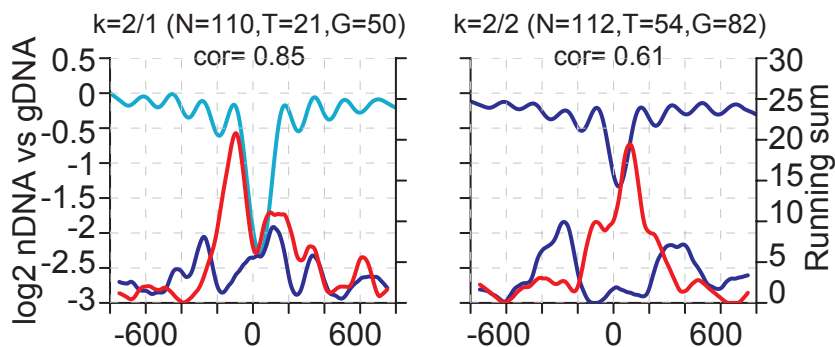
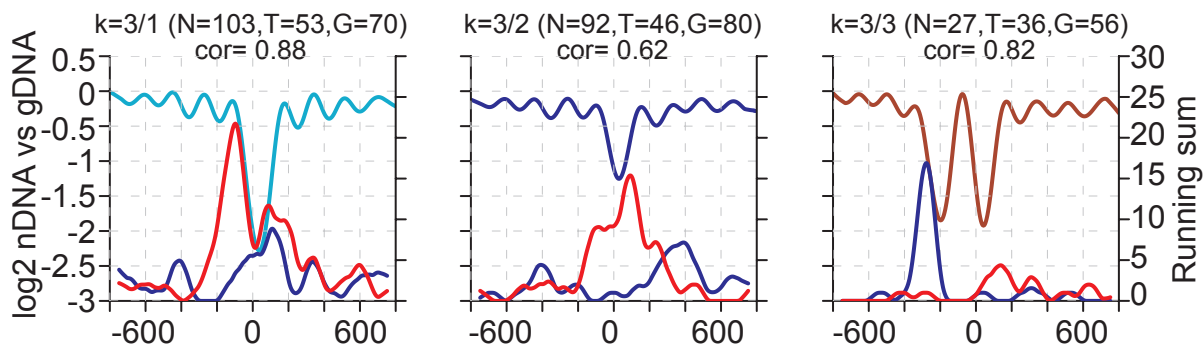


A K=2, inter-group correlation: $1v2 = 0.82$

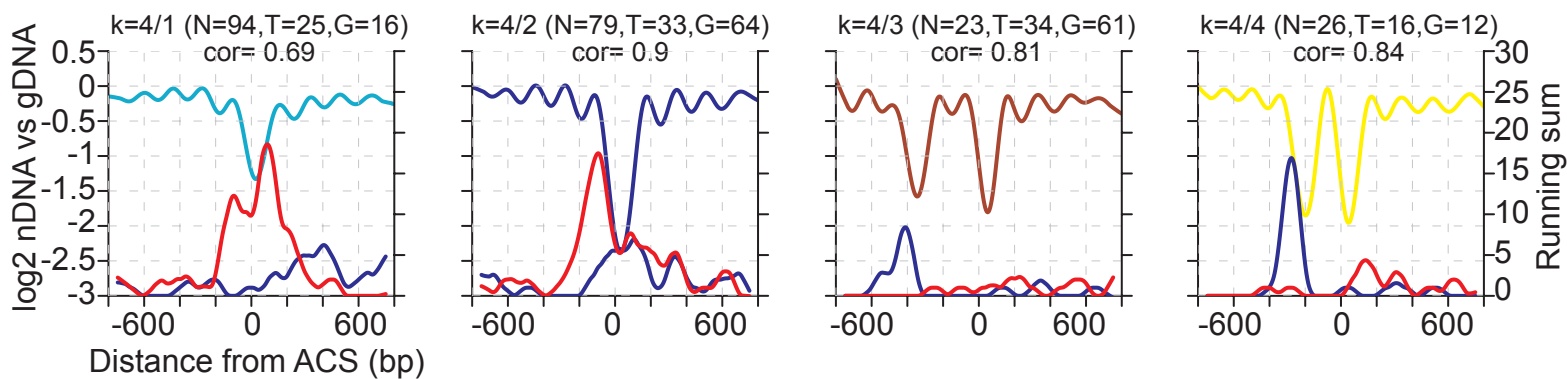
— TSS distribution
— gene end distribution



B K=3, inter-group correlation: $1v2 = 0.85$, $1v3 = 0.50$, $2v3 = 0.34$



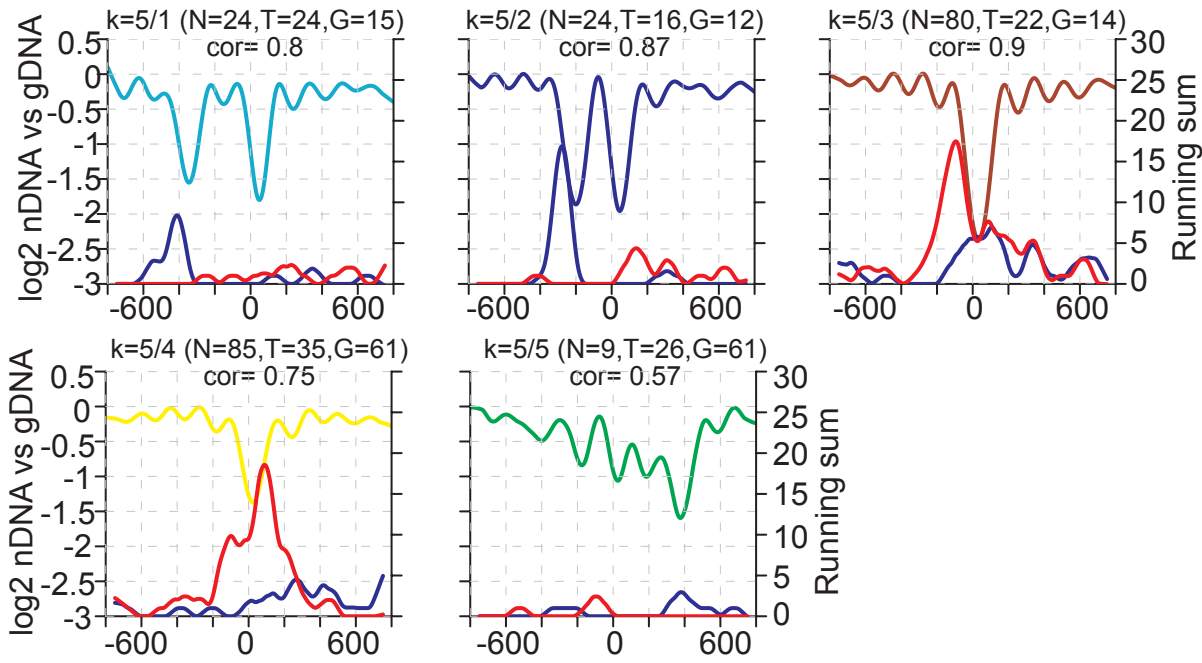
C K=4, inter-group correlation: $1v2 = 0.67$, $1v3 = 0.37$, $1v4 = 0.39$, $2v3 = 0.54$, $2v4 = 0.53$, $3v4 = 0.27$



— TSS distribution
 — gene end distribution

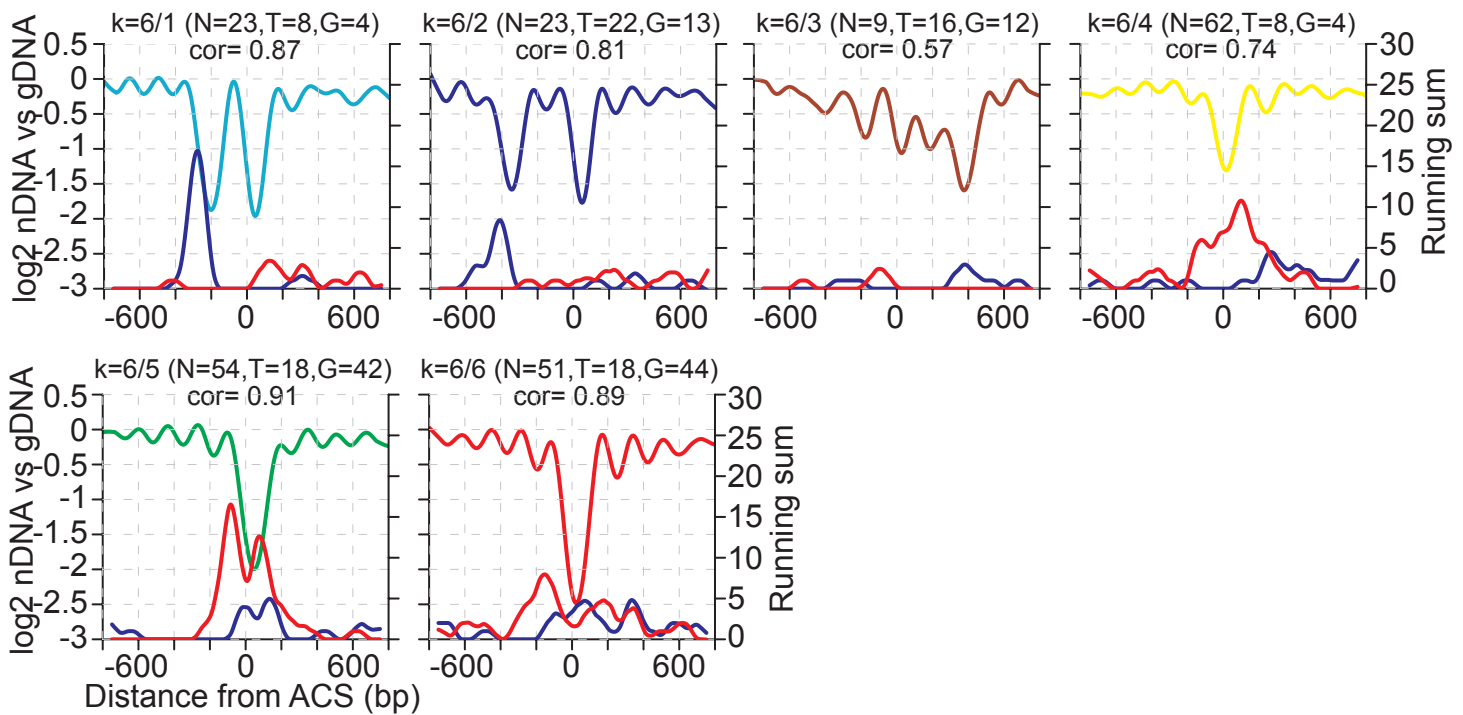
D

K=5, inter-group correlation: $1v2 = 0.27$, $1v3 = 0.48$, $1v4 = 0.44$, $1v5 = -0.15$,
 $2v3 = 0.49$, $2v4 = 0.4853$, $2v5 = -0.05$, $3v4 = 0.88$, $3v5 = 0.08$, $4v5 = 0.08$



E

K=6, inter-group correlation: $1v2=0.3$, $1v3=-0.05$, $1v4=0.42$, $1v5=0.49$, $1v6=0.47$,
 $2v3=-0.16$, $2v4=0.39$, $2v5=0.49$, $2v6=0.44$, $3v4=0.04$, $3v5=0.05$, $3v6=0.03$, $4v5=0.63$,
 $4v6=0.72$, $5v6=0.84$



— TSS distribution
 — gene end distribution

F

K=7, inter-group correlation: $1v2=0.47$, $1v3=0.32$, $1v4=-0.04$, $1v5=0.30$, $1v6=0.47$, $1v7=0.49$, $2v3=0.74$, $2v4=0.02$, $2v5=0.50$, $2v6=0.89$, $2v7=0.86$, $3v4=0.04$, $3v5=0.31$, $3v6=0.71$, $3v7=0.62$, $4v5=-0.12$, $4v6=0.03$, $4v7=0.03$, $5v6=0.42$, $5v7=0.5$, $6v7=0.61$

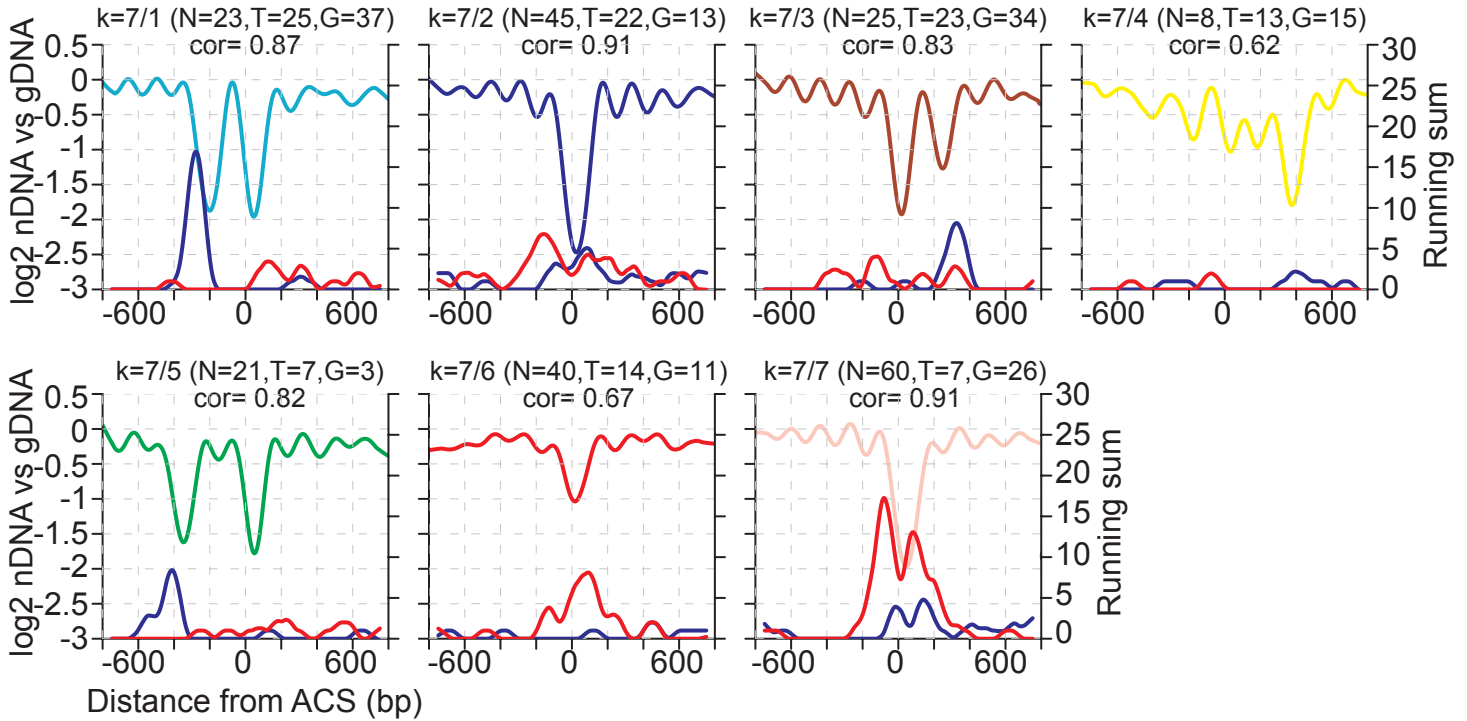


Figure S2. Subcluster average, TSS (—) and gene end (—) distribution obtained following kmeans clustering of the wild-type (k=2 to k=7) following 10,000 iterations. For each grouping the number of origins in each subcluster is indicated (N), along with the number of TSSs (T), gene ends (G), and the correlation of each subcluster against the average ACS profile (cor).