**Supplementary Figure 8. Transcriptional temporal program of the distribution of biological processes over diurnal cycles under long day conditions (16h light / 8h dark).** The white rectangle represent the photoperiod (light period or day) whereas the blue filled rectangle corresponds to the skotoperiod (dark period or night). ZTN, Zeitgeber time N, marks the time point N hours after dawn (lights on). Treemaps summarizing the significantly enriched biological processes at each time point. Semantically similar biological processes are grouped together into the same colored rectangles. The most representative biological processes are shown for each rectangle. Specific gene expression profiles are represented for each time point illustrating the different biological processes. Gene expression levels are measured as FPKM (Fragments Per Kilobase of transcript per Million fragments mapped). **(ZT0)** RNA processing and ribosome biogenesis are the two most prominent biological processes whose genes reach maximum expression level at dawn under LD conditions. Examples for such genes involved in ribosome biogenesis are *U3 small nucleolar RNA-associated protein 14* (*Utp14, ostta04g00770*), *Ribosome Biogenesis Factor BMS1* (*BMS1, ostta05g01080*), *M-phase phosphoprotein 10* (*Mpp10p, ostta05g01450*), *U3 small nucleolar RNA-associated protein 11* (*Utp11, ostta06g01560*), *U3 small nucleolar RNA-associated protein 12* (*Utp12, ostta08g03090*) and *ribosome biogenesis regulator 1* (*RRS1, ostta15g01610*). **(ZT4)** Translation is the most prominent biological process whose genes reach maximum expression level early in the morning four hours after dawn under LD conditions. Examples for such genes are *eukaryotic Initiation Factor 2* (*eIF2, ostta03g02100*), *translation elongation factor P* (*YeiP, ostta03g03015*), *Elongation Factor 1 B* (*EF1B*, *ostta04g00090*), *alanyl-tRNA synthase II* (*aaRSII*, *ostta07g00280*), *proline-tRNA ligase* (*proS*, *ostta15g00620*) and isoleucyl, leucyl and valyl-tRNA synthetase (*I/L/VRSs*, *ostta06g00460*). **(ZT8)** Photosynthesis is the most prominent biological process whose genes reach maximum expression level at midday, eight hours after dawn under LD conditions. Examples for such genes are *Photosystem II subunit P* (*PsbP, ostta01g03170*), *Photosystem I subunit L* (*PsaL, ostta02g00580*), *Photosystem II subunit X* (*PsbX*, *ostta02g02560*), *Photosystem I subunit E* (*PsaE*, *ostta02g03860*), *Photosystem I subunit F* (*PsaF*, *ostta04g01790*) and *Photosystem II subunit R* (*PsbR*, *ostta05g04560*). **(ZT12)** DNA replication and chromosome organization are two prominent biological processes whose genes reach maximum expression level late during the day four hours before dusk under LD conditions. Examples for such genes are *Minichromosome Maintenance 6* (*MCM6*, *ostta01g02580*), *Minichromosome Maintenance 9* (*MCM9*, *ostta05g01680*), *Proliferating Cell Nuclear Antigen* (*PCNA*, *ostta06g02890*), *Cell Division Cycle protein 45* (*CDC45*, *ostta04g04640*), *Topoisomerase 6 subunit B* (*TOP6B*, *ostta05g02940*) and *DNA Polymerase Alpha subunit B* (*POLAB*, *ostta08g03680*). **(ZT16)** Intracellular transport and cellular respiration are the two most prominent biological processes whose genes reach maximum expression level at dusk under LD conditions. Examples for such genes are *Clathrin light chain* (*CLC*, *ostta01g04440*), *Coatomer delta subunit* (*COPD*, *ostta03g05300*), *Secretion-associated and Ras-related protein* (*SAR*, *ostta05g00860*), *von Willebrand factor, type A* (*VWA*, *ostta08g01930*), *Syntaxin/epimorphin* (*STX*, *ostta11g02920*), *Nucleoporin 133* (*Nup133*, *ostta14g02210*). **(ZT20)** Cellular aminoacid metabolic process is the most prominent biological process whose genes reach maximum expression level at midnight four hours before dawn under LD conditions. Examples for such genes are *3-Deoxy-D-arabinoheptulosonate 7-phosphate synthase* (*DAHP*, *ostta06g03270*), *Diaminopimelate epimerase* (*DapF*, *ostta02g03980*), *Aconitase/3-isopropylmalate dehydratase* (*Acn*, *ostta03g03860*), *Uridylate kinase* (*pyrH*, *ostta16g01780*), *Acetolactate synthase* (*ALS*, *ostta11g00540*) and *Orn/DAP/Arg decarboxylase* (*ADC*, *ostta18g01010*).