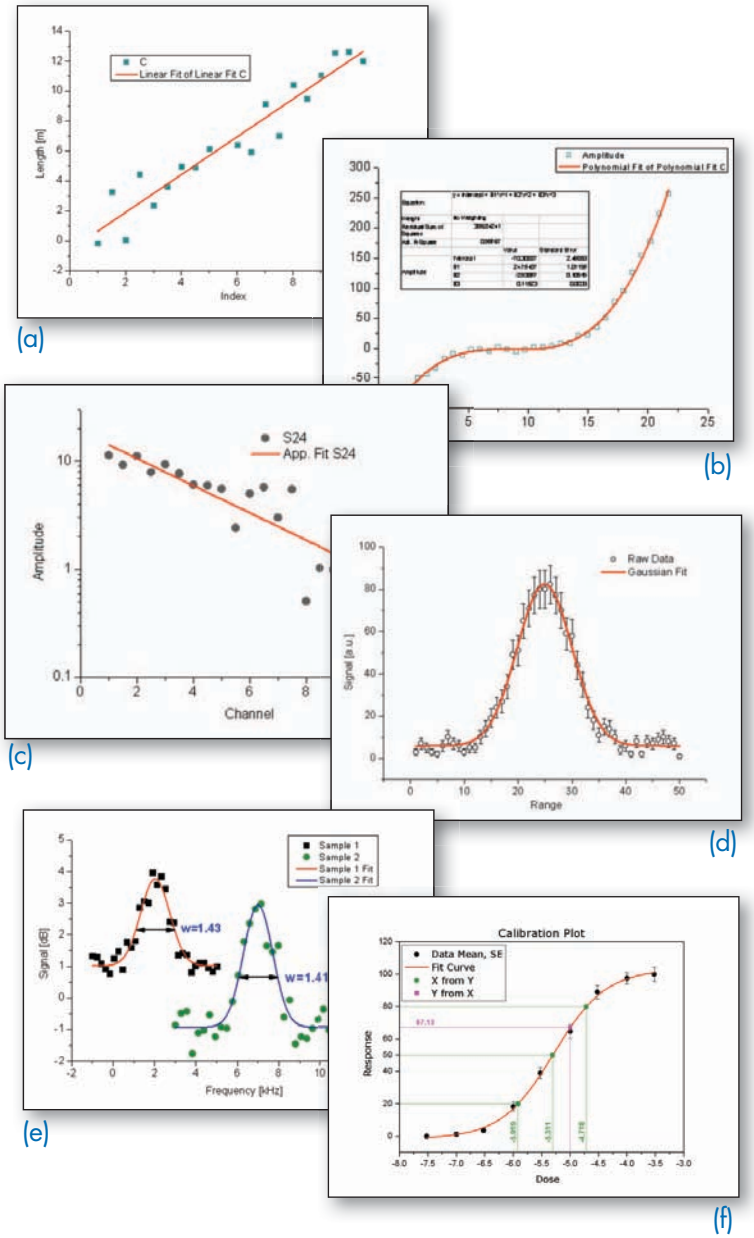
Curve Fitting

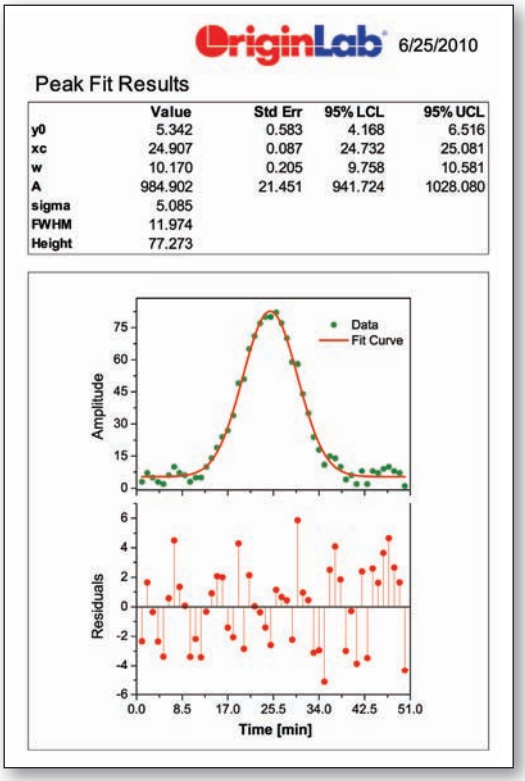
Origin supports linear, polynomial and nonlinear fitting from both worksheets and graphs. Fit only a portion of your data, an entire dataset, or fit multiple datasets simultaneously.



Fit types: (a) Linear, (b) Polynomial, (c) Apparent, (d) Weighted, (e) Global, (f) Concatenate/Replicate

Origin provides full control of the fitting process…

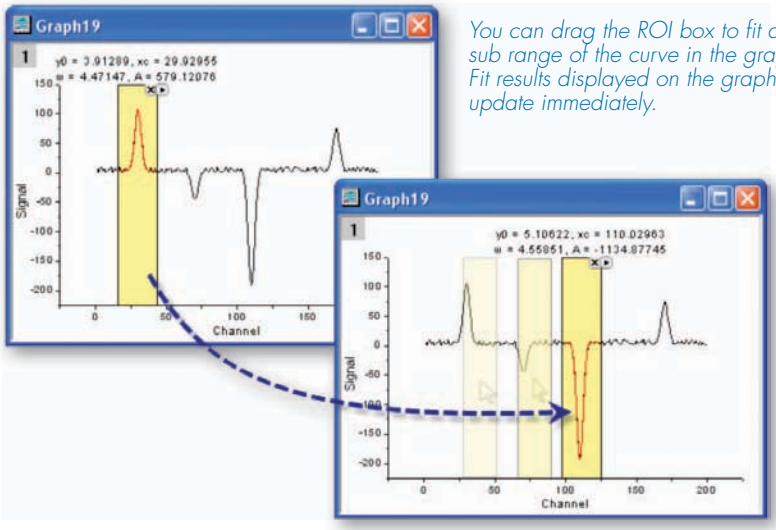
- Flexible data input
- A wizard for defining custom fitting functions
- A consolidated fitting report sheet
- Multi-dataset fitting modes: fit multiple datasets independently, in concatenate fit mode, or use a global fit with shared parameters
- Fit statistics and parameters output to the fit report
- Residualsan alysis
- Interpolation on the fit curve to compute new X/Y values at desired locations
- Recalculation of your fitting results automatically when data or parameters are changed
- Analysis Templates to save your settings and desired results for repeat use



Create a custom fitting report sheet that presents the desired fitting results and related graphs.

Quick Fit Gadget

Origin provides a simple tool to quickly fit data plotted in a graph. Move or resize a region of interest (ROI) object to update results. Interactively perform fit operations on multiple ranges of the same dataset, or on multiple datasets in the graph.



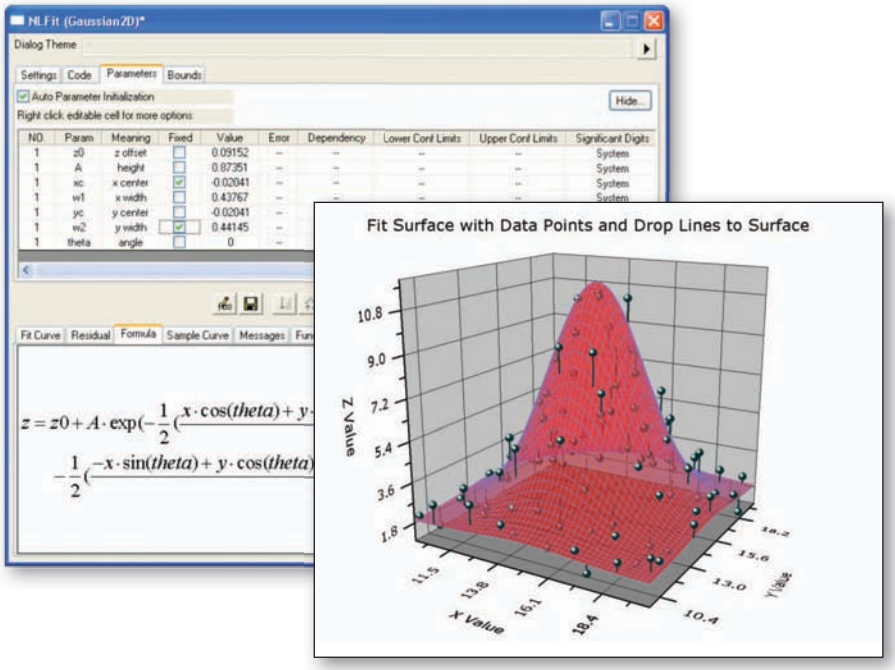
You can drag the ROI box to fit any sub range of the curve in the graph. Fit results displayed on the graph update immediately.

Fit parameters and other key values can be output directly to the graph or to a worksheet.

Qkfit

	A	B	C	D	E(Y)	F(yEr±)	G(Y)	H(yEr±)	I(Y)	J(yEr±)
Long Name	Function	Input	Range	Weighting	y0	y0-Error	xc	xc-Error	w	w-Error
Units										
Comments										
1	Gauss	Signal	[154:181]	No Weighting	4.56663	0.68765	170.00289	0.0641	4.64227	0.14407
2	Gauss	Signal	[141:168]	No Weighting	5.4106	0.58756	169.1392	1.31362	3.82151	1.20206
3	Gauss	Signal	[96:123]	No Weighting	5.40797	0.56778	110.02963	0.01825	4.56804	0.0409
4	Gauss	Signal	[61:88]	No Weighting	4.32127	0.60784	70.15248	0.07754	4.61447	0.17405
5	Gauss	Signal	[16:43]	No Weighting	3.91289	0.71431	29.92955	0.04407	4.47147	0.09838
6	Gauss	Signal	[157:184]	No Weighting	4.49203	0.65383	170.00288	0.06091	4.6491	0.13693
7										

Result



3D Surface Fitting PRO

Origin performs 3D surface fitting on XYZ worksheet data and matrix data using one of 19 built-in models or your own custom formula.

Data points and fit surface are shown together. The fit surface has been made transparent to show more of the data. Drop lines from the data points to the surface have been added.