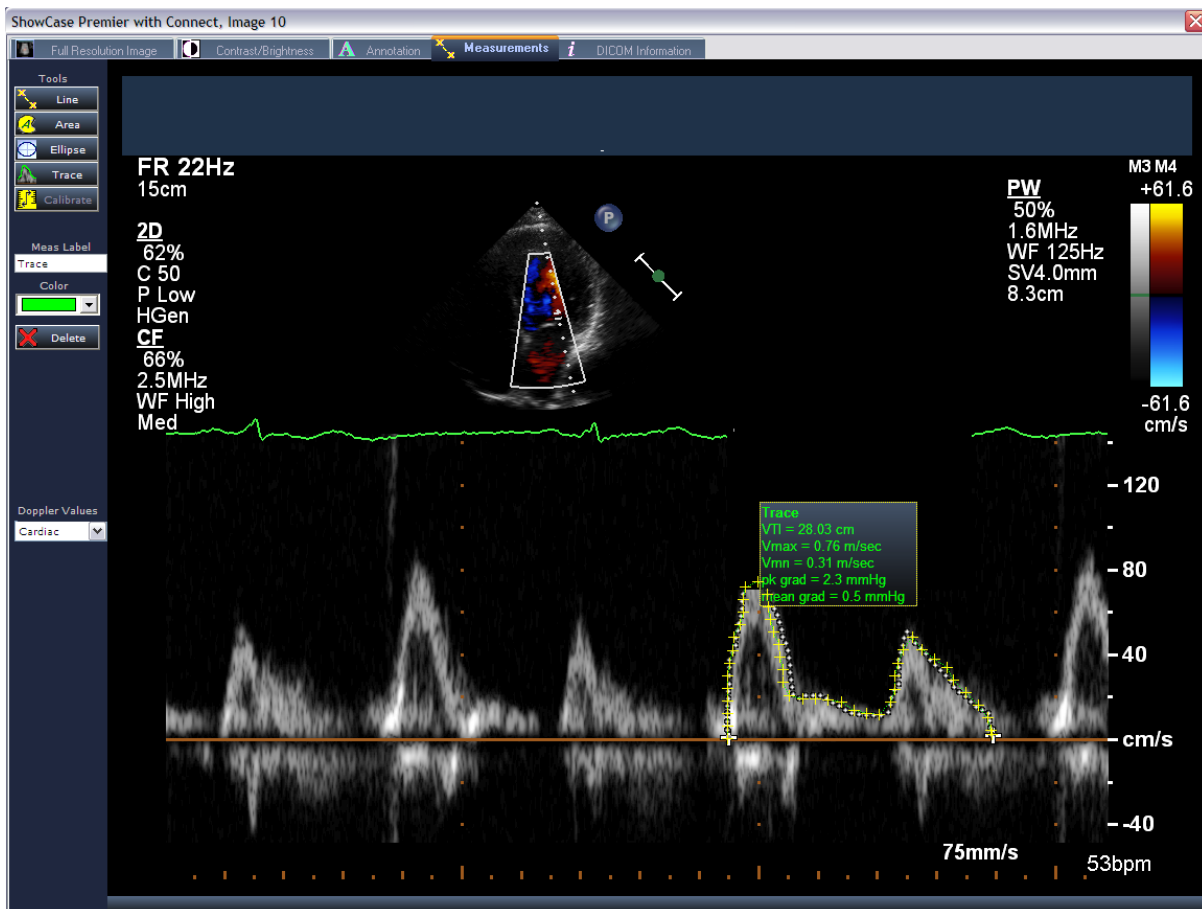


ShowCase Measurements

ShowCase Premier provides the ability to make simple measurements on an image. Measurement tools include **Line**, a free form **Area**, and an **Ellipse**. In ultrasound images, the **Line** tool provides measurements over the 2D, M-Mode, and Spectral Doppler regions. All measurements are temporary – They are not added to structured report data or saved in an editable format. You can burn them into the image if you select the **Save Series As...** option in the File Menu.

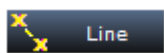
Making Measurements:

To access the measurement tools double-click on an image and select the **Measurements** tab.

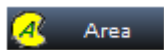


The **Tools** are on the left side of the window. After selecting a tool, move out over the image to make the measurement. The cursor changes when it is over an area of the image in which the tool is valid. You can define the measurement by clicking and dragging or by multiple individual clicks. The measurement values are displayed in a box adjacent to the measurement. This box can be positioned by selecting it and dragging it to a new location. A measurement can be selected by clicking on the measurement itself or on the box containing the measurement values. Once selected, the measurement can be edited by grabbing and moving the highlighted grab points.

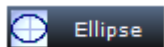
The **Meas Label** on the left allows you to label a selected measurement. The **Color** dropdown allows you to select a color for the current measurement. The **Delete** button removes the selected measurement.



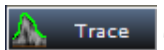
The **Line** tool provides a distance measurement when placed on a 2D image or 2D region of an ultrasound image. When placed on an M-Mode region, it provides a length, the vertical dimension, dT, the change in time, and a Slope. The Line tool also provides measurements in Spectral Doppler regions. See the User Guide for complete details.



The **Area** tool provides the ability to draw a free form area. It measures the area in square centimeters and the perimeter in centimeters.



The **Ellipse** tool provides the ability to place an ellipse on the image. It measures the area of the ellipse in square centimeters and the perimeter in centimeters.

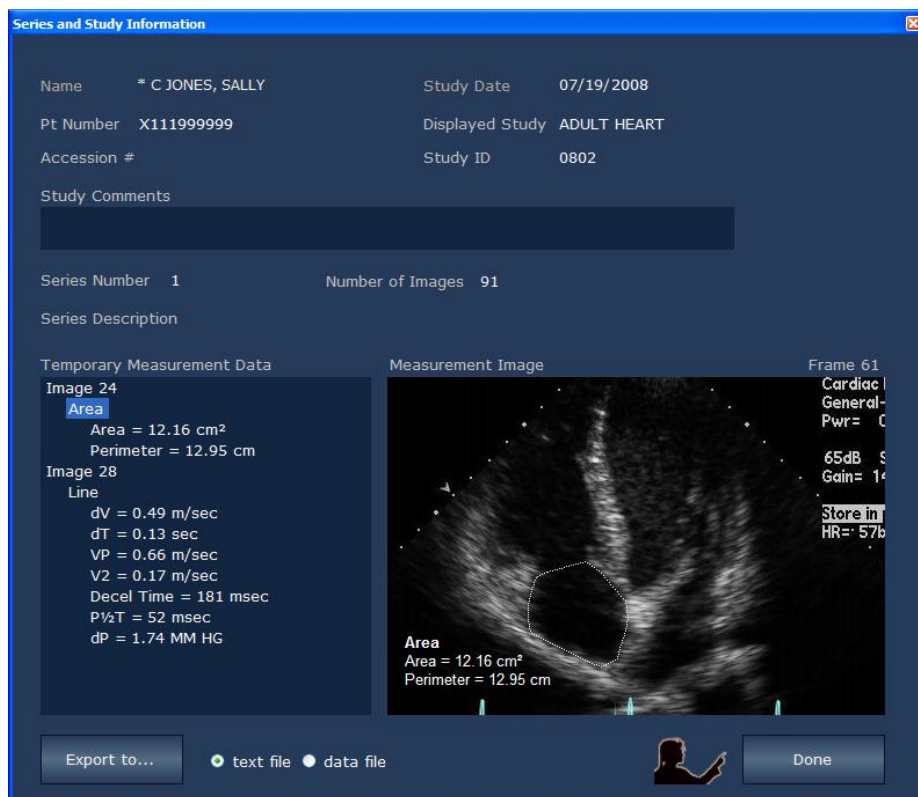


The **Spectral Doppler Trace** tool is enabled for ultrasound images that include a Doppler strip. It allows you to click and drag or multiple-click a tracing over one cardiac cycle from begin systole to end diastole. For accurate results, do not cross time discontinuities or trace multiple cycles.

Reviewing and Exporting Measurements



All of the measurements taken in a series can be reviewed and exported from the Series and Study Information dialog invoked by the Series Information button on the toolbar.



The **Temporary Measurement Data** area on the left contains a scrolling list of all of the measurements in the series organized by image. Selecting a measurement causes the corresponding image to appear on the right.

The **Export to...** button provides the ability to export all of the data listed to a text file or to a comma separated value (csv) file which can be read by spreadsheet and database programs like Excel.