Adjusting Parameters with TableCurve User-Defined Functions (UDFs) – Part 2, Adjusting Parameters

User Defined Function 1						
Read UDF Library S	Clear All UDF			ear All UDFs	Selected UDF	
Function Name: Eqn8074	Adjustable Parameter <u>C</u> ount: 3			1		
Eunction: Y=#A/(1.0+EXP(-(X-#B)/#C))						1 2 3 4 5 6 7 8 8 10 11 12 13 14 15
Copy Cut Paste Clear Current UDF	<u>G</u> eneral Ca <u>l</u> culus	<u>I</u> rigonometric X <u>Y</u> Data Table	[rigonometric Statįstical ⊻Data Table <u>N</u> on-Lin		<u>B</u> essel <u>P</u> eakFit	Copy ⇒ I 🗁 Read
Min		Start	Мах		Мах	Save
#A [A0] -1E+25	1	1		1E+2	25	
#B [A1] -1E+25	1	1			25	
#C [A2] -1E+25	1	1			1E+25	
#D [A3] -1E+25	1	1		1E+25		C Fit UDFs
#E [A4] -1E+25	1			1E+2	25	
#F [A5] -1E+25	1			1E+2	25	
#G [A6] -1E+25	1	1		1E+25		🔮 0K
#H [A7] -1E+25	1			1E+2	25	X Cancel
#I [A8] -1E+25	1			1E+2	25	
#J [A9] -1E+25]1			1E+2	25	? Help

An advantage to using TableCurve for user-defined functions is the graphical interface for adjusting the parameters. If you click on the Adjust button after entering your UDF and setting the parameter count, the dialog will show your data plotted against the UDF with the initial parameter settings.

If you click on the Find & Update button, the program will make an attempt to adjust the initial parameter values. If these don't appear to be a good starting point, you can either use the sliders, or type in new values for the parameters.

When you have a good approximation of the curve against the datapoints, you can click on the check box to update the initial parameters, then fit the equation for the full optimisation.



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This procedure is the same both for TableCurve 2D and TableCurve 3D.

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