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Abrupt Climate Regime Shifts, Their Potential Forcing and Fisheries Impacts

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ABSTRACT

The purpose of this paper is to investigate whether a logical chain of events can be established to explain the abrupt climatic regime shift changes in the Pacific that link the atmosphere to the ocean to fisheries impacts. The investigation endeavors to identify synchronous abrupt changes in a series of data sets to establish the feasibility of abrupt of climate change often referred to as regime shifts. The study begins by using biological (fish catch/stock) markers to mathematically identify the dates of abrupt change. The dates are confirmed by a literature search of parameters that also show abrupt changes on the same dates. Using the biological date markers of abrupt change, analyses are performed to demonstrate that the interactions between the atmosphere, ocean, ecosystems and fisheries are a plausible approach to explaining abrupt climate change and its impacts.

KEYWORDS

Climate Regime Shift, Fishery

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