



**Fig. S2.** Time course of gross photosynthetic  $\text{O}_2$ -evolution rates (A) and Y(II) (B) in the induction phase of photosynthesis in *S. 6803* WT (black circles) and  $\Delta flv1/3$  (red triangles).  $\text{CO}_2$ -saturated conditions were generated by adding 10 mM  $\text{NaHCO}_3$  to the reaction mixture. Actinic light ( $240 \mu\text{mol photons m}^{-2} \text{ s}^{-1}$ ) was turned on at time zero. Data are represented as the mean  $\pm$  SD of three independent measurements. Differences in Y(II) between *S. 6803* WT and  $\Delta flv1/3$  were analyzed using Student's *t*-test. Asterisks indicate statistically significant differences between *S. 6803* and  $\Delta flv1/3$  at  $p < 0.05$ .