

GLOBAL WARMING

**the reason or continuation of global
climate changing ?**

Introduction

Dozens of hectares with burnt down trees , charred carcasses of birds and animals, smoke-screen which closed the sun for the weeks, it is not a plot of a new film of catastrophies , it is reality which I faced this summer.

All this set me thinking about the reasons of natural cataclysms and about what can happen in the near future

I think that the reason of this cataclysms is the global warming which is the most readable lately so I decided to do a close study of this theme.



Firefighters from Jaroslavl are trying to put out the fire near the village Ostrovo of Orehovo-Zuevo district, Moscow region. In the short the fire is within 50 meters from the village. August, 5, 2010



Helicopter No 32 Moscow region aviation centre is preparing to drop water on the forest fire near the village Ostrovo Orehovo-Zuevo district.

Global warming – what's that?

Global warming is the increase in the average temperature of Earth's near-surface air and oceans since the mid-20th century and its projected continuation.

Most of the observed temperature increase since the middle of the 20th century has been caused by increasing concentrations of greenhouse gases, which result from human activity such as the burning of fossil fuel and deforestation.

Climate model projections summarized in the latest IPCC report indicate that the global surface temperature is likely to rise a further 1.1 to 6.4 °C (2.0 to 11.5 °F) during the 21st century. .

An increase in global temperature will cause sea levels to rise and will change the amount and pattern of precipitation, probably including expansion of subtropical deserts.

Warming is expected to be strongest in the Arctic and would be associated with continuing retreat of glaciers, permafrost and sea ice.

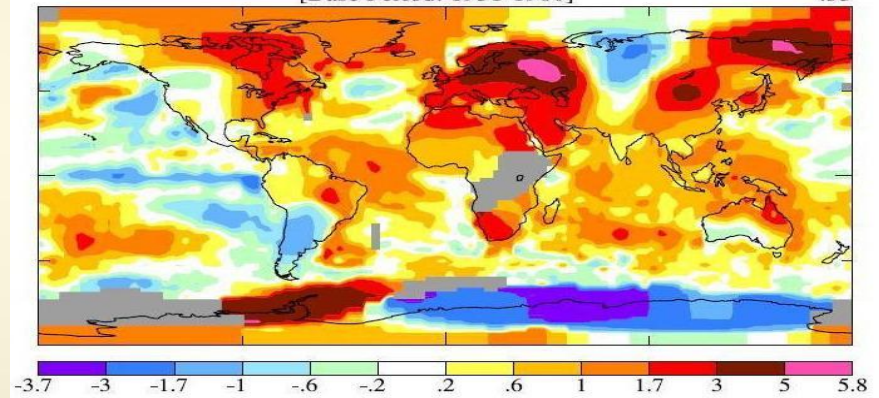
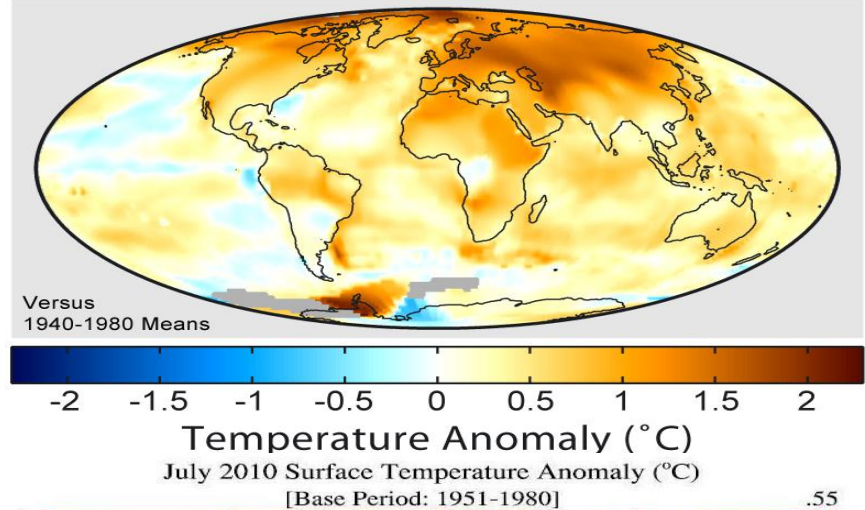
Other likely effects include changes in the frequency and intensity of extreme weather events, species extinctions, and changes in agricultural yields.

Warming and related changes will vary from region to region around the globe, though the nature of these regional variations is uncertain.

As a result of contemporary increases in atmospheric carbon dioxide, the oceans have become more acidic, a result that is predicted to continue.

The Kyoto Protocol is aimed at stabilizing greenhouse gas concentration to prevent a "dangerous anthropogenic interference". As of November 2009, 187 states had signed and ratified the protocol.

1999-2008 Mean Temperatures



Kyoto Protokol

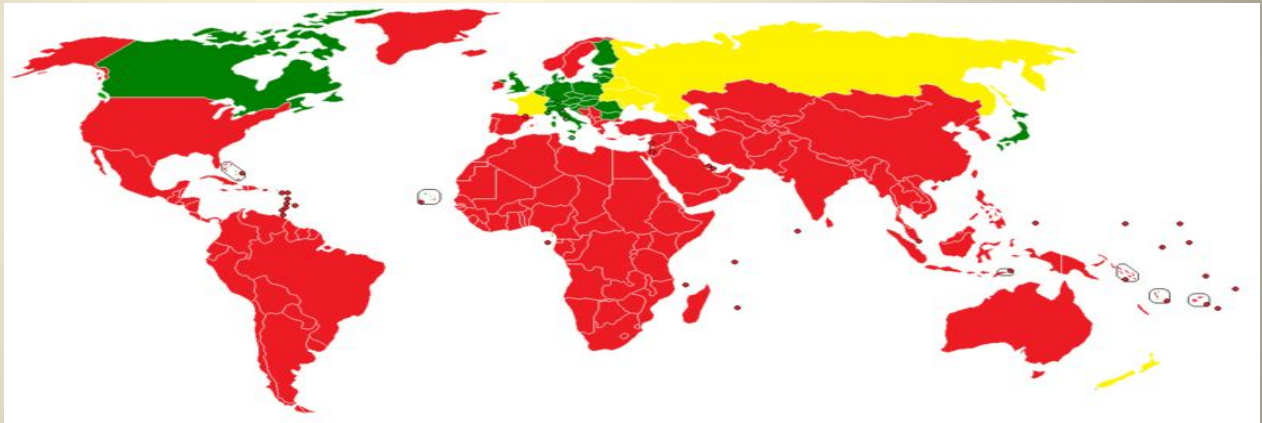
The Kyoto Protocol is a protocol to the United Nations Framework Convention on Climate Change (UNFCCC or FCCC), aimed at fighting global warming. The UNFCCC is an international environmental treaty with the goal of achieving "stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system."

The Protocol was initially adopted on 11 December 1997 in Kyoto, Japan and entered into force on 16 February 2005. As of July 2010, 191 states have signed and ratified the protocol.^[1]

Under the Protocol, 37 countries ("Annex I countries") commit themselves to a reduction of four greenhouse gases (GHG).



Participation in the Kyoto Protocol, as of June 2009,
Green = Countries that have signed and ratified the treaty
Grey = Countries that have not yet decided
Red = No intention to ratify at this stage.



Overview map Of States Committed to a CO2 reduction in the 2008-2012 Kyoto Protocol period.^[2]

Green countries = Committed to reduction

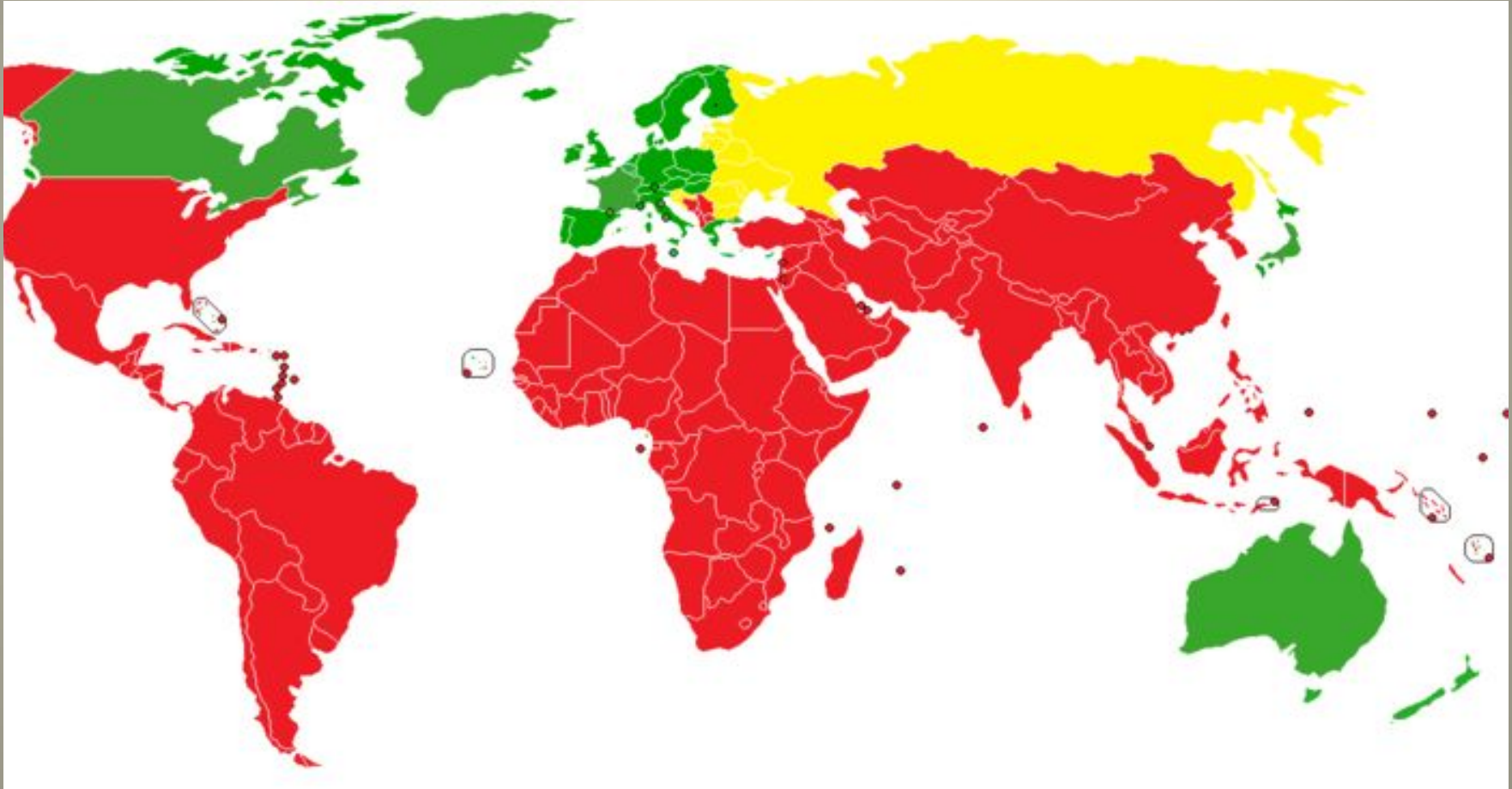
Yellow countries = Committed to 0% reduction

Red countries = Not committed to any reduction

EU-countries like Greece, Spain, Ireland and Sweden have not committed themselves to any reduction while France has committed itself not to expand its emissions (0% reduction) in the internal-EU distribution agreement. This agreement ensures a 8% reduction for the EU-region as a whole in accordance with the Kyoto Protocol.^[3] Greenland has only committed itself through Denmark. However Greenland has not committed itself to a reduction towards Denmark. But might do it in the next period.

Are either countries who have Non-annex 1 status in the protocol, and thereby are not obligated or countries that have not signed the protocol yet.^[4]

Overview map Of States obligated by the Kyoto Protocol as of 2010. Green countries = Those of the Annex I countries who are fully obligated (also called Annex II countries). Yellow countries = Annex I countries who only are obligated within some freedom as to their requirements in the protocol. Also called Countries with Economics in Transition (EIT)). Red countries = are not obligated by the Kyoto Protocol. Are either countries who have Non-annex 1 status in the protocol, and thereby are not obligated or countries that have not signed the protocol yet.



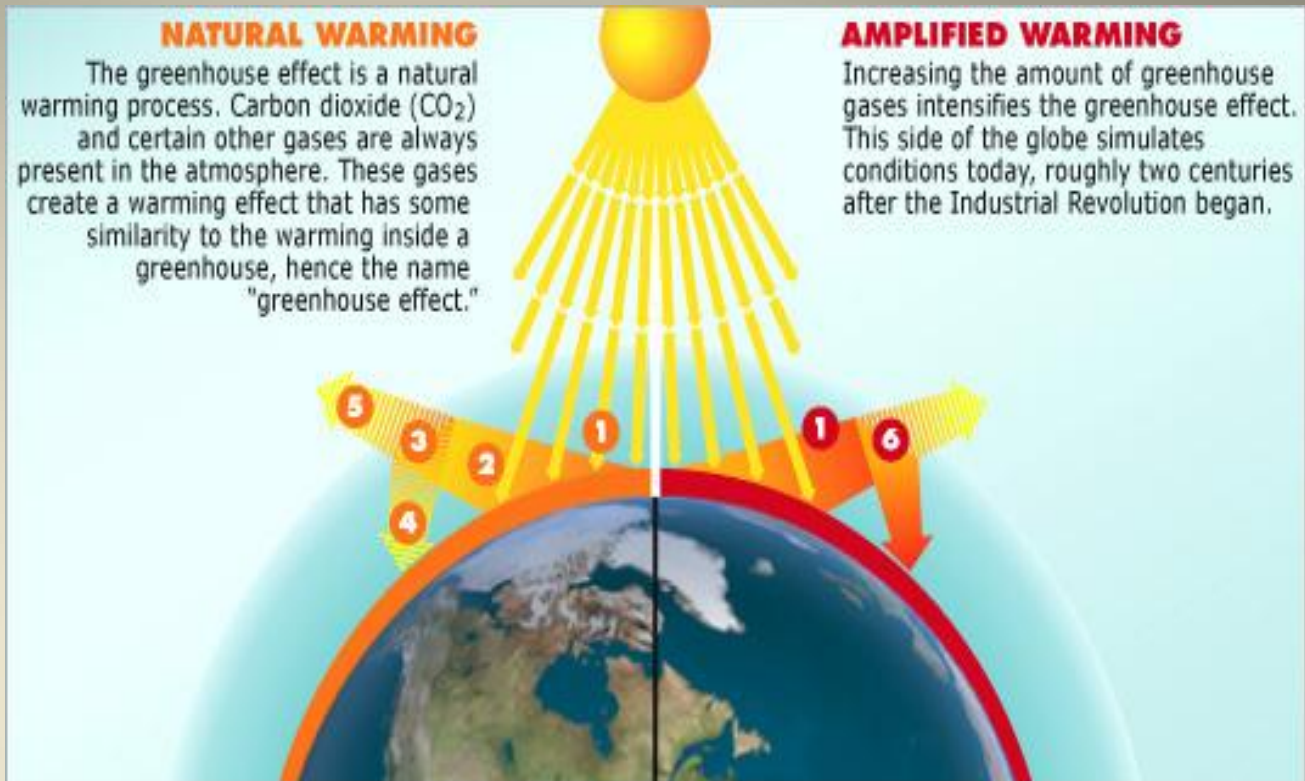
Greenhouse effects

Natural Warming

The greenhouse effect is a natural warming process. Carbon dioxide (CO₂) and certain other gases are always present in the atmosphere.

Amplified Warming

Increasing the amount of greenhouse gases intensifies the greenhouse effect.



NATURAL WARMING
The greenhouse effect is a natural warming process. Carbon dioxide (CO₂) and certain other gases are always present in the atmosphere. These gases create a warming effect that has some similarity to the warming inside a greenhouse, hence the name "greenhouse effect."

AMPLIFIED WARMING
Increasing the amount of greenhouse gases intensifies the greenhouse effect. This side of the globe simulates conditions today, roughly two centuries after the Industrial Revolution began.

1. Sunlight brings energy into the climate system; most of it is absorbed by the oceans and land.

THE GREENHOUSE EFFECT:

- 2. Heat (infrared energy) radiates outward from the warmed surface of the Earth.
- 3. Some of the infrared energy is absorbed by greenhouse gases in the atmosphere, which re-emit the energy in all directions.
- 4. Some of the infrared energy further warms the Earth.
- 5. Some of the infrared energy is emitted into space.

AMPLIFIED GREENHOUSE EFFECT:

- 6. Higher concentrations of CO₂ and other "greenhouse" gases trap more infrared energy in the atmosphere than occurs naturally. The additional heat further warms the atmosphere and Earth's surface.

Effects of global warming

Some impacts from increasing temperatures are already happening.

Ice is melting worldwide, especially at the Earth's poles. This includes mountain glaciers, ice sheets covering West Antarctica and Greenland, and Arctic sea ice.

Researcher Bill Fraser has tracked the decline of the Adélie penguins on Antarctica, where their numbers have fallen from 32,000 breeding pairs to 11,000 in 30 years.

Sea level rise became faster over the last century.

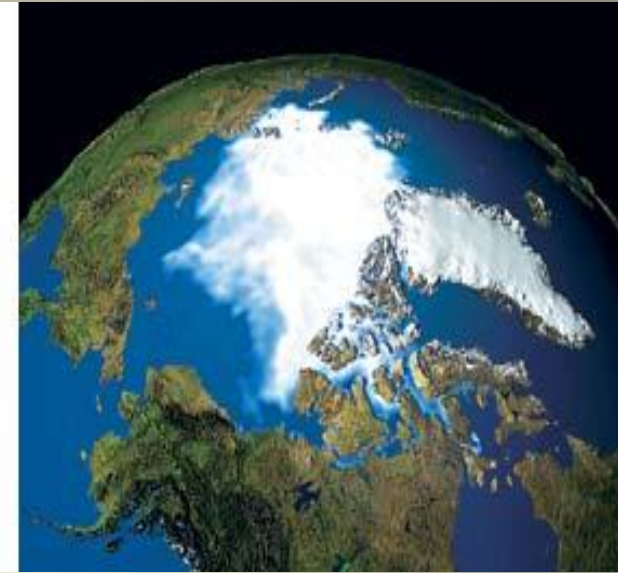
Some butterflies, foxes, and alpine plants have moved farther north or to higher, cooler areas.

Precipitation (rain and snowfall) has increased across the globe, on average.

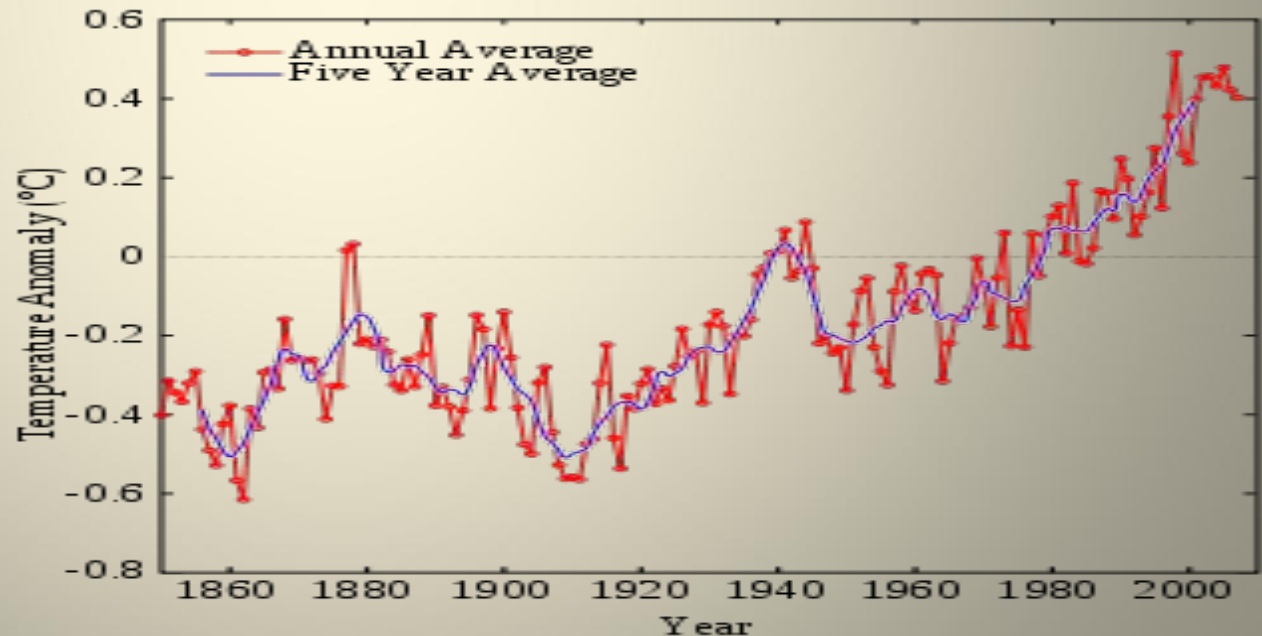
Spruce bark beetles have boomed in Alaska thanks to 20 years of warm summers. The insects have chewed up 4 million acres of spruce trees.



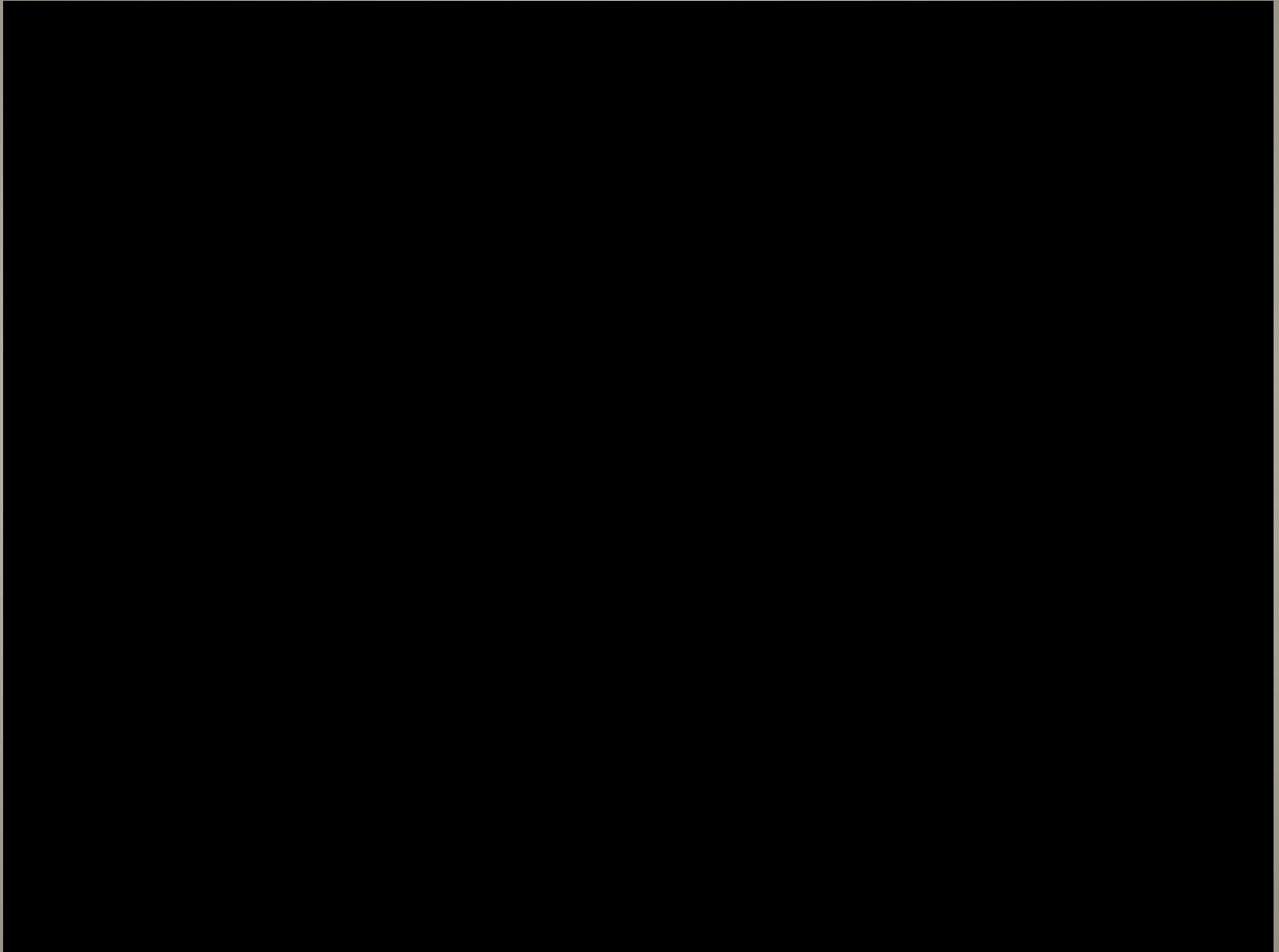
1979 year Antarctica



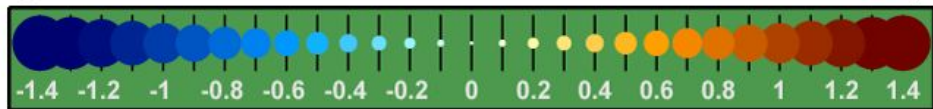
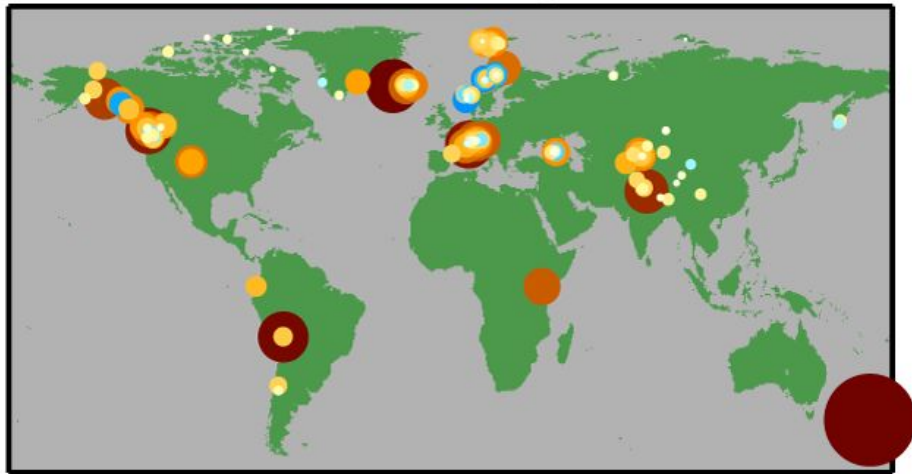
2003 year Antarctica



Thawing of Antarctic Ice 1979-2009y



Mountain Glacier Changes Since 1970



Effective Glacier Thinning (m / yr)

On the top:

mountain glacier changes as a result of temperature rise.

To the right:

the thawing of Greenland ice.



A VARIETY OF RESPONSES



Shifting Habitats

The American pika, a small rodent that lives in California mountains, cannot tolerate temperatures much higher than 80 degrees. As temperatures have risen, some pika populations have moved more than 1,300 feet further up the slopes to find a cooler home.



Predators Decline as Prey Declines

On Isle Royale, Mich., higher temperatures mean that one species of tick is growing more numerous and becoming more troublesome for the island's moose. As the population of moose has declined, so has the population of wolves, which prey on the moose for food.



Shifting Migration Patterns

Many birds have begun making their annual migrations earlier — some British species have shifted by two to three weeks over the past 30 years. That can be a problem if the bird's main food source doesn't also shift its timing so it is available when the bird needs to eat.



Entire Ecosystem Changes

In the northern Bering Sea, near Alaska, warmer waters are causing an entire ecosystem shift. Native animals, such as walrus and gray whales, are finding less of the prey animals they rely on. At the same time, fish are moving in from less frigid areas.



Adaptation

Research on wood frogs in New England seems to show that they may be able to evolve and adapt to rising temperatures. That is good news, but scientists say that many animals will not be able to evolve in the same way.

CHANGES LOCAL AND BEYOND



Blackwater National Wildlife Refuge, Md.

Rising water levels threaten to turn most of this enormous swamp — which shelters baby fish and blue crabs along with migrating birds — into open water by 2030. A crucial habitat on the Eastern Shore could vanish.



Catoctin Mountain, Frederick County

The brook trout that live in mountain streams here cannot tolerate water much hotter than 68 degrees. As temperatures rise, the fish in central Maryland could be gone in a century.



Monteverde Cloud Forest, Costa Rica

Animals living in this forest depend on moisture from near-constant clouds of mist and fog. Climate change seems to be reducing this moisture. Two amphibian species have not been seen since the 1980s and are now presumed extinct.



South Pacific Ocean

Warming waters have become too hot for coral reefs in some places, leading to so-called "bleachings" in which large amounts of coral die. During 1998, warm temperatures killed off about 16 percent of all the world's coral.



Beaufort and Chukchi seas, off Alaska

Walrus mothers in this area typically leave their young on the sea ice while they dive down to find food on the bottom. But now, sea ice is melting more rapidly than before, which can leave walrus calves floating helplessly in open water.



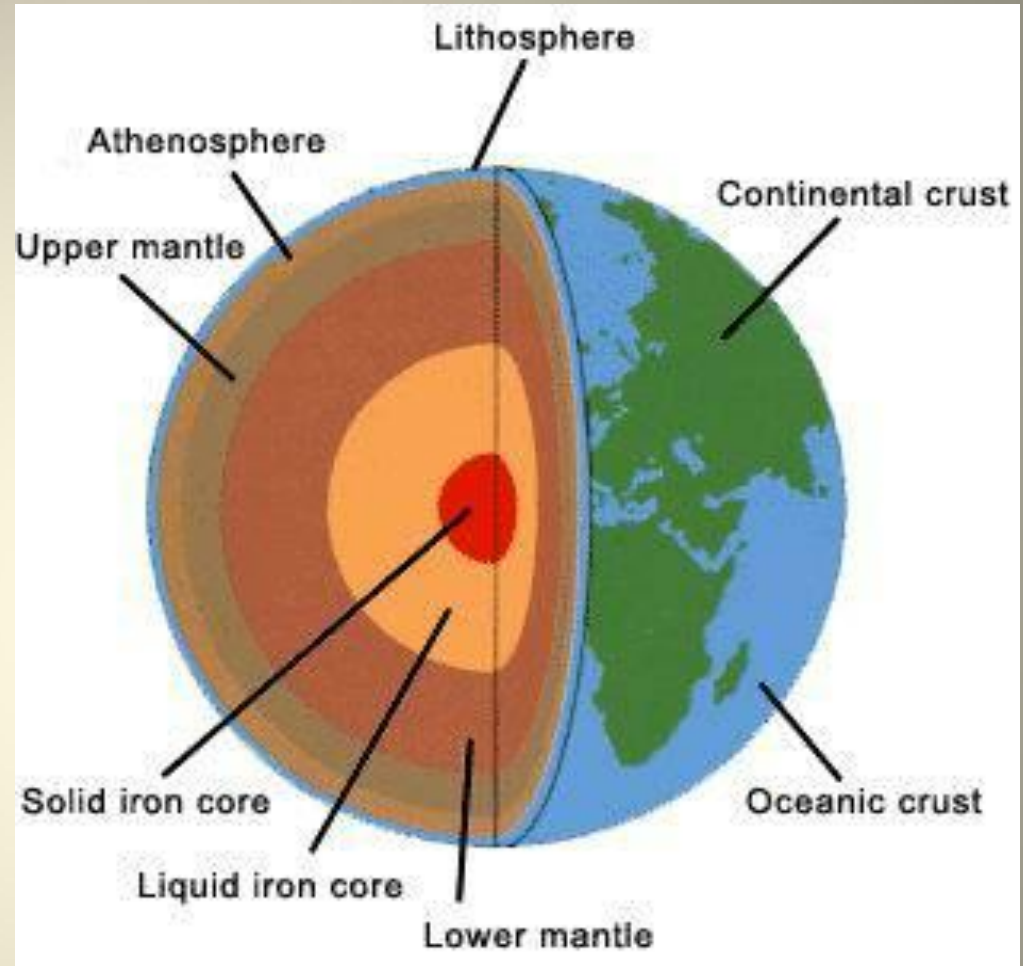
Lithosphere and Poles changing

All scientists know, that there are many reasons, which influence on the climate:

- 1 The change of Earth orbit.
2. Displacement (shift) of the axis of the Earth
3. The change of sun intensity
- 4 The change of the magnetic field of the Earth.
5. Greenhouse gases in atmosphere
6. Landscape changing
7. Asteroid falls

As you see greenhouse gases are only one of many other factors .That is why a lot of scientists have another opinion about global warming. They have analyzed many facts: sea bottom, polar ice ,Egypt sphinks and others and have made a conclusion, that climate has changed many times, not only climate but our planet.

They theory connects and explains all reasons above mentioned. Its essence consists in the following. The Earth's crust together with a hard upper part of the mantle - the lithosphere - like an egg-shell rests on a bed of the melted mantle - the athenosphere. Width of the lithosphere - from 1-5 km in oceans up to 50-100 km in mainlands at a common radius of the Earth of 6370 km. It gives the opportunity to the lithosphere to slip (slide) on the liquid athenosphere . In the result of slip (slipping, sliding) of the lithosphere a location of the geographical poles changes and alteration of global climate takes place.

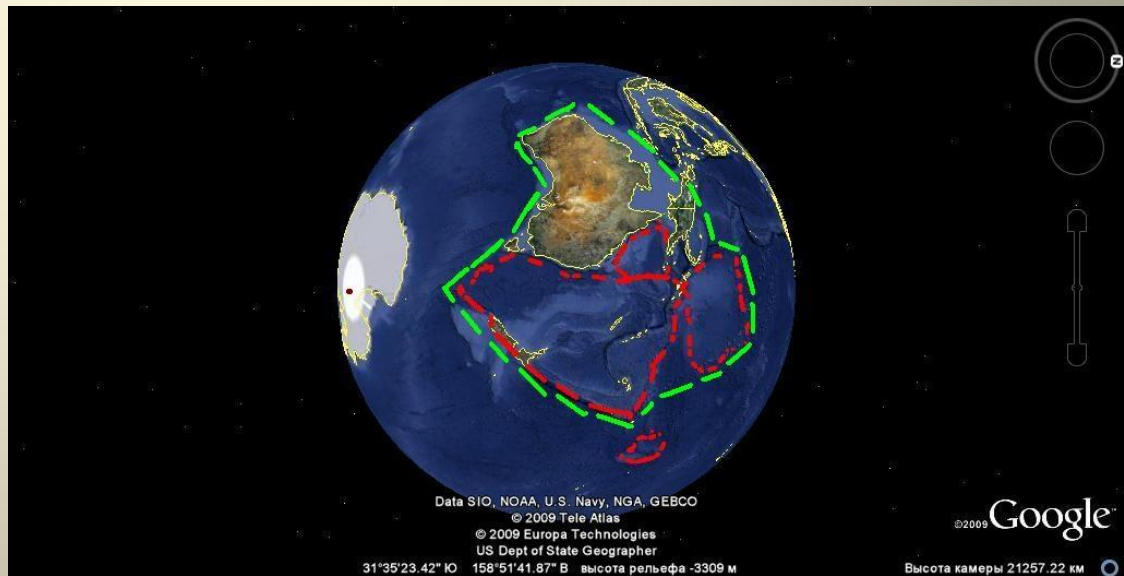
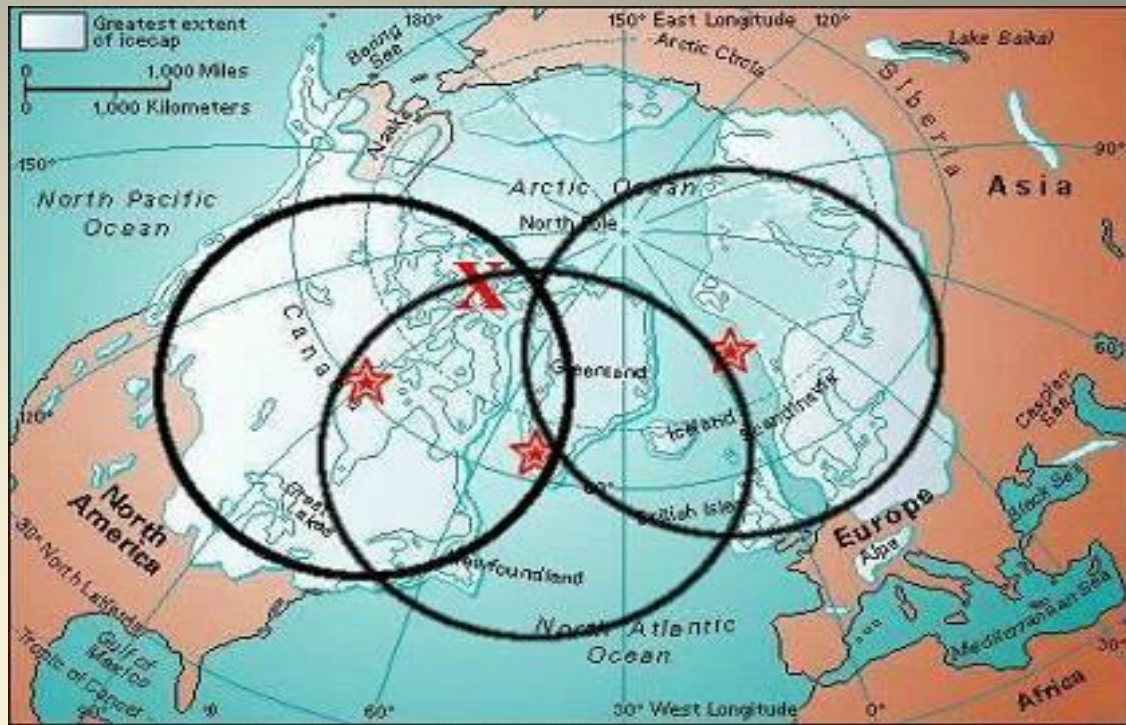
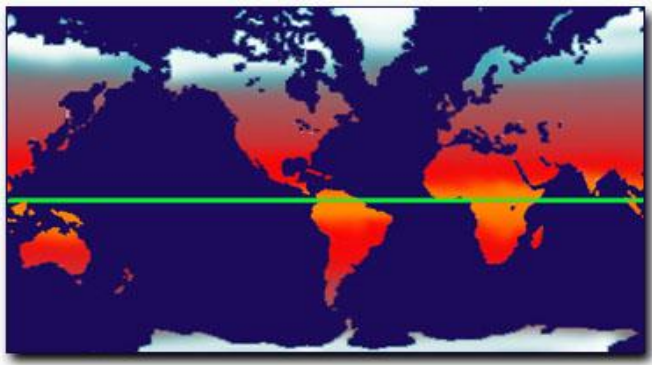
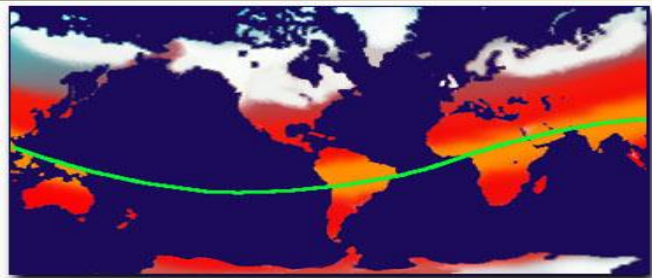
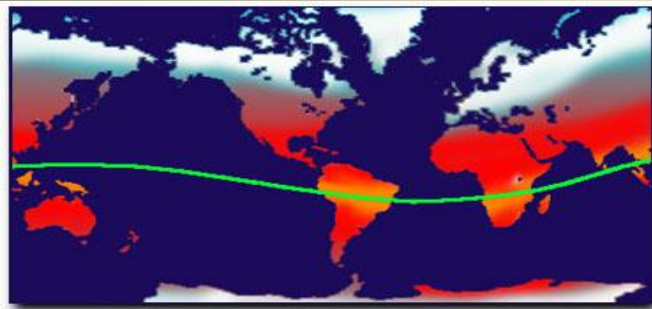


Herodotus described a strange fact, which was the demonstration of this theory: "So, as the priests said only mortal people had been ruling in Egypt for 11 340 years. There were no gods in the human appearance among the rulers of Egypt before and after that time as they through. The priests told that the sun rose 4 times in various places. It rose twice in the place where it sets now and it set twice where it rises now. And this thing didn't entail any changes as fertility of the soil and plants, river rate, diseases and people mortality."

Reading this text we can suppose that the lithosphere has moved lately. It was about 14 thousand years ago. The map of Antarctica by Turkish admiral Piri Reis is very interesting demonstration of recent changes of the lithosphere position relative to the axis of the equator. The map was made in 1513 and it is very exact. Greenwich is situated near the city of Alexandria. It demonstrates that the maps of Piri Reis are the copies of very old Egyptian maps. Up-to-date facts about Antarctica, had been got with the help of drilling of ice, corroborate the exactness of the Antarctica maps, which was made when the axis of the South Pole crossed lithosphere in another place.



Scientists consider that poles and equator have changed their location four times. Usually it takes 150-300 days and accompanies by earthquakes, sea level rising, global changing of the earth landscape. This theory explains disappearing of Atlantida and Lemuria, Ise period and the Flood.



Conclusion

I have studied this material and made the conclusion: global warming is not the reason but continuation of global periodical changing, which takes place all over the time on the Earth. We can't change it, but we can change ourselves and our attitude to our planet.

Earth is living organism and our careful attitude it's only one thing that we can do to save balance and harmony on our planet.



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