## Subject: Re: POLY\_FIT gives wrong answer! Posted by Henk Schets on Thu, 11 May 2000 07:00:00 GMT

View Forum Message <> Reply to Message

## David Fanning wrote:

```
Henk Schets (Henk.Schets@oma.be) writes:
>
>> David Fanning wrote:
>>
>>> Henk Schets (Henk.Schets@oma.be) writes:
>>> Maybe all of you already know this, but I didn't and I could not find
>>> any documentation about it.
>>>> The problem: I have two long arrays (x- and y-values) and I made
>>> subarrays out of them by using an array as subscript, like
        x = fltarray(l)
>>>>
        y = fltarray(l)
>>>>
        indexarr = longarray(I)
>>>>
>>> (you know, the way to sort different arrays together)
>>>> However, when I do something like out =
>>> poly fit(x[indexarr],y[indexarr]), the outcome is simply wrong! I know
>>>> this because other programs gave another solution (all the same).
>>>> The only way to do it right is by making other arrays like x2 and y2 and
>>>> doing a poly_fit on it.
>>>>
>>>> Is this a known issue?
>>> I don't know. What is known is that things are not always
>>> the way they seem to be. I'm guessing this is one of those
>>> times. :-)
>>>
>>> Cheers,
>>> David
>>>
>>> --
>>> David Fanning, Ph.D.
>> Could you be a littlebit more cryptic, please?
>
> I'm just saying that about 5 times out of 10 when users
> describe problems to you, they are offering red herrings.
> I think this is one of those times. There is no explanation
> that I can think of why a subscripted array is not identical
> to a variable made from that subscripted array. Subscripted
> arrays are, of course, passed into the program by value, while
> variables are passed in by reference. But since the input
```

- > variables don't change when they are passed into POLY\_FIT,
- > I think we can rule this out as a suspect.

>

- > And from what I learned from my Sherlock Holmes, if you
- > eliminate everyone who can't possibly have committed the
- > crime, who you are left with--no matter how improbable--
- > is the murderer. My list of suspects is pretty much narrowed
- > down to programmer error in the absence of a working
- > (or mis-working, in this case) example. :-)

>

> Cheers,

>

> David

OK, so if you think I am wrong, why is it that when I just plot the data with the array as a subscript, the outcome is the same as if I made a totally new array? Isn't this an indication of some bug in poly\_fit?

Henk