

Sakamoto et al. 1986

"True model:" $y = e^{(x-0.3)^2} - 1 + \varepsilon,$

Generated 10 data sets sampling from normal distribution with mean = 0 and variance = .01

Fit 5 approximating models to the 10 data sets

$$y = \beta_0 + \beta_1 x$$

$$y = \beta_0 + \beta_1 x + \beta_2 x^2$$

$$y = \beta_0 + \beta_1 x + \beta_2 x^2 + \beta_3 x^3$$

$$y = \beta_0 + \beta_1 x + \beta_2 x^2 + \beta_3 x^3 + \beta_4 x^4$$

$$y = \beta_0 + \beta_1 x + \beta_2 x^2 + \beta_3 x^3 + \beta_4 x^4 + \beta_5 x^5$$