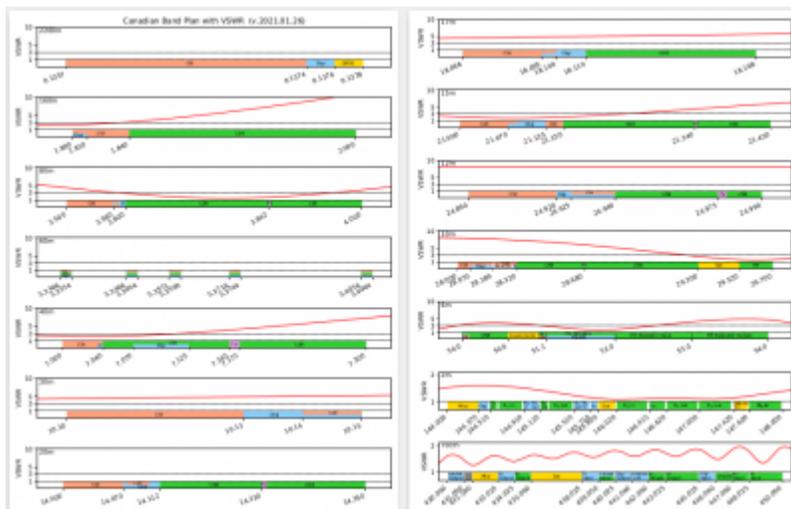# Band Plan With SWR

This python script does two things:

1. It reads all `.asd` output files from the Rig Expert that are placed in the same folder as this script and calculates the VSWR as a function of the frequency.
2. It recreates the band plan for all bands from 2200m to 70cm and adds VSWR graphs on top of it.

The HF band plan information was taken from
https://www.rac.ca/operating/bandplans/

The VHF and UHF band plan information is for British-Columbia and was taken from https://bcarcc.org/

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