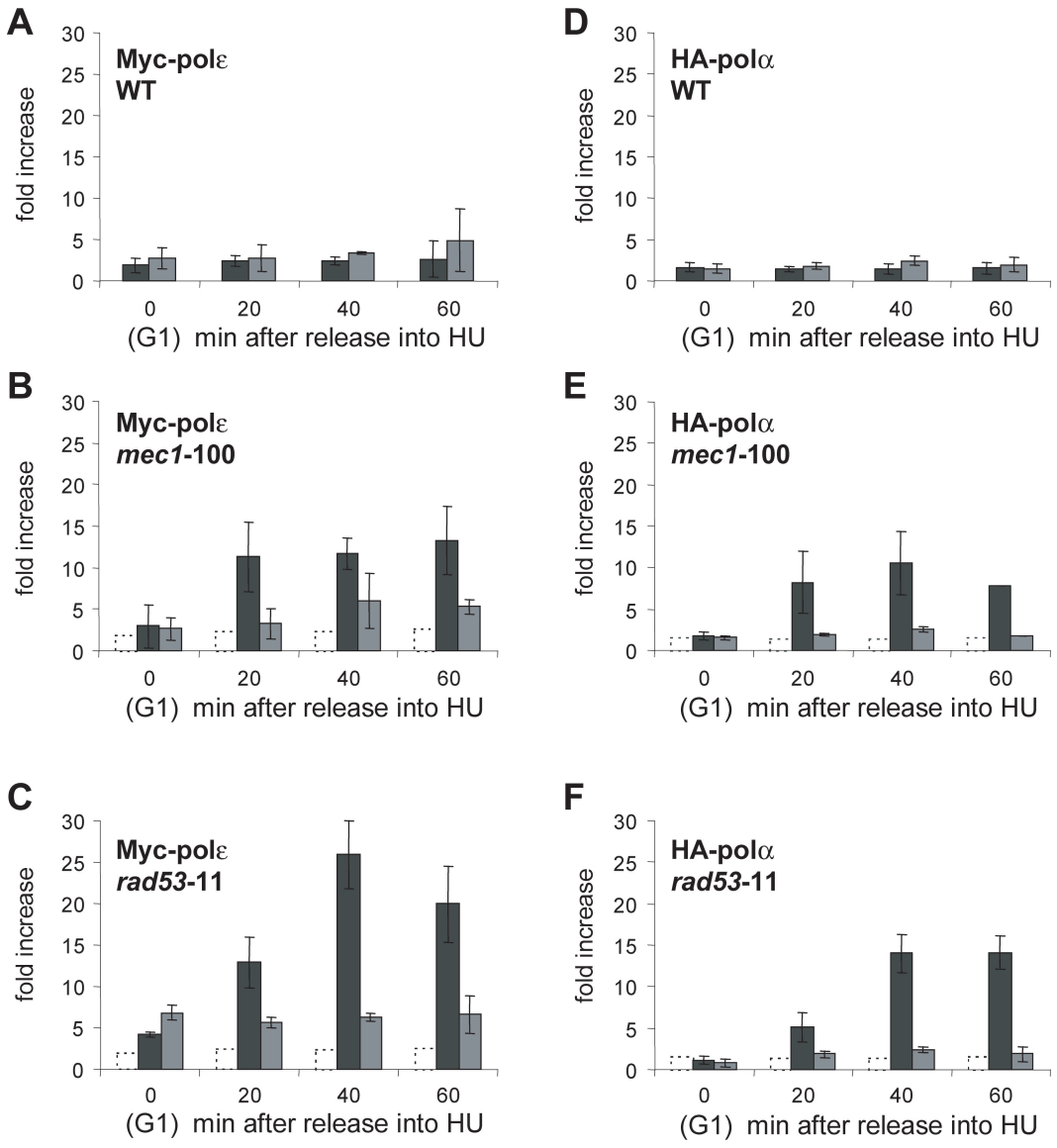

Primers were designed to amplify regions in the *S. cerevisiae* genome corresponding to the late firing origin ARS501 (black), and non-origin site 14kb away from ARS607 on Chr 6 (gray) as described in Supp. Figure 2A. ChIP was performed at 30ºC on either Myc-tagged DNA pol ε for **A.** wild-type (GA-2448), **B**. *mec1-100* (GA-2515), and **C**. r*ad53-11* (GA-2574) cells with white dashed bars representing the signal for WT at ARS501 in B and C, or HA-tagged DNA pol α **D.** wild-type (GA-2238), **E.** *mec1-100* (GA-2567), and **F.** *rad53-11* (GA-2574) cells, with white dashed bars representing the signal for WT at ARS501 in E and F.