Subject: Plot in wavelength and energy axes
Posted by burkina on Thu, 09 Jun 2005 14:28:45 GMT
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I'd like to plot a spectrum with two different x axes, one in wavelenght, the other in energy. The two quantities are clearly not linear one to the other, so that I guess there's no other way than writing my own tickmarks.
The best solution I've found is:

plot, lambda, smoothed_flux, charsize=1, xtitle=xlabel, ytitle=ylabel, xrange=[lambda_min,lambda_max], yrange=[miny*0.9,maxy*1.25], xstyle=1+8, ystyle=1
axis, xaxis=1, xtickv=[wave2kev, wave2kev/0.9, wave2kev/0.8, wave2kev/0.7, wave2kev/0.6, wave2kev/0.5], xticks=8, xstyle=1, xtickname=[0.8, 0.9, 0.8, 0.7, 0.6, 0.5], xtitle="Energy (keV)"

It works, but:

1. I also would like to put ten minor tickmarks for each interval (at positions, say, wave2kev/0.81, wave2kev/0.82, ...), but without the labels. How can I do that? Clearly, they are also not linear, so I cannot simply let IDL draw them for me with the xminor key.

2. Why IDL keeps on writing 1.00000 instead of 1.0 in my new axis!?! What should I do? I tried with xtickunits, but then it puts back the labels in wavelenght!!!

Thanks,

Stefano