

Southwest (SW) monsoon dynamics study in Indo-Gangetic plains using isotopic techniques

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ABSTRACT

The atmospheric ground level water vapors (GLV) were collected during 2008-10 on daily basis by condensation method in Indo-Gangetic plains at sites: Roorkee (Uttarakhand) and Sagar (Madhya Pradesh). The two sites are located a few hundred kilometers away along the southwest monsoon track. Isotopic composition of GLV collected at both the sites is compared and it is found that the two isotopic spectra grossly correlate at most part of the spectrum indicating that although rainout process take place locally, its effect on the atmospheric water vapors can be observed over long distances. This opens up possibility of monsoon prediction through monitoring of atmospheric water vapor.