



Physical Research Laboratory

Tuesday Seminar

Sea water $\delta^{18}\text{O}$ and δD dynamics over the Northern Indian Ocean

Abstract

Sea water oxygen isotopic composition ($\delta^{18}\text{O}$) is a widely used proxy to study modern and past dynamics of the ocean. $\delta^{18}\text{O}$ -Salinity relation in the surface ocean is a useful tracer to study imprints of physical processes, such as runoff, sea ice melting, large-scale ocean mixing and also paleo-salinity. Effect of precipitation (P), runoff (R) and evaporation (E) in the surface ocean as a 'P+R-E' budget on $\delta^{18}\text{O}$, δD and S is relatively well understood, however in the subsurface waters it still remains elusive.

In this seminar I will discuss a new data set of $\delta^{18}\text{O}$, δD and Salinity for the surface and subsurface sea water samples collected from the northern Indian Ocean during pre and post-monsoon months in 2016 and 2017 and highlight various controlling processes.

**Speaker: Mr. Kiran Kumar P.
SRF, GSDN**

Date	Time	Venue
7-August-2018	16:00 Hrs	Ground Floor Lecture Hall

All are invited to attend and participate in discussion

A.K. Sudheer, Geosciences Division