

TELECONNECTIONS BETWEEN INDIAN OCEAN TROPICAL CYCLONES AND AMO

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The study aims to investigate trends and periodicities of tropical cyclone (TC) intensity in the North Indian Ocean (NIO). Basic (regression analysis) and advanced (empirical mode decomposition) statistical methods are employed to understand the variability. A significant increasing trend in the TC intensity in NIO over a period of 67 years is found which indicated strengthening of storms over the course of time. The increasing trend is explained by the warming trend of the ocean temperature. Another important finding that emerged from this study is the connection between the Atlantic Multi-decadal Oscillations (AMO) and the TC intensity in the NIO. This intriguing finding broadens our perspective towards TCs as a phenomenon affected by the global factors.

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