

WAHS Appendix Data

The data tables listed here were used to construct the contour plots found in this application. The FCC web FM, TV, & DTV Propagation Curves Calculations pages were used to create these tables.

WAHS				HAAT	KM	KM	KM	KM	KM	KM	KM	KM
				2.6Elevation	F(50,10)	F(50,50)	F(50,10)	F(50,50)	F(50,10)	F(50,50)	F(50,50)	F(50,50)
Angle	Field	% power	kW	Meters	60	60	40	54	54	54.5	55	56
0	1.000	1	2.600	3.35	12.78	12.78	50.41	18.28	18.76			
10	1.000	1	2.600	14.26	12.78	12.78	50.41	18.28	18.76			
20	1.000	1	2.600	25.18	12.78	12.78	50.41	18.28	18.76			
30	1.000	1	2.600	36.07	13.85	13.85	54.61	19.90	20.61			
40	1.000	1	2.600	46.97	16.34	15.95	60.10	22.68	23.72			
50	1.000	1	2.600	55.74	18.19	17.60	63.35	24.62	25.87			
60	1.000	1	2.600	62.38	19.27	18.63	65.33	25.82	27.27			
70	1.000	1	2.600	69.02	20.25	19.53	67.06	26.93	28.62			
80	1.000	1	2.600	75.66	21.23	20.43	68.67	28.05	30.02	27.34	26.64	25.30
90	1.000	1	2.600	82.30	22.19	21.30	70.17	29.17	31.49	28.42	27.69	26.30
100	1.000	1	2.600	83.31	22.33	21.43	70.39	29.34	31.71	28.58	27.85	26.45
110	1.000	1	2.600	84.33	22.48	21.56	70.55	29.51	31.94	28.75	28.01	26.60
120	0.915	0.837225	2.177	85.34	21.62	20.79	68.11	28.51	30.62	27.78	27.07	257.40
130	0.727	0.528529	1.374	86.36	19.26	18.63	61.59	25.85	27.39	25.19	24.55	23.30
140	0.577	0.332929	0.866	85.31	16.73	16.32	55.54	23.15	24.28			
150	0.459	0.210681	0.548	82.20	14.15	14.16	49.28	20.40	21.21			
160	0.364	0.132496	0.344	79.08	12.46	12.41	42.91	17.74	18.29			
170	0.325	0.105625	0.275	75.96	11.56	11.56	39.61	16.31	16.73			
180	0.258	0.066564	0.173	72.85	10.14	10.14	34.03	14.11	14.11			
190	0.258	0.066564	0.173	62.21	9.42	9.42	31.18	13.15	13.15			
200	0.230	0.0529	0.138	51.58	8.03	8.03	26.73	11.43	11.44			
210	0.215	0.046225	0.120	40.94	6.83	6.83	21.94	9.75	9.80			

220	0.242	0.058564	0.152	24.99	6.26	6.26	20.85	8.94	8.94			
230	0.258	0.066564	0.173	23.54	6.46	6.46	21.56	9.25	9.25			
240	0.289	0.083521	0.217	20.63	6.84	6.84	22.90	9.80	9.80			
250	0.364	0.132496	0.344	17.71	7.69	7.69	25.81	10.97	10.97			
260	0.459	0.210681	0.548	14.80	8.71	8.71	29.27	12.25	12.26			
270	0.577	0.332929	0.866	11.89	9.80	9.80	33.93	13.67	13.68			
280	0.674	0.454276	1.181	10.60	10.58	10.58	37.71	14.77	14.77			
290	0.674	0.454276	1.181	9.31	10.58	10.58	37.71	14.77	14.77			
300	0.674	0.454276	1.181	8.03	10.58	10.58	37.71	14.77	14.77			
310	0.674	0.454276	1.181	6.10	10.58	10.58	37.71	14.77	14.77			
320	0.674	0.454276	1.181	5.79	10.58	10.58	37.71	14.77	14.77			
330	0.699	0.488601	1.270	5.18	10.77	10.77	38.66	15.04	15.06			
340	0.774	0.599076	1.558	4.57	11.31	11.31	41.47	15.89	16.09			
350	0.924	0.853776	2.220	3.96	12.30	12.30	47.27	17.53	17.92			

WAHS				F(50,10)		F(50,10)		F(50,10)		F(50,10)		F(50,10)		F(50,50)	
				2.6Elevation	KM	KM	KM	KM	KM	KM	KM				
Angle	Field	% power	kW	Meters	74dBu	48dBu	49dBu	50dBu	51dBu	52dBu					
0	1.000	1	2.600	3.35	5.68	27.06	25.47	23.99		21.28					
10	1.000	1	2.600	14.26	5.68	27.06	25.47	23.99		21.28					
20	1.000	1	2.600	25.18	5.68	27.06	25.47	23.99		21.28					
30	1.000	1	2.600	36.07	6.18	29.54	27.74	26.12		23.23					
40	1.000	1	2.600	46.97	7.07	34.52	32.09	29.99		26.58					
50	1.000	1	2.600	55.74	7.76	38.09	35.58	33.18		29.06					
60	1.000	1	2.600	62.38	8.22	40.26	37.70	35.27		30.77					
70	1.000	1	2.600	69.02	8.65	42.20	39.61	37.14		32.50					
80	1.000	1	2.600	75.66	9.07	44.07	41.44	38.93		34.23					
90	1.000	1	2.600	82.30	9.46	45.83	43.17	40.47		35.88					
100	1.000	1	2.600	83.31	9.52	46.09	43.43	40.88		36.12					

110	1.000	1	2.600	84.33	9.57	46.35	35.64	41.14		36.36		
120	0.915	0.837225	2.177	85.34	9.21	44.53	41.95	39.49		34.85		
130	0.727	0.528529	1.374	86.36	8.21	39.73	37.36	35.09		30.83		
140	0.577	0.332929	0.866	85.31	7.26	34.84	32.65	30.61		27.20		
150	0.459	0.210681	0.548	82.20	6.38	30.00	28.27	26.69		23.82		
160	0.364	0.132496	0.344	79.08	5.59	26.12	24.68	23.31		20.73		
170	0.325	0.105625	0.275	75.96	5.18	24.22	22.87	21.59		19.11		
180	0.258	0.066564	0.173	72.85	4.50	21.11	19.87	18.66		16.32		
190	0.258	0.066564	0.173	62.21	4.19	19.52						
200	0.230	0.0529	0.138	51.58	3.60	16.50						
210	0.215	0.046225	0.120	40.94	3.06	13.66						
220	0.242	0.058564	0.152	24.99	2.80	12.54						
230	0.258	0.066564	0.173	23.54	2.88	12.94						
240	0.289	0.083521	0.217	20.63	3.03	13.66						
250	0.364	0.132496	0.344	17.71	3.40	15.44						
260	0.459	0.210681	0.548	14.80	3.82	17.83						
270	0.577	0.332929	0.866	11.89	4.28	20.28						
280	0.674	0.454276	1.181	10.60	4.53	22.03						
290	0.674	0.454276	1.181	9.31	4.53	22.03						
300	0.674	0.454276	1.181	8.03	4.53	22.03						
310	0.674	0.454276	1.181	6.10	4.53	22.03						
320	0.674	0.454276	1.181	5.79	4.53	22.03						
330	0.699	0.488601	1.270	5.18	4.67	22.45						
340	0.774	0.599076	1.558	4.57	4.85	23.68						
350	0.924	0.853776	2.220	3.96	5.43	25.95						

WAHS				F10		F10		F50		F50		F50		F50		F50	
				2.6Elevation		0.5KM		KM		KM		KM		KM		KM	
Angle	Field	% power	kW	Meters		5448dBu		54.5		55		56		52		58	
0	1.000	1	2.600	3.35		3.55		5.13				3.05		4.03		2.71	
10	1.000	1	2.600	14.26		3.55		5.13				3.05		4.03		2.71	

20	1.000	1	2.600	25.18	3.55	5.13			3.05	4.03	2.71	
30	1.000	1	2.600	36.07	3.90	5.60			3.35	4.40	2.95	
40	1.000	1	2.600	46.97	4.49	6.54			3.85	5.04	3.43	
50	1.000	1	2.600	55.74	4.90	7.21			4.20	5.51	3.76	
60	1.000	1	2.600	62.38	5.17	7.63			4.41	5.83	3.96	
70	1.000	1	2.600	69.02	5.42	7.99			4.60	6.16	4.14	
80	1.000	1	2.600	75.66	5.69	8.35	5.18	5.05	4.79	6.48	4.32	
90	1.000	1	2.600	82.30	5.96	8.68	5.38	5.25	4.98	6.80	4.49	
100	1.000	1	2.600	83.31	6.01	8.73	5.41	5.28	5.01	6.84	4.52	
110	1.000	1	2.600	84.33	6.05	8.78	5.45	5.31	5.04	6.89	4.54	
120	0.915	0.837225	2.177	85.34	5.80	8.44	5.26	5.13	4.87	6.60	4.39	
130	0.727	0.528529	1.374	86.36	5.19	7.53	4.77	4.65	4.41	5.84	3.96	
140	0.577	0.332929	0.866	85.31	4.60	6.60			3.94	5.15	3.51	
150	0.459	0.210681	0.548	82.20	4.02	5.68			3.44	4.51	3.03	
160	0.364	0.132496	0.344	79.08	3.47	4.95			2.96	3.93	2.64	
170	0.325	0.105625	0.275	75.96	3.17	4.59			2.73	3.62	2.44	
180	0.258	0.066564	0.173	72.85	2.67	4.00			2.39	3.09	2.15	
190	0.258	0.066564	0.173	62.21	2.49	3.70						
200	0.230	0.0529	0.138	51.58	2.17	3.13						
210	0.215	0.046225	0.120	40.94	1.86	2.59						
220	0.242	0.058564	0.152	24.99	1.69	2.38						
230	0.258	0.066564	0.173	23.54	1.75	2.45						
240	0.289	0.083521	0.217	20.63	1.86	2.59						
250	0.364	0.132496	0.344	17.71	2.08	2.92						
260	0.459	0.210681	0.548	14.80	2.32	3.38						
270	0.577	0.332929	0.866	11.89	2.59	3.84						
280	0.674	0.454276	1.181	10.60	2.80	4.17						
290	0.674	0.454276	1.181	9.31	2.80	4.17						
300	0.674	0.454276	1.181	8.03	2.80	4.17						
310	0.674	0.454276	1.181	6.10	2.80	4.17						
320	0.674	0.454276	1.181	5.79	2.80	4.17						
330	0.699	0.488601	1.270	5.18	2.85	4.25						

340	0.774	0.599076	1.558	4.57	3.05	4.49						
350	0.924	0.853776	2.220	3.96	3.40	4.92						

	WOVI							KM	KM
Angle			2.6	Elevation	Elevation			F(50,50)	F(50,10)
	Field	% power	kW	ft	meter	100	80	60	40
0	1.000	1	0.10	42.65	13.00			5.63	18.57
10	1.000	1	0.10	44.09	13.44			5.63	18.57
20	1.000	1	0.10	45.52	13.88			5.63	18.57
30	1.000	1	0.10	46.96	14.32			5.63	18.57
40	1.000	1	0.10	48.39	14.75			5.63	18.57
50	1.000	1	0.10	69.17	21.09			5.63	18.57
60	1.000	1	0.10	109.29	33.32			5.91	19.60
70	1.000	1	0.10	149.41	45.55			6.89	23.12
80	1.000	1	0.10	189.54	57.79			7.85	26.10
90	1.000	1	0.10	229.66	70.02			8.64	28.58
100	1.000	1	0.10	234.00	71.34			8.72	28.85
110	1.000	1	0.10	238.41	72.69			8.80	29.11
120	1.000	1	0.10	242.78	74.02			8.88	29.41
130	1.000	1	0.10	247.15	75.35			8.96	29.70
140	1.000	1	0.10	242.77	74.02			8.88	29.41
150	1.000	1	0.10	229.65	70.02			8.64	28.58
160	1.000	1	0.10	216.53	66.02			8.38	27.76
170	1.000	1	0.10	203.41	58.02			8.11	26.97
180	1.000	1	0.10	190.29	47.79			7.85	26.16
190	1.000	1	0.10	156.75	37.56			7.06	23.73
200	1.000	1	0.10	123.21	27.34			6.26	20.87
210	1.000	1	0.10	89.67	11.34			5.63	18.57

220	1.000	1	0.10	37.18	11.34			5.63	18.57
230	1.000	1	0.10	37.18	11.34			5.63	18.57
240	1.000	1	0.10	32.81	10.00			5.63	18.57
250	1.000	1	0.10	28.44	8.67			5.63	18.57
260	1.000	1	0.10	24.06	7.34			5.63	18.57
270	1.000	1	0.10	19.69	6.00			5.63	18.57
280	1.000	1	0.10	20.41	6.22			5.63	18.57
290	1.000	1	0.10	21.14	6.45			5.63	18.57
300	1.000	1	0.10	21.87	6.67			5.63	18.57
310	1.000	1	0.10	22.60	6.89			5.63	18.57
320	1.000	1	0.10	25.15	7.67			5.63	18.57
330	1.000	1	0.10	29.53	9.00			5.63	18.57
340	1.000	1	0.10	33.90	10.34			5.63	18.57
350	1.000	1	0.10	38.28	11.67			5.63	18.57

		WPHS				
					F(50,50)	F(50,10)
			AMSL	HAAT/Radial	100	60
		0		36.58	0.70	6.17
		45		38.71	0.70	6.34
		90		40.54	0.70	6.49
		135		42.98	0.70	6.69
		180		26.52	0.70	5.63
		225		32.61	0.70	5.85
Less than 30m		270		14.63	0.70	5.63
Less than 30m		315		10.06	0.70	5.63

Chatham Alloc										
			F(50,50)	F(50,10)	F(50,10)	F(50,10)	F(50,10)	F(50,10)	F(50,10)	F(50,10)
	40kW	HAAT/Radial	54	54	54.5	55	56	48	50	52
0		122	11.141	13.348	13.042	12.739	12.146	17.244	15.907	14.607
			F(50,50)	F(50,50)	F(50,50)	F(50,50)	F(50,10)	F(50,10)	F(50,10)	F(50,10)
	40kW	HAAT/Radial	55	56	57	58				
0		122	10.731	10.334	9.941	9.548				

WCMU				
HAAT	99.8		60 dBu	40 dBu
	Meters	ft	km	km
0	136.5	447.8338	56.6014	152.5477
45	149.9	491.7969	58.4421	154.826
90	154.1	505.5764	58.98755	155.5259
135	138.2	453.4112	56.84275	152.8389
180	128.3	420.9309	55.42683	151.1527
225	108.5	355.9704	52.39709	147.8156
270	112.1	367.7814	53.00046	148.4286
315	117.6	385.826	53.87093	149.4391

WBLD	0			
HAAT	49.2	161.417	60 dBu	54 dBu
	meters	ft	KM	KM
0	27.3	89.56675	3.478658	4.933194
45	32.3	105.9709	3.602551	5.111793
90	66.3	217.5193	5.246949	7.317732
135	93.5	306.7579	6.234875	8.775486
180	82.9	271.9811	5.853542	8.22199
225	38.1	124.9998	3.914697	5.55105
270	33.4	109.5798	3.663693	5.200288
315	19.5	63.97625	3.478658	4.933194

CBEFM			F(50,50)	F(50,10)	F(50,50)	F(50,50)	F(50,50)	F(50,50)	F(50,50)
	100kW	HAAT/Radial	54	74	56	58	60	62	64
0		159.4107	73.28351	34.71096	68.59489	64.01085	59.64724	55.46223	51.34963
45		159.4107	73.28351	34.71096	68.59489	64.01085	59.64724	55.46223	51.34963
90		159.4107	73.28351	34.71096	68.59489	64.01085	59.64724	55.46223	51.34963
135		167.0307	74.15881	35.50741	69.49271	64.92154	60.53863	56.34879	52.24423
180		163.9827	73.81609	35.19527					
225		168.5547	74.32615	35.66188	69.66487	65.09531	60.70757		
270		168.5547	74.32615	35.66188	69.66487	65.09531	60.70757	0	0
315		167.0307	74.15881	35.50741	69.49271	64.92154	60.53863	56.34879	52.24423

	W208BB						
			45	Elevation	Elevation	1	0.1
Angle	Field	% power	Watts	ft	meter	60	40
0	0.923	0.851929	38.33681	128.3	39.11	5.03617	16.27825
10	0.840	0.7056	31.75200	129.3	39.42	4.823782	15.41583
20	0.735	0.540225	24.31013	130.3	39.73	4.510027	14.2847
30	0.600	0.36	16.20000	131.3	40.04	4.096514	12.99428
40	0.410	0.1681	7.56450	132.4	40.35	3.412689	10.90258
50	0.185	0.034225	1.54013	136.0	41.46	2.36523	7.269462
60	0.030	0.0009	0.04050	142.2	43.34		
70	0.020	0.0004	0.01800	148.4	45.23		
80	0.020	0.0004	0.01800	154.6	47.12		
90	0.020	0.0004	0.01800	160.8	49.01		
100	0.020	0.0004	0.01800	160.2	48.83		
110	0.025	0.000625	0.02813	159.6	48.66		
120	0.125	0.015625	0.70313	159.0	48.48	2.33305	7.124652
130	0.195	0.038025	1.71113	158.4	48.30	2.627497	8.184983
140	0.230	0.0529	2.38050	159.1	48.51	2.823795	9.012009
150	0.250	0.0625	2.81250	161.1	49.11	2.963778	9.446439
160	0.260	0.0676	3.04200	163.1	49.71	3.029747	9.679744
170	0.250	0.0625	2.81250	165.0	50.91	2.995958	9.570332
180	0.230	0.0529	2.38050	167.0	49.78	2.915508	9.261404
190	0.195	0.038025	1.71113	163.3	48.65	2.669331	8.33462
200	0.125	0.015625	0.70313	159.6	47.51	2.337877	7.139133
210	0.025	0.000625	0.02813	155.8	46.38		
220	0.020	0.0004	0.01800	152.1	44.59		
230	0.020	0.0004	0.01800	146.3	44.59		
240	0.020	0.0004	0.01800	138.2	42.14		
250	0.020	0.0004	0.01800	130.2	39.70		
260	0.030	0.0009	0.04050	122.2	37.25		
270	0.185	0.034225	1.54013	114.2	34.81	2.168932	6.666087
280	0.410	0.1681	7.56450	107.5	32.79	3.063536	9.864779

290	0.600	0.36	16.20000	100.9	30.76	3.58807	11.5317
300	0.735	0.540225	24.31013	94.3	28.74	3.919524	12.56951
310	0.840	0.7056	31.75200	87.6	26.72	4.193054	13.39493
320	0.923	0.851929	38.33681	89.2	27.20	4.390961	14.02404
330	0.980	0.9604	43.21800	99.0	30.17	4.522899	14.48583
340	1.000	1	45.00000	108.7	33.15	4.81091	15.40296
350	0.980	0.9604	43.21800	118.5	36.13	4.976637	16.0546