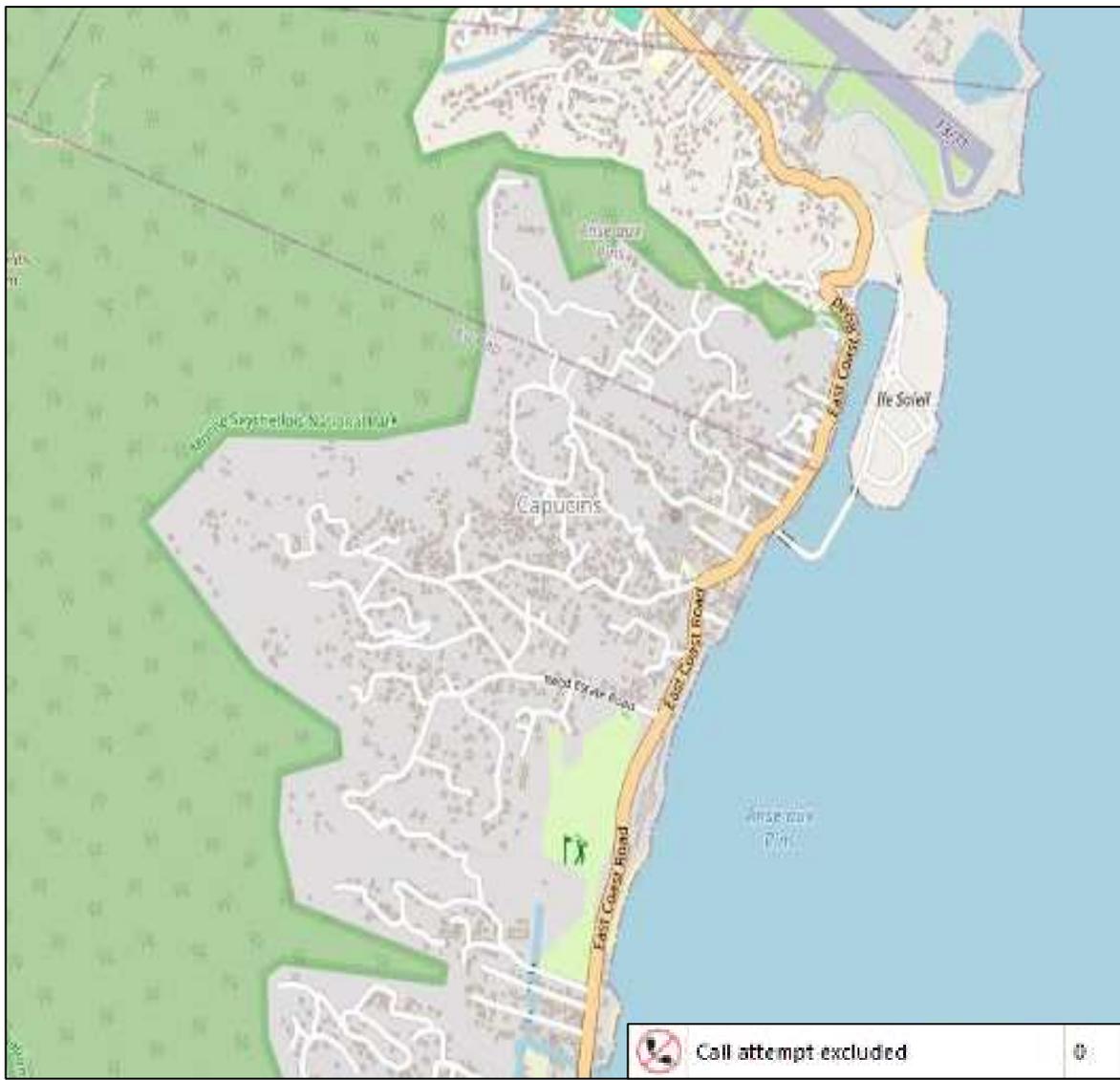
CWS SC MO



Phase-1 SHORT CALL EXCLUDED EVENTS

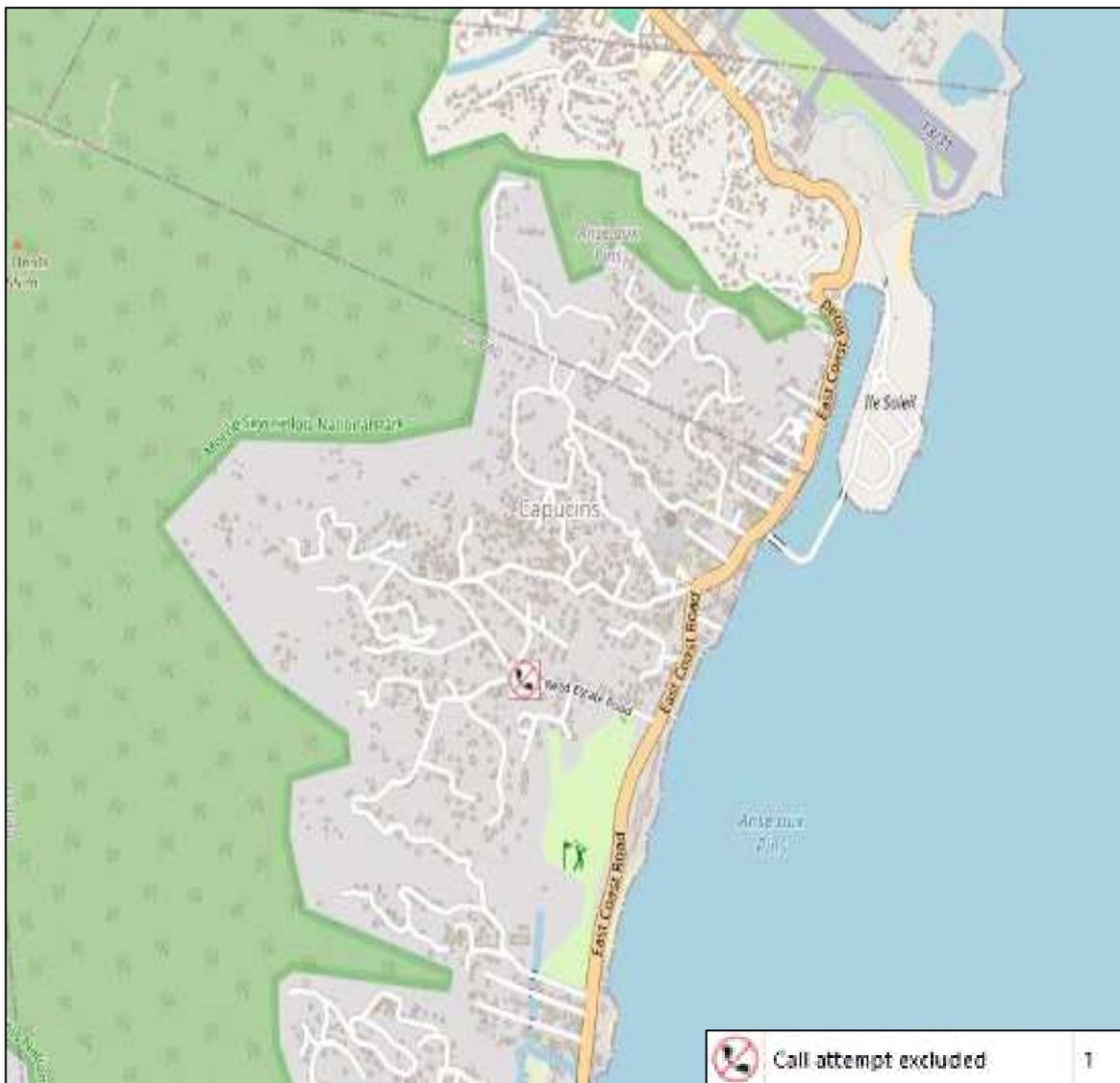
Airtel SC MO

CWS SC MO

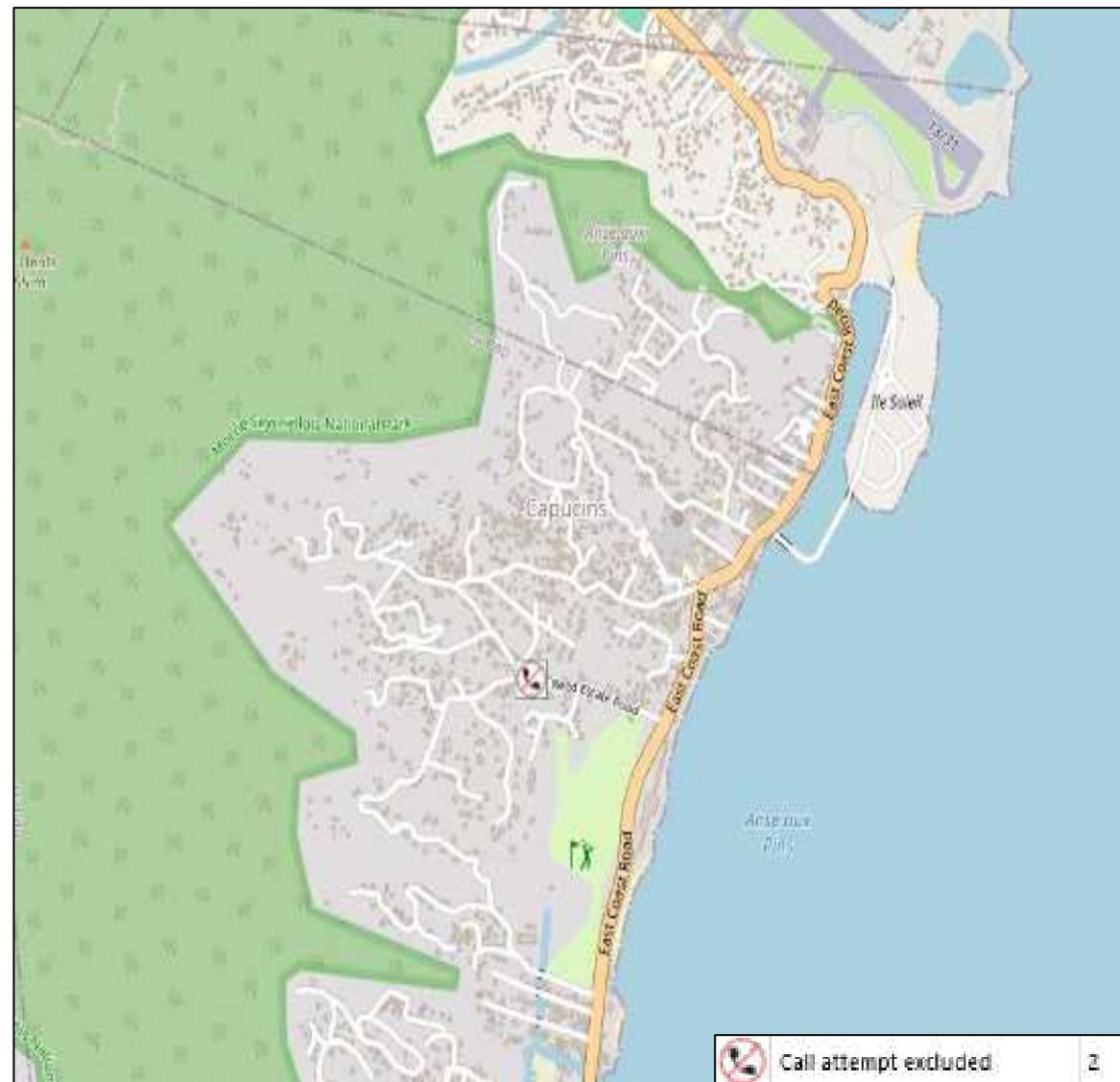


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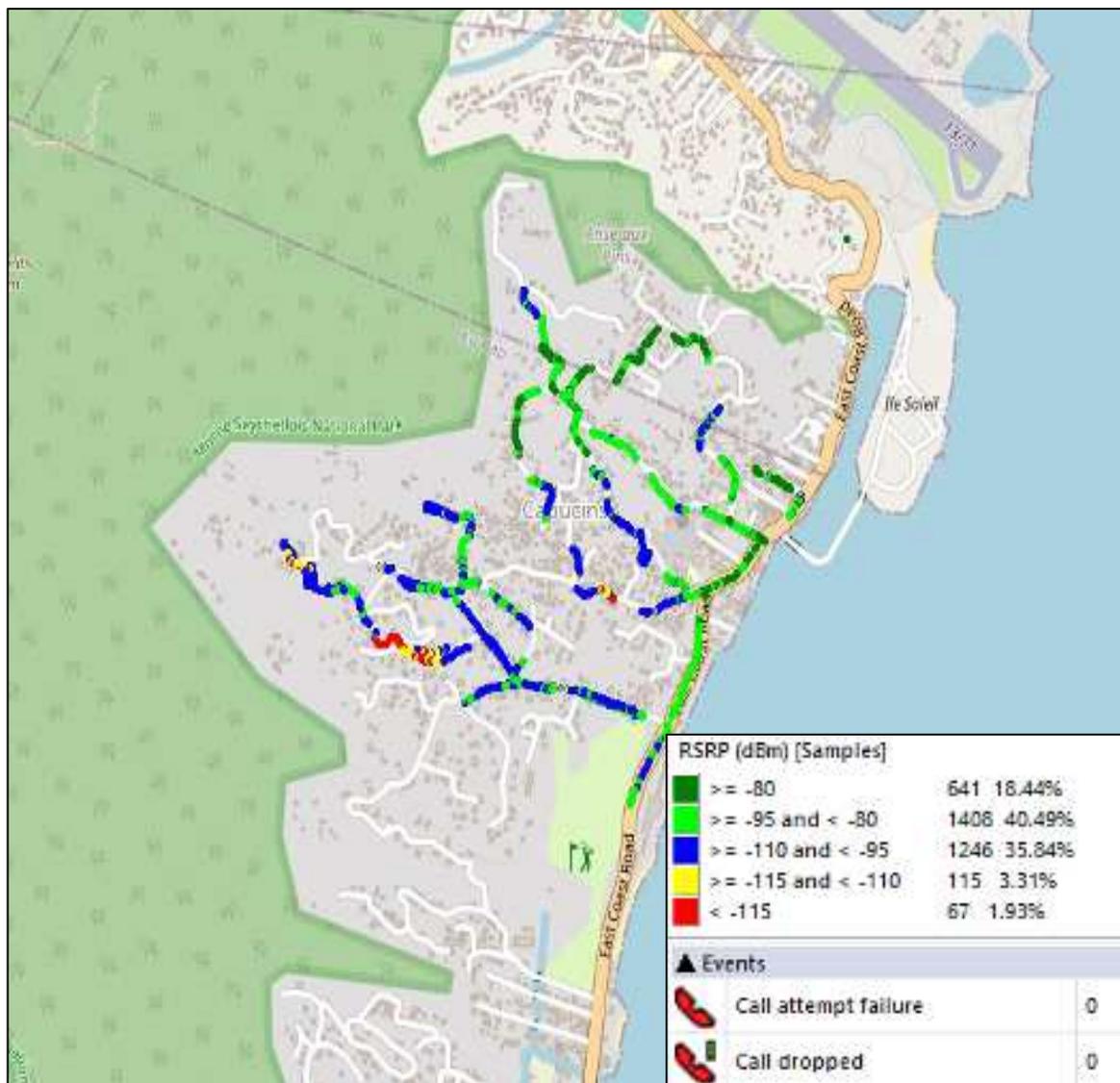
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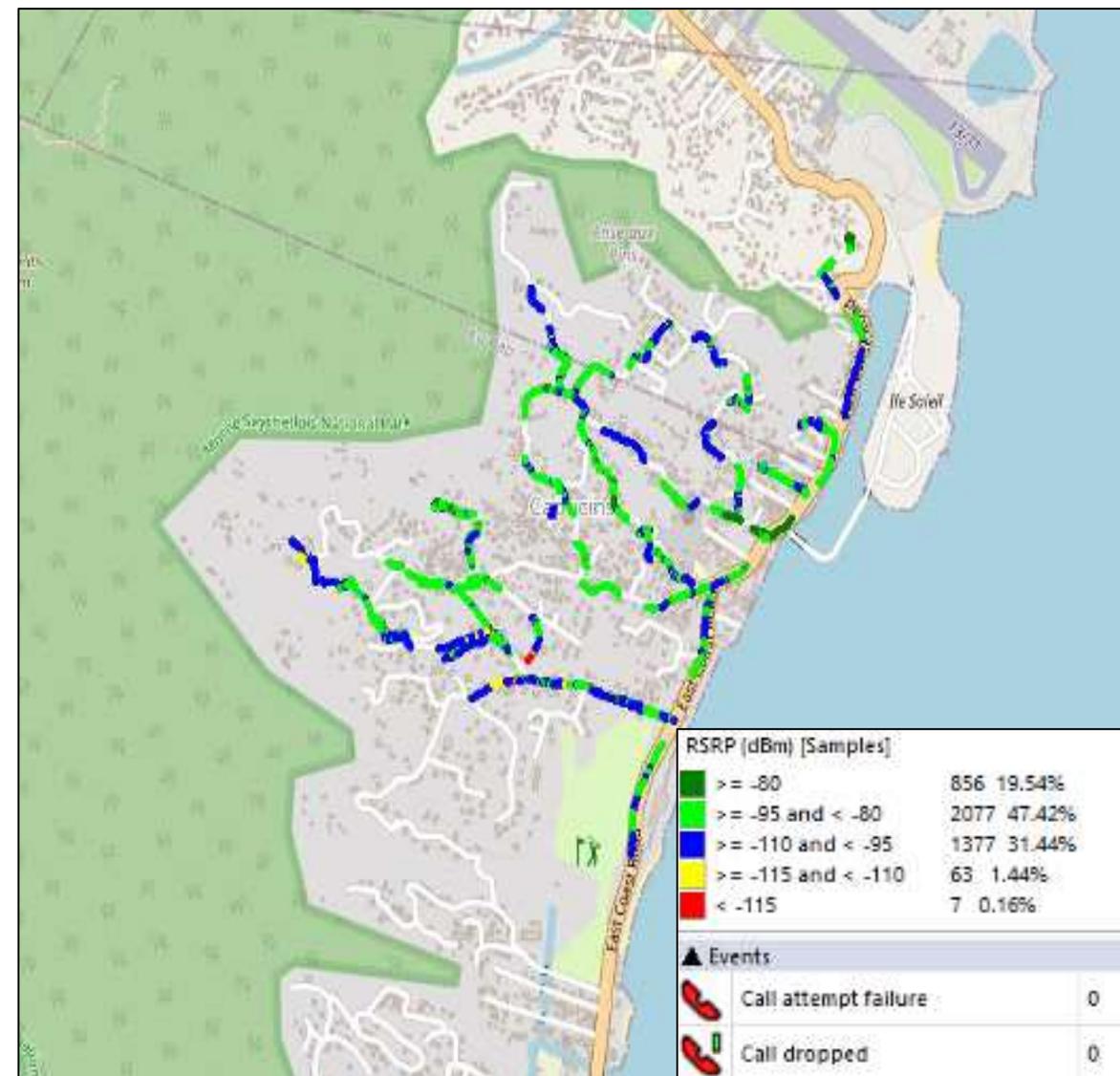
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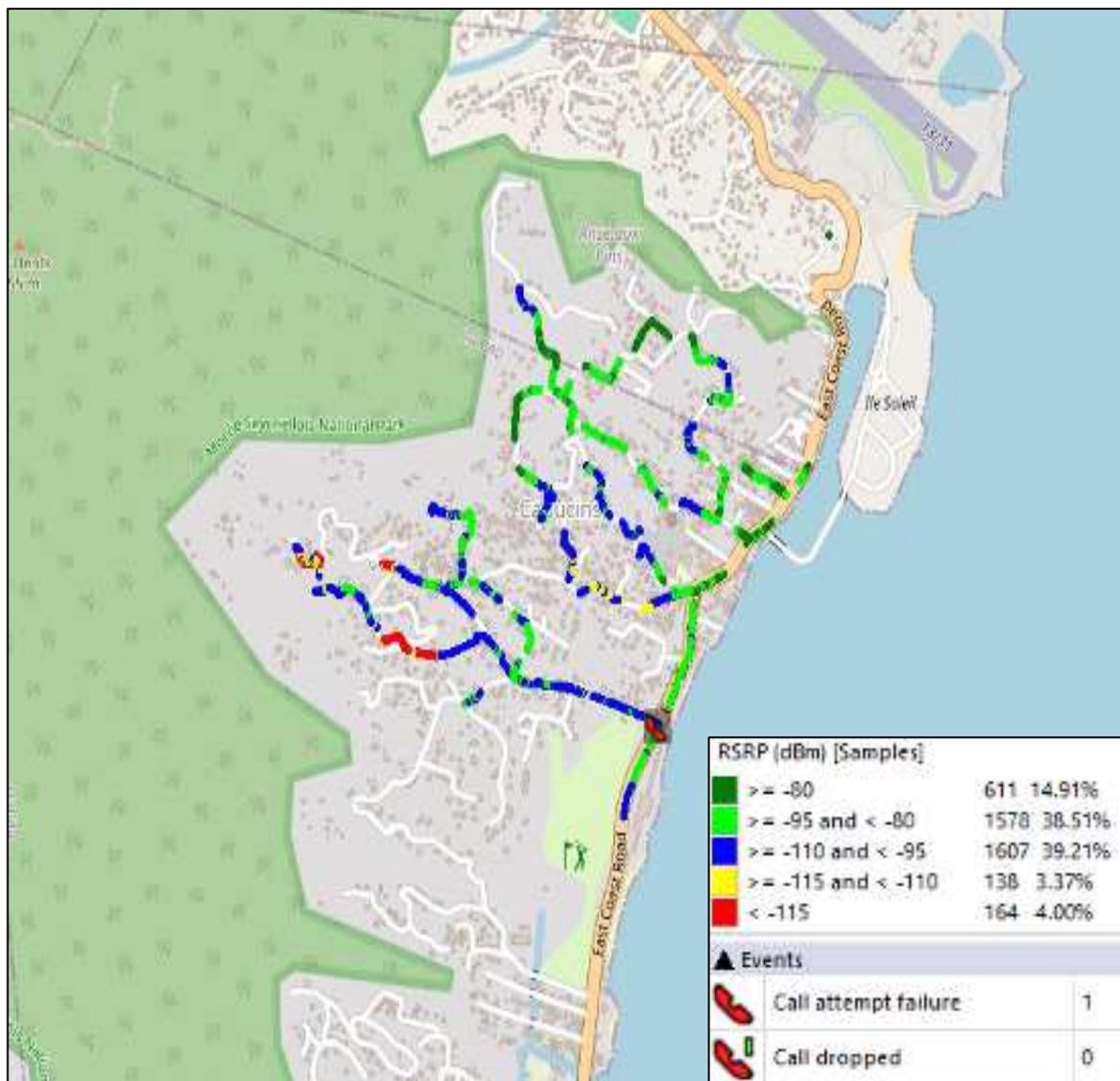
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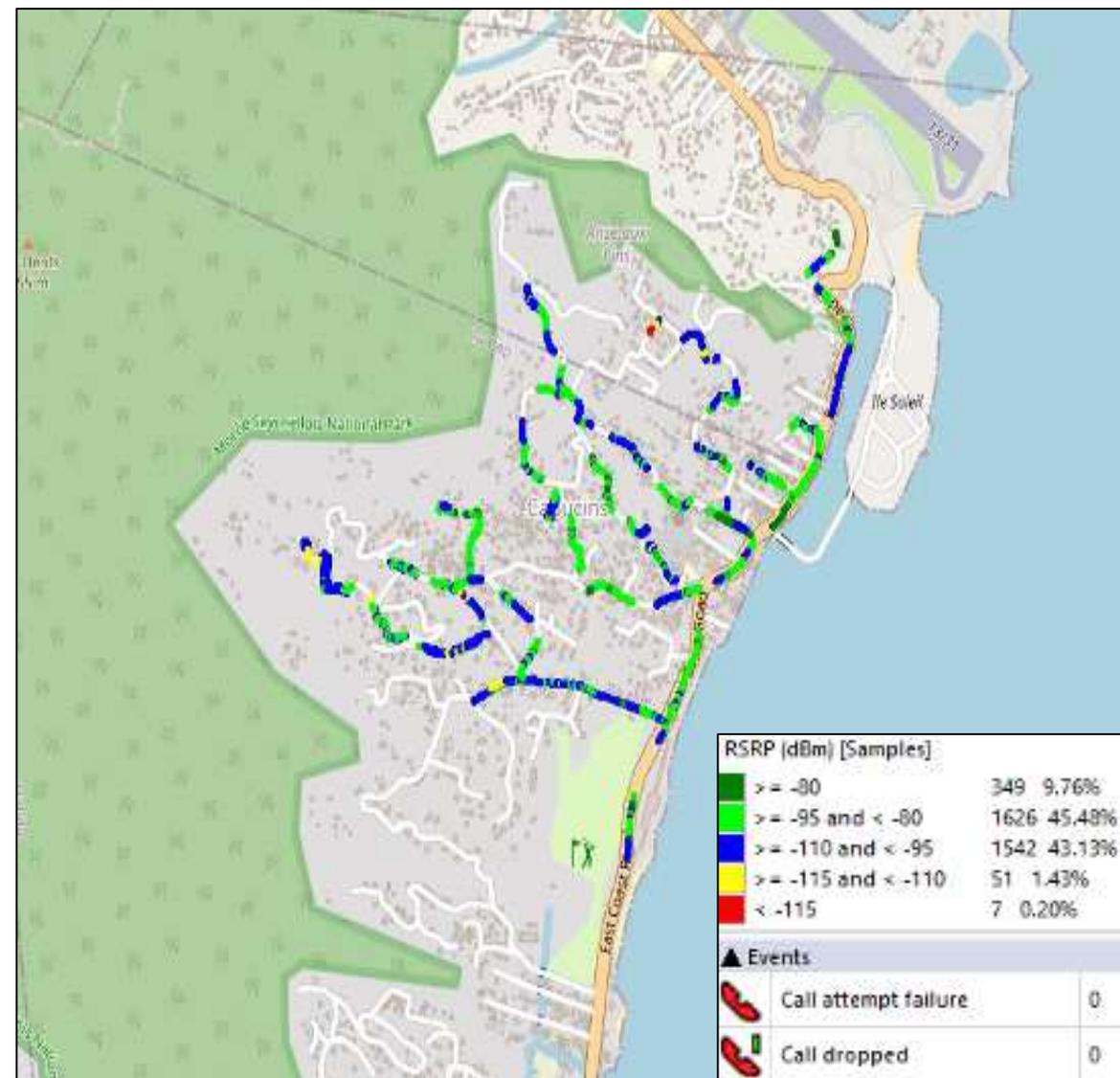
CWS SC MO



Airtel SC MO

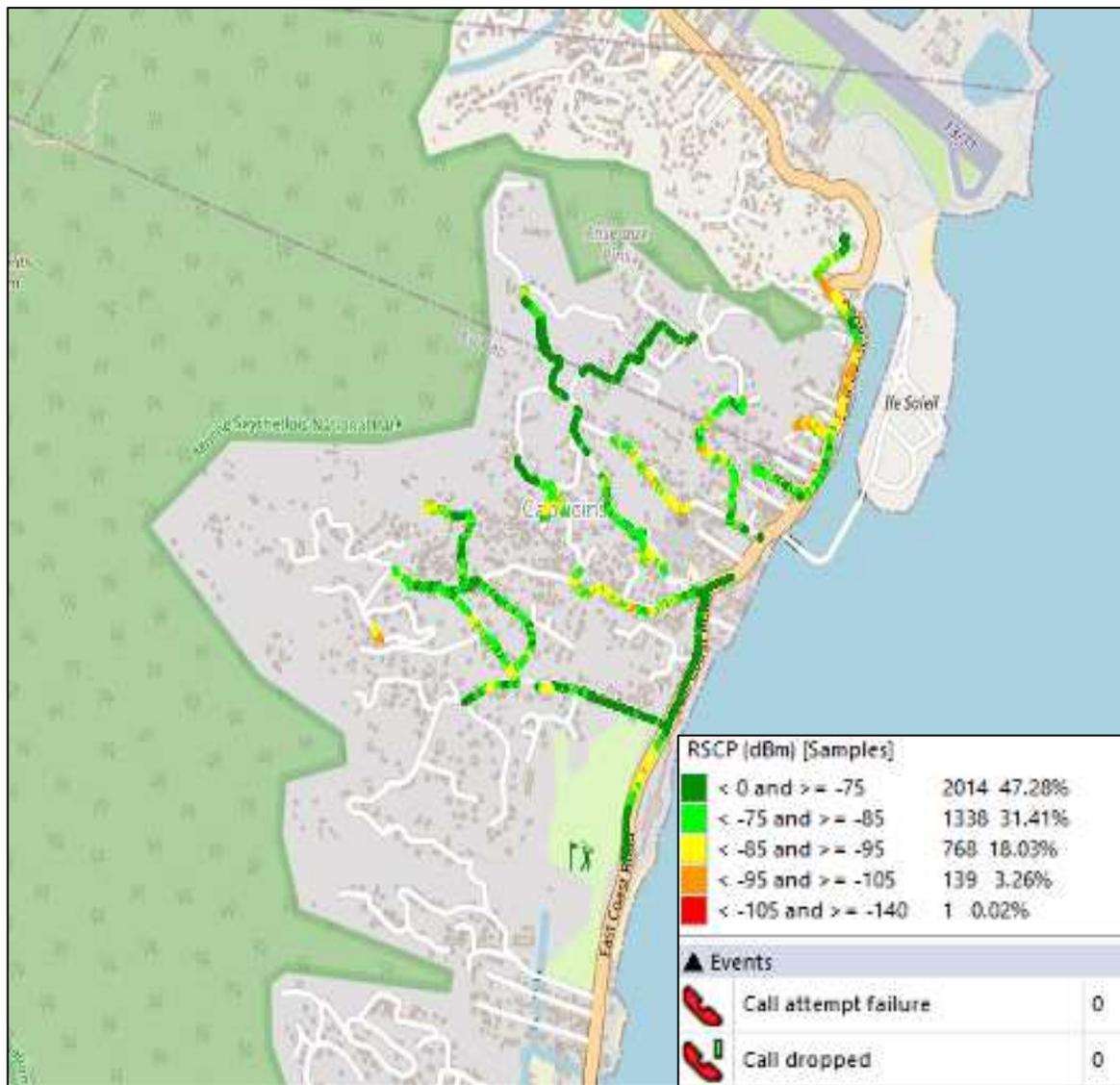


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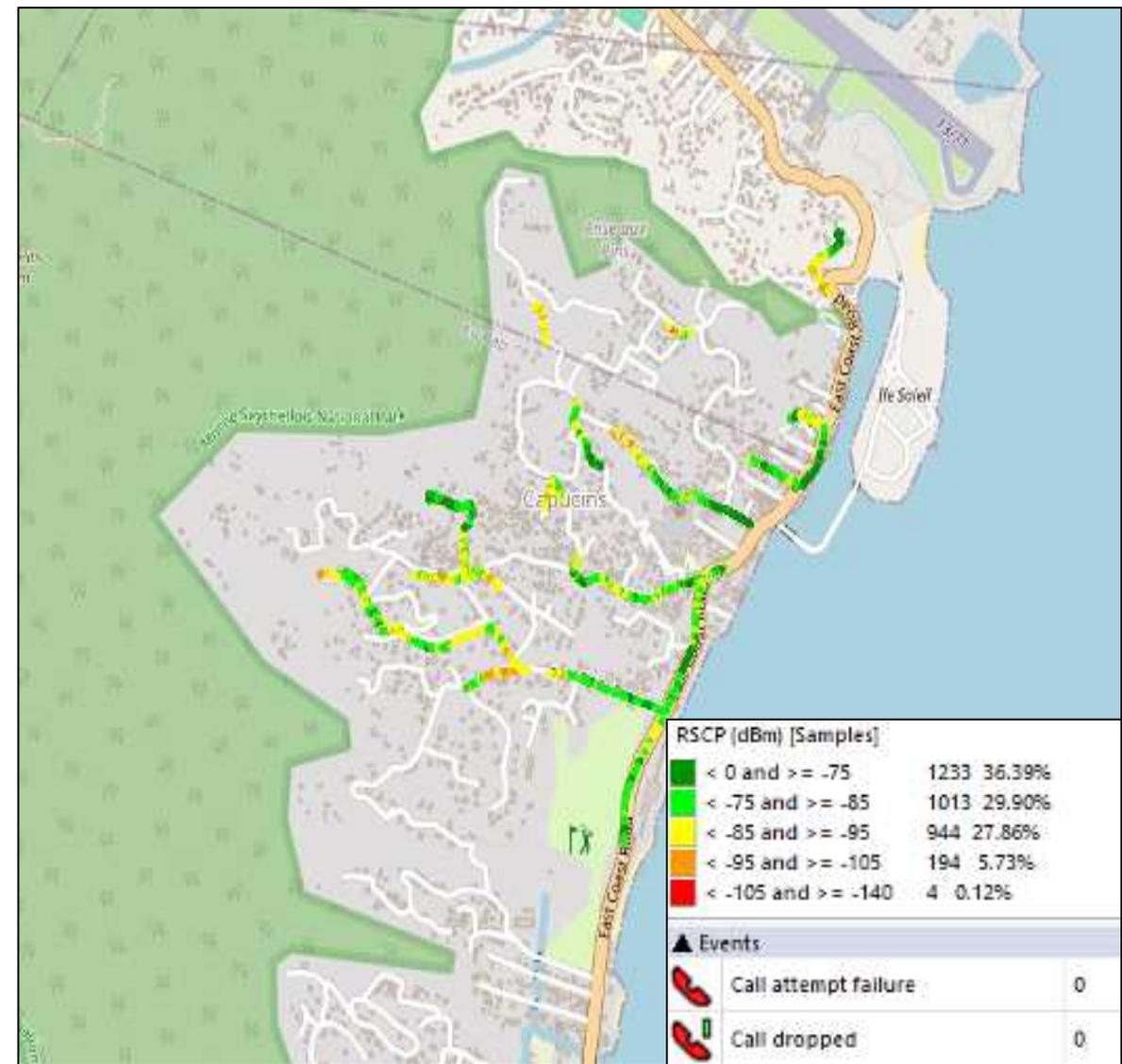


Phase-1 LONG CALL FAILURE EVENTS LOCATION vs RSCP

Airtel LC MO

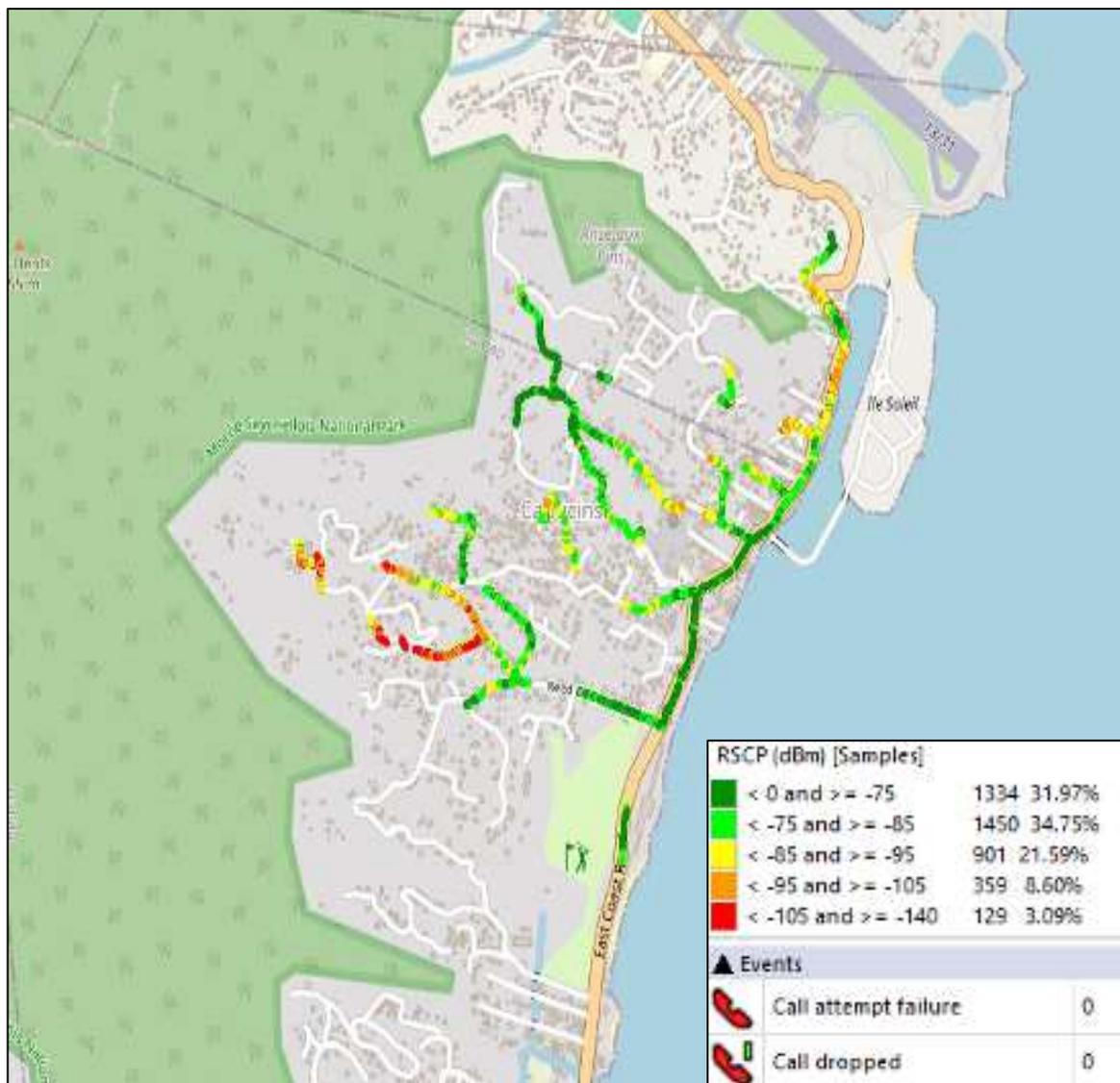


CWS LC MO

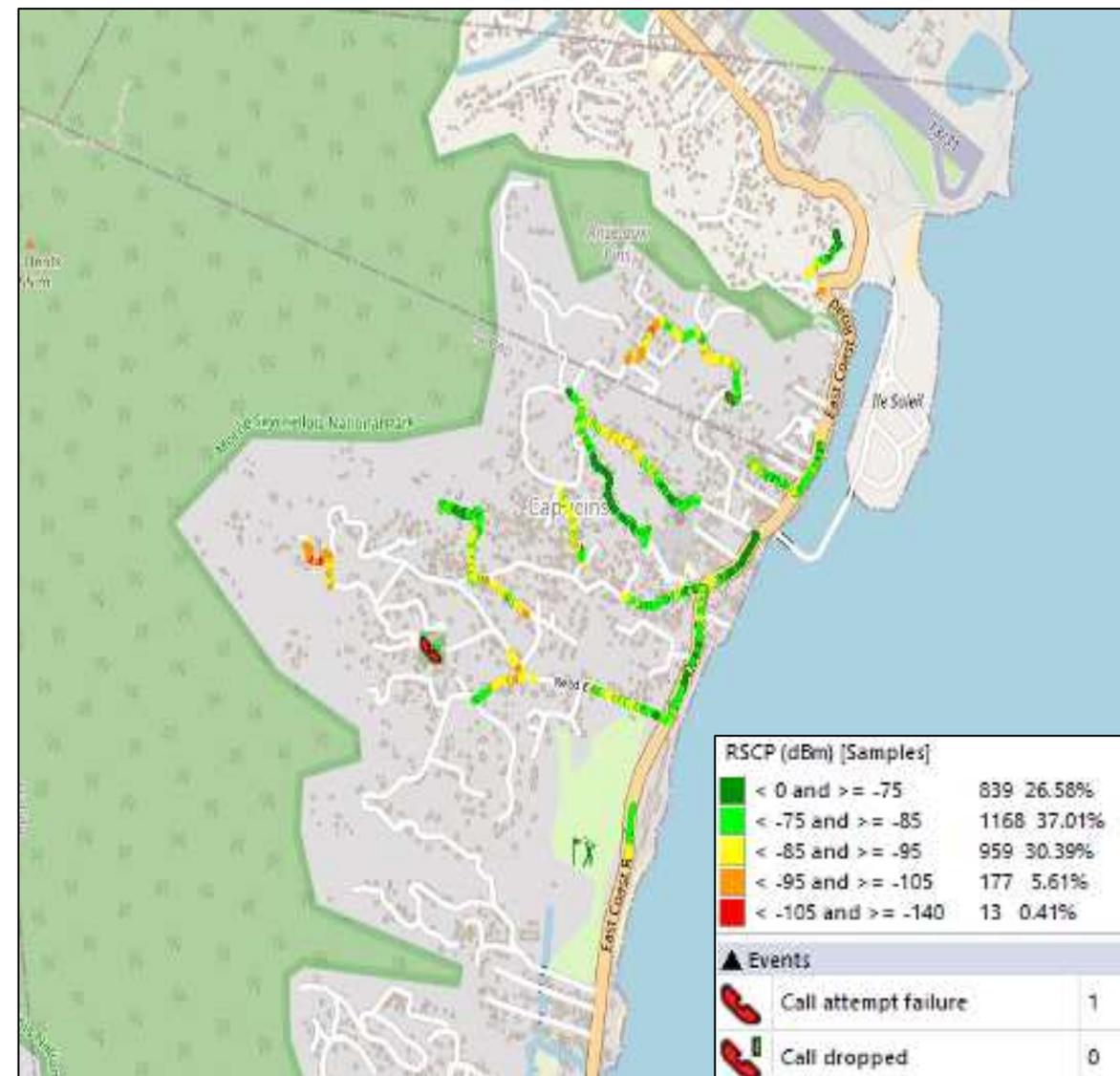


Phase-2 LONG CALL FAILURE EVENTS LOCATION vs RSCP

Airtel LC MO



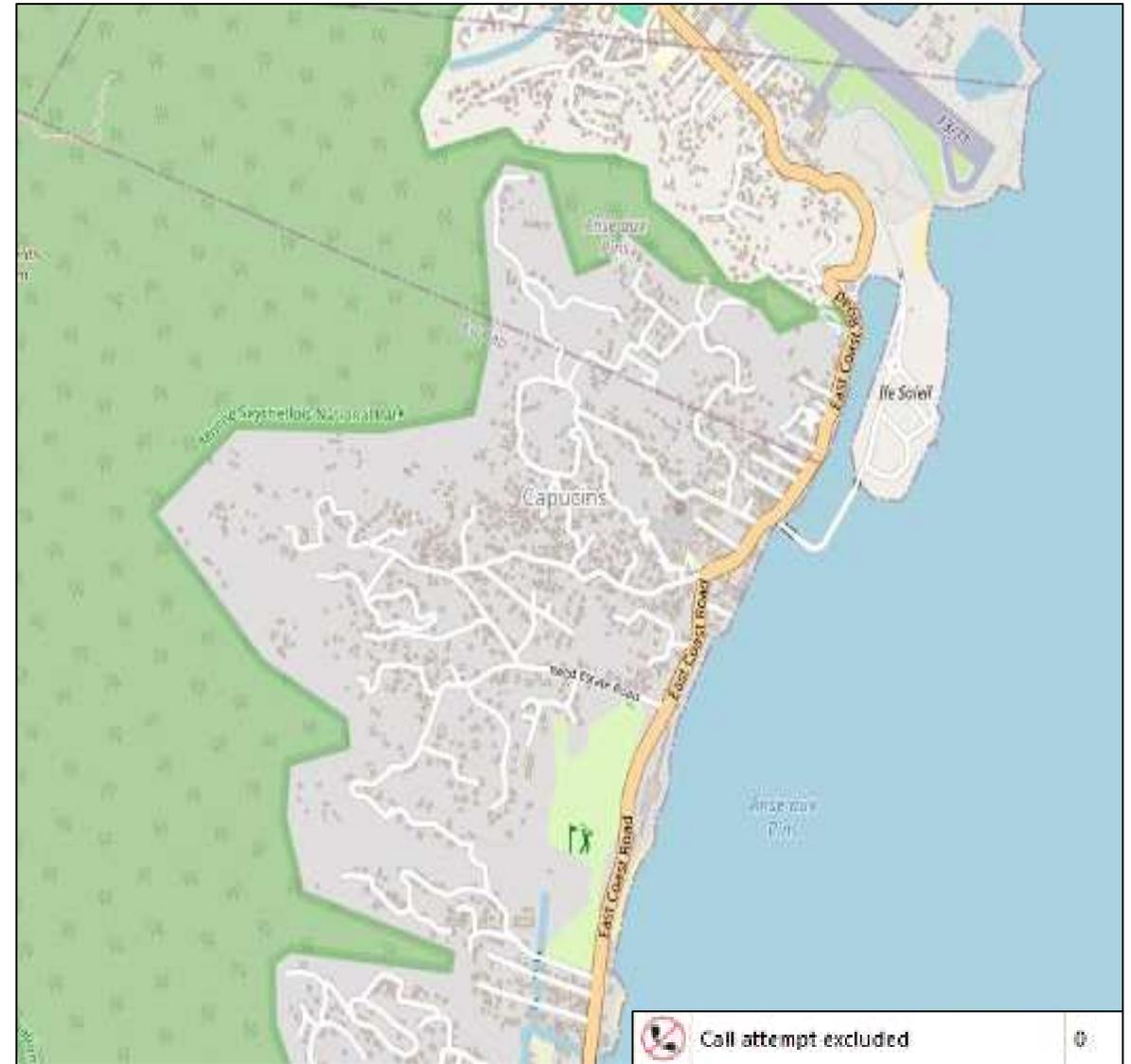
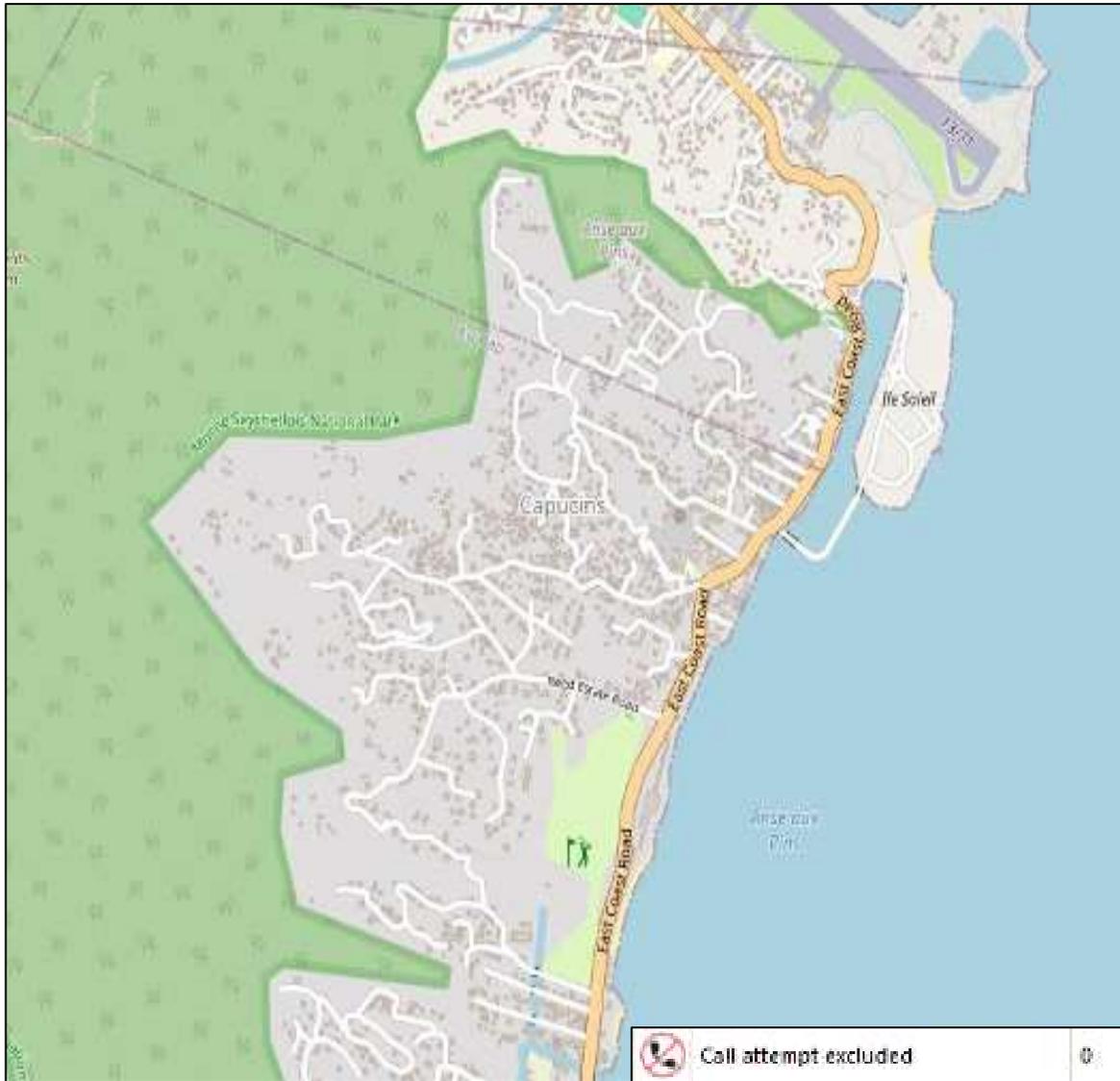
CWS LC MO



Phase-1 LONG CALL EXCLUDED EVENTS

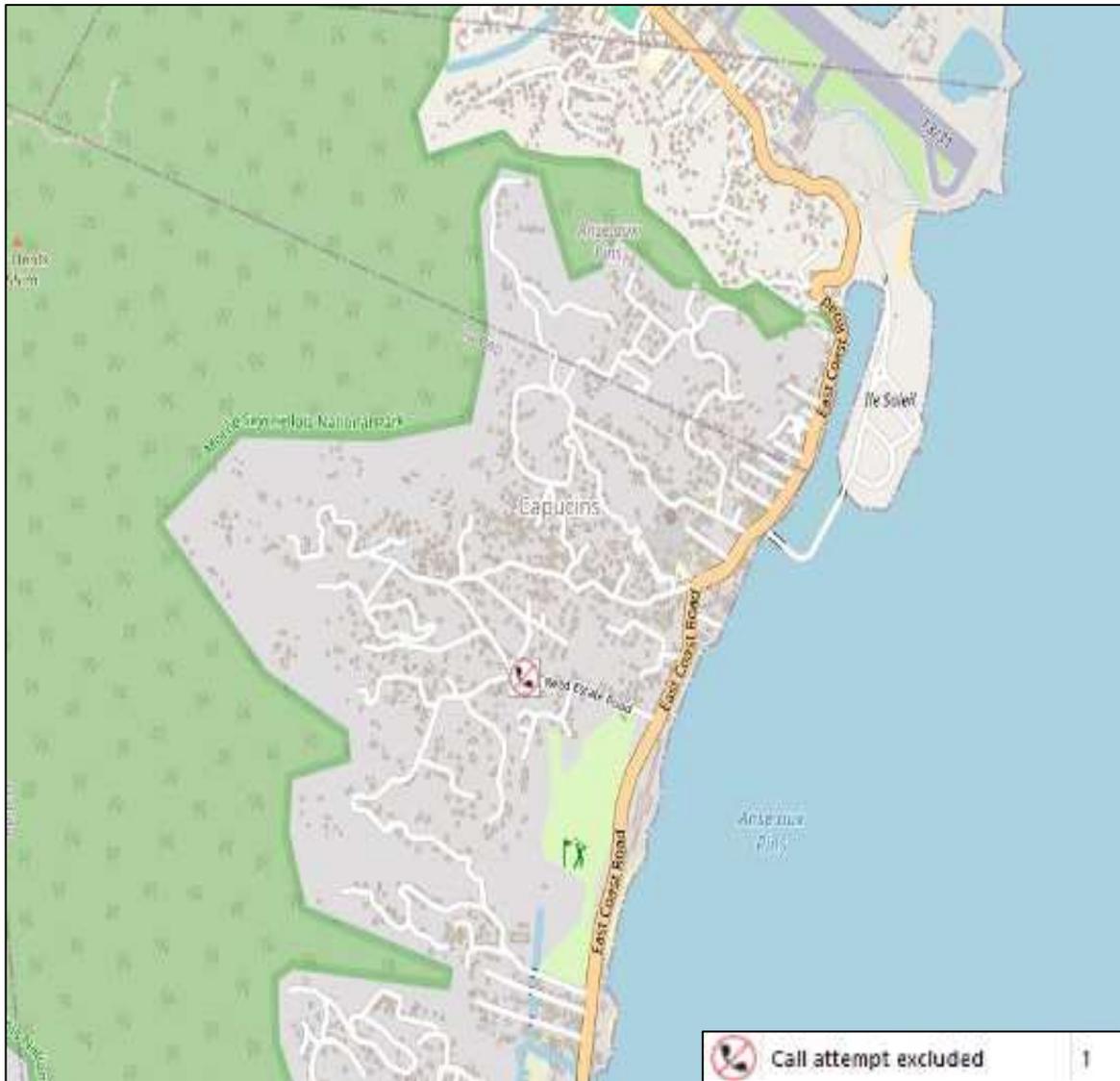
Airtel LC MO

CWS LC MO

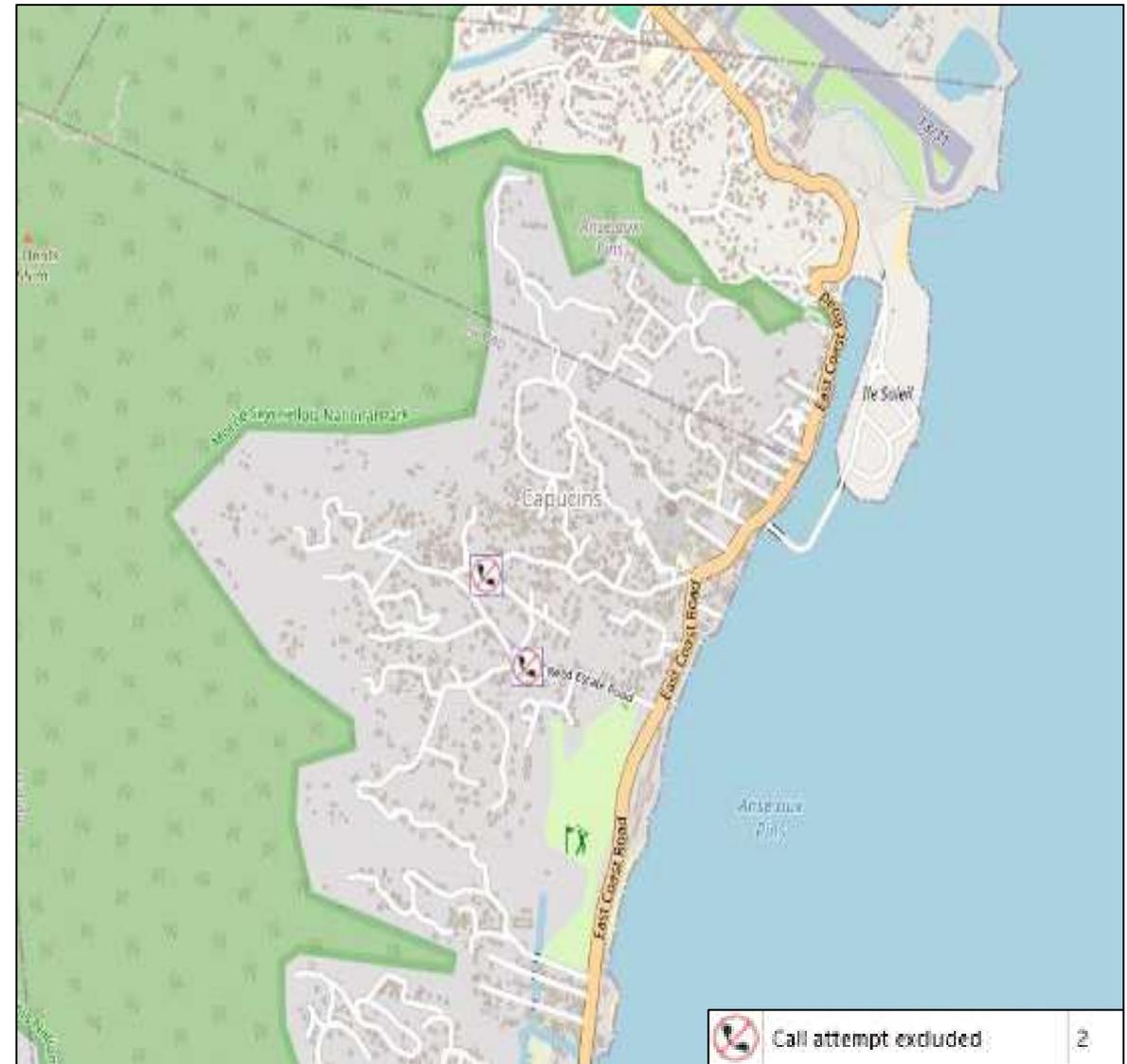


Phase-2 LONG CALL EXCLUDED EVENTS

Airtel LC MO

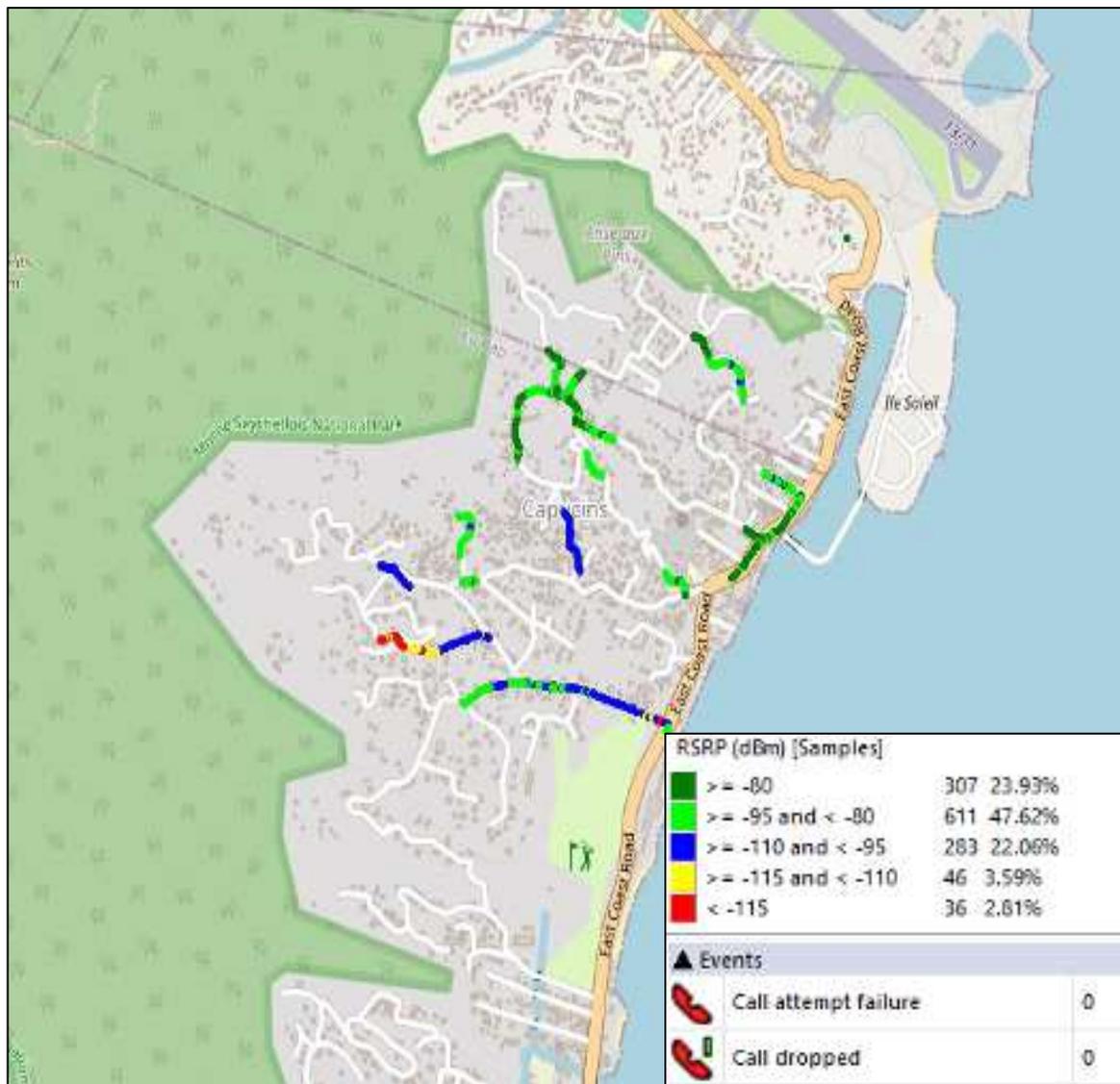


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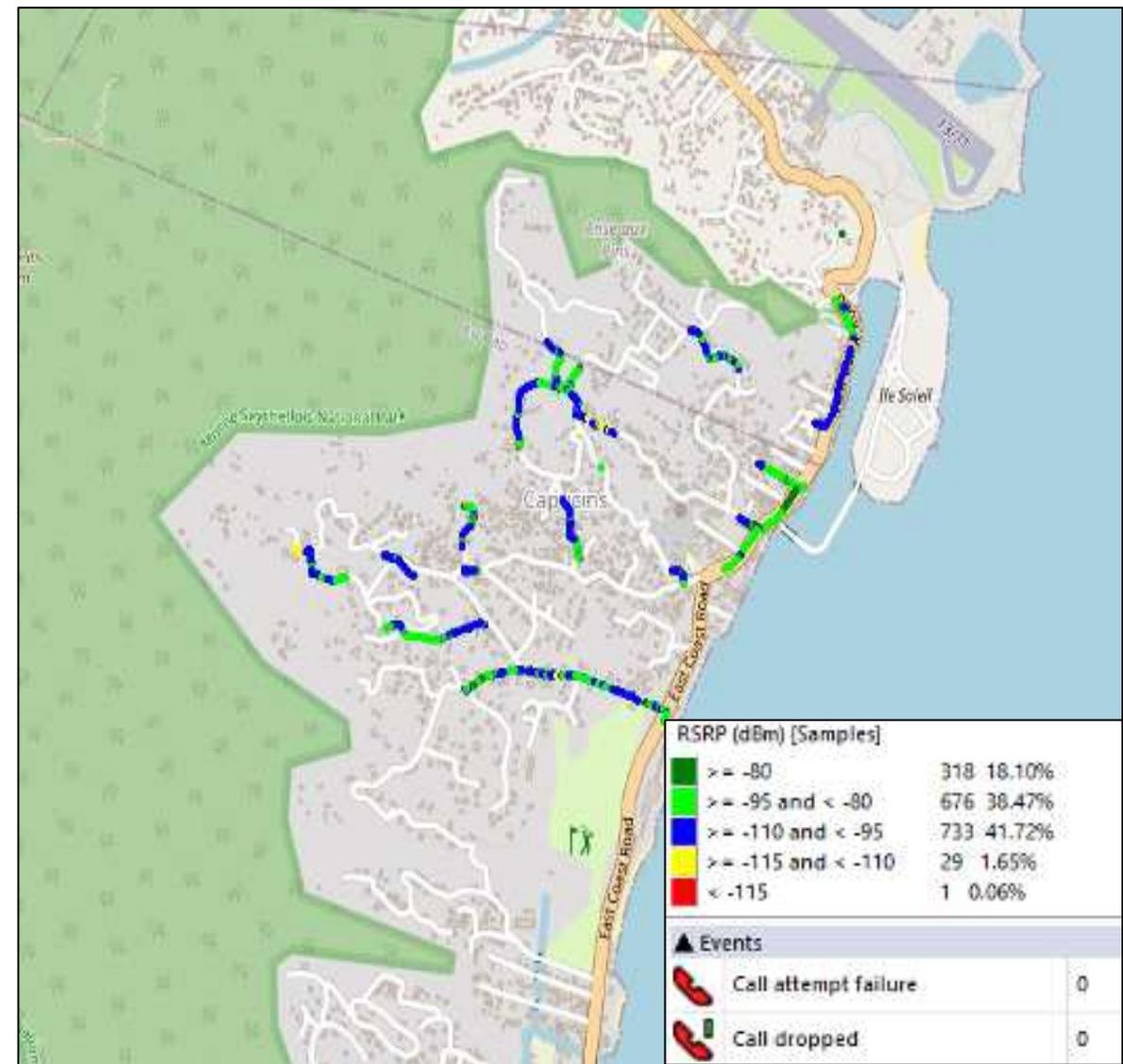


Phase-1 LONG CALL FAILURE EVENTS LOCATION vs RSRP

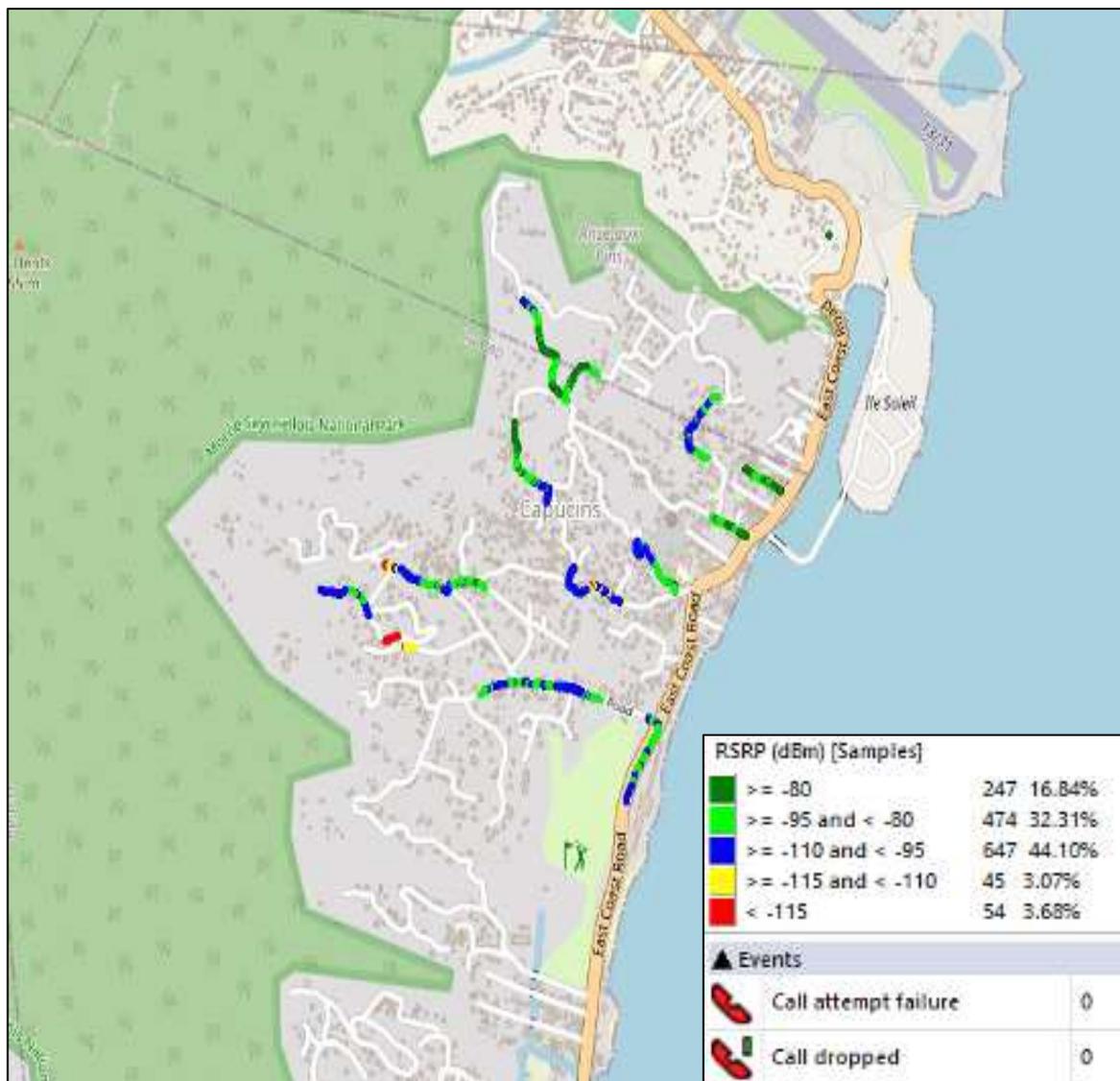
Airtel LC MO



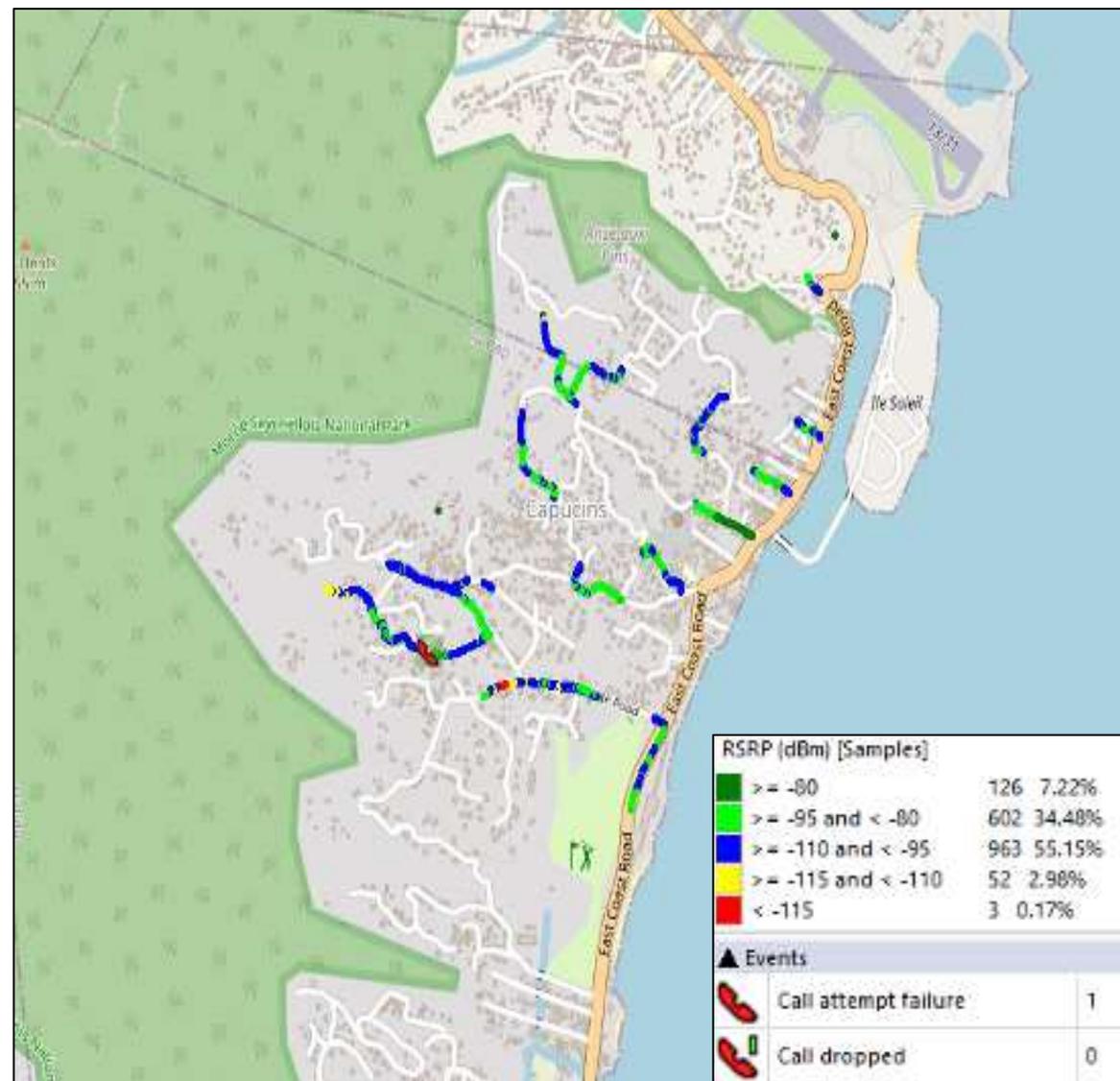
CWS LC MO



Airtel LC MO

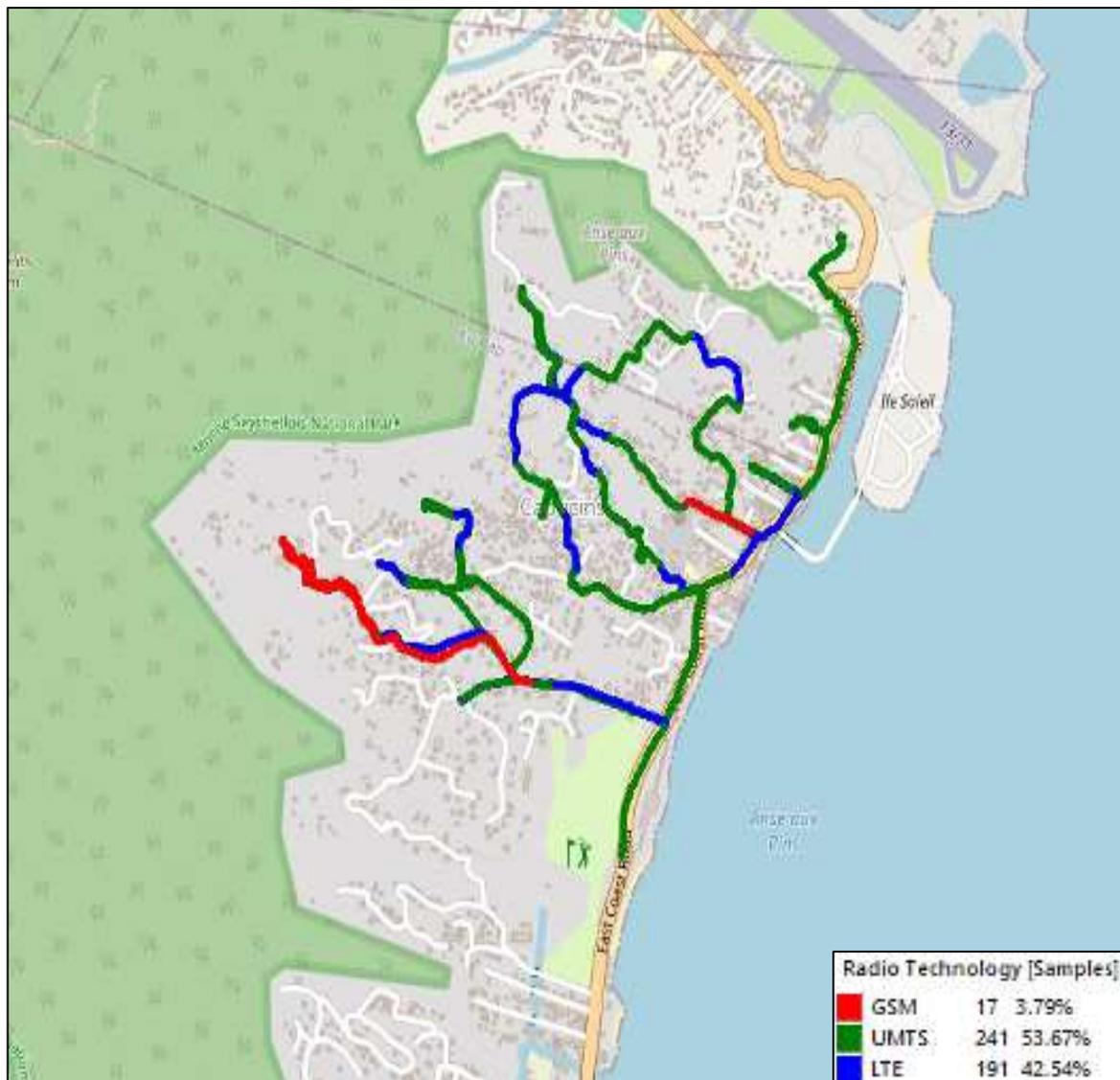


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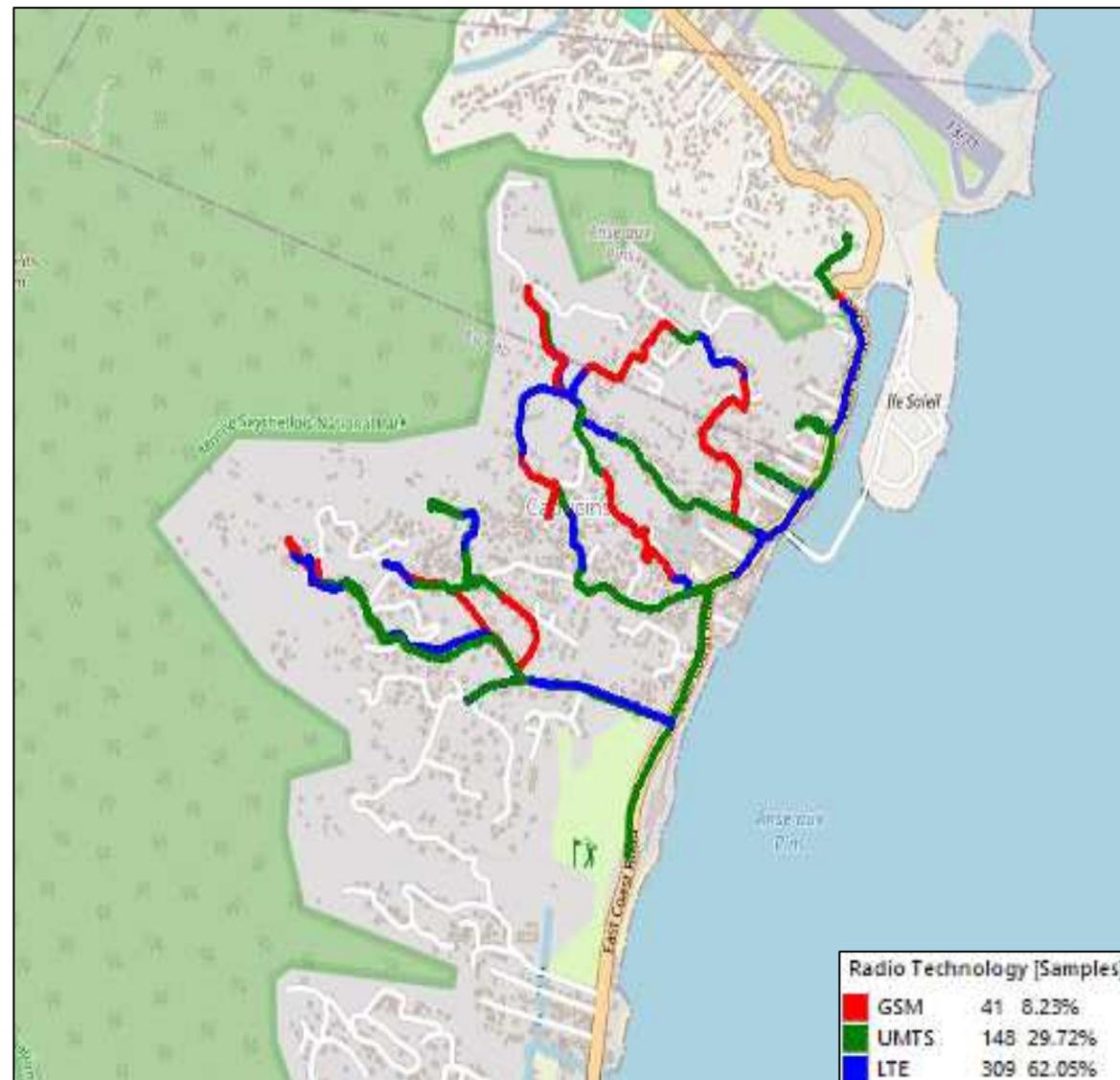


LONG CALL DRIVE PLOTS

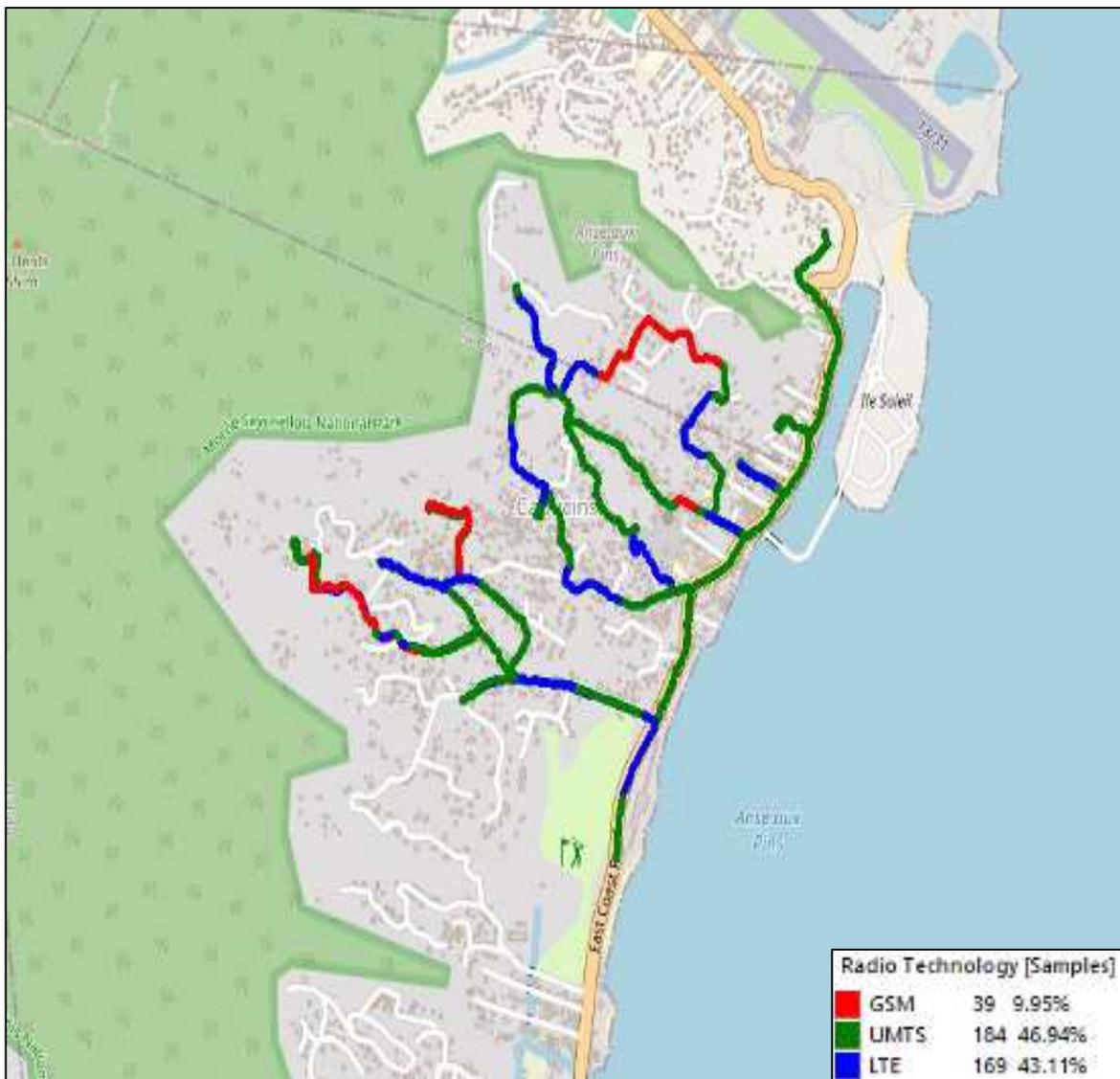
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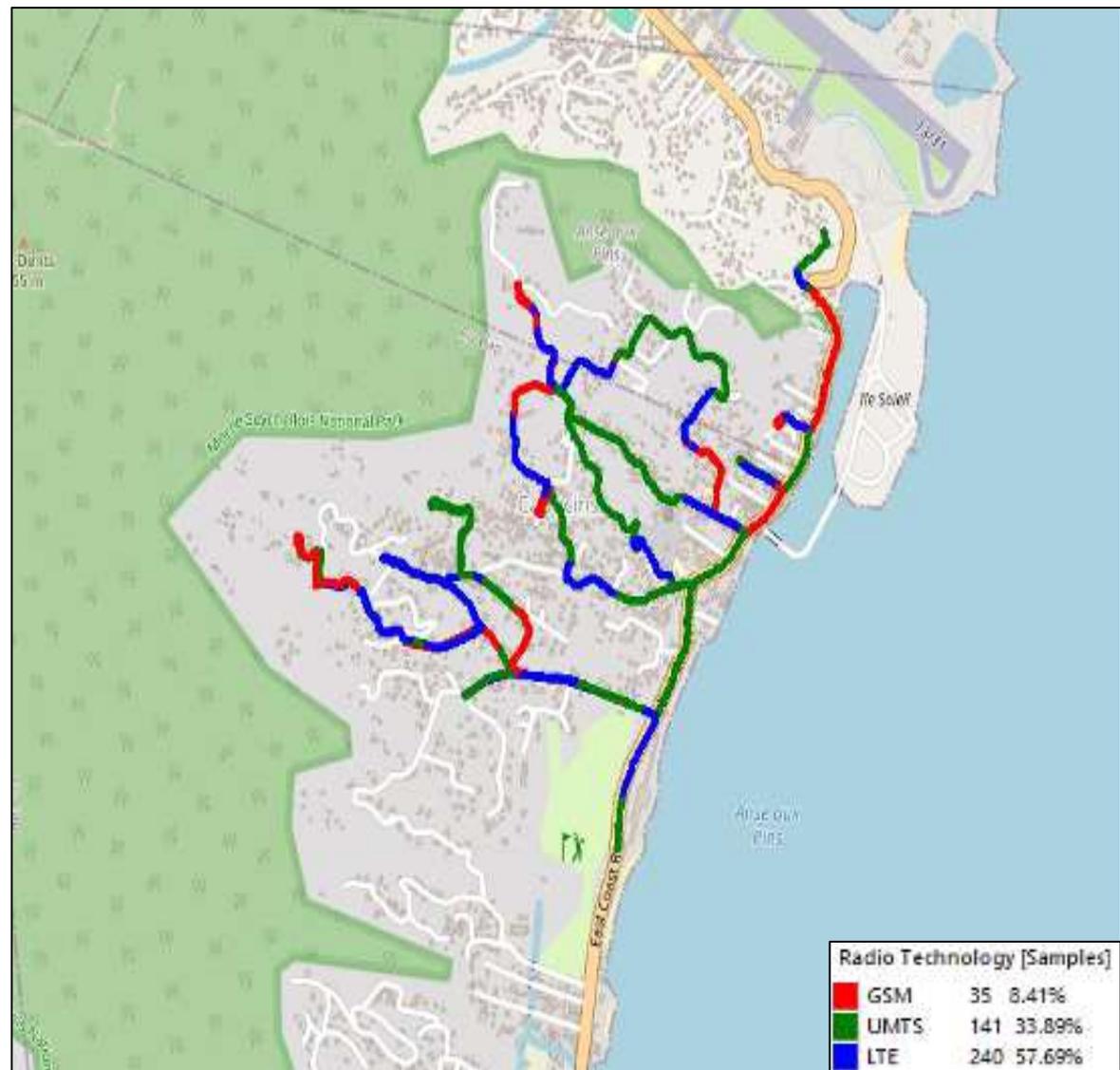
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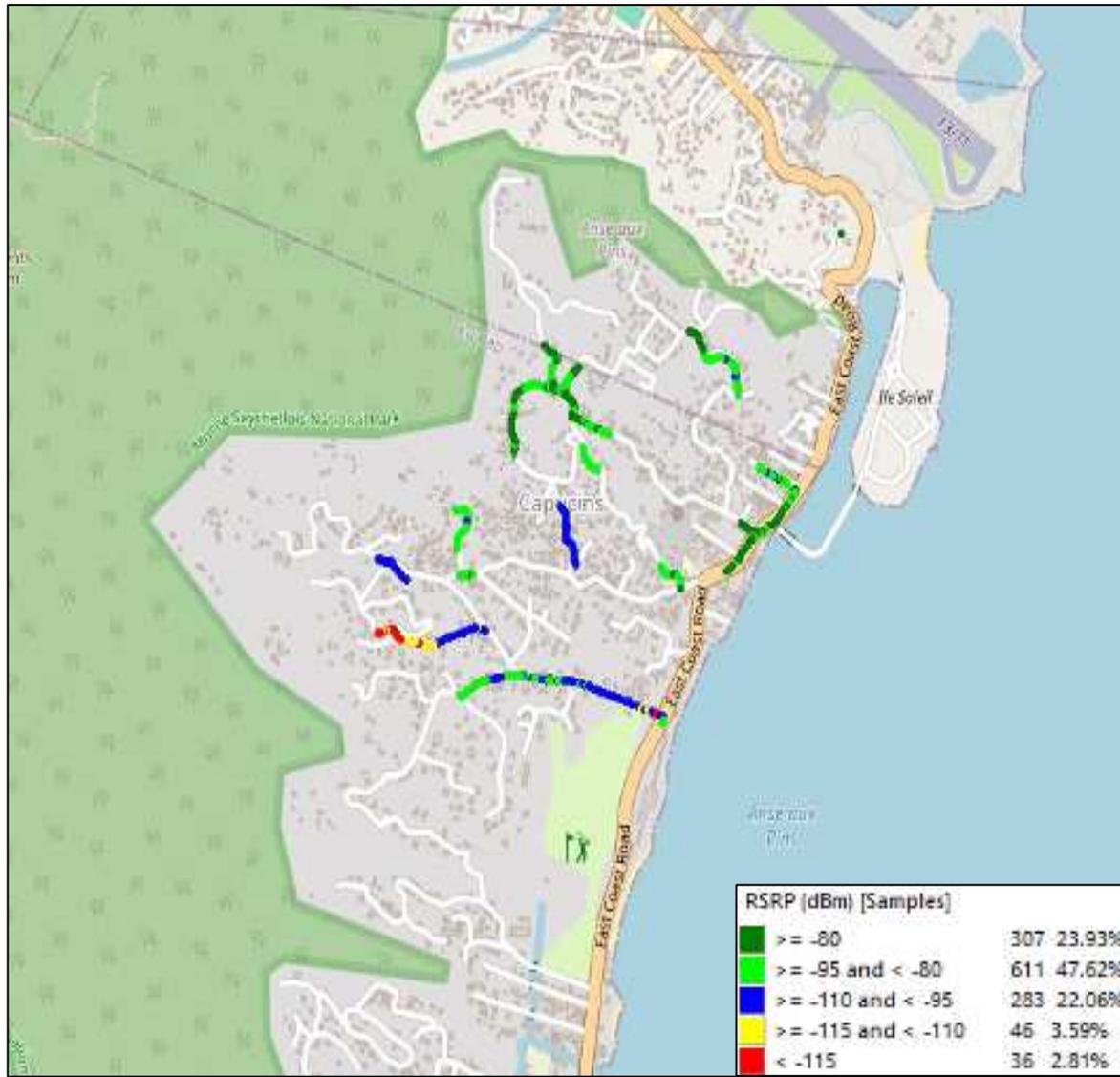
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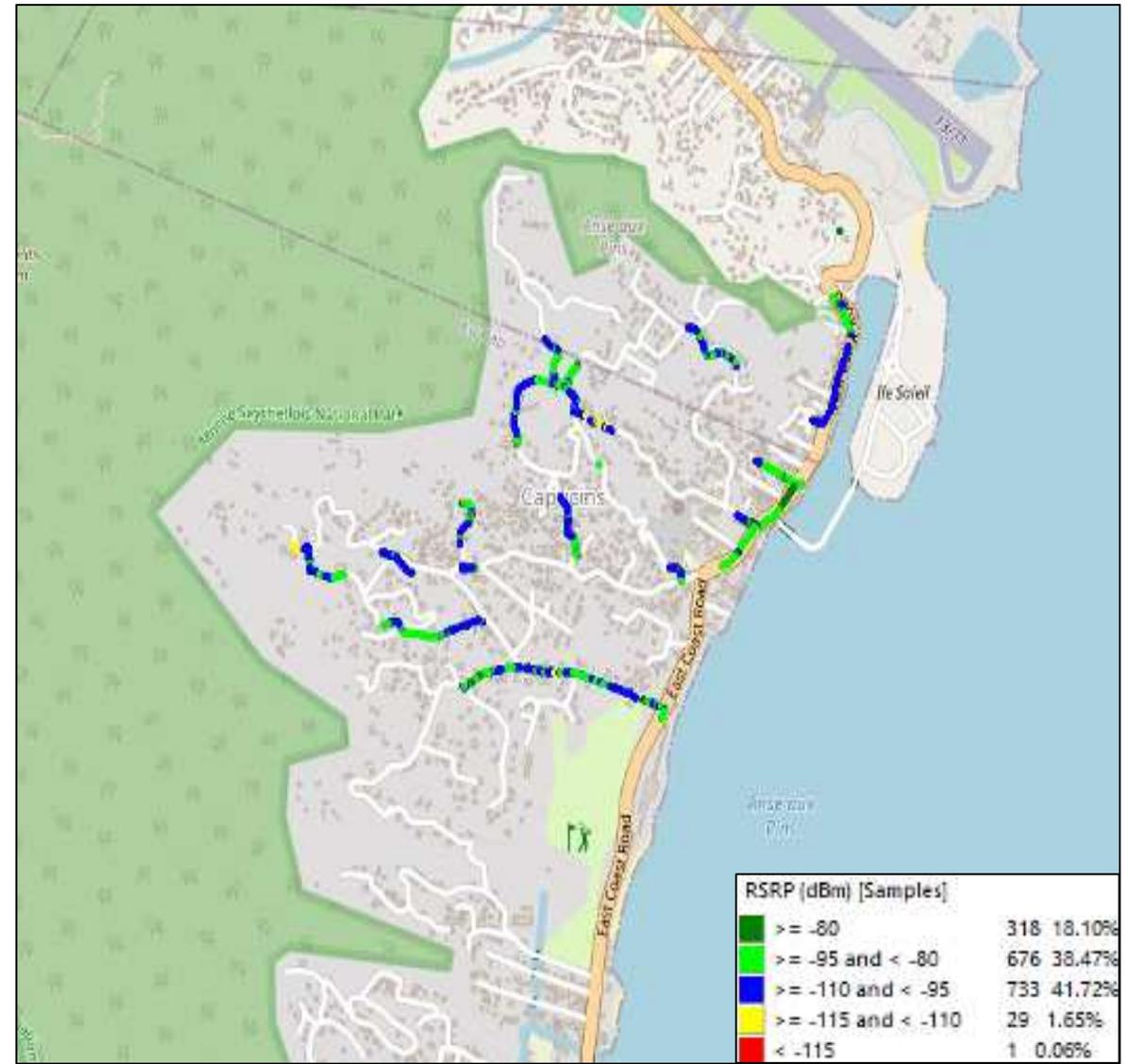
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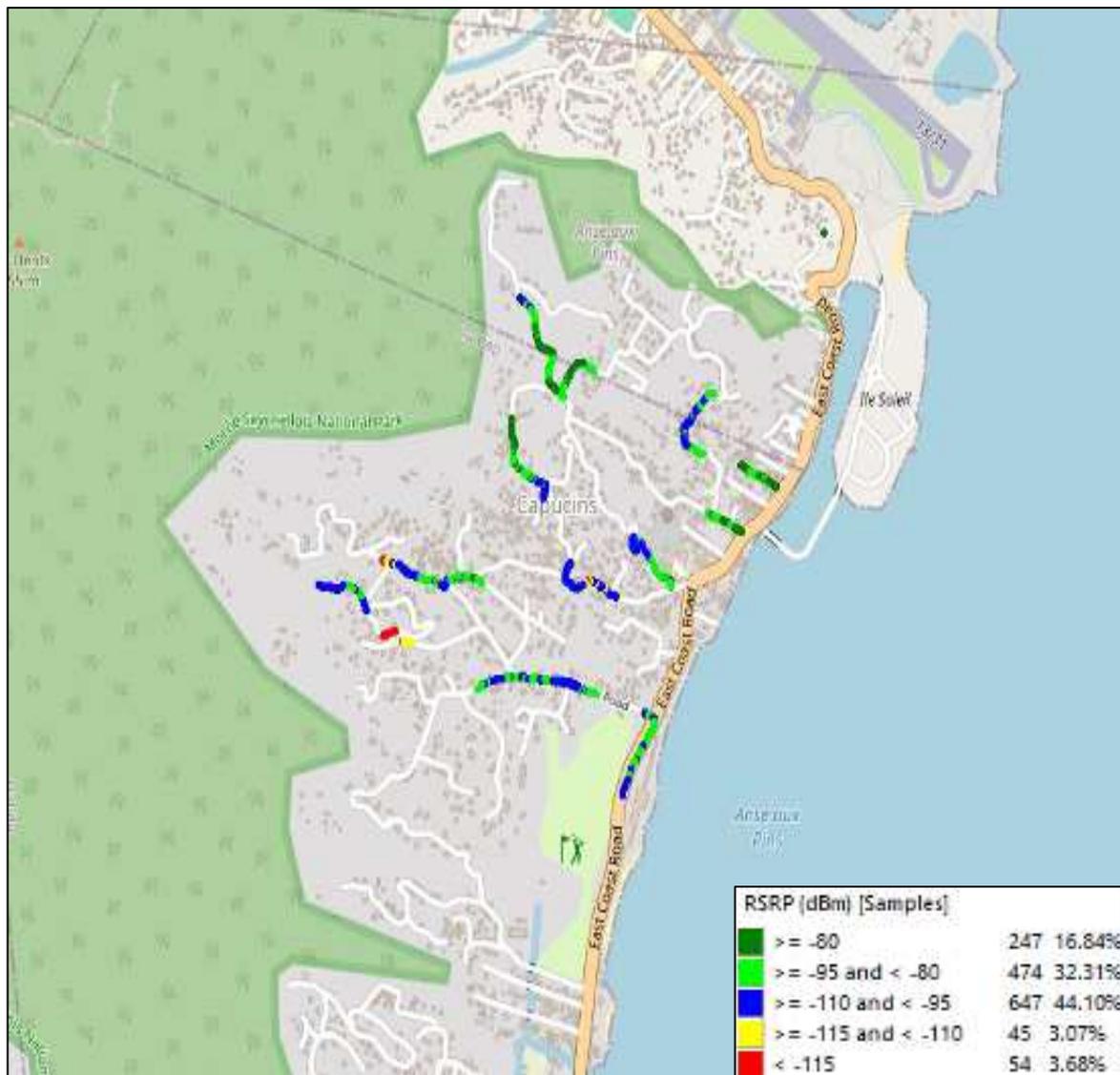
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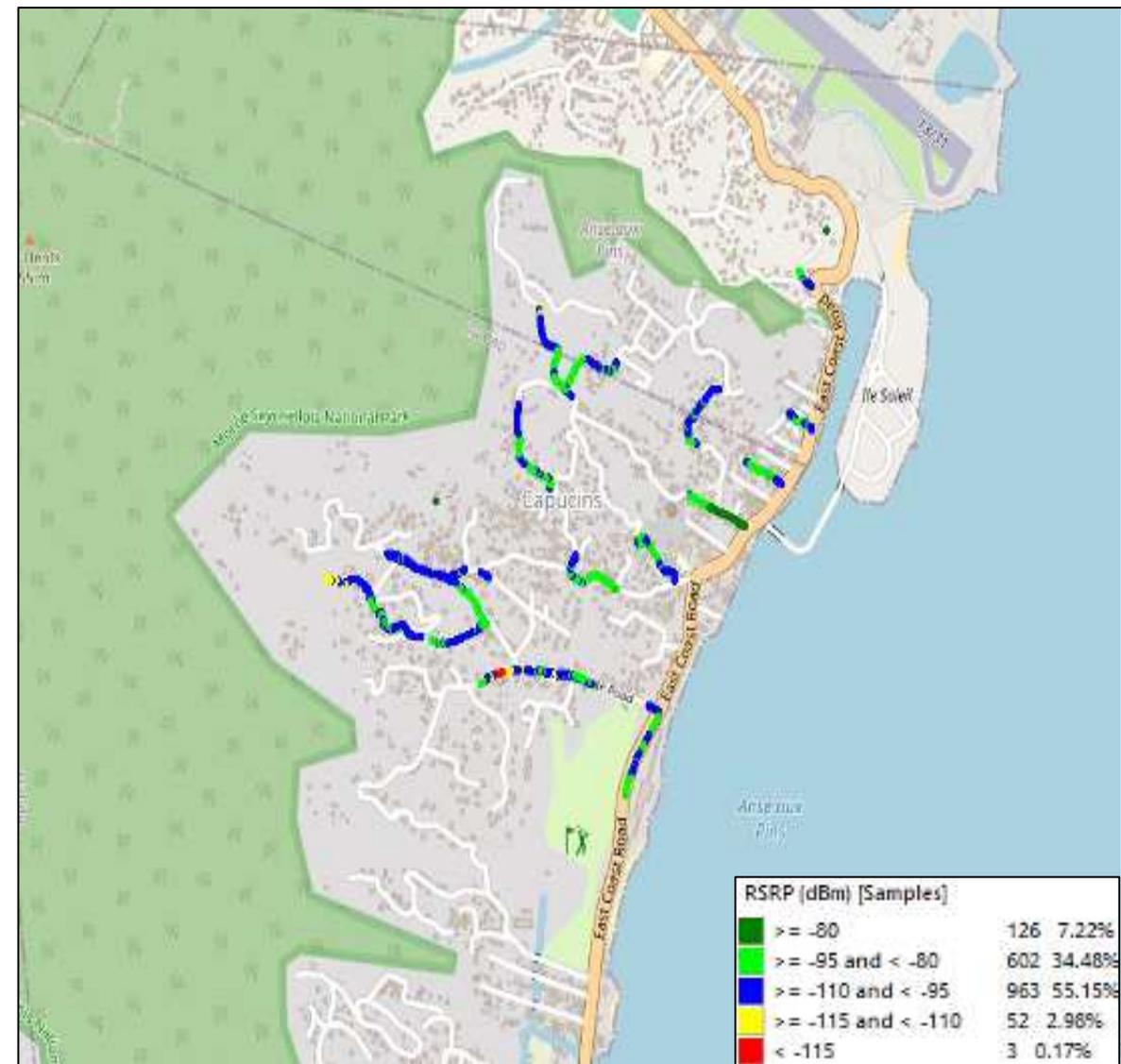
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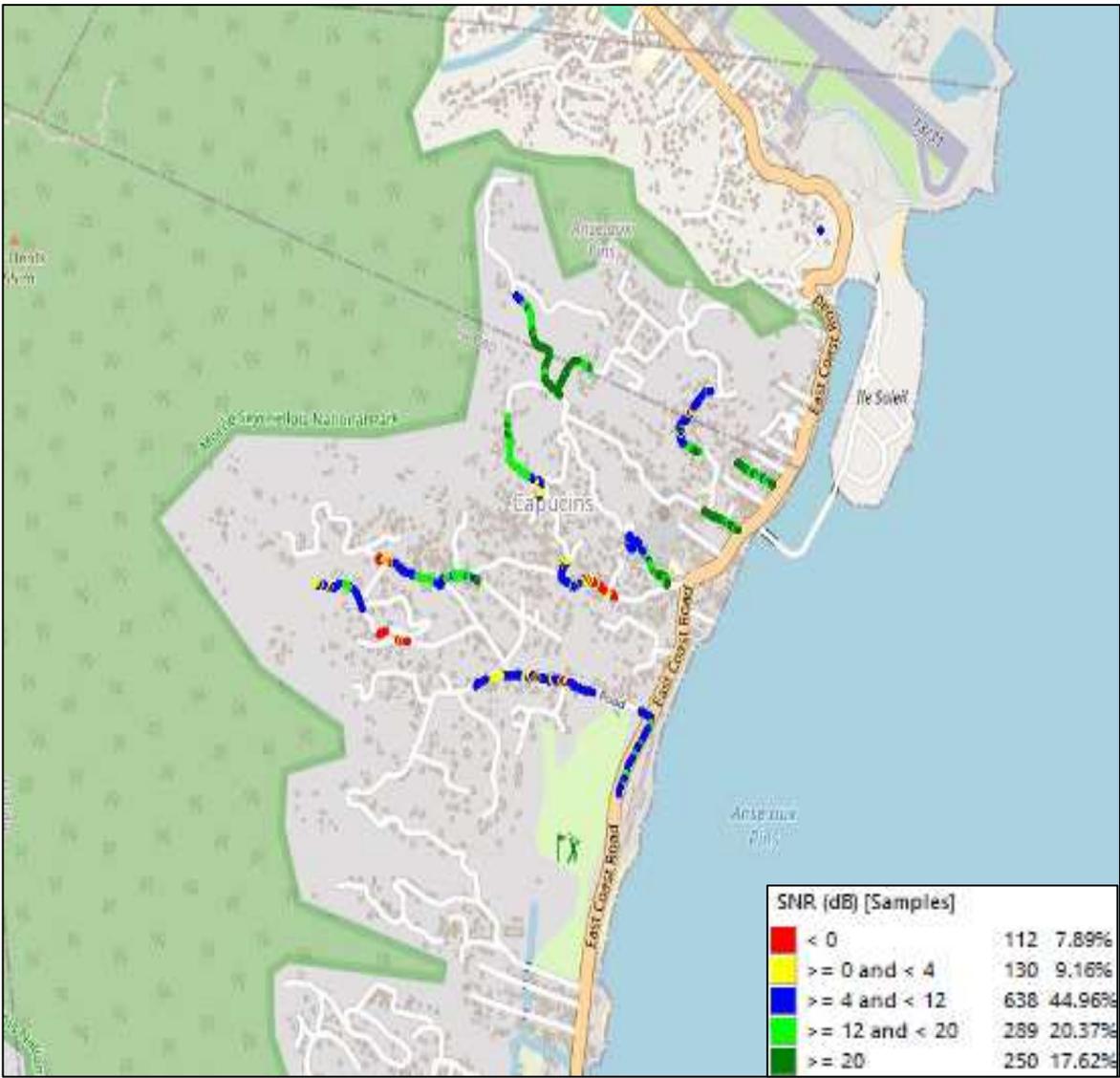
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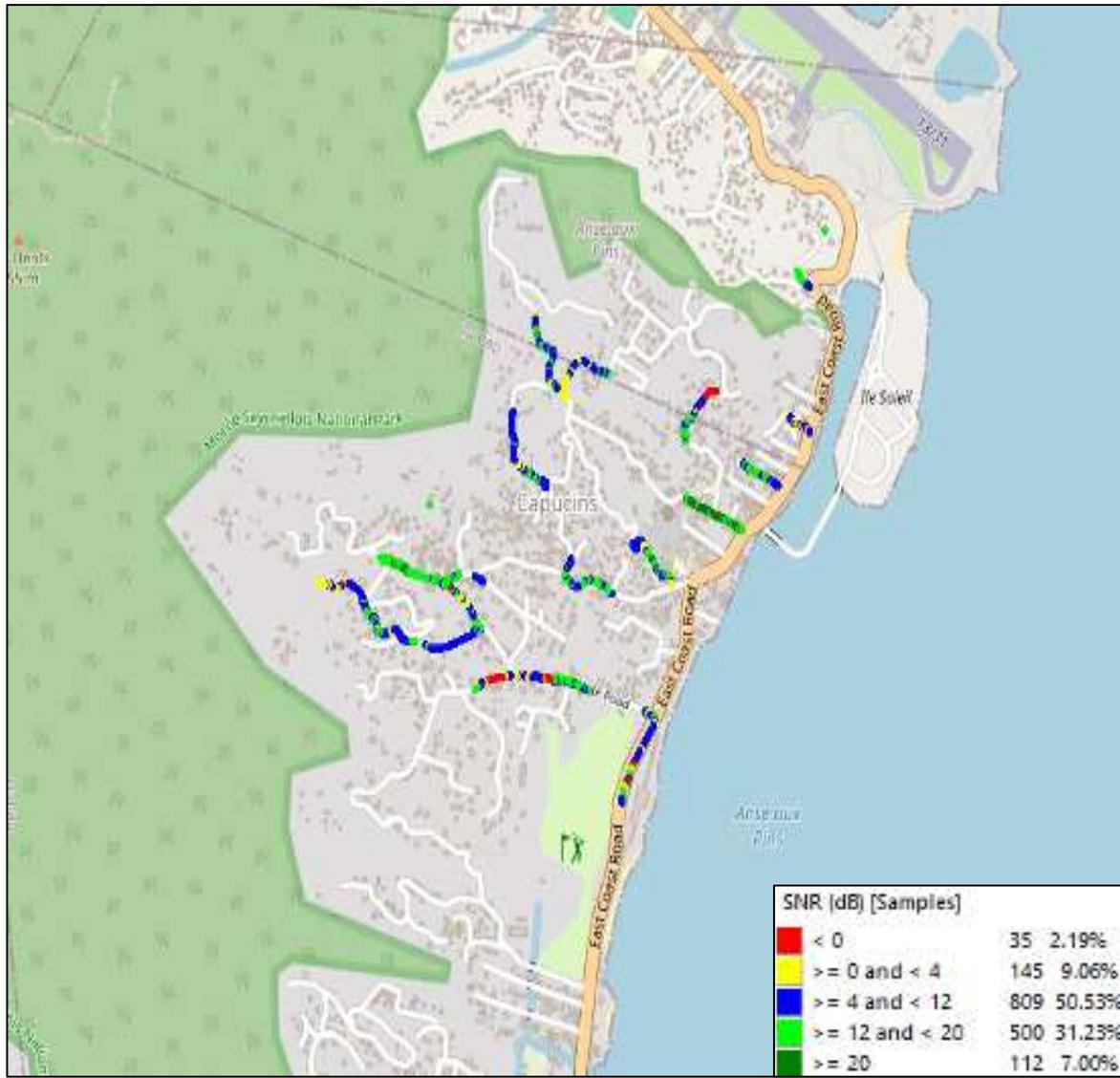
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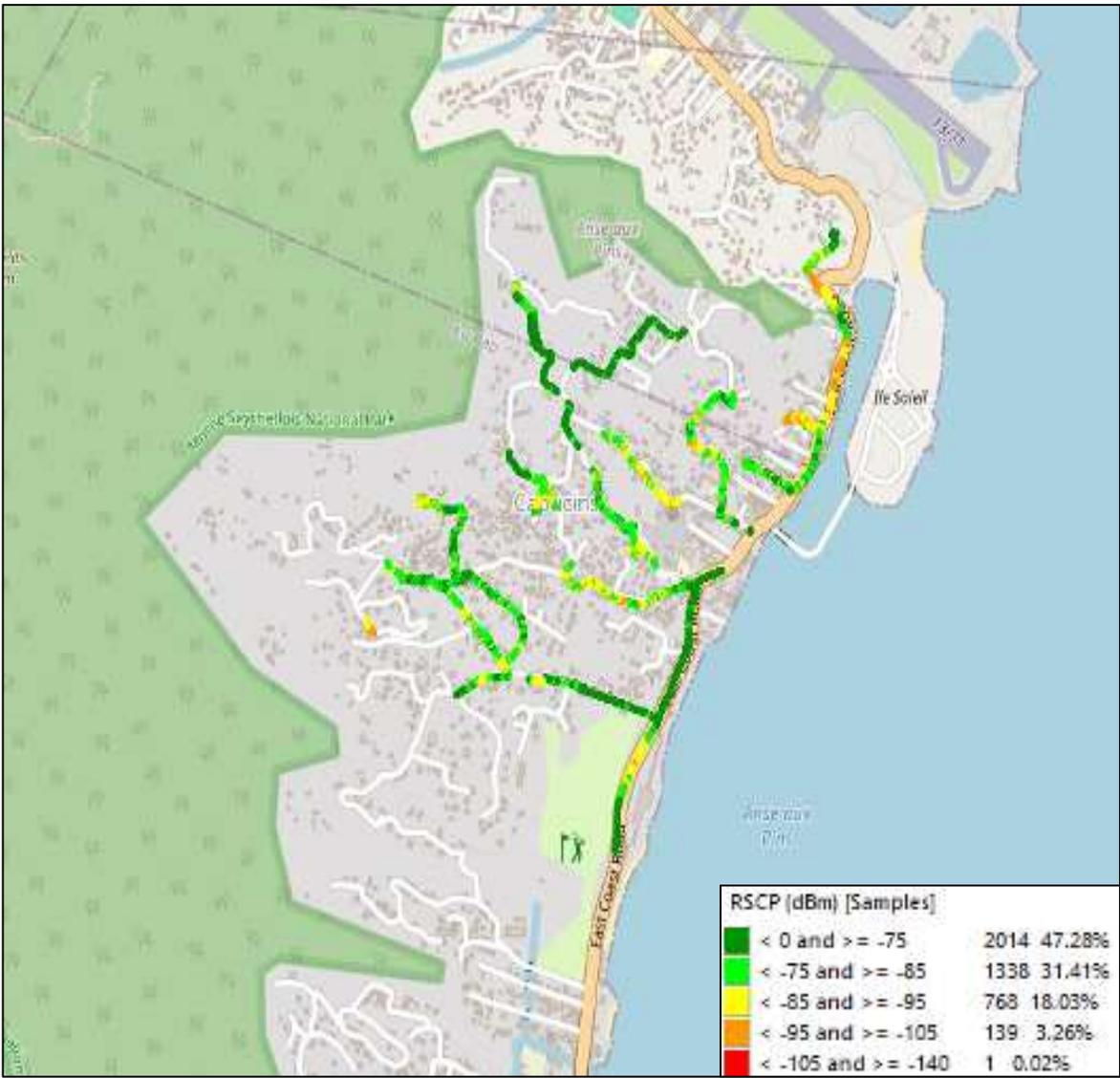
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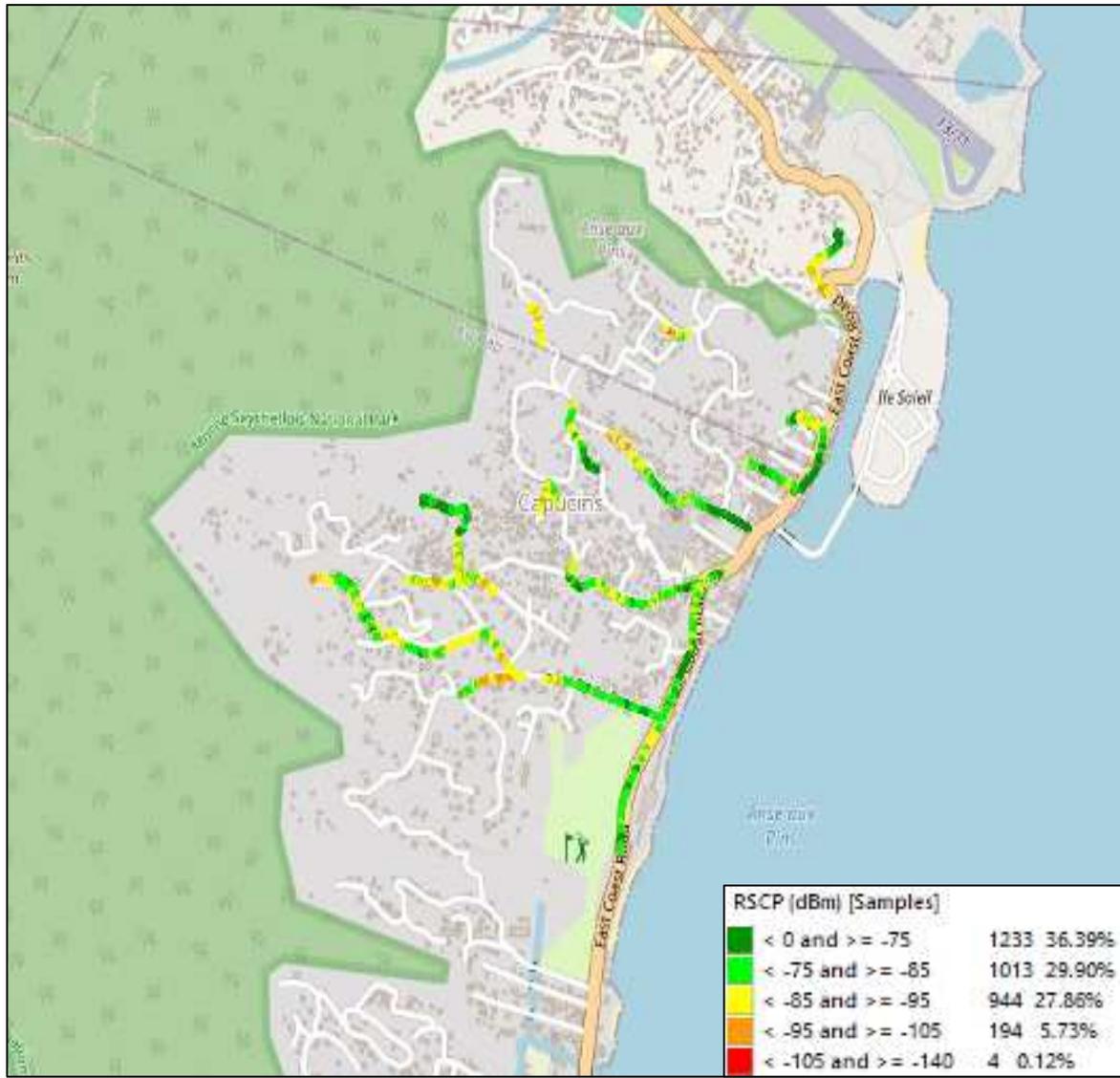
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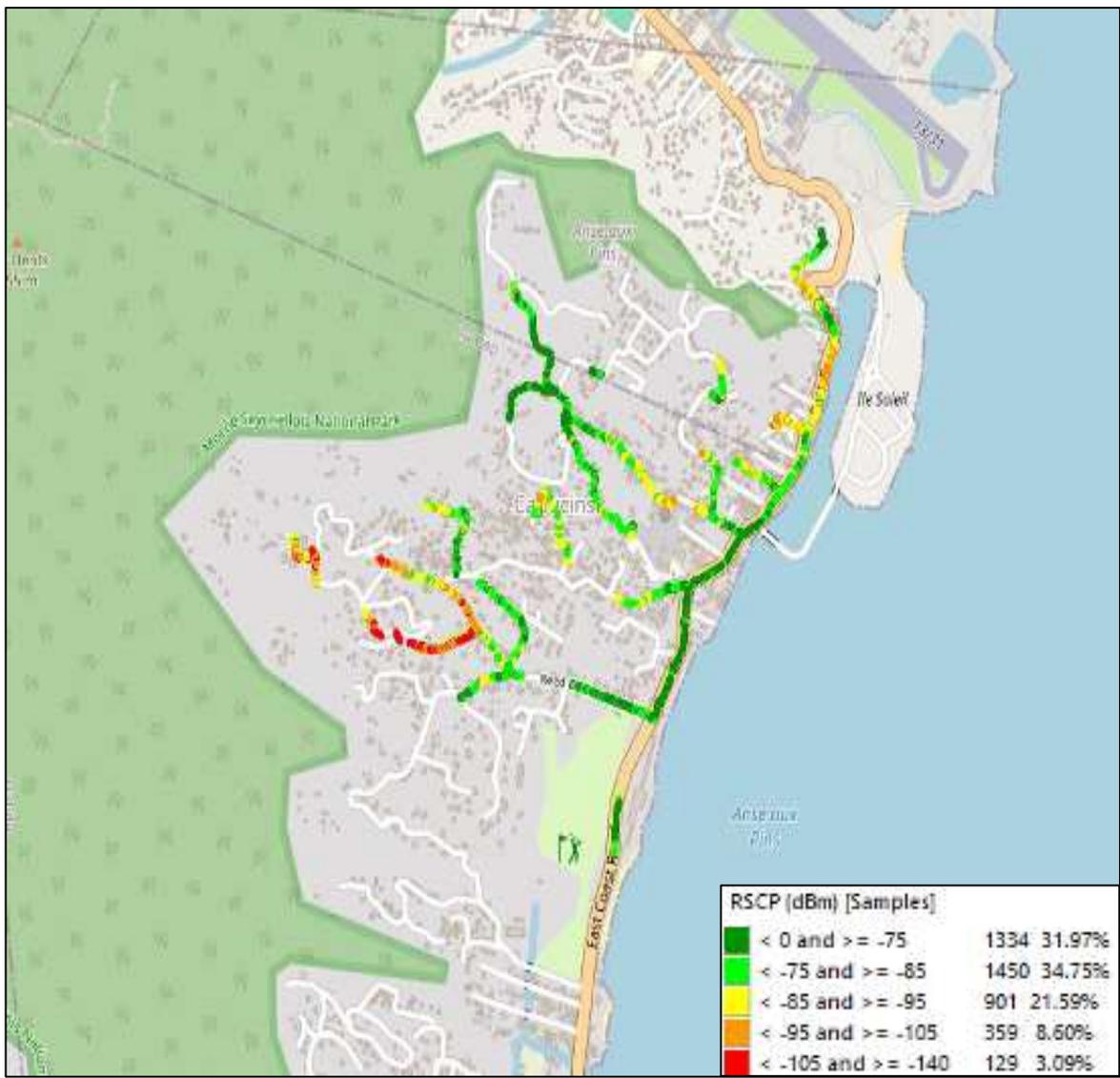
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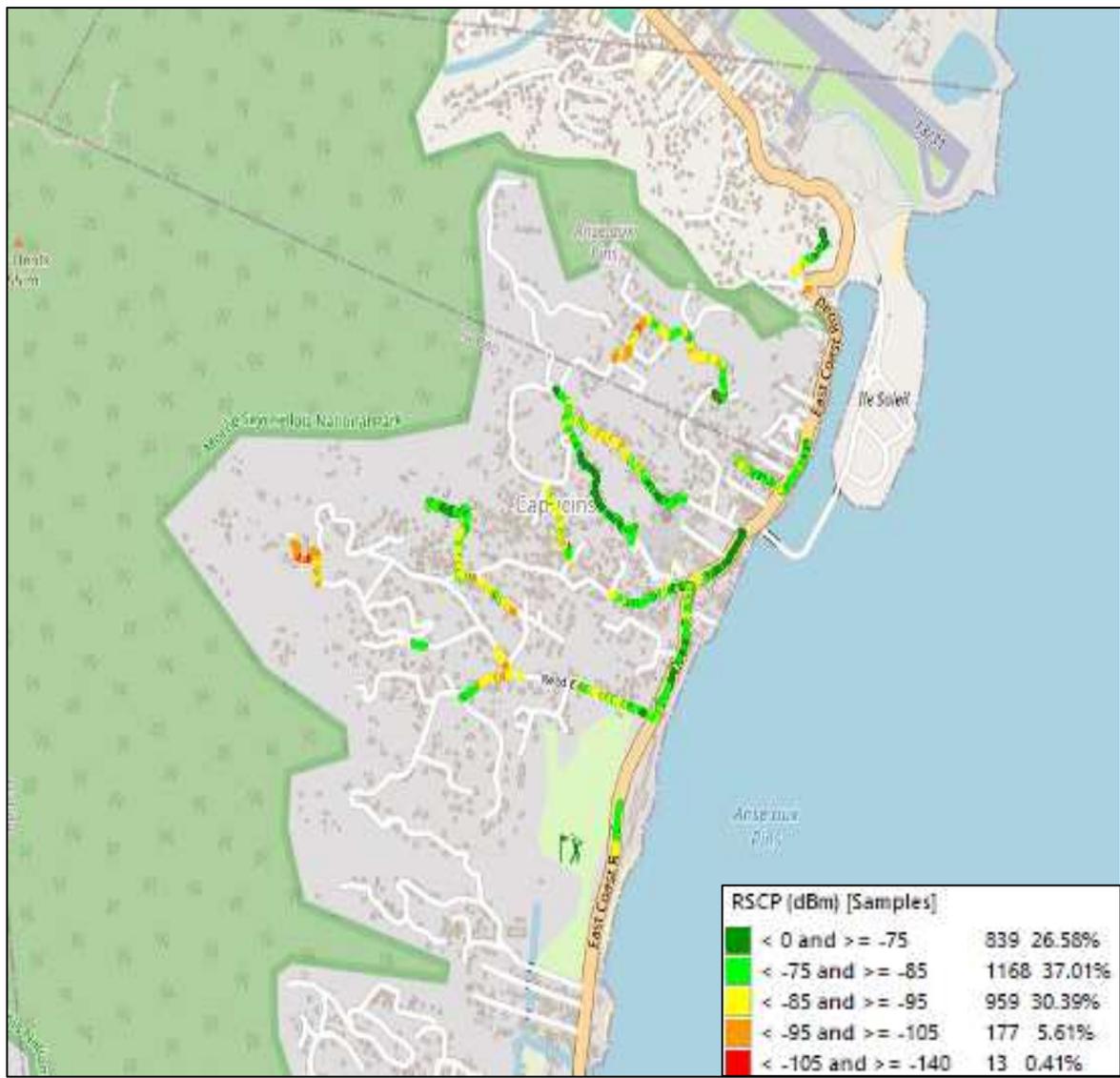
CWS LC MO



Airtel LC MO



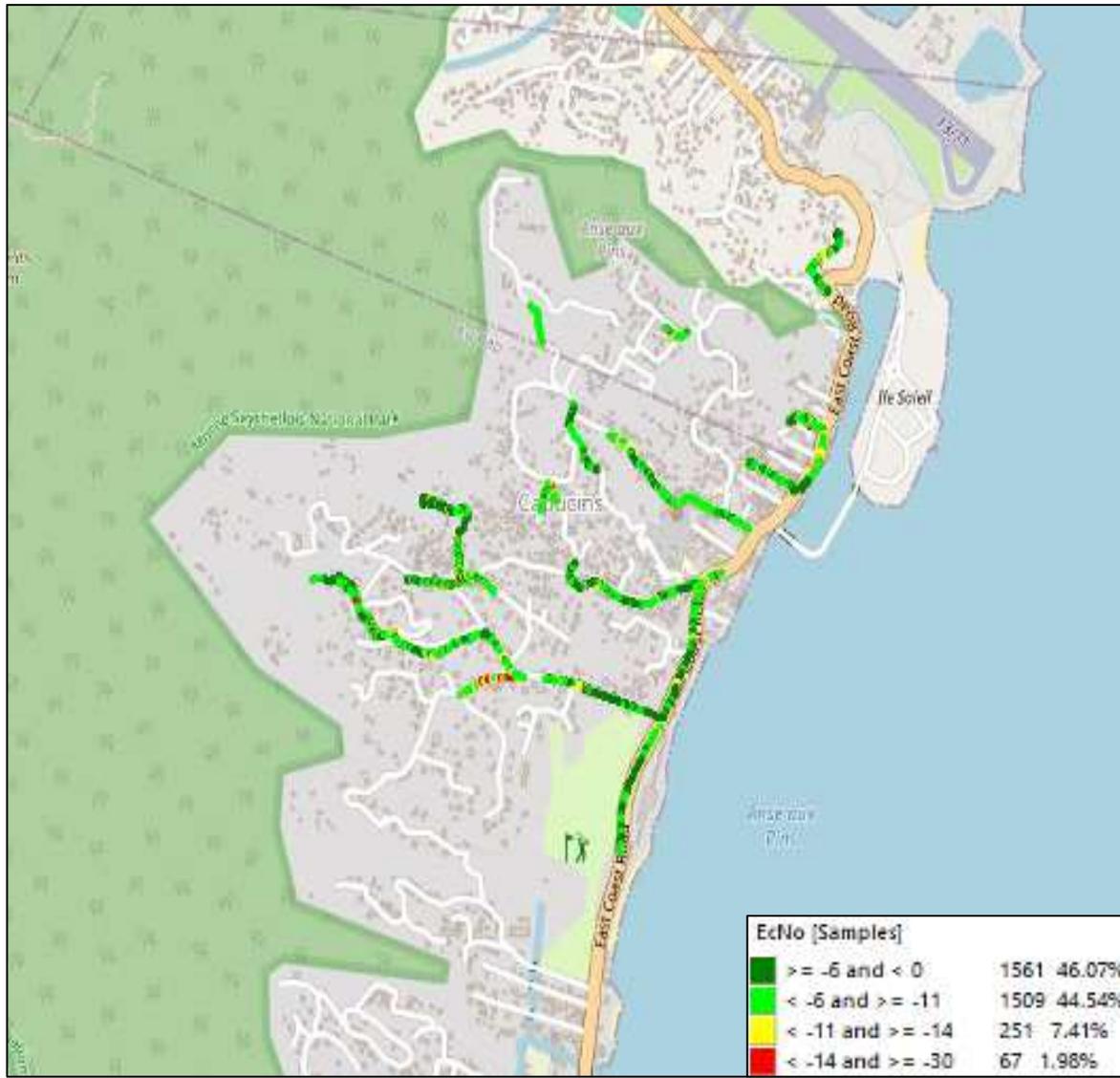
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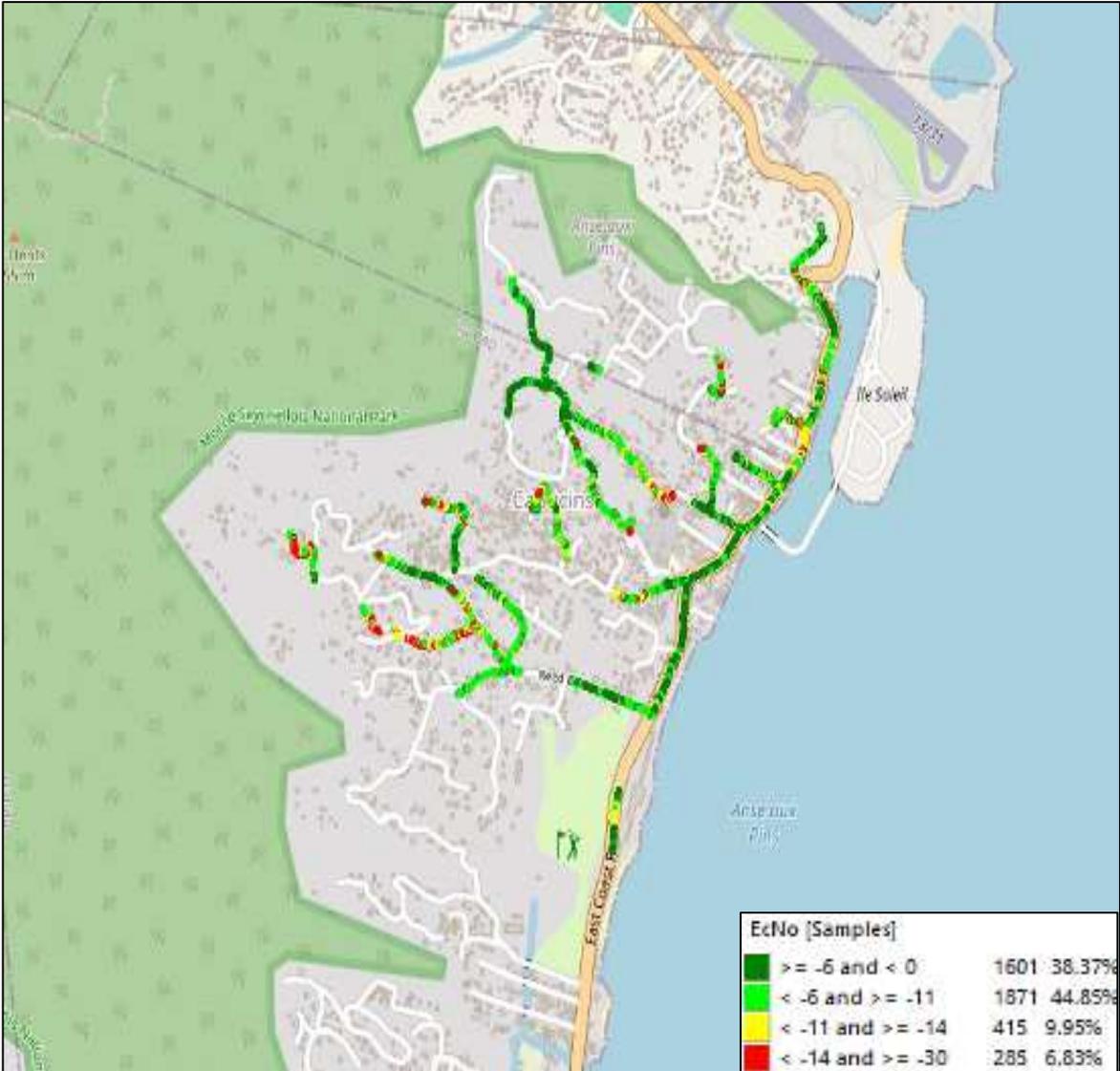
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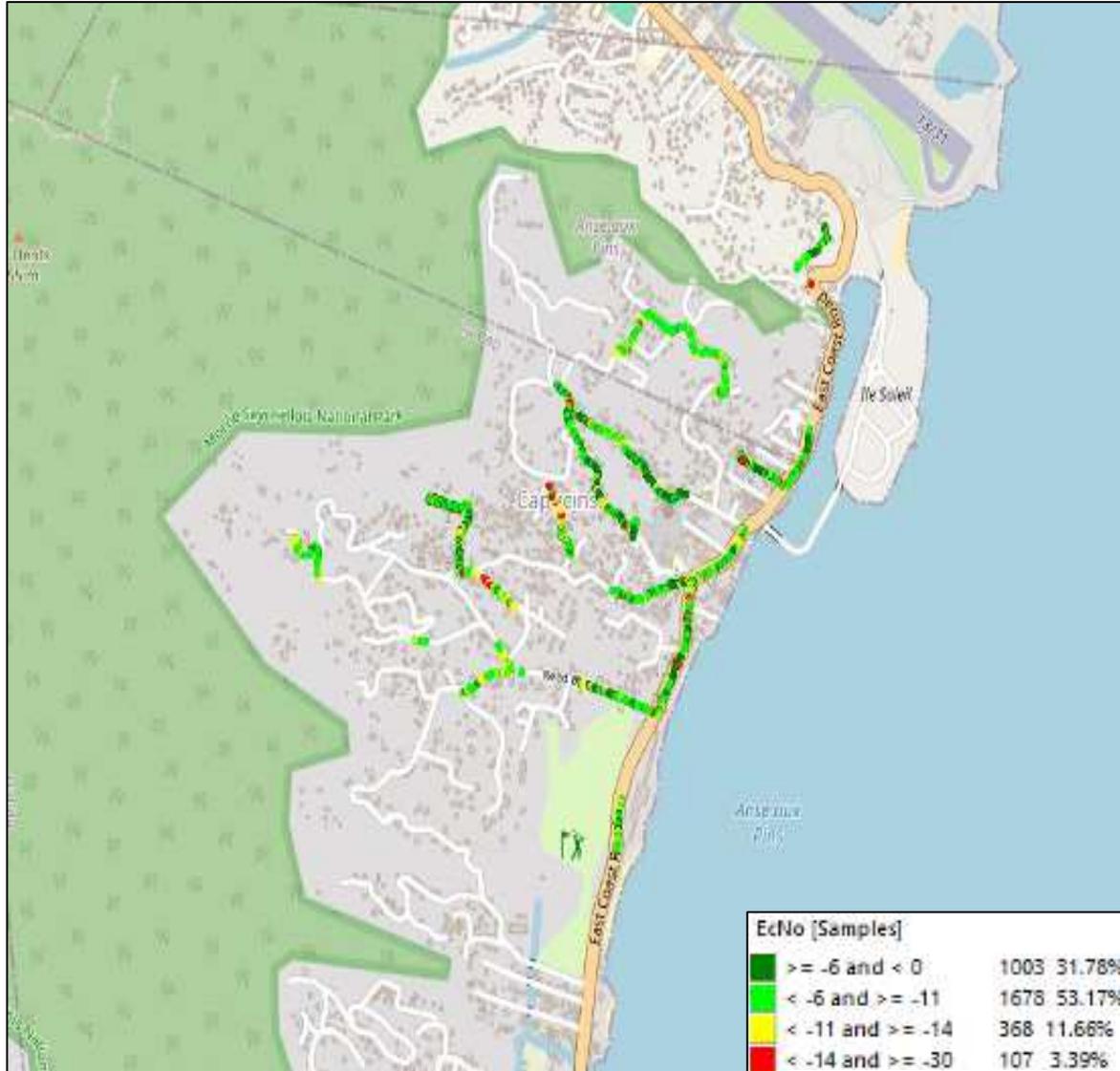
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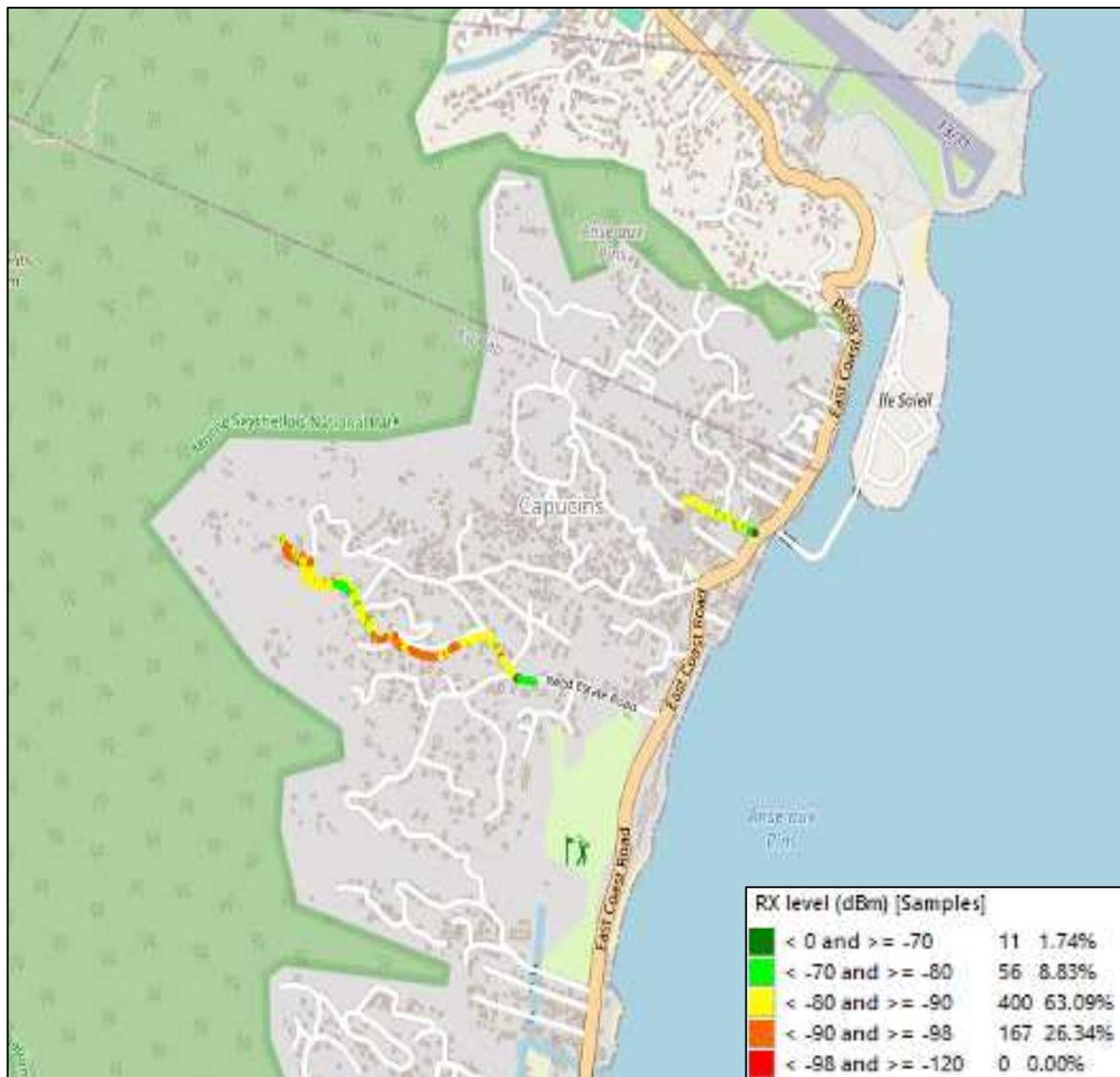
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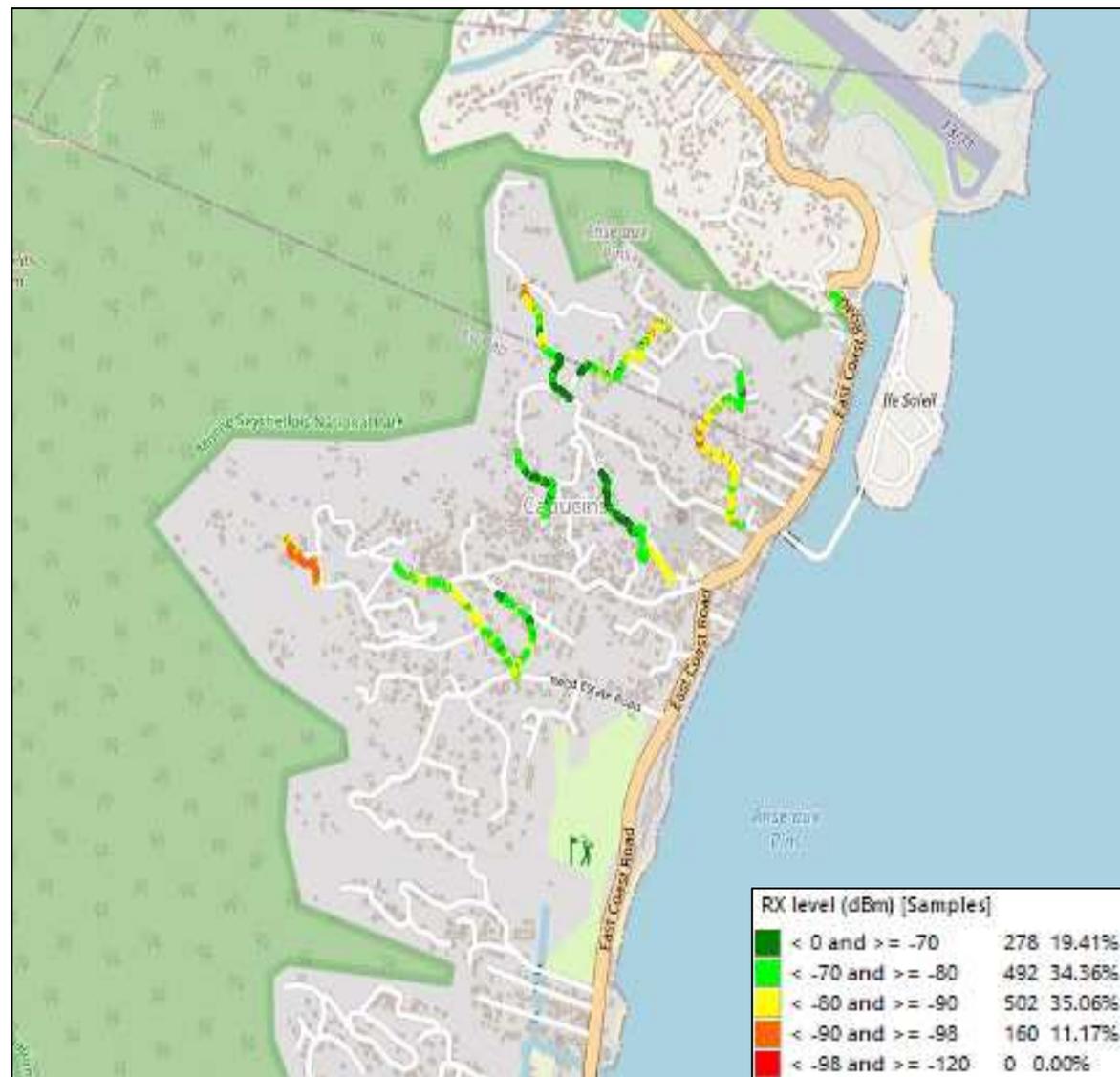
CWS LC MO



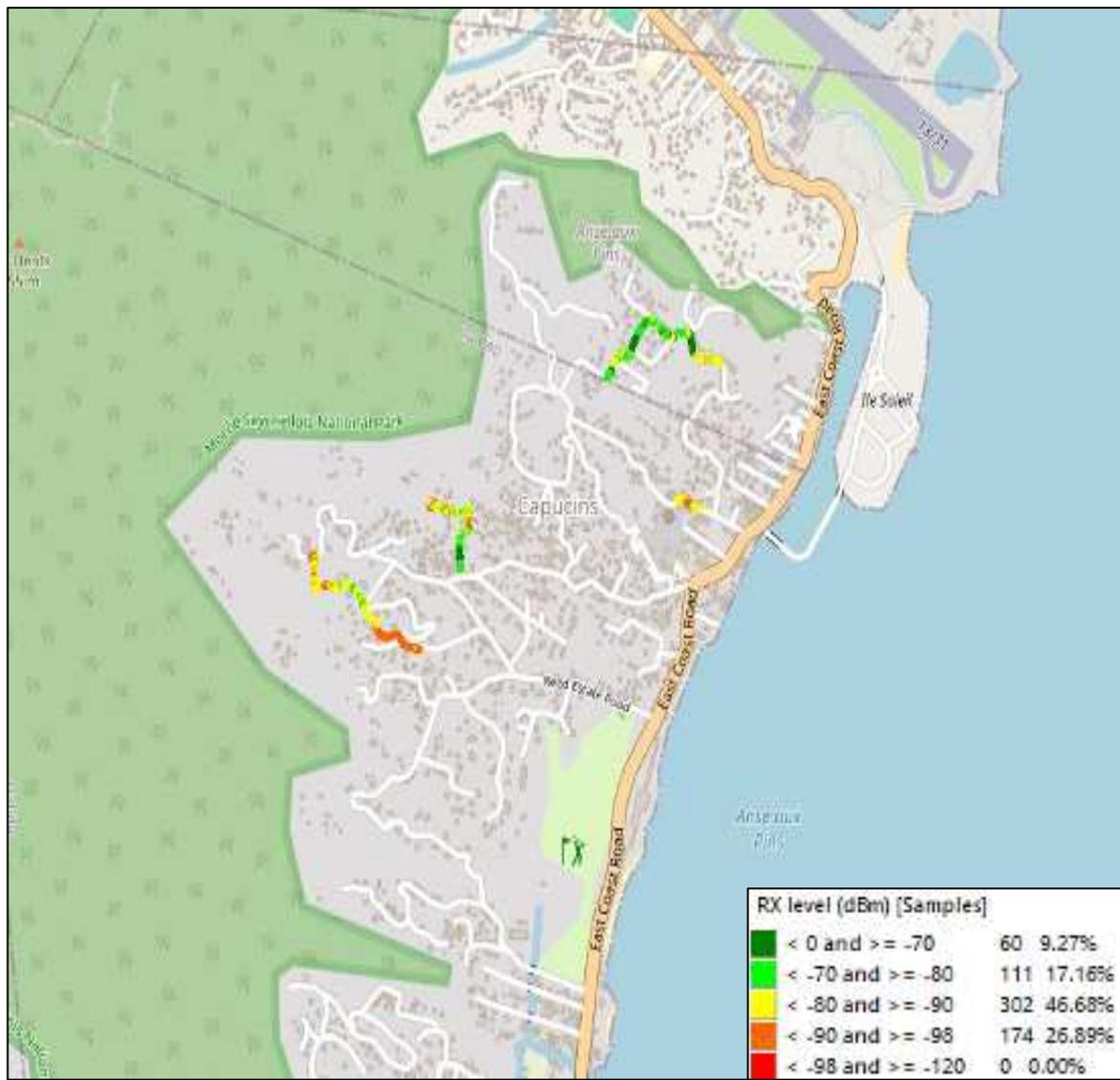
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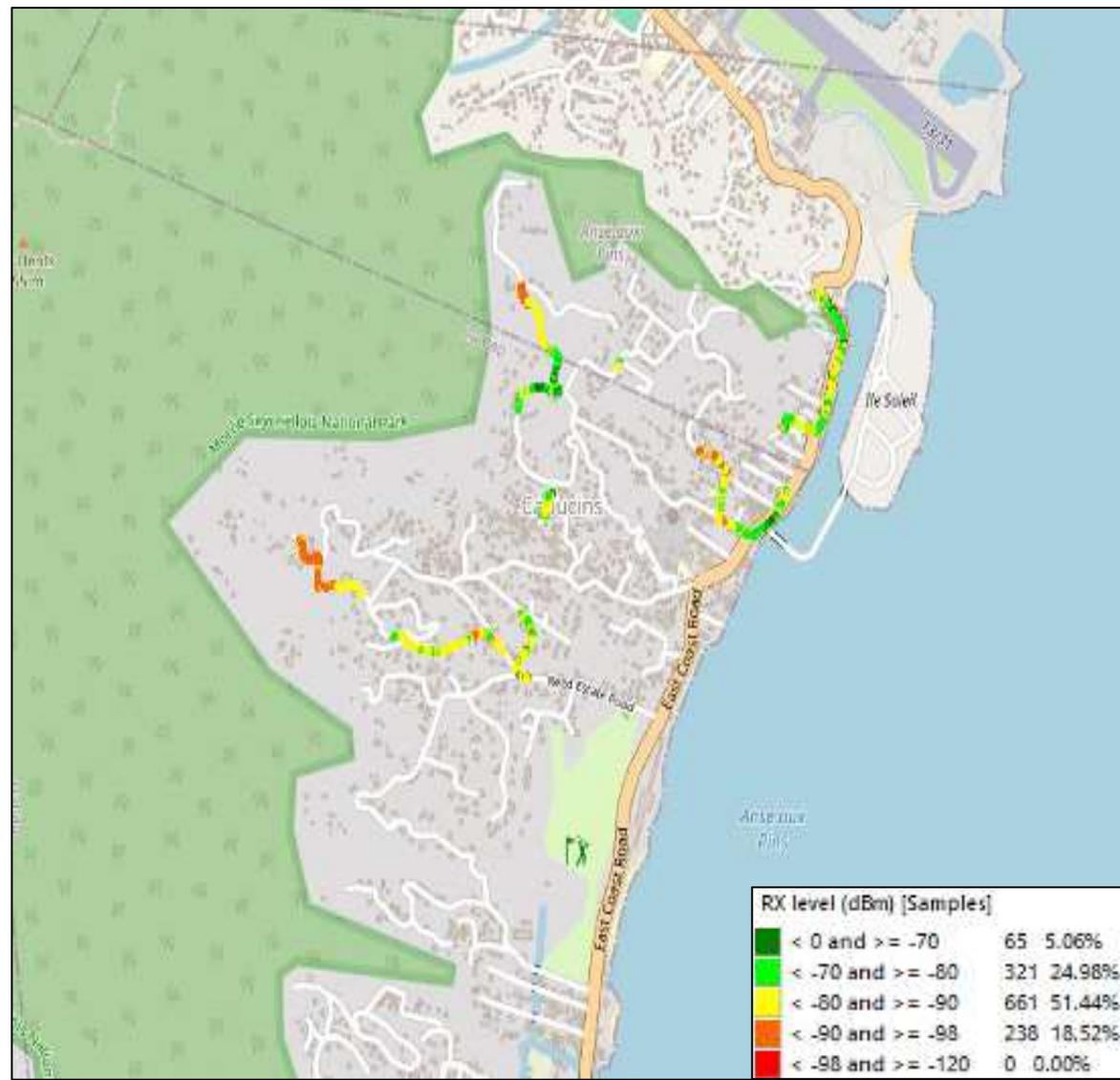
CWS LC MO



Airtel LC MO

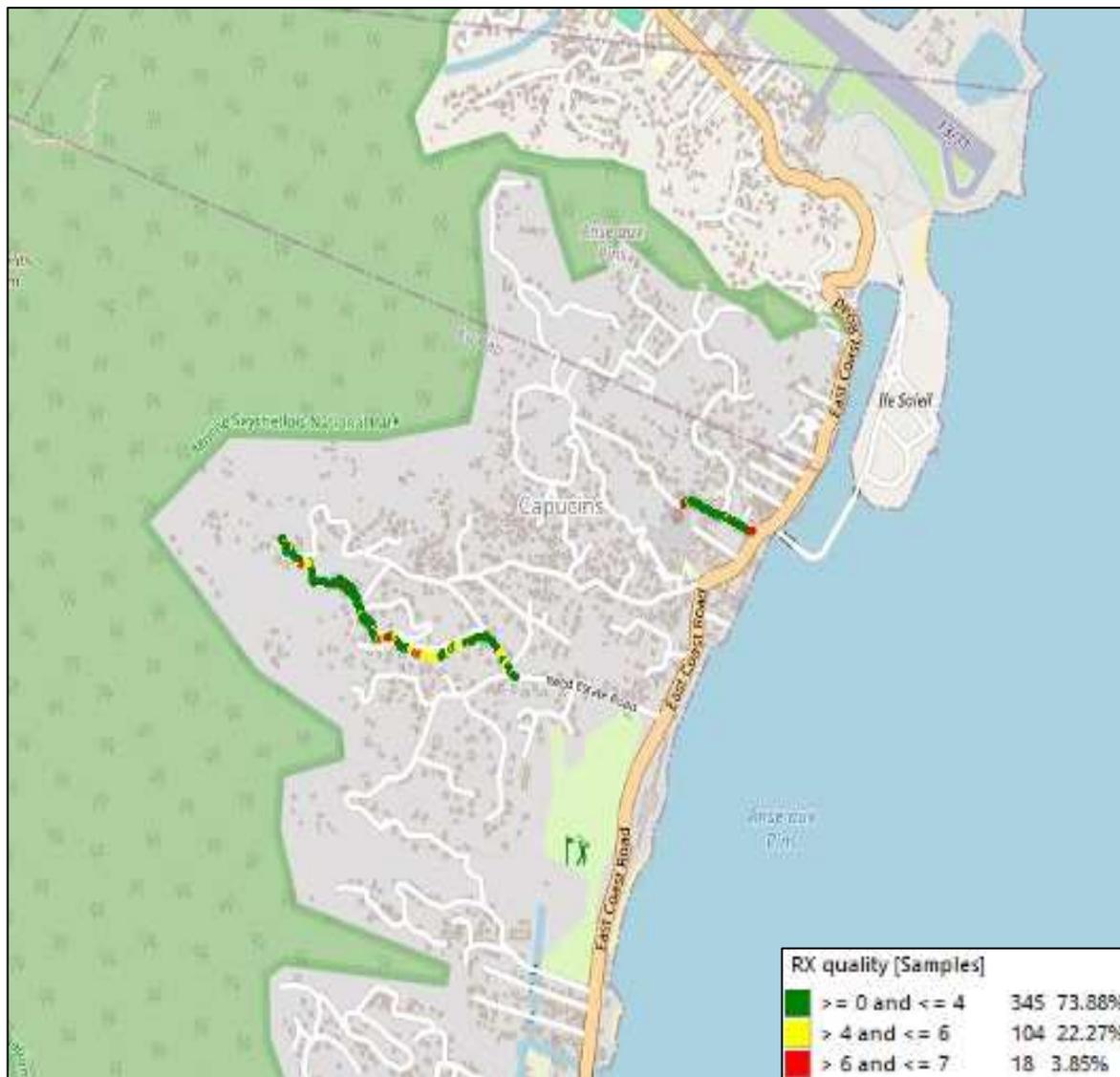


CWS LC MO



Phase-1 Long Call RX quality sub PLOT

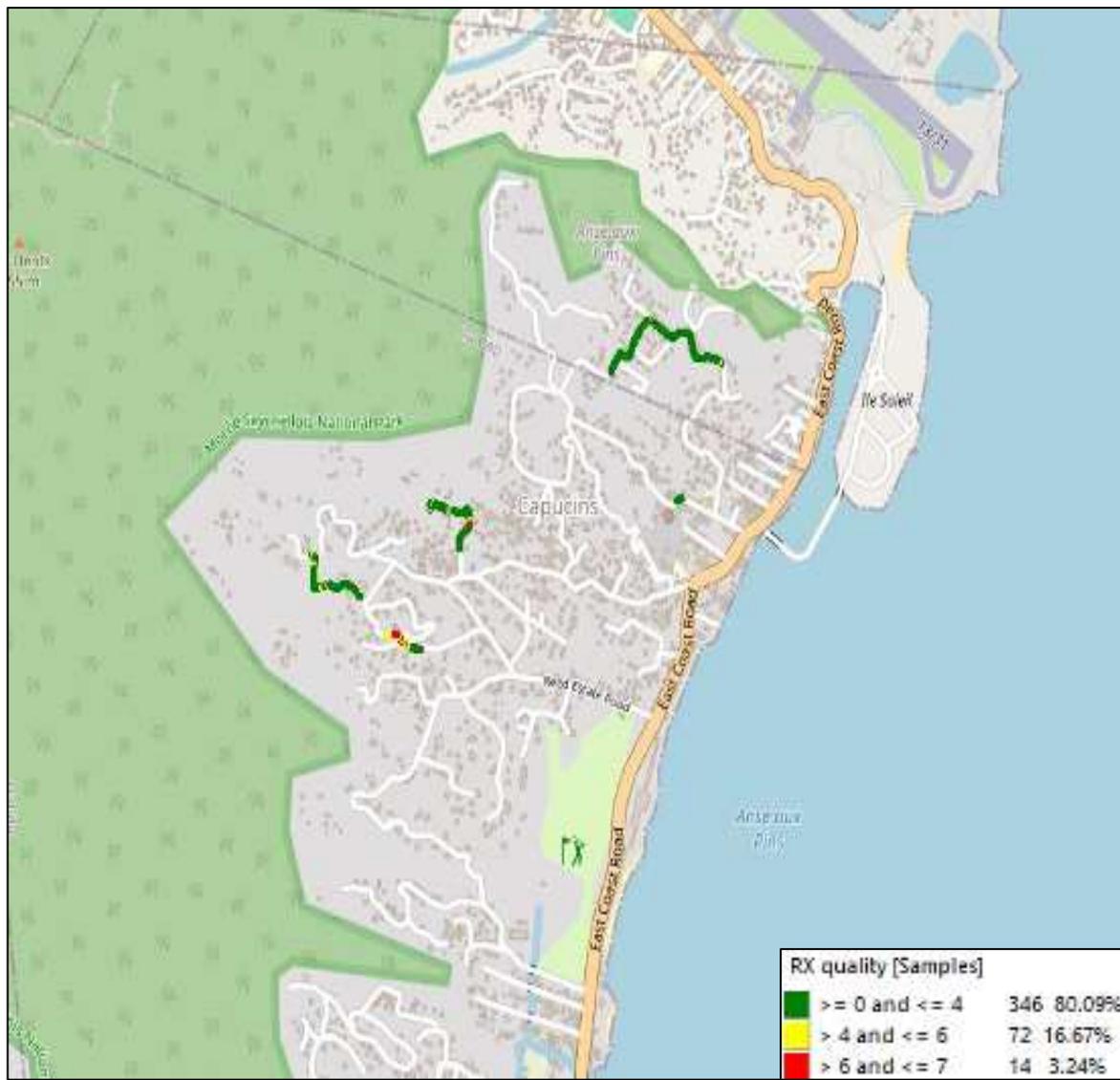
Airtel LC MO



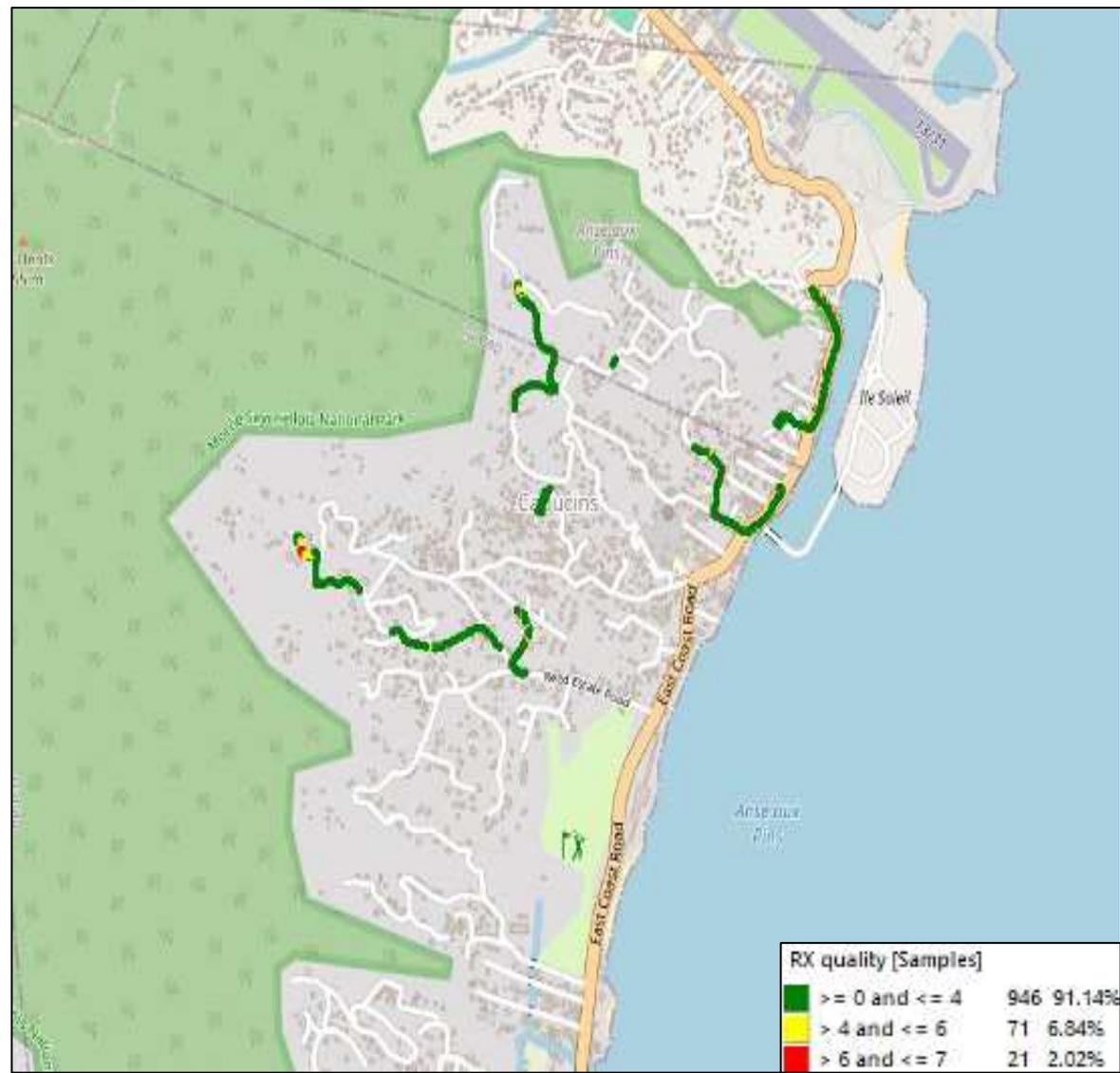
CWS LC MO



Airtel LC MO



CWS LC MO

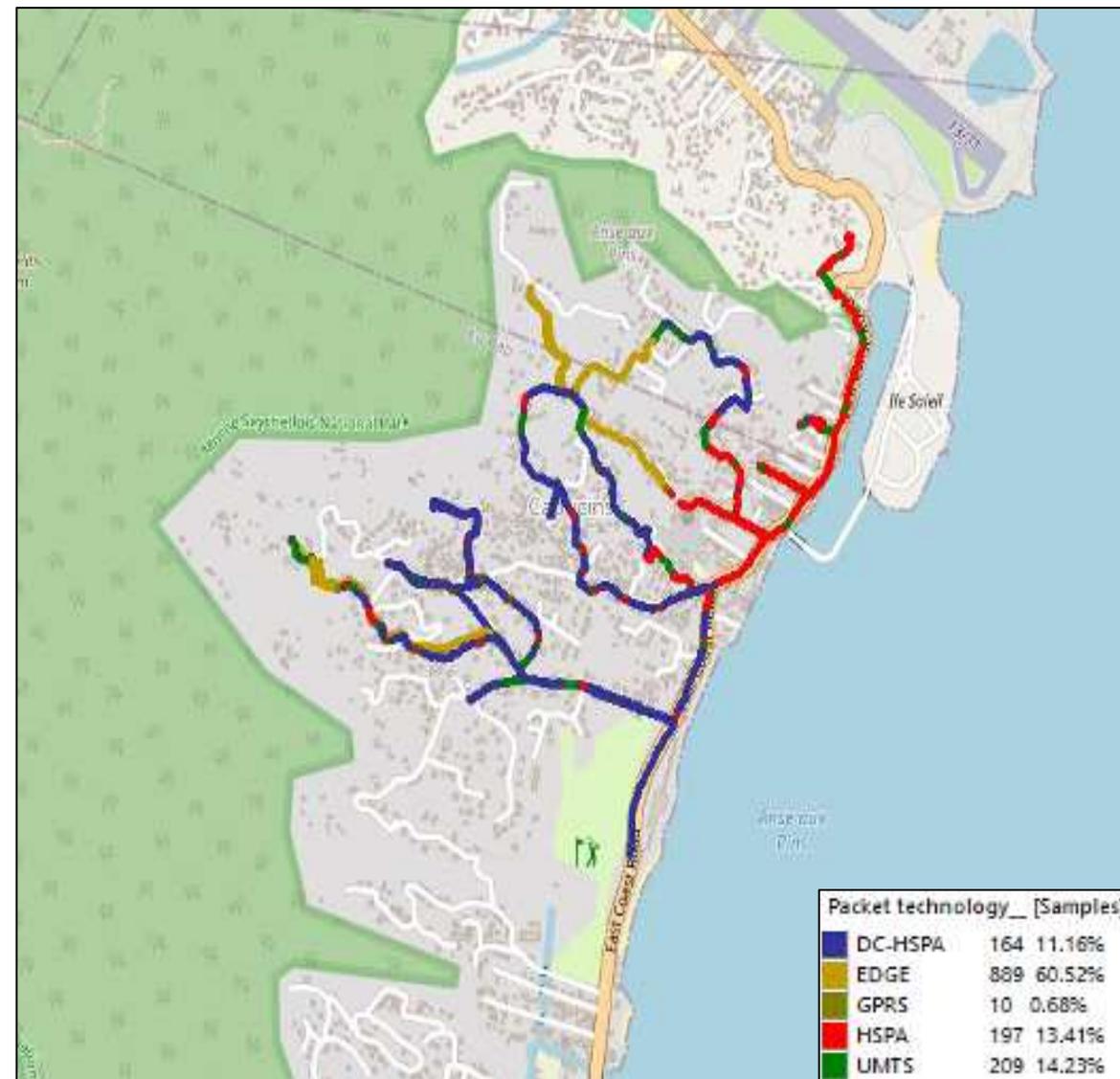


3G PREFERRED DATA DRIVE PLOTS

Airtel Data 3G



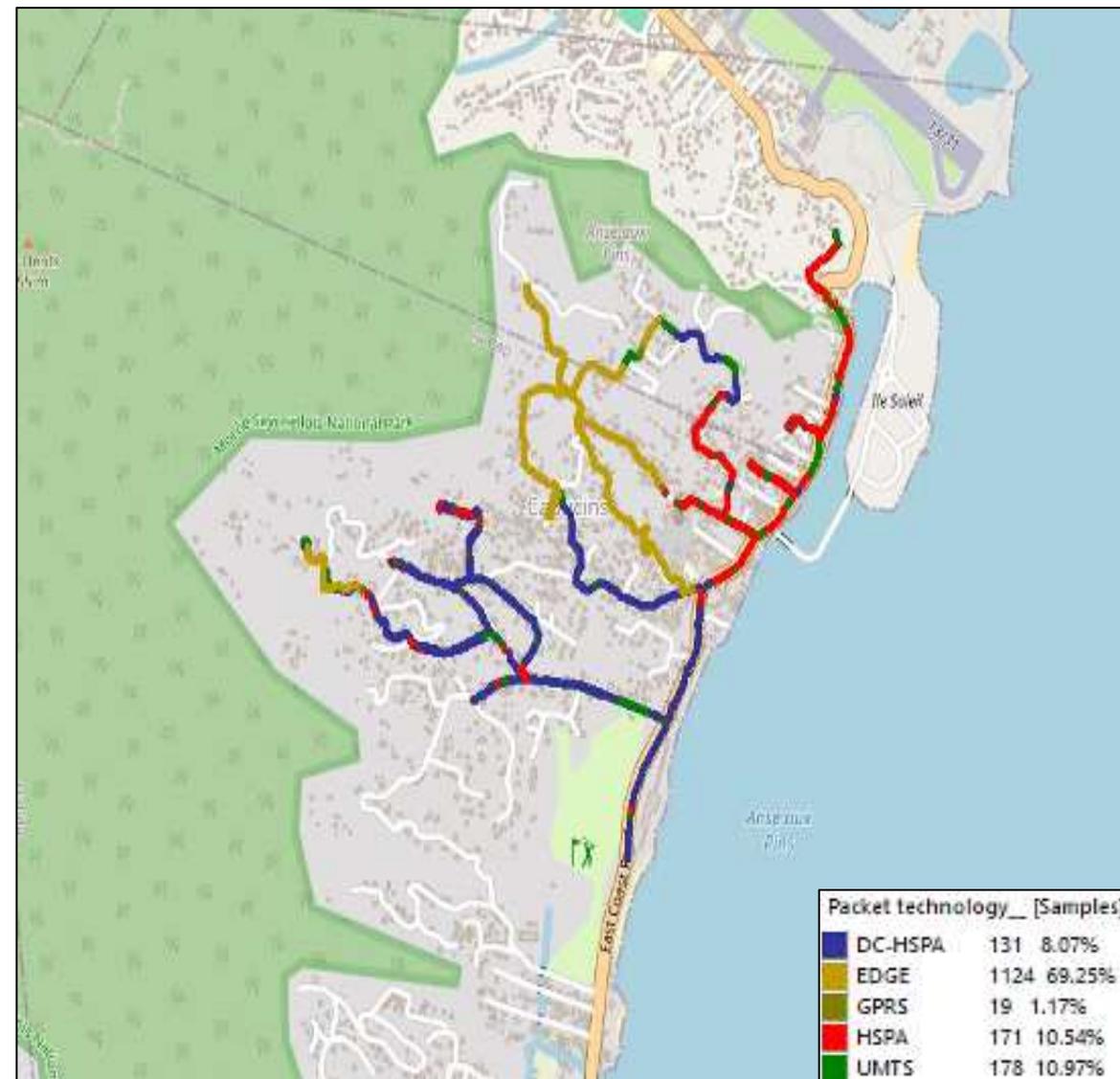
CWS Data 3G



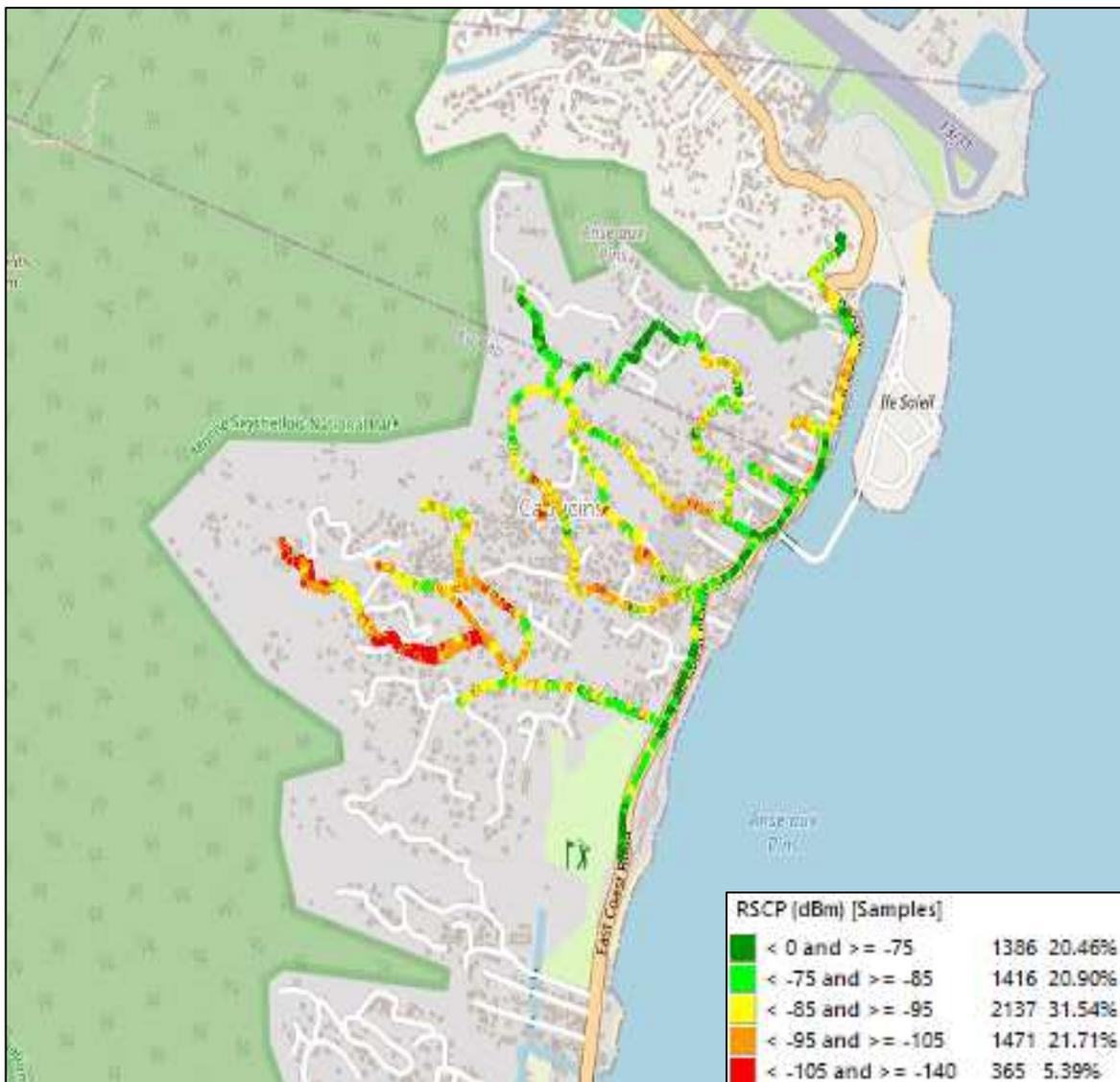
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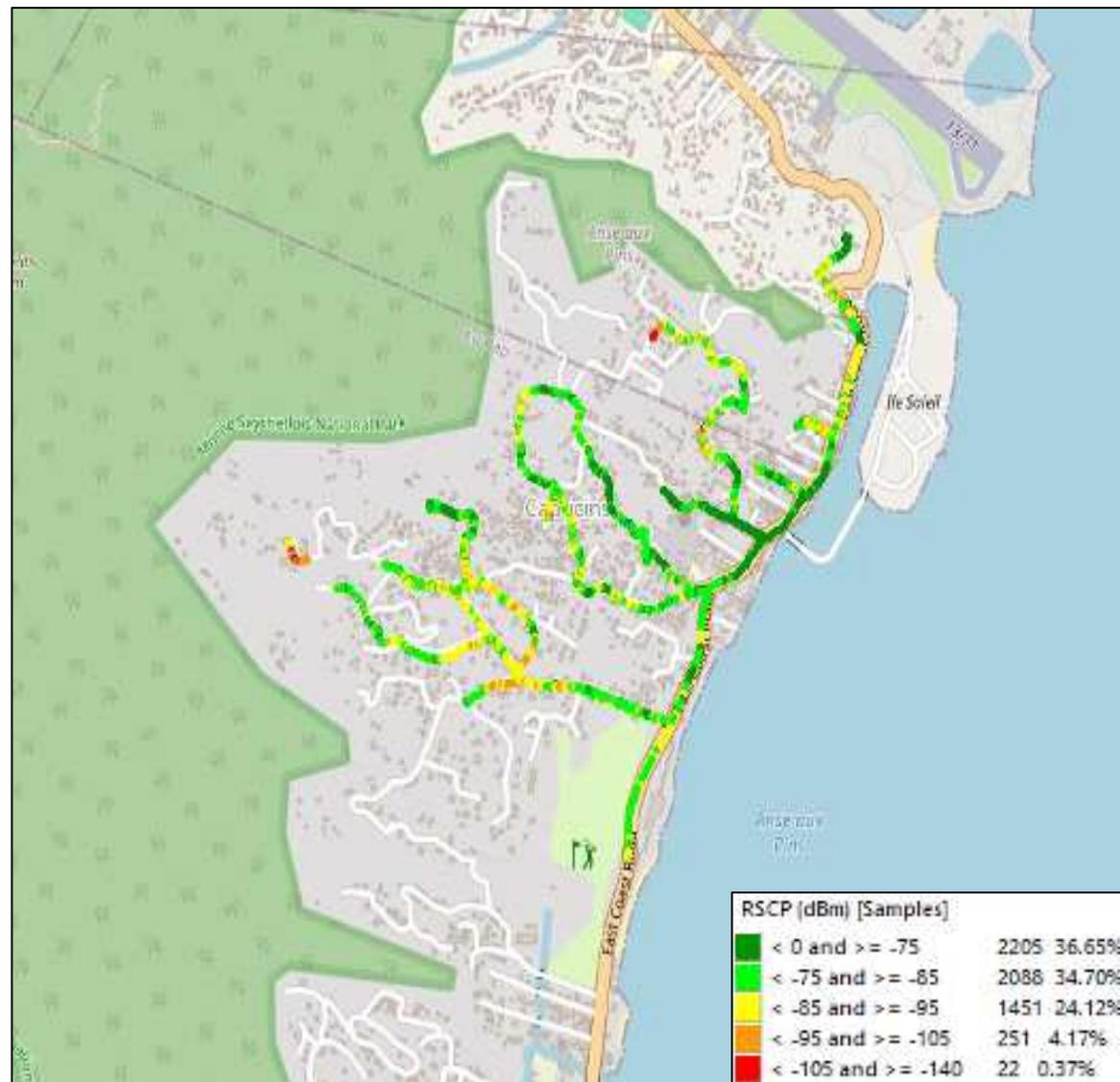
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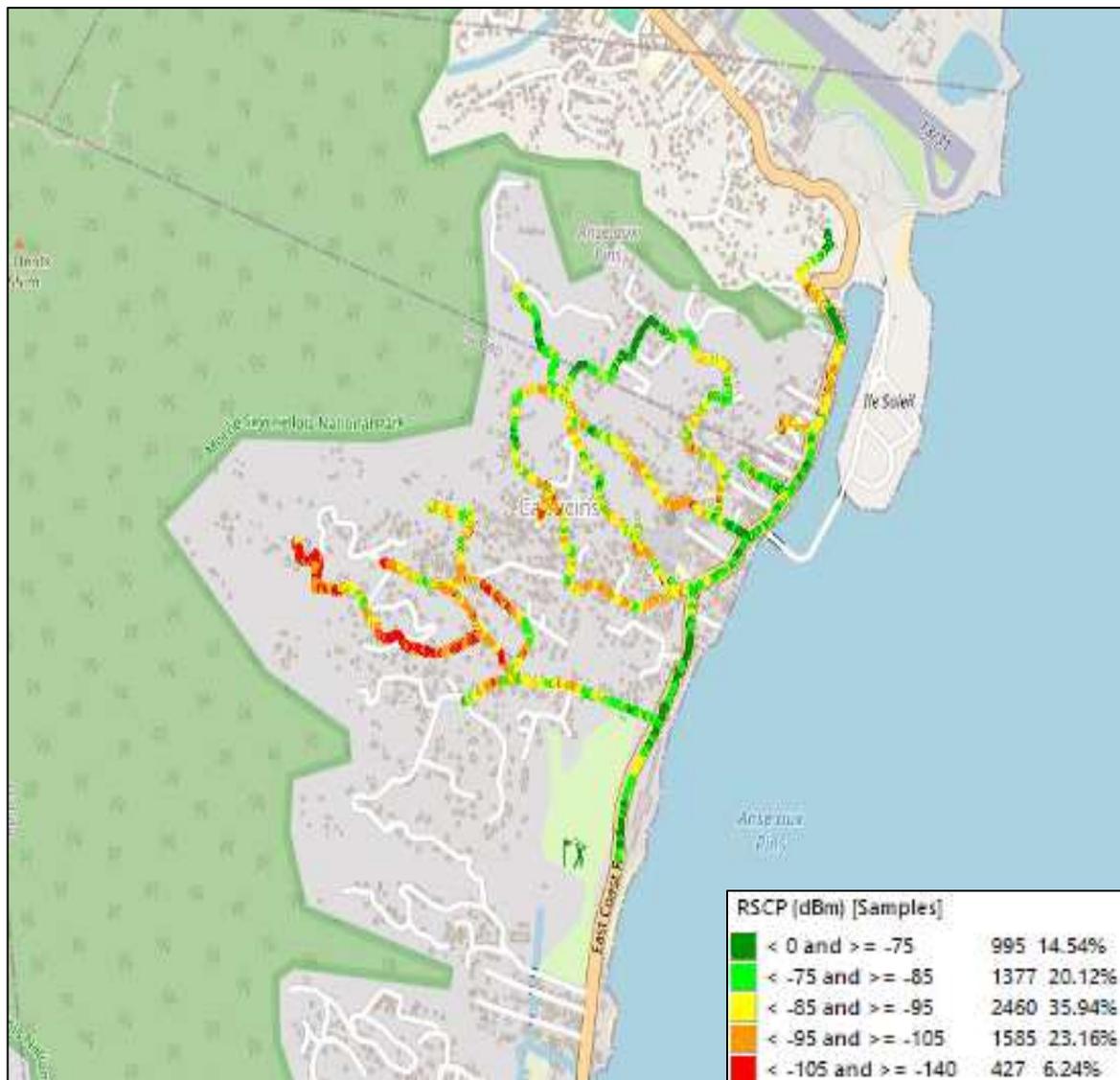
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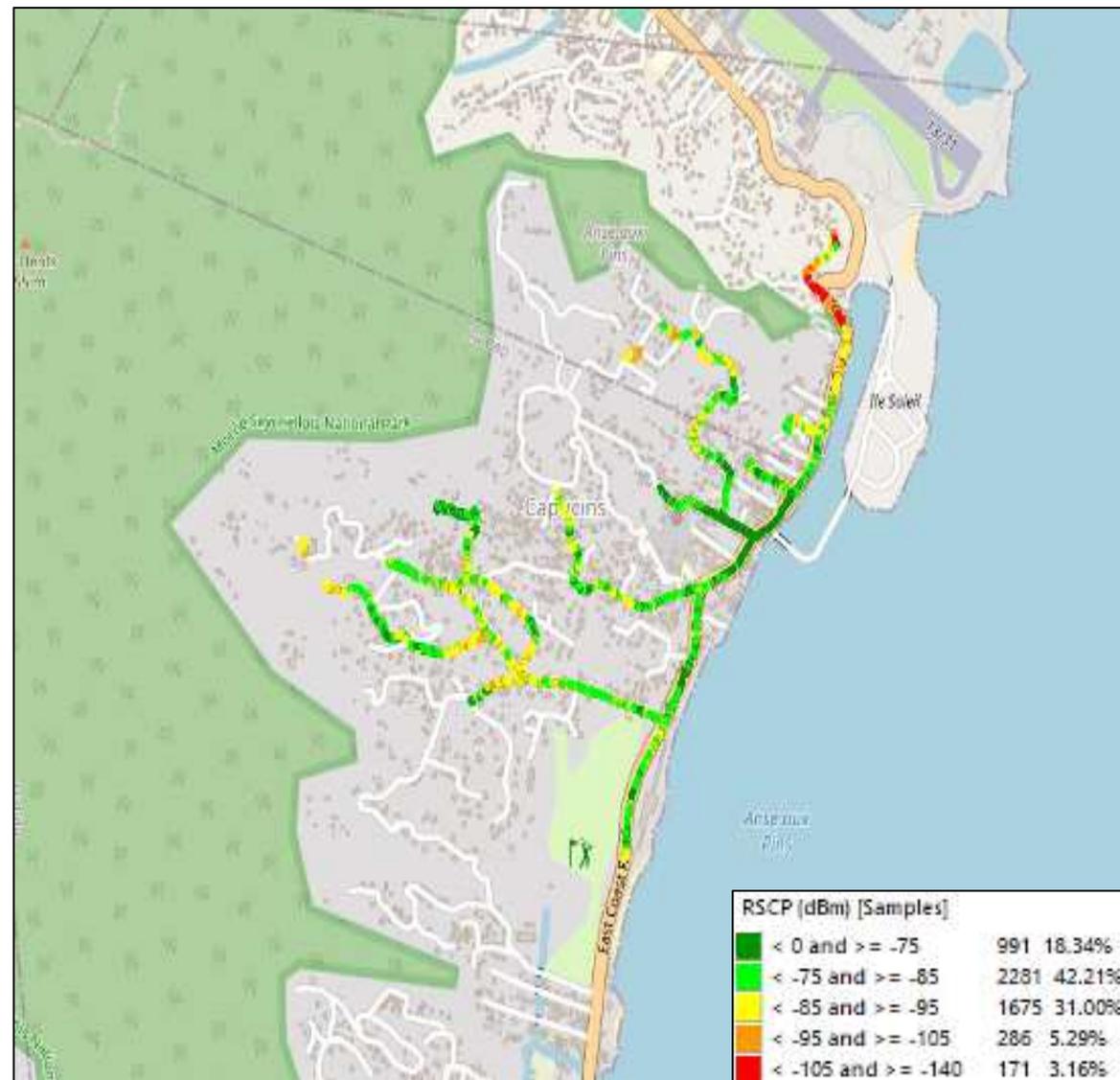
CWS Data 3G



Airtel Data 3G



CWS Data 3G



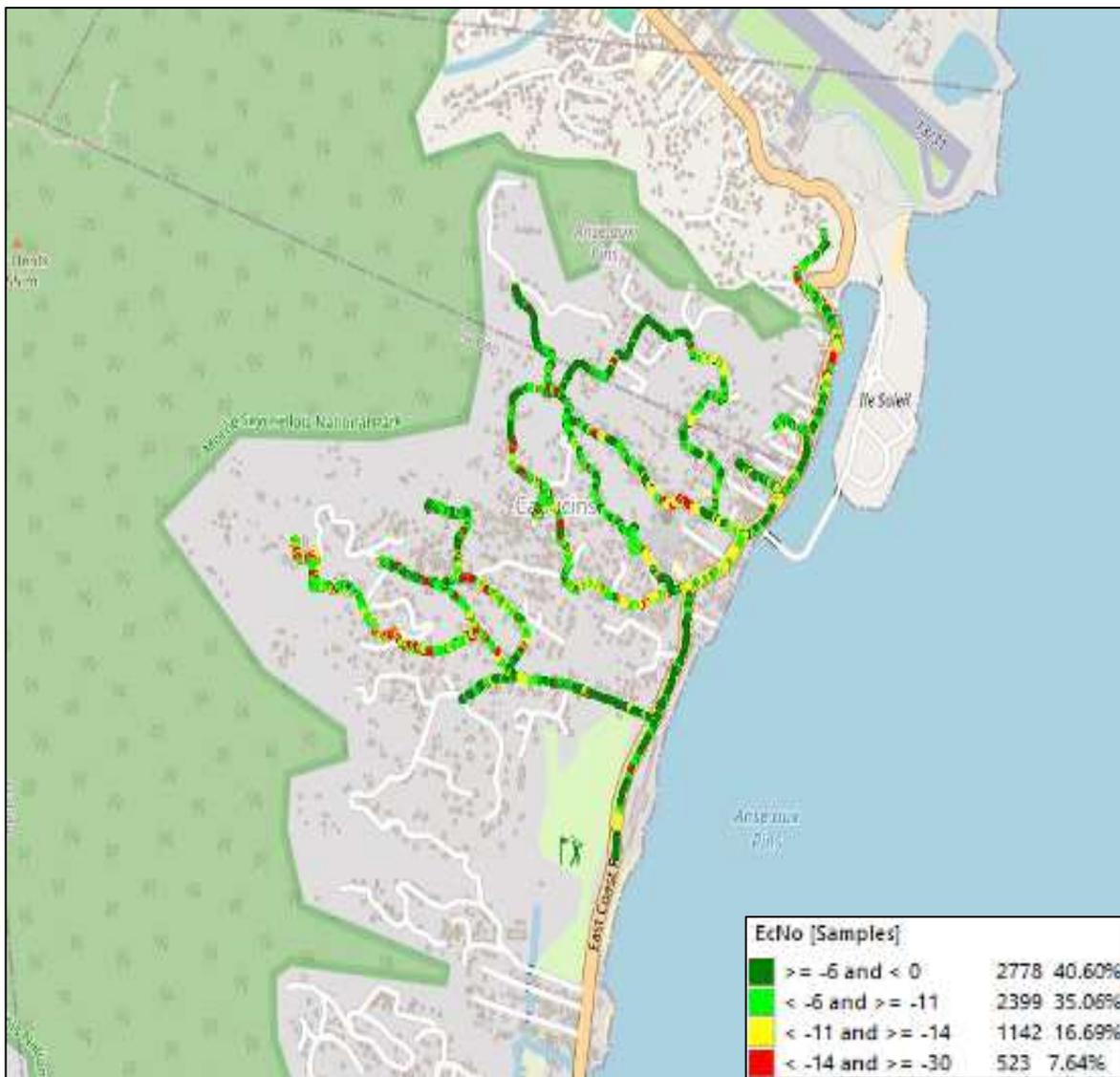
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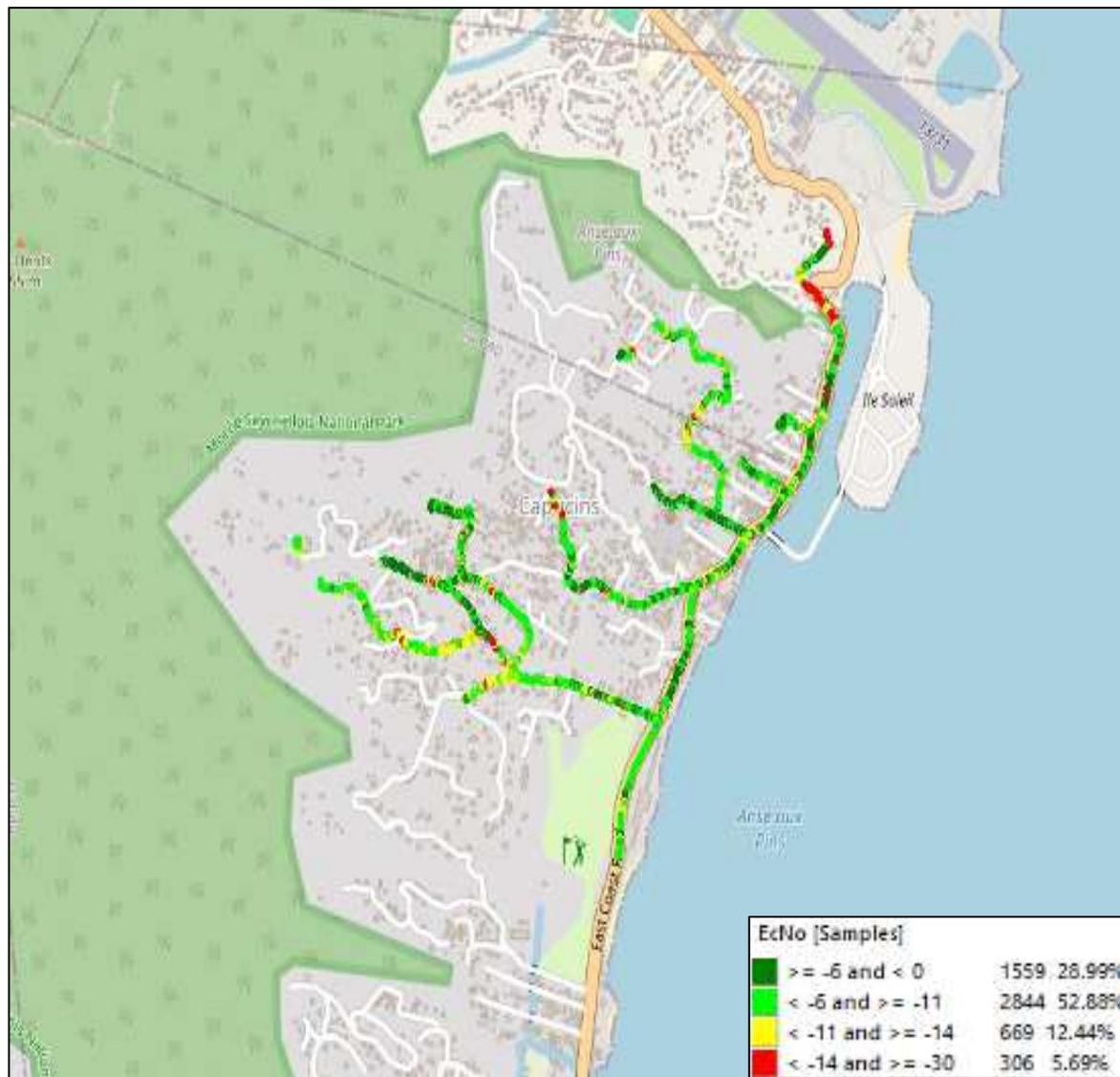
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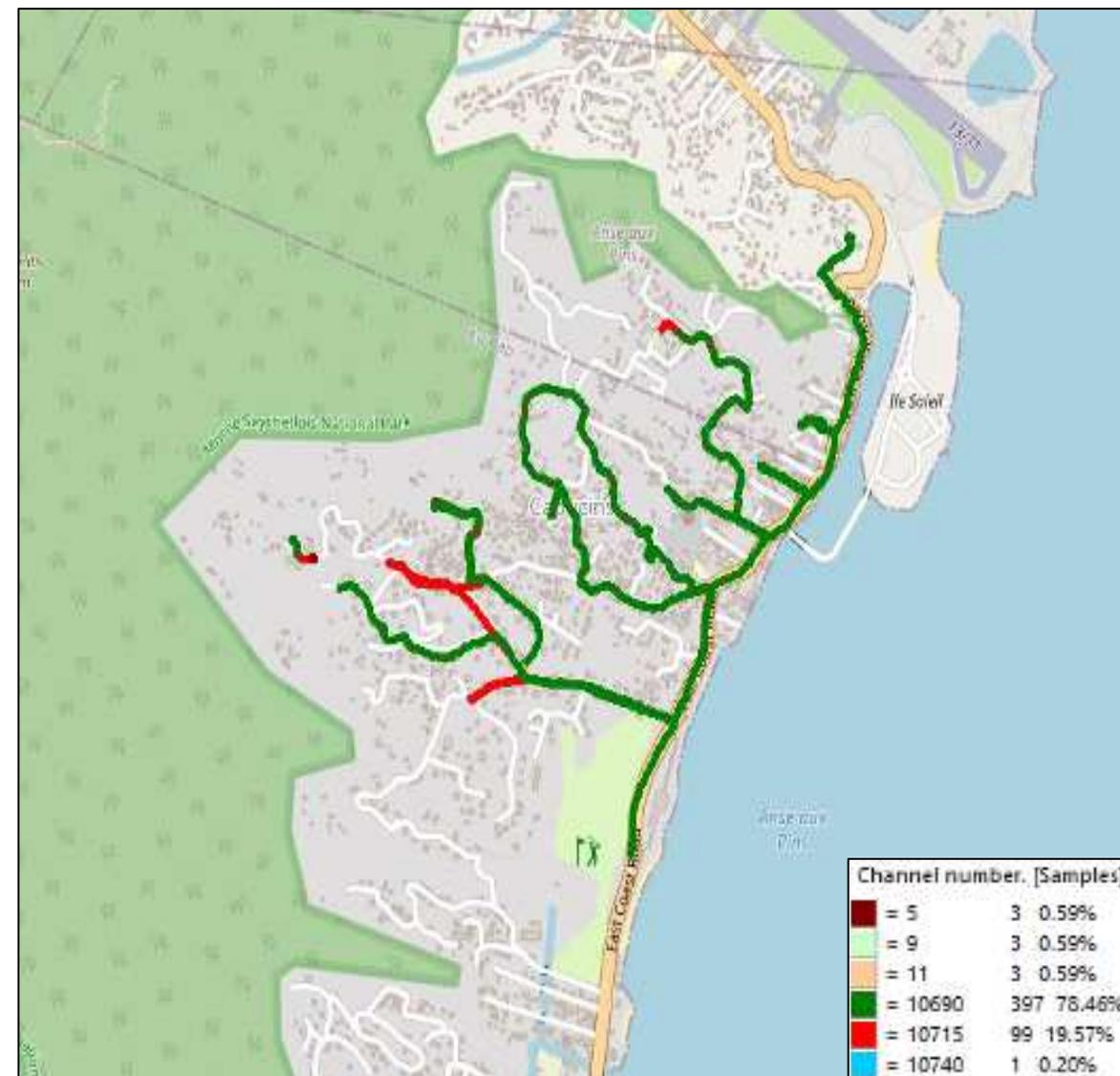
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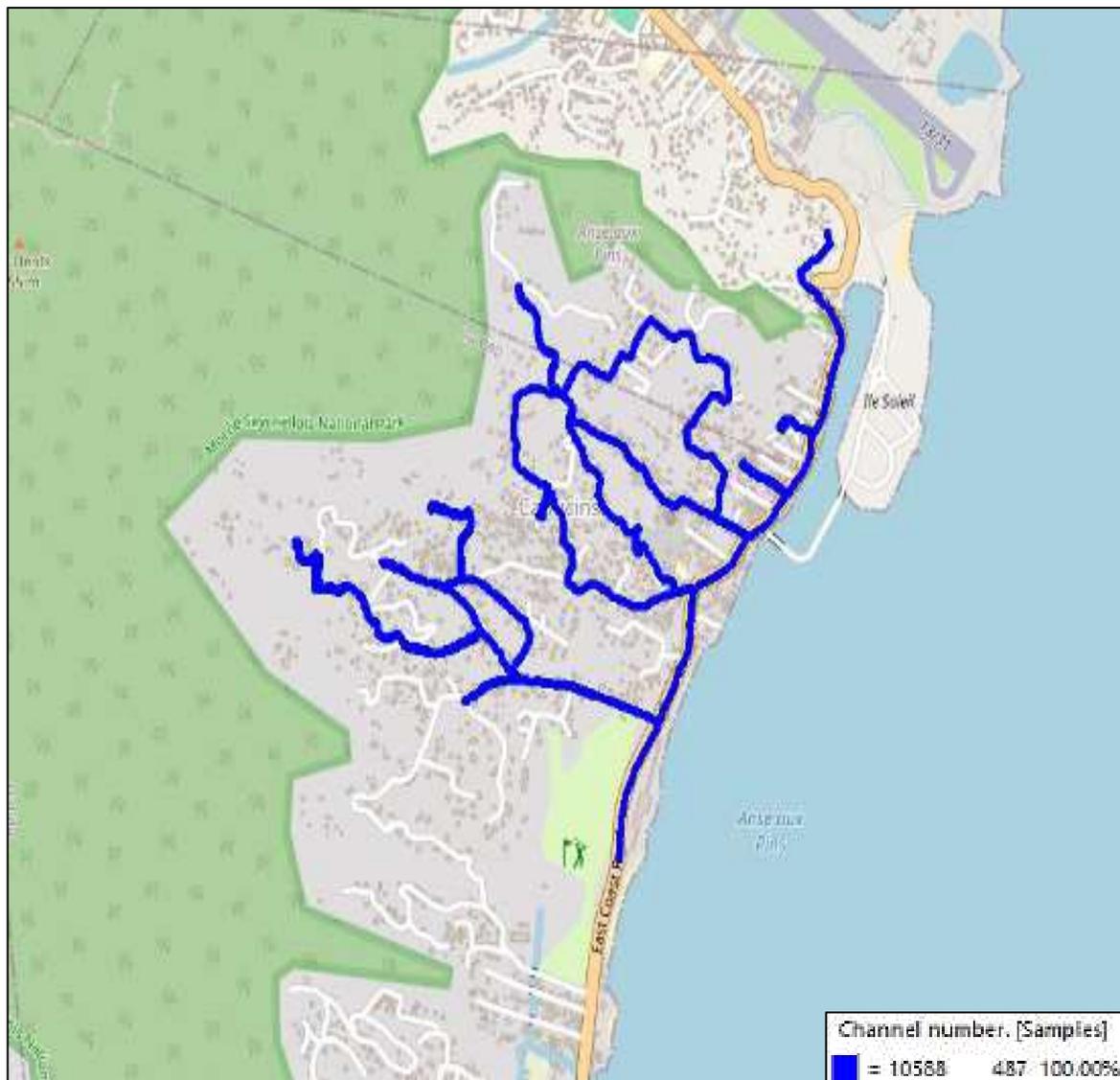
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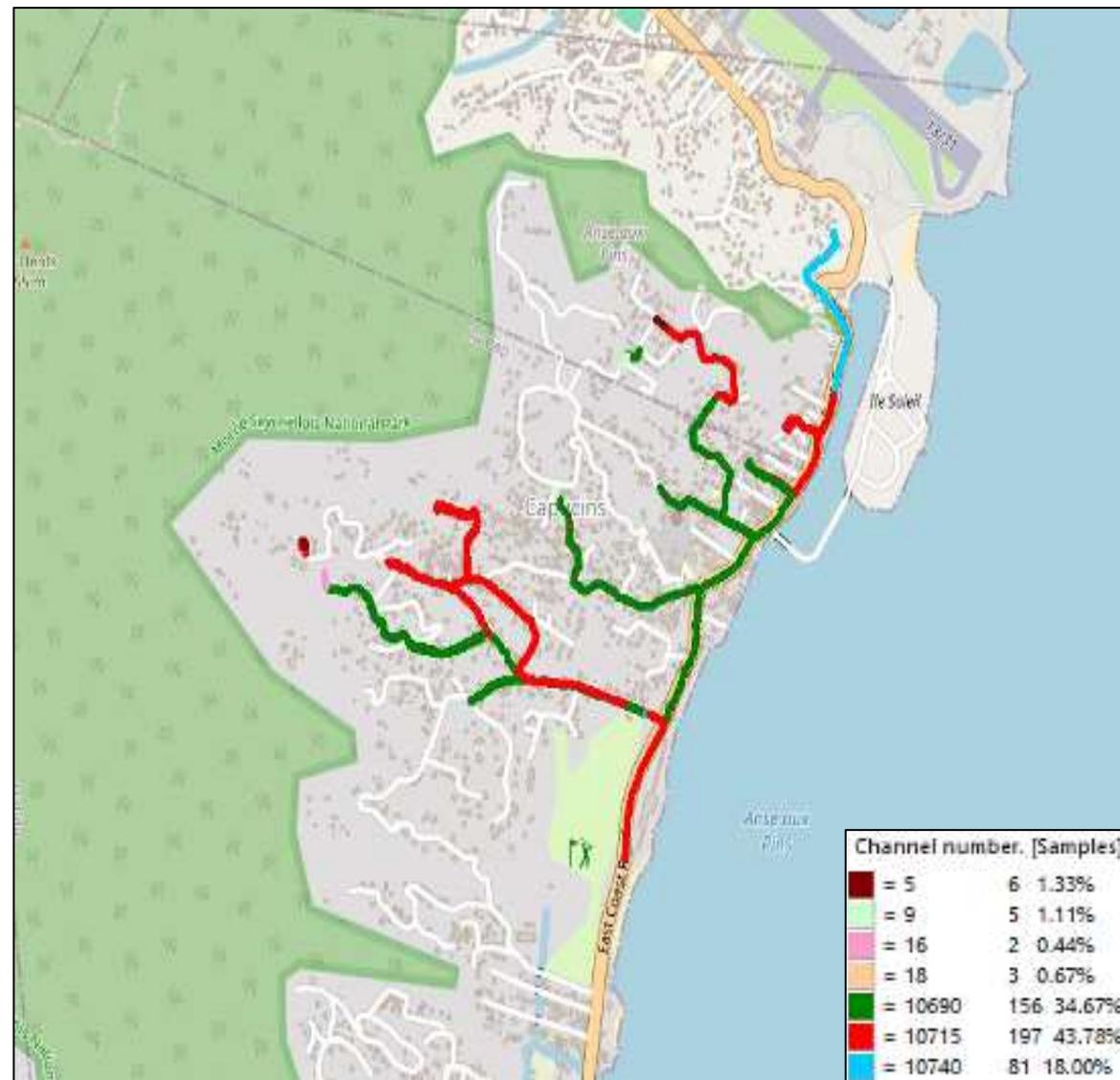
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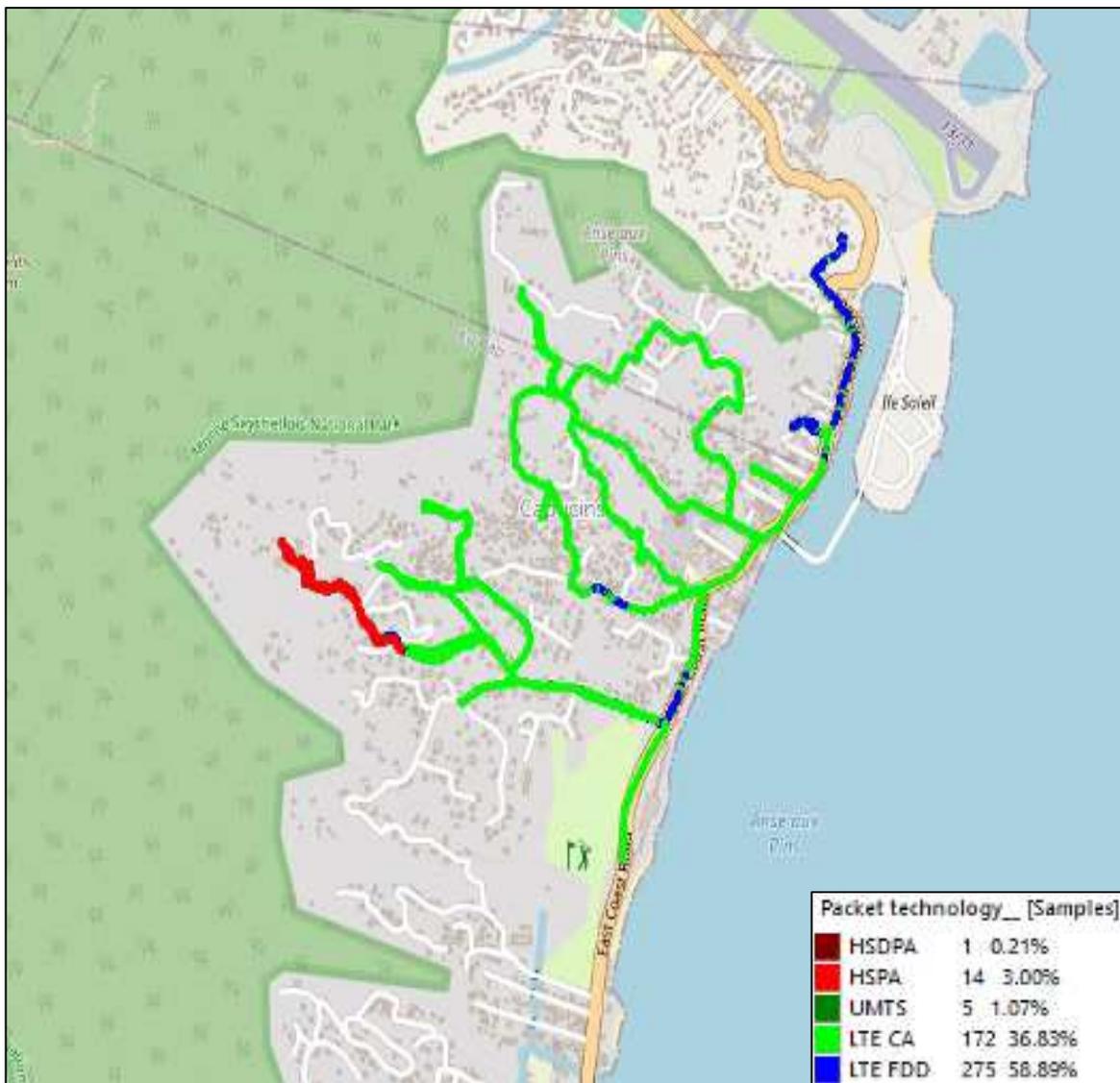


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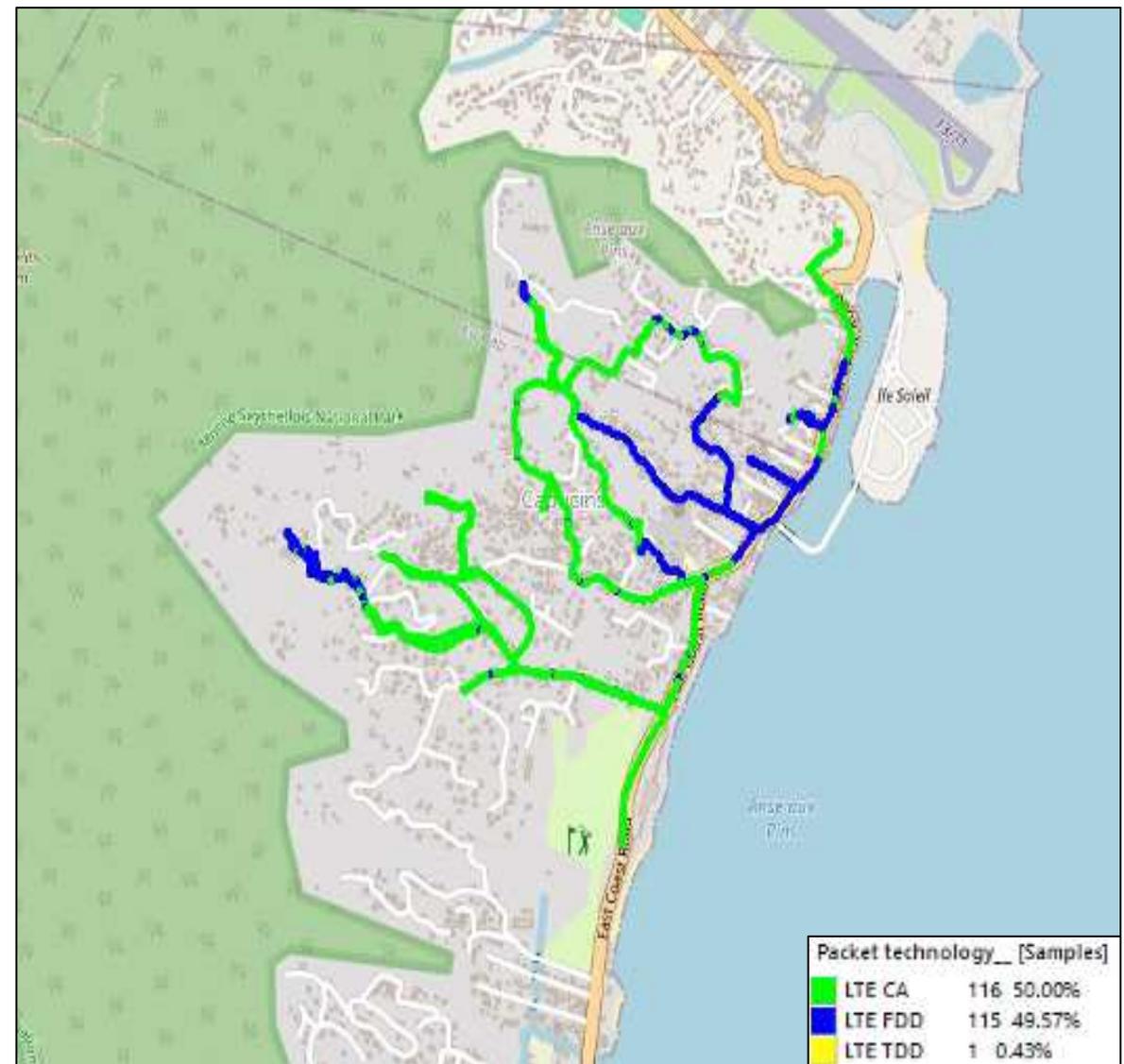


4G PREFERRED DATA DRIVE PLOTS

Airtel Data 4G



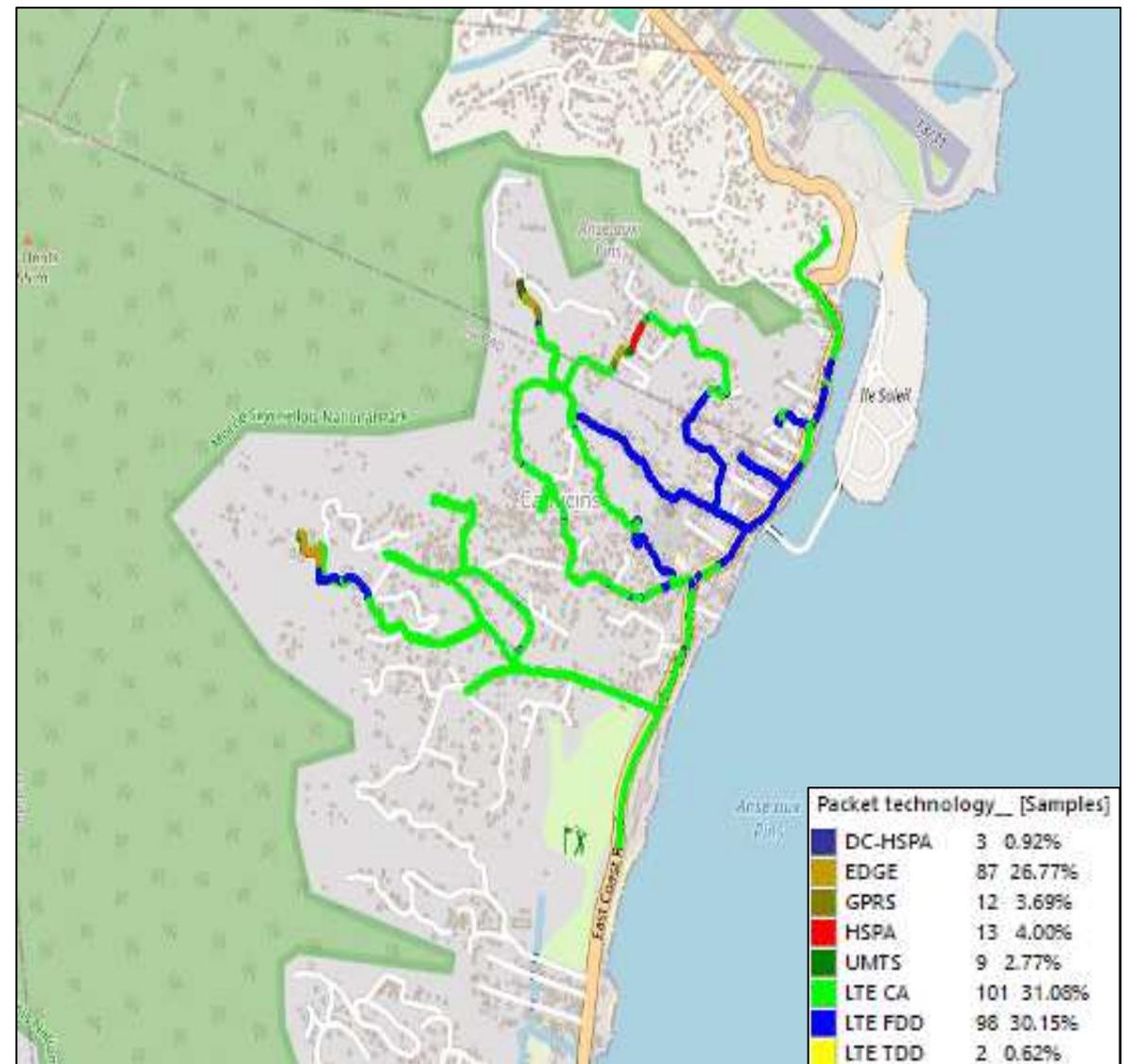
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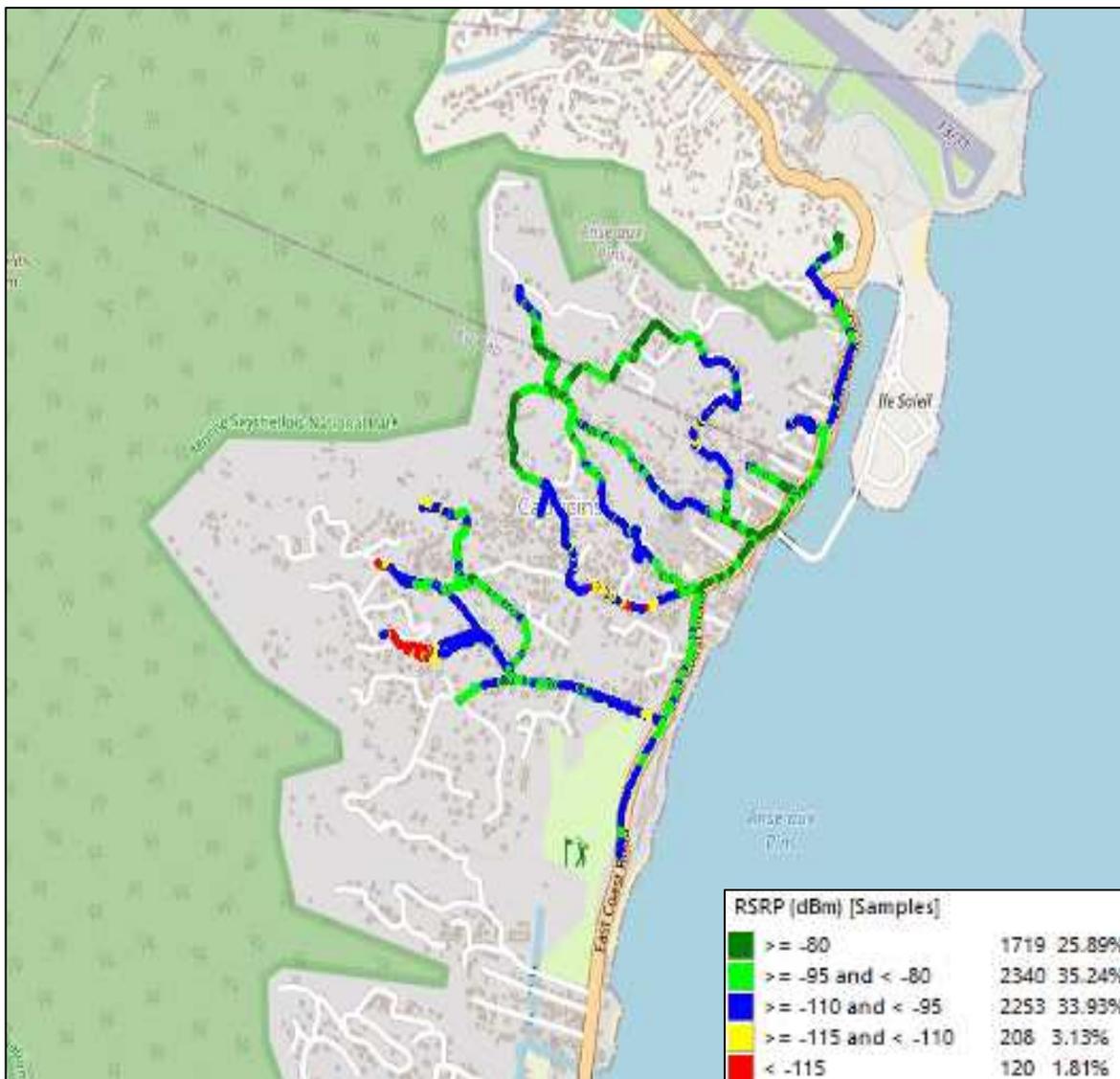
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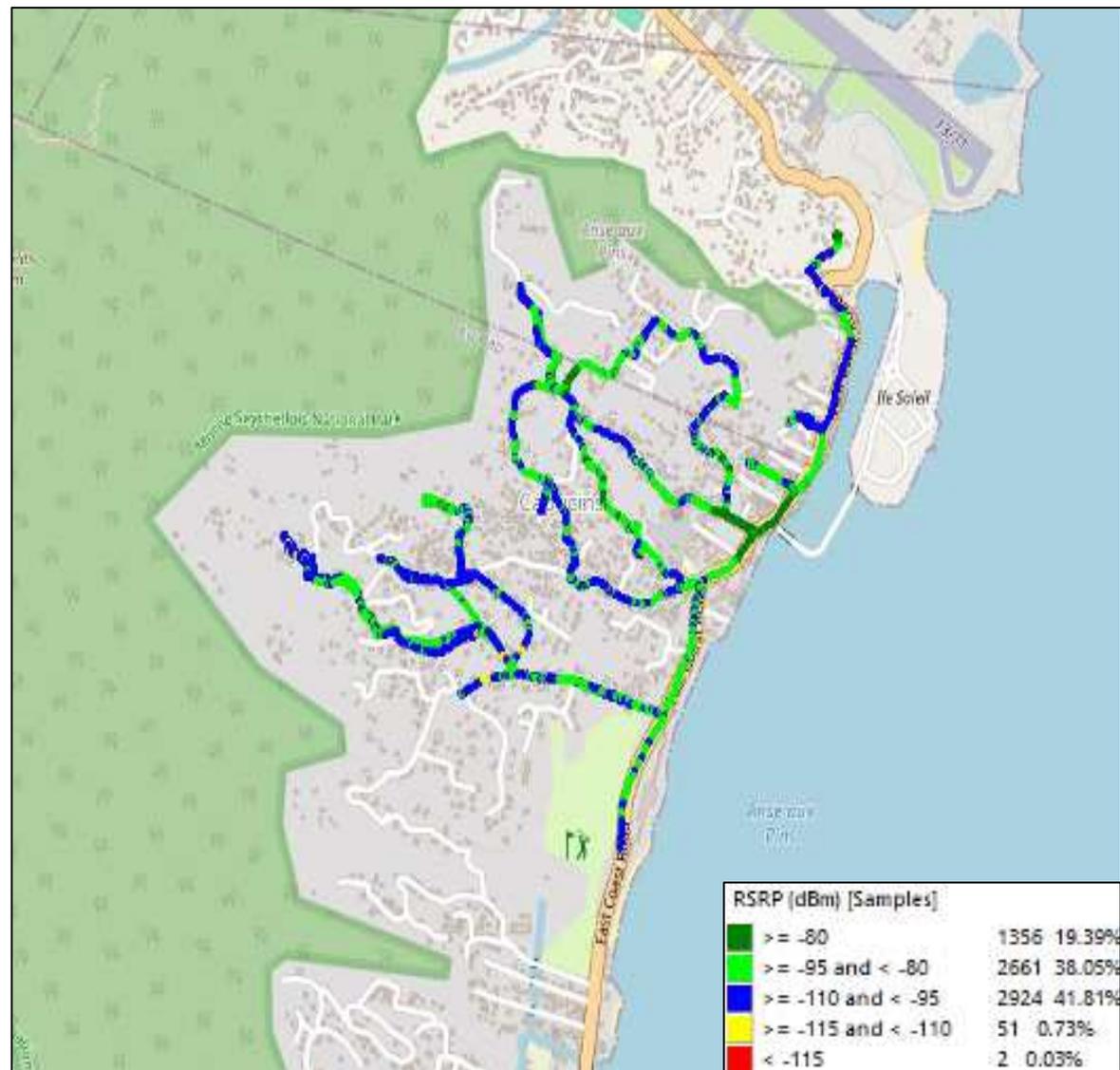
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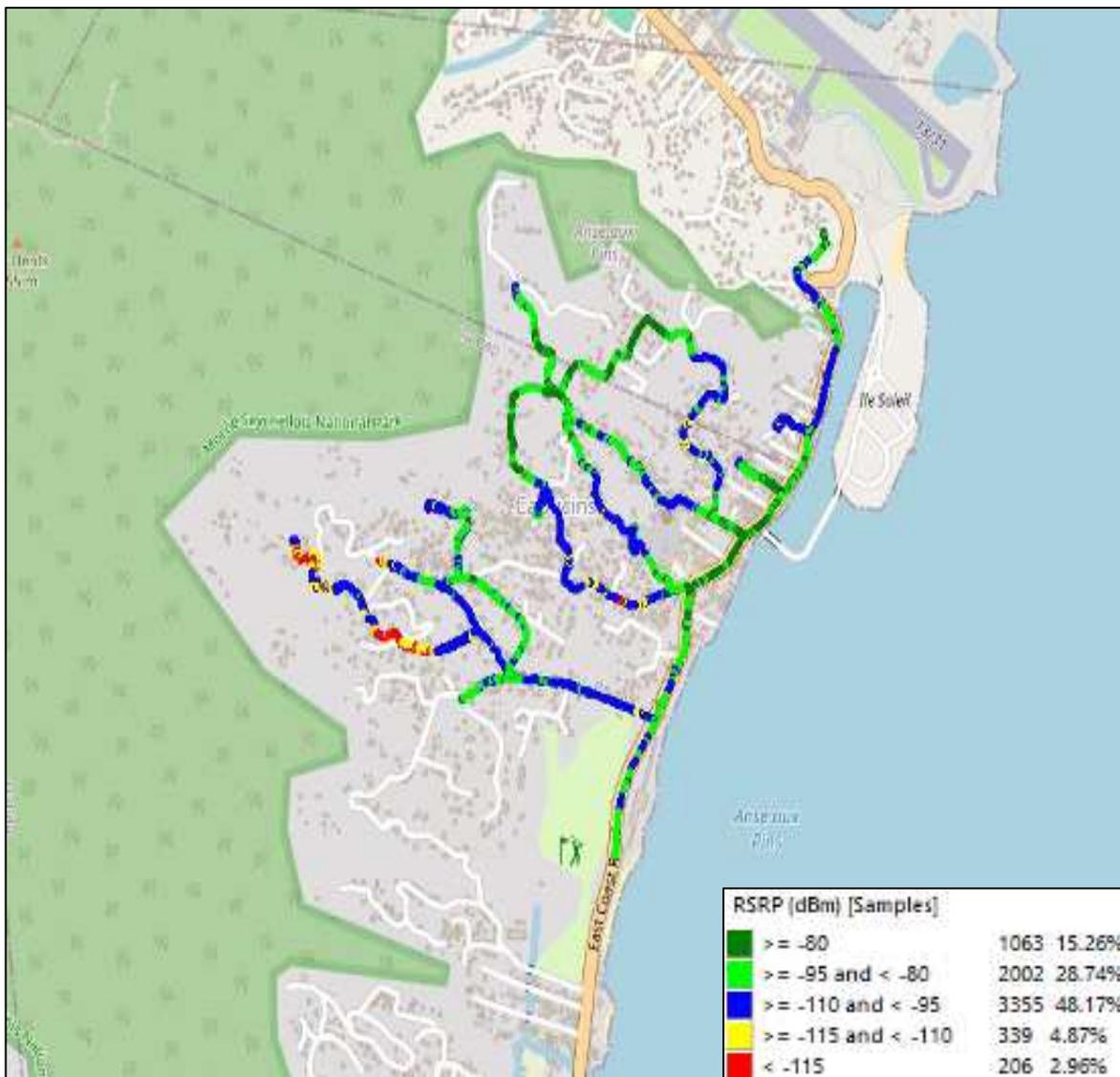
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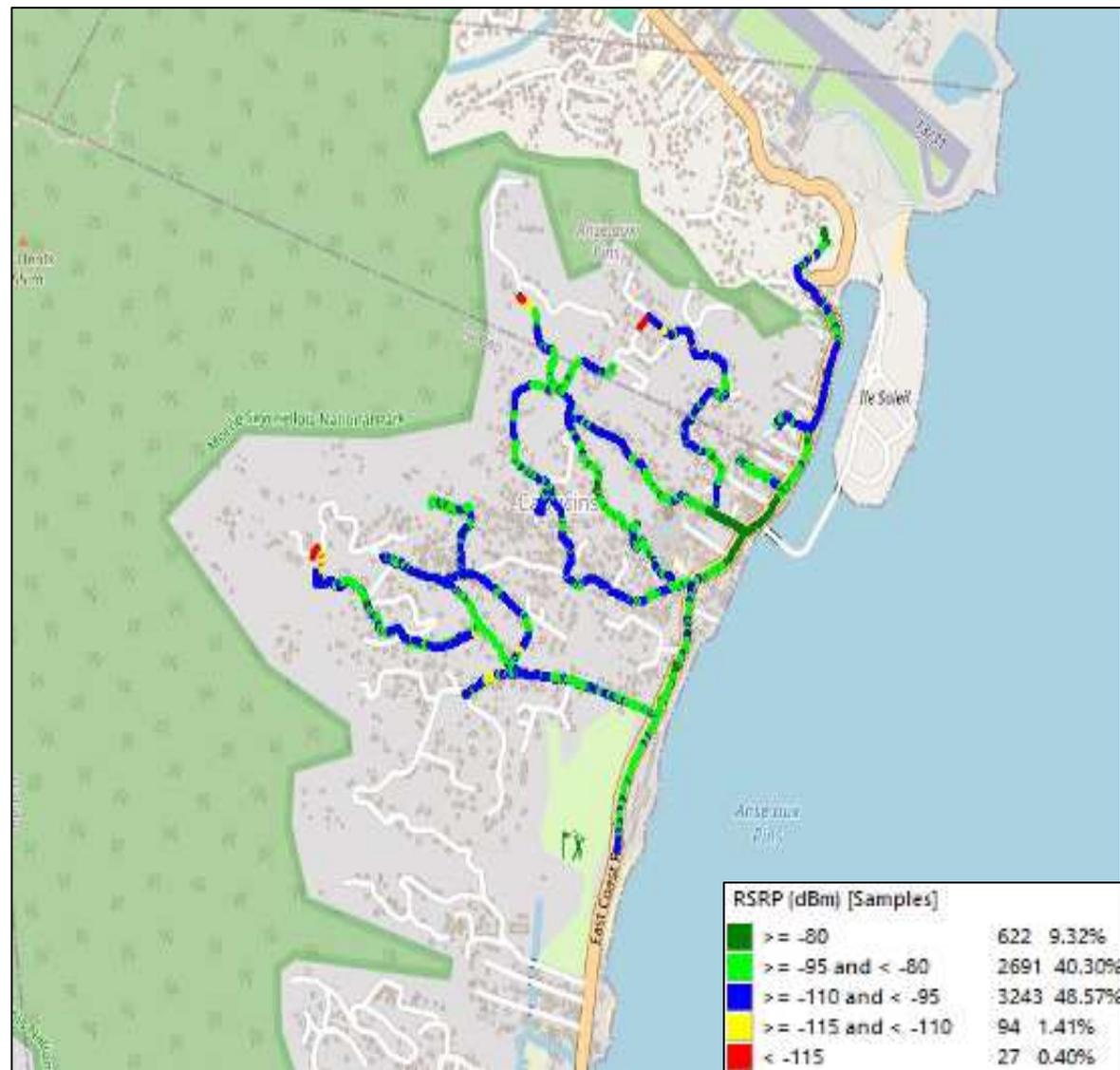
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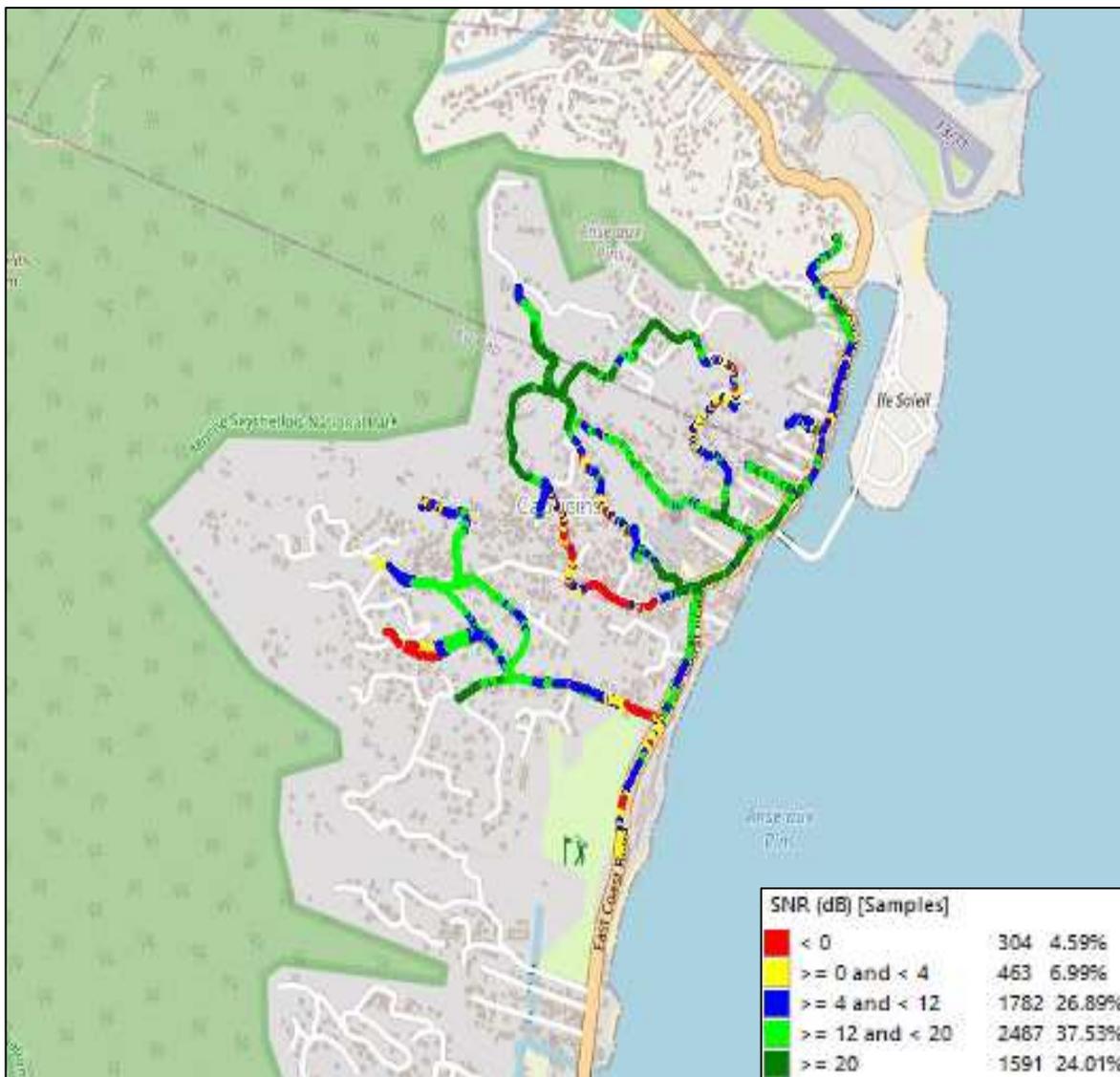
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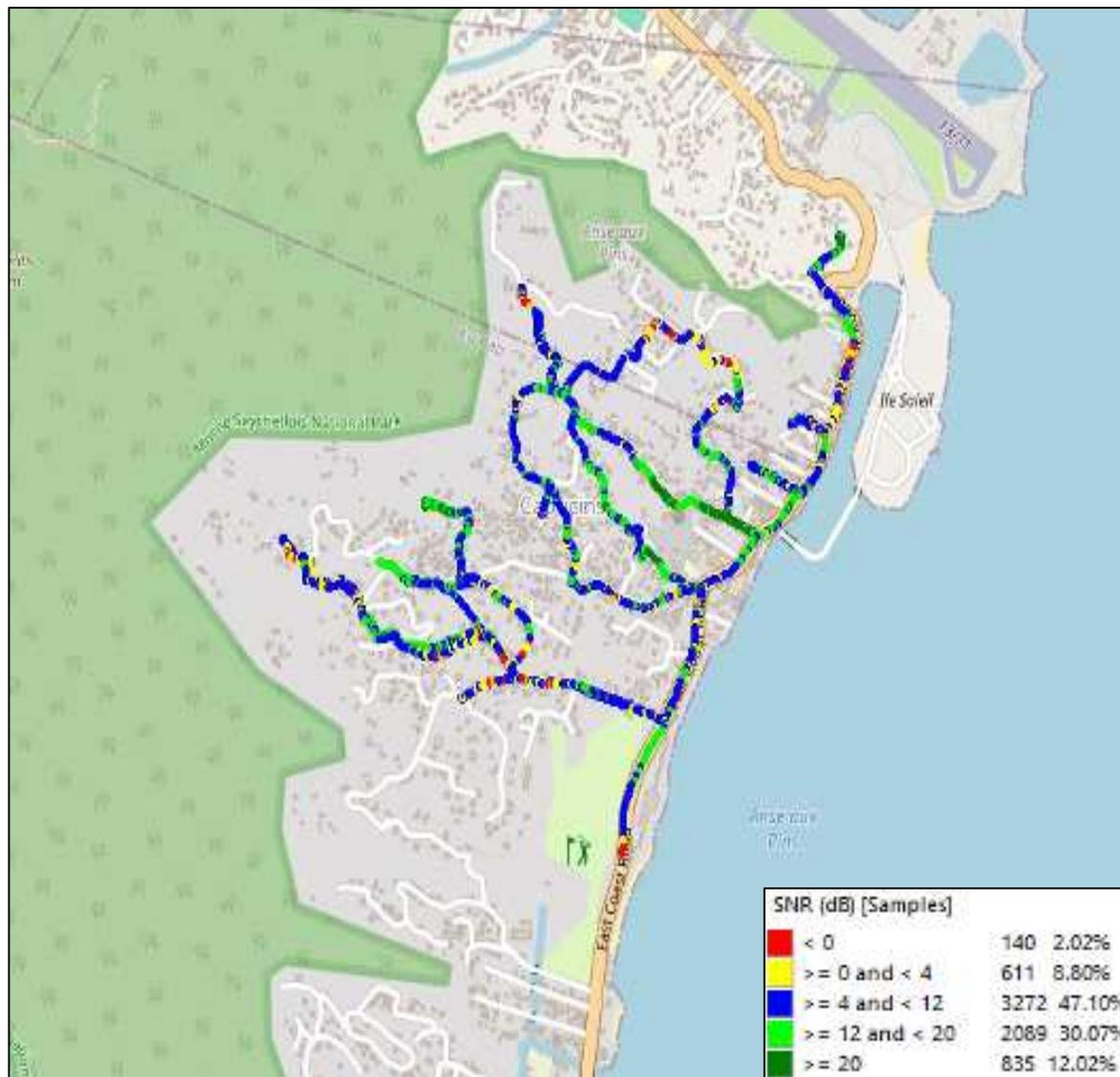
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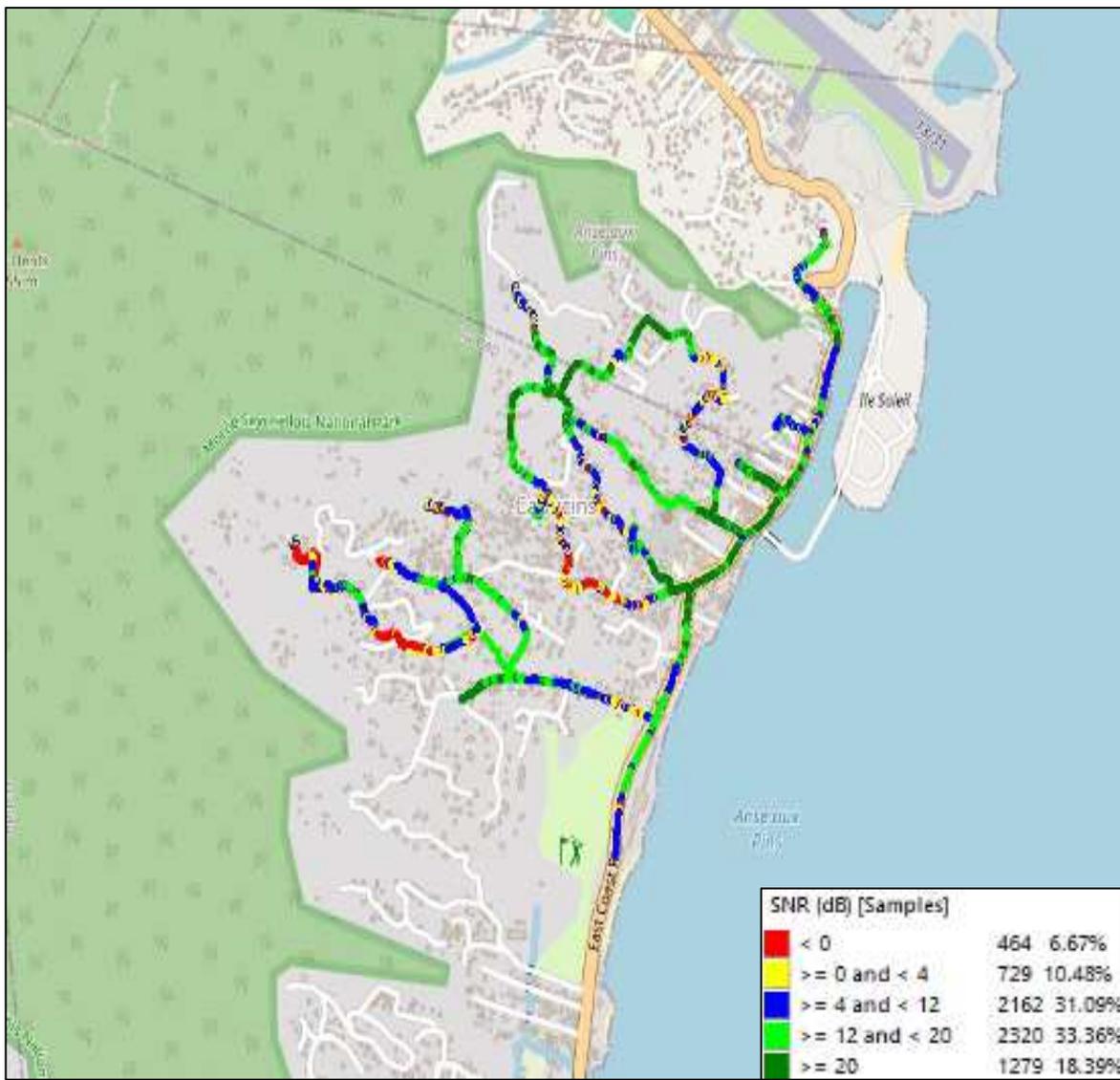
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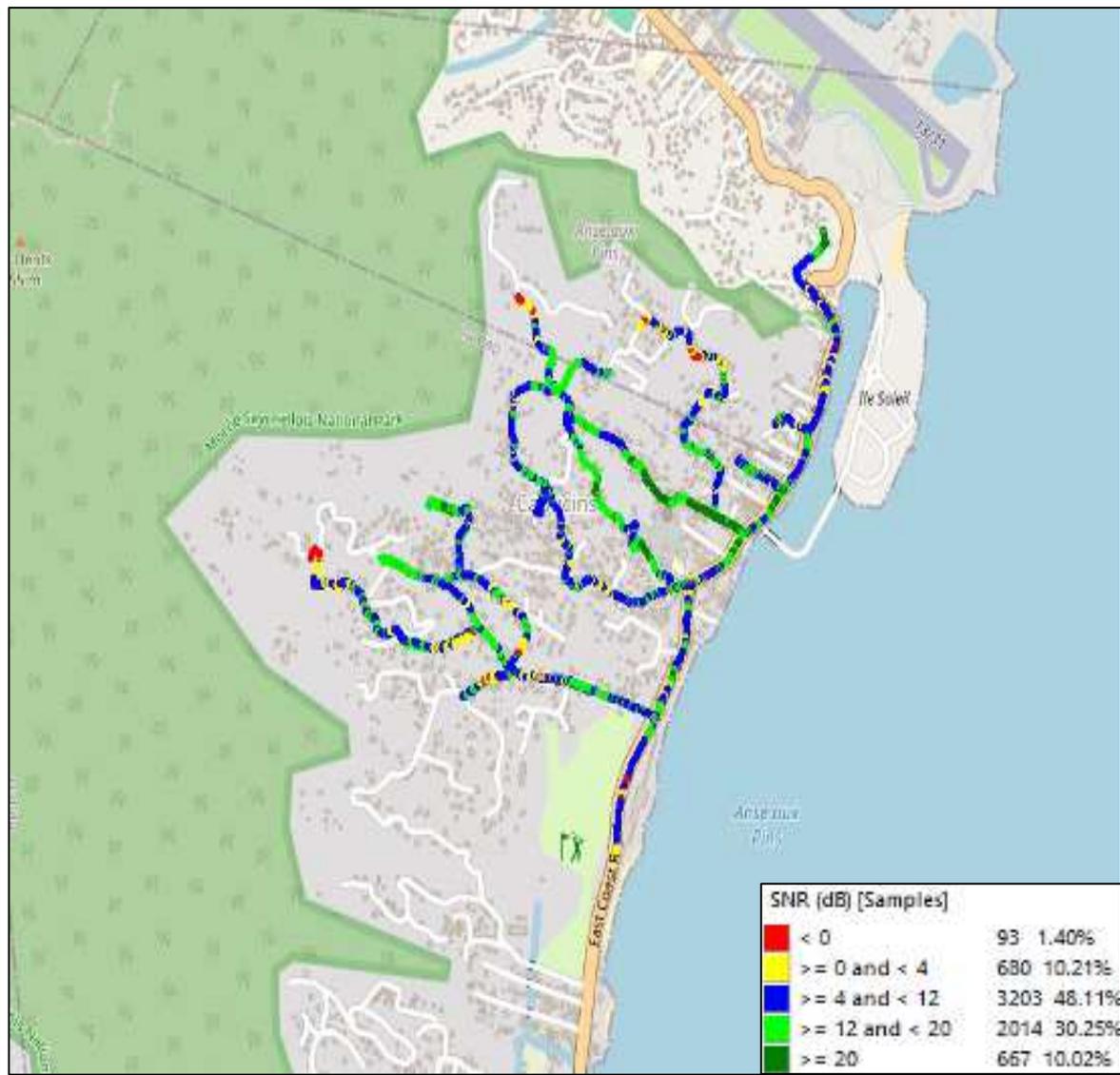
CWS Data 4G



Airtel Data 4G



CWS Data 4G



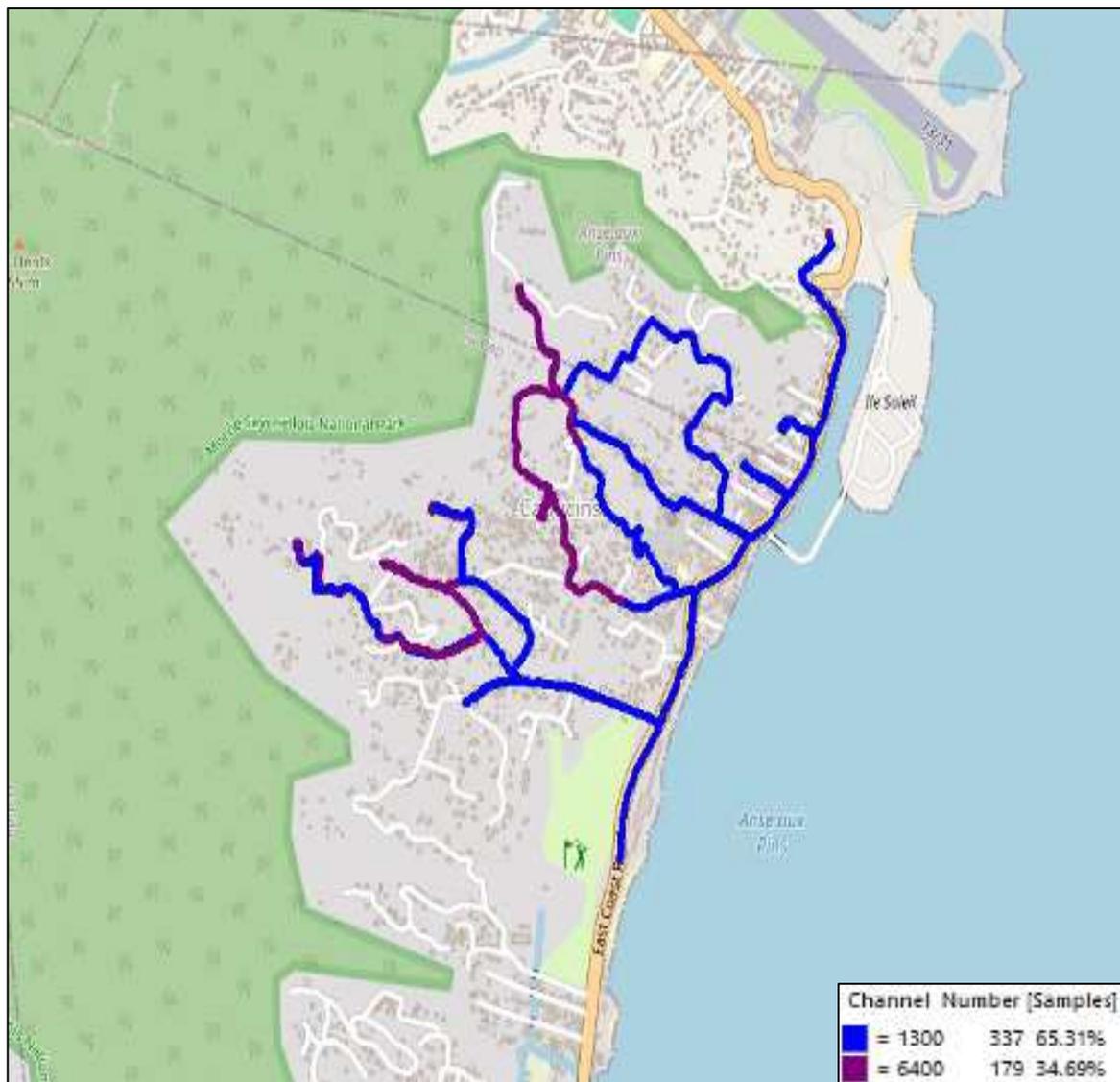
Airtel Data 4G



CWS Data 4G



Airtel Data 4G



CWS Data 4G



Phase-1 4G PREFERRED DATA TEST - CARRIER AGGREGATION PLOT

Airtel Data 4G



CWS Data 4G



Airtel Data 4G



CWS Data 4G



Airtel Data 4G



CWS Data 4G



Airtel Data 4G



CWS Data 4G



Negative Event Analysis

Phase-1 Call Drop & Call Attempt Failure Airtel , CWS Summary

Call Attempt Failure cause from Airtel	Count
Total Call Attempt Failure	0

Call Attempt Failure cause from CWS	Count
Total Call Attempt Failure	0

Call Drop cause from Airtel	Count
Total Call Drop	0

Call Drop cause from CWS	Count
Total Call Drop	0

Phase-2 Call Drop & Call Attempt Failure Airtel , CWS Summary

Call Attempt Failure cause from Airtel	Count
Total Call Attempt Failure	1
Network End	1

Call Attempt Failure cause from CWS	Count
Total Call Attempt Failure	0

Call Drop cause from Airtel	Count
Total Call Drop	0

Call Drop cause from CWS	Count
Total Call Drop	0

Phase-2 Call Attempt Failure Analysis 1 From MS5 Airtel MO

Time	System	Serving band	Call	1. best active RSCP	Time	Ch	SC	1. best a	Event ID	System	Transf. dir.	Time	Subchannel	Message name
1. 10:15:30.264	UMTS FDD	2100	Dr	5386.	10:14:50.02	3050	52	-7.4	16008.	RRCSM	Downlink	10:15:22.76	DCCH	MEASUREMENT_CONTROL
				5387.	10:14:50.63	3050	52	-69	16009.	RRCSM	Downlink	10:15:22.77	DCCH	MEASUREMENT_CONTROL
				5388.	10:14:50.63	3050	52	-4.3	16010.	RRCSM	Downlink	10:15:22.81	DCCH	DOWNLINK_DIRECT_TRANSFER
				5389.	10:14:51.10	3050	52	-69.2	16011.	L3SM	Downlink	10:15:22.81	DCCH	AUTHENTICATION_REQUEST
				5390.	10:14:51.10	3050	52	-4	16012.	RRCSM	Uplink	10:15:22.95	DCCH	UPLINK_DIRECT_TRANSFER
				5391.	10:15:22.22	10588	52	-80.8	16013.	L3SM	Uplink	10:15:22.95	DCCH	AUTHENTICATION_RESPONSE
				5392.	10:15:22.22	10588	52	-4.8	16014.	RRCSM	Downlink	10:15:23.06	DCCH	SECURITY_MODE_COMMAND
				5393.	10:15:22.45	10588	52	-79.6	16015.	RRCSM	Uplink	10:15:23.06	DCCH	SECURITY_MODE_COMPLETE
				5394.	10:15:22.45	10588	52	-6.5	16016.	RRCSM	Uplink	10:15:23.14	DCCH	UPLINK_DIRECT_TRANSFER
				5395.	10:15:22.96	10588	52	-79.1	16017.	L3SM	Uplink	10:15:23.14	DCCH	SETUP
				5396.	10:15:22.96	10588	52	-3.7	16018.	RRCSM	Downlink	10:15:23.16	DCCH	DOWNLINK_DIRECT_TRANSFER
				5397.	10:15:23.41	10588	52	-85.6	16019.	L3SM	Downlink	10:15:23.16	DCCH	IDENTITY_REQUEST
				5398.	10:15:23.41	10588	52	-5.9	16020.	RRCSM	Uplink	10:15:23.16	DCCH	UPLINK_DIRECT_TRANSFER
				5399.	10:15:24.14	10588	52	-80.4	16021.	L3SM	Uplink	10:15:23.16	DCCH	IDENTITY_RESPONSE
				5400.	10:15:24.14	10588	52	-4.5	16022.	RRCSM	Downlink	10:15:23.27	DCCH	DOWNLINK_DIRECT_TRANSFER
				5401.	10:15:24.65	10588	52	-76.5	16023.	L3SM	Downlink	10:15:23.27	DCCH	CALL_PROCEEDING
				5402.	10:15:24.65	10588	52	-3.5	16024.	RRCSM	Downlink	10:15:23.45	DCCH	RADIO_BEARER_SETUP
				5403.	10:15:25.13	10588	52	-81	16025.	RRCSM	Uplink	10:15:23.81	DCCH	RADIO_BEARER_SETUP_COMPLETE
				5404.	10:15:25.13	10588	52	-4.8	16026.	RRCSM	Uplink	10:15:23.96	DCCH	MEASUREMENT_REPORT
				5405.	10:15:25.70	10588	52	-78.5	16027.	RRCSM	Uplink	10:15:24.07	DCCH	MEASUREMENT_REPORT
				5406.	10:15:25.70	10588	52	-3.9	16028.	RRCSM	Uplink	10:15:24.07	DCCH	MEASUREMENT_REPORT
				5407.	10:15:26.14	10588	52	-77.3	16029.	RRCSM	Downlink	10:15:24.10	DCCH	RADIO_BEARER_RECONFIGURATION
				5408.	10:15:26.14	10588	52	-3.2	16030.	RRCSM	Uplink	10:15:24.14	DCCH	RADIO_BEARER_RECONFIGURATION_CO
				5409.	10:15:26.91	10588	52	-73.4	16031.	RRCSM	Downlink	10:15:24.18	DCCH	DOWNLINK_DIRECT_TRANSFER
				5410.	10:15:26.91	10588	52	-3.8	16032.	L3SM	Downlink	10:15:24.18	DCCH	PROGRESS
				5411.	10:15:27.14	10588	52	-78.4	16033.	RRCSM	Uplink	10:15:25.21	DCCH	MEASUREMENT_REPORT
				5412.	10:15:27.14	10588	52	-4.7	16034.	RRCSM	Downlink	10:15:25.46	DCCH	ACTIVE_SET_UPDATE
				5413.	10:15:27.95	10588	52	-80.8	16035.	RRCSM	Uplink	10:15:25.47	DCCH	ACTIVE_SET_UPDATE_COMPLETE
				5414.	10:15:27.95	10588	52	-9.1	16036.	RRCSM	Downlink	10:15:25.74	DCCH	MEASUREMENT_CONTROL
				5415.	10:15:28.15	10588	52	-73.1	16037.	RRCSM	Uplink	10:15:27.15	DCCH	MEASUREMENT_REPORT
				5416.	10:15:28.15	10588	52	-4.7	16038.	RRCSM	Downlink	10:15:27.38	DCCH	ACTIVE_SET_UPDATE
				5417.	10:15:28.91	10588	52	-73.6	16039.	RRCSM	Uplink	10:15:27.41	DCCH	ACTIVE_SET_UPDATE_COMPLETE
				5418.	10:15:28.91	10588	52	-4.9	16040.	RRCSM	Downlink	10:15:27.62	DCCH	MEASUREMENT_CONTROL
				5419.	10:15:29.55	10588	52	-77.1	16041.	RRCSM	Downlink	10:15:30.26	DCCH	DOWNLINK_DIRECT_TRANSFER

Analysis:

- This call failure event occurred on short call at 10:15:30:264 time when UE was latched with 3G network.
- After sending "CM Service Request" message to core network, then core network responds with "Call Proceeding" message. After that call setup has been failed.
- During the failure, UE was latched with PSC 79.1 and RF condition RSCP -3.7 dBm good but Ec/No -16 dB are very good.
- Need to check MT.

Phase-1 Call Attempt Failure Analysis 1 From MS6 Airtel MT

	Time	Band	Band (MHz)	Ch	PCI	RSRP	SNR	▲	Event ID	System	Transf. dir.	Time	Subchannel	Message name
6480.	10:15:10.030	B20	800	6400	58	-99.8			13143.	L3SM	LTE FDD	Uplink	10:15:29.331	ESM_INFORMATION_RESPONSE
6481.	10:15:10.030						7		13144.	RRCSM	LTE FDD	Uplink	10:15:29.331	ULInformationTransfer
6482.	10:15:11.662	B20	800	6400	58	-100.1			13145.	RRCSM	LTE FDD	Downlink	10:15:29.448	SecurityModeCommand
6483.	10:15:11.662						3.6		13146.	RRCSM	LTE FDD	Uplink	10:15:29.449	SecurityModeComplete
6484.	10:15:12.591	B20	800	6400	58	-91.6			13147.	RRCSM	LTE FDD	Downlink	10:15:29.466	UECapabilityEnquiry
6485.	10:15:12.591						13.5		13148.	RRCSM	LTE FDD	Uplink	10:15:29.469	UECapabilityInformation
6486.	10:15:14.254	B20	800	6400	58	-90.9			13149.	RRCSM	UMTS FDD	Uplink	10:15:29.469	INTER_RAT_HANDOVER_INFO
6487.	10:15:14.254						9.2		13150.	RRCSM	LTE FDD	Downlink	10:15:29.517	RRCCConnectionReconfiguration
6488.	10:15:15.222	B20	800	6400	58	-96.9			13151.	RRCSM	LTE FDD	Uplink	10:15:29.532	RRCCConnectionReconfigurationComplete
6489.	10:15:15.222						4.4		13152.	L3SM	LTE FDD	Downlink	10:15:29.533	ACTIVATE_DEFAULT_EPS_BEARER_CONTEXT_REQUEST
6490.	10:15:16.430	B20	800	6400	58	-98.6			13153.	L3SM	LTE FDD	Downlink	10:15:29.533	ATTACH_ACCEPT
6491.	10:15:16.430						6.1		13154.	L3SM	LTE FDD	Uplink	10:15:29.537	ATTACH_COMPLETE
6492.	10:15:17.909	B20	800	6400	58	-95.3			13155.	L3SM	LTE FDD	Uplink	10:15:29.537	ACTIVATE_DEFAULT_EPS_BEARER_CONTEXT_ACCEPT
6493.	10:15:17.909						-2.7		13156.	RRCSM	LTE FDD	Uplink	10:15:29.537	ULInformationTransfer
6494.	10:15:19.270	B20	800	6400	58	-94.5			13157.	RRCSM	LTE FDD	Downlink	10:15:29.574	DLInformationTransfer
6495.	10:15:19.270						9.9		13158.	L3SM	LTE FDD	Downlink	10:15:29.574	EMM_INFORMATION
6496.	10:15:20.270	B20	800	6400	58	-94.5			13159.	RRCSM	LTE FDD	Uplink	10:15:29.615	MeasurementReport
6497.	10:15:20.270						7.5		13160.	RRCSM	LTE FDD	Downlink	10:15:29.636	RRCCConnectionReconfiguration
6498.	10:15:21.962	B20	800	6400	58	-94.1			13161.	RRCSM	LTE FDD	Uplink	10:15:29.641	RRCCConnectionReconfigurationComplete
6499.	10:15:21.962						3.9		13162.	RRCSM	LTE FDD	Uplink	10:15:29.975	MeasurementReport
6500.	10:15:22.594	B20	800	6400	58	-94.6			13163.	RRCSM	LTE FDD	Downlink	10:15:30.008	RRCCConnectionReconfiguration
6501.	10:15:22.594						9.5		13164.	RRCSM	LTE FDD	Uplink	10:15:30.018	RRCCConnectionReconfigurationComplete
6502.	10:15:26.071								13165.	RRCSM	LTE FDD	Downlink	10:15:32.011	RRCCConnectionReconfiguration
6503.	10:15:29.199	B3	1800	1300	39	-96.1			13166.	RRCSM	LTE FDD	Uplink	10:15:32.023	RRCCConnectionReconfigurationComplete
6504.	10:15:29.703	B3	1800	1300	39	-94.3			13167.	RRCSM	LTE FDD	Uplink	10:15:32.163	MeasurementReport
6505.	10:15:29.703						13.2		13168.	RRCSM	LTE FDD	Downlink	10:15:32.186	RRCCConnectionReconfiguration
6506.	10:15:30.190	B3	1800	1300	39	-97			13169.	RRCSM	LTE FDD	Uplink	10:15:32.187	RRCCConnectionReconfigurationComplete
6507.	10:15:30.190						15		13170.	RRCSM	LTE FDD	Uplink	10:15:32.203	MeasurementReport
6508.	10:15:30.703	B3	1800	1300	39	-99.2			13171.	RRCSM	LTE FDD	Downlink	10:15:32.230	RRCCConnectionReconfiguration
6509.	10:15:30.703						10.3		13172.	RRCSM	LTE FDD	Uplink	10:15:32.241	RRCCConnectionReconfigurationComplete
6510.	10:15:31.246	B3	1800	1300	39	-97.3			13173.	RRCSM	LTE FDD	Downlink	10:15:34.233	RRCCConnectionReconfiguration
6511.	10:15:31.246						18.4		13174.	RRCSM	LTE FDD	Uplink	10:15:34.248	RRCCConnectionReconfigurationComplete
6512.	10:15:31.786	B3	1800	1300	39	-97.2			13175.	RRCSM	LTE FDD	Uplink	10:15:34.403	MeasurementReport
6513.	10:15:31.786						14.7		13176.	RRCSM	LTE FDD	Uplink	10:15:34.403	MeasurementReport
6514.	10:15:32.283	B3	1800	1300	39	-91.8			13177.	RRCSM	LTE FDD	Downlink	10:15:34.443	RRCCConnectionReconfiguration
6515.	10:15:32.283						17.3		13178.	RRCSM	LTE FDD	Uplink	10:15:34.445	RRCCConnectionReconfigurationComplete

Analysis:

- On MT End, During the setup fail, UE was latched with PCI 39 and RF condition RSRP -97 dBm is and SINR 15 which is good.
- As per the analysis call failure happened from network end.

THANKS