

TECHNICAL STATEMENT AND WAIVER REQUEST
K288EX LAKEWOOD, CO
MOUNTAIN COMMUNITY TRANSLATORS, LLC
FCC FORM 349
APRIL 2010

This Technical Statement and Waiver Request is in support of a minor change application, FCC form 349, being filed on behalf of Mountain Community Translators, LLC (“MCT”) in regards to its recently acquired FM translator, K288EX Lakewood, Colorado, facility ID 140231.

Upon consummation of the assignment of K288EX Lakewood from Skandia, LLC (the prior licensee), it was discovered that the translator transmitter final output stage had failed and was producing less than 1 watt of output power. Also, as part of this assignment, the input station was switched from K245AD Arvada, Colorado, facility ID 140240, which retransmits KJAC Timnath, Colorado, facility ID 38345, to KLDV Morrison, Colorado, facility ID 12354. The transmitter was restored to its licensed output of 0.030 Kilowatts.

However, with these changes, the new licensee, MCT is now receiving numerous complaints of interference being generated against KJAC Timnath, Colorado, facility ID 38345, which operates on channel 288C1, or co-channel with the licensed operation of K288EX. MCT believed this interference was not recognized previously, as the output of the translator was not at maximum, and that the input station that was being rebroadcast by K288EX was KJAC, or the same station now receiving interference complaints by K288EX.

While using standard FCC prediction methods, the 40 dB μ (F50,10) Interference contour of the current licensed operation of K288EX, does not overlap with the co-channel operation of KJAC. However, because of unusual terrain roughness in this area of Colorado, there is substantial co-channel overlap between K288EX and KJAC. Figure 1 attached shows a Desired/Undesired signal prediction map utilizing the Longley-Rice alternate signal prediction methods. It clearly shows that the two facilities have signal strengths nearly the same within many areas in the K288EX coverage area.

Because of many interference complaints received by MCT, it was decided to temporarily cease broadcasting by K288EX. A Special Temporary Authority was filed by MCT on February 28th, 2010, BLSTA-20100218ADT, to remain silent until the interference issue can be solved.

After some technical research conducted by MCT, it was determined that it will be impossible to eliminate the interference being caused to KJAC without limiting the operation of K288EX 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 K288EX. Channels 285, 286 and 287 are precluded because the transmitter site for K288EX is located inside the protected 60 dB μ contour of KXKL-FM Denver, Colorado on channel 286C, facility ID 59959. Channel 289, 290 and 291 are precluded because the transmitter site for K288EX is located inside of the protected 60 dBu contour of KALC(FM) Denver, Colorado on channel 290C, facility ID 59601. I.F. channels 234 and 235 are precluded because the transmitter site for K288EX is located inside of the protected 60 dB μ of KRKS-FM Lafayette, Colorado, on channel 234C, facility ID 58631.

It was determined that non-adjacent channel 229D could be utilized at the current K288EX transmitter site and not cause any interference to any licensed or authorized stations, with the exception of the licensed operation of KTCL Wheat Ridge, Colorado, on second adjacent channel 227C1, facility 68684. However, it will be shown that no actual interference will occur to KTCL, there are no persons residing inside of the potential area of interference. Thus, it was determined that channel 229D could be utilized by K288EX Lakewood.

REQUEST FOR WAIVER OF 74.1233(a)(1)

MCT, the licensee of Station K288EX Lakewood, 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, MCT makes the following showing:

- 1) MCT has sought to file a modification application that is in accord with the Commission's minor change rules. However, MCT has been unable to do so and is, therefore, seeking the instant waiver.
- 2) As evidenced in the showing contained in this Technical Statement and attached exhibits, there are simply no available channels that would allow MCT 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 channel is Channel 229 and that channel has been selected for this application.

- 3) Station K288EX can longer operate on channel 288. As evidenced in Figure 1, there is severe interference being caused to and received from KJAC Timnath. Therefore, unless K288EX can transition to another channel, the impact of the service provided by KJAC would be to likely ultimately cause the permanent termination of the operations of K288EX. In that K288EX provides a valuable program service to the community of Lakewood, by retransmitting the signal of KLDV Morrison, Colorado, listeners in Lakewood should not lose the service and only a waiver of Section 74.1233(a)(1) will permit K288EX's broadcast service to remain in operation.
- 4) A waiver of the rules to allow K288EX to migrate to Channel 229, will enable K288EX 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 K288EX to continue to serve the public, MCT 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 229D

MCT is proposing to remain at its existing site located at N. 39°-43'-46", W. 105°-14'-08", NAD 27, with an increased Effective Radiated Power of 99 Watts and replace the current Nicom BLD-1, one bay antenna, with a Nicom BKG-77, one bay, circular polarized, directional antenna. The antenna will be mounted at the 11 meter level on a 12 meter overall tower, with a Center of Radiation at 2246 Above Mean Sea Level. This is at the same level and heights as the currently licensed operation of K288EX. It also seeks to change channels from 288D to 229D.

Figure 2 shows a channel interference study conducted from the current site for K288EX. It shows that the proposed operation of K288EX on channel 229D, will not cause any prohibited outgoing interference to any licensed or proposed FM services, with the exception of KTCL(FM) Wheat Ridge, Colorado operating on channel 227C1, facility ID 68684 . The proposed operation of K288EX on 229D is located within the protected 60 dB μ contour of 2nd adjacent station KTCL. Figure 3 shows the predicted F(50-50) field strength of KTCL at the proposed K288EX transmitter site is 133 dB μ . Therefore, the respective predicted interfering contour F(50-10) generated by the proposed K288EX on channel 229D is an additional 40 dB μ or 173 dB μ .

Figure 4 shows that there is no population in the area of interference. Plus, this proposed interference contour (173 dB μ) will only extend 0.2 meters from the antenna, thus it will not reach the ground with a center of radiation 11 meters above the ground. The applicant, Mountain Community Translators, LLC, respectfully requests a waiver of C.F.R. 74.1204(d) of the Commission's rules based on the fact that there is no population

within the area of predicted interference. There are no homes nearby the proposed existing tower site, which is a privately owned 1 acre square wooded area, with private access. The transmitter building is uninhabited and does not have indoor plumbing.

Figure 5 shows a detailed interference study conducted against a pending application for KIIQ Limon, Colorado, facility ID 85056, on channel 229C1, BPH-20070313ABN. Recorded number 1 of the interference study at Figure 2, shows that the proposed operation of K288EX would overlap with the proposed allotment point for KIIQ Limon, CO on channel 229C1, but this is only a proposed allotment point. The associated pending minor change application as mentioned above will not receive any proposed interference from K288EX.

Figure 6 shows a detailed interference study conducted against K229AC Ward, Colorado, facility ID 6514.

Figure 7 shows a detailed interference study conducted against a pending translator application at Berthoud, Colorado on channel 229D, facility ID 140249.

Figure 8 shows the proposed 60 dB μ of K288EX will be completely contained inside of the current 60 dB μ predicted coverage contour of the station being rebroadcast, KLDV Morrison, Colorado on channel 216C0, facility ID 12354. The proposed operation of K288EX will be considered a “fill-in” translator for KLDV, 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 99 watts, thus this proposed operation is in compliance with 74.1235(a).

Figure 9 shows the antenna polar plot of the proposed directional antenna.

Figure 10 is a tabulation of the pertinent distances to contours for the proposed operation of K288EX on channel 229D.

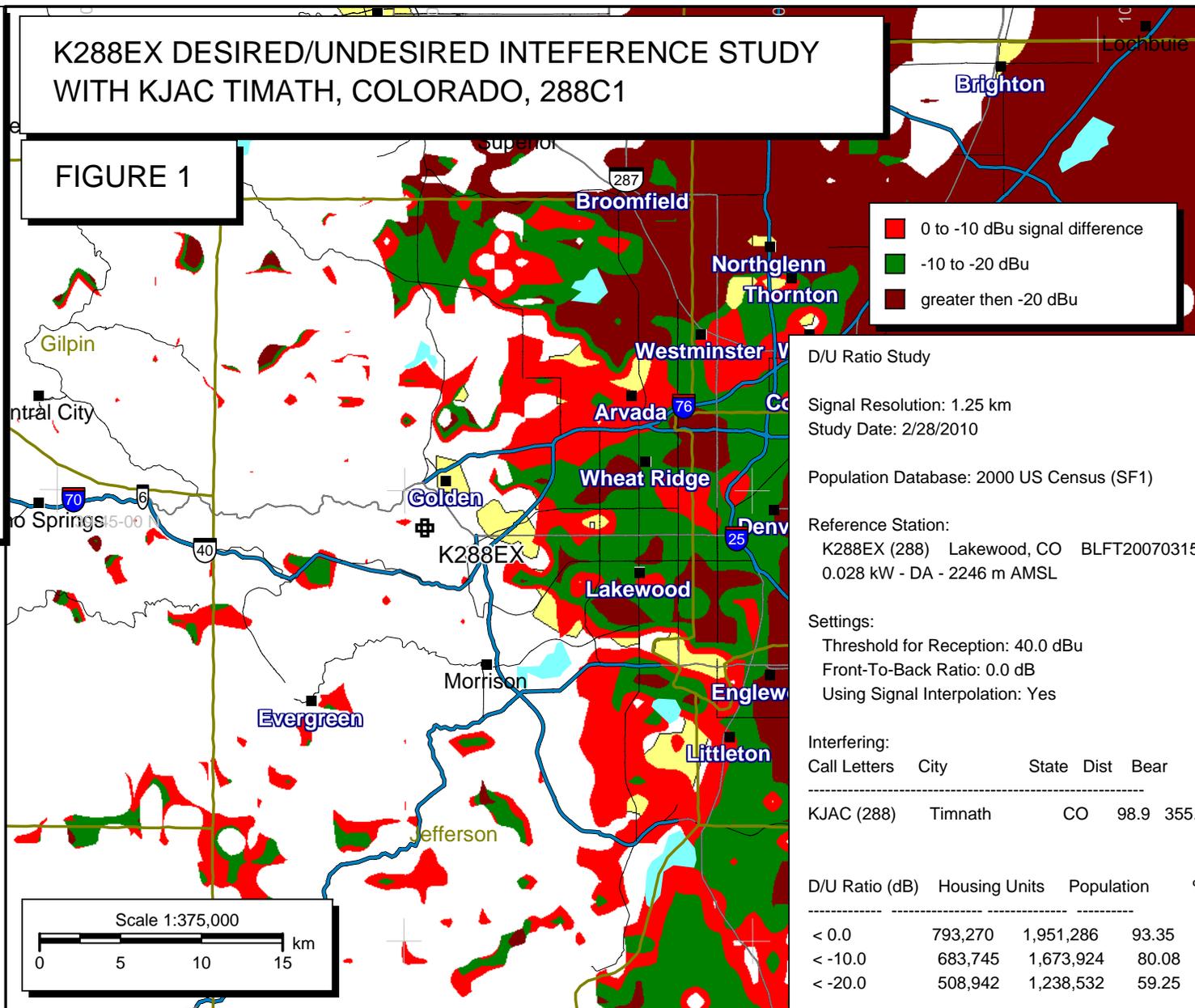
It was concluded that the new proposed operation of K288EX Lakewood, Colorado on channel 229D will not cause any harmful interference to any existing stations, and will be in full compliance with the commission's rules.

K288EX

BLFT20070315AAE
Latitude: 39-43-46 N
Longitude: 105-14-08 W
ERP: 0.028 kW
Channel: 288
Frequency: 105.5 MHz
AMSL Height: 2246.0 m
Elevation: 2235.0 m
Horiz. Pattern: Directional
Vert. Pattern: No
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 311.0
Receiver Ht AG: 9.1 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast

**K288EX DESIRED/UNDESIRED INTEFERENCE STUDY
WITH KJAC TIMATH, COLORADO, 288C1**

FIGURE 1



D/U Ratio Study

Signal Resolution: 1.25 km
Study Date: 2/28/2010

Population Database: 2000 US Census (SF1)

Reference Station:
K288EX (288) Lakewood, CO BLFT20070315AAE
0.028 kW - DA - 2246 m AMSL

Settings:
Threshold for Reception: 40.0 dBu
Front-To-Back Ratio: 0.0 dB
Using Signal Interpolation: Yes

Interfering:

Call Letters	City	State	Dist	Bear
KJAC (288)	Timnath	CO	98.9	355.5

D/U Ratio (dB)	Housing Units	Population	%
< 0.0	793,270	1,951,286	93.35
< -10.0	683,745	1,673,924	80.08
< -20.0	508,942	1,238,532	59.25

FIGURE 2, DETAILED INTERFERENCE STUDY
 K288EX LAKEWOOD, CO, CHANNEL 229D
 Average Protected F(50-50)= 5.62 km
 Standard Directional

REFERENCE
 39 43 46.0 N.
 105 14 08.0 W.

CH# 229D - 93.7 MHz, Pwr= 0.099 kW DA, HAAT= 0.0 M, COR= 2246 M

DISPLAY DATES
 DATA 04-03-10
 SEARCH 04-03-10

CH CITY	CALL	TYPE STATE	ANT	AZI <--	DIST FILE #	LAT LNG	PWR (kW) HAAT (M)	INT (km) COR (M)	PRO (km) LICENSEE	*IN* (Overlap in km)	*OUT*
229C1 Limon	KIIQ *	RSV CO	___	106.1 287.1	138.1	39 22 34.0 103 41 43.0	100.000 299	169.0 1996	70.9 Percheron Associates, Llc	-53.5*<	-4.3*< *
227C1 Wheat Ridge	KTCL **	LIC CO	DCX	353.2 173.2	0.4 BLH20070621AQR	39 43 59.0 105 14 10.0	71.000 346	5.6 2256	49.1 Jacor Broadcasting Of Colo	-18.7*<	-49.1*< **
229C1 Limon	KIIQ	APP CO	NCX	106.1 287.1	138.1 BPH20070313ABN	39 22 34.0 103 41 43.0	100.000 205	158.6 1901	62.6 Percheron Associates, Llc	-43.0*<	3.9
229D Ward	K229AC	LIC CO	_E_	318.2 138.0	36.4 BLFT20061218ACR	39 58 22.0 105 31 13.0	0.028	28.5 2655	15.0 Boulder Community Broadcas	0.1	2.4
229D Berthoud	631534	APP CO	DE_	15.0 195.1	58.7 BNPFT20030312ADC	40 14 24.0 105 03 23.0	0.100	16.8 1637	5.5 Educational Communications	26.4	1.9
230A Frisco	KYSL	LIC CO	_CN	255.9 75.4	77.9 BLH19940808KA	39 33 22.0 106 06 53.0	0.560 324	60.3 3549	43.0 Krystal Broadcasting, Inco	9.2	28.4
231D Boulder	K231AA	LIC CO	_CN	0.2 180.2	26.2 BLFT19960111TK	39 57 54.0 105 14 05.0	0.205 -133	1.0 1719	6.7 Citicasters Licenses, Inc.	10.6	19.1
230C3 Loveland	KRKU	APP CO	NCX	18.1 198.3	84.9 BPH20100302ACE	40 27 19.0 104 55 25.0	14.500 131	57.9 1621	39.1 Laramie Mountain Broadcast	11.4	22.9
229D Monument	631407	APP CO	_C_	155.8 336.1	81.6 BNPFT20030310AVZ	39 03 31.0 104 50 54.1	0.250	23.8 2103	7.1 Way-fm Media Group, Inc.	37.2	12.6
229C2 Salida	KSBV	LIC CO	_CX	205.4 24.9	157.4 BLH20020828AAQ	38 26 47.0 106 00 37.0	1.000 830	132.5 3572	59.7 Arkansas Valley Broadcasti	12.8	77.9
230C3 Loveland	KRKU	RSV CO	___	15.3 195.5	87.9	40 29 33.0 104 57 41.0	25.000 100	59.1 1606	39.4 Laramie Mountain Broadcast	13.0	26.5
232C Colorado Springs	KILO	LIC CO	_C_	163.5 343.7	113.9 BLH20070426AAL	38 44 44.0 104 51 42.0	79.000 670	16.3 2922	97.7 Colorado Springs Radio Bro	80.6	15.5
230D Fort Lupton	630344	APP CO	_C_	47.4 227.8	55.9 BNPFT20030317AZW	40 04 05.0 104 45 08.0	0.170	15.8 1611	11.1 Horizon Christian Fellowsh	21.2	17.3
230D Fort Lupton	644473	APP CO	_C_	43.5 223.9	60.8 BNPFT20030317GEL	40 07 28.1 104 44 36.1	0.115	17.0 1630	11.6 Radio Assist Ministry, Inc	25.1	22.4
230A Loveland	KRKU	LIC CO	NCX	3.1 183.1	85.0 BLH20100302ABS	40 29 37.0 105 10 53.0	0.300 319	47.0 2098	30.4 Laramie Mountain Broadcast	24.0	32.3
230D Westcreek	631674	APP CO	_C_	164.2 344.4	63.9 BNPFT20030310BGE	39 10 33.0 105 02 03.1	0.010	14.4 2823	13.6 Way-fm Media Group, Inc.	30.1	24.4
229D Fort Collins	637466	APP CO	_C_	2.0 182.1	90.8 BNPFT20030317CVW	40 32 46.8 105 11 50.0	0.010	47.0 2188	12.8 Radio Assist Ministry, Inc	28.8	27.3
229C1 Craig	KRAI-FM	LIC CO	_CN	295.8 114.3	223.0 BLH6997	40 34 35.0 107 36 29.0	100.000 299	178.4 2315	76.3 Wild West Radio, Inc.	36.0	132.6
230D Estes Park	K230BA	LIC CO	DV_	341.1 160.9	74.2 BLFT20091211AGE	40 21 38.0 105 31 12.0	0.250	23.5 2734	15.5 Cedar Cove Broadcasting, I	37.1	46.3
232D Estes Park	K230BA	APP CO	DV_	336.9 156.7	68.1 BPFT20100104ABT	40 17 34.0 105 33 05.0	0.250	1.0 2917	22.2 Cedar Cove Broadcasting, I	60.4	45.5
229C3 Cheyenne	KAZY-FM	LIC WY	_CX	16.2 196.6	162.7 BLH20060615AAH	41 08 04.0 104 41 32.0	25.000 35	99.8 1859	27.8 Freisland Broadcasting Cor	46.9	88.3
229D Colorado Springs	629875	APP CO	DE_	163.5 343.7	113.9 BNPFT20030312AJI	38 44 43.0 104 51 39.0	0.010	2.2 2718	13.5 Educational Communications	91.8	47.3
228D Woodland Park	K228EM	LIC CO	_C_	170.0 350.1	83.7 BLFT20070823AEI	38 59 12.0 105 04 04.0	0.015	16.8 2774	11.6 Cheyenne Mountain Public B	48.8	57.9
230D Windsor	631544	APP CO	DE_	3.1 183.1	84.9 BNPFT20030312ADM	40 29 36.0 105 10 52.0	0.010	9.0 2078	11.3 Educational Communications	62.0	52.7
230D Fort Collins	644477	APP CO	_C_	2.0 182.1	90.8 BNPFT20030317GEQ	40 32 46.8 105 11 50.0	0.010	19.9 2188	12.8 Radio Assist Ministry, Inc	56.0	55.5

CH CITY	CALL	TYPE STATE	ANT	AZI <--	DIST FILE #	LAT LNG	PWR (kW) HAAT (M)	INT (km) COR (M)	PRO (km) LICENSEE	*IN* (Overlap in km)	*OUT*
230D Greeley	631577	APP DE_ CO		30.1 210.5	84.9 BNPFT20030312AWW	40 23 19.0 104 43 56.0	0.050	1.0 1528	5.8 Educational Communications	66.7	56.6
227D Breckenridge	652035	APP _C_ CO		245.3 64.8	70.3 BNPFT20030317MPR	39 27 48.0 105 58 41.0	0.008	0.2 3752	7.9 Mitchell A. Beranek	64.5	61.7
229A Limon	KIIQ	LIC _CX CO		110.7 291.7	142.7 BLH20041025AEJ	39 16 00.0 103 41 15.0	1.000 -32	35.6 1649	10.2 Percheron Associates, Llc	84.8	62.5
231D Byers	649226	APP _C_ CO		91.4 272.1	88.4 BNPFT20030312ARO	39 42 19.0 104 12 18.0	0.200	1.0 1705	8.9 Frank G. Mccoy	64.5	78.8
227D Breckenridge	634531	APP DH_ CO		245.0 64.6	70.6 BNPFT20030311AOY	39 27 35.0 105 58 46.0	0.070	0.5 3822	0.9 Krystal Broadcasting	64.7	69.0
230D Timnath	650170	APP _C_ CO		11.5 191.6	97.0 BNPFT20030317IUB	40 35 08.0 105 00 23.0	0.250	10.1 1520	7.1 Educational Media Foundati	71.5	67.1
229A Hillsdale	KYOY	APP NCX WY		17.2 197.6	166.7 BPH20100301ADY	41 09 40.0 104 38 46.0	6.000 71	76.9 1872	25.7 Kimball Radio, Llc	73.8	90.7
229A Hillsdale	KYOY	RSV ___ WY		21.0 201.5	176.8	41 12 45.0 104 28 36.0	6.000 100	85.0 1830	29.3 Kimball Radio, Llc	75.4	96.4
228D Leadville	K228AG	LIC DHN CO		237.8 57.2	96.3 BLFT19790511IC	39 15 54.0 106 10 54.0	0.107 546	10.4 4011	9.0 Lake County Tv-fm, Inc	79.1	80.3
232C3 Wellington	KMAX-FM	LIC _CX CO		3.3 183.4	133.3 BLH20021101AAV	40 55 41.0 105 08 36.0	8.700 168	4.9 2131	51.1 Regent Broadcasting Of Ft.	113.6	81.9
226D Frisco	K226AH	LIC DVN CO		264.6 83.8	104.4 BLFT19980717TD	39 38 05.0 106 26 47.0	0.150 72	0.9 2978	19.7 Krystal Broadcasting, Inc.	98.2	84.1
227D Cimmaron Hills	651528	APP _C_ CO		158.5 338.8	108.6 BNPFT20030317MCX	38 49 08.0 104 46 32.0	0.140	0.8 1900	6.1 Educational Media Foundati	89.2	101.8
227D Colorado Springs	629882	APP DE_ CO		163.5 343.7	113.9 BNPFT20030312AJS	38 44 43.0 104 51 39.0	0.010	0.0 2718	4.2 Educational Communications	98.3	109.0
226C3 Walden	1170083	APP _HX CO		313.8 133.0	153.7 BNPH20070125ACD	40 40 42.0 106 33 00.0	25.000 14	6.1 2727	53.5 Laramie Mountain Broadcast	143.5	99.8
231C2 Phippsburg	KEZZ	LIC NCX CO		300.3 119.3	143.0 BLH20090522ACV	40 22 03.0 106 41 28.0	1.750 380	2.7 3107	41.5 Youngers Colorado Broadcas	135.9	101.0
228C3 Aspen	KVVQ	CP _CX CO		253.3 72.2	155.1 BNPH20070501AAQ	39 18 56.0 106 57 32.0	21.000 109	33.5 2682	57.2 Bs&t Wireless, Inc.	113.4	115.0
228A Aspen	AU7052710	VAC ___ CO		246.7 65.7	148.8 RM9994	39 11 24.0 106 49 06.0	6.000 100	23.5 3078	15.8 Roaring Forks Broadcasting	117.6	125.1
226C3 Walden	AL7155	VAC ___ CO		315.1 134.2	153.7 RM11387	40 42 01.0 106 31 21.0	25.000 100	6.7 2758	0.0 Laramie Mountain Broadcast	142.9	153.3
228L1 Laramie	KOCA-LP	LIC ___ WY		350.6 170.4	178.3 BLL20021223AAQ	41 18 48.0 105 35 00.0	0.100	8.0 2218	5.6 La Radio Montanesa: Voz De	155.9	154.0
231C Montrose	KKXX	LIC _CY CO		234.1 52.6	259.2 BLH19961009KC	38 20 16.0 107 38 23.0	100.000 574	15.1 3094	92.8 Ccr-montrose Iv, Llc	238.6	165.8

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.
 Reference station has protected zone issue: AM tower

* This record is an allotment point only for a proposed operation of KIIQ Limon, Colorado on channel 229C1.
 The associated minor change application for KIIQ on channel 229C1 will be protected
 (as seen at record number three below).

** Actual interference will not occur towards KTCL on second adjacent channel 227 as there are no
 persons living inside of the proposed interference contour. See Technical Statement for a more
 detailed interference study.

FIGURE 3, KTCL 133 DBU CONTOUR AT THE K288EX SITE
K288EX LAKEWOOD, CO, CH. 229D

Coverage Study - USGS 03 SEC
03-01-2010

KTCL CH227 C1, 71.0 kW, 346.0M HAAT, 2256.0M COR AMSL
Service Contour = 133 dBu. Population =

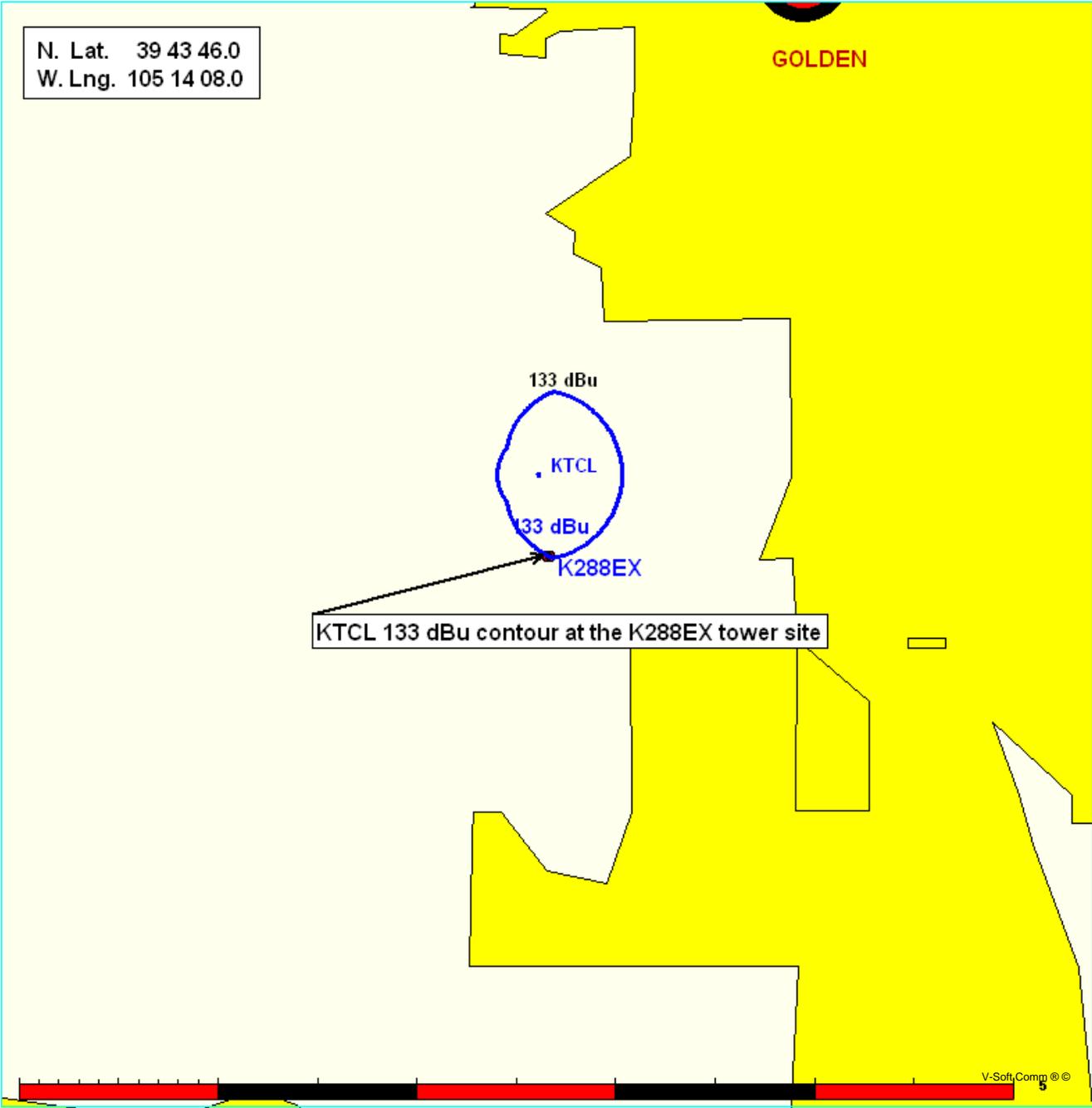


FIGURE 4, PROPOSED 173 DBU CONTOUR
K288EX LAKEWOOD, CO, CH. 229D

Coverage Study - USGS 03 SEC
03-01-2010

K288EX CH229 D , 0.099 kW, 0.0M HAAT, 2246.0M COR AMSL
Interference Contour = 173 dBu. Population = 0

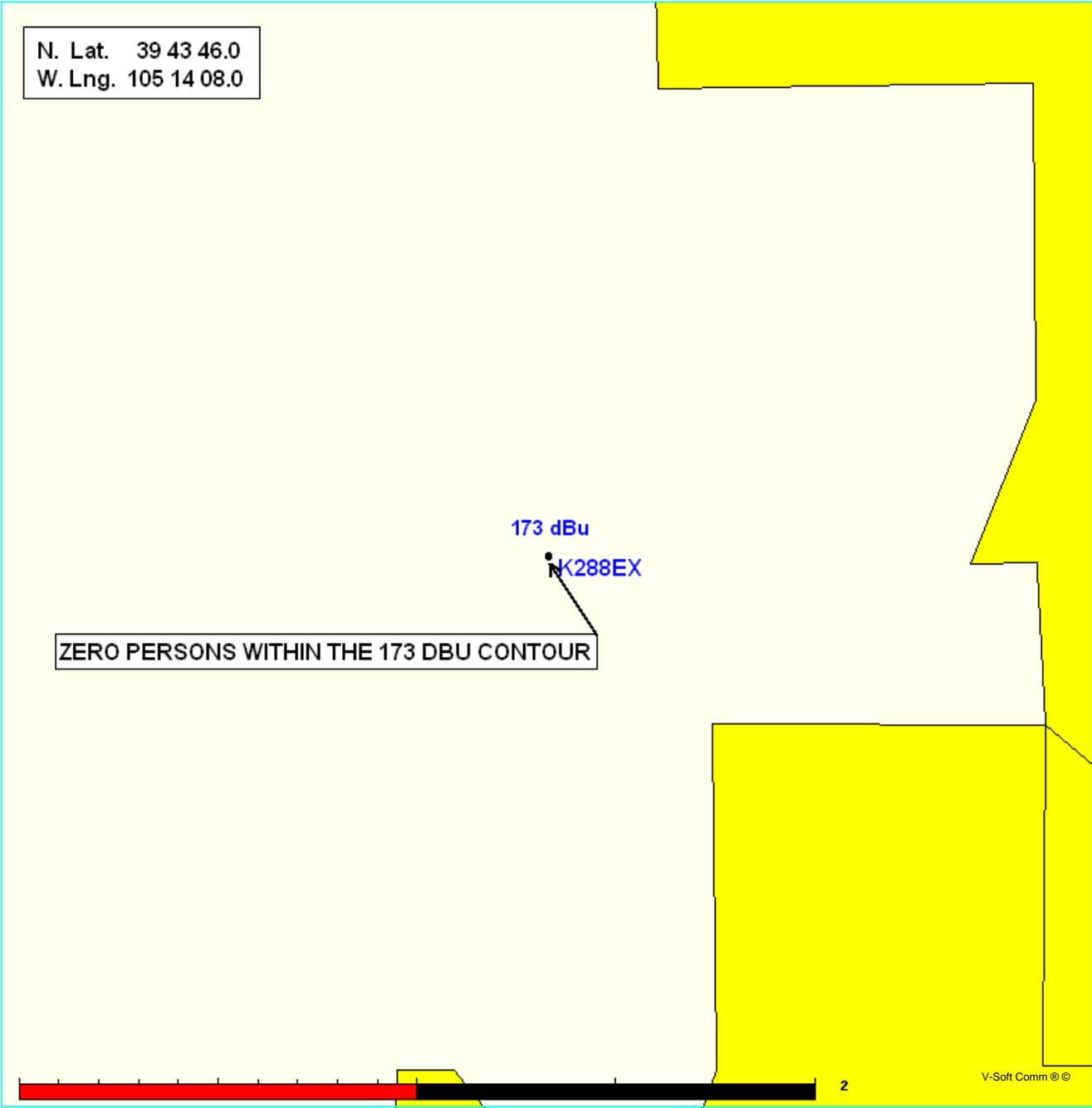


FIGURE 5, INTERFERENCE STUDY WITH KIIQ (App.) 229C1
K288EX LAKEWOOD, CO, CHANNEL 229D

FMCommander Single Allocation Study - 03-14-2010 - USGS 03 SEC
K288EX's Overlaps (In= -42.48 km, Out= 5.65 km)

K288EX CH 229 D DA
Lat= 39 43 46.0, Lng= 105 14 08.0
0.099 kW 0 M HAAT, 2246 M COR
Prot.= 60 dBu, Intef.= 40 dBu

KIIQ-A CH 229 C1 73.215 N BPH20070313ABN
Lat= 39 22 34.0, Lng= 103 41 43.0
100.0 kW 205 M HAAT, 1901 M COR
Prot.= 60 dBu, Intef.= 40 dBu

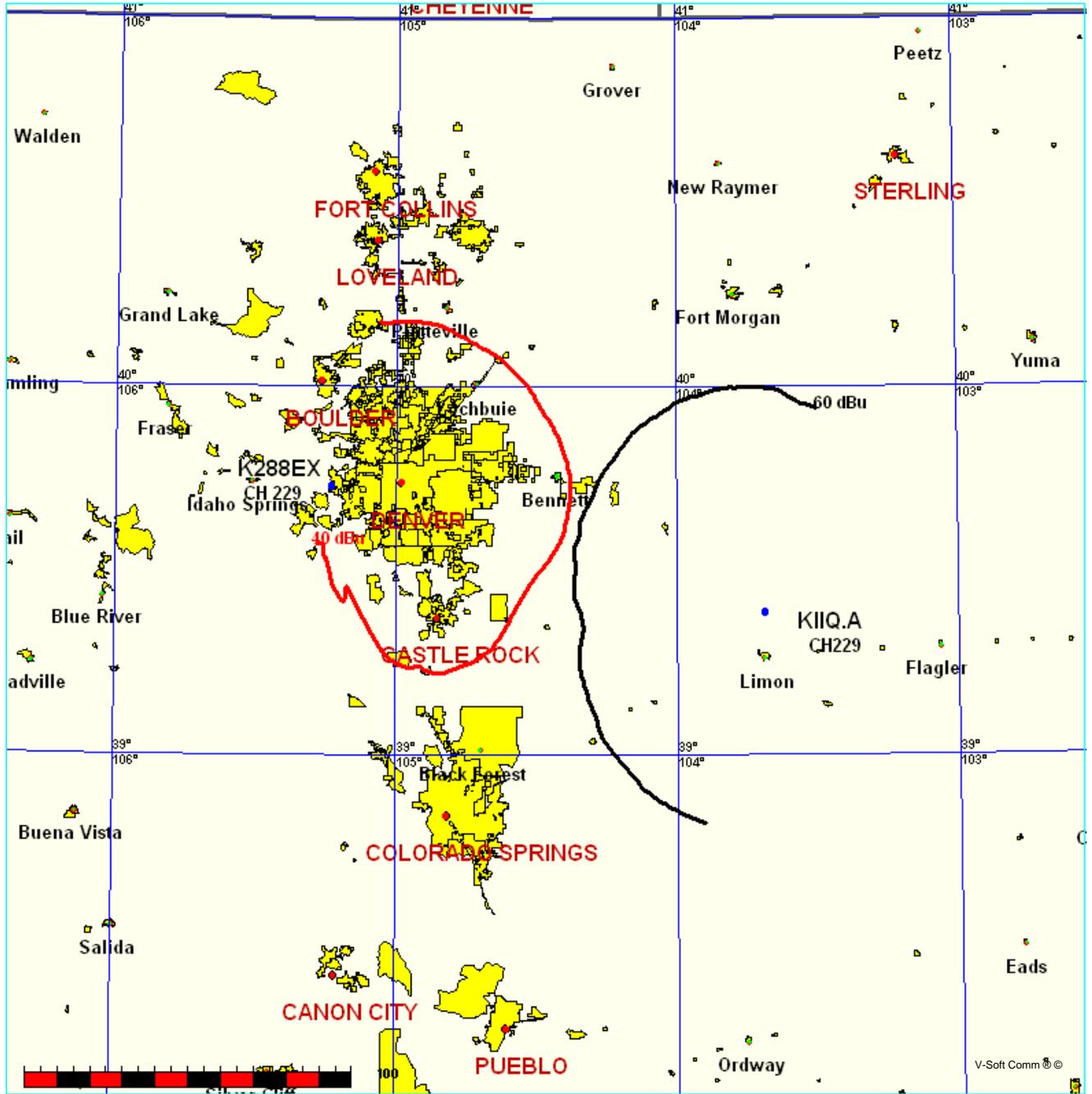


FIGURE 6, DETAILED INTERFERENCE STUDY, K229AC WARD, CO
 K288EX LAKEWOOD, CO, CHANNEL 229D

FMCommander Single Allocation Study - 04-03-2010 - USGS 03 SEC
 K288EX's Overlaps (In= 0.11 km, Out= 2.43 km)

K288EX CH 229 D DA
 Lat= 39 43 46.0, Lng= 105 14 08.0
 0.099 kW 0 M HAAT, 2246 M COR
 Prot.= 60 dBu, Intef.= 40 dBu

K229AC CH 229 D BLFT20061218ACR
 Lat= 39 58 22.0, Lng= 105 31 13.0
 0.028 kW 0 M HAAT, 2655 M COR
 Prot.= 60 dBu, Intef.= 40 dBu

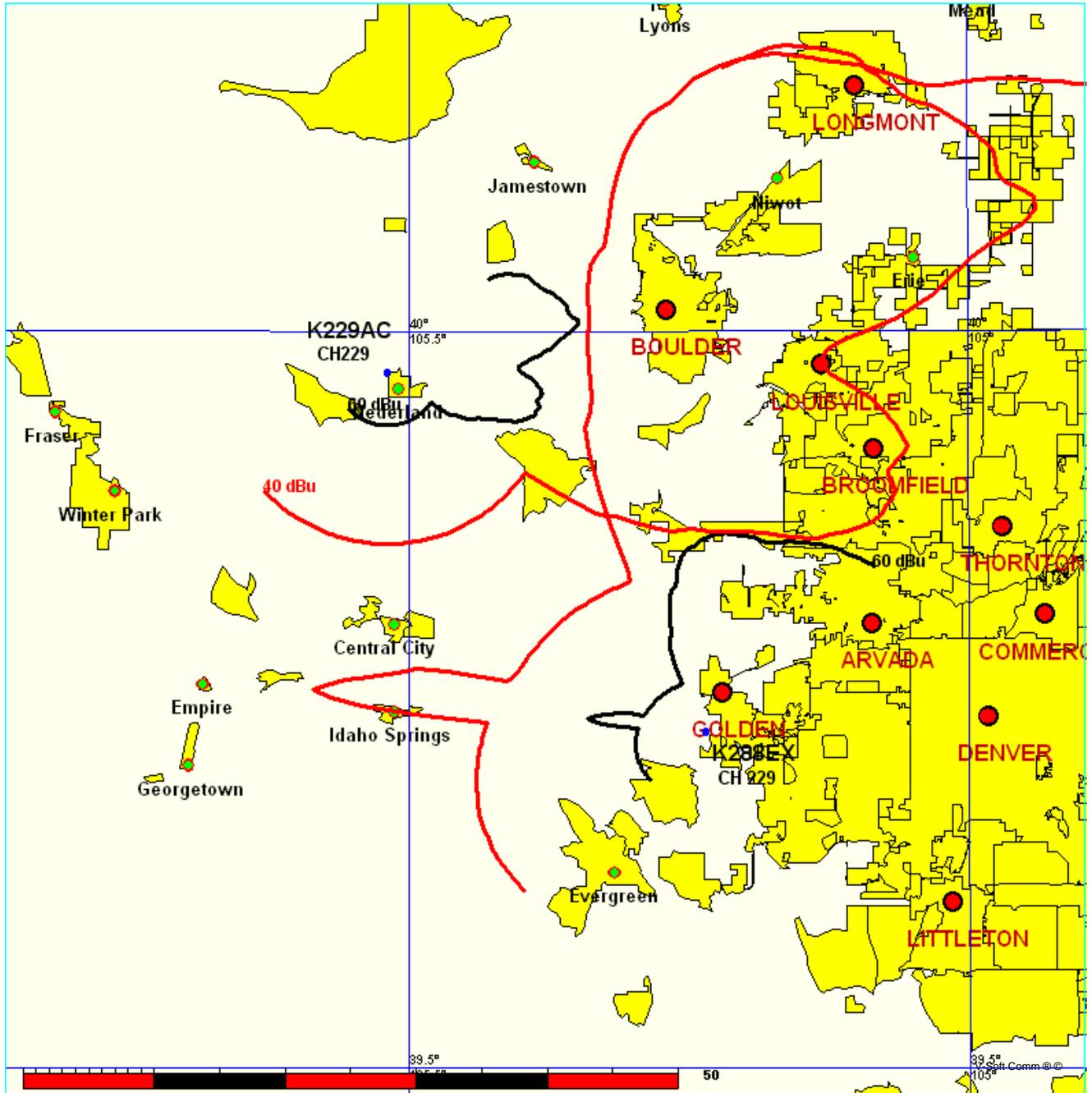


FIGURE 7, INTERFERENCE STUDY WITH BERTHOUD, CO 229D
 K288EX LAKEWOOD, CO, CHANNEL 229D

FMCommander Single Allocation Study - 03-14-2010 - USGS 03 SEC
 K288EX's Overlaps (In= 27.88 km, Out= 2.24 km)

K288EX CH 229 D DA
 Lat= 39 43 46.0, Lng= 105 14 08.0
 0.099 kW 0 M HAAT, 2246 M COR
 Prot.= 60 dBu, Intef.= 40 dBu

631534 CH 229 D DA BNPFT20030312ADC
 Lat= 40 14 24.0, Lng= 105 03 23.0
 0.1 kW 0 M HAAT, 1637 M COR
 Prot.= 60 dBu, Intef.= 40 dBu

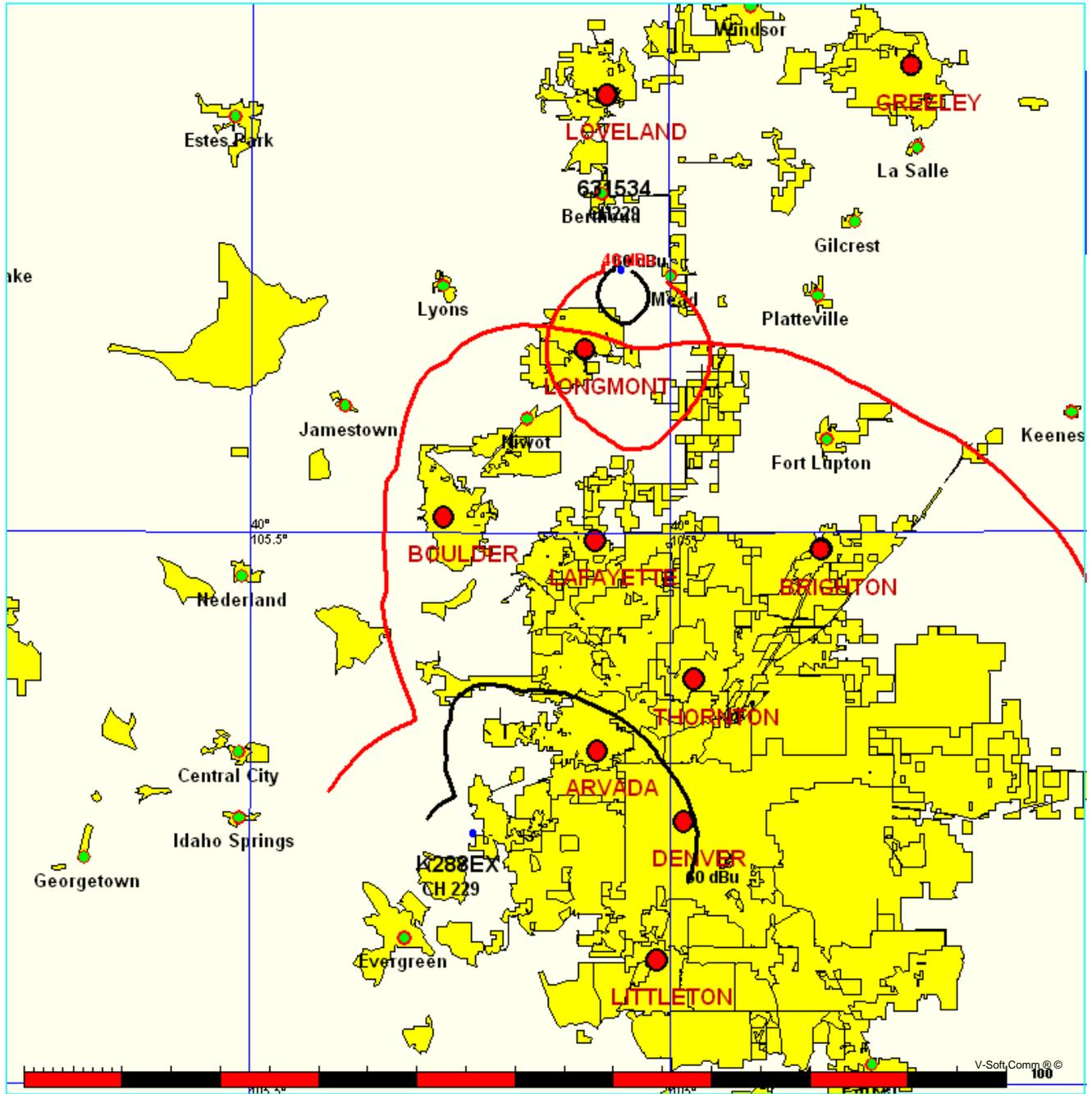


FIGURE 8, FILL IN SHOWING WITH KLDV MORRISON, CO, CH.216C0
K288EX LAKEWOOD, CO, CH. 229D

Coverage Study - USGS 03 SEC
03-01-2010

K288EX CH216 D , 0.099 kW, 0.0M HAAT, 2246.0M COR AMSL
Service Contour = 60 dBu. Population = 2,579,498

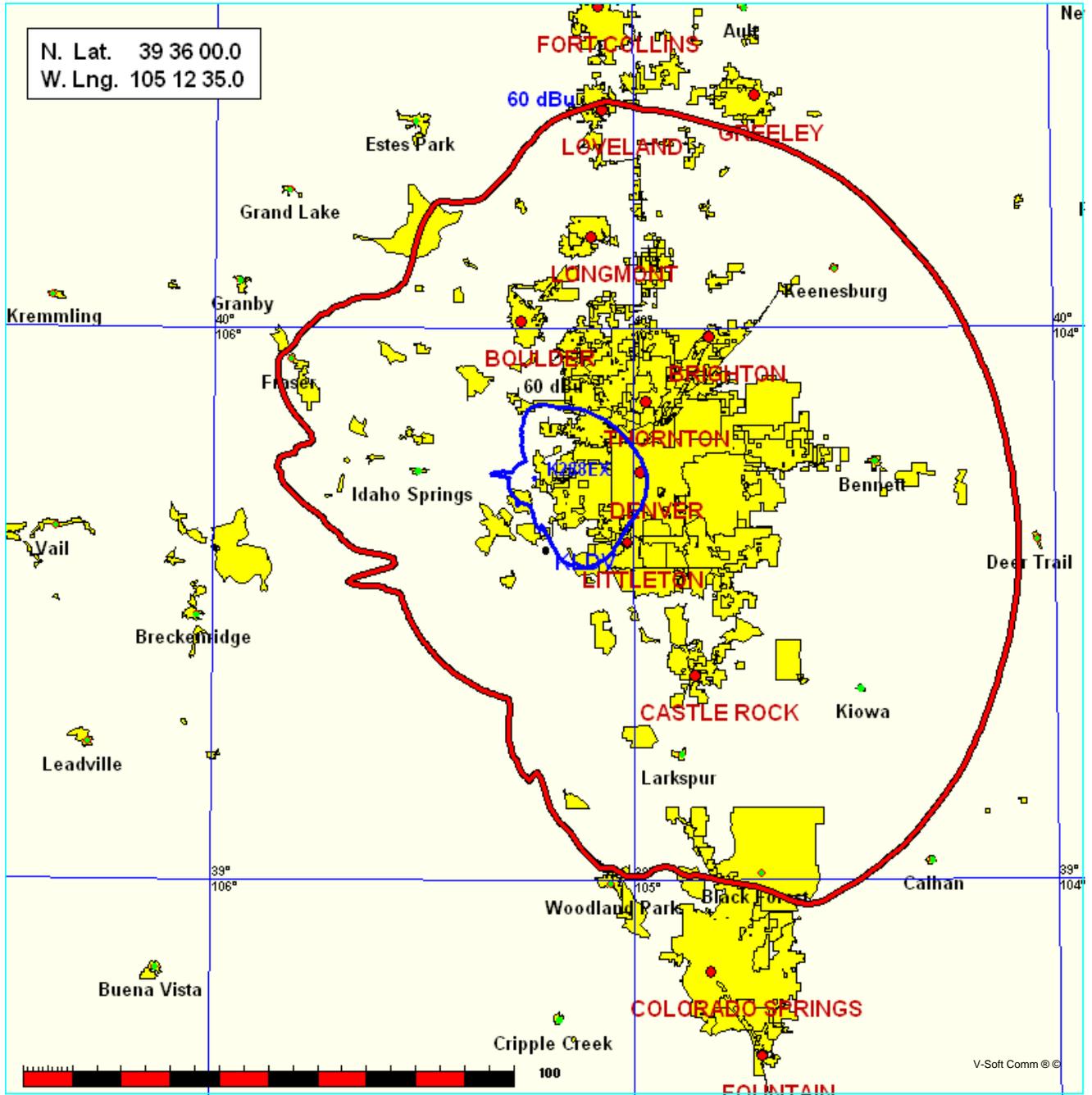
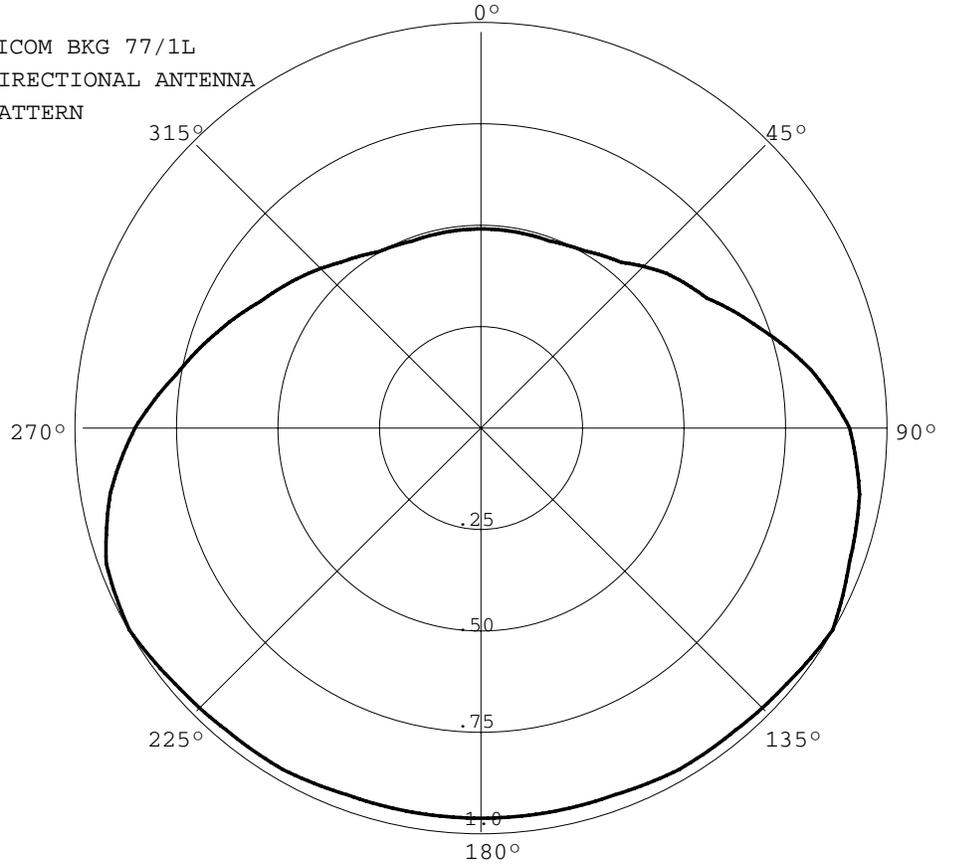


FIGURE 9, DIRECTIONAL ANTENNA DATA

Graph is Relative Field

Azi	Field	dBk	kW
000	0.493	-16.187	0.024
010	0.493	-16.187	0.024
020	0.493	-16.187	0.024
030	0.507	-15.943	0.025
040	0.536	-15.460	0.028
050	0.596	-14.539	0.035
060	0.643	-13.879	0.041
070	0.728	-12.801	0.052
080	0.826	-11.704	0.068
090	0.908	-10.882	0.082
100	0.947	-10.517	0.089
110	0.966	-10.344	0.092
120	1.000	-10.044	0.099
130	0.984	-10.184	0.096
140	0.976	-10.255	0.094
150	0.976	-10.255	0.094
160	0.966	-10.344	0.092
170	0.966	-10.344	0.092
180	0.966	-10.344	0.092
190	0.966	-10.344	0.092
200	0.966	-10.344	0.092
210	0.976	-10.255	0.094
220	0.976	-10.255	0.094
230	0.984	-10.184	0.096
240	1.000	-10.044	0.099
250	0.982	-10.201	0.095
260	0.927	-10.702	0.085
270	0.852	-11.435	0.072
280	0.762	-12.405	0.057
290	0.692	-13.242	0.047
300	0.627	-14.098	0.039
310	0.581	-14.760	0.033
320	0.536	-15.460	0.028
330	0.504	-15.995	0.025
340	0.493	-16.187	0.024
350	0.493	-16.187	0.024

NICOM BKG 77/1L
DIRECTIONAL ANTENNA
PATTERN



Contour.out

N. Lat. = 394346.0 W. Lng. = 1051408.0
 HAAT and Distance to Contour,
 FCC, FM 2-10 Mi, 51 pts Method - USGS 03 SEC

FIGURE 10, TABULATION OF PREDICTED CONTOURS

Azi.	AV EL	HAAT	dBk	60-F5	40-F1	173-F1
000	1839.8	406.2	-16.19	14.51	49.54	0.00
010	1812.1	433.9	-16.19	14.97	51.34	0.00
020	1804.4	441.6	-16.19	15.10	51.83	0.00
030	1745.3	500.7	-15.94	16.31	56.43	0.00
040	1721.0	525.0	-15.46	17.32	59.53	0.00
050	1713.4	532.6	-14.54	18.53	62.75	0.00
060	1693.5	552.5	-13.88	19.73	65.96	0.00
070	1709.9	536.1	-12.80	20.67	68.06	0.00
080	1709.1	536.9	-11.70	22.05	71.30	0.00
090	1713.7	532.3	-10.88	22.99	73.39	0.00
100	1737.8	508.2	-10.52	22.81	72.76	0.00
110	1776.5	469.5	-10.34	21.95	70.32	0.00
120	1816.2	429.8	-10.04	21.34	68.03	0.00
130	1797.7	448.3	-10.18	21.61	69.10	0.00
140	1792.7	453.3	-10.25	21.65	69.29	0.00
150	1831.1	414.9	-10.25	20.74	66.22	0.00
160	1928.7	317.3	-10.34	18.17	57.90	0.00
170	2154.9	91.1	-10.34	9.67	32.39	0.00
180	2169.6	76.4	-10.34	8.85	29.30	0.00
190	2233.3	12.7	-10.34	5.52	18.16	0.00
200	2292.0	-46.0	-10.34	5.52	18.16	0.00
210	2224.5	21.5	-10.25	5.55	18.27	0.00
220	2243.0	3.0	-10.25	5.55	18.27	0.00
230	2286.6	-40.6	-10.18	5.58	18.35	0.00
240	2386.9	-140.9	-10.04	5.62	18.52	0.00
250	2398.4	-152.4	-10.20	5.57	18.33	0.00
260	2317.5	-71.5	-10.70	5.41	17.73	0.00
270	2269.7	-23.7	-11.43	5.18	16.85	0.00
280	2182.7	63.3	-12.40	7.09	23.77	0.00
290	2266.5	-20.5	-13.24	4.64	14.80	0.00
300	2400.5	-154.5	-14.10	4.41	14.08	0.00
310	2411.0	-165.0	-14.76	4.25	13.57	0.00
320	2350.1	-104.1	-15.46	4.08	13.05	0.00
330	2256.3	-10.3	-16.00	3.95	12.68	0.00
340	2141.6	104.4	-16.19	7.38	24.74	0.00
350	1960.8	285.2	-16.19	12.27	40.93	0.00

Ave EI = 2030.24 M HAAT= 215.76 M AMSL= 2246