



## **Analysis of Water Vapor Characteristics of Regional Rainfall Around Poyang Lake Using Ground-based GPS Observations**

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Atmospheric precipitation of Poyang Lake area can be analyzed using ground-based GPS observation data. Analysis of the atmosphere can precipitate rainfall changes in the weather characteristics. At the same time we can use National Centers for Environmental Prediction (NCEP) data analysis of weather system, water vapor transmission, convergence and precipitation power mechanism, high-density grid point data analysis of rainfall. The atmospheric precipitation and rainfall contrast analysis show that rainfall and atmospheric precipitation are not directly in corresponding relation. Size and atmospheric rainfall can be precipitation size and also does not always correspond. Before the precipitation can be increased, atmospheric precipitation process is a continuous change process. It may be 1 hour before rainfall around spurt. Rainfall is not always smaller than the maximum atmospheric precipitation. There may be a far outweigh to the atmospheric precipitation water quantity. Rain occurrence and atmosphere can change rainfall and weather system of water vapor transport. Water vapor convergence is closely related to the dynamic conditions.