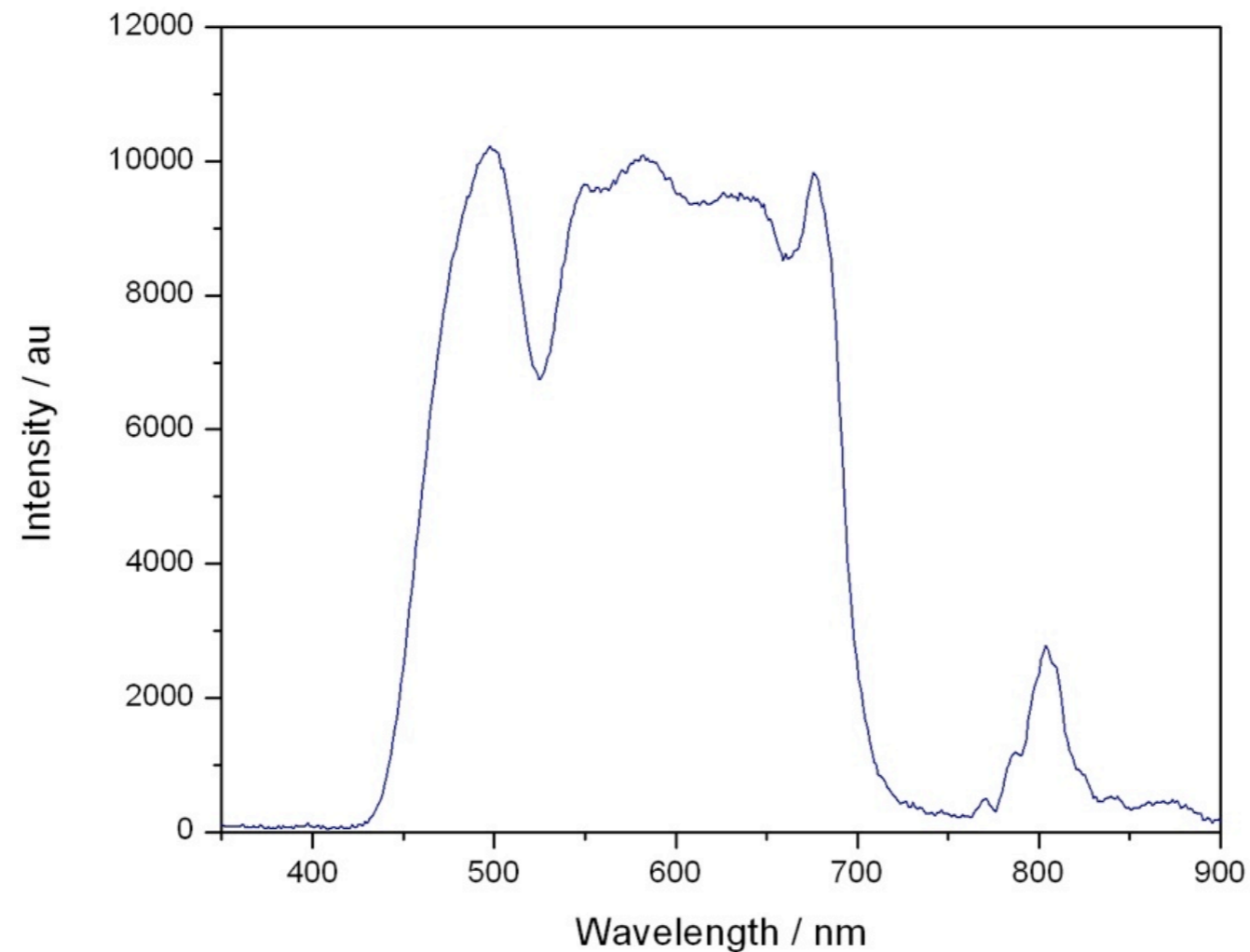


HELIOS + LEGEND ELITE

Data Example

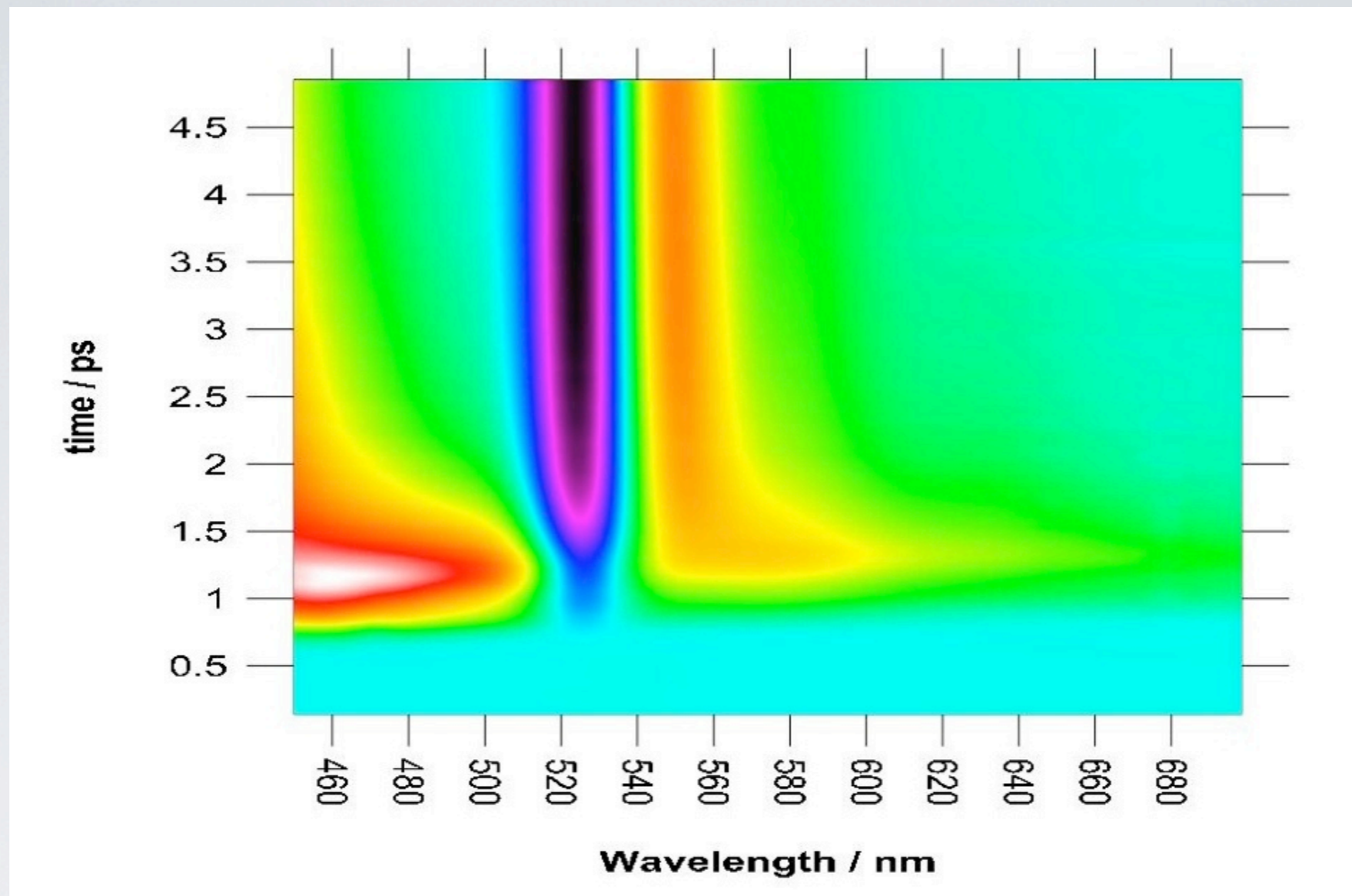
EXPERIMENTAL DETAILS

- The lab is not humidity controlled.
- The lab is air conditioned at 76° F, however the temperature fluctuations are up to 4 degrees throughout the day.
- Laser repetition rate was 1 kHz.
- The photoexcitation of the samples was done with the SH (second harmonic) of the fundamental laser output - 400 nm.
- Each transient spectrum is a result of 2500 averages, which corresponds to 5 sec at 1 kHz.
- The experiment was performed with a single probe channel (with no reference).
- The background noise in the experiment was 5E-5 OD for 5 seconds of averaging per transient spectrum.
- No correction for excitation energy fluctuations was performed.
- The photoexcitation energy was 3 μ J per pulse.
- Sample measured: NiTPPS (Ni Tetra-sulphonato-phenyl-porphyrin) in water.



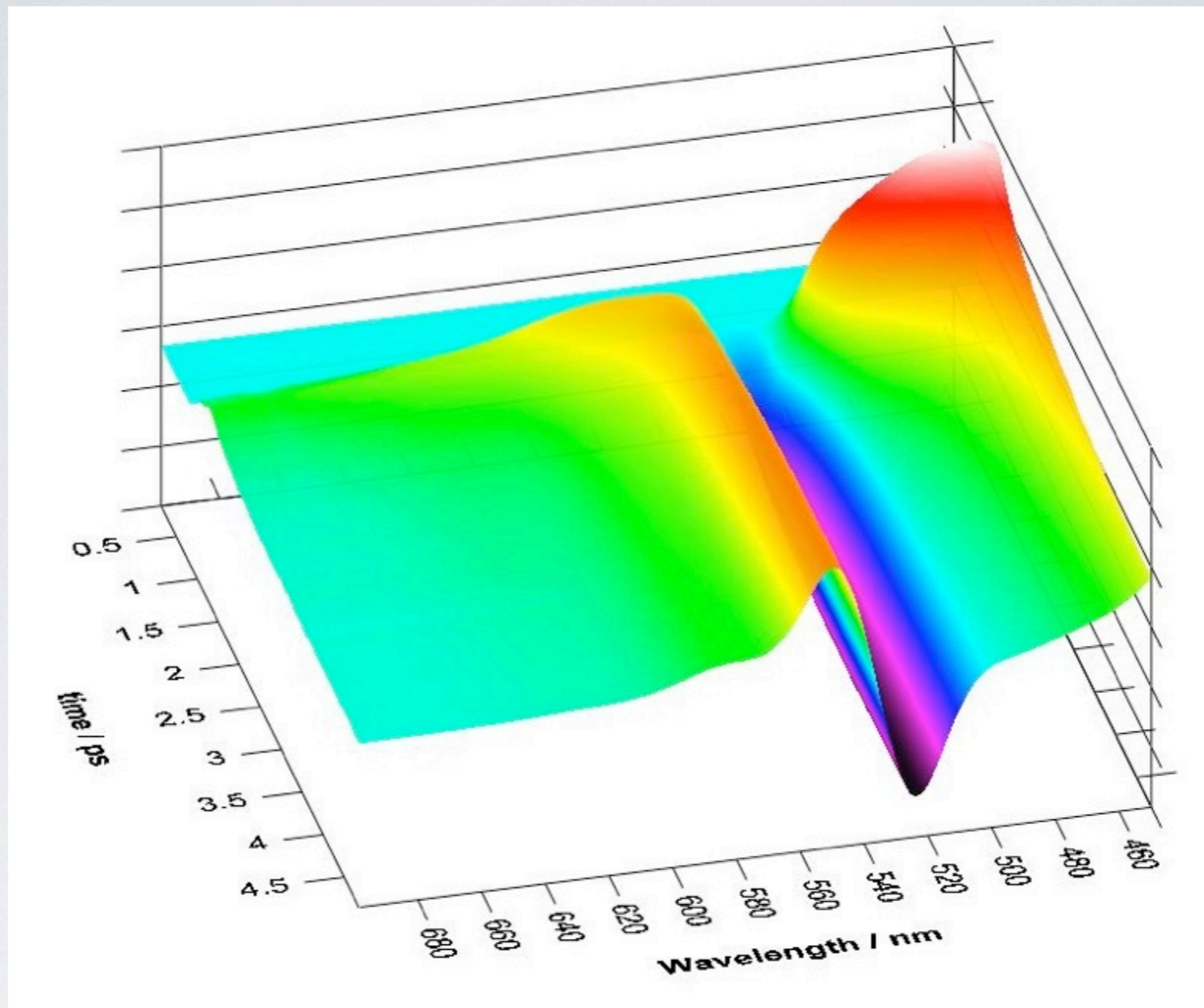
PROBE LIGHT SPECTRUM

30 fs continuum spectrum. A short-pass filter was used to suppress the region around 800 nm. Note the flat top of the spectrum, which is indicative of high quality laser pulses.



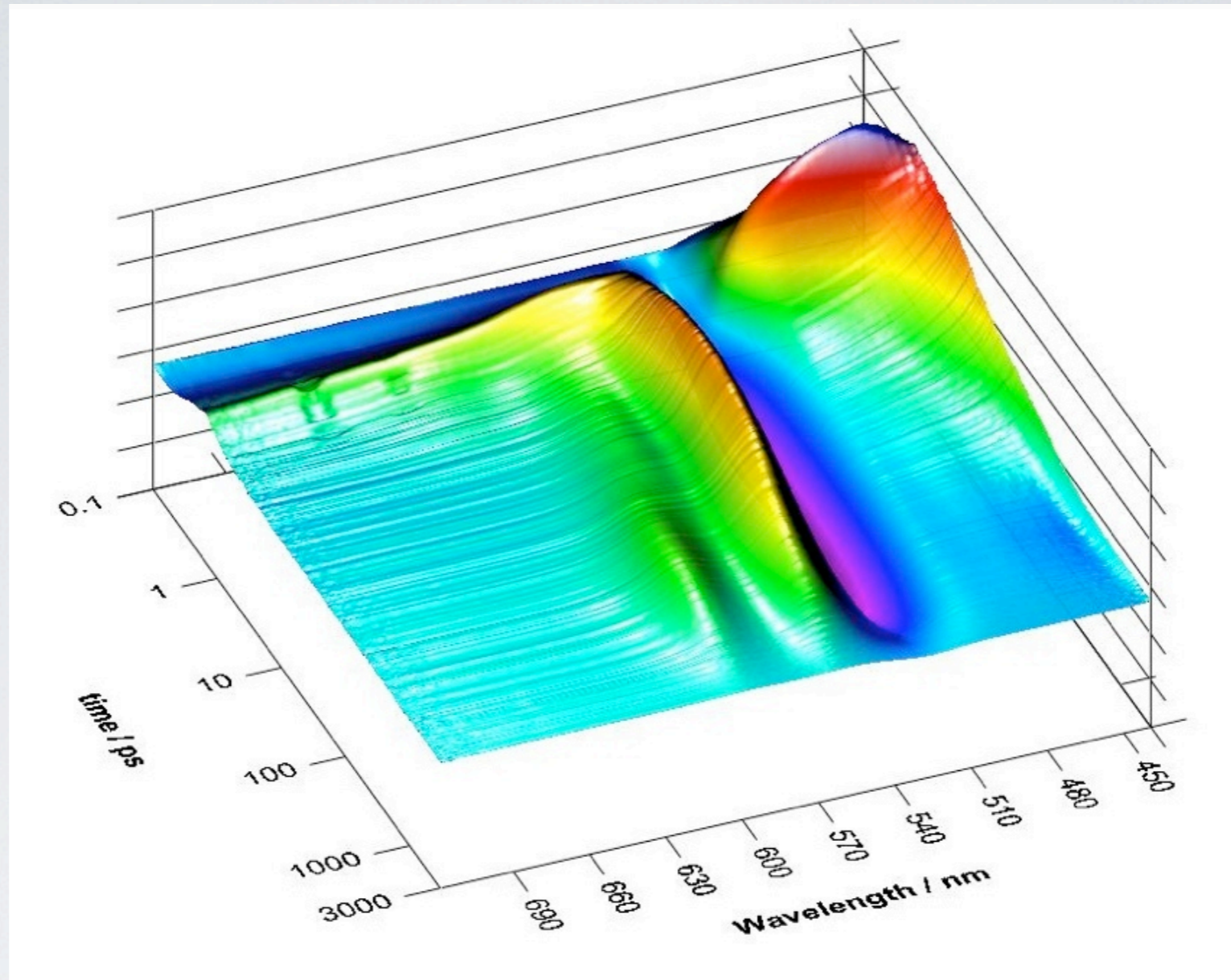
DYNAMIC SURFACE

Delta Absorbance-Wavelength-Time surface of NiTPPS in water. Bird's eye view.



DYNAMIC SURFACE

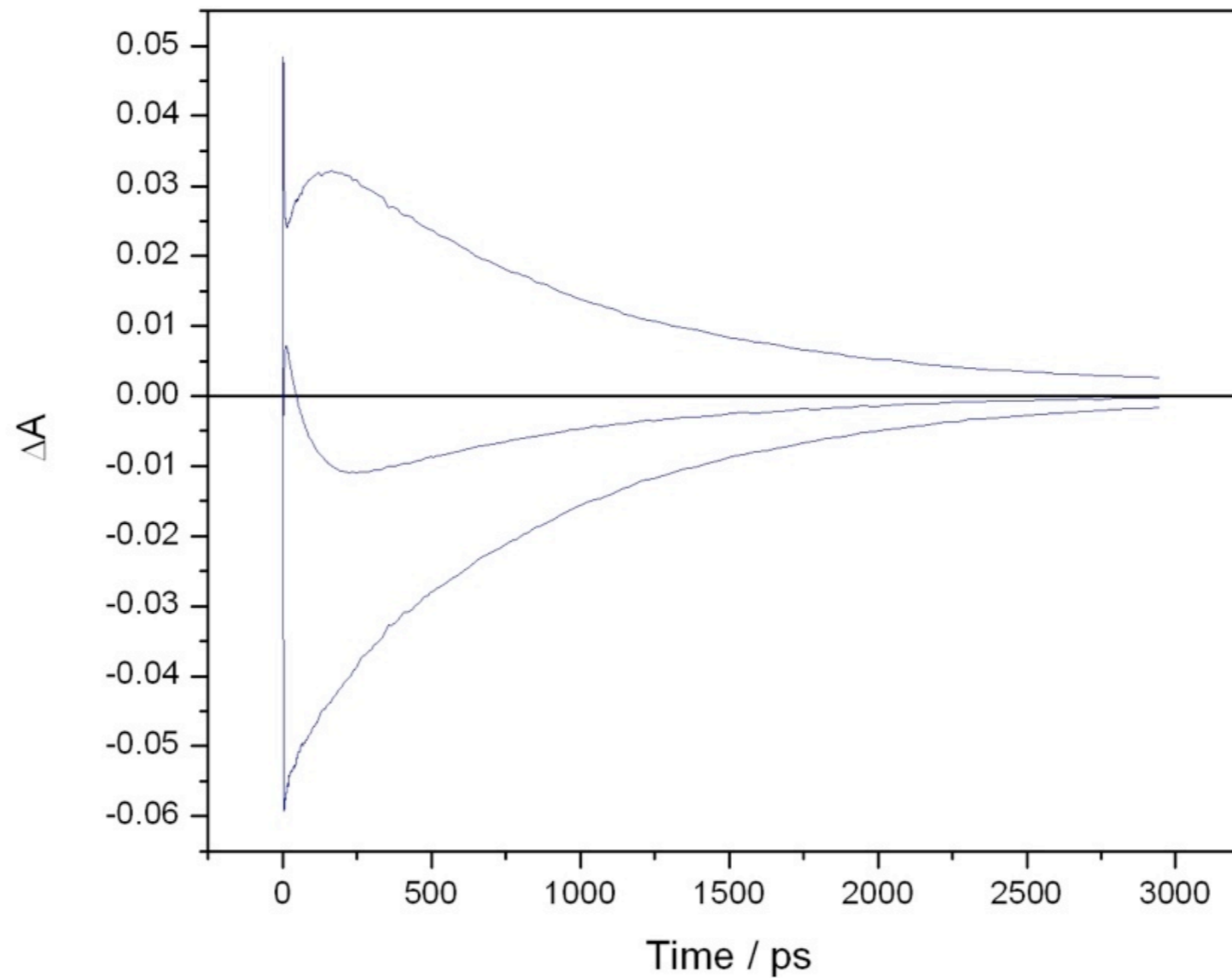
Delta Absorbance-Wavelength-Time surface of NiTPPS in water. 3D view.



DYNAMIC SURFACE

Delta Absorbance-Wavelength-Time surface of NiTPPS in water. 3D view. Logarithmic time scale.

Ground state bleaching recovery at 522 nm



DATA EXAMPLES

Kinetic profiles at various wavelengths. Note the low ripple (excitation noise) in the profiles, which is indicative of high power stability and a constant pulse duration.