Geosciences Division
Physical Research Laboratory

Tuesday Seminar

Classical Isotope Effects in Precipitation and Recent Advancement

Abstract

The relationship between the oxygen and hydrogen isotopic composition ($\delta^{18}O$ and δD) of precipitation and certain climatic and geographical factors such as, surface air-temperature, amount of rain, altitude and latitude was well recognized and explained by the early 1960s. These have come to be known as classical isotope effects, namely, amount effect, altitude effect, continental effect, temperature effect etc.

Over the years, with the advent of new scientific techniques, larger data sets from in-situ and remotely sensed observations and better understanding of climate systems some new concepts such as dependency of isotopes on types of cloud, atmospheric moisture residences time, late monsoonal depletion, local recycling, and western disturbances, etc. have also been recognized and explained.

In this seminar some of the classical isotope effects will be revisited and recently reported newer observations will also be presented. Departure from the classical isotope effects observed in the Indian isotope dataset will also be pointed out along with possible explanation.

Speaker: Harsh Oza
JRF, GSDN.

Date	Time	Venue
29-Nov-2016	16:00 hrs	Ground Floor Lecture Hall

All are invited to attend and participate in discussion
Tea at 15:30 hrs

Neeraj Rastogi, Seminar Secretary, Geosciences Division