



 AHELP for CIAO 3.4

dmimgpick

Context: [tools](#)

Jump to: [Description](#) [Example](#) [Parameters](#) [Bugs](#) [See Also](#)

Synopsis

Maps image values to rows in a table

Syntax

```
dmimgpick infile imgfile outfile method [clobber] [verbose]
```

Description

'dmimgpick' will map values from an image to rows in a table. Typical kinds of uses include getting background values for source positions, exposure values for sources, etc.

The input image must have axis names that map to columns in the input table. An error will be generated if the tool cannot find the axes names. For each row in the table, the columns that correspond to the image axes are mapped into the image coordinates. The values closest to the location are extracted and then interpolated based on the user selected criteria.

Example

```
dmimgpick mysrc.fits expmap.fits srcexp.fits method=minimum
```

For each source in the source list, find the value of the exposure map and get the minimum value (useful for edge detections).

Parameters

name	type	ftype	def	min	max	reqd
infile	file	input				yes
imgfile	file	input				yes
outfile	file	output				yes

<u>method</u>	string		weight			yes
<u>clobber</u>	boolean		no			
<u>verbose</u>	integer		0	0	5	

Detailed Parameter Descriptions

Parameter=infile (file required filetype=input)

The input table name

The input table. There must be columns with the same name as the axes in the 'imgfile' parameter.

Parameter=imgfile (file required filetype=input)

The input image file

The input image file. The axes names need to match the columns in the 'infile' parameter. The output column in the 'outfile' will be the name of the input image file and will have the same units as the image.

Parameter=outfile (file required filetype=output)

The output file name

A copy of the input file with a new column (double data type) containing the interpolated image values.

Parameter=method (string required default=weight)

Interpolation method

The column values in the table are mapped to the image and the 4 closest pixel values (and their locations) are returned. The user can select from the following interpolation methods:

- weight – a weighted average. The weight is the distance from the image pixels to the location mapped onto the image.
- average – a simple average of the 4 pixel values.
- minimum – the minimum of the 4 pixel values
- maximum – the maximum of the 4 pixel values
- closest – the value of the pixel closest to the mapped location
- furthest – the value of the pixel furthest from the mapped location

Parameter=clobber (boolean default=no)

Remove output if it exists?

Used to specify whether or not to clobber existing file that has the same name as the specified output file (only DM dataset will be clobbered).

Parameter=verbose (integer default=0 min=0 max=5)

The tool chatter level

Verbose can be from 0 to 5, generating different amounts of debugging output.

Bugs

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

See Also

dm

[dmimages](#), [dmimfiltering](#)

tools

[dmappend](#), [dmcontour](#), [dmfilth](#), [dmimg2jpg](#), [dmimgcalc](#), [dmimghist](#), [dmimgthresh](#), [dmregrid](#),
[get_sky_limits](#)

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URL:
<http://cxc.harvard.edu/ciao3.4/dmimgpick.html>
Last modified: December 2006

Ahelp: dmimgpick – CIAO 3.4