Figure S1. Calibration of forward scatter measurements. Relationship between forward scatter normalized to 1-µm calibration beads measured by SeaFlow and carbon quotas estimated with independent methods. Carbon quotas were determined by bulk measurements of particulate carbon normalized by cell number. Red line represents the least-squared regression line between normalized light scattering and cell quotas plotted in logarithmic scale.
Figure S2. Environmental metadata for the 25 samples collected at 15m for nanoplankton abundances and grazing pressure during the 4-d study period. Environmental metadata include (a) temperature (°C), (b) salinity, (c) dissolved oxygen (μmoL L⁻¹), and (d) chlorophyll a (μg L⁻¹). Day-night cycles are shown, with gray boxes indicating nighttime.
Figure S3. Inferred Prochlorococcus mortality using changes in Prochlorococcus biomass over time. Green dots represent the hourly Prochlorococcus biomass, calculated from SeaFlow data as described. Maximal (Zenith) values (observed near dusk or early evening, indicated by red dots) and minimal (Nadir) values (observed near dawn, indicated by dark blue dots) in picocyanobacterial biomass were used to calculate daily biomass removed (see Table 1). Subtracting the initial (Nadir) from the final (Zenith) values for each 24-h period provided the net production/removal of Prochlorococcus biomass each day. Day-night cycles are shown, with gray boxes indicating nighttime.