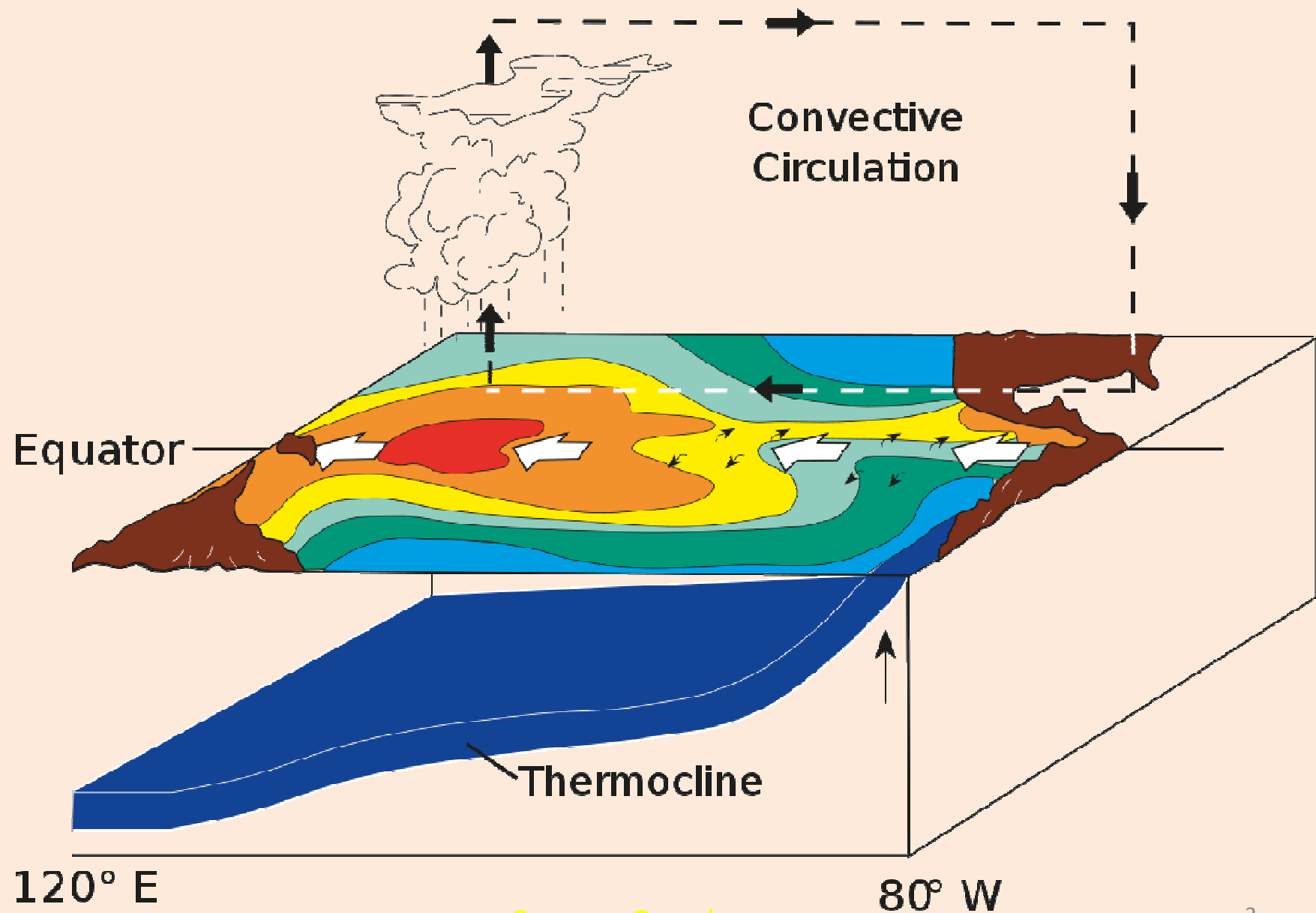


El Niño

ABOUT El Nino

- El Nino means 'little boy' or 'Christ child' in Spanish.
- El Nino refers to the large-scale ocean-atmosphere climate interaction linked to periodic warming in sea surface temperatures across the central and east-central Equatorial Pacific.
- It is associated with high pressure in the western Pacific.

Normal Conditions



Source: Google

Temperature at Sea Surface: It is warmer than normal sea-surface temperatures. It is a warming of the Pacific Ocean between South America and the **International Date Line**, centred directly on the Equator, and moves towards several degrees of latitude to either side of the equator.

- El Nino adversely impacts the Indian monsoons and hence, agriculture in India.
- This causes heavy rains in Peru during the El Nino years robbing the Indian subcontinent of its normal monsoon rains.
- The larger the temperature and pressure difference, the larger the rainfall shortage in India.

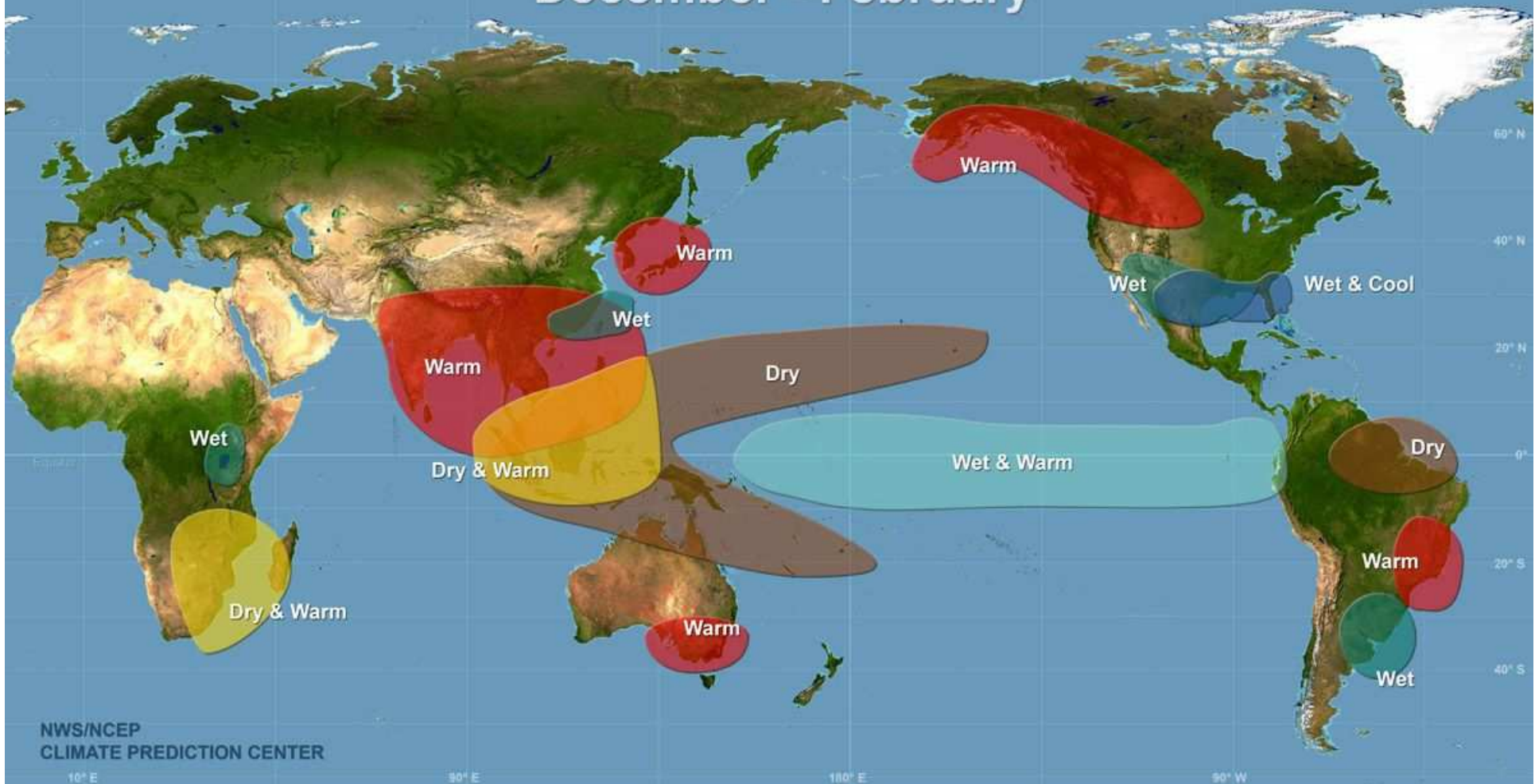
Pressure: It is laden with high air surface pressure in the western Pacific.

Trade winds: It originated when tropical Pacific Ocean trade winds die out and ocean temperatures become unusually warm.



Warm Episode Relationships

December - February



NWS/NCEP
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Seasons: It has great impact on season pattern because it makes warmer and drier than average in the Northwest of pacific during winters and wetter in Southwest of pacific and experience reduced snowfalls.

Coriolis force: It decreases in the strength of the Coriolis force.

Ocean waters in Pacific: Warm water approaches the coasts of South America which results in reduced upwelling of nutrient-rich deep water impacting impacts on the fish populations.

Cyclones: Wind speed is low.

EFFECTS

- HEAVY RAINS IN ECUADOR, PERU AND IN SOUTHERN BRAZIL
- DROUGHT IN NORTH EAST BRAZIL etc.

• Source: Google