

## CHANNEL STUDY

## WRAS

Georgia State University, ATLANTA, GEORGIA

REFERENCE 33 44 41.0 N. CH# 203C1 - 88.5 MHz, Pwr= 50 kW DA, HAAT= 318.2 M, COR= 597 M  
 84 21 36.0 W. Average Protected F(50-50)= 66.73 km  
 Standard Directional

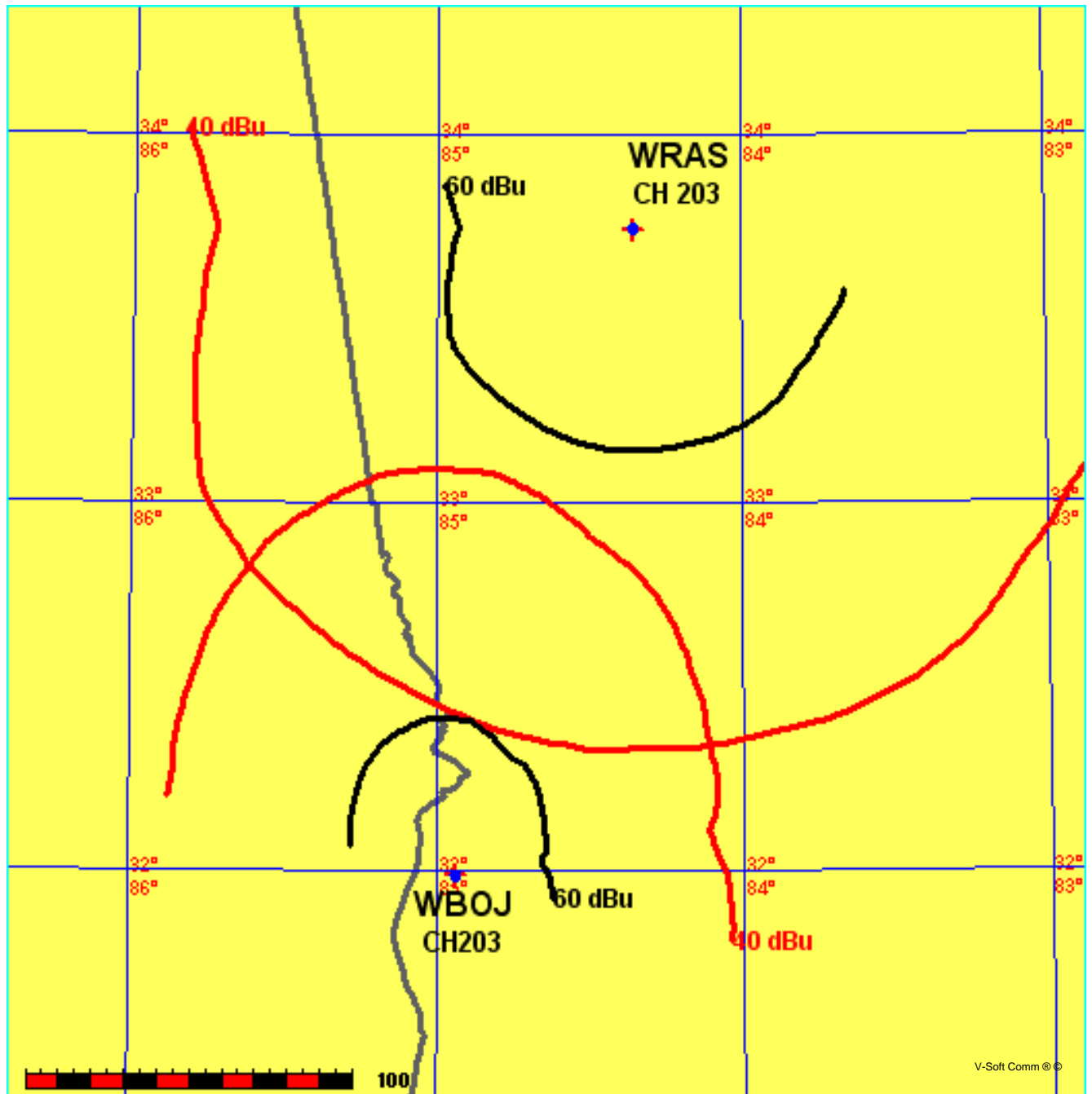
DISPLAY DATES  
 DATA 03-03-14  
 SEARCH 03-29-14

CH CITY	CALL	TYPE STATE	ANT STATE	AZI <--	DIST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
203C1 WRAS Atlanta		CP DCX GA		55.5 235.5	2.83 BPED20110318AFM	33 45 33.0 84 20 05.0	100.000 164	154.4 445	58.1 Georgia State University	-212.7*	-200.5*
203C1 WRAS Atlanta		LIC _CN GA		135.9 315.9	9.33 BLED19870417KD	33 41 04.0 84 17 23.0	100.000 133	148.2 401	52.7 Georgia State University	-206.4*	-201.7*
203D W203BO Athens		LIC _C_ GA		72.2 252.7	91.45 BLFT20120320ADR	33 59 35.0 83 24 56.0	0.019 88	21.8 316	6.6 Calvary Chapel Of Twin Falls	4.3	-69.8
203D W203BH Macon		LIC _C_ GA		147.4 327.8	118.86 BLFT20011031ABN	32 50 31.0 83 40 29.0	0.010 129	21.3 247	6.4 Calvary Chapel Of Twin Falls	29.1	-48.0
201D W201DM Woodstock		CP _C_ GA		346.4 166.4	36.79 BMPFT20130327AEE	34 03 59.0 84 27 14.0	0.009 233	0.2 539	8.6 Calvary Chapel Of Twin Falls	-16.0*	22.7
201D W201CC Buford		LIC _C_ GA		44.5 224.8	56.40 BLFT20070122ABR	34 06 20.0 83 55 49.0	0.019 66	0.3 388	5.6 Calvary Chapel Of Twin Falls	-1.7*	44.2
203C2 WBOJ Lumpkin		LIC DC_ GA		195.5 15.2	202.44 BLED20080326AHV	31 59 19.0 84 55 59.0	23.000 164	118.0 278	42.6 88.5 The Truth, Inc.	19.7	0.3
202A WIVL Jasper		LIC DCX GA		355.4 175.4	80.55 BLED20000303AAA	34 28 01.0 84 25 49.0	0.200 1	7.8 451	5.6 Community Public Radio, Inc	22.2	0.5
204A WEYY Tallapoosa		LIC _CX GA		270.3 89.8	85.77 BLED20120507ABF	33 44 42.6 85 17 16.2	0.250 30	10.1 366	7.1 Barnes Evangelistic Minist	21.3	0.6
204A WCDG Dahlonega		LIC DC_ GA		21.8 202.0	96.80 BLED20121212ABB	34 33 10.0 83 58 05.0	0.600 -28	18.5 434	11.3 Silver Dove Broadcasting,	21.3	0.6
202C3 WRGC-FM Milledgeville		LIC DEX GA		126.5 307.1	125.69 BLED20110217AAV	33 04 05.0 83 16 30.0	4.800 117	42.7 239	27.8 Georgia College & State Un	16.6	1.0
203D W203BA Blueridge		LIC _C_ GA		359.6 179.6	129.12 BLFT20010423AFD	34 54 22.0 84 22 12.0	0.010 96	22.7 674	6.5 Calvary Chapel Of Twin Falls	56.1	1.2
202C2 WPPR Demorest		LIC DCX GA		35.7 216.1	106.84 BLED20080428ABF	34 31 24.0 83 40 46.0	7.300 194	35.4 611	21.0 Georgia Public Telecommuni	16.2	1.3
256L1 NEW« Riverdale		CP _ GA		197.4 17.3	20.98 BNPL20131114BMU	33 33 51.0 84 25 40.0	0.100 26	305	19.5R Minority Voices Speak		1.5M
203C2 WEPC Belton		LIC DCN SC		66.6 247.7	186.19 BLED19940509KA	34 23 43.0 82 29 49.0	50.000 91	81.2 308	25.8 Toccoa Falls College	40.0	7.5
203A WMQS Murphy		LIC _CX NC		11.2 191.4	156.69 BLED20130320AEK	35 07 37.0 84 01 35.0	0.049 196	48.7 835	14.7 Western North Carolina Pub	53.2	11.5
201C WJSP-FM Warm Springs		LIC DCX GA		197.8 17.6	104.16 BLED20131101AGM	32 51 08.0 84 42 04.0	100.000 461	12.0 724	83.9 Georgia Public Telecommuni	25.6	11.7
256L1 1588745« Snellville		APP _ GA		79.0 259.2	32.45 BNPL20131106AUY	33 47 59.0 84 00 57.0	0.089 32	301	19.5R C.a.m. Community Radio Inc		13.0M
205C2 WKEU-FM The Rock		LIC DC_ GA		180.4 0.3	84.31 BLED19991215ABA	32 59 11.0 84 21 56.0	5.000 233	3.5 466	38.7 Georgia Public Radio, Inc.	13.8	37.0
06 2E WCES-TV Wrens		LI _HN GA		105.1 286.3	199.72 BLEDT20090612ACF	33 15 33.0 82 17 09.0	7.900 429	99.7 544	86.1 Georgia Public Telecommuni	185.8R	13.9M
205C3 WMSL Athens		LIC DC_ GA		77.1 257.5	82.07 BMLLED20051128AFV	33 54 25.0 83 29 35.0	20.000 91	2.4 320	24.0 Prince Educational Media,	14.0	47.8
203A WJIA Guntersville		LIC _VN AL		293.4 112.4	194.60 BLED19950905KB	34 25 33.0 86 18 25.0	2.200 130	76.6 368	25.4 Lake City Educational Broa	51.4	14.9
256L1 1625481« Marietta		APP _ GA		342.7 162.7	34.69 BNPL20131115AKY	34 02 35.6 84 28 19.3	0.030 53	361	19.5R Semeadores De Boas Novas,		15.2M
206A WBI B-FM Forsyth		LIC _CX GA		153.8 334.0	85.96 BLED20101220AAF	33 03 01.0 83 57 10.0	0.100 53	0.7 234	7.7 Believers In Broadcasting,	17.0	69.1
257D W257DF« Dallas		CP _C_ GA		269.4 89.1	39.41 BMPFT20131217EGN	33 44 24.0 84 47 07.0	0.130	0.0 443	0.0 Edgewater Broadcasting, In	21.5R	17.9M

CH CITY	CALL	TYPE STATE	ANT	AZI <--	DI ST FI LE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LI CENSEE	Page # 2 *IN* (Overlap in km)	*OUT*
202C3 Piedmont	WJCK	LIC DVX AL		275.0 94.2	127.27 BLED20050630AEC	33 50 12.0 85 43 59.0	2.700 295	37.3 556	25.4 Immanuel	31.9 Broadcasting Netw	18.2
204A Sparta	WJDS	LIC _V_ GA		110.5 291.2	134.74 BLED20001115AAE	33 18 48.0 83 00 05.0	2.000 41	22.9 194	15.4 Augusta	44.3 Radio Fellowship I	20.2
206A Gainesville	WBCX	LIC _CN GA		37.4 217.7	80.24 BLED19851202KDD	34 19 01.0 83 49 45.0	0.840 166	1.6 447	16.3 Brenau	21.6 College	55.6
206A Smithboro	WAKP	LIC DV_ GA		121.4 301.9	90.62 BLED20100726AIO	33 19 00.0 83 31 40.0	2.900 67	1.9 219	19.4 Middle Georgia	22.6 Community R	62.9
256L1 Dallas	WDJY-LP«	CP _ GA		304.3 124.0	44.66 BNPL20131114BNZ	33 58 12.0 84 45 36.2	0.070 36	326		19.5R Hype Media Global Inc	25.2M
256L1 Loganville	1593589«	APP _ GA		78.9 259.2	45.45 BNPL20131113BTN	33 49 19.2 83 52 41.1	0.100 26	295		19.5R New Vision Outreach & Perf	26.0M
256L1 Woodstock	1595107«	APP _ GA		342.9 162.8	47.50 BNPL20131114BPV	34 09 13.6 84 30 44.2	0.100 23	331		19.5R Papa's Pantry Inc.	28.0M
204C1 Waverly	WELL-FM	LIC DVX AL		223.7 43.0	154.18 BLED20090224ABS	32 44 11.0 85 29 54.0	60.000 129	45.2 349	29.4 Alabama	43.6 Christian Radio, I	29.5
201A Patterson	WNEE	LIC DCX GA		72.9 253.5	102.79 BLED20110304ABT	34 00 43.0 83 17 38.0	6.000 49	1.9 276	19.1 Community	35.5 Public Radio, In	74.8
256L1 Newnan	WQEE-LP«	CP _ GA		223.6 43.3	58.50 BNPL20131021AAY	33 21 45.6 84 47 39.5	0.020 66	329		19.5R New Vision Communications	39.0M
202D Warner Robins	W202BA	LIC _CN GA		153.6 334.0	145.31 BLFT19980715TD	32 34 19.0 83 40 15.0	0.013 116	8.7 223	6.2 Calvary Chapel	68.4 Of Twin Fal	39.7
206A Heflin	WKNG-FM	LIC _CX AL		258.6 78.0	103.69 BLED20050512ADF	33 33 18.0 85 27 25.0	0.250 219	1.1 533	19.2 Covenant	44.1 Communications, I	77.9
06 2C Tuscaloosa	WUOA	CP _CN AL		263.4 82.0	228.30 BPCDT20100716ADI	33 29 02.0 86 48 21.0	45.000 395	82.5 586	100.8 The Board Of Trustees Of T	183.3R	45.0M
06 3E Pelham	WABW-TV	LI _HY GA		175.2 355.3	291.16 BLEDT20090612ACC	31 08 05.0 84 06 16.0	10.500 379	99.7 462	86.1 Georgia Public	245.5R Telecommuni	45.7M
06 2C Tuscaloosa	WUOA	LI _CN AL		263.4 82.0	228.30 BLCDT20090612AHT	33 29 02.0 86 48 21.0	26.000 395	82.5 586	95.0 The Board Of Trustees Of T	177.5R	50.8M

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Terrain database is 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= - Zone 2, Co to 3rd adjacent.  
All separation margins (if shown) include 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 protected contour.  
« = Station meets FCC minimum distance spacing for its class.

SEE DETAILED CONTOUR CLEARANCE ANALYSIS ON THE FOLLOWING PAGE.



WRAS, ATLANTA, GEORGIA

DETAILED CONTOUR CLEARANCE ANALYSIS FOR WBOJ (FMOver)

09-04-2013      Terrain Data: NGDC 30 SEC      FMOver Analysis

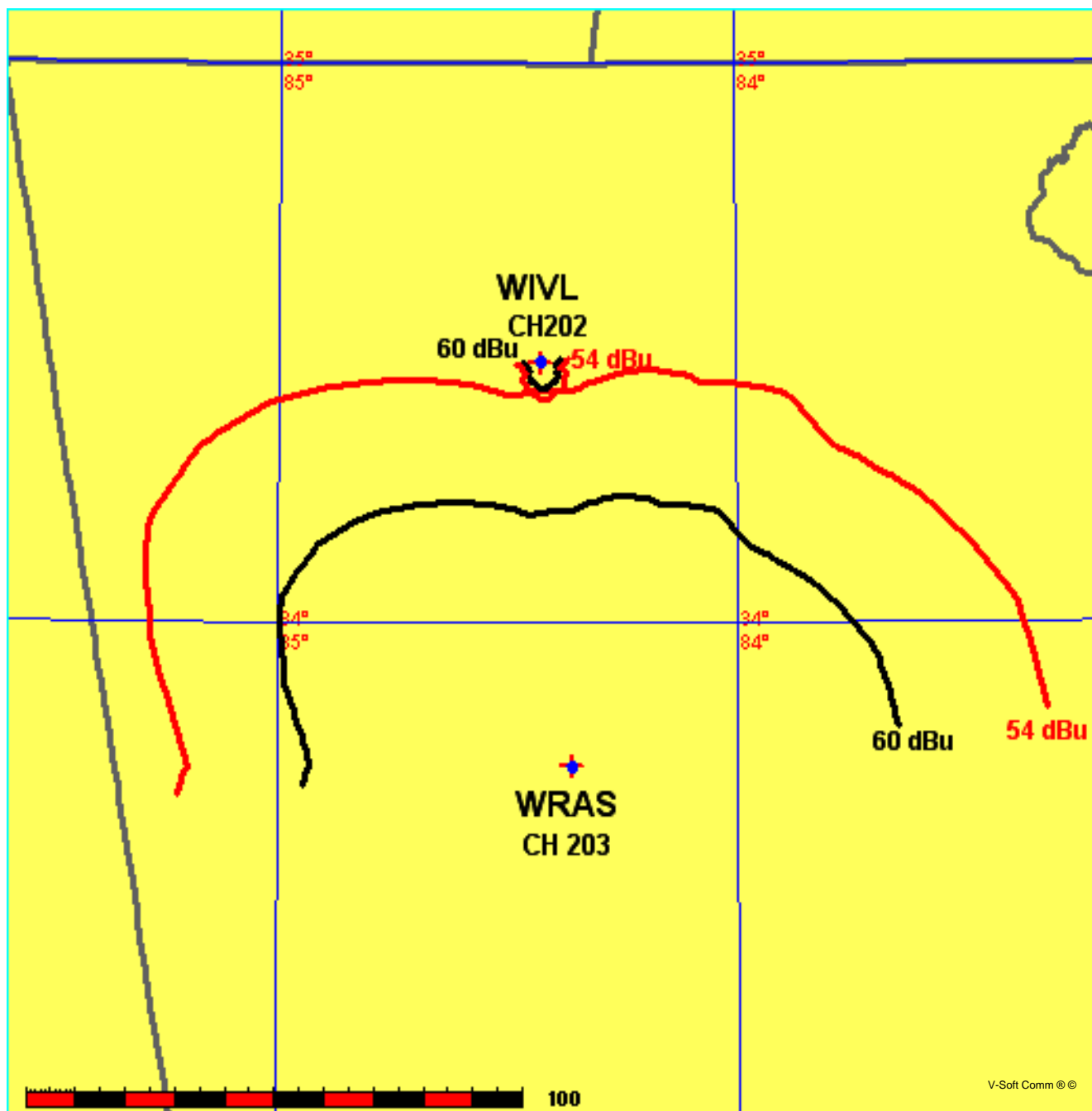
WBOJ    BLED20080326AHV

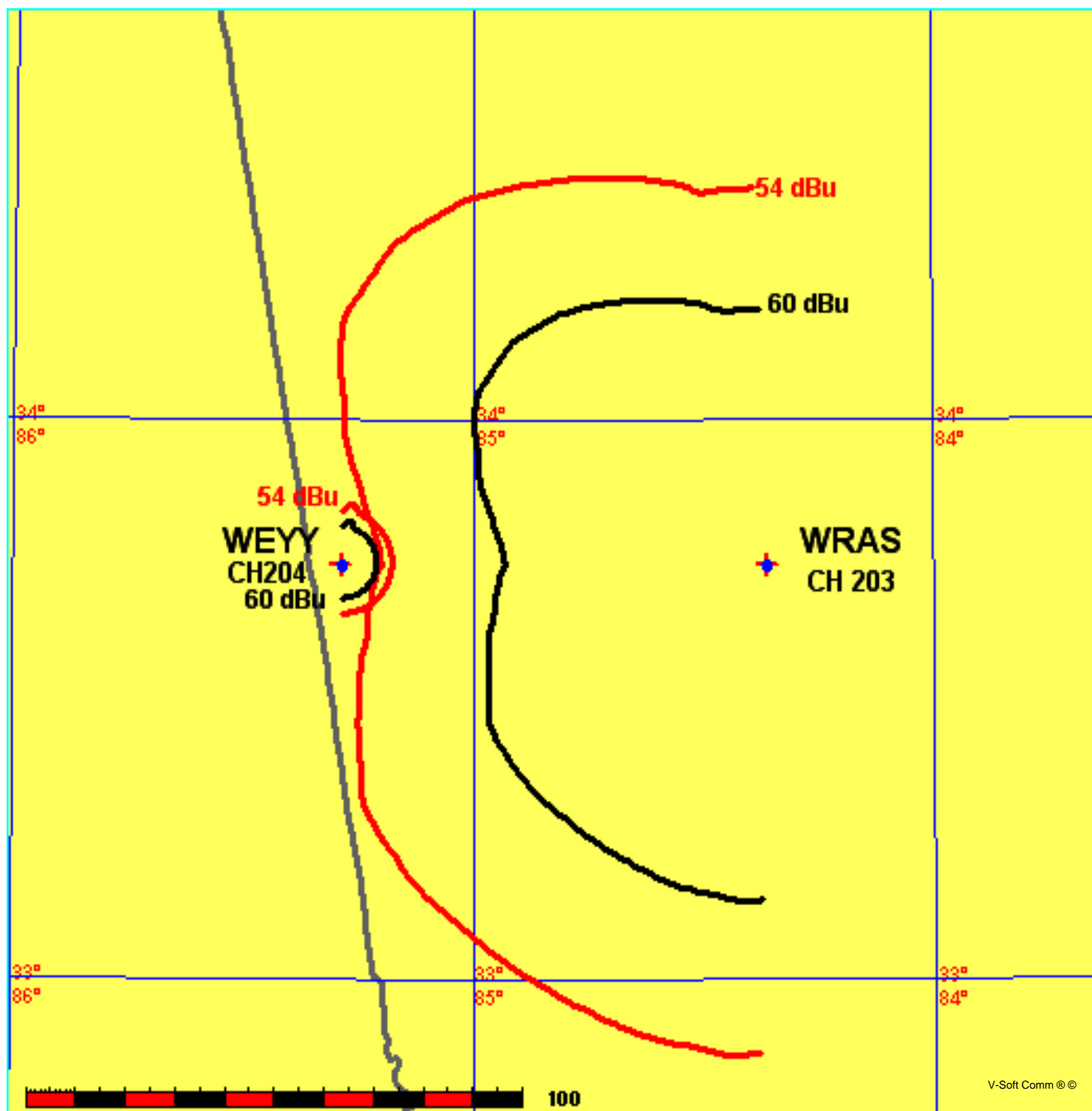
WRAS.C

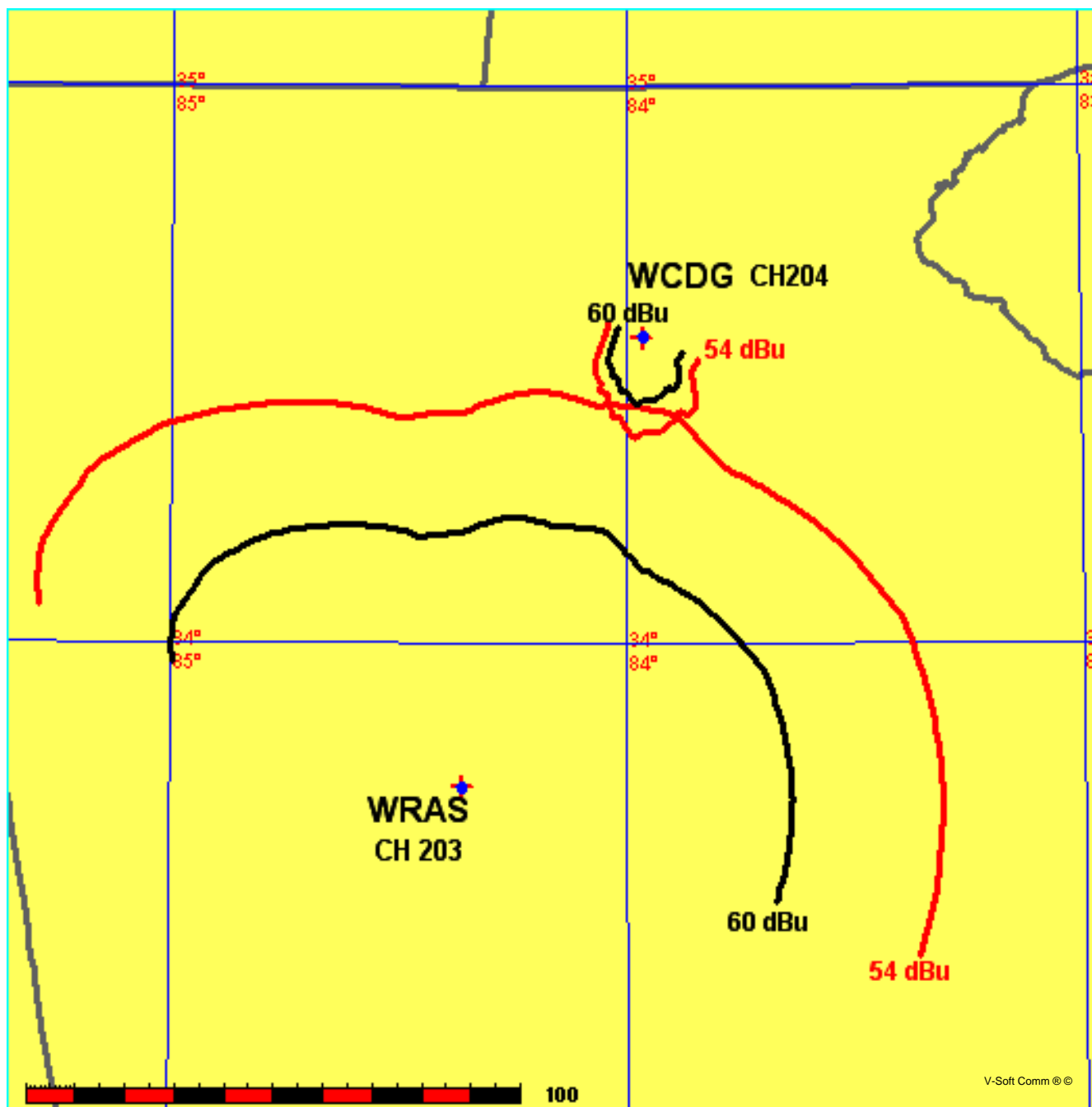
Channel = 203C2  
Max ERP = 23 kW  
RCAMSL = 278 M  
N. Lat. 31 59 19.0  
W. Lng. 84 55 59.0  
Protected  
60 dBu

Channel = 203C1  
Max ERP = 50 kW  
RCAMSL = 597 M  
N. Lat. 33 44 41.0  
W. Lng. 84 21 36.0  
Interfering  
40 dBu

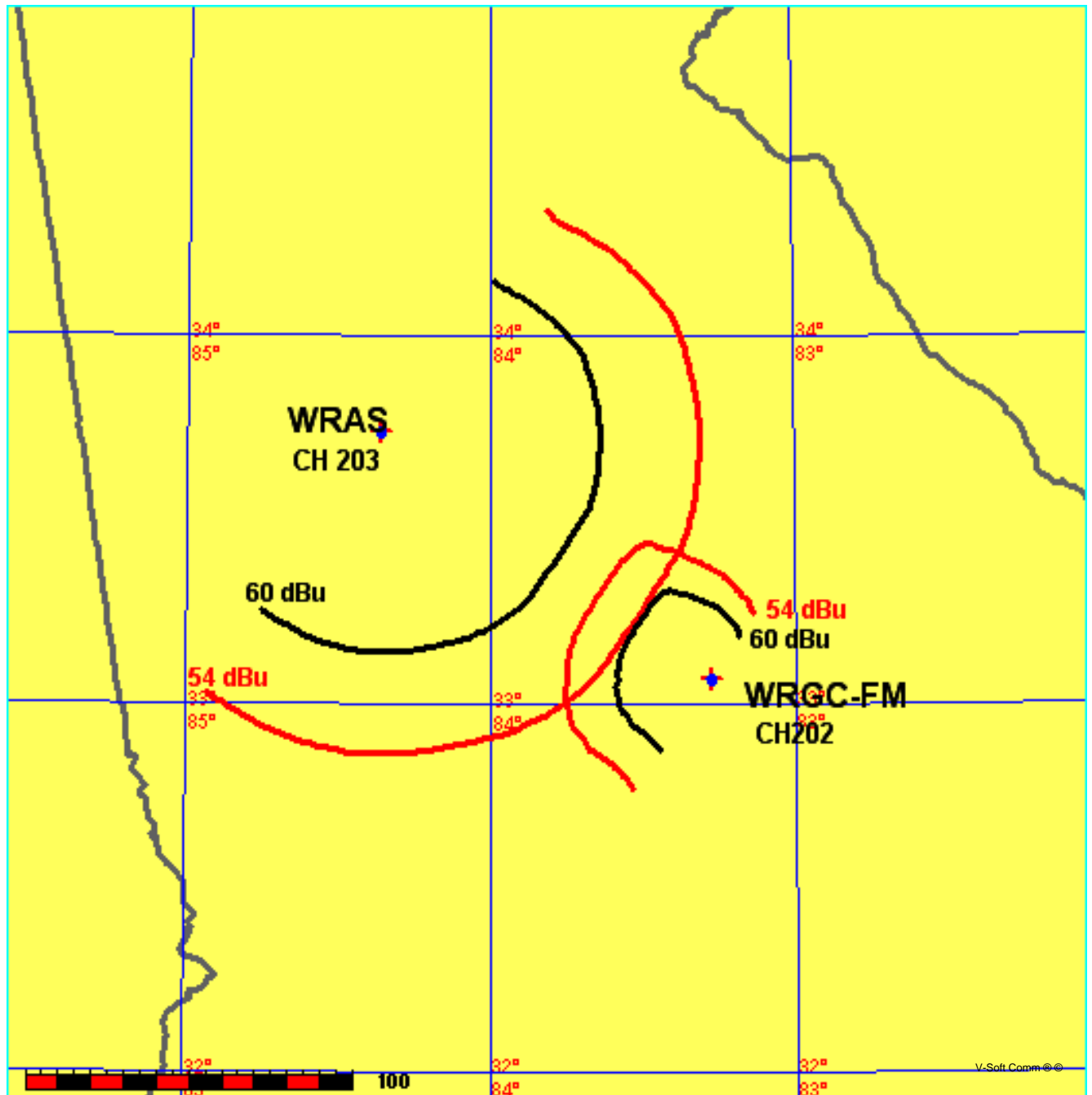
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
348.0	021.4359	0176.6	047.7	203.2	050.0000	0307.6	161.5	38.96	
349.0	021.8061	0175.8	047.8	203.0	050.0000	0307.9	160.9	39.06	
350.0	022.1795	0174.7	047.9	202.8	050.0000	0308.1	160.4	39.15	
351.0	022.3424	0173.3	047.8	202.5	050.0000	0308.4	160.1	39.22	
352.0	022.5059	0172.0	047.7	202.2	050.0000	0308.7	159.7	39.29	
353.0	022.6700	0170.8	047.7	202.0	050.0000	0309.0	159.3	39.36	
354.0	022.8347	0169.7	047.6	201.7	050.0000	0309.3	159.0	39.43	
355.0	023.0000	0168.1	047.5	201.4	050.0000	0309.7	158.7	39.49	
356.0	023.0000	0167.0	047.4	201.1	050.0000	0310.1	158.5	39.54	
357.0	023.0000	0166.0	047.2	200.8	050.0000	0310.5	158.2	39.59	
358.0	023.0000	0165.4	047.2	200.5	050.0000	0310.9	158.0	39.65	
359.0	023.0000	0164.7	047.1	200.3	050.0000	0311.4	157.8	39.70	
000.0	023.0000	0164.1	047.0	200.0	050.0000	0311.9	157.5	39.75	
001.0	023.0000	0163.1	046.9	199.7	050.0000	0312.4	157.4	39.80	
002.0	023.0000	0162.2	046.8	199.4	050.0000	0313.0	157.2	39.83	
003.0	023.0000	0161.3	046.7	199.1	050.0000	0313.5	157.1	39.87	
004.0	023.0000	0160.7	046.6	198.8	050.0000	0314.1	157.0	39.91	
005.0	023.0000	0159.6	046.5	198.5	050.0000	0314.7	156.9	39.94	<-MOST CRITICAL AZ
006.0	022.7340	0157.8	046.2	198.2	050.0000	0315.2	157.0	39.92	
007.0	022.4695	0155.6	045.8	197.9	050.0000	0315.8	157.3	39.90	
008.0	022.2066	0153.4	045.4	197.5	050.0000	0316.2	157.5	39.86	
009.0	021.9452	0151.2	045.0	197.2	050.0000	0316.6	157.8	39.83	
010.0	021.6853	0149.6	044.7	196.9	050.0000	0316.9	158.0	39.79	
011.0	021.2896	0148.0	044.3	196.7	050.0000	0317.2	158.3	39.75	
012.0	020.8976	0146.3	044.0	196.4	050.0000	0317.4	158.6	39.70	
013.0	020.5092	0144.7	043.6	196.1	050.0000	0317.5	158.9	39.64	
014.0	020.1244	0142.9	043.2	195.8	050.0000	0317.6	159.3	39.58	
015.0	019.7433	0140.5	042.7	195.5	050.0000	0317.7	159.7	39.49	
016.0	019.3658	0138.0	042.2	195.3	050.0000	0317.7	160.2	39.40	
017.0	018.9919	0135.8	041.8	195.0	050.0000	0317.7	160.7	39.32	
018.0	018.6217	0134.2	041.4	194.8	050.0000	0317.7	161.1	39.25	
019.0	018.2552	0133.0	041.1	194.5	050.0000	0317.7	161.5	39.18	
020.0	017.8923	0131.4	040.7	194.3	050.0000	0317.7	161.9	39.10	
021.0	017.5491	0129.6	040.3	194.0	050.0000	0317.7	162.4	39.02	
022.0	017.2092	0128.2	040.0	193.8	050.0000	0317.7	162.8	38.95	
023.0	016.8726	0127.5	039.8	193.6	050.0000	0317.7	163.1	38.88	
024.0	016.5394	0127.3	039.6	193.4	050.0000	0317.7	163.5	38.83	
025.0	016.2095	0127.2	039.4	193.1	050.0000	0317.8	163.8	38.78	



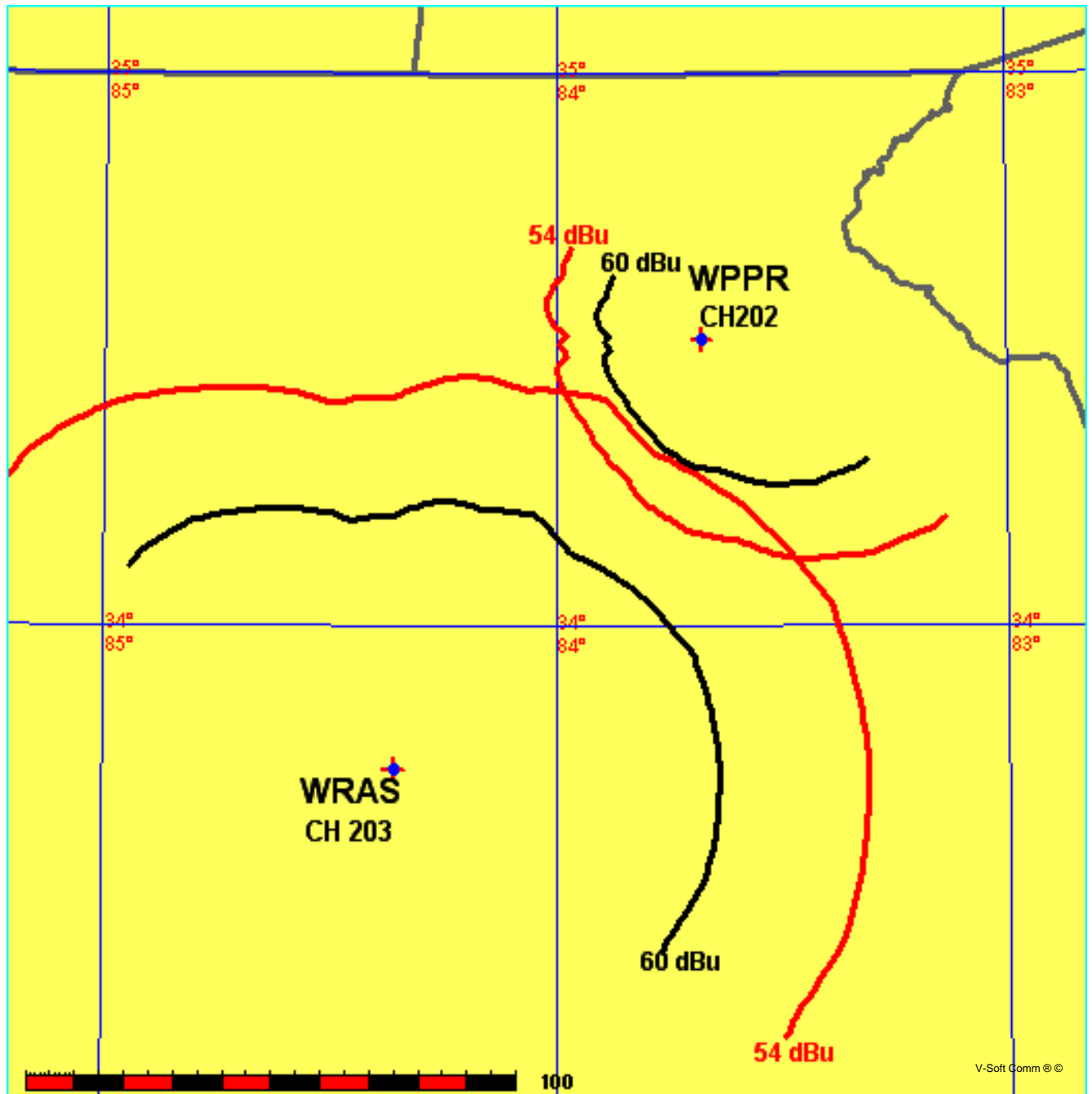




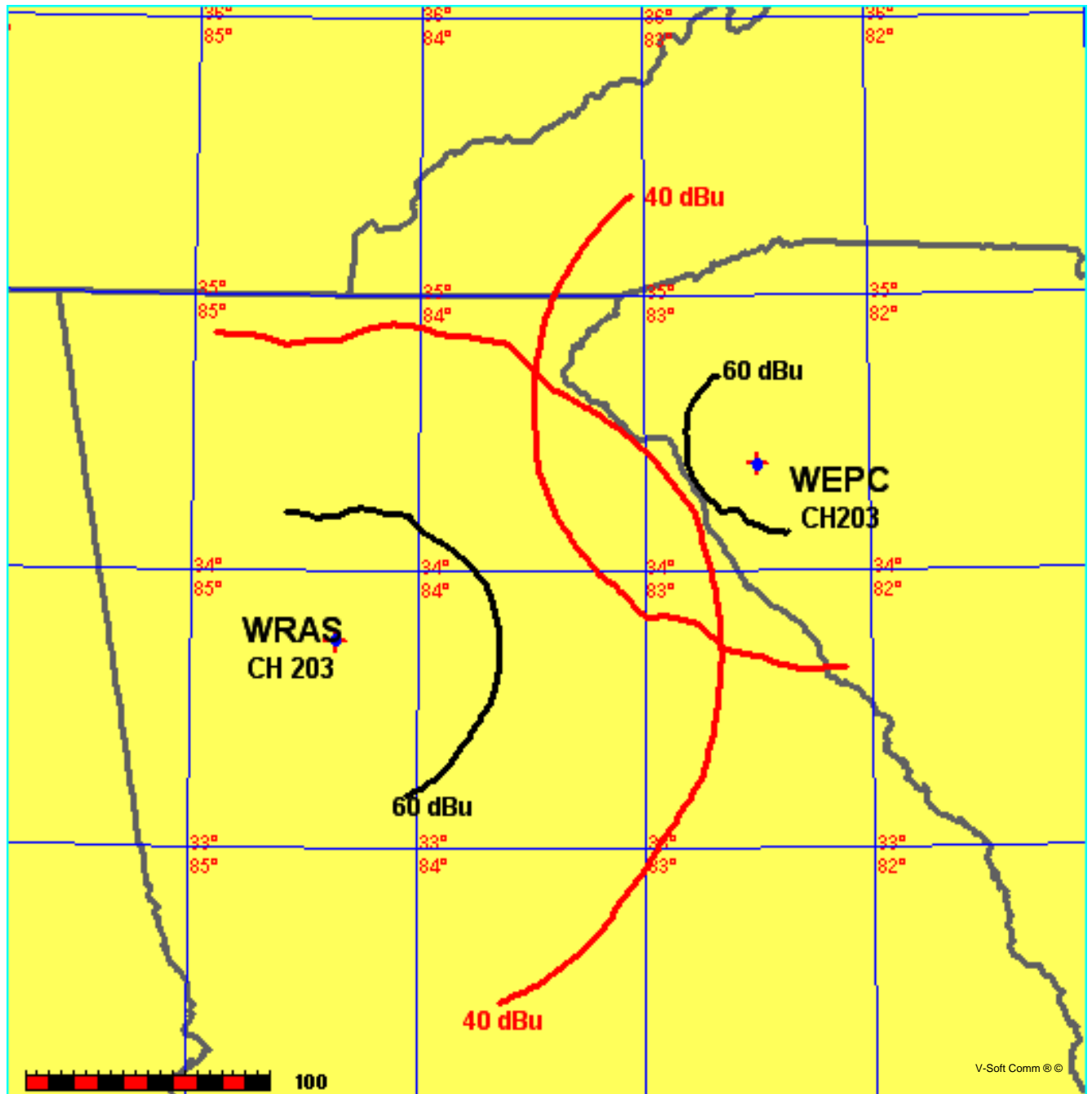
WRAS AND WRGC-FM, MILLEDGEVILLE, GEORGIA  
Georgia State University

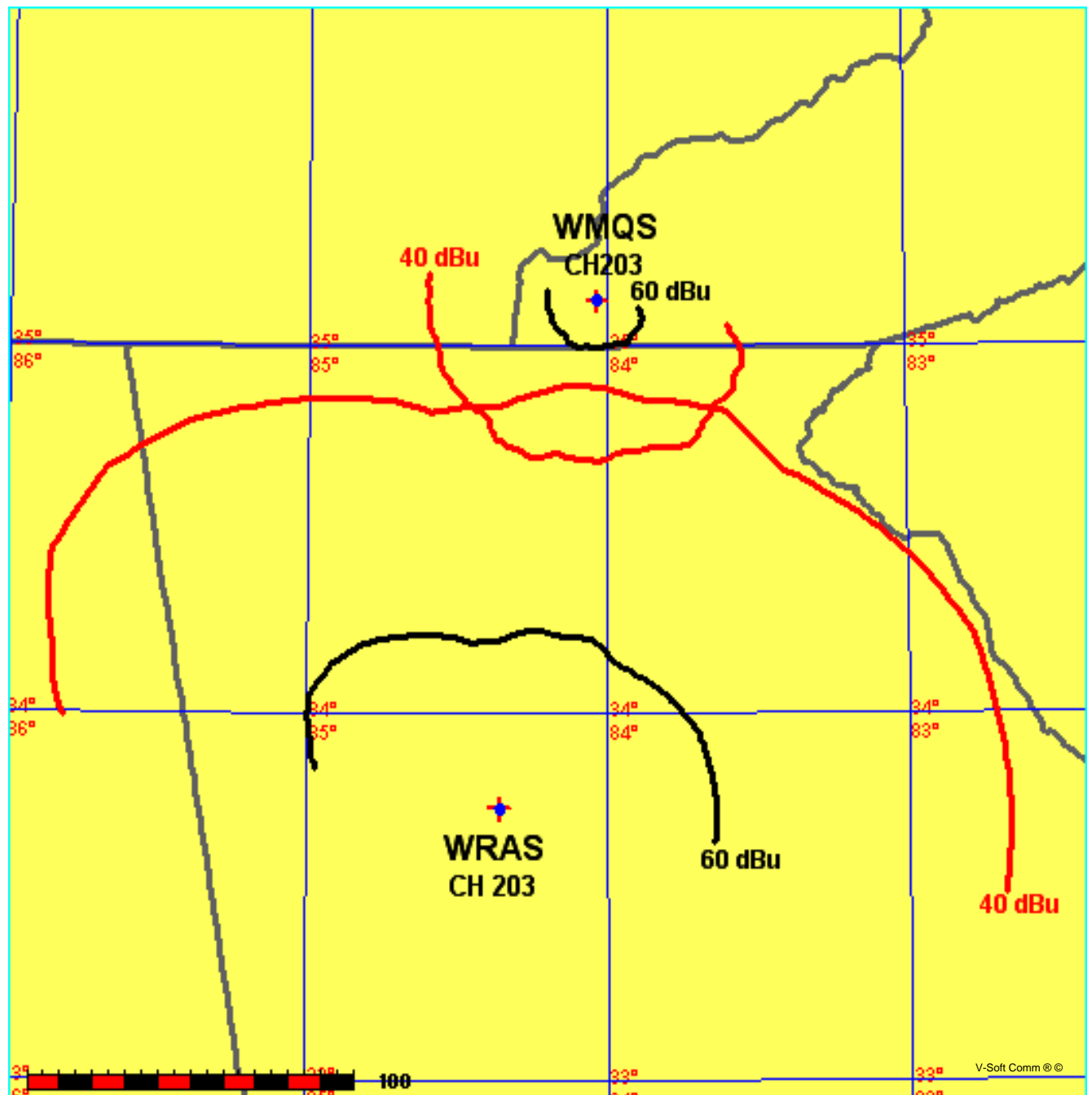




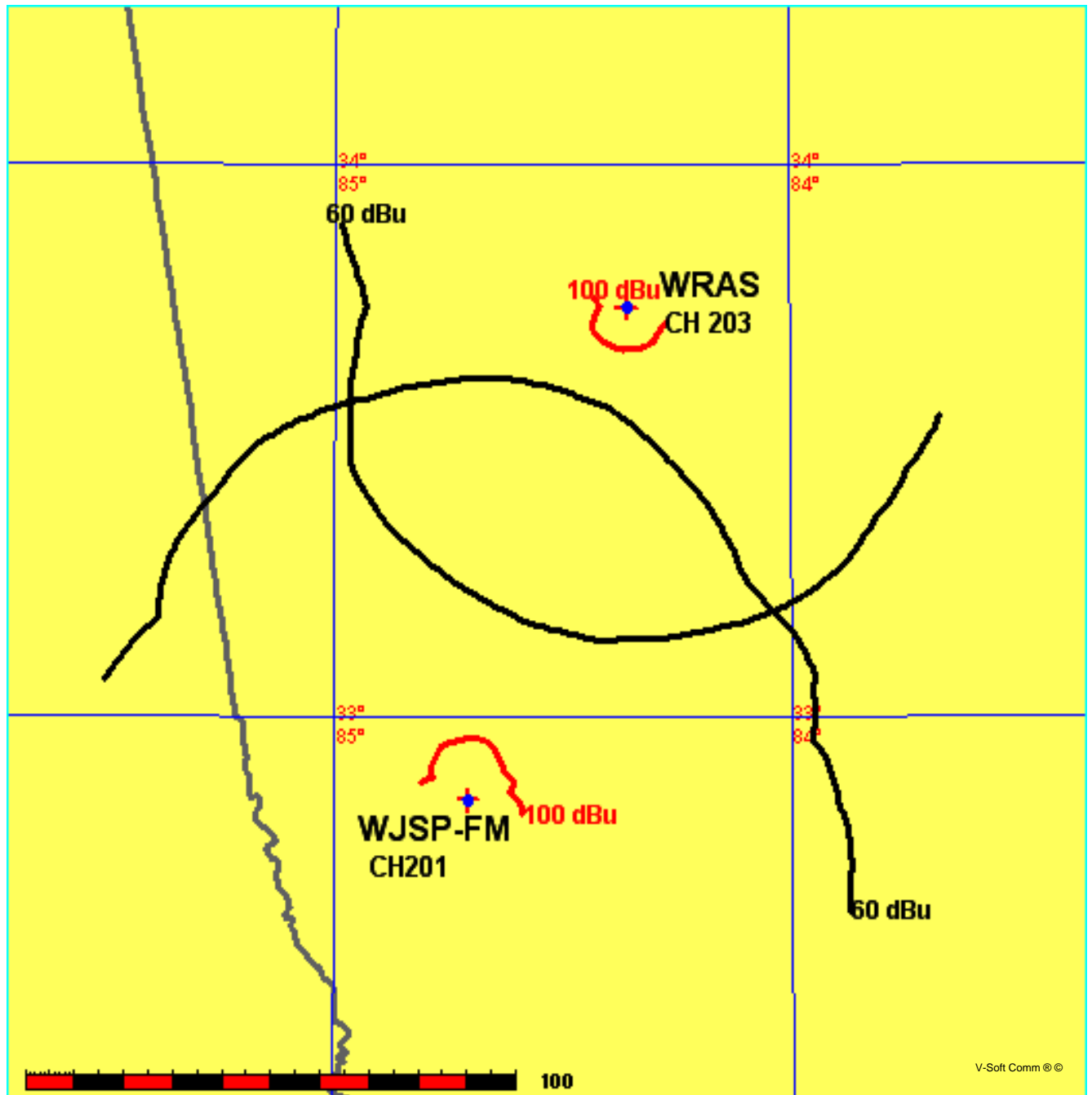


WRAS AND WEPC, BELTON, SOUTH CAROLINA  
Georgia State University

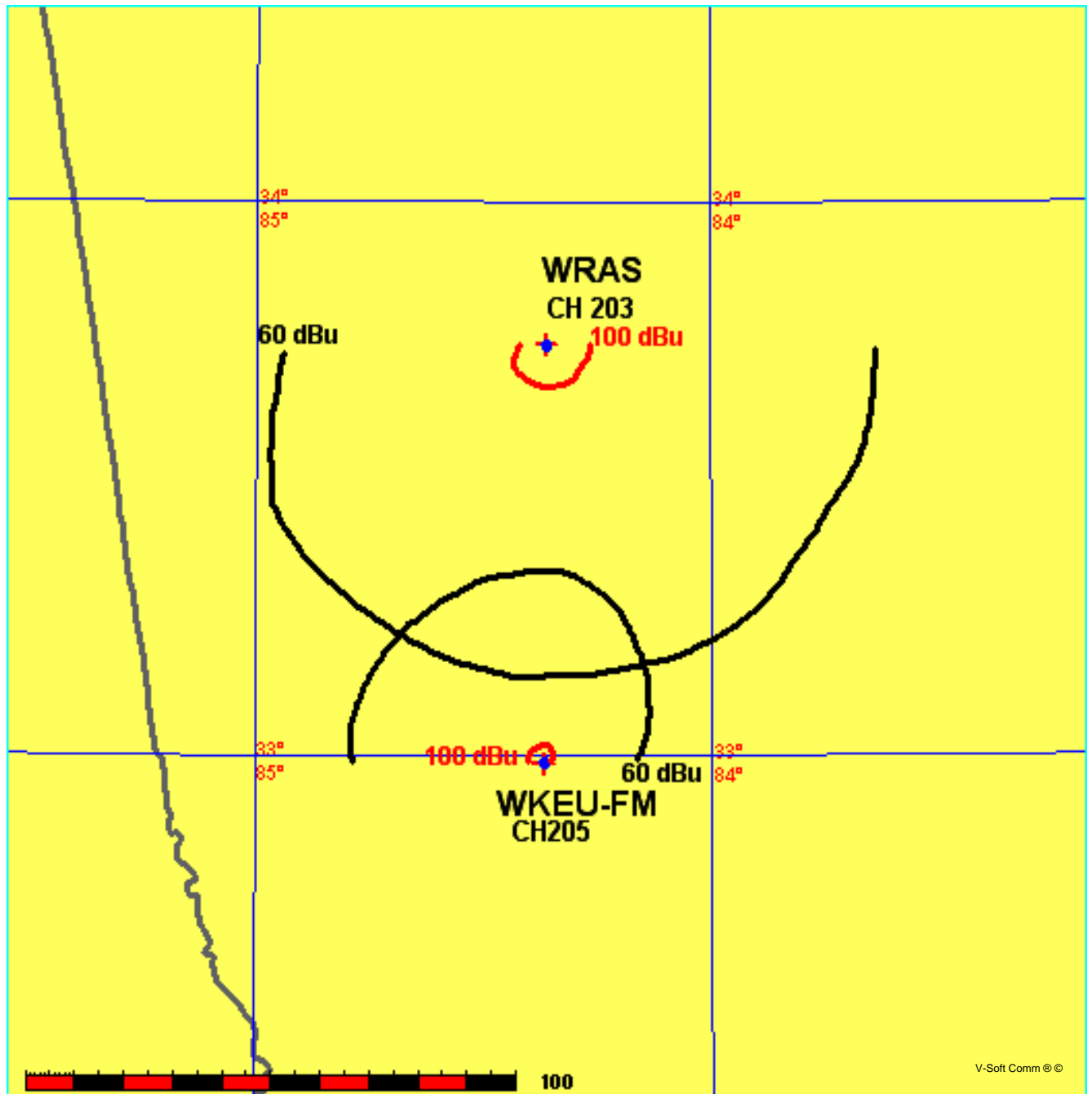


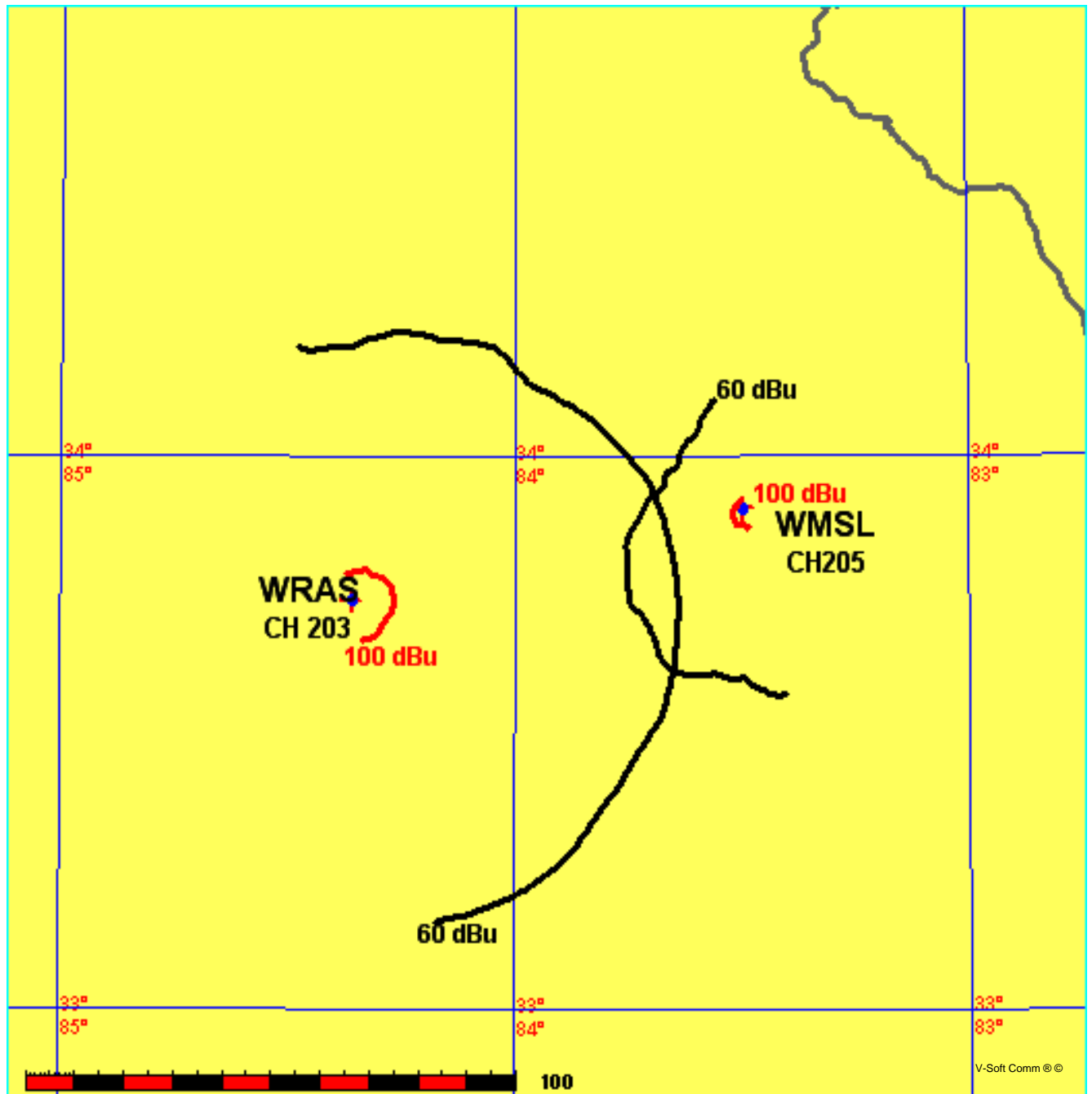


WRAS AND WJSP-FM, WARM SPRINGS, GEORGIA  
Georgia State University



WRAS AND WKEU, THE ROCK, GEORGIA  
Georgia State University





WRAS AND WJIA, GUNTERSVILLE, ALABAMA  
Georgia State University

