
Subject: Re: histogram, how to trasfer from linear bins to logarithmic bin?

Posted by [Brian Larsen](#) on Tue, 29 Sep 2009 14:31:00 GMT

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Along the lines that David is saying here, when all the value_locate stuff was hot on the group I wrote up a few routines that *might* be useful to you.

One of them "log_bins" is like findgen for log spaced bins over a given range. I use this constantly for binning particle energy spectra.

http://people.bu.edu/balarsen/IDLdoc/log_bins.html

Another is "histo_bins" this creates a histogram with use specified bins, it is exactly what David did in his logbins page just bundled up for easier (for me) use.

http://people.bu.edu/balarsen/IDLdoc/histo_bins.html

To recreate David's example:

```
IDL> v1 = Randomu(-3L, 1000) * 100
IDL> v2 = Randomu(-5L, 1000) * 100
IDL> ratio = v1 / v2
IDL> bins=log_bins(0.01, 1000, 6)
IDL> print, log_bins(0.01, 1000, 6)
    0.0100000    0.100000    1.00000    10.0000    100.000
1000.00
IDL> hist=histo_bins(ratio, bins)
IDL> plot, bins, hist, /xlog, psym=10
```

For me this is easier than the labels and xyouts stuff.

Cheers,

Brian

Brian Larsen
Boston University
Center for Space Physics
