

Source: Data Source: National Climatic Data Center, NOAA, U.S. Department of Commerce.

## Directions for Creating a Climograph for Computers Running Microsoft Vista

Open a Word document (or, you can do this in Excel). Select the *Insert Chart* tab. Under the heading called Column, select *Clustered Column* and then *OK*. Two screens will appear: Microsoft Excel with data in a spreadsheet and Microsoft Word with a chart inserted in the document. Type in the months of the year beginning with January (abbreviated as Jan) in row 1 column B (type over series 1) of the spreadsheet. Proceed to row 1 column C and type Feb (type over series 2). March (Mar) is row 1 column D. Continue to input the months to December at row 1 column M. Highlight row 1in the spread sheet and click on the *Switch Row/Column* tab found over the chart. The months of the year will now appear on the X axis.

Now input the temperature data. In row 2 column A of the spreadsheet type the word "Temperature" (type over category 1). For each month, type the temperature data across the row. In row 3 column A type the word "Precipitation". Input the precipitation data for each of the months across row 3. Highlight row 4 and row 5 and delete them. Now you have a bar chart showing two bars above each month. You are done inputting data into the spreadsheet. Click on any temperature bar in the chart. The temperature bars become selected. Right click and select *Change Series Chart Type*. Under the heading called Line select *Line with Markers* and *OK*. Now you have a line and bar chart where temperature is represented as a line; however, both temperature and precipitation data relate only to the left vertical axis. Another Y axis is needed. You need to create a right vertical axis that corresponds to the precipitation data. Click on one of the precipitation bars in the chart. Be certain that you click on a precipitation bar and not a temperature bar. Right click on *Format Data Series*. Under the *Series Options* tab and find the *Plot Series On* option and change the selection from *Primary Axis* to *Secondary Axis*.

You now have a climograph with temperature values on the left Y axis and precipitation on the right Y axis and months of the year on the X axis. Select the Layout tab and add a chart title, Y axis's titles, X axis titles, and legend. You can play with title/legend positioning, bar and line colors, and line thicknesses as you please, but be certain that the final chart is professional. No handwriting on the chart. View the climograph I created as a reference.