Subject: Re: Error Bar Thoughts
Posted by Paul Van Delst[1] on Thu, 03 Feb 2011 00:48:26 GMT
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Gray wrote:
> On Feb 2, 3:14 pm, David Fanning <n...@dfanning.com> wrote:
>> Matt writes:
>>> I second this motion. And I'd prefer actual values rather than
>>> offsets, but it's an easy enough operation to be able to figure out.
>> Yeah, actual data makes sense to me, too. And it means
>> I don't have to fool around too much with philosophical
>> discussions about whether up is down or visa versa. Plus,
>> it's easy enough it might even happen in the next hour
>> or two. :-)
>>
>> Cheers,
>>
>> David
>>
>> --
>> David Fanning, Ph.D.
>> Fanning Software Consulting, Inc.
>> Coyote's Guide to IDL Programming:http://www.idlcoyote.com/
>> Sepore ma de ni thui. ("Perhaps thou speakest truth.")
>
> It's funny, offsets make more sense to me because that's how results
> are usually quoted: 1.05+0.02-0.06

seconded.

Using actual data values as input means the user will pretty much *always* have to convert the values since I have never
(well, very very rarely) seen error estimates reported as anything other than +/- offset values. But I think different
fields will have their favourite way so whatever you choose you'll get complaints. :o)

Apart from that, if the user passes the offset in as, e.g., a 2-element array for each data point then, if the position

is important the first one is the +ve delta, the second one is the -ve delta. Just plot
datavalue+abs(errest[0]) and
datavalue-abs(errest[1]).

If the position isn't considered indicative of the value being a +ve or -ve delta, then the user is responsible for
supplying the sign of the error and just plot from value to value, i.e. datavalue+errest[0] to datavalue+errest[1]

I prefer the latter since relying on data position makes me uneasy (I'll forget the "rule").

cheers,

paulv