



Figure S3, Matzke et al.

**Figure S3: Simultaneous changes in fluorescence intensity of reporter proteins in multiple root cells following eATP addition**

The traces derived from the regions of the root indicated by the connecting lines (MiCAM image at 0sec, 20x objective except in F, which used a 40x objective) are displayed over a time period of 1092 sec. The 2mM ATP was added at approximately 100 sec indicated by the blue arrow in part B. Fractional fluorescence changes ( $\%dF/F_{\max}$ ) were calculated by the BV-Analyzer software supplied with the MiCAM camera. The divisions of the Y-axis are set at 6%. The X-axis shows time in seconds.

(B) WPP-ArcLight; (C) SUN2-ArcLight; (D) CBL1-SEpHluorinA277D; (E) WPP-SEpHluorinA277D; (F) SUN2-SEpHluorinA277D; (G) Case12; (H) Ci-VSD-mCitrine; (I) CBL1-mCitrine. The letters correspond to the constructs shown in **Figure 2** (Construct A, Arclight, is shown in **Figure 5**). For any given fluorescent reporter, all cells show a qualitatively similar response. Background traces are shown above the MiCAM images and stay flat following addition of eATP.