

Supplementary Movies

Movie S1. MCA fluorescence dynamics in a growing root. The scale bar is 200 μ m. The duration of the movie is 15 hours. The images in this movie have been corrected for photobleaching using the ImageJ Histogram Matching algorithm.

Movie S2. The root clock in *pDR5:LUC* plants treated with D15. One hour before imaging, roots were treated with a vehicle control (left) or retinal (right). The scale bar is 0.5 mm. The movie covers a period of 8 hours.

Movie S3. The *pDR5:LUC* root clock and pre-branch site formation in WT and *til-1* plants. The root on the left is WT and the root on the right is *til-1*. The scale bar is 0.5 mm. The movie covers a period of 13.5 hours.

Movie S4. A representative *pTIL:LUC* root. The scale bar is 1 mm. The movie covers a period of 12 hours.