Band Plan With SWR

A few weeks ago my external tuner kicked the bucket and the portion of the HF spectrum that I can now use shrank to what my internal tuner can handle under a 3:1 SWR. I got my RigExpert antenna analyzer out and started hand writing the SWR on my printed copy of the RAC HF Band Plan when I thought of my next Python project: Recreate the Band using matplotlib and overlay the SWR from the RigExpert asd files.

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After a few days of reading about matplotlib and playing with a few examples, I managed to put all the pieces of the puzzle together and created my first (incomplete) graphs. I've got all the essential elements, but I just need to finish re-creating the band plans, annotate them properly, tweak a few things here and there, and clean up the code. Here's the output of my G5RV and GP9 so far:

- The top of the band plan graph corresponds to SWR = 1:1, where the first dotted horizontal line is.
- For HF, I also added a horizontal line at SWR = 3:1, which is where my internal tuner can reach.
- And the top of the graph is at SWR = 10:1, which is where most external tuners can reach.
- The red graph is the SWR curve. If it's not showing, it's because it's above 10:1

Update (Jan 26): I'm almost done adding all of the pieces together and re-uploaded my latest output file. Next, I'll clean up the code a bit and post it here as well.