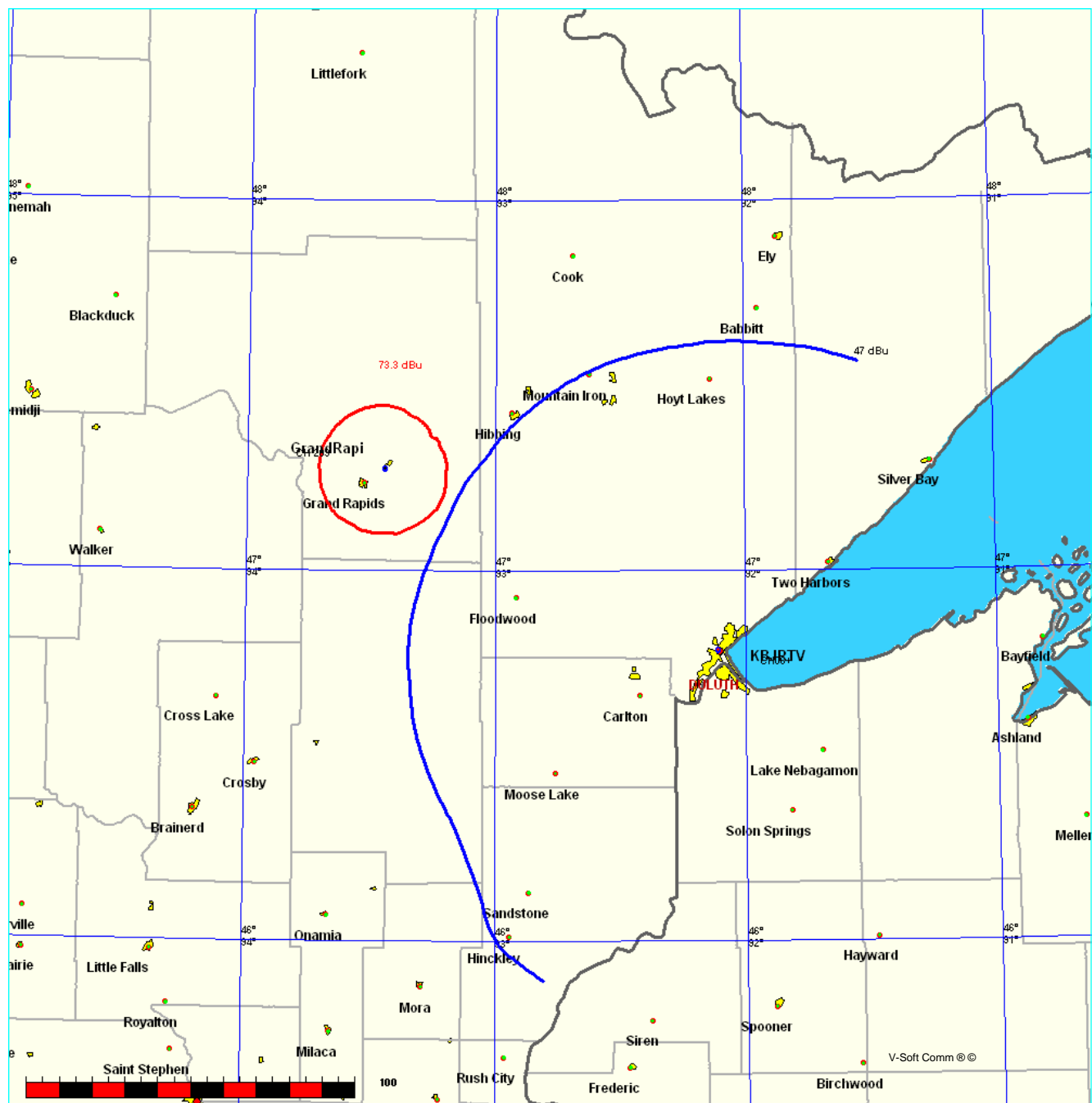


Minnesota Public Radio  
Grand Rapids 209 v. KBJR-TV

FMCommander Single Allocation Study  
09-14-2007

GrandRapi CH 209 C3  
9.943 kW 548 M COR  
Intef. = 73.3 dBu

KBJRTV CH 06+ 2C BLCT20000517AEX  
100.0 kW, 603.8 M COR  
Prot. = 47 dBu



09-14-2007 USGS 03 SEC Terrain Data

KBJRTV BLCT20000517AEX  
 Channel = 06+2C  
 Max ERP = 100 kW  
 RCAMSL = 603.8 M  
 N. Lat. 46 47 21.0  
 W. Lng. 92 06 51.0  
 Protected  
 47 dBu

GrandRapi  
 Channel = 209C3  
 Max ERP = 9.9425 kW  
 RCAMSL = 548 M  
 N. Lat. 47 16 39.2  
 W. Lng. 93 26 58.3  
 Interfering  
 73.3 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
239.0	100.0000	0218.4	095.9	169.4	009.9425	0152.1	105.5	39.39
240.0	100.0000	0217.2	095.8	169.4	009.9425	0152.0	103.9	39.75
241.0	100.0000	0216.4	095.7	169.7	009.9425	0151.9	102.3	40.14
242.0	100.0000	0215.7	095.6	170.0	009.9425	0151.8	100.7	40.54
243.0	100.0000	0214.4	095.5	170.2	009.9425	0151.8	099.1	40.96
244.0	100.0000	0213.1	095.4	170.4	009.9425	0151.7	097.5	41.39
245.0	100.0000	0212.2	095.3	170.7	009.9425	0151.6	095.8	41.83
246.0	100.0000	0211.4	095.2	170.9	009.9425	0151.5	094.2	42.27
247.0	100.0000	0211.0	095.2	171.1	009.9425	0151.5	092.6	42.73
248.0	100.0000	0211.2	095.2	171.4	009.9425	0151.4	091.0	43.19
249.0	100.0000	0211.5	095.2	171.7	009.9425	0151.2	089.4	43.65
250.0	100.0000	0211.8	095.3	171.9	009.9425	0151.0	087.7	44.12
251.0	100.0000	0211.9	095.3	172.2	009.9425	0150.7	086.1	44.59
252.0	100.0000	0212.0	095.3	172.4	009.9425	0150.5	084.5	45.07
253.0	100.0000	0212.3	095.3	172.6	009.9425	0150.1	082.8	45.54
254.0	100.0000	0212.2	095.3	172.8	009.9425	0149.8	081.2	46.03
255.0	100.0000	0211.2	095.2	172.9	009.9425	0149.6	079.5	46.53
256.0	100.0000	0209.8	095.1	173.0	009.9425	0149.5	077.9	47.04
257.0	100.0000	0208.4	094.9	173.0	009.9425	0149.5	076.2	47.55
258.0	100.0000	0207.3	094.8	173.1	009.9425	0149.4	074.5	48.07
259.0	100.0000	0206.6	094.7	173.2	009.9425	0149.3	072.9	48.59
260.0	100.0000	0204.9	094.6	173.1	009.9425	0149.3	071.2	49.12
261.0	100.0000	0202.2	094.3	173.0	009.9425	0149.5	069.6	49.66
262.0	100.0000	0201.1	094.2	172.9	009.9425	0149.6	067.9	50.20
263.0	100.0000	0201.8	094.3	173.0	009.9425	0149.5	066.3	50.73
264.0	100.0000	0201.8	094.3	173.0	009.9425	0149.5	064.6	51.28
265.0	100.0000	0202.1	094.3	173.0	009.9425	0149.5	063.0	51.83
266.0	100.0000	0202.3	094.3	173.0	009.9425	0149.5	061.3	52.41
267.0	100.0000	0202.3	094.3	172.9	009.9425	0149.7	059.7	53.00
268.0	100.0000	0201.6	094.3	172.7	009.9425	0150.0	058.1	53.62
269.0	100.0000	0200.9	094.2	172.5	009.9425	0150.3	056.4	54.24
270.0	100.0000	0200.3	094.1	172.2	009.9425	0150.6	054.8	54.88
271.0	100.0000	0199.4	094.0	171.9	009.9425	0151.0	053.2	55.51
272.0	100.0000	0198.3	093.9	171.5	009.9425	0151.3	051.6	56.15
273.0	100.0000	0196.8	093.8	171.0	009.9425	0151.5	050.0	56.77

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
274.0	100.0000	0194.8	093.6	170.4	009.9425	0151.7	048.5	57.38
275.0	100.0000	0193.0	093.4	169.7	009.9425	0151.9	046.9	58.00
276.0	100.0000	0191.7	093.3	169.0	009.9425	0152.4	045.4	58.64
277.0	100.0000	0190.2	093.1	168.2	009.9425	0152.7	043.9	59.30
278.0	100.0000	0189.2	093.0	167.3	009.9425	0152.6	042.4	59.95
279.0	100.0000	0188.2	092.9	166.4	009.9425	0152.4	040.9	60.60
280.0	100.0000	0186.3	092.7	165.2	009.9425	0150.7	039.5	61.16
281.0	100.0000	0184.9	092.6	164.0	009.9425	0149.4	038.1	61.75
282.0	100.0000	0183.6	092.4	162.7	009.9425	0148.0	036.7	62.33
283.0	100.0000	0181.7	092.2	161.1	009.9425	0147.2	035.5	62.92
284.0	100.0000	0180.1	092.1	159.5	009.9425	0146.7	034.2	63.52
285.0	100.0000	0178.6	091.9	157.7	009.9425	0146.7	033.0	64.13
286.0	100.0000	0176.9	091.7	155.7	009.9425	0146.9	031.8	64.72
287.0	100.0000	0175.6	091.6	153.5	009.9425	0147.3	030.7	65.34
288.0	100.0000	0174.8	091.5	151.3	009.9425	0147.3	029.7	65.96
289.0	100.0000	0173.7	091.4	148.8	009.9425	0147.1	028.7	66.54
290.0	100.0000	0172.4	091.2	146.1	009.9425	0148.1	027.8	67.16
291.0	100.0000	0171.1	091.1	143.2	009.9425	0149.1	027.0	67.72
292.0	100.0000	0169.8	090.9	140.1	009.9425	0150.4	026.4	68.26
293.0	100.0000	0169.2	090.9	137.0	009.9425	0151.3	025.7	68.76
294.0	100.0000	0169.2	090.9	133.6	009.9425	0151.6	025.1	69.20
295.0	100.0000	0169.6	090.9	130.2	009.9425	0154.0	024.6	69.72
296.0	100.0000	0169.9	091.0	126.6	009.9425	0155.7	024.2	70.11
297.0	100.0000	0170.2	091.0	122.9	009.9425	0152.8	023.9	70.13
298.0	100.0000	0170.4	091.0	119.1	009.9425	0150.7	023.8	70.10
299.0	100.0000	0170.8	091.1	115.2	009.9425	0150.8	023.8	70.11
300.0	100.0000	0171.5	091.1	111.4	009.9425	0148.4	023.8	69.90
301.0	100.0000	0172.4	091.2	107.6	009.9425	0144.8	024.0	69.53
302.0	100.0000	0173.0	091.3	104.0	009.9425	0141.7	024.4	69.08
303.0	100.0000	0173.0	091.3	100.5	009.9425	0140.0	024.9	68.58
304.0	100.0000	0172.7	091.3	097.2	009.9425	0136.5	025.6	67.87
305.0	100.0000	0171.6	091.1	094.3	009.9425	0137.7	026.5	67.36
306.0	100.0000	0170.1	091.0	091.6	009.9425	0137.9	027.5	66.73
307.0	100.0000	0169.0	090.9	089.1	009.9425	0139.2	028.5	66.17
308.0	100.0000	0167.9	090.7	086.8	009.9425	0138.5	029.6	65.46
309.0	100.0000	0167.2	090.7	084.7	009.9425	0139.1	030.7	64.87
310.0	100.0000	0167.5	090.7	082.6	009.9425	0138.7	031.8	64.25
311.0	100.0000	0169.0	090.9	080.5	009.9425	0137.4	032.9	63.62
312.0	100.0000	0170.6	091.0	078.6	009.9425	0136.2	034.0	62.99
313.0	100.0000	0173.4	091.4	076.6	009.9425	0134.9	035.1	62.36
314.0	100.0000	0174.3	091.4	075.1	009.9425	0134.7	036.4	61.74
315.0	100.0000	0174.6	091.5	073.8	009.9425	0133.4	037.7	61.02
316.0	100.0000	0174.9	091.5	072.6	009.9425	0132.6	039.1	60.33
317.0	100.0000	0175.1	091.5	071.6	009.9425	0131.6	040.5	59.63
318.0	100.0000	0175.3	091.6	070.6	009.9425	0130.4	042.0	58.93
319.0	100.0000	0175.4	091.6	069.8	009.9425	0129.4	043.4	58.24
320.0	100.0000	0175.5	091.6	069.1	009.9425	0128.9	044.9	57.59
321.0	100.0000	0175.7	091.6	068.4	009.9425	0128.5	046.4	56.95
322.0	100.0000	0175.9	091.6	067.8	009.9425	0128.1	048.0	56.34
323.0	100.0000	0176.1	091.6	067.3	009.9425	0127.9	049.5	55.73
324.0	100.0000	0176.6	091.7	066.8	009.9425	0127.7	051.0	55.12

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
325.0	100.0000	0177.3	091.8	066.3	009.9425	0128.3	052.6	54.55
326.0	100.0000	0178.3	091.9	065.9	009.9425	0129.8	054.1	54.03
327.0	100.0000	0178.5	091.9	065.5	009.9425	0131.2	055.7	53.50
328.0	100.0000	0178.7	091.9	065.3	009.9425	0132.3	057.2	52.96
329.0	100.0000	0179.2	092.0	065.0	009.9425	0133.2	058.8	52.43
330.0	100.0000	0179.8	092.0	064.8	009.9425	0133.7	060.4	51.88
331.0	100.0000	0180.1	092.1	064.6	009.9425	0134.0	062.0	51.33
332.0	100.0000	0180.5	092.1	064.5	009.9425	0134.2	063.6	50.80
333.0	100.0000	0180.9	092.1	064.4	009.9425	0134.3	065.2	50.28
334.0	100.0000	0181.0	092.2	064.4	009.9425	0134.3	066.8	49.76
335.0	100.0000	0181.0	092.2	064.3	009.9425	0134.4	068.4	49.25
336.0	100.0000	0180.8	092.1	064.4	009.9425	0134.3	070.0	48.74
337.0	100.0000	0180.4	092.1	064.4	009.9425	0134.2	071.6	48.24
338.0	100.0000	0179.9	092.0	064.5	009.9425	0134.1	073.2	47.74
339.0	100.0000	0179.8	092.0	064.6	009.9425	0134.1	074.8	47.24
340.0	100.0000	0179.7	092.0	064.7	009.9425	0133.9	076.4	46.75
341.0	100.0000	0179.6	092.0	064.8	009.9425	0133.7	078.0	46.26
342.0	100.0000	0179.4	092.0	064.9	009.9425	0133.5	079.6	45.77
343.0	100.0000	0179.1	092.0	065.1	009.9425	0133.0	081.2	45.28
344.0	100.0000	0178.7	091.9	065.3	009.9425	0132.4	082.7	44.79
345.0	100.0000	0178.0	091.8	065.5	009.9425	0131.5	084.3	44.29
346.0	100.0000	0177.9	091.8	065.6	009.9425	0130.8	085.9	43.80
347.0	100.0000	0177.9	091.8	065.8	009.9425	0129.9	087.5	43.31
348.0	100.0000	0177.4	091.8	066.1	009.9425	0129.0	089.0	42.82
349.0	100.0000	0176.5	091.7	066.3	009.9425	0128.3	090.6	42.36
350.0	100.0000	0176.2	091.6	066.5	009.9425	0127.9	092.1	41.91
351.0	100.0000	0176.6	091.7	066.7	009.9425	0127.7	093.7	41.47
352.0	100.0000	0177.1	091.7	066.9	009.9425	0127.7	095.2	41.05
353.0	100.0000	0177.4	091.8	067.2	009.9425	0127.8	096.8	40.65
354.0	100.0000	0177.6	091.8	067.4	009.9425	0127.9	098.3	40.25
355.0	100.0000	0177.9	091.8	067.6	009.9425	0128.0	099.9	39.87
356.0	100.0000	0179.2	092.0	067.8	009.9425	0128.2	101.5	39.49
357.0	100.0000	0180.9	092.1	068.0	009.9425	0128.3	103.0	39.12
358.0	100.0000	0182.0	092.3	068.2	009.9425	0128.4	104.6	38.76
359.0	100.0000	0182.4	092.3	068.5	009.9425	0128.5	106.1	38.42