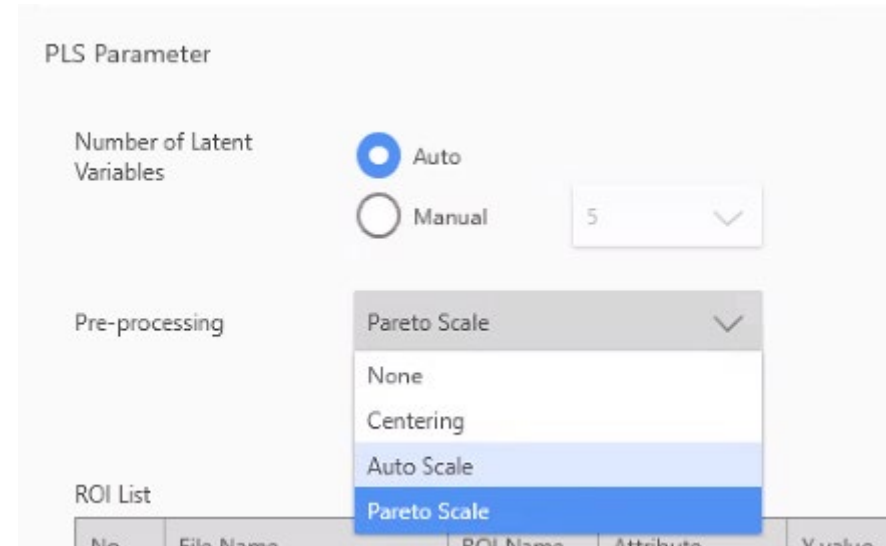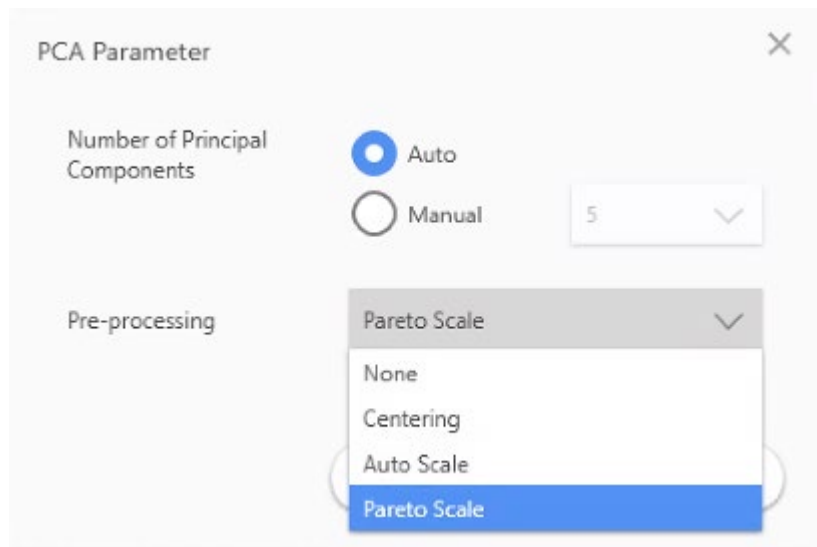# Scale

There are several places to select the Scale in IMAGEREVEAL.

About "Scale"

- Scale selection: How to handle the signal strength Xi

  - None: Leave it as it is

  - Centering :   Set the average to 0 $X_i - \hat{X}$

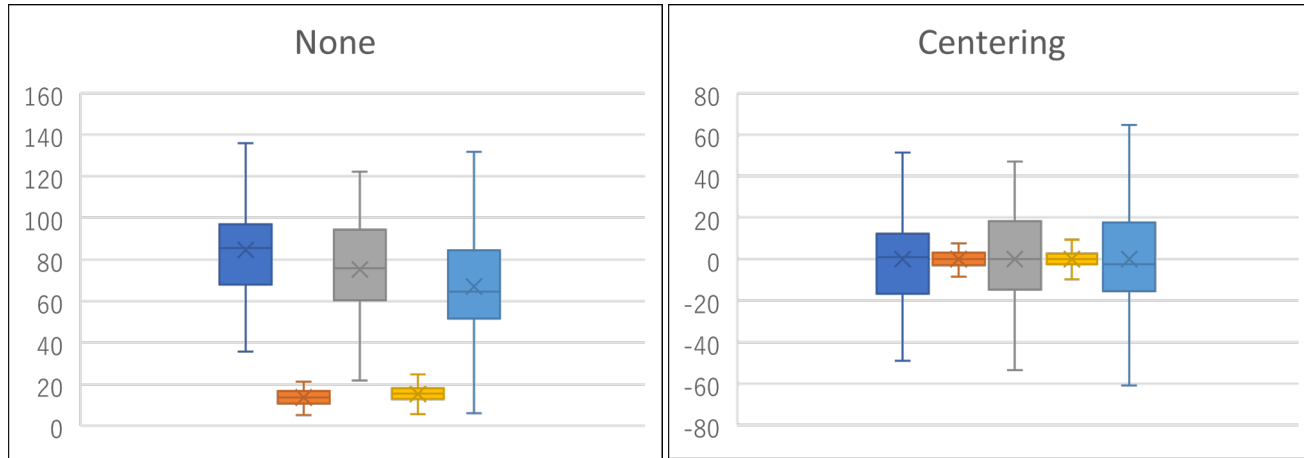 - Pareto scale :   Reduce the effect of the range of variation $\dfrac{X_i - \hat{X}}{\sqrt{\sigma}}$

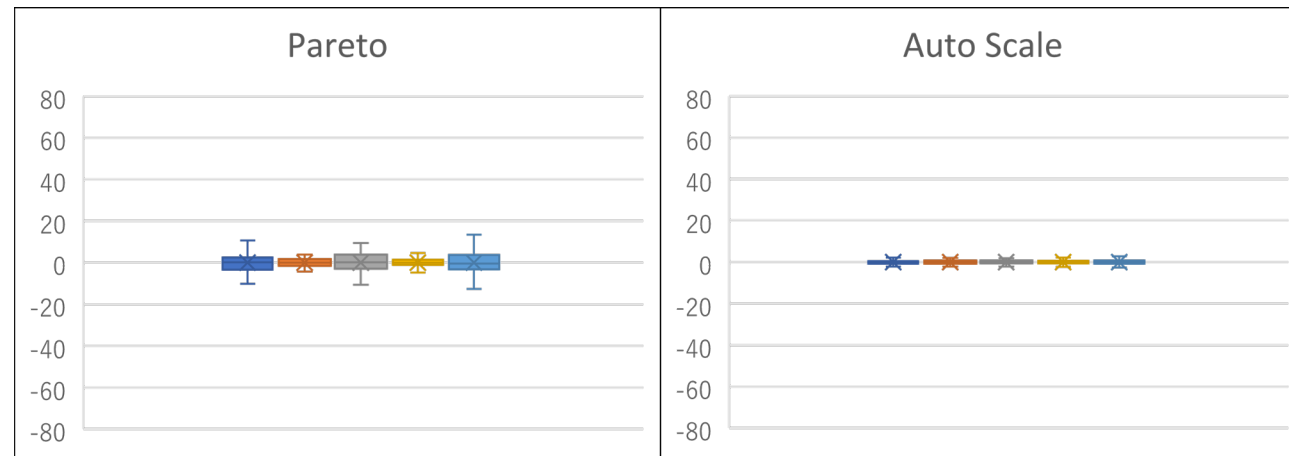 - Auto scale :   Eliminate the effect of the range of variation $\dfrac{X_i - \hat{X}}{\sigma}$

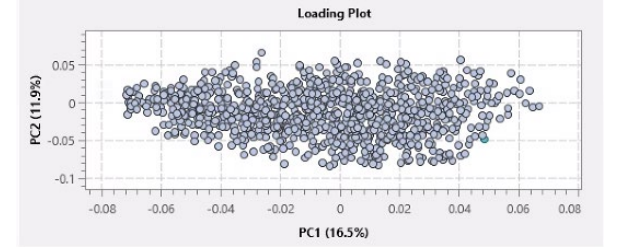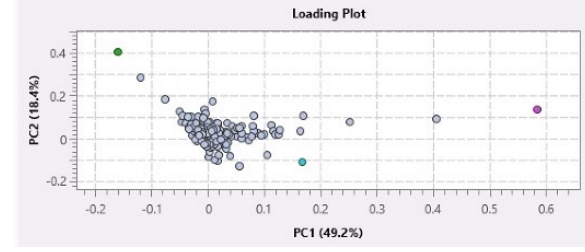In the case of PCA, Score Plot does not change much, but the scatter of data points in Loading Plot changes.

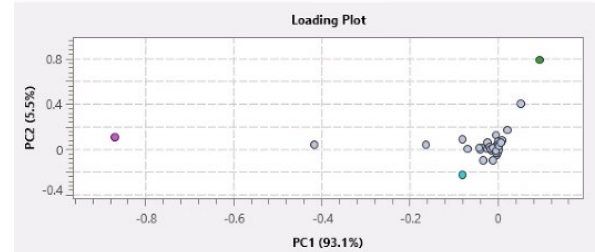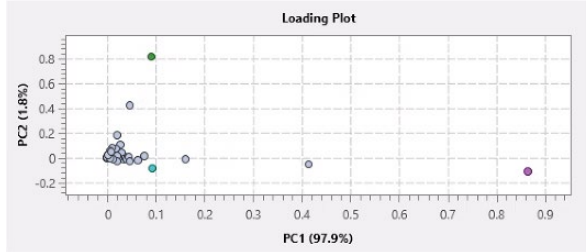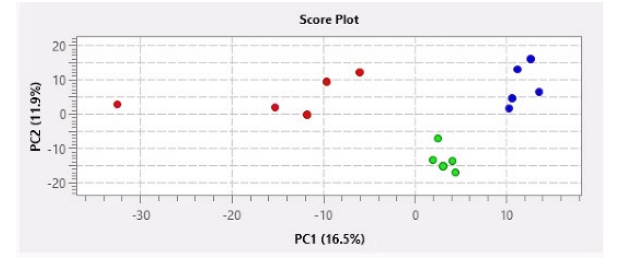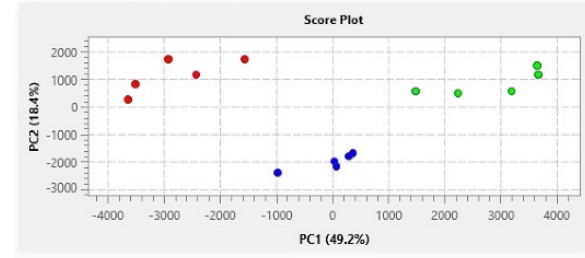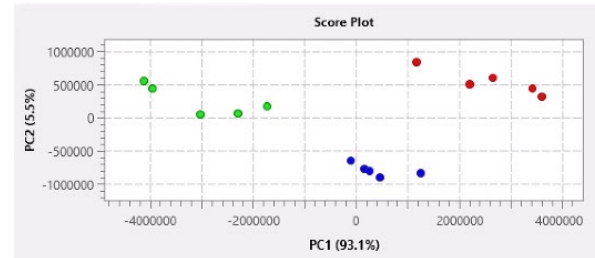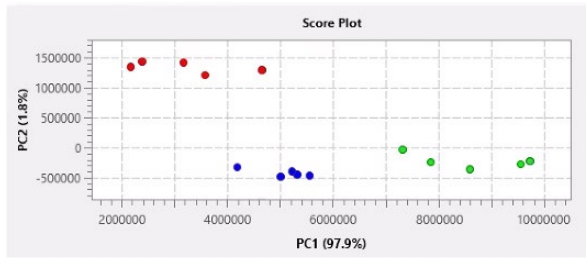# Image of scale

Variation is approximately proportional to signal strength

Example of a PCA with a different scale

None

Centering

Pareto scale

Auto Scale