{rokbox title=|Thriving cold-water corals observed in the oxygen minimum zone (OMZ) off Angola :: Image: © MARUM| thumb=|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-ieo-cold-water-coral-reefs-thriving-under-hypoxia-hebbeln-et-al-2020-thumb.jpg|}images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-ieo-cold-water-coral-reefs-thriving-under-hypoxia-hebbeln-et-al-2020.jpg{/rokbox}

Dierk Hebbeln, Claudia Wienberg, Wolf-Christian Dullo, André Freiwald, Furu Mienis, **Covadonga Orejas**, Jürgen Titschack, 2020.
Cold-water coral reefs thriving under hypoxia.
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Abstract: Reefs formed by scleractinian cold-water corals represent unique biodiversity hot spots in the deep sea, preferring aphotic water depths of 200–1000 m. The distribution of the most prominent reef-building species *Lophelia pertusa* is controlled by various environmental factors including dissolved oxygen concentrations and temperature. Consequently, the expected ocean deoxygenation and warming triggered by human-induced global change are considered as a serious threat to cold-water coral reefs. Here, we present results on recently discovered reefs in the SE Atlantic, where *L. pertusa* thrives in hypoxic and rather warm waters. This sheds new light on its capability to adapt to extreme conditions, which is facilitated by high surface ocean productivity, resulting in extensive food supply. Putting our data in an Atlantic-wide perspective clearly demonstrates *L. pertusa*'s ability to develop population-specific adaptations, which are up to now hardly considered in assessing its present and future distributions.

Keywords: Cold-water corals, Lophelia pertusa, Hypoxia, Adaptation, Global change