Subject: Re: how to speed up multiple regressions?
Posted by Charlotte DeMott on Mon, 30 Apr 2001 19:48:01 GMT
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Hi Craig,

Thanks for taking a look. I was hoping someone would point out to me a very obvious blunder I was making. I had high hopes upon reading your message, but I think I'm sticking all of this in a loop to compute the significance because datadof is NOT a constant for all points in my array. In the first loop I included in the original post, data_tau is the decorrelation timescale at each data point which is, unfortunately, not constant. T_CVF, as you indicated, requires the 2nd argument (datadof in my case) to be a scalar. My problem is that datadof isn't the same for all data points.

However, your post make me realize that I can do the regression in a slightly different way that will eliminate this problem, and save me loads of time.

So while your suggestion wasn't the fix I was looking for, it jarred my tired brain enough to think of another work-around. So thanks!

Charlotte

Craig Markwardt wrote:

> I've only looked at the second section, the part you thought was too
> slow. Here is my take on the situation:
>
> datadof = float(big_count)/data_tau ;; DOF's are a scalar!
> tval = t_cvf(0.1, datadof) ;; Student's T value, computed once
>
> data_t = abs(datar*sqrt(datadof))/sqrt(1-datar*2)
> datcomp = dataf(*,*,*,0) + dataf(*,*,*,1)*tsval
> data_sig = datar*sqrt(datadof)/sqrt(1-datar*2) GT tval
>
> You may be able to vectorize the first part a little better, but I'll
> leave that to you.
>
> Craig
>
> --
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> Craig B. Markwardt, Ph.D. EMAIL: craigmnet@cow.physics.wisc.edu
> Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response
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