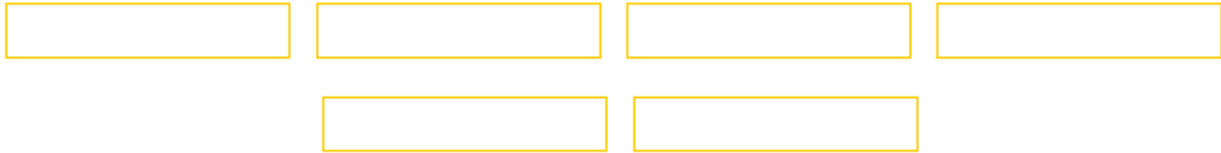


# Interference Coverage



I can be contacted at E-mail address: - [web@g3tvu.co.uk](mailto:web@g3tvu.co.uk)



A click on the toolbar Icon

Or by opening 'Tools/Radio Coverage/Interference', the following pane will open, where the wanted and interfering units are selected, and the interference margin defined for acceptable communications. The Mobile Unit has been moved to the top of the map for these plots, and is used as the unwanted 'Interferer' with communications between the Base and Hand Held Units.

**Interference Radio coverage**
✕

Coverage based on required Signal to Interference ratio (S/I) or acceptable time delay

S-Unit    Minimum Signal ( >= )

dBm        10.0000

$\mu$ V         Minimum S/I (dB)

dB $\mu$ V/m    10

Time delay

■ Color    Required S/I is met

■ Color    Required S/I is not met

No color    Minimum signal is not met

Draw

Cancel

Draw size (pixels)

1

Mode

All picture

Selection

**Wanted**

Tx Unit

Base

Antenna pattern

omni.ant

Front beam azimuth(°)

0  Draw pattern

View pattern

**Interferer**

Tx Unit

Mobile

Antenna pattern

omni.ant

Front beam azimuth(°)

0  Draw pattern

View pattern

**Mobile**

Mobile Rx Unit

HH

In network

Base

1 common net(s)

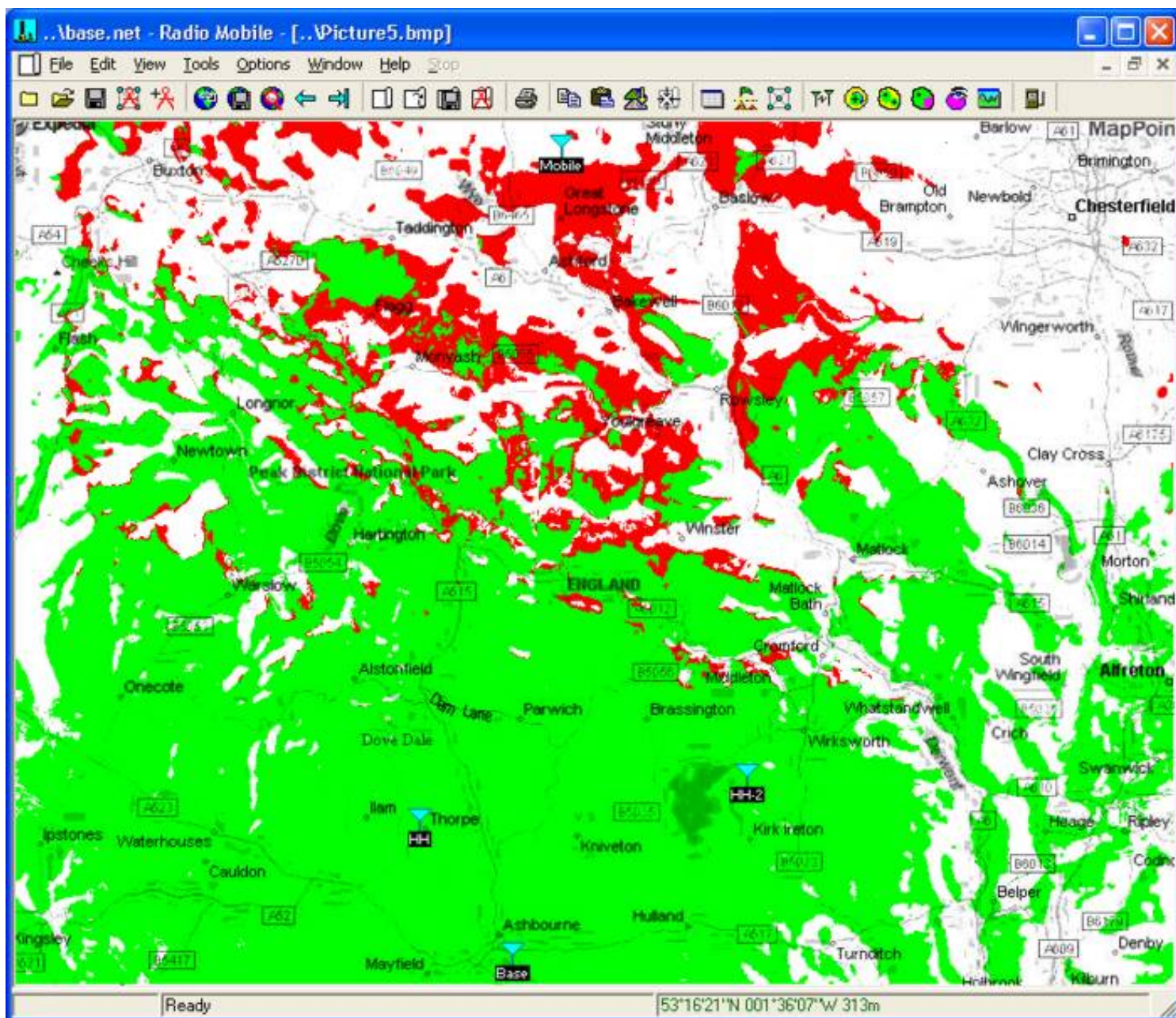
Use network antenna settings

Draw background

Small

Swap

Where pressing 'Draw' produces this plot:



The Red areas showing that the Mobile Unit exceeded the margin in these locations with the Hand Held Unit, and green areas where the margin was acceptable, with Base to HH Unit communications available.

Invoking the 'Swap' button, reverses the roles of wanted and interfering Units, and will show the areas where acceptable communications between the Mobile and HH Units can be achieved.

**Interference Radio coverage**

Coverage based on required Signal to Interference ratio (S/I) or acceptable time delay

S-Unit  
 dBm  
  $\mu\text{V}$   
 dB $\mu\text{V}/\text{m}$

Minimum Signal ( >= )  Time delay

10.0000  Color Required S/I is met  
 10 Minimum S/I (dB)  Color Required S/I is not met  
 10  No color Minimum signal is not met

Draw size (pixels)

Draw   
 Cancel

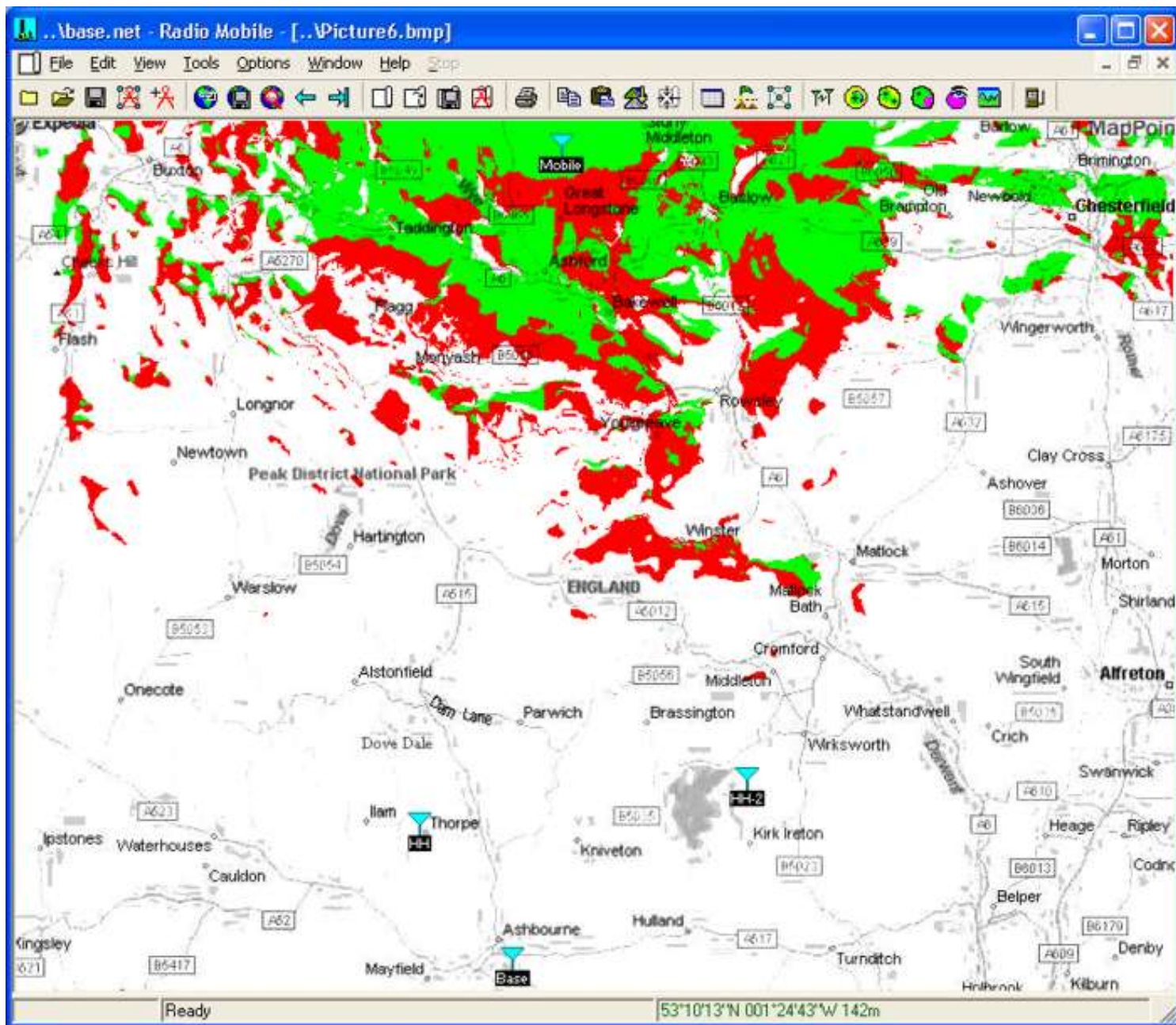
Mode  
 All picture  
 Selection

**Wanted**  
 Tx Unit:   
 Antenna pattern:   
 Front beam azimuth(\*):   Draw pattern

**Interferer**  
 Tx Unit:   
 Antenna pattern:   
 Front beam azimuth(\*):   Draw pattern

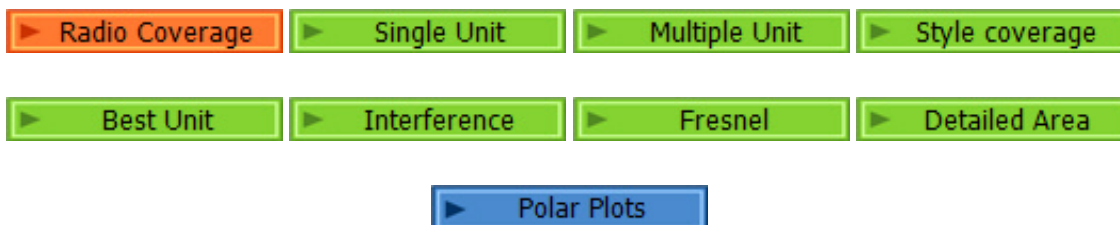
**Mobile**  
 Mobile Rx Unit:   
 In network:   
 1 common net(s)  
 Use network antenna settings  
 Draw background  
 Small

Clicking on 'Draw' then produces:



*It should be noted that the swept 'Mobile receive Unit' selected above, is always treated as if it has an '**Omni antenna**', regardless of its Network Antenna setting! The two transmitting Units can have gain antennas specified, and the characteristics applied to the plots.*

*Where it is required to accurately determine the Signal to Interference level in a Network having gain antennas, the Radio Link pane should be used.*



*[This page is available in .pdf format here](#)*

*Please keep checking back for updates/additions.*

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