DEVELOPING SPATIAL TEMPORAL METEOROLOGICAL DROUGHT MAPS FOR VIETNAM CENTRAL COASTAL REGION USING NON-CONTIGOUS DROUGHT ANALYSIS (NCDA)

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Summary

Spatial temporal meteorological drought maps have a significant importance to drought management and mitigation. Non-contiguous drought analysis (NCDA) was applied for Vietnam Central Coastal Region in order to build spatial-temporal maps based on two common drought indices, namely, Standardized Precipitation Index (SPI) and Standardized Precipitation Evapotranspiration Index (SPEI). This study used 27 rainfall and temperature stations to set up 5x5 km grid for the study area. Each drought index was calculated with 1 and 3-month. The results show that SPI and SPEI map could detect historical drought events although the magnitude for each event was different based on different indices.

Keywords: Standardized precipitation index, standardized precipitation evapotranspiration index, drought.