



Figure S5: *Eve* locus expression data for Figure 4.

The left panels show the average stripe boundaries for *eve* stripes 3-7; the error bars represent the standard error of the mean. The right panels show the *eve* peak expression level for the corresponding stripe in the WT *eve* locus and the Δgt-2 *eve* locus. Filled circles represent the mean expression level and open circles are individual embryo peak expression. (A) Stripe 3 boundaries and peak expression levels do not change significantly in the Δgt-2 *eve* locus compared to the WT *eve* locus (p=0.55, Mann-Whitney U test with Bonferroni adjustment, 8). (B) Stripe 4 boundaries significantly shift anteriorly at a point on the dorsal side of the embryo indicated by the asterisk (p=0.31, Mann-Whitney U test with Bonferroni adjustment, 8). However, *eve* stripe 4 peak expression levels do not change significantly in the Δgt-2 *eve* locus (p=0.26, Mann-Whitney U test with Bonferroni adjustment, 8). (C) Stripe 5 boundaries do not shift significantly, but there is a significant increase in *eve* expression in the Δgt-2 *eve* locus

($p=0.0047$, Mann-Whitney U test with Bonferroni adjustment, 8). During this time in development, stripe 5 is the most dynamic, and although embryos were age controlled, there may be small differences in age resulting in the observed increase. (D) Stripe 6 boundaries do not shift, but there is a significant increase in *eve* expression in the Δ gt-2 *eve* locus ($p=0.018$, Mann-Whitney U test with Bonferroni adjustment, 8). (E) Stripe 7 boundaries and levels in Δ gt-2 *eve* locus do not change significantly compared to the WT *eve* locus.