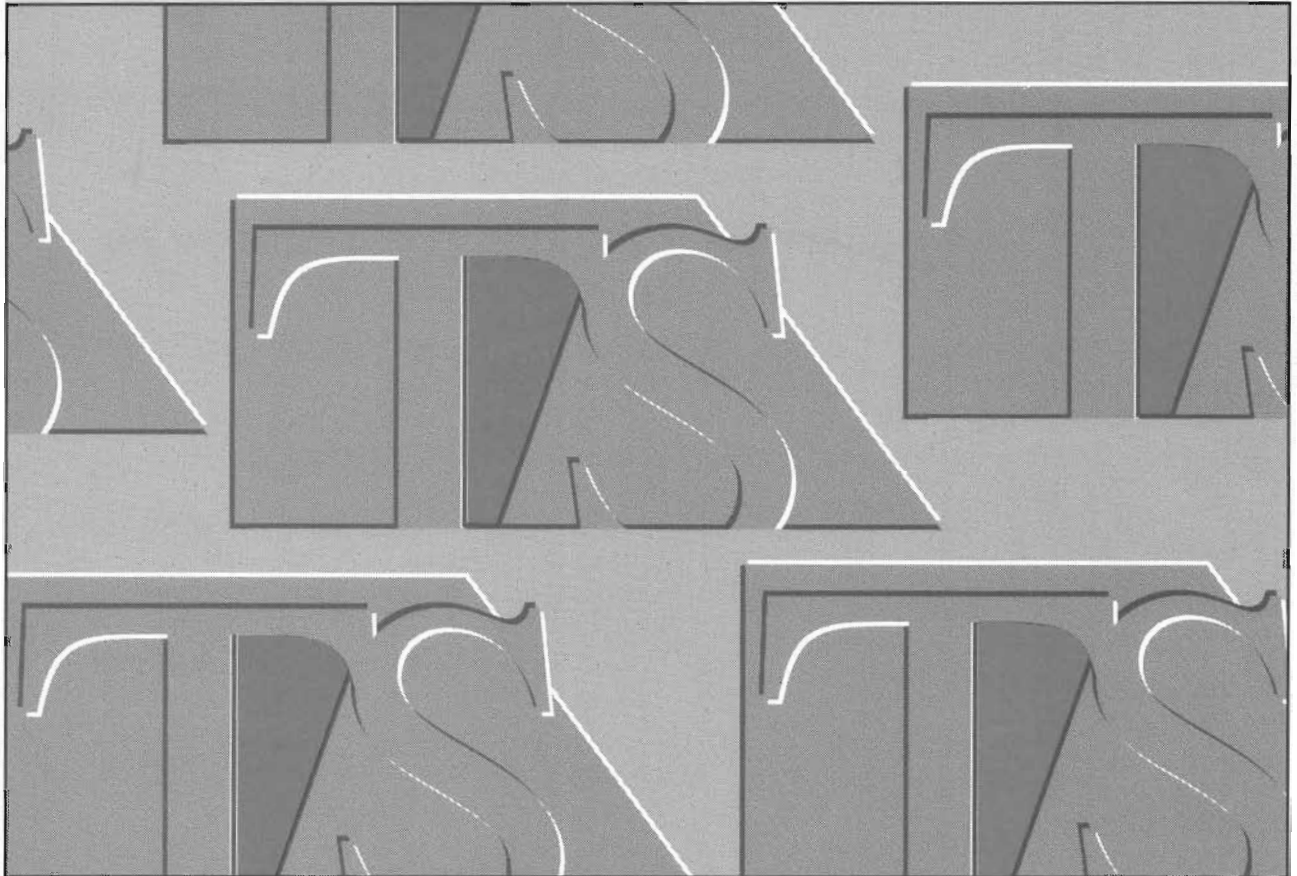


ATEMVA



User's Manual



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1 INTRODUCTION TO ATEMVA

1.1 ABOUT THIS MANUAL

This manual assumes that you have worked with Sun workstations and OpenWindows, and that you know how to work in the OpenWindows environment, using the pointer and the mouse buttons.

Consult *The OpenWindows Version 3 User's Guide* for information on working in the OpenWindows environment.

1.2 WHAT IS ATEMVA

ATEMVA— **A**TE **M**easured **V**alue **A**nalyzer is a tool that integrates INFORMIX Relational Database Management System and Statistics Graphics Data Management for storing and evaluating measured values from objects tested in ATS10 and other automatic test systems. Statistics Graphics Data Management is from now on abbreviated to Analysis Tool.

ATEMVA consists of one base window (see Figure 1) with a scrolling list and buttons. It also has a number of pop-up windows for additional functions.

The following chapters introduces the different parts of ATEMVA.

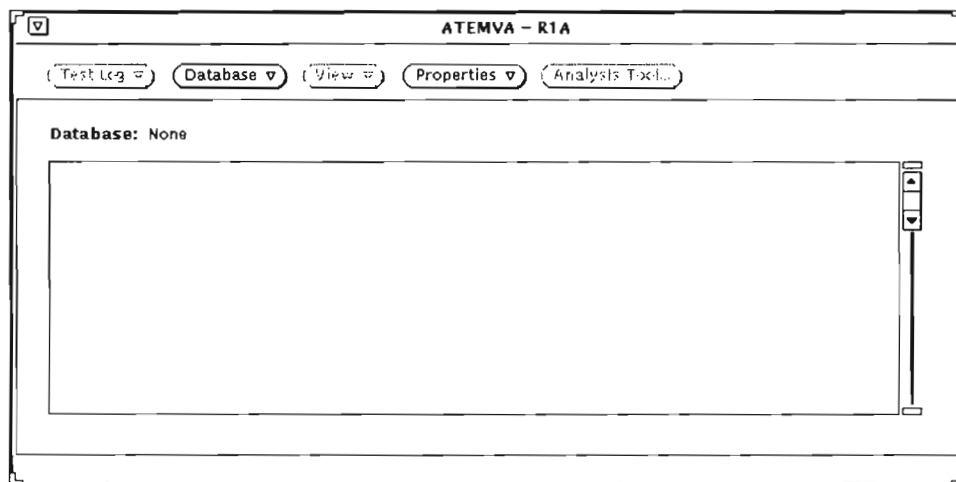


Figure 1. ATEMVA base window

1.3 STARTING ATEMVA

After you have logged in to your workstation, you start ATEMVA by typing **atemva** at the command prompt of a shell and then pressing the **RETURN** key.

1.4 BUTTONS AND MENUS

When buttons and menus are grey they are disabled, they are enabled together with their appropriate function.

1.5 TEST LOG DATA HANDLING

The test result data are extracted from test logs and stored in the test result database by the test result DBMS (Database Management System). The test logs that shall be entered into test result database are considered to contain two types of test result data, reference data and result data. The reference data are static and does not change between two test logs created with the same test program. Example of reference data are Test No. Limits etc. The result data are always unique for each test log. Example of result data are measured value, evaluation flag etc. The test result DBMS examines the test log that are to be entered into the test result database and compares the test program to the previously stored test program. If there are previously stored test logs with the same test program as actual, the test result DBMS checks that the test log reference data are exactly matching. If a mismatch is found, an error is reported and the loading is aborted. If a new test log are to be stored, the reference data are filtered and stored by the test result DBMS for future checks of equalness of test logs.

2 DATABASE

This chapter describes how to select, create and delete a database. These functions are activated by the **Database** button, shown in Figure 1.

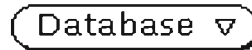


Figure 1. Database button

The following sections describes the choices on the **Database** button menu.

2.1 SELECT

If this item is selected, a "file chooser" pop-up window is activated. A list of databases with extension ".dbs" is displayed. One of the databases is selected by pointing to it and pushing the left mouse button. When a database is selected push the "Select" button or press the RETURN key, then is the selected database and its contents shown in ATEMVA scrolling list area.

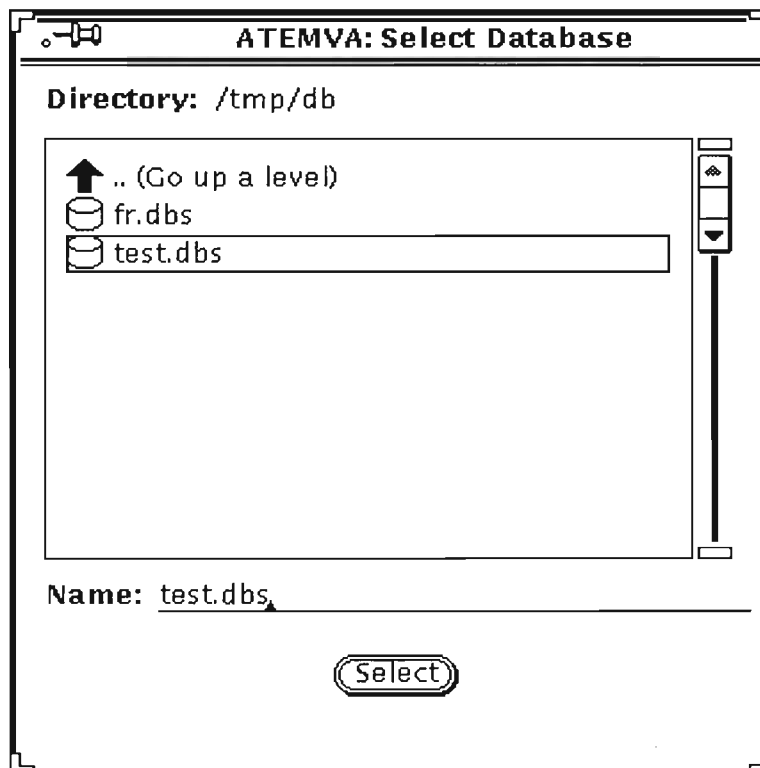


Figure 2. Select database pop-up window

2.2 CREATE

If this item is selected, a "file chooser" pop-up window is activated. A list of databases with extension ".dbs" is displayed. When a database is to be created, edit the name and push the "Create" button or press the RETURN key.

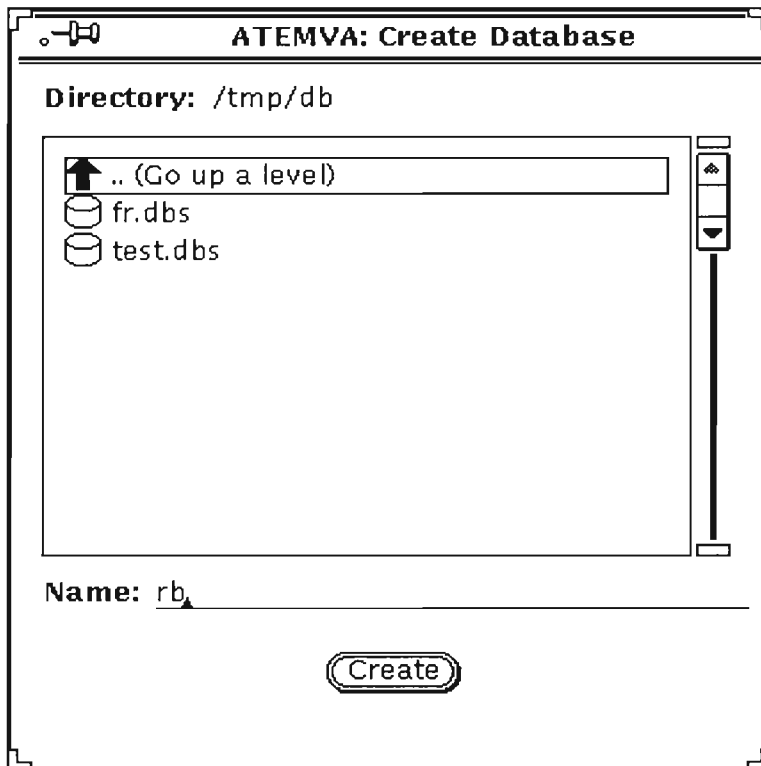


Figure 3. Create database pop-up window

2.3 DELETE

If this item is selected, a "file chooser" pop-up window is activated. A list of databases with extension ".dbs" is displayed. When a database is to be deleted select one database by pointing to it and pushing the left mouse button. When a database is selected, push the "Delete" button or press the RETURN key.

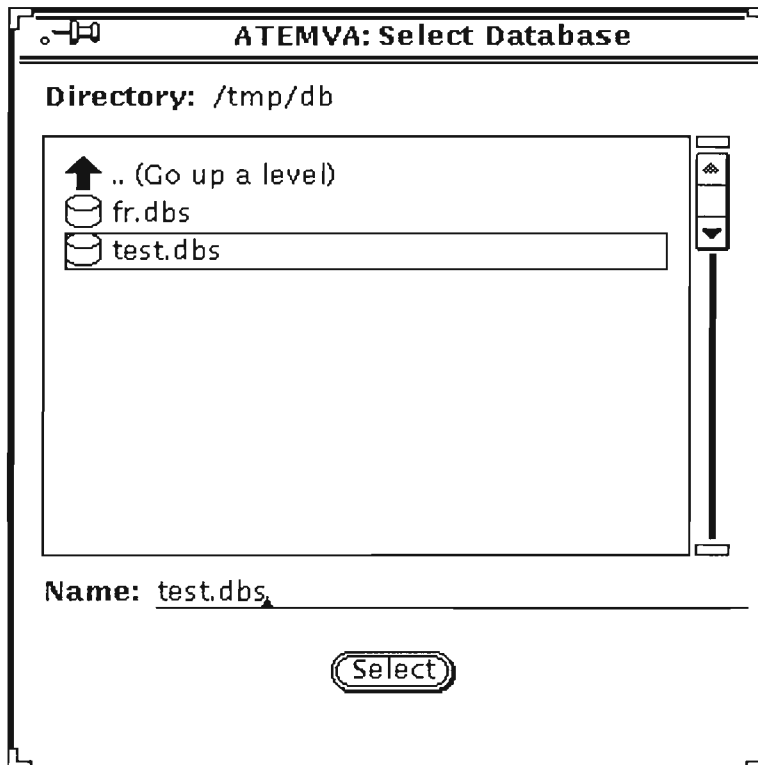


Figure 4. Delete database pop-up window

3 VIEW

This chapter describes how to view the contents of selected database. These functions are activated by the **View** button, shown in Figure 1.



Figure 1. View button

The following sections describes the choices of the **View** button menu.

3.1 TEST PROGRAMS

If this item is selected, the test program(s) in current database are displayed.

3.2 TEST SESSIONS

If this item is selected, the test session(s) are displayed together with tested object(s) serial number.

4 TEST LOG

This chapter describes how to insert, create, delete, export and import test log(s). These functions are activated by the **Test Log** button, shown in Figure 1.

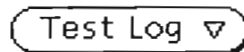


Figure 1. Test Log button

The following sections describes the choices on the **Test Log** button menu.

4.1 INSERT

If this item is selected, a "file chooser" pop-up window is activated. A list of files with names starting with "ATELOG_" or "ATEWIN_" is displayed. One of the files is selected by pointing to it and pushing the left mouse button. When a file is selected, push the "Insert" button or press the RETURN key, the file will then be inserted into current database. Inserting file(s) not starting with "ATELOG_" or "ATEWIN_" , edit the name and push the "Insert" button or press the RETURN key.

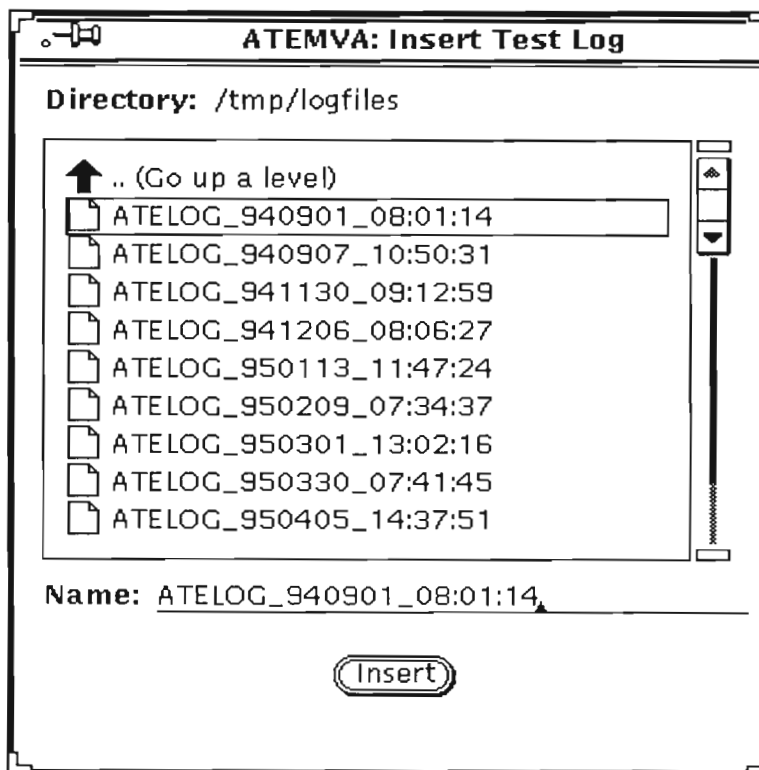


Figure 2. Insert test log pop-up window

4.2 CREATE

Select a test log(s) from ATEMVA scrolling list, by pointing to it and pushing the left mouse button. Then if this item is selected, a formatted test log(s) is created on output directory.

4.3 DELETE

Select a test log(s) from ATEMVA scrolling list, by pointing to it and pushing the left mouse button. Then if this item is selected, a test log(s) is deleted from current database.

4.4 EXPORT

If this item is selected, a "file chooser" pop-up window is activated. A list of exported databases with extension ".dbsexp" is displayed. A database is selected by pointing to it and pushing the left mouse button. When a database is selected, push the "Export" button or press the RETURN key, the test log(s) selected from ATEMVA scrolling list area will then be exported into selected database and its contents will be overwritten. If a new database is to be created for exported test log(s), edit the name and push the "Export" button or press the RETURN key.

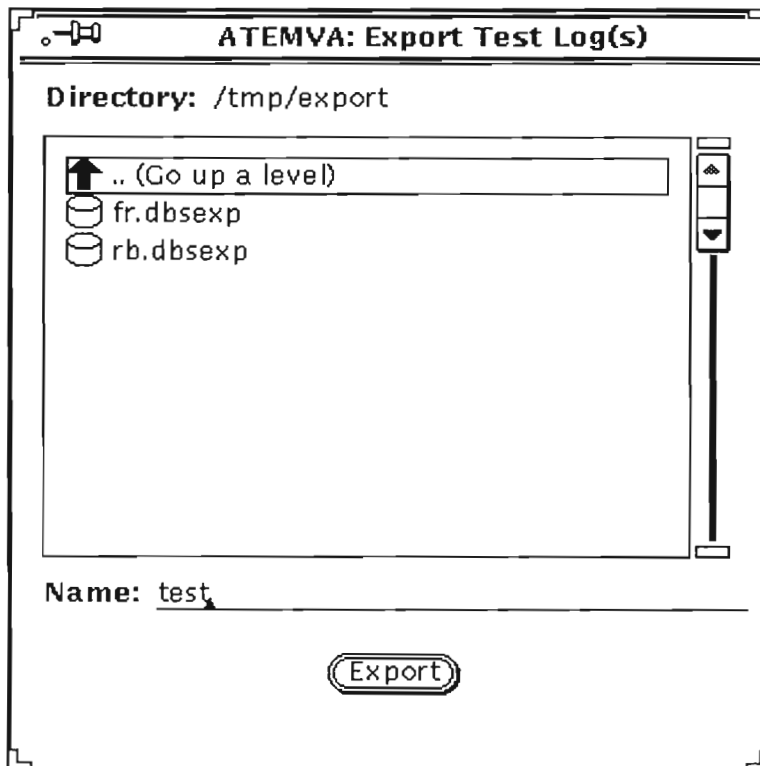


Figure 3. Export test log pop-up window

4.5 IMPORT

If this item is selected, a "file chooser" pop-up window is activated. A list of databases to import with extension ".dbsexp" is displayed. A database is selected by pointing to it and pushing the left mouse button. When a database is selected, push the "Import" button or press the RETURN key, the selected database test log(s) will then be imported into current database.

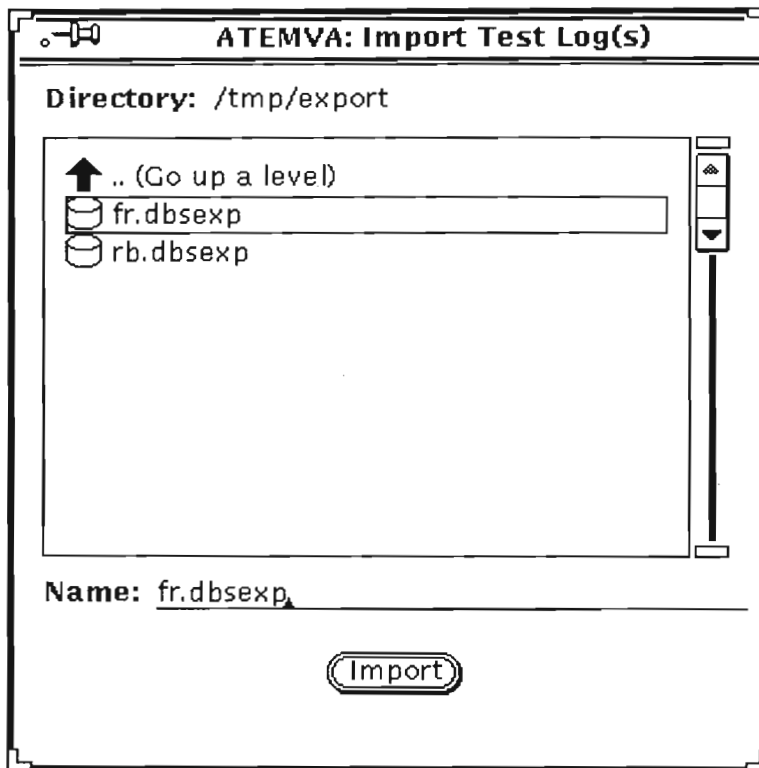


Figure 4. Import test log pop-up window

5 ANALYSIS TOOL

The following chapters describes how to operate Analysis tool and evaluate measured values from objects tested in ATS10 and other automatic test systems. To activate Analysis tool press the **Analysis Tool** button, shown in Figure 1.

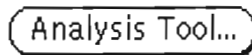


Figure 1. Analysis tool button

Analysis tool consists of one base window (see Figure 2) with a scrolling list and buttons. It also has a number of pop-up windows for additional functions.

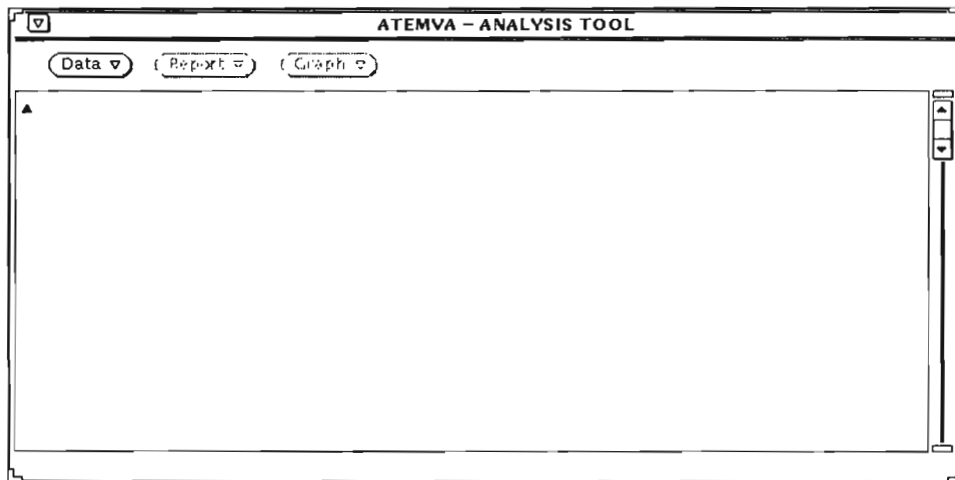


Figure 2. Analysis tool base window

5.1 INTERACTIVE USE OF ANALYSIS TOOL

To use the Analysis tool interactive, move the pointer into the Text Pane at the lower half in the Analysis tool base window and enter commands directly. How to operate Analysis tool is described in STATA Reference Manual.

6 DATA

This chapter describes how to load and display variables in Analysis tool. These functions are activated by the **Data** button, shown in Figure 1.



Figure 1. Data button

The following sections describes the choices on the **Data** button menu.

6.1 LOAD

If this item is selected, a pop-up window becomes visible and current database test program(s) are displayed.

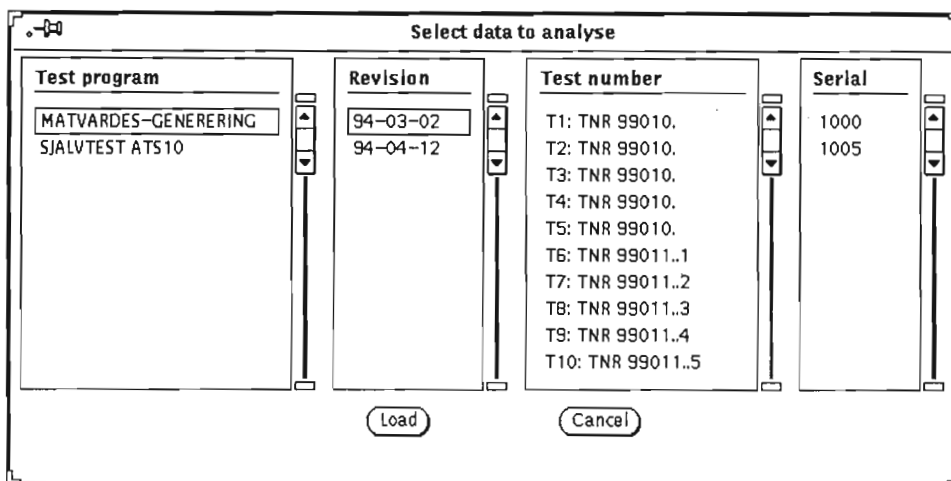


Figure 2. Load pop-up window

Perform the following steps to load data into Analysis tool:

1. Select a test program, a test program is selected by pointing to it and pushing the left mouse button.
2. Select a revision, selected in the same way as a test program.
3. Select a specific test number or none, by default all is selected. Selected in the same way as a test program.
4. Select a specific serial number or none, by default all is selected. Selected in the same way as a test program.
5. Press the **Load** button to load the desired data or the **Cancel** button to dismiss the window and cancel any selection you may have done.

6.2 DISPLAY

If this item is selected, the loaded variable(s) in Analysis tool are displayed.

7 REPORT

This chapter describes how to create a Brief or a Detailed report from Analysis tool. These functions are activated by the **Report** button, shown in Figure 1.

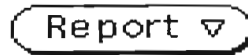


Figure 1. Report button

The following sections describes the choices on the **Report** button menu.

7.1 BRIEF

Brief report produce a set of statistics. The number of observations, the mean and standard deviation, and the minimum and maximum values are presented. If this item is selected, a "file chooser" pop-up window is activated. A list of created report(s) are displayed. A report is selected by pointing to it and pushing the left mouse button. When a report is selected, push the "Create" button or press the RETURN key, previously information in the report will be overwritten. When a new report is to be created, edit the name and push the "Create" button or press the RETURN key.

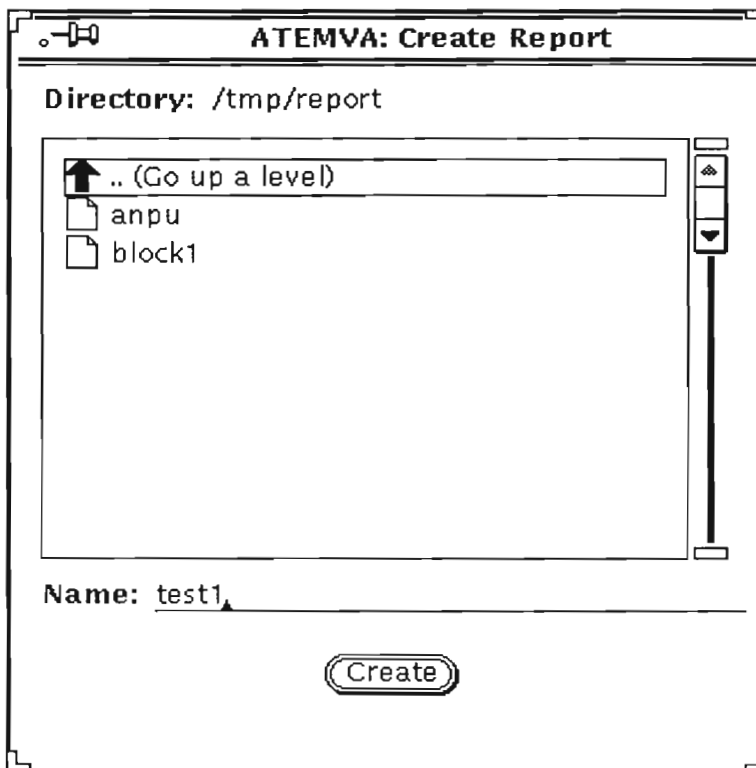


Figure 2. Create report pop-up window

7.2 DETAILED

Detailed report produces the same information as a brief along with the variance, skewness, and kurtosis. The four smallest and four largest values, and the 1st. 5th. 10th. 25th. 50th. (median), 75th. 90th. 95th. and 99th. percentiles. If this item is selected, a "file chooser" pop-up window is activated. A list of created report(s) are displayed. A report is selected by pointing to it and pushing the left mouse button. When a report is selected, push the "Create" button or press the RETURN key, previously information in the report will be overwritten. When a new report is to be created, edit the name and push the "Create" button or press the RETURN key.

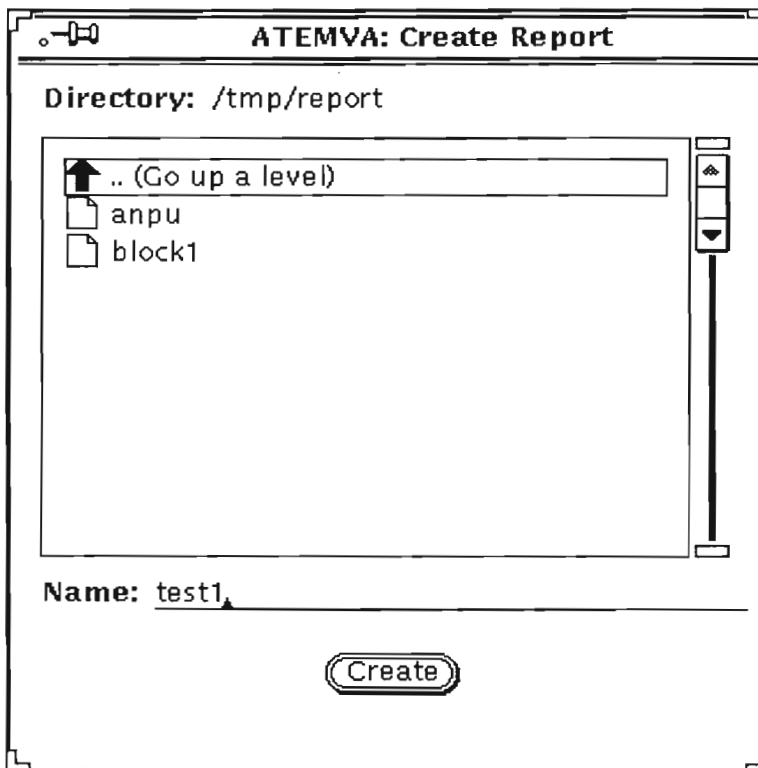


Figure 3. Create report pop-up window

8 GRAPH

This chapter describes how to Create and Save a graph in Analysis tool. These functions are activated by the **Graph** button, shown in Figure 1.

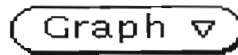


Figure 1. Graph button

The following sections describes the choices on the **Graph** button menu.

8.1 CREATE

If this item is selected, a pop-up window becomes visible and loaded test(s) are displayed.

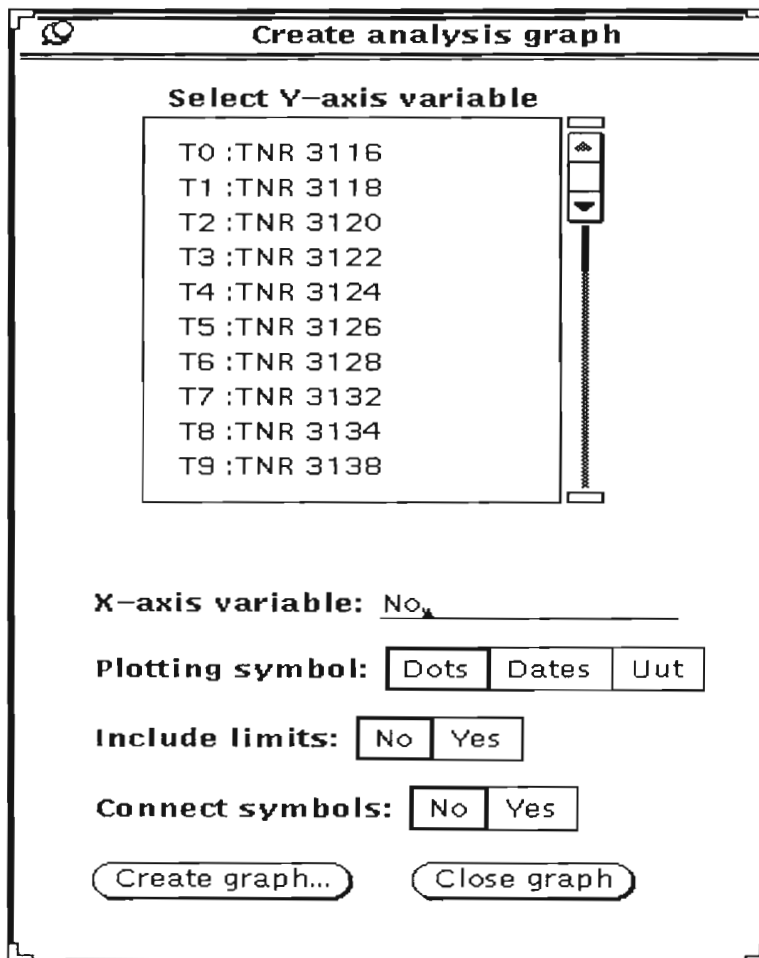


Figure 2. Create analysis graph pop-up window

Perform the following steps to create and close graph(s):

1. Select test(s) as graph y-axis variable. As many as four test numbers can be selected at same time. Select a test number by pointing to it and pushing the left mouse button.
2. Select graph x-axis variable: default is **No**. (Observation number).
3. Select graph plotting symbol: **Dots**, **Dates** or **Uut**.
4. Select include limits: **No** or **Yes** (Display graph limit(s)).
5. Select connect symbols: **No** or **Yes** (Draw a line between observations).
6. Press the **"Create graph"** button to create the desired graph(s) or the **"Close graph"** button to cancel created graph(s).

8.2 SAVE

If this item is selected, a "file chooser" pop-up window is activated. A list of saved graph(s) with extension ".ps" is displayed. (Graph(s) is saved in postscript format). A graph is selected by pointing to it and pushing the left mouse button. When a graph is selected, remove the extension then push the "Create" button or press the RETURN key, previously information in the graph will be overwritten. When a new graph is to be created, edit the name and push the "Save" button or press the return key.

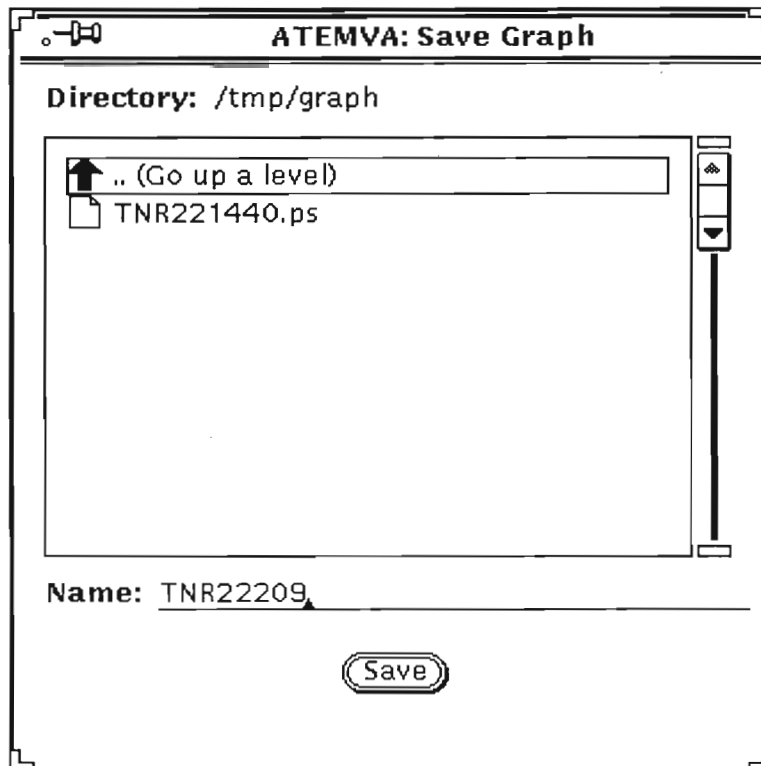


Figure 3. Save graph pop-up window

9 GETTING HELP

This chapter describes the On-line Help facility. Most items in ATEMVA have a Help window that you can display.

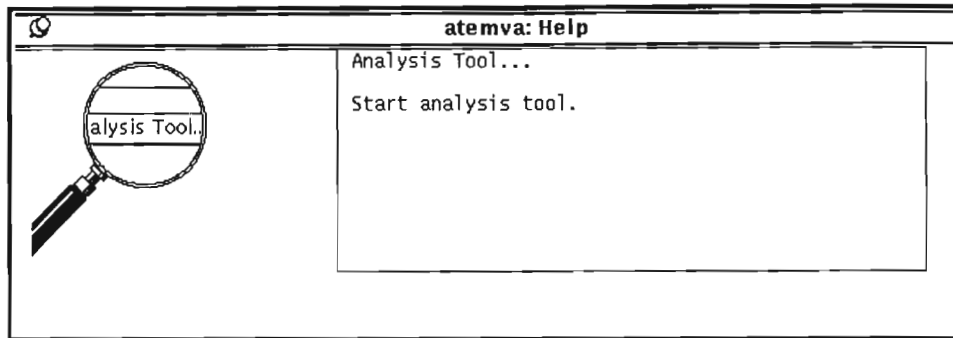


Figure 1. On-line Help pop-up window

9.1 DISPLAYING A HELP WINDOW

Perform the following steps to display a Help window:

1. Point to the item for which you want help. The item can be any button, setting, text entry etc.
2. Press the **Help** key on the keyboard. A Help window is displayed. The item (or a portion of it) that you pointed to is displayed in the magnifying glass. Context-sensitive help for that item is displayed in the pane of the Help window, as shown in Figure 1.
3. Dismiss the Help window by clicking the **SELECT** mouse button on the pushpin.

10 MODIFYING PROPERTIES

This chapter describes how to change the default settings of the software. The default settings are stored in the file ".atemva-defaults" in your home directory. If the defaults file does not already exist, it will be created the first time you perform a save operation (described in this chapter). These functions are activated by the **Properties** button, shown in Figure 1.

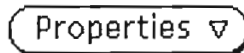


Figure 1. Properties button

The following sections describes the choices on the **Properties** button menu.

10.1 LOG FILES DIRECTORY

If this item is selected, a pop-up window becomes visible and the default directory is displayed. This is the directory where "Insert" test log file chooser look for log files.

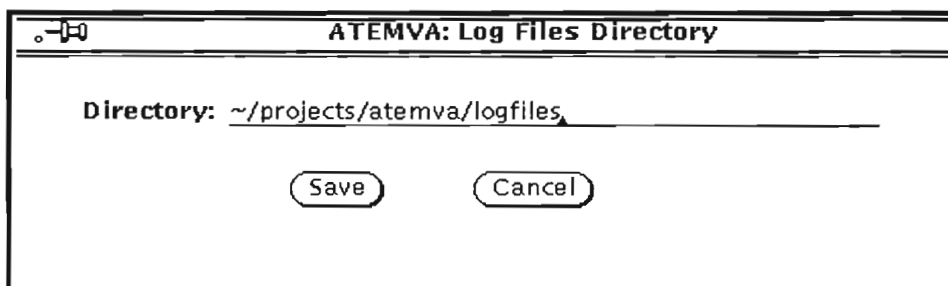


Figure 2. Log Files Directory pop-up window

Perform the following steps to change the log files directory:

1. Edit the directory name (Use Delete key to erase characters).
2. Press the **Save** button to store the directory name in the defaults file or the **Cancel** button to dismiss the window and cancel any changes you may have done.

10.2 DATABASE DIRECTORY

If this item is selected, a pop-up window becomes visible and the default directory is displayed. This is the directory where "Select", "Create" and "Delete" database file chooser look for databases.

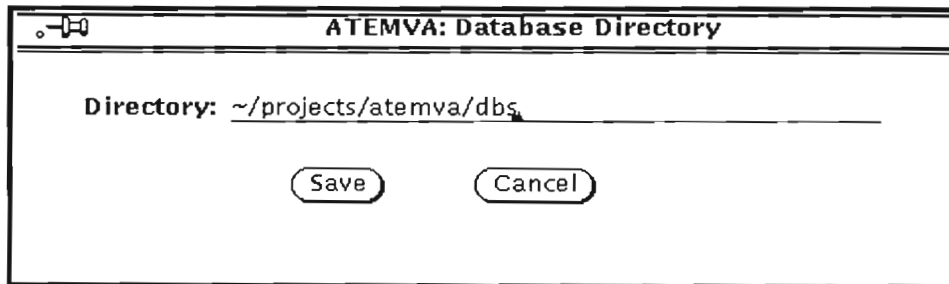


Figure 3. Database Directory pop-up window

Perform the following steps to change the database directory:

1. Edit the directory name (Use Delete key to erase characters).
2. Press the **Save** button to store the directory name in the defaults file or the **Cancel** button to dismiss the window and cancel any changes you may have done.

10.3 OUTPUT DIRECTORY

If this item is selected a pop-up window becomes visible and the default directory is displayed. This is the directory where out files are stored and also where the "Export" and "Import" database file chooser look for databases.

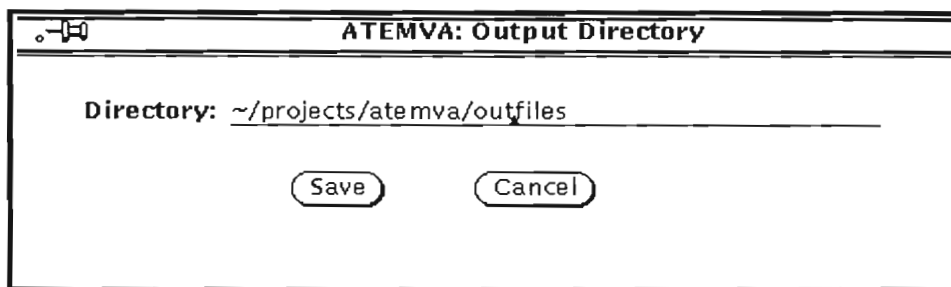


Figure 4. Output Directory pop-up window

Perform the following steps to change the output directory:

1. Edit the directory name (Use Delete key to erase characters).
2. Press the **Save** button to store the directory name in the defaults file or the **Cancel** button to dismiss the window and cancel any changes you may have done.