

Higher 2 (9173)	Tropical Environments	TMJC
Tutorial 2	<i>Tropical Climates and El Niño</i>	2025

Data Response Question:

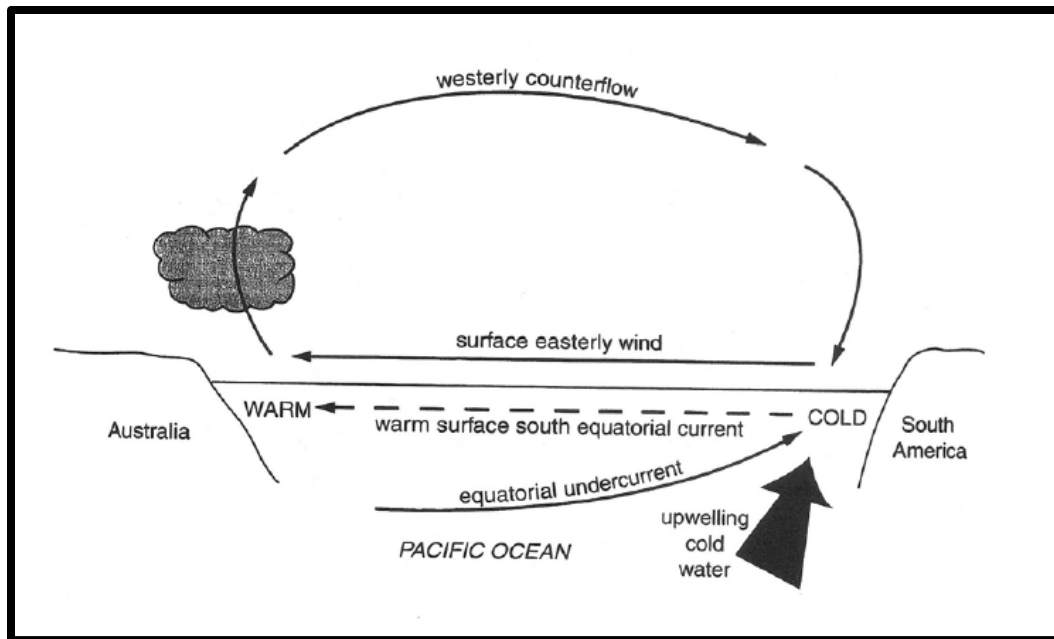
- 1 Changes in Sea Surface Temperature (SST) is a phenomena that concerns many countries. **Resource 1** shows a process occurring over the pacific ocean.
Resource 2 shows the weekly SST anomalies in the month of February 2016.
Resource 3 shows the occurrence of El Niño and La Niña events. **Resource 4** shows the climatic impacts of El Niño events globally.
- a) Explain how the process occurring in Resource 1 would affect the climate of Australia and South America [5]
- b) Describe the Sea Surface Temperature anomalies as shown in Resource 2. [4]
- c) Using an annotated **cross section sketch**, explain how the Sea Surface Temperature anomalies in Resource 2 could have occurred and its effect on the climate of Australia and South America [6]
- d) Using Resource 3, compare El Nino and La Nina events from 1982 to 2016 [4]
- e) Using Resource 4, suggest possible impacts faced by different countries which occur during an El Nino event [6]

*Try to use different keywords: Social, Economic, Environmental Impact
Positive or Negative*

Essay Questions:

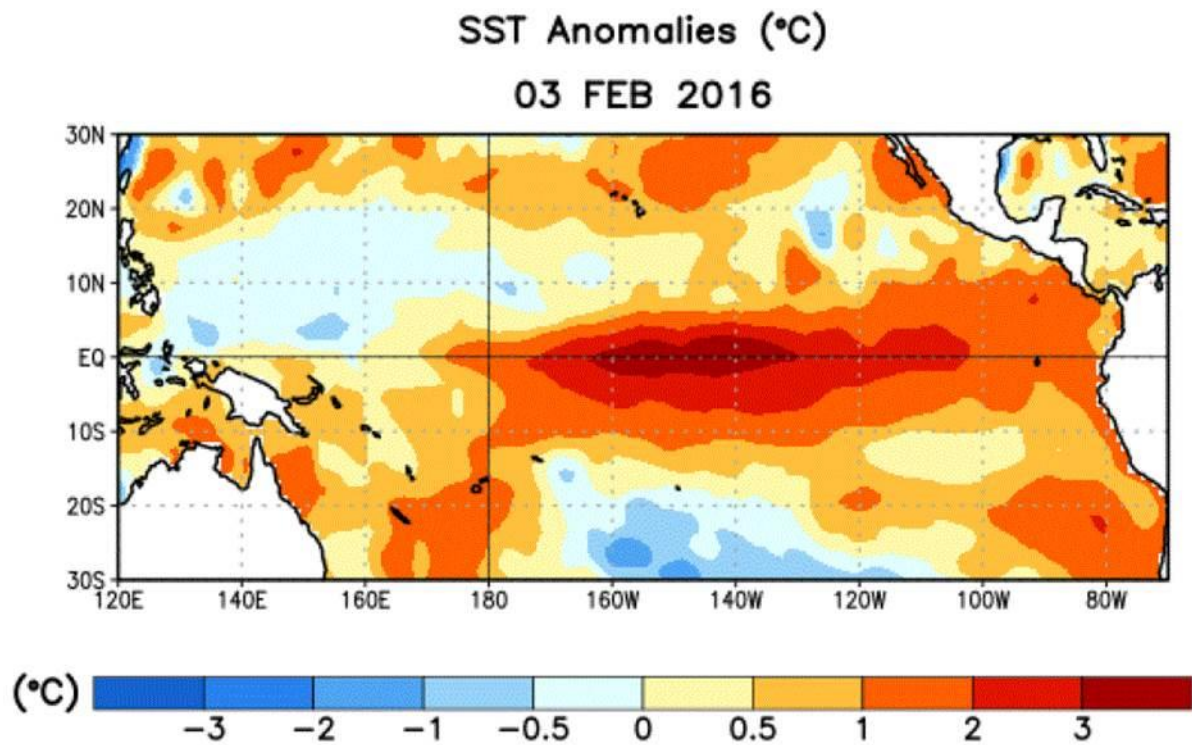
- 2) 'Precipitation varies across different climates in the humid tropics'. Evaluate this statement. [20]

Resource 1 for Question 1



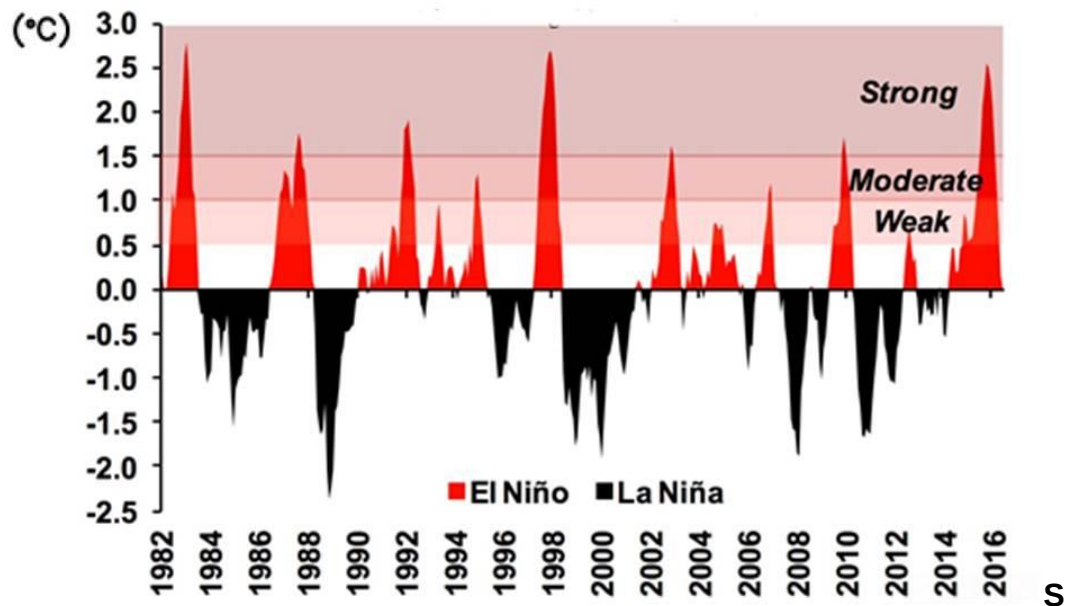
Resource 2 for Question 1

Sea Surface Temperature (SST) Anomalies across the Pacific Ocean



Resource 3 for Question 1

El Niño and La Niña trends from 1982 to 2016



Resource 4 for Question 1

Climatic Impact of El Niño events globally

Climatic impacts of warm El Niño events (October-March)

El Niño has different impacts in different parts of the world and at different times of the year. During the northern hemisphere winter, El Niño's expected impacts include drought in southern Africa, continuing drought in northern Australia and Indonesia, high rainfall in three continents and unseasonably warm weather in parts of North America and eastern China.

