SHARPpy

A community standard in sounding analysis and visualization for the atmospheric sciences.
https://github.com/sharppy/SHARPpy

Configuration on Windows 10 for NVU-Lyndon Atmospheric Sciences

The Andover (version 1.4) release of SHARPpy is an "alpha" release, meaning it may have bugs in it. However, there are significant improvements and functionality fixes compared to the previous release. The following additional steps are necessary to run SHARPpy on Windows 10 from Miniconda in ASAC 315, ASAC 317, and the WX Center.

1. Click on the Start menu, and search for **Anaconda**. Open the **Anaconda Prompt (Miniconda2)**. Type the following into the Anaconda Prompt, and press the Enter key.

   ```
   setx PYTHONHOME C:\Miniconda2
   ```

2. Close the Anaconda Prompt. Then search for it again, and open it a second time.
3. Type or copy the command below into the Anaconda Prompt. You should run this command even if you have already done it in the past. This will ensure that conda-forge is set as the highest priority channel.

   ```
   conda config --add channels anaconda
   ```

4. To list conda environments that exist, type the following into the Anaconda Prompt (on Windows) or the Terminal window (on Linux):

   ```
   conda info --envs
   ```

   Specifically on Windows, running this command may show you environments that other users already created (because the C:\Miniconda3 location is a shared location for multiple environments). **If you see sharppyenv, skip to step 7.**

5. Create the sharppyenv environment (if it doesn't already exist), and install the necessary Python packages by typing into the Anaconda Prompt:

   ```
   conda create –n sharppyenv pyside numpy=1.9.3
   ```

   This command should automatically determine if any additional package dependencies are required, and download and install them as well.

6. When prompted, type: **y** and press Enter to proceed. It may take a couple minutes to install everything.
7. To activate the sharppyenv conda environment, in the Anaconda Prompt, type:

   ```
   conda activate sharppyenv
   ```

8. In the Anaconda Prompt, type each of the following lines, followed by the Enter key:

   ```
   cd C:\SHARPpy\SHARPpy-1.4.0-Andover-Alpha1
   ```

   ```
   python setup.py install
   ```

9. To open the SHARPpy graphical user interface, in the Anaconda Prompt, type:

   ```
   python c:\SHARPpy\SHARPpy-1.4.0-Andover-Alpha1\runsharp\full_gui.py
   ```

   > **NOTE**
   >
   > The Anaconda Prompt window **must remain open** for SHARPpy to run (if desired, it can be minimized).