

TECHNICAL STATEMENT AND WAIVER REQUEST  
K215BE ESTES PARK, CO  
CEDAR COVE BROADCASTING, INC.  
FCC FORM 349  
NOVEMBER 2010

This Technical Statement and Waiver Request is in support of a minor change application, FCC form 349, being filed on behalf of Cedar Cove Broadcasting, Inc. (“CCB”) in regards to its recently acquired FM translator, K215BE Estes Park, Colorado, facility ID 68216.

A new NCE-FM station, KENC Estes Park, Colorado, facility ID 175208, recently commenced service on channel 214A at an adjacent communication tower site on Prospect Mountain as the current operation of K215BE. This new station is first adjacent channel to the channel 215 operation of K215BE. Because of this new station commencing operation, K215BE has been forced to cease broadcasting as it was causing interference to KENC. A Special Temporary Authority was filed by CCB on July 19<sup>th</sup>, 2010, BLSTA-20100719AAD, to remain silent until a modified operation of K215BE can be made.

After some technical research conducted by CCB, it was determined that it will be impossible to eliminate the interference being caused to KENC without limiting the operation of K215BE to the point it would no longer cover any meaningful population. A channel study was conducted on the three adjacent, and I.F. spaced channels. None of these channels would be available for use by K215BE. Channels 212, 213, 214, 215, 216, 217 are precluded because the transmitter site for K215BE is located inside the protected 60 dBμ contour of the new KENC, Colorado on channel 214A. Channel 216,

is also precluded because of overlap that would occur with co-channel KLDV Morrison, Colorado on channel 216C, facility ID 12354. Channels 217 and 218 are precluded since there would be overlap with KUNC Greeley, Colorado on channel 218C1. I.F. channels 268 and 269 are precluded because the transmitter site for K215BE is located inside of the protected 60 dB $\mu$  of KRKY-FM, Colorado, on channel 271A, facility ID 76780.

It was determined that non-adjacent channel 202D could be utilized at a new proposed site for K215BE and not cause any interference to any licensed or authorized stations. Thus, it was determined that channel 202D could be utilized by K215BE Estes Park.

#### **REQUEST FOR WAIVER OF 74.1233(a)(1)**

CCB, the licensee of Station K215BE Estes Park, Colorado, hereby requests that the Commission waive the provisions of the Section 74.1233(a)(1) of the Commission's Rules that would otherwise consider a relocation to a channel, other than a first, second, or third adjacent channel or an IF channel, to be a "major change" which would require the opening of a window before an application could be filed. In support of the waiver request, CCB makes the following showing:

- 1) CCB has sought to file a modification application that is in accord with the Commission's minor change rules. However, CCB has been unable to do so and is, therefore, seeking the instant waiver.
- 2) As evidenced in the showing contained in this Technical Statement, there are simply no available channels that would allow CCB to comply with the applicable provisions of Section 74.1233. Each of the adjacent channels and the I.F. channels are precluded because of interference that would occur to

other stations on those channels. The best available NCE channel is Channel 202 and that channel has been selected for this application.

- 3) Station K215BE can no longer operate on channel 215 because of the new operation of KENC on channel 214A. Therefore, unless K215BE can transition to another channel, the impact of the service provided the new KENC, would likely ultimately cause the permanent termination of the operations of K215BE. In that K215BE provides a valuable program service to the community of Estes Park, by retransmitting the signal of KXWA Loveland, Colorado, listeners in Estes Park should not lose the service and only a waiver of Section 74.1233(a)(1) will permit K215BE's broadcast service to remain in operation.
- 4) A waiver of the rules to allow K215BE to migrate to channel 202, will enable K215BE to continue to operate and is in the best interest of the station and its listeners. Accordingly, the public interest would be well served by treating the requested channel change as a minor change, given the unique circumstances attendant to this request, involving a displaced translator station and otherwise unavailable channels to migrate to. On the basis of the unique circumstances presented and that the public interest is well-served by a waiver of the major change rule in order to permit Station K215BE to continue to serve the public, CCB urges that it has overcome the high hurdle for waiver requests and is entitled to the waiver it is seeking. *See WAIT Radio v. FCC*, 418 F.2d 1153 (D.C. Cir. 1969), *cert denied*, 409 U.S. 1027(1972).

## **TECHNICAL STUDY FOR OPERATION ON CHANNEL 202D**

CCB is proposing to relocate to an existing tower site (former KRKY-FM Estes Park tower site) located at N.  $40^{\circ}-17'-34''$ , W.  $105^{\circ}-33'-05''$ , NAD 27, with an increased Effective Radiated Power of 110 Watts and replace its current antenna, with a Scala HDCA-5/HRM, one bay, horizontal only polarized, directional antenna. The antenna will be mounted at the 12 meter level on a 16 meter overall tower, with a Center of Radiation at 2914 Above Mean Sea Level. It also seeks to change channels from 215D to 202D.

Figure 1 shows a channel interference study conducted from the current site for K215BE. It shows that the proposed operation of K215BE on channel 202D, will not cause any prohibited outgoing interference to any licensed or proposed FM services.

Figure 2 is a detailed interference study conducted against KGNU-FM Boulder, Colorado, facility ID 6512, on the first adjacent channel 203A.

Figure 3 shows the proposed 60 dB $\mu$  of K215BE will be completely contained inside of the current 60 dB $\mu$  predicted coverage contour of the station being rebroadcast, KXWA Loveland, Colorado on channel 209C0, facility ID 89401. The proposed operation of K215BE will be considered a “fill-in” translator for KXWA, thus some of the maximum allowable ERP limits on some of the pertinent radials will be exceeded. However, the maximum ERP on any radial will not exceed 110 watts, thus this proposed operation is in compliance with 74.1235(a).

Figure 4 is a map showing the present and proposed 60 dB $\mu$  contours for K215BE. It shows that there will be overlap between these two facilities as required.

Figure 5 shows the antenna polar plot of the proposed directional antenna.

Figure 6 is a tabulation of the pertinent distances to contours for the proposed operation of K215BE on channel 202D.

It was concluded that the new proposed operation of K215BE Estes Park, Colorado on channel 202D will not cause any harmful interference to any existing stations, and will be in full compliance with the commission's rules.

FIGURE 1, DETAILED INTERFERENCE STUDY K215BE ESTES PARK, COLORADO, CH. 202D REFERENCE 40 17 34.0 N. 105 33 05.0 W. CH# 202D - 88.3 MHz, Pwr= 0.11 kW DA, HAAT= 73.9 M, COR= 2914 M Average Protected F(50-50)= 9.11 km Standard Directional DISPLAY DATES DATA 07-31-10 SEARCH 07-31-10											
CH CITY	CALL	TYPE STATE	ANT DCX	AZI <--	DIST FILE #	LAT LNG	PWR (kW) HAAT (M)	INT (km) COR (M)	PRO (km) LICENSEE	*IN* (Overlap in km)	*OUT* (Overlap in km)
202C3 Winter Park	1227487	APP CO	DCX	213.0 32.8	37.9 BNPED20071018BDM	40 00 23.0 105 47 38.0	10.000 -180	74.4 2745	17.4 Fraser Valley Community Me	-44.0*<	8.1
202A Fort Collins	KGCO	LIC CO	_VX	27.6 207.7	40.7 BLED20060117AFJ	40 37 03.0 105 19 40.0	0.150 364	51.0 2552	13.5 Educational Media Foundati	-9.3*<	3.5
203A Boulder	KGNU-FM	LIC CO	DC_	134.6 314.8	47.5 BLED20100528ADY	39 59 33.0 105 09 16.0	4.000 65	35.2 1732	23.2 Boulder Community Broadcas	-3.8<	0.1
06NT Denver	KXDP-LP *	CPM CO	D_N	152.4 332.5	47.6 BMPTVL20100503ACK	39 54 48.0 105 17 33.0	3.000 879	18.2 2536	31.4 Syncom Media Group, Inc.	146.0R	-98.4M *
06NT Rock River	K06LU	LI WY	DHN	349.1 168.9	160.0 BLTTTV19871211IA	41 42 24.0 105 54 53.0	0.005 180	18.2 2254	31.4 Town Of Rock River	146.0R	14.0M
06NT Encampment	K06BR	LI WY	DHN	318.4 137.6	148.7 BLTTTV3558	41 17 10.0 106 44 00.0	0.095 258	18.2 2390	31.4 Elk Mountain Tv Co.	146.0R	2.7M
202A Fraser	1212100	APP CO	_CX	213.3 33.1	44.7 BNPED20071017AHY	39 57 23.0 105 50 22.0	1.000 45	35.6 2640	10.2 Rv Ministries, Inc.	-1.0<	22.3
204A Estes Park	NEW	CP CO	DVX	19.4 199.5	8.0 BNPED20071018AXE	40 21 38.0 105 31 12.0	0.290 14	1.2 2731	7.1 Academy Media Inc.	0.2	0.8
202A Idaho Springs	1205743	APP CO	DVX	189.8 9.7	63.2 BNPED20071019AIY	39 43 56.0 105 40 38.0	2.000 -195	27.8 3018	19.0 Clear Creek Radio, Inc	21.3	6.2
201C3 Lakewood	KVOD	CP CO	_CX	157.5 337.8	74.6 BPED200911106AEN	39 40 18.0 105 13 05.0	1.200 321	45.2 2348	37.8 Prc Denver-i, Llc	12.8	13.4
201C3 Lakewood	KVOD	LIC CO	_VX	157.5 337.8	74.6 BLED200711113AFB	39 40 18.0 105 13 05.0	1.200 321	45.2 2348	37.8 Prc Denver-i, Llc	12.8	13.4
202C1 Fort Morgan	1277517	APP CO	ZCX	106.5 287.5	140.8 BNPED20071019BCM	39 55 21.9 103 58 18.4	11.000 334	105.4 1815	39.3 The Helpline	22.0	75.4
205A Central City	KDAB	APP CO	_VX	179.2 359.2	47.3 BMPED20100712ABL	39 52 01.0 105 32 37.0	0.005 489	0.2 3247	10.1 Cedar Cove Broadcasting, I	38.1	36.4
205A Central City	KDAB	CP CO	DCX	180.1 0.1	47.0 BMPED20100205ACZ	39 52 09.0 105 33 08.0	0.100 460	0.6 3341	8.9 Cedar Cove Broadcasting, I	38.3	37.4
205A Fort Collins	KRFC	LIC CO	_EX	59.4 239.8	63.5 BLED20030324ADY	40 34 53.0 104 54 20.0	3.000 66	2.3 1596	23.6 Public Radio For The Front	60.5	39.8
201C1 West Laramie	KGCV	APP WY	DCX	345.7 165.5	115.1 BMPED20100517AAA	41 17 46.0 105 53 30.0	74.000 158	68.2 2419	51.3 Ocean Side Broadcasting, I	40.6	57.5
202A Pine	1212074	APP CO	_CX	168.9 349.0	99.3 BNPED20071022AZK	39 24 56.0 105 19 40.0	0.100 21	18.6 2203	5.6 The North Fork Angling Soc	62.6	41.5
256C1 Windsor	KUAD-FM	LIC CO	_CX	57.7 238.2	73.3 BLH20031223ACH	40 38 31.0 104 49 03.0	100.000 255	4.6 1816	1.6 Regent Broadcasting Of For	22.0R	51.3M
204A Red Feather Lakes	KUSZ	CP CO	_CX	353.2 173.1	64.3 BMPED20080408AAW	40 52 04.0 105 38 33.0	0.005 260	0.2 2927	8.1 Wren Communications, Inc.	57.7	56.2
202D Breckenridge	K202CV	CP CO	DV_	204.8 24.5	97.5 BPFT20100205ABF	39 29 44.0 106 01 44.0	0.250	25.6 3217	9.1 Community Radio For Northe	59.4	75.1
202D Breckenridge	K202CV	LIC CO	DC_	201.7 21.4	99.5 BLFT20020828ABF	39 27 35.0 105 58 46.0	0.040 481	25.8 3820	6.5 Community Radio For Northe	60.6	78.8
203A Santa Maria	NEW	CP CO	DCX	186.6 6.5	92.5 BNPED20071017AHQ	39 27 54.0 105 40 31.0	0.500 -501	12.0 2722	8.5 Rv Ministries, Inc.	64.4	76.4
204A Breckenridge	KMPB	LIC CO	_CX	204.8 24.5	97.5 BLED20090724ADM	39 29 44.0 106 01 44.0	0.300 -76	1.2 3246	22.6 Wren Communications, Inc.	92.0	74.3
202A Fort Morgan	1245230	APP CO	_CX	84.1 265.2	152.8 BNPED20071018ASZ	40 25 14.0 103 45 37.0	1.500 130	67.7 1520	23.5 The Praise Network, Inc.	76.1	125.7
203A Vail	KVJZ	LIC CO	_CX	225.7 45.2	107.4 BLED20091112AJH	39 36 56.0 106 26 57.0	5.000 -241	22.4 2730	15.0 Denver Educational Broadca	76.7	88.9

CH CITY	CALL	TYPE STATE	ANT STATE	AZI <--	DIST FILE #	LAT LNG	PWR (kW) HAAT (M)	INT (km) COR (M)	PRO (km) LICENSEE	Page # 2		
										*IN*	*OUT*	(Overlap in km)
204A South Greeley	KDNR	CP WY	DCX	26.1 206.5	100.1 BPED20090205ACH	41 06 02.0 105 01 29.0	1.900 129	2.3 2153	17.8 Western Inspirational Bro	92.0	82.3	
202A Strasburg	1213233	APP CO	_CX	119.4 300.3	130.6 BNPED20071022AGO	39 42 31.3 104 13 23.7	0.500 -21	28.5 1607	8.5 De Mujer A Mujer Internati	86.9	85.0	
203A Laramie	KUWY	LIC WY	_CX	4.1 184.1	113.3 BLED20080303AJB	41 18 36.0 105 27 17.0	0.135 298	15.8 2703	21.1 University Of Wyoming	90.5	85.5	
204A South Greeley	KDNR	LIC WY	_CX	26.1 206.5	100.1 BMLED20080929AUD	41 06 02.0 105 01 29.1	0.500 129	1.6 2153	13.7 Western Inspirational Bro	92.5	86.4	
205A Laramie	KAIW	LIC WY	_CX	345.7 165.5	115.1 BLED20090220AAZ	41 17 46.0 105 53 30.0	1.150 197	2.1 2459	28.5 Educational Media Foundati	106.9	86.5	
202C1 Pueblo	KTPL	LIC CO	_CX	169.5 349.8	265.0 BLED20050309AAH	37 56 40.0 104 59 56.0	65.000 69	159.6 2593	78.0 Educational Communications	88.1	134.8	
201C2 Glenwood Springs	KDNK	LIC CO	DEX	238.5 57.4	183.4 BLED20041022ABU	39 25 08.0 107 22 10.0	1.200 775	89.1 3227	59.9 Carbondale Community Acces	88.5	121.4	
201D Laramie	K201HM	LIC WY	_C_	3.9 184.0	109.0 BLFT20040728AEH	41 16 20.0 105 27 42.0	0.013	10.7 2705	11.2 Western Inspirational Broa	91.3	88.6	
255A Steamboat Springs	970910MF	APP CO	_CX	280.6 99.9	102.5 BPH19970910MF	40 27 23.0 106 44 21.0	0.160 574	4.6 3214	1.6 George S Flinn Jr	10.0R	92.5M	
201D Vail	K201DU	LIC CO	DC_	225.8 45.2	107.4 BLFT20090515ADA	39 36 58.0 106 26 57.0	0.028	5.0 2734	3.8 Educational Media Foundati	94.1	100.3	
201A Cheyenne	KAIX	LIC WY	_CX	36.2 216.8	120.0 BLED20100603ACJ	41 09 37.0 104 42 13.0	1.900 63	19.2 1890	14.0 Educational Media Foundati	94.5	98.4	
205D Copper Mountain	K205CO	LIC CO	_VN	210.0 29.6	101.2 BLFT19970828TH	39 30 08.0 106 08 28.0	0.100 -348	0.7 2962	5.6 Educational Communications	96.6	95.0	
201C2 Elk Mountain	KGCV	CP WY	_CX	331.6 150.9	170.0 BMPED20080408ABD	41 38 00.0 106 31 33.0	0.380 1045	67.7 3408	45.5 Ocean Side Broadcasting, I	95.9	115.1	
202A Brush	1239651	APP CO	_CX	90.1 271.3	162.3 BNPED20071018AYM	40 16 30.0 103 38 33.0	1.000 56	54.7 1370	15.7 Make A Difference Foundati	97.5	141.5	
203A Steamboat Springs	KRNC	LIC CO	_CX	280.1 99.3	111.8 BLED20060418ADQ	40 27 43.0 106 50 57.0	0.240 183	10.0 2528	19.5 Community Radio Of Norther	97.9	99.4	
201D Steamboat Springs	K201HP	LIC CO	DC_	280.1 99.3	111.8 BLFT20080205ACJ	40 27 43.0 106 50 58.0	0.225	8.5 2540	6.5 Cedar Cove Broadcasting, I	99.4	104.1	
203D Cheyenne	K203DT	LIC WY	_V_	35.7 216.2	119.0 BLFT20010626AAN	41 09 34.0 104 43 19.0	0.170	12.3 1910	8.9 Calvary Chapel Of Twin Fal	100.5	102.2	
255A Steamboat Springs	970908MB	VAC CO	__N	281.7 100.8	110.8	40 29 12.0 106 49 54.0	6.000 100	4.6 2493	1.6 10.0R	100.8M		
205A Living Springs	1214520	APP CO	DEX	111.0 291.8	117.2 BNPED20071022ARD	39 54 31.0 104 16 16.0	6.630 91	2.0 1629	15.8 Calvary Chapel Aurora	108.9	101.0	
255A Steamboat Springs	970910MK	APP CO	_CN	280.1 99.3	111.8 BPH19970910MK	40 27 43.0 106 50 57.0	1.550 195	4.6 2544	1.6 Eb Needles Llc	10.0R	101.8M	
255A Steamboat Springs	970911MV	APP CO	_CX	280.1 99.3	111.8 BPH19970911MV	40 27 43.0 106 50 57.0	1.700 186	4.6 2531	1.6 Ramsey Leasing, Inc	10.0R	101.8M	
255A Steamboat Springs	970911ML	APP CO	_CN	280.1 99.3	111.8 BPH19970911ML	40 27 43.0 106 50 57.0	1.700 191	4.6 2536	1.6 Boat Of Steam Broadcasting	10.0R	101.8M	
202A Craig	KPYR	LIC CO	_C_	280.5 99.1	177.4 BLED20051021ACN	40 33 50.0 107 36 40.0	0.250 271	70.0 2283	23.5 Public Broadcasting Of Col	103.4	152.1	
204C1 Manitou Springs	KCME	LIC CO	_CY	160.8 341.2	181.9 BLED19990203KA	38 44 40.0 104 51 41.0	12.000 668	6.8 2918	76.2 Cheyenne Mountain Public B	156.8	105.0	
205C1 Carbondale	KCJX	LIC CO	DEX	238.5 57.4	183.4 BLED20040907AAD	39 25 08.0 107 22 10.0	4.000 775	4.1 3227	71.8 Roaring Fork Public Radio,	177.6	111.2	
202A Brush	1214025	APP CO	_CX	90.1 271.3	162.3 BNPED20071022ATG	40 16 30.0 103 38 33.0	0.400 45	40.1 1359	11.7 Wren Communications, Inc.	112.1	145.5	
205A Burns	KEZF	CP WY	_CX	43.4 224.1	134.6 BPED20100202ACK	41 10 01.0 104 26 49.0	2.700 27	1.6 1739	12.9 Cedar Cove Broadcasting, I	130.0	121.7	
205A Burns	KEZF	LIC WY	_CX	42.0 222.7	131.0 BLED20080725ADD	41 09 45.0 104 30 16.0	0.600 36	1.6 1774	8.9 Cedar Cove Broadcasting, I	126.1	122.0	

CH CITY	CALL	TYPE STATE	ANT STATE	AZI <--	DIST FILE #	LAT LNG	PWR (kW) HAAT (M)	INT (km) COR (M)	PRO (km) LICENSEE	Page # 3		
										*IN*	*OUT*	(Overlap in km)
202C1 Pueblo	KTPL	CP	DCX	172.7	251.9	38 02 31.0	2.200	110.1	50.3	123.9	152.3	
		CO		352.9	BPED20100420AIP	105 11 10.0	642	3538	Educational	Communications		
205A Leader	1213218	APP	_CX	106.5	140.8	39 55 21.8	1.000	1.6	13.7	134.8	126.7	
		CO		287.5	BNPED20071022AGT	103 58 18.3	38	1523	De Mujer A	Mujer Internati		
201C3 Salida	KMPZ	CP	_CX	191.0	208.7	38 26 48.0	0.200	65.4	44.2	127.6	157.3	
		CO		10.7	BMPED20080408AAG	106 00 36.0	827	3567	Cheyenne Mountain	Public B		
06 D Thomasville	K06OQ-D	CP	D_N	223.1	142.4	39 21 12.0	0.020	4.6	2.4	146.0R	-3.6M	
		CO		42.4	BDCCDTV20061027AFY	106 41 00.0	268	2666	Pitkin County	Translator D		
06 D Aspen	K06HU-D	LI	D_N	223.1	161.6	39 13 33.0	0.006	4.6	2.4	146.0R	15.6M	
		CO		42.3	BLDTV20100503ACZ	106 50 00.0	619	2882	Pitkin County	Translator D		
202A Kimball	KGCQ	CP	_CX	58.9	197.9	41 11 36.0	0.510	40.4	11.8	152.5	181.0	
		NE		240.2	BNPED20071022ATP	103 31 45.0	86	1527	Ocean Side Broadcasting,	I		
255C Pueblo	KKMG	LIC	_CY	160.8	181.8	38 44 43.0	72.000	4.6	1.6	29.0R	152.8M	
		CO		341.2	BLH19951005KA	104 51 41.0	695	2946	Radio License Holding	Cbc,		
202C1 Montrose	KPRH	LIC	_CN	221.4	279.7	38 23 14.0	3.500	116.4	53.4	153.7	217.7	
		CO		40.1	BLED19981124KD	107 40 28.0	511	2890	Public Broadcasting Of	Col		
256C3 Glenwood Springs	KMTS	LIC	_CX	241.6	174.8	39 31 57.0	10.000	4.6	1.6	12.0R	162.8M	
		CO		60.5	BLH20050119ABM	107 20 30.0	-69	2295	Colorado West	Broadcasting		
203A Atwood	1211122	APP	_VX	81.9	214.2	40 32 12.0	3.000	41.3	28.5	164.0	184.8	
		CO		263.5	BNPED20071012ABQ	103 02 52.0	113	1440	Calvary Chapel Of	Twin Fal		
201D West Glenwood Sprin	KDNK-FM1	LIC	DV_	242.2	171.7	39 33 36.0	0.200	2.5	3.2	164.3	167.1	
		CO		61.1	BLFTB20051214AAR	107 19 12.0		2164	Carbondale Community	Acces		
202A Scottsbluff	KLJV	LIC	_CX	39.4	224.5	41 50 21.0	0.390	53.6	20.8	164.7	185.5	
		NE		220.6	BMLED20080523AEY	103 49 53.0	238	1532	Educational Media Foundati			
205D West Glenwood Sprin	KCJX-FM1	LIC	DV_	242.2	171.7	39 33 37.0	0.099	0.2	1.9	169.9	169.4	
		CO		61.1	BLFTB20051005AAR	107 19 12.0		2171	Roaring Fork Public	Radio,		

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Terrain database is USGS 03 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 = 2, Co to 3rd adjacent.  
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 protected contour.

\* Low power TV station. A letter agreement has been signed by the licensee of KXDP-LP Denver,  
consenting to the proposed operation of K215BE on channel 202D. See exhibit 14 for more details.



FIGURE 2, DETAILED INTERFERENCE STUDY WITH KGNU  
K215BE ESTES PARK, COLORADO, CH. 202D

FMCommander Single Allocation Study - 07-31-2010 - USGS 03 SEC  
K215BE's Overlaps (In= -3.75 km, Out= 0.15 km)

K215BE CH 202 D DA  
Lat= 40 17 34.0, Lng= 105 33 05.0  
0.11 kW 73.9 M HAAT, 2914 M COR  
Prot.= 60 dBu, Intef.= 54 dBu

KGNU-FM CH 203 A DA BLED20100528ADY  
Lat= 39 59 33.0, Lng= 105 09 16.0  
4.0 kW 65 M HAAT, 1732 M COR  
Prot.= 60 dBu, Intef.= 54 dBu

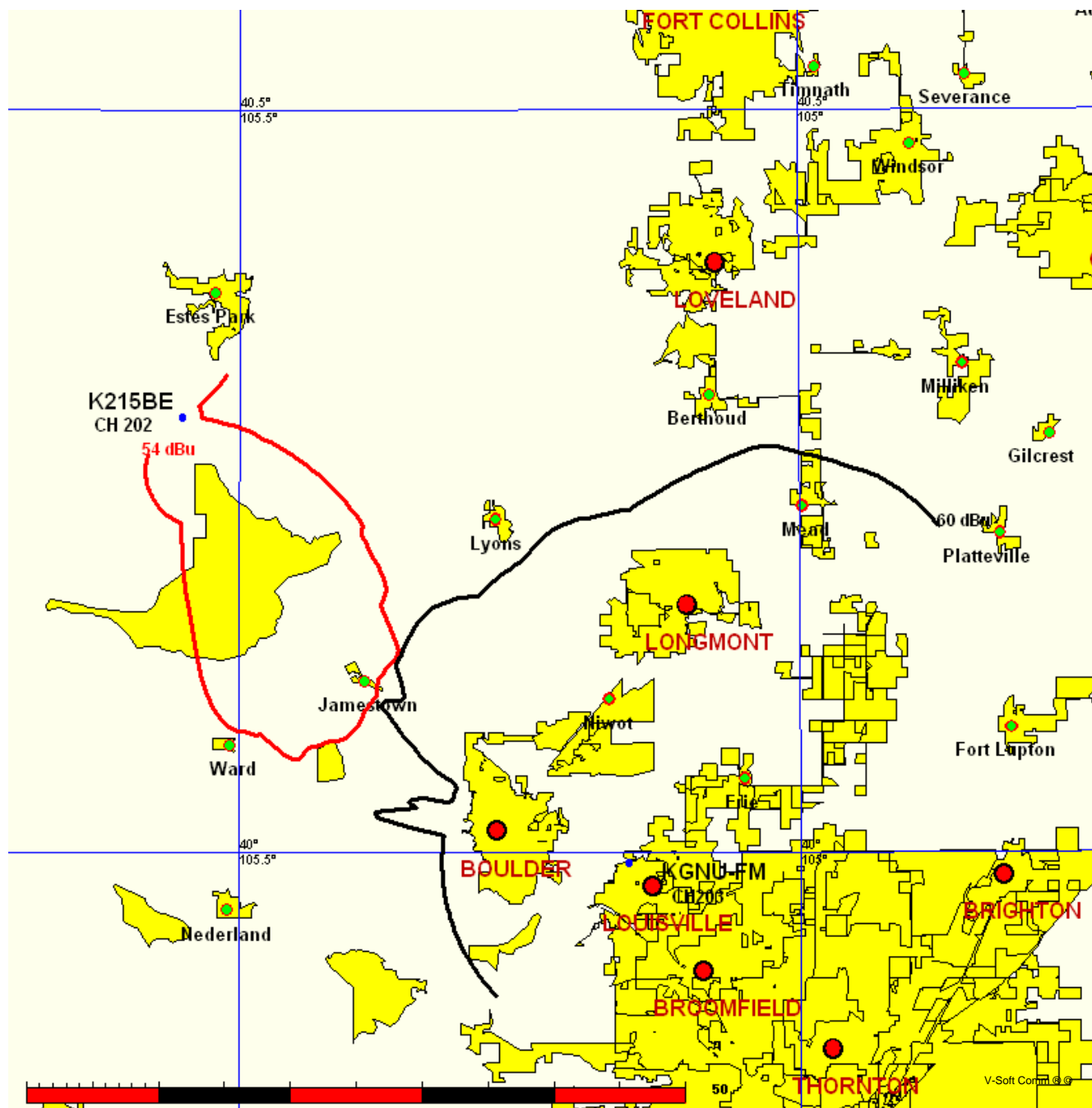


FIGURE 3 PROPOSED 60 DBU WITH KXWA 60 DBU CONTOURS

Coverage Study - USGS 03 SEC  
07-31-2010

KXWA CH209 C0, 80.0 kW, 372.0M HAAT, 2561.2M COR AMSL  
Service Contour = 60 dBu. Population = 1,227

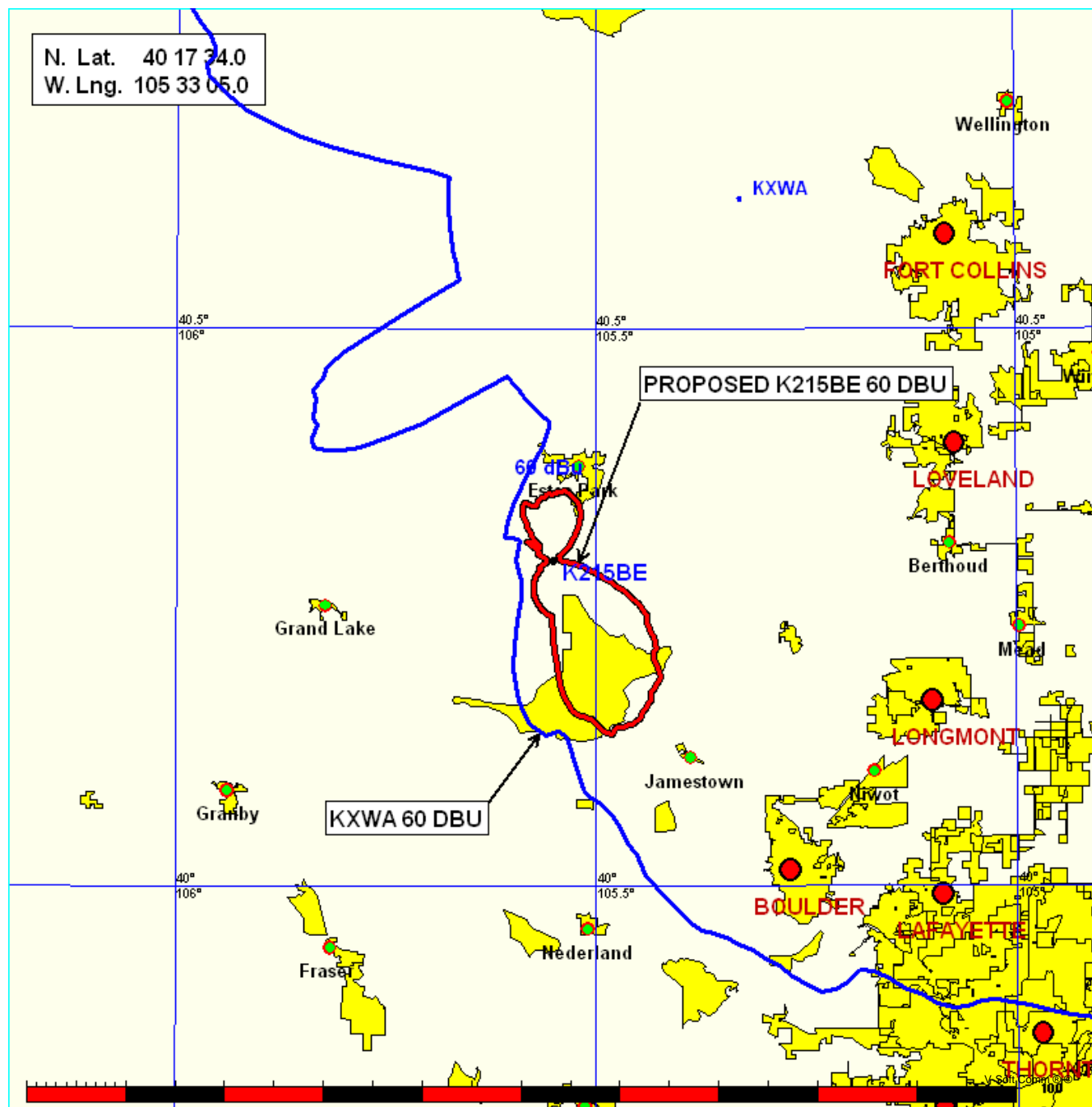


FIGURE 4, OVERLAP WITH CURRENT K215BE 60 DBU  
K215BE ESTES PARK, COLORADO, CHANNEL 202D

Coverage Study - USGS 03 SEC  
07-31-2010

K215BE CH215 D , 0.018 kW, 14.0M HAAT, 2719.0M COR AMSL  
Service Contour = 60 dBu. Population = 1,227

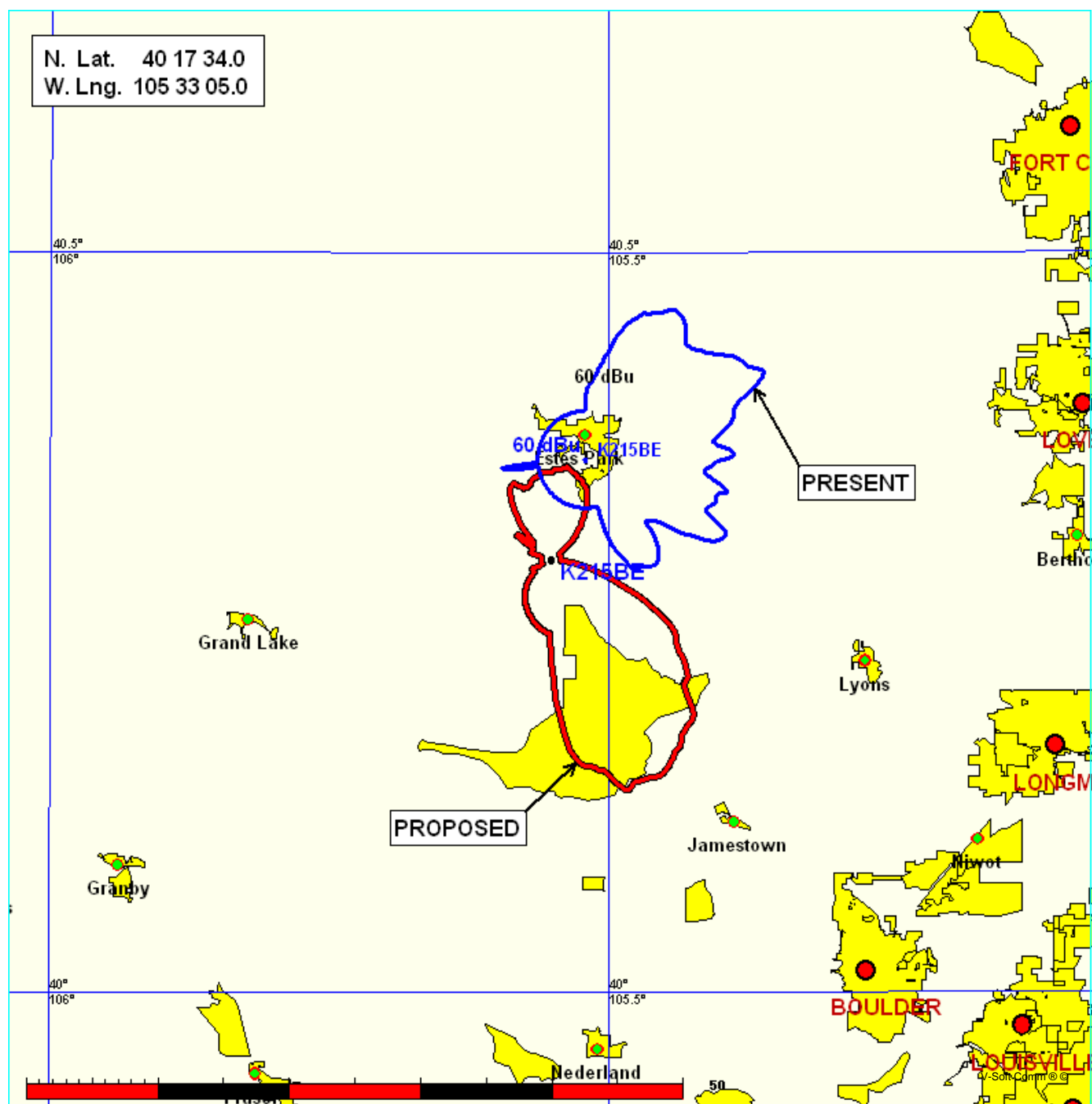


FIGURE 5

K215BE ESTES PARK, COLORADO

07-31-2010

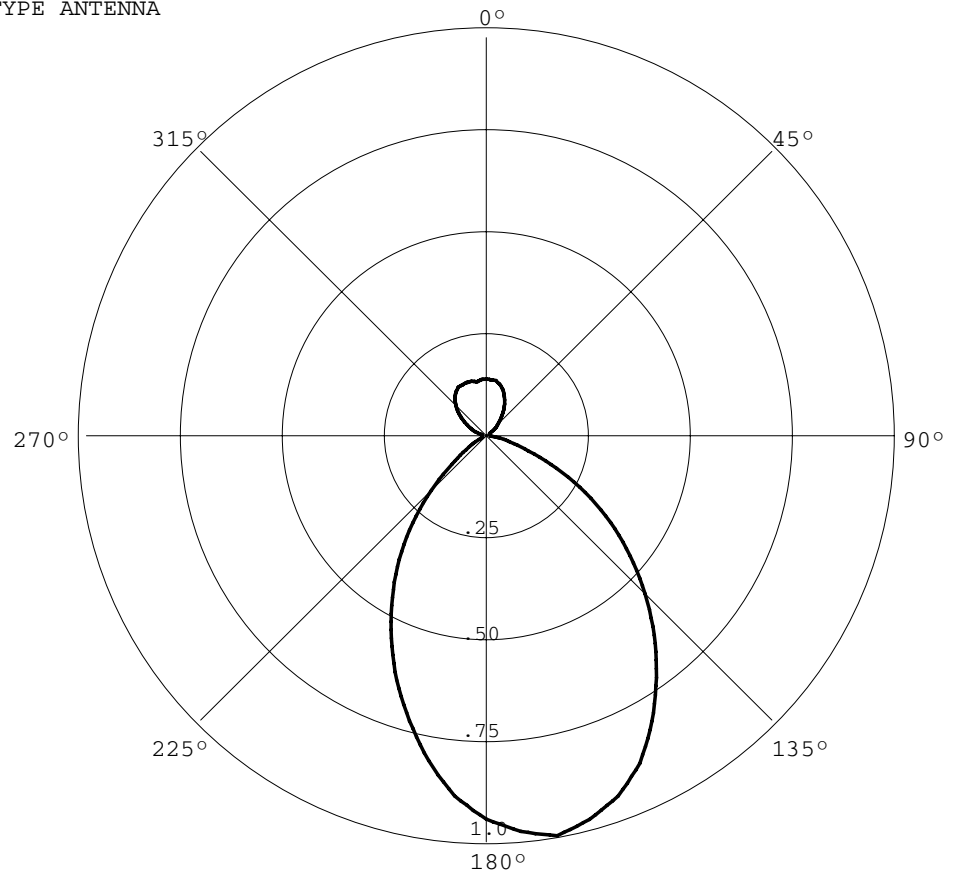
RMS(V) = .396

DIRECTIONAL ANTENNA DATA, SCALA HDCA-5HRM, DIRECTIONAL

Graph is Relative Field

YAGI TYPE ANTENNA

Azi	Field	dBk	kW
000	0.140	-26.664	0.002
010	0.138	-26.788	0.002
020	0.120	-28.002	0.002
030	0.090	-30.501	0.001
040	0.055	-34.779	0.000
050	0.030	-40.044	0.000
060	0.010	-49.586	0.000
070	0.010	-49.586	0.000
080	0.010	-49.586	0.000
090	0.010	-49.586	0.000
100	0.035	-38.705	0.000
110	0.110	-28.758	0.001
120	0.280	-20.643	0.009
130	0.460	-16.331	0.023
140	0.641	-13.449	0.045
150	0.812	-11.395	0.073
160	0.944	-10.087	0.098
170	1.000	-9.586	0.110
180	0.944	-10.087	0.098
190	0.812	-11.395	0.073
200	0.641	-13.449	0.045
210	0.460	-16.331	0.023
220	0.280	-20.643	0.009
230	0.110	-28.758	0.001
240	0.035	-38.705	0.000
250	0.010	-49.586	0.000
260	0.010	-49.586	0.000
270	0.010	-49.586	0.000
280	0.010	-49.586	0.000
290	0.030	-40.044	0.000
300	0.055	-34.779	0.000
310	0.090	-30.501	0.001
320	0.120	-28.002	0.002
330	0.138	-26.788	0.002
340	0.140	-26.664	0.002
350	0.135	-26.979	0.002



# Contour.out

N. Lat. = 401734.0 W. Lng. = 1053305.0  
 HAAT and Distance to Contour,  
 FCC, FM 2-10 Mi, 51 pts Method - USGS 03 SEC

FIGURE 7, TABULATION OF DISTANCE TO CONTOURS

Azi.	AV EL	HAAT	dBk	60-F5	54-F1	40-F1
000	2603.7	310.3	-26.66	6.54	9.88	23.33
010	2510.8	403.2	-26.79	7.07	11.05	26.59
020	2479.0	435.0	-28.00	6.51	10.55	25.91
030	2411.1	502.9	-30.50	5.50	9.18	24.02
040	2419.0	495.0	-34.78	3.64	6.34	18.19
050	2563.8	350.2	-40.04	2.04	3.65	10.88
060	2613.1	300.9	-49.59	0.74	1.47	5.16
070	2645.5	268.5	-49.59	0.74	1.47	4.94
080	2609.8	304.2	-49.59	0.74	1.47	5.18
090	2605.6	308.4	-49.59	0.74	1.47	5.20
100	2516.1	397.9	-38.70	2.39	4.29	12.45
110	2552.2	361.8	-28.76	5.83	9.30	22.33
120	2521.5	392.5	-20.64	11.03	15.90	37.86
130	2546.0	368.0	-16.33	13.78	20.49	46.47
140	2542.6	371.4	-13.45	16.33	24.45	54.30
150	2561.9	352.1	-11.39	17.97	26.72	58.20
160	2606.1	307.9	-10.09	18.16	26.89	57.75
170	2694.7	219.3	-9.59	15.60	23.59	51.05
180	2863.4	50.6	-10.09	7.26	10.43	24.32
190	3069.4	-155.4	-11.39	5.19	7.35	16.90
200	3123.8	-209.8	-13.45	4.58	6.53	14.62
210	3328.3	-414.3	-16.33	3.88	5.53	12.44
220	3504.0	-590.0	-20.64	3.03	4.28	9.79
230	3596.3	-682.3	-28.76	1.95	2.72	6.05
240	3631.6	-717.6	-38.70	1.61	1.52	3.39
250	3511.7	-597.7	-49.59	0.74	1.47	1.86
260	3439.1	-525.1	-49.59	0.74	1.47	1.86
270	3314.1	-400.1	-49.59	0.74	1.47	1.86
280	3291.6	-377.6	-49.59	0.74	1.47	1.86
290	3092.8	-178.8	-40.04	1.61	1.61	3.14
300	2978.9	-64.9	-34.78	1.61	1.95	4.24
310	2933.1	-19.1	-30.50	1.76	2.47	5.47
320	2809.4	104.6	-28.00	3.67	5.33	11.77
330	2639.3	274.7	-26.79	6.17	9.24	21.82
340	2688.3	225.7	-26.66	5.71	8.42	19.95
350	2623.8	290.2	-26.98	6.24	9.39	22.17

Ave El = 2845.60 M HAAT= 68.40 M AMSL= 2914