

Critical remarks addressed to climate fanatics and climate skeptics

Klímafanatikusoknak és klímaszkeptikusoknak címezett kritikai megjegyzések

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„The World is a very complex system. It is easy to have too simple a view of it, and it is easy to do harm and to make things worse under the impulse to do good and make things better.”

(Kenneth Building 1910-1993)

Critical remarks addressed to climate fanatics and climate skeptics

Climate fanatics

They think the greenhouse-based global warming is the central environmental problem.

They declare the „green economy, based on alternative energies”.

Climate skeptics

They think that there is no (problem with) greenhouse-based global warming.

They declare the „traditional economy, based on fossil energies”

Assume that both climate fanatics and climate skeptics have the same objectives: sustain (and enhance) the creative comforts of the humanity, suggesting their own ways

Is it possible to continue without changing, as suggested by climate skeptics? No.

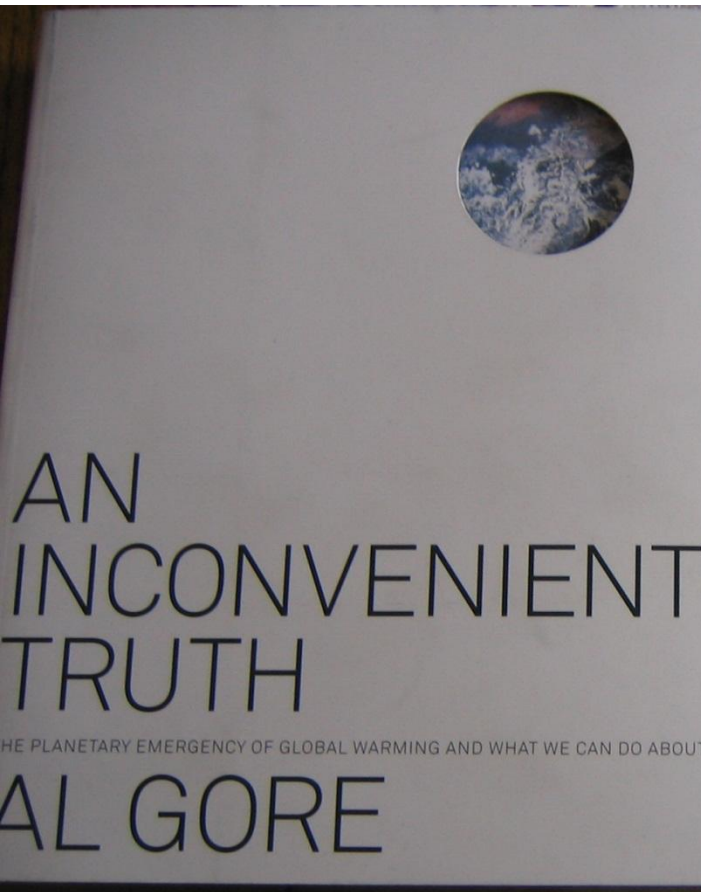
Is it possible to continue with the change suggested by climate fanatics? No.

Why it is impossible?

Until we concentrate on the climate change issue, we'll never find out what is the problem.

Illustration

a typical climate fanatic



a typical climate skeptic



Both ones focuss on climate



Contents

1. An Earth science perspective
2. Water, soil, energy, raw materials and environment, as human needs
3. Conclusion:

The climate change is not a principal problem.

The principal problem is as follows:

In a finite domain (the Earth) it is impossible to have an infinite growth.

So far in the Anthropocene...

- **Humans have already transformed 40-50% of the ice-free land surface on earth.**
- **Humans now use 54% of the available fresh water on the globe.**
- **Humans are now an order of magnitude more important at moving sediment than the sum of all other natural processes operating on the surface of the planet.**

Humans become agents of environmental change

Ecological equilibrium disturbed

Human-induced changes on a global scale

"Anthropocene epoch"

Approaching thresholds of ecosystems

Threats to earth resources

Energy and Mineral Resources

Global competition

Growing population, expanding economies heighten demand

Environmental consequences of development, extraction, use

Living for the Future

Systems approach helps reveal nature of earth systems

Climate change, population growth are difficult issues

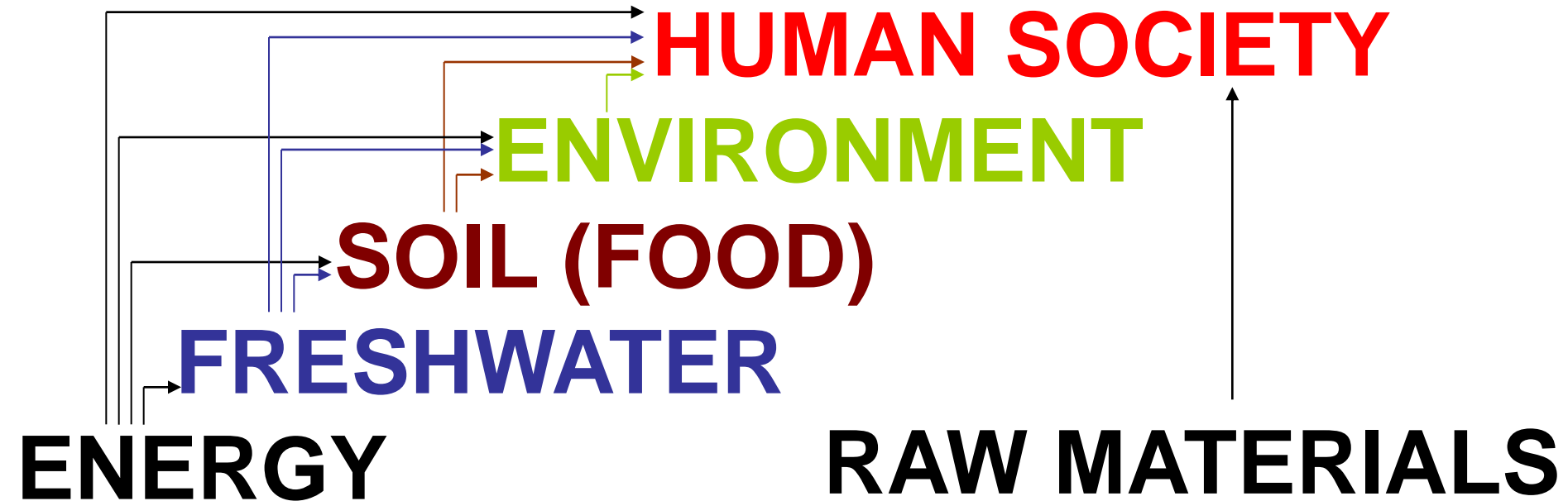
We are all at risk

Many near-term decisions will influence the future health of the planet

A summary from the perspective of the International Year of Planet Earth:

- 1. Earth's resources:** a) fossil energy: decreasing; the renewables are not able to satisfy the present demands; b) rare earth metals in future might be unavailable
 - 2. Groundwater:** the reservoirs are diminishing, since the freshwater consumption is much larger than the refilling of the subsurface reservoirs
 - 3. Soil:** the Earth is hardly able to feed ~9 billion people, predicted for 2040, but on the price of ecosystems and biodiversity, and there is no room for biomass production
- Σ: Earth and Life:** the global ecological system is at risk. We are all at risk!
- **Climate changes:** a) The Earth's history is not else than history of climate changes, b) the Homo sapiens seems to be one of the agents of the environmental change
 - **Geohazards (environmental catastrophes):** the increase of number of catastrophes is of anthropogenic origin
 - **Earth and Health:** a better co-operation between geologists and physicians would be required
 - **Megacities** are not sustainable
 - **Oceans:** the future is full of surprises (1. biology, 2. resources, 3. environmental risk)
 - **Deep Earth:** slow, permanent changes

ORDER OF IMPORTANCE



Smalley's classification (Dinya, 2010) is similar to the conclusions of those of the International Year of Planet Earth

**ENVIRONMENT:
planetary
boundaries**

MAN-MADE

MAN-MADE

MAN-MADE

Rockström et al.: Nature, 24 September 2009

MAN-MADE

MAN-MADE???????

MAN-MADE

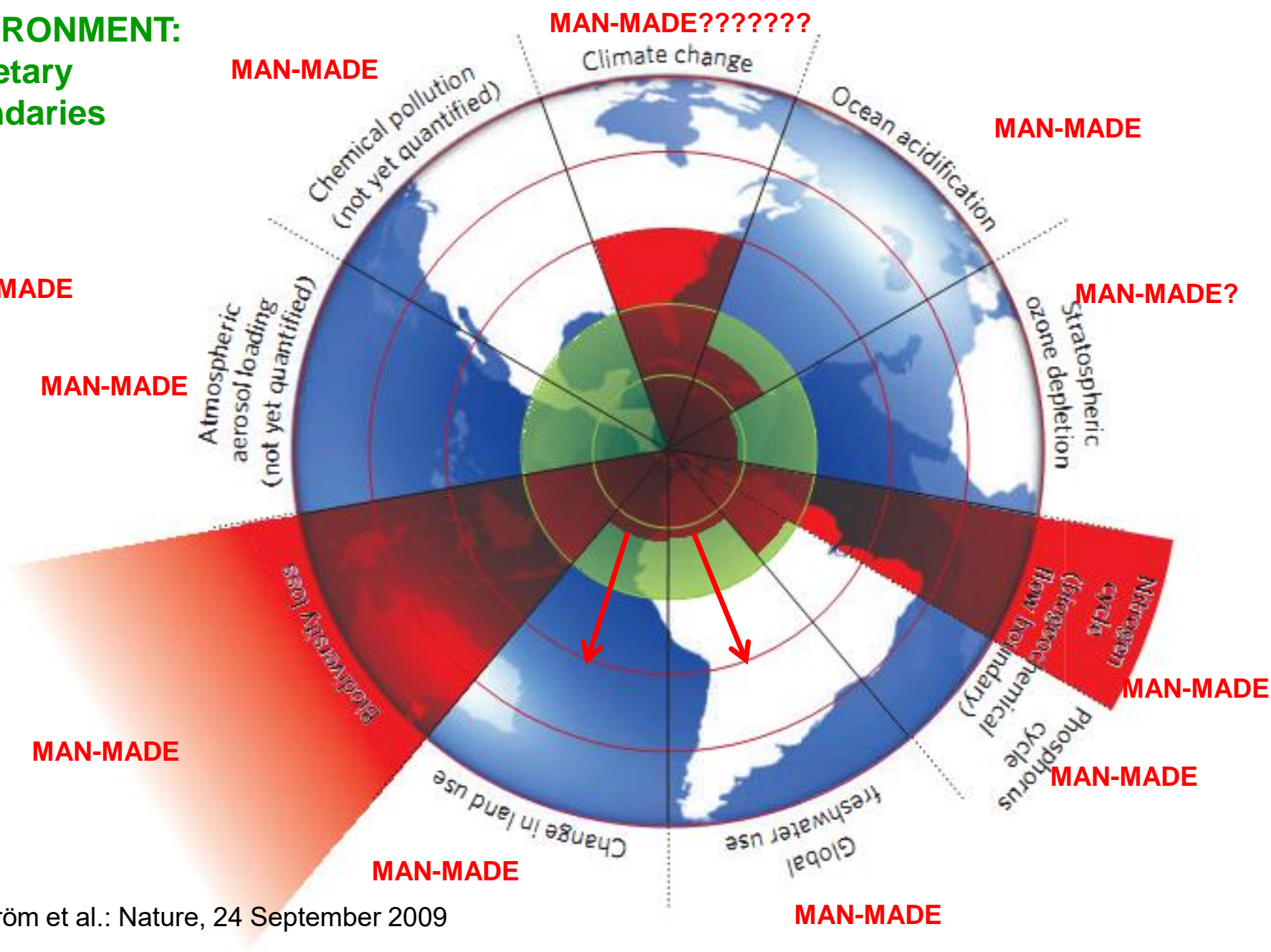
MAN-MADE?

MAN-MADE

MAN-MADE

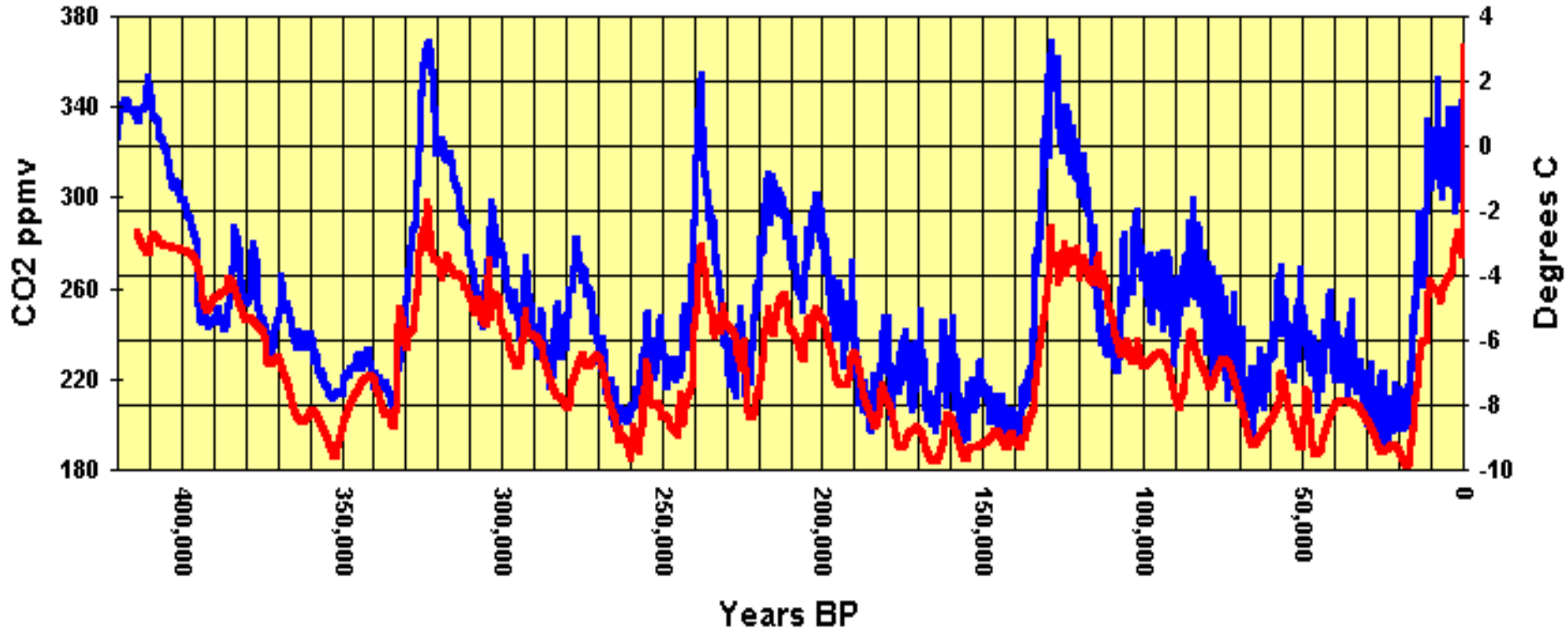
MAN-MADE

Critics: the diminishing Earth's resources(energy and matter) are missing



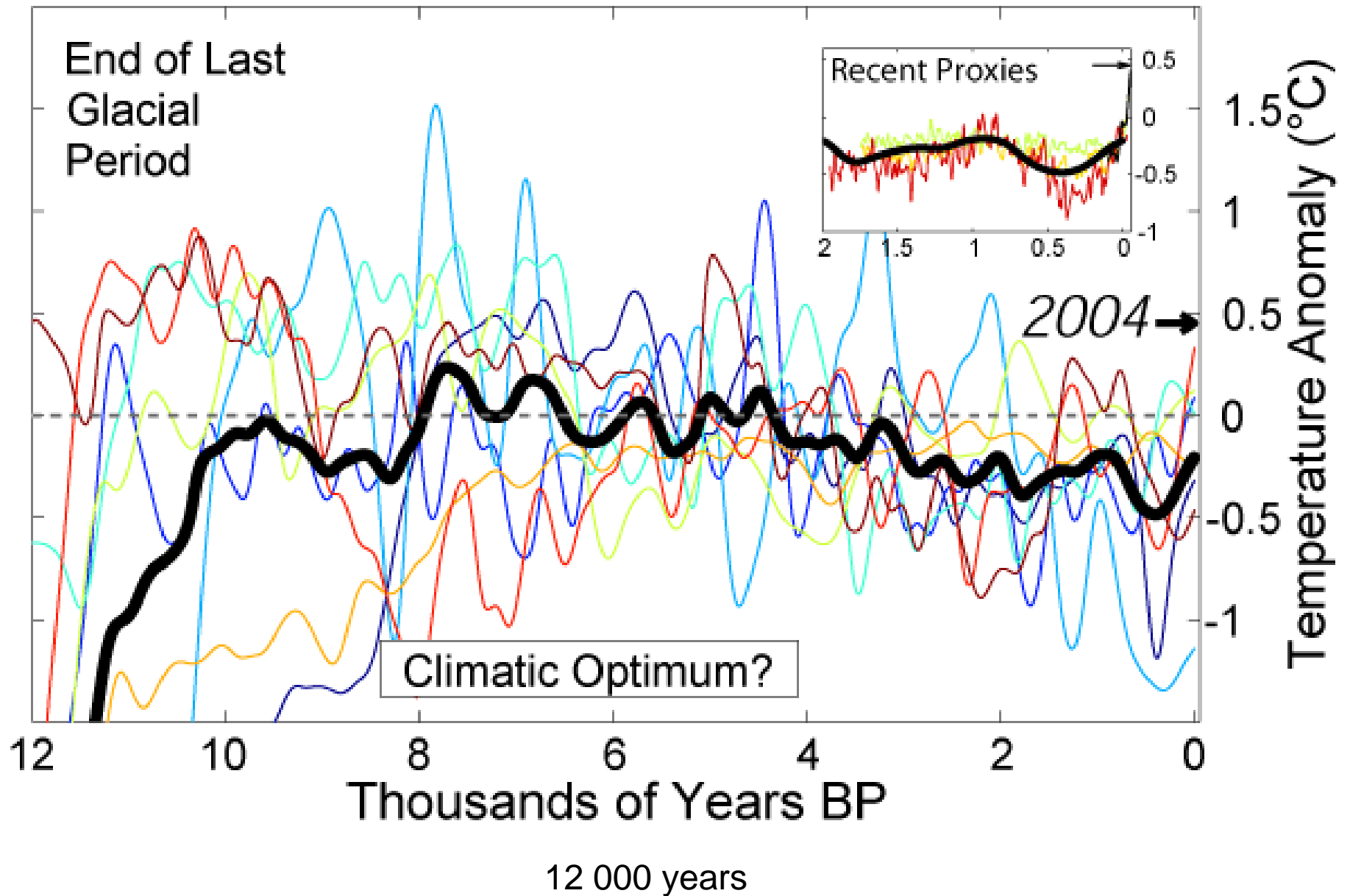
Antarctic Ice Core Data 1

— Temperature Variation — CO2 Concentration

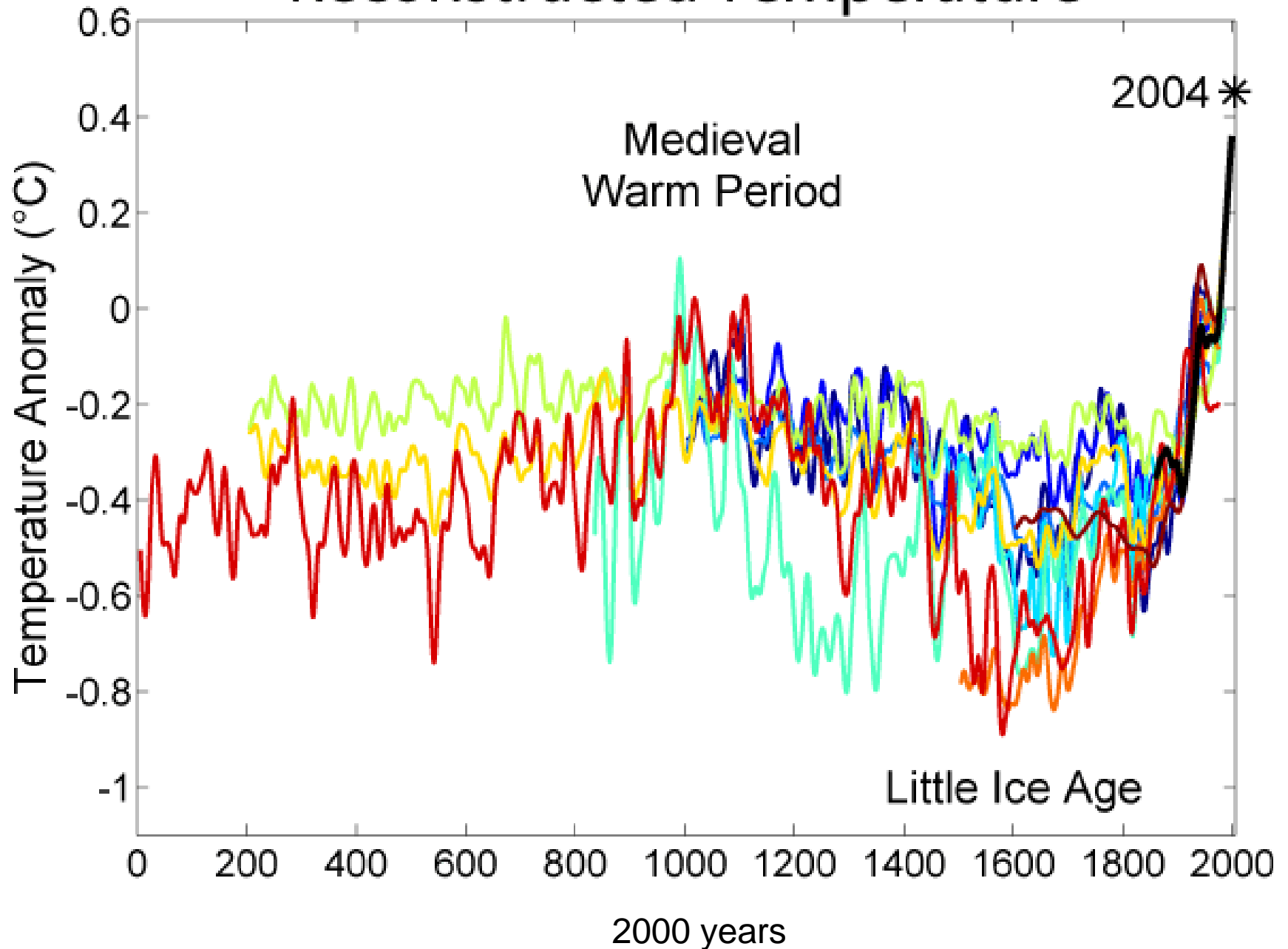


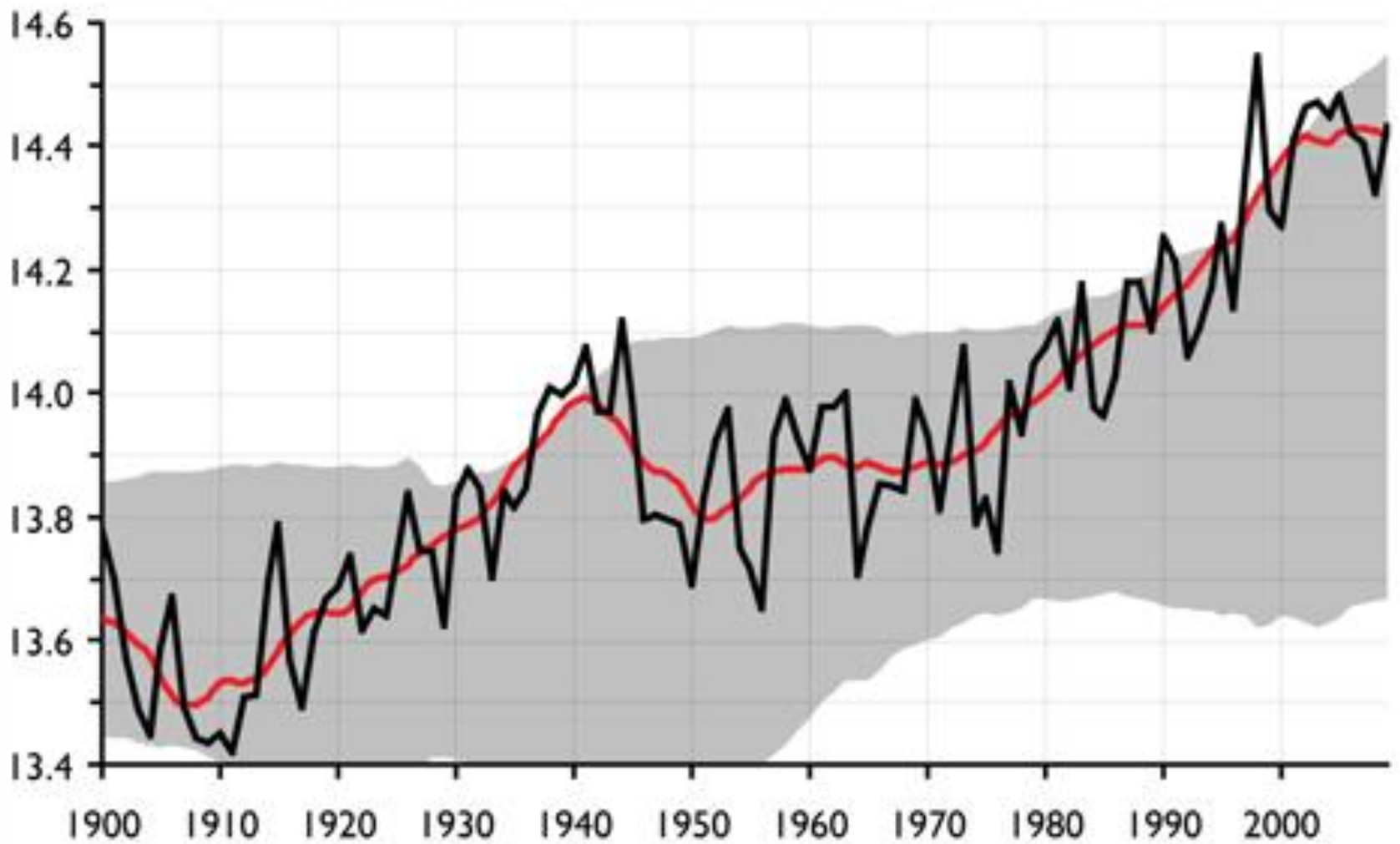
450 000 years

Holocene Temperature Variations

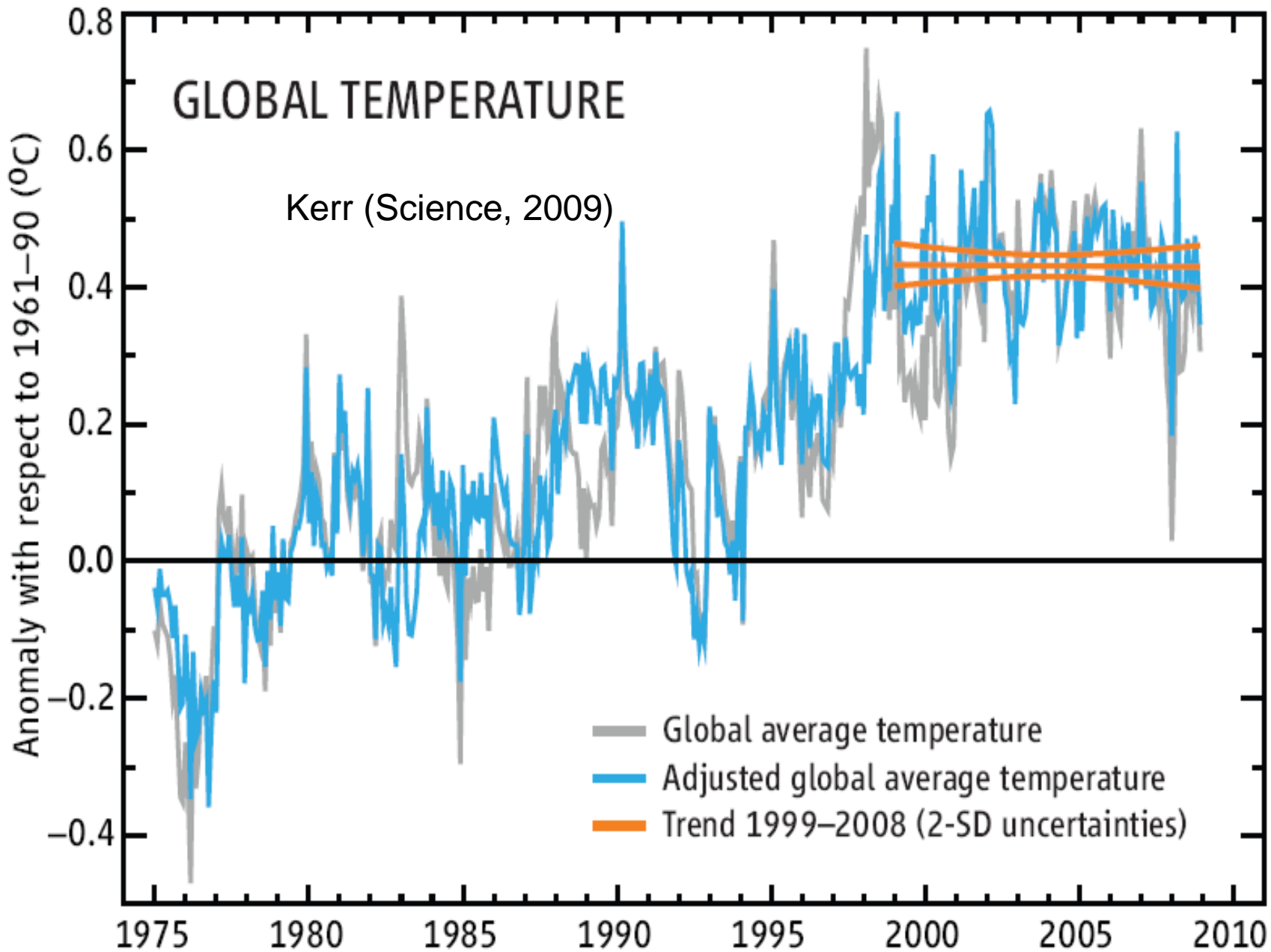


Reconstructed Temperature





110 years



35 years

Climate change related assumptions:

- future tendency
- causes

(There are only hypotheses, no proves!)

Proven facts:

- diminishing fossil energy,
- diminishing freshwater,
- diminishing soil,
- diminishing rare earth elements
- +
- biodiversity loss,
- Nitrogen cycle problems,
- pollutions,
- etc, etc.

The economic growth will inevitably lead to a catastrophic situation and collapse, Independently of the actual climate tendency.

„Now it is up to us to use our democracy and our God-given ability to reason with one another about our future and make moral choices to change the policies and behaviours that would, if continued, leave a degraded, diminished and hostile planet for our children and grandchildren – and for humankind.”

(Al Gore, 2007)

AN
INCONVENIENT
TRUTH
THE PLANETARY EMERGENCY OF GLOBAL WARMING AND WHAT WE CAN DO ABOUT IT
AL GORE

KELLEMETLEN
IGAZSÁG
A BOLYGÖNKAT FENYEGETŐ GLOBÁLIS FELMELEGEDÉS, ÉS LEKÜZDÉSÉNEK LEHETŐSÉGEI
AL GORE

Title page and page 296 of Al Gore's book

Now it is up to us to use our democracy and our God-given ability to reason with one another about our future and make moral choices to change the policies and behaviors that would, if continued, leave a degraded, diminished, and hostile planet for our children and grandchildren—and for humankind.

Úgy kell döntenünk, hogy a XXI. századot a megújulás idejévé tesszük. Meg kell ragadnunk a válságban rejlő lehetőséget szabadjára engedhetjük a kreativitásunkat, újításainkat, és inspirációnkat, hiszen ezek éppen annyira részei a születésünkél fogva bennünk rejlő emberi lehetőségeknek, mint a kapzsiság és a kicsinység. A választás a miénk. A felelősség a miénk. A jövő a miénk.

We must choose instead to make the 21st century a time of renewal. By seizing the opportunity that is bound up in this crisis, we can unleash the creativity, innovation, and inspiration that are just as much a part of our human birthright as our vulnerability to greed and pettiness. The choice is ours. The responsibility is ours. The future is ours.



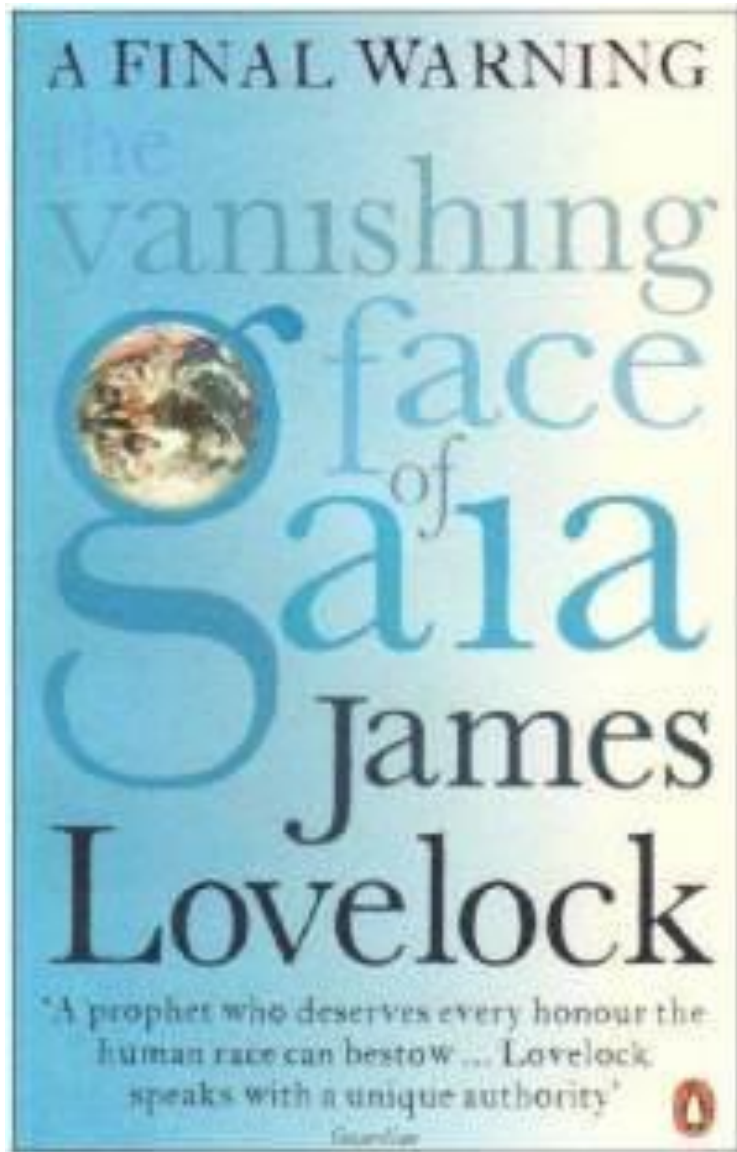
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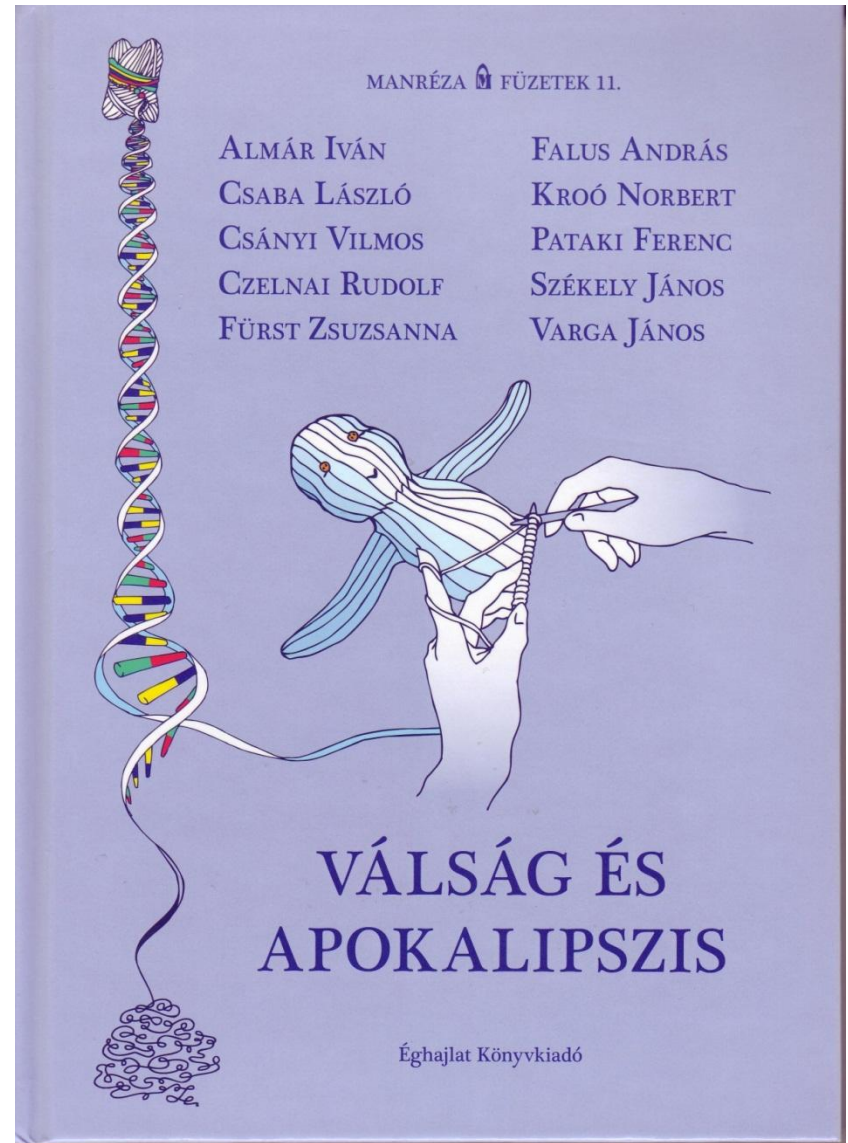
GLOBAL WARMING

(Energy + matter) consumption = creature comfort + environmental degradation

To be read:



„The greatest problem is the *urban green ideology*” (Lovelock, 2011)



„Manha de Carnaval” (Czelnai, 2012)
(The day after the Carnival)

"Anyone who believes exponential growth can go on forever in a *finite* world is either a madman or an *economist*."

(Kenneth Boulding, 1910-1993)



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•Policy Forum

ENVIRONMENT AND DEVELOPMENT

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Meeting fundamental human needs while preserving Earth's life support systems will require an accelerated transition toward sustainability. A new field of sustainability science is emerging that seeks to understand the fundamental character of interactions between nature and society and to encourage those interactions along more sustainable trajectories. Such an integrated, place-based science will require new research strategies and institutional innovations to enable them especially in developing countries still separated by deepening divides from mainstream science. Sustainability science needs to be widely discussed in the scientific community, reconnected to the political agenda for sustainable development, and become a major focus for research.