Subject: Re: Can this be done using CALL_FUNCTION?
Posted by John-David T. Smith on Tue, 07 Mar 2000 08:00:00 GMT
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edward.s.meinel@aero.org wrote:
>
> OK, here's one for the IDL gurus (since I'm only a little guru would
> that make me a gu-gu?)...
>
> I am working with spectral images. Unfortunately, IDL is geared toward
> multidimensional data in which all of the dimensions are the same type
> (i.e. spatial, spectral, frequency...) but it doesn't like to operate on
> data with mixed dimensions, such as a multispectral image (unless I'm
> missing something really obvious).
>

What is it about multi-spectral data that IDL doesn't like? It certainly doesn't care about whether a single dimension of your data array represents spatial, temporal, or spectral changes... maybe I'm missing something. The IDL data types are tied to machine types: longs, shorts, floats, doubles, etc... mixing these types in a single array *is* impossible.

E.g., a 4-d array of floats in which axes 1 & 2 are spatial (e.g. latitide and longitude), axis 3 is spectral (say 10 different bands), and axis 4 is temporal (100 days worth of data at once per day) is perfectly acceptable. It's up to you to keep track of which dimensions are which, but I don't see the problem... It is true that certain IDL routines operate on images, or require other specially formatted or dimensioned data, but how is it to know which dimensions you are interested in without specifically telling it?

Maybe you could give us an example in which this kind of generality would be useful.

JD

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