

# Europe

Physical Geography

# I. Landforms

- A. Europe
  - 1. The Alps (France, Switzerland, Italy, & Austria)
  - 2. The Sierra Nevada in Spain
  - 3. The Pyrenees btwn Spain & France
  - 4. The Apennines in Italy
  - 5. The Carpathian Mountains in Slovakia & Romania
  - 6. The Balkan Mountains in Bulgaria
  - 7. The Ural Mountains form the eastern most “boundary of Europe.
  - 8. Volcanic Mountains
    - a. Iceland – due to a divergent boundary where two plates are separating
    - b. Italy – Mt. Etna, Stromboli, Mt. Vesuvius and more...

- 9. Peninsulas – A large piece of land surrounded on three sides by water
  - 1. Scandinavian – Norway & Sweden
  - 2. Jutland – Denmark
  - 3. Iberian – Spain & Portugal
  - 4. Italy
  - 5. Balkan - Greece, Albania, & Macedonia

+ Mountain ranges of Europe.

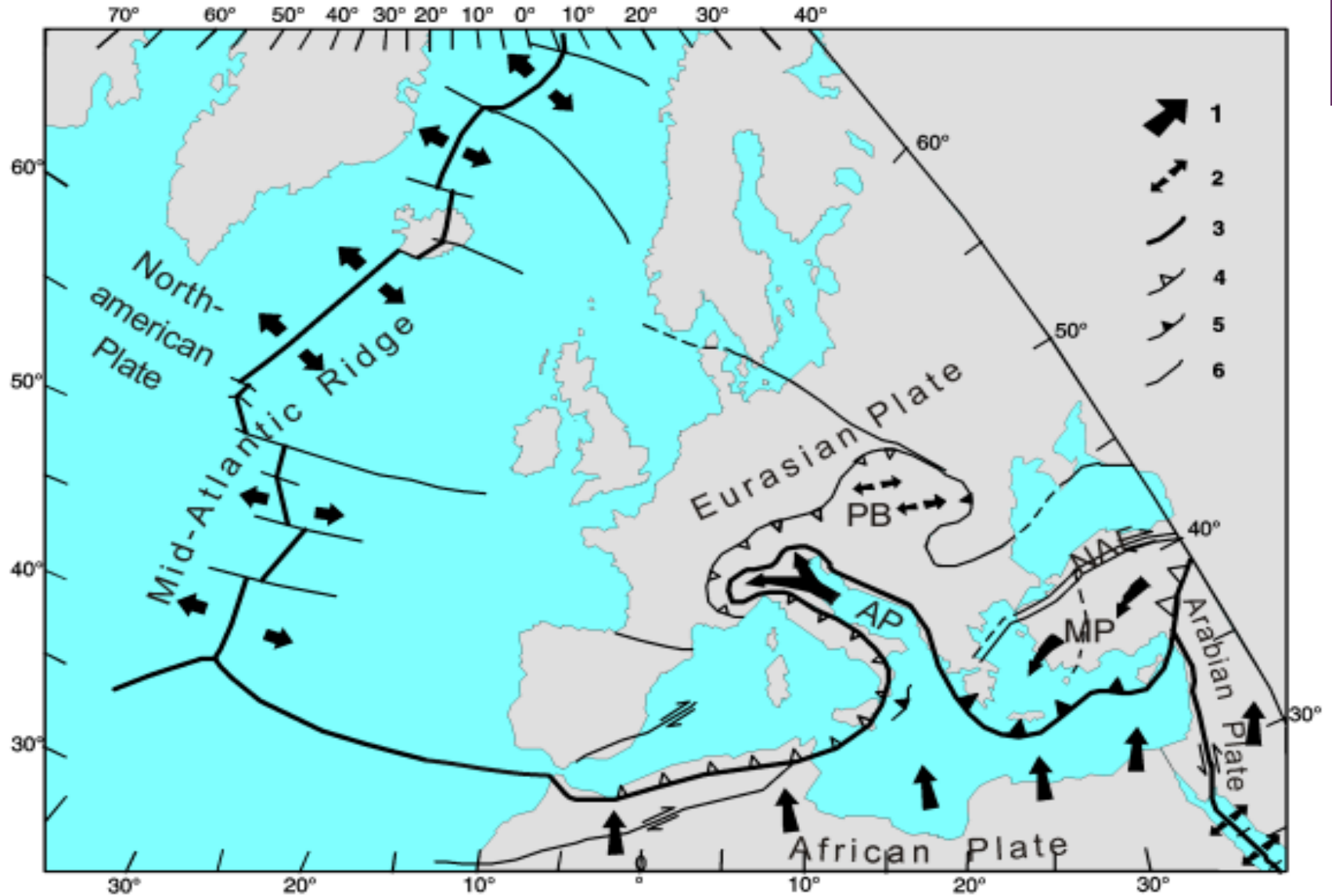




## Volcanoes of Italy



# +Tectonics of Europe

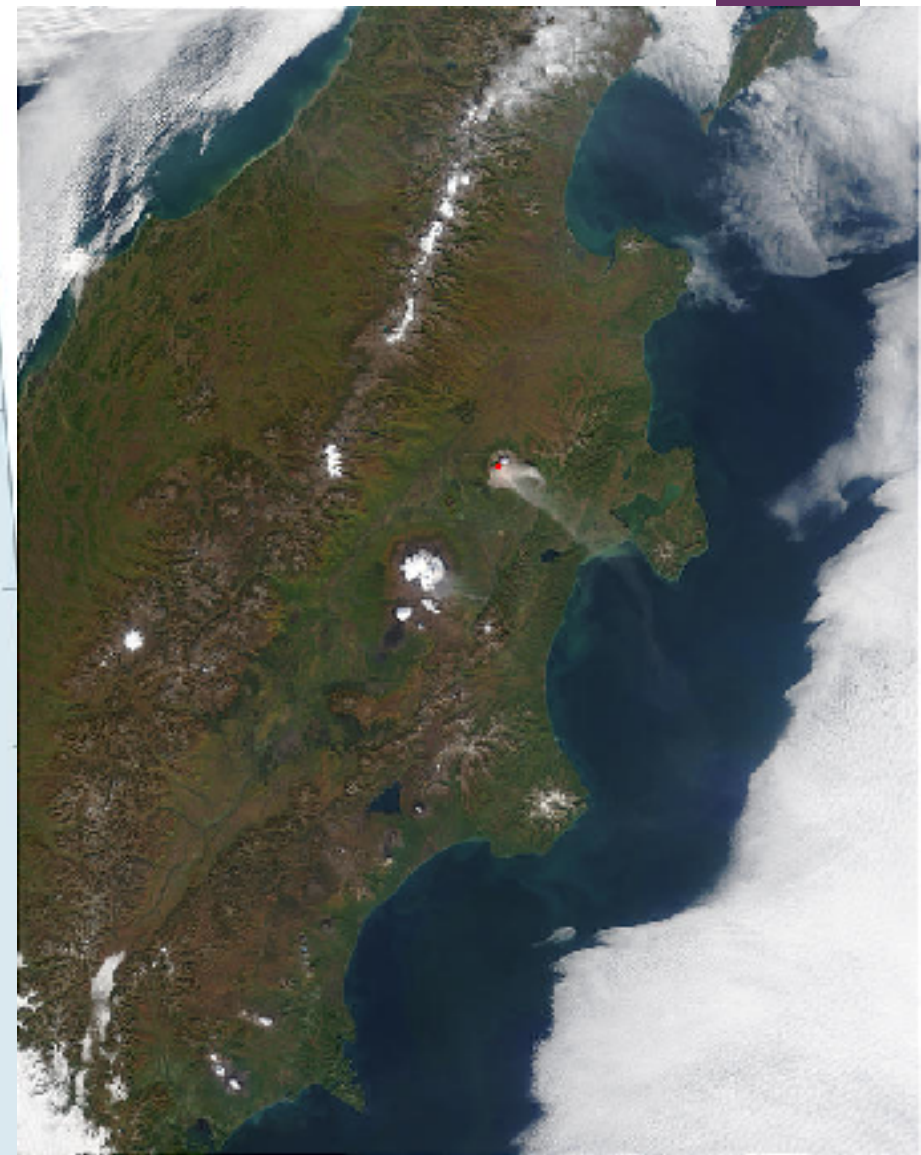
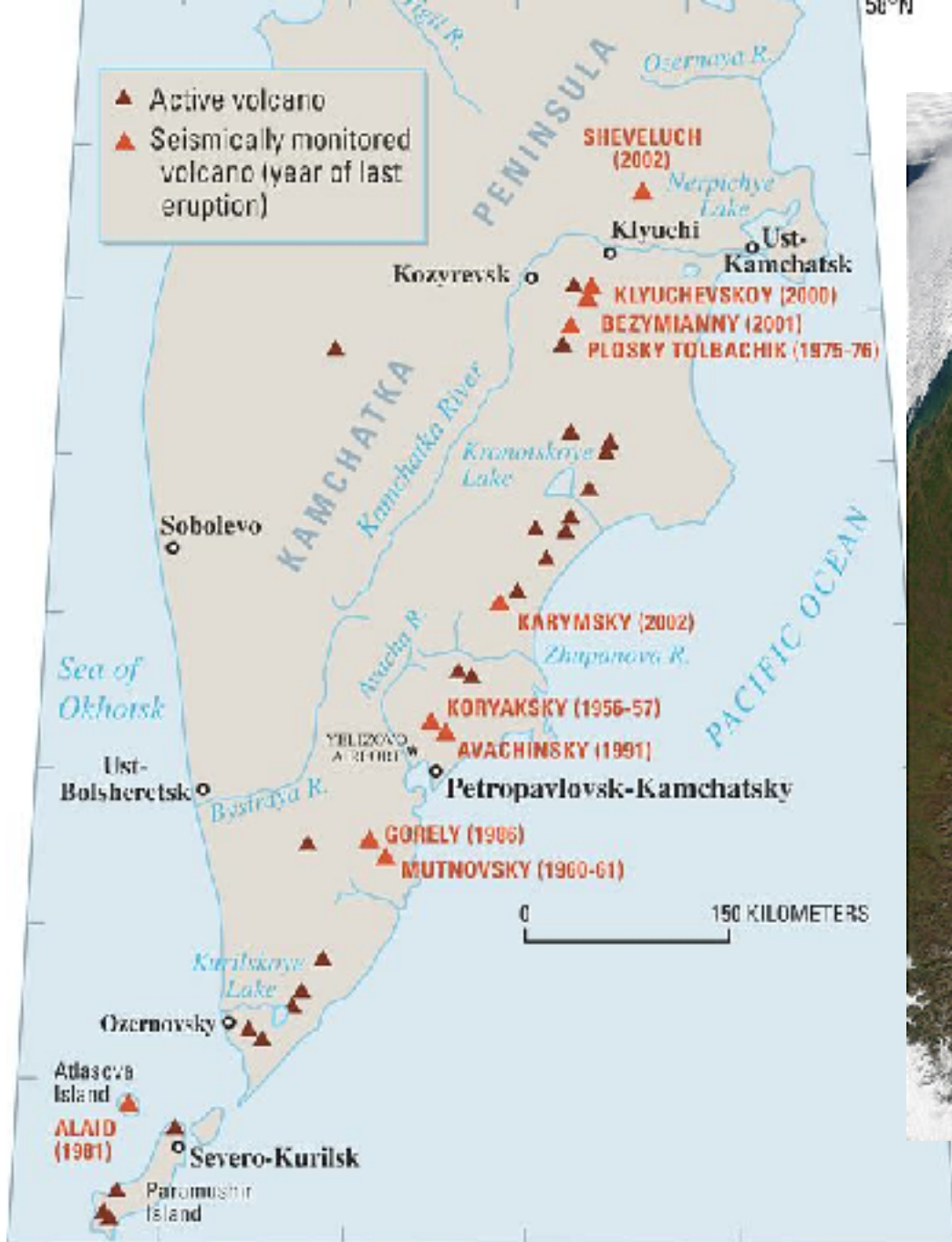


- B. Russia
  - 1. The Caucasus Mountains – between the Black & Caspian Seas and extend through the...
    - a. Highest point in Europe/Russia – Mt. Elbrus at 18,511 ft. – Caucasus Mtns.
  - 2. Elbruz Mountains of northern Iran to the ...
  - 3. Tien Shan & the Pamir mountains along the southern borders of the Central Asian countries.
  - 4. These ranges rise to over 24,000 ft., they are snowcapped and produce considerable meltwater for streams in dry areas.
  - 5. In the far east, are the volcanic peaks of the Kamchatka Peninsula.















- 6. The Plains & Plateaus of Russia
  - a. Northern European Plain – Poland into Belarus, Ukraine, & “European Russia” to the Ural Mountains (marks the line between Europe & Asia).
  - b . Western steppes to West Siberian Plains – northern shores of the Black Sea along the rivers leading to the Caspian & Aral Seas.
  - c. Central Siberian Plateau – hillier, mineral bearing rocks, vast flat to hilly area. Help facilitate invasions from eastern Asia and central Europe during the Middle Ages, and later Imperial Russian expansion eastward







# II. Bodies of Water

- A. Europe
- 1. Estuaries & Fjords
  - a. What is an estuary? Flooded mouth of a river (not the same as a delta)
  - b. What is a fjord? Glacial valley flooded by seawater.
- 2. Rivers, Lakes, & Seas - these are all significant to the movement of people and goods now and in the past
  - a. The Rhine (heavily modified for barges – canalized – straightened out; highly polluted) & Elbe (Germany)
  - b. The Danube (Germany, Austria, the Balkans) – world’s busiest waterway
  - c. Rhône, Seine, & Loire (France); Thames (England); Po (Italy)

Did you know that when parrots play dead it's because they're "pining for the fjords?" 😊



# Major rivers of Europe



- B. Russia

- 1. Along the low lying areas, some of the longest rivers in the world:

- a. Don – flows into the Black Sea

- b. Volga – flows into the Caspian Sea

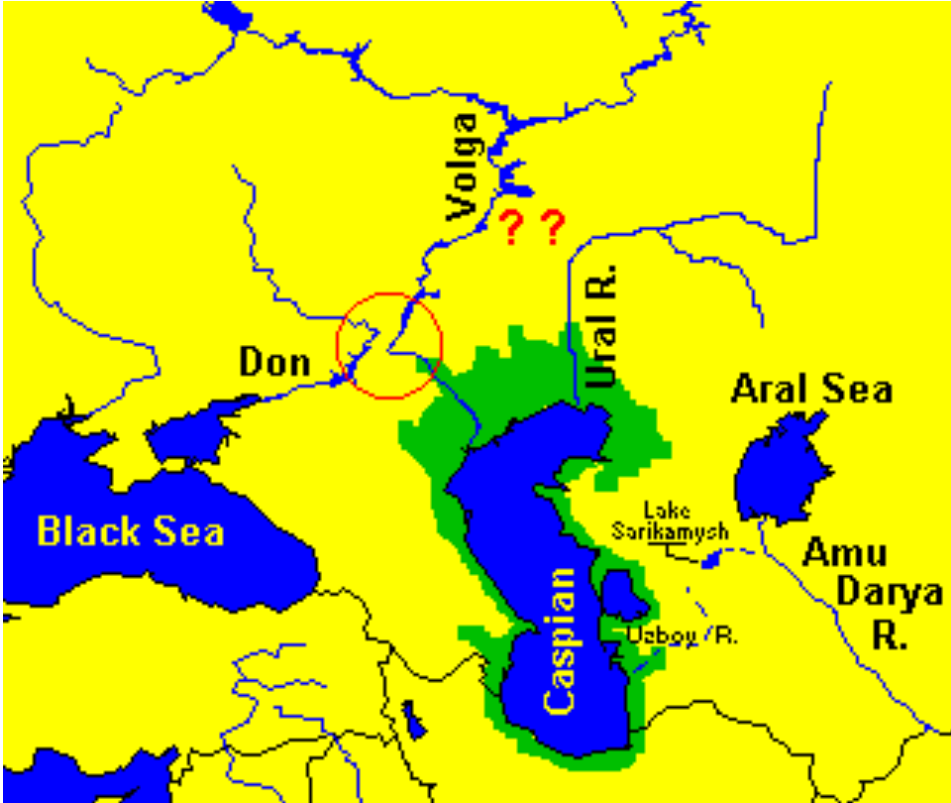
- (1) A canal, the Volga-Don, connects the Volga to the Black Sea.

- c. Amu Darya & Syr Darya flow into the Aral Sea.

- d. The Ob, Yenisey, & Lena flow north into the Arctic Ocean and are frequently flooded do to meltwater causing cast wetlands around them.

- <https://www.youtube.com/watch?v=CPep-KUMAYA>









Barents Sea

Arctic Ocean

East Siberian Sea

Kara Sea

Laptev Sea

Volga

Yana

Indigirka

Kolyma

**RUSSIA**

Irtysh

Ob

Yenisei

Lena

Caspian Sea

Sea of Okhotsk

Lake Aral

**KAZAKHSTAN**

Lake Balkhash

Lake Baikal

Amur

**MONGOLIA**

**CHINA**

[www.freeworldmaps.net](http://www.freeworldmaps.net)

- e. Lake Baikal – continental rift lake
  - (1) Maximum depth – 5,387 ft.; deepest lake in the world
  - (2) Greatest volume of any freshwater lake in the world – contains 20% of unfrozen surface fresh water
  - (3) Clearest lake and oldest lake at 25 million years

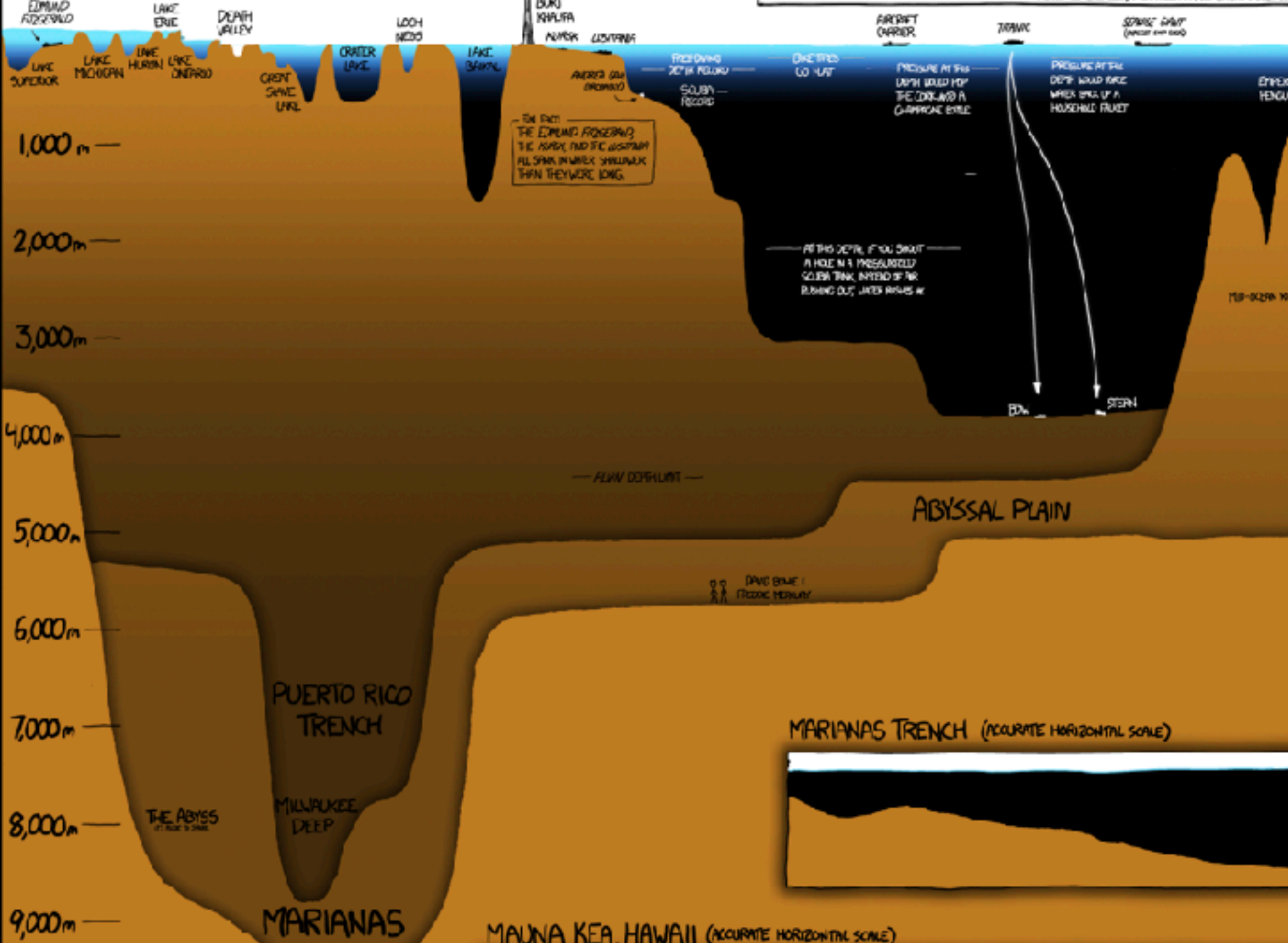






# LAKES AND OCEANS

VERTICAL DISTANCE IS TO SCALE; HORIZONTAL DISTANCE IS NOT





- f. The Caspian Sea is the largest lake in the world. Like the Aral & Black Sea it is salty.
  - (1) It drains the world's largest area of dry land below sea level.
  - (2) It has both petroleum & natural gas fields that are important to local economies.
- g. The Aral Sea was the world's fourth largest body of inland water. It is salty.
  - (1) It has shrank considerably after two rivers that fed it, the Amu Darya & the Syr Darya were diverted for agricultural irrigation by the Soviet Union (USSR).
  - (2) The degradation of the Aral Sea is considered one of the top ecological disasters in human history.



# Water resources of the Aral Sea basin













- h. The Black Sea is a marginal salty sea. It is connected to the Mediterranean Sea by 2 straits, the Bosphorus & the Dardenelles.
  - (1) It was a busy waterway on the crossroads of the ancient world and still is strategically important to many countries.
  - (2) The Crimean peninsula juts into the northern part of the sea and is a piece of land that has been fought over for centuries.



