
Subject: Re: Convolve a spectrum (from MODTRAN) with a spectral response function

Posted by [rogass](#) on Thu, 31 Dec 2009 10:56:58 GMT

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On 30 Dez., 04:55, Mat <m...@waikato.ac.nz> wrote:

> On Dec 30, 4:41 pm, Mat <m...@waikato.ac.nz> wrote:

>

> Sorry I will try again!

>

> Hi all

>

> I would like to convolve a spectrum (output from MODTRAN) with a
> spectral response curve (Landsat7 B62) and then integrate the
> convoluted result. As you can see from the example below the spectral
> resolution does not match.

>

> Eg. Spectrum:

>

> Wavenumber	Radiance
> 800.0	7.52E-004
> 801.0	7.66E-004
> 802.0	7.58E-004
> 803.0	7.25E-004
> 804.0	7.23E-004
> 805.0	7.62E-004

>

> Eg. Response

>

> Wavenuber	Relative Spectral response
> 800.00000	0.2
> 800.64051	0.29
> 801.28205	0.27
> 801.92462	0.28
> 802.56822	0.36
> 803.21285	0.36
> 803.85852	0.39
> 804.50523	0.41
> 805.15298	0.42
> 805.80177	0.43
> 806.45161	0.45

>

> Any help would be much appreciated.

Just search in this newsgroup for 'convolve fft' and you will find the answer, i think.

Regards

CR
