



Figure 4. Net O₂ and CO₂ exchange rates during a light transient in *C. reinhardtii* wild-type and two *flvB* mutants. After 1.5h of dark anaerobic acclimation, wild-type (WT, in red) and two independent *flvB* mutants (*flvB-208* in black, and *flvB-308* in grey) cell suspensions were illuminated (660 µmol photons m⁻² s⁻¹ green light). O₂ and CO₂ gas exchange were measured using a MIMS. (A, B) Representative traces of net O₂ evolution and net CO₂ evolution. (C, D) Mean values of net O₂ evolution (C) and net CO₂ uptake (D) rates measured at 3 min and 9 min of illumination. Due to some variability in absolute gas exchange values between biological replicates, shown data are expressed relative to the WT mean level (+/-SD, n=3 for the mutants, n=6 for the WT). Stars indicate significant differences between the wild-type and the mutant strains (P-value < 0.05) based on ANOVA analysis (Tukey adjusted P value).