Supplementary Figures to "Wildfire drives widespread and decadal change in boreal lake color"



Fig. S1. Annual time series of post-fire δ_τ in lake SR_{Red} (plotted as % change of pre-fire lake SR_{Red}) of 22 earliest fires (2005–2009) (blue line = median, shading = interquartile range (IQR)).

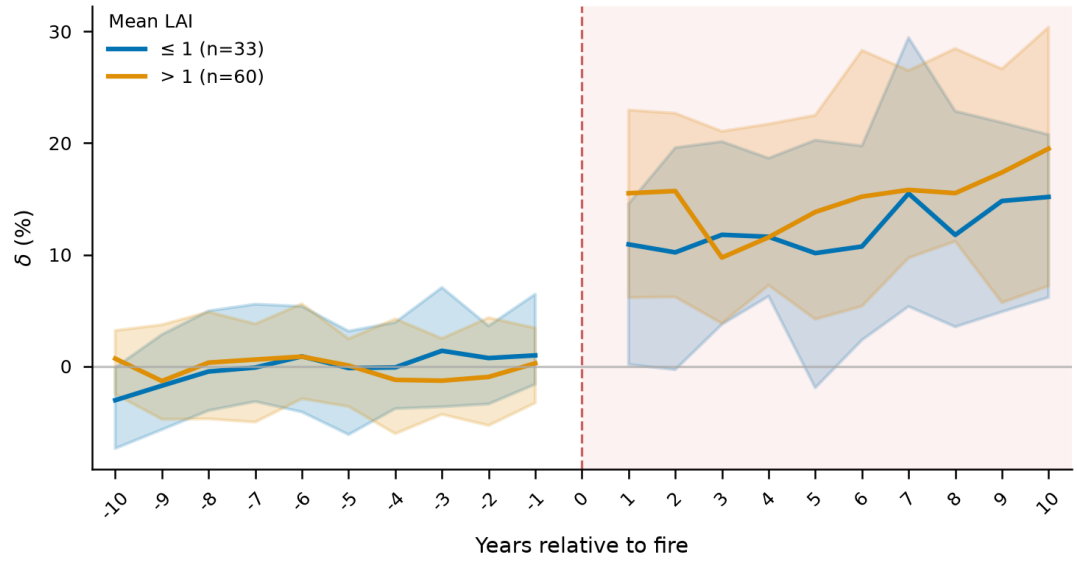


Fig. S2. Annual time series of post-fire δ_τ (%), stratified by high vegetation cover (orange) and low vegetation cover (blue) measured by leaf area index (LAI).

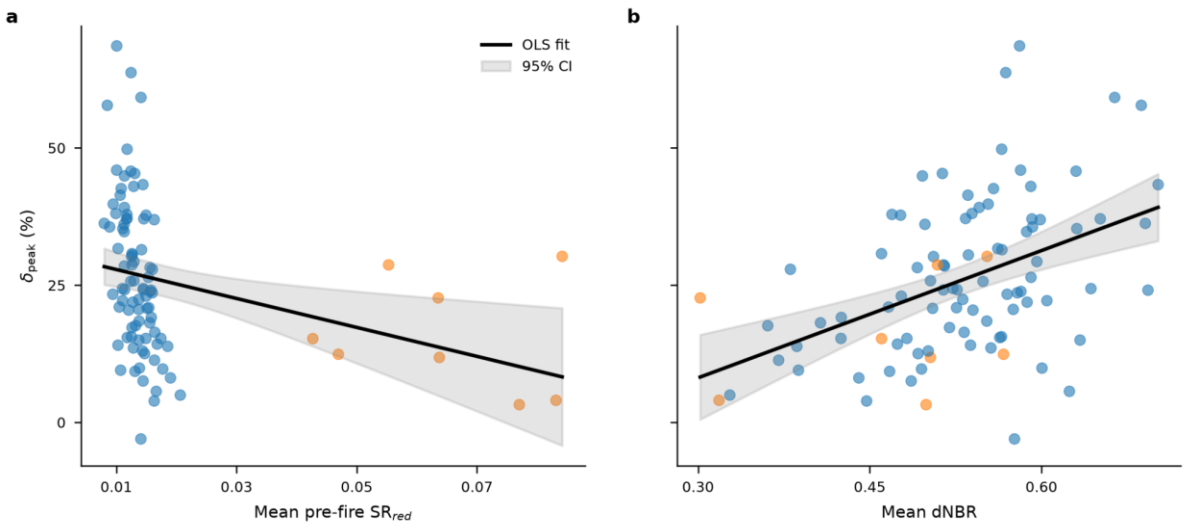
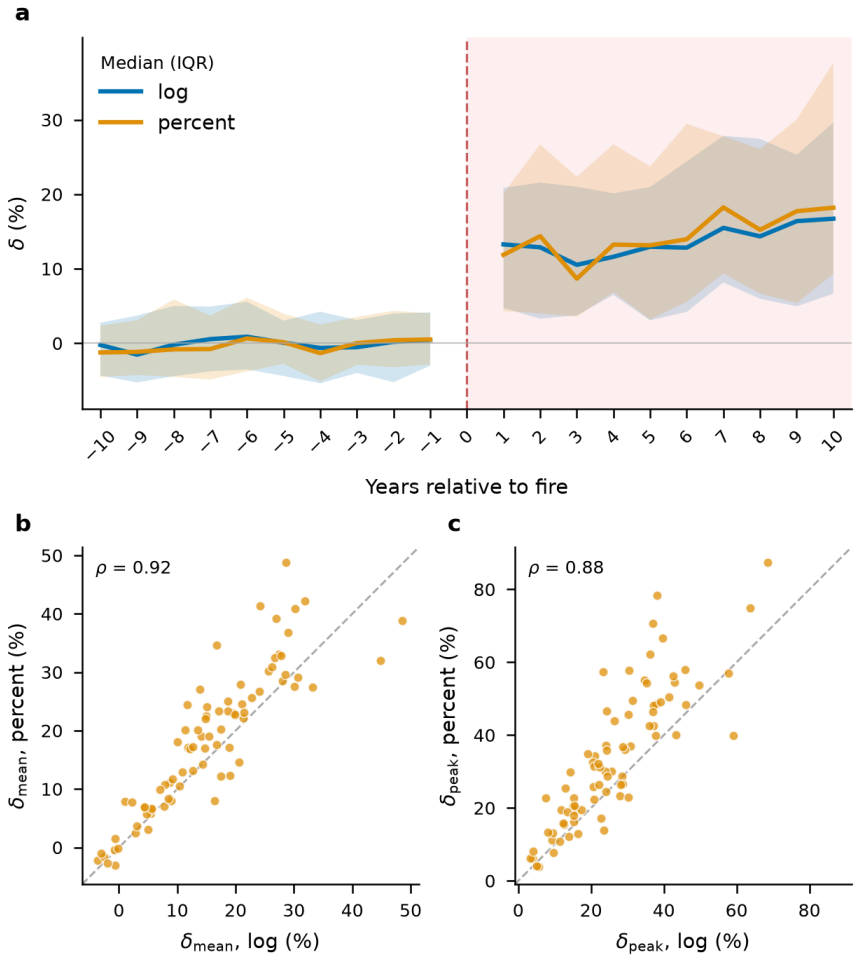


Fig. S3. Ordinary Least Square (OLS) regression and 95% confidence interval (CI) between δ_{peak} and mean pre-fire lake SR_{Red} (a) and fire severity (dNBR) (b), with the outliers of high pre-fire SR_{Red} included (orange).



Normalization	**Log,** n = 93	**Percent,** n = 92	**Raw SR_{Red},** n = 92
δ_{peak} (IQR)	24% (15 – 36%)	31% (20 – 48%)	4.7 (3.3 - 6.1) ($\times 10^{-3}$)
δ_{mean} (IQR)	14% (7 – 21%)	17% (8 – 27%)	2.54 (1.3 - 3.5) ($\times 10^{-3}$)
Fires with $\delta_{mean} > 0$	84	83	83
Fires recovered within 10 yrs	51	49	49

Fig. S4. Sensitivity of the treatment effect to logarithmic-, percentage-, and no normalization, for the 81 fires passing quality control. (a) Median (line) and interquartile range (shading) of δ_τ across fires for the log- and the percent normalization, plotted as a percentage of each fire's pre-fire mean SR_{Red}. (b–c) Per-fire comparison of δ_{mean} and δ_{peak} under the log vs. percent normalization (ρ = Spearman's rank correlation; dashed = 1:1 line). Table comapres selected key metrics for the DiD estimates and recovery across normalization schemes.