

A scatter plot showing the relationship between  $\log_{10}(L/L_{\odot})$  (Y-axis) and time [MJD] (X-axis). The X-axis ranges from 56400 to 57400 MJD, and the Y-axis ranges from 2.5 to 4.5. Data points are categorized by filter: 'r' (purple), 'i' (blue), and 'z' (green). The plot displays four distinct clusters of points, suggesting different populations or evolutionary stages. A legend in the top right corner identifies the filter colors.

