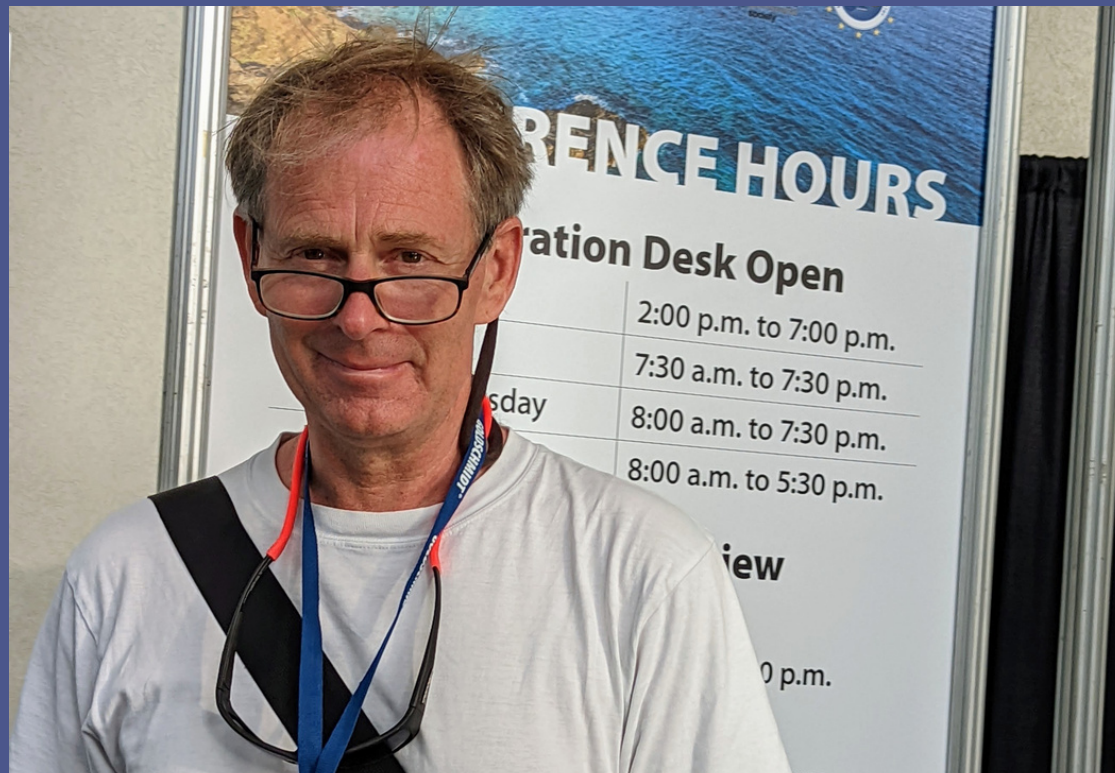


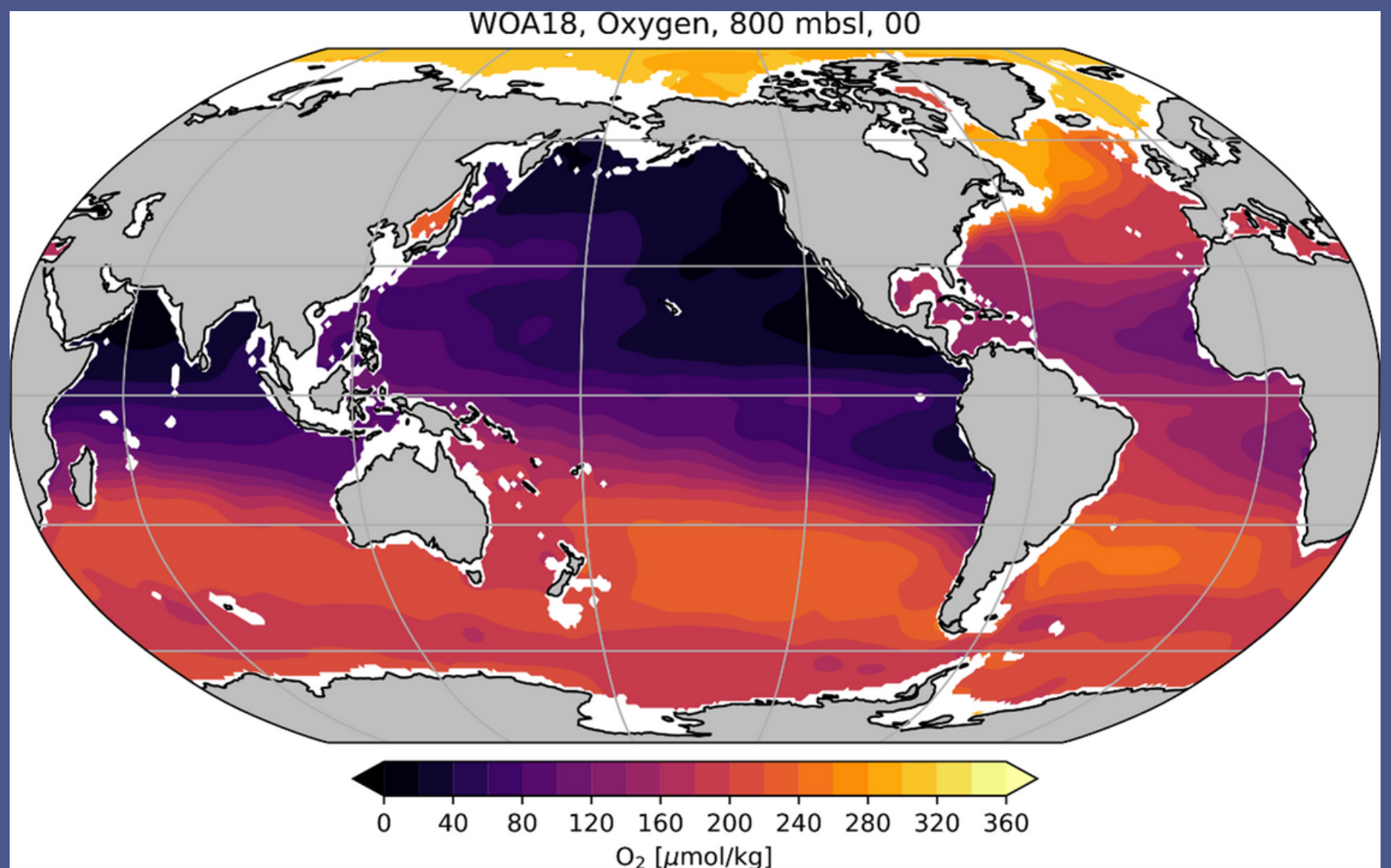


COLLOQUIUM SEMINAR SERIES

OCEAN CHEMISTRY IN A WARMING WORLD



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The ocean absorbs large amounts of carbon dioxide, buffering much of the anthropogenic CO₂ release. The ocean's buffering capacity depends on the interaction of biological and chemical processes, e.g., photosynthesis and organic matter decomposition. These are processes understood well enough to create computer models that accurately describe, e.g., ocean acidification in response to the anthropogenic CO₂ release.

Current ocean models typically assume that there is always enough oxygen to facilitate organic matter decomposition. However, increasing temperatures will reduce marine oxygen concentrations, possibly to the point of complete oxygen loss. Earth's history is full of examples where this process resulted in large ocean areas devoid of oxygen, inhospitable to all higher life forms. The transition from oxygen-bearing to oxygen-free waters affects not only life but also the ocean's ability to absorb CO₂.

COLLOQUIUM SEMINAR SERIES

featuring

Dr. Ulrich Georg Wortmann

Wednesday, March 1, 2023 | 3:30pm

Location: CCT2150