# ARRL 10M Contest from WRTC2022 land

An antenna designer and propagation elmer sharing his skills from the land of the best contest team in the world upcoming gathering



Where is WRTC2022 land?



I spans from ME to VA in latitude and is EU centered, if we include northern africa and middle east.















Different urbanization, different beaming, different propagation.



N1MM, *thank you for the logger*, SWS and GIRO, *thank you for foF2 maps*.

# Enjoy the contest, improve propagation skills, share the results



My goal was to check foF2 maps from SWS media web site as well as to have a setup with performances comparable to those of the WRTC2022 teams, with nothing else to do except enjoying the contest.

The yagi the teams are going to use, will be 35' height; as my tower is 70' height, we expect a 6dB more gain for the



component having 5 degrees of take-off [see *Propagation Handhouts*, I4MFA] and maybe 1dB more for my optimized quad: running 13dB less of power, 5W QRP, means 1S-point higher for the teams compared to my *Little Pistol* contest configuration. As I noticed that PHONE contacts get more points respect CW, I decided to enter SOUQRPPH category and configured N1MM Logger Plus in *enter-to-send* mode on my 10" (*Windows XP*) netbook, remotely managed with a BT keyboard: I used my voice just a couple of times.

I wrote on *Propagation Handouts* [published by RR03/21, available on YouTube I4MFA channel] about the very great difference between using Voacap *predictions* respect to SWS and GIRO foF2 maps, showing *real propagation data*, as well as how to compute the foF2 value needed to have a refraction toward earth of em waves: a suggested reading to understand properly the following reported results.

Saturday, E-VK at 11z - 15000Km, beam ENE vs NW





Sunday, ZL at 08z - 18500Km, beam E vs WNW





Saturday vs sunday, East Coast compare at 13z - 6500Km to 8000Km, beam NW vs NE



Saturday vs sunday, East Coast compare at 14z - 6500Km to 8000Km, beam NW vs NE



Saturday vs sunday, East Coast compare at 15z - 6500Km to 8000Km, beam NW vs NE



#### East Coast compare - notes

Upper left side of map is saturday at NN:00z, lower right side is sunday at NN:30z.

Early opening: ME, NH, MA, NY, RI, CT; later, on closing: TX, LA, MS, FL, GA.

## What about propagation from WRTC2022 land to other countries?

During the contest, either saturday or sunday, signals from FR were anytime strong. No more stations from Africa apart D4 (worked on sunday at 12:30z) with good signals. Asia from 07z to 09z. Europe on late morning, UA were the strongest stations. South America from early (12z) to late (16z) afternoon.

### ARRL10M foF2 maps

Every 30', from 6am to 5pm, saturday and sunday, one map every 2".

