Subject: Re: About REGRESS.pro
Posted by David Fanning on Tue, 07 Mar 2006 16:54:48 GMT
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Daelomin writes:

> I discovered the newsgroup existence from a post on David Fanning's
> website. Thanks sir!
>
> I am working on a somewhat simple multi-linear regression problem from
> brightness temperatures of a satellite to cloud liquid water.
>
> As I have started to investigate the REGRESS procedure in IDL, I just
> realized that I don't quite know its code. Is it totally kosher by
> Numerical Methods standards?
>
> Does anyone have another version that I could use to at least compare
> the validity of outputs?

You are doubting IDL's results!? You, sir, are in the entirely wrong newsgroup. You want comp.lang.matlab. :-)

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/

Subject: Re: About REGRESS.pro
Posted by Daelomin on Tue, 07 Mar 2006 17:06:43 GMT
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hehehe good one

Thing is, I have always been told to doubt before I have verified... ;)

I tend to try and keep to this rule, neverminding the extra load of work... :/

Subject: Re: About REGRESS.pro
Posted by K. Bowman on Tue, 07 Mar 2006 17:44:08 GMT
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In article <1141751203.052652.161560@v46g2000cwv.googlegroups.com>,
 "Daelomin" <joey.pourriciel@gmail.com> wrote:

> hehehe good one
>
> Thing is, I have always been told to doubt before I have verified... ;)
>
> I tend to try and keep to this rule, neverminding the extra load of
> work... :/

You could test REGRESS by giving it data for which you know the answer.

Ken

Subject: Re: About REGRESS.pro
Posted by David Fanning on Tue, 07 Mar 2006 18:13:52 GMT
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Kenneth Bowman writes:

> You could test REGRESS by giving it data for which you know the answer.

Too simple. If it was me, and I knew the answer ahead of time,
confirmation of the result wouldn't make me at all confident.
I'd just assume they were making the same damn errors I'm
making. :-(

Cheers,

David
--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/

Subject: Re: About REGRESS.pro
Posted by Daelomin on Tue, 07 Mar 2006 19:27:05 GMT
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Well I know of at least the Numerical Recipes book which has the
regression subroutine which could be tested from a Fortran program...

Is there a thread as to how one can call fortran from IDL? (I'll search
!)

Subject: Re: About REGRESS.pro
Posted by Kenneth P. Bowman on Wed, 08 Mar 2006 01:53:58 GMT
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In article <MPG.1e777b4ff5bfe993989bc4@news.frii.com>,
David Fanning <davidf@dfanning.com> wrote:

> Kenneth Bowman writes:
>
>> You could test REGRESS by giving it data for which you know the answer.
>
> Too simple. If it was me, and I knew the answer ahead of time,
> confirmation of the result wouldn't make me at all confident.
> I'd just assume they were making the same damn errors I'm
> making. :-(
>
> Cheers,
>
> David

Well, here's a stochastic test. You could also try a problem with an
analytical solution.

Ken

```
a0  = 1.0
b0  = 0.5
eps = 0.3
n   = 1000

x    = RANDOMN(seed, n)
y    = a0 + b0*x + eps*RANDOMN(seed, n)
b    = REGRESS(x, y, CONST = a, YFIT = yfit)

PLOT,  x, y,    PSYM =  1
OPLOT, x, yfit, PSYM = -3

PRINT, a0, b0
PRINT, a,  b
```

Subject: Re: About REGRESS.pro
Posted by Haje Korth on Wed, 08 Mar 2006 12:59:51 GMT
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Examples are given in the external development guide, available as PDF on
your IDL CD.

Haje

"Daelomin" <joey.pourriciel@gmail.com> wrote in message
news:1141759625.468155.7310@j52g2000cwj.googlegroups.com...
> Well I know of at least the Numerical Recipes book which has the
> regression subroutine which could be tested from a Fortran program...
>
> Is there a thread as to how one can call fortran from IDL? (I'll search
> !)
>
