
Subject: Weighted standard deviation in IDL
Posted by [cb16](#) on Thu, 14 Jul 2016 16:06:42 GMT
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Hi!

What is the best way to calculate a weighted standard deviation in IDL? Is there some function that does this?

Subject: Re: Weighted standard deviation in IDL
Posted by [Heinz Stege](#) on Thu, 14 Jul 2016 20:03:53 GMT
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On Thu, 14 Jul 2016 09:06:42 -0700 (PDT), cb16 wrote:

> Hi!

>

> What is the best way to calculate a weighted standard deviation in IDL? Is there some function that does this?

Here is an excerpt from a function of mine:

```
wsum=total(weight,double=double)
xmean=total(xvals*weight,double=double)/wsum
xvar=total((xvals-xmean)^2*weight,double=double)/wsum
xmean_error=(xvar/(count-1))^0.5
xstdev=xmean_error*count^0.5
xmin=min(xvals,max=xmax)
xrms=(xvar+xmean^2)^0.5
```

Cheers, Heinz
