



AHELP for CIAO 3.4

## set\_notice2d

Context: [sherpa](#)

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## Synopsis

Module functions for noticing source and background regions in 2–D datasets.

## Syntax

```
Integer_Type set_notice2d([Integer_Type],String_Type[,String_Type])
Integer_Type set_snotice2d([Integer_Type],String_Type[,String_Type])
Integer_Type set_bnotice2d([Integer_Type],String_Type[,String_Type])
```

Success/Error Return Values: 1/0

Arguments:

- (1) Dataset number (default 1)
- (2) A filter expression: <filterExpr>
- (3) The coordinate system expression

## Description

The commands `set_notice2d`, `set_snotice2d`, and `set_bnotice2d` allow the user to specify regions to notice in both source and background datasets, a source dataset, or a background dataset respectively. These functions may only be applied to 2–D data. Use `set_notice` to set ranges to notice in 1–D spectra.

See the Sherpa Filtering Chapter for the full definition of <filterExpr>. (Also see examples below.)

The default coordinate system expression is "logical" (i.e., image coordinates). Allowed coordinate system expressions include:

- "logical" | "image" – image coordinates
- "physical" – physical coordinates
- "wcs" | "world" – world coordinates

See the related Sherpa commands NOTICE and IGNORE for more information.

## Example 1

Read in an image; notice the central source using a circular include region:

```
sherpa> load_image(2,"example_img.fits")
1
sherpa> set_notice2d(2,"circle(247,257,20)")
1
```

In this example, all data within a radius of 20 pixels of the image coordinate (247,257) are noticed.

## Example 2

Apply a box filter to an image in physical coordinates:

```
sherpa> load_image(1,"example_img2.fits")
1
sherpa> set_notice2d("box(4050,3920,30,30)","physical")
1
```

## Bugs

See the [Sherpa bug pages](#) online for an up-to-date listing of known bugs.

## See Also

*sherpa*

[analysis](#), [get\\_groups](#), [ignore](#), [notice](#), [set\\_filter](#), [set\\_groups](#), [set\\_ignore](#), [set\\_ignore2d](#), [set\\_ignore\\_all](#),  
[set\\_ignore\\_bad](#), [set\\_notice](#), [set\\_notice\\_all](#)

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URL:  
[http://cxc.harvard.edu/ciao3.4/set\\_notice2d.html](http://cxc.harvard.edu/ciao3.4/set_notice2d.html)  
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