

---

Subject: Re: spatial interpolation

Posted by [Mark Hadfield](#) on Sun, 05 Oct 2003 21:18:00 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

Richard G. French wrote:

> On 10/3/03 6:32 AM, in article

> e1330fff.0310030232.52e4cea4@posting.google.com, "Hjalti Sig"

> <hjalti@vatnaskil.is> wrote:

>

>> Thank you so much. The description for this function in the reference  
>> guide does not mention this - only regular grids. And the only  
>> possible return value mentioned is a two dimensional array. This is  
>> somewhat misleading.

>

> I've just looked this up in the IDL6.0 manual and the KEYWORDS XOUT and YOUT  
> (NOT the same as a returned value of a function) are definitely described,  
> albeit in the midst of about another 20 definitions for other keywords. So,  
> I don't find it misleading, but it does show that you need to read through  
> the documentation with great care to see the capabilities of some of the  
> more complex IDL procedures/functions such as AXIS.

Great care and a grain or two of salt.

The opening sentence of the GRIDDATA documentation says:

The GRIDDATA function interpolates scattered data values and  
locations sampled on a plane or a sphere to a regular grid.

This is true, but incomplete. As noted, GRIDDATA also does interpolation  
onto irregular grids and scattered data points.

And the "return value" section says

The function result is a two-dimensional floating point array.

This is just plain wrong. It can also return 1-D output data.

A documentation bug report to RSI is warranted. Any volunteers? (They're  
tired of hearing from me.)

--

Mark Hadfield "Ka puwaha te tai nei, Hoesa tatou"

m.hadfield@niwa.co.nz

National Institute for Water and Atmospheric Research (NIWA)

---