Review

Climate change effects on a miniature ocean: the highly diverse, highly impacted Mediterranean Sea

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Little doubt is left that climate change is underway, strongly affecting the Earth's biodiversity. Some of the greatest challenges ahead concern the marine realm, but it is unclear to what extent changes will affect marine ecosystems. The Mediterranean Sea could give us some of the answers. Data recovered from its shores and depths have shown that sea temperatures are steadily increasing, extreme climatic events and related disease outbreaks are becoming more frequent, faunas are shifting, and invasive species are spreading. This miniature ocean can serve as a giant mesocosm of the world's oceans, with various sources of disturbances interacting synergistically and therefore providing an insight into a major unknown: how resilient are marine ecosystems, and how will their current functioning be modified?

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