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Poster

Marine heatwaves (MHWs) are periods of anomalously high sea surface temperature (SST) and their occurrence has increased globally in the past decades. Their impacts threaten physical, biological, and human systems. Here we show through different scenarios of the Coupled Model Intercomparison Project Phase 6 (CMIP6) that these events are indeed increasing in frequency and cumulative intensity, leading to an almost permanent state of MHWs in the western South Atlantic. Significant positive trends in these metrics for past, near and far future was identified. These trends are explained not only by long-term warming due to climate change but also by the increase in the occurrence of atmospheric blocking, which is the main generating mechanism for MHWs in the western South Atlantic.

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