



**Figure 4 – figure supplement 1. Single-cell distributions of reporter gene expression versus nuclear TF levels in response to natural stresses.** (A) Single-cell scatter plots showing the relationships between  $P_{SIP18}$  reporter expression and (left) Msn2 or (right) Msn4 nuclear level, respectively, in response to 0.5 M KCl. Single-cell data are from Figure 4A. (B) Single-cell scatter plots showing the relationships between  $P_{SIP18}$  reporter expression and (left) Msn2 or (right) Msn4 nuclear level, respectively, in response to 4% ethanol. Single-cell data are from Figure 4B. Because the majority of cells are not able to express the reporter gene, scatter plots, instead of boxplots, are used here to show the distributions of responder cells (green and red) and non-responder cells (blue) with different TF levels.