

Examining drought in Jamaica and the Caribbean using the Standardized Precipitation Index

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Drought in the Caribbean and specifically Jamaica is researched using the Standardized Precipitation Index (SPI). Jamaica shows strong periodicity of 20-26 years, and a weaker signal of 2-6 years, while the Caribbean shows strong periodicity over 6-15 years and 20-26 years, and an on and off signal of 2-6 years. A strong relationship is suggested with the Atlantic Multidecadal Oscillation for Jamaica and the Caribbean. Weaker relationships are found with the El Niño Southern Oscillation for both Jamaica and the Caribbean. Patterns of basin wide sea surface temperature and sea level pressure consistent with the examined drought cycles are presented.