

Scatter plot showing the first two principal components (PC1 and PC2) for the four groups (g, r, i, z). The x-axis (PC1) ranges from 56400 to 57400, and the y-axis (PC2) ranges from 56400 to 57400. The groups are color-coded: g (purple), r (blue), i (green), and z (orange). The groups are clustered in the upper left, upper middle, and upper right regions, with a single orange point (z) isolated in the lower middle region.

