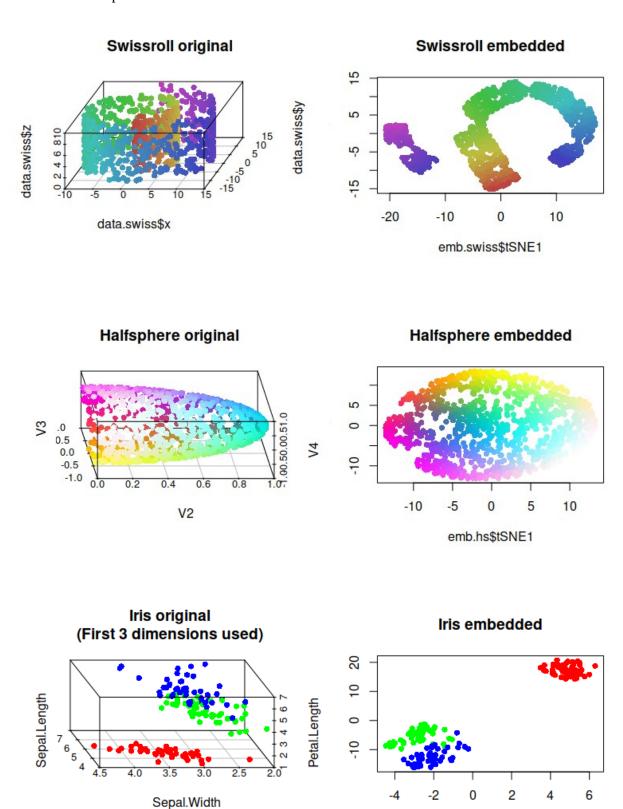
DATA.STAT.770

Exercise set 11

Problem G1:

I have had some issues with the installation of the dimensionality reduction toolbox, and I couldn't find any implementations of SNE (in R or Python). Hence I only implemented the t-SNE parts. Here are the outputs.



emb.iris\$tSNE1

Based on the results, the tSNE seemed to perform really well by keeping the original neighbourhoods similar at every dataset. The only unexpected behaviour happens in swissroll dataset, where the blue neighbourhood has been cut to two parts and both of these happen to be located at opposite ends of the 2d frame.