

Indian Ocean Dipole

May 9, 2024 • vajiramandravi.com



About Indian Ocean Dipole:

- It is sometimes referred to as the **Indian Nino**, is a similar phenomenon, playing out in the relatively smaller area of the Indian Ocean between the **Indonesian and Malaysian** coastline in the east and the **African coastline near Somalia** in the west.
- A '**positive IOD**' — or simply 'IOD' — is associated with cooler than normal **sea-surface temperatures** (SST) in the eastern equatorial Indian Ocean and warmer than normal sea-surface temperatures in the western tropical Indian Ocean.
- The opposite phenomenon is called a '**negative IOD**', and is characterised by warmer than normal SSTs in the eastern equatorial Indian Ocean and cooler than normal SSTs in the western tropical Indian Ocean.
- A positive IOD event is often seen developing at **times of an El Nino**, while a negative IOD is sometimes associated with La Nina.
- **Impacts**
 - A positive IOD helps **rainfall along the African coastline** and also over the Indian sub-continent while suppressing rainfall over Indonesia, southeast Asia and Australia. The impacts are opposite during a negative IOD event.
 - The IOD was identified as an independent system only in 1999.

Q1: What is El Nino?

A warming of the ocean surface, or above-average sea surface temperatures (SST), in the central and eastern tropical Pacific Ocean. It is associated with lower than normal monsoon rainfall in India.

Source: Positive IOD may re-emerge this year, likely to boost south-west monsoon

Source: <https://vajiramandravi.com/current-affairs/indian-ocean-dipole-upsc/>

© Vajiram & Ravi. For personal use only.