
Subject: Re: How to speed up KRIG2D by 30x

Posted by chris_torrence@NOSPAM on Thu, 10 Oct 2013 16:28:27 GMT

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On Thursday, October 10, 2013 5:44:05 AM UTC-6, Mike wrote:

> Hi Chris,

>

>

>

> Thank you for your prompt response.

>

>

>

> You are right, I did notice the covariances were not right. I rewrote them as variograms instead, like below:

>

>

>

> FUNCTION Krig_sphere, rad, c ;Return Spherical variogram Fcn

>

> r = rad/c[0] < 1.0

>

> return, c[1] + c[2] * (r*(1.5 - 0.5*r^2))

>

> end

>

> FUNCTION Krig_expon, rad, c ;Return Exponential variogram Fcn

>

> return, c[1] + c[2] * (1.0 - exp(-3.0*rad/c[0]))

>

> end

>

>

>

> Another small change I made was to use the two lines below instead of the double loop to fill the array coefficients

>

>

>

> a[0,0] = distance_measure(transpose([[x],[y]]), /MATRIX)

>

> a = call_function(fname, a, t) ; Get coefficient matrix

>

>

Hey Mike,

So when you are using the variograms, what does the rest of the code look like? I just want to make sure that we get the same answer.

-Chris
