

# Welcome to GCSE Geography



Where will it take us today?

# **TOPIC 1.1:**

## **GLOBAL HAZARDS**

**1.1a: How can weather be hazardous?**

**iii) The distribution and frequency of .....**

# Think back.....



Geolingo for UK climate type

Name of wind caused by air flowing downhill

N.A.D. an ocean current affecting the temps on the west coast of the UK



This 'a' affects temperatures, what is it and what's the correlation?

This is the 'type' of rainfall most common in TRFs

A wind that blows downhill in the Antarctic is called this



This WW is a name for a tropical storm in which country?

Name of tropical storms in the Indian Ocean

How long a TS lasts typically

**How many points can you rack up?**

# What do you know about drought?



# Why do we have Drought?

## Learning is successful when I can:

- describe what drought is.
- describe and suggest reasons for the global distribution of [areas of risk of]drought.
- explain the physical & human conditions that result in drought.
- Comment on the frequency of drought over time

Impressive  
Vocabulary  
Mortalities  
Abnormally  
decadal

### Keywords

drought  
El Niño  
Irrigation  
Over-grazing  
Transpiration  
ITCZ

### Geography Skills:

Scale  
  
Conceptual  
understanding

### Literacy Skills:

Capital Letters  
Spelling  
Describing  
distributions

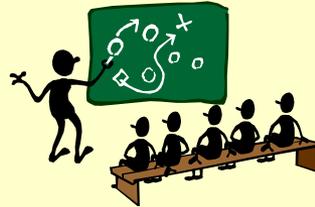
### Employability Skills:

Independent thinking  
Time management



**PRESENT NEW INFORMATION**

**LOOK, LISTEN, LEARN**



# What is a drought?

## Australia



UK

**A drought occurs when a region experiences below average precipitation.**

It is a period of time with abnormally dry weather leading to a shortage of water, which can have a negative effect on vegetation, animals and people over a large area.

## Ethiopia



# What causes a drought?

## Over To You

1. Read through the statements on your sheet and use two colours to categorise them into **physical** and **human** causes of drought.
2. Select 3 causes and explain **how** they can lead to a higher risk of drought.

*Remember physical causes are natural whereas human causes are man-made.*

*Use connectives to ensure you are developing your points.*

- *This means...*
- *This is because...*



# What causes a drought?

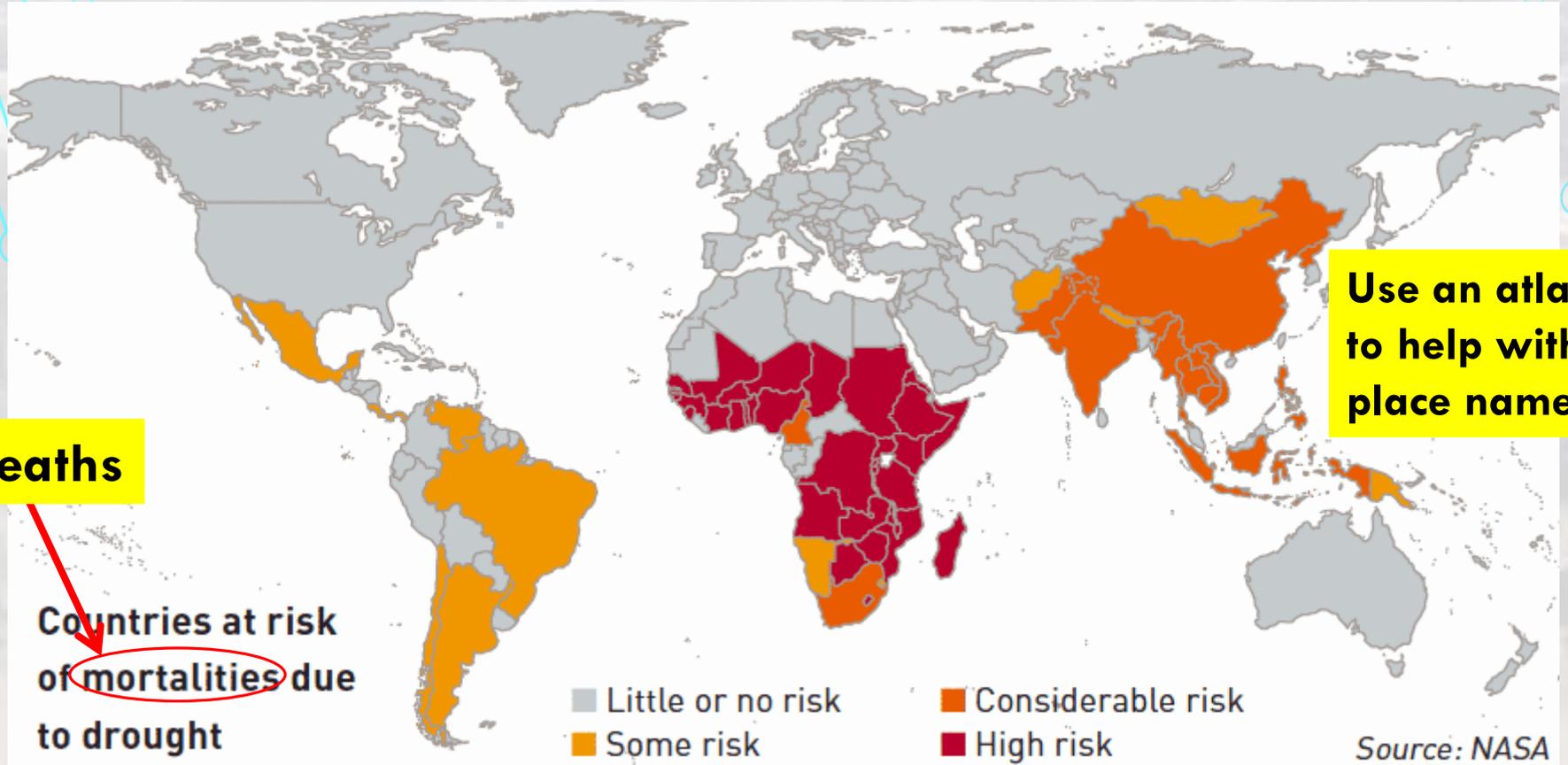
<p>Most drought occur when the regular weather patterns have been disturbed. There might be an above average presence of dry, high-pressure systems.</p>	<p>Excessive irrigation (water used in agriculture).</p>	<p>El Niño brings descending air and high pressure over Indonesia and Australia, leading to drought.</p>
<p>Over farming and intensive farming.</p>	<p>Soil erosion – impacts the ability of the soil to capture and store water.</p>	<p>The building of dams.</p>
<p>Deforestation – reduced transpiration; reduces the soil's ability to hold water and it dries out.</p>	<p>As global temperatures increase, more water is needed to grow crops and more water is lost through evaporation.</p>	<p>Over-grazing exposes soil to wind erosion.</p>

# What causes a drought? [answers]

<p>Most droughts occur when regular weather patterns have been disturbed. There might be an above average presence of high-pressure systems.</p>	<p>Excessive irrigation (water used in agriculture).</p>	<p>El Niño brings descending air and high pressure eg over Indonesia and Australia, leading to drought.</p>
<p>Over farming and intensive farming.</p>	<p>Soil erosion – impacts the ability of the soil to capture and store water.</p>	<p>The building of dams.</p>
<p>Deforestation – reduced transpiration; reduces the soil's ability to hold water and it dries out.</p>	<p>As global temperatures increase, more water is needed to grow crops and more water is lost through evaporation.</p>	<p>Over-grazing exposes soil to wind erosion.</p>



# Where in the world do droughts occur?



## Over To You

1. Name four countries with high risk of death due to drought. *Level 2*
2. Describe the **distribution** of the risk of death by drought. *Level 5*
3. Why do some places have greater risk of death by drought than others?  
Give place name examples in your answer. *Level 8*

Describe the **distribution** of risk of death by drought.

Level 5

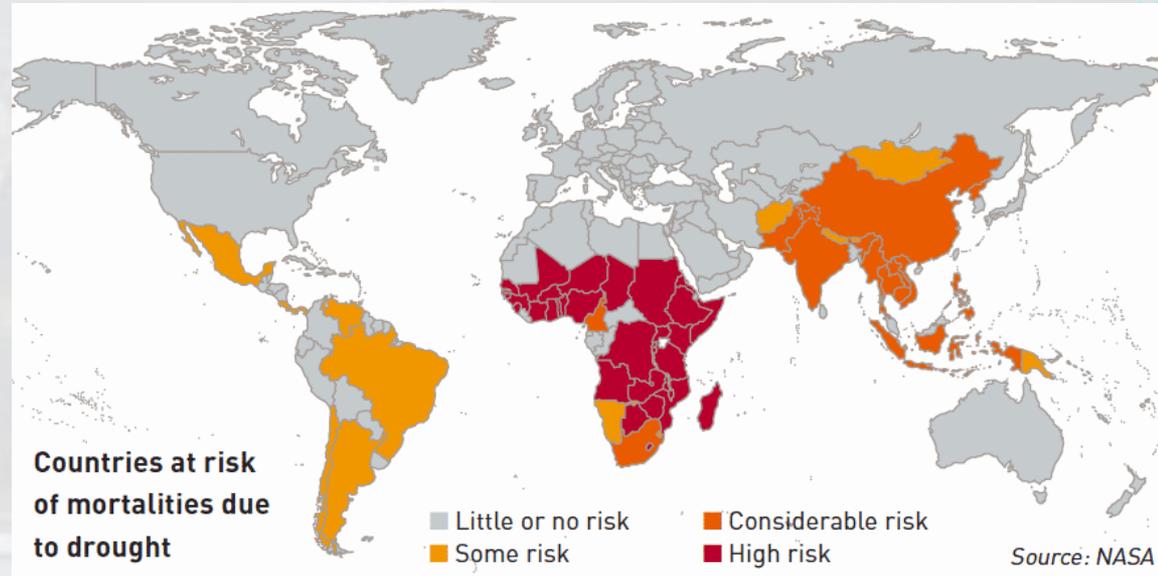


Figure one shows that overall it is countries in South America, Africa and South Asia which are most at risk of death from drought.

The countries with the highest risk are located in Africa, including those countries within the Sahel Region. Countries with a considerable risk include China, India and much of Indonesia. There is some risk in the Americas eg Brazil and Mexico.

**BONUS:** Quote latitudes if the map displays them eg between ?°N and ?°S

# Drought-changing frequency?

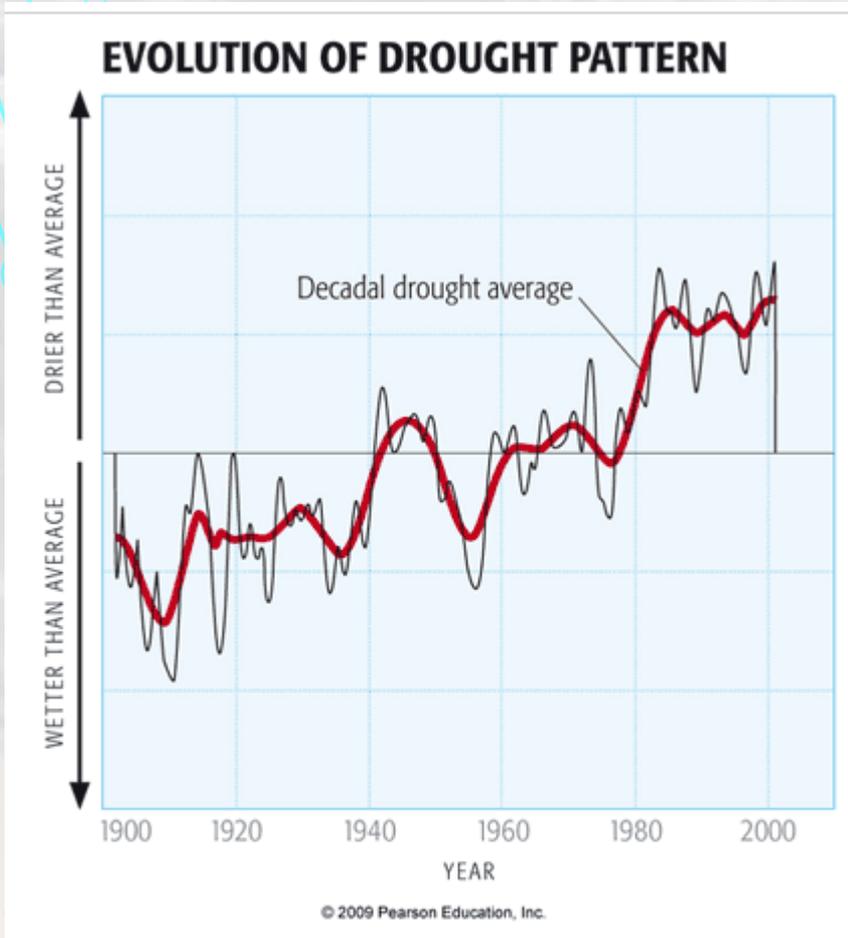


Figure 2.9: Evolution of Drought Pattern.

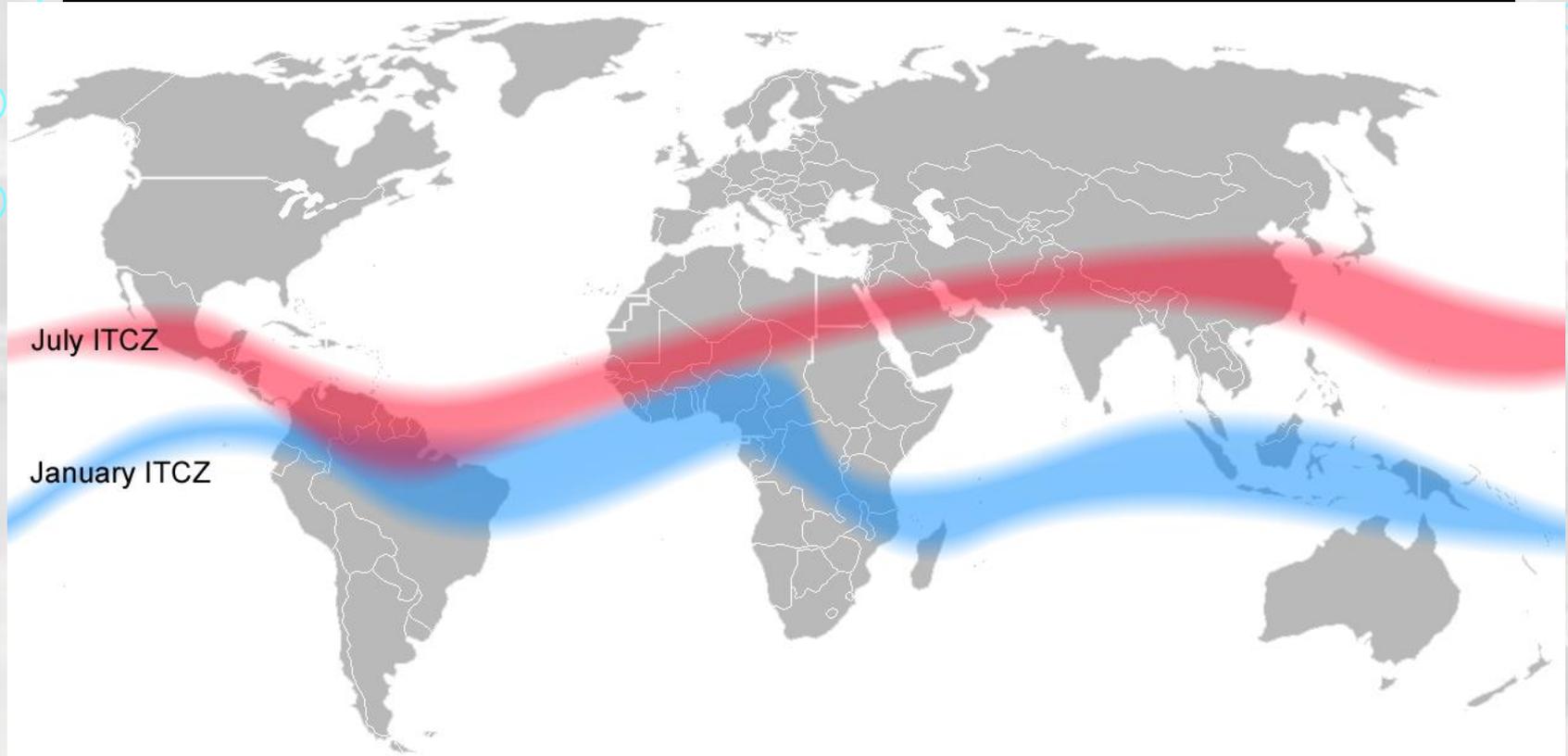
Credit: Pearson, 2009

More frequent in general since 1940 due to climate change or just following the previous trend?

What's your view?

Based on this data, I believe that drought ..... I think this because the data for ..... suggests .....

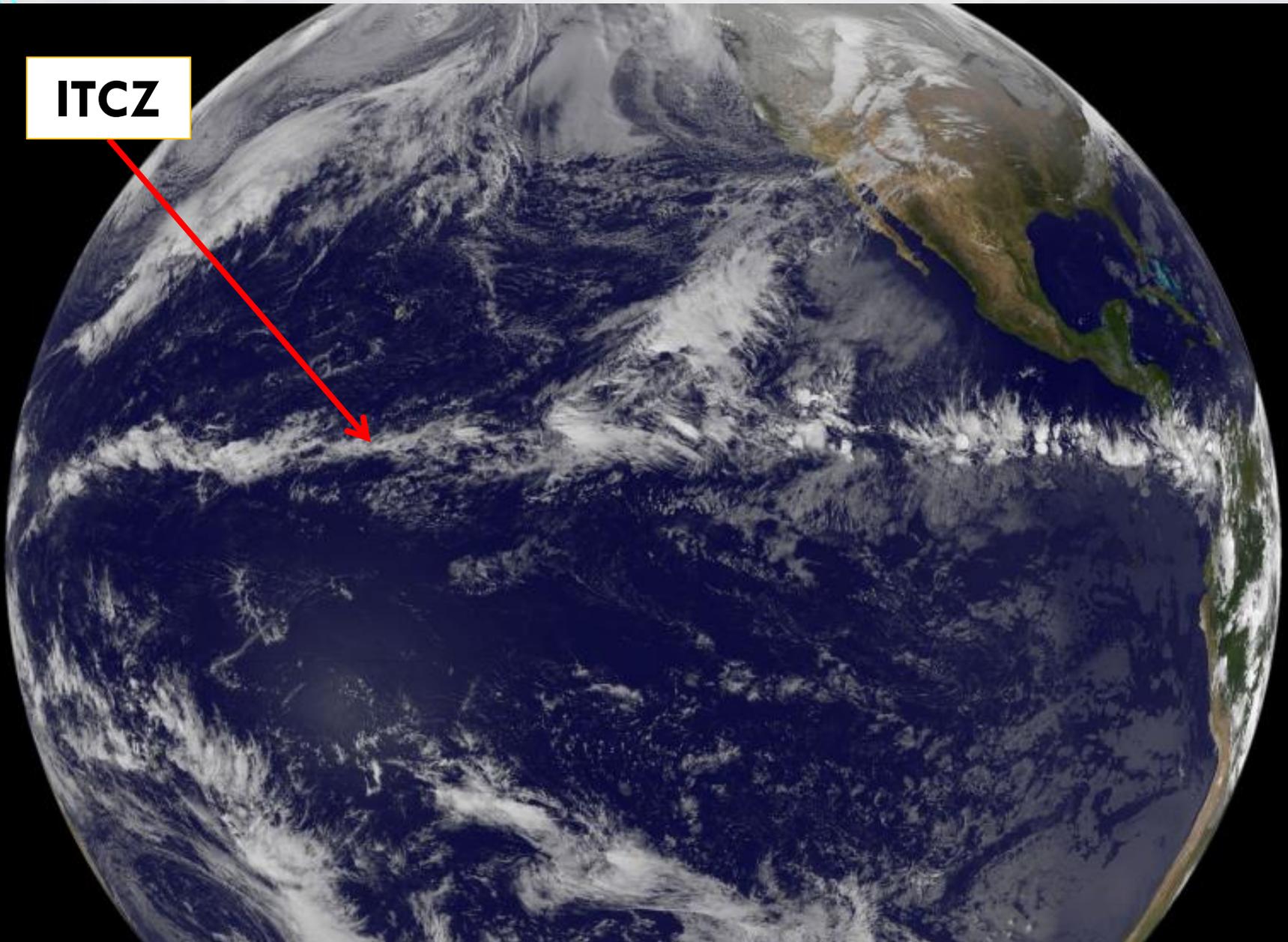
# What is the intertropical convergence zone (ITCZ)?



The ITCZ is a low-pressure belt which encircles the globe around the Equator. It is where the trade winds from the northeast and southeast meet.

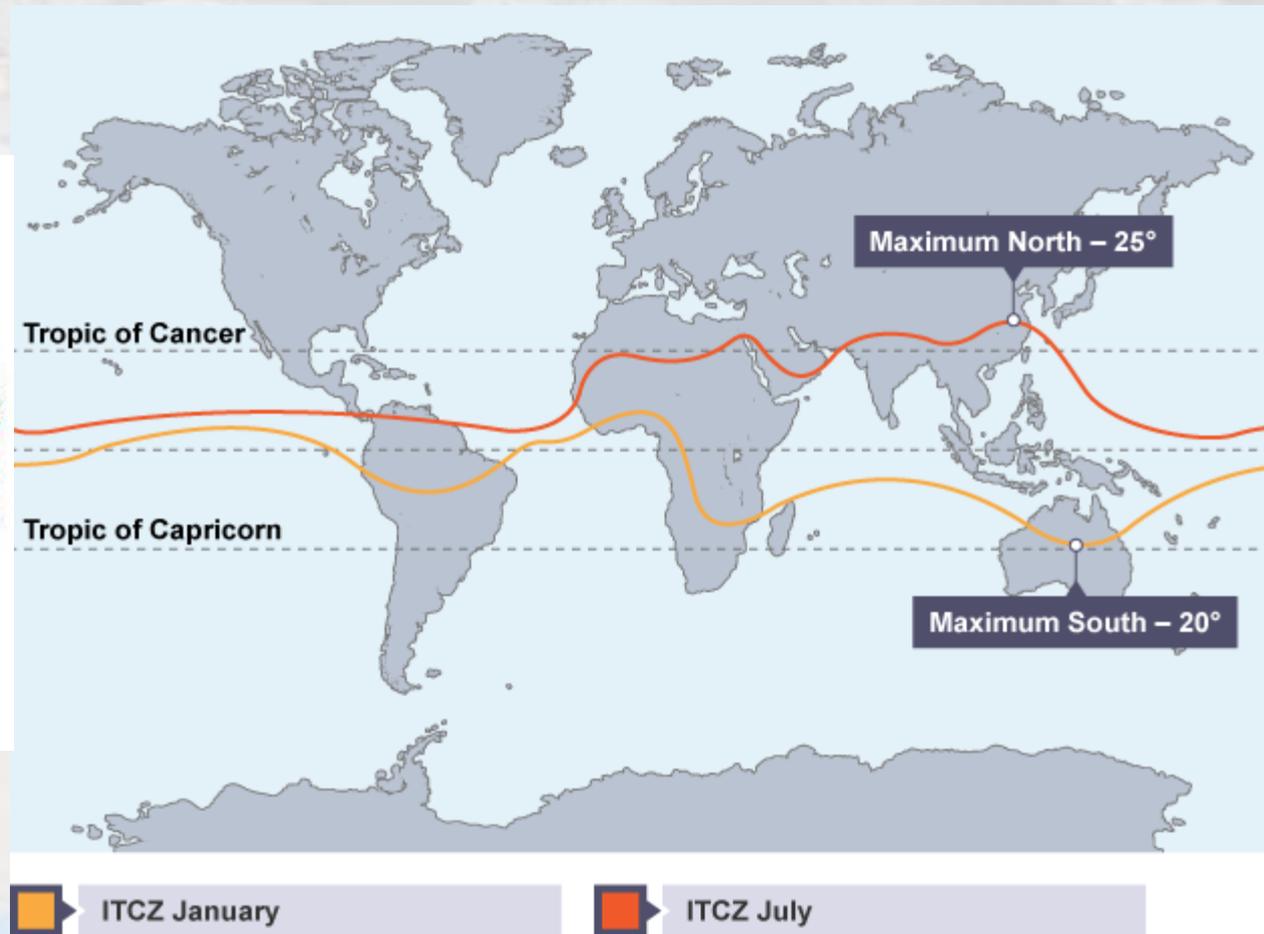
Winds and pressure shift annually from north to south. The point where the two trade winds meet at the ITCZ results in heavy precipitation and thunderstorms as hot, dry air and warm, moist air combines. Consequently, parts of the African continent are in a cycle of wet and dry seasons.

**ITCZ**



# How does the ITCZ lead to drought?

In some years, the ITCZ might not move as far northwards or southwards to reach some of the driest areas, and so not relieve them of the dry conditions they have experienced for half of the year. Local people in those regions may therefore be faced with a period of drought.



# WHAT WOULD AN EXAM QUESTION LOOK LIKE?



Explain how the inter-tropical convergence zone affects the distribution of droughts. [4]

6  
mins

## Steps to Success

1. Box
2. Underline
3. Lingo to include .....
4. Write it! Remember to Glance back
5. Spell- check

\* Point Explain Evidence Evaluation Link

S H E E P

Place Specific Detail

# WHAT WOULD AN EXAM ANSWER LOOK LIKE?

6  
mins  
peer  
assess



Explain how the inter-tropical convergence zone affects the distribution of droughts. [4]

The ITCZ is a belt of low-pressure around the Equator. It is where the trade winds from the northeast and southeast meet. This results in heavy precipitation and thunderstorms as hot, dry air and warm, moist air combine [1]. In July the ITCZ usually shifts northwards [1], bringing rainfall to dry regions [1]. Sometimes the ITCZ doesn't move as far north or south as usual if there is a blocking high pressure. This can result in places suffering from an extended dry season or drought [1].



# Why do we have Drought?

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