Interannual variation of precipitation isotopes and estimated water origins over Indochina.

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Stable water isotopes are hydrologically conserved and can contribute to a better understanding of hydrological cycle. Ichiyanagi and Yamanaka (2005) found a close relationship between the interannual variation of stable isotopes in Bangkok precipitaion and the El Nino/ Southern Oscillation (ENSO). There are positive correlations between the ENSO index and oxygen 18 in precipitation only for May and October. May and October are the months in which the Asian summer monsoon begins and ends in Bangkok, respectively.

In addition, Ichiyanagi et al. (2005) proposed a new definition of the withdrawal date of the Asian summer monsoon using a transitions of the origin of water vapor. The temporal and spatioal distributions of water origins showed a clear transition from the Indian Ocean to the Pacific Ocean over Indochina.

In this study, the interannual variation of water origin and their relations with the ENSO are discussed.