



Bugs: wavdetect

Bugs

1. *There cannot be two sets of brackets ("[]") in the input file specification.*

An example of an unacceptable syntax is

```
unix% wavdetect "evt2.fits[energy=500:8000][bin X=4275:4925:1,Y=3775:4425:1]"
```

The tool will exit with an error:

```
grep: RE error 49: [ ] imbalance.
parammatch : can't find parameter X in reference list
parameter error?
```

Workaround:

Include the parameter name before the file specification:

```
unix% wavdetect infile="evt2.fits[energy=500:8000][bin X=4275:4925:1,Y=3775:4425:1]"
```

2. *Autonaming of ASCII region files uses the .fits extension instead of .reg as would be expected.*

In general, autonaming only works for simple cases.

3. *Zero-length radius in source region (23 Mar 2007)*


If the source region determined by `wavdetect` is only one pixel wide, then the axis in that direction is equal to 0. If the entire region is one pixel square, then both the semi-major and minor axes are (0,0). A region with a zero-length `yradius` looks like this in the output ASCII region file:

```
ellipse(4164.500000,3885.033333,5.986652,0.000000,90.000000)
```

If the source list is used as stack input to `dmextract` – e.g. to create radial profiles – these zero-length regions will result in NaN values in the output file, usually because the source area is zero.

4. *Comma-separated values for scales parameter (16 May 2007)*

The values given for the `scales` parameter must be space-separated, e.g. "`scales='1.0 1.414 2.0 2.828 4.0 5.656 8 11.3'`". If commas are used instead, the tool only recognizes the first scale and disregards the rest.

5. *Wavdetect deletes the input file  (10 Oct 2007)*

If the input filename does not contain a "." (e.g. ".fits"), the tool deletes the input file and exits with an error.

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