

## Supporting information

Long-wavelength limit of photochemical energy conversion in  
Photosystem I

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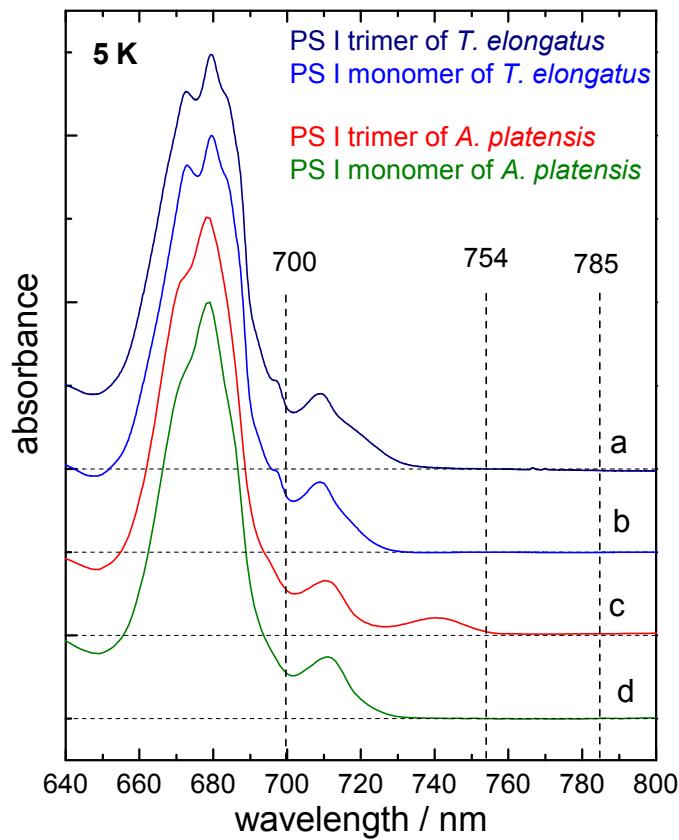
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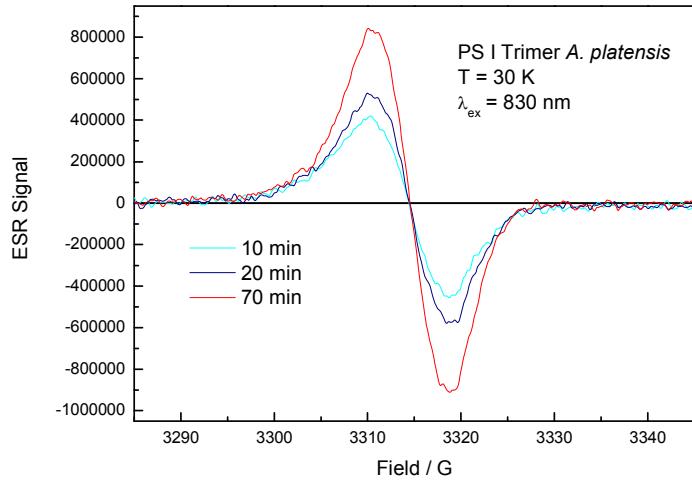
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Figure S1



**Figure S1:** 5 K absorbance spectra from (a) PS I trimers from *T. elongatus*, (b) PS I monomers from *T. elongatus*, (c) PS I trimers from *A. platensis*, and (d) PS I monomers from *A. platensis*. Absorbance bands beyond 700 nm are assigned to long-wavelength chlorophylls. The spectra have been normalized to the same maximum amplitude. The PS I concentration is too low, to resolve absorbance above 750 nm.

Figure S2



**Figure S2:** EPR spectra of PS I trimers from *A. platensis* at 30 K after different illumination periods with 830 nm laser light (laser diode HL8318G von Hitachi, cw, power 25 mW). The EPR spectra demonstrate that even excitation at 830 nm induces the formation of  $\text{P}700^{+}\bullet$ .