Electronic Supplementary Material (ESI) for Environmental Science: Nano.

SUPPORTING INFORMATION

Environmental exposure of a simulated pond ecosystem to CuO nanoparticle based-wood stain throughout its life cycle

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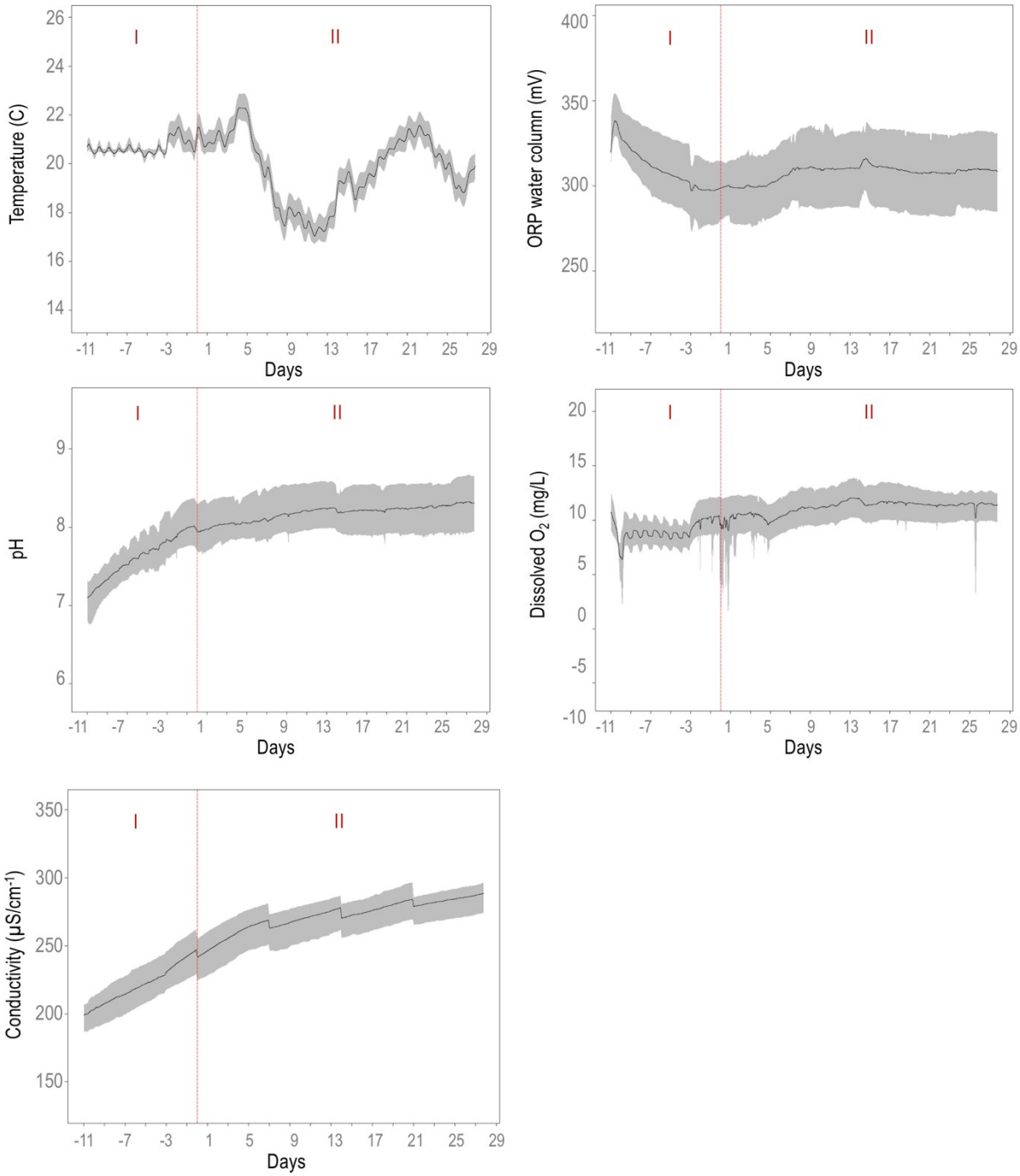

Figure S1. Evolution of the physical-chemical parameters in the water column of the mesocosms: temperature in degree Celsius, redox potential in mV, pH, dissolved oxygen in mg.L^{-1}, and conductivity in µS.cm^{-1}. Day 0 (red dotted line) corresponds to the first dosing of nanoparticles, I to the phase I of acclimation and equilibration, and II to phase II of contamination. The grey surface is defined by the maximum and minimum values of each parameter, and the dark line corresponds to the average values of the 6 mesocosms. One measurement was performed every 5 minutes.

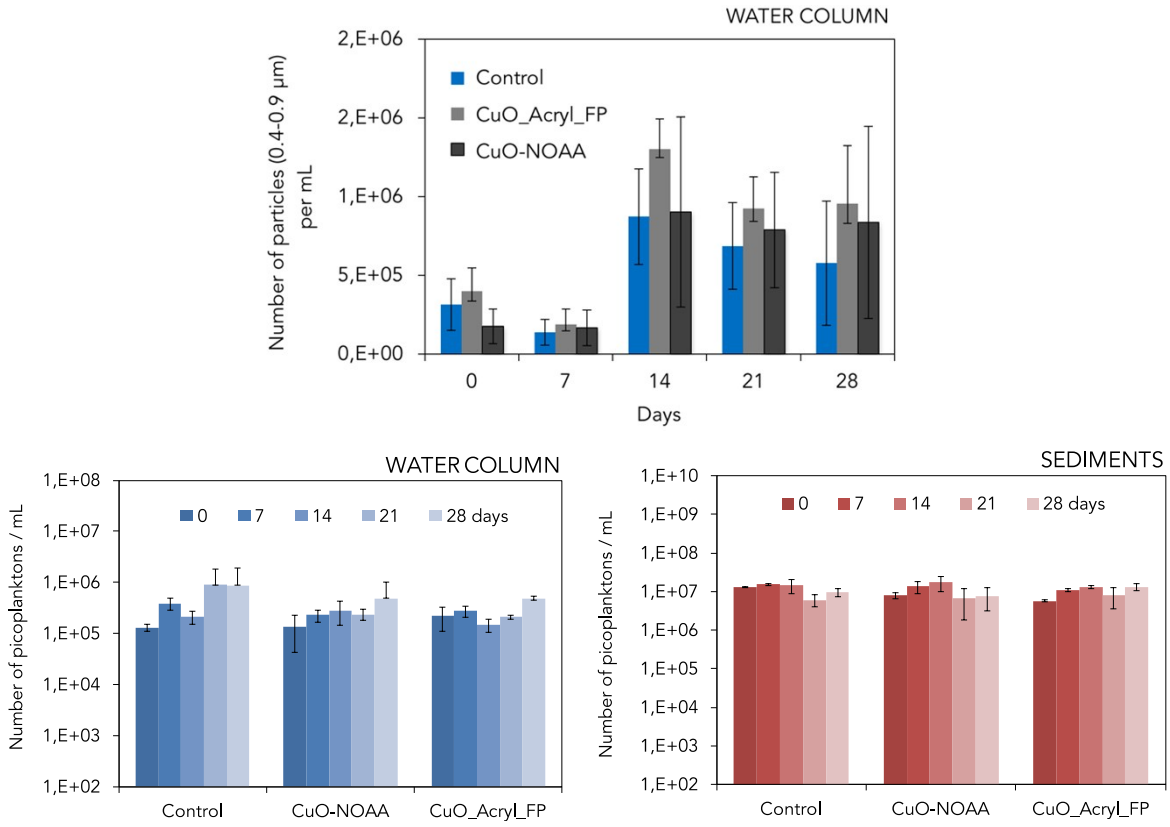

Figure S2. (top) Evolution of the number of colloidal particles in the 0.4 – 0.9 µm range from day 0 to 28 in the water column (at 10 cm below water surface) of the mesocosms. The data represent the mean ± standard deviation of the particle counting. (Bottom left) Concentration of picoplankton in water column at 10 cm below water surface. (Bottom right) Concentration of picoplankton in surficial sediments (depth: 0.5 to 1 mm). The data represent the mean ± standard deviation of the bacteria counting.

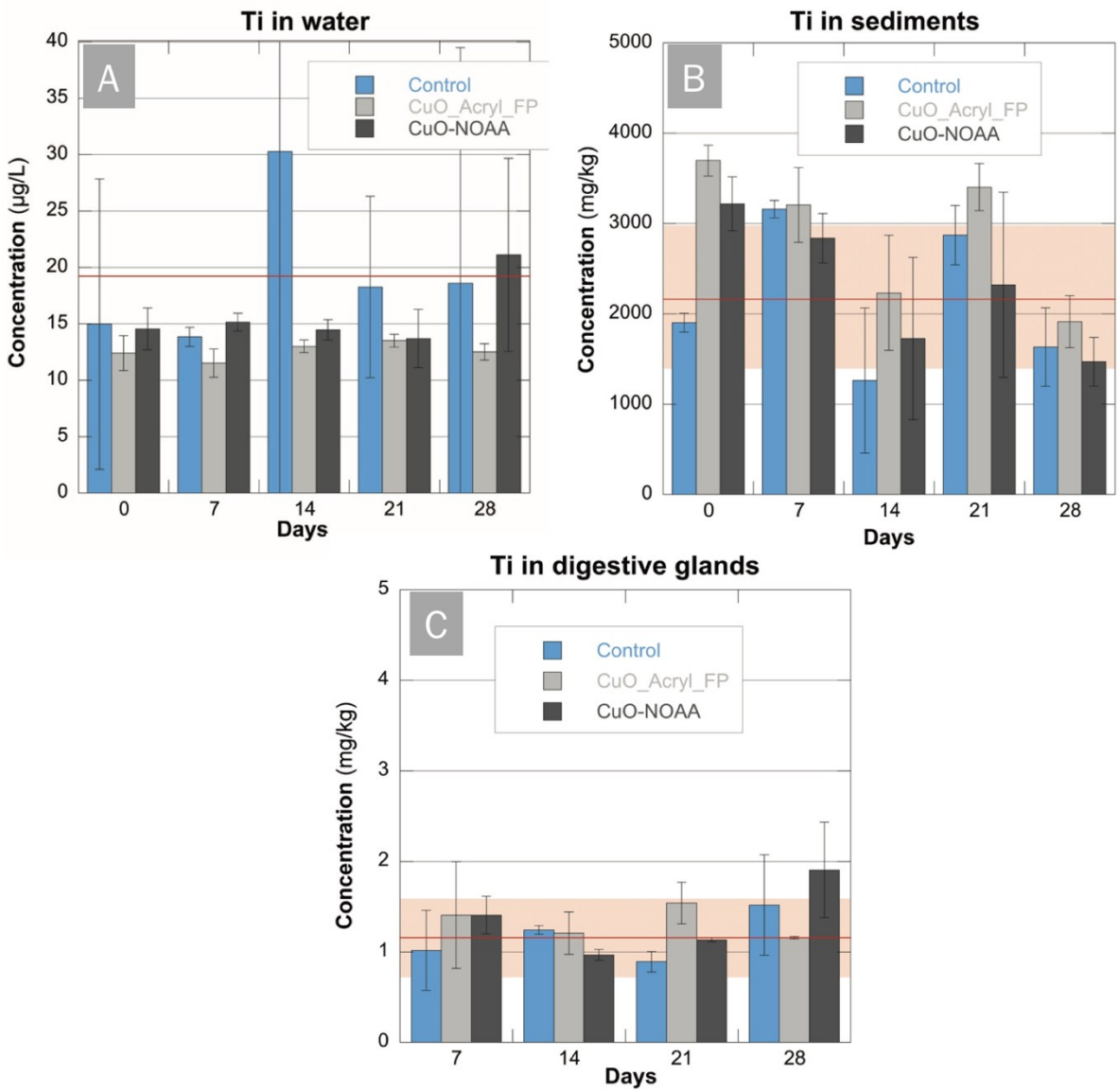

Figure S3. Average total Ti concentrations measured (A) in the water column, (B) in the surficial sediment, and (C) in the digestive glands of *P. Corneus* in control mesocosms and mesocosms contaminated with either CuO_Acryl_FP or CuO-NOAA. The standard deviation observed between replicates was plotted in error bars. The red line represents the average background Ti concentration determined on controls over the whole experiment.