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# Fit a Cubic Polynomial Specifying Normalize and Robust Options

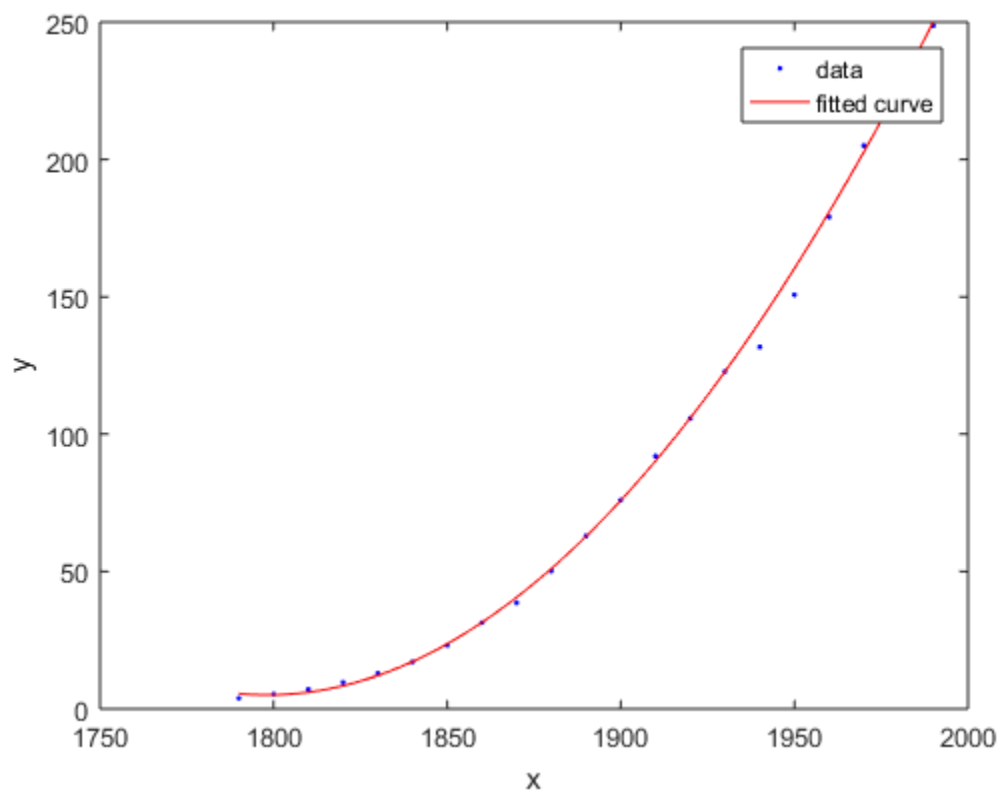
Load some data and fit and plot a cubic polynomial with center and scale (Normalize) and robust fitting options.

```
load census;  
f=fit(cdate,pop,'poly3','Normalize','on','Robust','Bisquare')  
plot(f,cdate,pop)
```

$f =$

Linear model Poly3:  
 $f(x) = p1*x^3 + p2*x^2 + p3*x + p4$   
where  $x$  is normalized by mean 1890 and std 62.05  
Coefficients (with 95% confidence bounds):

$p1 =$	-0.4619	(-1.895, 0.9707)
$p2 =$	25.01	(23.79, 26.22)
$p3 =$	77.03	(74.37, 79.7)
$p4 =$	62.81	(61.26, 64.37)



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