Loading NUCAPS data in AWIPS

NUCAPS data can be loaded through multiple methods, partly depending on the type of display you wish to activate (skew-T or 2-D surfaces). First, we'll take a look at how the sounding (or skew-t) data are loaded through the AWIPS menu bar.

Loading NUCAPS Soundings

1. Mouse over the **Satellite** menu in your CAVE session



2. Then, mouse over S-NPP and NOAA-20.

Sounder Imagery Derived Products Imagery		NPP Products	×
Derived Products Plots	•	VIIRS	
S-NPP and NOAA-20	- k	CONUS Imagery	•
NH/NA/US every image		Alaska Imagery	•
IR Window	04.1800	Pacific Imagery	•
Water Vapor	04.1800	Soundings	
Visible	04.1800	NI ICAPS Sounding Availability - DB Improved Latency	01 2035
3.9u	04.1800	NOCAI 5 Sounding Availability DD improved Latency	01.2055
13u	04.1800	NUCAPS Sounding Availability - DB Modified	01.2042
11u-3.9u	04.1800	NUCAPS MetOp-A Sounding Availability	01.2153
11u-13u	04.1800	NUCAPS MetOp-B Sounding Availability	01.1950
WV/IR	04.1800	NUCAPS Sounding Availability	01.2359

- 3. In the sub-menu that opens, select from among the five NUCAPS sounding options:
 - NUCAPS Sounding Availability DB Improved Latency
 - NUCAPS soundings received through Direct Broadcast to allow availability within 30min of satellite overpass
 - NUCAPS Sounding Availability DB Modified
 - NUCAPS soundings received through Direct Broadcast and with the boundary layer automatically adjusted to surface observations
 - NUCAPS MetOp-A Sounding Availability
 - Mid-morning and late evening soundings from MetOp-A
 - NUCAPS MetOp-B Sounding Availability
 - Mid-morning and late evening soundings from MetOp-B
 - NUCAPS Sounding Availability
 - o Operational NUCAPS soundings from S-NPP; early afternoon and very early morning
- 4. Click on the NUCAPS soundings individually to load in standard AWIPS format (NSharp; not shown), which will include available thermodynamic data and related severe weather parameters. You can also use the Popup SkewT feature (shown right). In the CAVE menu, go to Volume->Popup SkewT. Then, right click on the screen and select 'Sample Cloud Heights/Radar Skew T', and then NUCAPS. Mouse over the sounding locations to observe the popup skewT.



Loading NUCAPS Gridded Data

- In your CAVE session, mouse over the Volume menu, and select 'Browser'.
- After the Volume Browser opens, in the *Sources* section, open the Volume drop-down menu and select 'NUCAPS-CONUS'.





 Then, select your desired NUCAPS parameter from the *Fields* section. There will be many options, and an example is shown here (Theta E – which is under the Moist drop-down menu). Most of the available NUCAPS parameters will appear under the Hgt/Pres, Temp, Moist, and Stability drop-down menus (red oval).





4. Under the *Planes* section of the Volume Browser there are many options. Specific millibar levels for Gridded NUCAPS can be found under the Misc drop-down menu (shown left). You can also load data from the Pres, Theta or Temp drop-down menus, including layers (e.g., 850MB – 500MB). Finally, it's best to load or view the Gridded NUCAPS data as an image instead of contours.