

Higher 2 (9173)	Tutorial 3: March Break 2025 -Homework	TMJC
		2025

From Tutorial 2:

2. 'Precipitation varies across different climates in the humid tropics.'

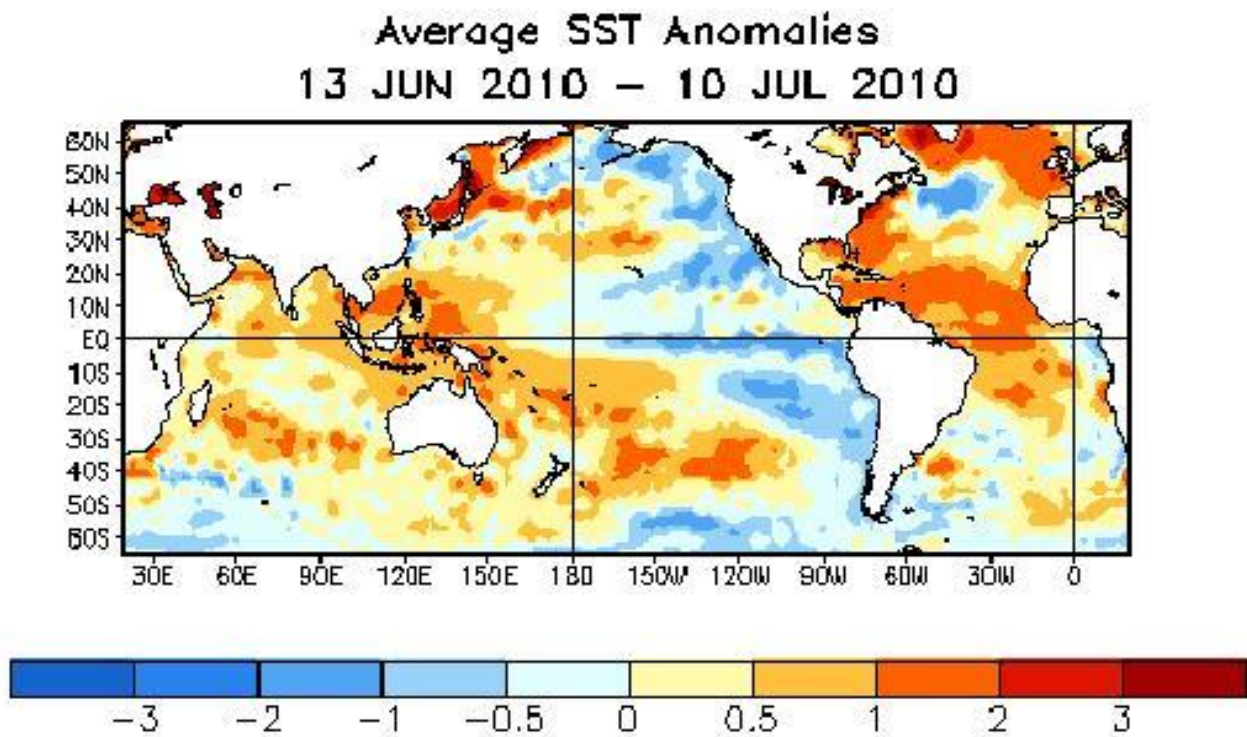
Evaluate this statement

[20]

- 1 Resource 1 shows the average sea surface temperature anomalies between June and July 2010.
Resource 2 shows the location and climograph of the Acatama desert and Rio De Janerio, both located in South America.
- a) Using Resource 1, describe the temperature anomalies in the Pacific Ocean. [4]
- b) Compare the climate between the Acatama Desert and Rio de Janeiro as shown in Resource 2. [4]
- c) Using Resource 2 and your own knowledge, account for the precipitation experienced in the Acatama Desert. [6]
- d) Using Resource 3, describe the changes in climate caused by ENSO. [4]
- e) Using Resource 4, compare the percentages of cropland affected by droughts between periods of 'El Nino Dominance' and other periods. [4]
- f) With Reference to Resource 5, compare the location and extent of the areas labelled **warm** between the periods April to September and October to March, [6]
- g) Using Resource 5, describe the location and extent of the **two** areas labelled **dry** from April to September. [2]

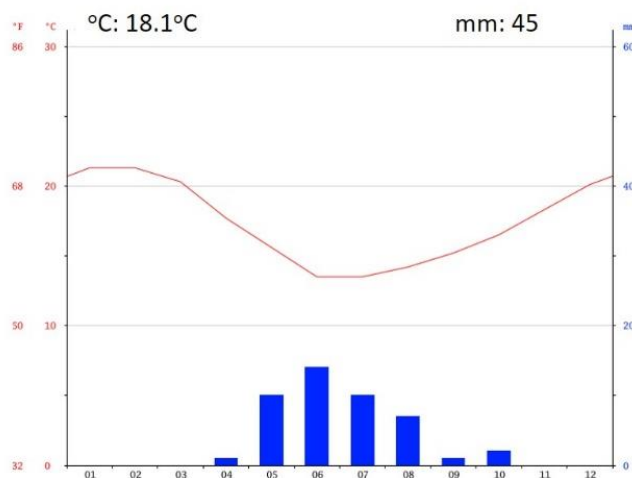
Resource 1 for Question 1

Average sea surface temperature anomalies between June and July 2010



Resource 2 for Question 1

Location and Climograph of Acatama Desert and Rio De Janeiro

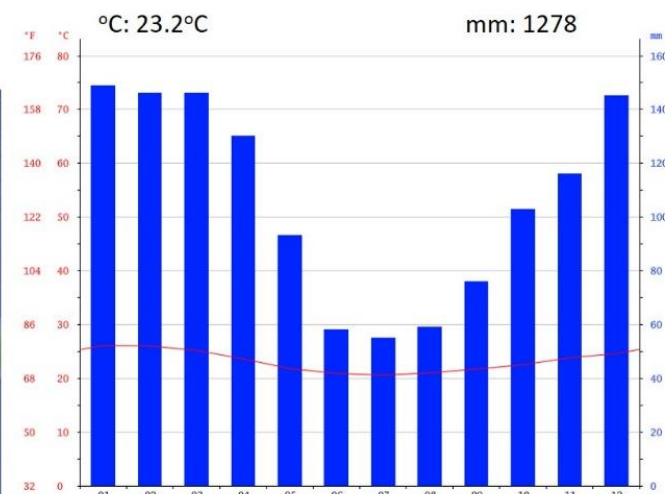
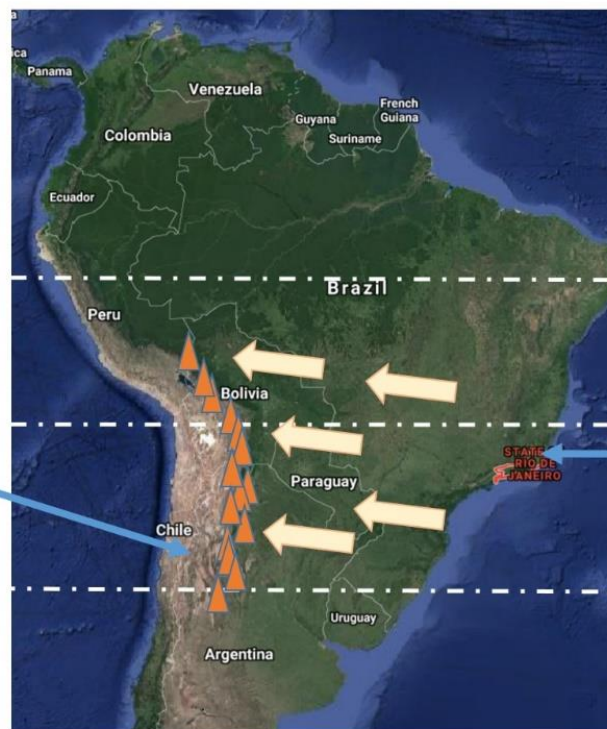


Acatama Desert, Chile

15°S

20°S

25°S



Rio De Janeiro, Brazil



The Andes Mountain Range



Direction of prevailing winds

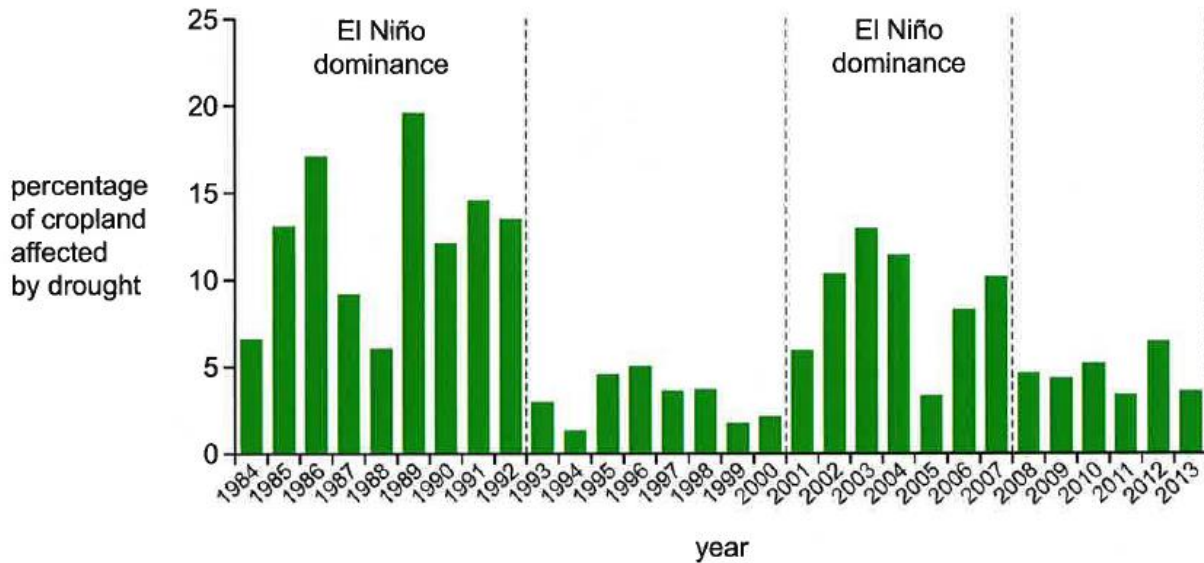
Resource 3 for Question 1

Average November weather data for Sydney, Australia for El Niño years and for normal (non-ENSO) years, 1970–2015.

	mean monthly rainfall (mm)	mean temperature (°C)	mean high temperatures (°C)	mean monthly sunshine hours (h)
El Niño years	84.8	21.8	25.1	252
normal (non-ENSO) years	105.2	19.9	23.8	228

Resource 4 for Question 1

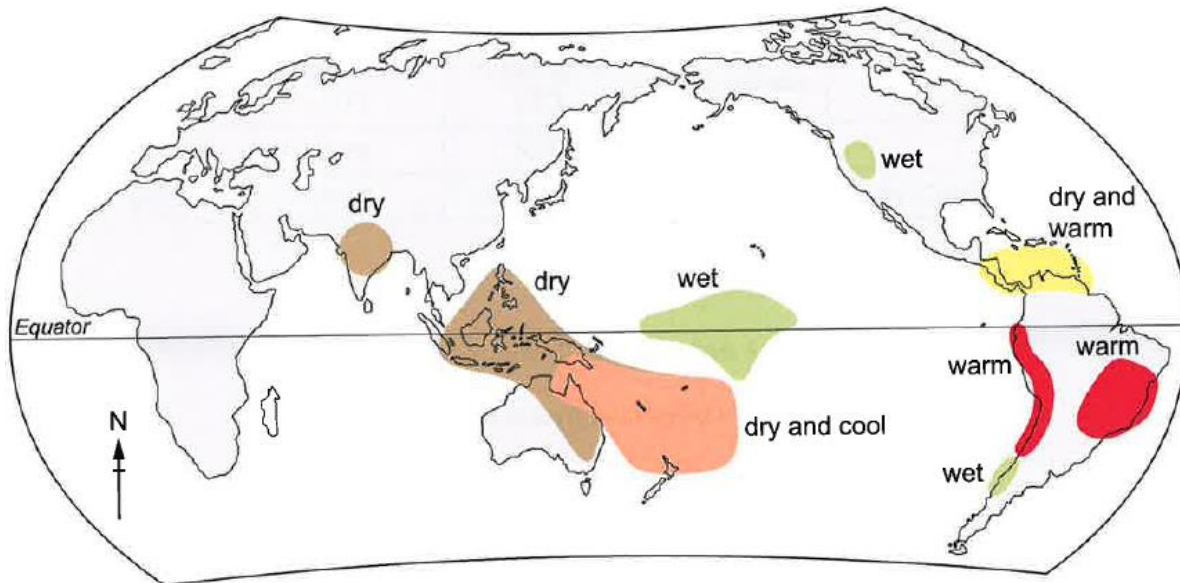
Percentage of cropland affected by drought, 1984–2013



Resource 5 for Question 1

Generalised Climatic impacts of ENSO

April to September



Key

dry	drought
wet	unusually high rainfall (not necessarily intense rainfall)
warm	abnormally warm periods
cool	abnormally cool periods

October to March

