# MS Excel Tennis Portfolio - Part 5

In my first four sections, I showed my readers how I collected, organized, and formatted the data for all the currently active women’s singles Grand Slam Champions. One main piece of data I focused on was the YTD Stats worksheet I created. Now, I’m in the final stage of completing a polished Excel spreadsheet. The last piece I have left is to create charts. Charts are powerful tools that let me visually display my data in a variety of different charts.

The first chart I created was to show the YTD wins and losses. For that, I created a clustered column chart. A clustered column chart compares values across categories. First, I highlighted the YEAR, WINS, and LOSSES columns. Then, I navigated to the “Insert” tab, went to the “Charts” group, and clicked on “Recommended Charts”. When I clicked on “Recommended Charts”, I got a “Insert Chart” pop-up window. I clicked on the “Clustered Column Chart” option. When I selected the “Clustered Column Chart” option, I got a clustered column chart on my “YTD Stats” worksheet. I also got two new tabs at the top of my Excel window Ribbon - “Chart Design” and “Format”. I moved the chart to a new worksheet called “YTD Wins-Losses”. In my clustered column chart, my legend is formatted with default colors to represent wins and losses. But I wanted to customize the colors to show wins in green and losses in red. To do this, I selected the chart, right clicked on the “WINS”, and set the “Fill” and “Outline” colors to “Green”. I repeated the same step for “LOSSES”. But for the losses, I set the Fill” and “Outline” colors to “Red” instead. At the top of my chart, I have “Chart Title” in the center. I changed the title so to reflect each woman’s YTD wins and losses. I selected the chart, clicked on the “Chart Title” text box, and titled it as “Serena Williams (USA): YTD Wins-Losses”.

Next, I added titles for my Axes. The X axis goes horizontally from left to right, while the Y axis vertically from top to bottom. I selected the clustered column chart, navigated to the “Chart Design” tab, and went to the “Chart Layouts” group. In the “Add Chart Element” drop-down menu, I clicked on “Axis Titles”. For the X axis, I clicked on “Primarily Horizontal”, and named it as “YEAR”. I repeated this step for the Y axis too. But I clicked on “Primarily Vertical” instead and I named it as “NUMBER OF MATCHES”.

I followed this process to create a second chart to analyze each woman’s winning percentile range. But instead of a clustered column chart, I created a line chart. A line chart is used to show trends over time. Just like when I created the clustered column chart, I still highlighted the “YEAR” column. But this time, I selected the “WINNING PERCENTILE RANGE” column instead. I followed the same steps when I navigated to the “Insert” tab, went to the “Charts” group, and clicked on “Recommended Charts”. But, this time, I navigated to the “All Charts” tab, selected the “Line” tab option, and clicked on “Line with Markers” instead. Then, I moved the line chart to a new worksheet called “Winning Percentile Range”. I set the “Fill” and “Outline” colors to “Green” for the line that displays for all the years. Then, I named my line chart as “Serena Williams (USA): Winning Percentile Range”. Just like my first clustered column chart, I followed the same steps to name my X and Y axes. I still named my X axis as “YEAR”. But my Y axis was “PERCENTAGE”. Then, I added a trendline to my chart. A trendline can tell me an upward slope or downward trend in my data. I wanted to see Serena’s winning percentile range for 2022. So, I selected the line chart, navigated to the “Chart Design” tab, and went to the “Chart Layouts” group. In the “Add Chart Element” drop-down menu, I clicked on “Trendline” and selected “More Trendline Options”. When I clicked on “More Trendline Options”, I got a “Format Trendline” sidebar on the right side of my spreadsheet. I can see that my trendline option is set to “Linear” as default. I’ll leave the option as it is. Next, I went to the “Forecast” section and typed in “1” for “Forward”. When I typed in “1” for “Forward”, a new line was added on my line chart. That new line shows each woman’s winning percentile range for 2021 and 2022. I customized the color for the new trendline to show in “Green”.