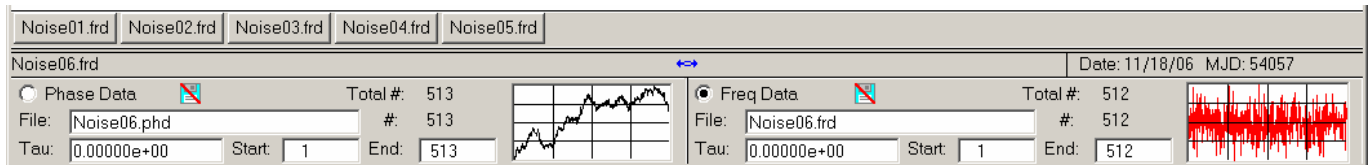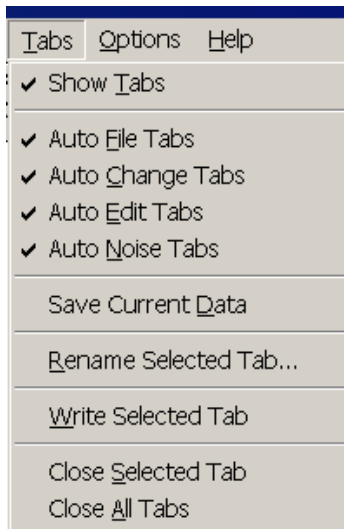# Stable32 Version 1.47 User Manual Addendum

● Data Tabs

Stable32 Version 1.47 introduces a new data tab feature that supports the saving of phase or frequency data, and their optional timetags, in a row of up to 12 tabs (buttons) above the status and message bars at the bottom of the main screen. These data tabs operate independently for phase and frequency data, and can be created to save the current data manually or automatically whenever it changes. Clicking on a tab then restores the data that it holds. This is a convenient way to analyze and compare multiple data sets, and it also serves as an undo feature to restore data after it has been changed. The data tabs are labeled with the filename of the corresponding data. An example of Stable32 data tabs is shown below:

Data tab operation is controlled by the **Tabs** main menu item that has several sub-items as shown below:

Initially, after the Stable32 program is launched, no data tab row is displayed. Clicking on the top **Show Tabs** item in the **Tabs** menu activates a blank tab row for both phase and frequency data (switched in the usual way). That also activates all of the other Tab menu items. The second group of four items (**Auto File Tabs**, **Auto Change Tabs**, **Auto Edit Tabs**, and **Auto Noise Tabs**) select whether new data tabs are automatically created when a new data file is read, the current data file is changed or edited, or a new noise file is generated. These options can be selected in any combination. The **Save Current Data** command creates a new tab for the current data. The **Rename Selected Tab** command renames the data file of the selected tab. The **Write Selected Tab** command writes the data of the selected tab to disk. The last group of two items contains the **Close Selected Tab** and **Close All Tabs** commands to remove either the selected or all of the data tabs (and free their memory).

Clicking on a tab selects it, and reloads its data for analysis. This can also be done by moving between the tabs with the left or right arrow keys, or using the Home and End keys move between the first and last tabs respectively, and pressing the spacebar. To select a tab without loading its data, press the CTRL key while clicking the tab.

The only significant disadvantage of the data tabs is that they require allocated memory to hold their data, and this can take a significant amount of RAM for many tabs with large data sets.

● Append Option in Run Plot Options

Checking **Append** in the Run Plot Options dialog box causes the stability data from the next run to be appended to an existing stability file with the specified filename (default SIGMA.TAU). This can be used with the Read function to easily produce a stability plot with multiple data sets. Stable32 always initializes the Append flag to the off position, thus assuring that the first stability file will be a new one. After each run, the Run Plot Options dialog box may be opened to change the Append flag, thus allowing the results multiple runs to be combined. New phase or frequency data may be opened, the current data may be manipulated, or the run parameters may be changed between the runs that are combined (e.g. to compare different data sets, preprocessing steps, or variances).

● Multiple Stability Plots in Read Function

Multiple data sets are now plotted with up to five different symbols. The first symbol is a circle ●, followed by a down triangle ▼, diamond ◆, up triangle ▲, and square ■, and they repeat thereafter. The symbols are filled for normal variances, and open for modified ones.