Subject: Re: Histogram: Normalised Occurrence Frequency Posted by David Fanning on Thu, 28 Feb 2008 15:43:23 GMT

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Hazel writes:

- > I want to plot a histogram where the number of samples in each bin are
- > normalised by the total number of samples across all bins.

>

- > Currently I use David's 'HISTOPLOT' and the REVERSE_INDICIES keyword
- > to get the indicies in each bin. Then Jaco's HISTOBIN to count these
- > for each bin.

Say what!? Isn't the count in each bin the, uh, histogram?

I would think a normalized histogram plot looks like this:

Plot, Histogram(data)/Total(Histogram(data))

- > Then I normalise the bin totals and have to plot number of bins vs.
- > normalised values using Plot and Psym=10.

>

- > Is there an easier way to do this? Also how would I use HISTOPLOT to
- > replot this normalised hist as I can't seem to get it to work.

Maybe I'll add a NORMALIZED keyword. I found a couple of other oddities with HISTOPLOT the other day. I'll have to have a look at it, but right now, I have to get to work. Maybe there will be something new this weekend. :-)

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: http://www.dfanning.com/

Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: Histogram: Normalised Occurrence Frequency Posted by pgrigis on Thu, 28 Feb 2008 15:50:27 GMT

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hazel wrote:

> Hi All,

>

> I want to plot a histogram where the number of samples in each bin are

- > normalised by the total number of samples across all bins.
- >
- > Currently I use David's 'HISTOPLOT' and the REVERSE_INDICIES keyword
- > to get the indicies in each bin. Then Jaco's HISTOBIN to count these
- > for each bin.

n_elements(your_input) is the total number of samples (unless you have NANs as missing elements, in that case you may have to use the finite function to find out the number of non-NANs)

Paolo

>

- > Then I normalise the bin totals and have to plot number of bins vs.
- > normalised values using Plot and Psym=10.

>

- > Is there an easier way to do this? Also how would I use HISTOPLOT to
- > replot this normalised hist as I can't seem to get it to work.
- > Thanks,

>

>

> Hazel