

Report of **Signal Survey** to Determine Grade A Coverage of KTKA Signal in Lawrence, KS

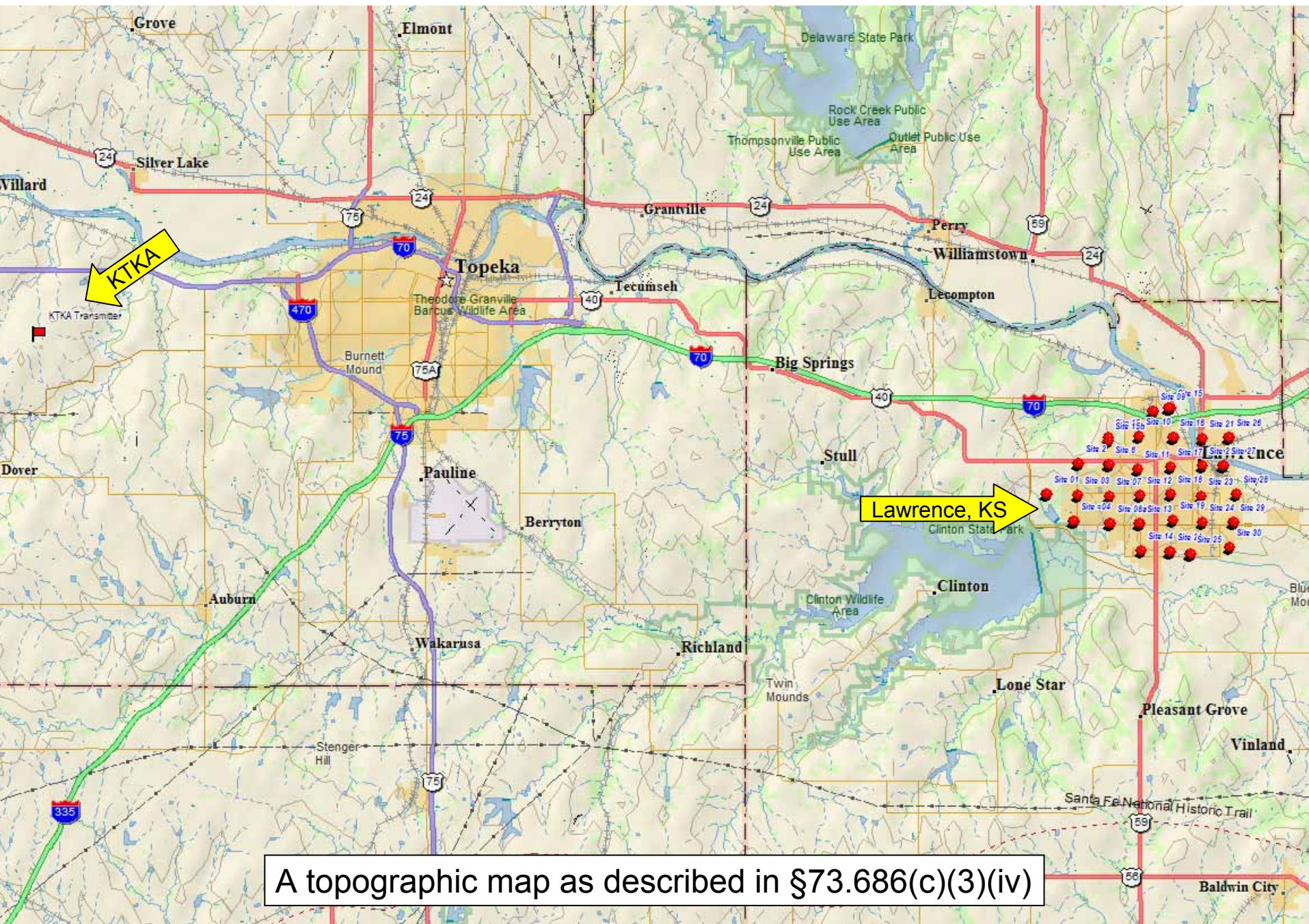
13 April 2005

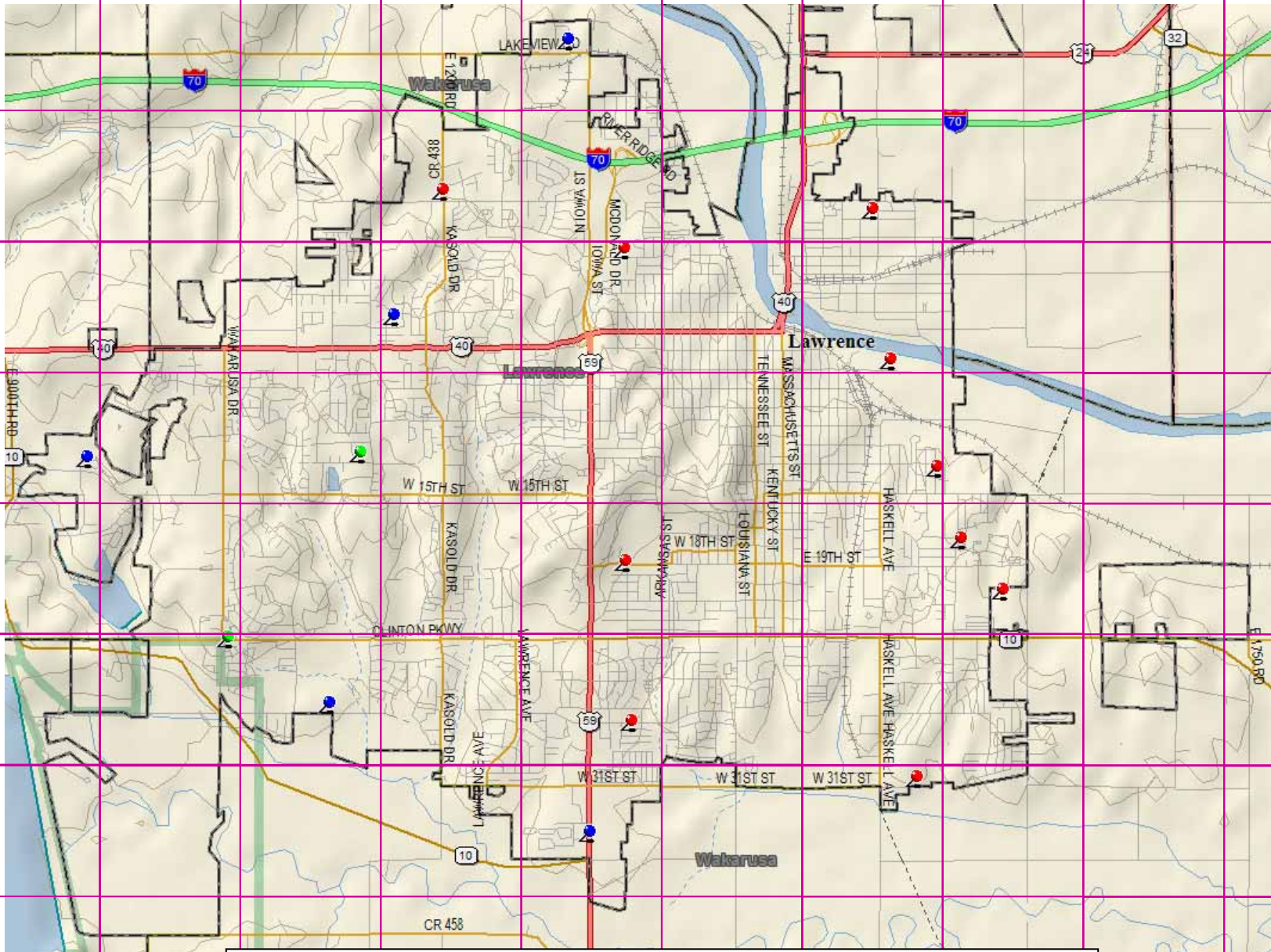
Measurements & Documentation
Based on CFR 47§73.686(c)

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A rectangular grid as described in §73.686(c)(1)(iii)

Number of test sites required per §73.686(c)(1)(ii)

$$\text{test sites} = 0.1 (P)^{1/2}$$

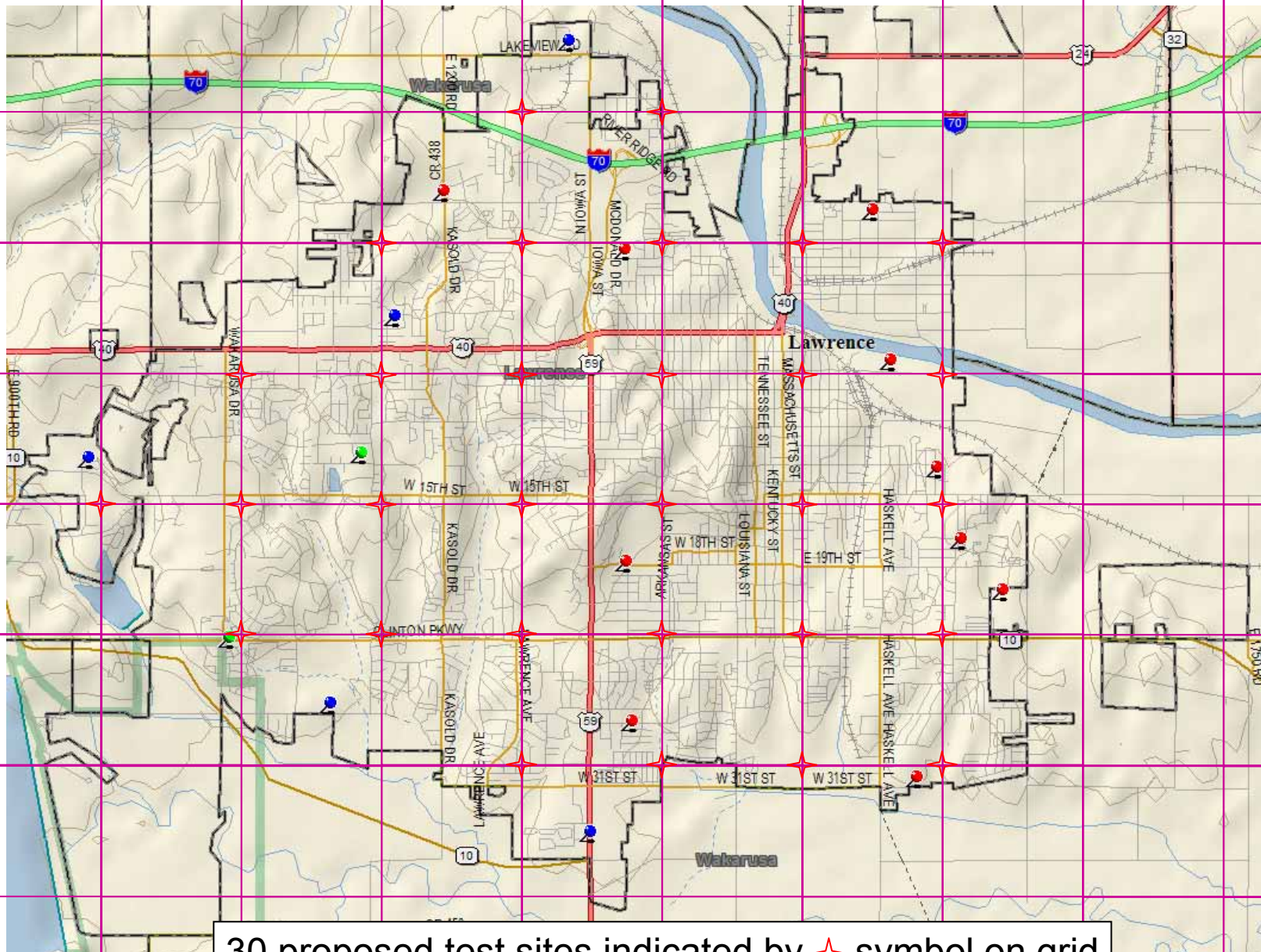
where $P=80,098$

$$\text{test sites} = 0.1(80,098^{1/2})$$

$$\text{test sites} = 0.1 \times 283$$

$$\text{test sites} = 28.3$$

Lawrence Population = 80,098 *according to 2000 Census*



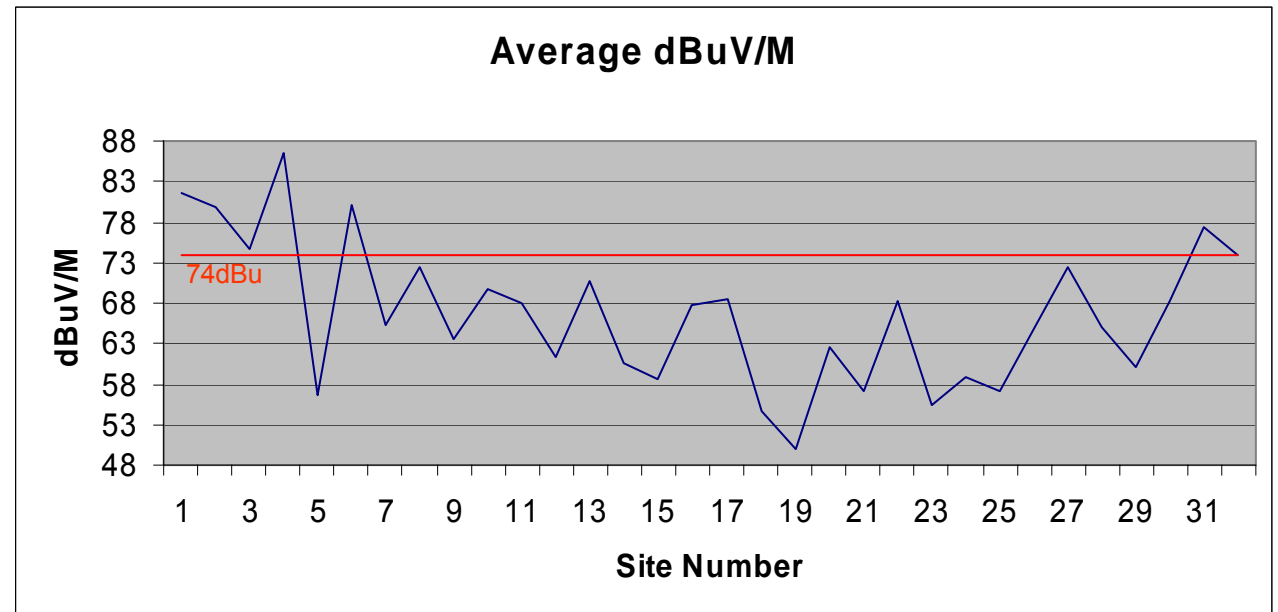
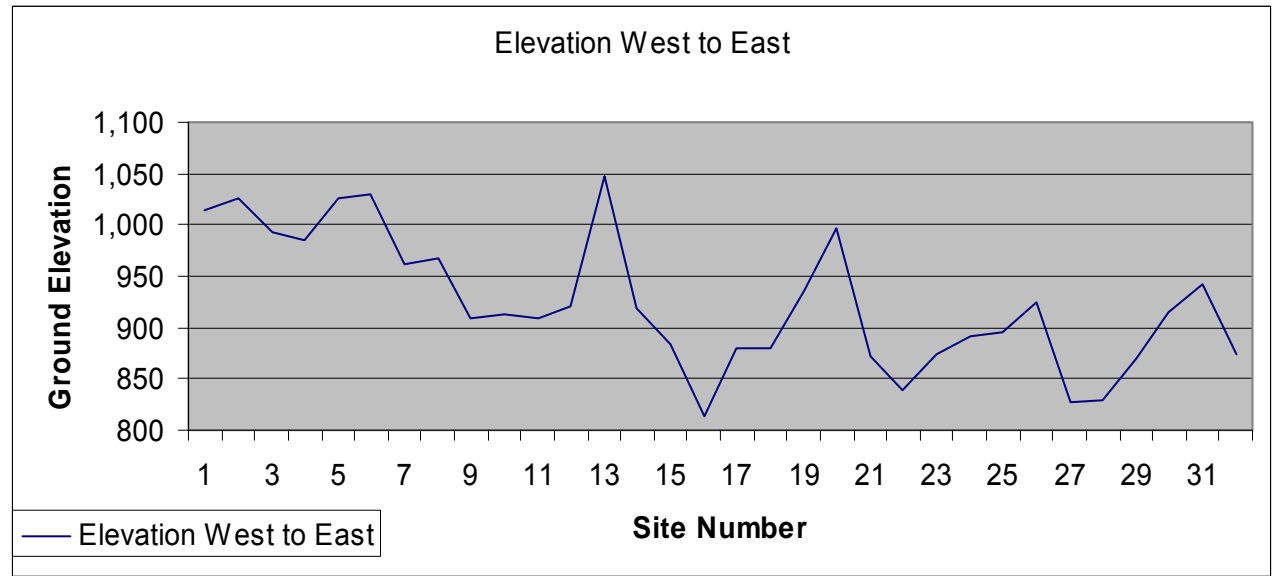
30 proposed test sites indicated by ★ symbol on grid
(all other intersections fall outside of the community)

A note about the following Path Profiles

The following path profiles are representative of actual terrain conditions, they are not to scale and do not include buildings, trees or other structures that are above the terrain. Also, they do not regard “K” factors for earth curvature or antenna beam tilt. These will only contribute to the grade “A” coverage deficit.

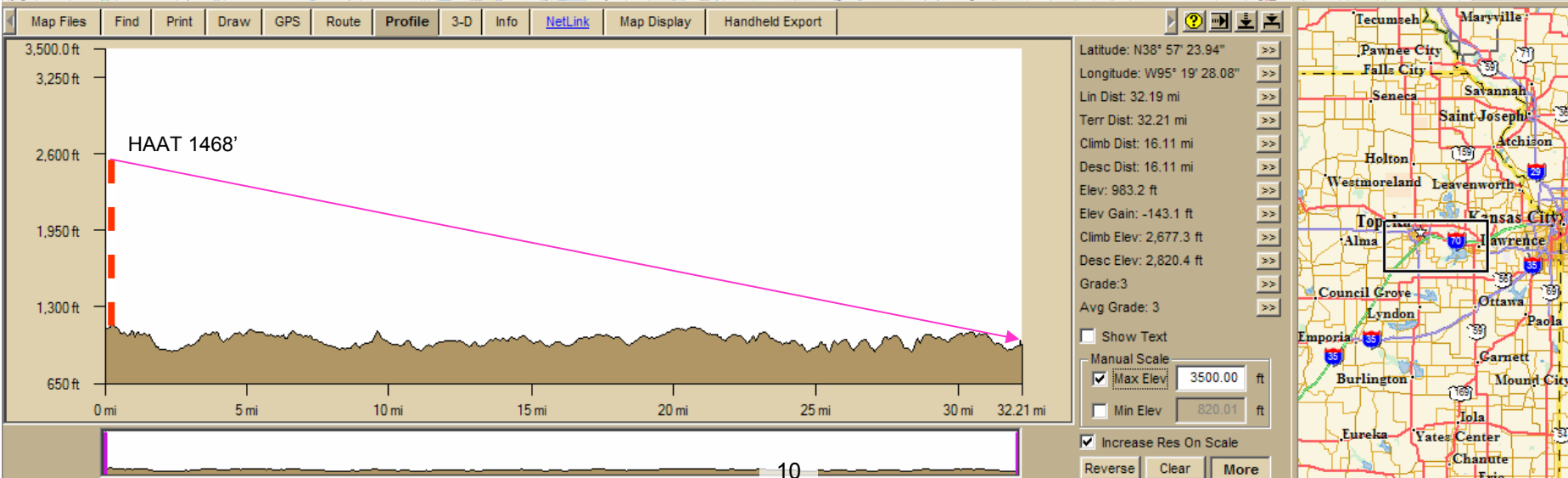
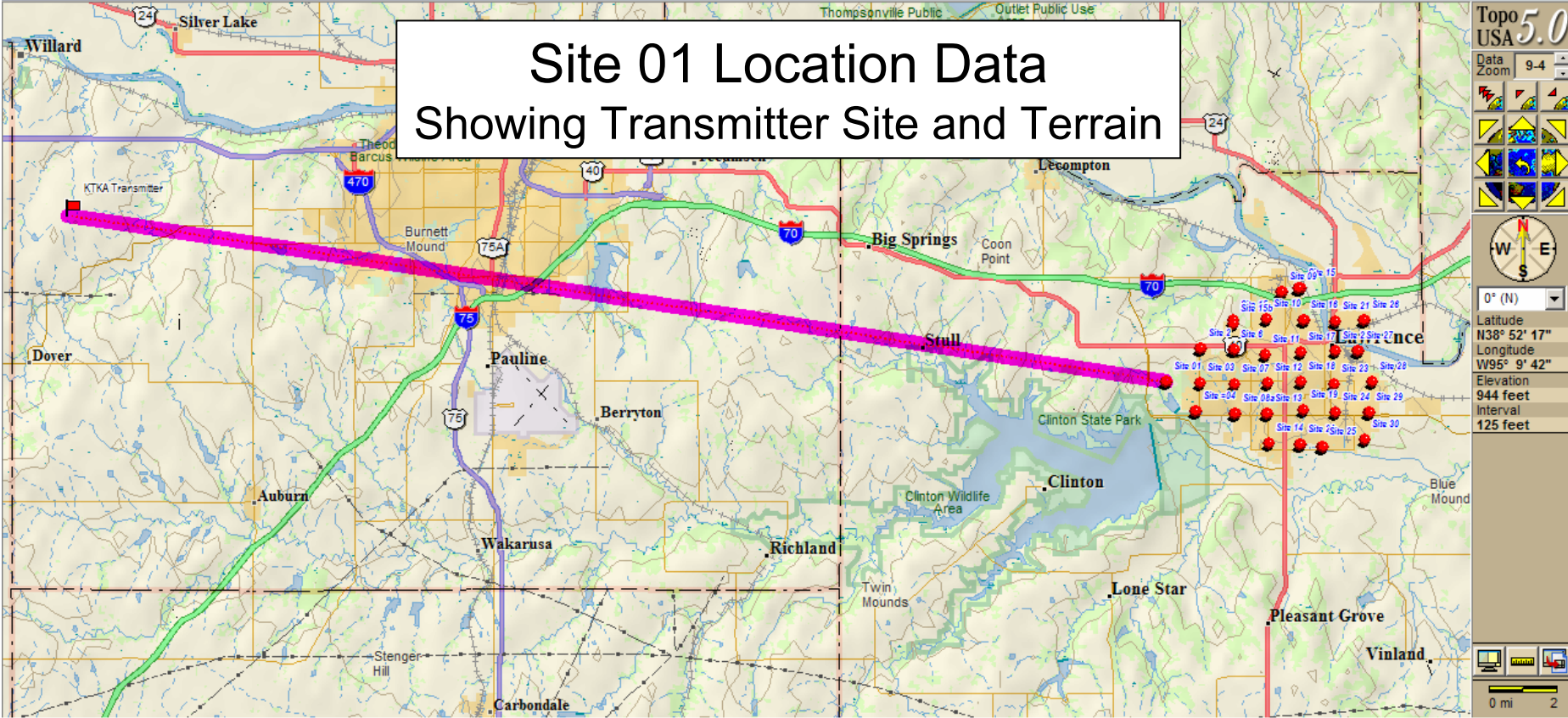
Summary

Site	dBuV/M	Elev.	<74 dBu
1	81.66	1014.62	
2	79.81	1026.94	
3	74.66	992.72	
4	86.59	984.69	
5	56.54	1026.08	*
5b	80.09	1030.40	
6	65.30	961.89	*
7	72.37	966.60	*
8	63.68	910.03	*
8a	69.82	912.08	*
9	67.90	909.38	*
10	61.31	920.87	*
11	70.66	1048.25	*
12	60.67	918.93	*
13	58.72	883.35	*
14	67.82	812.73	*
15	68.56	880.44	*
16	54.56	878.95	*
17	49.93	936.55	*
18	62.48	995.99	*
19	57.14	872.52	*
20	68.13	838.52	*
21	55.40	874.88	*
22	58.83	891.32	*
23	57.10	896.34	*
24	64.87	925.42	*
25	72.41	828.05	*
26	65.01	829.51	*
27	60.06	870.08	*
28	68.33	914.29	*
29	77.38	942.85	
30	73.93	874.14	



Site 01 Location Data

Showing Transmitter Site and Terrain



Location: Site 01

Date: 13 April 2005

Time: 1714

Temperature: 66°F

Dew Point: 34°F

Humidity: 30%

Pressure: 30.08"

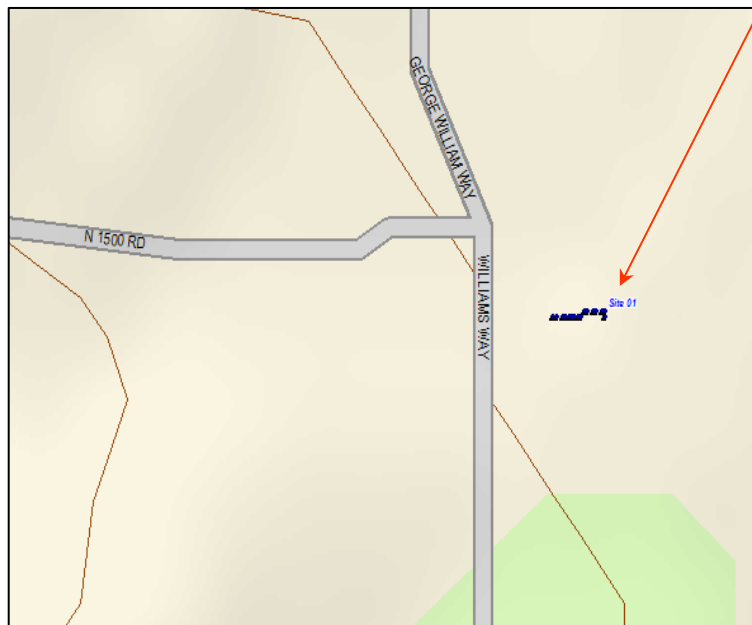
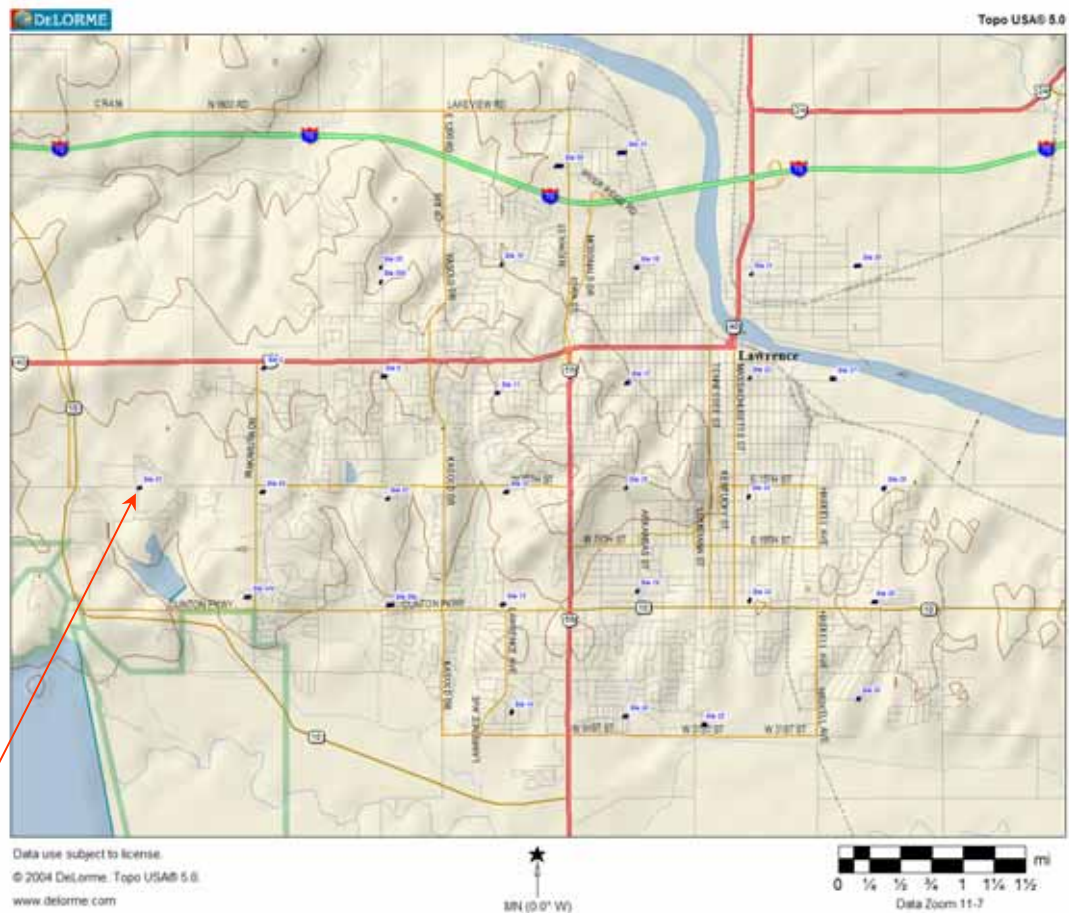
Visibility: 10 miles

Winds: ENE @ 15MPH

Conditions: Clear

81.66 dBuV

1,014.6' Average elevation



Notes:

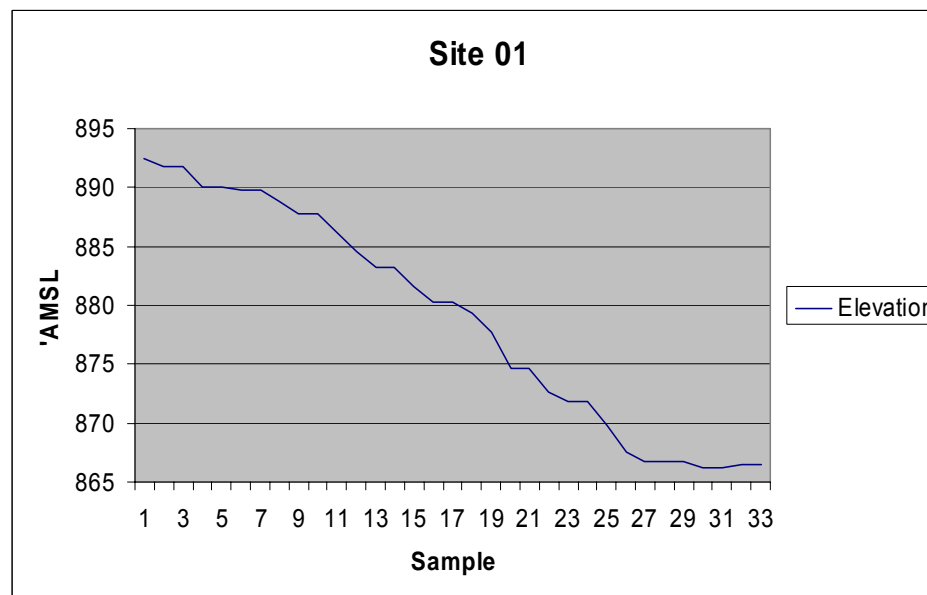
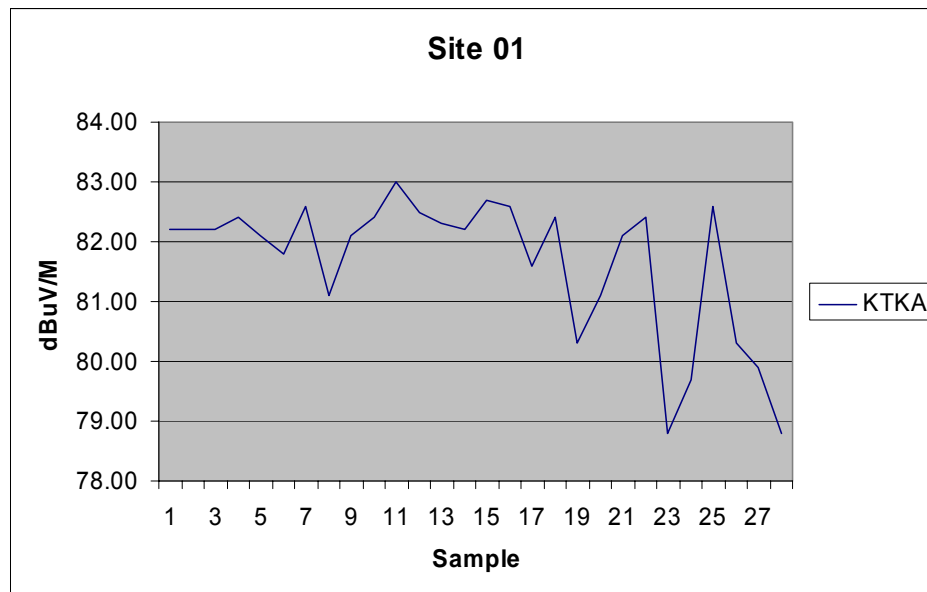
Antenna is vehicle mounted, 30' above ground level
Antenna oriented towards transmitter

The adjacent picture indicates the sample points of the test and is present in the logged information.

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 ' SpaceUnits=English
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 ' Delay=1

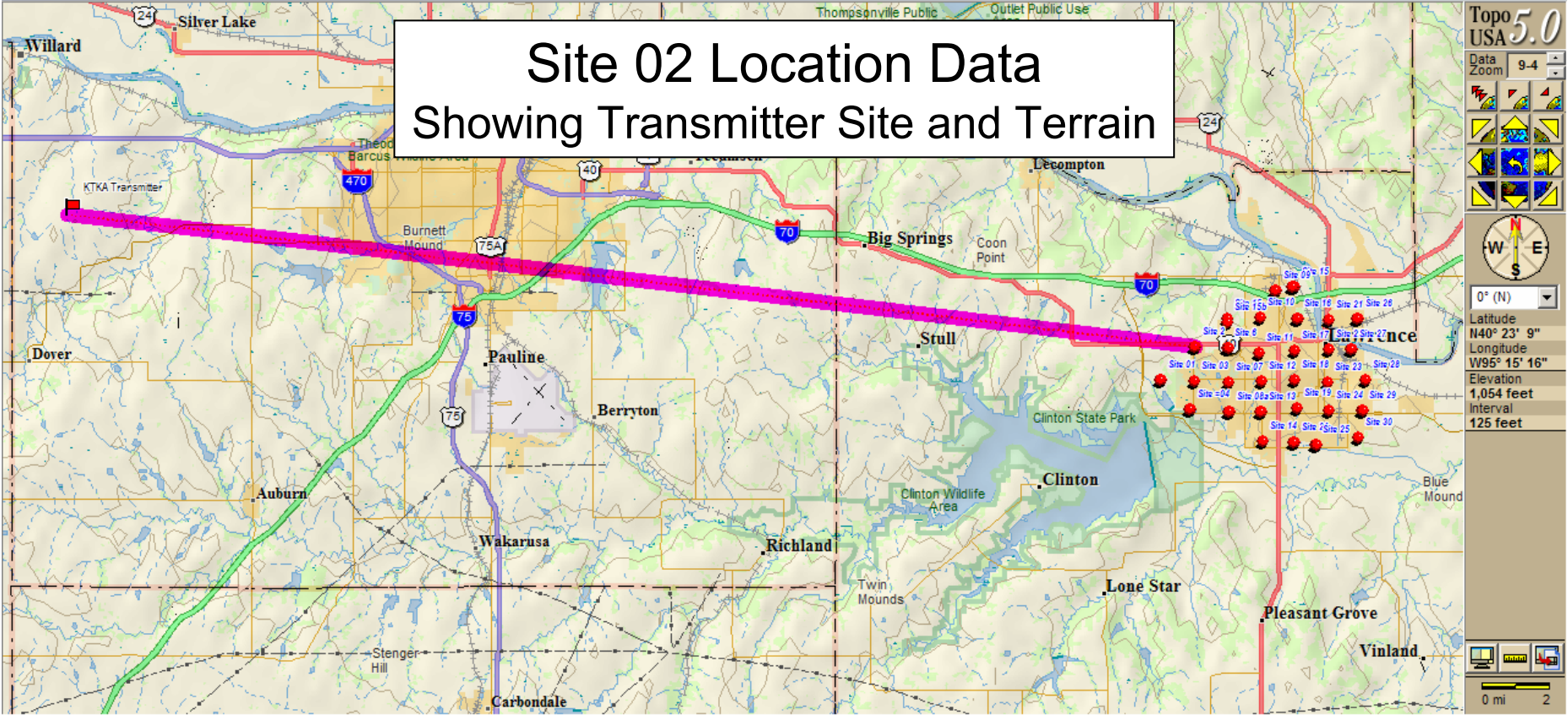
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 ' Freq 1= 681 Freq 1 38.6 Total 2286.4 Count 28 Total dBuV divided by Count Avg Elevation
 ' Comment=st1 81.66 dBuV/M 1014.6

Date	Time	Freq	dBuV/M	Count	Total dBuV	Avg dBuV	Elevation	Deg	1	10	0.8		
4/13/2005	17:14:17	681.25 MHz	82.2 dBuV/M	38.95665	-95.32418	Freq 1	38.6	1022.4	Feet	Deg	1	10	0.8
4/13/2005	17:14:18	681.25 MHz	82.2 dBuV/M	38.95665	-95.32418	Freq 1	38.6	1022	Feet	Deg	1	10	0.8
4/13/2005	17:14:20	681.25 MHz	82.2 dBuV/M	38.95665	-95.32418	Freq 1	38.6	1022	Feet	Deg	1	10	0.8
4/13/2005	17:14:21	681.25 MHz	82.4 dBuV/M	38.95665	-95.32418	Freq 1	38.6	1021.7	Feet	Deg	1	10	0.8
4/13/2005	17:14:22	681.25 MHz	82.1 dBuV/M	38.95665	-95.32418	Freq 1	38.6	1021.7	Feet	Deg	1	10	0.8
4/13/2005	17:14:24	681.25 MHz	81.8 dBuV/M	38.95665	-95.32418	Freq 1	38.6	1021.7	Feet	Deg	1	10	0.8
4/13/2005	17:14:25	681.25 MHz	82.6 dBuV/M	38.95667	-95.32418	Freq 1	38.6	1021.4	Feet	Deg	1	10	0.8
4/13/2005	17:14:27	681.25 MHz	81.1 dBuV/M	38.95667	-95.3242	Freq 1	38.6	1020.4	Feet	Deg	1	10	0.8
4/13/2005	17:14:28	681.25 MHz	82.1 dBuV/M	38.95667	-95.32423	Freq 1	38.6	1019.7	Feet	Deg	1	10	0.8
4/13/2005	17:14:29	681.25 MHz	82.4 dBuV/M	38.95667	-95.32423	Freq 1	38.6	1019.7	Feet	Deg	1	10	0.8
4/13/2005	17:14:31	681.25 MHz	83 dBuV/M	38.95667	-95.32425	Freq 1	38.6	1019.7	Feet	Deg	1	10	0.8
4/13/2005	17:14:32	681.25 MHz	82.5 dBuV/M	38.95667	-95.32428	Freq 1	38.6	1018.8	Feet	Deg	1	10	0.8
4/13/2005	17:14:34	681.25 MHz	82.3 dBuV/M	38.95667	-95.32428	Freq 1	38.6	1018.8	Feet	Deg	1	10	0.8
4/13/2005	17:14:35	681.25 MHz	82.2 dBuV/M	38.95667	-95.3243	Freq 1	38.6	1017.4	Feet	Deg	1	10	0.8
4/13/2005	17:14:36	681.25 MHz	82.7 dBuV/M	38.95665	-95.32432	Freq 1	38.6	1016.1	Feet	Deg	1	10	0.8
4/13/2005	17:14:38	681.25 MHz	82.6 dBuV/M	38.95665	-95.32432	Freq 1	38.6	1016.1	Feet	Deg	1	10	0.8
4/13/2005	17:14:39	681.25 MHz	81.6 dBuV/M	38.95665	-95.32433	Freq 1	38.6	1013.8	Feet	Deg	1	10	0.8
4/13/2005	17:14:41	681.25 MHz	82.4 dBuV/M	38.95665	-95.32435	Freq 1	38.6	1012.2	Feet	Deg	1	10	0.8
4/13/2005	17:14:42	681.25 MHz	80.3 dBuV/M	38.95665	-95.32437	Freq 1	38.6	1010.2	Feet	Deg	1	10	0.8
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4/13/2005	17:14:45	681.25 MHz	82.1 dBuV/M	38.95665	-95.32438	Freq 1	38.6	1008.6	Feet	Deg	1	10	0.9
4/13/2005	17:14:46	681.25 MHz	82.4 dBuV/M	38.95665	-95.3244	Freq 1	38.6	1006.9	Feet	Deg	1	10	0.9
4/13/2005	17:14:48	681.25 MHz	78.8 dBuV/M	38.95665	-95.3244	Freq 1	38.6	1006.9	Feet	Deg	1	10	0.9
4/13/2005	17:14:49	681.25 MHz	79.7 dBuV/M	38.95665	-95.32442	Freq 1	38.6	1005.6	Feet	Deg	1	10	0.9
4/13/2005	17:14:51	681.25 MHz	82.6 dBuV/M	38.95665	-95.32445	Freq 1	38.6	1004.6	Feet	Deg	1	9	1
4/13/2005	17:14:52	681.25 MHz	80.3 dBuV/M	38.95665	-95.32447	Freq 1	38.6	1003.7	Feet	Deg	1	10	1
4/13/2005	17:14:54	681.25 MHz	79.9 dBuV/M	38.95665	-95.32447	Freq 1	38.6	1003.7	Feet	Deg	1	10	1
4/13/2005	17:14:55	681.25 MHz	78.8 dBuV/M	38.95665	-95.32447	Freq 1	38.6	1003.3	Feet	Deg	1	10	1.1

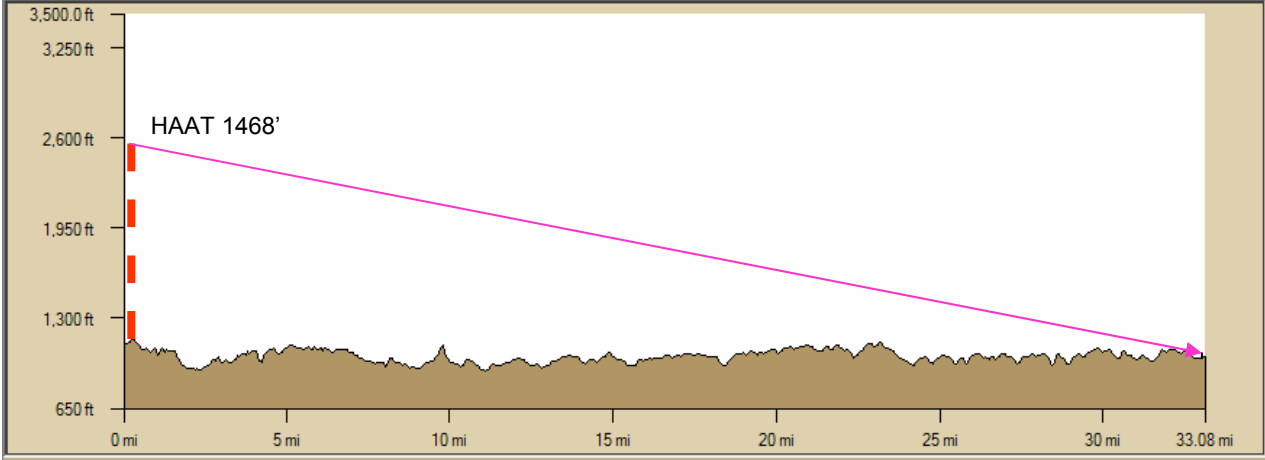


Site 02 Location Data

Showing Transmitter Site and Terrain



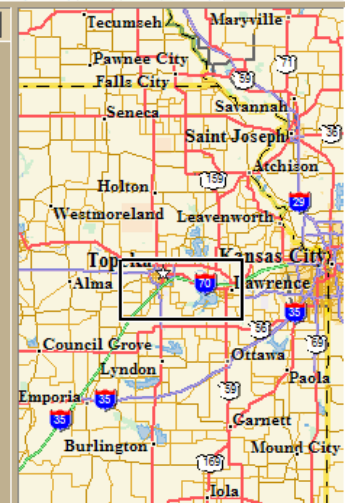
Map Files Find Print Draw GPS Route Profile 3-D Info [NetLink](#) Map Display Handheld Export



Latitude: N38° 58' 14.04"
Longitude: W95° 18' 20.34"
Lin Dist: 33.06 mi
Terr Dist: 33.08 mi
Climb Dist: 15.98 mi
Desc Dist: 17.10 mi
Elev: 1,018.0 ft
Elev Gain: -108.3 ft
Climb Elev: 2,730.6 ft
Desc Elev: 2,838.9 ft
Grade:3
Avg Grade: 3

☐ Show Text
Manual Scale
☒ Max Elev: 3500.00 ft
☐ Min Elev: 820.01 ft
☒ Increase Res On Scale

Reverse Clear More



Location: Site 02

Date: 13 April 2005

Time: 1324

Temperature: 64°F

Dew Point: 39°F

Humidity: 40%

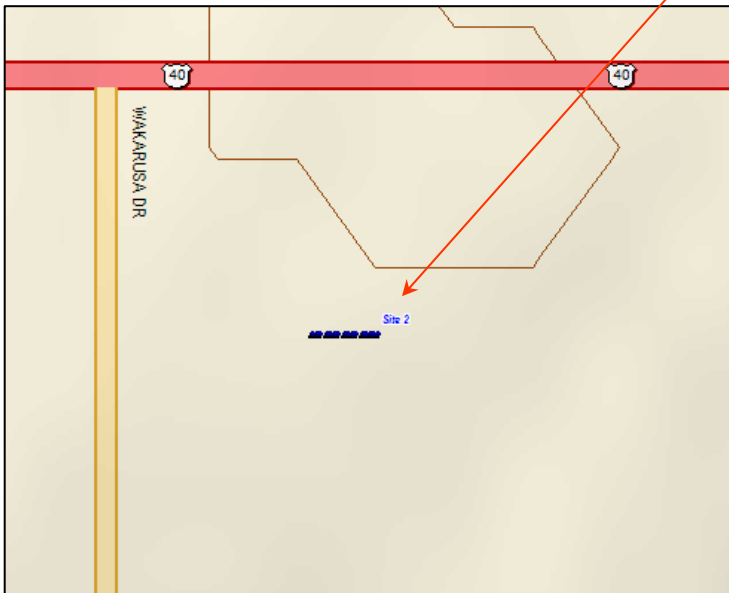
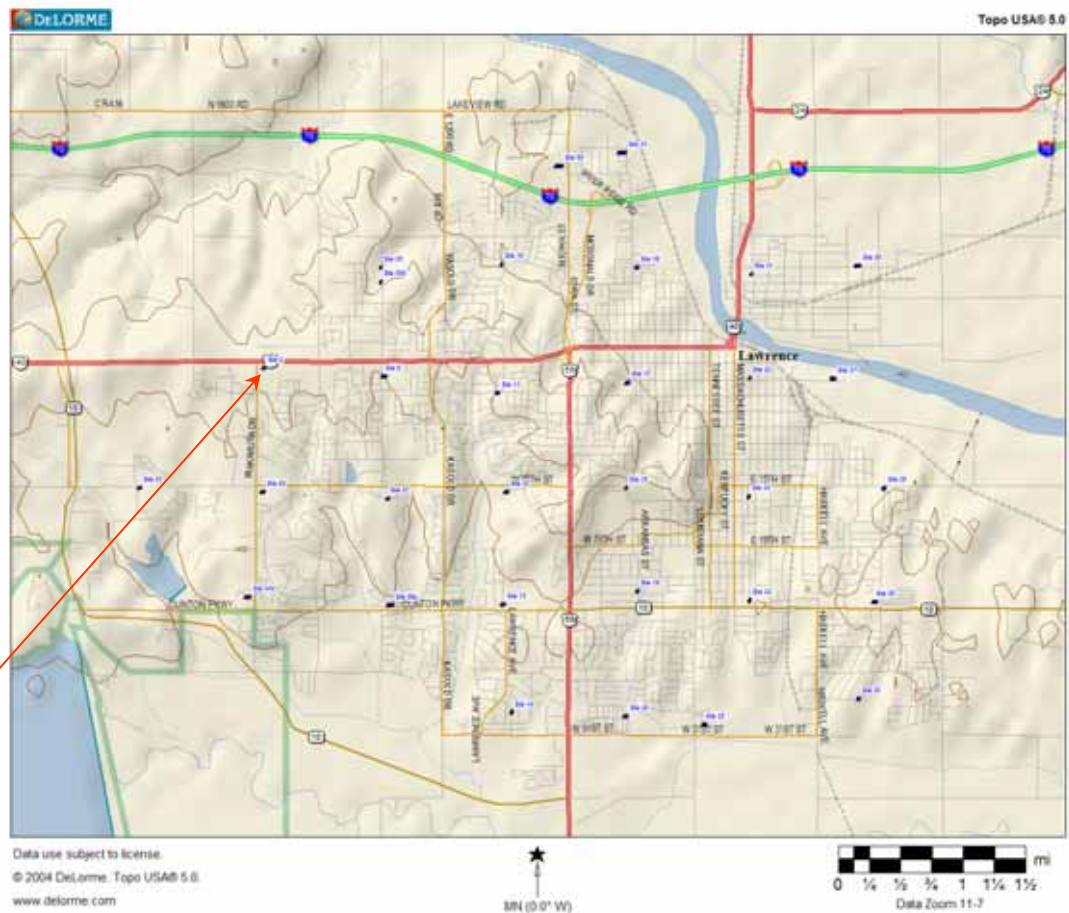
Pressure: 30.08"

Visibility: 10 miles

Winds: NE @ 16.1MPH

Conditions: Clear

79.81 dBuV/M
1,026.9' Average Elevation



Notes:

Antenna is vehicle mounted, 30' above ground level
Antenna oriented towards transmitter

The adjacent picture indicates the sample points of the test and is present in the logged information.

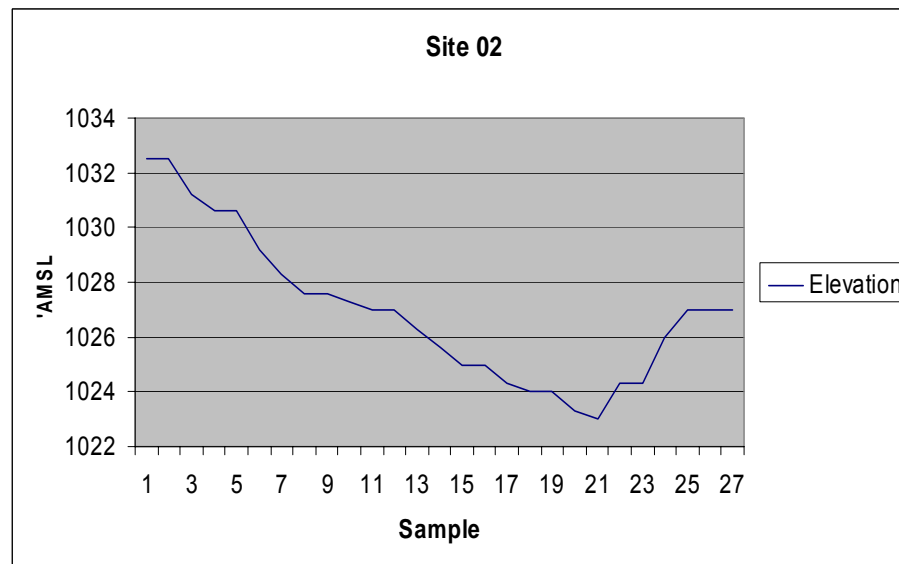
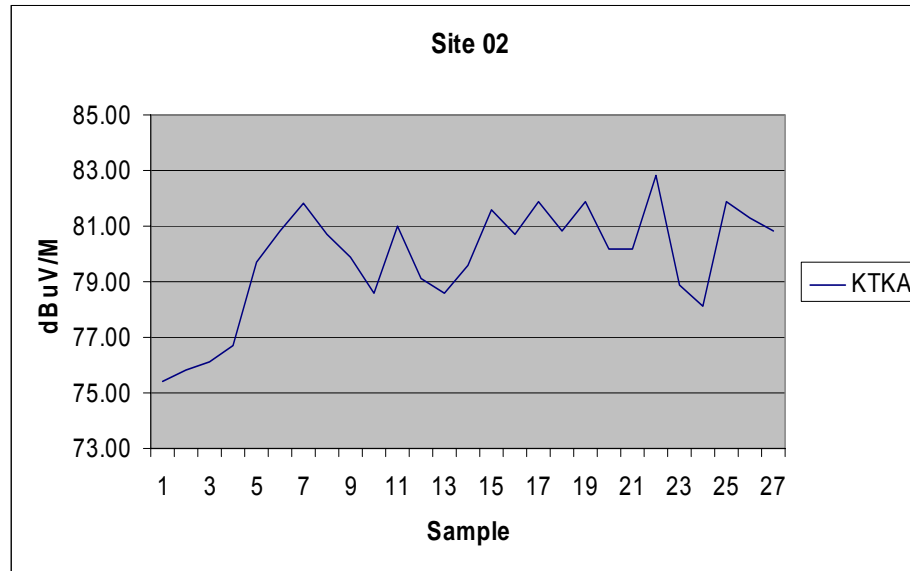
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 ' SpaceUnits=English
 ' RFAmp=Off
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 ' Delay=1

' FreqListLength=1

' Freq 1= 681 Freq 1 38.6 2154.9 27 Total dBuV divided by Count

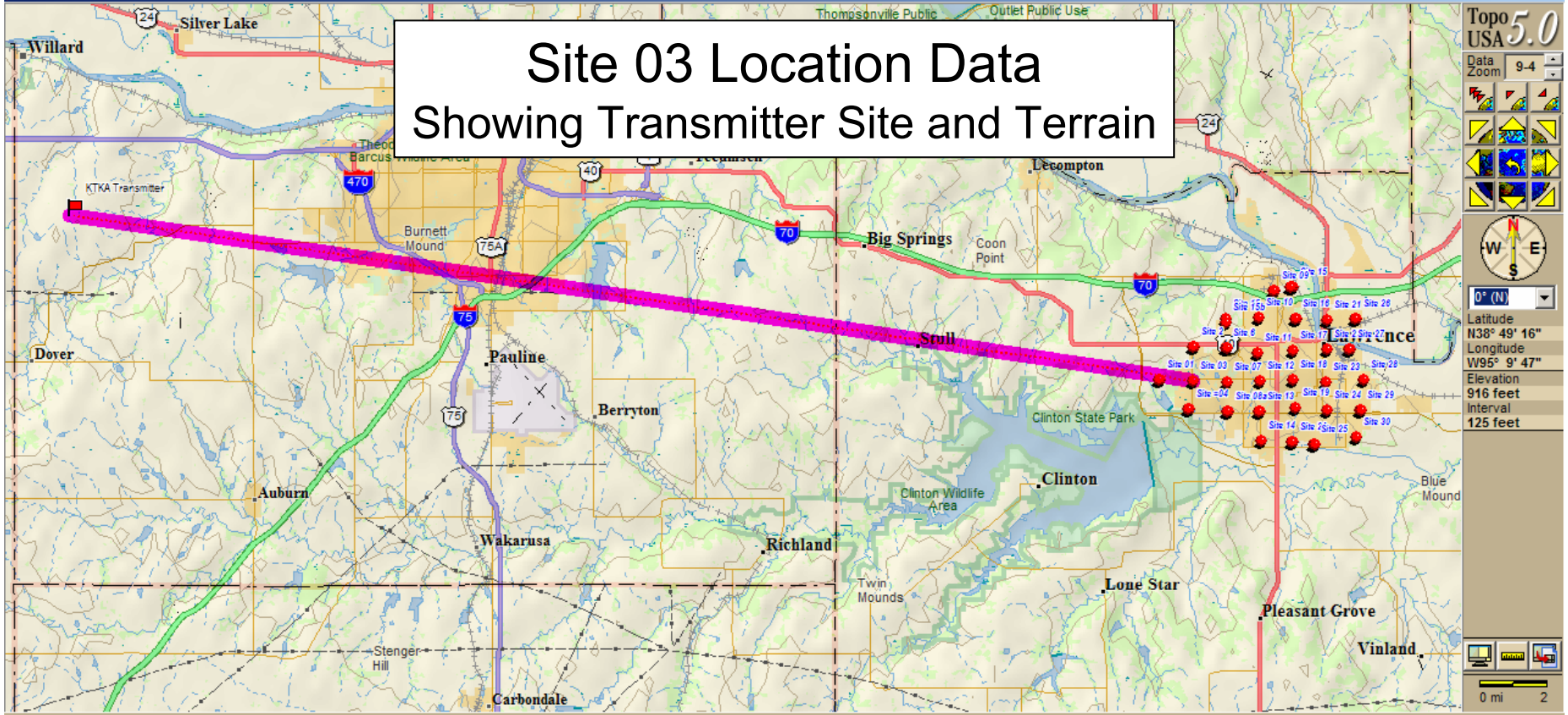
' Comment=st2

			Total	Count				Avg				
			2154.9	27				Elevation				
			79.81 dBuV/M					1026.9				
4/13/2005	13:24:54	681.25 MHz	75.4 dBuV/M	38.97057	-95.30565	Freq 1	38.6	1032.5 Feet	Deg	1	8	1.2
4/13/2005	13:24:55	681.25 MHz	75.8 dBuV/M	38.97057	-95.30565	Freq 1	38.6	1032.5 Feet	Deg	1	8	1.2
4/13/2005	13:24:57	681.25 MHz	76.1 dBuV/M	38.97057	-95.30565	Freq 1	38.6	1031.2 Feet	Deg	1	8	1.2
4/13/2005	13:24:58	681.25 MHz	76.7 dBuV/M	38.97057	-95.30565	Freq 1	38.6	1030.6 Feet	Deg	1	8	1.2
4/13/2005	13:25:00	681.25 MHz	79.7 dBuV/M	38.97057	-95.30565	Freq 1	38.6	1030.6 Feet	Deg	1	8	1.2
4/13/2005	13:25:01	681.25 MHz	80.8 dBuV/M	38.97057	-95.30565	Freq 1	38.6	1029.2 Feet	Deg	1	8	1.2
4/13/2005	13:25:03	681.25 MHz	81.8 dBuV/M	38.97057	-95.30567	Freq 1	38.6	1028.3 Feet	Deg	1	8	1.2
4/13/2005	13:25:04	681.25 MHz	80.7 dBuV/M	38.97057	-95.30568	Freq 1	38.6	1027.6 Feet	Deg	1	8	1.2
4/13/2005	13:25:06	681.25 MHz	79.9 dBuV/M	38.97057	-95.30568	Freq 1	38.6	1027.6 Feet	Deg	1	8	1.2
4/13/2005	13:25:07	681.25 MHz	78.6 dBuV/M	38.97057	-95.3057	Freq 1	38.6	1027.3 Feet	Deg	1	8	1.2
4/13/2005	13:25:08	681.25 MHz	81 dBuV/M	38.97057	-95.30572	Freq 1	38.6	1027 Feet	Deg	1	8	1.2
4/13/2005	13:25:10	681.25 MHz	79.1 dBuV/M	38.97057	-95.30572	Freq 1	38.6	1027 Feet	Deg	1	8	1.2
4/13/2005	13:25:11	681.25 MHz	78.6 dBuV/M	38.97057	-95.30575	Freq 1	38.6	1026.3 Feet	Deg	1	8	1.2
4/13/2005	13:25:13	681.25 MHz	79.6 dBuV/M	38.97057	-95.30577	Freq 1	38.6	1025.6 Feet	Deg	1	8	1.2
4/13/2005	13:25:14	681.25 MHz	81.6 dBuV/M	38.97057	-95.30578	Freq 1	38.6	1025 Feet	Deg	1	8	1.2
4/13/2005	13:25:16	681.25 MHz	80.7 dBuV/M	38.97057	-95.30578	Freq 1	38.6	1025 Feet	Deg	1	8	1.2
4/13/2005	13:25:17	681.25 MHz	81.9 dBuV/M	38.97057	-95.3058	Freq 1	38.6	1024.3 Feet	Deg	1	8	1.2
4/13/2005	13:25:18	681.25 MHz	80.8 dBuV/M	38.97057	-95.30583	Freq 1	38.6	1024 Feet	Deg	1	8	1.2
4/13/2005	13:25:20	681.25 MHz	81.9 dBuV/M	38.97057	-95.30583	Freq 1	38.6	1024 Feet	Deg	1	8	1.2
4/13/2005	13:25:21	681.25 MHz	80.2 dBuV/M	38.97057	-95.30585	Freq 1	38.6	1023.3 Feet	Deg	1	8	1.2
4/13/2005	13:25:23	681.25 MHz	80.2 dBuV/M	38.97057	-95.30587	Freq 1	38.6	1023 Feet	Deg	1	8	1.2
4/13/2005	13:25:24	681.25 MHz	82.8 dBuV/M	38.97057	-95.30588	Freq 1	38.6	1024.3 Feet	Deg	1	8	1.2
4/13/2005	13:25:26	681.25 MHz	78.9 dBuV/M	38.97057	-95.30588	Freq 1	38.6	1024.3 Feet	Deg	1	8	1.2
4/13/2005	13:25:27	681.25 MHz	78.1 dBuV/M	38.97057	-95.30592	Freq 1	38.6	1026 Feet	Deg	1	8	1.2
4/13/2005	13:25:28	681.25 MHz	81.9 dBuV/M	38.97057	-95.30593	Freq 1	38.6	1027 Feet	Deg	1	8	1.2
4/13/2005	13:25:30	681.25 MHz	81.3 dBuV/M	38.97057	-95.30593	Freq 1	38.6	1027 Feet	Deg	1	8	1.2
4/13/2005	13:25:31	681.25 MHz	80.8 dBuV/M	38.97057	-95.30595	Freq 1	38.6	1027 Feet	Deg	1	8	1.2



Site 03 Location Data

Showing Transmitter Site and Terrain



Topo USA 5.0

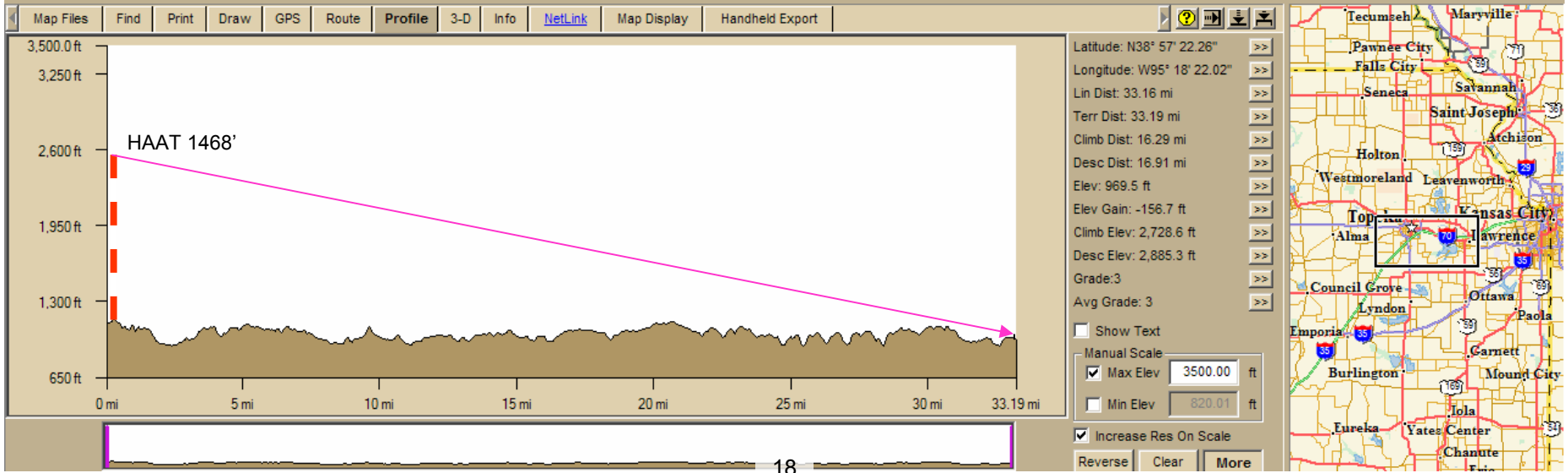
Data Zoom 9-4

Latitude N38° 49' 16"

Longitude W95° 9' 47"

Elevation 916 feet

Interval 125 feet



Location: Site 03

Date: 13 April 2005

Time: 1723

Temperature: 66°F

Dew Point: 34°F

Humidity: 30%

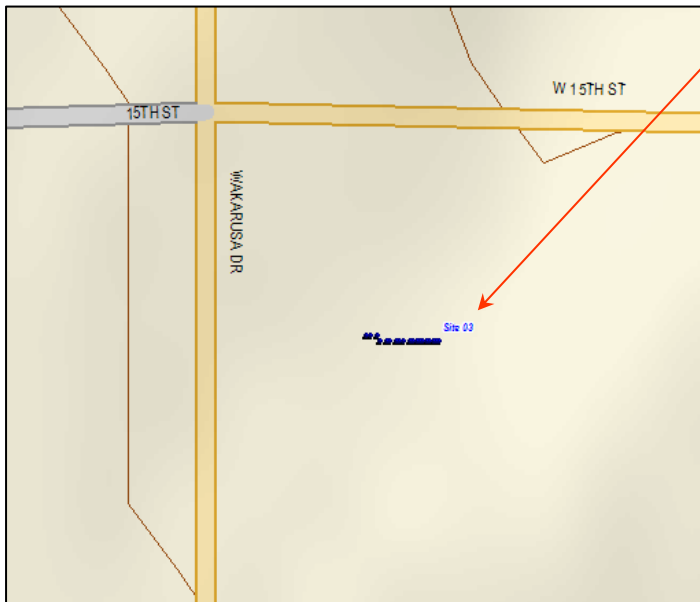
Pressure: 30.08"

Visibility: 10 miles

Winds: ENE @ 15MPH

Conditions: Clear

74.66 dBuV/M
992.72' Average Elevation



Notes:

Antenna is vehicle mounted, 30' above ground level
Antenna oriented towards transmitter

The adjacent picture indicates the sample points of the test and is present in the logged information.

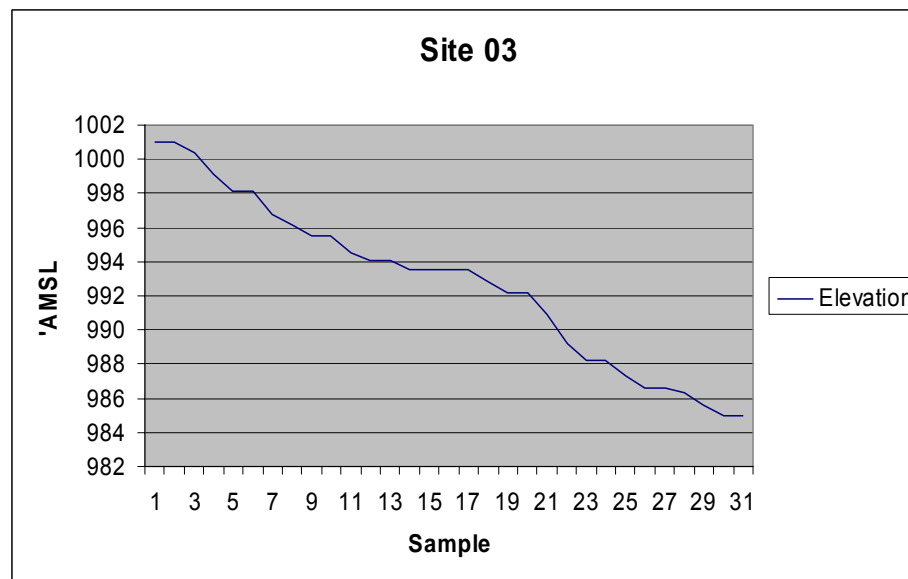
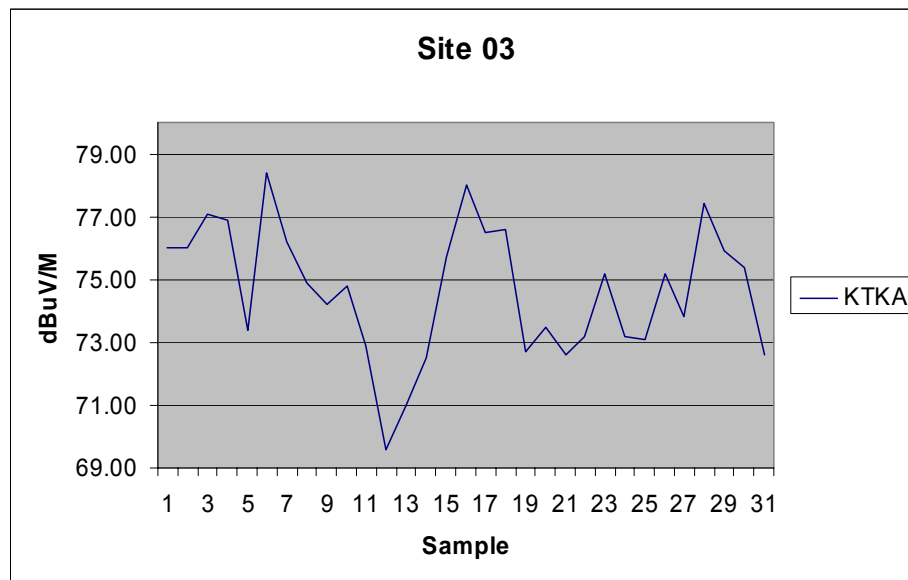
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 ' SpaceUnits=English
 ' RFAmp=Off
 ' Bandwidth=WB
 ' DelayDimension=Time
 ' Delay=1

' FreqListLength=1

' Freq 1= 681 Freq 1 38.6 2314.5 31 Total dBuV divided by Count

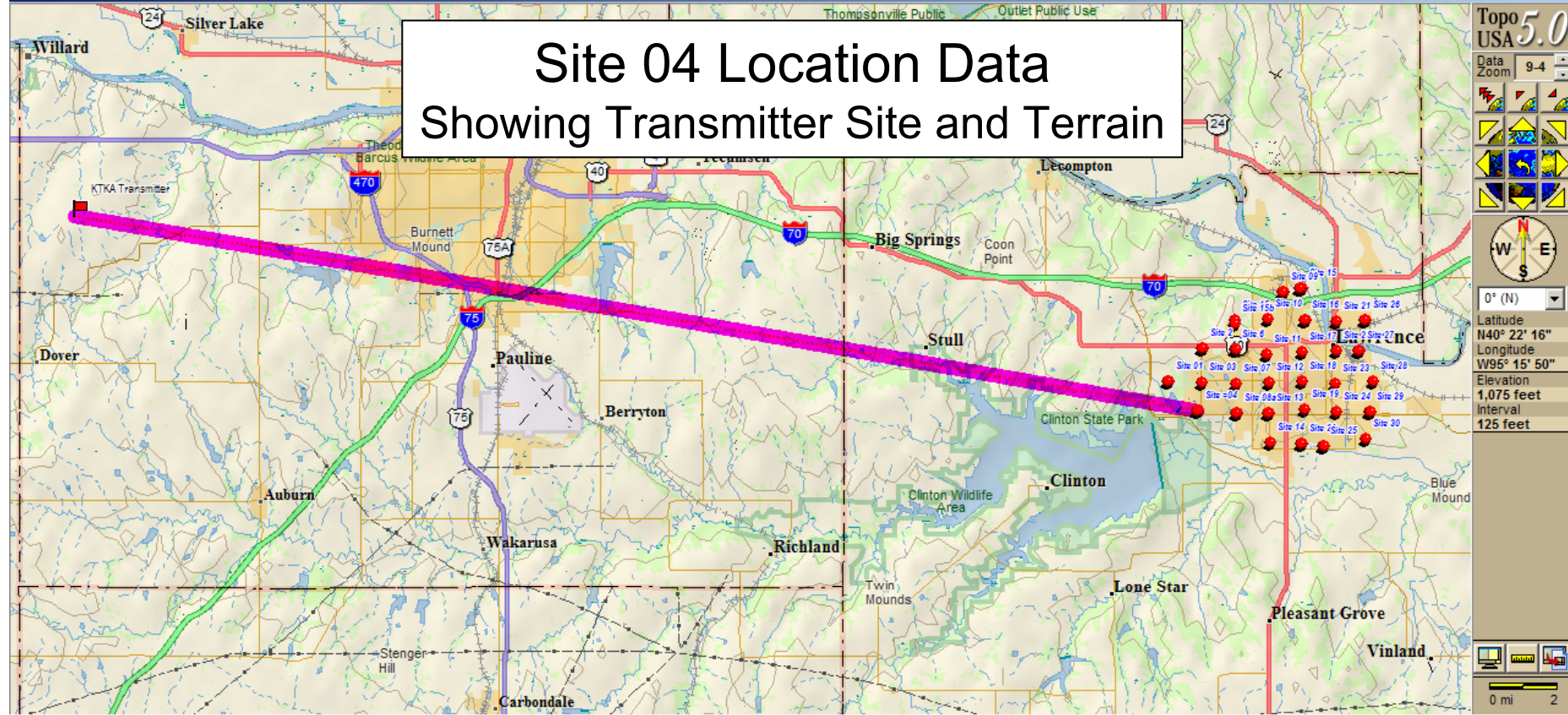
' Comment=st3

			Total	Count				Avg			
			2314.5	31	Total dBuV divided by Count			Elevation			
			74.66 dBuV/M					992.72			
4/13/2005	17:23:15	681.25 MHz	76 dBuV/M	38.95618	-95.30582	Freq 1	38.6	1001 Feet	Deg	1	9 1.1
4/13/2005	17:23:16	681.25 MHz	76 dBuV/M	38.95618	-95.30582	Freq 1	38.6	1001 Feet	Deg	1	9 1.1
4/13/2005	17:23:18	681.25 MHz	77.1 dBuV/M	38.95618	-95.30582	Freq 1	38.6	1000.4 Feet	Deg	1	9 1.1
4/13/2005	17:23:19	681.25 MHz	76.9 dBuV/M	38.95618	-95.30582	Freq 1	38.6	999.1 Feet	Deg	1	9 1.1
4/13/2005	17:23:21	681.25 MHz	73.4 dBuV/M	38.95618	-95.30582	Freq 1	38.6	998.1 Feet	Deg	1	9 1.1
4/13/2005	17:23:22	681.25 MHz	78.4 dBuV/M	38.95618	-95.30582	Freq 1	38.6	998.1 Feet	Deg	1	9 1.1
4/13/2005	17:23:23	681.25 MHz	76.2 dBuV/M	38.95618	-95.30583	Freq 1	38.6	996.8 Feet	Deg	1	8 1.2
4/13/2005	17:23:25	681.25 MHz	74.9 dBuV/M	38.95618	-95.30585	Freq 1	38.6	996.1 Feet	Deg	1	8 1.7
4/13/2005	17:23:26	681.25 MHz	74.2 dBuV/M	38.95618	-95.30587	Freq 1	38.6	995.5 Feet	Deg	1	8 1.5
4/13/2005	17:23:28	681.25 MHz	74.8 dBuV/M	38.95618	-95.30587	Freq 1	38.6	995.5 Feet	Deg	1	8 1.5
4/13/2005	17:23:29	681.25 MHz	72.9 dBuV/M	38.95618	-95.30588	Freq 1	38.6	994.5 Feet	Deg	1	8 1.2
4/13/2005	17:23:31	681.25 MHz	69.6 dBuV/M	38.95618	-95.3059	Freq 1	38.6	994.1 Feet	Deg	1	8 1.2
4/13/2005	17:23:32	681.25 MHz	71 dBuV/M	38.95618	-95.3059	Freq 1	38.6	994.1 Feet	Deg	1	8 1.2
4/13/2005	17:23:33	681.25 MHz	72.5 dBuV/M	38.95618	-95.30592	Freq 1	38.6	993.5 Feet	Deg	1	8 1.2
4/13/2005	17:23:35	681.25 MHz	75.7 dBuV/M	38.95618	-95.30593	Freq 1	38.6	993.5 Feet	Deg	1	8 1
4/13/2005	17:23:36	681.25 MHz	78 dBuV/M	38.95618	-95.30595	Freq 1	38.6	993.5 Feet	Deg	1	9 0.9
4/13/2005	17:23:38	681.25 MHz	76.5 dBuV/M	38.95618	-95.30595	Freq 1	38.6	993.5 Feet	Deg	1	9 0.9
4/13/2005	17:23:39	681.25 MHz	76.6 dBuV/M	38.95618	-95.30597	Freq 1	38.6	992.8 Feet	Deg	1	9 0.9
4/13/2005	17:23:41	681.25 MHz	72.7 dBuV/M	38.95618	-95.306	Freq 1	38.6	992.2 Feet	Deg	1	9 0.9
4/13/2005	17:23:42	681.25 MHz	73.5 dBuV/M	38.95618	-95.306	Freq 1	38.6	992.2 Feet	Deg	1	9 0.9
4/13/2005	17:23:44	681.25 MHz	72.6 dBuV/M	38.95618	-95.30602	Freq 1	38.6	990.9 Feet	Deg	1	9 1
4/13/2005	17:23:45	681.25 MHz	73.2 dBuV/M	38.95618	-95.30603	Freq 1	38.6	989.2 Feet	Deg	1	9 1
4/13/2005	17:23:47	681.25 MHz	75.2 dBuV/M	38.95618	-95.30607	Freq 1	38.6	988.2 Feet	Deg	1	9 1
4/13/2005	17:23:48	681.25 MHz	73.2 dBuV/M	38.95618	-95.30607	Freq 1	38.6	988.2 Feet	Deg	1	9 1
4/13/2005	17:23:49	681.25 MHz	73.1 dBuV/M	38.95618	-95.30608	Freq 1	38.6	987.3 Feet	Deg	1	9 1
4/13/2005	17:23:51	681.25 MHz	75.2 dBuV/M	38.95618	-95.30612	Freq 1	38.6	986.6 Feet	Deg	1	9 1
4/13/2005	17:23:52	681.25 MHz	73.8 dBuV/M	38.95618	-95.30612	Freq 1	38.6	986.6 Feet	Deg	1	9 1
4/13/2005	17:23:54	681.25 MHz	77.4 dBuV/M	38.9562	-95.30613	Freq 1	38.6	986.3 Feet	Deg	1	9 1
4/13/2005	17:23:55	681.25 MHz	75.9 dBuV/M	38.9562	-95.30617	Freq 1	38.6	985.6 Feet	Deg	1	8 1.1
4/13/2005	17:23:57	681.25 MHz	75.4 dBuV/M	38.9562	-95.30618	Freq 1	38.6	985 Feet	Deg	1	8 1
4/13/2005	17:23:58	681.25 MHz	72.6 dBuV/M	38.9562	-95.30618	Freq 1	38.6	985 Feet	Deg	1	8 1



Site 04 Location Data

Showing Transmitter Site and Terrain



Topo USA 5.0

Data Zoom 9-4

0° (N)

Latitude N40° 22' 16"

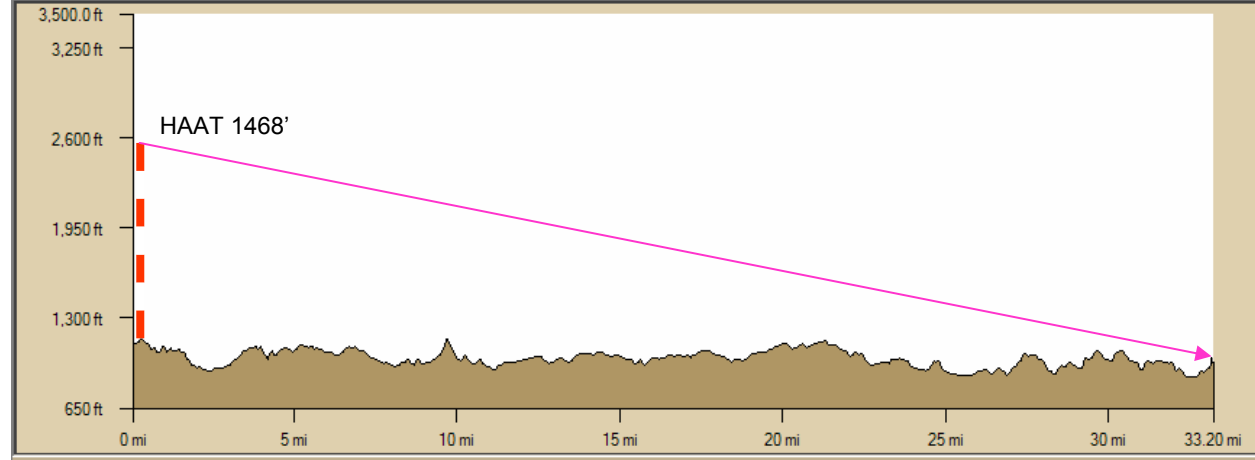
Longitude W95° 15' 50"

Elevation 1,075 feet

Interval 125 feet

0 mi 2

Map Files Find Print Draw GPS Route Profile 3-D Info NetLink Map Display Handheld Export



Latitude: N38° 56' 38.34"

Longitude: W95° 18' 30.54"

Lin Dist: 33.18 mi

Terr Dist: 33.20 mi

Climb Dist: 16.23 mi

Desc Dist: 16.85 mi

Elev: 975.6 ft

Elev Gain: -150.7 ft

Climb Elev: 2,525.6 ft

Desc Elev: 2,676.3 ft

Grade: 2

Avg Grade: 2

☐ Show Text

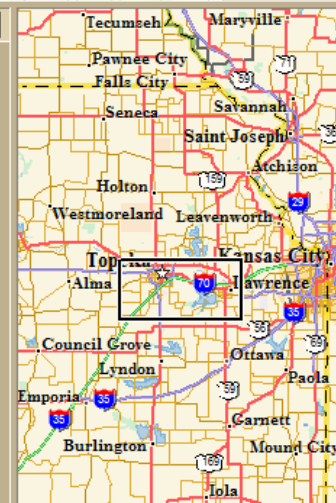
Manual Scale

☒ Max Elev: 3500.00 ft

☐ Min Elev: 820.01 ft

☒ Increase Res On Scale

Reverse Clear More



Location: Site 04

Date: 13 April 2005

Time: 1700

Temperature: 66°F

Dew Point: 34°F

Humidity: 30%

Pressure: 30.08"

Visibility: 10 miles

Winds: ENE @ 15MPH

Conditions: Clear

86.59 dBuV/M
984.69' Average Elevation



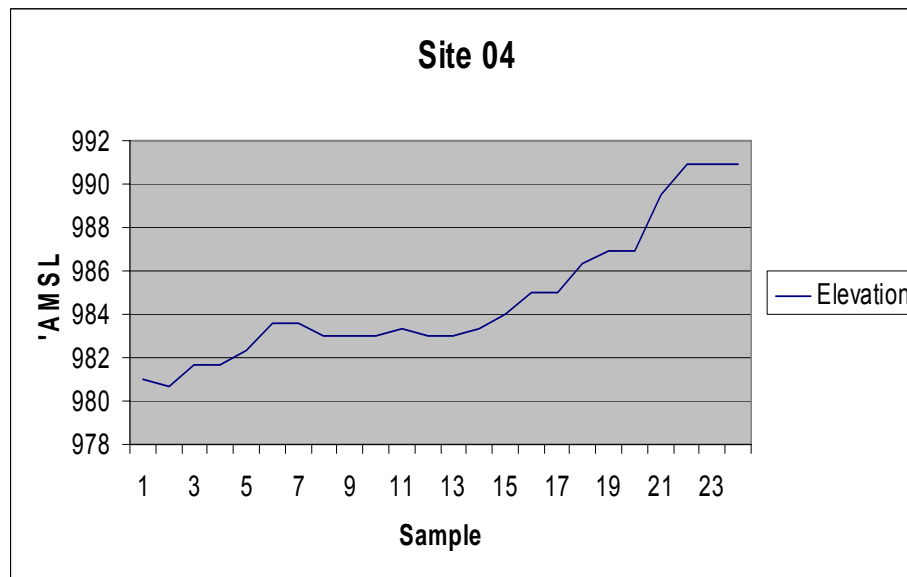
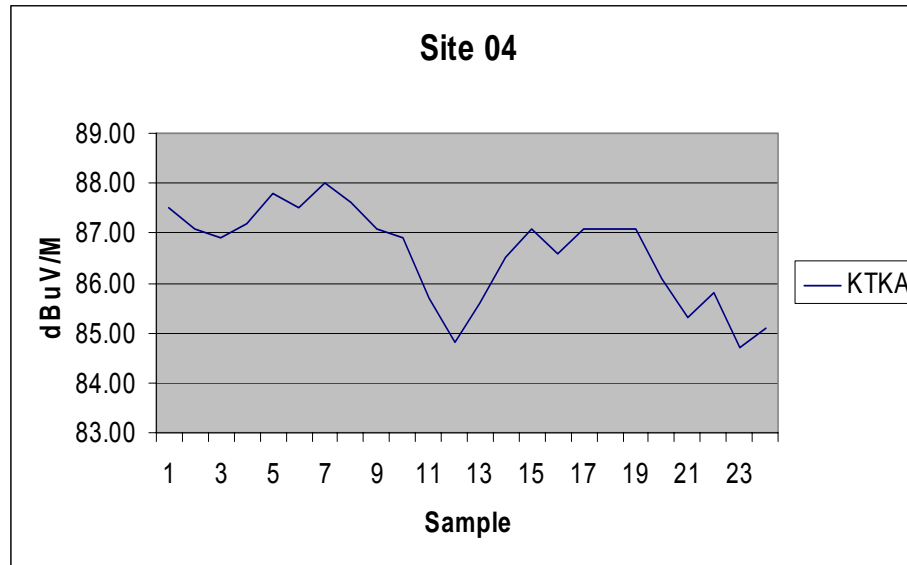
Notes:

Antenna is vehicle mounted, 30' above ground level
Antenna oriented towards transmitter

The adjacent picture indicates the sample points of the test and is present in the logged information.

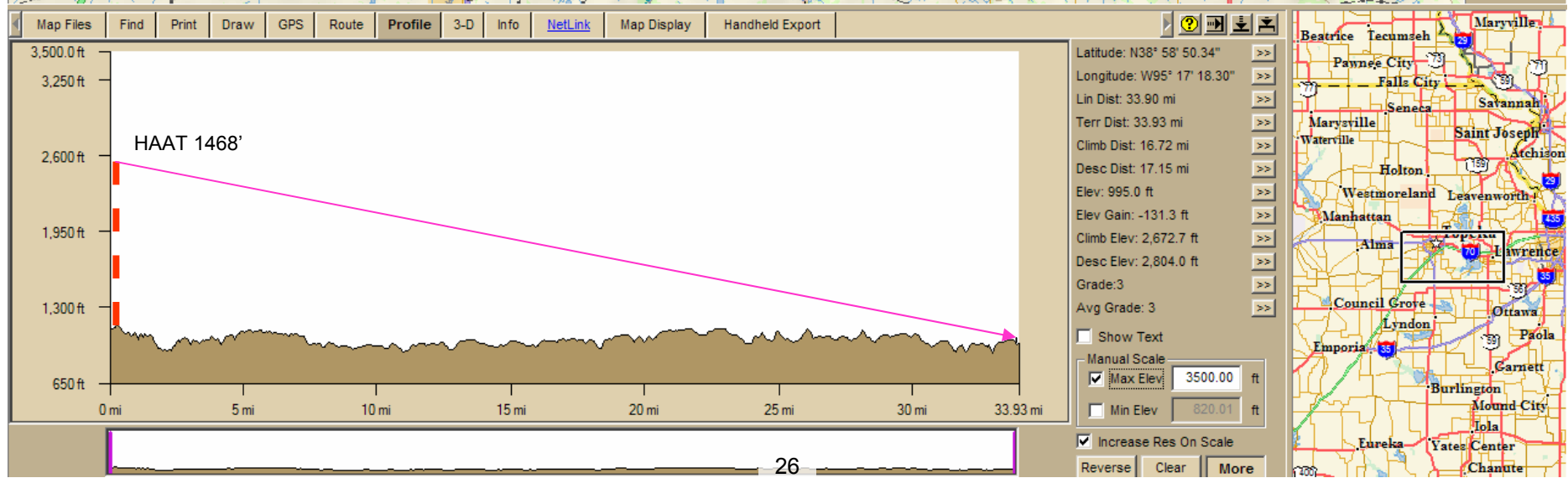
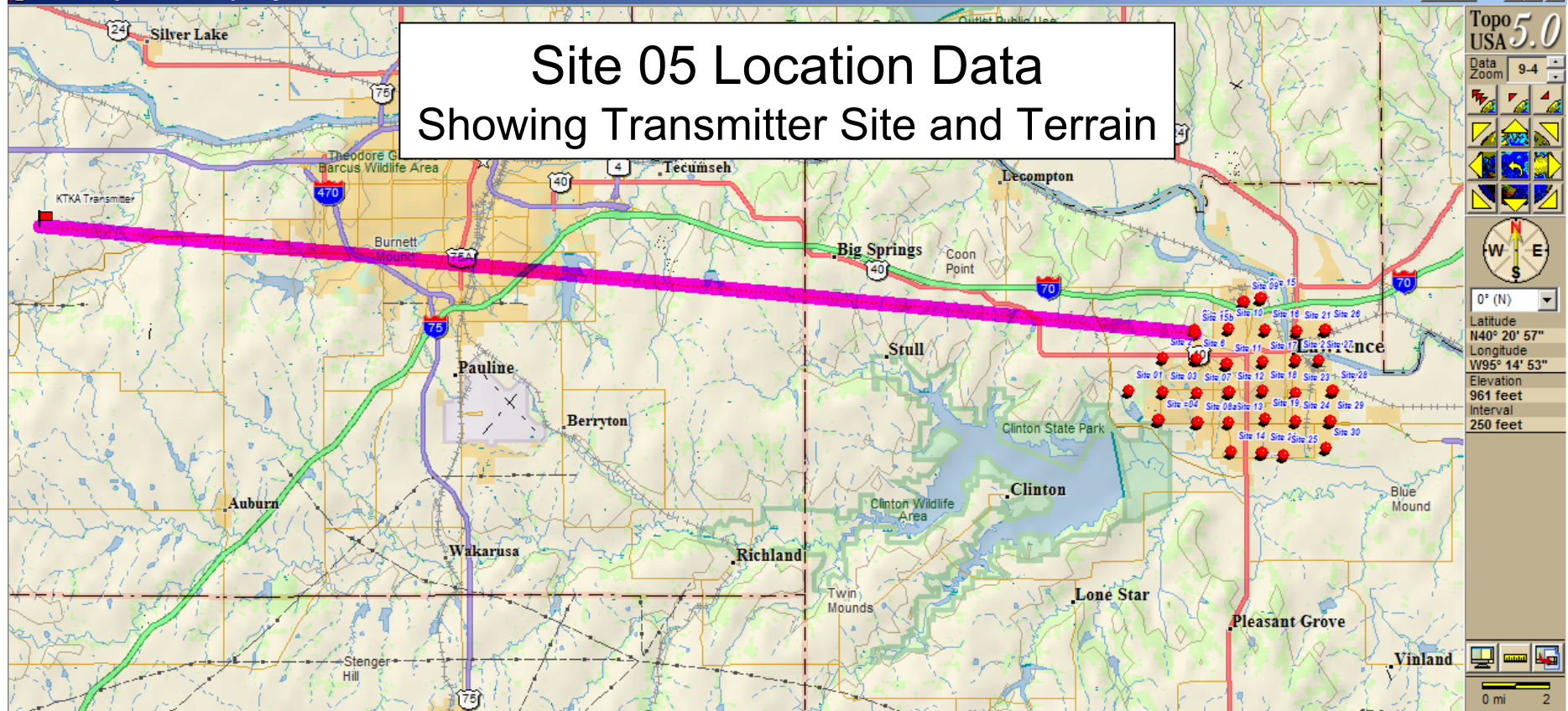
' JobName=KTKA2.dto
 ' JobFileVersion=1.02
 ' Locked=No
 ' IncludeComment=Yes
 ' FullDataRecords=Yes
 ' SignalUnits=dBuV/M
 ' SpaceUnits=English
 ' RFamp=Off
 ' Bandwidth=WB
 ' DelayDimension=Time
 ' Delay=1

FreqListLength=1			Total	Count				Avg				
' Freq 1= 681 Freq 1			38.6	2078.2	24	Total dBuV divided by Count			Elevation			
' Comment=st4			86.59 dBuV/M						984.69			
4/13/2005	17:00:04	681.25 MHz	87.5 dBuV/M	38.94397	-95.3079	Freq 1	38.6	981 Feet	Deg	1	10	1.5
4/13/2005	17:00:06	681.25 MHz	87.1 dBuV/M	38.94397	-95.3079	Freq 1	38.6	980.7 Feet	Deg	1	9	1.2
4/13/2005	17:00:07	681.25 MHz	86.9 dBuV/M	38.94397	-95.3079	Freq 1	38.6	981.7 Feet	Deg	1	9	1.4
4/13/2005	17:00:09	681.25 MHz	87.2 dBuV/M	38.94397	-95.3079	Freq 1	38.6	981.7 Feet	Deg	1	9	1.4
4/13/2005	17:00:10	681.25 MHz	87.8 dBuV/M	38.94397	-95.3079	Freq 1	38.6	982.3 Feet	Deg	1	9	1.3
4/13/2005	17:00:11	681.25 MHz	87.5 dBuV/M	38.94397	-95.30792	Freq 1	38.6	983.6 Feet	Deg	1	10	1.3
4/13/2005	17:00:13	681.25 MHz	88 dBuV/M	38.94397	-95.30792	Freq 1	38.6	983.6 Feet	Deg	1	10	1.3
4/13/2005	17:00:14	681.25 MHz	87.6 dBuV/M	38.94397	-95.30798	Freq 1	38.6	983 Feet	Deg	1	10	2.2
4/13/2005	17:00:16	681.25 MHz	87.1 dBuV/M	38.94397	-95.30802	Freq 1	38.6	983 Feet	Deg	1	10	1.8
4/13/2005	17:00:17	681.25 MHz	86.9 dBuV/M	38.94397	-95.30802	Freq 1	38.6	983 Feet	Deg	1	10	1.8
4/13/2005	17:00:18	681.25 MHz	85.7 dBuV/M	38.94397	-95.30807	Freq 1	38.6	983.3 Feet	Deg	1	10	1.6
4/13/2005	17:00:20	681.25 MHz	84.8 dBuV/M	38.94397	-95.30812	Freq 1	38.6	983 Feet	Deg	1	10	1.8
4/13/2005	17:00:21	681.25 MHz	85.6 dBuV/M	38.94397	-95.30812	Freq 1	38.6	983 Feet	Deg	1	10	1.8
4/13/2005	17:00:22	681.25 MHz	86.5 dBuV/M	38.94397	-95.30817	Freq 1	38.6	983.3 Feet	Deg	1	10	1.6
4/13/2005	17:00:24	681.25 MHz	87.1 dBuV/M	38.94397	-95.3082	Freq 1	38.6	984 Feet	Deg	1	10	1.6
4/13/2005	17:00:25	681.25 MHz	86.6 dBuV/M	38.94397	-95.30825	Freq 1	38.6	985 Feet	Deg	1	10	1.3
4/13/2005	17:00:27	681.25 MHz	87.1 dBuV/M	38.94397	-95.30825	Freq 1	38.6	985 Feet	Deg	1	10	1.3
4/13/2005	17:00:28	681.25 MHz	87.1 dBuV/M	38.94397	-95.3083	Freq 1	38.6	986.3 Feet	Deg	1	10	1.9
4/13/2005	17:00:29	681.25 MHz	87.1 dBuV/M	38.94397	-95.30835	Freq 1	38.6	986.9 Feet	Deg	1	10	2.1
4/13/2005	17:00:31	681.25 MHz	86.1 dBuV/M	38.94397	-95.30835	Freq 1	38.6	986.9 Feet	Deg	1	10	2.1
4/13/2005	17:00:32	681.25 MHz	85.3 dBuV/M	38.94397	-95.3084	Freq 1	38.6	989.5 Feet	Deg	1	10	1.7
4/13/2005	17:00:33	681.25 MHz	85.8 dBuV/M	38.94398	-95.30845	Freq 1	38.6	990.9 Feet	Deg	1	10	2
4/13/2005	17:00:35	681.25 MHz	84.7 dBuV/M	38.94398	-95.30845	Freq 1	38.6	990.9 Feet	Deg	1	10	2
4/13/2005	17:00:36	681.25 MHz	85.1 dBuV/M	38.94398	-95.30848	Freq 1	38.6	990.9 Feet	Deg	1	10	1.5



Site 05 Location Data

Showing Transmitter Site and Terrain



Location: Site 05

Date: 13 April 2005

Time: 1311

Temperature: 60.1°F

Dew Point: 44.1°F

Humidity: 55%

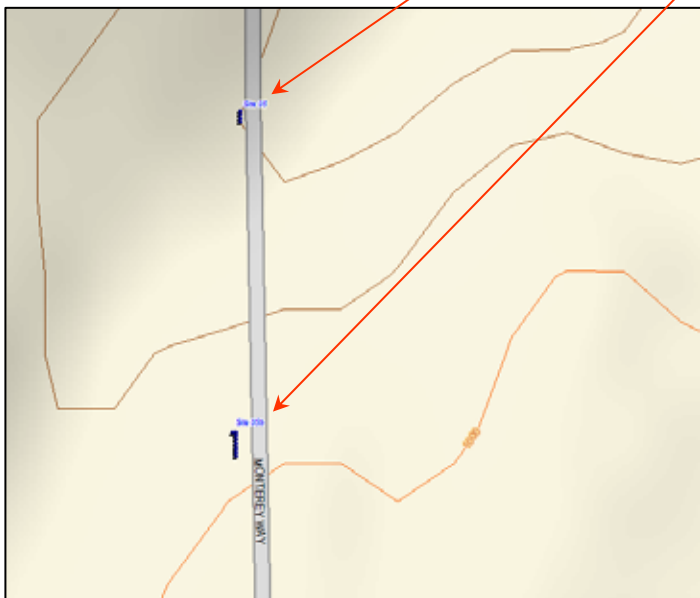
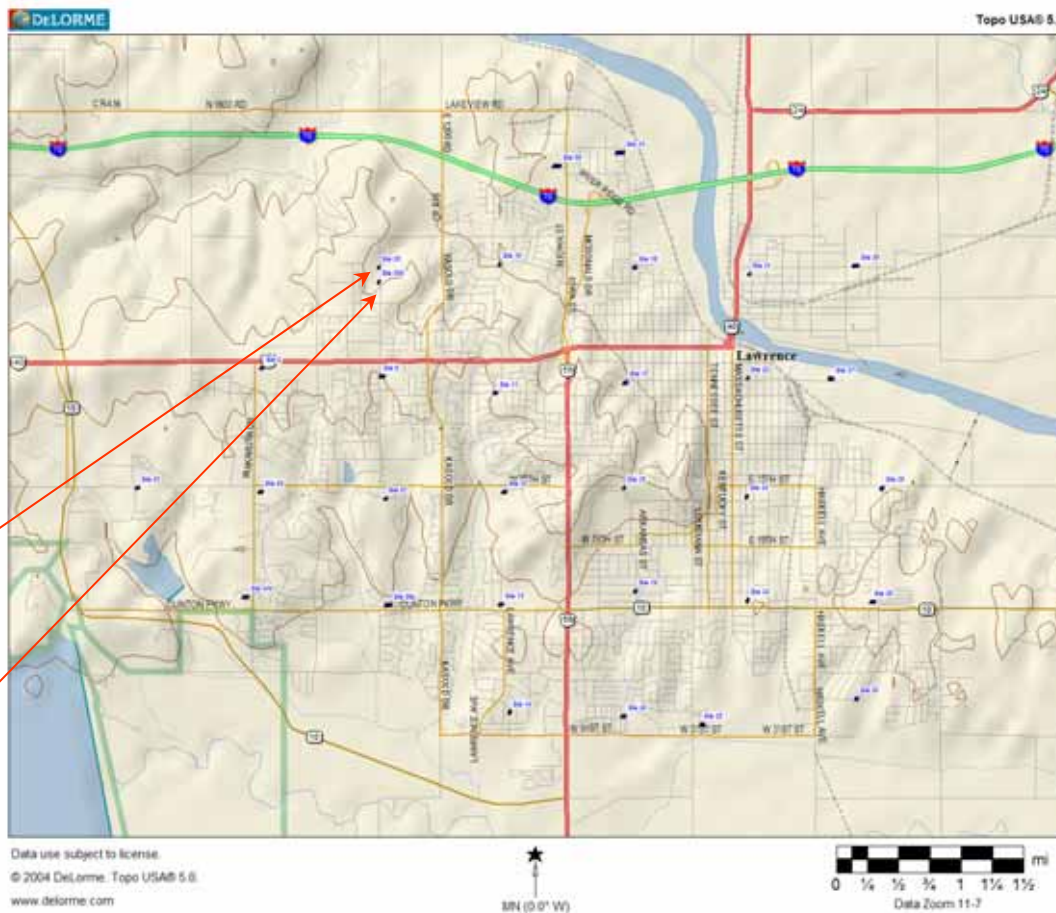
Pressure: 30.08"

Visibility: 10 miles

Winds: N @ 15MPH

Conditions: Partly Cloudy

80.09 dBuV/M
1,030.4' Average Elevation



Notes:

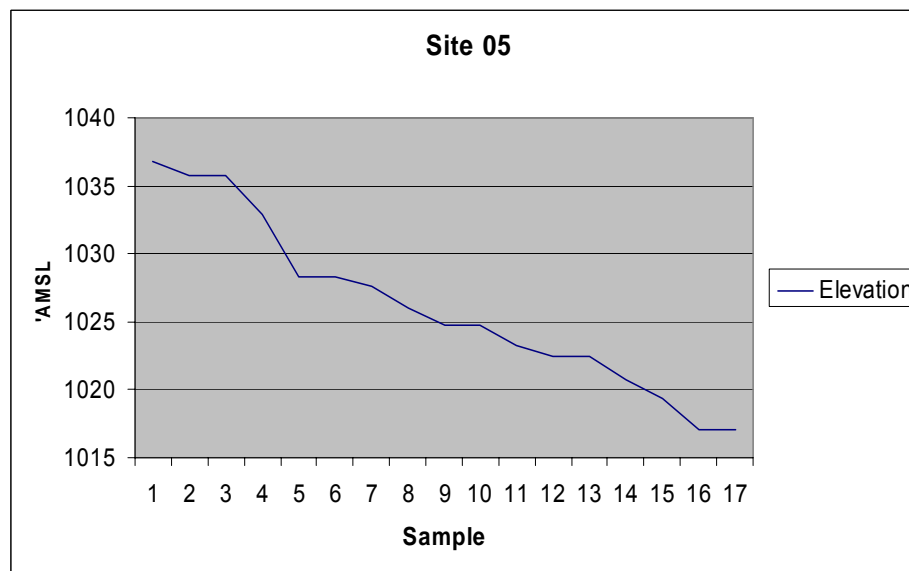
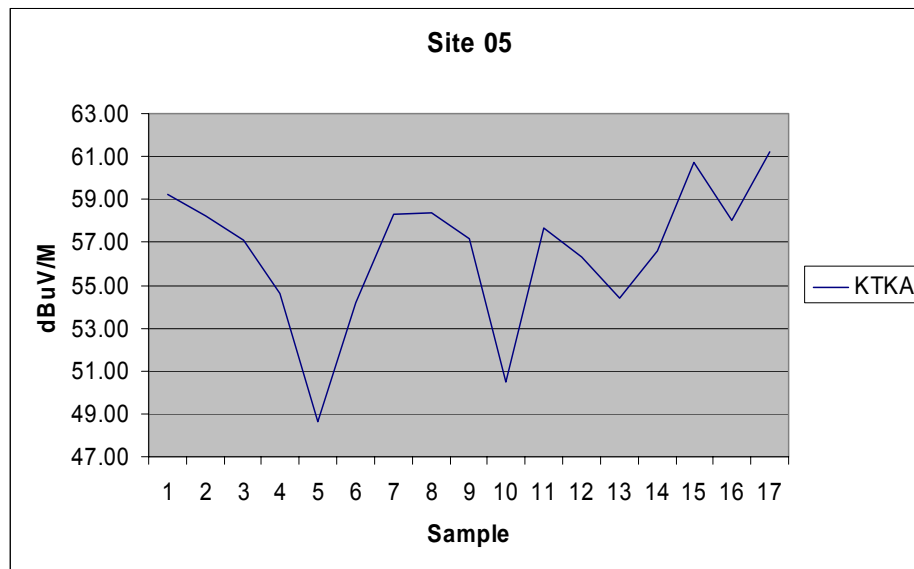
Antenna is vehicle mounted, 30' above ground level
Antenna oriented towards transmitter

Site 05b is $\approx 572'$ S of Site 05 but provided better, unobstructed view of horizon

The adjacent picture indicates the sample points of the test and is present in the logged information.

' JobName=KTKA2.dto
 ' JobFileVersion=1.02
 ' Locked=No
 ' IncludeComment=Yes
 ' FullDataRecords=Yes
 ' SignalUnits=dBuV/M
 ' SpaceUnits=English
 ' RFAmp=Off
 ' Bandwidth=WB
 ' DelayDimension=Time
 ' Delay=1

				Total	Count			Avg				
								Elevation				
' FreqListLength=1				961.2	17	Total dBuV divided by Count						
' Freq 1= 681 Freq 1	38.6											
' Comment=st5				56.54 dBuV/M				1026.1				
4/13/2005	13:11:00	681.25 MHz		59.2 dBuV/M	38.98225	-95.28837	Freq 1	38.6	1036.8 Feet	Deg	1	7 1.6
4/13/2005	13:11:01	681.25 MHz		58.2 dBuV/M	38.98225	-95.28837	Freq 1	38.6	1035.8 Feet	Deg	1	7 1.6
4/13/2005	13:11:03	681.25 MHz		57.1 dBuV/M	38.98225	-95.28837	Freq 1	38.6	1035.8 Feet	Deg	1	7 1.6
4/13/2005	13:11:04	681.25 MHz		54.6 dBuV/M	38.98227	-95.28837	Freq 1	38.6	1032.9 Feet	Deg	1	7 1.6
4/13/2005	13:11:06	681.25 MHz		48.6 dBuV/M	38.98227	-95.28837	Freq 1	38.6	1028.3 Feet	Deg	1	7 1.7
4/13/2005	13:11:07	681.25 MHz		54.2 dBuV/M	38.98227	-95.28837	Freq 1	38.6	1028.3 Feet	Deg	1	7 1.7
4/13/2005	13:11:08	681.25 MHz		58.3 dBuV/M	38.98227	-95.28837	Freq 1	38.6	1027.6 Feet	Deg	1	7 1.7
4/13/2005	13:11:10	681.25 MHz		58.4 dBuV/M	38.98227	-95.28837	Freq 1	38.6	1026 Feet	Deg	1	7 1.6
4/13/2005	13:11:11	681.25 MHz		57.2 dBuV/M	38.98225	-95.28837	Freq 1	38.6	1024.7 Feet	Deg	1	7 1.6
4/13/2005	13:11:13	681.25 MHz		50.5 dBuV/M	38.98225	-95.28837	Freq 1	38.6	1024.7 Feet	Deg	1	7 1.6
4/13/2005	13:11:14	681.25 MHz		57.7 dBuV/M	38.98225	-95.28837	Freq 1	38.6	1023.3 Feet	Deg	1	7 1.6
4/13/2005	13:11:16	681.25 MHz		56.3 dBuV/M	38.98223	-95.28837	Freq 1	38.6	1022.4 Feet	Deg	1	7 1.6
4/13/2005	13:11:17	681.25 MHz		54.4 dBuV/M	38.98223	-95.28837	Freq 1	38.6	1022.4 Feet	Deg	1	7 1.6
4/13/2005	13:11:18	681.25 MHz		56.6 dBuV/M	38.98223	-95.28837	Freq 1	38.6	1020.7 Feet	Deg	1	7 1.6
4/13/2005	13:11:20	681.25 MHz		60.7 dBuV/M	38.98223	-95.28837	Freq 1	38.6	1019.4 Feet	Deg	1	7 1.6
4/13/2005	13:11:21	681.25 MHz		58 dBuV/M	38.98222	-95.28837	Freq 1	38.6	1017.1 Feet	Deg	1	7 1.6
4/13/2005	13:11:23	681.25 MHz		61.2 dBuV/M	38.98222	-95.28837	Freq 1	38.6	1017.1 Feet	Deg	1	7 1.6



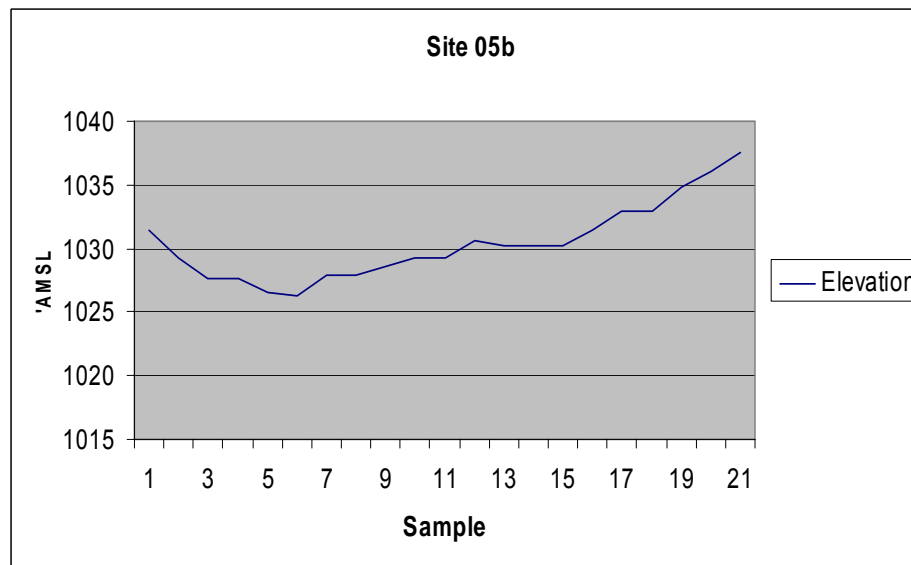
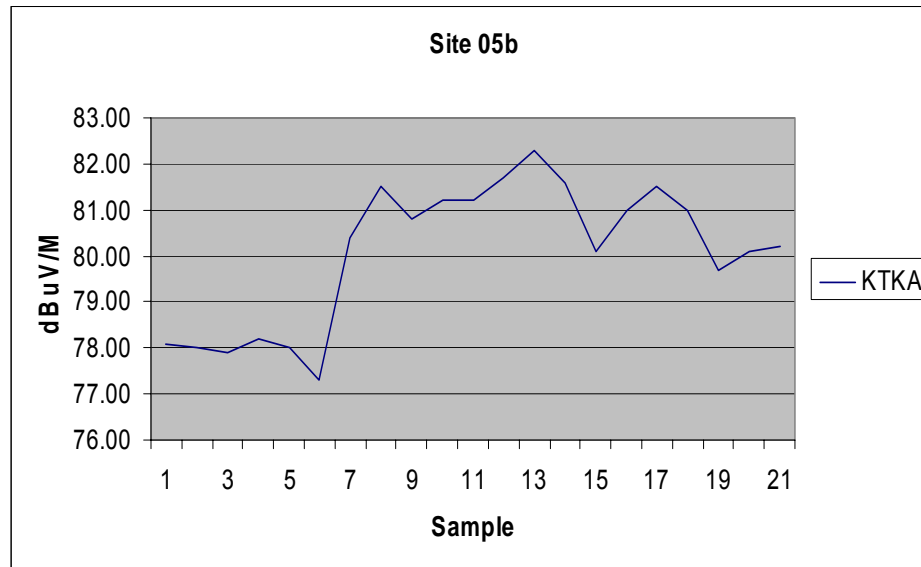
' JobName=KTKA2.dto
 ' JobFileVersion=1.02
 ' Locked=No
 ' IncludeComment=Yes
 ' FullDataRecords=Yes
 ' SignalUnits=dBuV/M
 ' SpaceUnits=English
 ' RFAmp=Off
 ' Bandwidth=WB
 ' DelayDimension=Time
 ' Delay=1

' FreqListLength=1

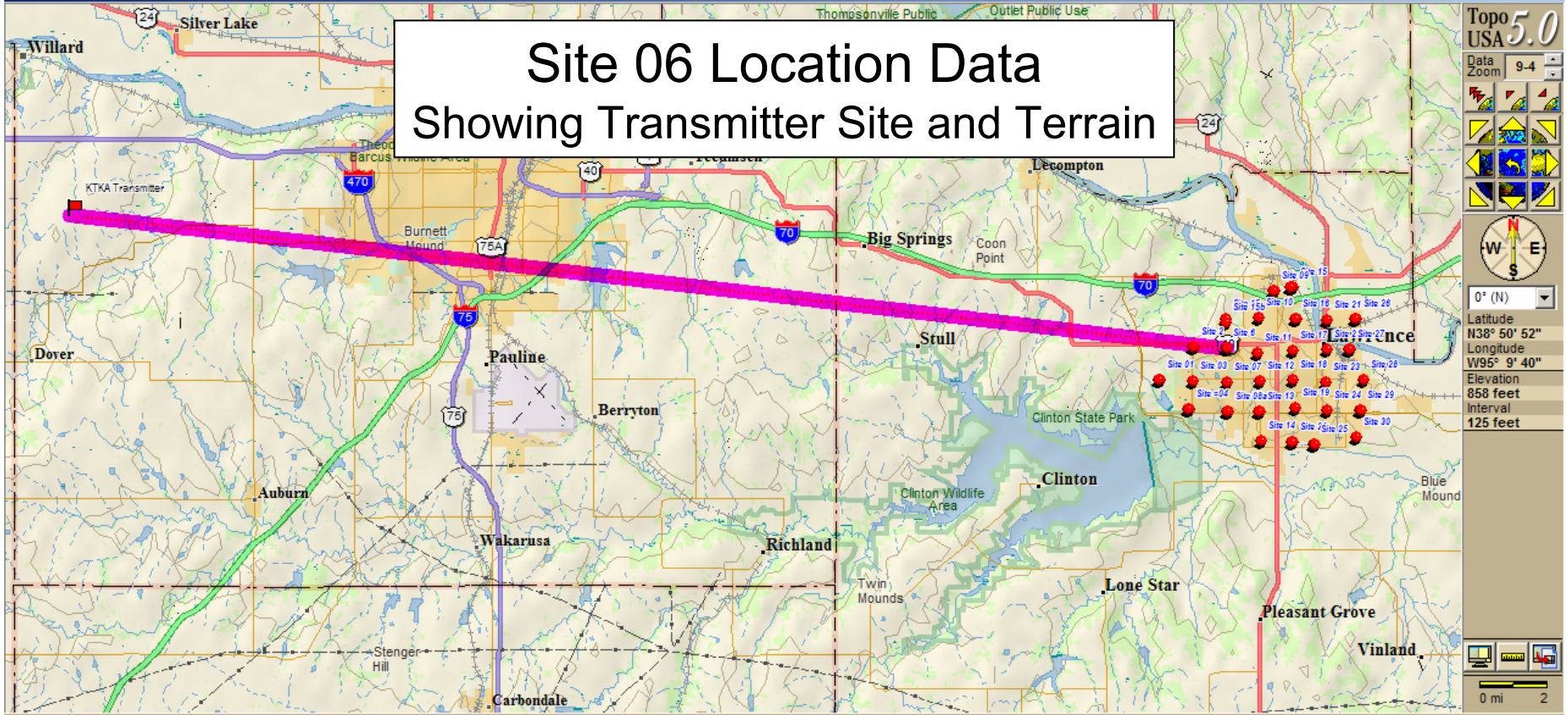
' Freq 1= 681 Freq 1 38.6 1681.8 21 Total dBuV divided by Count

' Comment=st5b

			Total	Count				Avg				
			1681.8	21				Elevation				
			80.09 dBuV/M					1030.4				
4/13/2005	13:14:33	681.25 MHz	78.1 dBuV/M	38.98065	-95.28842	Freq 1	38.6	1031.5 Feet	Deg	1	8	1.7
4/13/2005	13:14:34	681.25 MHz	78 dBuV/M	38.98065	-95.28842	Freq 1	38.6	1029.2 Feet	Deg	1	8	1.7
4/13/2005	13:14:36	681.25 MHz	77.9 dBuV/M	38.98065	-95.28842	Freq 1	38.6	1027.6 Feet	Deg	1	8	1.7
4/13/2005	13:14:37	681.25 MHz	78.2 dBuV/M	38.98065	-95.28842	Freq 1	38.6	1027.6 Feet	Deg	1	8	1.7
4/13/2005	13:14:39	681.25 MHz	78 dBuV/M	38.98065	-95.2884	Freq 1	38.6	1026.6 Feet	Deg	1	8	1.7
4/13/2005	13:14:40	681.25 MHz	77.3 dBuV/M	38.98065	-95.2884	Freq 1	38.6	1026.3 Feet	Deg	1	8	1.7
4/13/2005	13:14:42	681.25 MHz	80.4 dBuV/M	38.98065	-95.2884	Freq 1	38.6	1027.9 Feet	Deg	1	8	1.7
4/13/2005	13:14:43	681.25 MHz	81.5 dBuV/M	38.98065	-95.2884	Freq 1	38.6	1027.9 Feet	Deg	1	8	1.7
4/13/2005	13:14:44	681.25 MHz	80.8 dBuV/M	38.98065	-95.2884	Freq 1	38.6	1028.6 Feet	Deg	1	8	1.7
4/13/2005	13:14:46	681.25 MHz	81.2 dBuV/M	38.98063	-95.2884	Freq 1	38.6	1029.2 Feet	Deg	1	7	1.7
4/13/2005	13:14:47	681.25 MHz	81.2 dBuV/M	38.98063	-95.2884	Freq 1	38.6	1029.2 Feet	Deg	1	7	1.7
4/13/2005	13:14:49	681.25 MHz	81.7 dBuV/M	38.98062	-95.2884	Freq 1	38.6	1030.6 Feet	Deg	1	7	1.7
4/13/2005	13:14:50	681.25 MHz	82.3 dBuV/M	38.9806	-95.2884	Freq 1	38.6	1030.2 Feet	Deg	1	7	1.7
4/13/2005	13:14:52	681.25 MHz	81.6 dBuV/M	38.9806	-95.2884	Freq 1	38.6	1030.2 Feet	Deg	1	8	1.7
4/13/2005	13:14:53	681.25 MHz	80.1 dBuV/M	38.9806	-95.2884	Freq 1	38.6	1030.2 Feet	Deg	1	8	1.7
4/13/2005	13:14:54	681.25 MHz	81 dBuV/M	38.98058	-95.2884	Freq 1	38.6	1031.5 Feet	Deg	1	8	1.7
4/13/2005	13:14:56	681.25 MHz	81.5 dBuV/M	38.98057	-95.2884	Freq 1	38.6	1032.9 Feet	Deg	1	8	1.7
4/13/2005	13:14:57	681.25 MHz	81 dBuV/M	38.98057	-95.2884	Freq 1	38.6	1032.9 Feet	Deg	1	8	1.7
4/13/2005	13:14:59	681.25 MHz	79.7 dBuV/M	38.98055	-95.2884	Freq 1	38.6	1034.8 Feet	Deg	1	8	1.7
4/13/2005	13:15:00	681.25 MHz	80.1 dBuV/M	38.98055	-95.2884	Freq 1	38.6	1036.1 Feet	Deg	1	8	1.7
4/13/2005	13:15:02	681.25 MHz	80.2 dBuV/M	38.98053	-95.2884	Freq 1	38.6	1037.5 Feet	Deg	1	8	1.7



Site 06 Location Data Showing Transmitter Site and Terrain



Topo USA 5.0

Data Zoom 9-4

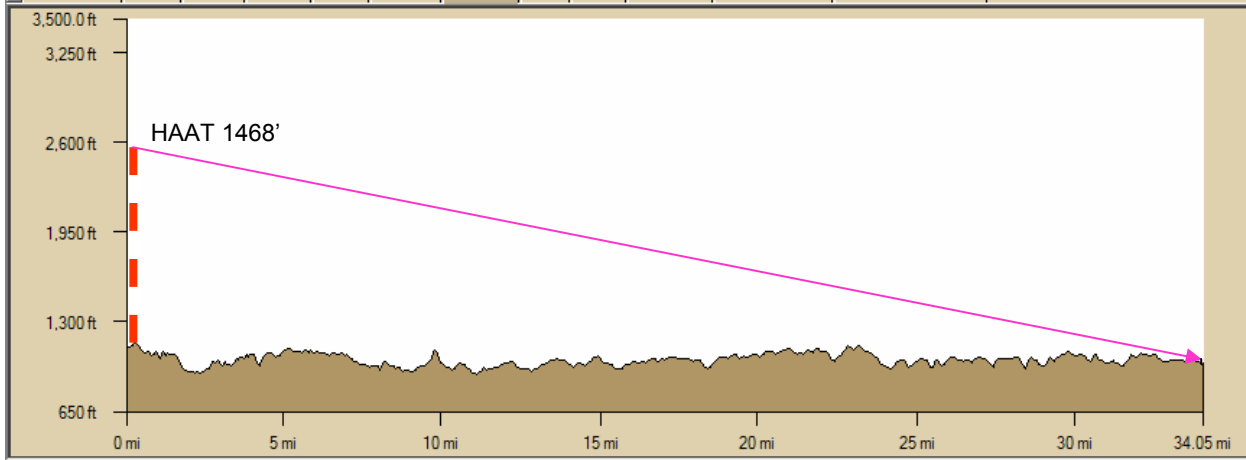
Latitude N38° 50' 52"

Longitude W95° 9' 40"

Elevation 858 feet

Interval 125 feet

Map Files Find Print Draw GPS Route Profile 3-D Info [NetLink](#) Map Display Handheld Export



Latitude: N38° 58' 10.68"

Longitude: W95° 17' 15.48"

Lin Dist: 34.03 mi

Terr Dist: 34.05 mi

Climb Dist: 16.59 mi

Desc Dist: 17.46 mi

Elev: 998.2 ft

Elev Gain: -128.1 ft

Climb Elev: 2,724.7 ft

Desc Elev: 2,852.8 ft

Grade: 3

Avg Grade: 3

☐ Show Text

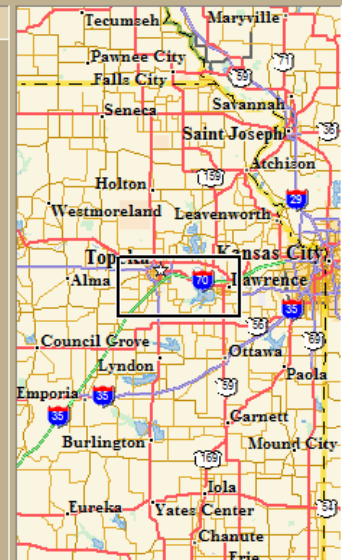
Manual Scale

☒ Max Elev 3500.00 ft

☐ Min Elev 820.01 ft

☒ Increase Res On Scale

Reverse Clear More



Location: Site 06

Date: 13 April 2005

Time: 1331

Temperature: 60.1°F

Dew Point: 44.1°F

Humidity: 55%

Pressure: 30.08"

Visibility: 10 miles

Winds: N @ 15MPH

Conditions: Partly Cloudy

65.30 dBuV/M
961.89' Average Elevation



Notes:

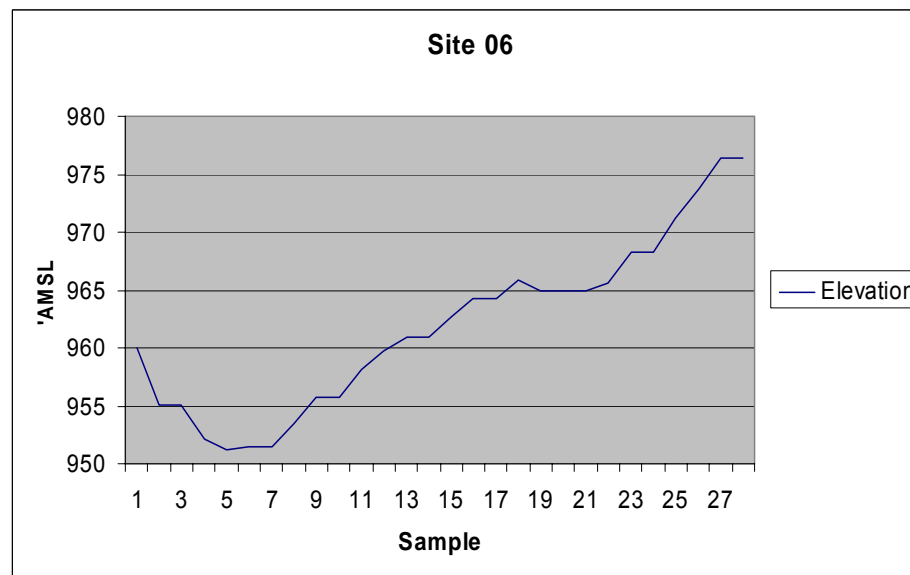
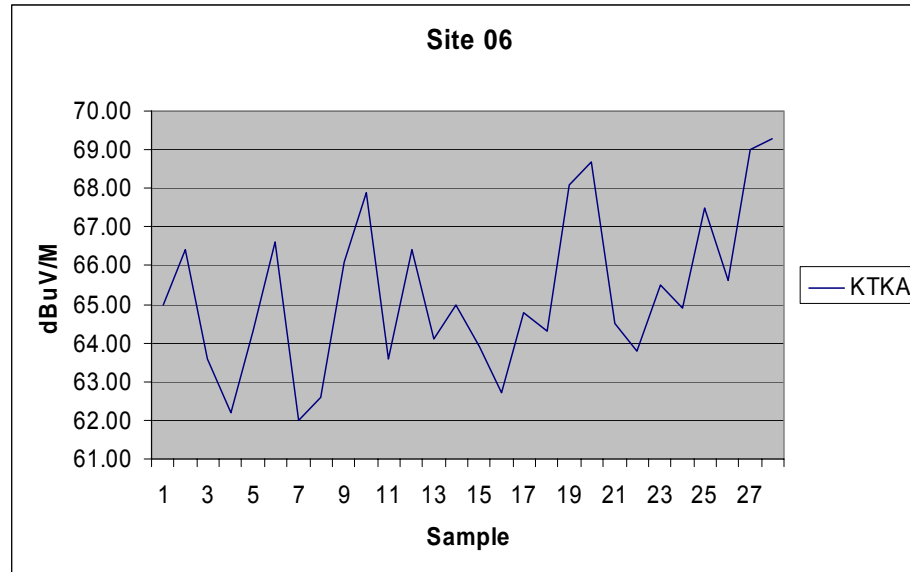
Antenna is vehicle mounted, 30' above ground level
Antenna oriented towards transmitter

The adjacent picture indicates the sample points of the test and is present in the logged information.

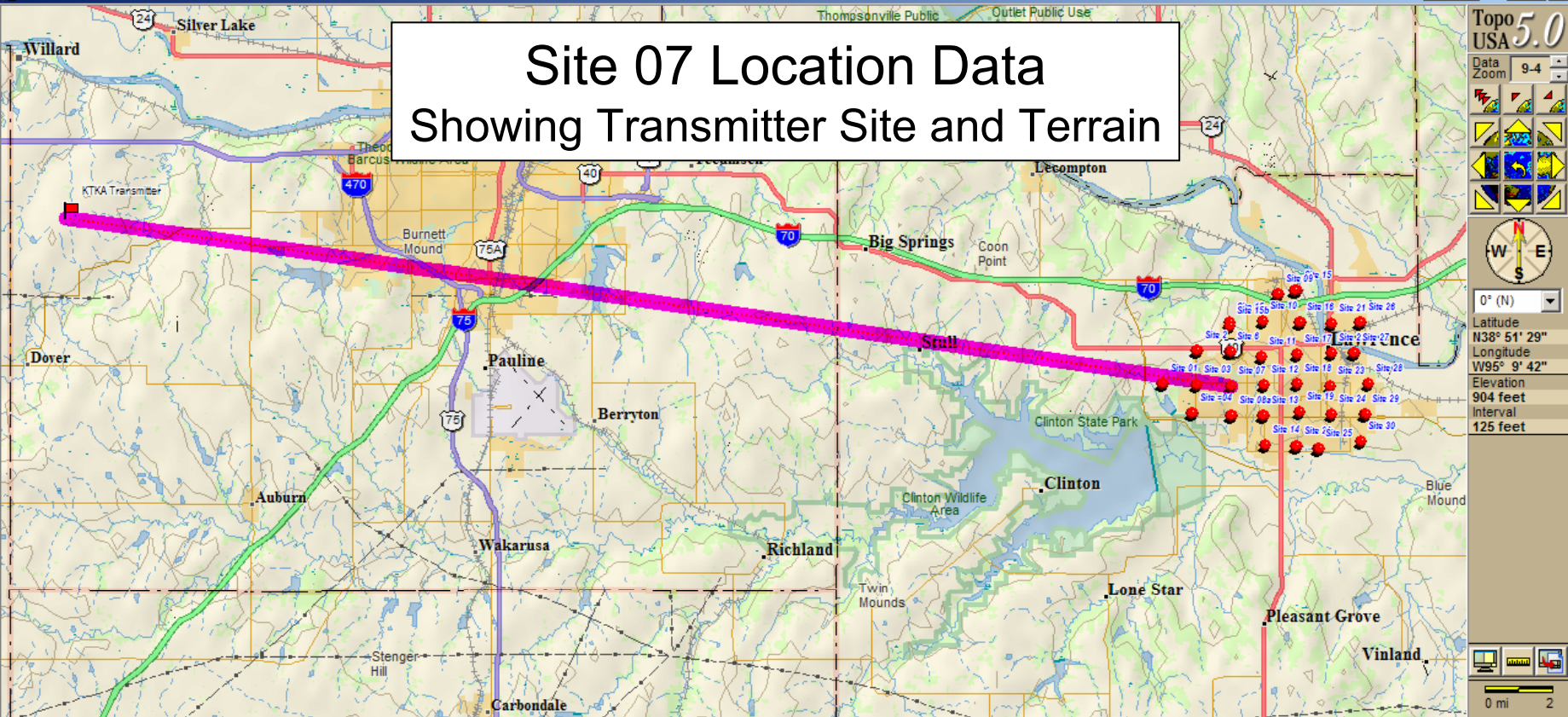
' JobName=KTKA2.dto
 ' JobFileVersion=1.02
 ' Locked=No
 ' IncludeComment=Yes
 ' FullDataRecords=Yes
 ' SignalUnits=dBuV/M
 ' SpaceUnits=English
 ' RFAmp=Off
 ' Bandwidth=WB
 ' DelayDimension=Time
 ' Delay=1

' FreqListLength=1
 ' Freq 1= 681 Freq 1 38.6 Total 1828.4 Count 28 Total dBuV divided by Count Avg Elevation
 ' Comment=st6 65.30 dBuV/M 961.89

Date	Time	Freq	dBuV/M	Count	Total dBuV	Avg Elevation	Unit	Angle	Altitude	
4/13/2005	13:31:55	681.25 MHz	65 dBuV/M	38.96963	-95.28812	Freq 1	38.6	960 Feet	Deg	1 8 1.2
4/13/2005	13:31:57	681.25 MHz	66.4 dBuV/M	38.96963	-95.2881	Freq 1	38.6	955.1 Feet	Deg	1 8 1.2
4/13/2005	13:31:58	681.25 MHz	63.6 dBuV/M	38.96963	-95.2881	Freq 1	38.6	955.1 Feet	Deg	1 8 1.2
4/13/2005	13:32:00	681.25 MHz	62.2 dBuV/M	38.96963	-95.2881	Freq 1	38.6	952.1 Feet	Deg	1 8 1.3
4/13/2005	13:32:01	681.25 MHz	64.3 dBuV/M	38.96963	-95.2881	Freq 1	38.6	951.2 Feet	Deg	1 8 1.2
4/13/2005	13:32:02	681.25 MHz	66.6 dBuV/M	38.96963	-95.28808	Freq 1	38.6	951.5 Feet	Deg	1 8 1.2
4/13/2005	13:32:04	681.25 MHz	62 dBuV/M	38.96963	-95.28808	Freq 1	38.6	951.5 Feet	Deg	1 8 1.2
4/13/2005	13:32:05	681.25 MHz	62.6 dBuV/M	38.96963	-95.28807	Freq 1	38.6	953.5 Feet	Deg	1 8 1.2
4/13/2005	13:32:07	681.25 MHz	66.1 dBuV/M	38.96963	-95.28805	Freq 1	38.6	955.8 Feet	Deg	1 8 1.3
4/13/2005	13:32:08	681.25 MHz	67.9 dBuV/M	38.96963	-95.28805	Freq 1	38.6	955.8 Feet	Deg	1 8 1.3
4/13/2005	13:32:10	681.25 MHz	63.6 dBuV/M	38.96963	-95.28803	Freq 1	38.6	958.1 Feet	Deg	1 8 1.3
4/13/2005	13:32:11	681.25 MHz	66.4 dBuV/M	38.96963	-95.288	Freq 1	38.6	959.7 Feet	Deg	1 8 2
4/13/2005	13:32:12	681.25 MHz	64.1 dBuV/M	38.96963	-95.28798	Freq 1	38.6	961 Feet	Deg	1 8 2.1
4/13/2005	13:32:14	681.25 MHz	65 dBuV/M	38.96963	-95.28798	Freq 1	38.6	961 Feet	Deg	1 8 2.1
4/13/2005	13:32:15	681.25 MHz	63.9 dBuV/M	38.96965	-95.28795	Freq 1	38.6	962.6 Feet	Deg	1 8 2.4
4/13/2005	13:32:17	681.25 MHz	62.7 dBuV/M	38.96965	-95.2879	Freq 1	38.6	964.3 Feet	Deg	1 8 2.3
4/13/2005	13:32:18	681.25 MHz	64.8 dBuV/M	38.96965	-95.2879	Freq 1	38.6	964.3 Feet	Deg	1 8 2.3
4/13/2005	13:32:20	681.25 MHz	64.3 dBuV/M	38.96965	-95.28788	Freq 1	38.6	965.9 Feet	Deg	1 8 1.4
4/13/2005	13:32:21	681.25 MHz	68.1 dBuV/M	38.96965	-95.28785	Freq 1	38.6	964.9 Feet	Deg	1 8 1.4
4/13/2005	13:32:22	681.25 MHz	68.7 dBuV/M	38.96965	-95.28782	Freq 1	38.6	964.9 Feet	Deg	1 8 1.6
4/13/2005	13:32:24	681.25 MHz	64.5 dBuV/M	38.96965	-95.28782	Freq 1	38.6	964.9 Feet	Deg	1 8 1.6
4/13/2005	13:32:25	681.25 MHz	63.8 dBuV/M	38.96965	-95.28778	Freq 1	38.6	965.6 Feet	Deg	1 8 1.3
4/13/2005	13:32:27	681.25 MHz	65.5 dBuV/M	38.96965	-95.28775	Freq 1	38.6	968.2 Feet	Deg	1 8 1.4
4/13/2005	13:32:28	681.25 MHz	64.9 dBuV/M	38.96965	-95.28775	Freq 1	38.6	968.2 Feet	Deg	1 8 1.4
4/13/2005	13:32:30	681.25 MHz	67.5 dBuV/M	38.96965	-95.28772	Freq 1	38.6	971.2 Feet	Deg	1 8 1.3
4/13/2005	13:32:31	681.25 MHz	65.6 dBuV/M	38.96963	-95.28768	Freq 1	38.6	973.8 Feet	Deg	1 8 1.7
4/13/2005	13:32:32	681.25 MHz	69 dBuV/M	38.96963	-95.28763	Freq 1	38.6	976.4 Feet	Deg	1 8 1.3
4/13/2005	13:32:34	681.25 MHz	69.3 dBuV/M	38.96963	-95.28763	Freq 1	38.6	976.4 Feet	Deg	1 8 1.3



Site 07 Location Data Showing Transmitter Site and Terrain



Topo USA 5.0

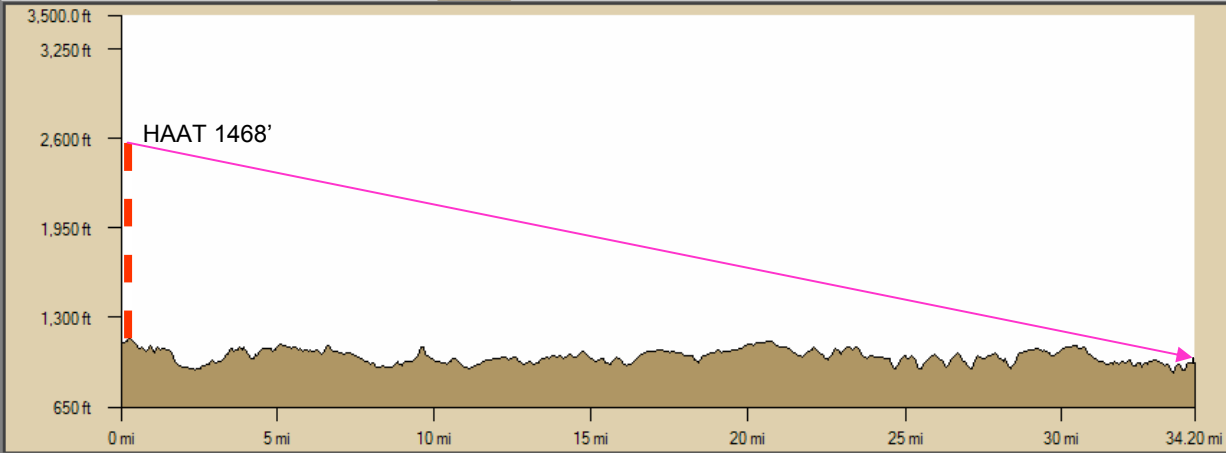
Data Zoom 9-4

Latitude: N38° 51' 29"
Longitude: W95° 9' 42"
Elevation: 904 feet
Interval: 125 feet

0° (N)

0 mi 2

Map Files Find Print Draw GPS Route Profile 3-D Info [NetLink](#) Map Display Handheld Export



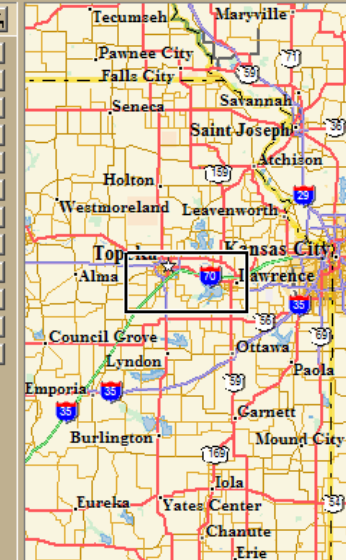
Latitude: N38° 57' 19.62"
Longitude: W95° 17' 14.28"
Lin Dist: 34.17 mi
Terr Dist: 34.20 mi
Climb Dist: 16.98 mi
Desc Dist: 17.23 mi
Elev: 971.2 ft
Elev Gain: -155.1 ft
Climb Elev: 2,780.2 ft
Desc Elev: 2,935.3 ft
Grade: 3
Avg Grade: 3

☐ Show Text

Manual Scale
☒ Max Elev 3500.00 ft
☐ Min Elev 820.01 ft

☒ Increase Res On Scale

Reverse Clear More



Location: Site 07

Date: 13 April 2005

Time: 1732

Temperature: 66°F

Dew Point: 34°F

Humidity: 30%

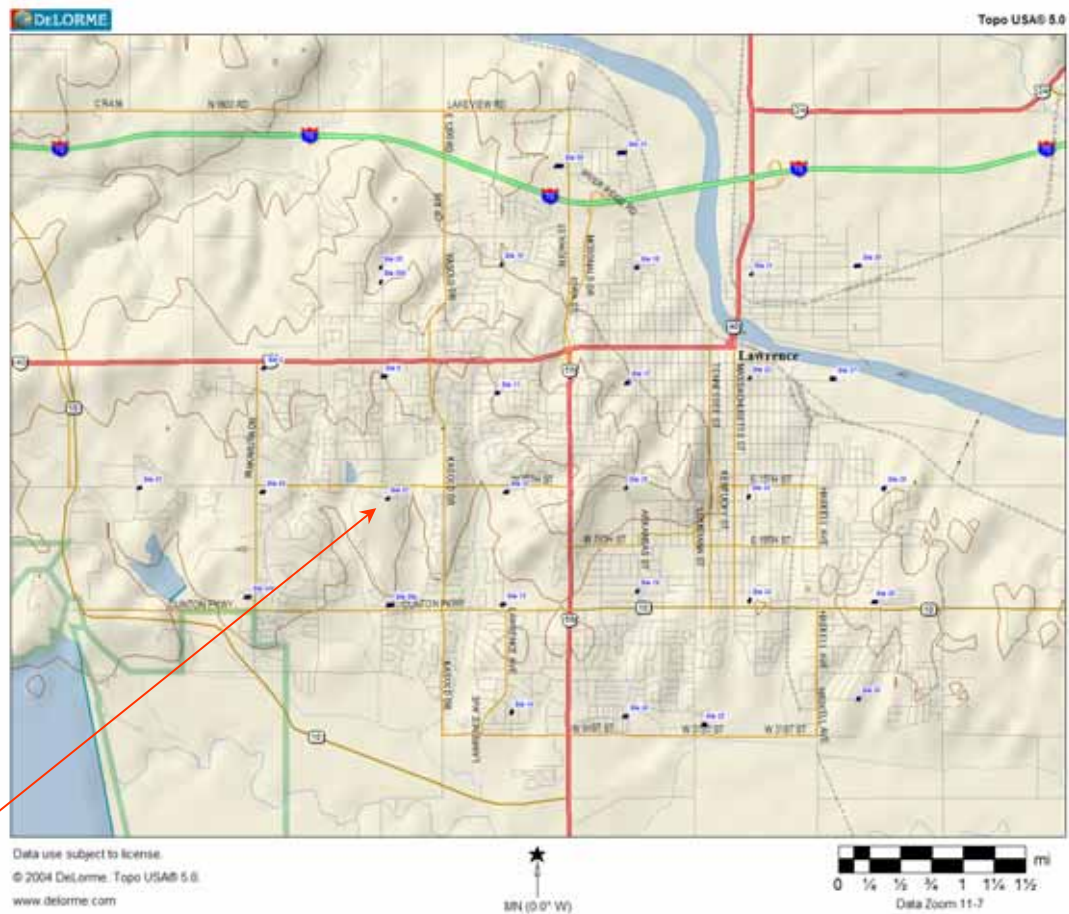
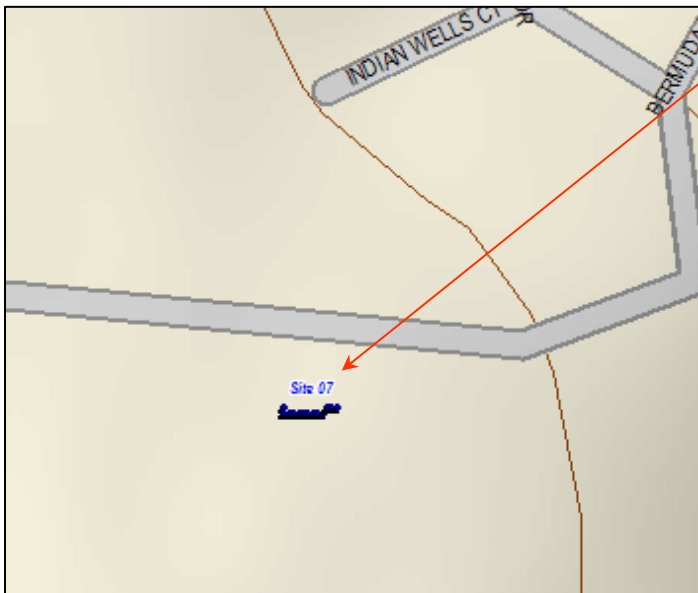
Pressure: 30.08"

Visibility: 10 miles

Winds: ENE @ 15MPH

Conditions: Clear

72.37 dBuV/M
966.6' Average Elevation



Notes:

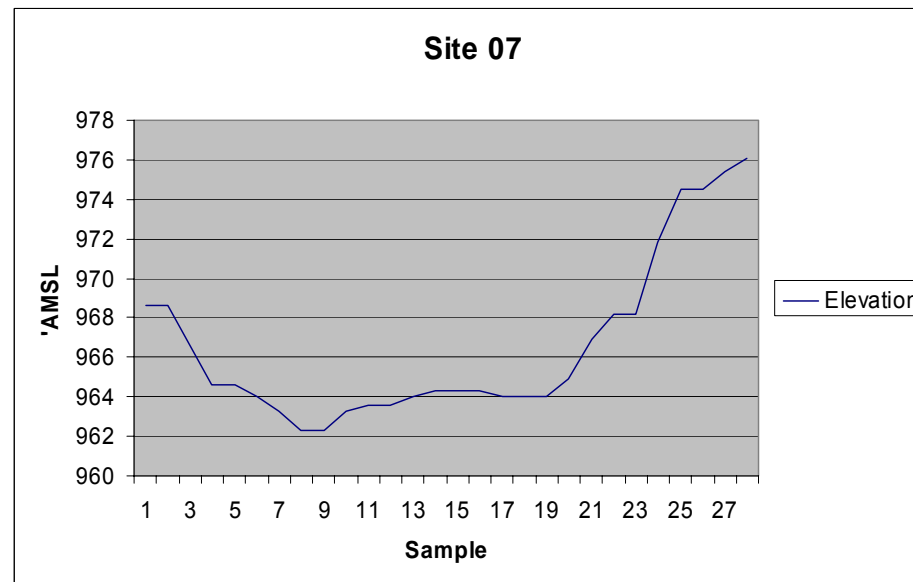
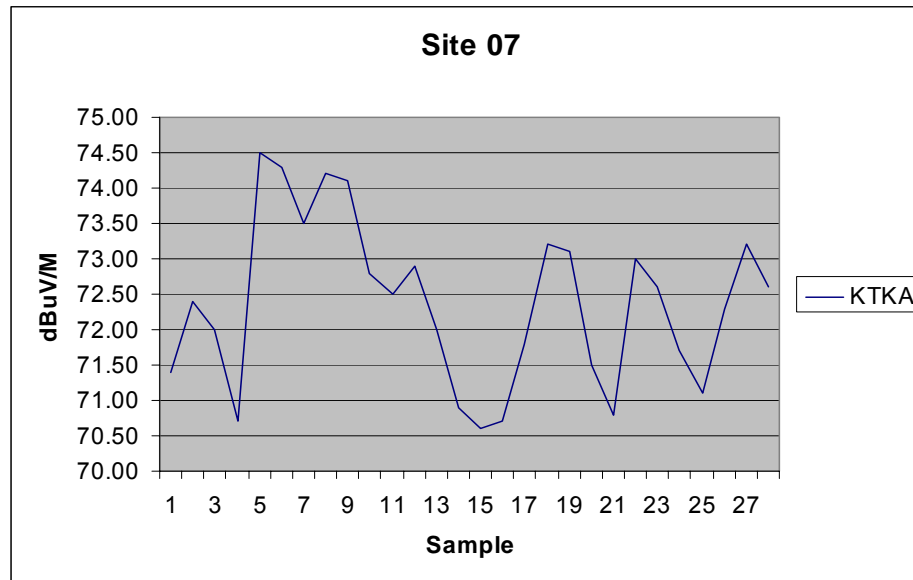
Antenna is vehicle mounted, 30' above ground level
Antenna oriented towards transmitter

The adjacent picture indicates the sample points of the test and is present in the logged information.

' JobName=KTKA2.dto
 ' JobFileVersion=1.02
 ' Locked=No
 ' IncludeComment=Yes
 ' FullDataRecords=Yes
 ' SignalUnits=dBuV/M
 ' SpaceUnits=English
 ' RFAmp=Off
 ' Bandwidth=WB
 ' DelayDimension=Time
 ' Delay=1

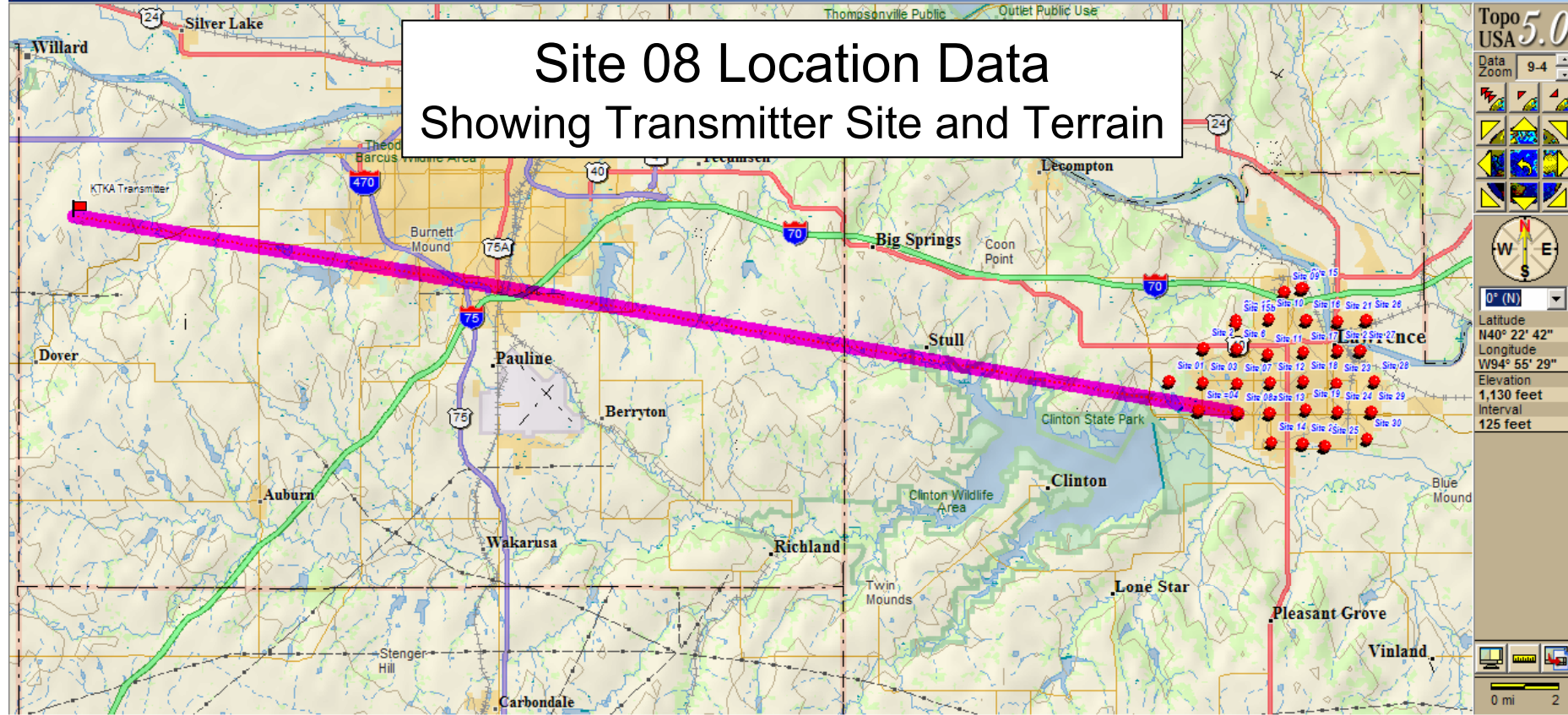
' FreqListLength=1
 ' Freq 1= 681 Freq 1 38.6 Total Count 2026.4 28 Total dBuV divided by Count Avg Elevation
 ' Comment=st7 72.37 dBuV/M 966.6

Date	Time	Freq	Power (dBuV/M)	Count	Total dBuV	Avg Elevation (Feet)	Angle (Deg)	Altitude (Feet)	Speed (ft/s)
4/13/2005	17:32:47	681.25 MHz	71.4 dBuV/M	38.95545	-95.28748	38.6	968.6	Feet	1 6 1.4
4/13/2005	17:32:49	681.25 MHz	72.4 dBuV/M	38.95545	-95.28748	38.6	968.6	Feet	1 6 1.4
4/13/2005	17:32:50	681.25 MHz	72 dBuV/M	38.95543	-95.28748	38.6	966.6	Feet	1 7 1.4
4/13/2005	17:32:52	681.25 MHz	70.7 dBuV/M	38.95543	-95.28748	38.6	964.6	Feet	1 7 1.4
4/13/2005	17:32:53	681.25 MHz	74.5 dBuV/M	38.95543	-95.28748	38.6	964.6	Feet	1 7 1.4
4/13/2005	17:32:54	681.25 MHz	74.3 dBuV/M	38.95543	-95.28747	38.6	964	Feet	1 7 1.4
4/13/2005	17:32:56	681.25 MHz	73.5 dBuV/M	38.95543	-95.28747	38.6	963.3	Feet	1 7 1.5
4/13/2005	17:32:57	681.25 MHz	74.2 dBuV/M	38.95543	-95.28745	38.6	962.3	Feet	1 7 1.4
4/13/2005	17:32:59	681.25 MHz	74.1 dBuV/M	38.95543	-95.28745	38.6	962.3	Feet	1 7 1.4
4/13/2005	17:33:00	681.25 MHz	72.8 dBuV/M	38.95543	-95.28743	38.6	963.3	Feet	1 8 1.4
4/13/2005	17:33:02	681.25 MHz	72.5 dBuV/M	38.95543	-95.28743	38.6	963.6	Feet	1 8 1.5
4/13/2005	17:33:03	681.25 MHz	72.9 dBuV/M	38.95543	-95.28743	38.6	963.6	Feet	1 8 1.5
4/13/2005	17:33:04	681.25 MHz	72 dBuV/M	38.95543	-95.28742	38.6	964	Feet	1 8 1.5
4/13/2005	17:33:06	681.25 MHz	70.9 dBuV/M	38.95543	-95.28742	38.6	964.3	Feet	1 8 1.4
4/13/2005	17:33:07	681.25 MHz	70.6 dBuV/M	38.95543	-95.2874	38.6	964.3	Feet	1 8 1.5
4/13/2005	17:33:09	681.25 MHz	70.7 dBuV/M	38.95543	-95.2874	38.6	964.3	Feet	1 8 1.5
4/13/2005	17:33:10	681.25 MHz	71.8 dBuV/M	38.95543	-95.2874	38.6	964	Feet	1 7 1.7
4/13/2005	17:33:12	681.25 MHz	73.2 dBuV/M	38.95543	-95.28738	38.6	964	Feet	1 7 1.4
4/13/2005	17:33:13	681.25 MHz	73.1 dBuV/M	38.95543	-95.28738	38.6	964	Feet	1 7 1.4
4/13/2005	17:33:14	681.25 MHz	71.5 dBuV/M	38.95543	-95.28738	38.6	964.9	Feet	1 7 1.8
4/13/2005	17:33:16	681.25 MHz	70.8 dBuV/M	38.95543	-95.28737	38.6	966.9	Feet	1 7 2
4/13/2005	17:33:17	681.25 MHz	73 dBuV/M	38.95543	-95.28735	38.6	968.2	Feet	1 7 2.3
4/13/2005	17:33:19	681.25 MHz	72.6 dBuV/M	38.95543	-95.28735	38.6	968.2	Feet	1 7 2.3
4/13/2005	17:33:20	681.25 MHz	71.7 dBuV/M	38.95545	-95.28733	38.6	971.8	Feet	1 7 2
4/13/2005	17:33:22	681.25 MHz	71.1 dBuV/M	38.95545	-95.28733	38.6	974.5	Feet	1 7 1.1
4/13/2005	17:33:23	681.25 MHz	72.3 dBuV/M	38.95545	-95.28733	38.6	974.5	Feet	1 7 1.1
4/13/2005	17:33:24	681.25 MHz	73.2 dBuV/M	38.95545	-95.28732	38.6	975.4	Feet	1 7 1.9
4/13/2005	17:33:26	681.25 MHz	72.6 dBuV/M	38.95545	-95.2873	38.6	976.1	Feet	1 8 2.2



Site 08 Location Data

Showing Transmitter Site and Terrain



Topo USA 5.0

Data Zoom 9.4

Latitude N40° 22' 42"

Longitude W94° 55' 29"

Elevation 1,130 feet

Interval 125 feet

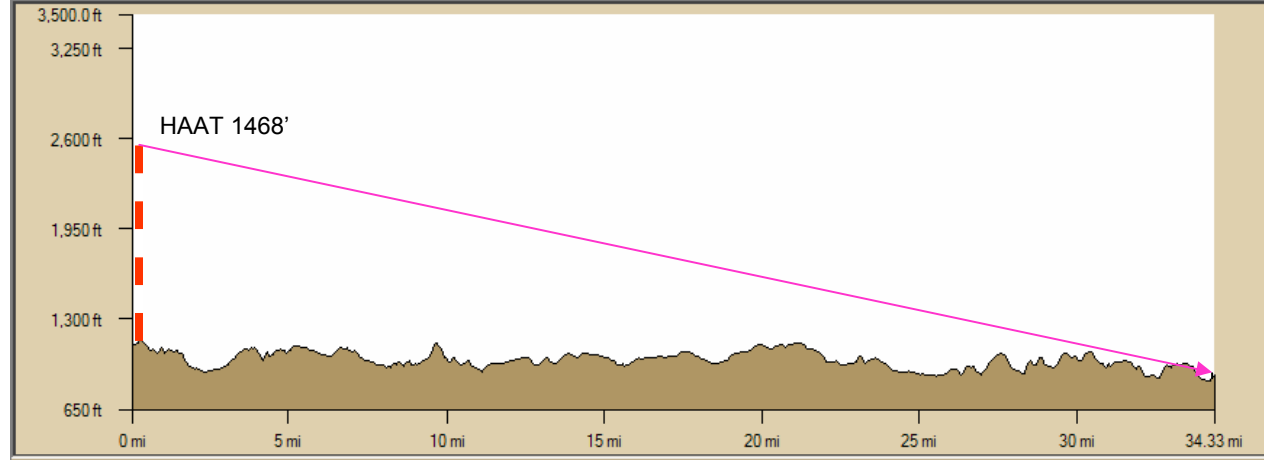
0° (N)

W E

S

0 mi 2

Map Files Find Print Draw GPS Route Profile 3-D Info NetLink Map Display Handheld Export



Latitude: N38° 56' 35.16"

Longitude: W95° 17' 14.46"

Lin Dist: 34.31 mi

Terr Dist: 34.33 mi

Climb Dist: 16.45 mi

Desc Dist: 17.88 mi

Elev: 893.2 ft

Elev Gain: -233.1 ft

Climb Elev: 2,562.3 ft

Desc Elev: 2,795.4 ft

Grade: 2

Avg Grade: 2

☐ Show Text

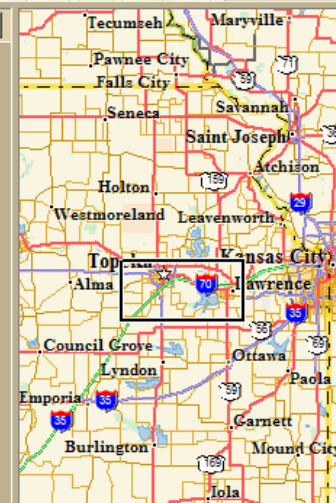
Manual Scale

☒ Max Elev 3500.00 ft

☐ Min Elev 820.01 ft

☒ Increase Res On Scale

Reverse Clear More



Location: Site 08

Date: 13 April 2005

Time: 1649

Temperature: 66.9°F

Dew Point: 39.9°F

Humidity: 37%

Pressure: 30.06"

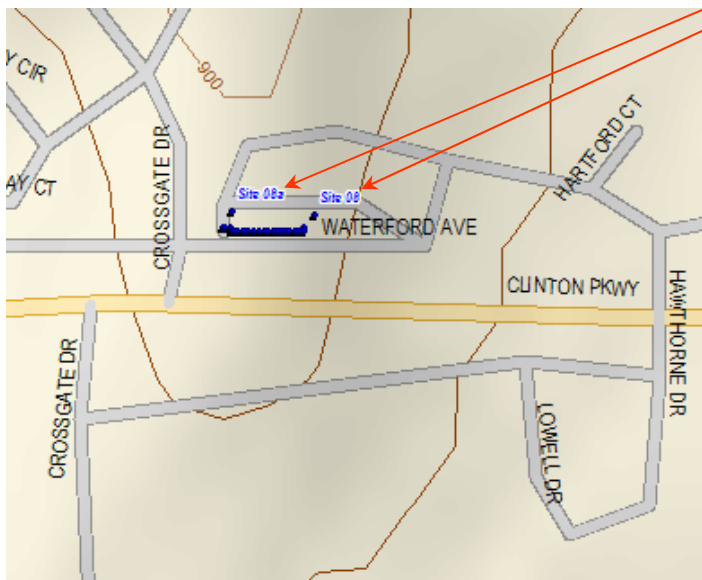
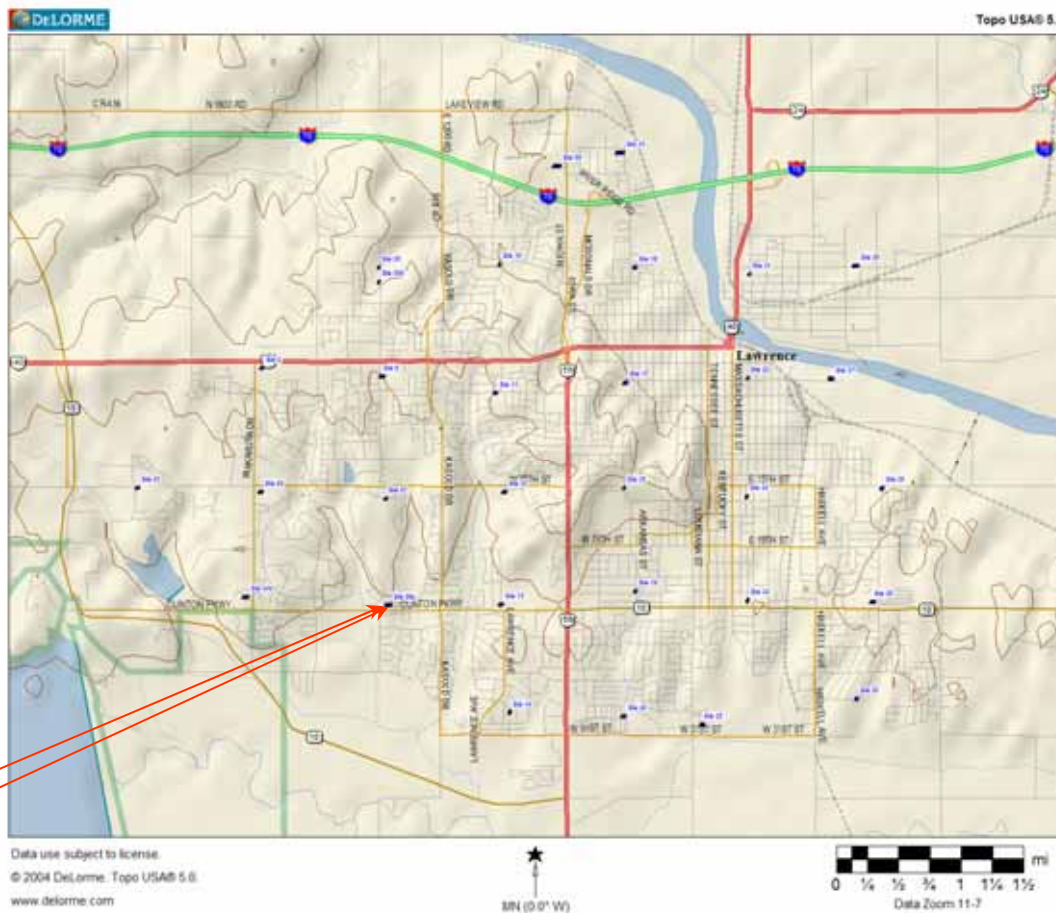
Visibility: 10 miles

Winds: NE @ 13.8MPH

Conditions: Clear

69.82 dBuV/M

912.08' Average Elevation



Notes:

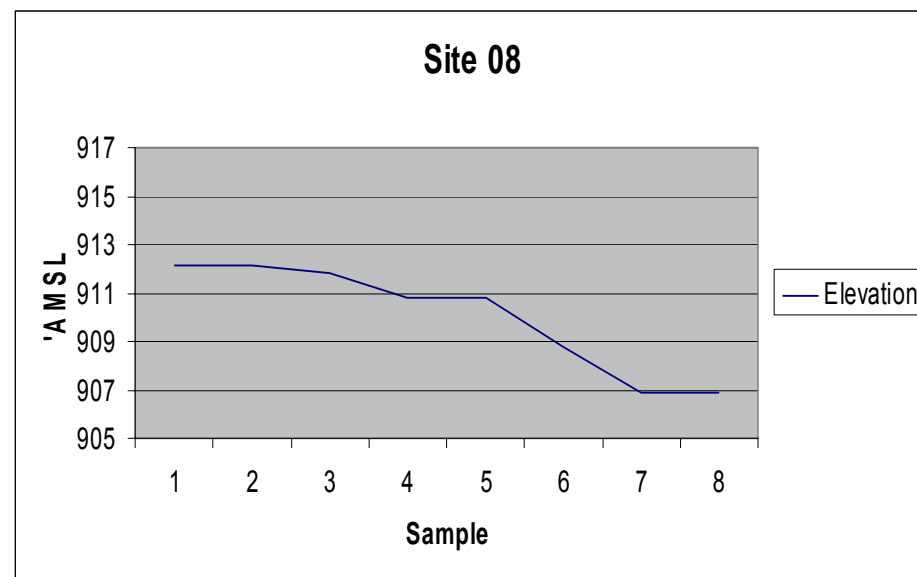
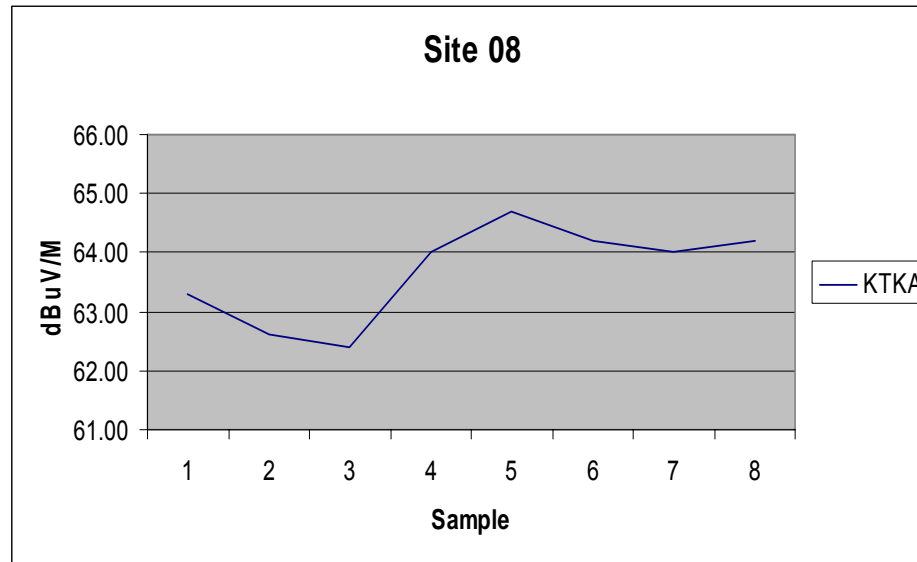
Antenna is vehicle mounted, 30' above ground level
Antenna oriented towards transmitter

Site 08b is $\approx 190'$ W of Site 08 but provided better clearance from heavy foliage that appeared to be partially obstructing antenna

The adjacent picture indicates the sample points of the test and is present in the logged information.

' JobName=KTKA2.dto
 ' JobFileVersion=1.02
 ' Locked=No
 ' IncludeComment=Yes
 ' FullDataRecords=Yes
 ' SignalUnits=dBuV/M
 ' SpaceUnits=English
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 ' Bandwidth=WB
 ' DelayDimension=Time
 ' Delay=1
 ' FreqListLength=1
 ' Freq 1= 681 Freq 1
 ' Comment=st8

	Total	Count					Avg				
38.6	509.4	8	Total dBuV divided by Count				Elevation				
	63.68 dBuV/M						910.03				
81.25 MHz	63.3 dBuV/M	38.9431	-95.28673	Freq 1	38.6	912.1 Feet	Deg	1	9	1	
81.25 MHz	62.6 dBuV/M	38.9431	-95.28673	Freq 1	38.6	912.1 Feet	Deg	1	9	1	
81.25 MHz	62.4 dBuV/M	38.9431	-95.28673	Freq 1	38.6	911.8 Feet	Deg	1	9	1	
81.25 MHz	64 dBuV/M	38.9431	-95.28673	Freq 1	38.6	910.8 Feet	Deg	1	9	1.1	
81.25 MHz	64.7 dBuV/M	38.9431	-95.28673	Freq 1	38.6	910.8 Feet	Deg	1	9	1.1	
81.25 MHz	64.2 dBuV/M	38.9431	-95.28673	Freq 1	38.6	908.8 Feet	Deg	1	9	1.1	
81.25 MHz	64 dBuV/M	38.9431	-95.28673	Freq 1	38.6	906.9 Feet	Deg	1	9	1.2	
81.25 MHz	64.2 dBuV/M	38.9431	-95.28673	Freq 1	38.6	906.9 Feet	Deg	1	9	1.2	



' JobName=KTKA2.dto
 ' JobFileVersion=1.02
 ' Locked=No
 ' IncludeComment=Yes
 ' FullDataRecords=Yes
 ' SignalUnits=dBuV/M
 ' SpaceUnits=English
 ' RFAmp=Off
 ' Bandwidth=WB
 ' DelayDimension=Time
 ' Delay=1

' FreqListLength=1
 ' Freq 1= 681 Freq 1 38.6
 ' Comment=st8a

		Total	Count			Avg					
		2653.3	38	Total dBuV divided by Count		Elevation					
		69.82 dBuV/M				912.08					
4/13/2005	16:52:02	681.25 MHz	64.2 dBuV/M	38.94308	-95.28673 Freq 1	38.6	911.5 Feet	Deg	1	10	1
4/13/2005	16:52:03	681.25 MHz	64 dBuV/M	38.94308	-95.28675 Freq 1	38.6	911.8 Feet	Deg	1	10	1
4/13/2005	16:52:05	681.25 MHz	65 dBuV/M	38.94308	-95.28675 Freq 1	38.6	911.8 Feet	Deg	1	10	1.1
4/13/2005	16:52:06	681.25 MHz	65.7 dBuV/M	38.94308	-95.28675 Freq 1	38.6	911.8 Feet	Deg	1	10	1.1
4/13/2005	16:52:08	681.25 MHz	65.3 dBuV/M	38.94308	-95.28673 Freq 1	38.6	911.5 Feet	Deg	1	10	1.1
4/13/2005	16:52:09	681.25 MHz	65.1 dBuV/M	38.94308	-95.28675 Freq 1	38.6	910.5 Feet	Deg	1	10	1.2
4/13/2005	16:52:10	681.25 MHz	65.8 dBuV/M	38.94308	-95.28675 Freq 1	38.6	910.5 Feet	Deg	1	10	1.2
4/13/2005	16:52:12	681.25 MHz	65.4 dBuV/M	38.94308	-95.28675 Freq 1	38.6	910.1 Feet	Deg	1	10	1.1
4/13/2005	16:52:13	681.25 MHz	65.5 dBuV/M	38.94308	-95.28677 Freq 1	38.6	910.5 Feet	Deg	1	10	1
4/13/2005	16:52:14	681.25 MHz	71.7 dBuV/M	38.94308	-95.28677 Freq 1	38.6	910.5 Feet	Deg	1	10	1
4/13/2005	16:52:16	681.25 MHz	67.3 dBuV/M	38.94308	-95.2868 Freq 1	38.6	910.5 Feet	Deg	1	10	1
4/13/2005	16:52:17	681.25 MHz	69.3 dBuV/M	38.94308	-95.28683 Freq 1	38.6	911.5 Feet	Deg	1	9	1
4/13/2005	16:52:19	681.25 MHz	68.5 dBuV/M	38.94308	-95.28683 Freq 1	38.6	911.5 Feet	Deg	1	9	1
4/13/2005	16:52:20	681.25 MHz	71.3 dBuV/M	38.94308	-95.28685 Freq 1	38.6	912.1 Feet	Deg	1	10	1.1
4/13/2005	16:52:21	681.25 MHz	69.7 dBuV/M	38.94308	-95.28688 Freq 1	38.6	912.4 Feet	Deg	1	10	1.2
4/13/2005	16:52:23	681.25 MHz	71.7 dBuV/M	38.94308	-95.2869 Freq 1	38.6	913.4 Feet	Deg	1	10	1.2
4/13/2005	16:52:24	681.25 MHz	70.7 dBuV/M	38.94308	-95.2869 Freq 1	38.6	913.4 Feet	Deg	1	10	1.2
4/13/2005	16:52:26	681.25 MHz	70.1 dBuV/M	38.94308	-95.28693 Freq 1	38.6	913.8 Feet	Deg	1	10	1.2
4/13/2005	16:52:27	681.25 MHz	70.8 dBuV/M	38.94308	-95.28697 Freq 1	38.6	914.4 Feet	Deg	1	10	1.1
4/13/2005	16:52:28	681.25 MHz	71 dBuV/M	38.94308	-95.28697 Freq 1	38.6	914.4 Feet	Deg	1	10	1.1
4/13/2005	16:52:30	681.25 MHz	72.3 dBuV/M	38.94308	-95.287 Freq 1	38.6	914.7 Feet	Deg	1	10	1.2
4/13/2005	16:52:31	681.25 MHz	72 dBuV/M	38.94308	-95.28703 Freq 1	38.6	915.1 Feet	Deg	1	9	1.2
4/13/2005	16:52:32	681.25 MHz	72.6 dBuV/M	38.94308	-95.28703 Freq 1	38.6	915.1 Feet	Deg	1	9	1.2
4/13/2005	16:52:34	681.25 MHz	71.8 dBuV/M	38.94308	-95.28707 Freq 1	38.6	914.4 Feet	Deg	1	9	1.2
4/13/2005	16:52:35	681.25 MHz	72 dBuV/M	38.94308	-95.28712 Freq 1	38.6	912.8 Feet	Deg	1	9	1.2
4/13/2005	16:52:36	681.25 MHz	71.8 dBuV/M	38.94308	-95.28712 Freq 1	38.6	912.8 Feet	Deg	1	9	1.2
4/13/2005	16:52:38	681.25 MHz	71.5 dBuV/M	38.94308	-95.28715 Freq 1	38.6	912.1 Feet	Deg	1	9	1.2
4/13/2005	16:52:39	681.25 MHz	70.8 dBuV/M	38.94308	-95.28718 Freq 1	38.6	912.1 Feet	Deg	1	9	1.1
4/13/2005	16:52:41	681.25 MHz	73 dBuV/M	38.94308	-95.28718 Freq 1	38.6	912.1 Feet	Deg	1	9	1.1
4/13/2005	16:52:42	681.25 MHz	72.9 dBuV/M	38.94308	-95.2872 Freq 1	38.6	911.8 Feet	Deg	1	9	1.1
4/13/2005	16:52:43	681.25 MHz	70 dBuV/M	38.94308	-95.28723 Freq 1	38.6	911.8 Feet	Deg	1	10	1.1
4/13/2005	16:52:45	681.25 MHz	72.7 dBuV/M	38.94308	-95.28725 Freq 1	38.6	911.5 Feet	Deg	1	10	1.1
4/13/2005	16:52:46	681.25 MHz	72.9 dBuV/M	38.94308	-95.28725 Freq 1	38.6	911.5 Feet	Deg	1	10	1.1
4/13/2005	16:52:48	681.25 MHz	70.5 dBuV/M	38.94308	-95.28728 Freq 1	38.6	911.1 Feet	Deg	1	10	1.1
4/13/2005	16:52:49	681.25 MHz	72.8 dBuV/M	38.9431	-95.2873 Freq 1	38.6	910.5 Feet	Deg	1	10	1.1
4/13/2005	16:52:50	681.25 MHz	71.6 dBuV/M	38.9431	-95.2873 Freq 1	38.6	910.5 Feet	Deg	1	10	1.1
4/13/2005	16:52:52	681.25 MHz	71.4 dBuV/M	38.9431	-95.28733 Freq 1	38.6	910.5 Feet	Deg	1	10	1.1
4/13/2005	16:52:53	681.25 MHz	72.6 dBuV/M	38.9431	-95.28735 Freq 1	38.6	910.8 Feet	Deg	1	9	1