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Subject: Re: idl and R

Posted by [rlayberry](#) on Mon, 07 Apr 2008 10:25:27 GMT

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On 5 Apr, 17:19, "George N. White III" <aa...@chebucto.ns.ca> wrote:

> On Fri, 4 Apr 2008, rlaybe...@hotmail.com wrote:  
>> Does anybody have a summary of the major differences between R and  
>> idl? I have been using idl for years and have never used R. I  
>> understand R is statistics orientated, but does it do anything that  
>> idl can't or does it do it better?  
>  
> I use both IDL and R. The biggest advantage of R in my work is that  
> it provides NA values that are distinct from NaN. Most operations  
> have an na.rm option, e.g.  
>  
> mean(c(1,2,3,NA),na.rm=FALSE) returns NA, but  
> mean(c(1,2,3,NA),na.rm=TRUE) returns 2  
>  
> I've never been a fan of overloading NaN as a missing data value:  
> a) it can't be applied to integer data, b) there are times when  
> you need to know the difference between a computational error  
> and missing inputs. I've spent way to much of my life coding tests for  
> missing value flags, so I really appreciate a language that properly  
> supports NA values.  
>  
> R has very solid plotting capabilities, but tends to bog down  
> when working with images. R (like Matlab, unlike IDL) tends to  
> coerce everything to doubles for calculations, but (unlike Matlab and  
> IDL) checks for NA add significant overhead for big calculations.  
>  
> R is an implementation of the S-plus language. It has a large, active  
> user community. R is widely available and has a nice system to manage  
> packages (which are generally provided as binaries on Windows, sources  
> on \*X).  
>  
> In my work I often use IDL to extract data (e.g, time-series) from remote  
> sensing images and then use R to analyse the resulting data sets.  
>  
> --  
> George N. White III <aa...@chebucto.ns.ca>

Thanks very much for both responses. I have found them very useful.

Russ

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