

**May 2013**  
**KPAU(FM) Channel 278C3**  
**Center, Colorado**  
**Principal Community Coverage Study**

The 70 dBu contour from the proposed facility, as calculated using the standard contour prediction methodology described in §73.313 of the Commission’s Rules, does not encompass the entire community of Center. The far side of Center is located approximately 43 kilometers from the proposed transmitter site. The standard 70 dBu contour extends approximately 29 kilometers towards Center. However, it is believed that a supplemental showing using alternative contour prediction methodology is justified in this instance in accordance with §73.313(e).

The entire community of Center is encompassed by the 60 dBu contour.

An alternative prediction methodology has been employed to verify that Center will receive 70 dBu service from the proposed facility. Except as otherwise specified, all calculations were made using the 3-arc second database in conjunction with the height and ERP specified herein.

**Longley-Rice**

Study has been made of the predicted 70 dBu field strength over Center, using the Longley-Rice v1.2.2 methodology as described in the FCC’s Office of Engineering and Technology Bulletin 69. This study has been conducted using the software program SIGNAL™ from EDX Wireless.

A sample calculation has been made to a location within the community boundary of Center to verify the presence of 70 dBu service, using the formula:

$$\text{Field Strength} = \text{Free Space} - \text{Diffraction Loss} - \text{Clutter}$$

*Where Free Space = 106.9 + power in dBk - 20log(distance in km to point of interest)*

For the path studied (-0.56 dBk over a 42.6 km path), the result of this calculation is:

<b>Radial</b>	<b>Free Space Field</b>	<b>Minus Diffraction Loss</b>	<b>Yields</b>
87.5 deg	73.75 dBu	-0.05 dB	73.8 dBu

Attached is a plot of the terrain path from the transmitter site to the sample location in Center. The attached terrain path plot includes a list of the Longley-Rice study parameters.

The location of the Longley-Rice contour in the direction of Center has been determined for 1-degree increment radials passing through Center (starting at 85 degrees and ending at 88 degrees), as well as the “bracketing” radials (84 and 89 degrees) on either side.

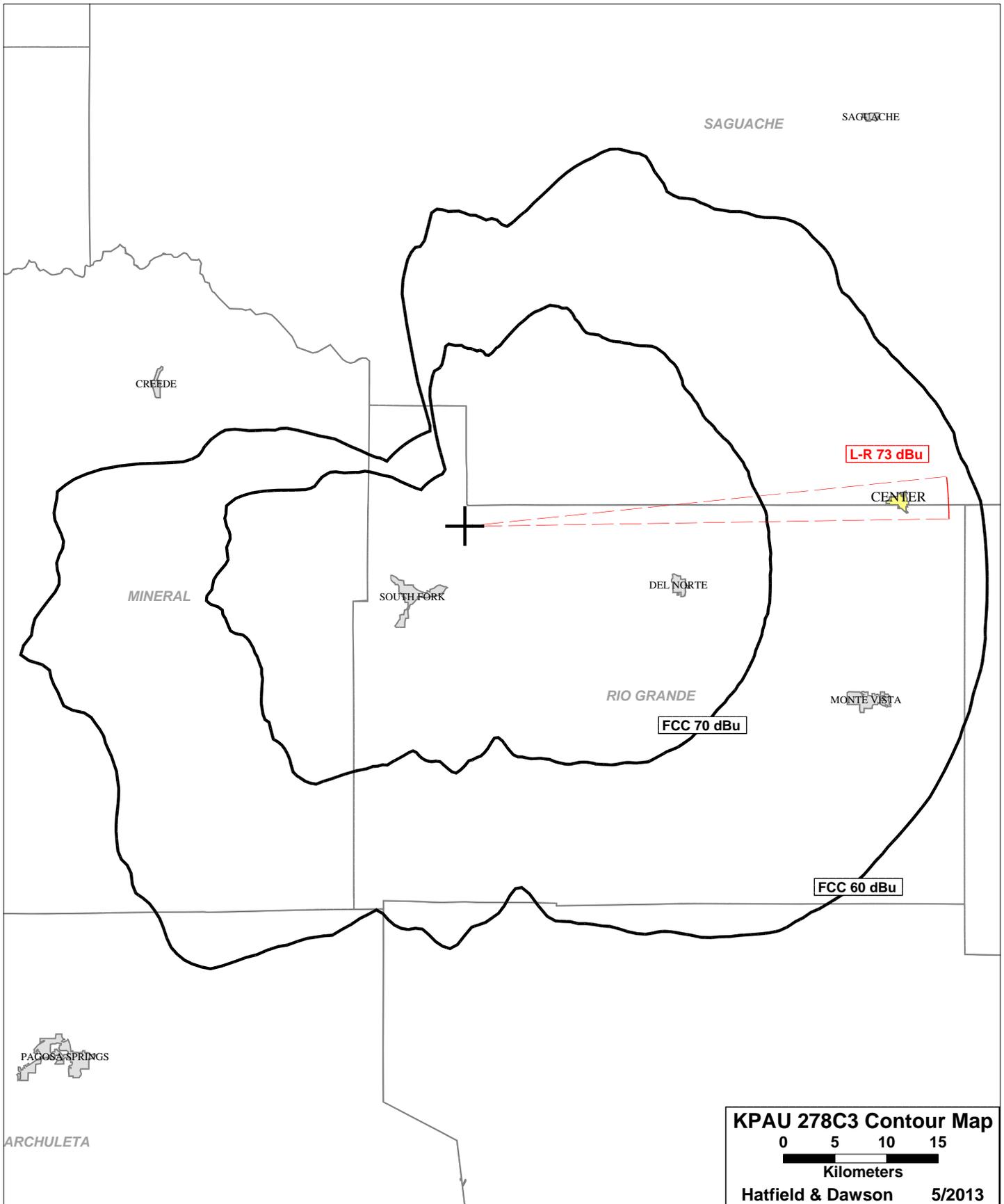
<b>Radial</b>	<b>F(50,50) 70 dBu</b>	<b>L-R 73 dBu</b>	<b>L-R exceeds F(50,50) by</b>
84	28.3 km	46.8 km	65%
85	28.5 km	46.8 km	64%
86	28.7 km	46.8 km	63%

87	28.9 km	46.8 km	62%
88	29.0 km	46.8 km	61%
89	29.1 km	46.8 km	61%

The attached map exhibit depicts the results of this analysis as a 73 dBu (chosen to allow for 3 dB of local clutter loss at the receive locations) contour over the span of 84 to 89 degrees.

It is believed that 3 dB is a sufficient value for local clutter loss in the community of Center. Center is a rural community surrounded by open farmland in the San Luis Valley of south-central Colorado. Buildings in Center are primarily one-to-two stories in height, including in the downtown core. Trees are sparse and scattered.

It should be noted that the standard 3-second terrain database includes an anomalous “pit” at the location of Center. Please see the attached additional analysis which provides corrected terrain data for radials passing through Center.



SAGUACHE

SAGUACHE

CREEDE

L-R 73 dBu

CENTER

MINERAL

SOUTH FORK

DEL NORTE

RIO GRANDE

FCC 70 dBu

MONTE VISTA

FCC 60 dBu

PAGOSA SPRINGS

ARCHULETA

KPAU 278C3 Contour Map

0 5 10 15

Kilometers

Hatfield & Dawson 5/2013



BENJAMIN F. DAWSON III, PE  
THOMAS M. ECKELS, PE  
STEPHEN S. LOCKWOOD, PE  
DAVID J. PINION, PE

ERIK C. SWANSON, PE  
THOMAS S. GORTON, PE  
MICHAEL H. MEHIGAN, EIT

HATFIELD & DAWSON  
CONSULTING ELECTRICAL ENGINEERS  
9500 GREENWOOD AVE. N.  
SEATTLE, WASHINGTON 98103

TELEPHONE (206) 783-9151  
FACSIMILE (206) 789-9834  
E-MAIL [hatdaw@hatdaw.com](mailto:hatdaw@hatdaw.com)

JAMES B. HATFIELD, PE  
PAUL W. LEONARD, PE  
CONSULTANTS

MAURY L. HATFIELD, PE  
(1942-2009)

**Engineering Statement  
Addendum to Principal Community Coverage Study  
KPAU(FM) Channel 278C3  
Center, Colorado  
April 2010**

This addendum has been prepared in response to an informal request from Commission staff, in which concern was expressed that the predicted Longley-Rice signal level from the proposed KPAU facility falls below 70 dBu within the boundary of the community of license (despite recovering to above 70 dBu at locations beyond the community). I have revisited the alternative contour prediction study included in the application, and have discovered that the standard 3-arc second terrain database has some significant errors in the vicinity of Center, Colorado. The erroneous terrain data, when used in a Longley-Rice study, would lead to an under-reporting of the received signal strength in that community. Once these errors have been corrected, it is clear that 70 dBu service will be provided to the entire community of license.

**Description of the Terrain Path to the Community**

Review of the relevant USGS 7.5 minute topographic maps reveals that the terrain path from the Agua Ramon transmitter site in the direction of Center can be characterized thusly:

The Agua Ramon transmitter site is highly elevated above the valley floor. Beginning at 3315 meters AMSL at the base of the tower, the terrain falls away steeply in the first five kilometers to approximately 2600 meters AMSL. There follows about 22 kilometers of hilly terrain, varying between approximately 2600 and 2500 meters AMSL. At about 26 kilometers and 2400 meters AMSL, the valley floor begins, sloping away very gradually to and beyond Center. Center itself is a small town located between 2332 and 2327 meters AMSL.

Hatfield & Dawson Consulting Engineers

The 3-arc second terrain database, however, suggests that starting at 26.5 kilometers from the tower site there exists a level shelf or plateau at an elevation of 2377 meters (exactly 7800 feet) AMSL, and that this plateau extends at exactly that elevation for a distance of 7 kilometers. Then the 3-arc second terrain database falls away, much more rapidly than does the actual terrain, bottoming out at 2229 meters AMSL precisely at the location of Center, and then rising again to match the actual elevation of the valley floor. The terrain elevation discrepancy at Center is significant; the 3-arc second terrain database understates the elevation within the city of Center by as much as 103 meters (338 feet)!<sup>1</sup>

If one were to conduct a Longley-Rice study of the predicted received signal level within Center, relying solely on the 3-arc second terrain database, the results would suggest that the signal strength falls below 70 dBu within the community boundary, owing to penetration of the first Fresnel zone by the edge of the false plateau, as the signal reaches into a 300-foot-deep pit in which the community appears to be located. Clearly this would be an erroneous result.

#### **Longley-Rice Study Using Corrected Terrain Data**

In order to correct this study, the terrain data along the four radials passing through Center has been hand-corrected by reading the terrain elevations from the relevant USGS 7.5 minute topographic maps at 0.1 km increments over a 20 kilometer span, starting at the beginning of the false 2377 meter plateau (situated at 26.3 to 26.5 km from the transmitter site, depending on the radial), and extending to 47 kilometers from the transmitter site.<sup>2</sup>

Included as Attachment A are four graphs depicting the terrain profiles along the 84 to 88 degree radials. On these graphs, the green line indicates the terrain elevations extracted from the 3-arc second terrain database. The red line indicates the corrected terrain elevations derived from the USGS 7.5 minute topographic quadrangle maps. Center lies between 41 and 43 km from the transmitter site, between the two vertical black lines. These graphs dramatically illustrate the erroneous terrain data in the vicinity of Center.

---

<sup>1</sup> My review of other locations in the valley identified another anomalous (and nonexistent) "pit" immediately south of Monte Vista, Colorado, according to the 3-arc second terrain database.

<sup>2</sup> 47 kilometers is just beyond the free-space 73 dBu contour distance for the proposed 880 watt ERP, the 73 dBu level having been chosen to allow for as much as 3 dB of local clutter loss at the receive locations.

Included as Attachment B are four graphs depicting the predicted F(50,50) Longley-Rice signal along these same four radials. On these graphs, the green line indicates the predicted signal as calculated using only the 3-arc second terrain database. The red line indicates the corrected prediction using the corrected terrain data from the topographic maps. A narrow blue line represents the 73 dBu signal level. It can be seen on these graphs that the entire city of Center is predicted to receive a signal of at least 73 dBu, once the terrain data has been corrected.<sup>3</sup>

Included as Attachment C is a map of Center which depicts the four radials passing through the community, and which shows the true elevation of the community.<sup>4</sup> And for the Commission's reference, included as Attachment D is a printout of the original 3-arc second and corrected terrain data and Longley-Rice prediction along the four radials passing through Center.

### **Conclusion**

Once the terrain data has been corrected for the four radials passing through the city of Center, Colorado, it is clear that the proposed KPAU facility will provide a signal of at least 70 dBu to 100% of that community, satisfying the requirements of §73.315(a) of the Commission's Rules.

---

<sup>3</sup> It should be noted that even with the terrain data corrected, the terrain in the direction of Center still satisfies the Commission's threshold test guidelines for the application of alternative contour prediction methodology. The delta-h value in the direction of Center is  $2551 - 2333 = 218$  meters.

<sup>4</sup> In fact, the 85 degree radial narrowly misses the community, but is included in this material out of an abundance of caution.

**Statement of Engineer**

This Engineering Statement, which is part of an amendment to an application for facilities changes for FM station KPAU at Center, Colorado, has been prepared entirely by the undersigned. All representations contained herein are true to the best of my knowledge. I am an experienced radio engineer whose qualifications are a matter of record with the Federal Communications Commission. I am a staff engineer in the firm of Hatfield and Dawson Consulting Engineers, LLC, and am Registered as a Professional Engineer in the States of Washington and Colorado.

Signed this 12<sup>th</sup> of April, 2010.

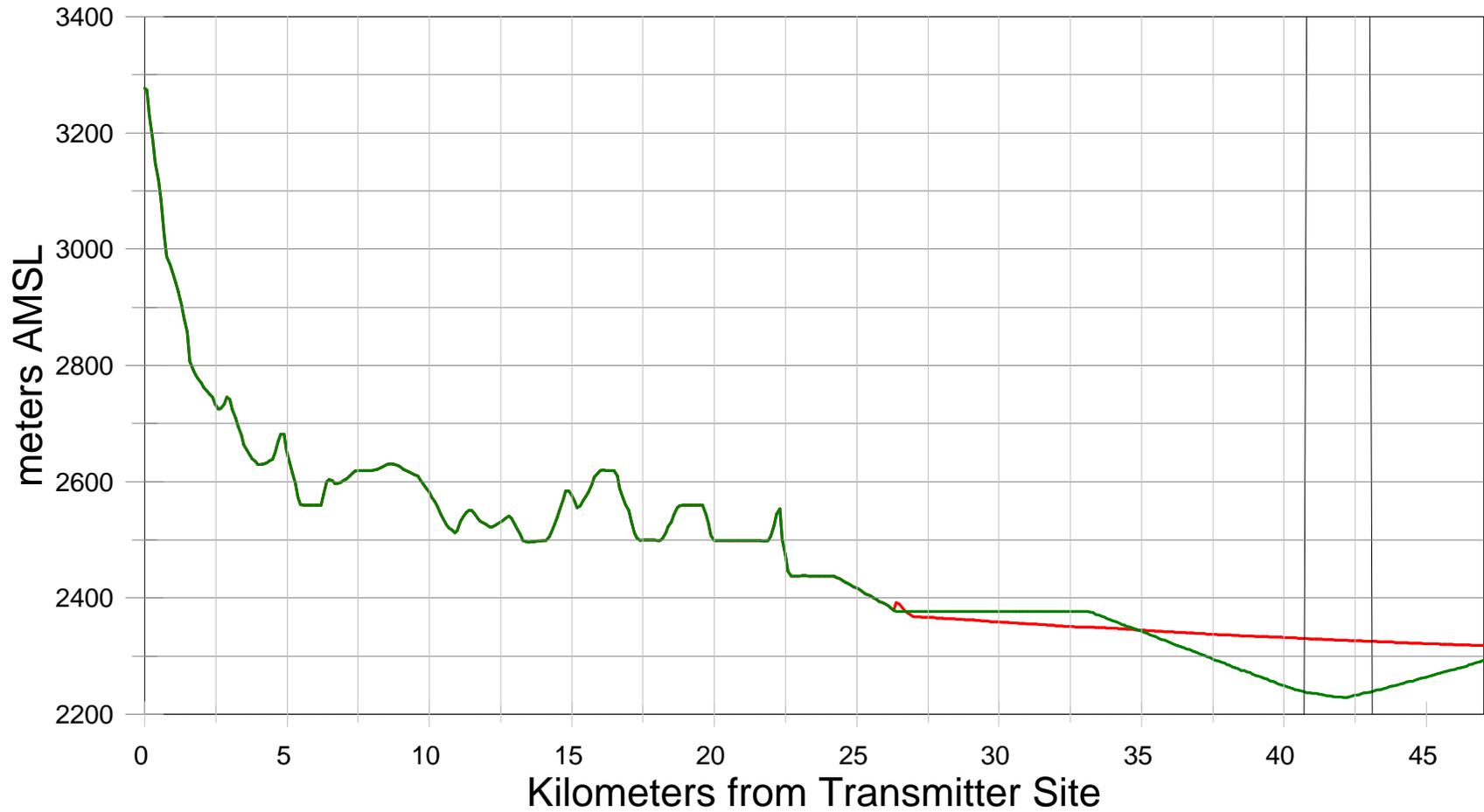


Erik C. Swanson, P.E.

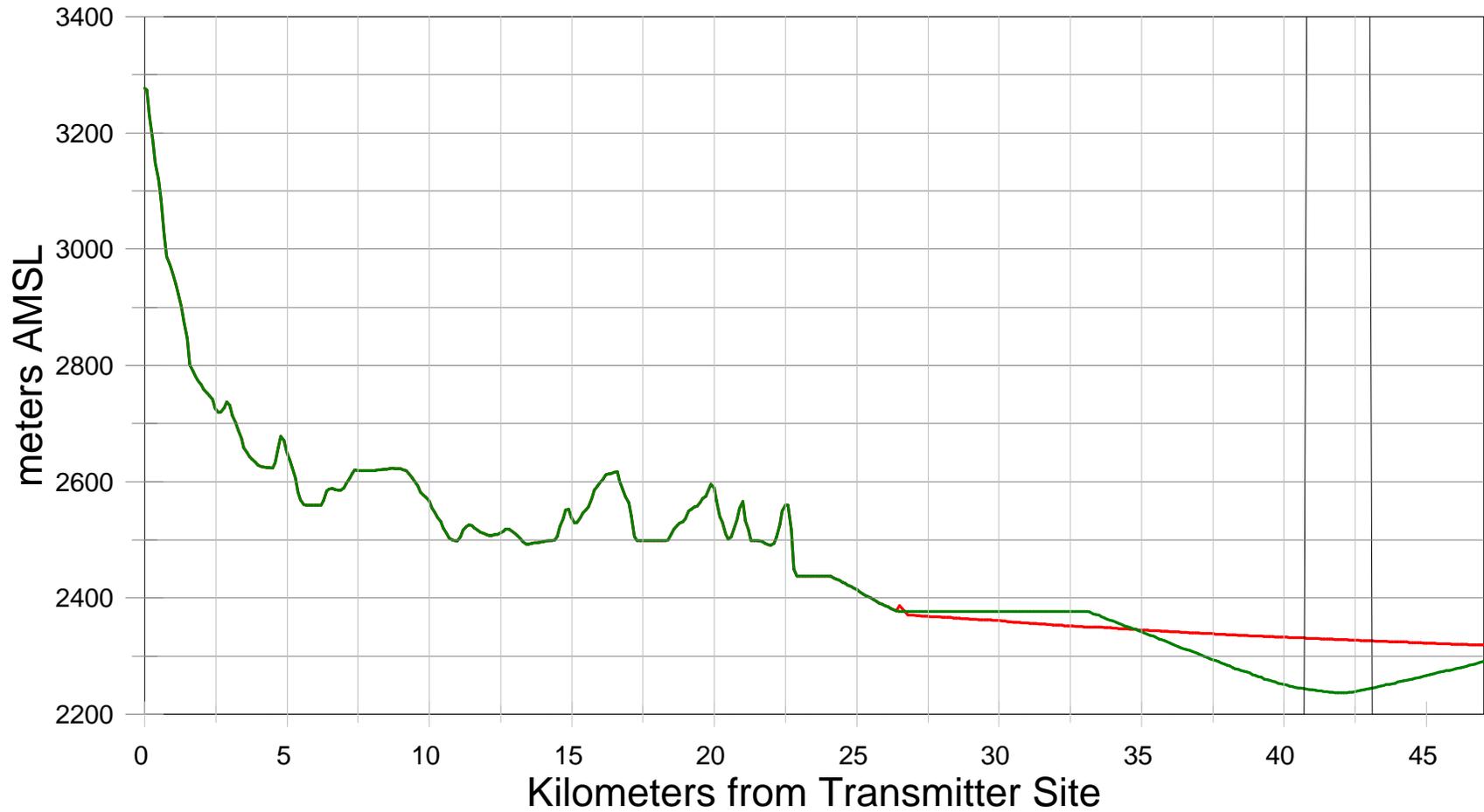
Hatfield & Dawson Consulting Engineers

**Attachment A**  
**KPAU Terrain Profile Graphs**  
**85 to 88 Degrees True**

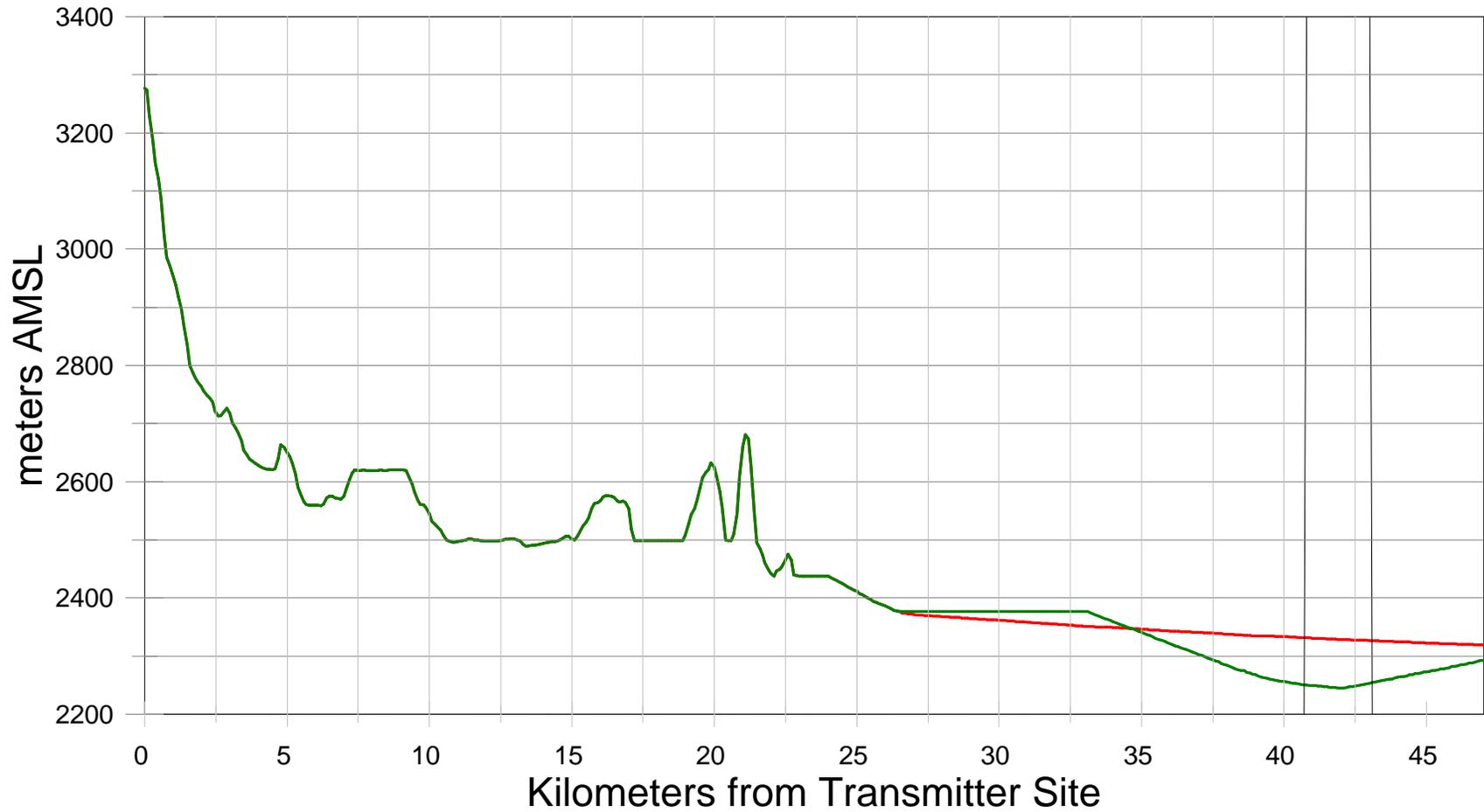
# KPAU 85 Degree Radial Terrain Profile



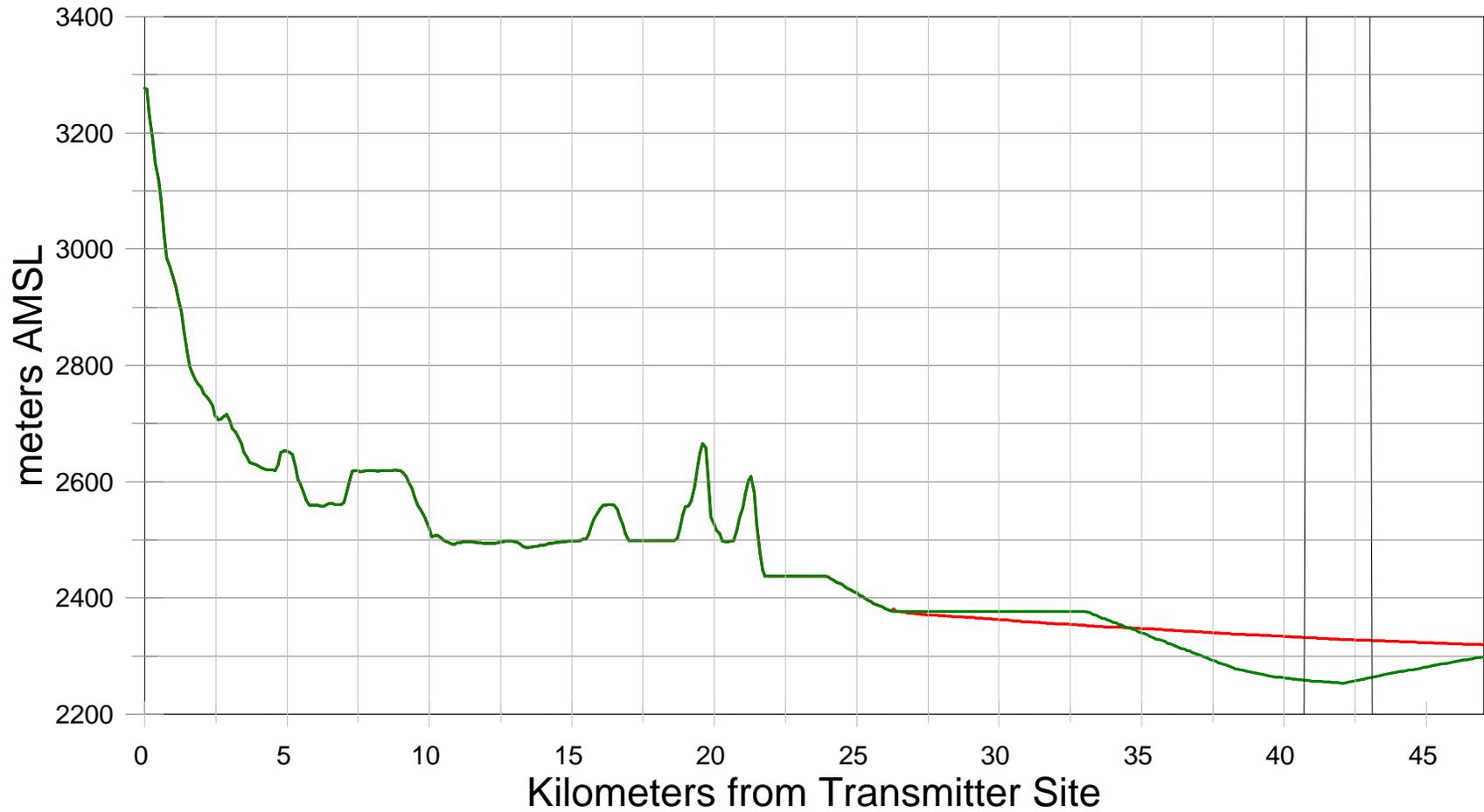
# KPAU 86 Degree Radial Terrain Profile



# KPAU 87 Degree Radial Terrain Profile

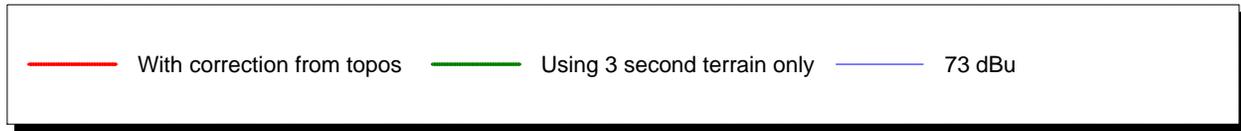
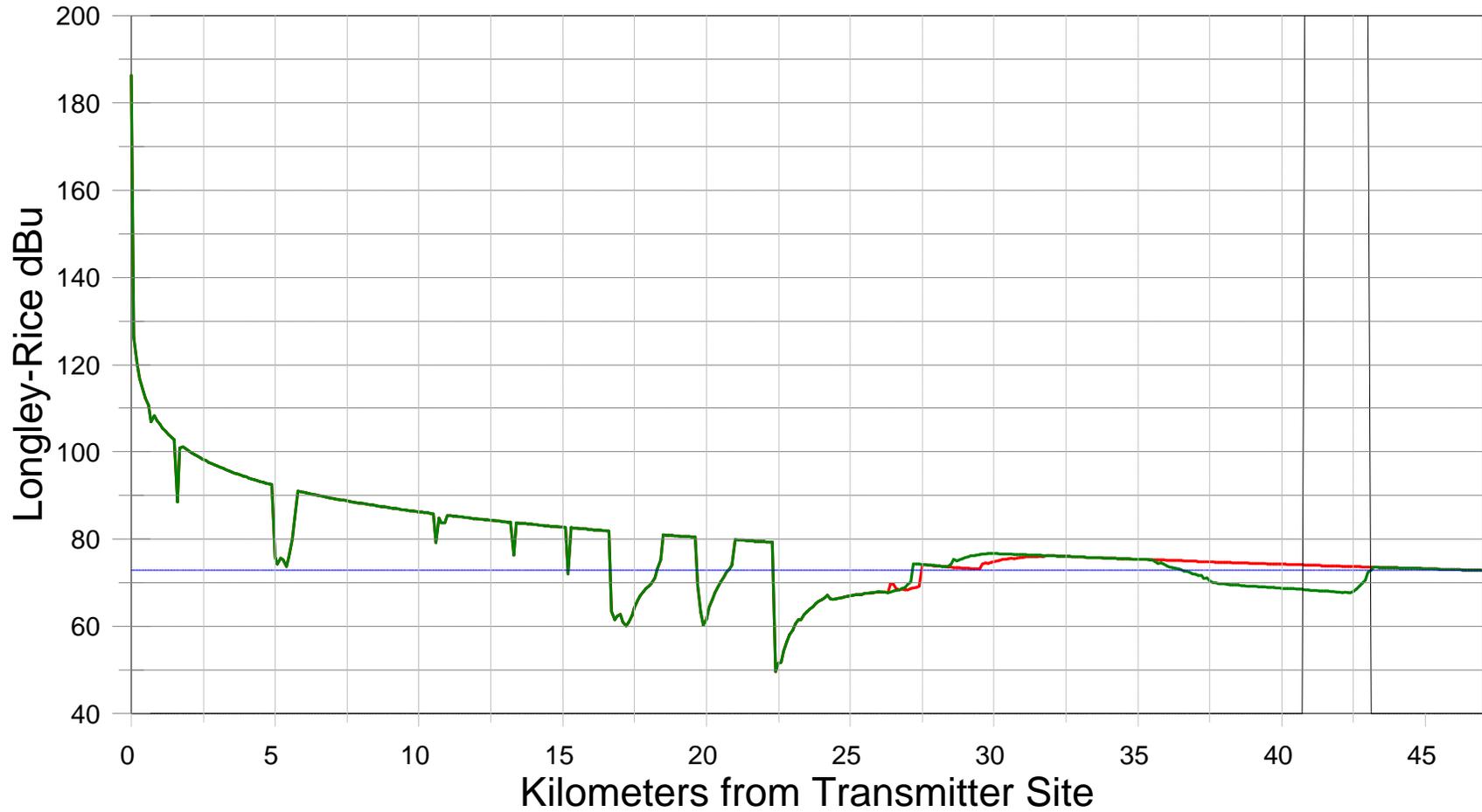


# KPAU 88 Degree Radial Terrain Profile

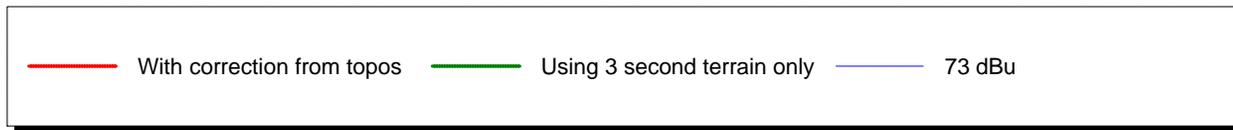
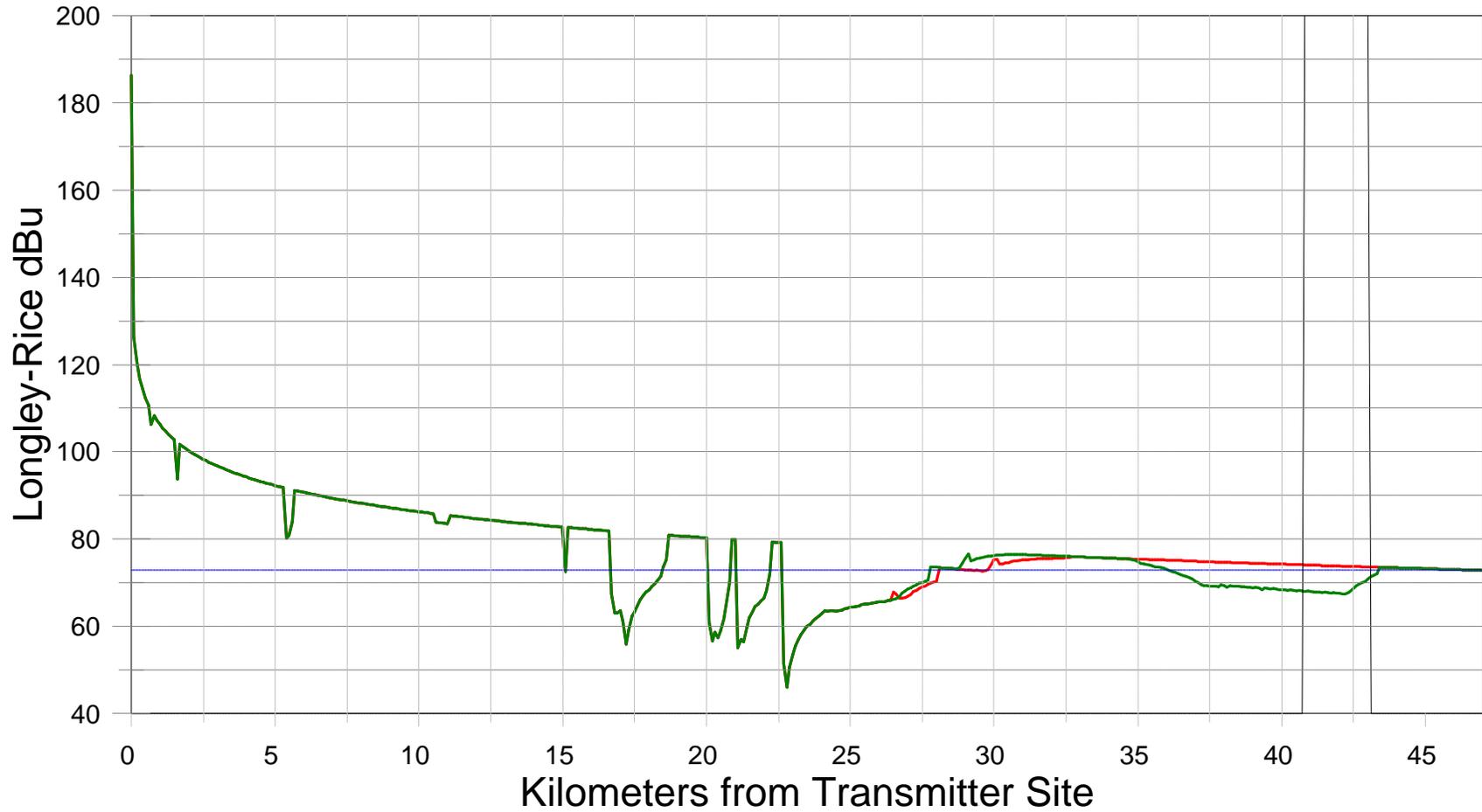


**Attachment B**  
**KPAU Longley-Rice Prediction Graphs**  
**85 to 88 Degrees True**

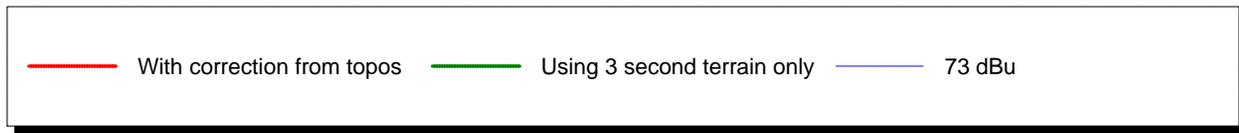
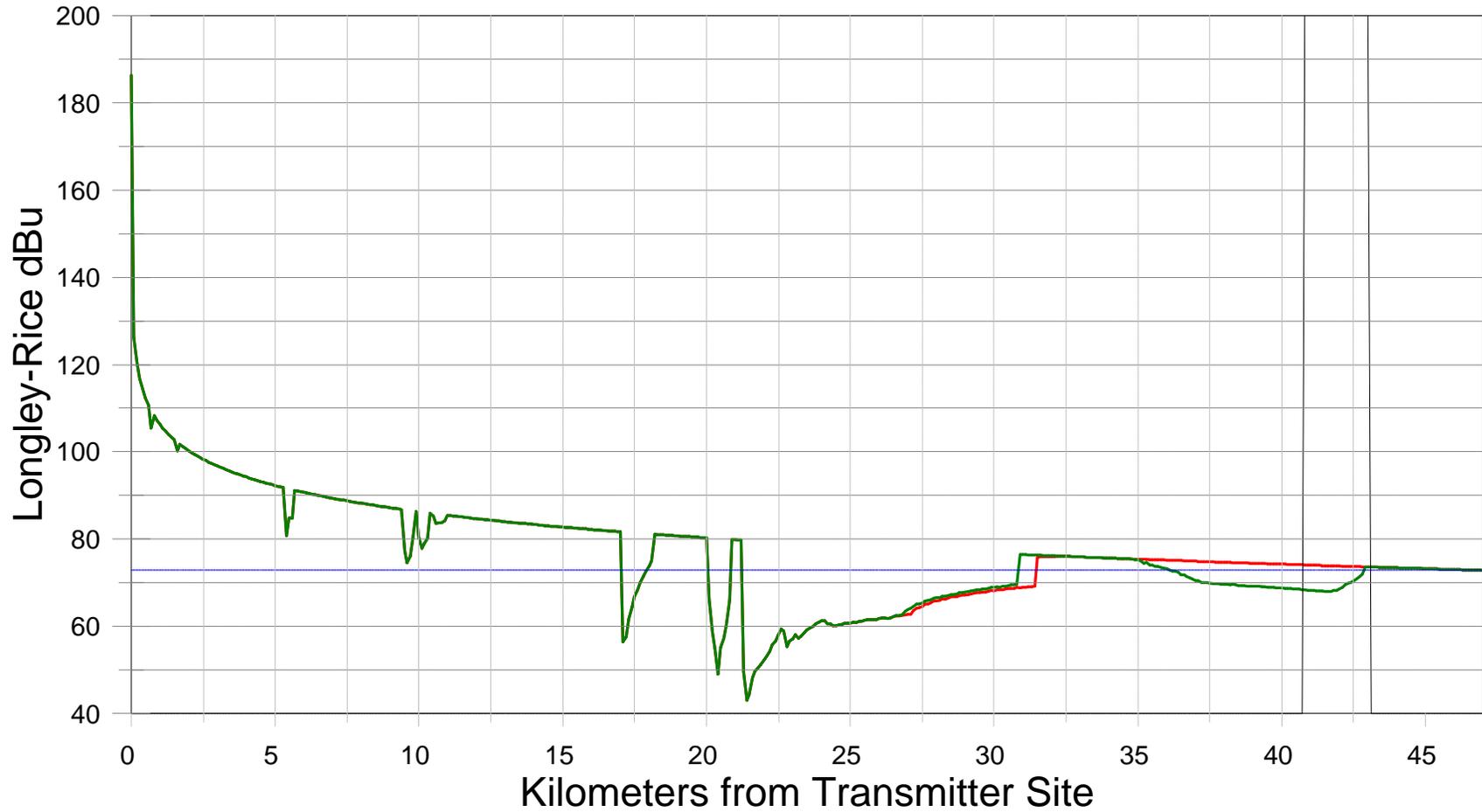
# KPAU 85 Degree Radial Longley-Rice Prediction



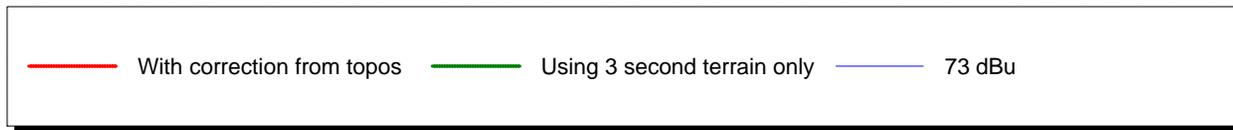
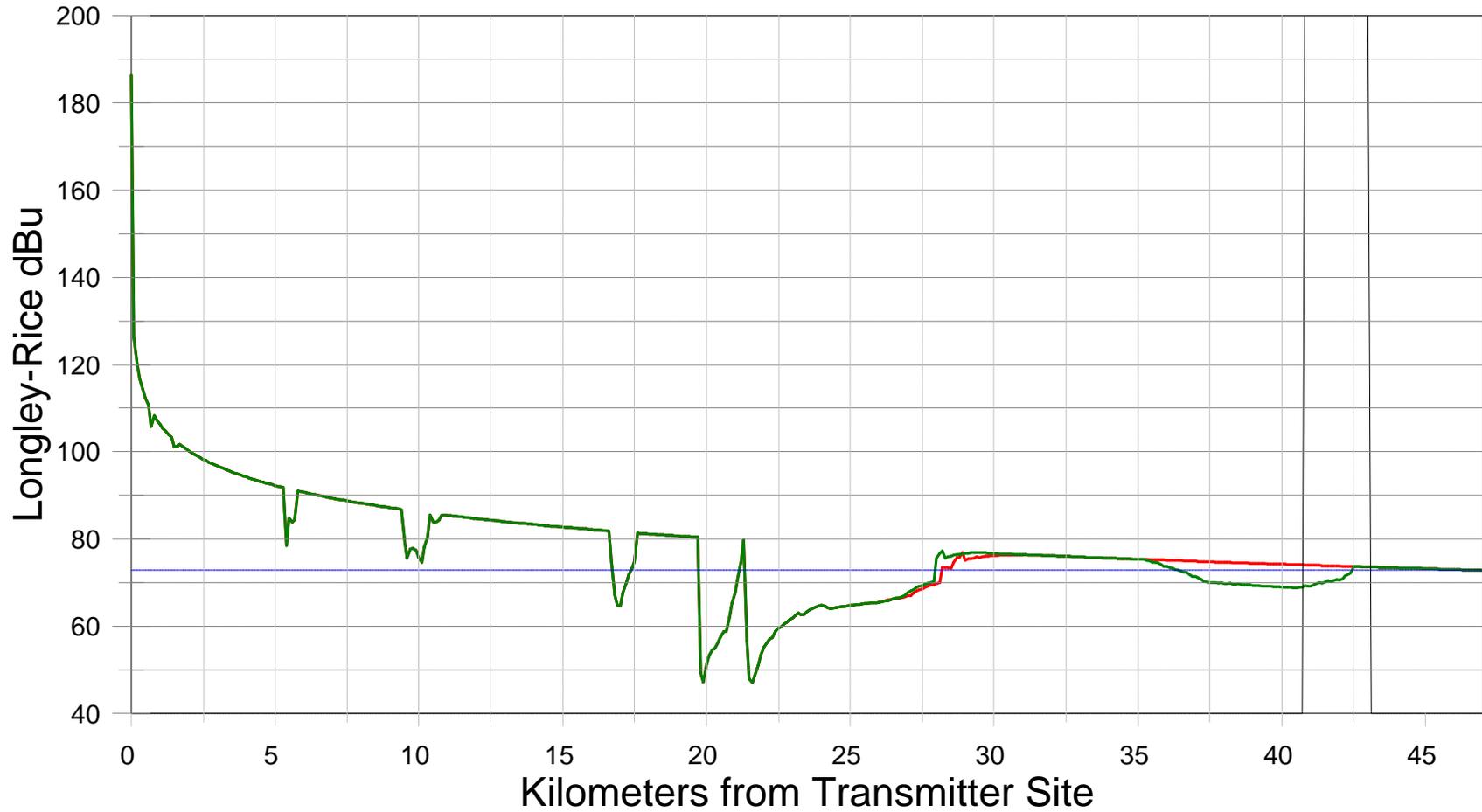
# KPAU 86 Degree Radial Longley-Rice Prediction



# KPAU 87 Degree Radial Longley-Rice Prediction

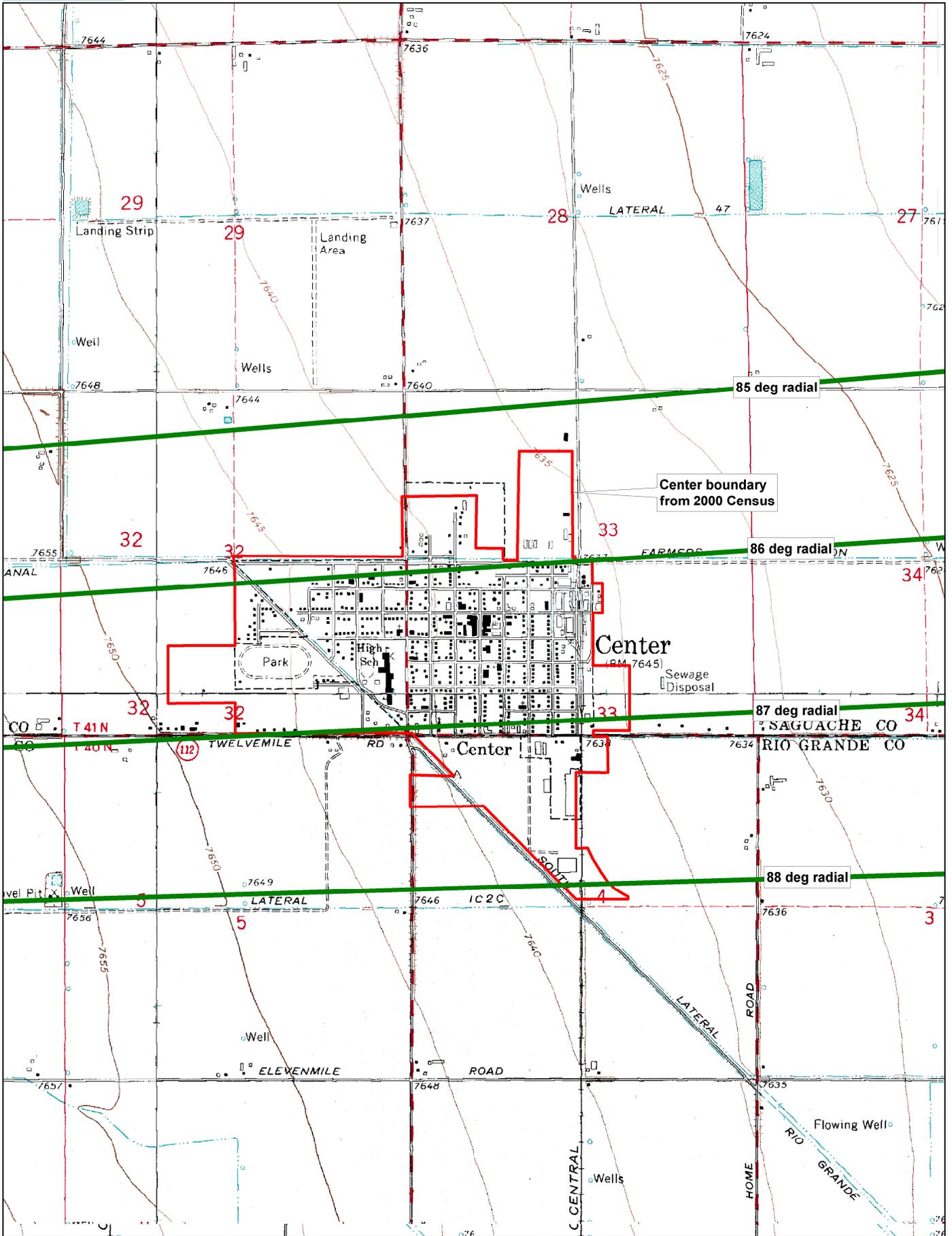


# KPAU 88 Degree Radial Longley-Rice Prediction



**Attachment C**  
**Map of Center, Colorado**  
**On USGS 7.5 Minute Topographic Quadrangle**

Hatfield & Dawson Consulting Engineers



**Attachment D**  
**Original and Corrected**  
**Terrain Data and Longley-Rice Prediction**

# KPAU 85 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL
0.0	3277	186.34	
0.1	3274	126.34	
0.2	3230	120.32	
0.3	3189	116.80	
0.4	3149	114.30	
0.5	3119	112.36	
0.6	3084	110.78	
0.7	3025	106.99	
0.8	2988	108.28	
0.9	2974	107.26	
1.0	2961	106.34	
1.1	2942	105.51	
1.2	2927	104.76	
1.3	2905	104.06	
1.4	2883	103.42	
1.5	2858	102.82	
1.6	2808	88.64	
1.7	2793	100.97	
1.8	2785	101.24	
1.9	2778	100.77	
2.0	2771	100.32	
2.1	2762	99.90	
2.2	2756	99.49	
2.3	2751	99.11	
2.4	2746	98.74	
2.5	2734	98.38	
2.6	2725	98.04	
2.7	2727	97.71	
2.8	2734	97.40	
2.9	2746	97.09	
3.0	2742	96.80	
3.1	2724	96.51	
3.2	2710	96.24	
3.3	2696	95.97	
3.4	2680	95.71	
3.5	2664	95.46	
3.6	2655	95.22	
3.7	2647	94.98	
3.8	2640	94.75	
3.9	2635	94.52	
4.0	2630	94.30	
4.1	2630	94.09	
4.2	2631	93.88	
4.3	2633	93.67	
4.4	2636	93.47	
4.5	2639	93.28	
4.6	2651	93.09	
4.7	2670	92.90	
4.8	2682	92.72	
4.9	2682	92.54	

# KPAU 85 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL
5.0	2654	76.05	
5.1	2632	74.36	
5.2	2616	75.77	
5.3	2597	75.30	
5.4	2573	73.78	
5.5	2561	76.08	
5.6	2560	80.14	
5.7	2560	84.65	
5.8	2560	91.07	
5.9	2560	90.92	
6.0	2560	90.78	
6.1	2560	90.63	
6.2	2560	90.49	
6.3	2579	90.35	
6.4	2600	90.22	
6.5	2604	90.08	
6.6	2602	89.95	
6.7	2597	89.82	
6.8	2598	89.69	
6.9	2599	89.56	
7.0	2603	89.44	
7.1	2605	89.32	
7.2	2610	89.19	
7.3	2615	89.07	
7.4	2619	88.96	
7.5	2620	88.84	
7.6	2620	88.72	
7.7	2620	88.61	
7.8	2620	88.50	
7.9	2620	88.39	
8.0	2620	88.28	
8.1	2621	88.17	
8.2	2622	88.06	
8.3	2625	87.96	
8.4	2627	87.86	
8.5	2630	87.75	
8.6	2631	87.65	
8.7	2631	87.55	
8.8	2630	87.45	
8.9	2628	87.35	
9.0	2626	87.26	
9.1	2622	87.16	
9.2	2620	87.07	
9.3	2618	86.97	
9.4	2615	86.88	
9.5	2612	86.79	
9.6	2610	86.70	
9.7	2603	86.61	
9.8	2596	86.52	
9.9	2590	86.43	

# KPAU 85 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL
10.0	2583	86.34	
10.1	2573	86.25	
10.2	2565	86.17	
10.3	2557	86.08	
10.4	2545	86.00	
10.5	2536	85.92	
10.6	2526	79.33	
10.7	2521	84.96	
10.8	2517	83.85	
10.9	2513	83.80	
11.0	2516	85.51	
11.1	2532	85.43	
11.2	2540	85.36	
11.3	2548	85.28	
11.4	2551	85.20	
11.5	2551	85.13	
11.6	2546	85.05	
11.7	2537	84.98	
11.8	2532	84.90	
11.9	2529	84.83	
12.0	2527	84.76	
12.1	2523	84.69	
12.2	2522	84.61	
12.3	2525	84.54	
12.4	2528	84.47	
12.5	2531	84.40	
12.6	2534	84.33	
12.7	2538	84.27	
12.8	2542	84.20	
12.9	2537	84.13	
13.0	2527	84.06	
13.1	2519	84.00	
13.2	2510	83.93	
13.3	2499	76.41	
13.4	2497	83.80	
13.5	2496	83.73	
13.6	2497	83.67	
13.7	2497	83.61	
13.8	2498	83.54	
13.9	2498	83.48	
14.0	2499	83.42	
14.1	2499	83.36	
14.2	2506	83.30	
14.3	2515	83.23	
14.4	2528	83.17	
14.5	2540	83.11	
14.6	2553	83.05	
14.7	2569	82.99	
14.8	2585	82.94	
14.9	2585	82.88	

# KPAU 85 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL
15.0	2579	82.82	
15.1	2567	82.76	
15.2	2556	72.10	
15.3	2559	82.65	
15.4	2567	82.59	
15.5	2576	82.53	
15.6	2583	82.48	
15.7	2595	82.42	
15.8	2608	82.37	
15.9	2615	82.31	
16.0	2620	82.26	
16.1	2621	82.20	
16.2	2620	82.15	
16.3	2620	82.10	
16.4	2620	82.04	
16.5	2620	81.99	
16.6	2610	81.94	
16.7	2589	63.52	
16.8	2572	61.57	
16.9	2561	62.45	
17.0	2551	62.83	
17.1	2532	61.07	
17.2	2513	60.18	
17.3	2504	61.03	
17.4	2499	62.49	
17.5	2500	64.35	
17.6	2500	66.00	
17.7	2501	67.08	
17.8	2501	68.03	
17.9	2500	68.77	
18.0	2499	69.38	
18.1	2499	69.94	
18.2	2503	71.13	
18.3	2513	73.19	
18.4	2523	75.25	
18.5	2531	81.00	
18.6	2544	80.95	
18.7	2556	80.90	
18.8	2559	80.86	
18.9	2560	80.81	
19.0	2560	80.77	
19.1	2560	80.72	
19.2	2560	80.68	
19.3	2560	80.63	
19.4	2560	80.59	
19.5	2560	80.54	
19.6	2560	80.50	
19.7	2545	69.47	
19.8	2529	63.25	
19.9	2508	60.41	

# KPAU 85 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL
20.0	2499	61.70	
20.1	2499	64.43	
20.2	2499	66.22	
20.3	2499	67.79	
20.4	2499	69.08	
20.5	2499	70.28	
20.6	2499	71.37	
20.7	2499	72.40	
20.8	2499	73.30	
20.9	2499	74.10	
21.0	2499	79.90	
21.1	2499	79.86	
21.2	2499	79.81	
21.3	2499	79.77	
21.4	2499	79.73	
21.5	2499	79.69	
21.6	2499	79.65	
21.7	2498	79.61	
21.8	2498	79.57	
21.9	2499	79.53	
22.0	2507	79.49	
22.1	2525	79.45	
22.2	2545	79.41	
22.3	2554	79.38	
22.4	2502	49.73	
22.5	2474	51.62	
22.6	2446	51.92	
22.7	2438	54.40	
22.8	2438	56.60	
22.9	2438	58.22	
23.0	2438	59.24	
23.1	2439	60.57	
23.2	2439	61.59	
23.3	2438	61.60	
23.4	2438	62.81	
23.5	2438	63.39	
23.6	2438	64.05	
23.7	2438	64.62	
23.8	2438	65.25	
23.9	2438	65.78	
24.0	2438	66.17	
24.1	2438	66.60	
24.2	2438	67.15	
24.3	2436	66.36	
24.4	2434	66.25	
24.5	2431	66.38	
24.6	2428	66.51	
24.7	2425	66.68	
24.8	2422	66.86	
24.9	2419	66.94	

# KPAU 85 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL
25.0	2417	67.10	
25.1	2415	67.27	
25.2	2411	67.29	
25.3	2408	67.35	
25.4	2406	67.42	
25.5	2404	67.62	
25.6	2401	67.63	
25.7	2398	67.69	
25.8	2395	67.79	
25.9	2393	67.86	
26.0	2391	67.97	
26.1	2388	67.91	
26.2	2383	67.84	
26.3	2379	67.80	
26.4	2393	69.81	corrected from topo map 2377
26.5	2390	69.67	corrected from topo map 2377
26.6	2384	68.79	corrected from topo map 2377
26.7	2377	68.51	corrected from topo map 2377
26.8	2374	68.56	corrected from topo map 2377
26.9	2371	68.51	corrected from topo map 2377
27.0	2368	68.51	corrected from topo map 2377
27.1	2368	68.69	corrected from topo map 2377
27.2	2368	68.88	corrected from topo map 2377
27.3	2367	69.04	corrected from topo map 2377
27.4	2367	69.25	corrected from topo map 2377
27.5	2367	74.22	corrected from topo map 2377
27.6	2367	74.18	corrected from topo map 2377
27.7	2367	74.11	corrected from topo map 2377
27.8	2366	74.06	corrected from topo map 2377
27.9	2366	73.99	corrected from topo map 2377
28.0	2366	73.98	corrected from topo map 2377
28.1	2365	73.89	corrected from topo map 2377
28.2	2365	73.84	corrected from topo map 2377
28.3	2365	73.75	corrected from topo map 2377
28.4	2365	73.72	corrected from topo map 2377
28.5	2364	73.69	corrected from topo map 2377
28.6	2364	73.59	corrected from topo map 2377
28.7	2364	73.58	corrected from topo map 2377
28.8	2363	73.51	corrected from topo map 2377
28.9	2363	73.43	corrected from topo map 2377
29.0	2363	73.42	corrected from topo map 2377
29.1	2363	73.35	corrected from topo map 2377
29.2	2362	73.30	corrected from topo map 2377
29.3	2362	73.23	corrected from topo map 2377
29.4	2361	73.20	corrected from topo map 2377
29.5	2361	73.27	corrected from topo map 2377
29.6	2361	74.39	corrected from topo map 2377
29.7	2360	74.56	corrected from topo map 2377
29.8	2360	74.43	corrected from topo map 2377
29.9	2360	74.74	corrected from topo map 2377

# KPAU 85 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL
30.0	2360	74.95	corrected from topo map 2377
30.1	2359	75.00	corrected from topo map 2377
30.2	2359	75.22	corrected from topo map 2377
30.3	2359	75.40	corrected from topo map 2377
30.4	2358	75.41	corrected from topo map 2377
30.5	2358	75.54	corrected from topo map 2377
30.6	2358	75.69	corrected from topo map 2377
30.7	2357	75.64	corrected from topo map 2377
30.8	2357	75.77	corrected from topo map 2377
30.9	2357	75.88	corrected from topo map 2377
31.0	2356	75.79	corrected from topo map 2377
31.1	2356	75.93	corrected from topo map 2377
31.2	2356	75.96	corrected from topo map 2377
31.3	2356	76.03	corrected from topo map 2377
31.4	2355	75.98	corrected from topo map 2377
31.5	2355	76.03	corrected from topo map 2377
31.6	2355	76.07	corrected from topo map 2377
31.7	2354	76.02	corrected from topo map 2377
31.8	2354	76.22	corrected from topo map 2377
31.9	2354	76.27	corrected from topo map 2377
32.0	2353	76.24	corrected from topo map 2377
32.1	2353	76.21	corrected from topo map 2377
32.2	2353	76.18	corrected from topo map 2377
32.3	2352	76.16	corrected from topo map 2377
32.4	2352	76.13	corrected from topo map 2377
32.5	2352	76.10	corrected from topo map 2377
32.6	2352	76.08	corrected from topo map 2377
32.7	2351	76.05	corrected from topo map 2377
32.8	2351	76.02	corrected from topo map 2377
32.9	2351	76.00	corrected from topo map 2377
33.0	2350	75.97	corrected from topo map 2377
33.1	2350	75.94	corrected from topo map 2377
33.2	2350	75.92	corrected from topo map 2376
33.3	2350	75.89	corrected from topo map 2375
33.4	2349	75.87	corrected from topo map 2372
33.5	2349	75.84	corrected from topo map 2371
33.6	2349	75.81	corrected from topo map 2369
33.7	2349	75.79	corrected from topo map 2367
33.8	2348	75.76	corrected from topo map 2365
33.9	2348	75.74	corrected from topo map 2363
34.0	2348	75.71	corrected from topo map 2361
34.1	2348	75.69	corrected from topo map 2360
34.2	2347	75.66	corrected from topo map 2358
34.3	2347	75.64	corrected from topo map 2355
34.4	2347	75.61	corrected from topo map 2354
34.5	2346	75.58	corrected from topo map 2352
34.6	2346	75.56	corrected from topo map 2350
34.7	2346	75.53	corrected from topo map 2348
34.8	2345	75.51	corrected from topo map 2346
34.9	2345	75.48	corrected from topo map 2345

# KPAU 85 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL
35.0	2345	75.46	corrected from topo map 2343
35.1	2345	75.44	corrected from topo map 2341
35.2	2344	75.41	corrected from topo map 2339
35.3	2344	75.39	corrected from topo map 2337
35.4	2344	75.36	corrected from topo map 2335
35.5	2343	75.34	corrected from topo map 2334
35.6	2343	75.31	corrected from topo map 2331
35.7	2343	75.29	corrected from topo map 2329
35.8	2342	75.26	corrected from topo map 2328
35.9	2342	75.24	corrected from topo map 2326
36.0	2342	75.22	corrected from topo map 2324
36.1	2342	75.19	corrected from topo map 2322
36.2	2341	75.17	corrected from topo map 2320
36.3	2341	75.14	corrected from topo map 2318
36.4	2341	75.12	corrected from topo map 2317
36.5	2341	75.10	corrected from topo map 2315
36.6	2340	75.07	corrected from topo map 2312
36.7	2340	75.05	corrected from topo map 2311
36.8	2340	75.02	corrected from topo map 2309
36.9	2339	75.00	corrected from topo map 2307
37.0	2339	74.98	corrected from topo map 2305
37.1	2339	74.95	corrected from topo map 2303
37.2	2339	74.93	corrected from topo map 2302
37.3	2338	74.91	corrected from topo map 2299
37.4	2338	74.88	corrected from topo map 2298
37.5	2338	74.86	corrected from topo map 2295
37.6	2338	74.84	corrected from topo map 2293
37.7	2337	74.81	corrected from topo map 2292
37.8	2337	74.79	corrected from topo map 2290
37.9	2337	74.77	corrected from topo map 2289
38.0	2337	74.75	corrected from topo map 2286
38.1	2337	74.72	corrected from topo map 2285
38.2	2336	74.70	corrected from topo map 2282
38.3	2336	74.68	corrected from topo map 2281
38.4	2336	74.65	corrected from topo map 2279
38.5	2335	74.63	corrected from topo map 2276
38.6	2335	74.61	corrected from topo map 2275
38.7	2335	74.59	corrected from topo map 2273
38.8	2335	74.56	corrected from topo map 2272
38.9	2335	74.54	corrected from topo map 2269
39.0	2334	74.52	corrected from topo map 2267
39.1	2334	74.50	corrected from topo map 2266
39.2	2334	74.48	corrected from topo map 2264
39.3	2334	74.45	corrected from topo map 2262
39.4	2334	74.43	corrected from topo map 2261
39.5	2333	74.41	corrected from topo map 2258
39.6	2333	74.39	corrected from topo map 2257
39.7	2333	74.37	corrected from topo map 2255
39.8	2333	74.34	corrected from topo map 2253
39.9	2333	74.32	corrected from topo map 2251



# KPAU 85 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL
45.0	2322	73.28	corrected from topo map 2264
45.1	2322	73.26	corrected from topo map 2266
45.2	2322	73.24	corrected from topo map 2267
45.3	2322	73.22	corrected from topo map 2268
45.4	2322	73.20	corrected from topo map 2270
45.5	2321	73.18	corrected from topo map 2271
45.6	2321	73.16	corrected from topo map 2273
45.7	2321	73.14	corrected from topo map 2274
45.8	2321	73.12	corrected from topo map 2275
45.9	2321	73.10	corrected from topo map 2277
46.0	2320	73.09	corrected from topo map 2278
46.1	2320	73.07	corrected from topo map 2280
46.2	2320	73.05	corrected from topo map 2281
46.3	2320	73.03	corrected from topo map 2282
46.4	2320	73.01	corrected from topo map 2283
46.5	2320	72.99	corrected from topo map 2286
46.6	2319	72.97	corrected from topo map 2287
46.7	2319	72.95	corrected from topo map 2289
46.8	2319	72.94	corrected from topo map 2290
46.9	2319	72.92	corrected from topo map 2291
47.0	2319	72.90	corrected from topo map 2293

# KPAU 86 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL
0.0	3277	186.34	
0.1	3274	126.34	
0.2	3230	120.32	
0.3	3189	116.80	
0.4	3149	114.30	
0.5	3120	112.36	
0.6	3085	110.78	
0.7	3025	106.30	
0.8	2987	108.28	
0.9	2973	107.26	
1.0	2960	106.34	
1.1	2940	105.51	
1.2	2923	104.76	
1.3	2901	104.06	
1.4	2875	103.42	
1.5	2847	102.82	
1.6	2802	93.85	
1.7	2790	101.73	
1.8	2782	101.24	
1.9	2775	100.77	
2.0	2768	100.32	
2.1	2759	99.90	
2.2	2753	99.49	
2.3	2748	99.11	
2.4	2742	98.74	
2.5	2727	98.38	
2.6	2719	98.04	
2.7	2720	97.71	
2.8	2728	97.40	
2.9	2738	97.09	
3.0	2732	96.80	
3.1	2714	96.51	
3.2	2702	96.24	
3.3	2690	95.97	
3.4	2675	95.71	
3.5	2659	95.46	
3.6	2650	95.22	
3.7	2643	94.98	
3.8	2639	94.75	
3.9	2634	94.52	
4.0	2629	94.30	
4.1	2627	94.09	
4.2	2626	93.88	
4.3	2625	93.67	
4.4	2625	93.47	
4.5	2624	93.28	
4.6	2633	93.09	
4.7	2659	92.90	
4.8	2678	92.72	
4.9	2671	92.54	

# KPAU 86 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL
5.0	2653	92.36	
5.1	2637	92.19	
5.2	2624	92.02	
5.3	2606	91.86	
5.4	2583	80.23	
5.5	2569	80.93	
5.6	2561	84.04	
5.7	2560	91.22	
5.8	2560	91.07	
5.9	2560	90.92	
6.0	2560	90.78	
6.1	2560	90.63	
6.2	2560	90.49	
6.3	2568	90.35	
6.4	2585	90.22	
6.5	2588	90.08	
6.6	2589	89.95	
6.7	2587	89.82	
6.8	2586	89.69	
6.9	2586	89.56	
7.0	2590	89.44	
7.1	2598	89.32	
7.2	2606	89.19	
7.3	2615	89.07	
7.4	2621	88.96	
7.5	2620	88.84	
7.6	2620	88.72	
7.7	2620	88.61	
7.8	2620	88.50	
7.9	2620	88.39	
8.0	2620	88.28	
8.1	2620	88.17	
8.2	2621	88.06	
8.3	2621	87.96	
8.4	2622	87.86	
8.5	2622	87.75	
8.6	2623	87.65	
8.7	2624	87.55	
8.8	2623	87.45	
8.9	2623	87.35	
9.0	2623	87.26	
9.1	2621	87.16	
9.2	2620	87.07	
9.3	2615	86.97	
9.4	2607	86.88	
9.5	2601	86.79	
9.6	2593	86.70	
9.7	2583	86.61	
9.8	2578	86.52	
9.9	2573	86.43	

# KPAU 86 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL
10.0	2567	86.34	
10.1	2556	86.25	
10.2	2547	86.17	
10.3	2539	86.08	
10.4	2532	86.00	
10.5	2521	85.92	
10.6	2512	83.91	
10.7	2504	83.86	
10.8	2500	83.74	
10.9	2499	83.66	
11.0	2498	83.49	
11.1	2506	85.43	
11.2	2517	85.36	
11.3	2523	85.28	
11.4	2526	85.20	
11.5	2525	85.13	
11.6	2521	85.05	
11.7	2517	84.98	
11.8	2514	84.90	
11.9	2512	84.83	
12.0	2510	84.76	
12.1	2508	84.69	
12.2	2508	84.61	
12.3	2510	84.54	
12.4	2510	84.47	
12.5	2513	84.40	
12.6	2515	84.33	
12.7	2519	84.27	
12.8	2519	84.20	
12.9	2516	84.13	
13.0	2512	84.06	
13.1	2508	84.00	
13.2	2503	83.93	
13.3	2497	83.86	
13.4	2493	83.80	
13.5	2493	83.73	
13.6	2494	83.67	
13.7	2495	83.61	
13.8	2495	83.54	
13.9	2496	83.48	
14.0	2497	83.42	
14.1	2498	83.36	
14.2	2499	83.30	
14.3	2499	83.23	
14.4	2500	83.17	
14.5	2507	83.11	
14.6	2523	83.05	
14.7	2536	82.99	
14.8	2552	82.94	
14.9	2553	82.88	

# KPAU 86 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL
15.0	2540	82.82	
15.1	2529	72.53	
15.2	2530	82.70	
15.3	2539	82.65	
15.4	2547	82.59	
15.5	2552	82.53	
15.6	2557	82.48	
15.7	2571	82.42	
15.8	2586	82.37	
15.9	2593	82.31	
16.0	2599	82.26	
16.1	2605	82.20	
16.2	2612	82.15	
16.3	2614	82.10	
16.4	2615	82.04	
16.5	2617	81.99	
16.6	2618	81.94	
16.7	2601	67.53	
16.8	2586	63.07	
16.9	2574	63.09	
17.0	2564	63.70	
17.1	2542	61.18	
17.2	2507	56.00	
17.3	2499	59.23	
17.4	2499	62.41	
17.5	2499	63.20	
17.6	2499	64.91	
17.7	2499	66.13	
17.8	2499	67.17	
17.9	2499	67.86	
18.0	2499	68.44	
18.1	2499	69.12	
18.2	2499	69.83	
18.3	2499	70.57	
18.4	2501	71.44	
18.5	2511	73.68	
18.6	2519	75.25	
18.7	2525	80.90	
18.8	2529	80.86	
18.9	2531	80.81	
19.0	2536	80.77	
19.1	2550	80.72	
19.2	2553	80.68	
19.3	2557	80.63	
19.4	2558	80.59	
19.5	2564	80.54	
19.6	2571	80.50	
19.7	2576	80.45	
19.8	2586	80.41	
19.9	2596	80.36	

# KPAU 86 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL
20.0	2590	80.32	
20.1	2568	61.05	
20.2	2541	56.71	
20.3	2531	58.78	
20.4	2511	57.53	
20.5	2502	58.93	
20.6	2506	61.69	
20.7	2518	65.33	
20.8	2535	70.18	
20.9	2555	79.94	
21.0	2566	79.90	
21.1	2533	55.13	
21.2	2518	57.05	
21.3	2499	56.46	
21.4	2499	59.82	
21.5	2499	61.99	
21.6	2498	63.40	
21.7	2497	64.57	
21.8	2494	65.14	
21.9	2492	65.90	
22.0	2491	66.49	
22.1	2494	68.21	
22.2	2506	72.05	
22.3	2527	79.38	
22.4	2550	79.34	
22.5	2560	79.30	
22.6	2560	79.26	
22.7	2518	51.42	
22.8	2450	46.12	
22.9	2438	50.83	
23.0	2438	53.67	
23.1	2438	55.60	
23.2	2438	57.01	
23.3	2438	58.21	
23.4	2438	59.28	
23.5	2438	60.03	
23.6	2438	60.51	
23.7	2438	61.27	
23.8	2438	61.89	
23.9	2438	62.46	
24.0	2438	62.97	
24.1	2438	63.62	
24.2	2435	63.51	
24.3	2433	63.61	
24.4	2431	63.68	
24.5	2428	63.50	
24.6	2426	63.69	
24.7	2422	63.77	
24.8	2420	64.01	
24.9	2417	64.22	

# KPAU 86 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL
25.0	2415	64.42	
25.1	2411	64.50	
25.2	2408	64.61	
25.3	2405	64.75	
25.4	2403	64.96	
25.5	2401	65.14	
25.6	2398	65.18	
25.7	2395	65.26	
25.8	2392	65.38	
25.9	2390	65.52	
26.0	2388	65.65	
26.1	2385	65.74	
26.2	2382	65.77	
26.3	2380	65.95	
26.4	2378	65.98	
26.5	2387	67.95	corrected from topo map 2377
26.6	2382	67.44	corrected from topo map 2377
26.7	2376	66.59	corrected from topo map 2377
26.8	2371	66.48	corrected from topo map 2377
26.9	2371	66.71	corrected from topo map 2377
27.0	2371	66.98	corrected from topo map 2377
27.1	2370	67.38	corrected from topo map 2377
27.2	2370	68.04	corrected from topo map 2377
27.3	2369	68.33	corrected from topo map 2377
27.4	2369	68.79	corrected from topo map 2377
27.5	2369	69.11	corrected from topo map 2377
27.6	2368	69.34	corrected from topo map 2377
27.7	2368	69.73	corrected from topo map 2377
27.8	2368	69.95	corrected from topo map 2377
27.9	2368	70.24	corrected from topo map 2377
28.0	2367	70.38	corrected from topo map 2377
28.1	2367	73.53	corrected from topo map 2377
28.2	2367	73.35	corrected from topo map 2377
28.3	2367	73.42	corrected from topo map 2377
28.4	2366	73.30	corrected from topo map 2377
28.5	2366	73.29	corrected from topo map 2377
28.6	2366	73.20	corrected from topo map 2377
28.7	2365	73.16	corrected from topo map 2377
28.8	2365	73.07	corrected from topo map 2377
28.9	2365	73.12	corrected from topo map 2377
29.0	2364	72.98	corrected from topo map 2377
29.1	2364	72.99	corrected from topo map 2377
29.2	2364	72.92	corrected from topo map 2377
29.3	2363	72.86	corrected from topo map 2377
29.4	2363	72.93	corrected from topo map 2377
29.5	2363	72.80	corrected from topo map 2377
29.6	2363	72.73	corrected from topo map 2377
29.7	2363	72.90	corrected from topo map 2377
29.8	2362	73.10	corrected from topo map 2377
29.9	2362	74.20	corrected from topo map 2377

# KPAU 86 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL
30.0	2362	75.27	corrected from topo map 2377
30.1	2361	75.38	corrected from topo map 2377
30.2	2361	74.35	corrected from topo map 2377
30.3	2360	74.34	corrected from topo map 2377
30.4	2360	74.62	corrected from topo map 2377
30.5	2359	74.62	corrected from topo map 2377
30.6	2359	74.85	corrected from topo map 2377
30.7	2359	75.02	corrected from topo map 2377
30.8	2358	75.02	corrected from topo map 2377
30.9	2358	75.19	corrected from topo map 2377
31.0	2358	75.29	corrected from topo map 2377
31.1	2357	75.29	corrected from topo map 2377
31.2	2357	75.37	corrected from topo map 2377
31.3	2357	75.50	corrected from topo map 2377
31.4	2356	75.43	corrected from topo map 2377
31.5	2356	75.57	corrected from topo map 2377
31.6	2356	75.61	corrected from topo map 2377
31.7	2355	75.62	corrected from topo map 2377
31.8	2355	75.62	corrected from topo map 2377
31.9	2354	75.64	corrected from topo map 2377
32.0	2354	75.64	corrected from topo map 2377
32.1	2354	75.70	corrected from topo map 2377
32.2	2354	75.72	corrected from topo map 2377
32.3	2353	75.69	corrected from topo map 2377
32.4	2353	75.71	corrected from topo map 2377
32.5	2353	75.79	corrected from topo map 2377
32.6	2353	75.80	corrected from topo map 2377
32.7	2352	75.96	corrected from topo map 2377
32.8	2352	75.93	corrected from topo map 2377
32.9	2352	76.00	corrected from topo map 2377
33.0	2351	75.97	corrected from topo map 2377
33.1	2351	75.94	corrected from topo map 2377
33.2	2351	75.92	corrected from topo map 2376
33.3	2351	75.89	corrected from topo map 2373
33.4	2350	75.87	corrected from topo map 2372
33.5	2350	75.84	corrected from topo map 2371
33.6	2350	75.81	corrected from topo map 2368
33.7	2349	75.79	corrected from topo map 2366
33.8	2349	75.76	corrected from topo map 2364
33.9	2349	75.74	corrected from topo map 2362
34.0	2348	75.71	corrected from topo map 2361
34.1	2348	75.69	corrected from topo map 2359
34.2	2347	75.66	corrected from topo map 2357
34.3	2347	75.64	corrected from topo map 2355
34.4	2347	75.61	corrected from topo map 2353
34.5	2347	75.58	corrected from topo map 2352
34.6	2346	75.56	corrected from topo map 2349
34.7	2346	75.53	corrected from topo map 2347
34.8	2346	75.51	corrected from topo map 2346
34.9	2345	75.48	corrected from topo map 2344

# KPAU 86 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL
35.0	2345	75.46	corrected from topo map 2342
35.1	2345	75.44	corrected from topo map 2340
35.2	2345	75.41	corrected from topo map 2338
35.3	2344	75.39	corrected from topo map 2336
35.4	2344	75.36	corrected from topo map 2335
35.5	2344	75.34	corrected from topo map 2333
35.6	2344	75.31	corrected from topo map 2330
35.7	2343	75.29	corrected from topo map 2329
35.8	2343	75.26	corrected from topo map 2327
35.9	2343	75.24	corrected from topo map 2325
36.0	2342	75.22	corrected from topo map 2323
36.1	2342	75.19	corrected from topo map 2321
36.2	2342	75.17	corrected from topo map 2319
36.3	2342	75.14	corrected from topo map 2317
36.4	2341	75.12	corrected from topo map 2315
36.5	2341	75.10	corrected from topo map 2313
36.6	2341	75.07	corrected from topo map 2311
36.7	2340	75.05	corrected from topo map 2310
36.8	2340	75.02	corrected from topo map 2308
36.9	2340	75.00	corrected from topo map 2306
37.0	2340	74.98	corrected from topo map 2304
37.1	2339	74.95	corrected from topo map 2302
37.2	2339	74.93	corrected from topo map 2300
37.3	2339	74.91	corrected from topo map 2298
37.4	2339	74.88	corrected from topo map 2296
37.5	2339	74.86	corrected from topo map 2294
37.6	2338	74.84	corrected from topo map 2293
37.7	2338	74.81	corrected from topo map 2291
37.8	2338	74.79	corrected from topo map 2289
37.9	2338	74.77	corrected from topo map 2287
38.0	2337	74.75	corrected from topo map 2285
38.1	2337	74.72	corrected from topo map 2284
38.2	2337	74.70	corrected from topo map 2281
38.3	2337	74.68	corrected from topo map 2279
38.4	2336	74.65	corrected from topo map 2278
38.5	2336	74.63	corrected from topo map 2276
38.6	2336	74.61	corrected from topo map 2274
38.7	2336	74.59	corrected from topo map 2273
38.8	2335	74.56	corrected from topo map 2271
38.9	2335	74.54	corrected from topo map 2268
39.0	2335	74.52	corrected from topo map 2267
39.1	2335	74.50	corrected from topo map 2265
39.2	2335	74.48	corrected from topo map 2264
39.3	2334	74.45	corrected from topo map 2261
39.4	2334	74.43	corrected from topo map 2260
39.5	2334	74.41	corrected from topo map 2259
39.6	2334	74.39	corrected from topo map 2257
39.7	2333	74.37	corrected from topo map 2256
39.8	2333	74.34	corrected from topo map 2254
39.9	2333	74.32	corrected from topo map 2253



# KPAU 86 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL
45.0	2323	73.28	corrected from topo map 2267
45.1	2323	73.26	corrected from topo map 2268
45.2	2323	73.24	corrected from topo map 2269
45.3	2323	73.22	corrected from topo map 2270
45.4	2322	73.20	corrected from topo map 2272
45.5	2322	73.18	corrected from topo map 2273
45.6	2322	73.16	corrected from topo map 2274
45.7	2322	73.14	corrected from topo map 2275
45.8	2322	73.12	corrected from topo map 2276
45.9	2321	73.10	corrected from topo map 2277
46.0	2321	73.09	corrected from topo map 2279
46.1	2321	73.07	corrected from topo map 2280
46.2	2321	73.05	corrected from topo map 2281
46.3	2321	73.03	corrected from topo map 2282
46.4	2321	73.01	corrected from topo map 2283
46.5	2320	72.99	corrected from topo map 2285
46.6	2320	72.97	corrected from topo map 2286
46.7	2320	72.95	corrected from topo map 2287
46.8	2320	72.94	corrected from topo map 2289
46.9	2320	72.92	corrected from topo map 2290
47.0	2320	72.90	corrected from topo map 2291

# KPAU 87 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL
0.0	3277	186.34	
0.1	3274	126.34	
0.2	3230	120.32	
0.3	3189	116.80	
0.4	3149	114.30	
0.5	3120	112.36	
0.6	3086	110.78	
0.7	3024	105.50	
0.8	2986	108.28	
0.9	2971	107.26	
1.0	2958	106.34	
1.1	2938	105.51	
1.2	2919	104.76	
1.3	2897	104.06	
1.4	2868	103.42	
1.5	2835	102.81	
1.6	2800	100.26	
1.7	2787	101.73	
1.8	2779	101.24	
1.9	2772	100.77	
2.0	2765	100.32	
2.1	2756	99.90	
2.2	2749	99.49	
2.3	2745	99.11	
2.4	2738	98.74	
2.5	2721	98.38	
2.6	2713	98.04	
2.7	2714	97.71	
2.8	2721	97.40	
2.9	2727	97.09	
3.0	2718	96.80	
3.1	2702	96.51	
3.2	2693	96.24	
3.3	2684	95.97	
3.4	2671	95.71	
3.5	2655	95.46	
3.6	2646	95.22	
3.7	2639	94.98	
3.8	2636	94.75	
3.9	2632	94.52	
4.0	2629	94.30	
4.1	2626	94.09	
4.2	2624	93.88	
4.3	2622	93.67	
4.4	2622	93.47	
4.5	2621	93.28	
4.6	2623	93.09	
4.7	2640	92.90	
4.8	2664	92.72	
4.9	2660	92.54	

# KPAU 87 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL
5.0	2653	92.36	
5.1	2643	92.19	
5.2	2632	92.02	
5.3	2614	91.86	
5.4	2591	80.83	
5.5	2580	84.84	
5.6	2566	84.94	
5.7	2561	91.22	
5.8	2560	91.07	
5.9	2560	90.92	
6.0	2560	90.78	
6.1	2560	90.63	
6.2	2559	90.49	
6.3	2562	90.35	
6.4	2572	90.22	
6.5	2576	90.08	
6.6	2575	89.95	
6.7	2572	89.82	
6.8	2571	89.69	
6.9	2570	89.56	
7.0	2576	89.44	
7.1	2589	89.32	
7.2	2605	89.19	
7.3	2616	89.07	
7.4	2621	88.96	
7.5	2620	88.84	
7.6	2620	88.72	
7.7	2621	88.61	
7.8	2620	88.50	
7.9	2620	88.39	
8.0	2620	88.28	
8.1	2620	88.17	
8.2	2620	88.06	
8.3	2621	87.96	
8.4	2620	87.86	
8.5	2620	87.75	
8.6	2621	87.65	
8.7	2621	87.55	
8.8	2621	87.45	
8.9	2621	87.35	
9.0	2621	87.26	
9.1	2621	87.16	
9.2	2620	87.07	
9.3	2609	86.97	
9.4	2597	86.88	
9.5	2583	77.40	
9.6	2568	74.61	
9.7	2561	76.10	
9.8	2561	80.28	
9.9	2556	86.43	

# KPAU 87 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL
10.0	2546	80.50	
10.1	2532	77.94	
10.2	2527	79.01	
10.3	2522	80.22	
10.4	2517	86.00	
10.5	2509	85.37	
10.6	2501	83.73	
10.7	2498	83.77	
10.8	2496	83.74	
10.9	2496	84.23	
11.0	2497	85.51	
11.1	2498	85.43	
11.2	2499	85.36	
11.3	2501	85.28	
11.4	2503	85.20	
11.5	2502	85.13	
11.6	2501	85.05	
11.7	2500	84.98	
11.8	2499	84.90	
11.9	2498	84.83	
12.0	2498	84.76	
12.1	2498	84.69	
12.2	2498	84.61	
12.3	2498	84.54	
12.4	2498	84.47	
12.5	2499	84.40	
12.6	2500	84.33	
12.7	2502	84.27	
12.8	2502	84.20	
12.9	2503	84.13	
13.0	2502	84.06	
13.1	2500	84.00	
13.2	2498	83.93	
13.3	2493	83.86	
13.4	2489	83.80	
13.5	2490	83.73	
13.6	2491	83.67	
13.7	2491	83.61	
13.8	2492	83.54	
13.9	2493	83.48	
14.0	2494	83.42	
14.1	2495	83.36	
14.2	2496	83.30	
14.3	2497	83.23	
14.4	2497	83.17	
14.5	2498	83.11	
14.6	2500	83.05	
14.7	2504	82.99	
14.8	2507	82.94	
14.9	2507	82.88	

# KPAU 87 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL
15.0	2503	82.82	
15.1	2500	82.76	
15.2	2506	82.70	
15.3	2516	82.65	
15.4	2524	82.59	
15.5	2530	82.53	
15.6	2538	82.48	
15.7	2555	82.42	
15.8	2563	82.37	
15.9	2564	82.31	
16.0	2567	82.26	
16.1	2574	82.20	
16.2	2577	82.15	
16.3	2577	82.10	
16.4	2575	82.04	
16.5	2573	81.99	
16.6	2567	81.94	
16.7	2565	81.89	
16.8	2567	81.84	
16.9	2564	81.78	
17.0	2554	81.73	
17.1	2519	56.58	
17.2	2499	57.59	
17.3	2499	61.77	
17.4	2499	64.52	
17.5	2499	66.80	
17.6	2499	68.50	
17.7	2499	70.04	
17.8	2499	71.53	
17.9	2499	72.71	
18.0	2499	73.91	
18.1	2499	75.07	
18.2	2499	81.14	
18.3	2499	81.09	
18.4	2499	81.04	
18.5	2499	81.00	
18.6	2499	80.95	
18.7	2499	80.90	
18.8	2499	80.86	
18.9	2499	80.81	
19.0	2509	80.77	
19.1	2528	80.72	
19.2	2544	80.68	
19.3	2554	80.63	
19.4	2568	80.59	
19.5	2590	80.54	
19.6	2607	80.50	
19.7	2617	80.45	
19.8	2621	80.41	
19.9	2633	80.36	

# KPAU 87 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL
20.0	2626	80.32	
20.1	2610	66.45	
20.2	2585	58.65	
20.3	2555	54.84	
20.4	2500	49.18	
20.5	2499	55.16	
20.6	2499	57.29	
20.7	2510	60.32	
20.8	2545	66.07	
20.9	2609	79.94	
21.0	2662	79.90	
21.1	2681	79.86	
21.2	2674	79.81	
21.3	2629	49.67	
21.4	2548	43.07	
21.5	2495	44.46	
21.6	2485	48.25	
21.7	2474	49.82	
21.8	2460	50.60	
21.9	2450	51.32	
22.0	2443	52.28	
22.1	2438	53.09	
22.2	2447	54.34	
22.3	2450	55.79	
22.4	2455	56.67	
22.5	2466	58.02	
22.6	2476	59.38	
22.7	2466	58.93	
22.8	2440	55.37	
22.9	2439	56.67	
23.0	2438	57.22	
23.1	2438	58.12	
23.2	2438	57.35	
23.3	2438	57.79	
23.4	2438	58.56	
23.5	2438	59.30	
23.6	2438	59.71	
23.7	2438	60.09	
23.8	2438	60.60	
23.9	2438	60.99	
24.0	2438	61.32	
24.1	2436	61.29	
24.2	2433	60.59	
24.3	2431	60.58	
24.4	2428	60.24	
24.5	2426	60.28	
24.6	2422	60.38	
24.7	2419	60.48	
24.8	2416	60.75	
24.9	2414	60.72	

# KPAU 87 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL
25.0	2412	60.77	
25.1	2408	61.06	
25.2	2406	60.97	
25.3	2403	61.15	
25.4	2401	61.20	
25.5	2398	61.43	
25.6	2395	61.54	
25.7	2393	61.62	
25.8	2391	61.59	
25.9	2389	61.62	
26.0	2387	61.86	
26.1	2384	61.99	
26.2	2382	61.98	
26.3	2379	61.92	
26.4	2378	62.04	
26.5	2377	62.25	corrected from topo map 2377
26.6	2374	62.40	corrected from topo map 2377
26.7	2374	62.38	corrected from topo map 2377
26.8	2373	62.51	corrected from topo map 2377
26.9	2373	62.74	corrected from topo map 2377
27.0	2372	62.83	corrected from topo map 2377
27.1	2371	62.88	corrected from topo map 2377
27.2	2371	63.60	corrected from topo map 2377
27.3	2371	64.26	corrected from topo map 2377
27.4	2370	64.28	corrected from topo map 2377
27.5	2370	64.65	corrected from topo map 2377
27.6	2370	65.14	corrected from topo map 2377
27.7	2369	65.18	corrected from topo map 2377
27.8	2369	65.41	corrected from topo map 2377
27.9	2369	65.84	corrected from topo map 2377
28.0	2368	65.87	corrected from topo map 2377
28.1	2368	65.97	corrected from topo map 2377
28.2	2368	66.33	corrected from topo map 2377
28.3	2367	66.29	corrected from topo map 2377
28.4	2367	66.47	corrected from topo map 2377
28.5	2367	66.81	corrected from topo map 2377
28.6	2367	66.80	corrected from topo map 2377
28.7	2366	66.86	corrected from topo map 2377
28.8	2366	67.10	corrected from topo map 2377
28.9	2366	67.20	corrected from topo map 2377
29.0	2365	67.25	corrected from topo map 2377
29.1	2365	67.38	corrected from topo map 2377
29.2	2365	67.50	corrected from topo map 2377
29.3	2364	67.61	corrected from topo map 2377
29.4	2364	67.73	corrected from topo map 2377
29.5	2364	67.81	corrected from topo map 2377
29.6	2363	67.87	corrected from topo map 2377
29.7	2363	67.95	corrected from topo map 2377
29.8	2363	68.07	corrected from topo map 2377
29.9	2363	68.30	corrected from topo map 2377

# KPAU 87 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL
30.0	2362	68.19	corrected from topo map 2377
30.1	2362	68.42	corrected from topo map 2377
30.2	2362	68.42	corrected from topo map 2377
30.3	2361	68.51	corrected from topo map 2377
30.4	2361	68.60	corrected from topo map 2377
30.5	2361	68.69	corrected from topo map 2377
30.6	2360	68.78	corrected from topo map 2377
30.7	2360	68.74	corrected from topo map 2377
30.8	2360	68.96	corrected from topo map 2377
30.9	2360	68.91	corrected from topo map 2377
31.0	2359	69.06	corrected from topo map 2377
31.1	2359	69.03	corrected from topo map 2377
31.2	2358	69.15	corrected from topo map 2377
31.3	2358	69.15	corrected from topo map 2377
31.4	2358	69.30	corrected from topo map 2377
31.5	2357	75.90	corrected from topo map 2377
31.6	2357	76.02	corrected from topo map 2377
31.7	2357	76.02	corrected from topo map 2377
31.8	2356	75.98	corrected from topo map 2377
31.9	2356	75.99	corrected from topo map 2377
32.0	2356	76.05	corrected from topo map 2377
32.1	2355	75.97	corrected from topo map 2377
32.2	2355	76.11	corrected from topo map 2377
32.3	2355	76.16	corrected from topo map 2377
32.4	2354	76.13	corrected from topo map 2377
32.5	2354	76.10	corrected from topo map 2377
32.6	2354	76.08	corrected from topo map 2377
32.7	2353	76.05	corrected from topo map 2377
32.8	2353	76.02	corrected from topo map 2377
32.9	2353	76.00	corrected from topo map 2377
33.0	2352	75.97	corrected from topo map 2377
33.1	2352	75.94	corrected from topo map 2377
33.2	2352	75.92	corrected from topo map 2375
33.3	2352	75.89	corrected from topo map 2373
33.4	2351	75.87	corrected from topo map 2371
33.5	2351	75.84	corrected from topo map 2369
33.6	2350	75.81	corrected from topo map 2367
33.7	2350	75.79	corrected from topo map 2365
33.8	2350	75.76	corrected from topo map 2364
33.9	2350	75.74	corrected from topo map 2362
34.0	2349	75.71	corrected from topo map 2360
34.1	2349	75.69	corrected from topo map 2358
34.2	2349	75.66	corrected from topo map 2356
34.3	2348	75.64	corrected from topo map 2354
34.4	2348	75.61	corrected from topo map 2353
34.5	2348	75.58	corrected from topo map 2350
34.6	2347	75.56	corrected from topo map 2348
34.7	2347	75.53	corrected from topo map 2347
34.8	2347	75.51	corrected from topo map 2345
34.9	2347	75.48	corrected from topo map 2343

# KPAU 87 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL
35.0	2346	75.46	corrected from topo map 2341
35.1	2346	75.44	corrected from topo map 2339
35.2	2346	75.41	corrected from topo map 2337
35.3	2345	75.39	corrected from topo map 2336
35.4	2345	75.36	corrected from topo map 2333
35.5	2345	75.34	corrected from topo map 2331
35.6	2345	75.31	corrected from topo map 2329
35.7	2344	75.29	corrected from topo map 2328
35.8	2344	75.26	corrected from topo map 2326
35.9	2344	75.24	corrected from topo map 2324
36.0	2343	75.22	corrected from topo map 2322
36.1	2343	75.19	corrected from topo map 2320
36.2	2343	75.17	corrected from topo map 2318
36.3	2343	75.14	corrected from topo map 2317
36.4	2342	75.12	corrected from topo map 2315
36.5	2342	75.10	corrected from topo map 2312
36.6	2342	75.07	corrected from topo map 2311
36.7	2342	75.05	corrected from topo map 2309
36.8	2341	75.02	corrected from topo map 2307
36.9	2341	75.00	corrected from topo map 2305
37.0	2341	74.98	corrected from topo map 2303
37.1	2341	74.95	corrected from topo map 2302
37.2	2340	74.93	corrected from topo map 2300
37.3	2340	74.91	corrected from topo map 2297
37.4	2340	74.88	corrected from topo map 2296
37.5	2340	74.86	corrected from topo map 2294
37.6	2339	74.84	corrected from topo map 2292
37.7	2339	74.81	corrected from topo map 2291
37.8	2339	74.79	corrected from topo map 2288
37.9	2338	74.77	corrected from topo map 2286
38.0	2338	74.75	corrected from topo map 2285
38.1	2338	74.72	corrected from topo map 2283
38.2	2338	74.70	corrected from topo map 2281
38.3	2337	74.68	corrected from topo map 2279
38.4	2337	74.65	corrected from topo map 2277
38.5	2337	74.63	corrected from topo map 2276
38.6	2336	74.61	corrected from topo map 2275
38.7	2336	74.59	corrected from topo map 2272
38.8	2336	74.56	corrected from topo map 2271
38.9	2335	74.54	corrected from topo map 2269
39.0	2335	74.52	corrected from topo map 2268
39.1	2335	74.50	corrected from topo map 2266
39.2	2335	74.48	corrected from topo map 2264
39.3	2335	74.45	corrected from topo map 2263
39.4	2335	74.43	corrected from topo map 2262
39.5	2335	74.41	corrected from topo map 2261
39.6	2335	74.39	corrected from topo map 2260
39.7	2334	74.37	corrected from topo map 2259
39.8	2334	74.34	corrected from topo map 2258
39.9	2334	74.32	corrected from topo map 2257



# KPAU 87 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL
45.0	2323	73.28	corrected from topo map 2273
45.1	2323	73.26	corrected from topo map 2274
45.2	2323	73.24	corrected from topo map 2275
45.3	2323	73.22	corrected from topo map 2276
45.4	2323	73.20	corrected from topo map 2277
45.5	2322	73.18	corrected from topo map 2279
45.6	2322	73.16	corrected from topo map 2279
45.7	2322	73.14	corrected from topo map 2280
45.8	2322	73.12	corrected from topo map 2281
45.9	2322	73.10	corrected from topo map 2283
46.0	2322	73.09	corrected from topo map 2283
46.1	2321	73.07	corrected from topo map 2284
46.2	2321	73.05	corrected from topo map 2286
46.3	2321	73.03	corrected from topo map 2286
46.4	2321	73.01	corrected from topo map 2287
46.5	2321	72.99	corrected from topo map 2289
46.6	2321	72.97	corrected from topo map 2289
46.7	2320	72.95	corrected from topo map 2290
46.8	2320	72.94	corrected from topo map 2292
46.9	2320	72.92	corrected from topo map 2293
47.0	2320	72.90	corrected from topo map 2293

# KPAU 88 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL
0.0	3277	186.34	
0.1	3275	126.34	
0.2	3230	120.32	
0.3	3189	116.80	
0.4	3149	114.30	
0.5	3120	112.36	
0.6	3085	110.78	
0.7	3024	105.84	
0.8	2985	108.28	
0.9	2970	107.26	
1.0	2956	106.34	
1.1	2936	105.51	
1.2	2915	104.76	
1.3	2893	104.06	
1.4	2860	103.42	
1.5	2823	101.28	
1.6	2798	101.38	
1.7	2784	101.73	
1.8	2776	101.24	
1.9	2769	100.77	
2.0	2762	100.32	
2.1	2752	99.90	
2.2	2746	99.49	
2.3	2740	99.11	
2.4	2732	98.74	
2.5	2714	98.38	
2.6	2707	98.04	
2.7	2708	97.71	
2.8	2713	97.40	
2.9	2716	97.09	
3.0	2705	96.80	
3.1	2692	96.51	
3.2	2685	96.24	
3.3	2677	95.97	
3.4	2666	95.71	
3.5	2652	95.46	
3.6	2642	95.22	
3.7	2634	94.98	
3.8	2632	94.75	
3.9	2630	94.52	
4.0	2628	94.30	
4.1	2625	94.09	
4.2	2623	93.88	
4.3	2621	93.67	
4.4	2621	93.47	
4.5	2621	93.28	
4.6	2620	93.09	
4.7	2630	92.90	
4.8	2650	92.72	
4.9	2654	92.54	

# KPAU 88 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL
5.0	2654	92.36	
5.1	2651	92.19	
5.2	2647	92.02	
5.3	2627	91.86	
5.4	2604	78.58	
5.5	2596	84.90	
5.6	2581	83.89	
5.7	2568	84.48	
5.8	2560	91.07	
5.9	2560	90.92	
6.0	2560	90.78	
6.1	2560	90.63	
6.2	2558	90.49	
6.3	2558	90.35	
6.4	2561	90.22	
6.5	2563	90.08	
6.6	2563	89.95	
6.7	2561	89.82	
6.8	2561	89.69	
6.9	2561	89.56	
7.0	2564	89.44	
7.1	2581	89.32	
7.2	2603	89.19	
7.3	2619	89.07	
7.4	2620	88.96	
7.5	2620	88.84	
7.6	2618	88.72	
7.7	2619	88.61	
7.8	2620	88.50	
7.9	2620	88.39	
8.0	2620	88.28	
8.1	2620	88.17	
8.2	2619	88.06	
8.3	2620	87.96	
8.4	2620	87.86	
8.5	2620	87.75	
8.6	2620	87.65	
8.7	2620	87.55	
8.8	2621	87.45	
8.9	2620	87.35	
9.0	2620	87.26	
9.1	2616	87.16	
9.2	2609	87.07	
9.3	2599	86.97	
9.4	2589	86.88	
9.5	2574	79.46	
9.6	2559	75.68	
9.7	2553	77.79	
9.8	2544	77.86	
9.9	2534	77.44	

# KPAU 88 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL
10.0	2520	75.80	
10.1	2506	74.70	
10.2	2508	78.18	
10.3	2508	80.53	
10.4	2505	85.57	
10.5	2500	83.92	
10.6	2497	83.88	
10.7	2495	84.30	
10.8	2493	85.41	
10.9	2493	85.59	
11.0	2495	85.51	
11.1	2495	85.43	
11.2	2497	85.36	
11.3	2497	85.28	
11.4	2497	85.20	
11.5	2497	85.13	
11.6	2496	85.05	
11.7	2495	84.98	
11.8	2495	84.90	
11.9	2494	84.83	
12.0	2494	84.76	
12.1	2494	84.69	
12.2	2494	84.61	
12.3	2494	84.54	
12.4	2495	84.47	
12.5	2496	84.40	
12.6	2497	84.33	
12.7	2498	84.27	
12.8	2498	84.20	
12.9	2498	84.13	
13.0	2497	84.06	
13.1	2496	84.00	
13.2	2493	83.93	
13.3	2489	83.86	
13.4	2487	83.80	
13.5	2487	83.73	
13.6	2488	83.67	
13.7	2489	83.61	
13.8	2489	83.54	
13.9	2491	83.48	
14.0	2491	83.42	
14.1	2492	83.36	
14.2	2494	83.30	
14.3	2494	83.23	
14.4	2495	83.17	
14.5	2496	83.11	
14.6	2496	83.05	
14.7	2497	82.99	
14.8	2497	82.94	
14.9	2498	82.88	

# KPAU 88 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL
15.0	2498	82.82	
15.1	2498	82.76	
15.2	2498	82.70	
15.3	2499	82.65	
15.4	2502	82.59	
15.5	2502	82.53	
15.6	2509	82.48	
15.7	2527	82.42	
15.8	2538	82.37	
15.9	2547	82.31	
16.0	2554	82.26	
16.1	2560	82.20	
16.2	2560	82.15	
16.3	2561	82.10	
16.4	2561	82.04	
16.5	2560	81.99	
16.6	2553	81.94	
16.7	2541	74.86	
16.8	2526	67.19	
16.9	2511	64.87	
17.0	2499	64.69	
17.1	2499	67.78	
17.2	2499	69.90	
17.3	2499	71.84	
17.4	2499	73.43	
17.5	2499	74.94	
17.6	2499	81.43	
17.7	2499	81.38	
17.8	2499	81.33	
17.9	2499	81.28	
18.0	2499	81.24	
18.1	2499	81.19	
18.2	2499	81.14	
18.3	2499	81.09	
18.4	2499	81.04	
18.5	2499	81.00	
18.6	2499	80.95	
18.7	2503	80.90	
18.8	2519	80.86	
18.9	2544	80.81	
19.0	2557	80.77	
19.1	2559	80.72	
19.2	2567	80.68	
19.3	2591	80.63	
19.4	2620	80.59	
19.5	2651	80.54	
19.6	2666	80.50	
19.7	2659	80.45	
19.8	2601	49.32	
19.9	2540	47.32	

# KPAU 88 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL
20.0	2527	51.30	
20.1	2517	53.35	
20.2	2511	54.71	
20.3	2498	55.02	
20.4	2497	56.42	
20.5	2497	57.57	
20.6	2498	58.81	
20.7	2499	58.92	
20.8	2518	62.32	
20.9	2539	65.26	
21.0	2556	67.70	
21.1	2580	71.26	
21.2	2602	74.89	
21.3	2609	79.77	
21.4	2582	56.73	
21.5	2526	47.97	
21.6	2477	47.19	
21.7	2449	49.01	
21.8	2438	51.23	
21.9	2438	53.56	
22.0	2438	55.23	
22.1	2438	56.15	
22.2	2438	57.14	
22.3	2438	57.54	
22.4	2438	59.02	
22.5	2438	59.47	
22.6	2438	59.98	
22.7	2438	60.53	
22.8	2438	61.03	
22.9	2438	61.54	
23.0	2438	62.00	
23.1	2438	62.59	
23.2	2438	63.04	
23.3	2438	62.64	
23.4	2438	62.83	
23.5	2438	63.35	
23.6	2438	63.86	
23.7	2438	64.21	
23.8	2438	64.52	
23.9	2438	64.74	
24.0	2437	64.91	
24.1	2434	64.74	
24.2	2431	64.32	
24.3	2428	64.04	
24.4	2426	64.22	
24.5	2423	64.32	
24.6	2419	64.49	
24.7	2416	64.63	
24.8	2414	64.60	
24.9	2411	64.69	

# KPAU 88 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL	
25.0	2409	64.90		
25.1	2405	64.93		
25.2	2403	65.06		
25.3	2400	65.00		
25.4	2397	65.13		
25.5	2395	65.30		
25.6	2391	65.30		
25.7	2389	65.41		
25.8	2387	65.43		
25.9	2385	65.48		
26.0	2382	65.62		
26.1	2380	65.71		
26.2	2378	65.84		
26.3	2381	66.08	corrected from topo map	2377
26.4	2377	66.08	corrected from topo map	2377
26.5	2377	66.33	corrected from topo map	2377
26.6	2376	66.49	corrected from topo map	2377
26.7	2376	66.56	corrected from topo map	2377
26.8	2374	66.61	corrected from topo map	2377
26.9	2374	66.84	corrected from topo map	2377
27.0	2374	67.07	corrected from topo map	2377
27.1	2373	67.07	corrected from topo map	2377
27.2	2373	67.67	corrected from topo map	2377
27.3	2372	68.12	corrected from topo map	2377
27.4	2372	68.47	corrected from topo map	2377
27.5	2371	68.61	corrected from topo map	2377
27.6	2371	68.96	corrected from topo map	2377
27.7	2371	69.23	corrected from topo map	2377
27.8	2371	69.50	corrected from topo map	2377
27.9	2370	69.59	corrected from topo map	2377
28.0	2370	69.84	corrected from topo map	2377
28.1	2370	70.07	corrected from topo map	2377
28.2	2369	73.58	corrected from topo map	2377
28.3	2369	73.51	corrected from topo map	2377
28.4	2368	73.49	corrected from topo map	2377
28.5	2368	73.44	corrected from topo map	2377
28.6	2368	74.70	corrected from topo map	2377
28.7	2368	75.82	corrected from topo map	2377
28.8	2367	75.90	corrected from topo map	2377
28.9	2367	76.95	corrected from topo map	2377
29.0	2367	75.19	corrected from topo map	2377
29.1	2367	75.53	corrected from topo map	2377
29.2	2366	75.57	corrected from topo map	2377
29.3	2366	75.68	corrected from topo map	2377
29.4	2366	75.94	corrected from topo map	2377
29.5	2365	75.88	corrected from topo map	2377
29.6	2365	76.00	corrected from topo map	2377
29.7	2365	76.16	corrected from topo map	2377
29.8	2364	76.07	corrected from topo map	2377
29.9	2364	76.24	corrected from topo map	2377

# KPAU 88 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL
30.0	2363	76.21	corrected from topo map 2377
30.1	2363	76.30	corrected from topo map 2377
30.2	2363	76.36	corrected from topo map 2377
30.3	2363	76.41	corrected from topo map 2377
30.4	2362	76.37	corrected from topo map 2377
30.5	2361	76.34	corrected from topo map 2377
30.6	2361	76.40	corrected from topo map 2377
30.7	2361	76.46	corrected from topo map 2377
30.8	2360	76.40	corrected from topo map 2377
30.9	2360	76.44	corrected from topo map 2377
31.0	2360	76.41	corrected from topo map 2377
31.1	2360	76.49	corrected from topo map 2377
31.2	2359	76.39	corrected from topo map 2377
31.3	2359	76.43	corrected from topo map 2377
31.4	2359	76.40	corrected from topo map 2377
31.5	2358	76.37	corrected from topo map 2377
31.6	2358	76.35	corrected from topo map 2377
31.7	2357	76.32	corrected from topo map 2377
31.8	2357	76.29	corrected from topo map 2377
31.9	2357	76.27	corrected from topo map 2377
32.0	2356	76.24	corrected from topo map 2377
32.1	2356	76.21	corrected from topo map 2377
32.2	2356	76.18	corrected from topo map 2377
32.3	2356	76.16	corrected from topo map 2377
32.4	2356	76.13	corrected from topo map 2377
32.5	2355	76.10	corrected from topo map 2377
32.6	2355	76.08	corrected from topo map 2377
32.7	2355	76.05	corrected from topo map 2377
32.8	2354	76.02	corrected from topo map 2377
32.9	2354	76.00	corrected from topo map 2377
33.0	2354	75.97	corrected from topo map 2377
33.1	2353	75.94	corrected from topo map 2376
33.2	2353	75.92	corrected from topo map 2375
33.3	2353	75.89	corrected from topo map 2372
33.4	2352	75.87	corrected from topo map 2371
33.5	2352	75.84	corrected from topo map 2368
33.6	2352	75.81	corrected from topo map 2366
33.7	2351	75.79	corrected from topo map 2365
33.8	2351	75.76	corrected from topo map 2363
33.9	2351	75.74	corrected from topo map 2361
34.0	2350	75.71	corrected from topo map 2359
34.1	2350	75.69	corrected from topo map 2358
34.2	2350	75.66	corrected from topo map 2355
34.3	2350	75.64	corrected from topo map 2354
34.4	2349	75.61	corrected from topo map 2352
34.5	2349	75.58	corrected from topo map 2349
34.6	2349	75.56	corrected from topo map 2348
34.7	2348	75.53	corrected from topo map 2346
34.8	2348	75.51	corrected from topo map 2345
34.9	2348	75.48	corrected from topo map 2342

# KPAU 88 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL
35.0	2347	75.46	corrected from topo map 2340
35.1	2347	75.44	corrected from topo map 2339
35.2	2347	75.41	corrected from topo map 2337
35.3	2347	75.39	corrected from topo map 2334
35.4	2347	75.36	corrected from topo map 2332
35.5	2346	75.34	corrected from topo map 2330
35.6	2346	75.31	corrected from topo map 2329
35.7	2346	75.29	corrected from topo map 2328
35.8	2345	75.26	corrected from topo map 2326
35.9	2345	75.24	corrected from topo map 2323
36.0	2345	75.22	corrected from topo map 2322
36.1	2345	75.19	corrected from topo map 2320
36.2	2344	75.17	corrected from topo map 2318
36.3	2344	75.14	corrected from topo map 2316
36.4	2344	75.12	corrected from topo map 2314
36.5	2343	75.10	corrected from topo map 2312
36.6	2343	75.07	corrected from topo map 2310
36.7	2343	75.05	corrected from topo map 2309
36.8	2343	75.02	corrected from topo map 2306
36.9	2342	75.00	corrected from topo map 2304
37.0	2342	74.98	corrected from topo map 2303
37.1	2342	74.95	corrected from topo map 2301
37.2	2341	74.93	corrected from topo map 2299
37.3	2341	74.91	corrected from topo map 2297
37.4	2341	74.88	corrected from topo map 2295
37.5	2340	74.86	corrected from topo map 2293
37.6	2340	74.84	corrected from topo map 2292
37.7	2340	74.81	corrected from topo map 2289
37.8	2339	74.79	corrected from topo map 2288
37.9	2339	74.77	corrected from topo map 2286
38.0	2339	74.75	corrected from topo map 2285
38.1	2339	74.72	corrected from topo map 2283
38.2	2338	74.70	corrected from topo map 2281
38.3	2338	74.68	corrected from topo map 2279
38.4	2338	74.65	corrected from topo map 2278
38.5	2338	74.63	corrected from topo map 2277
38.6	2338	74.61	corrected from topo map 2275
38.7	2337	74.59	corrected from topo map 2274
38.8	2337	74.56	corrected from topo map 2273
38.9	2337	74.54	corrected from topo map 2272
39.0	2337	74.52	corrected from topo map 2271
39.1	2337	74.50	corrected from topo map 2270
39.2	2336	74.48	corrected from topo map 2269
39.3	2336	74.45	corrected from topo map 2268
39.4	2336	74.43	corrected from topo map 2267
39.5	2336	74.41	corrected from topo map 2266
39.6	2335	74.39	corrected from topo map 2265
39.7	2335	74.37	corrected from topo map 2264
39.8	2335	74.34	corrected from topo map 2264
39.9	2335	74.32	corrected from topo map 2264



# KPAU 88 Degree Radial

## Corrected Terrain Data and Longley-Rice Prediction

Distance from Transmitter kilometers	Terrain Elevation meters AMSL	Longley-Rice Prediction dBu F(50,50)	Where Corrected, the Original 3-Sec Terrain Elevation was meters AMSL
45.0	2324	73.28	corrected from topo map 2282
45.1	2324	73.26	corrected from topo map 2283
45.2	2324	73.24	corrected from topo map 2284
45.3	2323	73.22	corrected from topo map 2285
45.4	2323	73.20	corrected from topo map 2286
45.5	2323	73.18	corrected from topo map 2287
45.6	2323	73.16	corrected from topo map 2288
45.7	2323	73.14	corrected from topo map 2288
45.8	2322	73.12	corrected from topo map 2289
45.9	2322	73.10	corrected from topo map 2290
46.0	2322	73.09	corrected from topo map 2291
46.1	2322	73.07	corrected from topo map 2292
46.2	2322	73.05	corrected from topo map 2293
46.3	2321	73.03	corrected from topo map 2294
46.4	2321	73.01	corrected from topo map 2294
46.5	2321	72.99	corrected from topo map 2295
46.6	2321	72.97	corrected from topo map 2296
46.7	2321	72.95	corrected from topo map 2297
46.8	2321	72.94	corrected from topo map 2298
46.9	2321	72.92	corrected from topo map 2298
47.0	2320	72.90	corrected from topo map 2299