

**1. THE PLANET AS OUR HOME**

St. Francis of Assisi, the first Franciscan, was a man of peace and harmony. He was a man of nature and a man of the poor. He was a man of the earth and a man of the sky. He was a man of the sun and a man of the moon. He was a man of the wind and a man of the rain. He was a man of the flowers and a man of the trees. He was a man of the birds and a man of the animals. He was a man of the whole creation and a man of the whole world.



Laudato Si'  
"Praised Be"

Is this  
everyone?  
The world is  
the work of our  
hands and our  
responsibility.



**Laudato Si'**  
**"Praised Be"**



"I urgently appeal for a new dialogue about how we are shaping the future of our planet. We need a conversation which includes everyone."

# **Is this everyone?**

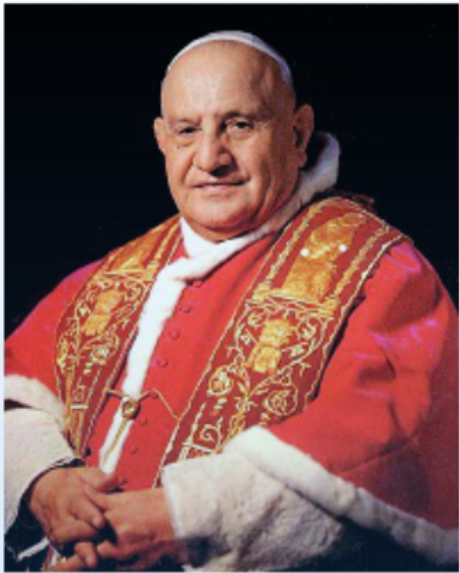
Hardly, but:  
We are not the only ones.  
We are all connected.  
No one is unimportant.

## **How can I effectively participate in:**

1. the global conversation
2. conversations at the national, state, and local level
3. conversations with my family, neighbors, and friends
4. conversations in this room in the coming weeks
5. a personal conversation with God

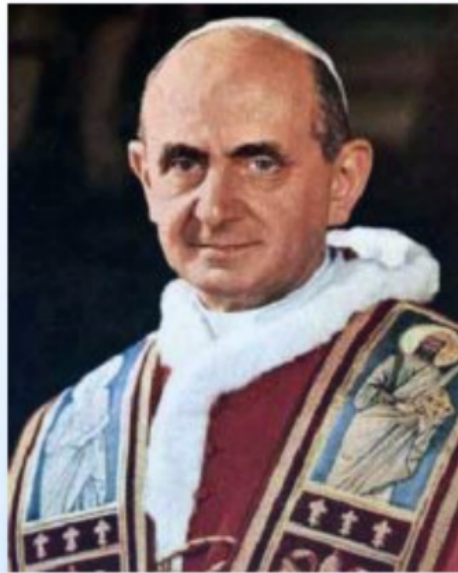
**about how we shape the future of our planet?**

Pope Saint John XXIII



b 1881, d 1963  
Served 1958-1963

Pope Paul VI



b 1897, d 1978  
Served 1963-1978

Pope Saint John Paul II



b 1920, d 2005  
Served 1978-2005

Pope Benedict XVI



b 1927  
Served 2005-2013

## **United by the same concern**

This encyclical is in continuity with the teachings of the Church, which in turn "echo the reflections of numerous scientists, philosophers, theologians and civic groups," including other Churches and Christian communities -- and other religions as well.

## Patriarch Bartholomew



b 1940, Ecumenical Patriarch since 1991





## One Earth Sangha

Crises have a way of eliciting clarity. Religious differences constitute one of the dominant sources of conflict in our world yet when faced with a common threat, those differences give way to our shared humanity. As the very systems of complex life on Earth are threatened, the release of Pope Francis' encyclical or teaching on climate change represents another moment for the world's faith traditions to affirm all that binds us together and take a firm stand on the need for dramatic change.

A central but rarely addressed aspect of this crisis is our forgetfulness of the sacred nature of creation, and how this affects our relationship to the environment.



**Pope Francis' Encyclical: Hearing the Cry of the Earth**  
Llewellyn Vaughan-Lee, Sufi teacher and author

As Pope Francis's message reminds us, we each need to be the person who "loves and protects creation," who remembers its sacred nature. We need to bring this song of love into our hearts and hands. Through our love for the Earth we can honor the call to climate action that comes from all faiths and from the single voice that is within all of humanity. We are all part of one living being we call the Earth and it desperately needs our love and attention.

## Sufi

## One Earth Sangha



Buddhism teaches that we can overcome greed, hatred and delusion, the causes of climate change, by developing ... ethical and spiritual capacities such as generosity, virtue, renunciation, mindfulness, wisdom, effort, compassion, truth, determination, loving kindness and peace."

~ Thanissara Mary Weinberg

# Embraced by major religions of the world.

## IFEES ecolslam



It cannot be just a coincidence that the encyclical was released on what happened to be the first day of the holy month of Ramadan in the Islamic calendar. This is the month in which Muslims throughout the world fast, and take no food and water during daylight hours as an exercise in frugality. Isn't this just the kind of message Pope Francis is attempting to put across? *There is depth to what is common between our faiths and we have much to gain by working together.* We echo the Pope's call to climate negotiators to waste no time in coming to an agreement that is fair to all and we call upon rich nations to tighten their belts a little so that the poor may have a fairer share of Earth's gifts.

## The Bhumi Project



As Hindus, we believe that all life is connected. Disrupting the finely balanced order on our planet through greed and exploitation is having significant and far-reaching consequences. In his encyclical the Pope speaks of this – that human beings have to consider their relationship with their surroundings, and to understand that the natural world cannot be considered separate to us. 'Every violation of solidarity and civic friendship harms the environment', the Pope states.



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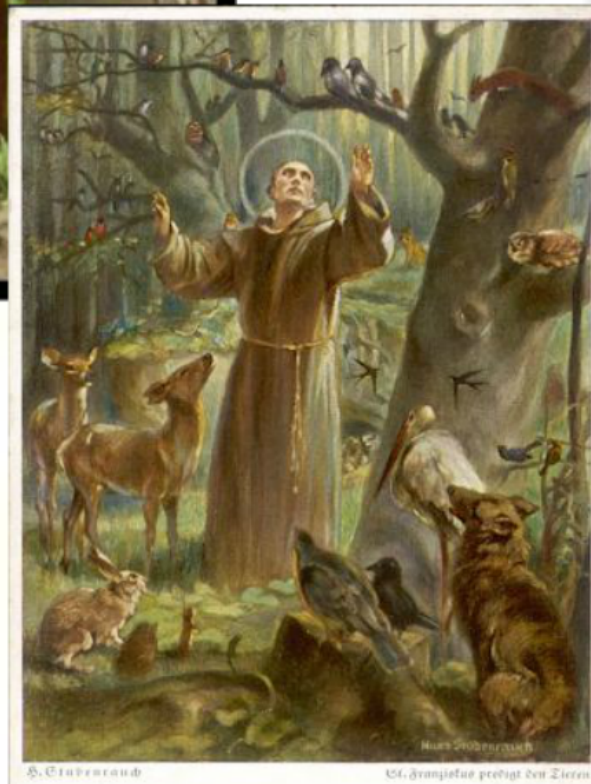
# Sufi

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"Francis embodies the Gospel journey from violence to non-violence, death to poverty, power to powerlessness, selfishness to selfless service, pride to humility, indifference to love, cruelty to compassion, vengeance to forgiveness, revenge to reconciliation, war to peace, killing enemies to loving enemies. More than any other Christian, he epitomizes discipleship to Jesus. . . ."

"Francis' logic points the way toward personal, social, and global justice, and peace. If each one of us practiced Gospel simplicity, voluntary poverty, and downward mobility like Francis, we would share the world's resources with one another, have nothing to fear from others, and live in peace with everyone." -Fr. John Dear



## e (chapters)

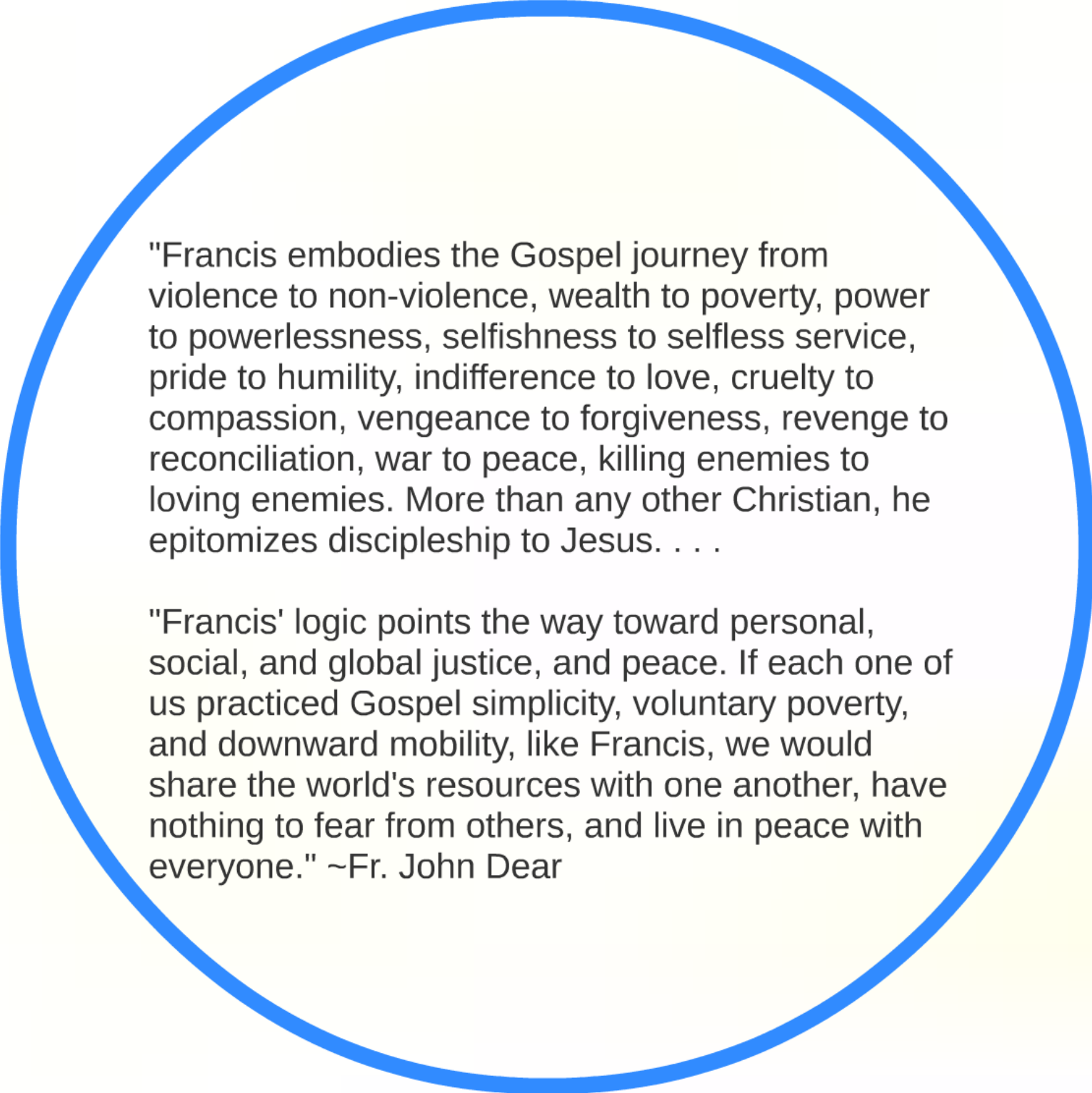
ological crisis

om Judaeo-Christian tradition  
the present situation

approach to ecology  
r dialogue and action







"Francis embodies the Gospel journey from violence to non-violence, wealth to poverty, power to powerlessness, selfishness to selfless service, pride to humility, indifference to love, cruelty to compassion, vengeance to forgiveness, revenge to reconciliation, war to peace, killing enemies to loving enemies. More than any other Christian, he epitomizes discipleship to Jesus. . . .

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## **Informal outline (chapters)**

1. review the present ecological crisis
2. consider principles from Judaeo-Christian tradition
3. examine the roots of the present situation
4. provide a respectful approach to ecology
5. advance proposals for dialogue and action
6. offer guidelines for human development

## **Recurring themes:**

- relationship between the poor and fragility of the planet
- conviction that everything in the world is connected
- critique of forms of power derived from technology
- call for new understanding of economy and progress
- the value proper to each creature
- the human meaning of ecology
- the need for forthright and honest debate
- the responsibility of international and local policy
- the throwaway culture
- the proposal of a new lifestyle



## **Chapter One: What Is Happening to Our Common Home**

- I. Pollution and Climate Change
- II. The Issue of Water
- III. Loss of Biodiversity
- IV. Decline in Quality of Human Life and  
Breakdown of Society
- V. Global Inequality
- VI. Weak Responses
- VII. A Variety of Opinions





**Pollution**







## **Pollution and Public Health**



## Periodic Table of the Elements

**Legend:**

- Metals (Yellow)
- Transition Elements (Red)
- Inner Transition Elements (Orange)
- Nonmetals (Light Blue)
- Noble Gases (Pink)
- Synthetic (Star)
- Radioactive (Triangle)

**Carbon (C) Callout:**

- Number of electrons in each shell: 2, 4, 6
- Atomic Number: 6
- Symbol: C
- Name: Carbon
- Atomic Mass: 12.01115

**Other Callouts:**

- 1. New designation
- 1A. Original designation
- ( ) Atomic weight of most stable isotope

**Periods and Groups:**

- Periods: 1 to 7
- Groups: 1 to 18
- Inner Transition Elements: Lanthanide Series (57-71) and Actinide Series (89-103)

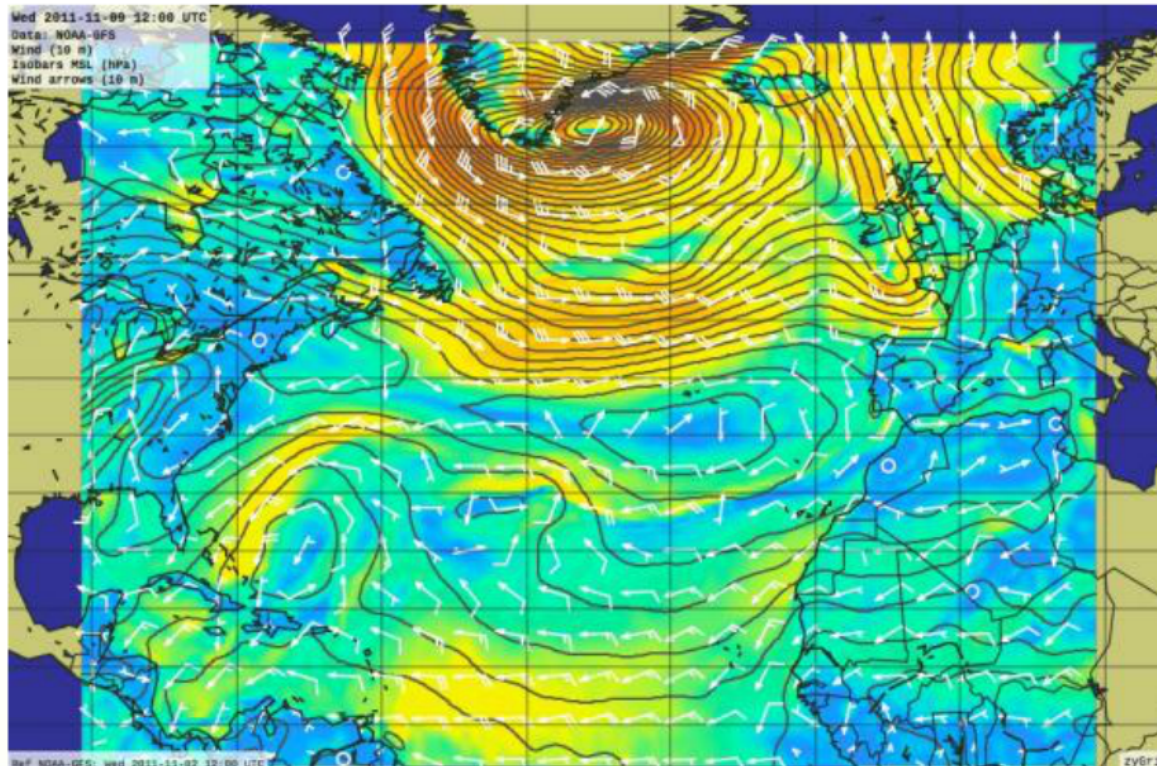
Pope Francis is said to have a degree in chemistry,  
but he is not a climate scientist.

I too have a degree in chemistry,  
and I too am not a climate scientist.

# As a scientist who is not a climate scientist, what do I think about climate change?

1. The science of weather and climate is complicated.
2. The science of man-made global warming is simple.
3. The scientific consensus on climate change is clear.
4. The politics of climate science denial is familiar.
5. The consequences of climate change are apparent.

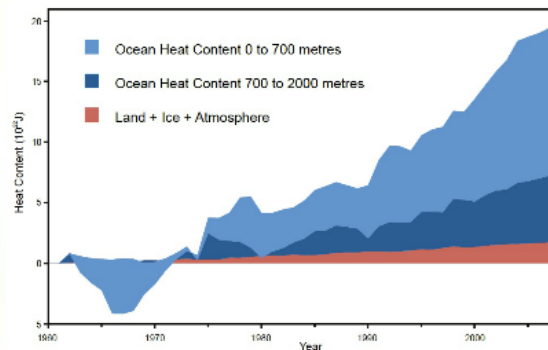
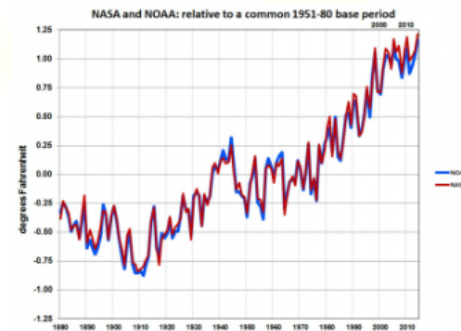
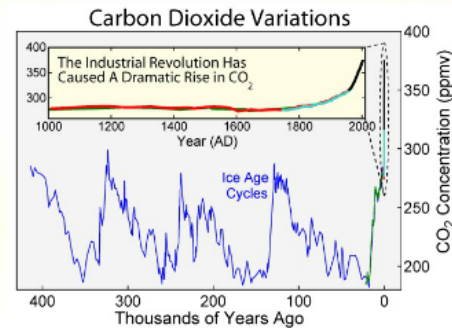
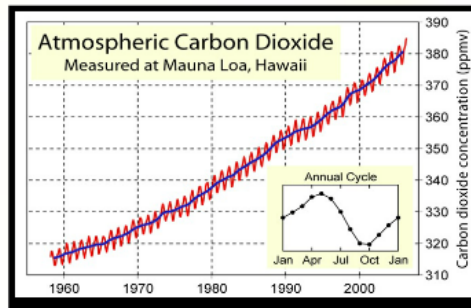




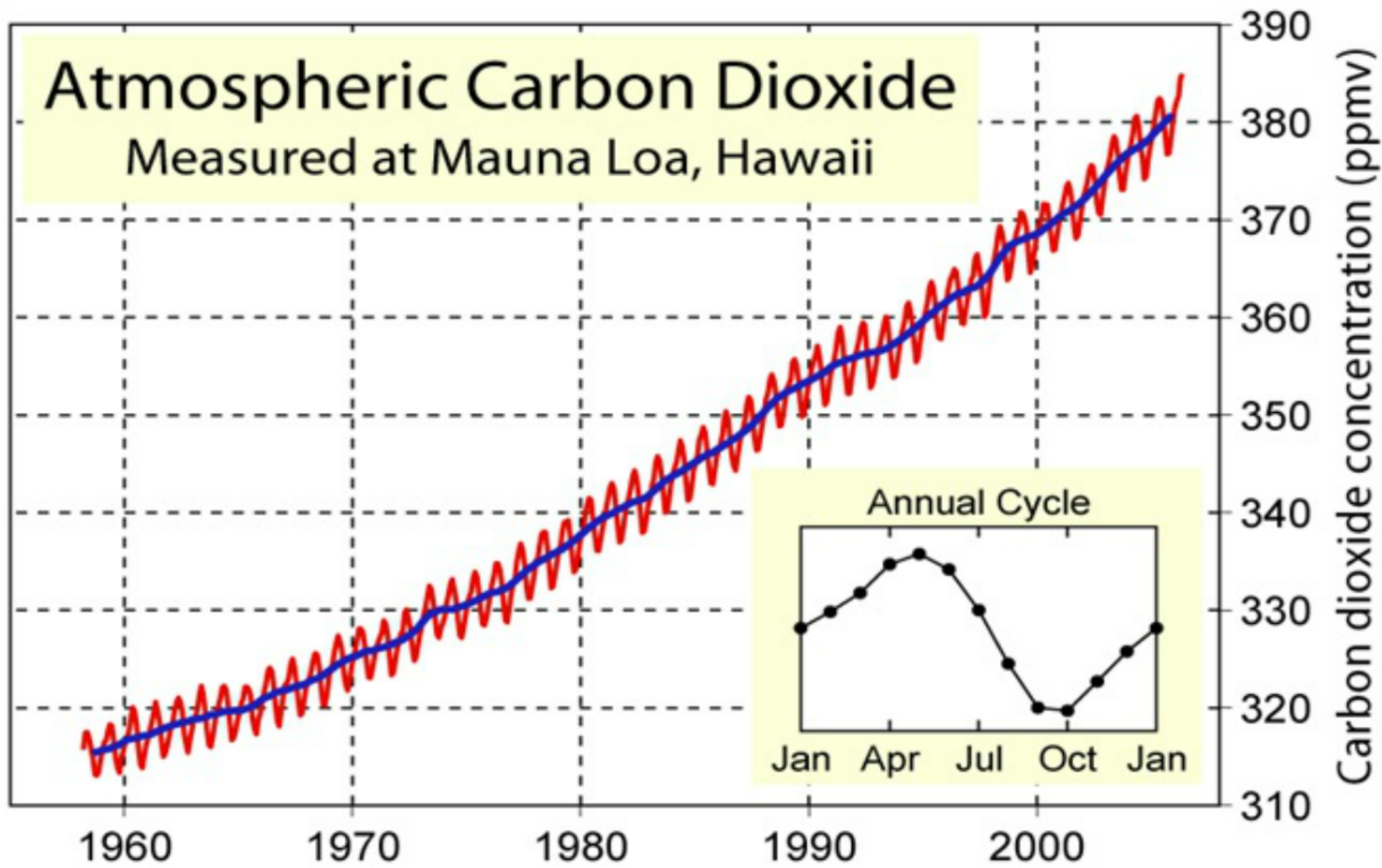
**The science of weather and climate is extremely complicated.**

## The science of man-made global warming is quite straightforward.

- chemistry of green-house gases is well understood
- rising CO<sub>2</sub> concentrations is well documented
- warming trends are clear

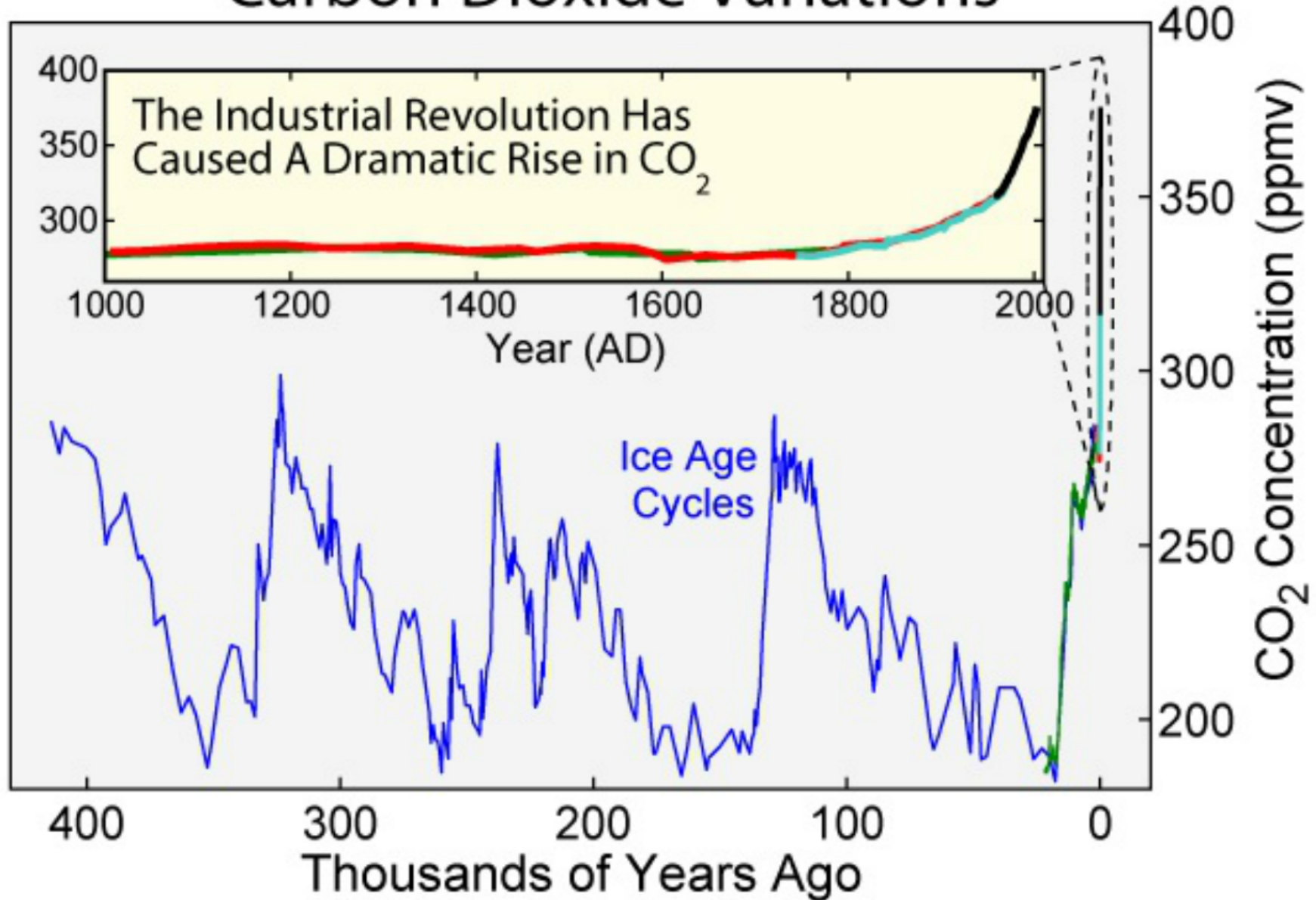


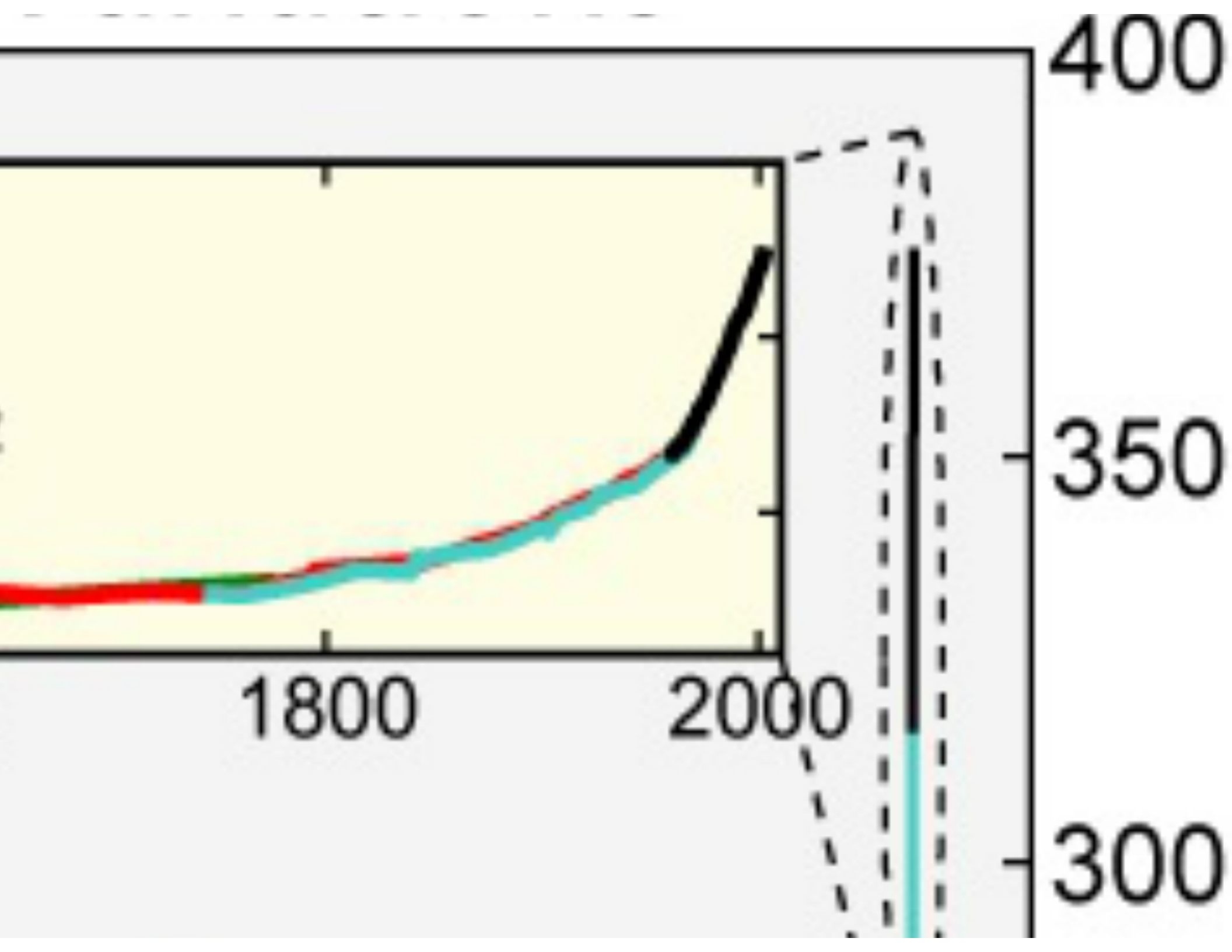
# Atmospheric Carbon Dioxide Measured at Mauna Loa, Hawaii



Carbon

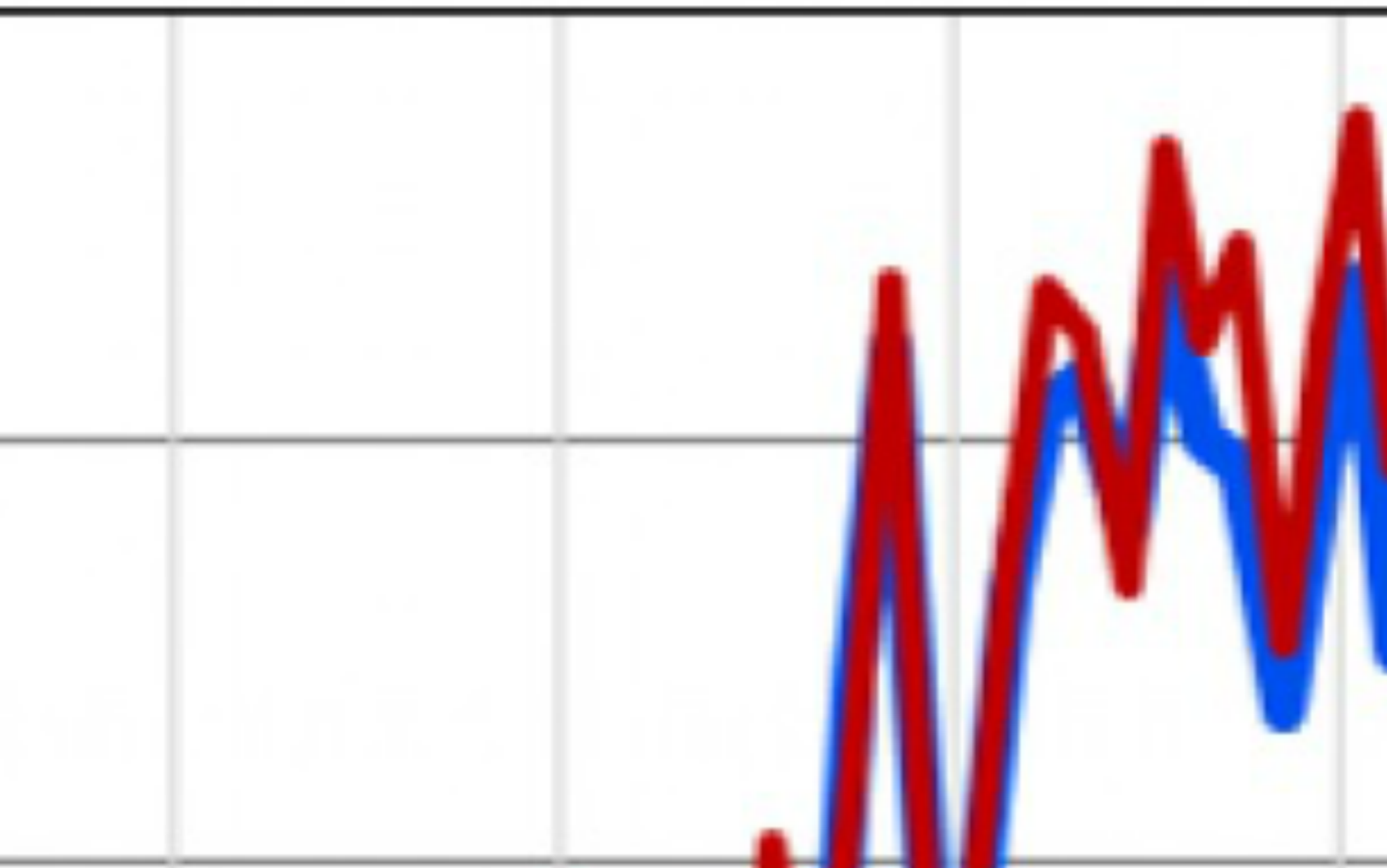
# Carbon Dioxide Variations





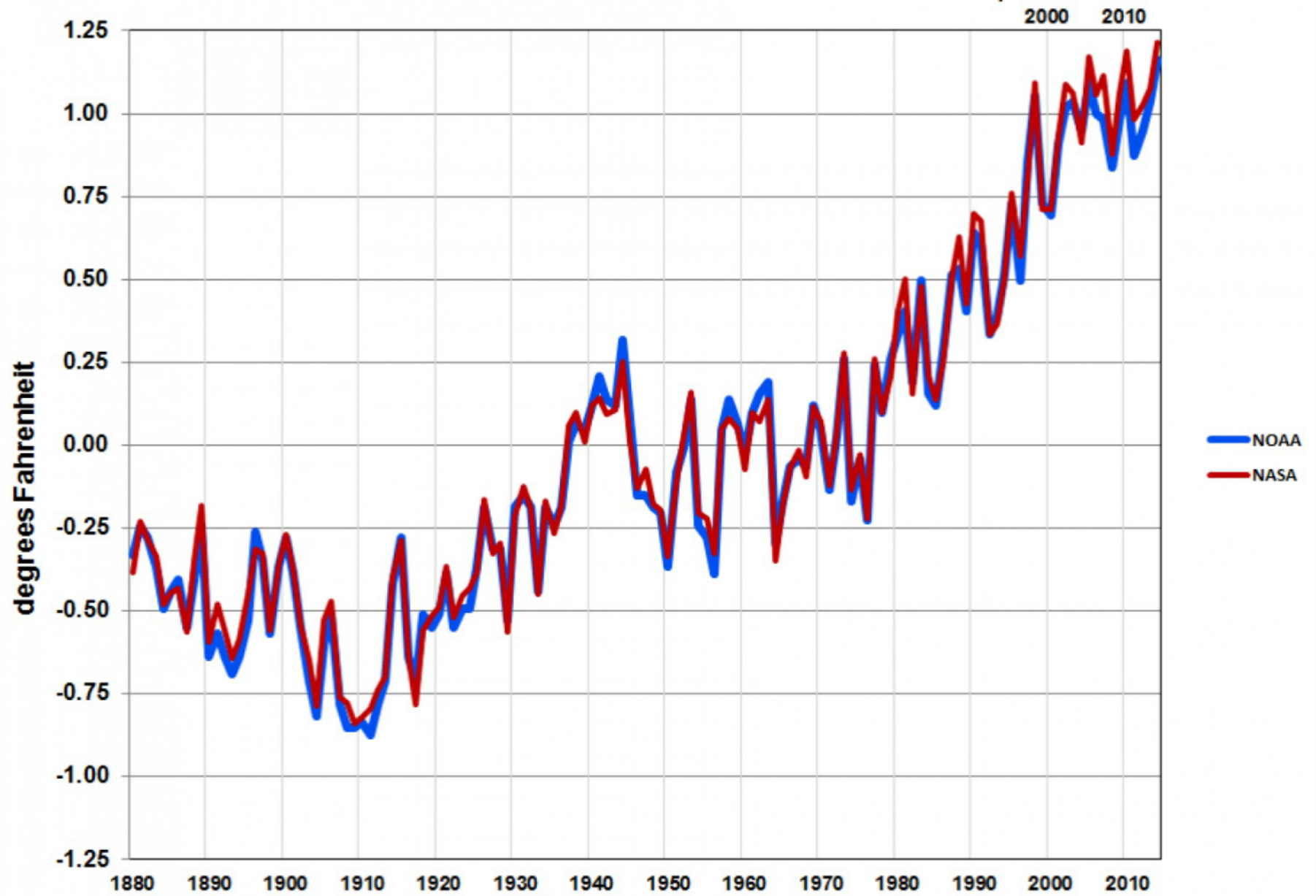
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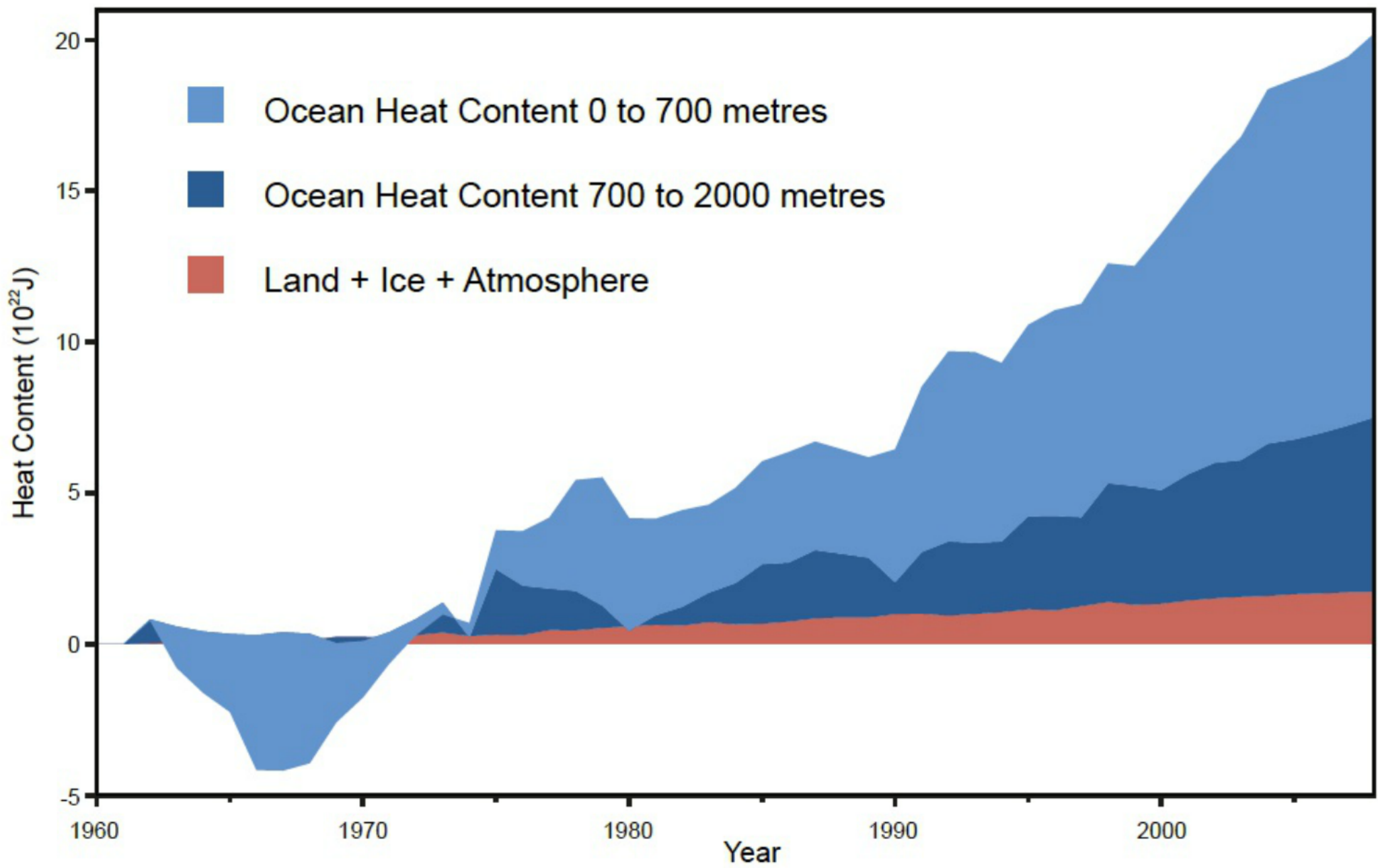
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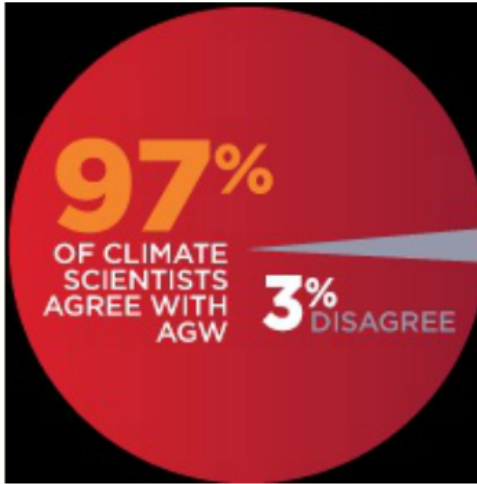


NASA and NOAA: relative to a common 1951-80 base period





-1.25  
1880 1890 1900 1910 1920 1



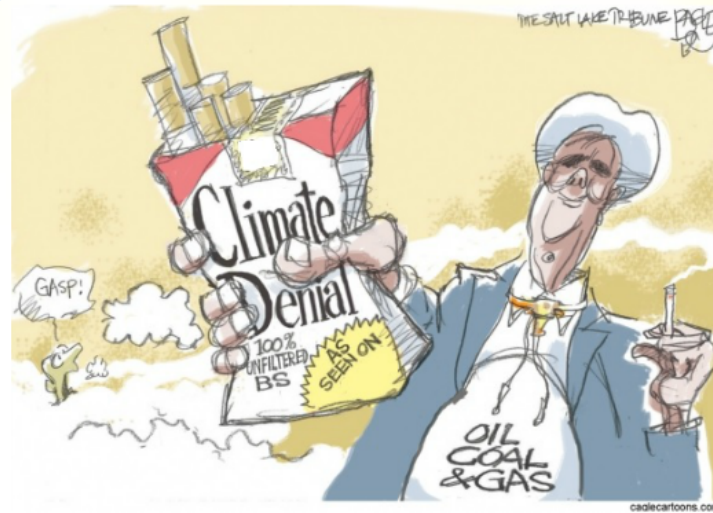
**The scientific consensus on climate change is crystal clear.**

Overwhelming majority of publishing climate scientists.  
Overwhelming majority of scientific organizations.



**American Medical Association**

"Our AMA ... supports the findings of the Intergovernmental Panel on Climate Change's fourth assessment report and concurs with the scientific consensus that the Earth is undergoing adverse global climate change and that anthropogenic contributions are significant." (2013)<sup>6</sup>



## The politics of science denial are all too familiar



The consequences of climate change are real (even though cause and effect not always clear).





# The Issue of Water



- indispensable for life, ecosystems
- demand exceeds supply
- depletion of fossil water, aquifers
- unsafe water available to the poor
- greater burden for women and girls
- privatization of a diminishing resource
- increasing the cost of food
- major source of conflict globally

# Loss of Biodiversity

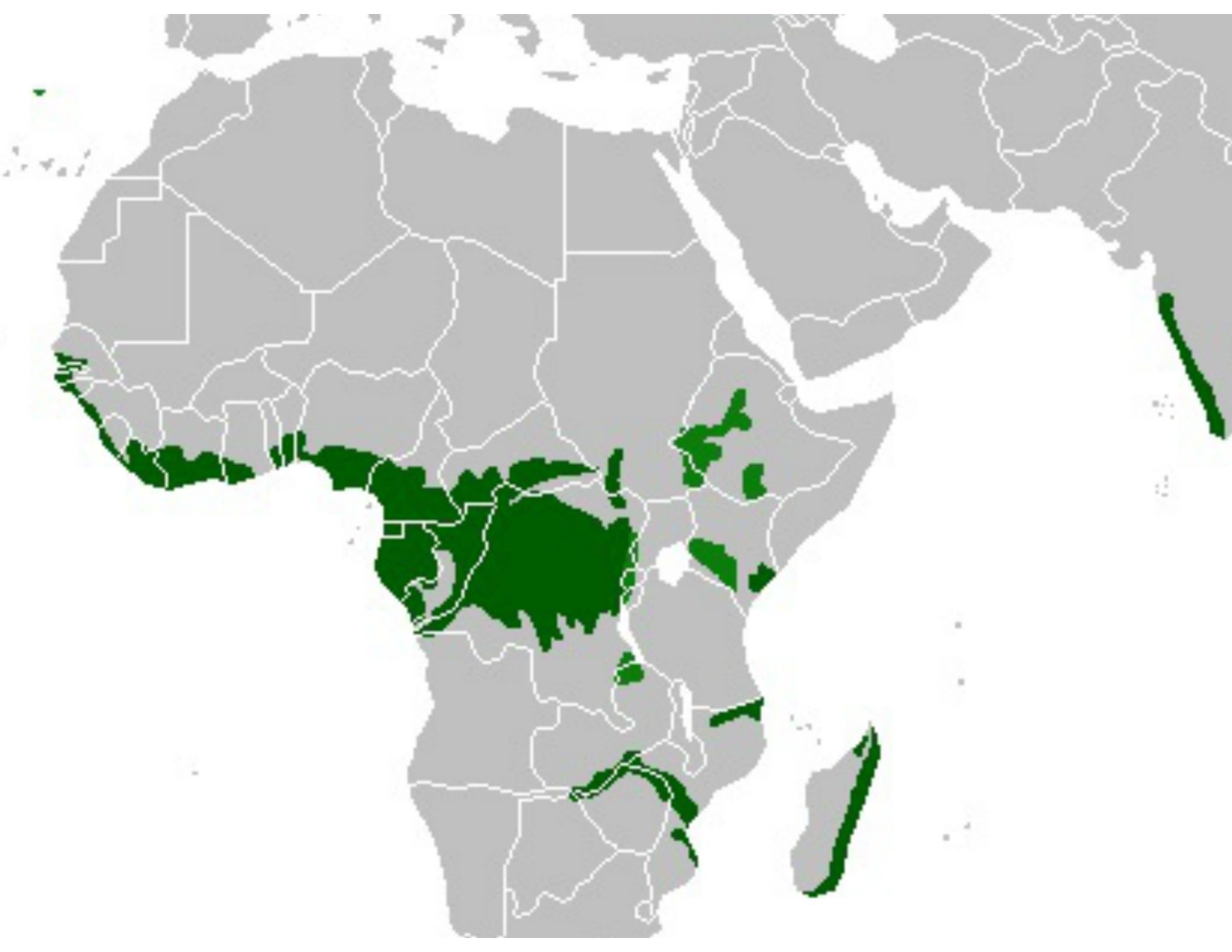


Vast changes in forests, woodlands, aquifers, glaciers, rivers, lakes, seas and oceans.

Losing species at 1,000 times the background rate, not only mammal and birds, but reptiles, worms, insects, algae, and microorganisms.









- Boreal Forest biome, Canada
- Boreal Forest biome, around the world



# Decline in the quality of human life and the breakdown of society



# Global Inequality





## Weak Responses

- We still lack the culture needed to confront this crisis
- We lack leadership capable of striking out on new paths
- International political responses have been remarkably weak
- Combating corruption has not changed habits of consumption
- Distractions dull our consciousness of how finite our world is
- Once resources are depleted, the scene will be set for new wars
- War does grave harm to the environment and to culture riches
- Superficially things do not look that serious. What a mistake.



## A Variety of Opinions

"§61. We need only take a frank look at the facts to see that our common home is falling into serious disrepair. Hope would have us recognize that there is always a way out, that we can always redirect our steps, that we can always do something to solve our problems. Still, we can see signs that things are now reaching a breaking point."



Word cloud 1 featuring prominent words: **God**, **World**, **environment**, **human**, **life**, **power**, **also**, **new**, **social**, **world**, **development**, **nature**, **problems**, **earth**, **change**, **growth**, **way**, **since**, **creatures**, **part**, **example**, **care**, **created**, **water**, **even**, **must**, **beings**, **reality**, **creatures**, **part**, **example**, **care**, **created**, **change**, **another**, **order**, **global**, **must**, **beings**, **reality**, **creatures**, **part**, **example**, **care**, **created**, **change**, **another**, **longer**, **new**, **relationship**, **environmental**, **power**, **life**, **human**, **consumption**, **society**, **others**, **also**, **technology**, **production**, **economic**, **Saint**, **crisis**, **waste**, **culture**, **ecology**, **different**, **integral**, **present**, **responsibility**, **everything**, **politics**, **species**, **make**, **Lord**, **towards**, **certain**, **pollution**, **progress**, **dignity**, **resources**, **problem**, **future**, **particular**, **areas**, **simply**, **something**, **time**, **may**, **see**, **place**, **find**, **given**, **respect**, **natural**, **family**, **significant**, **local**, **possible**, **acknowledge**, **planet**, **give**, **community**, **creature**, **live**

Word cloud 2 featuring prominent words: **human**, **life**, **world**, **God**, **environment**, **also**, **new**, **social**, **world**, **development**, **nature**, **problems**, **earth**, **change**, **growth**, **way**, **since**, **creatures**, **part**, **example**, **care**, **created**, **water**, **even**, **must**, **beings**, **reality**, **creatures**, **part**, **example**, **care**, **created**, **change**, **another**, **order**, **global**, **must**, **beings**, **reality**, **creatures**, **part**, **example**, **care**, **created**, **change**, **another**, **longer**, **new**, **relationship**, **environmental**, **power**, **life**, **human**, **consumption**, **society**, **others**, **also**, **technology**, **production**, **economic**, **Saint**, **crisis**, **waste**, **culture**, **ecology**, **different**, **integral**, **present**, **responsibility**, **everything**, **politics**, **species**, **make**, **Lord**, **towards**, **certain**, **pollution**, **progress**, **dignity**, **resources**, **problem**, **future**, **particular**, **areas**, **simply**, **something**, **time**, **may**, **see**, **place**, **find**, **given**, **respect**, **natural**, **family**, **significant**, **local**, **possible**, **acknowledge**, **planet**, **give**, **community**, **creature**, **live**



Tuesday, September 22 (Washington, DC)

4:00 p.m. Arrival from Cuba at Joint Base Andrews

Wednesday, September 23 (Washington, DC)

9:15 a.m. Welcome ceremony and meeting with President Obama at the White House

11:00 a.m. Papal Parade along the Ellipse and the National Mall (time approximate)

11:30 a.m. Midday Prayer with the bishops of the United States, St. Matthew's Cathedral

4:15 p.m. Mass of Canonization of Junipero Serra, Basilica of the National Shrine of the Immaculate Conception

Thursday, September 24 (Washington, DC, New York City)

9:20 a.m. **Address to Joint Meeting of the United States Congress**

11:15 a.m. Visit to St. Patrick in the City and Catholic Charities of Washington

4:00 p.m. Depart from Joint Base Andrews

5:00 p.m. Arrival at John F. Kennedy International Airport

6:45 p.m. Evening Prayer (Vespers) at St. Patrick's Cathedral



Friday, September 25 (New York City)

8:30 a.m. **Visit to the United Nations and Address to the United Nations General Assembly**

11:30 a.m. Multi-religious service at 9/11 Memorial and Museum, World Trade Center

4:00 p.m. Visit to Our Lady Queen of Angels School, East Harlem

5:00 p.m. Procession through Central Park (time approximate)

6:00 p.m. **Mass at Madison Square Garden**



Saturday, September 26 (New York City, Philadelphia)

8:40 a.m. Departure from John F. Kennedy International Airport

9:30 a.m. Arrival at Atlantic Aviation, Philadelphia

10:30 a.m. Mass at Cathedral Basilica of Sts. Peter and Paul, Philadelphia

4:45 p.m. Visit to Independence Mall

7:30 p.m. **Visit to the Festival of Families Benjamin Franklin Parkway**

Sunday, September 27 (Philadelphia)

9:15 a.m. Meeting with bishops at St. Martin's Chapel, St. Charles Borromeo Seminary

11:00 a.m. Visit to Curran-Fromhold Correctional Facility

4:00 p.m. Mass for the conclusion of the World Meeting of Families, Benjamin Franklin Parkway

7:00 p.m. Visit with organizers, volunteers and benefactors of the World Meeting of Families, Atlantic Aviation

8:00 p.m. Departure for Rome

**Topic: Environmental Protection**

**Sub-topics:** Air Pollution, Water Pollution, Land Pollution, Noise Pollution, Global Warming, Climate Change, Deforestation, Biodiversity Loss, Ozone Depletion, Acid Rain, Desertification, Soil Degradation, Marine Pollution, Air Quality Index (AQI), Environmental Impact Assessment (EIA), Environmental Monitoring and Assessment (EMA), Environmental Policy, Environmental Law, Environmental Education, Environmental Activism, Environmental Justice, Environmental Health, Environmental Quality, Environmental Risk Assessment, Environmental Sustainability, Environmental Science, Environmental Technology, Environmental Economics, Environmental Law, Environmental Policy, Environmental Education, Environmental Activism, Environmental Justice, Environmental Health, Environmental Quality, Environmental Risk Assessment, Environmental Sustainability, Environmental Science, Environmental Technology, Environmental Economics.




**Global Warming**



**Decline in the quality of water: the world's largest cities**



**2016 Environmental Performance Index**



**The World of Water**



**Water Pollution**



**Water Quality**



**Water Conservation**



**Water Pollution**



**Water Conservation**



**Water Quality**



**Water Pollution**



**Water Conservation**



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"Praised Be"

