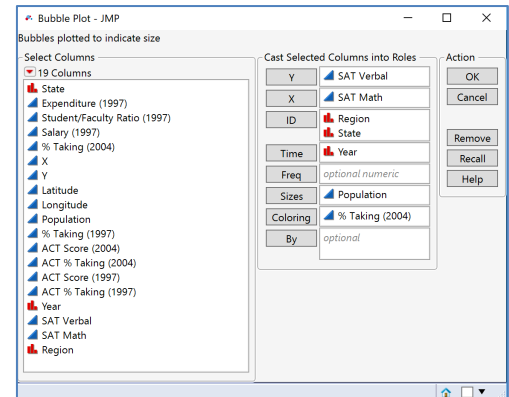# Bubble Plot

Use a Bubble Plot to explore the relationship between two continuous variables and how the values change over time. Bubble color and size can be used to incorporate additional variables.

Bubble Plot

1. From an open JMP® data table select **Graph > Bubble Plot**.
2. Drag a continuous variable into the **Y** and **X roles**.
3. Place one or more variables into the **ID** role so that labels can be added to the bubbles (optional).
4. Add a time variable into the **Time** role if desired to have the bubbles change location across time (optional).
5. Add a variable(s) into the **Sizes** and **Coloring** role to incorporate information about those variables into the plot (optional).
6. Click **OK**.
7. **Play, Rewind, and Forward button** are available to have the bubble positions, size, and/or color change as a function of the Time variable.

   Note: Options such as adding **Trail Lines** and **Labels** are available under the **Red Triangle**.

8. If there are multiple **ID Variables** (as in Region and State in this example), selecting a bubble and clicking the **Split Button** will separate the selected bubble into the values for the second ID Variable. In this example, the South Region was split into the individual states that make up that region. Select the **Combine Button** to return the individual states back into Region.
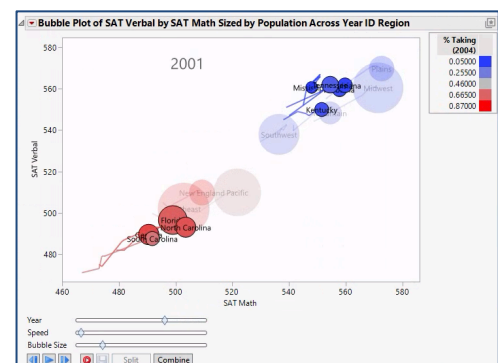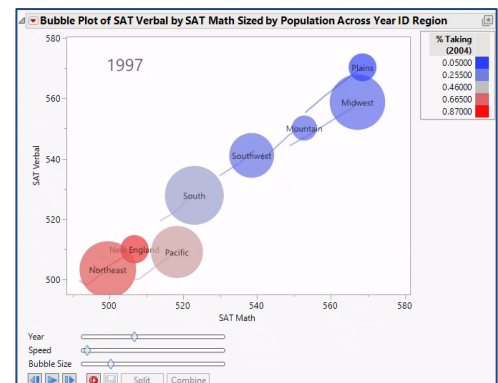
   Note: The animation can be saved:

   In **Windows OS**
   1. Save as a .gif using the **Record** and **Save Buttons**.
   2. Create as an Interactive HTML through **File > Publish > Publish to File** or **File > Export > Interactive HTML with Data.**

   In **Apple OS**
   1. Create as an Interactive HTML through **File > Publish to File** or **File > Export > Interactive HTML with Data.**

SATbyYear.jmp (under Help > Sample Data Folder)

Visit **Essential Graphing > Bubble Plot** in **JMP Help** to learn more.