Heatmap:

The visual representations presented seem to be associated with heatmaps and tables that aggregate the values of gene expression datasets. The images appear to be related to this information.

The first image is a **heatmap**, which is a data visualization technique used to represent the levels of gene expression across various conditions or samples. Here's a breakdown of what you're seeing:

Vertical Axis (Rows): Each row represents a different gene. Probe set IDs are unique numbers for certain sequences of DNA or RNA that are used to measure how much a gene is expressed. We use these IDs to talk about genes (for example, "200706_s_at").

Horizontal Axis (Columns): These likely represent different experimental samples or conditions, with the percentages possibly indicating different time points, treatment concentrations, or patient groups.

Color Scale: The colors in the heatmap correspond to the expression level of each gene in each sample or condition. Typically, colors towards one end of the spectrum (like red) indicate higher expression, and colors towards the other end (like blue) indicate lower expression. In this heatmap, it seems that a range of colors from blue, yellow, to red are used, which could represent a gradient from low to high expression levels.

90% 80% 70% 60% 50% 40% 20%

The second image is a list of values, specifically the **sum of GSM values**. "GSM" stands for "Geo Sample," which is a term from the GEO (Gene Expression Omnibus) database that refers to individual samples for which gene expression is measured.

Values: Each value in the list represents the sum of the expression levels of all genes within a particular sample (GSM ID). This might be used to get an overall sense of the gene activity within each sample or to normalize the data.

Researchers can figure out which genes are differentially expressed under different conditions by using these kinds of visualizations and summaries along with statistical tests. This may help us understand diseases like Parkinson's, as the title of the paper suggests. The

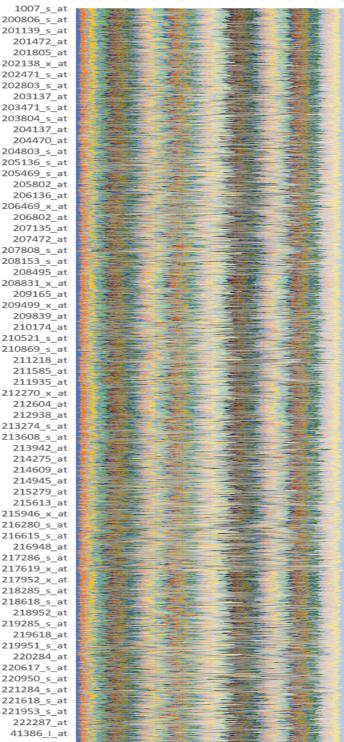


Fig. Heatmap

heatmap provides a quick visual comparison across all genes and samples, while the summed values might be a step in preprocessing the data for further analysis.



Fig. GSM Values selected for the heatmap