

Command	GDISP
PURPOSE	Display graphic data on screen
PARAMETERS	
ANALYZER	Name of the analyzer to be displayed. If omitted, the GDISP command will draw the graphic data previously read by the GREAD command.
/2DCOLOR	Define parameters of 2-dimensional cluster display. First option: Multicolor (sequence of colors as a Z scale) R / G / B / D or any combination, e.g. RB (monocolor) GRAYSCALE (gray scale for b/w printer) The parameters of the first option are exclusive. Second option: Default: Cluster size varies with Z value FULL (all clusters are drawn in full size) ABSSIZE (cluster size proportional to ABS(Z)) NOZEROES (clusters with Z = 0 are not drawn) The three parameters of the second option can be specified simultaneously.
/ALL	Set limits in x and y that all data are displayed.
/AUTO	Draw the data with default display parameters. This option is useful to set limits and other parameters such that all data are visible on display.
/AXCOL(c)	Specifies the color of the axes including numbers and captions. Colors are specified using "D" (default color = black), "R" (red), "G" (green) and "B" (blue). Combinations of letters can be given for additive color mixing, e.g. "RG" means yellow..
/AXFAC(r)	Specifies the line width of the axes, the size of the ticmarks, the size of the numbers and the captions of the axes, and the size of the legend.
/AXIS	The axes are drawn in addition to the data. This is the default option.
/BACKCOL(c)	Set color of the background inside the axes. (See /AXCOL how to define the color.)
/BINSIZE(i)	Integer number, which specifies the factor by which the binsize of the graphic data is increased. E.g. i = 3 means that over the whole range 3 consecutive data are combined. For analog data either the sum or the average of the contents of the combined channels is shown, depending on the histogramming mode (bin or channel), defined by the command "SET".
/CLUSTER	Display 2-dim data in cluster mode (= default)
/CMODE(i)	Character mode (font). The following options are supported : 1: proportional font with thin lines, 3: proportional font with thick lines (default), 11: equidistant font with thin lines, 13: equidistant font with thick lines.
/COLUMN(r)	Width of columns. This option refers to the linemodes "U ", "UU", "V", and "W"..
/CONTOUR	Display 2-dim data in contour mode.
/DEVICE(c)	This option can be used to execute all functions of the GDISP command, except drawing on the graphic window. For this purpose, the

	dummy device DEVICE(NONE) can be specified. Use the option DEVICE(XWIN) to return to the graphic mode.
/FORCE	Force drawing of an empty analyzer.
/FORMAT(r)	Specifies the format of the graphic window. FORMAT(r) denotes the ratio height/width of the area inside the axes.
/FRAME	Draw a frame around the display area.
/FULL	Set limits in x and y that all data are displayed.
/GRAF	Suppress the frame of the graphic presentation of an analyzer, which lists statistical data.
/HATCHING(r)	Distance of the lines of hatched areas. This option refers to the linemodes "I", "II", "A", "C", "AC", "J", "K", "JK", "V", "W", "AO", "CO", "ACO", "JO", "KO", and "JKO".
/INT	Draw integer numbers to denote the tic marks of the axes if possible.
/ISOMETRIC	Display 2-dim data in isometric mode.
/LINEWIDTH(r)	Specifies the width of the lines which represent the data. The displayed line width is $r * SCALING$.
/LIVE	Switch on the live display. The live display immediately shows the actual content of an analyzer (1-dim or 2-dim), e.g. when reading list-mode data. The live display is performed with a binsize of one.
/NCUTS(i)	Option for the display of 2-dim data. In cluster mode it defines the number of colours used, in contour mode it defines the number of contour lines (default = 8).
/NOAXIS	Do not display the axes.
/NOCOMMENT	Suppress the comment when displaying an analyzer.
/NODESCRIPT	Do not display the legend.
/NODSN	Do not write the dataset name or the name of the analyzer on the left border of the display.
/NOERRORBARS	Suppress drawing error bars.
/NOLEGEND	Do not display the legend.
/NOSPACE	Do not create any free space between the extreme data points and the axes.
/NOTITLE	Do not display the title of the figure, respectively the title of the analyzer.
/NOWRITE	Suppress writing any text on the display, defined in the GRF dataset.
/NOXNUMBER	Do not draw any numbers and any caption on the x axis.
/NOXSPACE	Do not create any free space between the extreme data points and the x axes.
/NOYNUMBER	Do not draw any numbers and any caption on the y axis.
/NOYSPACE	Do not create any free space between the extreme data points and the y axes.
/PALETTE(c)	

FUNCTION The command GDISP first creates the SATAN graphic window and the SATAN interface window, if they do not yet exist. The graphic data are drawn on the graphic window, and the TOOL interface window is created, which offers a number of graphic options. The size of the graphic window is adapted to the area needed to display the graphic data, e.g. according to the /SIZE and /FORMAT parameters of the GDISP command. If the size of the graphic window is modified by the

mouse, the size of display with the next GDISP command will be adapted to the modified window size.

Analyzer data or the data of a pseudoanalyzer are transferred to the fit package by the GDISP command.

If the graphic data of a GRF dataset are displayed, the GSAVE command can be used to write the graphic parameters to the dataset.

The GDISP command produces a softcopy of the display in WMF format. This softcopy can be written to a file by the command GCOPY / WMF. If the gcopy mode is switched on, the GDISP command produces an additional softcopy of the display in EPS format, which can be written to a file by the command GCOPY / EPS.

REMARKS

GDISP can be used either to display an analyzer or to display graphic data given in a GRF dataset. When GDISP is entered with an analyzer name, the analyzer data are displayed. Otherwise, the graphic data previously read by the GREAD command are displayed.

SATAN determines the default values of the graphic parameters (e.g. the limits in x and y, linear or logarithmic presentation) partly from the data. These defaults are overwritten by the graphic parameters stored in the graphic dataset. The graphic parameters defined by the GPRESET command have even higher priority, but the highest priority is attributed to the graphic parameters specified with the GDISP command.

EXAMPLE

GREAD MYDATA
GDISP / YLOG

Read the graphic data from the dataset MYDATA.GRF and display the data with a logarithmic y axis.

GDISP MASSES / FORMAT(0.5)
Display the analyzer “MASSES” with a ratio
(vertical size) / (horizontal size) = 0.5.

GDISP SHELLS / 2DCOLOR(GRAYSCALE)
Display the 2-dimensional analyzer SHELLS with a gray scale. The colors are chosen in a way that their brightness varies with the Z value.

GDISP YIELDS / 2DCOLOR(MULTI;FULL,NOZEROES)
Display the 2-dimensional analyzer YIELDS with full-size clusters. The colors vary with the Z value. Do not show the channels with zero content.