COBRAS Guide

The following guide will explain how to set up COBRAS (Cloud Based Radar Simulation) to work with GR-2 Analyst for the April 12, 2020, AWOC Severe Simulation.

Step 1. Go to the COBRAS webpage

Open a web browser and type the following in to the web address bar:
http://skywatch.org/COBRAS/

Step 2. Fill out informational fields

After the webpage loads, fill out the following fields near the top of the page to have the following:

Start Year: 2020
Month: 04
Day: 12
Hour: 13:00 UTC
Simulation Length: 4 hours

Step 3. Select your radar on the map

You'll notice that once you begin filling out the informational fields in step 2, the CONUS map will pop up with numerous blue dots. Each of these blue dots represents a WSR-88D. Zoom into northwest Louisiana and click on the blue dot in that part of the state (KSHV).
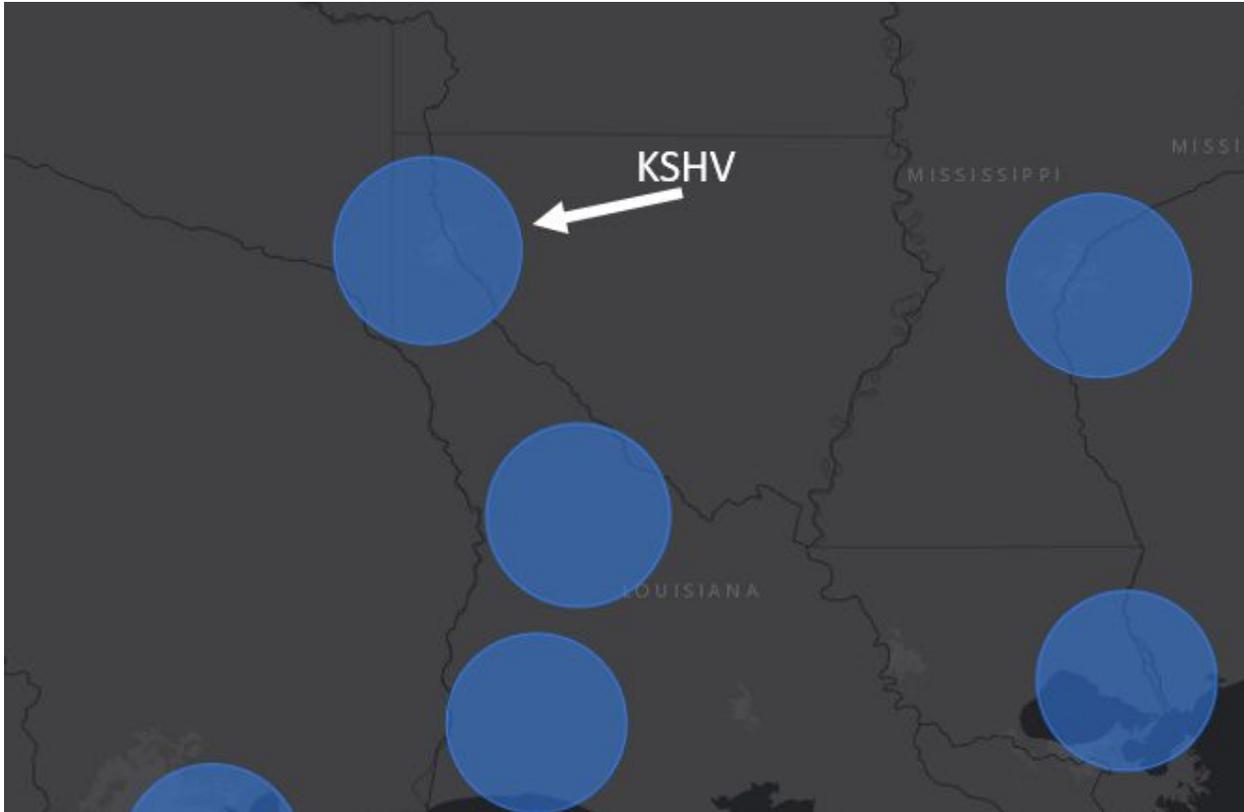
To confirm you have selected the correct radar, click the "Review Data" button near the bottom of the page. You should see a small gray box appear with the text KSHV inside of it. Clicking that box will reveal the timestamps of the volume scans for KSHV data.

Step 4. Configure GR2A (GR Level 2 Analyst) polling

Click on the "Begin Simulation" button near the bottom of the page. A new window will appear with a link to copy. This link will need to be put into GR2A as a polling location. Further instructions on how to do this can be found in the "Show me how" button.

One thing to note about polling links in GR2A... Make sure the link you copy in is moved to the top of the polling list if there are multiple polling servers. This can be done by clicking the "Move Up" button in GR2A while your selected polling server is highlighted.

Once you have successfully set up the polling server, click on the "Got it!" button.

Step 5. Begin the Simulation

The CONUS background image with blue dots (WSR-88Ds) will be replaced with a different background representing the settings for your particular scenario. Near the bottom of the screen, you may notice some text that says "Order Status" and a horizontal bar with a percentage marker. **Wait for that to reach 100% (and disappear off the screen entirely) before proceeding any further. This may take several minutes.**

Once the "Order Status" bar is no longer visible, you will need to adjust the starting clock on the screen. By default, you will see three time parameters (13h, 00m, 00s), denoting the starting time of the case in UTC. We will need to move the clock forward 30 minutes so that it says "13h, 30m, 00s." To do this, click on the "+" button near the bottom of the window to add time. Keep

clicking the "+" button until you see 30min. You can also hover over the minutes portion of the interface and use the wheel on your mouse to move to the (13h, 30m, 00s) mark.

Now click on the blue "Play" button. Let the simulation run for a few seconds and then click the blue "Pause" button. In GR2A, make sure you have KSHV selected as your radar, and click the "Start Polling" button in the top-left corner of the GR2A GUI. After several seconds, you should begin to see radar data appear.

As a best practice, you will want to make sure the LSR icons are deselected in GR2A so that real-time LSRs do not pop up in your GR2A window during the simulation. Additionally, if you have any placefiles that auto-refresh with live, real-time data, you will want to make sure those are turned off during the simulation.

From this point on, you are now ready to run a WES simulation in conjunction with GR2A. When the WES simulation begins, just click the blue "Play" button in the COBRAS window interface to begin syncing the GR2A data with the WES.

If for some reason the WES simulation is paused, be sure to pause the GR2A simulation. You can then restart the WES and GR2A in unison.

Extra Resources

Youtube Video Link of how to run COBRAS for a simulation (please note, the setup and parameters for the specific case in this video will be different than the AWOC Severe case) https://www.youtube.com/watch?v=5EP4EgpKgEE