Subject: Re: regression with 95% confidence interval
Posted by Fabzi on Mon, 22 Jul 2013 15:11:51 GMT
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On 07/22/2013 03:35 PM, Kenneth Bowman wrote:
> I e-mailed you a routine that will compute confidence limits on the
> slope and intercept.

I am interested in your method too ;-). Could you mail it to me too?

Until now I did following to test significance (on the F-test):

```
; Prepare data
r = RANDOMNUMBERGENERATOR()
nx = 12
x = FINDGEN(nx)+1

b = 2. ; intercept
sl = 0.5 ; slope
ra = r->GetRandomNumbers(nx) ; some random error
y = sl * x + b + ra

; Now the regression
Np = N_ELEMENTS(y) ; number of points
Nv = 1 ; number of variables (1 for simple reg)
Df = Np - Nv - 1  ; Degrees of freedom

r = regress(x, y, FTEST=ftest)

p_e = 2 * (1 - t_pdf(sqrt(ftest), Df)) ; error probability
if p_e lt 0.01 then Print, 'Significant at the 99% interval'
if p_e lt 0.05 then Print, 'Significant at the 95% interval'
```

I am always wondering what people mean when they write "significant". On the slope? OR according to the f-Test?