

### F 6.10.3 Deviation from least-squares line

With an active "LSS" option button or "Least square straight mode" option of the "Diagram" menu, a new diagram is generated from the selected section of the activated series of measurements, which shows the deviations from a least squares line.

### F 6.10.4 Velocity and acceleration

With the "Veloc(ity)" or "Accel(eration)" option button activated, or the "Velocity mode" or "Acceleration mode" option selected in the "Diagram" menu, the program computes from the selected segment of the active series of measurement data a series of velocity or acceleration data, respectively.

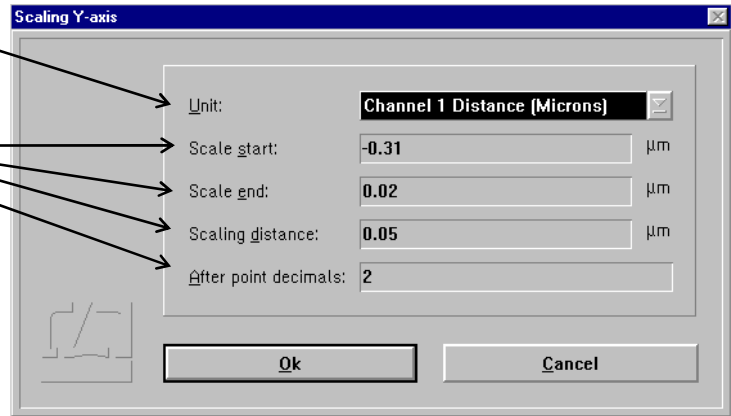
Velocity can be computed from measured distance or angle data, but not from linear or angular deviations. Acceleration can be computed from measured distance data or from velocity data.

### F 6.11 Rescaling of diagram axes

The program has an automatic algorithm for the automatic scaling of diagram presentations. If you want to change the unit of measurement or the coordinate scales to be applied to the display before you transfer a diagram to the "Document" program module for record compiling and printing (see sect. F 6.9 "Compiling a record"), use the menu options "Diagram - Abscissa scaling" or "Diagram - Ordinate scaling". Such a change will only remain valid until the visible diagram segment is changed by zooming or scrolling. Before you rescale an ordinate axis you need to select the respective ordinate by clicking the  button at its top end.

The drop-down list box "Unit" can be opened to change the unit.

In the four input boxes below this you can specify the required scaling.



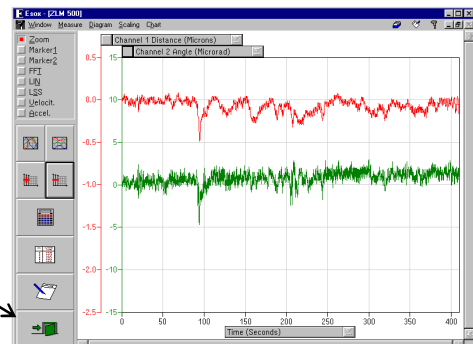
### F 6.12 Exiting the diagram presentation

To exit the diagram presentation and return to the display of the current

readings, activate the




button or choose the "End diagram" option of the "Diagram" menu.



## F 7 Analysis of previous measurements

After the measurement a file card is created and the measurement results written on it. These cards are managed by the program module "Cardfile". It lets you load the card with the results of an earlier measurement so that you can analyse them in the ways described in section F 6.



To load a card, first click the  button or select the "Card" option of the "Cardfile" menu.

This will change the screen display.

The left half of the window shows a file cabinet with 6 file boxes (drawers).

The right half of the window contains a field with one file card - the one whose data can presently be processed by the program.

If you want to process the data obtained in one of the previous measurements, you need to open the cabinet drawer containing the desired card, select the card from the drawer and move it into the field on the right.





The following subsections briefly describe how card boxes are opened and closed, and how cards are shifted, loaded into the main memory and placed back into the cabinet.


For further details of handling file cards, see section "K - Cardfile / Archiving of measurement Results".

### F 7.1 Changing the selected (highlighted) card field

One card field or one card box label field is shown highlighted, i.e. white lettering on black background.















With the cursor keys , ,  and  you can move from one card field or card box label to another.

With the  key you can move from the previously highlighted card field on one side of the screen to the card field on the other side of the screen that was highlighted there last.



Click on the card field or card box label you want to highlight. Please note: Clicking on an already highlighted box label will open the respective box.

### F 7.2 Opening and closing a card box

	Opening	Closing
	If the label of the card box is not highlighted, use  ,  ,  and  to move to this label. Then press  .	If necessary, press  ,  or  to move to the respective side of the screen. Then press  .
	If the label of the card box is not highlighted, click on the label once to highlight it; click on the label again to open the box.  If the label of the card box is already highlighted, click on it once to open the box.	Click the  button at the bottom right or left of the window to close the right or left card box.

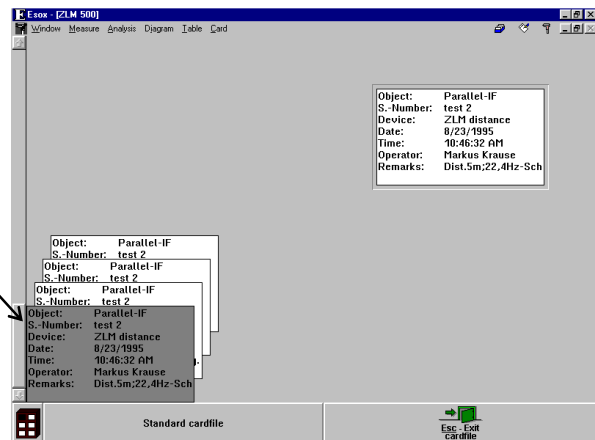
### F 7.3 Shifting of file cards

The cards in an open card box can be shifted to activate (and highlight) another card. Cards arranged in front of the current card are not displayed.

The vertical scroll bar shows the location of, and the amount of space occupied by, the current card with respect to all cards of the box.



The vertical scroll bar can be used to shift the cards.



Shifting the card with the keyboard requires that the first card on the left is highlighted.



- The file cards are shifted backward by one position. The card in the order before the card that was current last becomes the new current card.



- The file cards are shifted forward by one position. The card in the order behind the card that was current last becomes the new current card.



- The file cards are shifted backward by one screen page. The first card of the previous page becomes the new current card.



- The file cards are shifted forward by one screen page. The first card of the next page becomes the new current card.

### F 7.4 Loading and unloading of file cards



The easiest way of loading a card is by using the mouse. Move the mouse pointer on the source card, click and hold the left mouse button down. Now drag the mouse pointer with the file card to the target position, then release the mouse button.


If the main memory already contains a card, the program will automatically put it back to its previous position in the card box.

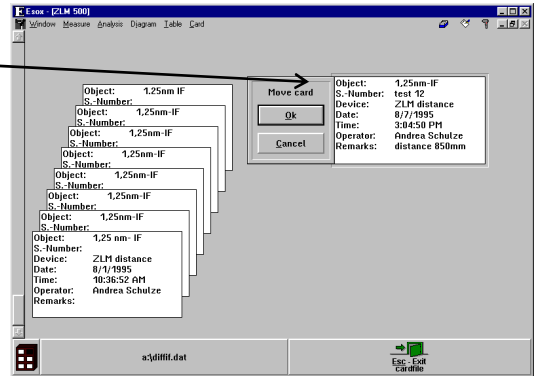
Proceed analogously when putting a loaded card back into its box. Click on the card and drag it to its target position. By dragging the mouse pointer with the card up to the upper or lower margin of the window you can shift the card stack in the box on the left.



Loading a card with the keyboard requires that the card must first be highlighted on the left half of the screen.


Now select the **"Load"** option from the **"Cardfile"** menu.

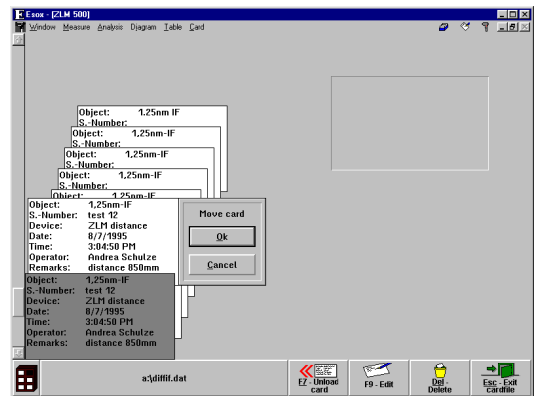
The screen shows a field with the card to be loaded.  
Press the  key.



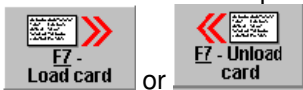
Putting a card back requires that it must first be highlighted in the main memory field represented on the left half of the screen. Then select the **"Move"** option from the **"Cardfile"** menu.

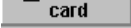
The target position can be selected with the direction keys.

Conclude by pressing the  key.



Instead of the menu options "Load" and "Move" of the "Cardfile" menu you can also use the



or  button at the bottom of the screen.

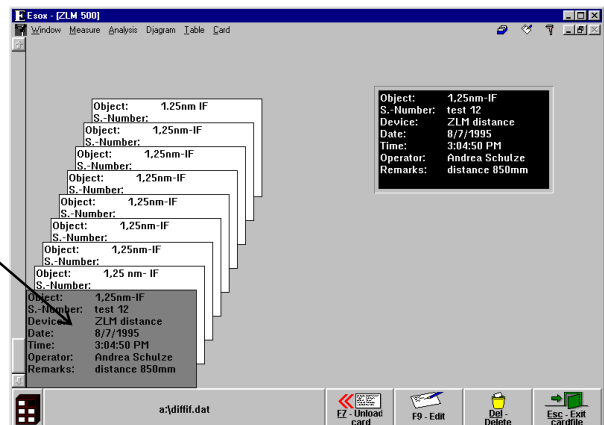
The target position can alternatively be selected with the scroll bar on the left margin.

The keys ,  and  can be used to page up and down for finding remote target positions.

It is thus possible to move a card from a left-side source position to a left-side target position, for the purpose of rearranging the cards.

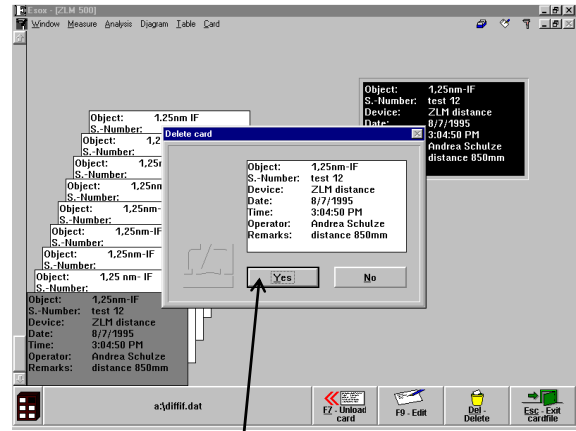
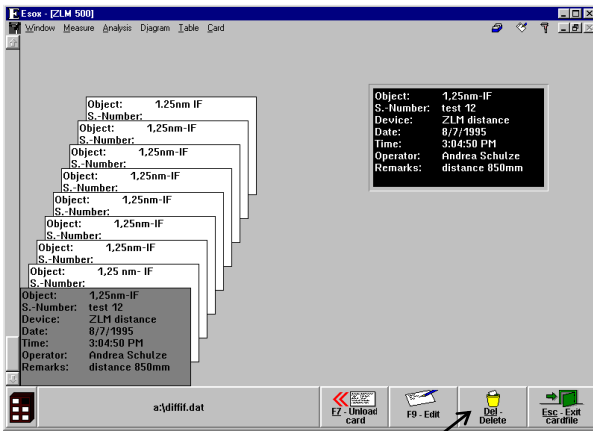
If a card has been loaded into the main memory, it still remains also visible at its source position on the left side, but it is shown here with black lettering on a grey background.


Such a "greyed-out" card cannot be moved from its place.

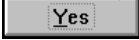


### F 7.5 Deleting a file card

A card you want to delete must first be highlighted.

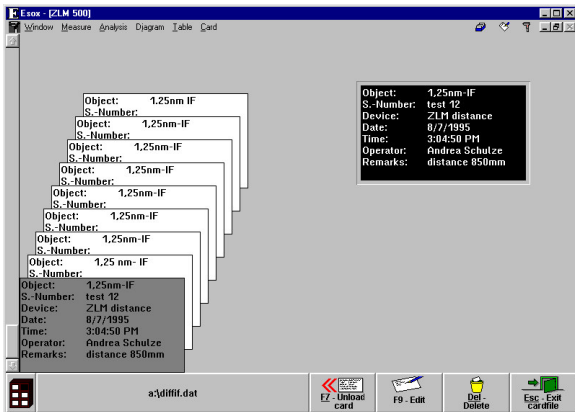



Select the **"Delete"** option from the **"Cardfile"** menu or click the  button.

Click the  button to delete the highlighted card.

### F 7.6 Editing of cards and card box labels

First highlight the card or the card box whose inscription you want to edit.



Start the text input mode by selecting the **"Edit"** option from the **"Cardfile"** menu or by clicking the  button.

Annex III contains a list of keys and key combinations that have special functions in the editing of text boxes. In addition you can use the following keys for moving within a card:



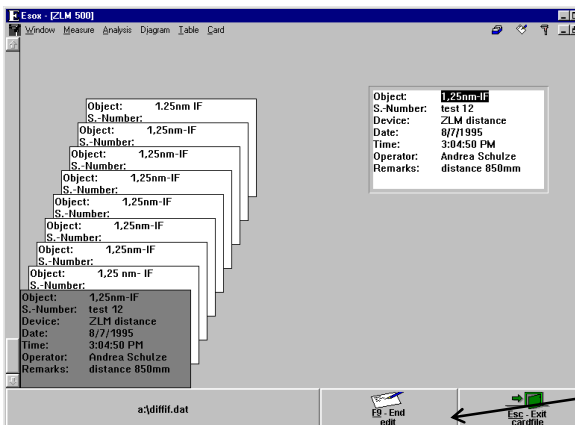
- moves the text cursor to the next card entry in the same line.




- moves the text cursor to the next lower card entry.



- moves the text cursor to the next upper card entry.

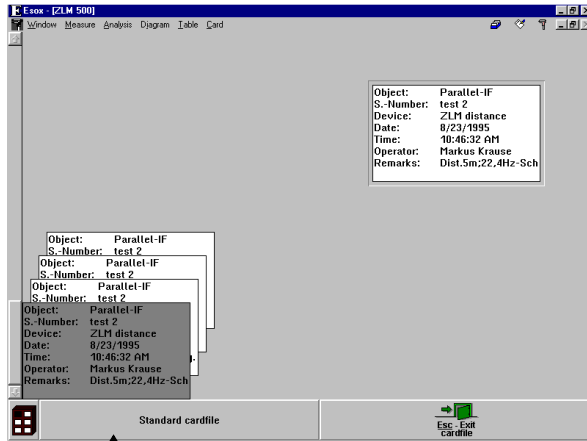


With editing finished, you need to quit the text input mode by selecting **"End edit"** in the **"Cardfile"**

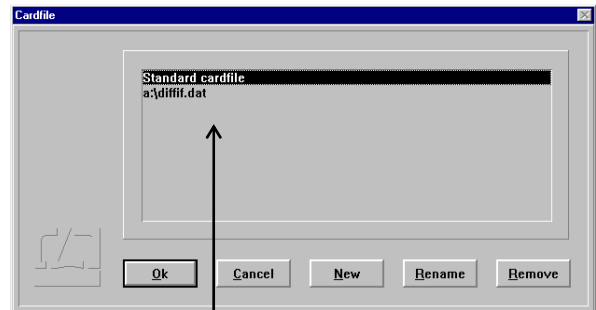
menu or clicking the  button.

### F 7.7 Creating, renaming and deleting a card file

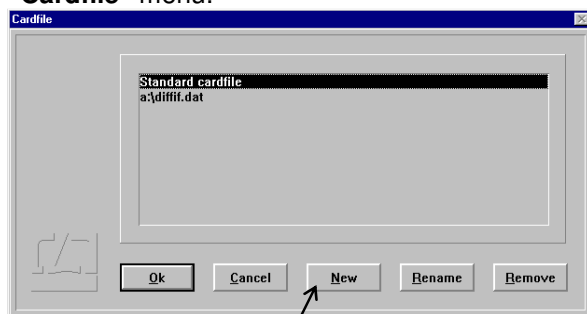
When the program is started first, it creates a card file named "Standard Cardfile" in the system data file "esoxm.dat" located in the installation path. It is possible to create further data files. Each data file comprises a card file cabinet with six card boxes.



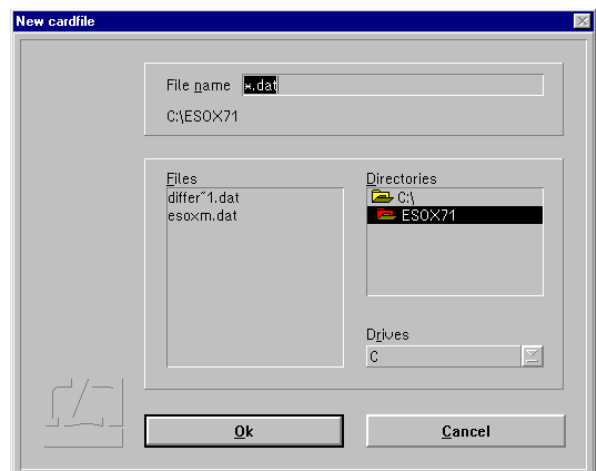
To create a new card file, click on the file name button at the bottom left window margin, or select the menu option "Open cardfile" from the "Cardfile" menu.



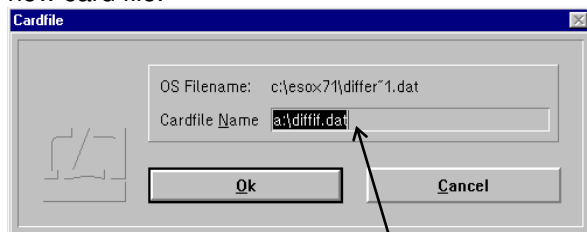
This opens a list showing the names of all existing card files in a dialog box.



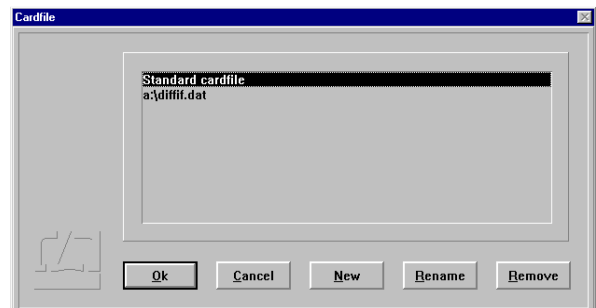
Click the **New** button if you want to create a new card file.



This opens another box in which you must enter the name of the data file.



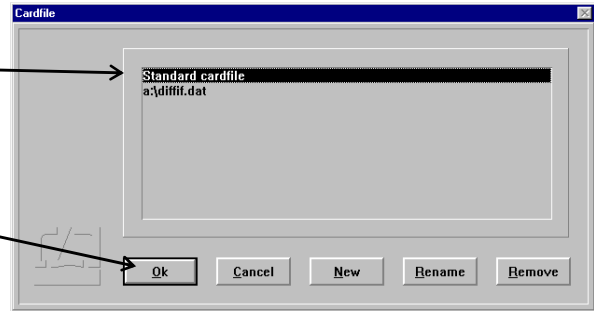
Click the **Ok** button to open another dialog box, in which you must enter a card file name, which then appears in the card file list.



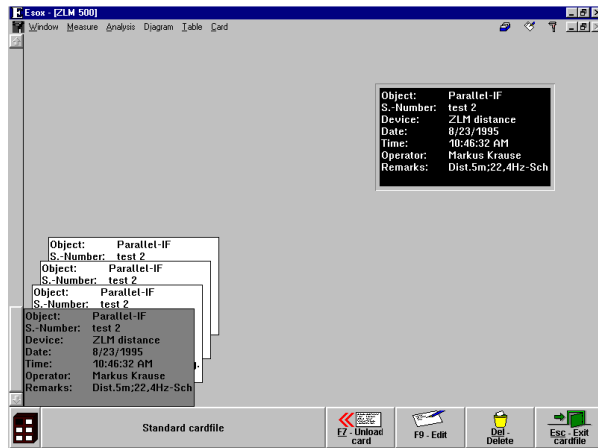
The same dialog box is opened if you use the **Rename** button to rename a card file.

Click the **Remove** button if you want to delete a card file from the card file list. This will not, however, delete the data file from the memory. For deleting the data file, use the file manager.

To select a card file from those created, highlight the file name in the list box and then click the **Ok** button.



### F 7.8 Quitting the Cardfile menu



To quit the Cardfile menu, click the **Esc - Exit cardfile** button or select the "Exit" option from the "Cardfile" menu.

### F 8 Exiting the measurement program



To exit the "ZLM-Synchron" program module, activate the **Esc - Exit cardfile** button or choose the "Exit measurement program" option of the "Measure" menu.