AFRICAN TELECOMMUNICATIONS UNION
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AFRICAN TELECOMMUNICATIONS UNION
UNION AFRICAINE DES TÉLÉCOMMUNICATIONS
ITU
2nd frequency coordination meeting
on the GE84 Plan Optimization for Africa
Deuxième réunion de coordination des fréquences
sur l'optimisation du Plan GE84 pour l'Afrique
28 June - 2 July 2021
GE84Optimization tool
New feature
By Andrea Manara
Broadcasting Service Division

Export Affected

Job Input (click to show)

Configuration Information (only results with Nuisance Field Strength (NFS) >= 30 dB (µV/m) will be displayed):

Consider Tip TV also Polarization Discrimination (dB) 10

Job Output

Input notice file validated by th

Ignore self interference Ign

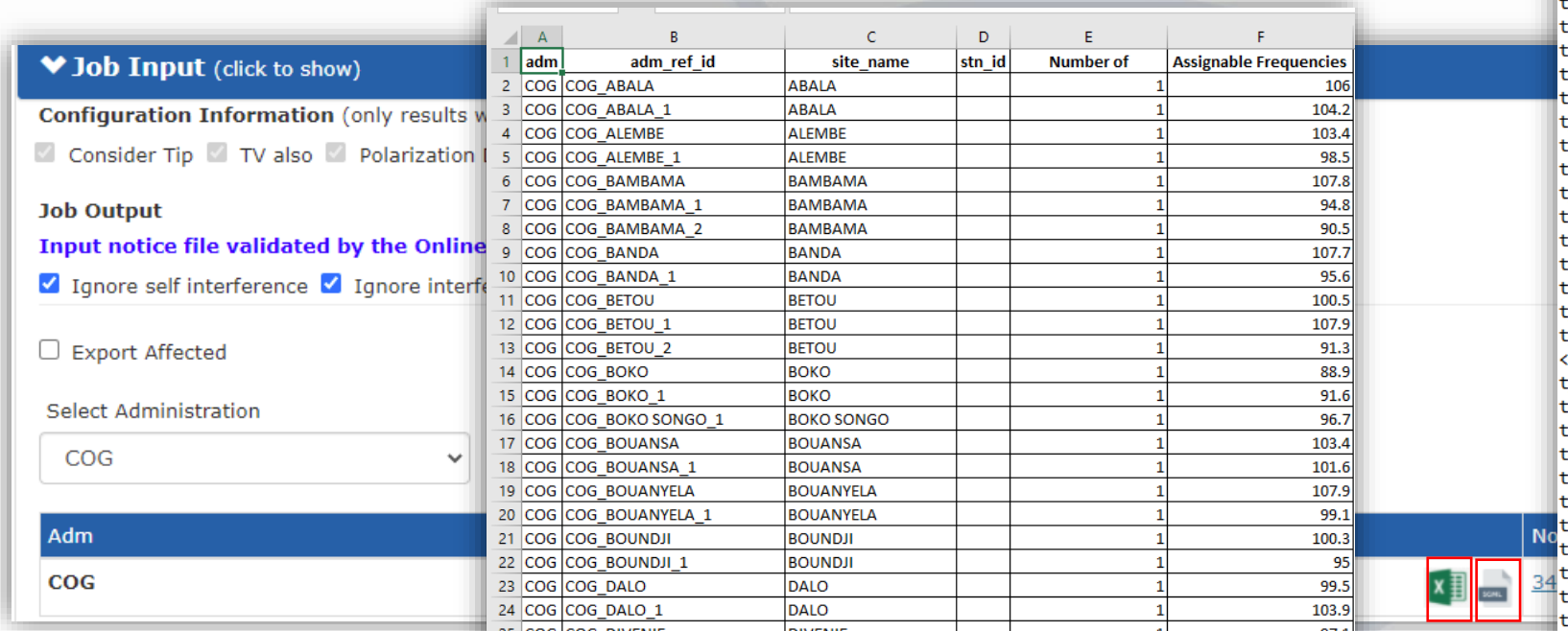
Export Affected

Select Administration

F

	A	B	C	D	E	F	G	H	I	J	K	
1	Adm(Interferer)	Assgn_id(Interferer)	site_name(Interferer)	Frequency(Interferer)	Adm(Affected)	Assgn_id(Affected)	Frequency(Affected)	site_name(Affected)	intent(Affected)	Distance[Km]	NFS [dBuV/m]	Coordi
2	ALG	1089	CHREA	100.9	F	84021910	100.9	TOULON SICIE	RECORDED	782	54.96	
3	MAU	8828	SIGNAL MOUNTAIN	90.5	F	84023503	90.4	PITON TEXTOR	RECORDED	223	56.06	
4	MAU	8829	JURANCON	90.5	F	84023503	90.4	PITON TEXTOR	RECORDED	209	60.28	
5	MAU	8829	JURANCON	90.5	F	94002994	90.4	LE PORT	RECORDED	234	56.63	
6	MAU	8832	PTE DU DIABLE	98.7	F	84023538	98.6	SALAZIE 3	RECORDED	243	54.9	
7	MAU	8833	PTE DU DIABLE	89.9	F	94002991	90	S JOSEPH	RECORDED	251	55.91	
8	MAU	8834	PTE DU DIABLE	89	F	84023577	89	PITON HYACINTHE	RECORDED	251	56.67	
9	MAU	8835	PTE DU DIABLE	105.3	F	84023588	105.3	S JOSEPH GREGUES	RECORDED	250	58.01	
10	MAU	8835	PTE DU DIABLE	105.3	F	84101573	105.2	S ANDRE	RECORDED	237	55.36	
11	MAU	8836	PTE DU DIABLE	100.2	F	94003087	100.1	PLAINE DES PALMISTES	RECORDED	242	55.34	
12	MAU	8838	PTE DU DIABLE	107.7	F	94003158	107.7	S FRANCOIS	RECORDED	251	66.13	
13	MAU	8839	SIGNAL MOUNTAIN	96.8	F	84023539	96.9	PITON TEXTOR	RECORDED	223	56.06	
14	MAU	8840	JURANCON	96.8	F	84023485	96.7	S DENIS	RECORDED	215	59.19	
15	MAU	8840	JURANCON	96.8	F	84023539	96.9	PITON TEXTOR	RECORDED	209	60.28	
16	MAU	8843	PTE DU DIABLE	102.7	F	84023501	102.6	PITON TEXTOR	RECORDED	241	55.44	
17	MAU	8844	PTE DU DIABLE	95.8	F	84023500	95.9	PITON TEXTOR	RECORDED	241	55.44	
18	MAU	8844	PTE DU DIABLE	95.8	F	112126704	95.7	SAINTE SUZANNE	RECORDED	235	55.41	
19	MAU	8844	PTE DU DIABLE	95.8	F	84023520	95.8	S JOSEPH	RECORDED	244	68.14	
20	MAU	8845	PTE DU DIABLE	94.6	F	84023484	94.5	S FRANCOIS	RECORDED	251	54.13	
21	MAU	8845	PTE DU DIABLE	94.6	F	84023548	94.7	PITON HYACINTHE	RECORDED	251	54.67	
22	MAU	8846	PTE DU DIABLE	92.7	F	84023504	92.6	PITON TEXTOR	RECORDED	241	55.44	
23	MAU	8846	PTE DU DIABLE	92.7	F	84023580	92.7	SALAZIE CIRQUE	RECORDED	252	56.11	
24	MAU	8847	PTE DU DIABLE	106.8	F	84023480	106.7	S JOSEPH 3	RECORDED	253	55.79	
25	MAU	8847	PTE DU DIABLE	106.8	F	84023593	106.8	S LEU	RECORDED	270	64.04	
26	MAU	8847	PTE DU DIABLE	106.8	F	94003147	106.7	POINTE DES CASCADES	RECORDED	222	56.66	
27	MAU	8848	PTE DU DIABLE	101.2	F	84023513	101.3	S ROSE	RECORDED	227	56.55	
28	MAU	8848	PTE DU DIABLE	101.2	F	84023549	101.3	PITON HYACINTHE	RECORDED	251	54.67	
29	MDG	8854	KIRARO MENA	104	F	84023436	104	MAMOUDZOU	RECORDED	618	55.88	
30	MDG	8867	B MAKOTAOLANA	104	F	84023436	104	MAMOUDZOU	RECORDED	426	71.12	
31	MDG	8877	ANOSIBE	96.9	F	84023509	96.9	S LEU	RECORDED	759	56.92	
32	MDG	8888	AMPOSINAMBO	103.9	F	84023602	103.9	LE TREMBLET	RECORDED	807	59.34	
33	MDG	8897	MORAMANGA	107.3	F	94003154	107.3	S FRANCOIS	RECORDED	784	55.69	
34												

Export Assignable



	A	B	C	D	E	F
1	adm	adm_ref_id	site_name	stn_id	Number of	Assignable Frequencies
2	COG	COG_ABALA	ABALA		1	106
3	COG	COG_ABALA_1	ABALA		1	104.2
4	COG	COG_ALEMBE	ALEMBE		1	103.4
5	COG	COG_ALEMBE_1	ALEMBE		1	98.5
6	COG	COG_BAMBAMA	BAMBAMA		1	107.8
7	COG	COG_BAMBAMA_1	BAMBAMA		1	94.8
8	COG	COG_BAMBAMA_2	BAMBAMA		1	90.5
9	COG	COG_BANDA	BANDA		1	107.7
10	COG	COG_BANDA_1	BANDA		1	95.6
11	COG	COG_BETOU	BETOU		1	100.5
12	COG	COG_BETOU_1	BETOU		1	107.9
13	COG	COG_BETOU_2	BETOU		1	91.3
14	COG	COG_BOKO	BOKO		1	88.9
15	COG	COG_BOKO_1	BOKO		1	91.6
16	COG	COG_BOKO SONGO_1	BOKO SONGO		1	96.7
17	COG	COG_BOUANSA	BOUANSA		1	103.4
18	COG	COG_BOUANSA_1	BOUANSA		1	101.6
19	COG	COG_BOUANYELA	BOUANYELA		1	107.9
20	COG	COG_BOUANYELA_1	BOUANYELA		1	99.1
21	COG	COG_BOUNDJI	BOUNDJI		1	100.3
22	COG	COG_BOUNDJI_1	BOUNDJI		1	95
23	COG	COG_DALO	DALO		1	99.5
24	COG	COG_DALO_1	DALO		1	103.9
25	COG	COG_DIVENIE	DIVENIE		1	97.1
26	COG	COG_DIVENIE_1	DIVENIE		1	105.7
27	COG	COG_DJAMBALA	DJAMBALA		1	100.5
28	COG	COG_DJAMBALA_1	DJAMBALA		1	102.8
29	COG	COG_DJAMBALA_2	DJAMBALA		1	103.4
30	COG	COG_DJAMBALA_3	DJAMBALA		1	98.5
31	COG	COG_DJAMBALA_4	DJAMBALA		1	88.2
32	COG	COG_DOLISIE	DOLISIE		1	95
33	COG	COG_DOLISIE_1	DOLISIE		1	100.3
34	COG	COG_DOLISIE_2	DOLISIE		1	87.9
35	COG	COG_DONGOU	DONGOU		1	102
36	COG	COG_DONGOU_1	DONGOU		1	97.5
37	COG	COG_ENYELLE	ENYELLE		1	104.9
38	COG	COG_ENYELLE_1	ENYELLE		1	98.9
39	COG	COG_ENYELLE_2	ENYELLE		1	97.8

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t_notice_type=T01
t_fragment=GE84
t_action=ADD
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t_lat=-012000
t_site_name=ABALA
t_ant_dir=ND
t_erp_h_dbw=30
t_hgt_agl=32
t_site_alt=400
t_bdwdth=300.000
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t_tran_sys=4
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t_remarks=A/86
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t_eff_hgt@azm10=15
t_eff_hgt@azm20=11
t_eff_hgt@azm30=3
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t_eff_hgt@azm50=8
t_eff_hgt@azm60=15
t_eff_hgt@azm70=19
t_eff_hgt@azm80=19
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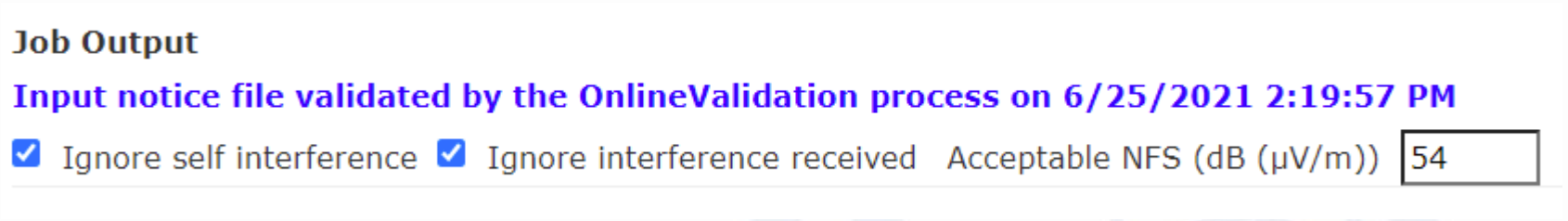
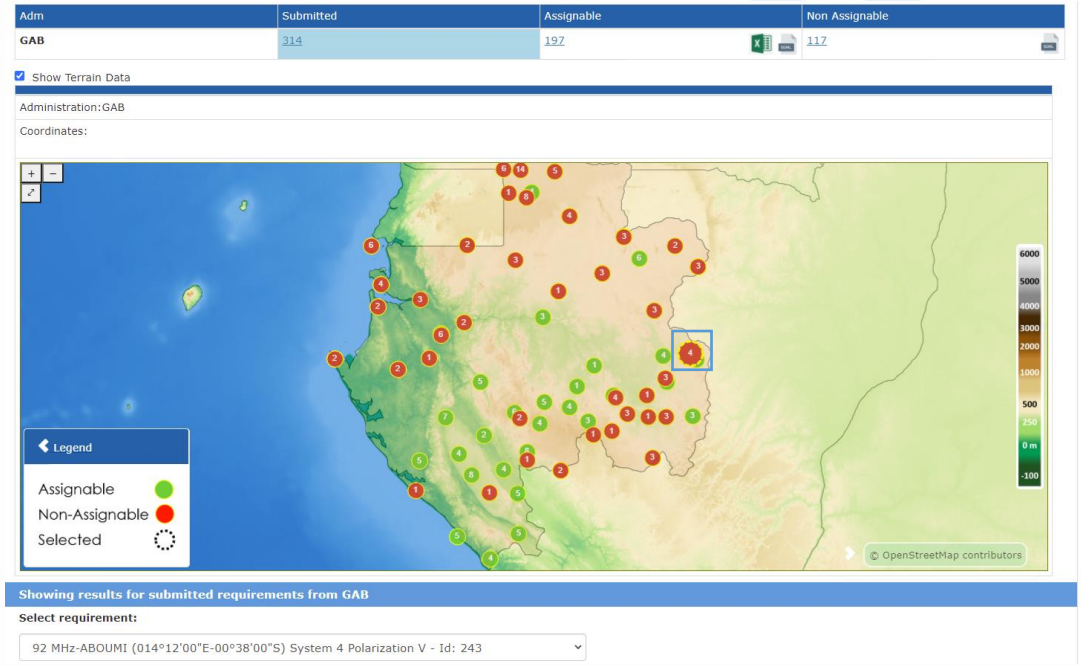
t_eff_hgt@azm180=-58
t_eff_hgt@azm190=-38
t_eff_hgt@azm200=-16
```

Export Assignable (FLEX)

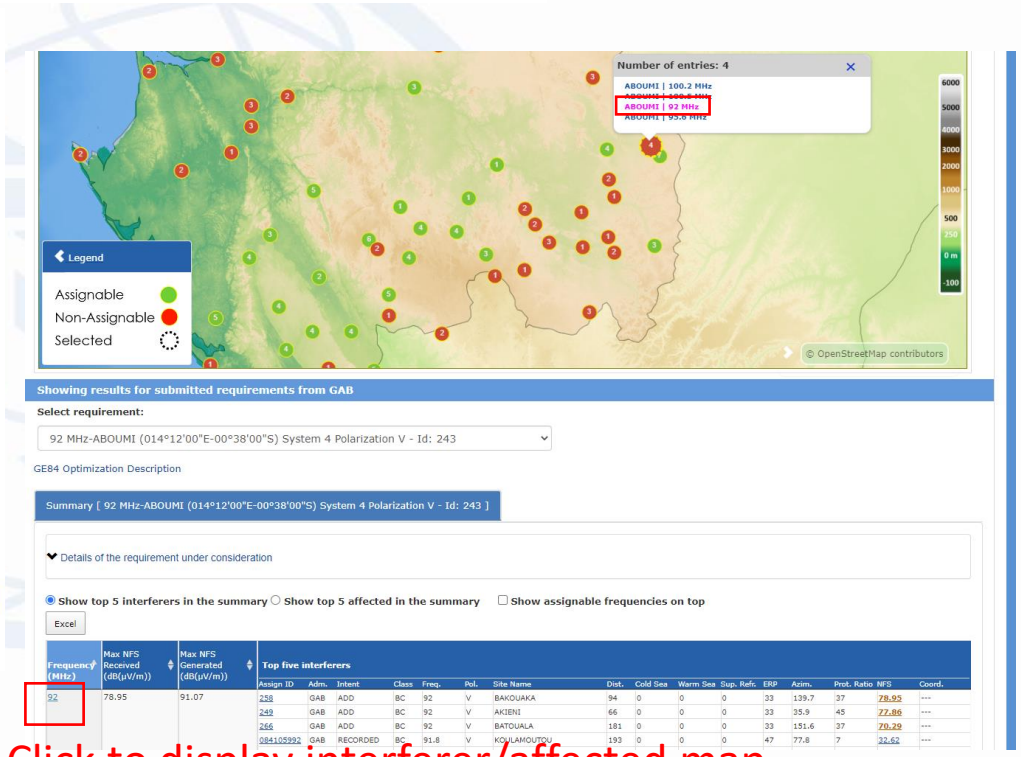
	A	B	C	D	E	F
1	adm	adm_ref_id	site_name	stn_id	Number of Assignable Frequencies	Assignable Frequencies
2	GNE	BR_BASUALA	BASUALA	FLEX	2	107.2
3	GNE	BR_BATA	BATA	FLEX	42	88.4;88.6;88.8;88.9;89.3;89.5;89.6;91.4;91.5;92.1;92.5;92.7;94.9;95.8;95.9;96.3;96.4;97.3;98.2;98.6;98.7;98.9;99;99.1;99.2;101;101.4;101.5;101.7;102.2;102.4;102.6;102.7;104.6;105;105.1;105.3;106.2;106.3;107.8;107.9
4	GNE	BR_EBEBIYING	EBEBIYING	FLEX	2	107.9
5	GNE	BR_MICOMESENG	MICOMESENG	FLEX	9	92;93.4;96.6;98.6;99;107;107.8;107.9
6	GNE	BR_MOKA	MOKA	FLEX	2	107.2
7	GNE	BR_MONGOMO	MONGOMO	FLEX	6	90;90.1;99.7;106.8;107.9
8	GNE	BR_NIEFANG	NIEFANG	FLEX	25	88.4;90;90.1;91.4;91.5;93.1;93.2;93.4;96.3;96.4;96.6;99;99.1;99.6;99.7;101.5;103.1;103.2;103.6;105.1;106.8;107;107.8;107.9
9	GNE	BR_PT_IRADIER	PT IRADIER	FLEX	23	87.5;87.6;88.3;88.4;90.1;91.8;92.4;94.3;95;97.9;98.3;98.5;99.7;99.9;101.8;103.2;103.4;104.3;105.4;105.6;106.8;107;107.9
10	GNE	BR_RIO_BENITO	RIO BENITO	FLEX	53	88.3;88.4;88.8;89.1;89.3;89.5;89.6;90;90.1;91.4;91.5;91.8;92;92.2;92.5;92.7;93.1;94.9;95;95.8;95.9;96.3;96.6;97.9;98.2;98.3;98.9;99;99.1;99.2;99.7;99.9;100.1;101.4;101.7;101.8;102;102.2;102.6;102.7;103.1;103.2;105;105.1;105.3;105.4;105.6;106.1;106.2;106.8;107.2;107.8
11	GNE	BR_RIO_CAMPO	RIO CAMPO	FLEX	35	89.1;89.3;89.5;90;90.1;92.1;92.2;92.5;93.1;93.2;94.2;95.8;96.3;96.4;98.6;98.7;98.9;99;99.1;99.6;99.7;100.9;101;102.2;102.4;102.6;103.1;103.2;103.4;104.6;105.7;106.2;106.8;107.9
12	GNE	BR_S.ISABEL	S.ISABEL	FLEX	17	88.3;91.4;92.5;94.6;96.5;97.9;99;99.7;99.9;101.4;102.3;103.2;103.3;104.5;105;107.2

Assignable/Non assignable Map



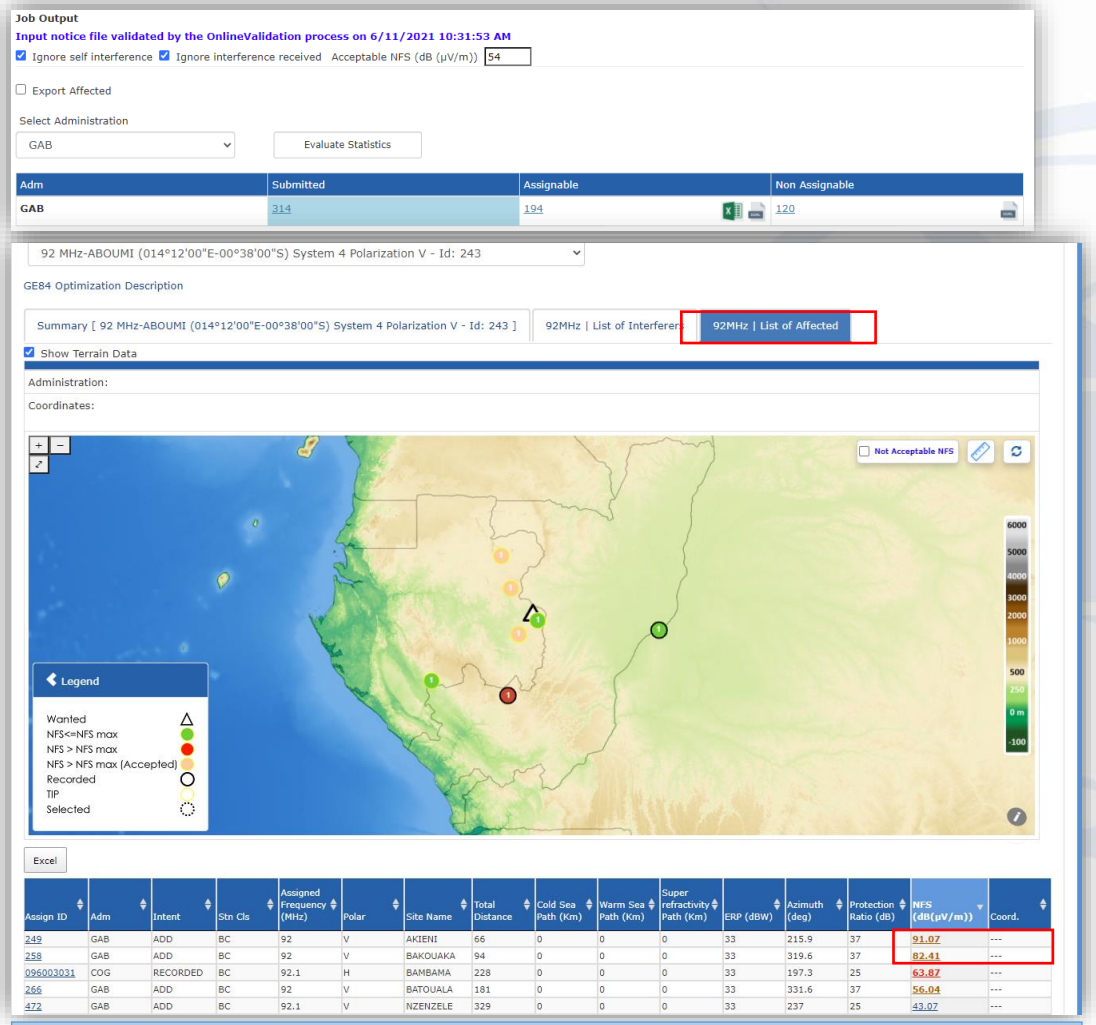


Navigation via drop down list

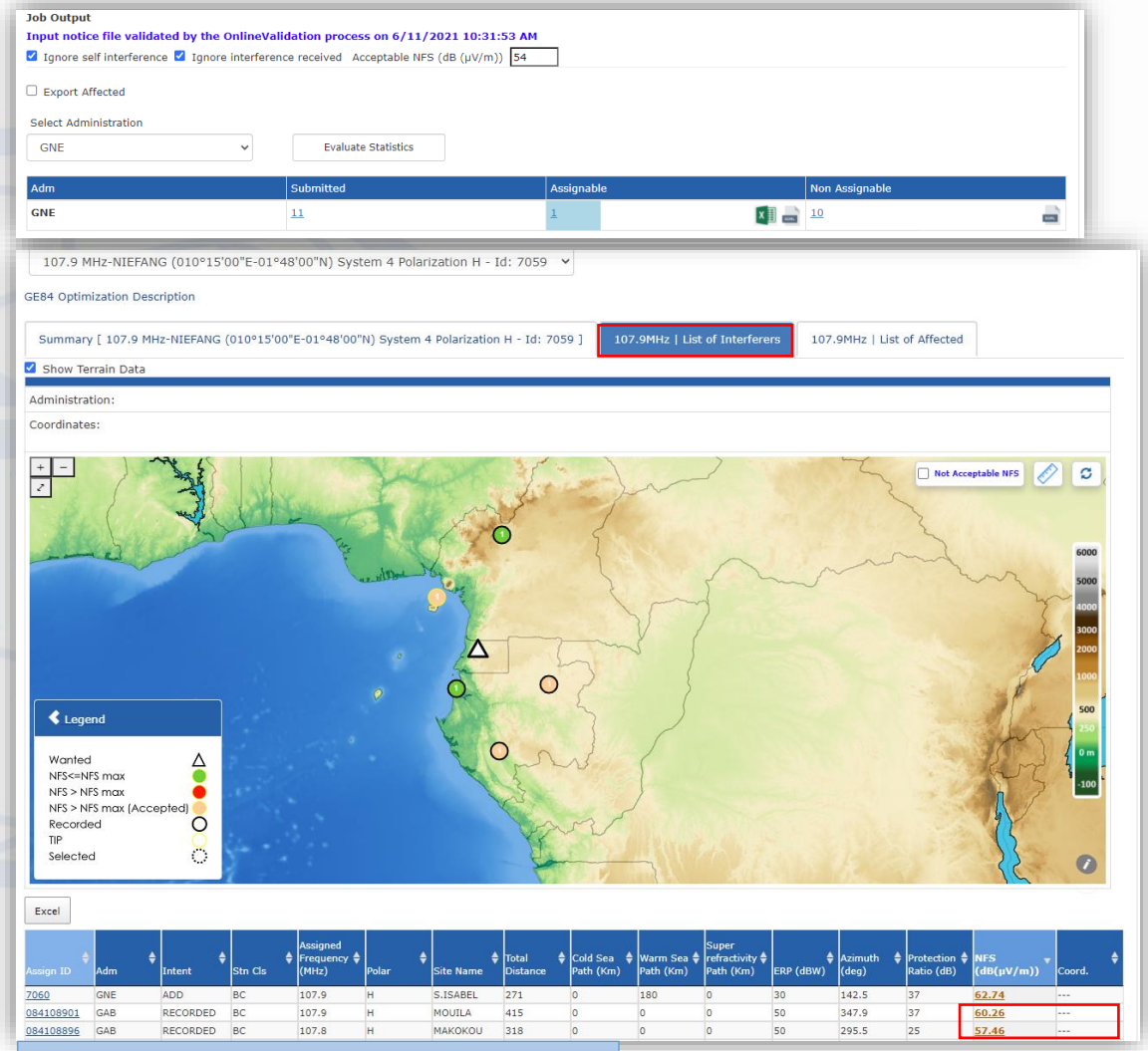


Click to display interferer/affected map

Interferers/Affected Map

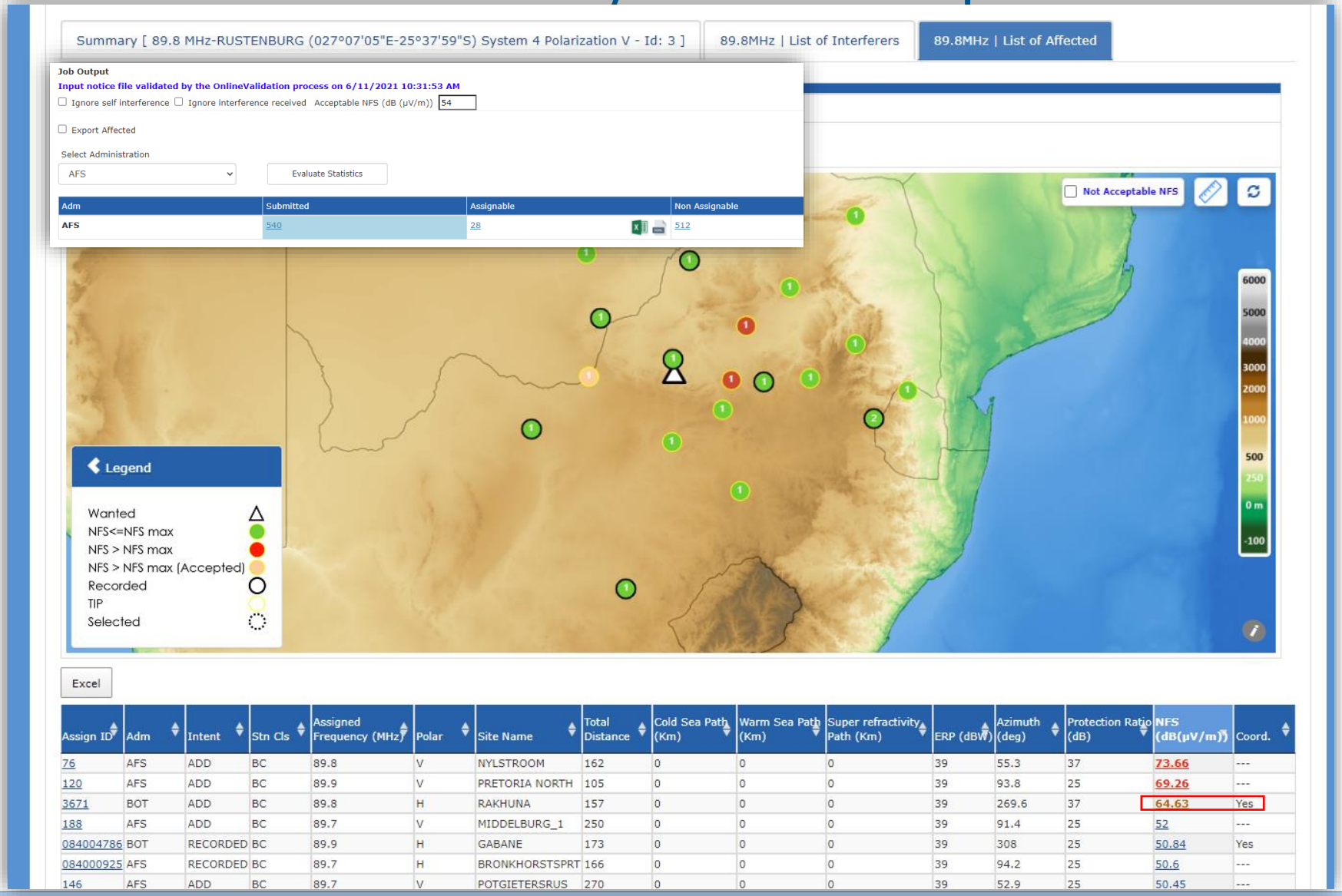


Ignore self interference (both for interferers/affected)



Ignore interference received

Interferers/Affected Map

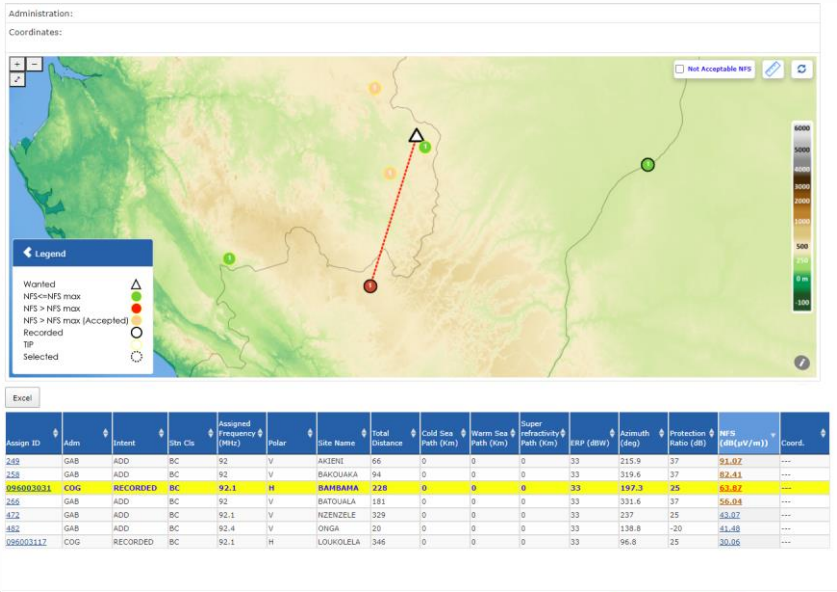


Excel

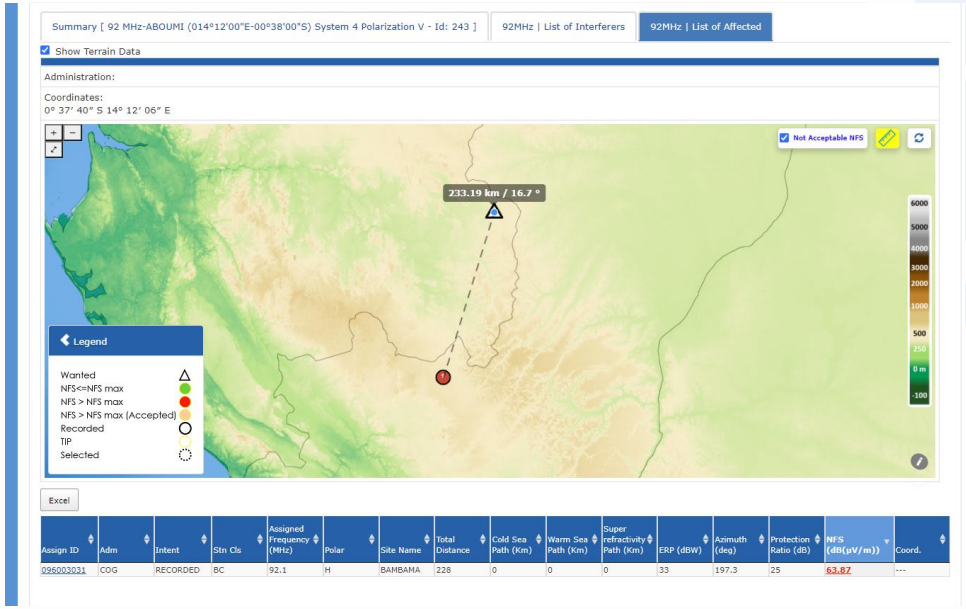
Assign ID	Adm	Intent	Stn Cls	Assigned Frequency (MHz)	Polar	Site Name	Total Distance	Cold Sea Path (Km)	Warm Sea Path (Km)	Super refractivity Path (Km)	ERP (dBW)	Azimuth (deg)	Protection Ratio (dB)	NFS (dB(µV/m))	Coord.
76	AFS	ADD	BC	89.8	V	NYLSTROOM	162	0	0	0	39	55.3	37	73.66	---
120	AFS	ADD	BC	89.9	V	PRETORIA NORTH	105	0	0	0	39	93.8	25	69.26	---
3671	BOT	ADD	BC	89.8	H	RAKHUNA	157	0	0	0	39	269.6	37	64.63	Yes
188	AFS	ADD	BC	89.7	V	MIDDELBURG_1	250	0	0	0	39	91.4	25	52	---
084004786	BOT	RECORDED	BC	89.9	H	GABANE	173	0	0	0	39	308	25	50.84	Yes
084000925	AFS	RECORDED	BC	89.7	H	BRONKHORSTSPRT	166	0	0	0	39	94.2	25	50.6	---
146	AFS	ADD	BC	89.7	V	POTGIETERSRUS	270	0	0	0	39	52.9	25	50.45	---

Requirement Coordinated!! Interference to requirements/assignments from a given administration is accepted.

Interferers/Affected Map



Assign ID	Adm	Intent	Stn Cls	Assigned Frequency (MHz)	Polar	Site Name	Total Distance	Cold Sea Path (Km)	Warm Sea Path (Km)	Super refractivity Path (Km)	ERP (dBW)	Azimuth (deg)	Protection Ratio (dB)	NFS (dB(µV/m))	Coord.
249	GAB	ADD	BC	92	V	AKIENI	66	0	0	0	33	215.9	37	91.07	---
258	GAB	ADD	BC	92	V	BAKOUAKA	94	0	0	0	33	319.6	37	82.41	---
096003031	COG	RECORDED	BC	92.1	H	BAMBAMA	228	0	0	0	33	197.3	25	63.87	---
266	GAB	ADD	BC	92	V	BATOUALA	181	0	0	0	33	331.6	37	56.04	---
472	GAB	ADD	BC	92.1	V	NZENZELE	329	0	0	0	33	237	25	43.07	---
482	GAB	ADD	BC	92.4	V	ONGA	20	0	0	0	33	138.8	-20	41.48	---
096003117	COG	RECORDED	BC	92.1	H	LOUKOLELA	346	0	0	0	33	96.8	25	30.06	---



Assign ID	Adm	Intent	Stn Cls	Assigned Frequency (MHz)	Polar	Site Name	Total Distance	Cold Sea Path (Km)	Warm Sea Path (Km)	Super refractivity Path (Km)	ERP (dBW)	Azimuth (deg)	Protection Ratio (dB)	NFS (dB(µV/m))	Coord.
096003031	COG	RECORDED	BC	92.1	H	BAMBAMA	228	0	0	0	33	197.3	25	63.87	---

Right mouse click to:

- From the table identify station in the map
- From the map identify station in the table

Filter Not acceptable NFS

Measurement tool

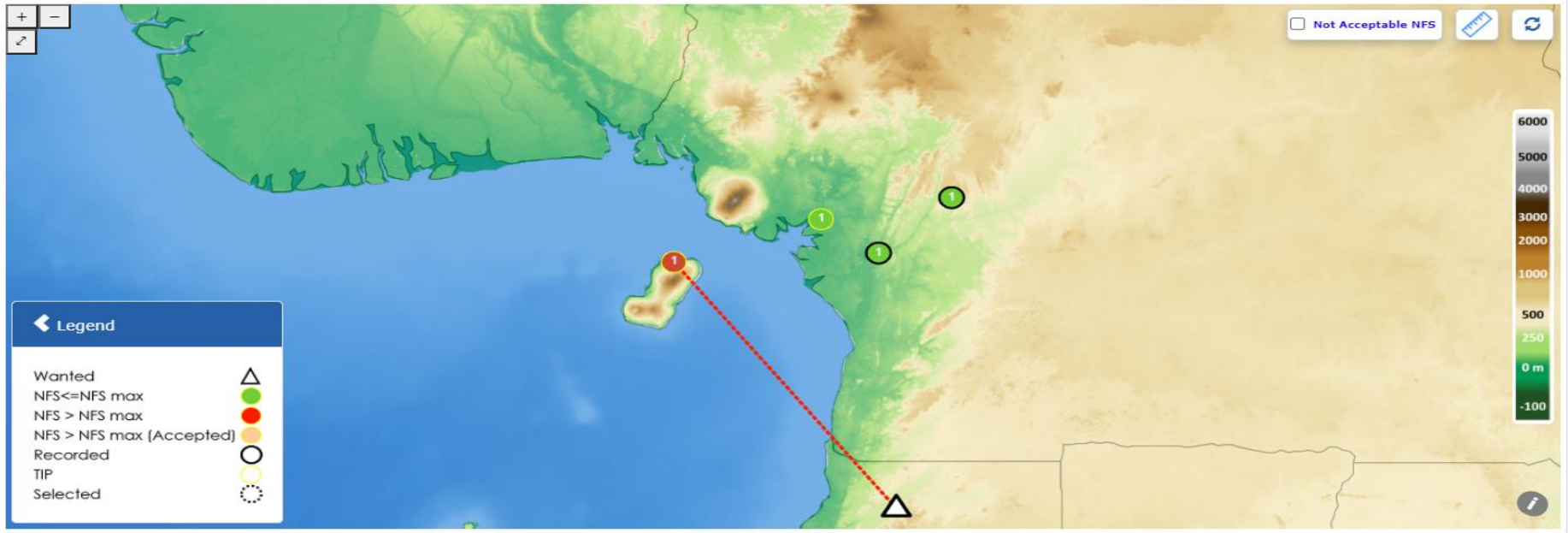
Interferers/Affected Map – P1812 calculations

Summary [107.9 MHz-NIEFANG (010°15'00"E-01°48'00"N) System 4 Polarization H - Id: 7262] | 107.9MHz | List of Interferers | 107.9MHz | List of Affected

Show Terrain Data

Administration:

Coordinates:

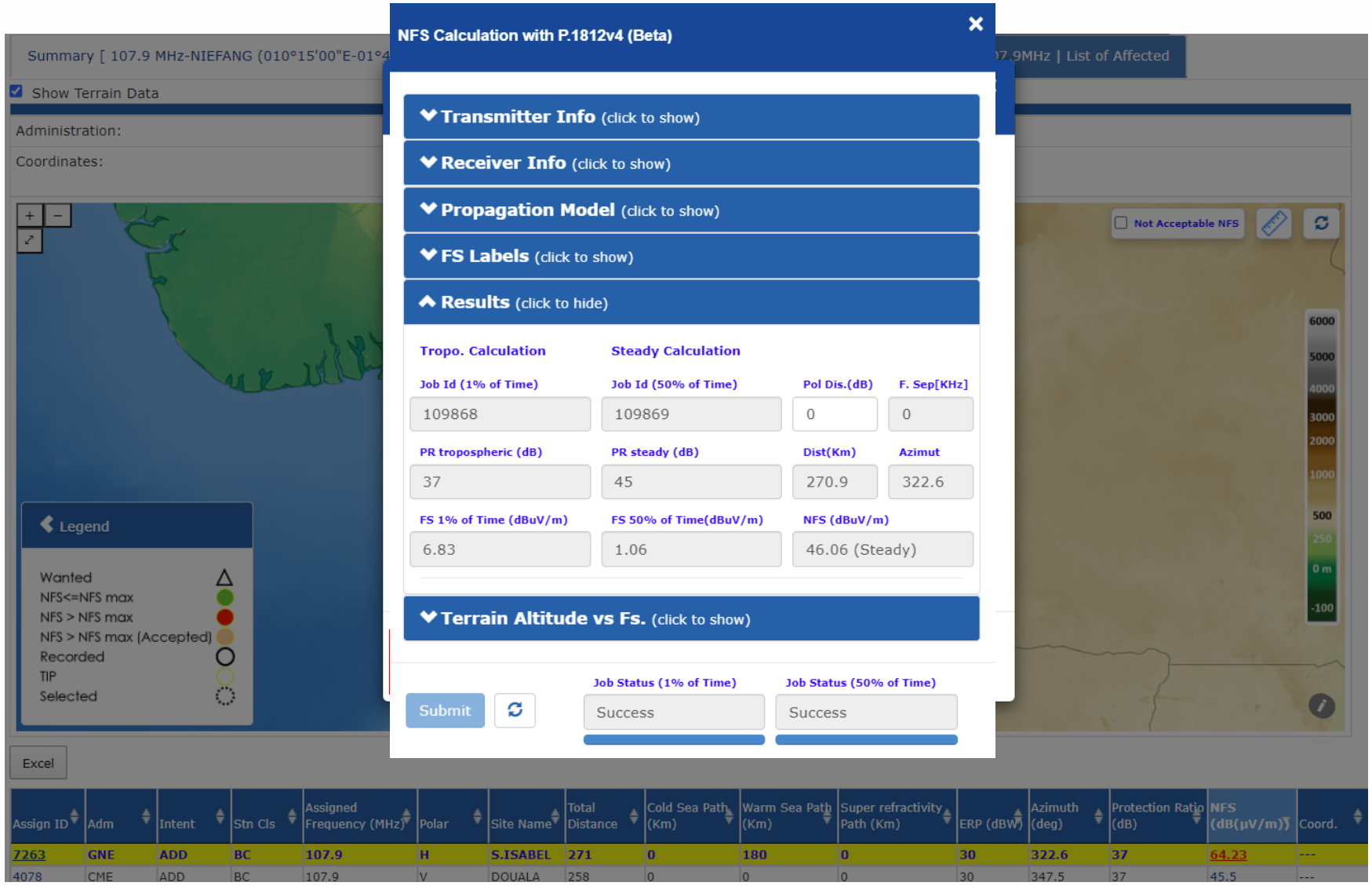


Excel

Assign ID	Adm	Intent	Stn Cls	Assigned Frequency (MHz)	Polar	Site Name	Total Distance	Cold Sea Path (Km)	Warm Sea Path (Km)	Super refractivity Path (Km)	ERP (dBW)	Azimuth (deg)	Protection Ratio (dB)	NFS (dB(µV/m))	Coord.
7263	GNE	ADD	BC	107.9	H	S.ISABEL	271	0	180	0	30	322.6	37	64.23	---
4078	CME	ADD	BC	107.9	V	DOUALA	258	0	0	0	30	347.5	37	45.5	---
084108901	GAB	RECORDED	BC	107.9	H	MOUILA	415	0	0	0	30	167.9	37	40.26	---
084108896	GAB	RECORDED	BC	107.8	H	MAKOKOU	318	0	0	0	30	115.5	25	37.46	---
117092422	CME	RECORDED	BC	107.8	V	EDEA	223	0	0	0	30	356.7	25	37.02	---
084105553	CME	RECORDED	BC	107.9	H	MAGBA	477	0	0	0	30	11.8	37	34.74	---

Click to run P1812 simulation on the fly

P1812 simulation from GE84Opt results



Thank you for your attention!

Questions?

brbcd@itu.int