

sounding should now pop

up.

Displaying NUCAPS in SHARPpy

Quick Guide

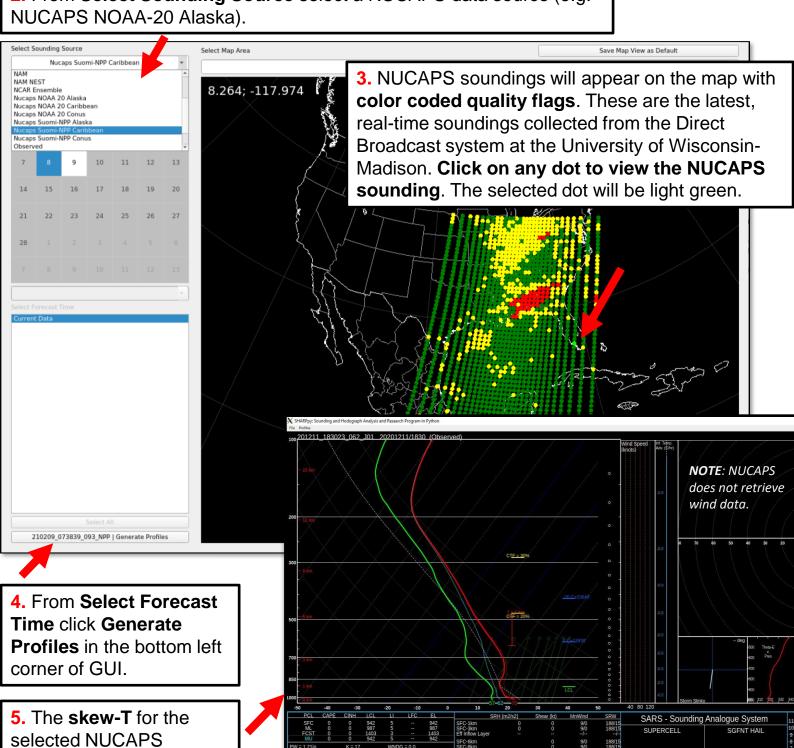




1. Run SHARPpy (https://sharppy.github.io/SHARPpy/index.html).

Note: Quick guide available for SHARPpy installation.

2. From Select Sounding Source select a NUCAPS data source (e.g. NUCAPS NOAA-20 Alaska).





Displaying NUCAPS in SHARPpy

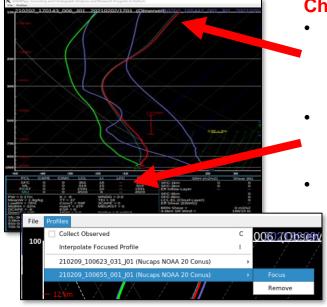
Quick Guide





Loading Multiple Profiles

- Select a dot on the map, click Generate
 Profiles to launch the skew-T window.
- Keep the skew-T window open. In the map display, select another point, and click Generate Profiles.
- In the skew-T window, click the Profiles -> Collect Observed



Changing Focus Profile

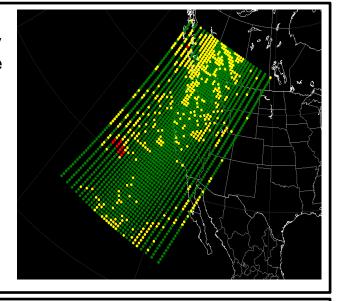
- The focus profile will have green (moisture) and red (temperature) lines.
 - The **CAPE** in the tables are for the focus profile.
 - Select Profiles → <profile name> → Focus to change the focus profile

Interpreting Quality Flags

- Color coded quality flag helps forecaster to quickly interpret retrieval robustness before interrogating the sounding profile.
- Green dots can be used without reservation. Yellow, red dots may be useful alongside cloud top fraction.

Dot Color Meaning

Green	Yellow	Red
Successful infrared (IR) + microwave (MW) NUCAPS retrieval under clear or partly cloudy conditions	Failed IR + MW NUCAPS retrieval. Successful MW-only NUCAPS retrieval under cloudy conditions	Failed IR + MW NUCAPS retrieval. Failed MW-only NUCAPS retrieval under precipitating cloudy conditions



CTE = 87% CTE = 87% CTE = 11% -10 0 10 20

Interpreting Cloud Top Fraction

- NUCAPS produces a model-independent cloud top pressure (CTP) and fraction retrieval for two cloud layers. CTF can be compared with model output.
- CTF is also useful because profiles above the cloud tops may be representative of the atmosphere, even for failed retrievals.
- Clouds can introduce uncertainty and cause IR+MW retrievals to fail, but cloud fraction alone does not determine the quality flag. Note: Quick Guide available for Quality Control



