

Supplementary Information

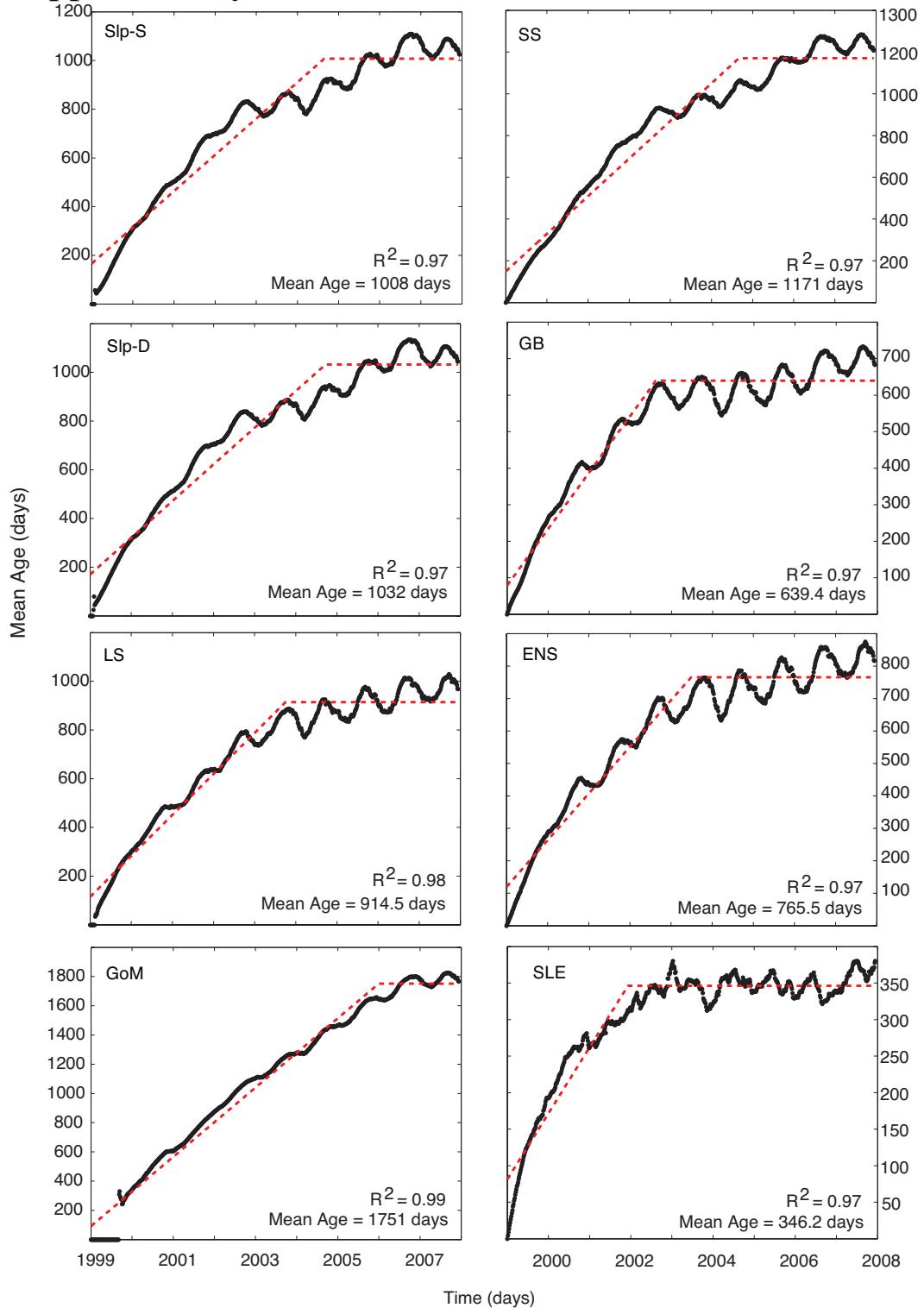


Figure 1: Time series of age averaged within GoSL for each dye (black) and bilinear fit (red) used to determine the mean age of each dye in GoSL.

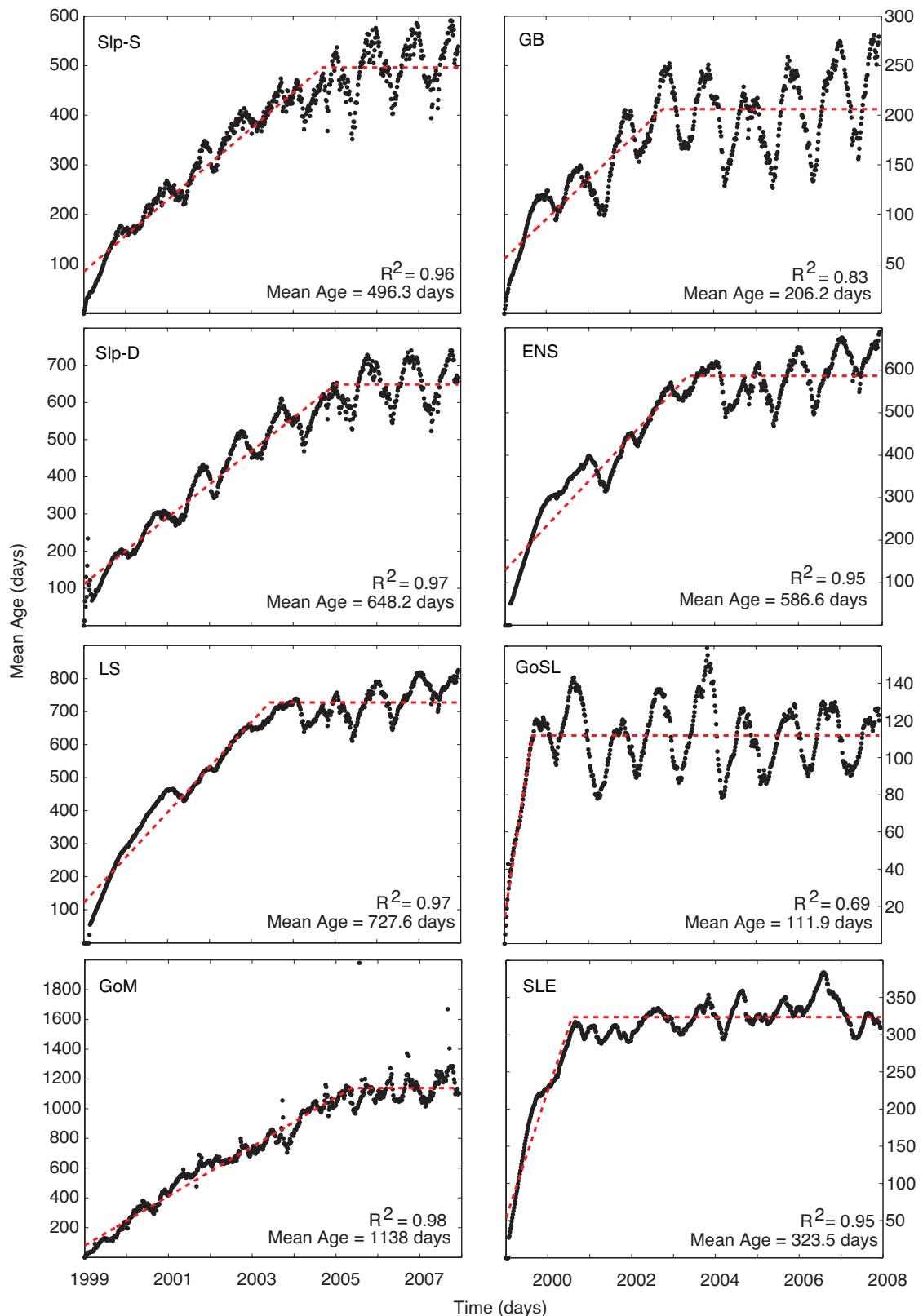


Figure 2: Time series of mean age averaged on SS for each dye (black) and bilinear fit (red) used to determine the steady state or mean age of each dye in SS.

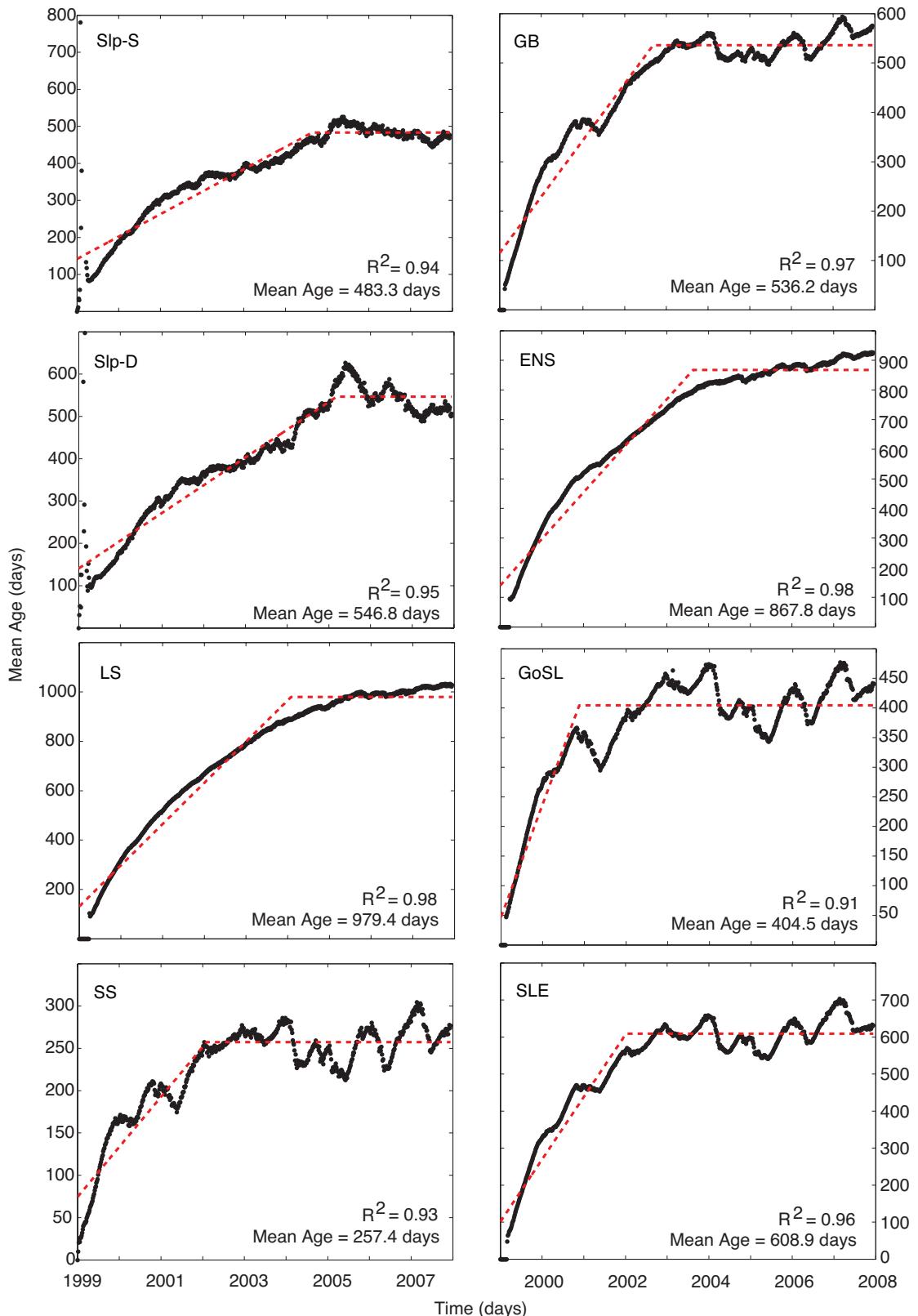


Figure 3: Time series of mean age averaged within GoM for each dye (black) and bilinear fit (red) used to determine the steady state or mean age of each dye in GoM.