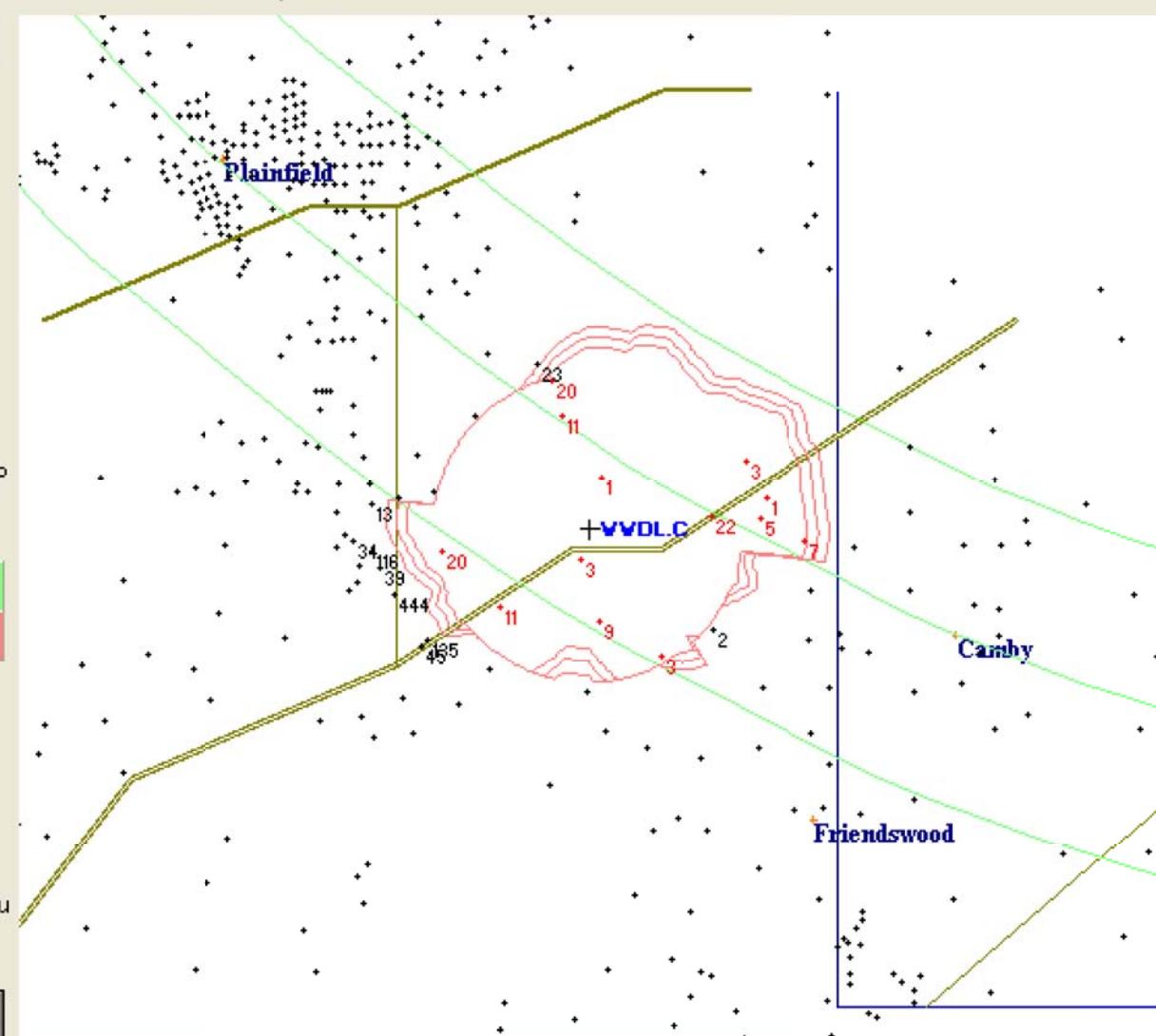


TV6 Calculation for Plainfield, IN

TV6 Call sign	<input type="text" value="WRTV"/>	Fcc Search
		81.5 dBu
City	<input type="text" value="Indianapolis"/>	State
	<input type="text" value="IN"/>	
COR AMSL (m)	<input type="text" value="531"/>	HAAT(m)
	<input type="text" value="279"/>	
Latitude	<input type="text" value="395357"/>	Longitude
	<input type="text" value="861204"/>	
TV ERP (kW)		
<input type="text" value="100.000"/>		
FM Horizontal ERP		
<input type="text" value="0.650"/>		
<input checked="" type="checkbox"/> Outside City Of 50k		
<input type="button" value="81"/>	<input type="button" value="83"/>	<input type="button" value="1"/>
<input type="button" value="TV"/>	<input type="button" value="FM"/>	
Plot Scale		
<input type="button" value="5000"/>	<input checked="" type="checkbox"/> DLG	<input type="checkbox"/> AJPI
<input checked="" type="checkbox"/> Hide Zeros <input checked="" type="checkbox"/> Plot All Centroids <input checked="" type="checkbox"/> Plot Inside Centroid Counts <input type="checkbox"/> Plot All Centroid Counts <input checked="" type="checkbox"/> Plot Contours <input type="checkbox"/> Print All Centroids to <input type="text" value="-3"/> dBu <input type="checkbox"/> Print Centroids <input checked="" type="checkbox"/> Print TV Contour Table		
<input type="button" value="Comp"/> <input type="button" value="Copy F"/> <input type="button" value="PrintText"/> <input type="button" value="Print Form"/>		



Channel Six TV Protection Study

WRTV 06 100.000kW ERP 531.0M COR AMSL 279.0M HAAT Lat. 395357 Lon. 861204
 WWDL.C 217 0.650kW ERP 274.0M COR AMSL 42.9M HAAT Lat. 394019 Lon. 862130

Distance from TV to FM 28.5979km Azi 28.1degr Rev Azi 208.1 degr

Cutoff radius for channel 217 is 174 km

The FM horizontal polarization component is 0.650 kW,
 and the area of just perceptible interference does not intersect a city of 50k,
 so the effective ERP is $(Pv/40+Ph) 0.6662\text{ kW}$

The TV6 signal strength at the FM transmit site is 81.5 dBu

This strength is inside the 68 dBu Grade A contour,
 preventing a 6 dB bonus to be applied to the allowable FM signal
 to F centroids (centroids in the angles between the FM station and the TV station)

TV Contour	Undesired/Desired Ratio	Total	Directional Total
81	6.1	87.1	93.1
82	6.0	88.0	94.0
83	5.8	88.8	94.8

Population in affected area 116