



Climate extremes in the amazon basin

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Changes in extreme weather and climate events have significant impacts and are among the most serious challenges to society in coping with a changing climate (CCSP, 2008). Indeed, according to IPCC AR4, confidence has increased that some extremes will become more frequent, more widespread and/or more intense during the 21st century.

Until recently, there had been little published work on rainfall extremes in South America, and emphasis has been given to the La Plata Basin, where data coverage is much better.

In this study, we use the indices of extremes derived by the WMO and used for the IPCC AR4 applied to 100 stations in Amazon Basin for the period from 1971 to 2005, with focus on rainfall extremes.

The quality control involved carefully evaluating numerous detailed graphs of daily data to detect evidence of possible quality issues with the data as well as statistically identifying outliers. Each outlier or potential data problem was manually validated using metadata information of our climate data.