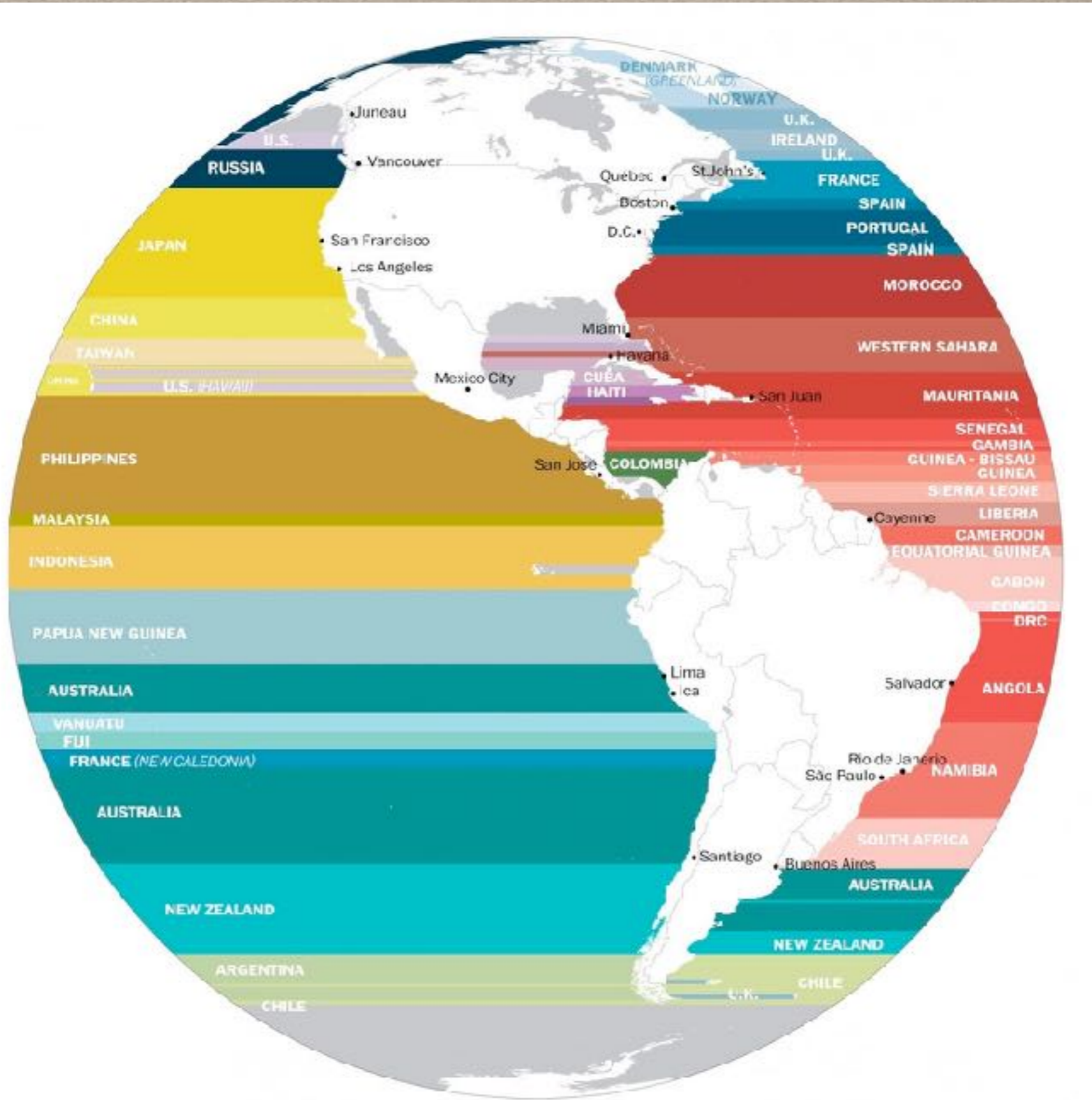


UNIT 5

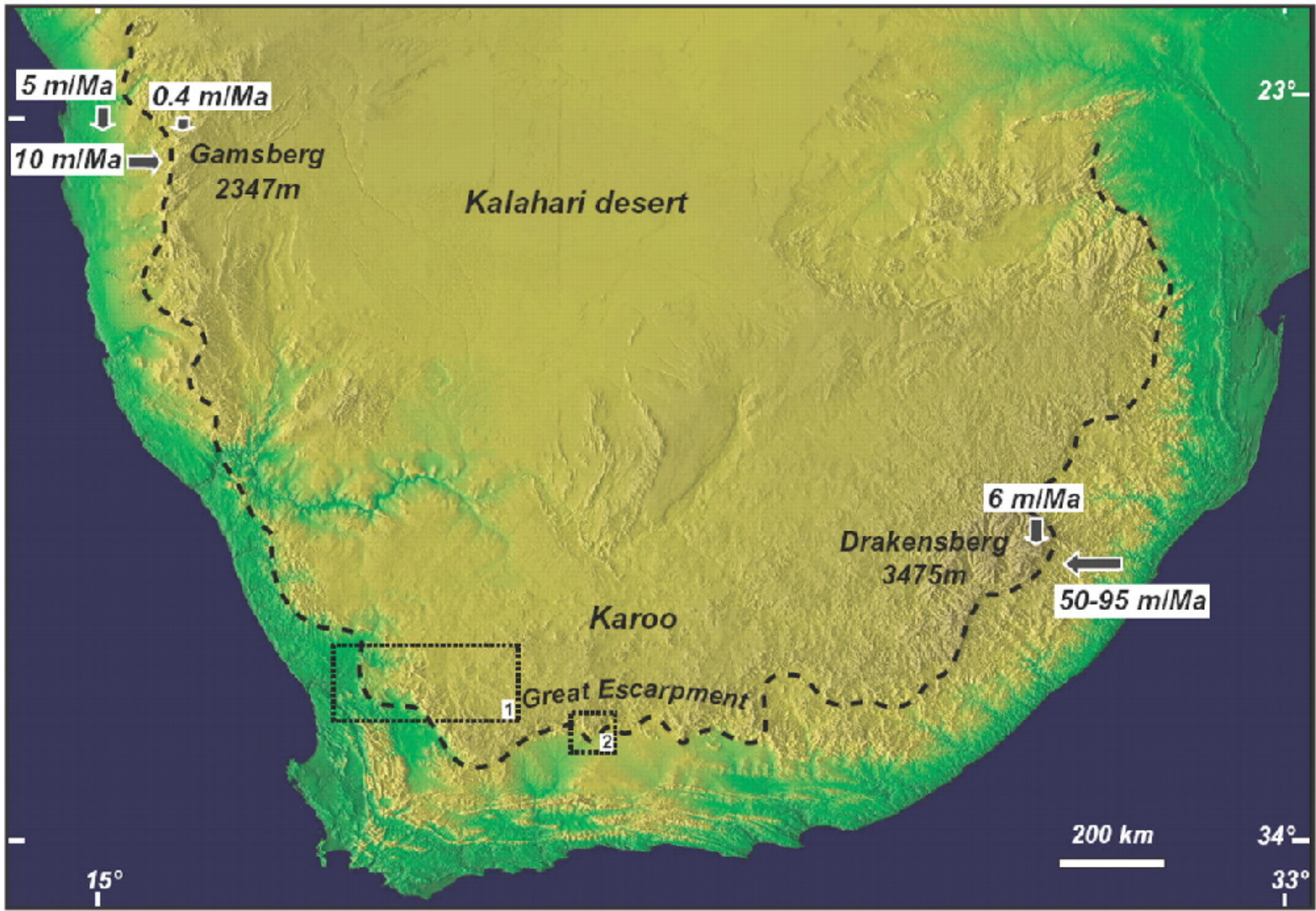
PHYSICAL GEOGRAPHY SG 1 - PART I

Africa is HUGE!

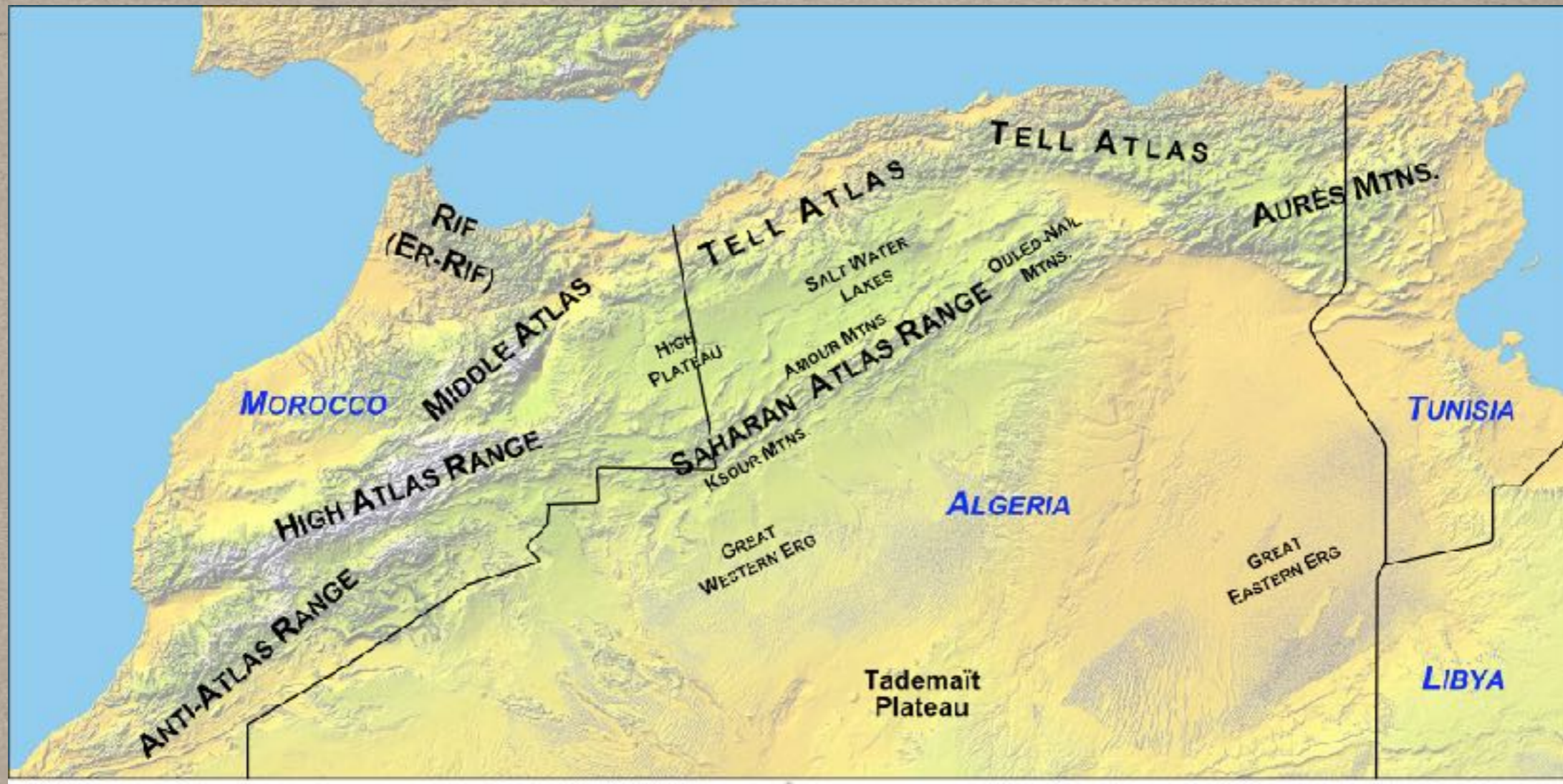


I. LANDFORMS

- **A. Plateaus - an area of relatively level high ground.**
 - **1. Africa's interior is dominated by series of plateaus and elevated basins such as the Congo River Basin**
 - **2. Much of southern Africa is rimmed by landform called *The Great Escarpment*;**
 - **3. In Ethiopia is the Ethiopian Plateau, which forms headwaters of several key rivers**



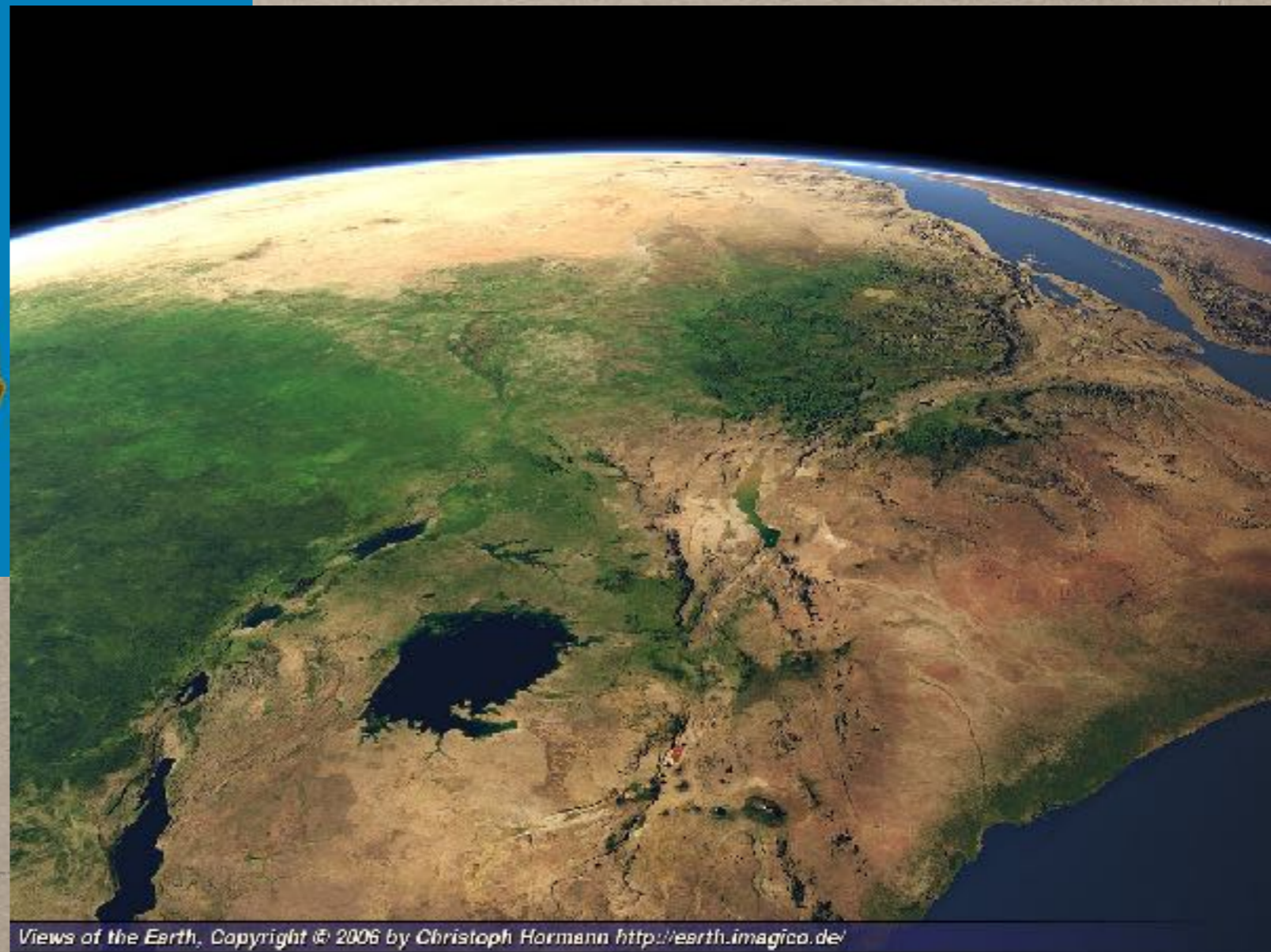
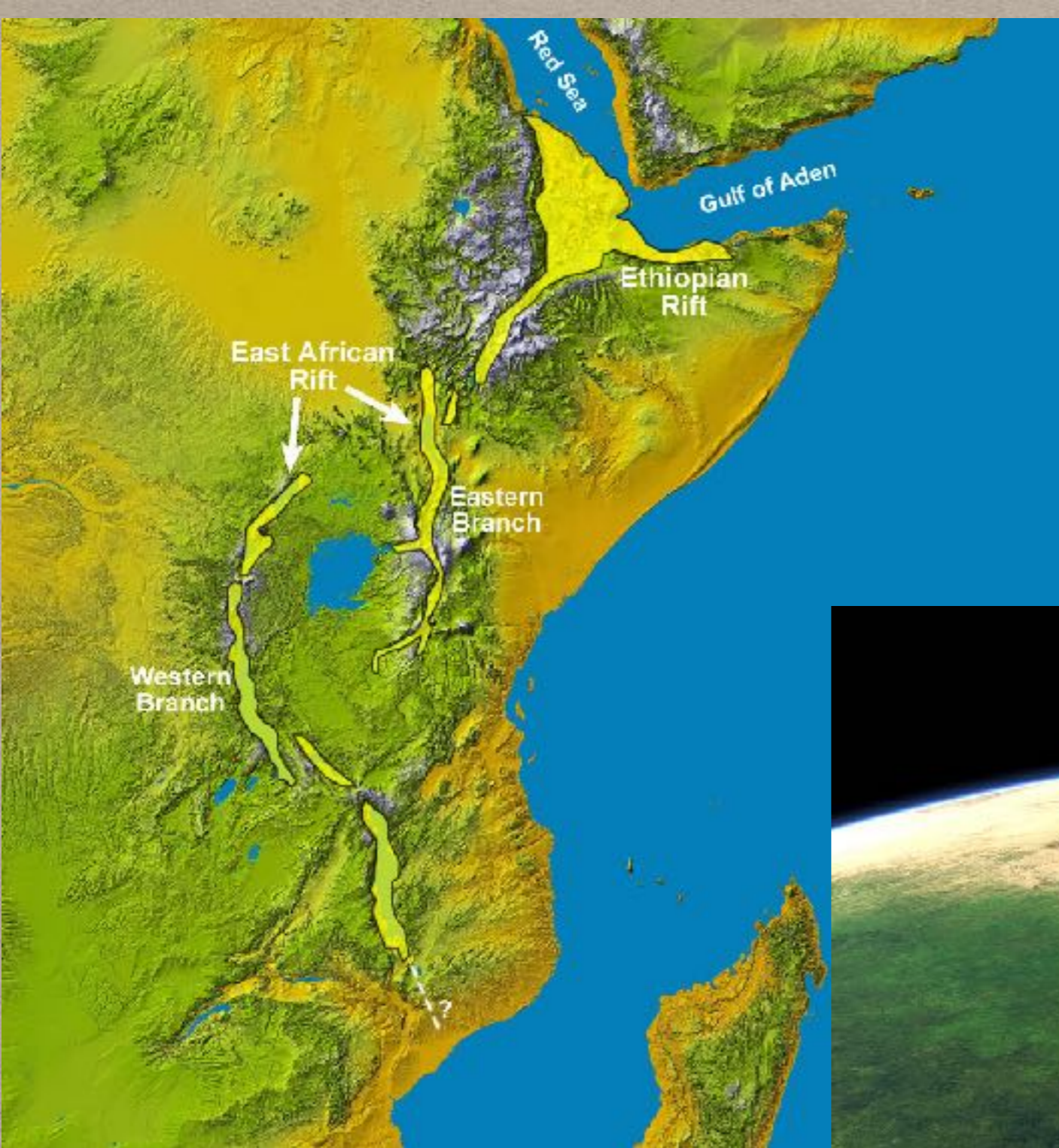
- **B. Mountains & Valleys**
 - **1. The Atlas Mountains (Morocco & Algeria) form a boundary between the milder climates along the Mediterranean Sea and the hot, arid Sahara Desert.**
 - **2. The Drakensburg Mountains form the highest point along the southern rim of Africa.**



The Drakensberg Mountains



- **3. The Ethiopian Highlands – is the most mountainous region in Africa.**
- **4. The African Rift Valley includes series of discontinuous volcanic mountains.**
 - **a. This valley is caused by a crack occurring in the African plate.**



Views of the Earth, Copyright © 2006 by Christoph Hormann <http://earth.imagico.de/>



- **5. Major Volcanos**

- **a. Mt. Kilimanjaro is a dormant volcano and the tallest mountain in Africa.**

- **b. Mt. Nyiragongo is considered one of the most dangerous active volcanoes in the world due to the number of people who live near its base.**





- **C. Deserts**

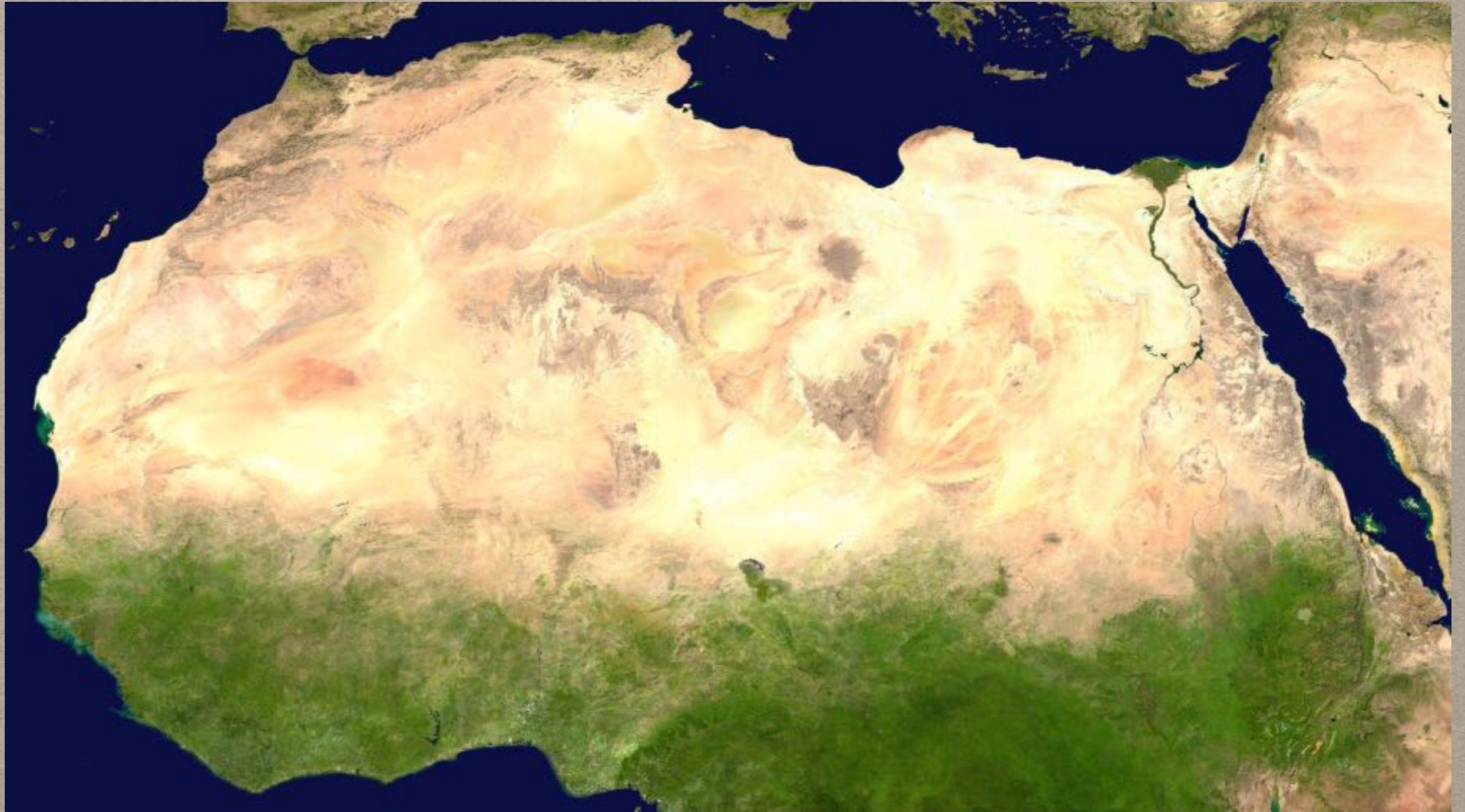
- **1. The Sahara, the world's largest desert**

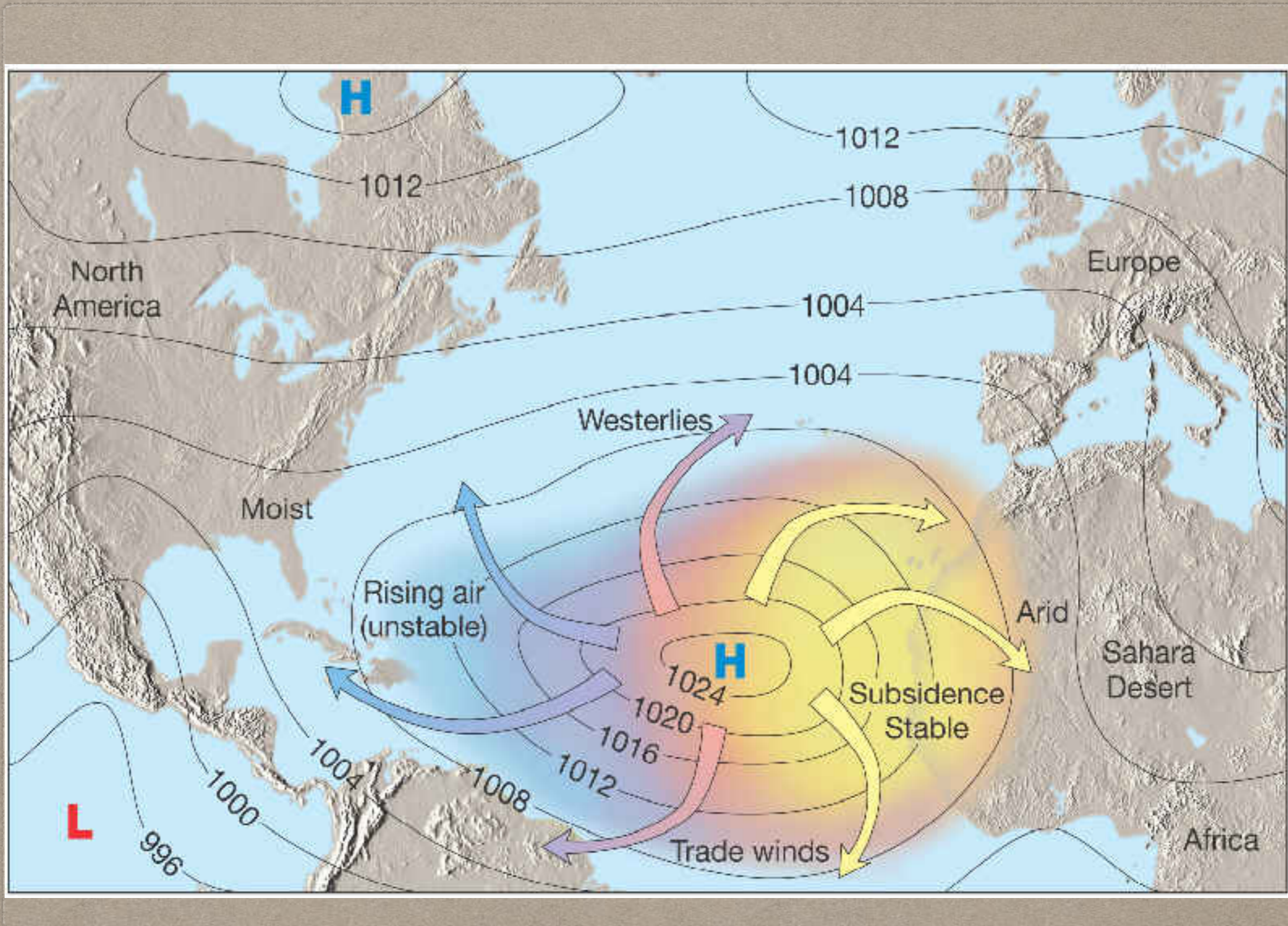
- **a. It crosses the continent from the Atlantic coast to the Red Sea coast**

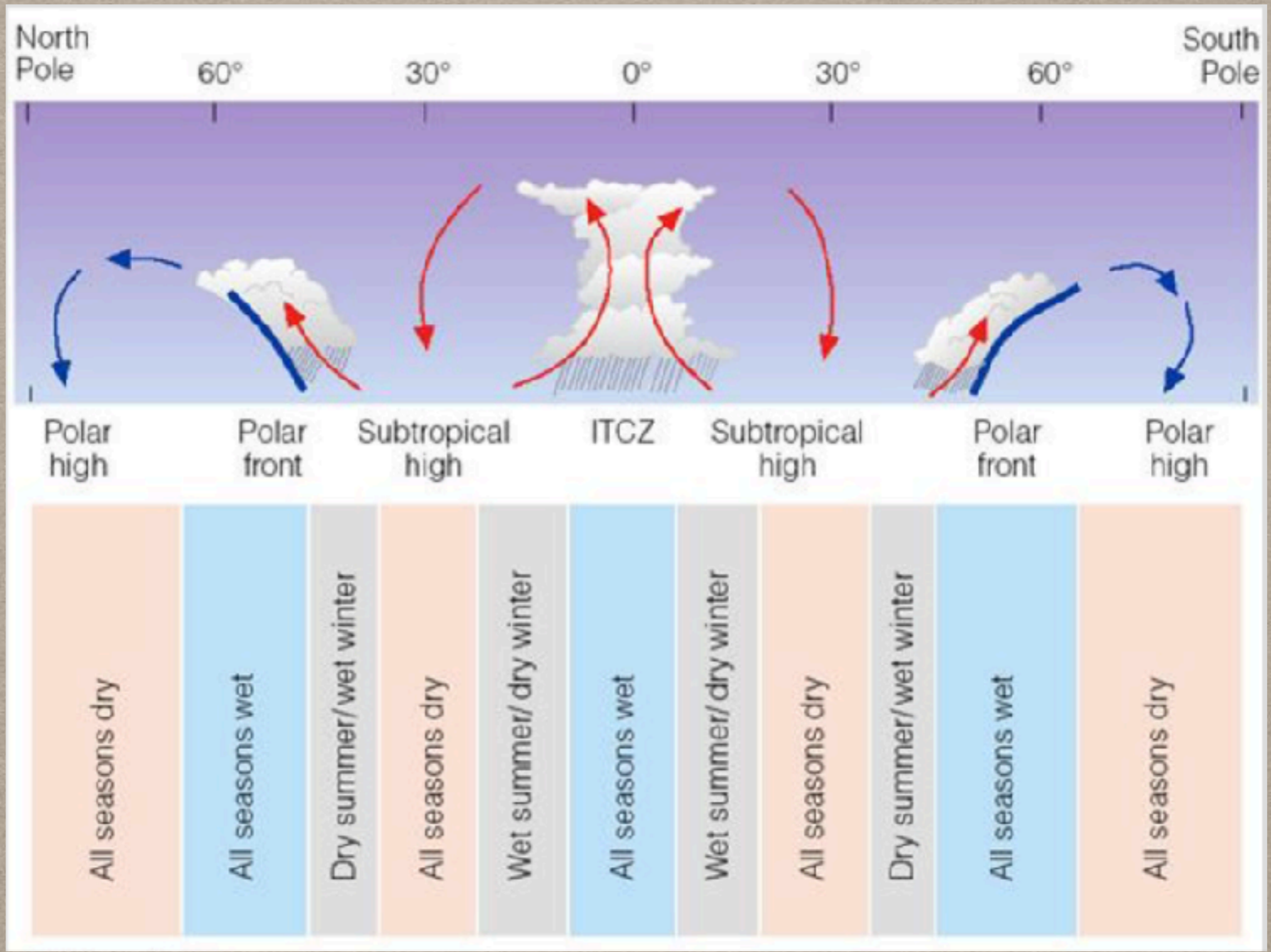
- **b. It is a subtropical desert mainly caused by a prevailing subtropical high pressure zone that is constantly overhead. Air is subsiding (falling) at this latitude.**

- **c. The highest one day temperature range was measured in Algeria.**







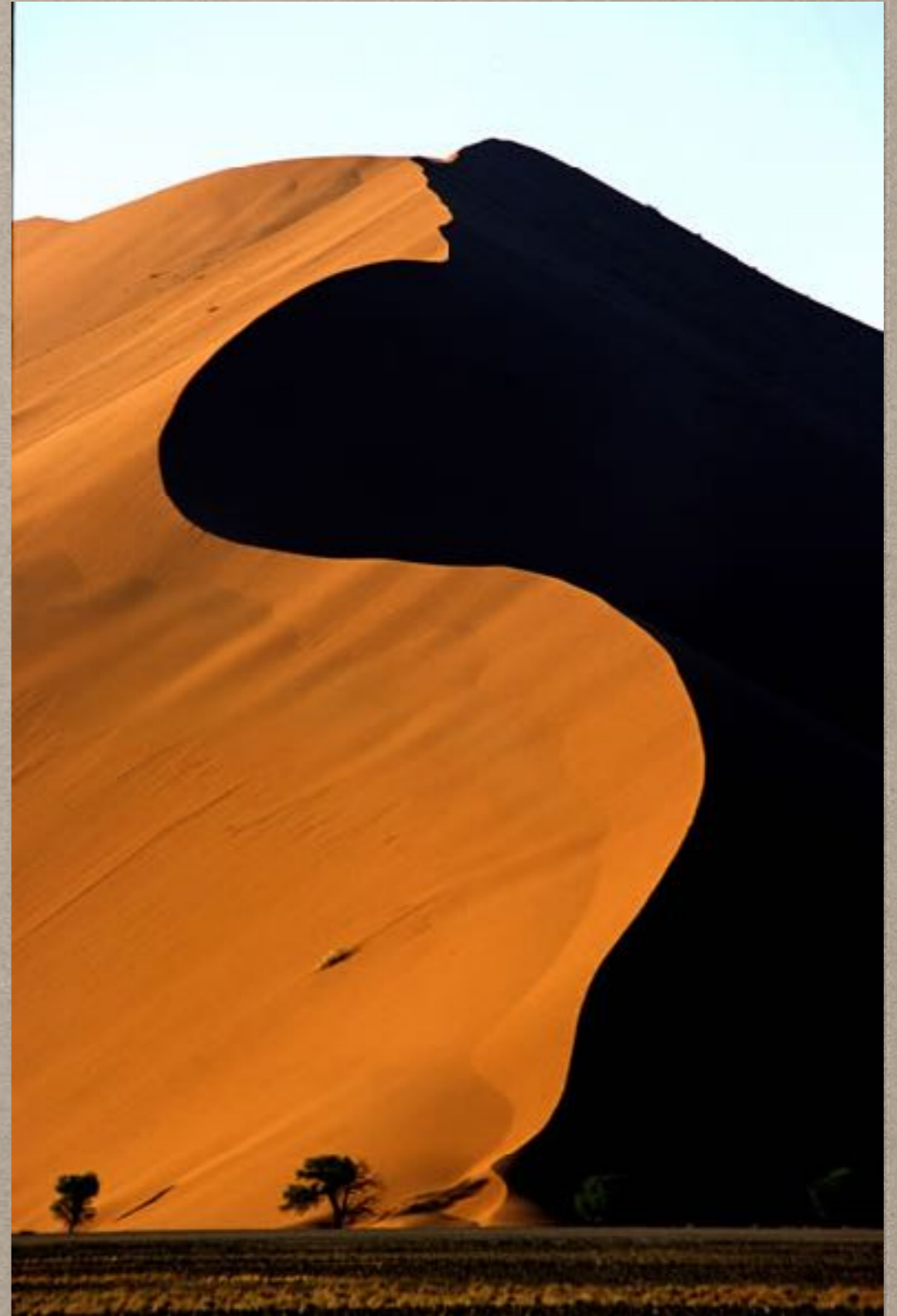
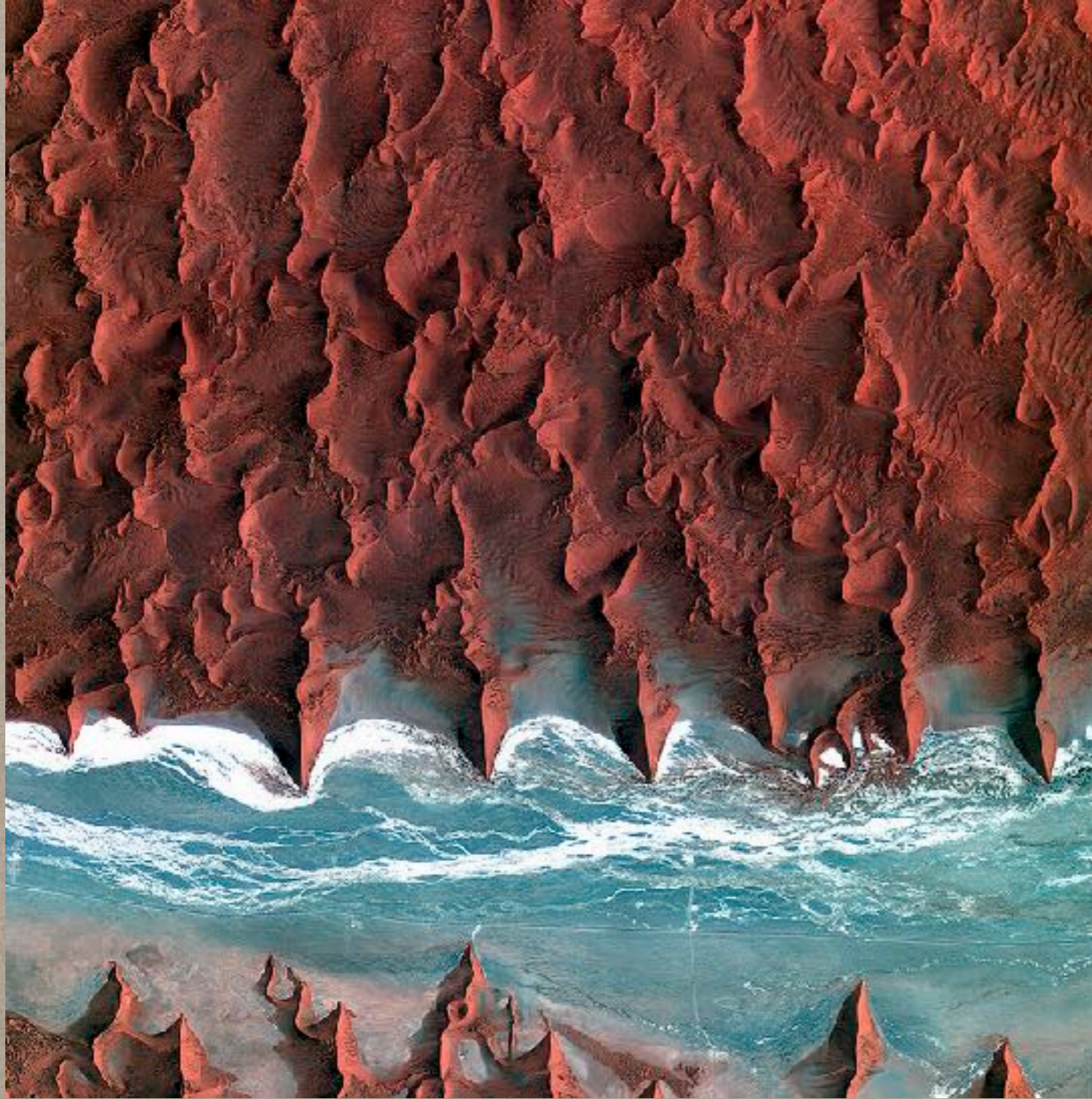


- **2. The Kalahari Desert is not a true desert because of a brief rainy season**
- **c. The Namib Desert is a dry zone found in southwestern Africa along the Atlantic Coast. It is affected by a strong cold water current, the Benguela Current, off the coast.**

Kalahari Desert



Namib Desert



II. BODIES OF WATER

- **A. Oceans & Seas**

- **1. Oceans - the Atlantic & Indian Oceans bound the west and east coasts of Africa.**
- **2. Seas - the Mediterranean & the Red Seas bound the north and northeast coasts of Africa**
 - **a. The Mediterranean and Red Seas are connected by the Suez Canal, a major construction venture by the occupying British Empire from 1859 - 1869.**
 - **(1) It is the 2nd most important canal in the world for trade. What is the first? the Panama Canal**



- **4. Other - Mozambique Channel & Gulf of Aden & oases**
 - **a. An oasis (pl. oases) is an area found in deserts where the water comes close to the surface. These small areas are important to trade across deserts like the Sahara.**



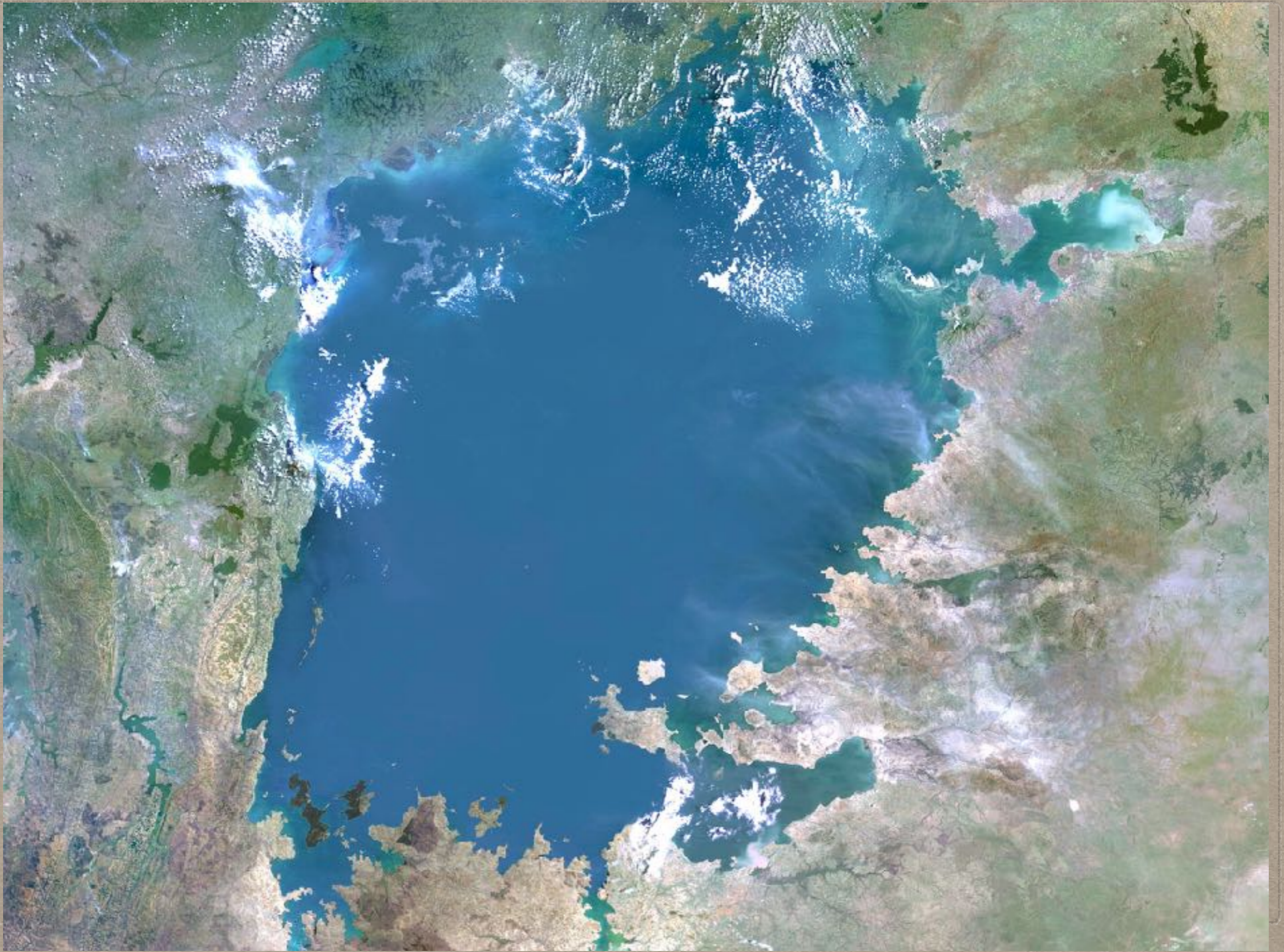


Photo source: www.hdwallpapers.im

- **B. Lakes & Rivers**

- **1. Lakes – Victoria, Chad, Tanganyika, Turkana, Nassar, & Malawi**

- **a. Lake Victoria is the largest lake in Africa and the source of the Nile River**



LAKE TURKANA NATIONAL PARKS

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- **2. Rivers – Many rivers are fed from meltwater at their sources in the mountains. Annual flooding in the spring is important for agriculture in the region. Some are fed from rain in the interior tropical regions.**

a. The Nile River provides water for drinking & agriculture for the 82 million people of Egypt. The Nile Delta & flood plain of Egypt is 3,053 people/square miles of arable (farmable) land.

(1) Almost all of Egypt's population lives along the Nile River.







b. The Congo (or Zaire) River is the largest watershed both in terms of drainage area & volume of river flow

(1) It is second only to the Amazon in terms of annual flow

(2) It is only partially navigable but remains a major corridor for travel within Republic of Congo and the Democratic Republic of the Congo





- **c. The Niger River is critical source of water for much of West Africa and the Sahel**
- **(1) at the end of the Niger River is the Niger Delta—a fertile region that is also home to Nigeria's oil industry which has caused a major ecological impact to the region**



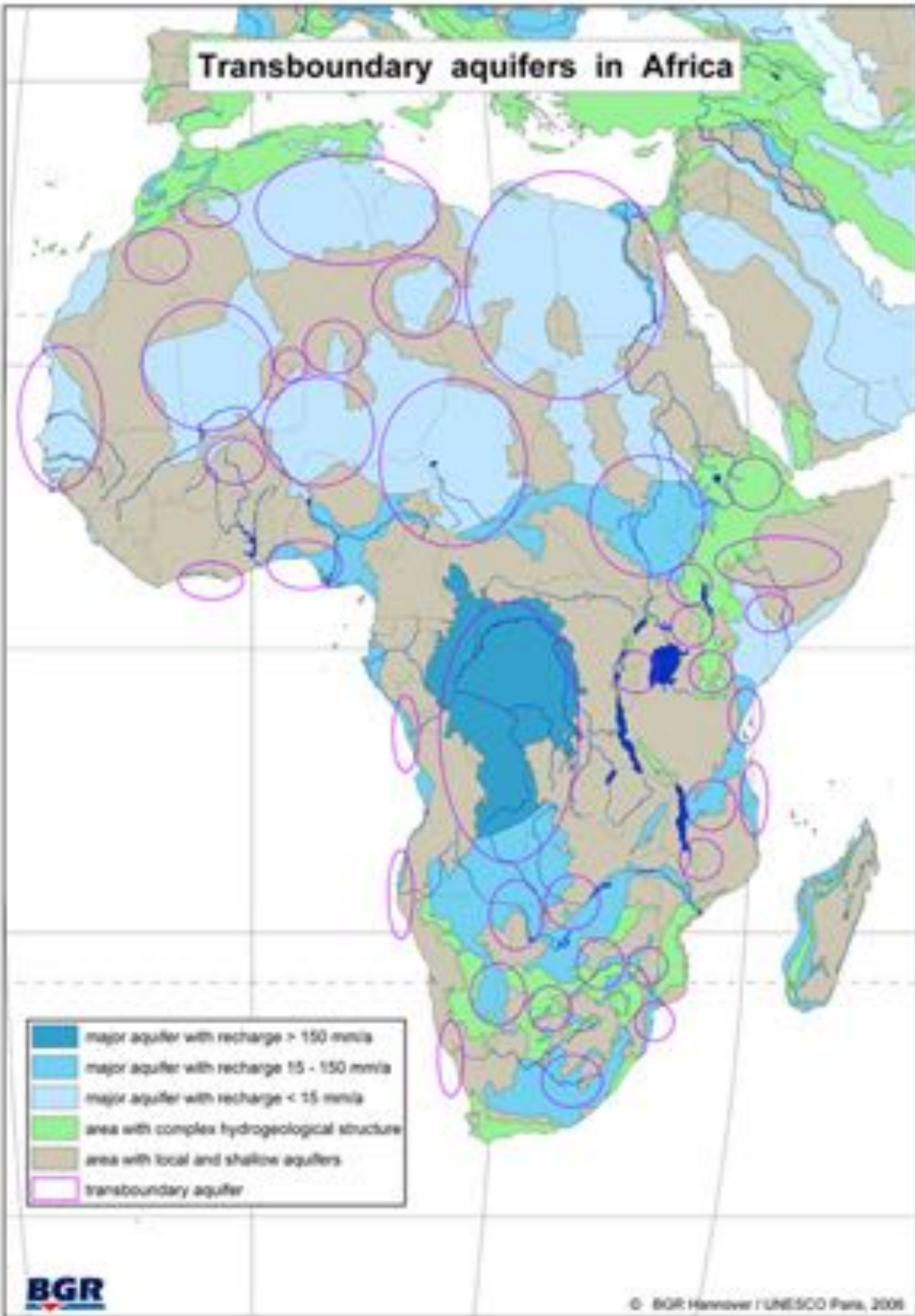


- **d. The Zambezi River, which contains Victoria Falls, is a major supplier of commercial energy (hydroelectricity) in the southern region of Africa**



- **C. Water resources are scarce in North Africa**
 - **1. Underground aquifers are the main source of water. Major issues:**
 - **a. Polluted agricultural chemical runoff (fertilizers & pesticides) contaminating the water.**
 - **b. Aquifers are replenished by rainfall, which is very small annually.**
 - **(1) Removal of groundwater by a growing population is occurring faster than it can be replenished.**
 - **c. The rock layers that hold the water are often contaminated by crude oil (petroleum)**
 - **d. Drilling wells is very expensive because the groundwater can be as far 6000 ft. below the surface.**

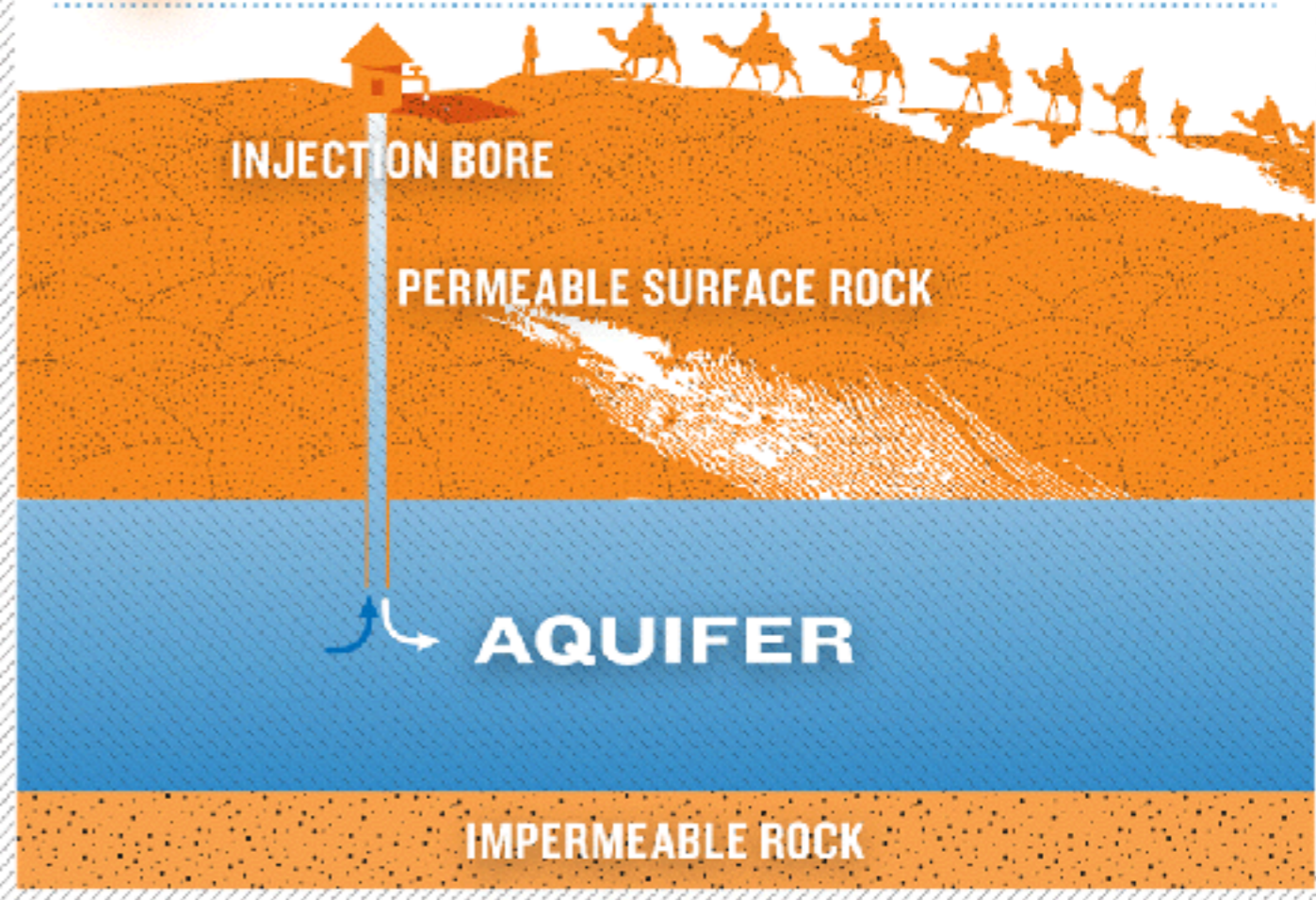
Transboundary aquifers in Africa



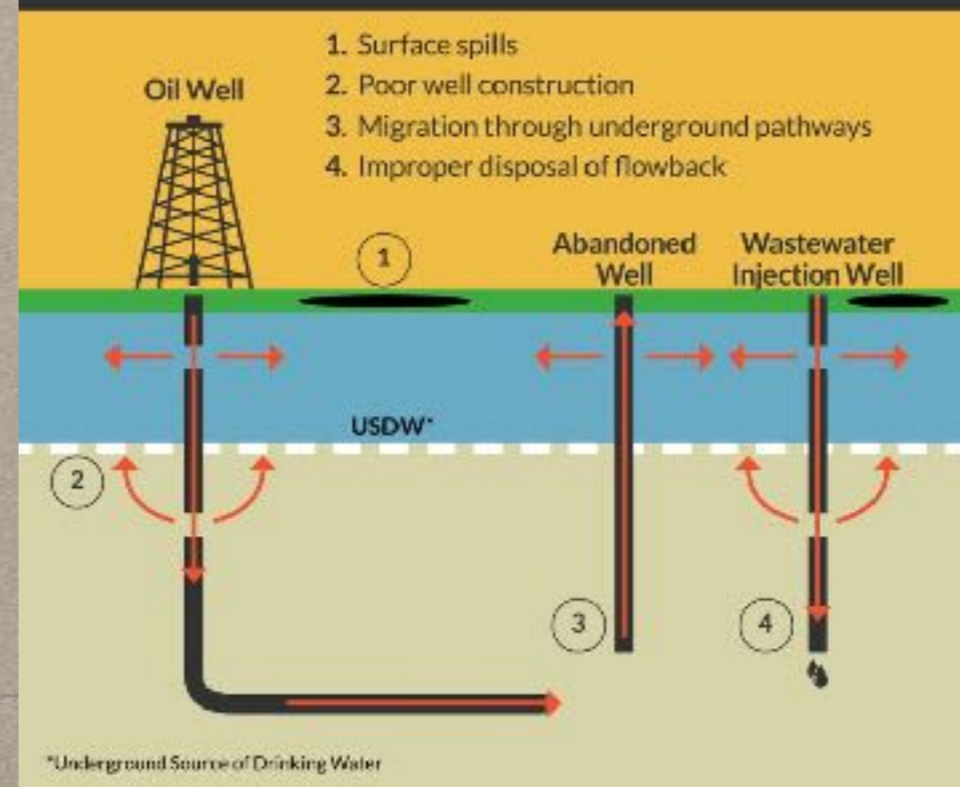
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HOW THE AQUIFER WORKS



POTENTIAL PATHWAYS FOR CONTAMINATION



- **2. Desalinization plants remove salt from water along the coasts.**