

Figure 1 is a scatter plot showing the distribution of comets in the Solar System, plotted against the Sun-Earth Direction [AU] (X-axis) and the N-S Direction [AU] (Y-axis). The X-axis ranges from 0.0 to 1.0, and the Y-axis ranges from -1.00 to 1.00. The plot is divided into four quadrants by the Sun-Earth line (horizontal axis) and the N-S line (vertical axis). The Sun is at the origin (0,0). The Earth is at (1,0). The North (N) direction is at (0,1) and the South (S) direction is at (0,-1). The plot shows the distribution of comets, with labels indicating their names and distances from the Sun. The comets are color-coded: red for those with a perihelion distance $q < 0.5$ AU, yellow for $0.5 < q < 1.0$ AU, and green for $q > 1.0$ AU. The plot also includes concentric dashed circles representing distances from the Sun at 0.5 AU, 1.0 AU, and 1.5 AU.