

# Velocity Azimuth Display (VAD) Wind Profile (VWP)

## VAD Adaptable Parameters

There are three VAD adaptable parameters that can be modified at the URC level: slant range, beginning azimuth, and ending azimuth. They are edited at the RPG HCI (Fig. 1) in the Algorithms window.

### Beginning and Ending Azimuths

You would want to edit the beginning and ending azimuth in order to define a partial circle from which to collect data, omitting an area that may have severe residual clutter.

## Output to the Environmental Winds Table

VAD winds are also output to the Environmental Winds Table used in the Velocity Dealiasing Algorithm. If the VAD winds are bad, the RPG HCI operator can turn off Auto Update, and manually input winds from a RAOB or profiler (Fig. 2). There is also a second option available to update the environmental winds table should the VAD product appear suspect. Turning on model update from the RPG Environmental Data Editor window will allow RUC wind profile data to update the environmental winds data table every hour, so long as VAD update is turned off. Fig. 3 has an example of this configuration.



Figure 1. VAD Adaptable Parameters edit screen at the RPG HCI.

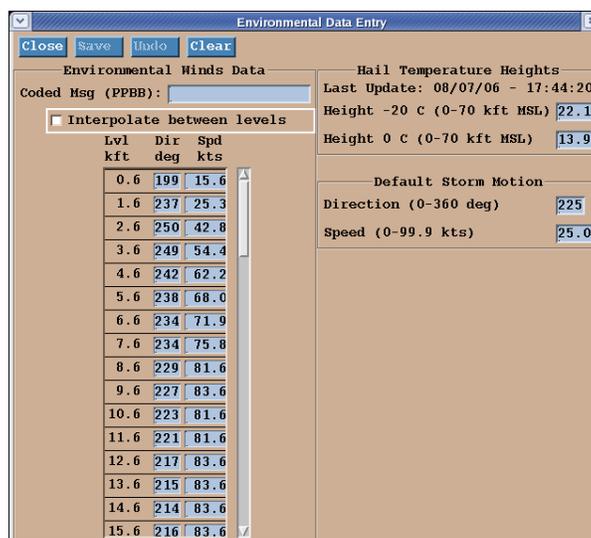


Figure 2. Environmental Winds Edit screen at the RPG HCI.

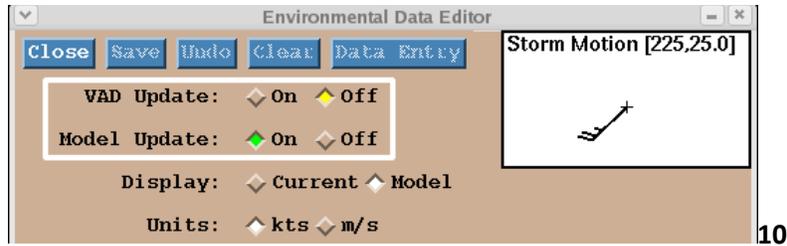


Figure 3. Environmental Winds screen at the RPG HCI. In this configuration, VAD is off, model update is on. Thus, only RUC model data will update the environmental winds.

**Note:** Turning both the VAD update and Model update on will result in the following: Environmental winds table will be updated by the VAD algorithm, while the 0°C and -20°C heights will be updated by the RUC.

## Adaptation Data

The VWP Adaptation Data can be displayed at the AWIPS-2 Text Display Window (WSRVWPOAX, Fig. 4). This can be used to determine the adaptable parameter settings used to generate the product.

## Hodograph

The VWP can also be displayed as a hodograph in AWIPS-2 using the following method:

1. Move a point to very near the location of the RDA.
2. Open the Volume Browser and choose “VWP” as the source, “sounding” as the field, and the point corresponding to the one over the RDA.
3. Select Load.

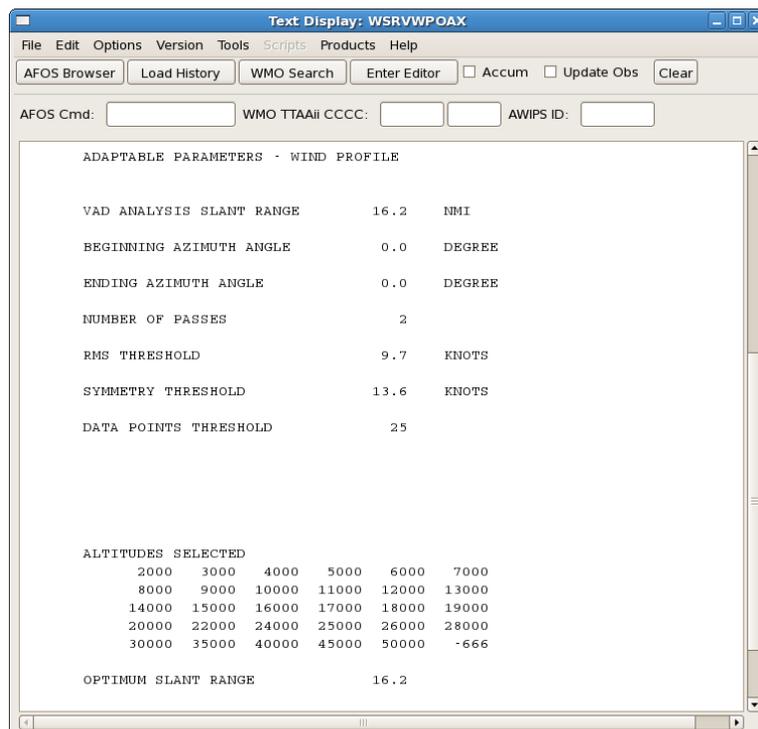


Figure 4. VWP adaptable parameters displayed at the AWIPS-2 Text Display Window.