Subject: scatter light correction

Posted by gunvicsin11 on Wed, 08 Jan 2014 06:44:08 GMT

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Hello everyone,

In my spectral data, there is some problem due to scatter light, the problem is even after flat correction, there is still some scatter light and this scatter light changes my result drastically. This is very urgent so please help me out to get rid of this scatter light from my spectral data. Please give me some ideas or some routines that performs this correction.

thanking you in advance

sid

Subject: Re: scatter light correction

Posted by David Fanning on Wed, 08 Jan 2014 12:39:41 GMT

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## sid writes:

> In my spectral data, there is some problem due to scatter light, the problem is even after flat correction, there is still some scatter light and this scatter light changes my result drastically. This is very urgent so please help me out to get rid of this scatter light from my spectral data. Please give me some ideas or some routines that performs this correction.

Median filter.

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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

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

Subject: Re: scatter light correction

Posted by gunvicsin11 on Thu, 09 Jan 2014 05:46:55 GMT

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On Wednesday, January 8, 2014 6:09:41 PM UTC+5:30, David Fanning wrote:

- > sid writes:
- >
- >
- >
- >> In my spectral data, there is some problem due to scatter light, the problem is even after flat correction, there is still some scatter light and this scatter light changes my result drastically. This

is very urgent so please help me out to get rid of this scatter light from my spectral data. Please give me some ideas or some routines that performs this correction.

Hello sir.

In my data there is a change in intensity along the wavelength axis. And I have to correct for this change in intensity.

Can I use median filter for this kind of a scenario.

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

thanking you

sid

Subject: Re: scatter light correction

Posted by David Fanning on Thu, 09 Jan 2014 14:04:40 GMT

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## sid writes:

- > In my data there is a change in intensity along the wavelength axis. And I have to correct for this change in intensity.
- > Can I use median filter for this kind of a scenario.

This seems to be a different problem from what you reported yesterday. Why don't you just fit the intensity with a curve and subtract the fitted intensity from your data.

Cheers.

## David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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

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

Subject: Re: scatter light correction Posted by Andy Sayer on Thu, 09 Jan 2014 14:33:44 GMT

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This sounds more like a technical (methodological) question than an IDL question? Maybe it would be better to ask elsewhere? Or, post a more detailed description of what you are trying to do.

On Thursday, January 9, 2014 9:04:40 AM UTC-5, David Fanning wrote: > sid writes: > > In my data there is a change in intensity along the wavelength axis. And I have to correct for this change in intensity. >> Can I use median filter for this kind of a scenario. > > > This seems to be a different problem from what you reported yesterday. > Why don't you just fit the intensity with a curve and subtract the > > fitted intensity from your data. > > > > > Cheers, > > David > David Fanning, Ph.D.

> Fanning Software Consulting, Inc.

>

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

>

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

Subject: Re: scatter light correction

Posted by on Thu, 09 Jan 2014 15:28:55 GMT

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Den torsdagen den 9:e januari 2014 kl. 06:46:55 UTC+1 skrev sid:

> On Wednesday, January 8, 2014 6:09:41 PM UTC+5:30, David Fanning wrote:

>> sid writes:

>

>>> In my spectral data, there is some problem due to scatter light, the problem is even after flat correction, there is still some scatter light and this scatter light changes my result drastically. This is very urgent so please help me out to get rid of this scatter light from my spectral data. Please give me some ideas or some routines that performs this correction.

>

>> Median filter.

>

> In my data there is a change in intensity along the wavelength axis. And I have to correct for this change in intensity.

Scattered light (or stray light - the terms are sometimes used interchangeably and sometimes mean slightly different things) can in general not be removed unless you know something about its characteristics. Is it just an added constant level? Or is it a purely additive but wavelength dependent component? Or, even worse, does the stray light depend on the object? In astronomical imaging, one useful model is that the observed image consist of two components: the "real" image and a blurred version of the real image. The problem then boils down to estimating the blurring kernel. You mention "wavelength axis" so I assume you also have one (or two?) spatial dimension(s).

Anyway, do you have any calibration data that might provide such information?