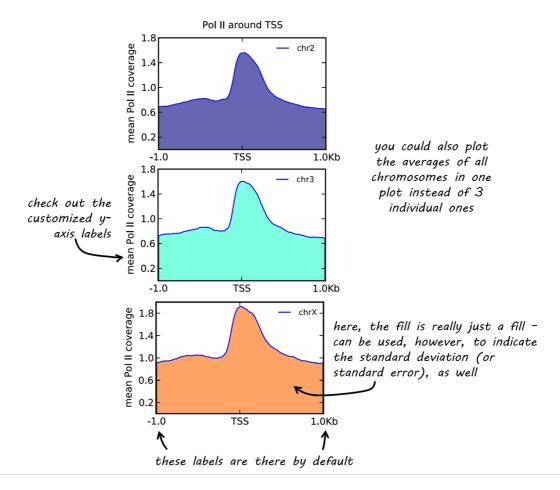
2nd example: Summary plots with all genes scaled to the one size and user-specified groups of genes

Here's the profiler plot corresponding to the heatmap above. There's one major difference though - do you spot it?



We used the same BED file(s) as for the heatmap, hence the 3 different groups (1 per chromosome). However, this time we used computeMatrix not with *scale-regions* but with *reference-point* mode.

```
$ /deepTools-1.5.2/bin/computeMatrix reference-point --referencePoint TSS \
--regionsFileName Dm.genes.indChromLabeled.bed --scoreFileName PolII.bw \
--beforeRegionStartLength 1000 --afterRegionStartLength 1000 \
--binSize 10 --outFileName PolII_matrix_indChr_refPoint \
--missingDataAsZero --sortRegions no

$ /deepTools-1.5.2/bin/profiler --matrixFile PolII_matrix_indChr_refPoint \
--outFileName profile_PolII_indChr_refPoint.pdf
--plotType fill --startLabel "TSS" \
--plotTitle "Pol II around TSS" --yAxisLabel "mean Pol II coverage" \
--onePlotPerGroup
```

When you compare the profiler commands with the heatmapper commands, you also notice that we made use of many more labeling options here, e.g. --yAxisLabel and a more specific title via -T

This is how you would have obtained this plot in Galaxy (only the part that's *different* from the above shown command for the scale-regions version is shown):

computeMatrix

| The reference point for the plotting: |
|---|
| beginning of region (e.g. TSS) |
| Discard any values after the region end: |
| |
| This is useful to visualize the region end when not using the scale-regions mode and when the reference-point is set to the TSS. |
| Distance upstream of the start site of the regions defined in the region file: |
| If the regions are genes, this would be the distance upstream of the transcription start site. |
| Distance downstream of the end site of the given regions: |
| 1000 |
| If the regions are genes, this would be the distance downstream of the transcription end site. |
| l |
| profiler |
| |
| |
| profiler (version 1.0.2) |
| Matrix file from the computeMatrix tool: |
| 5: ComputeMatrix output |
| The input matrix was computed in scale-regions mode: |
| no \$ |
| Show advanced output settings: |
| no \$ |
| Show advanced options: |
| yes 🕽 |
| Define the type of statistic that should be used for the profile.: |
| mean 🗘 |
| Plot height: |
| 5 |
| Height in cm. The default for the plot height is 5 centimeters. The minimum value is 3 cm. |
| Plot width: |
| 8 |
| |
| Plot type: |
| For the summary plot (profile) only. The "lines" option will plot the profile line based on the average type selected. The "fill" option fills the |
| profiles. The "std" option colors the region between the profile and the standard deviation of the data. As in the case of fill, a semi-transportion colors if "one plat any profile and the standard deviation of the data. As in the case of fill, a semi-transportion colors are profiled as a semi-transportion colors. |
| option only works if "one plot per proup" is set. |
| Labels for the regions plotted in the heatmap: "chrX,chr3,chr2" |
| If more than one region is being plotted a list of labels separated by comma and limited by quotes, is required. For example, "label1, label |
| Title of the plot: |
| Pol II around the TSS |
| Title of the plot, to be printed on top of the generated image. Leave blank for no title. |
| Do one plot per group: |
| When the region file contains groups separated by "#", the default is to plot the averages for the distinct plots in one plot. If this option is |
| Minimum value for the Y-axis of the summary plot. Leave empty for automatic values: |
| |
| Maximum value for Y-axis of the summary plot. Leave empty for automatic values: |
| |
| Description for the x-axis label: |
| gene distance (bp) |
| Description for the y-axis label for the top panel: |
| mean Pol II coverage |
| |
| Execute |