Subject: Re: Missing data and MPFITFUN
Posted by David Fanning on Mon, 23 Oct 2006 14:20:28 GMT
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Allan Whiteford writes:

> Set the weight of the missing data values to zero when doing the fit.

Humm. There must be more to it than that. -(
Consider this test program:

```
PRO TEST
npts = 101
time = Findgen(npts)
signal = 4.3 * Findgen(npts)^2.52
noisySignal = (Randomu(-3L, N_Elements(signal)) - 0.5) * 50000L + $
      signal
noisySignal[ [ 3, 5, 22, 54, 66, 87] ] = !VALUES.F_NAN
Plot, time, noisySignal, PSym=2
model = 'p[0] * x^p[1]'
error = Replicate(100, npts)
params = [1.0,2.0]
weights = Replicate(1.0, npts)
weights[ [ 3, 5, 22, 54, 66, 87] ] = 0.0
fit = MPFITEXPR(model, time, noisySignal, error, params, $
    WEIGHTS=weights)
OPlot, time, fit[0] * Findgen(npts)^fit[1]
END
```

If you comment out the line where I set certain values
to !VALUES.F_NAN the program works great. If I leave
the line uncommented, it doesn't work so well, even
though the WEIGHTS have been set to 0. :-(

Cheers,

David

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Coyote's Guide to IDL Programming: http://www.dfanning.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")