Subject: Re: interpolating flux
Posted by Russell Ryan on Thu, 24 Jan 2013 19:41:13 GMT
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I think you misunderstood Craig, if I can speak for him.

If you're working with a *TRUE* blackbody spectrum, then you know an exact analytic answer for the spectrum as a function of both temperature and wavelength. Why, then, do you want to interpolate? Instead of simply evaluating that *KNOWN* analytical expression at whatever temperatures and wavelengths you think are useful or compelling? For example, the planck() function in the astro library is probably what you want.

Russell

On Wednesday, January 23, 2013 3:26:03 PM UTC-5, idlhelp wrote:
> On Wednesday, January 23, 2013 5:15:12 PM UTC+1, Craig Markwardt wrote:
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>> On Wednesday, January 23, 2013 7:06:51 AM UTC-5, idlhelp wrote:
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>>> Dear All,
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>>> I have two black body spectra at different temperature i.e at 5000K and 5200K. Does anyone know How I can interpolate the flux of black body spectra between 5000K 5200K at a step of 50K.
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>> If it's a true black body spectrum, then consider that the spectrum can be computed exactly without interpolation.
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>> http://en.wikipedia.org/wiki/Planck%27s_law
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>> If you really want to use interpolation, I would recommend computing the ALOG10(flux) of your gridded spectra, interpolating those log-values, then converting back to flux.
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>> Craig
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> thanks Craig, I didn't you properly, but my question is that how can I interpolate flux of two different synthetic spectra between two different temperature for e.g 1000K and 200K at a step of 50K i.e i want to create a new synthetic spectra at temperature 150K
