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AHELP for CIAO 3.4　　　**gridmodel**　　　Context: sherpa

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Synopsis

N–D user–specified amplitude model. Integration OFF.

Description

GRIDMODEL Parameters

Number	Name	Description
1	file	input filename
2	norm	normalization

See "ahelp integrate" for further information about source model integration.

With GRIDMODEL, an N–dimensional data array may be input and used directly as a model. The data array must be of the same size as the source data and have the same binning.

Prior to CIAO 3.0, it was necessary to use GRIDMODEL when inputting an exposure map for use in spatial fitting; this is no longer true. Example 2 compares the CIAO 3.0 and 2.3 syntax; see the FEXPMAP command for further information.

Example 1

Input a data array as a model:

```
sherpa> PARAMPROMPT OFF
Model parameter prompting is off
sherpa> GRIDMODEL[gm]
sherpa> gm.file = "data/example1.dat"
sherpa> THAW gm.norm
sherpa> SOURCE = gm
```

In this example, the model component GRIDMODEL is established and assigned the name gm. Then, the input data array file is input using this model's file parameter. This model component, thus defined using an input data array, can then be used just as any other model component may be used. For example, here the model's normalization is thawed and then the model is used to define a source model expression for fitting.

Example 2

Input an exposure map for use with a dataset (this no longer uses the GRIDMODEL command):

```
sherpa> DATA data/data.fits
sherpa> PARAMPROMPT OFF
Model parameter prompting is off
sherpa> FEXPMAP[emap]
sherpa> emap.file = "data/data_expmap.fits"
sherpa> INSTRUMENT = emap
```

In this example, the instrument model component FEXPMAP is established, the exposure map file is input using this model's file parameter, and the instrument model stack is set for dataset number 1.

The CIAO 2.3 equivalent of this command is:

```
sherpa> DATA data/data.fits
sherpa> PARAMPROMPT OFF
Model parameter prompting is off
sherpa> GRIDMODEL[gm]
sherpa> gm.file = "data/data_expmap.fits"
sherpa> EXPMAP 1 = gm
```

Bugs

See the Sherpa bug pages online for an up−to−date listing of known bugs.

See Also

sherpa

atten, bbody, bbodyfreq, beta1d, beta2d, box1d, box2d, bpl1d, const1d, const2d, cos, delta1d, delta2d, dered, devaucouleurs, edge, erf, erfc, farf, farf2d, fpsf, fpsf1d, frmf, gauss1d, gauss2d, hubble, jdpileup, linebroad, lorentz1d, lorentz2d, models, nbeta, ngauss1d, poisson, polynom1d, polynom2d, powlaw1d, ptsrc1d, ptsrc2d, rsp, rsp2d, schechter, shexp, shexp10, shlog10, shloge, sin, sqrt, stephi1d, steplo1d, tan, tpsf, tpsf1d, usermodel, xs, xsabsori, xsacisabs, xsapec, xsbapec, xsbbody, xsbbodyrad, xsbexrav, xsbexriv, xsbknpower, xsbmc, xsbremss, xsbvapec, xsc6mekl, xsc6pmekl, xsc6pvmkl, xsc6vmekl, xscabs, xscemekl, xscevmkl, xscflow, xscompbb, xscompls, xscompst, xscomptt, xsconstant, xscutoffpl, xscyclabs, xsdisk, xsdiskbb, xsdiskline, xsdiskm, xsdisko, xsdiskpn, xsdust, xsedge, xsequil, xsexpabs, xsexpdec, xsexpfac, xsgabs, xsgaussian, xsgnei, xsgrad, xsgrbm, xshighecut, xshrefl, xslaor, xslorentz, xsmeka, xsmekal, xsmkcflow, xsnei, xsnotch, xsnpshock, xsnsa, xsnteea, xspcfabs, xspegpwrlw, xspexrav, xspexriv, xsphabs, xsplabs, xsplcabs, xsposm, xspowerlaw, xspshock, xspwab, xsraymond, xsredden, xsredge, xsrefsch, xssedov, xssmedge, xsspline, xssrcut, xssresc, xsssice, xsstep, xstbabs, xstbgrain, xstbvarabs, xsuvred, xsvapec, xsvarabs, xsvbremss, xsvequil, xsvgnei, xsvmcflow, xsvmeka, xsvmekal, xsvnei, xsvnpshock, xsvphabs, xsvpshock, xsvraymond, xsvsedov, xswabs, xswndabs, xsxion, xszbbody, xszbremss, xszedge, xszgauss, xszhighect, xszpcfabs, xszphabs, xszpowerlw, xsztbabs, xszvarabs, xszvfeabs, xszvphabs, xszwabs, xszwndabs

slang

usermodel

Example 2