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Settling plankton settling

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Plankton live in the upper ocean, where light allows photosynthesis. They often are denser than water and sink to deeper levels. It has been hypothesized that ocean turbulence favors plankton suspension but studies show contrasting results, indicating that settling can be even faster than in still water. Here, we present theoretical and numerical studies that indicate under what conditions turbulence induces a significant suspension of heavy particles and allows for survival of plankton in the euphotic layer. The study is also important for determining detrital settling velocity in the ocean water column, a key parameter in carbon cycle modeling.