
Subject: CURVEFIT, FUNCT

Posted by [dungan](#) on Mon, 24 Feb 1992 21:07:51 GMT

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I need help from a generous soul who has experience with the IDL function CURVEFIT. Is this considered a trusty and well-written routine? I am trying to get it to fit a simple exponential decay function to 307 data, and am having some trouble. I have created a procedure called EXPDECAY, which I modified from FUNCT. It takes 2 parameters, and is of the form:

$$y = A_0 * \exp(-x/A_1)$$

IDL doesn't seem to be recognizing it. My session looks like this:

Common Blocks:

DEVIO(1)

Saved Procedures:

EXPDECAY FUNCT READNUM READSTRING
SCATTER

Saved Functions:

CURVEFIT

```
IDL> print,n_elements(x1)
307
```

```
IDL> print,n_elements(y1)
307
```

```
IDL> print,n_elements(a)
2
```

```
IDL> w=replicate(1.,307)
```

```
IDL> yfit=curvefit(x1,y1,w,a,Function_Name=expdecay)
```

```
% Attempt to subscript A with <INT ( 2)> is out of range.
```

```
% Execution halted at FUNCT </u/local/idl.new/lib/userlib/funct.pro( 39)> .
```

```
% Called from CURVEFIT </u/local/idl.new/lib/userlib/curvefit.pro( 93)>.
```

```
% Called from $MAIN$.
```

```
IDL>
```

I must be specifying the keyword improperly, as IDL is looking for FUNCT. Any suggestions on this specific question or on the more general question of curvefitting with IDL would be appreciated.

Sincerely,

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