



AHELP for CIAO 3.4

errs

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Synopsis

Specifies the appearance of errorbars.

Syntax

```
chips> [D #] [C #] ERRS [<coord>] <color>
chips> [D #] [C #] ERRS [<coord>] <errorstyle>
chips> [D #] [C #] ERRS [<coord>] <errortype>
chips> [D #] [C #] ERRS [<coord>] <linestyle>
chips> [D #] [C #] ERRS [<coord>] {ABSOLUTE | RELATIVE}
chips> [D #] [C #] ERRS [<coord>] SIZE <errortick_size_value>
```

Description

Argument: {ABSOLUTE | ABS}
 Description: errors are not relative to the data value; instead they are plotted as absolute values
 Default: RELATIVE

Argument: C #
 Description: curve number designation
 Options: integer numbers
 Default: current curve

See the C command for more information about this argument.

Argument: <color>
 Description: axes color
 Options: BLACK, BLUE, CYAN, DEFAULT, GREEN, MAGENTA, RED, WHITE, YELLOW
 Default: DEFAULT (appears in ChIPS window as white; prints as black)

Argument: <coord>
 Description: axis coordinates
 Options: X, Y
 Default: both X and Y

Argument: D #
 Description: drawing area number designation
 Options: integer numbers
 Default: current drawing area

See the D command for more information about this argument.

Argument: <errorstyle>

```
Description: sytle for errorbars
Options: STANDARD - errorbar with top and bottom ticks
        BAR - errorbar only, no ticks on top or bottom
Default: STANDARD
```

```
Argument: <errortype>
Description: type of errorbars
Options: BOTH - both positive and negative errorbars
        NONE - no error bars
        UP - positive errorbar only
        {DOWN | DN} - negative errorbar only
Default: BOTH
```

```
Argument: <errortick_size_value>
Description: size of top and bottom errorbar ticks
Options: real numbers
Default: 3.0
```

```
Argument: <linestyle>
Description: style for lines
Options: SOLID, DOT, DASH, LONGDASH, DOTDASH, DOTLONGDASH,
        DASHLONGDASH
Default: SOLID
```

```
Argument: {RELATIVE | REL}
Description: errors are relative to the data value
Default: RELATIVE
```

The command:

```
chips> [D #] [C #] ERRS [<coor>] {ABSOLUTE | RELATIVE}
```

affects all subsequent plots, not just the existing plot.

CIAO allows some plot attributes to be changed using the ChIPS state object and resource file. See "ahelp chips" for further details.

Example 1

```
chips> SPLIT 2
chips> D 1 CURVE data/exampleA.dat YUP 5 YDOWN 6
chips> D 1 CURVE data/exampleB.dat YUP 7 YDOWN 8
chips> D 2 CURVE data/exampleA.dat XUP 3 XDOWN 3
chips> D 2 CURVE data/exampleB.dat XUP 4 XDOWN 5
chips> D 2 C 1 ERRS X UP
chips> D 2 C 1 ERRS BAR
```

Two curves with Y error bars are plotted in drawing area number 1, and two curves are plotted in drawing area number 2 with X error bars. The error bars for curve 1 of drawing area 2 are then changed to be positive error bars only, having no tick marks on the tops or bottoms of the bars.

Example 2

```
chips> D 1 C 1 ERRS Y UP
chips> D 1 C 1 ERRS BAR
```

Building on the previous example, the Y error bars plotted in drawing area 1 for curve 1 are modified.

Example 3

```
chips> ERRS ABS
chips> D 1 CURVE data/exampleA.dat YUP 5 YDOWN 6
chips> ERRS REL
```

```
chips> D 1 CURVE data/exampleAa.dat YUP 5 YDOWN 6
```

The first CURVE command is preceded by the ERRS ABS command, which will set all errors to be plotted as absolute (instead of relative) to the data points. The second CURVE command is preceded by the ERRS REL command, which will set all errors to plotted as relative to the data.

Bugs

See the [bugs page for ChIPS](#) on the CIAO website for an up-to-date listing of known bugs.

See Also

chips

[axes](#), [drawarea](#), [font](#), [grids](#), [label](#), [levels](#), [limits](#), [line](#), [linear](#), [location](#), [log](#), [relativesize](#), [split](#), [symbol](#), [ticks](#), [tickvals](#), [title](#), [xlabel](#), [ylabel](#), [zlabel](#)

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URL:
<http://cxc.harvard.edu/ciao3.4/errs.html>
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