

**S4 Fig** Comparison of instantaneous frequency distributions for all intrinsic mode functions (IMFs) collected before and during a PI period composed of 1000 msec pulses of light interspersed with 9000 msec darkness, 100 msec pulses of light interspersed with 9900 msec darkness, and 1 msec pulses of light interspersed with 9999 msec darkness. From (a) to (f), results of IMF1 till IMF6 are presented. Left: pulse length of 1000 msec; Middle: pulse length of 100 msec; Right: pulse length of 1 msec. P-value is calculated by K-S test.