Subject: Re: Wavelength Calibration
Posted by Nikola on Sat, 23 Jul 2011 07:57:28 GMT
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On Jul 22, 9:08 pm, Gray <graylikethecо...@gmail.com> wrote:
> Hi all,
>
> I've been beating my head against the wall trying to get this to work
> for two days... so I figured I'd head on over here and see if anyone
> could help.
>
> I'm trying to perform wavelength calibration for my near-infrared
> spectrum (2-2.4 microns). My tools:
>
> 1) A Neon-Argon arc lamp spectrum.
> 2) A list of NIR lines for Neon and Argon.
>
> Any suggestions? Thanks in advance!
>
> --Gray

Could you please specify more details? Is the observed spectrum in low resolution so that you don't see the lines? Or the problem is that you do not know the relative strengths of the Ne and Ar lines?

In principle, once you have the continuum normalized, you have to fit only coefficients of polynomial: lambdareal = a+b*lambdaobserved +c*lambdaobserved^2+... So, the problem can be linearized and the least square method is applicable. For my purposes linear relation is always sufficient, though my wavelength range is usually narrower.

Nikola