

Analysis of Drought Flood Abrupt Alteration Events and there Impacts in Kenya

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Abstract : Global warming has intensified the frequency and intensity of extreme climate disasters and led to unpredictable weather conditions. Consequently, rapid shifts between drought and floods, known as Drought-Flood Abrupt Alteration (DFAA), have become increasingly common. DFAA results in superimposed impacts of drought and floods within a short period, exacerbating the effects of the floods or drought event. Current disaster management plans often overlook DFAA events, as they primarily focus on either floods or drought. Therefore, effectively identifying DFAA events is crucial for developing effective mitigation strategies. This study aims to identify historical DFAA events in Kenya using the Long Cycle Drought-Flood Abrupt Alteration Index (LDFAI). The research will analyze the spatial distribution, temporal variation, and intensity of DFAA events from 1990 to 2023, as well as their socio-economic impacts. Understanding these events is important to develop more effective strategies to address the impacts of DFAA events. Findings from this study will inform decision making to develop coping strategies to mitigate the adverse effects of DFAA in Kenya.

Keywords : abrupt, alteration, drought, floods

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