

Using RMOOnline to plot

Written by Jim Kinter, K5KTF - Last Updated Wednesday, 11 June 2014 06:45

So you want to do some path profiling (seeing if links between BBHN sites might work or not).

Roger Coude VE2DBE has a stand-alone application RadioMobile, but it requires significant work get initially setup (downloading topo maps, aligning maps and networks properly, etc etc etc). This makes things SO MUCH EASIER!

Go here : <http://www.cplus.org/rmw/rmonline.html>

Create an account (you will learn why in a moment)

Once you have an account created, log in and go to NEW SITE

Zoom in to the desired POINT A.

Once you have the exact spot in view, click PLACE CURSOR AT CENTER, then grab the balloon/cursor and place it on the exact spot.

Click SUBMIT, then enter in a name for POINT A, a short Description, and for group, just do BBHN

Click ADD TO MY SITES

Repeat this step for POINTS B C, D, etc

Once you have 2 or more sites saved, from the main menu, click NEW LINK

Select FROM as POINT A, and enter an appropriate value for how high the antenna is off the ground IN METERS.

Do the same thing for the TO for POINT B (C, D, etc)

Description I usually put as POINTA15-POINTB25 where I have POINT A's name and AGL meters, hyphen, POINT B and its height (in METERS)

FREQ use 2310, as Roger disallows WIFI (close enough for what we are doing)

TX POWER = .5

Line Loss = .5

TX and RX gains = 24

leave rest default and hit SUBMIT

(adjust params as you see fit)

It make take a minute or so, depending on how many others are doing a profile at that very minute.

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At some point, it will pop up the calculated path with a cross-sectional view with Fresnel zones between the 2 points, all the calculated numbers below that, and finally a map view of the 2 points.

If you are satisfied with the results (whether a link would work or not here is irrelevant here, we are looking for ACCURACY of the data!), you can hit SAVE TO MY LINKS.

The reason for the account is because you can save all sites, links, etc for later use/retrieval.

Once you have done multiple link plots, you can, from the main menu, click MULTIPLE LINKS, then highlight which links you would like (ctrl-click selects individual, shift-click selects a range), then click SUBMIT and it will plot the selected sites onto a map with connection lines. If you click each connection line, it will pop up a thumbnail of the cross-sectional plot.

From the main menu, you can also do a coverage map for each site.

You select the site you want, again set the antenna AGL, type of antenna (keep it omni...you COULD select cardio for a dish, but then you would only be able to have it shoot one way, which you may want, so enter in headings, etc then too), change the gain to match (24 for a dish, even though you may have selected an omni), the mobile set to whatever height (in METERS) of other sites heights that may try and link back, Description/freq/power/loss the same as a standard link.

Rendering I usually crank up a bit although it does take longer, leave rest default and hit submit, then go get a drink/restroom break, etc.

Again, saving will save it to your account for quick retrieval later.

One VERY handy feature:

Go to Main Menu, then click on MY SITES. It will show your saved sites. Notice the buttons below. You can EXPORT your sites to a CSV file to give to a friend. Friends can give YOU sites to IMPORT into your account. You can export to CSV, fix in a spreadsheet program (Excel/Calc/etc) sort by name or whatever, save back to the CSV and reimport, to get your sites in order; I have 79 in mine currently, and they were not all put in in any order, so I used CALC to get them in alphabetic order (and reimport), and do so every so often when I add more, as they always add to the bottom.

Now you know enough to become a world-class path profiler!

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Happy Meshing
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