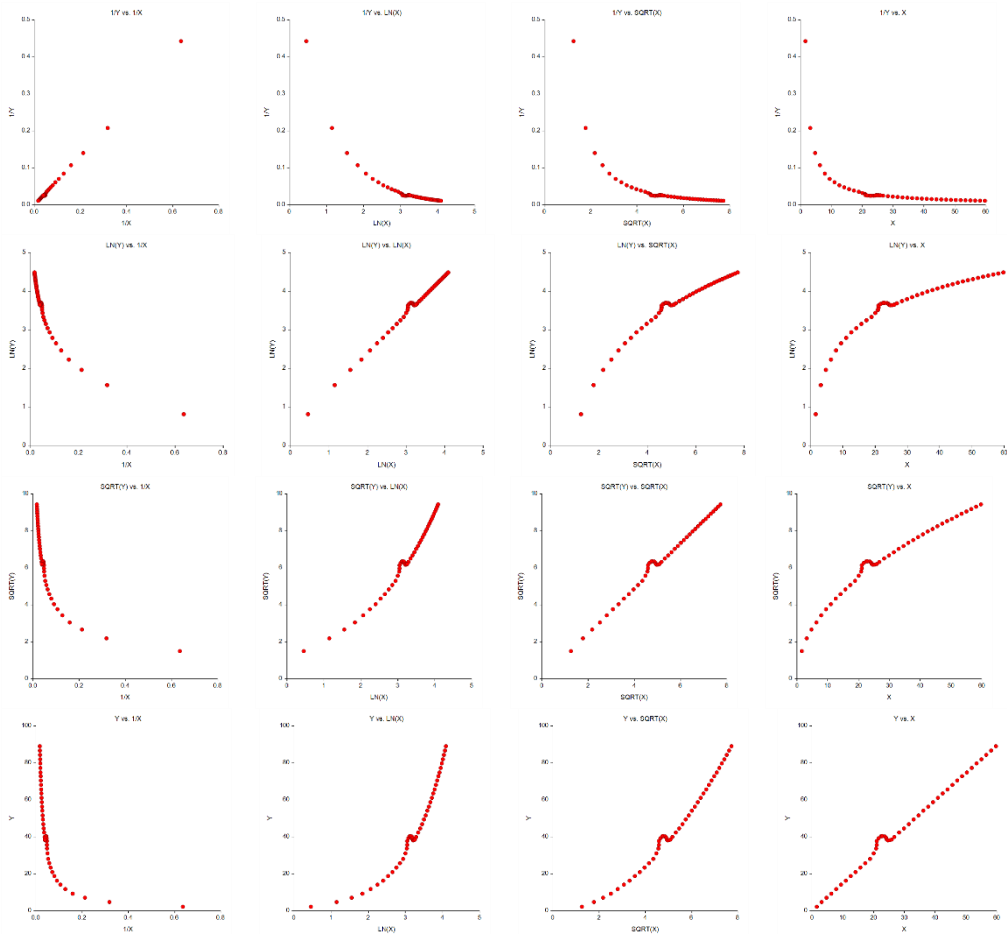Chapter 163

Scatter Plot Matrix for Curve Fitting

Introduction

One of the first tasks in curve fitting is to graphically inspect your data. This program lets you view scatter plots of various transformations of both X and Y. These plots are shown in matrix format.

You can look for transformations of both X and Y that give a simple relationship. Usually, your first choice would be to look for transformations of X and Y that yield a straight line. If these cannot be found, the next choice is to find functions that yield a recognizable curve.

Data Structure

The data are entered in two variables: one dependent (vertical) variable and one independent (horizontal) variable.

Example 1 – Creating a Scatter Plot Matrix

This section presents an example of how to generate a scatter plot matrix. In this example, we will plot the variables Y and X of the FnReg6 dataset.

Setup

To run this example, complete the following steps:

1 Open the FnReg6 example dataset

- From the File menu of the NCSS Data window, select **Open Example Data**.
- Select **FnReg6** and click **OK**.

2 Specify the Scatter Plot Matrix for Curve Fitting procedure options

- Find and open the **Scatter Plot Matrix for Curve Fitting** procedure using the menus or the Procedure Navigator.
- The settings for this example are listed below and are stored in the **Example 1** settings file. To load these settings to the procedure window, click **Open Example Settings File** in the Help Center or File menu.

Variables Tab

Y (Vertical) Variable..**Y**
X (Horizontal) Variable.....................................**X**

3 Run the procedure

- Click the **Run** button to perform the calculations and generate the output.

Scatter Plots

Scatter Plots