

Fig. S1. Circadian rhythms of CCA1, LHY and TOC1

(A-D) Q-RT-PCR analysis (*ACTIN2* as control) of *CCA1*, *LHY* and *TOC1* using samples harvested under SD conditions (A), LD conditions (B), 48-h darkness (DD) following SD conditions (C), or 48-h light (LL) following LD conditions (D). Relative mRNA levels are represented on a logarithmic scale. Error bars represent standard deviation values from two biological replicates, each sample analyzed in triplicate (n=6). White and black boxes indicate day and night, respectively. Gray boxes represent subjective day (in DD) or subjective night (in LL).



Fig. S2. Chromatin modifications of Histone 3 associated with LHY

(A) Schematic representation of *LHY*. The 4 primers used for q-PCR analysis of ChIP fragments are indicated, primers used for q-RT-PCR analysis of transcripts are in italic. (B-I) ChIP analysis of *LHY* using antibodies against H3K4Me3 (B-E) or H3K9/14Ac (F-I) by q-PCR analysis (*ACTIN2/7* as internal control). Error bars represent standard deviation values from two biological replicates, each sample analyzed in triplicate (n=6). (B, F) Short day conditions [SD (8L:16D)]. (C, G) Long day conditions [LD (16L:8D)]. (D, H) SD conditions followed by 48-h dark (DD). (E, I) LD conditions followed by 48-h light (LL). White and black boxes indicate day and night, respectively. Gray boxes correspond to subjective day (in DD) or subjective night (in LL).





(A-F) CCA1-ox plants grown under SD conditions were sampled every 4 hours in a 24h period starting at dawn (ZT0). ChIP analysis of *CCA1* (A, D), *LHY* (B, E) or *TOC1* (C, F) fragments using antibodies against H3K4Me3 (A-C) or H3K9/14Ac (D-F) by q-PCR analysis (*ACTIN2/7* as internal control). Error bars represent standard deviation values from two biological replicates, each sample analyzed in triplicate (n=6). White and black boxes indicate day and night, respectively.





(A-F) CCA1-ox plants grown under LD conditions were transferred to continuous light conditions (LL) and sampled every 4 hours in a 48-h period. ChIP analysis of *CCA1* (A, D), *LHY* (B, E) or *TOC1* (C, F) fragments using antibodies against H3K4Me3 (A-C) or H3K9/14Ac (D-F) by q-PCR analysis (*ACTIN2/7* as internal control). Error bars represent standard deviation values from two biological replicates, each sample analyzed in triplicate (n=6). White and gray boxes indicate day and subjective night, respectively.



Fig. S5. Chromatin modifications of Histone 3 associated with the clock genes in Ws plants under SD conditions (A-F) ChIP analysis of CCA1 (A, D), LHY (B, E) or TOC1 (C, F) fragments using antibodies against H3K4Me3 (A-C) or H3K9/14Ac (D-F) by q-PCR analysis (ACTIN2/7 as internal control). Error bars represent standard deviation values from two biological replicates, each sample analyzed in triplicate (n=6). White and black boxes indicate day and night, respectively.



Fig. S6. Chromatin modifications of Histone 3 associated with the clock genes in *taf1* mutants under SD conditions (A-F) ChIP analysis of *CCA1* (A, D), *LHY* (B, E) or *TOC1* (C, F) fragments using antibodies against H3K4Me3 (A-C) or H3K9/14Ac (D-F) by q-PCR analysis (*ACTIN2/7* as internal control). Error bars represent standard deviation values from two biological replicates, each sample analyzed in triplicate (n=6). White and black boxes indicate day and night, respectively.



Fig. S7. Chromatin modifications of Histone 3 associated with the clock genes in *hd1* mutants under SD conditions (A-F) ChIP analysis of *CCA1* (A, D), *LHY* (B, E) or *TOC1* (C, F) fragments using antibodies against H3K4Me3 (A-C) or H3K9/14Ac (D-F) by q-PCR analysis (*ACTIN2/7* as internal control). Error bars represent standard deviation values from two biological replicates, each sample analyzed in triplicate (n=6). White and black boxes indicate day and night, respectively.