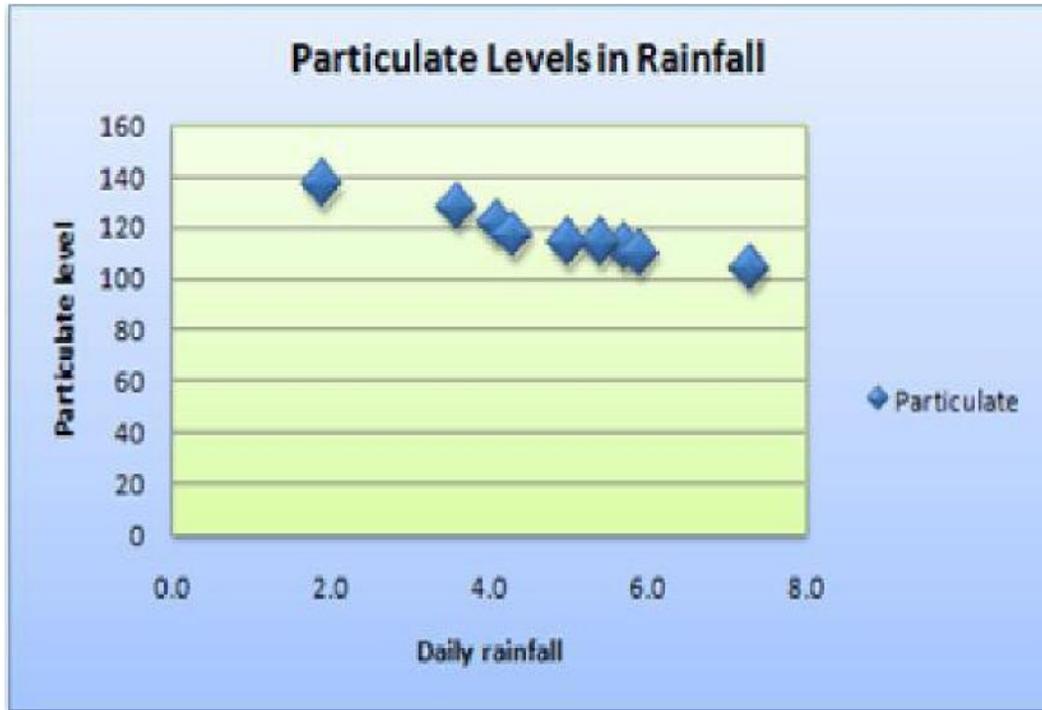


O: Plotting Data in Microsoft Excel

Microsoft Excel can easily produce publication quality scatter and line charts with very little effort on the part of the user. This document demonstrates how to do so with a set of sample data related to particulate levels and daily rainfall.

Create a Scatter Chart



The following procedure demonstrates how to create the above scatter chart given this tabulated data:

Daily Rainfall	Particulate Level
4.1	122
4.3	117
5.7	112
5.4	114
5.9	110
5.0	114
3.6	128
1.9	137
7.3	104

1. Copy the example worksheet data into a blank worksheet.
2. Select the data you want to plot in the scatter chart.
3. Click the **Insert** tab, and then click **Insert Scatter (X, Y) or Bubble Chart**.

4. Click **Scatter**.

Tip: You can rest the mouse on any chart type to see its name.

5. Click the chart area of the chart to display the **Design** and **Format** tabs.

6. Click the **Design** tab, and then click the chart style you want to use.

7. Click the chart title and type the text you want.

8. To change the font size of the chart title, right-click the title, click **Font**, and then enter the size that you want in the **Size** box. Click **OK**.

9. Click the chart area of the chart.

10. On the **Design** tab, click **Add Chart Element** > **Axis Titles**, and then do the following:

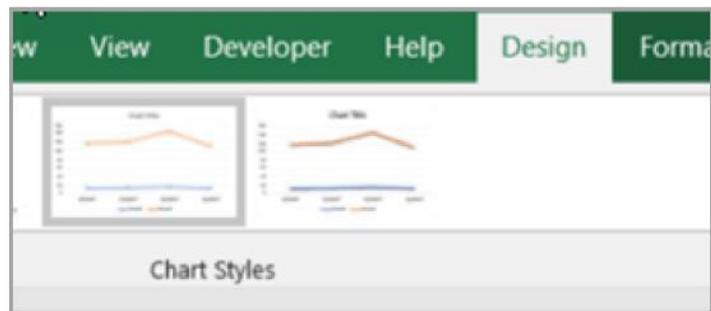
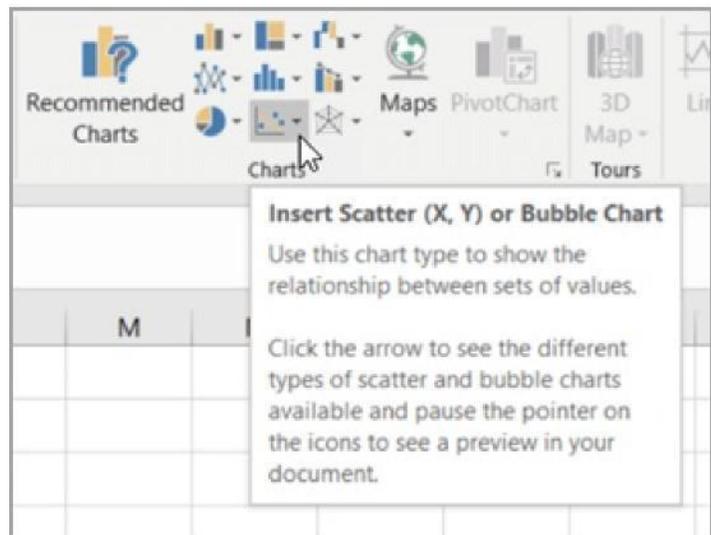
a. To add a horizontal axis title, click **Primary Horizontal**.

b. To add a vertical axis title, click **Primary Vertical**.

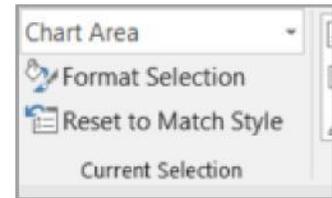
c. Click each title, type the text that you want, and then press Enter.

d. For more title formatting options, on the **Format** tab, in the **Chart Elements** box, select the title from the list, and then click **Format Selection**. A Format Title pane will appear. Click **Size & Properties**, and then you can choose **Vertical alignment**, **Text direction**, or **Custom angle**.

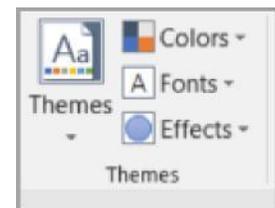
11. Click the plot area of the chart, or on the **Format** tab, in the **Chart Elements** box, select **Plot Area** from the list of chart elements.



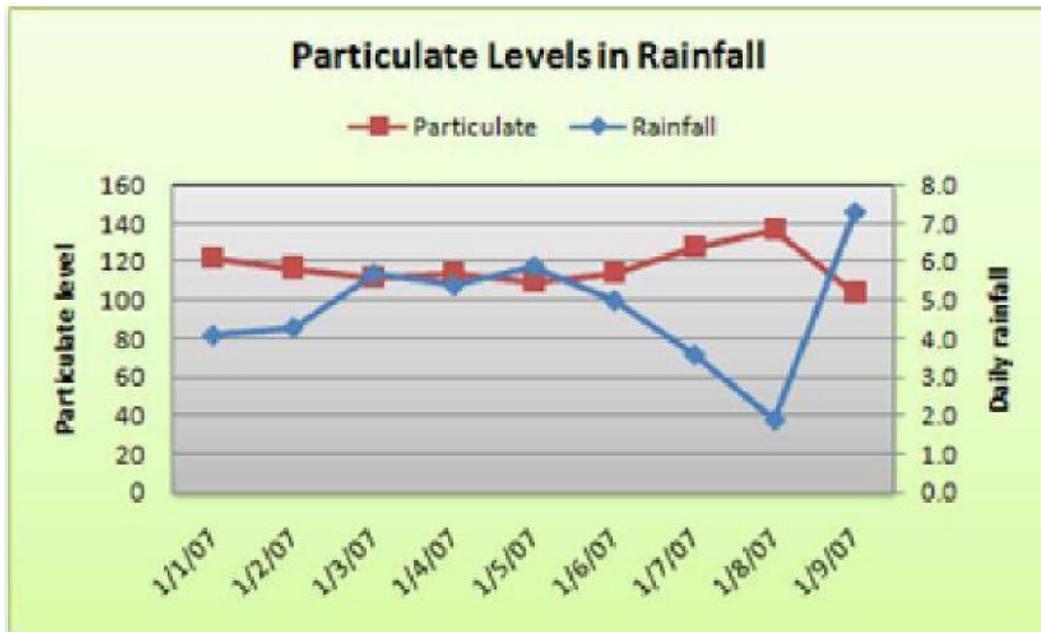
12. On the **Format** tab, in the **Shape Styles** group, click the **More** button, and then click the effect that you want to use.
13. Click the chart area of the chart, or on the **Format** tab, in the **Chart Elements** box, select **Chart Area** from the list of chart elements.



14. On the **Format** tab, in the **Shape Styles** group, click the **More** button, and then click the effect that you want to use.
15. If you want to use theme colors that are different from the default theme that is applied to your workbook, do the following:
 - a. On the **Page Layout** tab, in the **Themes** group, click **Themes**.
 - b. Under **Office**, click the theme that you want to use.



Create a Line Chart

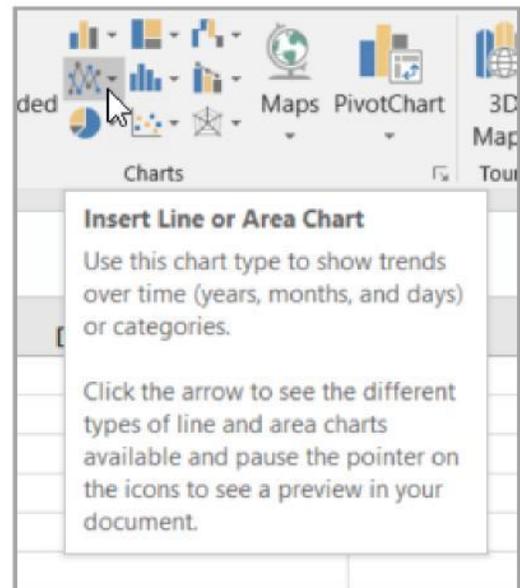


The following procedure demonstrates how to create the above scatter chart given this tabulated data:

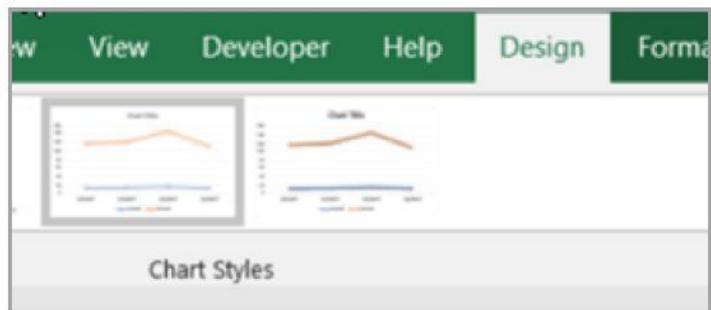
Date	Daily Rainfall	Particulate Level
01/01/07	4.1	122
01/02/07	4.3	117
01/03/07	5.7	112
01/04/07	5.4	114
01/05/07	5.9	110
01/06/07	5.0	114
01/07/07	3.6	128
01/08/07	1.9	137
01/09/07	7.3	104

1. Copy the example worksheet data into a blank worksheet.
2. Select the data that you want to plot in the line chart.
3. Click the **Insert** tab, and then click **Insert Line or Area Chart**.

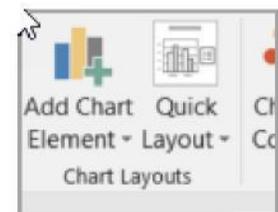
4. Click **Line with Markers**.
5. Click the chart area of the chart to display the **Design** and **Format** tabs.
6. Click the **Design** tab, and then click the chart style you want to use.
7. Click the chart title and type the text you want.
8. To change the font size of the chart title, right-click the title, click **Font**, and then enter the size that you want in the **Size** box. Click **OK**.
9. Click the chart area of the chart.



10. On the chart, click the legend, or add it from a list of chart elements (on the **Design** tab, click **Add Chart Element** > **Legend**, and then select a location for the legend).

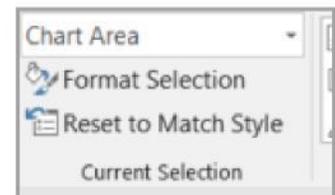


11. To plot one of the data series along a secondary vertical axis, click the data series, or select it from a list of chart elements (on the **Format** tab, in the **Current Selection** group, click **Chart Elements**).



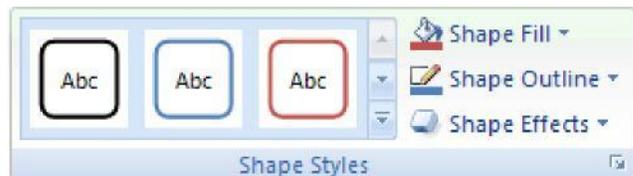
12. On the **Format** tab, in the **Current Selection** group, click **Format Selection**. The Format Data Series task pane appears.

13. Under **Series Options**, select **Secondary Axis**, and then click **Close**.



14. On the **Design** tab, in the **Chart Layouts** group, click **Add Chart Element**, and then do the following:
 - a. To add a primary vertical axis title, click **Axis Title >Primary Vertical**. and then on the Format Axis Title pane, click **Size & Properties** to configure the type of vertical axis title that you want.
 - b. To add a secondary vertical axis title, click **Axis Title > Secondary Vertical**, and then on the Format Axis Title pane, click **Size & Properties** to configure the type of vertical axis title that you want.
 - c. Click each title, type the text that you want, and then press Enter
15. Click the plot area of the chart, or select it from a list of chart elements (**Format** tab, **Current Selection** group, **Chart Elements** box).
16. On the **Format** tab, in the **Shape Styles** group, click the **More** button, and then click the effect that you want to use.

17. Click the chart area of the chart.
18. On the **Format** tab, in the **Shape Styles** group, click the **More** button , and  then click the effect that you want to use.



19. If you want to use theme colors that are different from the default theme that is applied to your workbook, do the following:
 - a. On the **Page Layout** tab, in the **Themes** group, click **Themes**.
 - b. Under **Office**, click the theme that you want to use.

