The scientists discovered that between the months of December to April, the Indian ocean gains and loses 3 trillion tons of water from the Pacific Ocean.
HYDERABAD: A group of researchers working at the Indian National Centre for Ocean Information Services (INCOIS) in collaboration with other scientists from France, have discovered the synchronised movement of water between Indian Ocean and the Pacific ocean, leading to a rise and fall in sea level between December to April.

The scientists discovered that between the months of December to April, the Indian ocean gains and losses 3 trillion tons of water from the Pacific Ocean.

This entire process is driven by intense winds hovering over a very small area in the eastern Indian Ocean. This wind is associated with a little-known tropical weather phenomenon known as Madden-Julian Oscillation (MJO).

The MJO, an eastward moving disturbance of clouds, rainfall, winds, and pressure, circles the planet. When the MJO winds reach the eastern Indian Ocean, particularly over the North West Australian Basin (NWAB), its energy is transferred deep down to the ocean bottom leading to the movement of the entire water column.

The topography of the NWAB amplifies the water movement and its moves out of the basin and proceeds towards tropical Indian Ocean with the help of fast-moving waves.