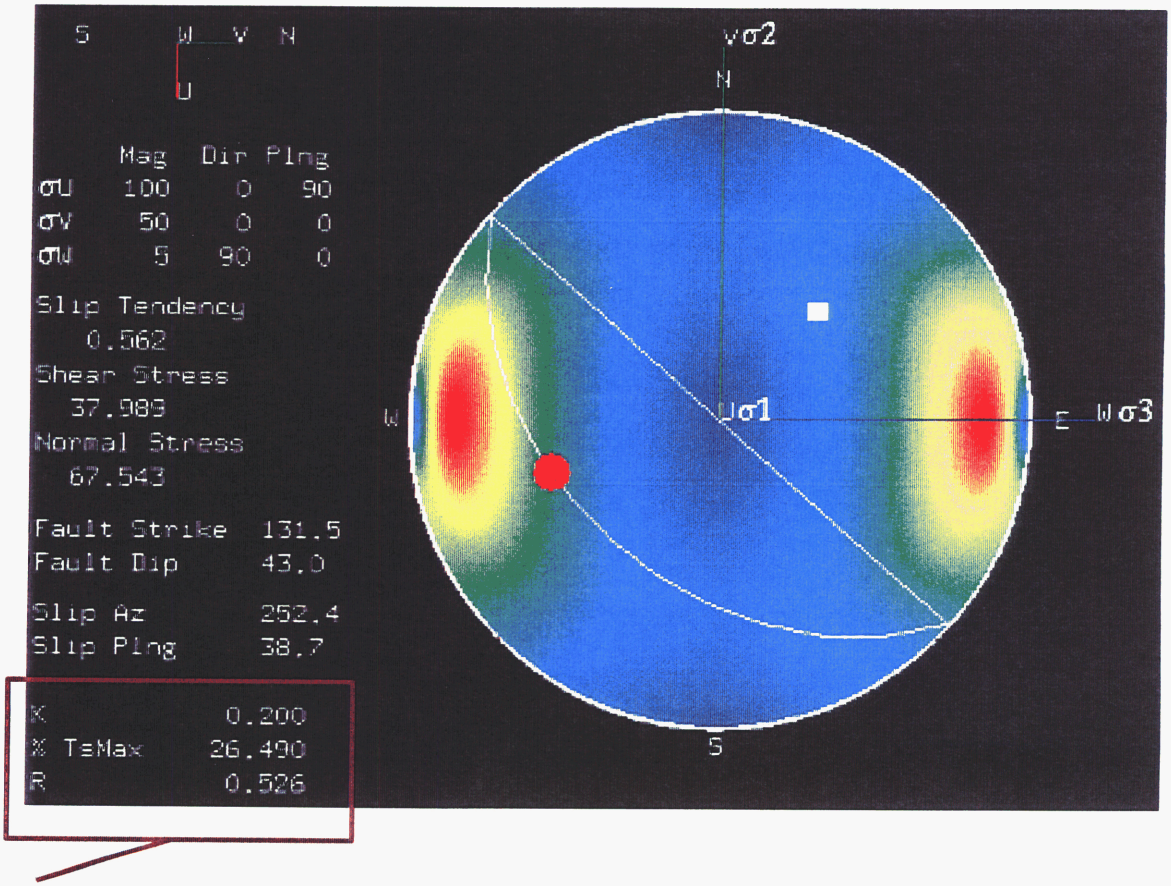
Tendency Plot Continued

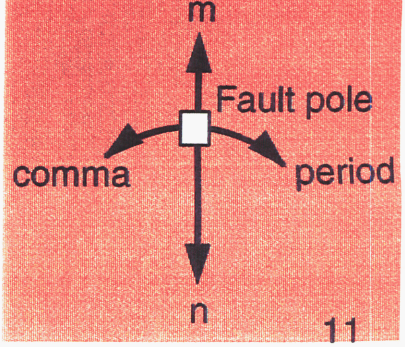
Slip direction is shown as a purple dot on the lower hemisphere plot. Slip direction is always in the plane of the fault, orthogonal to the fault pole, indicated by the white square. The user may select the fault pole by holding down the left mouse button and moving the mouse over the lower hemisphere plot or by keyboard control. For keyboard control the **comma** and **period** keys control fault pole strike while the **n** and **m** keys control dip (for additional key controls see the **appendix** or select the help button on the tendency plot window).



For further explanation of K, TsMax, and R see the **Stress Ratio Graph** section.

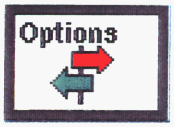
$$\%TsMax = \frac{\text{Slip Tendency for a select fault orientation}}{\text{Max Slip Tendency for all fault orientations in the current stress state}}$$

Keyboard Fault Pole Control:

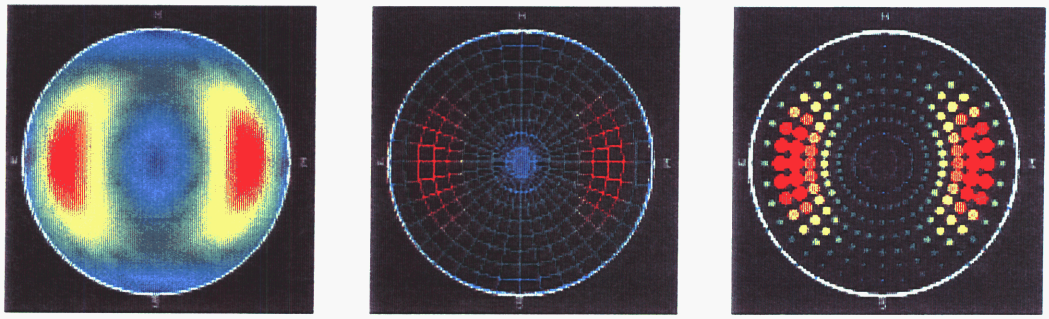


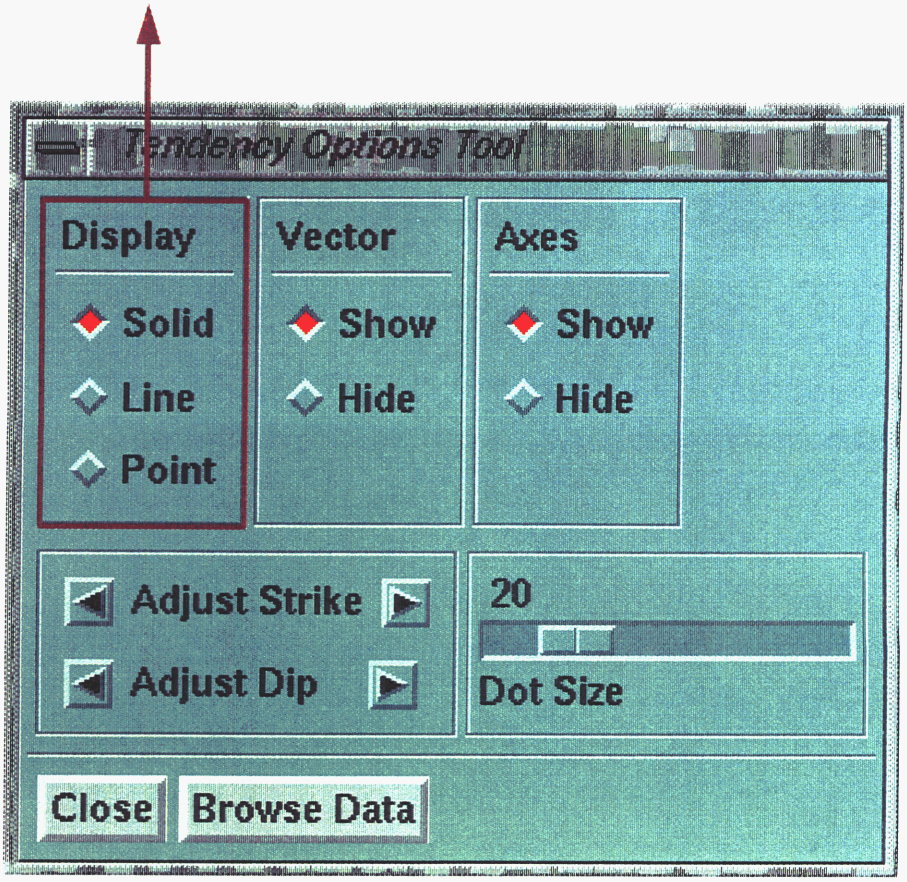
Tendency Plot Continued

Tendency Plot Options



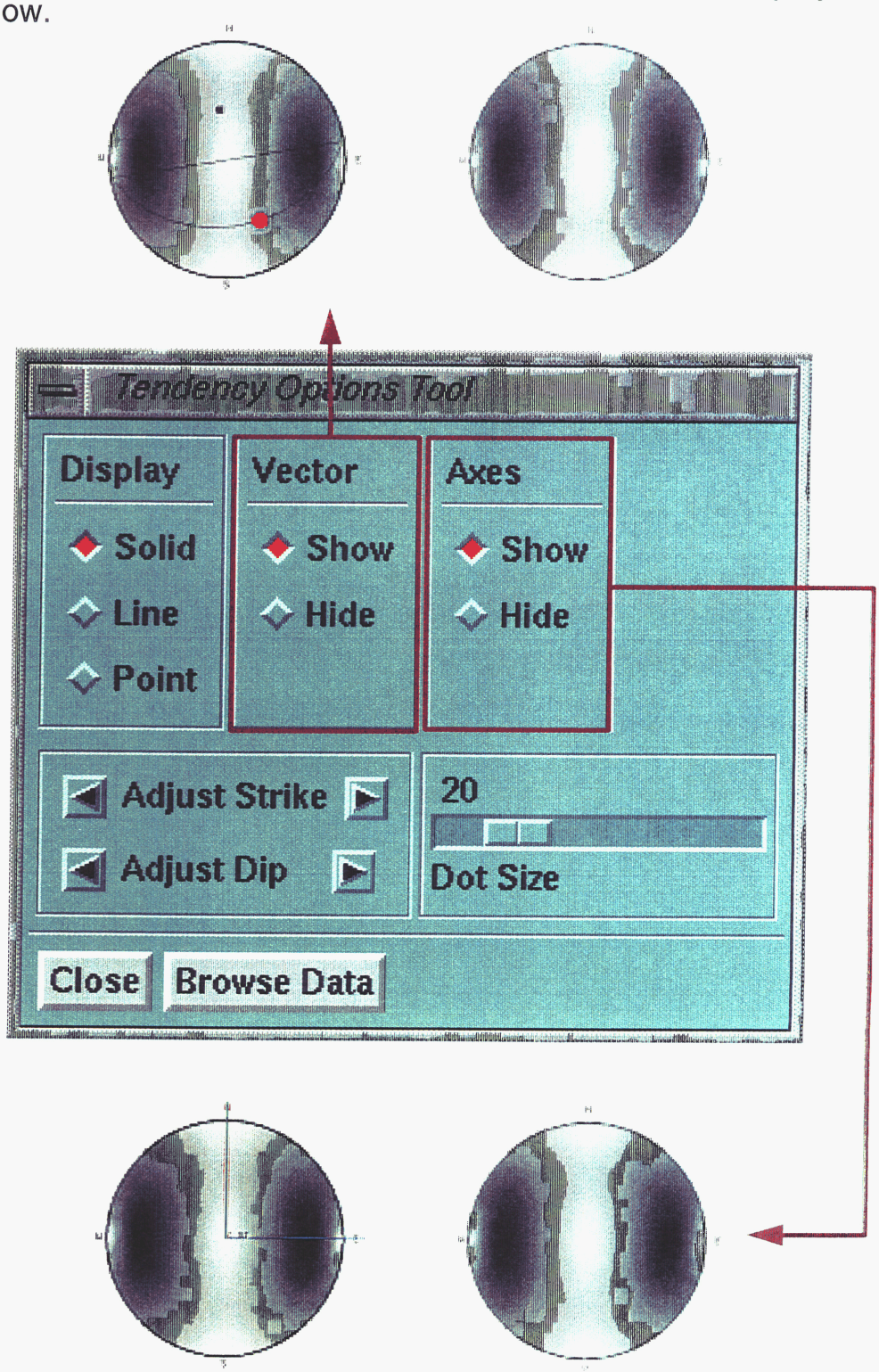
The **display** option allows rendering of the plot using either a **solid**, **line**, or **points** as shown below.





Tendency Plot Continued

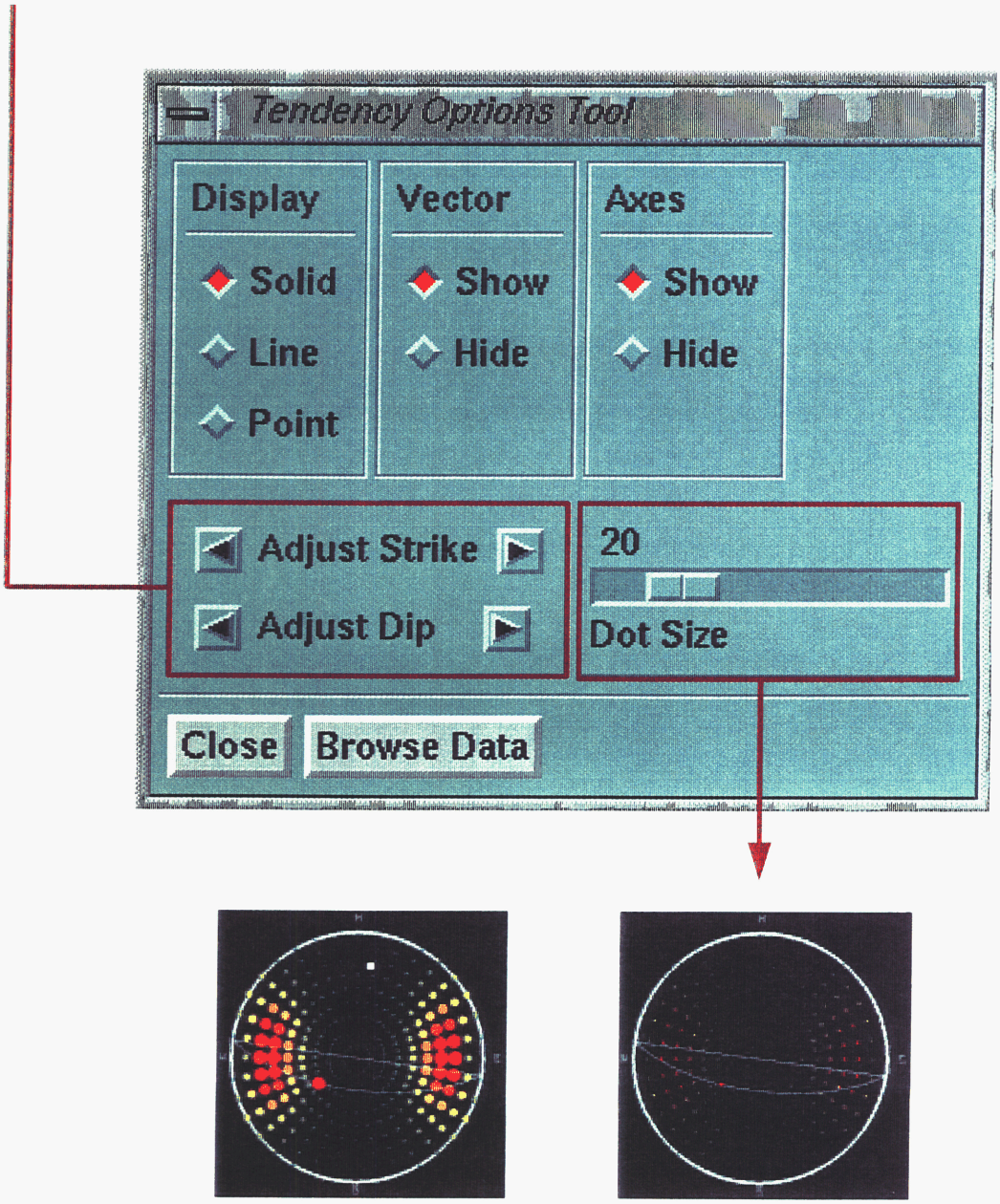
The vector show and hide button controls the slip vector data display as shown below.



The axes show and hide button controls the plot axes display as shown above.

Tendency Plot Continued

Controls the positioning of the pole by adjusting the strike or dip.



The **dot size** slider is only used with the display point mode as shown above.

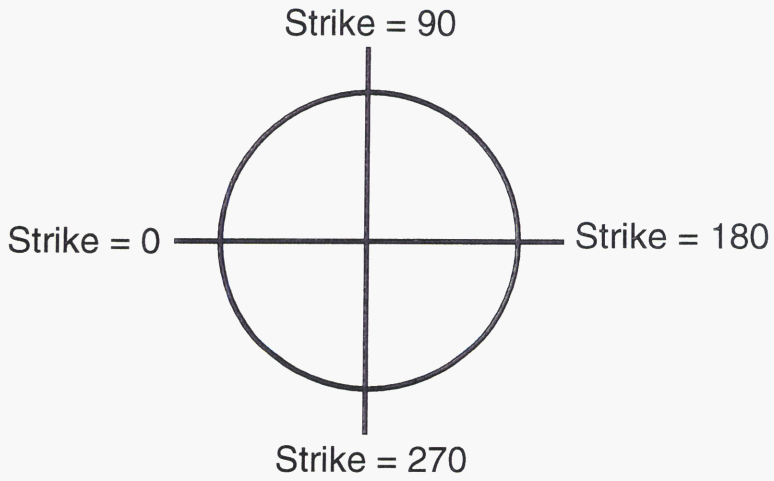
Tendency Plot Continued

Overlaying Points on the 2D Slip Tendency Plot

Measured or pre–computed fault pole and slip vector data points may be displayed over the lower hemisphere plot. This enables comparison of measured or pre–computed data with the user selected stress conditions. Measured or pre–computed data sorted in an ASCII data file with the following format may be displayed with 3DStress.

```
# Comment lines begin with a "#" symbol
# Strike / dip
45 65
90 65
135 65
180 65
225 65
270 65
315 65
0 65
```

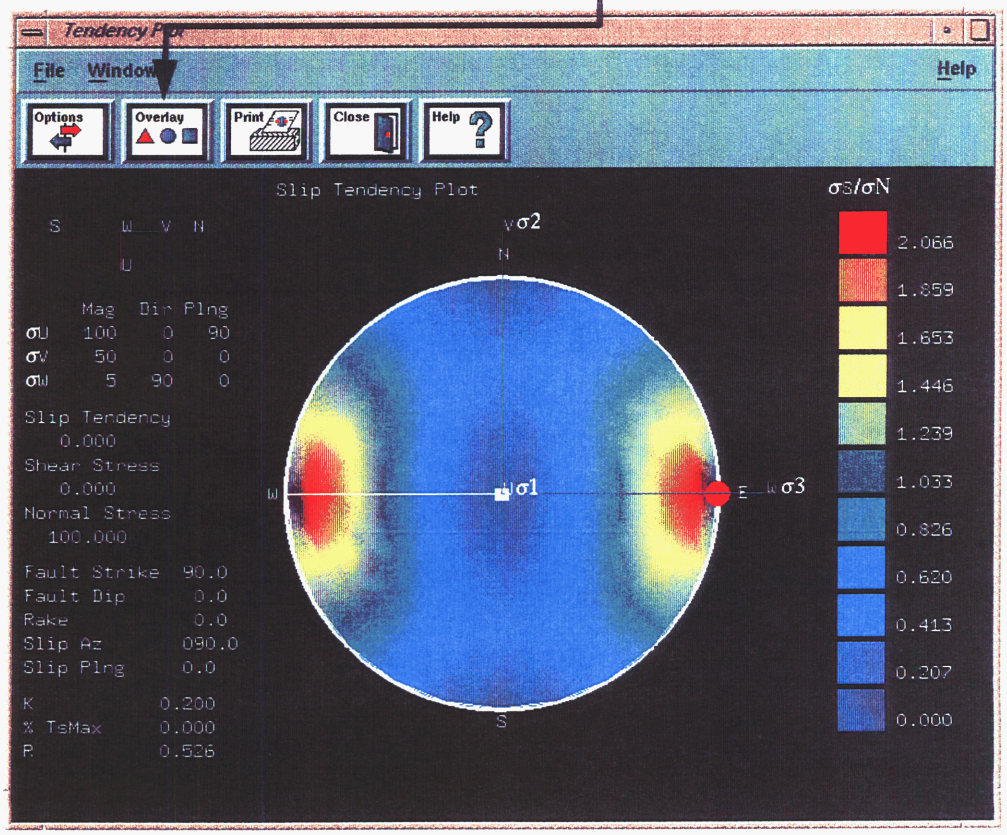
The convention used for overlay surface strike pole values is shown below:



Overlay files are expected to have a file name extension of "ovr". Each overlay file may contain 1 or more data points. Multiple overlay files may be displayed simultaneously with 3DStress.

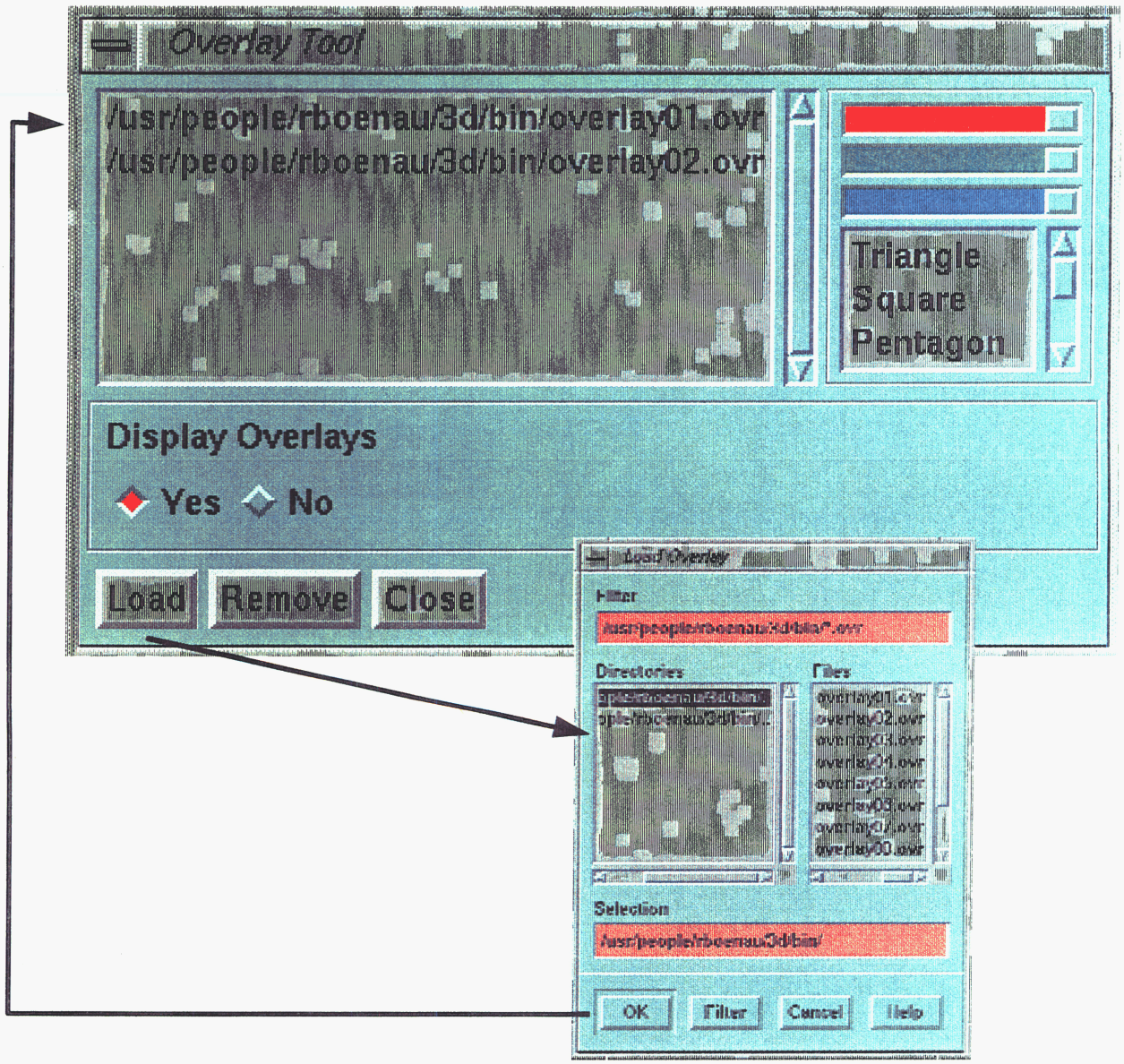
Tendency Plot Continued

Overlays are handled by the Overlay Tool, which is displayed by pressing the overlay button on the Tendency Plot.



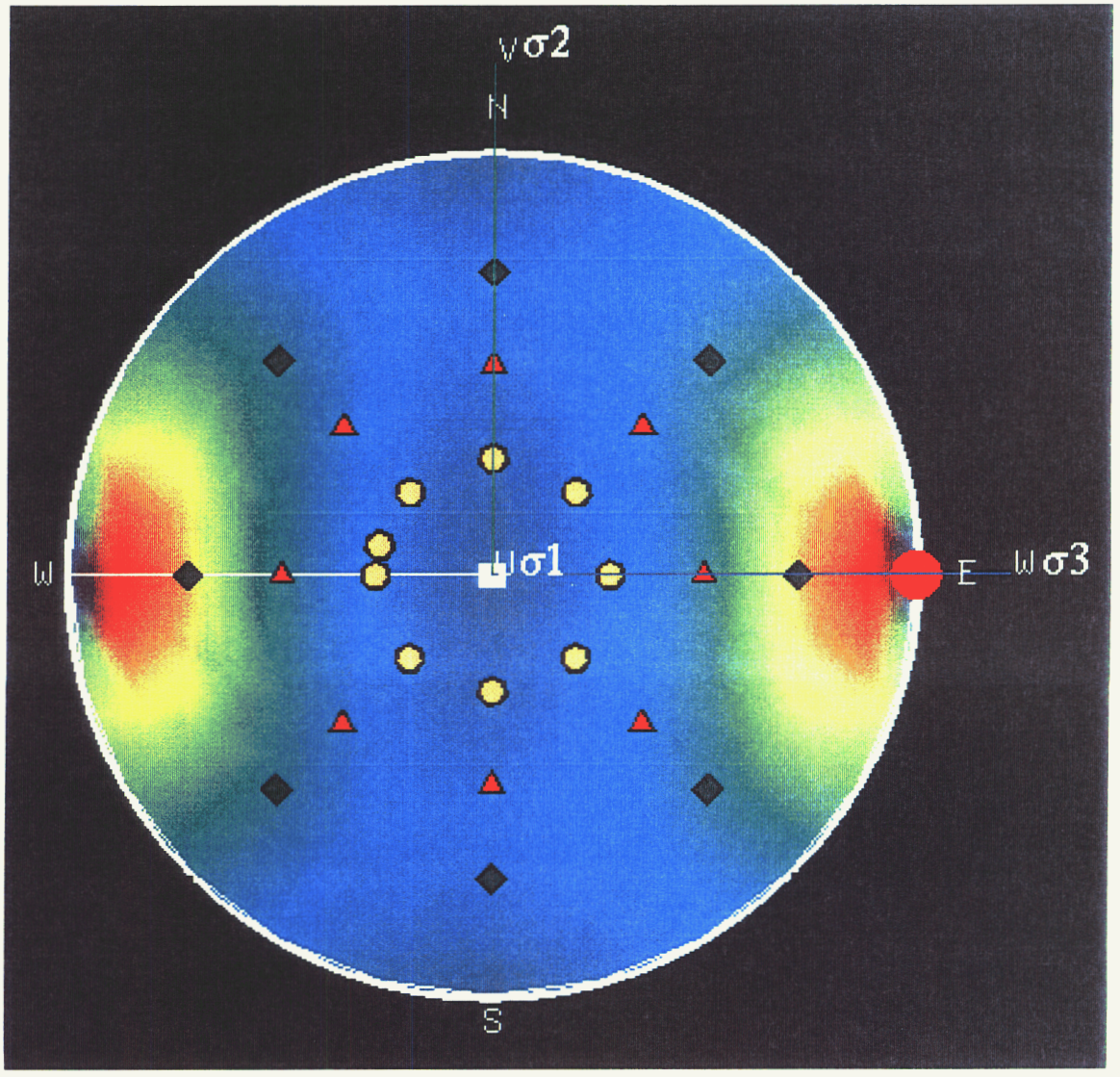
Tendency Plot Continued

To load an overlay file, press the **Load** button and a file selector will appear. After selecting an overlay file, the name of the file is displayed in the Overlay Tool. Each loaded overlay may be manipulated by clicking on the overlay name, then adjusting the color sliders or clicking on one of the various shapes. Removal is done in a similar fashion by selecting an overlay and pressing the **Remove** button.



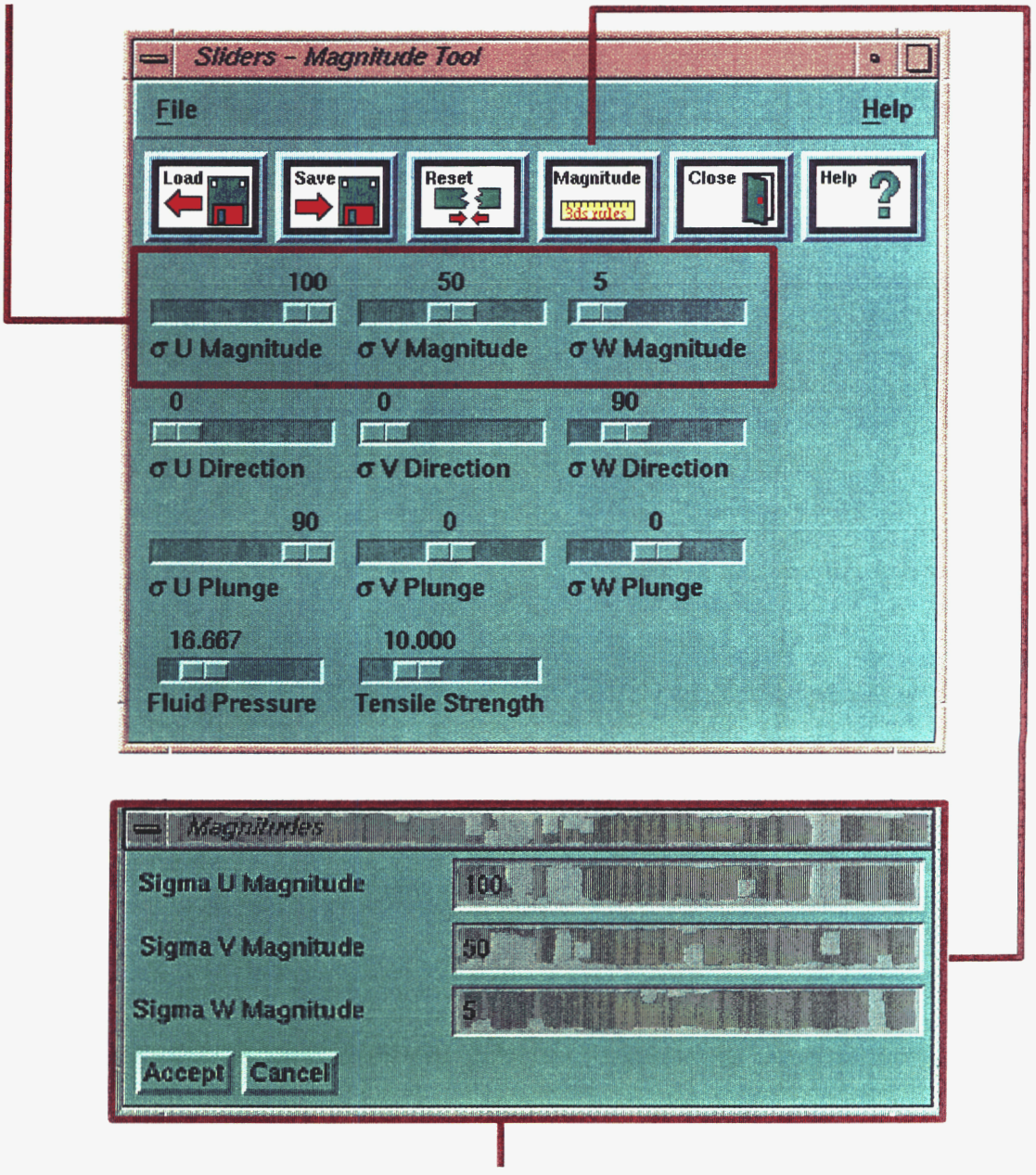
Tendency Plot Continued

Overlay data will appear as colored polygons on the lower hemisphere plot. All the points from a given overlay file will have the same color. Overlay data may represent fault poles or slip vectors. For example, one of the overlay datapoints (green diamond) below is located near the current slip vector (purple circle). Clicking on an overlay with the right mouse button displays the overlay file name.



Magnitude Tool

Stress magnitudes can be modified by using either the left or middle mouse button to select the desired normalized magnitude on the stress magnitude sliders. Input magnitudes range from 1 to 100 on each slider.



Use the magnitudes entry window to enter true magnitudes from the keyboard. The program will automatically normalize the input values to range from 1 to 100 while maintaining the correct magnitude ratios.