Tara Oceans: Eco-systems biology at planetary scale

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Résumé

The ocean is the largest ecosystem on Earth and yet we know very little about the plankton that drift within. To increase our understanding of this underexplored world a multidisciplinary consortium, Tara Oceans, was formed around the 110-ft research schooner Tara, which sampled plankton at more than 210 sites and multiple depth layers in all the major oceanic regions during expeditions from 2009-2013 (Karsenti et al. Plos Biol., 2011). The presentation will describe the first foundational resources from the project (based on a first data freeze from 579 samples at 75 stations; see Science special issue May 22, 2015) and their initial analyses, illustrating several aspects of the Tara Oceans' eco-systems biology approach. The project provides unique resources for several scientific disciplines, capturing biodiversity of a wide range of organisms that are rarely studied together, exploring interactions between them and integrating them with environmental conditions to further our understanding of life in the ocean and beyond in the context of ongoing climate changes.

Mots-Clés: Marine ecosystems, systems biology, biodiversity, plankton, Tara

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