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Climate change and a poleward shift in the distribution of the Pacific white-sided dolphin in the northeastern Pacific

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Increasing water temperatures due to global warming mean that specific isotherms are shifting polewards. This may cause the poleward shifts in the range limits of species that are only found in specific thermal habitats. Such range shifts have been recorded in a number of plant and animal species. In the last 3 decades, we observed a decline in the presence of Pacific white-sided dolphin *Lagenorhynchus obliquidens* in the southwest Gulf of California (GOC), which is considered the southern boundary of their distribution. Considering that the thermal environment is physiologically important to animals, we believe that this poleward shift in the usual geographic range of the Pacific white-sided dolphin is due to long-term changes in the local climate. To obtain the conceptual framework needed to discuss such a hypothesis, we summarize and analyze current knowledge about Pacific white-sided dolphins in the southwest GOC, and sea surface temperature variability at a regional scale.

Palabras clave: climate change, Northeastern Pacific, Body growth, Lagenorhynchus obliquidens, Poleward shift

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