NUCAPS P-awek-T Website with Global Coverage

BACKGROUND:
Values of the Temperature and Dew Point temperatures are derived from the CrIS/ATMS instruments aboard the NOAA/NESDIS satellites, as well as the MetOP instruments aboard the Metop-A/B satellites. They are dynamically displayed over the extended region of CONUS. These data are also used in the global analysis models for the entire globe. Previously, the sounding was restricted to only the U.S. continental region (CONUS). Using this map, one can view a NUCAPS sounding grid, as well as the corresponding aerologic and profile data tables, as part of the 10-day sounding animation page.

PURPOSE:
This website shows NUCAPS P-awek-T plots and aerologic data tables based on data output from the nucaps algorithm.

USAGE:
There are a couple ways to show NUCAPS Skew-T data tables and sounding plots. First, the user must click on the NUCAPS sounding plot (gray dots) on the map, and then click on the desired sounding profile data (square dots) on the map. When doing so, a NUCAPS sounding profile data table will appear on the right side of the page. To view a NUCAPS Skew-T data table, the user may click on the “Download XML Data for Area of Interest” above the map. To this end, some domain selections are outlined below.

DOWNLOADING NUCAPS SKEW-T XML DATA

When the user clicks on the “Download XML Data for Area of Interest” above the map, a new page will open with a blank page for the user to define a rectangular domain of interest. These colored dots represent the age of the sounding data. These colored dots will appear on the map in the domain of interest. The user can zoom in or out on the map using the zooming tool on the upper-left side of the map with the black rectangle and soundings plots. First, the user must click the button “Draw a rectangle”. By clicking this button, the user can draw and drag to draw a rectangular domain of interest. After drawing the desired domain of interest, the user must click on the “Add domain” button. The user should have been drawn on the map. Clicking the button “Download XML Data for Area of Interest” above the map will open a new page with the NUCAPS sounding data for the selected area.

MAP LEGEND & MEANINGS

The colors of the dots (squares) on the map represent the age of the NUCAPS sounding data. The colors range from 0 to 200 minutes. The age of the sounding data is represented in minutes. The color of each dot (square) on the map represents the age of the profile ranging from 0 to 200 minutes. The age of the sounding data is represented in minutes. The color of each dot (square) on the map represents the age of the profile ranging from 0 to 200 minutes. The age of the sounding data is represented in minutes.

The presentation will include the discussion on the ESPC (Environmental Satellites Processing Center) website which contains all of the relevant NUCAPS sounding data products. The presentation will also include the discussion on the NUCAPS sounding data products and the corresponding aerologic table data, as part of the 10-day animation of CONUS and these pages are updated every hour to show the latest soundings. It is hoped that this website will be able to provide a better understanding of the atmospheric conditions and will be of great benefit to the users of this website.

GENERAL MAP UTILITIES & FEATURES

The site contains a couple of features that allow the user to zoom in and out on the map. The user may click on the “Draw a rectangle” button on the map to draw a rectangular domain of interest. After drawing the desired domain of interest, the user must click on the “Add domain” button. The user should have been drawn on the map. Clicking the button “Download XML Data for Area of Interest” above the map will open a new page with the NUCAPS sounding data for the selected area.

NUCAPS Vertical Profile 10-day Observation Image Loop