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Subject: Re: New Fast Kriging Semivariogram Spherical Model Incorrect?

Posted by [David Fanning](#) on Wed, 16 Oct 2013 14:54:43 GMT

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David Fanning writes:

- > I have been writing a new cgKrig2D function for my own use that provides
- > orders of magnitude faster kriging for general use than the (extremely!) slow Krig2D function that is supplied with all currently released
- > versions of IDL. In doing so, I have come to believe that the Spherical modeling function in both the old version of Krig2D and in the new
- > version Chris released here last week is incorrect.

Now I think the Exponential modeling function is incorrect, too, based on this reference (and the one I provided previously):

<http://www.nbb.cornell.edu/neurobio/land/OldStudentProjects/cs490-94to95/clang/kriging.html>

It is listed as:

```
r = t[2] * exp((-3./t[0]) * d)
r[WHERE(d eq 0, /NULL)] = t[1] + t[2]
return, r
```

According to my references, this should be:

```
r = t[2] * exp((-3./t[0]) * d)
r[WHERE(d eq 0 /NULL)] = 0
return, r
```

Cheers,

David

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Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>

Sepore ma de ni thue. ("Perhaps thou speakest truth.")

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