



**Figure S12: Promoter proximal regions of genes exhibit large increase in Pol II density as a result of Spt4 deletion in *S. cerevisiae*.** A, D. Median PRO-seq signal around the observed TSS (A.) or CPS (D.) of active and filtered genes that are greater

than 1 kb in length and separated from neighboring genes on the same strand by at least 1 kb. Medians reflect 10 bp bins, and the 12.5% and 87.5% quantiles are shown in lightly shaded regions. **B, E.** Heatmaps of of  $\log_2$  fold change of mutant vs. wild-type per 10 bp bin around the TSS (B.) or CPS (E.) for all genes used in A and D. Heatmaps are sorted by decreasing amount of wild type PRO-seq reads within the first 500 bp downstream of the TSS. **C.** Box plots showing the distribution of pausing index values for WT and *spt4Δ* in *S. cerevisiae*. **F.** Box plots showing the distribution of termination index values for WT and *spt4Δ* in *S. cerevisiae*.