
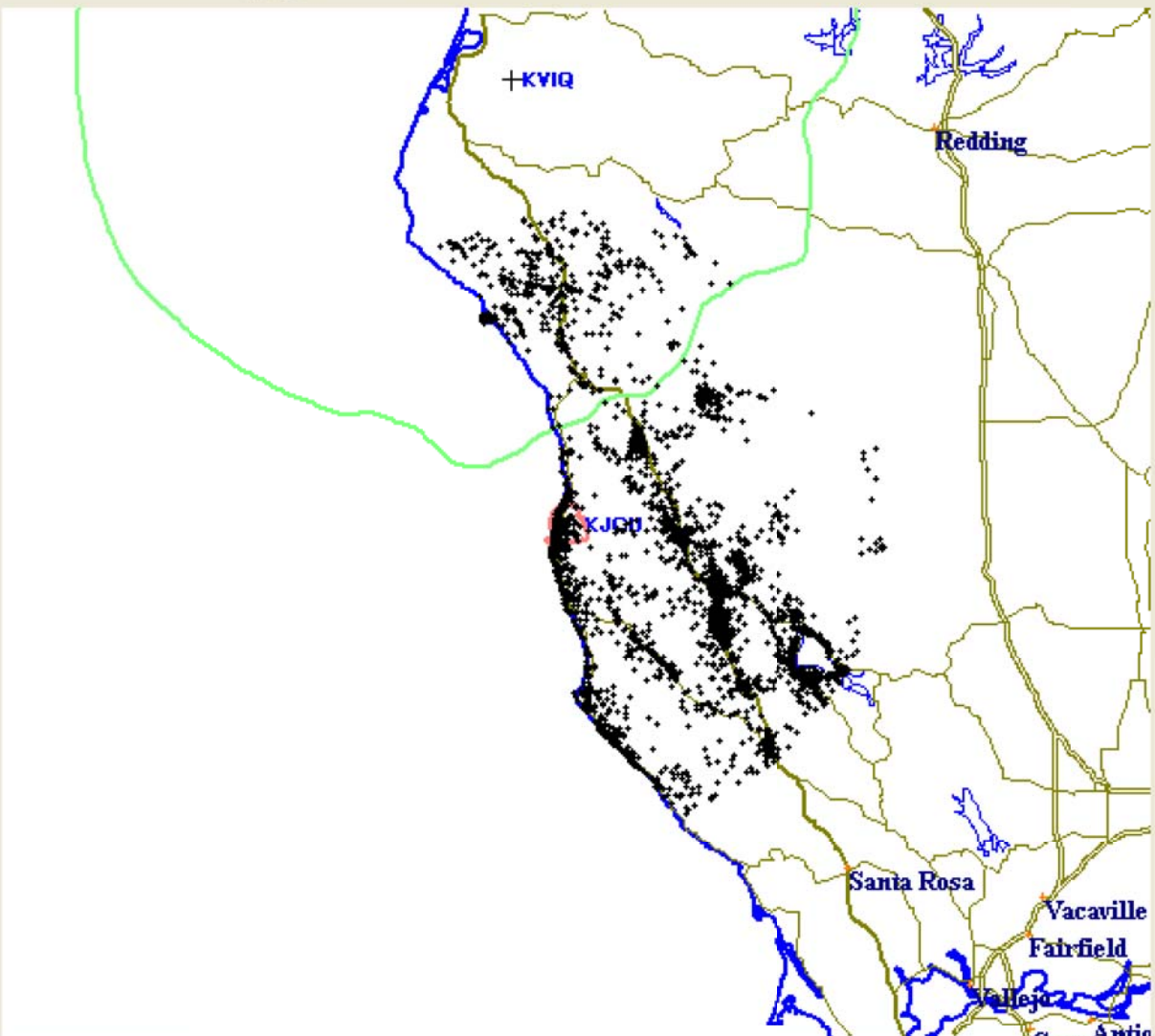


## TV6 Calculation for Fort Bragg, CA

TV6 Call sign		Fcc Search	
KVIQ		37.9 dBu	
City		State	
Eureka		CA	
COR AMSL (m)		HAAT(m)	
920		530	
Latitude		Longitude	
404336		1235818	
		TV ERP (kW)	
		100.000	
		FM Horizontal ERP	
		.130	
<input checked="" type="checkbox"/> Outside City Of 50k			
47	47	1	<div>TV</div> <div>FM</div>
Plot Scale			
150		<input checked="" type="checkbox"/> DLG <input type="checkbox"/> AJPL	
<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			
Print All Centroids to		-3 dBu	
<input type="checkbox"/> Print Centroids			
<input checked="" type="checkbox"/> Print TV Contour Table			
Comp	Copy F	PrintText	Print Form



## Channel Six TV Protection Study

KVIQ	06	100.000kW	ERP	920.0M	COR	AMSL	530.0M	HAAT	Lat.	404336	Lon.	1235818
KJCU	210	0.130kW	ERP	228.0M	COR	AMSL	106.0M	HAAT	Lat.	392635	Lon.	1234358

```
Distance from TV to FM 143.9738km    Azi 351.9degr    Rev Azi 171.9 degr
Cutoff radius for channel 210 is 196 km
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The FM horizontal polarization component is 0.130 kW,  
and the area of just perceptible interference does not intersect a city of 50k,  
so the effective ERP is  $(P_v/40+P_h)$  0.1332kW

The TV6 signal strength at the FM transmit site is 37.9 dBu  
This strength is outside the 68 dBu Grade A contour,  
allowing 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
47	20.4	67.4	73.4	

Population in affected area	0
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