

## Extensions for *DD*-plot

Dae-Heung Jang\*

Pukyong National University, Busan, KOREA [dhjang@pknu.ac.kr](mailto:dhjang@pknu.ac.kr)

The *DD*-plot is a useful graphical exploratory data analysis tool for graphical comparisons of two multivariate distribution or samples based on data depth. We can suggest several extensions for *DD*-plot, namely, *DDD*-plot, *DD*-plot matrix, three-dimensional *DD*-plot, and dynamic *DD*-plot. If we are interested in comparisons of three multivariate distributions  $F$ ,  $G$ , and  $H$ , we can suggest *DDD*-plot as an extension of *DD*-plot. If we are interested in comparisons of several multivariate distributions, we can suggest *DD*-plot matrix as an extension of *DD*-plot. If we are interested in comparisons of two multivariate distributions  $F$  and  $G$  with control parameter(eg. time), we can suggest dynamic *DD*-plot and three-dimensional *DD*-plots as an extension of *DD*-plot.

Key Words: Data depth, *DDD*-plot, dynamic *DD*-plot