ARROW ... COORDINATES

PURPOSE
Specifies the coordinates for arrows to appear on subsequent plots.

DESCRIPTION
The 2 pairs of coordinates define the (x,y) values for the tail and the head (respectively) of the arrow. Up to 100 arrows can be specified with this command.

SYNTAX
ARROW <id> COORDINATES <x1> <y1> <x2> <y2>
where <id> is an integer number or parameter in the integer range 1 to 100 that specifies the arrow identifier;
<x1> is decimal number or parameter in the range 0 to 100 that specifies the x coordinate for the arrow tail;
<y1> is decimal number or parameter in the range 0 to 100 that specifies the y coordinate for the arrow tail;
<x2> is decimal number or parameter in the range 0 to 100 that specifies the x coordinate for the arrow head;
and <y2> is decimal number or parameter in the range 0 to 100 that specifies the y coordinate for the arrow head.

EXAMPLES
ARROW 2 COORDINATES 50 50 60 50
ARROW 2 COORDINATES 20 70 50 50
ARROW 4 COORDINATES 80 Y1 60 Y2
ARROW 4 COORDINATES X1 Y1 X2 Y2

NOTE 1
Arrows can be generated in three ways.
1. Use the ARROW COORDINATES command to place arrows on subsequent plots in DATAPLOT 0 to 100 coordinates.
2. Create a data series that contains the start and stop positions of the arrow, use the character type VECTOR, and then use the PLOT command to plot the arrows in user coordinates. In this case, the attributes of the arrow are controlled by the various CHARACTER attribute setting commands. See the documentation for the VECTOR PLOT command for more details.
3. Use the ARROW command to draw one arrow immediately.

NOTE 2
The attributes of the arrow are controlled by the ARROW PATTERN, ARROW COLOR, and the ARROW THICKNESS commands. The ARROW COORDINATE command always generates filled arrow heads and does not give the user control over the size of the arrow head. The other two methods of generating arrows (CHARACTER VECTOR and the ARROW command) do give the user control of these attributes.

NOTE 3
An ARROW ... COORDINATES command with no arguments omits the arrow from subsequent plots. Thus ARROW 1 COORDINATES with no arguments omits arrow 1 from subsequent plots. An ARROW ... COORDINATES command with no <id> refers to all 100 arrows. Thus ARROW COORDINATES 30 80 40 60 assigns the coordinates (30,80) and (40,60) to all 100 arrows (but this has no practical use). ARROW COORDINATES with no <id> and no arguments omits all 100 arrows from subsequent plots.

DEFAULT
No arrows are drawn.

SYNONYMS
None

RELATED COMMANDS
PLOT = Generates a data or function plot.
ARROW = Draw an arrow.
ARROW PATTERN = Sets the line style for plot arrows.
ARROW THICKNESS = Sets the line thickness for plot arrows.
ARROW COLOR = Sets the colors of plot arrows.
LEGEND COORDINATES = Sets the location of plot legends.
BOX COORDINATES = Sets the location of plot boxes.
SEGMENT COORDINATES = Sets the location of plot line segments.

APPLICATIONS
Presentation Graphics

IMPLEMENTATION DATE
Pre-1987

PROGRAM
LET X = DATA 1 2 3 4 5 6 7 8 9 10
LET Y = DATA 2 4 6 0 7 9 12 14 15 18 20
.
XLIMITS 1 10
XTIC OFFSET 1 1
YLIMITS 0 60
YTIC OFFSET 0 5
.
ARROW 1 COORDINATES 45 87 36 85
ARROW 2 COORDINATES 71 46 78 45
.
LEGEND 1 OUTLIER
LEGEND 1 COORDINATES 47 86
LEGEND 2 LAST POINT
LEGEND 2 COORDINATES 69 45
LEGEND 2 JUSTIFICATION RIGHT
TITLE SIZE 5
TITLE AUTOMATIC
PLOT Y X

PLOT Y X

OUTLIER

LAST POINT