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**Studying the Characteristics of Warm Clouds in Thailand under the ENSO
Pattern using CFODD**

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This paper investigates the relationship between the ENSO pattern and the internal structure of warm weather systems in Thailand. The study utilizes the Contoured Frequency by Optical Depth Diagram (CFODD) technique, employing data from the Aqua satellite's Moderate Resolution Imaging Spectroradiometer (MODIS) and the CloudSat satellite's Cloud Profiling Radar (CPR). Thailand is located in Southeast Asia and has been facing severe drought events due to changing climate patterns, as indicated by the ENSO pattern. The findings reveal insights into the in-cloud structure from 2006 to 2014. The study illustrates a cloud process wherein cloud droplets transition into drizzle and eventually into rain as the size of cloud particles near the top of the cloud increases. The cloud droplet mode ranges from 9 μm to 15 μm , the drizzle mode ranges from 15 μm to 18 μm , and the rain mode consists of particles exceeding 18 μm . Furthermore, distinctions in the in-cloud structure observed in the CFODDs between La Niña and El Niño events are explained. During La Niña events, clouds exhibit thicker in-cloud optical depths and a longer predominance of the drizzle mode. In contrast, during El Niño events, clouds tend to transition more rapidly into the rain mode compared to La Niña events.