Subject: mpcurvefit vs. a matlab fitting technique
Posted by sheilakanani on Tue, 22 Jul 2008 10:52:19 GMT
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Hi there,

I am trying to run an IDL program using mpcurvefit. The same program was written in Matlab and used lsqcurvefit for the fitting. I am having some serious issues with mpcurvefit (although it is better than the IDL curvefit!) and was hoping you can help me resolve these issues.

I put 4 coefficients into the fitting routine then mpcurvefit "spits" out the fitted values for these coefficients. However, the program is not stable at all. For example

If I put [9.4,0.24,0.77,-1.5]
into the routine
I get [9.538911, 0.15903937, 0.72624838, -1.3497545] out.

But if I change the input even slightly eg [9.4,0.24,0.77,-1.5]
I get totally different values out, eg [7.7098139, 0.19333284, 0.60223838, -0.85758867]

Surely this should not be the case?

Also the outputs differ for the same inputs depending on whether I run IDL on Windows or on Linux.

When I run the same fitting algorithm using Matlab and lsqcurvefit the program is much more stable. If I put slightly different values into the routine I still get similar values out, as the iterations conviene on particular values.

What am I doing wrong with mpcurvefit?! Is there any way to make it stable. I have gone through the code over and over again and I can't see what I am doing wrong.

Thank you for your time.