

Figure S1. (a) Composition of SPM in fractions of PIM and POM for the entire dataset and respective samples in BB for Barra Bonita, B for Bariri, I for Ibitinga, and N for Nova Avanhandava reservoirs; (b) the average contributions of PIM/POM.



Figure S2. (a) Frequency distribution of the exponential slopes (Scdom) for all surveys; Scatterplot of acdom(443) as a function of Scdom for (b)BB1, (c)BB2, and (d)IBI2 (fields that presented significant statistical relations).



Figure S3. Relationships between acdom(443) and Chl-a concentrations (mg.m-3) encountered in BB1 (a), BAR2 (b), IBI2 (c) and NAV2 (d).



Figure S4. Scatterplots of $a\phi(443)$ as a function of Chl-a concentrations in BB2 at (a) 443 nm and (b) 675 nm; and BAR2 at (c) 443 nm and (d) 675 nm.



Figure S5. (a) Plot of Monthly average rainfall (mm) from TRMM in 2014, 2016 and 2017 and respective fieldworks; (b) Average incident spectral solar radiation (Ed in W.m⁻².nm⁻¹) for each fieldwork.



Figure S6. Absorption coefficients at OLI center wavelengths for (a) phytoplankton and Chl-a concentrations; (b) non-algae particles and PIM concentrations; and (c) colored dissolved organic matter in all fieldworks, where BB is Barra Bonita, BAR is Bariri, IBI is Ibitinga, and NAV is Nova Avanhandava reservoirs.