Fig. 3S. The predicted flash induced oscillations in $F_m$ (●, normalized to LF), assuming that quenching of $F_m$ is proportional to fraction of PSII centers in $S_2$ and $S_3$ states. The relative concentration of $S_2$ and $S_3$ at each flash was calculated from the analysis of the observed oxygen flash yields ($YO_2$) in *Chlorella*, induced by FRR ST protocol of 80 μs duration and repeated at 1 Hz, as shown in Fig. 5 at the accompanying paper [Kolber, #13168]. The measured pattern of $YO_2$ could be best modeled assuming that initially 40% of PSII centers were in $S_0$ and 60% in $S_1$ states. The FRR excitation protocol induced in 15% double-hits and misses in 10% of PSII centers during each S state advancement.