Subject: Re: significance of a linear regression
Posted by jochem.verelst@gmail. on Sat, 07 Apr 2007 09:07:51 GMT
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On Apr 7, 5:34 am, Craig Markwardt
<craigm...@REMOVEcow.physics.wisc.edu> wrote:
> "jochem.vere...@gmail.com" <jochem.vere...@gmail.com> writes:
>> Hi IDL gurus,
>
>> I am much in favor of the IDL way, but being a newbie, it still causes
>> me big headache.
>
>> So this is the question:
>
>> Just as in SPSS, I wanted calculate the significance of linear
>> regression. The function REGRESS is very handy, as it also provides
>> the F-value by means of the keyword FTEST. Luckily this is the same F-
>> value as calculated in SPSS (I just tested). However, SPSS also
>> provides the congruent p-value. And this is what matters to have an
>> idea of the significance. REGRESS does not provide such a keyword. So,
>> has anyone an idea how to calculate the significance of a linear
>> regression?
>
> I'm not sure what a "congruent p-value" is, but if you mean the
> Pearson's correlation coefficent, then you can use the standard
> CORRELATE() function. But surely that must be the same as the R value
> returned by REGRESS()?
>
> Craig
>
> --
> ---------- ----------
> Craig B. Markwardt, Ph.D. EMAIL: craigm...@REMOVEcow.physics.wisc.edu
> Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response
> ---------- ---------- Hide quoted text -
>
> - Show quoted text -

Thanks for the info Craig,
Though, I already figured out the CORRELATE function and keyword.
However, this is not exactly what i meant. Although it is recognized
that the R-square statistic is a better measure of the strength of
relationship, from the F-test, at least in SPSS, the significance
value (p) can be calculated. When it is smaller than 0.05, then the
variation explained by the model is not due to chance. I wish to
calculate this significance because then I have an automated threshold
to decide whether a relationship is valid.

Hopefully there is an easy way to calculate the significance.

Jochem