NAME

blur – blur rays' positions according to a specified function

PARAMETERS

blur uses an IRAF-compatible parameter interface. A template parameter file is in /proj/axaf/simul/lib/uparm/blur.par.

input

This parameter specifies the name of the bpipe format input ray file. If the filename is the string stdin, it reads the UNIX standard input stream.

output

This parameter specifies the name of the output ray file. If the filename is the string stdout, it writes to the UNIX standard output stream.

seed1

The first seed for the random number generator. It must be in the range [1,2147483562].

seed2

The second seed for the random number generator. It must be in the range [1,214748339].

block

The random number block to start at. It must be in the range [0,1048575].

func

The function used to blur the rays' position. These are probability distribution functions which represent the probability that a ray will be perturbed from its original (X,Y) position by a given amount. The functions available are:

gauss1d–fwhm

A radially symmetric Gaussian. The FWHM of the Gaussian is specified by the fwhm parameter.

gauss1d–stddev

A radially symmetric Gaussian. The standard deviation of the Gaussian is specified by the stddev parameter.

rect-uni

A uniform rectangle. The height and width parameters specify the rectangle's size. Here, height refers to the Y dimension, and width refers to the X dimension.

fwhm

The Full Width Half Maximum of the gauss1d–fwhm function.

stddev

The standard deviation of the gauss1d–stddev function.

height

The Y dimension of the rectangle for the rect-uni function.

width

The X dimension of the rectangle for the rect-uni function.

scale

A scale factor to be applied to the pixel offsets.

help

If true, print this message and exit.

version

If true, print the version and exit.

DESCRIPTION

blur is used to adjust rays' positions according to a given probability distribution function. Gaussian and uniform functions are available. blur should be run with the rays projected to the detector.

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