MINOR CHANGE APPLICATION
RADIO LICENSE HOLDING CBC, LLC
NEW FM TRANSLATOR STATION
CH 230D - 93.9 MHZ - 0.175 KW
CHATTANOOGA, TENNESSEE
April 2018

EXHIBIT B

Interference Study for New FM Translator Using Licensed/Proposed Site as Reference

The proposed new FM translator on Channel 230D, operating with an effective radiated power of 0.175 kilowatt, will not cause interference to any existing, applied for, or proposed facility. As noted on Exhibit B1, the proposed new translator is within the predicted 60 dBu contour of second adjacent stations WJTT, Channel 232A, Red Bank, Tennessee and WMPZ, Channel 228A, Harrison, Tennessee. Due to the relationship between the proposed new translator and WJTT and WMPZ, a 40 db ratio of the protected and interfering contours applies.

New Translator vs WJTT

The WJTT contour at the new translator's antenna site is in excess of 89.7 dBu (50/50). The corresponding interfering contour for the new translator is 129.7 dBu (50/10) (Exhibit B2). As shown in the tabulation of desired to undesired contours (Exhibit B3), the new translator's interfering contour (129.7 dBu, FCC 50/10) will not reach ground level. Since the new translator's antenna will be mounted 66.4 meters (217.8 feet) above ground and there are no structures of comparable height in the vicinity of the proposed new translator antenna, this contour never reaches any potentially occupied space. As such, WJTT will not receive interference from the proposed translator.

New Translator vs WMPZ

The WMPZ contour at the new translator's antenna site is in excess of 86.1 dBu (50/50). The corresponding interfering contour for the new translator is 126.1 dBu (50/10) (Exhibit B2). As shown in the tabulation of desired to undesired contours (Exhibit B4), the new translator's interfering contour (126.1 dBu, FCC 50/10) will not reach ground level. Since the new translator's antenna will be mounted 66.4 meters (217.8 feet) above ground and there are no structures of comparable height in the vicinity of the proposed new translator antenna, this contour never reaches any potentially occupied space. As such, WMPZ will not receive interference from the proposed translator.

Based on the foregoing, it is believed that the proposed new FM translator is in compliance with §74.1204(d) of the Commission's rules. If a waiver of the rule is needed to address WJTT or WMPZ, one is respectfully requested.

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EXHIBIT B1

Clearance Study for New Translator
Using Proposed Site as Reference

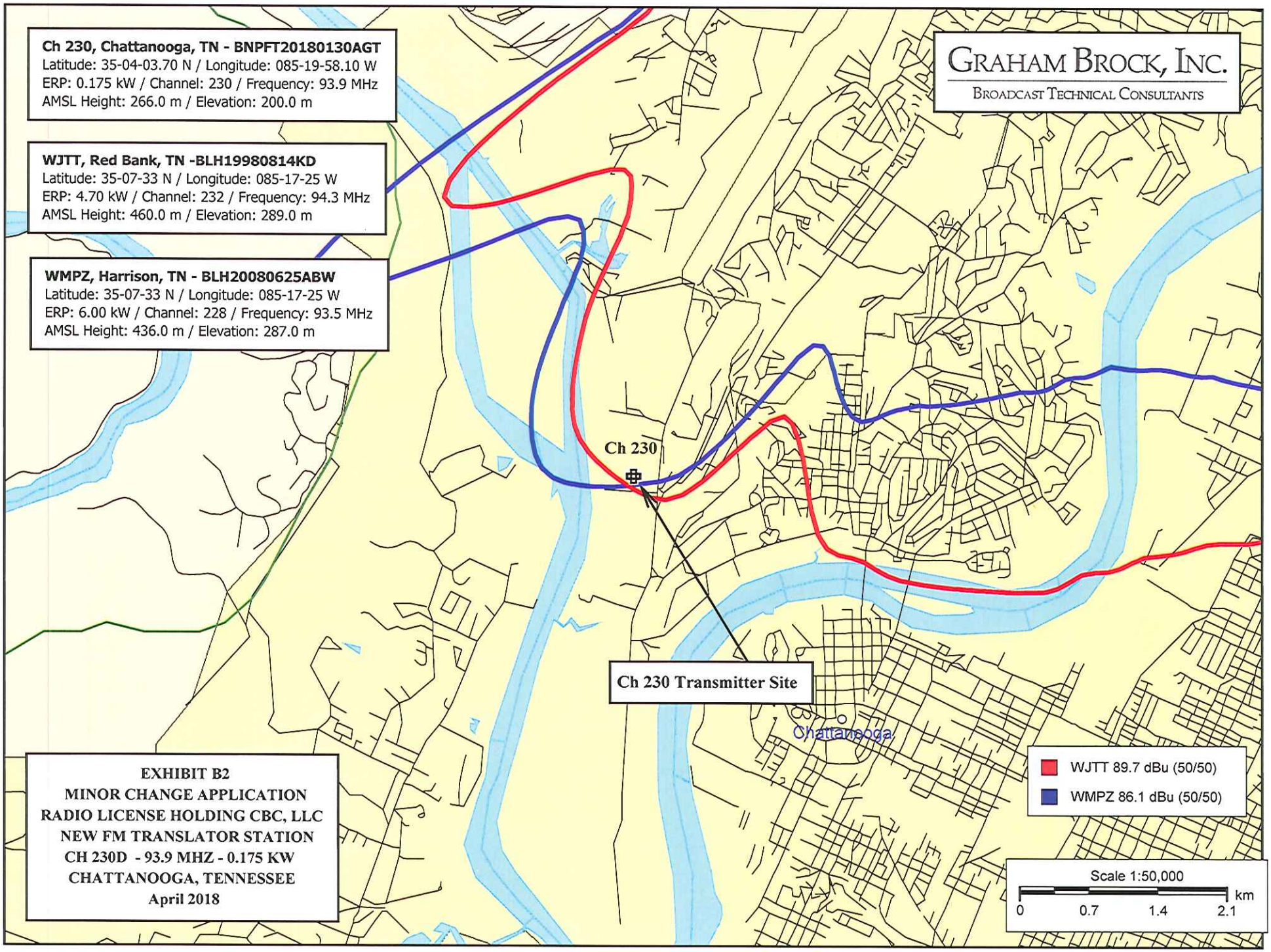
REFERENCE
35 04 03.7 N.
85 19 58.1 W.

CH# 230D - 93.9 MHz, Pwr= 0.175 kW DA, HAAT= 0.0 M, COR= 266 M
Average Protected F(50-50)= 6.5 km
Standard Directional

DISPLAY DATES
DATA 04-18-18
SEARCH 04-18-18

CH CALL / CITY	TYPE ANT / STATE	AZI. <--	DIST / FILE #	LAT. / LNG.	Pwr(kW) / HAAT(M)	INT(km) / COR(M)	PRO(km) / LICENSEE	*IN* (Overlap in km)	*OUT*
230C3 WQMT Decatur	LIC NC TN	57.6 237.9	61.95 BLH20080729ACZ	35 21 55.0 84 45 22.0	16.500 123	109.2 367	39.7 East Tennessee Radio Group		
230C3 AL1960 Decatur	RSV-A TN	52.5 232.9	71.65 RM11337	35 27 30.0 84 42 18.0	25.000 100	117.7 366	42.0	-52.5*	6.5
232A WJTT Red Bank	LIC CN TN	30.9 210.9	7.53 BLH19980814KD	35 07 33.0 85 17 25.0	4.700 113	3.6 460	40.3 Brewer Broadcasting Of Cha	-1.2	-33.3*
230D 1777196! Chattanooga	APP C TN	0.0 0.0	0.00 BNPFT20180130AGT	35 04 03.7 85 19 58.1	0.250	0.00 266	0.00 Radio License Holding Cbc,	-64.5R	64.5M
228A WMPZ Harrison	LIC ZEX TN	30.9 210.9	7.53 BLH20080625ABW	35 07 33.0 85 17 25.0	6.000 96	2.8 436	33.6 J.l. Brewer Broadcasting,	-0.7	-26.6*
230A AU7910440 Lynchburg	RSV-A TN	291.2 110.6	92.91 RM11229	35 21 58.0 86 17 18.0	6.000 100	84.5 401	26.6	1.9	44.3
230D W230CX Fort Payne	CP C AL	206.0 25.8	77.57 BNPFT20171221ABF	34 26 23.9 85 42 13.0	0.210	56.2 507	17.7 J. Michael Wallace	12.5	30.5
229D W229CX Lafayette	CP C GA	171.4 351.4	39.59 BNPFT20171201AGS	34 42 55.9 85 16 04.4	0.250	17.7 355	12.1 Radix Broadcasting, Inc.	13.7	15.6
230A WDUC Lynchburg	LIC NCX TN	290.5 109.9	99.88 BLH20110824ABY	35 22 40.0 86 21 54.0	4.100 119	77.7 407	23.9 Bowman Broadcasting, Llc	15.7	54.3
227D W227DM Dunlap	CP C TN	353.2 173.2	32.88 BNPFT20171201AOU	35 21 41.0 85 22 33.0	0.250	1.1 273	7.1 Travis Hickman D/b/a Tenne	25.9	24.2
227D W227DG Dalton	CP DC GA	142.4 322.6	46.99 BMPFT20171023AAB	34 43 57.0 85 01 08.0	0.250	0.5 579	14.4 Hope Broadcasting, Inc.	38.5	27.4
227D W227DG Dalton	LIC DC GA	141.7 321.9	46.61 BLFT20160720ACQ	34 44 18.0 85 00 59.0	0.110	0.4 498	11.7 Hope Broadcasting, Inc.	38.1	33.8

Terrain database is FCC NGDC 30 Sec, R= 73.215 qualifying spacings or FCC minimum spacings in KM, M= Margin in KM
In & Out distances between contours are shown at closest points. Reference Zone= East Zone, Co to 3rd adjacent.
All separation margins (if shown) INC.lude rounding.
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)
"*"affixed to 'IN' or 'OUT' values = site inside restricted contour.
Reference station has protected zone issue: AM tower


Ch 230, Chattanooga, TN - BNPFT20180130AGT
Latitude: 35-04-03.70 N / Longitude: 085-19-58.10 W
ERP: 0.175 kW / Channel: 230 / Frequency: 93.9 MHz
AMSL Height: 266.0 m / Elevation: 200.0 m
WJTT, Red Bank, TN -BLH19980814KD
Latitude: 35-07-33 N / Longitude: 085-17-25 W
ERP: 4.70 kW / Channel: 232 / Frequency: 94.3 MHz
AMSL Height: 460.0 m / Elevation: 289.0 m
WMPZ, Harrison, TN - BLH20080625ABW
Latitude: 35-07-33 N / Longitude: 085-17-25 W
ERP: 6.00 kW / Channel: 228 / Frequency: 93.5 MHz
AMSL Height: 436.0 m / Elevation: 287.0 m
GRAHAM BROCK, INC.
BROADCAST TECHNICAL CONSULTANTS
Ch 230
Ch 230 Transmitter Site
Chattanooga
WJTT 89.7 dBu (50/50)
WMPZ 86.1 dBu (50/50)
Scale 1:50,000
0 0.7 1.4 2.1 km
EXHIBIT B2
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EXHIBIT B3

New Ch 230 Chattanooga, TN, Showing Protection to WJTT
Geographic Coordinates: N.35 04 03.70 W.85 19 58.10
74.1204(d) Study - Using FCC 30 SEC Terrain Database
Translator or LPFM Maximum Licensed ERP = 0.175
Translator or LPFM Antenna Height AG = 66.4 Meters
New Ch 230 Antenna Model = 1 BAY

Protected Station's Contour = 89.7 dBu
Translator's or LPFM's full Interference contour 129.7

Review Azimuth = 0 Degrees True
Relative Field on the horizon at Review Azimuth = 0.731
Translator/LPFM ERP on the horizon at Review Azimuth = 0.094 kW
Distance between stations = 7.5 km
Protected Station= WJTT, 4.7 kW, 460 M Meters COR AMSL

Depression Angle From Horizon(Deg)	Vertical Relative Field	Horizontal Relative Field	ERP (kw)	Dist to IX Contour Along Dep. Angle(m)	Dist to IX Contour From Tower Base(m)	Height IX Above Ground (m)
00.00	1.0	0.73	0.1279	025.9703	025.9703	066.400
05.00	0.993	0.73	0.1261	025.7886	025.6904	064.152
10.00	0.974	0.73	0.1214	025.2951	024.9108	062.008
15.00	0.941	0.73	0.1133	024.4381	023.6054	060.075
20.00	0.897	0.73	0.1029	023.2954	021.8905	058.433
25.00	0.843	0.73	0.0909	021.8930	019.8418	057.148
30.00	0.78	0.73	0.0778	020.2569	017.5430	056.272
35.00	0.709	0.73	0.0643	018.4130	015.0830	055.839
40.00	0.633	0.73	0.0513	016.4392	012.5932	055.833
45.00	0.554	0.73	0.0393	014.3876	010.1735	056.226
50.00	0.473	0.73	0.0286	012.2840	007.8960	056.990
55.00	0.394	0.73	0.0199	010.2323	005.8690	058.018
60.00	0.317	0.73	0.0129	008.2326	004.1163	059.270
65.00	0.245	0.73	0.0077	006.3627	002.6890	060.633
70.00	0.181	0.73	0.0042	004.7006	001.6077	061.983
75.00	0.124	0.73	0.0020	003.2203	000.8335	063.289
80.00	0.077	0.73	0.0008	001.9997	000.3472	064.431
85.00	0.041	0.73	0.0002	001.0648	000.0928	065.339
90.00	0.016	0.73	0.0000	000.4155	000.0000	065.984

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EXHIBIT B4

New Ch 230 Chattanooga, TN, Showing Protection to WMPZ
Geographic Coordinates: N.35 04 03.70 W.85 19 58.10
74.1204(d) Study - Using FCC 30 SEC Terrain Database
Translator or LPFM Maximum Licensed ERP = 0.175
Translator or LPFM Antenna Height AG = 66.4 Meters
New Ch 230 Antenna Model = 1 BAY

Protected Station's Contour = 86.1 dBu
Translator's or LPFM's full Interference contour 126.1

Review Azimuth = 0 Degrees True
Relative Field on the horizon at Review Azimuth = 0.731
Translator/LPFM ERP on the horizon at Review Azimuth = 0.094 kW
Distance between stations = 7.5 km
Protected Station= WMPZ, 6 kW, 436 M Meters COR AMSL

Depression Angle From Horizon(Deg)	Vertical Relative Field	Horizontal Relative Field	ERP (kw)	Dist to IX Contour Along Dep. Angle(m)	Dist to IX Contour From Tower Base(m)	Height IX Above Ground (m)
00.00	1.0	0.73	0.1279	039.3077	039.3077	066.400
05.00	0.993	0.73	0.1261	039.0326	038.8840	062.998
10.00	0.974	0.73	0.1214	038.2857	037.7041	059.752
15.00	0.941	0.73	0.1133	036.9886	035.7282	056.827
20.00	0.897	0.73	0.1029	035.2590	033.1326	054.341
25.00	0.843	0.73	0.0909	033.1364	030.0318	052.396
30.00	0.78	0.73	0.0778	030.6600	026.5523	051.070
35.00	0.709	0.73	0.0643	027.8692	022.8291	050.415
40.00	0.633	0.73	0.0513	024.8818	019.0605	050.406
45.00	0.554	0.73	0.0393	021.7765	015.3983	051.002
50.00	0.473	0.73	0.0286	018.5925	011.9511	052.157
55.00	0.394	0.73	0.0199	015.4872	008.8831	053.714
60.00	0.317	0.73	0.0129	012.4605	006.2303	055.609
65.00	0.245	0.73	0.0077	009.6304	004.0700	057.672
70.00	0.181	0.73	0.0042	007.1147	002.4334	059.714
75.00	0.124	0.73	0.0020	004.8742	001.2615	061.692
80.00	0.077	0.73	0.0008	003.0267	000.5256	063.419
85.00	0.041	0.73	0.0002	001.6116	000.1405	064.795
90.00	0.016	0.73	0.0000	000.6289	000.0000	065.771

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EXHIBIT B5

N. Lat. = 35° 04' 03.7" - Protected and Interfering Contour Data
W. Lng. = 85° 19' 58.1" - New FM Translator, Chattanooga, Tennessee

HAAT and Distance to Contour - FCC 30 second terrain database

Azi.	AV EL	HAAT	ERP kW	dBk	Field	129.7-F1	126.1-F1	100-F1	60-F5	54-F1	40-F1
000	509.6	-243.6	0.0935	-10.29	0.731	0.02	0.03	0.68	5.54	7.85	18.22
010	453.2	-187.2	0.0800	-10.97	0.676	0.02	0.03	0.63	5.33	7.53	17.40
020	292.6	-26.6	0.0690	-11.61	0.628	0.02	0.03	0.58	5.13	7.26	16.64
030	235.9	30.1	0.0617	-12.09	0.594	0.02	0.03	0.55	4.99	7.07	16.11
040	231.9	34.1	0.0571	-12.44	0.571	0.02	0.03	0.53	5.20	7.33	16.90
050	219.5	46.5	0.0545	-12.64	0.558	0.02	0.03	0.52	6.00	8.56	20.02
060	223.0	43.0	0.0535	-12.72	0.553	0.02	0.03	0.51	5.75	8.14	19.04
070	208.3	57.7	0.0545	-12.64	0.558	0.02	0.03	0.52	6.70	9.64	22.48
080	221.4	44.6	0.0571	-12.44	0.571	0.02	0.03	0.53	5.95	8.47	19.80
090	214.5	51.5	0.0617	-12.09	0.594	0.02	0.03	0.55	6.52	9.38	21.89
100	215.2	50.8	0.0690	-11.61	0.628	0.02	0.03	0.58	6.66	9.58	22.35
110	216.4	49.6	0.0814	-10.89	0.682	0.02	0.03	0.63	6.85	9.86	22.99
120	217.0	49.0	0.0953	-10.21	0.738	0.02	0.03	0.68	7.08	10.19	23.77
130	219.9	46.1	0.1162	-9.35	0.815	0.02	0.04	0.76	7.21	10.35	24.17
140	219.9	46.1	0.1408	-8.51	0.897	0.03	0.04	0.83	7.57	10.85	25.35
150	220.0	46.0	0.1589	-7.99	0.953	0.03	0.04	0.88	7.82	11.16	26.11
160	222.9	43.1	0.1657	-7.81	0.973	0.03	0.04	0.90	7.61	10.89	25.49
170	218.2	47.8	0.1691	-7.72	0.983	0.03	0.05	0.91	8.13	11.55	27.04
180	223.7	42.3	0.1750	-7.57	1.000	0.03	0.05	0.93	7.65	10.94	25.60
190	361.2	-95.2	0.1750	-7.57	1.000	0.03	0.05	0.93	6.48	9.28	21.65
200	402.1	-136.1	0.1750	-7.57	1.000	0.03	0.05	0.93	6.48	9.28	21.65
210	210.5	55.5	0.1750	-7.57	1.000	0.03	0.05	0.93	8.94	12.53	29.49
220	249.1	16.9	0.1750	-7.57	1.000	0.03	0.05	0.93	6.48	9.28	21.65
230	362.0	-96.0	0.1750	-7.57	1.000	0.03	0.05	0.93	6.48	9.28	21.65
240	396.3	-130.3	0.1750	-7.57	1.000	0.03	0.05	0.93	6.48	9.28	21.65
250	383.1	-117.1	0.1750	-7.57	1.000	0.03	0.05	0.93	6.48	9.28	21.65
260	376.0	-110.0	0.1750	-7.57	1.000	0.03	0.05	0.93	6.48	9.28	21.65
270	361.7	-95.7	0.1750	-7.57	1.000	0.03	0.05	0.93	6.48	9.28	21.65
280	404.9	-138.9	0.1750	-7.57	1.000	0.03	0.05	0.93	6.48	9.28	21.65
290	397.0	-131.0	0.1750	-7.57	1.000	0.03	0.05	0.93	6.48	9.28	21.65
300	434.2	-168.2	0.1750	-7.57	1.000	0.03	0.05	0.93	6.48	9.28	21.65
310	464.3	-198.3	0.1719	-7.65	0.991	0.03	0.05	0.92	6.45	9.24	21.54
320	417.5	-151.5	0.1623	-7.90	0.963	0.03	0.04	0.89	6.36	9.10	21.22
330	429.1	-163.1	0.1491	-8.27	0.923	0.03	0.04	0.86	6.23	8.90	20.74
340	488.8	-222.8	0.1300	-8.86	0.862	0.03	0.04	0.80	6.01	8.58	19.99
350	514.5	-248.5	0.1112	-9.54	0.797	0.02	0.04	0.74	5.79	8.23	19.14

AMSL= 266.0 M