**Supplementary Figure 2. Biological processes significantly enriched in the genes exhibiting rhythmicity under alternating light/dark cycles and constant light.** **(A)** Treemap summarizing the significantly enriched biological processes. Semantically similar biological processes are grouped together into the same colored rectangle. The most representative biological process is shown for each rectangle. DNA replication and chromosome organization are the two most prominent biological processes enriched in the genes exhibiting rhythmicity under alternating light/dark cycles and constant light. **(B), (C), (D) and (E)** Gene expression profiles under long day (LD, 16h light / 8h dark, blue) / constant light (LL) (top left), LD / constant dark (DD) (top right), short day conditions (SD, 8h light / 16h dark, red) / LL (bottom left) and SD / DD conditions (bottom right) for *Minichromosome Maintenance 6* (*MCM6*, *ostta01g02580*, **B**), *Proliferating Cell Nuclear Antigen* (*PCNA*, *ostta06g02890*, **C**), *Topoisomerase 6 subunit B* (*TOP6B*, *ostta05g02940*, **D**) and *DNA Polymerase Alpha subunit B* (*POLAB*, *ostta08g03680*, **E**). Gene expression levels are measured as FPKM (Fragments Per Kilobase of transcript per Million fragments mapped). White rectangles represent photoperiods (light periods or days), blue and red filled rectangles correspond to skotoperiods under LD and SD respectively (dark periods or nights). ZTN, Zeitgeber time N, marks the time point N hours after dawn (lights on). These genes involved in DNA replication exhibit rhythmic gene expression patterns under alternating ligh/dark cycles that are maintained with a drastic reduction in amplitude (maximum level of expression) under LL. Nevertheless, these genes are strongly repressed under DD indicating that their expression requires as input a light period.