Subject: idl and R
Posted by rlayberry on Fri, 04 Apr 2008 09:26:28 GMT
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Hi

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?

Thanks

Russ

Subject: Re: idl and R
Posted by George N. White III on Sat, 05 Apr 2008 16:19:39 GMT
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On Fri, 4 Apr 2008, rlayberry@hotmail.com wrote:

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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 <aa056@chebucto.ns.ca>

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:
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> --
> George N. White III <aa...@chebucto.ns.ca>

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

Russe