

Greenhouse Gases

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Abstract

Infrared (IR) dynamic gasses, basically water vapor (H₂O), carbon dioxide (CO₂), and ozone (O₃), normally exhibit in the Earth's climate, assimilate warm IR radiation produced by the Earth's surface and environment. The air is warmed by this instrument and, thus, transmits IR radiation, with a noteworthy part of this vitality acting to warm the surface and the lower climate. As an outcome the normal surface air temperature of the Earth is around 30° C higher than it would be without air ingestion and reradiating of IR vitality. This wonder is prominently known as the "nursery impact," and the IR dynamic gasses in charge of the impact are moreover alluded to as "nursery gasses." The fast increment in groupings of nursery gasses since the mechanical period started has offered ascend to worry over potential resultant atmosphere changes.

Outline

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What we know about Greenhouse Gases? Why the greenhouse effect occurs?

The phenomenon is called the greenhouse effect by which certain gases, which are components of the planetary atmosphere, retain part of the energy that the soil emits because it has been heated by solar radiation. It affects all planetary bodies endowed with atmosphere. According to most of the scientific community, the greenhouse effect is being accentuated on Earth by the emission of certain gases, such as carbon dioxide and methane, due to human activity. This phenomenon prevents that the solar energy constantly received by the Earth returns immediately to the space, producing at world scale an effect similar to the one observed in a greenhouse.

The greenhouse effect originates because the energy that comes from the sun, coming from a body of very high temperature, is formed by waves of high frequencies that pass through the atmosphere with great ease. The energy sent to the outside, from the Earth, coming from a much colder body, is in the form of waves of lower frequencies, and is absorbed by the gases with greenhouse effect. This retention of energy makes the temperature higher, although it is necessary to understand well that, in the end, under normal conditions, the amount of energy that reaches the Earth is equal to that which it emits. If it were not so, the temperature of our planet would have been steadily increasing, which, fortunately, has not happened.

We could say, in a very simplified way, that the greenhouse effect is to cause the energy that reaches the Earth to be "returned" more slowly, so it is "held" longer along the surface and is thus maintained. The elevation of temperature.

Cambio Climático Global. Accessed July 19, 2017.

What are the kinds of greenhouses gases?

Atmospheric gases of natural and anthropogenic origins that absorb and emit radiation at certain wavelengths of the infrared radiation spectrum emitted by the Earth's surface, atmosphere, and clouds. This property causes the greenhouse effect. Water vapor (H₂O), carbon dioxide (CO₂), nitrous oxide (N₂O), methane (CH₄), and ozone (O₃) are the main greenhouse gases in the Earth's atmosphere. In addition, a series of man-made greenhouse gases exist in the atmosphere, such as halocarbons and other chlorine and bromine.

Greenhouses Gases molecules have the ability to absorb and re-emit long-wave radiation (this is infrared radiation, which is eminently thermal) that comes from the sun and reflects the Earth's surface into space, controlling the flow of natural energy through the climate system. Climate must somehow adjust to increases in Greenhouses Gases concentrations, which leads to an increase in the infrared radiation that is absorbed by Greenhouses Gases in the lower atmosphere (the troposphere), in order to maintain the energy balance of the same. This adjustment will generate a climate change that will be manifested in an increase in global temperature (referred to as global warming) that will lead to an increase in sea level, changes in precipitation regimes and in the frequency and intensity of extreme weather events (Such as storms, hurricanes, El Niño and El Niño phenomena), and a variety of impacts will be presented on different components, such as agriculture, water resources, ecosystems, human health, among others.

El Efecto Invernadero. Accessed July 19, 2017.

How the greenhouse gases impact in this country?

South Florida is among the most vulnerable places in the world for the greenhouse gases.

Climate change is already affecting the US

Climate change is transforming the United States into a country increasingly affected by storms, air pollution and disease, according to a new federal science report.

The different damages caused by climate change "will surely become more and more noticeable throughout the country in this century and beyond," concluded the National Climate Assessment on Tuesday.

The report highlighted how warming and changing weather conditions change people's daily lives, even using the phrase "climate change" as one more way of referring to global warming. "We are all part of a single Earth, a unique atmosphere," said Assistant Director of Research of the Science Division of the US space agency, Jack Kaye, during a ceremony in Washington to commemorate Earth Day 44 last 22 of April.

Climate change, the result of human action, focuses the concerns of environmental groups and governments, as revealed by the director of the NASA Earth Science Division, Michael Freilich.

"The climate is changing and it will have a profound impact on all of us," said Freilich, who reminded the children at Union Station of their "great responsibility" for the future of the planet.

"Humans are the only creatures that can change what we do based on predictions of how the world will be," said Freilich, who emphasized our ability to change our behavior to be "better guardians of the Earth."

Glacier melting and ocean water warming accelerated sea level rise, which rose at a rate of two millimeters per year between 1971 and 2010, and even more rapidly over the last decade.

US President Barack Obama presaged in a statement released Monday that "the consequences of climate change will worsen in the years to come."

"Let us accept our responsibility to future generations and meet the current challenge with the same energy, passion and sense of duty" that led to the creation of the first Earth Day in 1970, Obama said.

Our planet was formed about 4.5 billion years ago and is the densest and fifth largest of the eight that make up the Solar System.

"Climate Miami Beach - Florida - Climate - United States." Accessed July 19, 2017.

Case: South Beach Miami

Located between the 1st and 25th Streets of Miami Beach, South Beach is Miami's busiest and most famous beach. It is an extensive white sand beach and crystalline shallow and calm waters. South Beach is one of the most visited beaches because it is beautiful, but at the same time it is being contaminated and affected both by the neglect of the man not to preserve this beach wonder as the climatic changes that today presents the Earth. South beach has certainly warm temperatures, presents a large range of animals as marriage as terrestrial, like the flora. It is climate is mostly warm.

Climate in South Beach Miami

Miami has a subtropical climate, with moderate and pleasant temperatures throughout the year. The city of Miami has an average of 3,000 hours of sunshine per year, making it one of the sunniest cities in the United States.

The summers in Miami are hot, very humid and quite rainy. The months in which there is a greater number of precipitations are those that go from May to September, dates that also coincide with those of greater risk of hurricanes, while in winters are usually fairly dry and not too cold, with a mean minimum temperature of 13°C and maximum temperatures of up to 25°C in the month of December.

Temperature in South Beach Miami

The surface water temperature close to shore at South Beach (Miami) can vary by several degrees compared with these open water averages. This occurs especially after heavy rains, near South Beach (Miami) sea temperatures in the range 29 to 30 ° C (84 to 86 ° F) on the 10th of August and are at their coldest on the 10th of February in the range 22 to 24 ° C (72 to 75 ° F). Year round warm sea temperatures at South Beach (Miami) climb to their highest in early to mid August. Even then a rash vest and board shorts should be fine for surfing at any time of year. South Beach (Miami) are temperatures are always warm but dip to their coldest in early to mid February.

Weather2Travel.com. "South Beach Climate: Monthly Weather Averages, Florida." Weather2Travel.com. Accessed July 19, 2017.

Animals and Plants affected in South Beach Miami

Florida's vegetation is varied; there are up to 7 floral zones.

- Flatwoods: open forests with an abundance of flowers (up to 60 species of orchid).
- Scrublands: mostly small sand pines.
- Savannas: American lotus, water hyacinth and water lettuce.
- Grassy swamps: The Everglades
- Salt marshes: Mangroves
- Hardwood forest or Hammock: Trees growing on wet soil and in marshlands.
- Pinelands

Florida's fauna has also some native species, specific to Florida. Some of these species are endangered and, therefore, protected.

- Alligators and crocodiles
- Manatees
- The Killer whale, also called the Orca
- The Bottlenose dolphin
- Jellyfish

"Animals and Plants in Miami." Miami Beach Vacation Rentals. Accessed July 19, 2017.

References

- "American Geophysical Union." AGU. Accessed July 19, 2017.
http://www.agu.org/sci_soc/policy/climate_change.html.
- "Animals and Plants in Miami." Miami Beach Vacation Rentals. Accessed July 19, 2017.
<http://www.miamihabitat.com/animals-plants-miami-area.asp>.
- "Artículos." CIIFEN - CIIFEN. Accessed July 19, 2017.
http://www.ciifen.org/index.php?option=com_content&%3Bview=category&%3Blayout=blog&%3Bid=99&%3BItemid=132&%3Blang=es.
- "Cambio Climático, Calentamiento Global y Efecto Invernadero." Cambio Climático Global. Accessed July 19, 2017.
<http://cambioclimaticoglobal.com/>.
- Cambio climático y efecto invernadero. Accessed July 19, 2017.
<http://www4.tecnun.es/asignaturas/Ecologia/Hipertexto/10CAtm1/350CaCli.htm>.
- "Climate Miami Beach - Florida - Climate - United States." Accessed July 19, 2017.
https://www.bing.com/cr?IG=699E19057B5A4A2192F5039B9D4D0D6D&CID=23A181DCB16360D30E258B18B065613C&rd=1&h=omGMDnqqJa_4UOEaXpIloHLXJMDIx3OQh2rZwfbffu4&v=1&r=https%3a%2f%2fwww.usclimatedata.com%2fclimate%2fmiami-beach%2fflorida%2f united-states%2fusfl0543&p=DevEx,5066.1.
- "EL EFECTO INVERNADERO." El Efecto Invernadero. Accessed July 19, 2017.
http://exterior.pntic.mec.es/pvec0002/e_invernadero.htm.
- "Temperatura del Agua y Guía de Traje de Surf para South Beach (Miami)." Surf Forecast Surf Report. Accessed July 19, 2017.
http://es.surf-forecast.com/breaks/South-Beach_Miami/seatemp.

- Weather2Travel.com. "South Beach Climate: Monthly Weather Averages, Florida."

Weather2Travel.com. Accessed July 19, 2017.

<http://www.weather2travel.com/climate-guides/united-states/florida/south-beach-fl.php>.