



**Figure 1—figure supplement 2. Fluorescence decay-associated spectra (FDAS) at 77K (ex., 405 nm, 4  $\mu\text{g Chl ml}^{-1}$ ).** **a**, Cell. **b**, A3 fraction. **c**, A3L fraction. Fluorescence decay kinetics were fitted to a sum of exponentials with the time constants linked in a global analysis. The normalized amplitudes of FDAS are plotted against wavelength for each time constants (lifetime component).