
Subject: to convert pixel numbers into wavelength

Posted by [sid](#) on Mon, 22 Mar 2010 13:57:05 GMT

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Hi,

My data is in fits format which is taken using 1k by 1k ccd. So the data has 1024 rows and 1024 columns each having different count values. I need to convert this pixel number by wavelength, to do that, im having a relation like,

$\text{lamda}(n) = \text{lamda}(0) + n(\text{dispersion})$

where,

$\text{dispersion} = \text{dispersion along x axis in units of wavelength per pixel(known value)}$

$n = \text{pixel number(known value)}$

$\text{lamda}(0) = \text{wavelength at zeroth pixel(known value)}$

$\text{lamda}(n) = \text{wavelength at nth pixel(unknown value)}$

Now please give me some suggesions to get the lamda(n) for each n value and finally to get the pixel values converted to wavelength with the help of this above relation.

Note: rightnow i have averaged the counts along 1024 rows, so I have 1 row and 1024 columns, if i plot the data, my xaxis will be pixel numbers and y axis will be counts per pixel.

regards

sid
