B−spline Fit Demonstrating Key Features
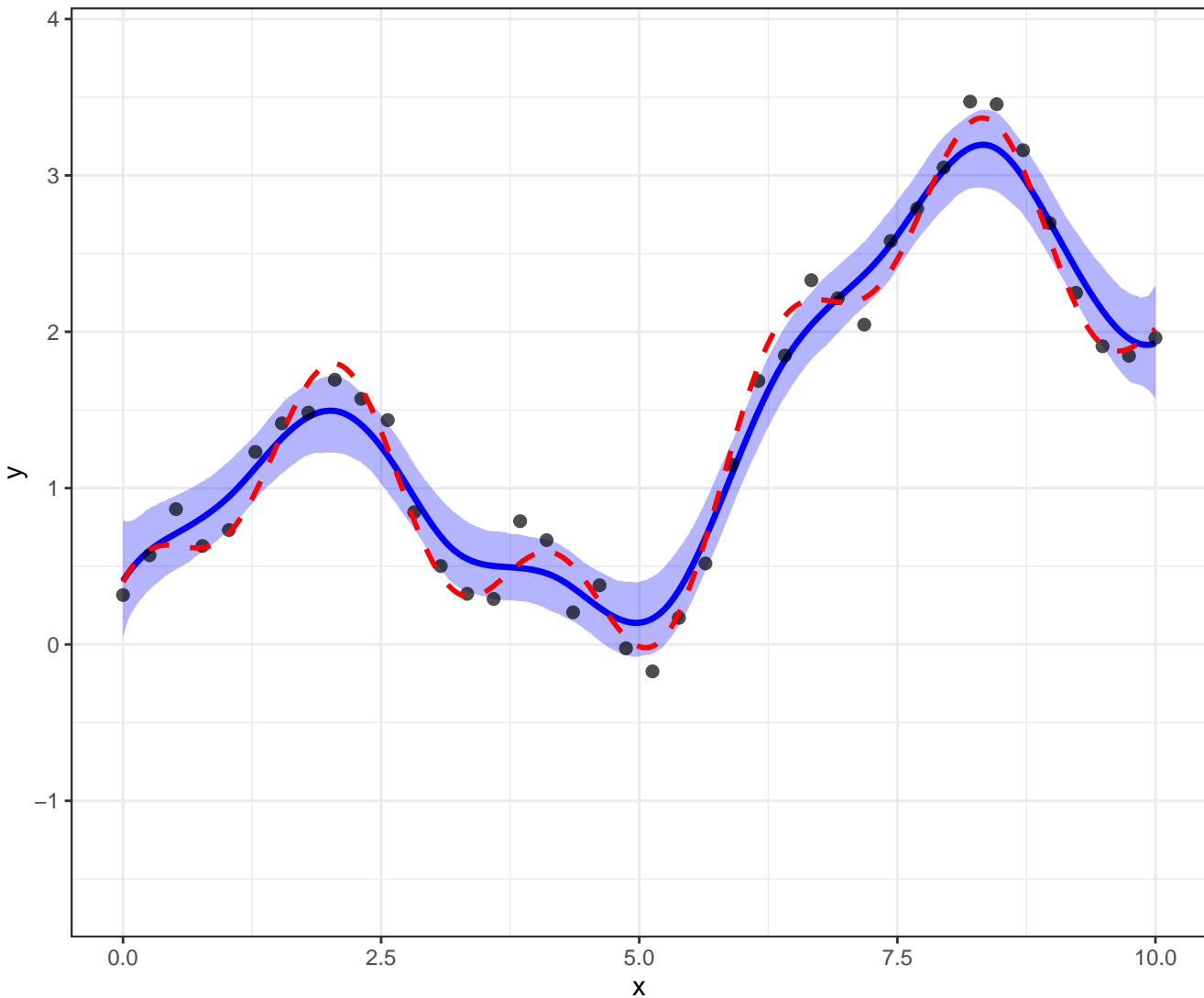
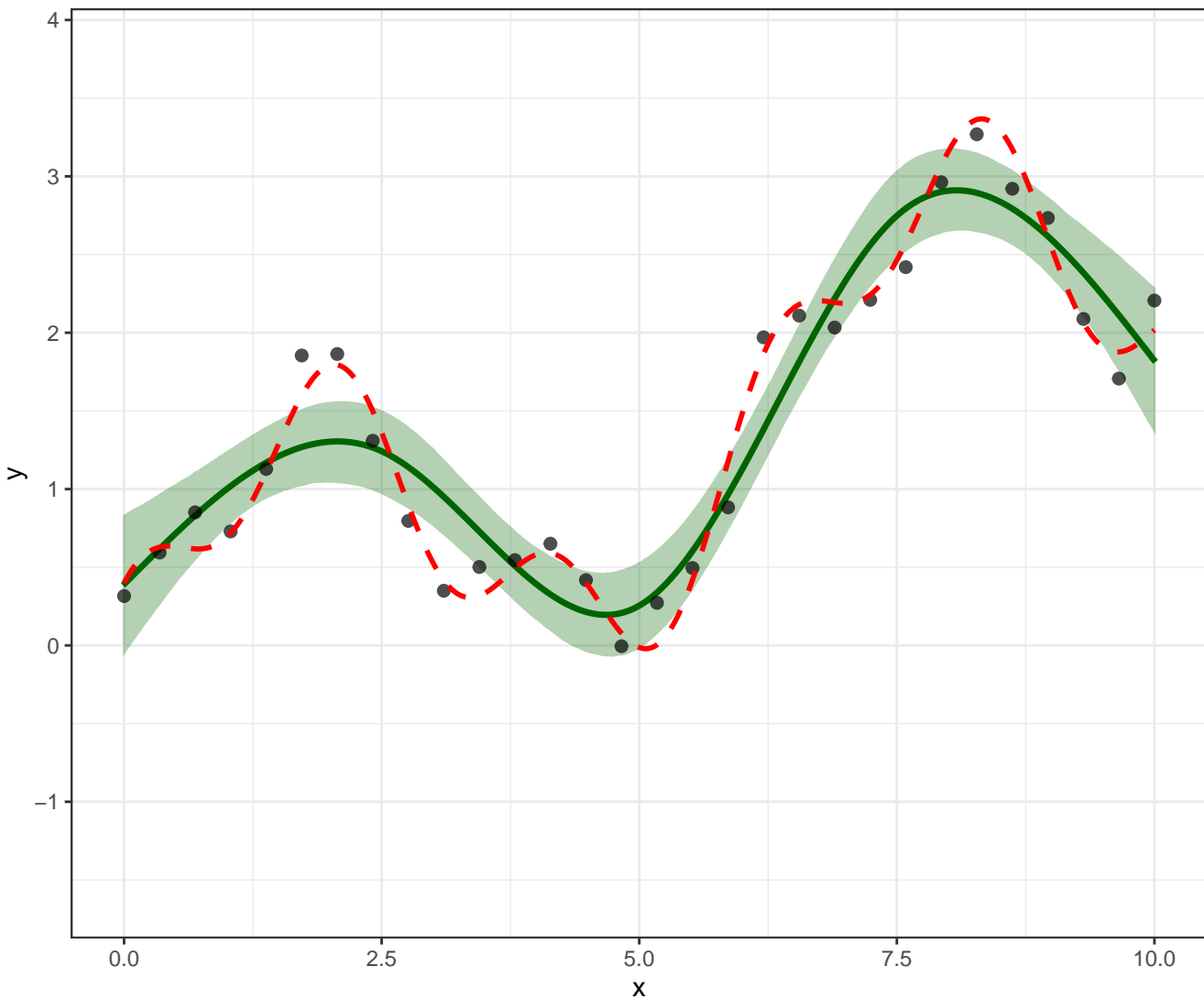True function: sin(x) + 0.4*cos(3x) + 0.25*x

Legend: B−spline fit · Data · True function · 95% CI

Parameters: knots = 20, smoothing_strength = 2, Estimated sigma = 0.219

C−spline (Natural Cubic Spline) Fit with 95% Credible Interval

True function: sin(x) + 0.4*cos(3x) + 0.25*x

Legend: C−spline fit, Data, True function, 95% CI

Parameters: num_knots = 5, Estimated sigma = 0.347