

A scatter plot showing the time evolution of the color index $g-r$ for a sample of 1000 galaxies. The x-axis is labeled 'time [MJD]' and ranges from 5630 to 5740. The y-axis is labeled ' $g-r$ ' and ranges from 0.0 to 1.0. The data points are colored according to their redshift, as indicated by the legend in the top right corner: g (purple), r (blue), i (green), and z (orange). The plot displays four distinct clusters of points, each corresponding to a different epoch of observation. The clusters are located at approximately (5635, 0.4), (5660, 0.4), (5690, 0.4), and (5735, 0.4). The points are scattered around a central value of $g-r \approx 0.4$, with some outliers reaching up to 0.6 and down to 0.2. The legend indicates that the points are colored by redshift: g (purple), r (blue), i (green), and z (orange).

