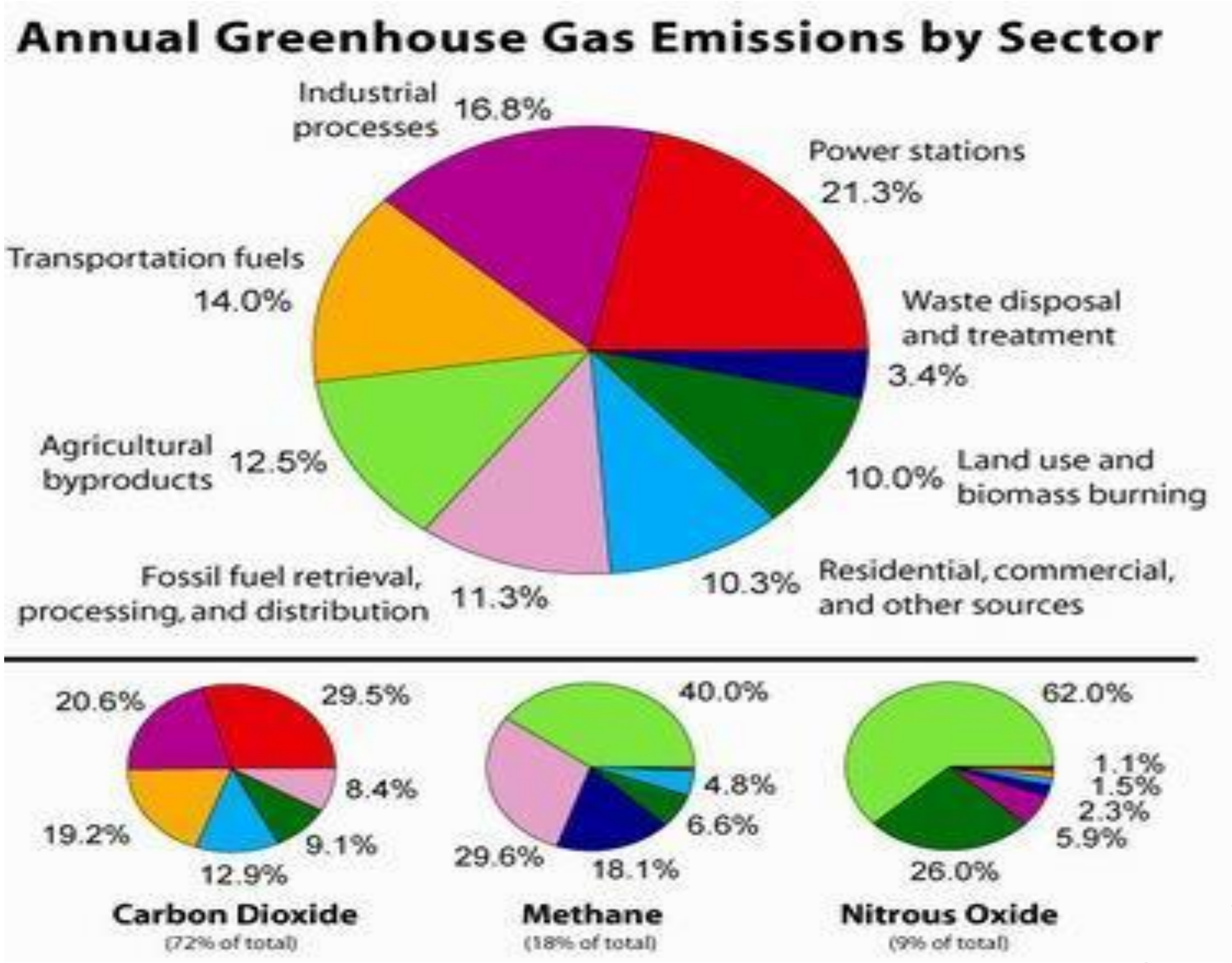
CAUSES AND EFFECTS

WHY IS CLIMATE CHANGING ?

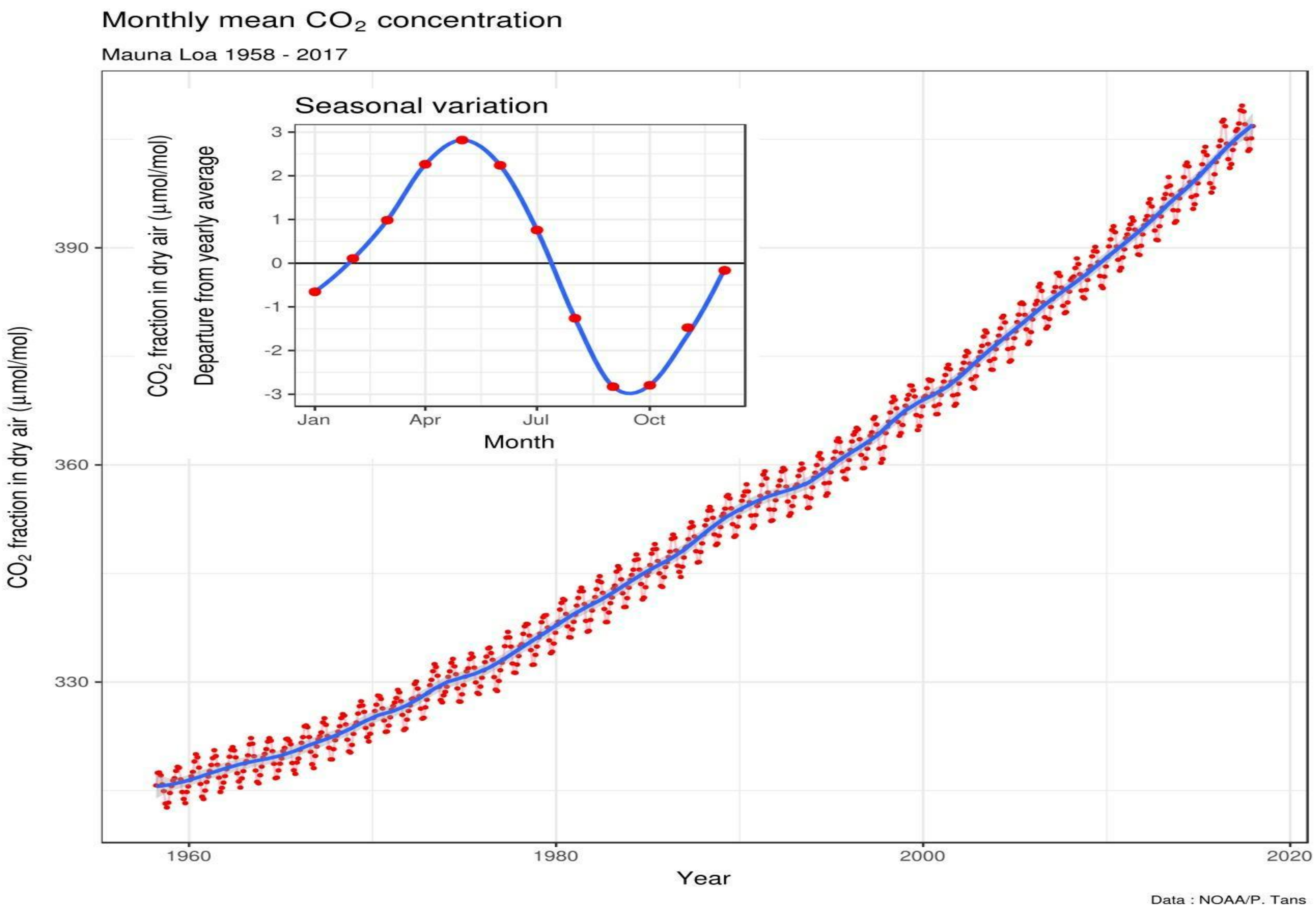
- NATURAL CAUSES OF CLIMATE CHANGE:
  - the amount of solar radiation reaching the surface of the Earth;
  - volcanic eruptions which may emit: carbon dioxide ($C0_2$), sulflur dioxide $S0_2$ etc.

- ANTHROPOGENIC CAUSES:
  - industrial activity, emition of gases that trap heat in the atmosphere, such as: carbon monoxide (IV), water vapor, ozone;
  - agriculture, including the release of gases that have a negative effect on the environment, e.g. Methane, released during rice cultivation;
  - traffic pollution.

GREENHOUSE GAS EMISSIONS



EMISSION OF CO2 OVER THE YEARS



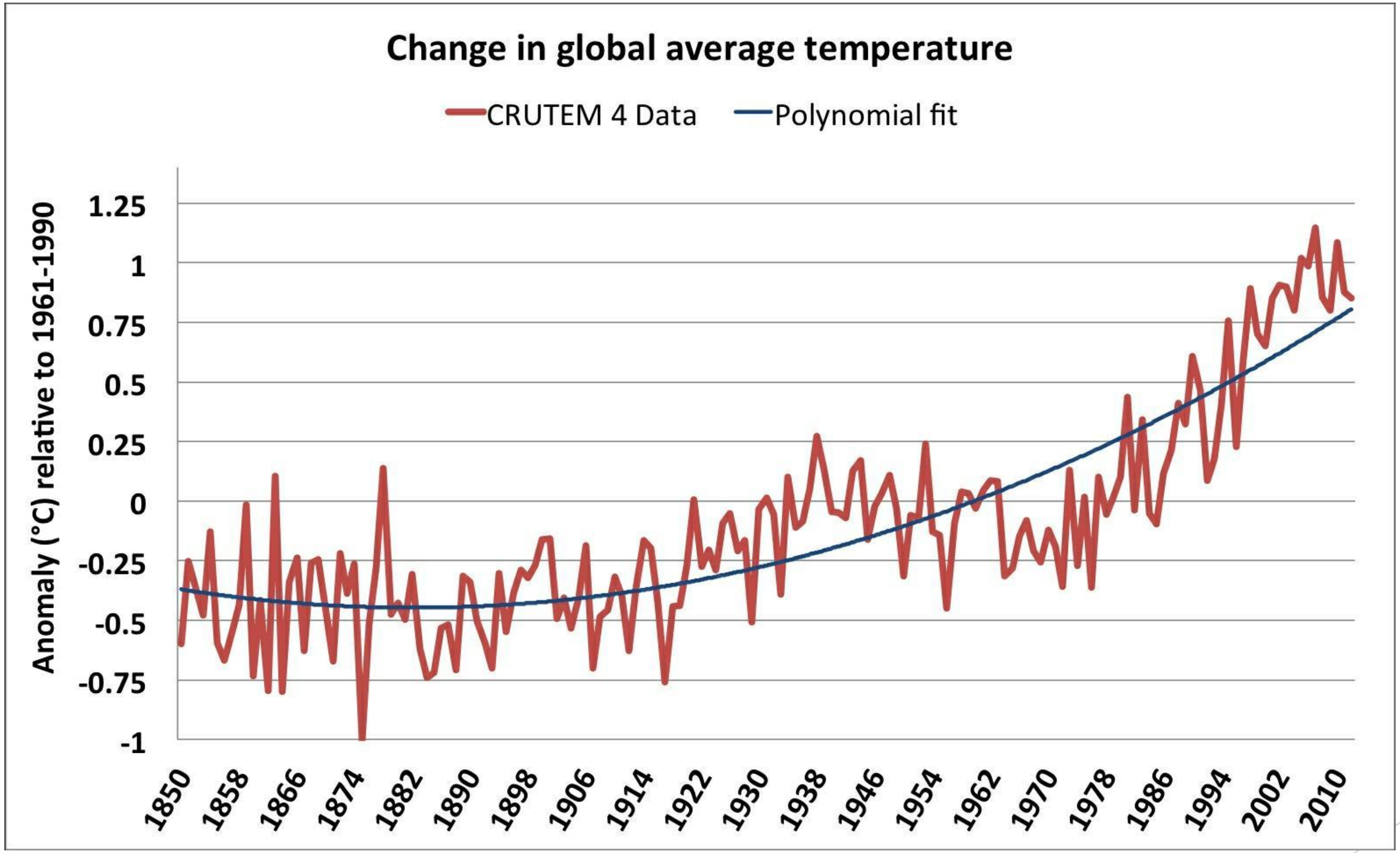
EFFECTS OF CLIMATE CHANGE

Climate Change Will Have Effect On All Environment On Earth.

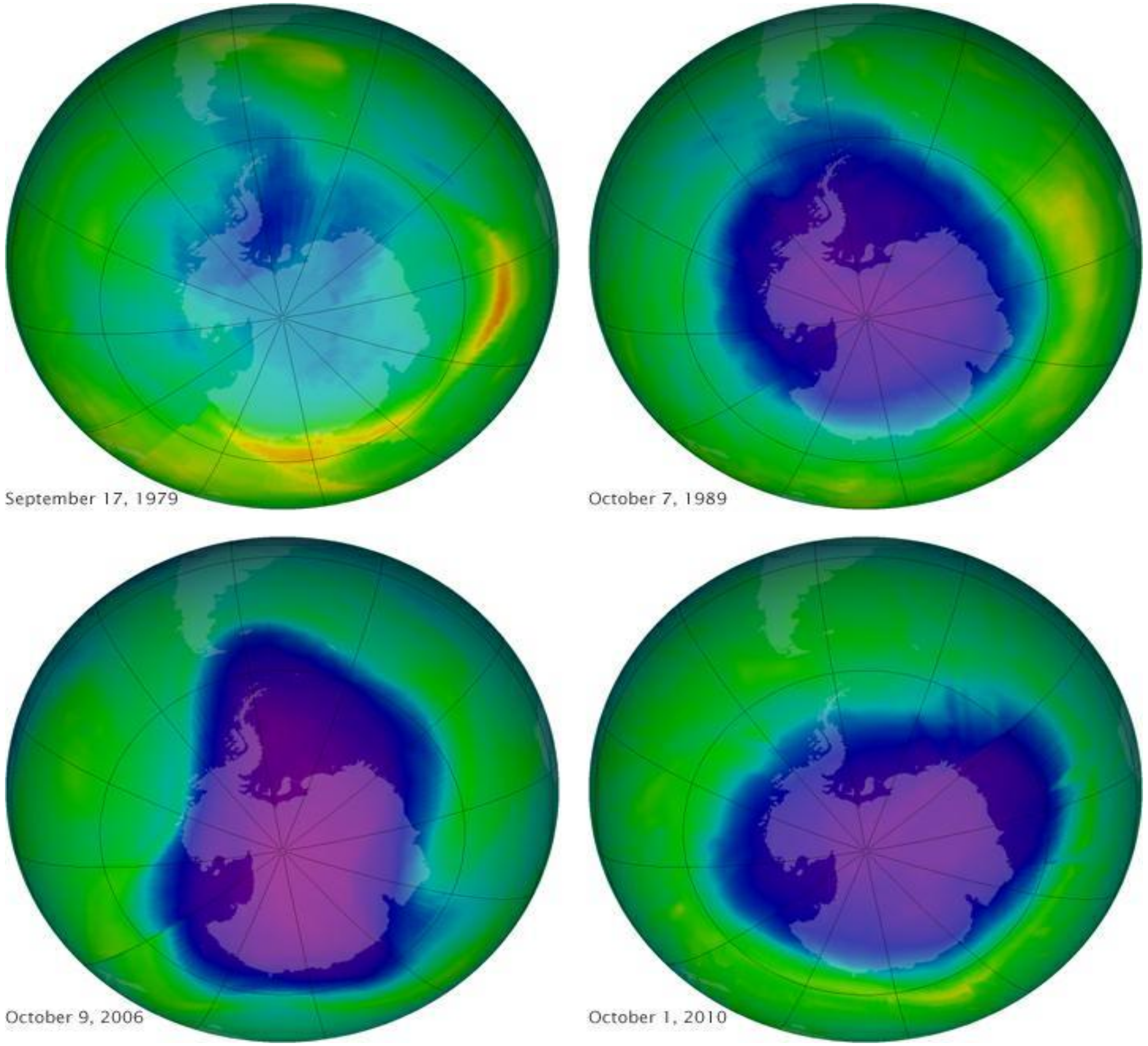
ATMOSPHERE:

- Global warming;
- Weather anomalies :
  - more frequent and more violent extreme conditions
    (e.g. rainstorms, floods, hurricanes, storms, blizzards, etc.);
- Enlargement of the ozone hole:
  - increase of UV radiation reaching the Earth;

RISE OF TEMPERATURE OVER THE YEARS

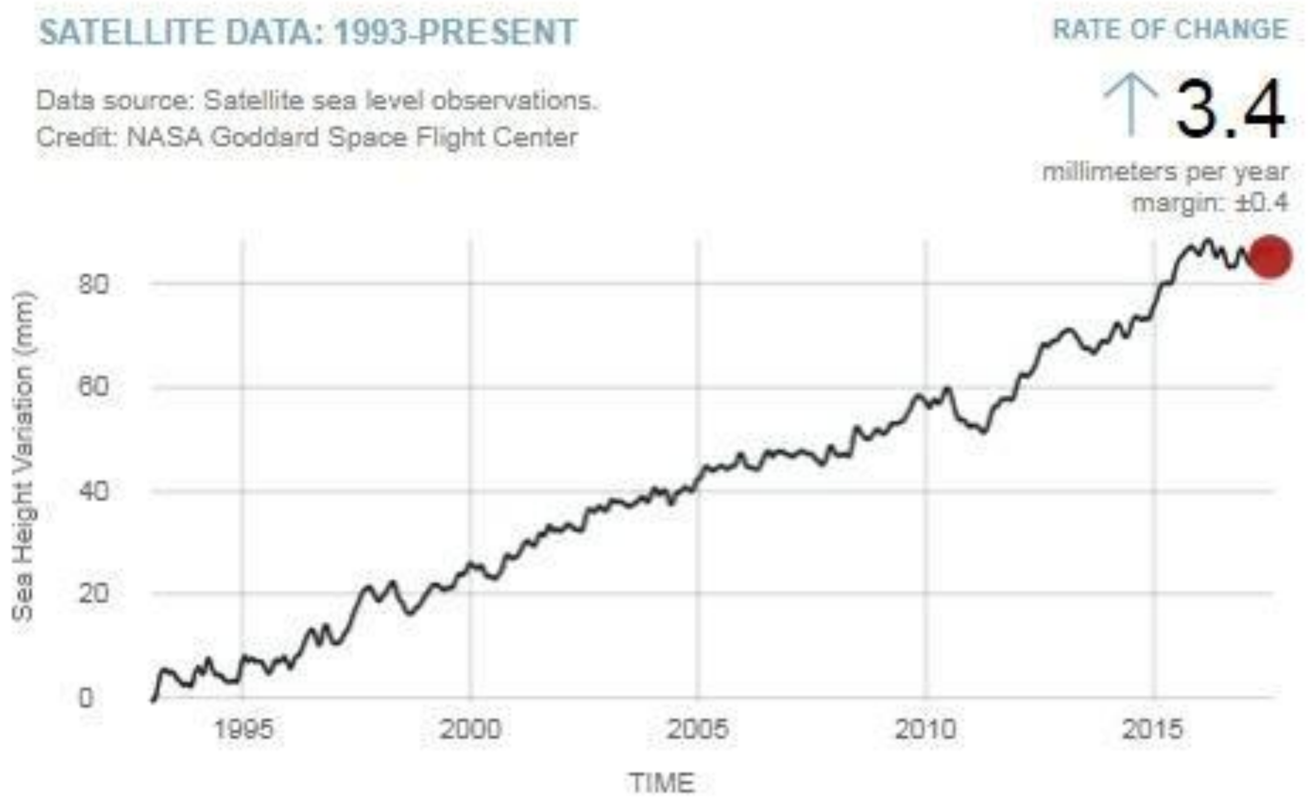


Evolution of ozone hole

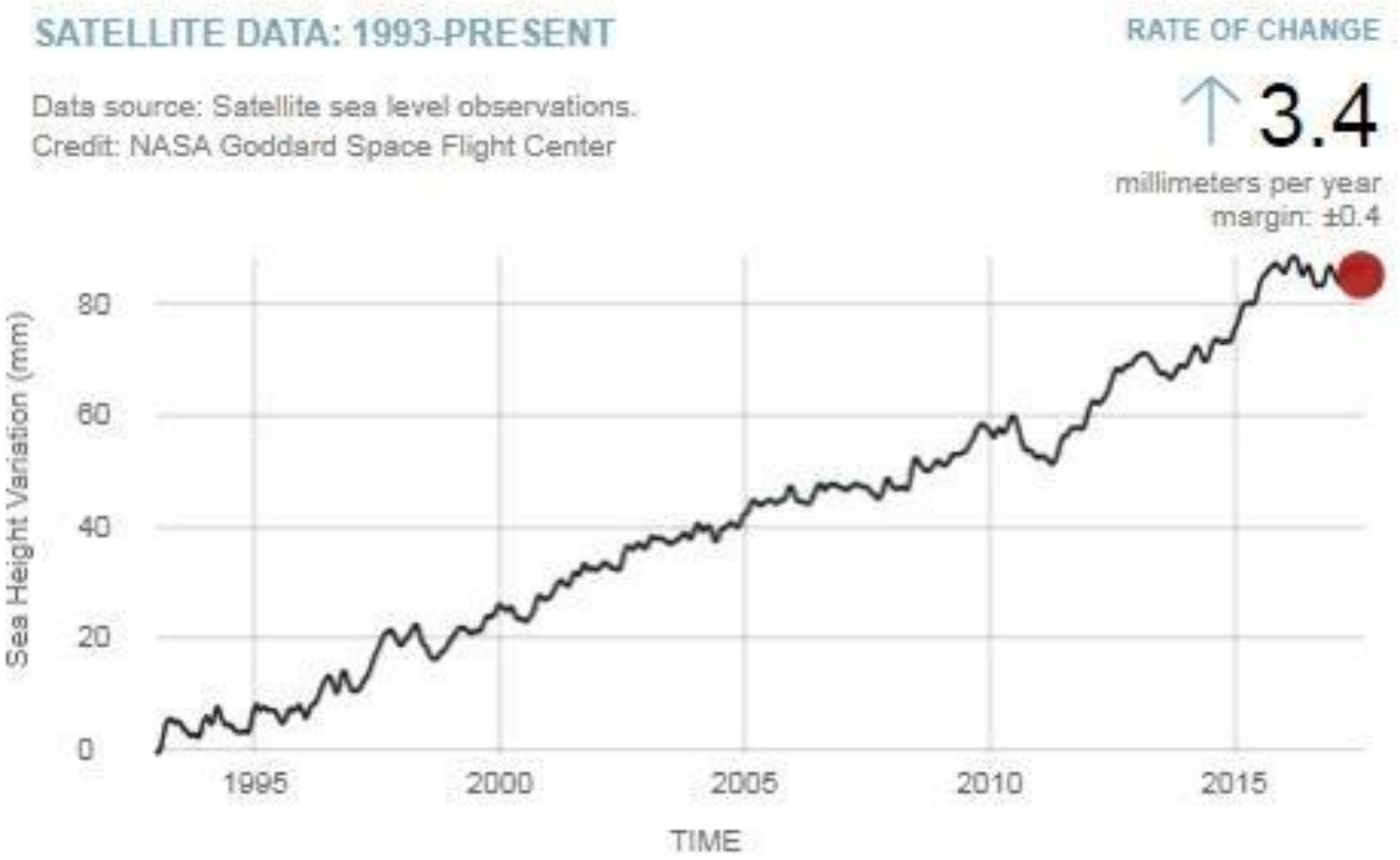


HYDROSPHERE:

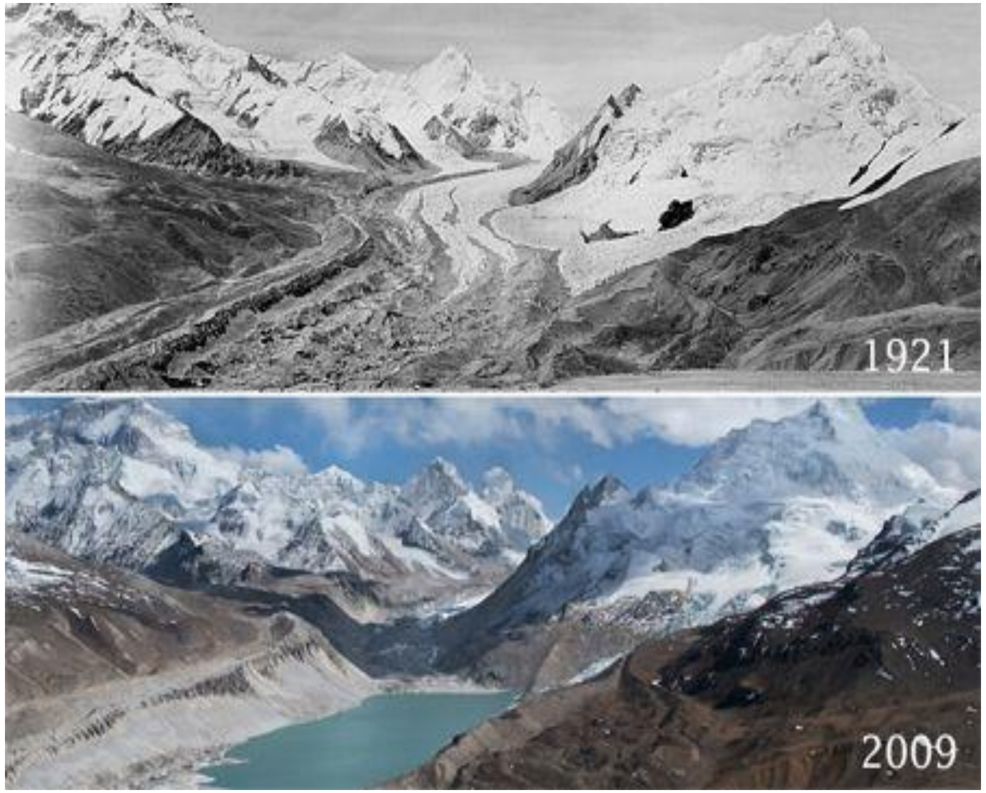
- melting glaciers;
- raising the level of the seas and oceans;
- increase in floods and erosion of coastal and lowland regions.

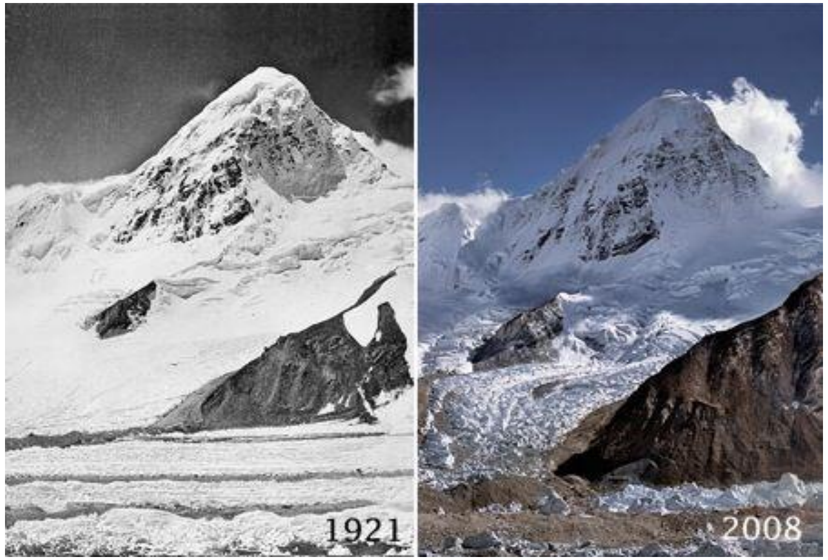


RAISING SEA LEVEL OVER THE YEARS



GLACIERS THEN AND NOW





GLACIERS IN HIMALAYAS

PEDOSPHERE:

- excessive rainfall and violent winds contribute to the degradation of soils;
- gases that have been formed as a result of human activity
  poison soils, which results in lowering their quality

LITHOSPHERE:

excessive rainfall causes acceleration of slope processes.

Biosphere:

- heavy rainfall and weather anomalies destroy the plant cover

  (e.g. windmills and snowstorms);
- changes in the ecosystem lead to the extinction of some species of animals;

ECONOMIC EFFECTS OF CLIMATE CHANGE:

- huge losses for sectors dependent on climatic conditions, including: forestry, agriculture, energy and tourism;
- increased economic losses due to the higher occurrence of weather anomalies; the economic crisis of poor countries that are heavily dependent on the environment.

INFLUENCE OF CLIMATE CHANGE ON HUMAN LIFE :

- in some regions, more deaths are caused by heat waves, while in others due to cold;
- change in the occurrence of water-borne diseases.

THANK YOU FOR YOUR ATTENTION

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