

CLIMATE CHANGE ON PLANET EARTH

HISTORY, PHYSICS, SCIENCE FACTS, CONSEQUENCES,
COUNTERMEASURES, AND CONCLUSIONS

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presented at **Burschenschaft Alemannia zu Giessen, Germany**, 16 January 2017
updated version, 5 March 2017

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3. FACTS and CONSEQUENCES of Climate Change cntnd.

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Education: Jochem H. Hauser gained his diploma (simulation of particle beams for the GSI accelerator) and Dr.rer.nat in space physics (electric space propulsion) from Giessen University, Germany.

Professional Positions: He worked for ten years in the Institute of Coastal Research, Helmholtz Research Center, Geesthacht on numerical fluid dynamics models for both coastal waters and the atmosphere. After that, he joined the European Space Agency (ESA) for five years as the chief of the Aerothermodynamics Section (reentry simulation) at the European center of Science and Technology, Noordwijk, The Netherlands. He also worked (seconded by ESA) at the NASA Ames Research Center, Moffett Field, CA. In 1993, he became professor (now, em) of High Performance Computing in the Faculty H at Ostfalia University of Applied Sciences, Germany and also was an adjunct professor at the Univ. of Greenwich, London. Since 2012, he is the Scientific Director of the HPCC-Space GmbH, Hamburg, Germany.

Visiting Scientist: He has held guest scientist positions at the mathematics department of the Swiss Federal Institute of Technology (ETH), Zurich, Switzerland in 2000, and at the Dept. of Mech. Eng. of the University of Clausthal, Germany in 2007. He has lectured widely both in the U.S. and in Europe. From 2009-2011 he lectured on the *Physics of Climate Change* for Master of Science students at the Univ. of Luneburg.

Research: His research ranges over the field of fluid dynamics and plasma physics simulation, aerospace science and gravitational physics. Current research topic is on novel space propulsion using extreme gravity-like fields.

Professional Societies: He is a senior member of the American Institute of Aeronautics and a member of the Technical Committee for Future Flight of the American Institute of Aeronautics and Astronautics. Dr. Hauser is also a full member of the Society of Scientific Exploration (SSE), and an affiliate member of the American Astronomical Society. He is the editor/coauthor of 10 books in computational physics and advanced space propulsion and authored about 70 papers (available from Researchgate).

Together with W. Droscher he co-authored the recent book:

Introduction to the Physics, Astrophysics, and Cosmology of Gravity-Like Fields,
25 November 2015, 526 pp., color, available from Amazon.de or Amazon.com

Acronyms in Climate Science

AGW Anthropogenic Global warming

CERN European Organization for Nuclear Research

IPCC Intergovernmental Panel of Climate Change

ENSO El Niño–Southern Oscillation (eastern pacific, warm El Niño, cold La Niña)

ESA European Space Agency

EPA Environmental Protection Agency

GCM Global Circulation Model

HFG Helmholtz Forschungszentrum Geesthacht

MAAT Mean Annual Air Temperature

MIT Massachusetts Institute of Technology

NASA National Aeronautics and Astronautics Agency

NCAR National Center of Atmospheric Research, Boulder, CO

NOAA National Oceanographic and Atmospheric Agency

NSIDC National Snow & Ice Data Center

PDO Pacific Decadal Oscillations

PIK Politisch Ideologischer Klimawandel, Potsdam

ppm Parts per million, CO₂ = 406

ppb Parts per billion, CH₄ = 1,800

RSS Remote Sensing System by microwave satellite observations

UAH University of Alabama at Huntsville

TSI Total Solar Irradiation (solar energy flux J m⁻² s⁻¹, solar constant 1,367 W m⁻²)

WES Waterways Experiment Station, Vicksburg (sea level gauges)

Before we start:

let us hear and see (video in German) the
fundamental remarks from

Prof. N. Bolz, TU Berlin

about

**Climate Change as a replacement for religion
*in its wake scientific misconduct has surged !***

It must be understood the Earth is a living planet and life always has had, will have, and must have an impact on the Earth climate

climate change is a natural phenomenon and is there forever

apart from factors on Earth itself, that is, the **internal heat** that is released by the core of the Earth into the oceans and the atmosphere, the climate on our planet is mainly driven by the Sun's **external power**, which is, despite the name of the solar constant, not constant but does vary with time, and the deep solar minima seem to change the ocean currents, while the magnetic field of the Sun is changing the cosmic ray flux (and thus the low cloud cover) based on the Be 10 data, whereas the positions of the four large planets are changing the eccentricity of the orbit of the Earth, leading, for instance, to observed periods of about, 30, 84, and 164 years.

While the CO₂ concentration has been increasing from about 0.03% to 0.04% (or from 300 to 400 CO₂ molecules per 1,000,000 molecules of air (N₂ and O₂) this increase may have led to a small increase in global temperature as will be discussed, but this increase alone **cannot** account for any dramatic effect, like the melting of the North pole or a sea level rise of 7 m within the next hundred years, as claimed by politicians or pseudoscientists. In this presentation these and other claims will be discussed, but **solely** on experiments, observations, and measured data.

Welcome to Absurdistan I

The warnings by Prof. Bolz (previous slide) are referring to the video released by the IPCC in 2009 shortly before the Copenhagen climate summit. In this video a 6 or 7 year old girl is fervently trying to escape the flood caused by the man made (western countries) climate change, and, while running for her life, the soil opens, threatening to devour her. To heighten the tragedy, she eventually loses her teddy bear. Finally, she saves herself by clinging to a high branch of a tree while the flood is rushing on under her feet. Her fate is representative for all the children on Earth, and her final message to the public is: please help the world. Other activist groups have put children in polar bear costumes asking to sign petitions to save this endangered species (however, this has become more difficult as it is now widely known that the number of polar bears has more than quintupled since the 1950s). But there is no shortage of other weird campaigns.

The viewer is led to believe that we, the industrial countries, are jeopardizing the future and even the lives of the young generation on Earth by our greedy and irresponsible behavior. It is us who are destroying the planet and are causing all kinds of biblical plagues on the other continents, foremost the African continent.

No scientific facts or data are presented - emotions are stirred to a high level and rational thinking is disabled. This is the strategy of the producers of this video.

Nothing could be farther from scientific reality as will be shown in this presentation, which is based exclusively on empirical data and their rational analysis.

The goal of those responsible for this scientifically baseless video, without any shred of experimental evidence, was to create emotions and to disable reason. The aim of this type of propaganda is to produce totally uncritical followers that are easy to manipulate, ready to do and to believe things that are irrational. That is, ultimately creating a sect of true climate believers whose faith cannot be shattered by facts anymore.

Welcome to Absurdistan II

Thus, for these groups the scientific truth backed by data is no longer of interest, because it is replaced by blind belief - and this is happening before our very eyes in the 21st century.

This is the severe warning by Prof. Bolz, namely that the new religion of climate change eventually will harm humanity, except of course those groups profiting from this belief: scrupulous businessmen, self advocated prophets, NGOs, ruthless politicians (both from western and developing countries), and also scientists pursuing fame or funding. We are facing an unholy alliance, so Prof. Bolz, and therefore need to uncover these false claims and reject any demands that are derived from these pressure groups.

The people need to fight back and get rid of those political forces that want to restrict freedom because of a higher cause. This is the old mantra of all totalitarian governments (e.g., communists or religious fanatics) trying to set up an Orwellian state that leads us into submission and the destruction of our society, finally completely ruining our lives.

The 21st century is the century of starkly advancing science and not the century of blind belief. In this context it is right to say: in reason we trust! There is no need for blind believers!

In the following the empirical climate data will be evaluated without (hopefully) any bias, and conclusions as well as necessary actions will be identified in order to curb any negative effects that might have been caused by man's activity.

Life in the Universe and on Earth

Planet Earth was created about 4.6 billion years ago and took about 20 million years to be formed. At that time, the planet was subject to heavy asteroid bombardment. Life is relatively old and dates back about 3.8 billion years, starting with single-celled prokaryotic cells, such as bacteria, the oldest life form on Earth. Nevertheless, life was fairly primitive. Concerning the origin of life, the Urey-Miller experiment of 1952 showed that a mixture of water H₂O, methane CH₄, and hydrogen H₂ (all inorganic constituents) when subjected to electric discharges produced **organic molecules**. Also, ultraviolet radiation, **hν**, led to the same result. The younger Sun radiated much stronger in the UV and X - ray spectrum, about 100 to 1,000 times more intensive than today, while Earth had **not** yet produced its protective ozone layer (**O₂ + hν → O + O, O₂ + O → O₃**).

The chemical reaction that is sustaining **all life on Earth is photosynthesis**



That is, plants are using carbon dioxide, water and sunlight to produce sugar and oxygen. More CO₂ leads to more plant growth that in turn consumes more CO₂, i.e., a **feedback mechanism** exists. Probably photosynthesis dominates life in the *Universe* too, because the carbon reactivity results in the most versatile chemical compounds. Other life forms based on sulphur or silicon may also be possible.

What is learned from photosynthesis is that **water and carbon dioxide are the main ingredients for life** on planets or moons. Whether the CO₂ content is 0.3 % or 0.4% most likely is not that important, as we will see in later slides. But CO₂ must be around in sufficient quantity along with large percentages of oxygen and nitrogen, at least for higher life forms to develop. CO₂ is also warming the planet, in that respect it can be considered a so called **green house gas (a green house, however, has no convection)**, but it is dominated by water vapor.

From the above reaction it is directly visible that living organisms, since their very inception, have affected the climate on Earth, otherwise there would be no oxygen in the atmosphere(today about 20%), and life would not exist! Therefore, life itself has been a disturbing agent of Nature, and must continue to be so in order to exist. But man needs to be thoughtful utilizing the resources of the planet, in particular, drinking water. Too many of a good thing, that is, too many human beings on the surface of the Earth, will eventually lead to its destruction !!

Fundamental Features of Science

Science is not democratic but elite

Remember: *Deutsche Physik*:

One hundred authors against Einstein, 1938

If you thought that science was certain – well, that is just an error on your part.

It doesn't matter how beautiful your theory is, it doesn't matter how smart you are. If it doesn't agree with experiment, it's **wrong**.

— **Richard P. Feynman, Physics Nobel Prize, Caltech**

the man with the O-ring and the ice water, Space Shuttle Challenger accident 1986

Climate History: NYT in 1974

The New York Times

FORECAST FOR

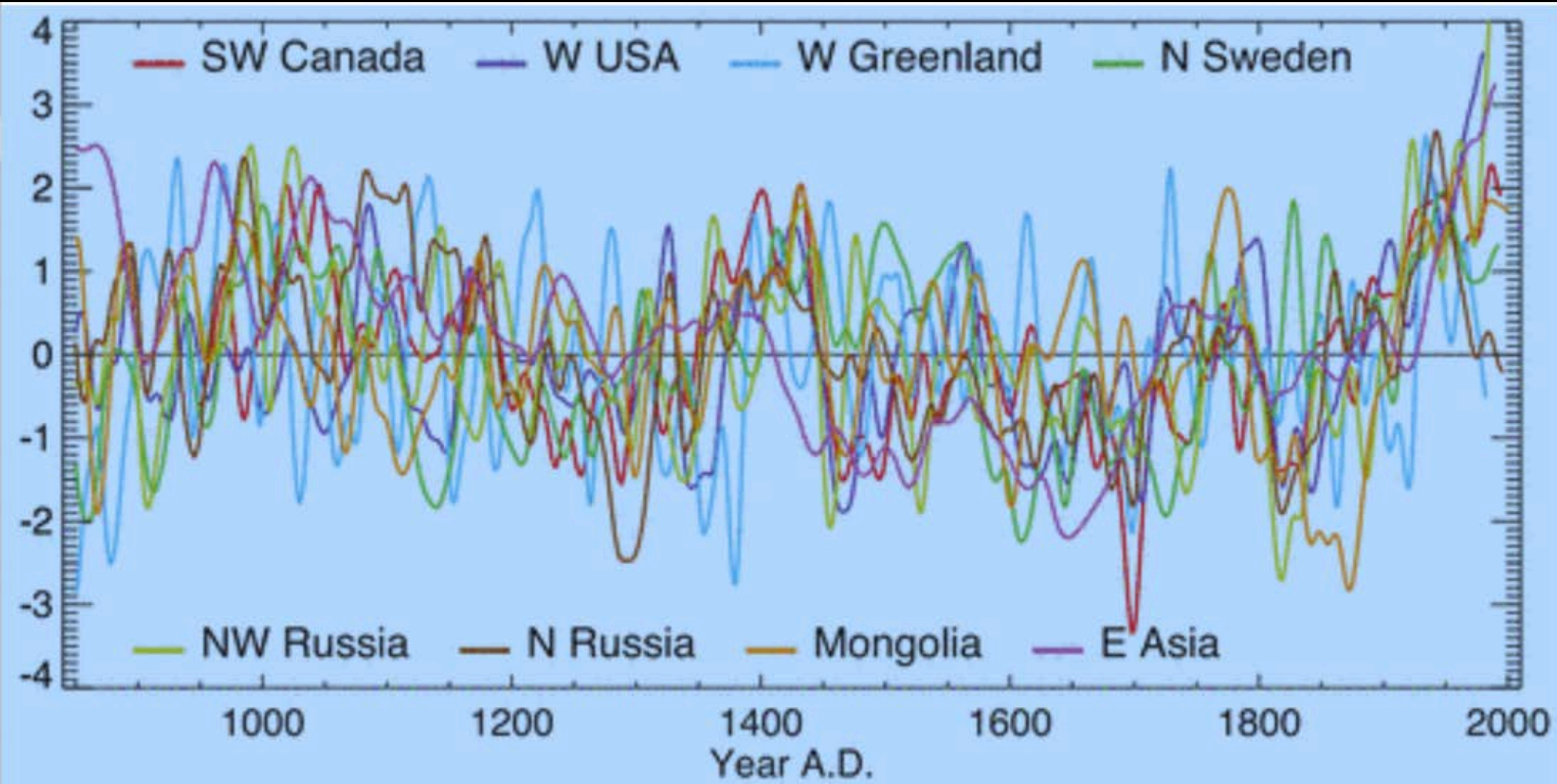
By ALAN ANDERSON JR. DEC. 29, 1974



December 29, 1974, Page 156
The New York Times Archives

A number of climatologists, whose job it is to keep an eye on long-term weather changes, have lately been predicting deterioration of the benign climate to which we have grown accustomed. They point to signs both great (a steady global cooling trend since World War II) and quaint (the southward retreat from Nebraska of the warmth-loving armadillo) to support their claim that the coming years will feature colder, more erratic weather. Some recent warnings, from reputable researchers in Japan, Europe and the U.S., have so worried policy-makers that last January certain scientists at a meeting of the National Academy of Sciences proposed the evacuation of some six million people from their parched homelands in the Sahel region of Africa.

Climate History: difficult temperature reconstruction



What is the real climate? Variations in temperature reconstruction, source IPCC report 2007

Simplified Earth Irradiation Energy balance

where does the Earth get its energy from and what is happening to it, ref.

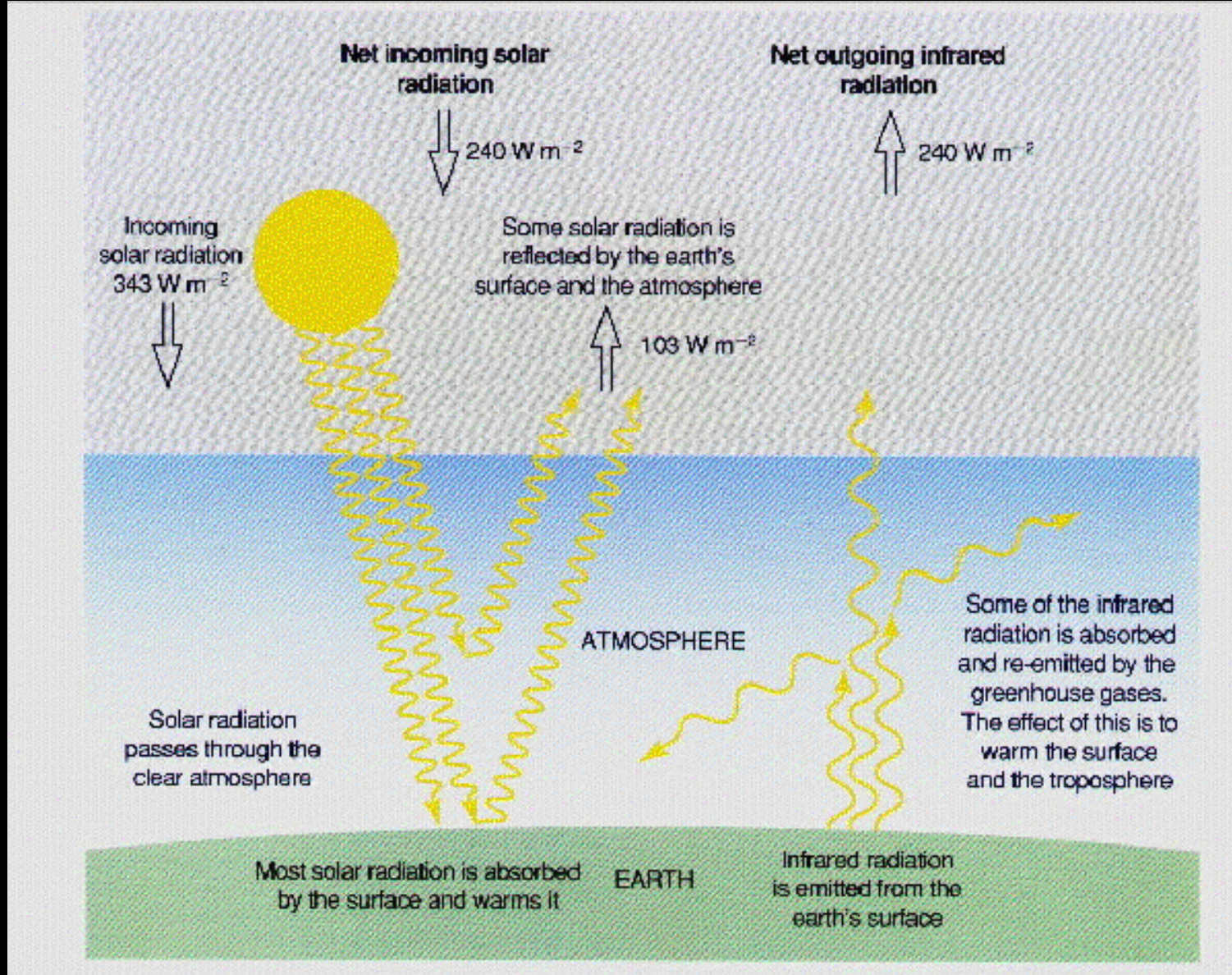
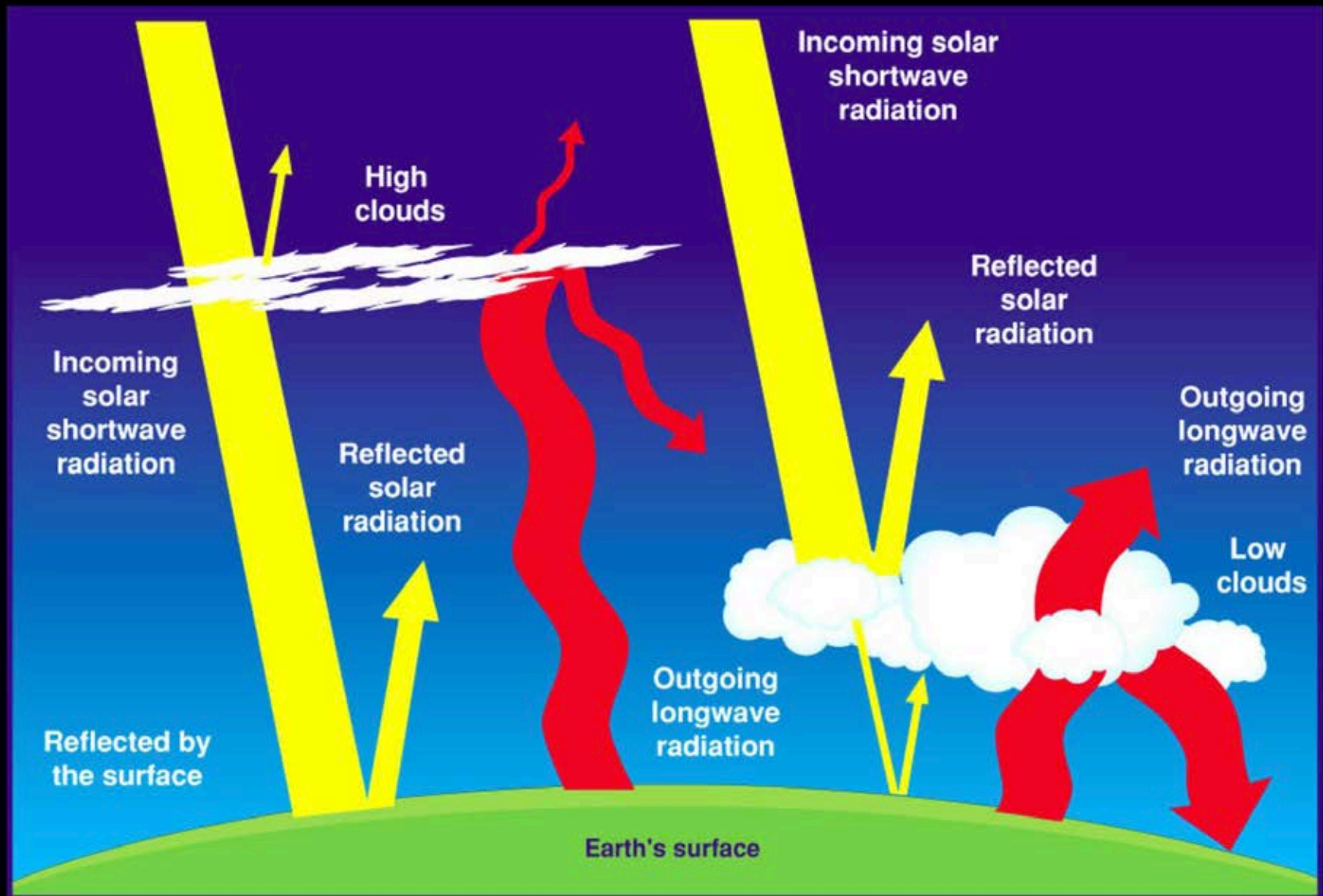


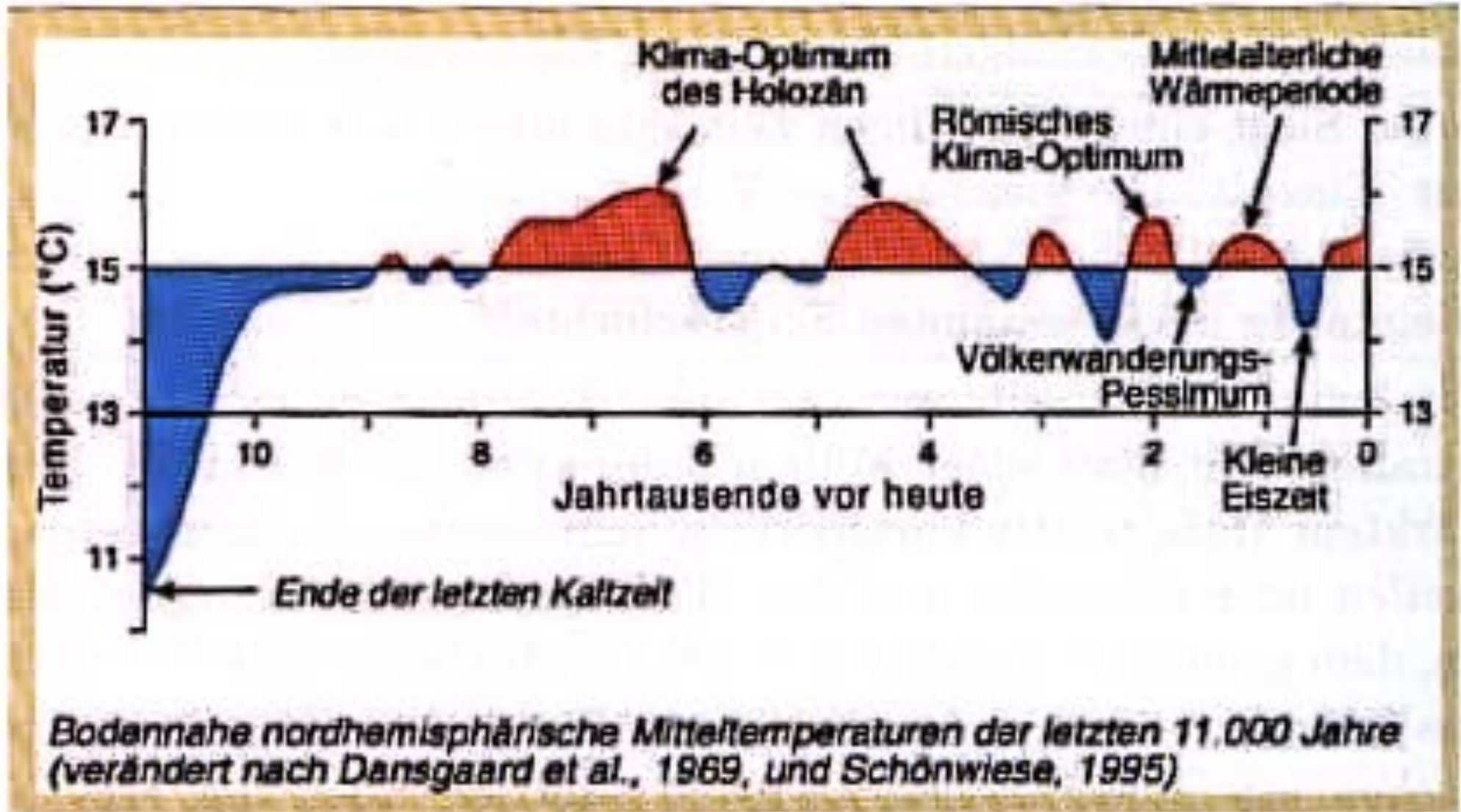
Figure 1. A simplified diagram illustrating the global long-term radiative balance of the atmosphere.

Cloud Effects On Earth's Radiation



(credit Prof. J. E. Solheim, Oslo Univ., climate4you.com)

Temperature History 11,000 Years (ref. 6)



It is important to note that for about 11,000 years the climate exhibits an oscillatory behavior, i.e., there are **no tipping points**, but **feedback mechanisms exist** in Nature that are restoring the average T of about 15 C.

Climate History

German translation (2009) of a report from a Norwegian arctic expedition

Die Arktis scheint sich zu erwärmen. Berichte von Fischern, Robbenjägern und Forschern welche das Meer um Spitzbergen und den östlichen Teil der Arktis befahren, zeigen alle auf eine radikale Änderung der klimatischen Bedingungen und bis dato gänzlich unbekannt hohen Temperaturen in diesem Teil der Welt. Viele Landschaften haben sich so verändert, sie sind nicht mehr erkennbar. Wo sich vorher grosse Eismassen befanden, sind jetzt oft Moränen, Ansammlungen von Erde und Steinen. An vielen Orten wo früher Gletscher weit ins Meer ragten, sind sie komplett verschwunden. Die Temperaturveränderung, sagt Kapitän Ingebrigtsen, hat auch die Flora und Fauna in der Arktis verändert. Diesen Sommer suchte er nach Weissfisch in den Gewässern um Spitzbergen. Früher gab es grosse Schwärme davon. Dieses Jahr sah er keine, obwohl er alle seine alten Fischgründe absuchte. Es gab wenige Robben in den Gewässern um Spitzbergen dieses Jahr und der Fang war weit unter dem Durchschnitt. Das hat aber den Kapitän nicht überrascht. Er wies daraufhin, daß das Wasser um Spitzbergen normalerweise eine gleichbleibende Temperatur im Sommer von 3°C hat. Dieses Jahr wurden Temperaturen von bis zu 15°C gemessen und letzten Winter ist das Meer nicht mal an der Nordküste von Spitzbergen zugefroren. **Sounds Terrible Enough ???**

Climate History

Here is the original English report describing the findings of the Norwegian expedition that took place in 1922, almost 100 years ago. I did not show it first, because everyone would have seen that it is not a current report, though it sounds like one of the current most alarming reports.

The Arctic seems to be warming up. Reports from fishermen, seal hunters, and explorers who sail the seas about Spitzbergen and the eastern Arctic, all point to a radical change in climatic conditions, and hitherto unheard-of high temperatures in that part of the earth's surface.

In August, 1922, the Norwegian Department of Commerce sent an expedition to Spitzbergen and Bear Island under the leadership of Dr. Adolf Hoel, lecturer on geology at the University of Christiania. Its purpose was to survey and chart the lands adjacent to the Norwegian mines on those islands, take soundings of the adjacent waters, and make other oceanographic investigations.

Dr. Hoel, who has just returned, reports the location of hitherto unknown coal deposits on the eastern shores of Advent Bay—deposits of vast extent and superior quality. This is regarded as of first importance, as so far most of the coal mined by the Norwegian companies on those islands has not been of the best quality.

* H. L. Holmes: Quart. Journ. Royal Meteorol. Soc., January, 1905.

The oceanographic observations have, however, been even more interesting. Ice conditions were exceptional. In fact, so little ice has never before been noted. The expedition all but established a record, sailing as far north as $81^{\circ} 29'$ in ice-free water. This is the farthest north ever reached with modern oceanographic apparatus.

The character of the waters of the great polar basin has heretofore been practically unknown. Dr. Hoel reports that he made a section of the Gulf Stream at 81° north latitude and took soundings to a depth of 3,100 meters. These show the Gulf Stream very warm, and it could be traced as a surface current till beyond the 81st parallel. The warmth of the waters makes it probable that the favorable ice conditions will continue for some

Current Climate Situation

too many polar bears compared to 1950 (5,000) : 26,000 in 2016



Polar bears an endangered species? Listen to the video of ...

Prof. J. Reichholf, Munich: Biodiversity video



Doomsday Predictions are not Science

The false prophet Al Gore: In his 2006 documentary, "An Inconvenient Truth," he famously predicted increasing temperatures would cause Earth's oceans to rise by 7 m, a claim scientists say is *utterly without rational basis*. His latest movie *An Inconvenient Sequel* is pure propaganda, fabricated by Hollywood (or Bollywood), that has **NO** resemblance to current climate observations. A self-named prophet predicts the end of the world.

Sierra Club Canada also said in 2013 that the *Arctic sea ice would vanish* that year. *There is still a total of more than > 12 sqkm covered with ice.*

One leading **expert**, in 2013, Peter Wadhams, a professor of ocean physics at the University of Cambridge, says the Arctic Ocean **could** be *completely free of ice in summer as soon as 2015*. An overheated Arctic in turn threatens catastrophic knock-on effects for the rest of the globe. *The ocean decided otherwise. Astrologers seems to be far more serious scientists!*

Faster sea level rise.... and more climate refugees. The warmer Arctic has dramatically accelerated the melting of the Greenland ice sheet. "We are now losing 300 cubic kilometer of ice a year in Greenland," said Wadhams. "That in itself will double the rate of sea level rise globally — *but this has not been observed. Is it the eskimos who are now asking for asylum!? Climate science misused for political goals !*

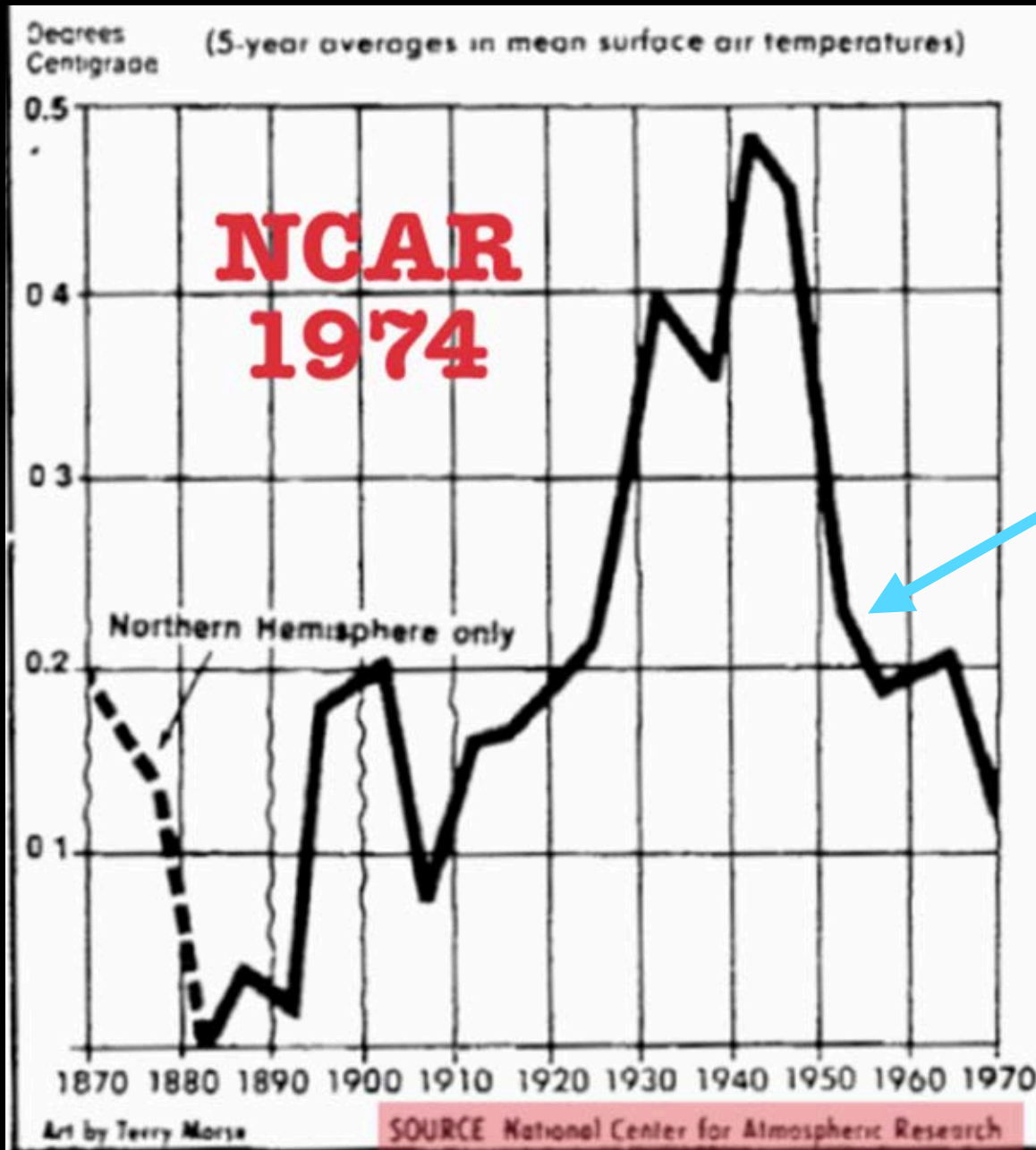
Higher risk of "runaway" global warming. The warmer Arctic has begun unleashing substances—specifically, permafrost and underwater methane—that **could** sharply accelerate global warming- methane is 23 times more effective than CO₂. *Nothing is running — global temperature remains practically stagnant since more than 18 years — despite the release of additional 550 billion tons of CO₂ during this period !!!.* Read more at <http://www.wnd.com/2017/01/report-on-arctic-sea-ice-unleashes-shock-waves/#Yr3iXi6xZ4WlxFF4.99>

Numerous reports on climate change are without logic:

" I think the findings that the heat is going into the Atlantic and Southern Ocean's is **probably pretty robust**. However, I will defer to people like Josh Willis who know the data better than I do."-says Andrew Dessler.

Debunked by Josh Willis, who Dessler **"knows the data better than I do,"** says in the very same NYT article that **"it is not clear to me, actually, that an accelerated warming of some...layer of the ocean ... is robustly supported by the data itself"** – Josh Willis

Global temperature variation from 1870-1970

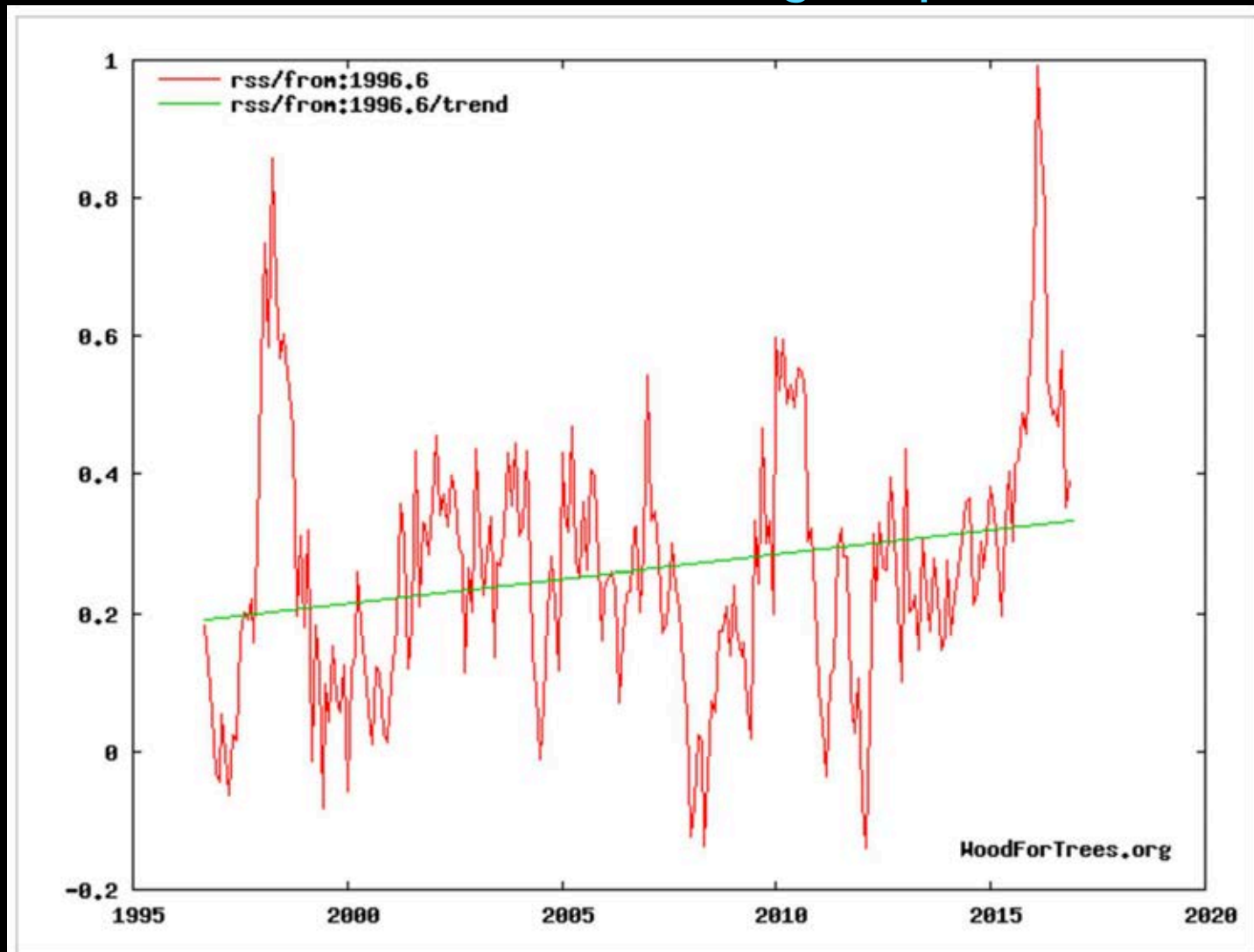


Eventually, in **1975** a consensus was reached, and a new **ice age** was predicted by almost **all** scientists

In the **2000s NASA removed** this plot from their website

<http://realclimatescience.com/nasa-hiding-the-decline-in-sea-level-and-temperature/>

Temperature increase from 1997- 2016 about 0.1 C
about 550 billion tons of CO₂ were released during this period! (credit Dr. R. Spencer)



RSS satellite data showing the 18 year 'pause' of global warming

Scientific Misconduct I

Climategate, Politics, and Political Correctness in Science Topics in Climategate e-mails as of November 2009

- **hiding the decline** (of the global temperature despite record CO₂ levels)
- **prevent publication of papers that are considered skeptical**
- **introducing fudge factors into climate models**
- **temperature hockey stick curve** (falsification by "Prof." M. Mann, Univ. of Pennsylvania)
- **countless modifications of recorded temperature surface data by NOAA, latest scandal 2015, and NASA**
- **disappearance of original measured data from NOAA and NASA websites**
- **pressure on PhD students** (Politisch Ideologischer Klimawandel)
- **IPCC report 2007: falsification of Himalaya glacier meltdown date by 2035, instead of 2350, which is, most likely incorrect too, but worse, this false date was confirmed in German TV by 'a physicist' "Prof. Schellenhuber", PIK and also by IPCC President Raychaudhari** (the Josef Blattner, FIFA, of IPCC) who **accused Indian scientists, who declared his prediction to be pseudoscience, of doing voodoo science**
- **we must get rid of H. von Storch** (Mist-Wissenschaft, i.e., bullshit science)
- **constructing plots how to run scientific journals** (latest scandal see [Scientific Misconduct II](#)) **that is, suppressing the publication of undesirable opinions.**

Example e-mail: Prof. Phil Jones to Michael Mann: I can't see either of these papers being in the next IPCC report, Kevin and I will keep them out somehow.

Example for Irrational Behavior

Beware of the warning of **Prof. N. Bolz, TU Berlin**: climate change as a replacement for religion. Here it is: Even a nobel prize does not seem to prevent one from insane predictions!

Appeals to religion and the afterlife have been showered on us. Whether it be comments from the pope, or from Nobel Prize winning 'economist' *Paul Krugman*, who says:

You can deny global warming and may you be punished in the afterlife for doing so – this kind of denial for petty personal or political reasons is an almost inconceivable sin.

There is not much difference to the medieval inquisition or other current religious maniacs. Don't worry these fools are not right!

*Just remember Emanuel Kant, Koenigsberg, Prussia, 18th century philosopher:
Use your own mind without the guidance of anyone else.*

In the following, we will analyze the facts (all kinds of measurements) and draw conclusions based on the rational laws of Nature. There is nothing to be afraid of!

PEOPLE POLITICIANS MONEY

Prof. S. Rahmsdorf, PIK, in
Klimawandel und CO₂, 2004:

Wir **danken** Eduardo Zorita,
Helmholtz Zentrum
Gessthacht, für die
Erläuterung der falschen
Darstellung seiner
Ergebnisse!

I am not sure that S.
Rahmsdorf would have
thanked Dr. E. Zorita if
he had known of this
2009 public letter!

As a consequence of Dr.
Zorita's letter, I do not
use any data from
institutions that were
actively involved in the
Climategate incident!

Why I think that *Michael Mann, Phil Jones and Stefan Rahmstorf* should be barred from the IPCC process

Eduardo Zorita, November 2009

Short answer: *because the scientific assessments in which they may take part are not credible anymore.*

A longer answer: My voice is not very important. I belong to the climate-research infantry, publishing a few papers per year, reviewing a few manuscript per year and participating in a few research projects. I do not form part of important committees, nor do I pursue a public awareness of my activities. My very minor task in the public arena was to participate as a contributing author in the Fourth Assessment Report of the IPCC.

By writing these lines I will just probably achieve that a few of my future studies will, again, not see the light of publication. My area of research happens to be the *climate of the past millennia*, where I think I am appreciated by other climate-research 'soldiers'. And it happens that some of my mail exchange with Keith Briffa and Timothy Osborn can be found in the CRU-files made public recently on the internet.

To the question of legality or ethicalness of reading those files I will write a couple of words later.

I may confirm what has been written in other places: research in some areas of climate science has been and is full of machination, conspiracies, and collusion, as any reader can interpret from the CRU-files. They depict a realistic, I would say even harmless, picture of what the real research in the area of the climate of the past millennium has been in the last years. The **scientific debate has been in many instances hijacked to advance other agendas.**

These words do not mean that I think anthropogenic climate change is a hoax. On the contrary, it is a question which we have to be very well aware of. But I am also aware that in this thick atmosphere -and I am not speaking of greenhouse gases now- editors, reviewers and authors of alternative studies, analysis, interpretations, even based on the same data we have at our disposal, have **been bullied and subtly blackmailed.** In this atmosphere, **PhD students are often tempted to tweak their data so as to fit the 'politically correct picture'.** *Some, or many issues, about climate change are still not well known.* Policy makers should be aware of the attempts **to hide these uncertainties** under a unified picture. I had the 'pleasure' to experience all this in my area of research.

I thank explicitly Keith Briffa and Tim Osborn for their work in the formulation of one Chapter of the IPCC report. As can be distilled from these e-mails, **they withstood the evident pressure of other IPCC authors**, not experts in this area of research, to convey a distorted picture of our knowledge of the hockey-stick graph.

Is legal or ethical to read the CRU files? I am not a lawyer. It seems that if the files had been hacked this would constitute an illegal act. If they have been leaked it could be a whistle blower action protected by law. I think it is not unethical to read them. Once published, I feel myself entitled to read how some researchers tried to *influence reviewers to scupper the publication of our work on the 'hockey stick graph'* or to read how some *IPCC authors tried to exclude this work from the IPCC.*

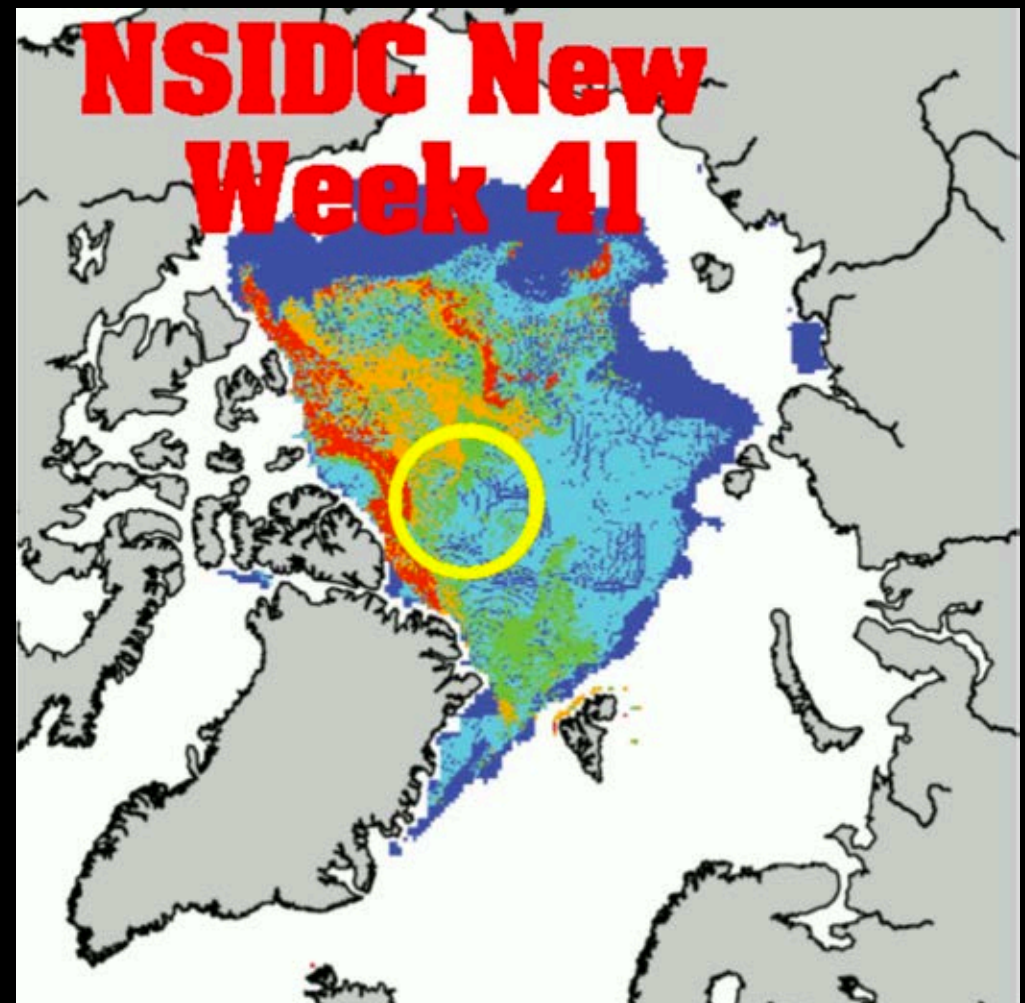
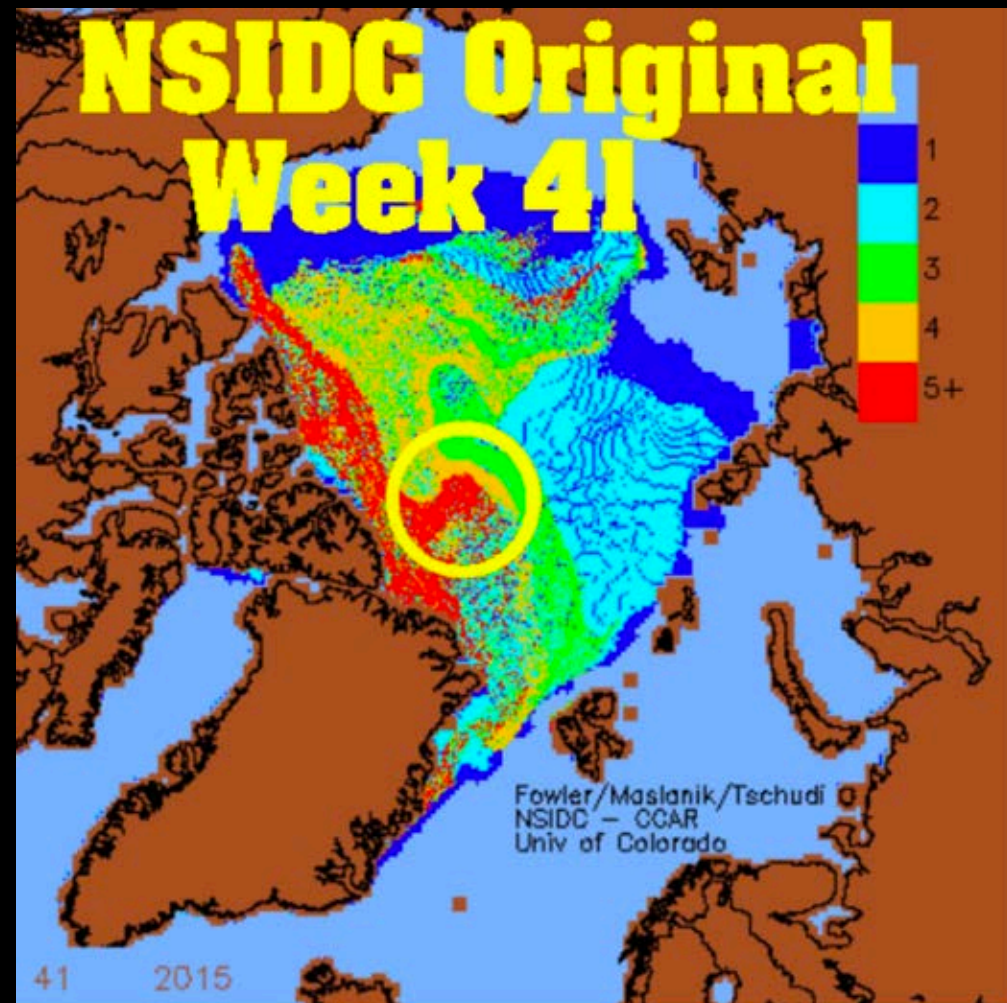
Climategate on NSIDC Website: arctic ice week 41, 2015

left picture replaced by right picture, that is, all arctic ice pictures were tampered showing thinned ice

Arctic ice 5m thick

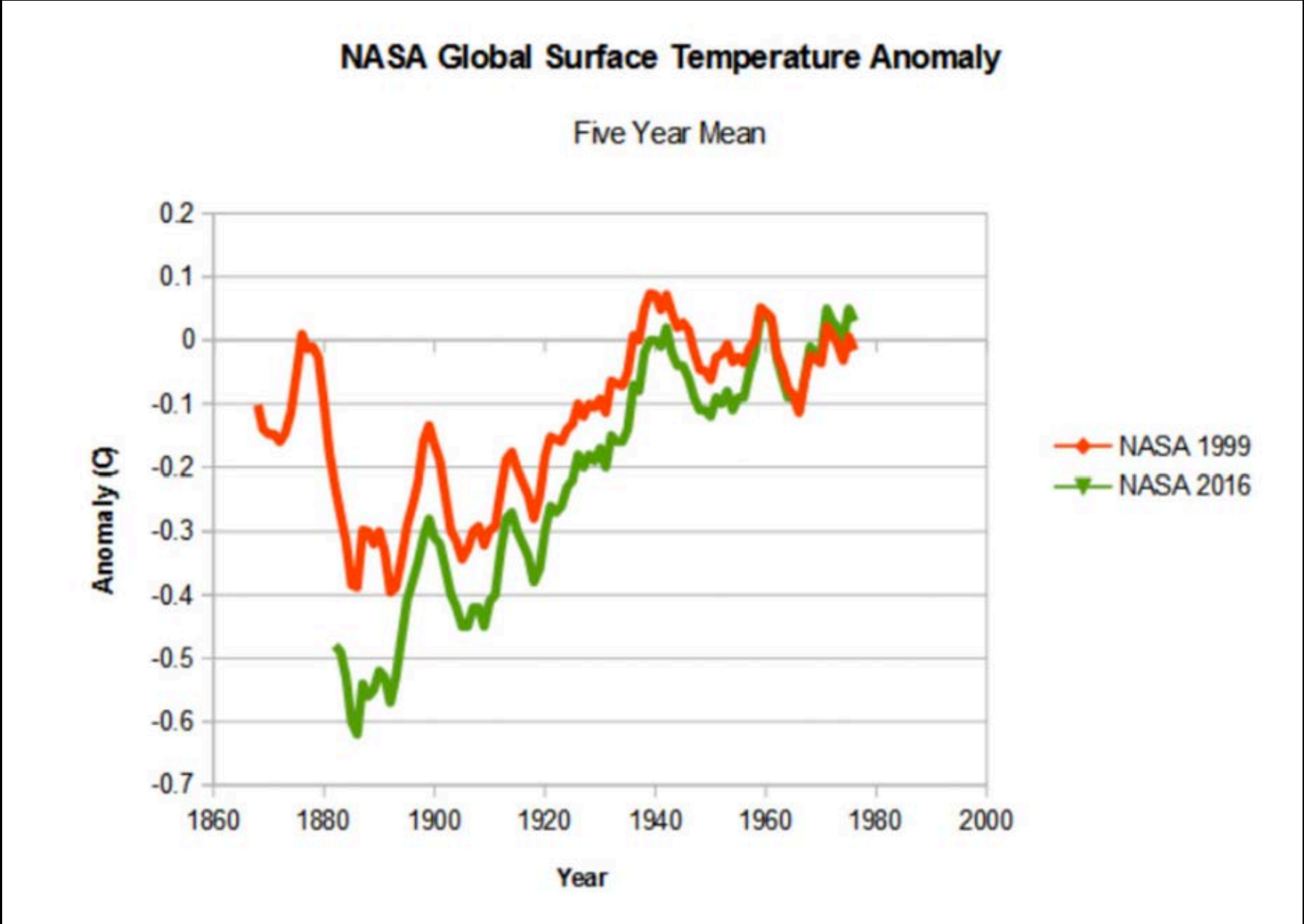
Arctic Ice 5m disappeared

all of the original ice sheet data from 1984 to week 36 of 2015 was deleted from their website without notification



NASA MODIFIED MEASURED TEMPERATURES

The original measured data were deleted from the NASA website



THESE NASA ORIGINAL TEMPERATURE DATA DISAPPEARED

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	J-D	D-N	DJF	MAM	JJA	SON	Year
1941	10	24	-4	7	10	16	37	8	-19	11	-1	11	9	11	21	4	20	-3	1941
1942	27	1	1	2	7	7	9	5	3	0	14	9	7	7	13	3	7	5	1942
1943	-20	8	-15	4	-5	-12	13	-25	-2	29	9	23	1	-1	-1	-5	-8	12	1943
1944	35	12	7	-4	-5	-10	7	8	18	23	3	-13	7	10	23	-1	2	15	1944
1945	5	-11	0	22	-21	-24	-14	27	5	5	-3	-28	-3	-2	-6	0	-4	2	1945
1946	7	3	-10	12	10	-11	12	-7	3	-14	-3	-22	-2	-2	-6	4	-2	-5	1946
1947	-2	11	24	18	7	2	12	8	4	27	27	-7	11	10	-4	16	7	19	1947
1948	25	-10	-22	-8	7	12	-9	-18	-8	-1	-16	-14	-5	-4	3	-8	-5	-8	1948
1949	7	-29	-10	-26	-11	-17	-2	-13	-6	3	-8	-9	-10	-11	-12	-16	-11	-4	1949
1950	-24	-27	-3	-16	-19	-7	-5	-28	-12	-13	-32	-12	-17	-16	-20	-13	-13	-19	1950
1951	-37	-44	-13	-2	10	-7	-5	15	3	12	9	21	-3	-6	-31	-2	1	8	1951
1952	15	16	-9	-1	-7	-2	12	15	16	2	-15	1	4	5	17	-6	8	1	1952
1953	15	12	21	21	8	9	3	17	13	10	7	23	13	11	9	16	10	10	1953
1954	-23	-1	-4	-10	-14	-15	-21	-17	-17	5	24	-7	-8	-6	-1	-9	-18	4	1954
1955	26	-6	-33	-13	-12	-14	-8	3	-10	5	-20	-24	-9	-8	4	-19	-7	-8	1955
1956	-15	-26	-25	-20	-23	-5	-6	-31	-6	-19	-17	-14	-17	-18	-22	-22	-14	-14	1956
1957	-11	0	0	15	10	18	-7	15	14	0	17	22	8	5	-8	8	9	11	1957
1958	42	24	19	13	8	-17	12	-9	-8	10	10	-6	8	11	29	14	-5	4	1958
1959	4	6	24	14	-1	9	9	0	-15	-5	-8	9	4	3	1	12	6	-9	1959
1960	4	24	-45	-23	-14	-6	-11	10	5	12	-9	19	-3	-4	13	-27	-2	3	1960

Political Correctness in Science

Resignation: Prof. Dr. Judith Curry, Georgia Tech., U.S.A., explained:

"the deeper reasons have to do with my growing disenchantment with universities, the academic field of climate science and scientists... I no longer know what to say to students and postdocs regarding how to navigate the **CRAZINESS** in the field of climate science. Research and other professional activities are professionally rewarded only if they are channeled in certain directions approved by a politicized academic establishment — funding, ease of getting your papers published, getting hired in prestigious positions, appointments to prestigious committees and boards, professional recognition, etc."

"How young scientists are to navigate all this is beyond me, and it often becomes a battle of **scientific integrity versus career suicide.**"

This is all too true as shown by the scientific misconduct both on the individual and organizational level, see [Scientific Misconduct slides](#).

Politicians, Politics, and Climate

Climate change is already disrupting our agriculture and ecosystems, our water and food supplies," Obama recently inveighed. "If we do nothing, Alaskan temperatures are projected to rise between *six and twelve degrees* by the end of the century."

So naturally, President Obama, and also Pope Francis, the notorious European Commission, the radical United Nations, and many poor countries are obsessed with – climate change!, that is, these nations have found a bonanza, foremost the **German taxpayer**.

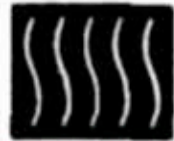
Following Obama's recent GLACIER conference in Anchorage, China, India, and Russia (three of the four biggest CO₂ - emitting nations) refused to sign a nonbinding declaration seeking greater international action to combat Arctic melting and climate change.

John Kerry stated, we must act quickly "to avoid the catastrophe we will inevitably see if we allow carbon emissions to go up, and up, and up." Moreover, he added, "We need to speed it up dramatically because we are in a race against time." ... "What we do right now, today, matters," Kerry told the audience. "We don't get a second chance on this one."

Politicians, Politics, and Climate

The Canberra Times (ACT : 1926 - 1995) (about) ◀ Sunday 1 April 1990 ▶

Global Warming



A report issued by the U.S. space agency NASA concluded that there has been no sign that the greenhouse effect increased global temperatures during the 1980s. Based on satellite analysis of the atmosphere between 1,500 and 6,000 metres above sea level, the report said that the study found "a seemingly random pattern of change from year to year." While several government and university meteorologists around the world have concluded that average surface temperatures have increased significantly in recent years, the report's authors said that their satellite analysis of the upper atmosphere is more accurate, and should be adopted as the standard way to monitor global temperature change.

Prof. L. Bengtson, former MPI director, HH, 2013, in the blog

Klimazwiebel of

Prof. H. von Storch, HFG Geesthacht:

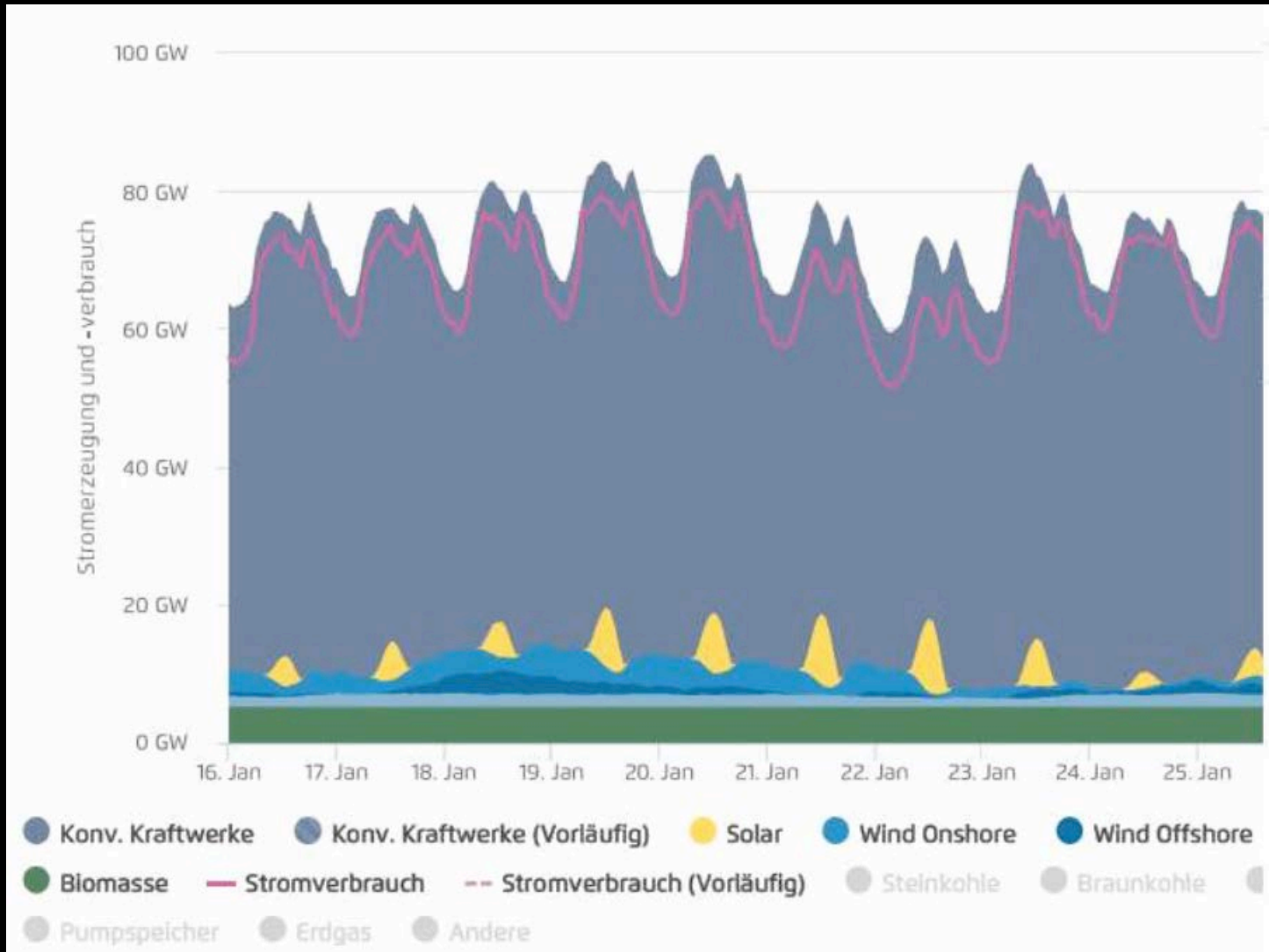
For some parts of the industry as well as for different NGOs such as Greenpeace and WWF a threatening climate warming have become a necessity and a source of extra income as it provides continued subventions for wind and solar energy. In the almost hysterical climate hype of today a less dramatic warming is not very well received as all political correct members of the public would prefer to hide this uncomfortable fact.

Politics in Germany: Renewable Energy Production for January 2017

The picture shows that the energy production by solar and wind energy (yellow and blue curves) is totally unreliable, it is not even a niche technology because it is available only for a few hours per day and most of the time you would have a **complete blackout** with regard to the total power consumption in Germany (red curve). Despite the humongous cost of renewable energy, it **cannot** contribute significantly to energy production in a useful way.

The energy turn is a **failed approach**, based on **political ideology**, but **not on science**, and will **never work**. The German taxpayer is subsidizing this **failure** with 22 billion Euros each year. It seems to be the declared goal of the four political parties represented in the German Parliament to **eventually ruining the German economy and destroying jobs on a large scale !!**

The result of this irresponsible policy is that the produced renewable energy sells at most at 6 cent per kWh, or must be sent to neighboring countries for free (if possible), while the actual cost is about 40 cent per kWh. When renewable energy is available, the price for electric energy is dropping dramatically. If electric energy is needed, the market for energy may reply by an up to seven fold increase in price compared to normal situations. Renewable energy has led to a complete destabilization of the electric energy market. During the winter season, e.g. January 2017, the situation became dramatic, because only 2-4 % of the installed renewable peak power of 26 GW was available.

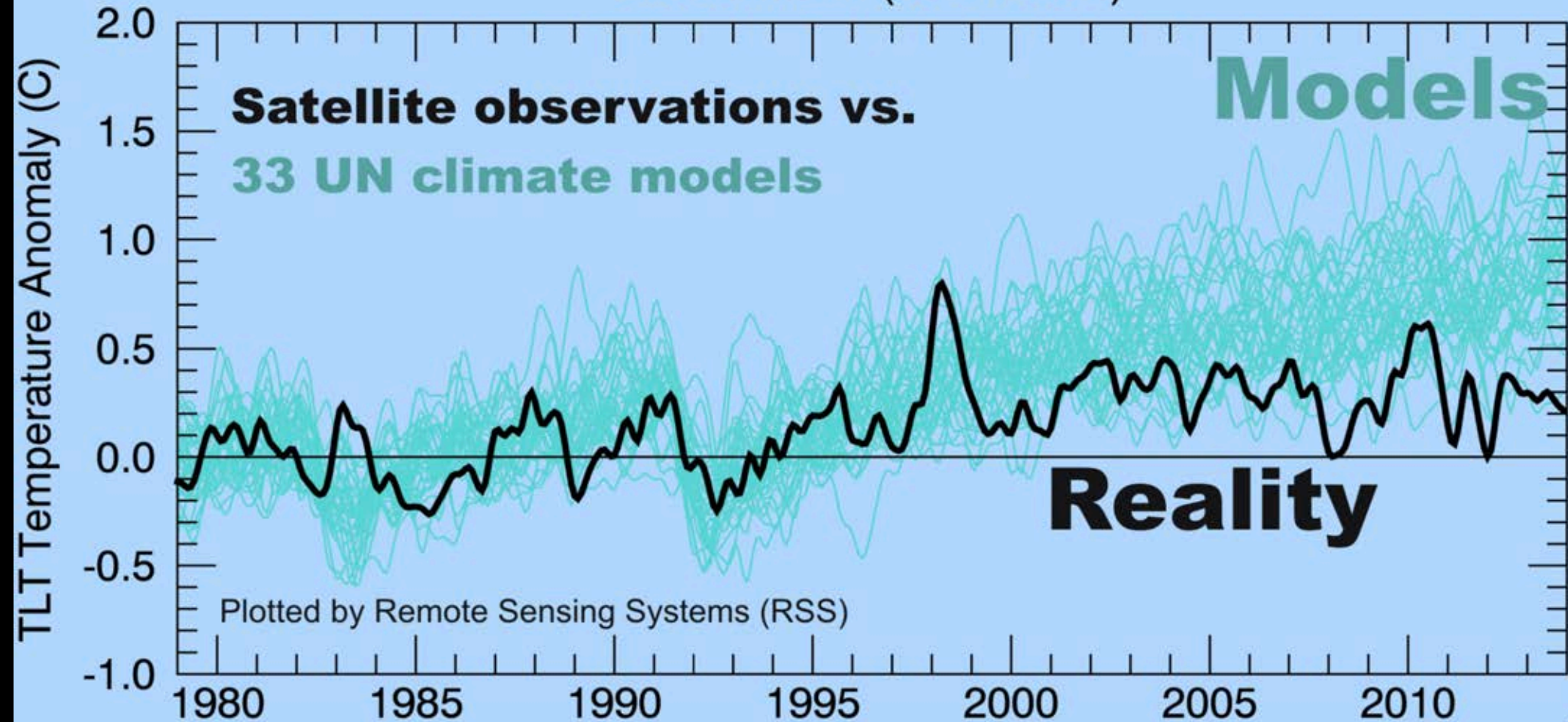


PHYSICS

Climate Models and Experimental Data

Temperature pause continues

Global Mean (80S to 80N)



Computer models are incapable of **exact quantitative** predictions, hence only experimental data should be utilized, but computer models can be used for parameter studies that show the impact of the individual sources (credit Dr. Roy Spencer)

Climate Models and H. von Storch

no increase in global temperature observed as of January 2017

The Challenge

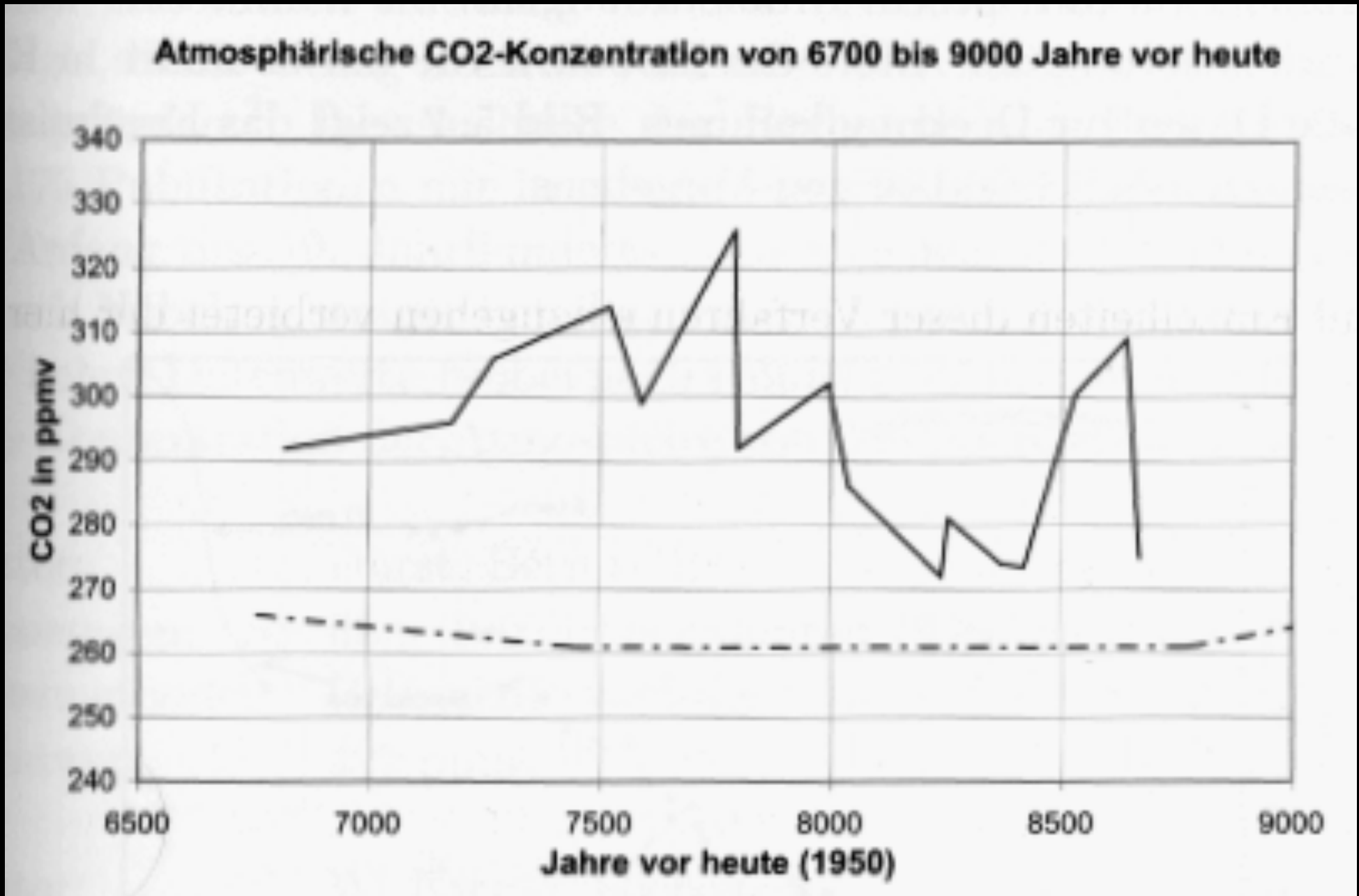
- If things continue as they have been, in five years, at the latest, we will need to acknowledge that something is fundamentally wrong with our climate models. A 20-year pause in global warming does not occur in a single modeled scenario.



**Prof. Hans von Storch, 2013,
Inst. of Coastal Science,
HFG Geesthacht and
MPI Hamburg, Germany**

Errors in CO₂ Icecore Concentrations

the upper curve shows the correct CO₂ concentration from plant pollen (ref. 6)

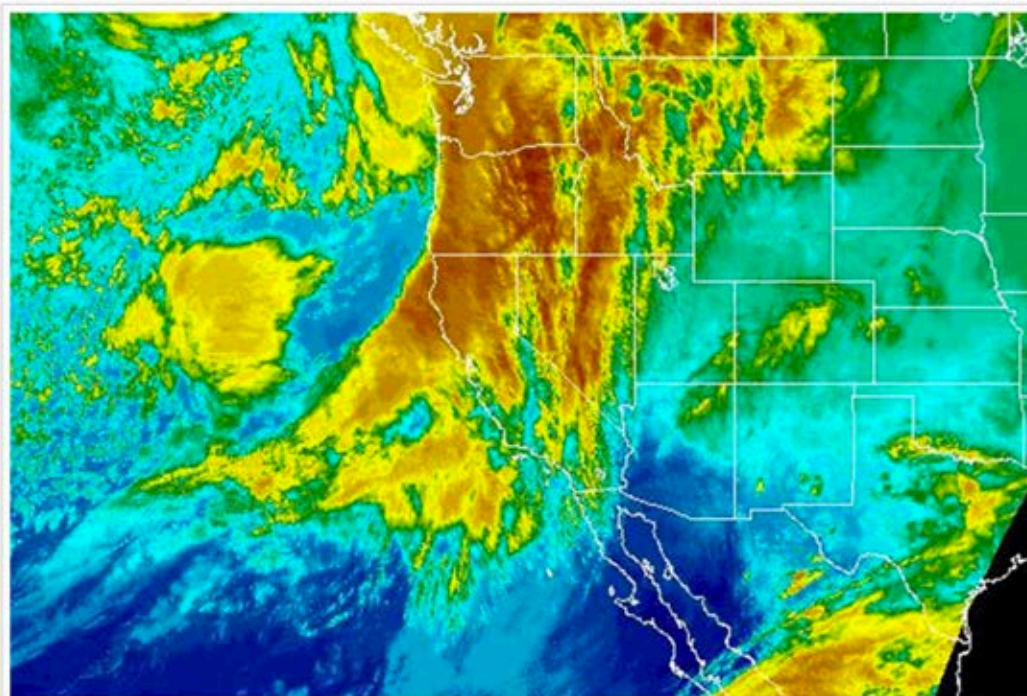


A recent MIT model bears no proximity to climate reality in CA: In 1862 the state of CA went bankrupt, because of a period of rain for three months, floods destroyed one quarter of all homes in CA at a CO₂ concentration of about 260 ppm. The next major catastrophes were in 1907, 1912, and 1969. No major flood since 50 years while CO₂ concentration climbed to 407 ppm. **The catastrophe comes out of the computer!**

MIT: 'more extreme storms' for California due to warming - but history mocks the claim

Anthony Watts / 21 hours ago January 3, 2017

From the "models can make you believe anything" department comes this breathless doom-laden press release from the same school that brought you the big wheel of silly climate model results.



The "Pineapple Express" hits California in 2014 Image: NOAA

Study finds more extreme storms ahead for California

New technique predicts frequency of heavy precipitation with global warming

Statistische Untersuchungen des **Gießener Physikers Prof. Dr. Armin Bunde** (my former classmate) und Kollegen belegen:

Trends wie die globale Erwärmung werden in Klimamodellen offenbar überschätzt -
Publication in Physical Review Letters

Erwärmung ist offenbar nicht ganz so gravierend wie vielfach befürchtet. Dies bedeutet zwar keine Entwarnung von wissenschaftlicher Seite, zeigt aber, dass kein Anlass zu Panikreaktionen und übertriebener Hektik bei politischen Entscheidungen besteht.

Und nun die schlechte Nachricht: **Klimamodelle sind weit schlechter als ihr Ruf**. Sie reproduzieren die Gesetzmäßigkeiten des Wetters längst nicht so wie erhofft und spiegeln somit die tatsächlichen Entwicklungen nur unzulänglich wider. **Conclusion by Prof. Bunde:**

Climate Models must not be considered!

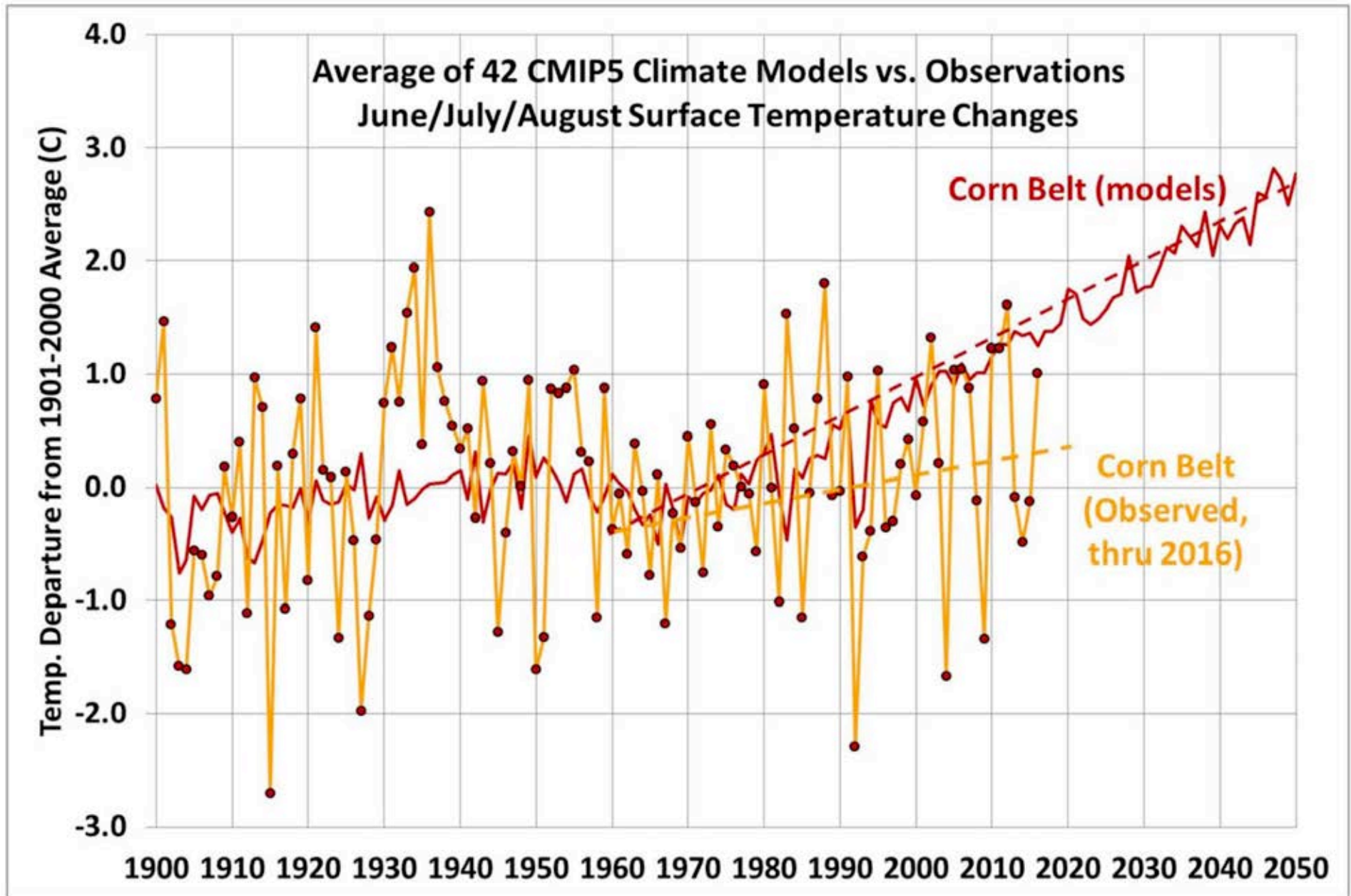
Let us also see the video of

Prof. Patzelt, Univ. of Innsbruck on climate data

As an **example of the disconnect between reality and climate models** which are being relied upon to guide energy policy, here are the yearly growing season average temperatures in the U.S. 12-state corn belt (official NOAA data), compared to the average of the climate model projections used by the IPCC:

Climate Models versus Observations

From Dr. Roy Spencer, Jan. 2017



Global sea level measurements: no future flooding

In dieser Hinsicht sieht der Vizepräsident des Alfred-Wegener-Instituts Prof. Dr. Miller [6] auch für die Zukunft kein Überflutungsproblem, indem er feststellt, daß "...Grönland zwar sehr wahrscheinlich an Masse verlieren wird, aber dieser Massenverlust durch verstärktes Abschmelzen in Grönland wird kompensiert durch eine Eiszunahme in der Antarktis" und weiter "... nach den von uns berechneten Szenarien kommen wir zu dem Schluss, daß Veränderungen der großen Eismassen keinen Beitrag zu einem Meeresspiegelanstieg leisten werden"

The same result has been obtained by a comprehensive study conducted by the Army Corps of Engineers, WES, Vicksburg analyzing thousands of gauges worldwide.

Physical mechanism: Temperature first and then CO₂

CO₂ Level Rise (credit ESA)
the CO₂ level increases about 3 ppm/year

forcing and feedback mechanisms: radiation flux

$$S = s T^4, s = 5.67 \times 10^{-8} \text{ W m}^{-2} \text{ K}^{-4}$$

$$dT = dS \times T \times (4 S)^{-1}$$

formula for doubling of CO₂ concentration, IPCC data

$$dS = 3.7 \text{ W m}^{-2}, T = 255 \text{ K}, S = 235 \text{ W m}^{-2}$$

$$dT = 5.35 \times \ln (C/C_0) \text{ W m}^{-2}$$

where C_0 denotes, for instance, the concentration in 1960 (270 ppm),
logarithmic law leads to saturation, i.e., eventually temperature is insensitive to CO₂

positive and negative feedbacks

$$T/T_0 = (1-f)^{-1}$$

where $f < 1$

Temperature Increase According to Logarithmic CO₂ Law

From 1979 or 1980 to 2016 the CO₂ concentration increased from about
 $C_0 = 306$ ppm to $C = 407$ ppm.

Applying the logarithmic law from the previous slide should then have resulted in a temperature increase of 1.52 C. **WRONG:** Measured, however, was a value of 0.52 C or 0.24 C (the temperature change from 1979 to 1980 was ALREADY about 0.3 C !)

From 1998 to 2016 the CO₂ concentration increased from about
 $C_0 = 350$ ppm to $C = 407$ ppm.

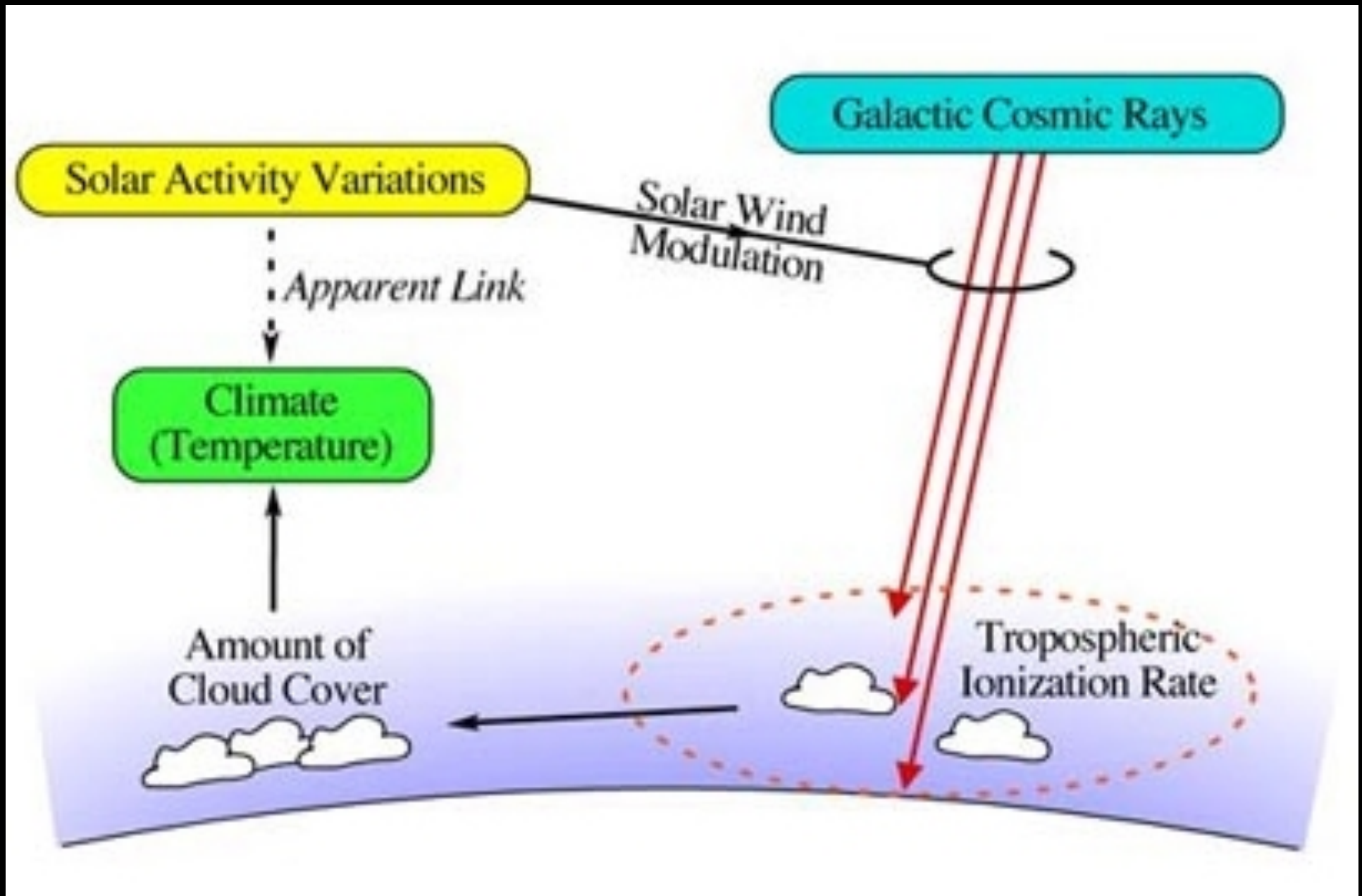
Applying the logarithmic law should then have resulted in a temperature increase of 0.81 C. **WRONG:** Measured, however, was a value of maximal 0.1 C !

What would happen if the current CO₂ concentration is doubled? This has been investigated in ref. 15, with a totally unforeseen result! It should be noted that, in order to reach this level, **every organic material on Earth would have to be burned**, that is, all the trees and coal etc. A totally scorched planet would be the case. This is a completely unrealistic scenario, because humanity would be wiped out long before such a state can be reached. But even then, the logarithmic law gives an (unrealistic) temperature increase of only 3.7 C. Hence, claims of temperature increases of 6 C or even 12 C are totally **WRONG** and baseless (**Obama administration**) for they are a **scientific impossibility**.

The first two examples show that the logarithmic law does not reflect climate reality and cannot be used alone to predict the global temperature. Only measured data should be used !

Sun-Cosmic Rays Impact on Terrestrial Climate

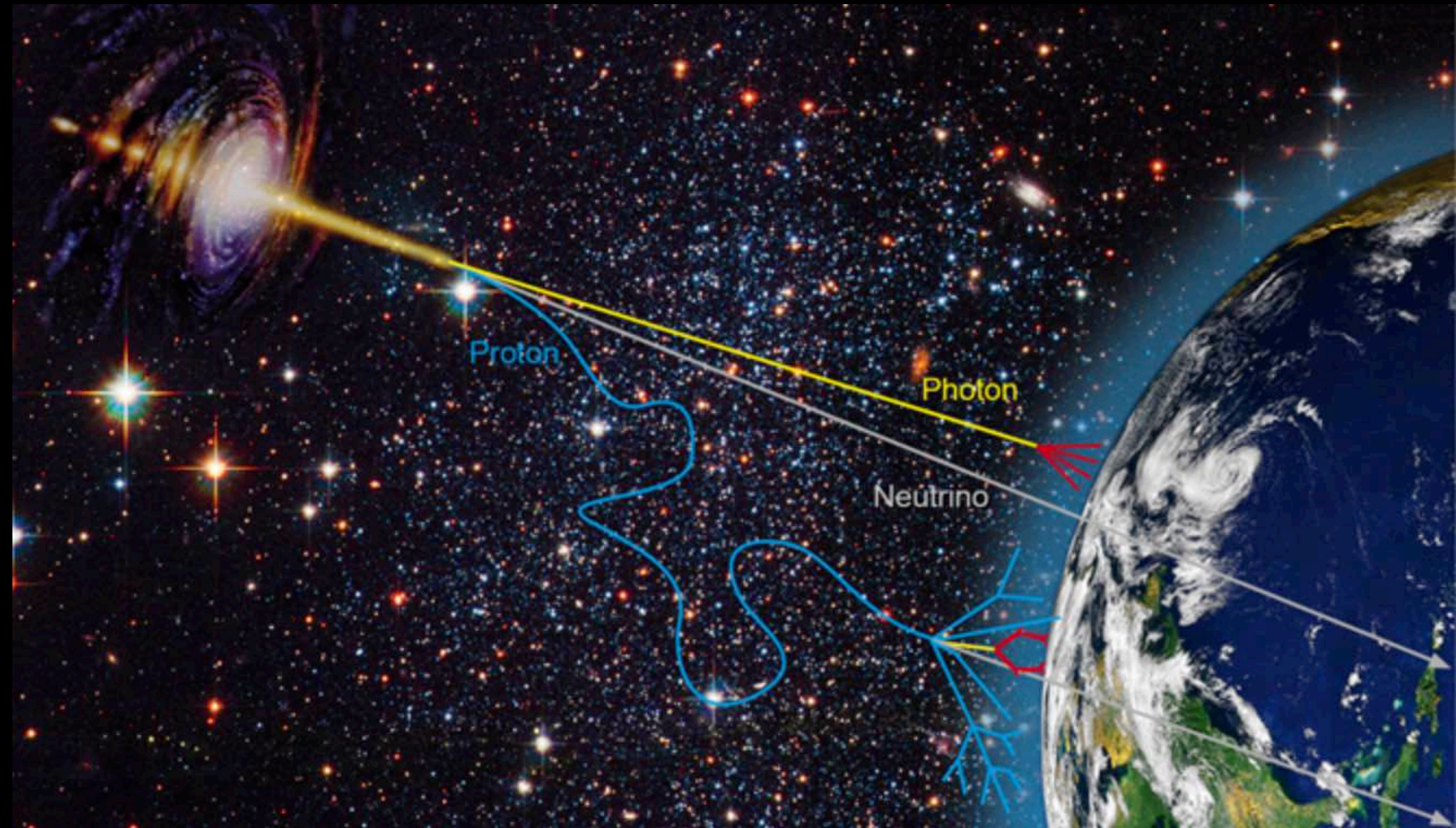
(credit Prof N. Shaviv)



Cosmic Rays of High Energy Bombarding Earth

as known from the recent Ice cube experiment extremely energetic neutrinos (100 Tera eV) are hitting Earth as well as charged particles from cosmic particle accelerators and also gamma rays are constantly bombarding Earth at unprecedented energy and in numbers (credit DESY, Hamburg)

high energetic particles have an impact on cloud cover according to Profs. Svensmark, Veizer, Shaviv et al. the physical mechanism is shown in the subsequent slides

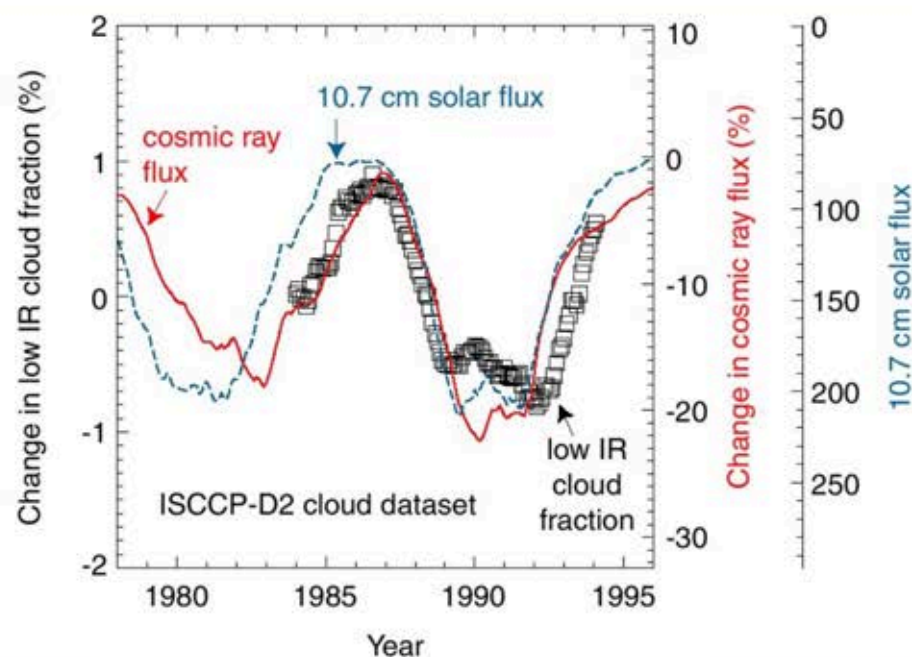
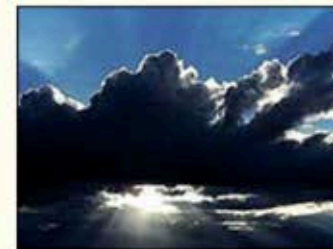


Physical mechanism: Cosmic rays and solar radiation

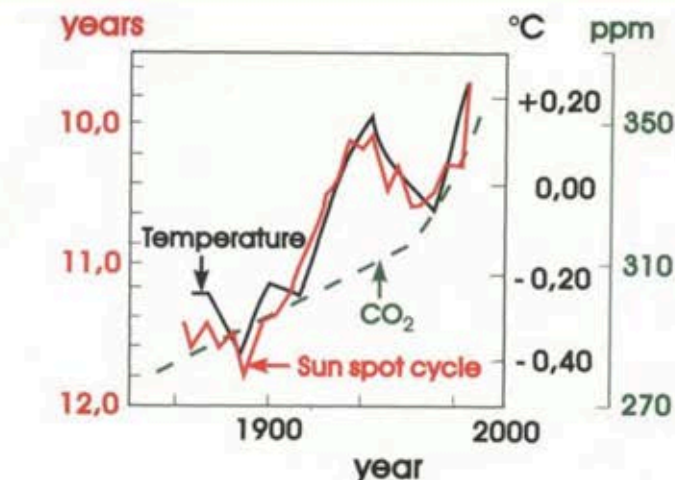
(theory and experiments after Svensmark & Friis-Christensen 1997)

there is no observed correlation between temperature and CO₂

- Sonnenaktivität beeinflusst Magnetosphäre (des Sonnensystems)
- Fluss der kosmischen Strahlung dadurch moduliert
- Hochenergetische Strahlen ionisieren Luft in geringen Höhen
- Kondensationskeime für Wolken in ca. 3 km Höhe



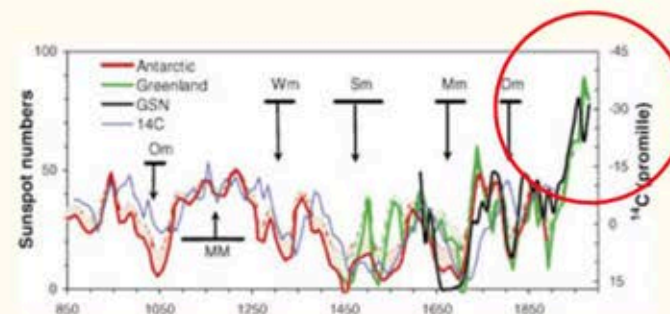
(Svensmark & Friis-Christensen 1997)



Temperatur im letzten Jahrhundert folgte Sonnenaktivität eher denn CO₂

Die Sonnenaktivität war im letzten Jahrhundert deutlich höher als im Jahrtausend davor.

Die Radiokarbonkonzentration (und damit der Fluss der kosmischen Strahlung) folgt den Sonnendaten.

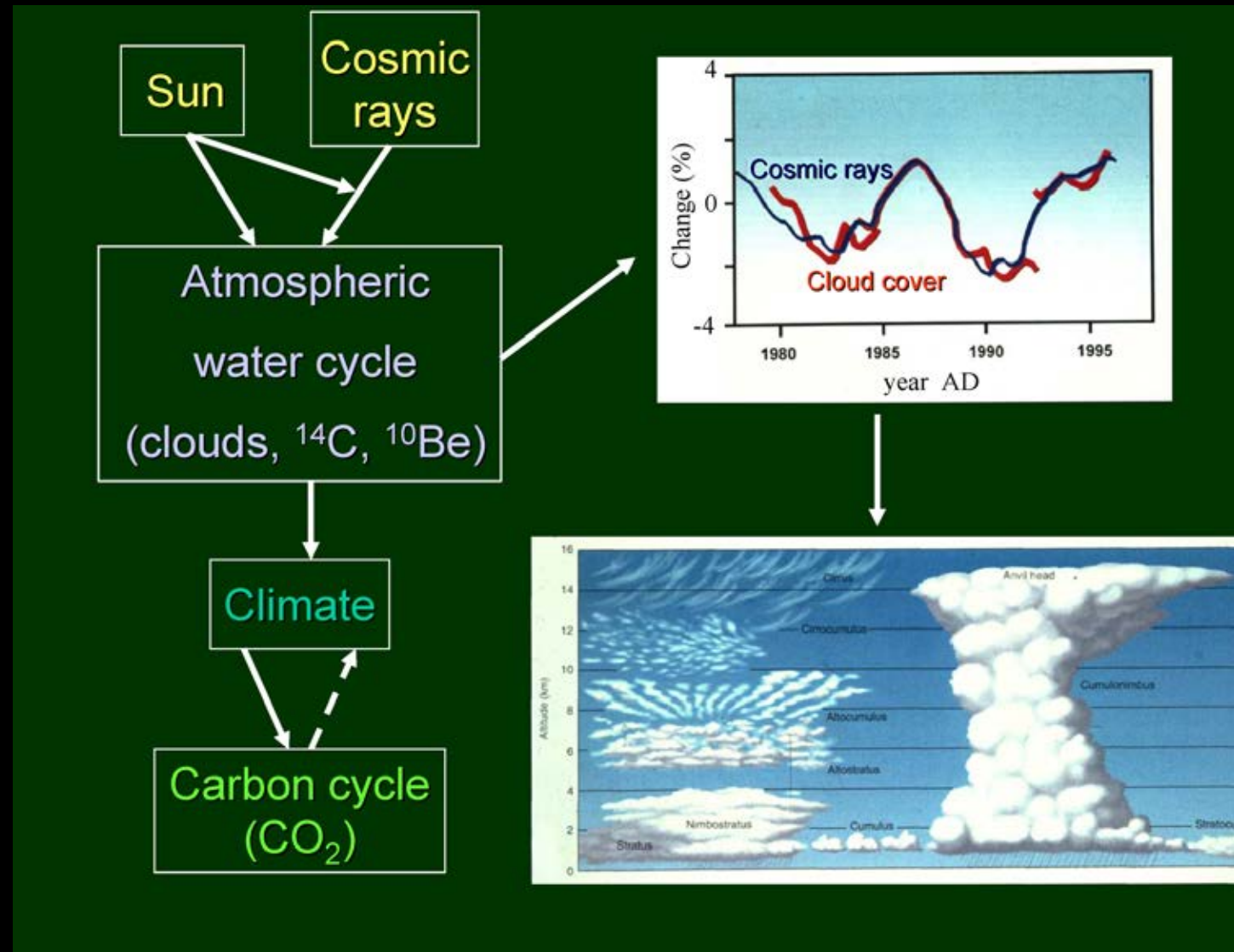


Veizer, Svensmark, and Shaviv Solar-Cosmic Theory

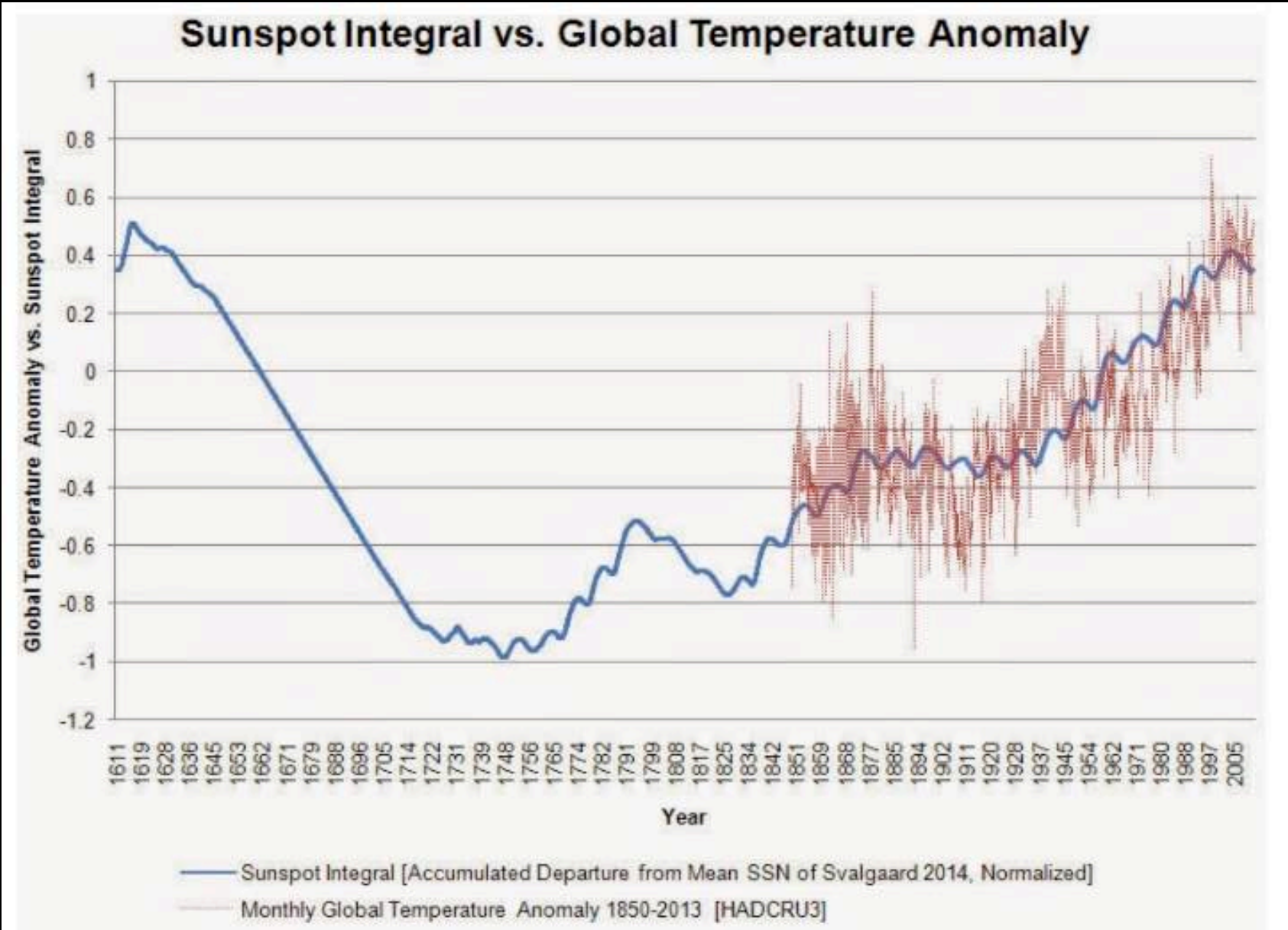
Physical mechanism: Impact of the sun on global temperature:

SKY and CLOUD experiments: (credit Prof. Jan Veizer)

Magnetic field of the Sun deflects cosmic radiation that causes ionization, and ionized particles are forming aerosols in the lower atmosphere that are the seed for cloud formation that, in turn, is shielding solar radiation. A proxy should be the ^{10}Be concentration, but **NOT necessarily the number of sun spots** that are only reflecting the number of **closed** magnetic field lines, but not the number of open field lines that go into outer space.



From the website of Prof. N. Shaviv, 2017: Solar physicist Dr. Leif Svalgaard has revised his reconstruction of sunspot observations over the past 400 years from 1611-2013. Plotting the "time integral" of sunspot numbers from Dr. Svalgaard's data shows a significant increase in accumulated solar energy beginning during the 1700's and continuing through and after the end of the Little Ice Age in ~1850. After a ~30 year hiatus, accumulated solar energy resumes a "hockey stick" rise for the remainder of the 20th century, followed by a decline beginning in 2004, all of which show remarkable correspondence to the HADCRU3 global temperature record:



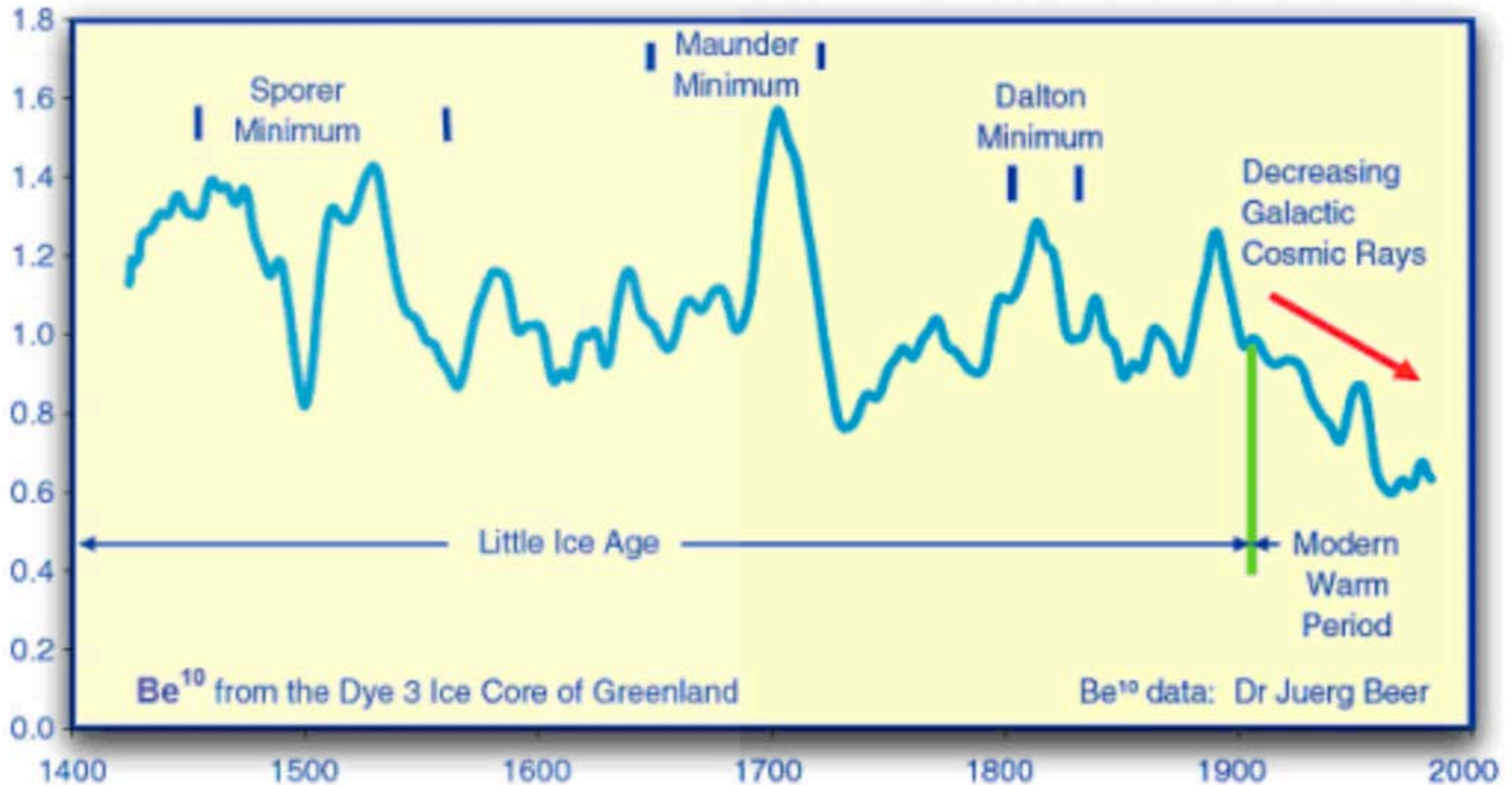
Determining the Sun's activity by the Number of Sun Spots and the Problem of Closed Magnetic Field Lines (credit NASA)

The picture clearly shows that the number of sun spots is **not a reliable proxy** for the magnitude of the Sun's magnetic field, i.e., the activity of the Sun, because of the **closed** magnetic field lines that curve back onto the Sun's surface and do **not reach out far enough** into space. Thus they cannot deflect the cosmic radiation (that comprises electrically charged particles) that is en route to the Earth. In other words, only those magnetic field lines that close in at infinity will be able to deflect the cosmic particles so they cannot reach Earth. Thus the amount of ionization in the lower atmosphere of the Earth decreases. In that way, the formation of aerosol particles in the lower atmosphere is reduced, and cloud formation is hampered. As a consequence, the surface of our planet will experience a higher solar energy flux. Hence, instead, the concentration of the **Be 10 isotope** should be measured that is generated by the incoming cosmic radiation.



Be 10 Ice Core data, Cosmic Ray Flux, and Climate Change

the content of Be 10 (beryllium) isotope is strongly correlated to the cosmic ray flux, supporting the theory of Prof. Svensmark et al. (credit WattsUp March 17, 2009) see also the paper by Pedro, J.B. et al., *Clim. Past*, 7, 707–721, 2011, www.clim-past.net/7/707/2011/



Latest results from the CLOUD experiment at CERN: May 2016

Unexpected experimental result May 2016:

*aerosol formation (key to cloud formation)
occurs naturally from trees:*

CERN, the European Organization for Nuclear Research, have left the issue even more confusing after discovering, while creating a fake cloud, that **trees could have been putting these aerosols into the atmosphere** since they first grew at the time of the dinosaurs, providing an additional time-varying source for low cloud formation, in addition to the cosmic ray hypothesis of Svensmark, Veizer, Shaviv et al.

CERN scientists have also discovered that projected temperature increases over the next century may have been **over estimated**.

Science clearly was not settled!

Impact of the sun on global temperature: CLOUD experiment at CERN, Geneva

From journal *Science*, 25 May 2016: *Cosmic Ray Physical Mechanism Vindicated*

Clouds need to condense around small particles called aerosols to form, and human aerosol pollution—primarily in the form of sulfuric acid—has made for cloudier skies. That's why scientists have generally assumed Earth's ancient skies were much sunnier than they are now. But today, three new studies show how naturally emitted gases from trees can also form the seed particles for clouds. The results not only point to a cloudier past, but they also indicate a potentially cooler future: If Earth's climate is less sensitive to rising carbon dioxide (CO₂) levels, as the study suggests, future temperatures may not rise as quickly as predicted.

"It's been long thought that sulfuric acid is really the key player [in cloud formation]," says atmospheric chemist Chris Cappa of the University of California, Davis, who was not involved in the research. The studies "show pretty convincingly that we **don't need sulfuric acid around to allow new particles to grow.**" To simulate ancient atmospheric conditions, one research group used CLOUD (Cosmics Leaving Outdoor Droplets), a controlled chamber at CERN, Europe's particle physics facility near Geneva, Switzerland. Nearly as big as a bus, the chamber was filled with synthetically produced air, allowing precisely controlled chemical conditions. Jasper Kirkby, a CERN particle physicist, and his colleagues introduced a mixture of natural oxidants present in the air and an organic hydrocarbon released by coniferous plants. The hydrocarbon was rapidly oxidized.

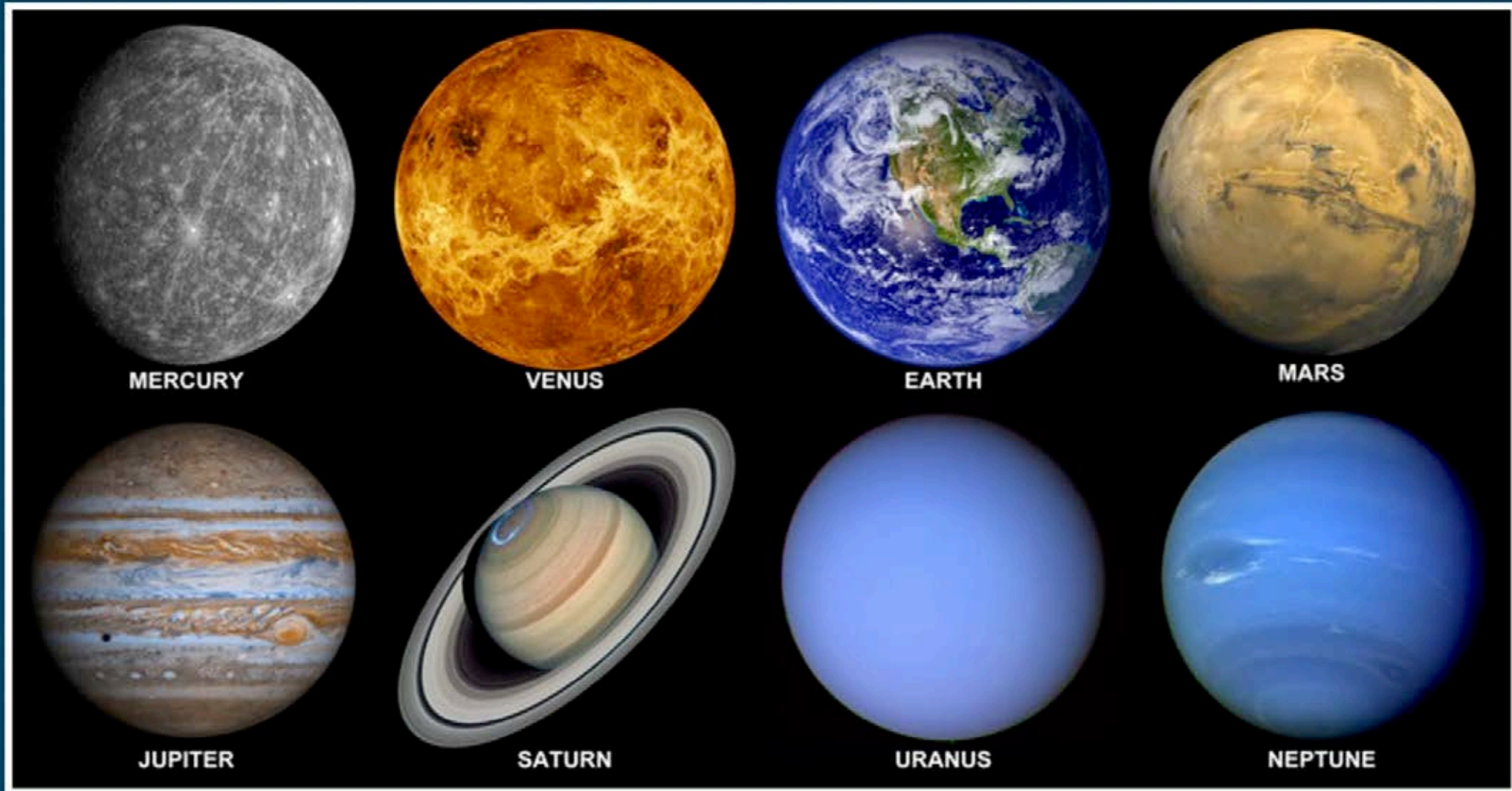
The only other ingredient allowed in the chamber was **cosmic rays, high energy radiation from outer space**, which made the molecules clump together into aerosols. **Sulfuric acid was not required.** In fact, even when the researchers introduced low concentrations of sulfuric acid to the chamber such as might be found in unpolluted air, **the aerosol formation rate was unaffected.** In a second CLOUD experiment published simultaneously in *Nature*, researchers showed these same oxidized molecules could rapidly grow the particles to sizes **big enough to seed cloud droplets, providing essential experimental for the hypothesis of cosmic ray impact on the Earth temperature of Svensmark & Veizer & Shaviv et al.**

The understanding of the deterministic properties of the TSI variability is critical for understanding the cause of irradiation variability and how the TSI irradiation will contribute to the natural climate variation on the Earth (ref. 12). Their study of long solar variable data series (1,000 years) has shown that the **four large planets** are the source of the

Solar position variability, the TSI variability, and the sunspot variability, and thus also may have an impact on the Earth's climate !

SOLAR PLANETARY SYSTEM

(CREDIT NASA)



Prof. Rahmstorf, PIK, (falsely) informed the State Parliament of Lower Saxony in 2004 that our anthropogenic CO₂ was causing an acidification of the oceans, which has increased 30%, and as a result the coral reefs are in danger.

Geologist Prof. F. K. Ewert dismisses S. Rahmstorf's alarmist claims of man-made ocean acidification.

Are we really seeing the alleged acidity? No. This is because with a pH = 8.1 they are still very much **alkaline**. Foremost ocean researcher and climate agitator Rahmstorf apparently does not know about the chemistry of the ocean, let alone the coral reefs. Yet he sees himself qualified to judge this.

It is a fact that atmospheric CO₂ concentration over the course of the earth's history was far greater than it is today. And if that is the case, then so were the oceans. It is a fact that the pH value of the oceans has dropped from 8.18 to 8.1. This is nothing more than a small drop in alkalinity because water does not become acidic until the pH drops under 7.0. Whether the current pH change from 8.18 to 8.1 is new and unique, or can also be greater and how it was in former times, is unknown because no long-term measurements are available.

CO₂ and H₂O don't want anything to do with each other and so they separate immediately after their first connection to carbonic acid. Only 1% of carbonic acid reacts and bonds with the plentiful amounts of calcium found in water to form calcium carbonate, which in water is only 0.0114 g/l soluble. While constantly new calcium carbonate forms, as lime slurry **it has to settle** and form limestone.

Moreover CO₂ is the building block of coral reefs. Their growth begins with algae that live in the corals, and they need CO₂ in order to live and grow, and thus provide for the growth of calcium carbonate skeletons that eventually lead to the formation of the reefs.

THANKS TO CALCIUM CARBONATE WE HAVE THE ALPS.

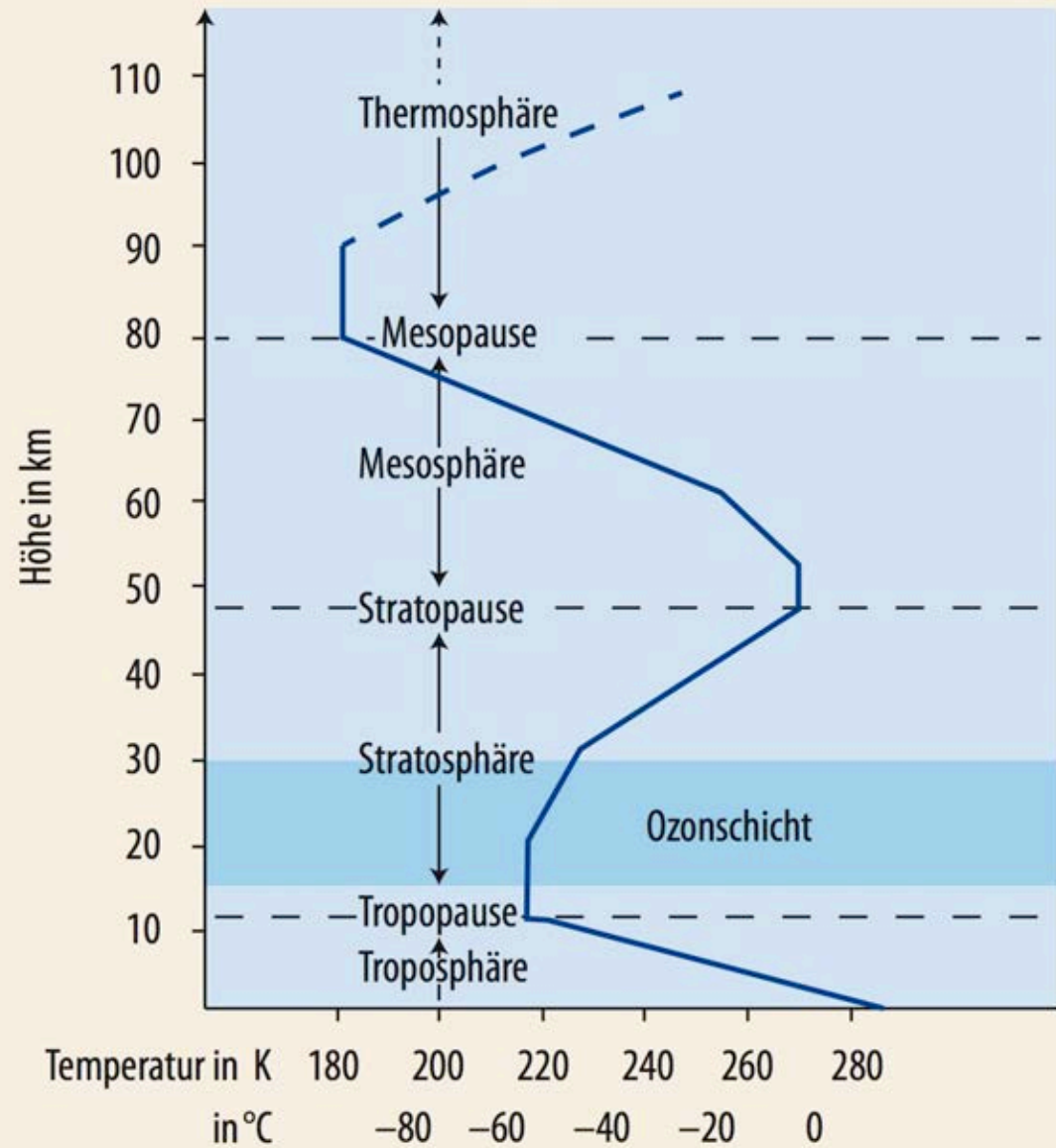
FACTS

Temperature Distribution in the Atmosphere

(credit Journal of European Physics, June 2016)

weather phenomena
mainly take place in the
troposphere and the
tropopause

if we ever got a scramjet
flying it would be in the
stratosphere



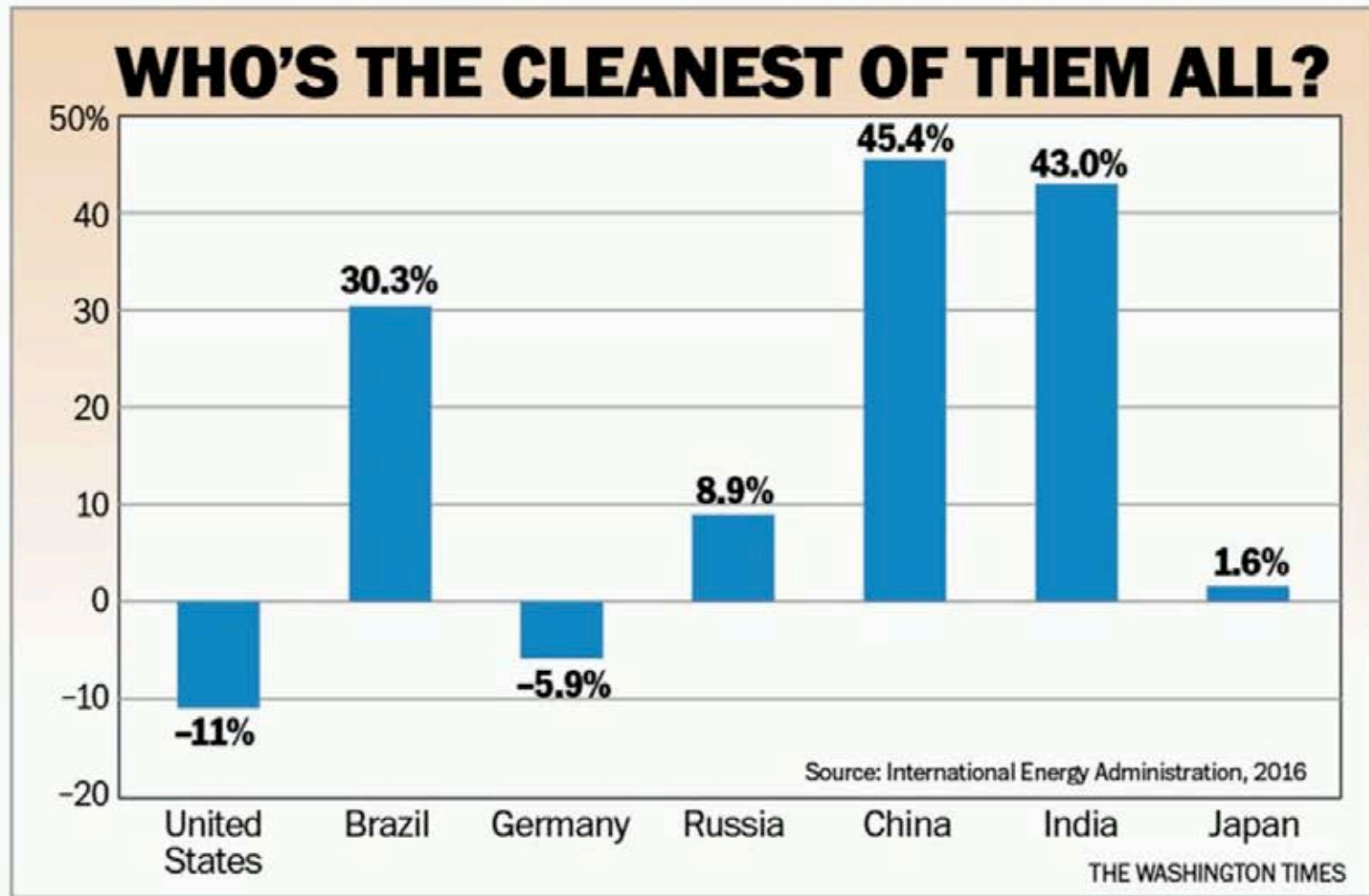
Rising CO₂ Levels: Country Overview 2014

there is only **one** number that is believed correct: **Germany** (source Wikipedia)

in 2017 the 40,000,000 should be reached

Country	CO ₂ emissions (kt) in 2014 ^[2]	% CO ₂ emissions by country	Emission per capita (t) in 2014 ^[3]
<i>World</i>	35,669,000	100%	5.0
 China	10,540,000	29.55%	7.6
 United States	5,334,000	14.95%	16.5
 European Union	3,415,000	9.57%	6.7
 India	2,341,000	6.56%	1.8
 Russia	1,766,000	4.95%	12.4
 Japan	1,278,000	3.58%	10.1
 Germany	767,000	2.15%	9.3
International Shipping	624,000	1.74%	—
 Iran	618,000	1.73%	7.9
 South Korea	610,000	1.71%	12.3
 Canada	565,000	1.58%	15.9
 Brazil	501,000	1.40%	2.5
 Saudi Arabia	494,000	1.38%	16.8
International Aviation	492,000	1.38%	—
 Mexico	456,000	1.28%	3.7
 Indonesia	452,000	1.27%	1.8
 United Kingdom	415,000	1.16%	6.5
 Australia	409,000	1.15%	17.3
 South Africa	392,000	1.10%	7.4
 Turkey	353,000	0.99%	4.7
 Italy	337,000	0.94%	5.5
 France	323,000	0.91%	5.0

CO₂ Plus and Minus

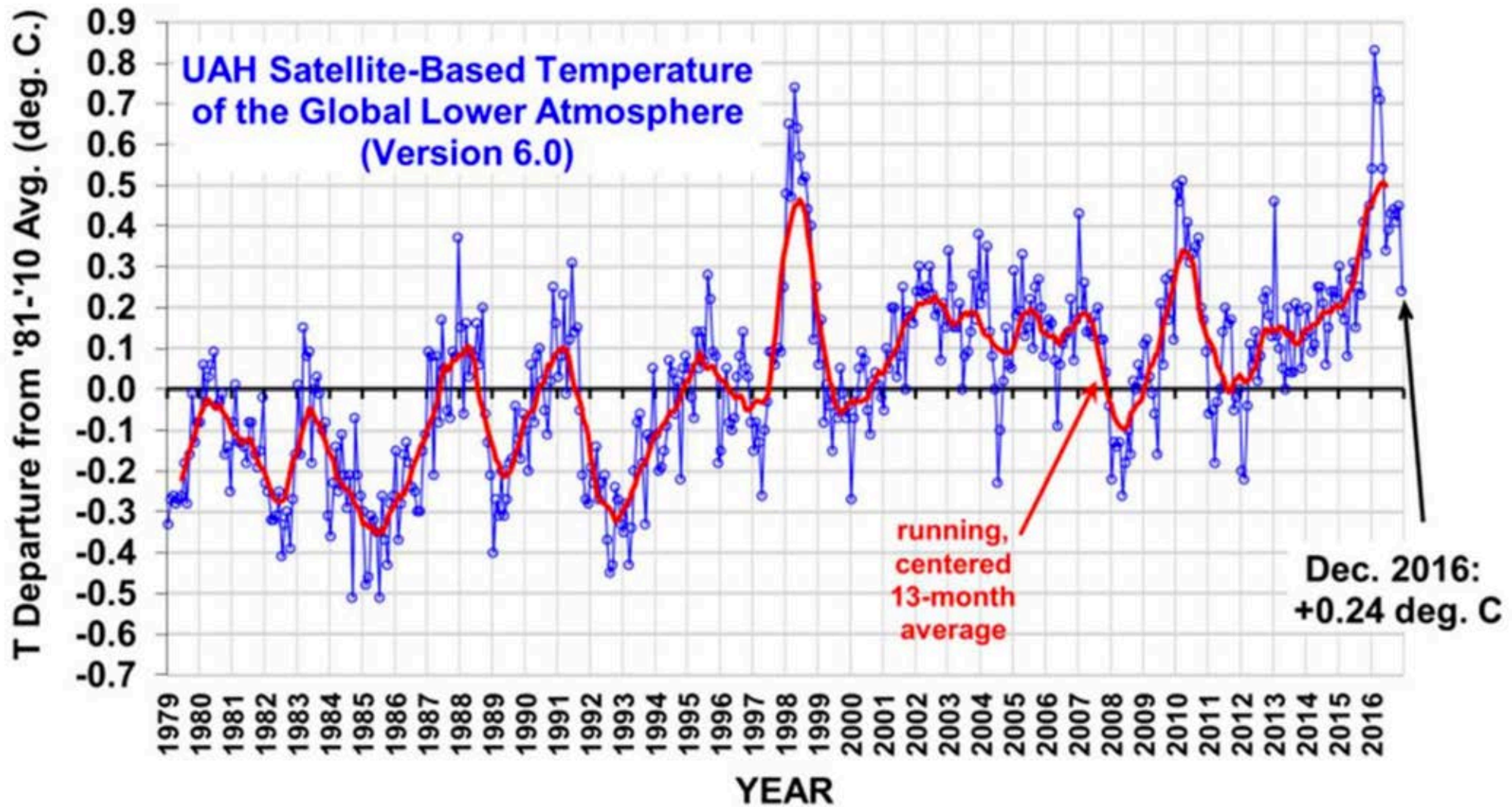


Source: Washington Times,

http://www.washingtontimes.com/multimedia/image/4_102016_moore-chart-0411-208201jpg/

Latest Global Temperatures as of December 2016, Satellites

Dr. R. Spencer, UAH



Latest Global Average Tropospheric Temperatures (Dr. R. Spencer, UAH)

Since 1979, NOAA satellites have been carrying instruments which measure the natural microwave thermal emissions from oxygen in the atmosphere. The intensity of the signals these microwave radiometers measure at different microwave frequencies is directly proportional to the temperature of different, deep layers of the atmosphere. Every month, John Christy and I update global temperature datasets that represent the piecing together of the temperature data from a total of fourteen instruments flying on different satellites over the years. A discussion of the latest version (6.0) of the dataset is located [here](#).

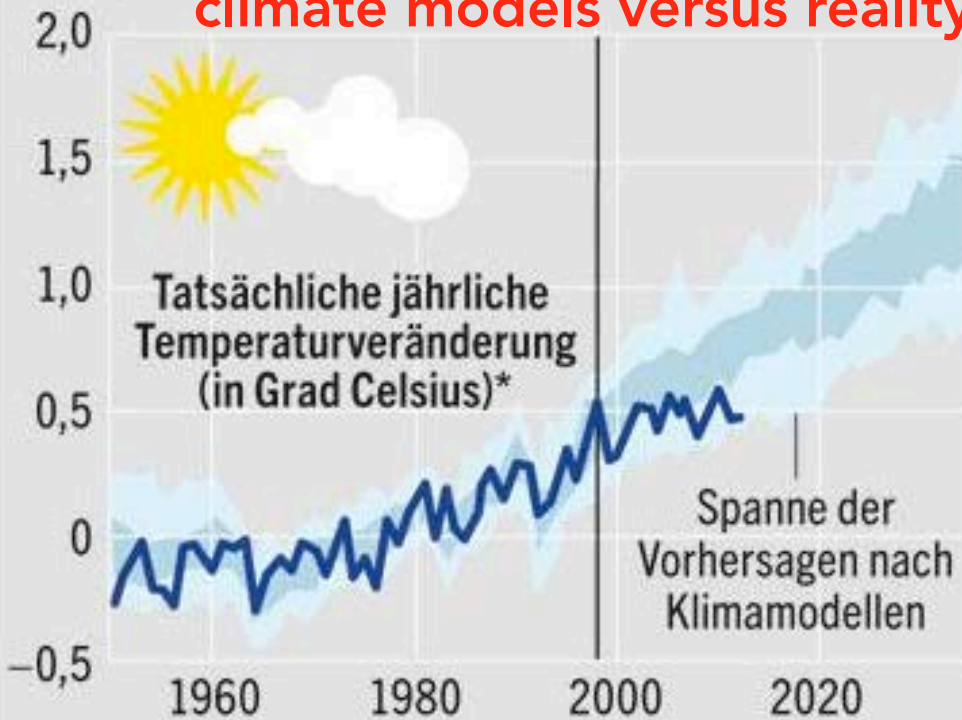
The graph above represents the latest update; updates are usually made within the first week of every month. Contrary to some reports, the satellite measurements are not calibrated in any way with the global surface-based thermometer records of temperature. They instead use their own on-board precision redundant platinum resistance thermometers (PRTs) calibrated to a laboratory reference standard before launch.

Global Temperature Hiatus since 1998

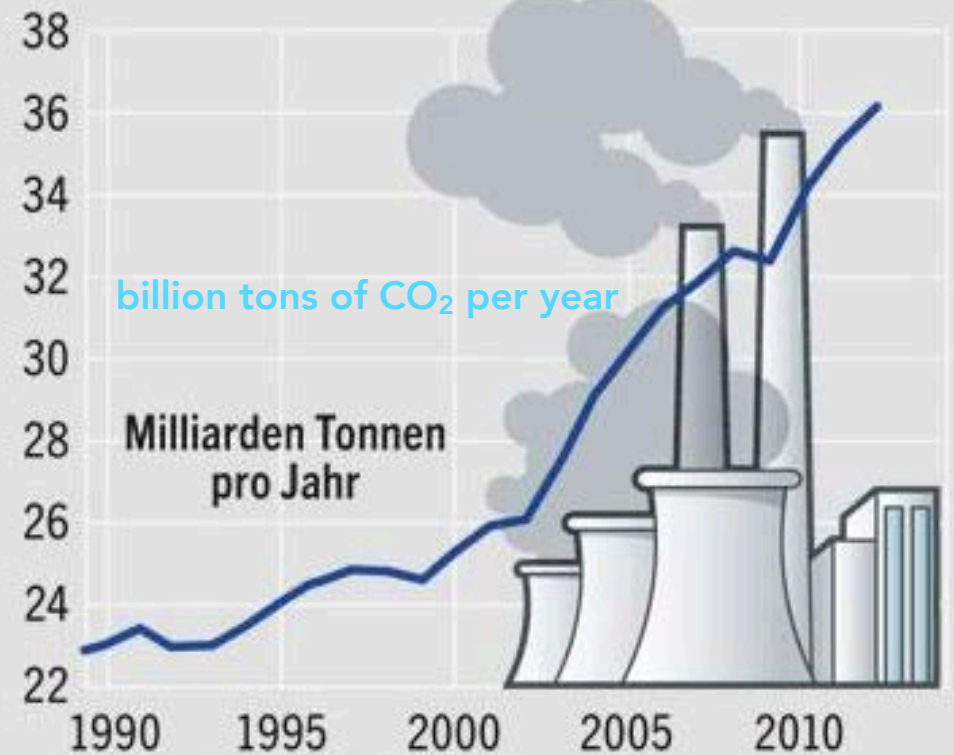
Stillstand bei der Erderwärmung no global temperature increase since 1998

Die globale Durchschnittstemperatur stagniert seit 1998...

climate models versus reality



...obwohl die CO₂-Emissionen steigen



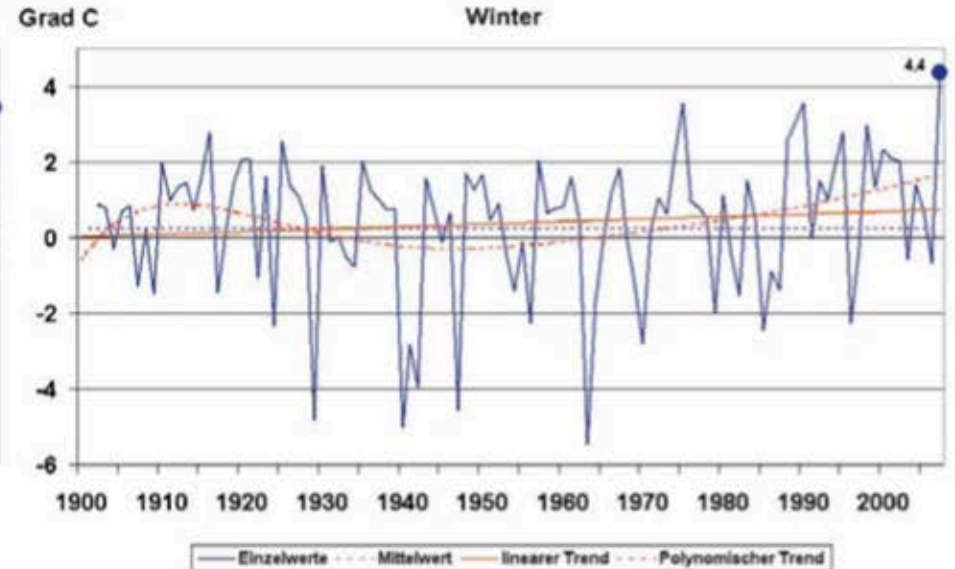
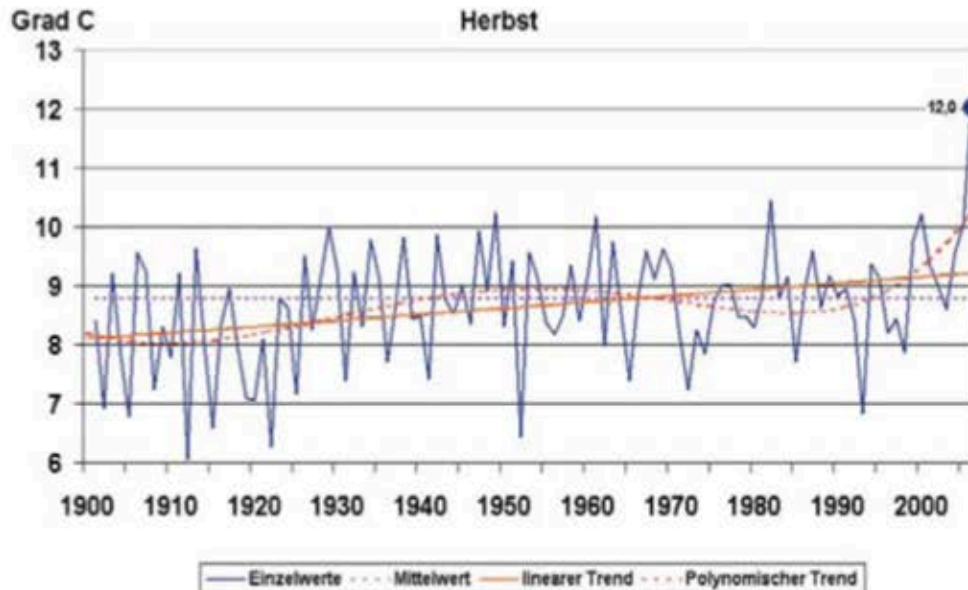
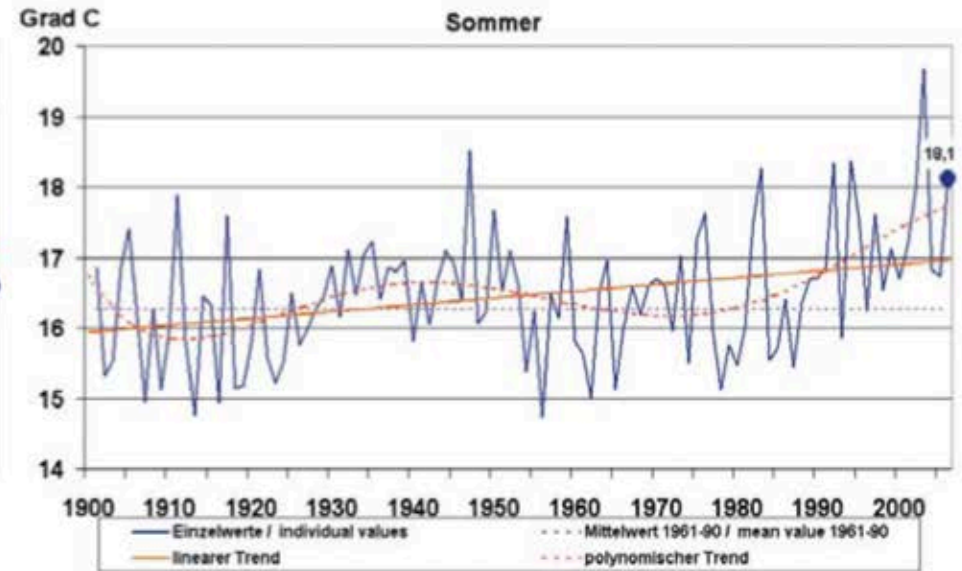
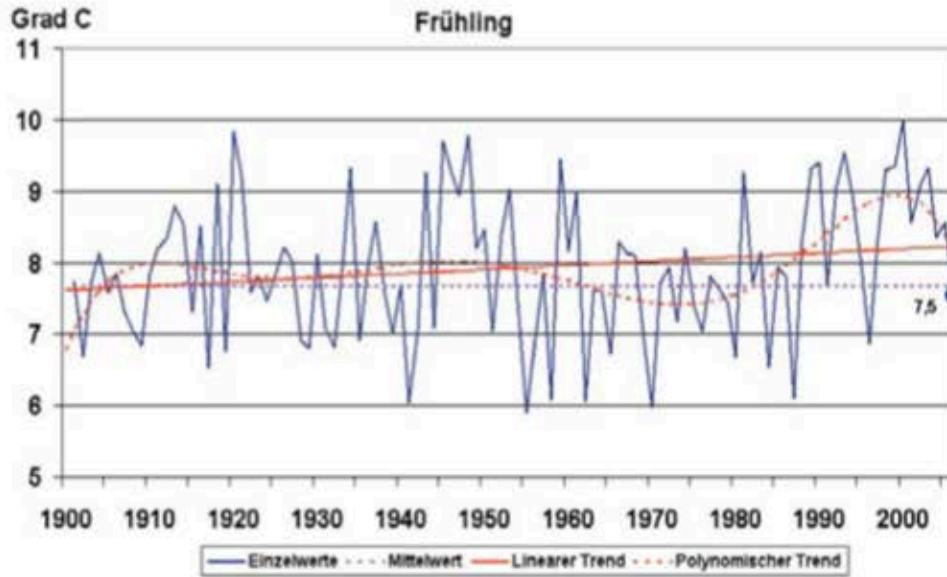
* relativ zur Periode 1961–1990;
Quelle: Global Carbon Project, Nasa

Wirtschafts
Woche

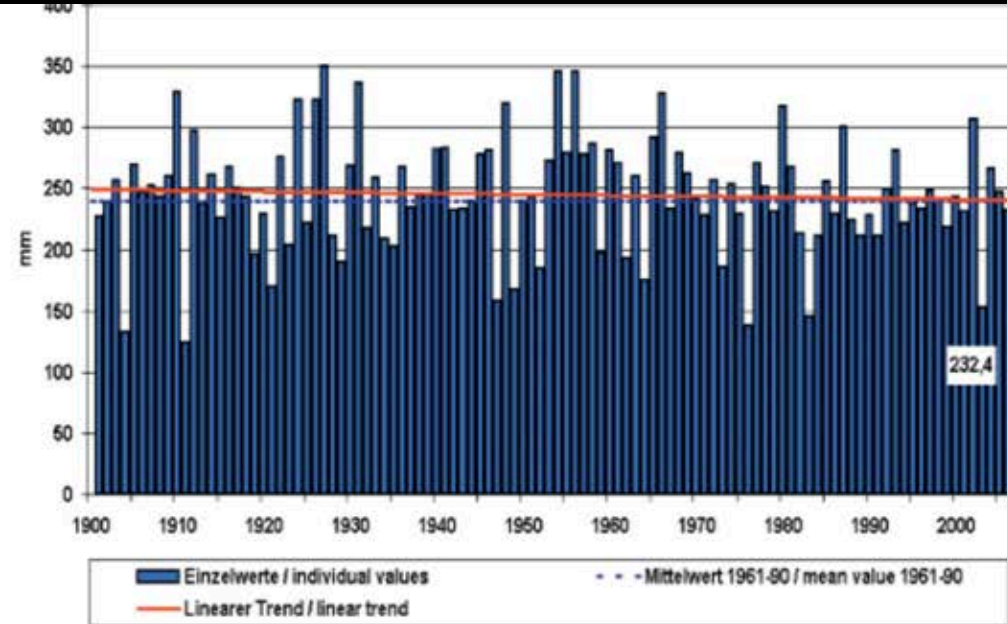
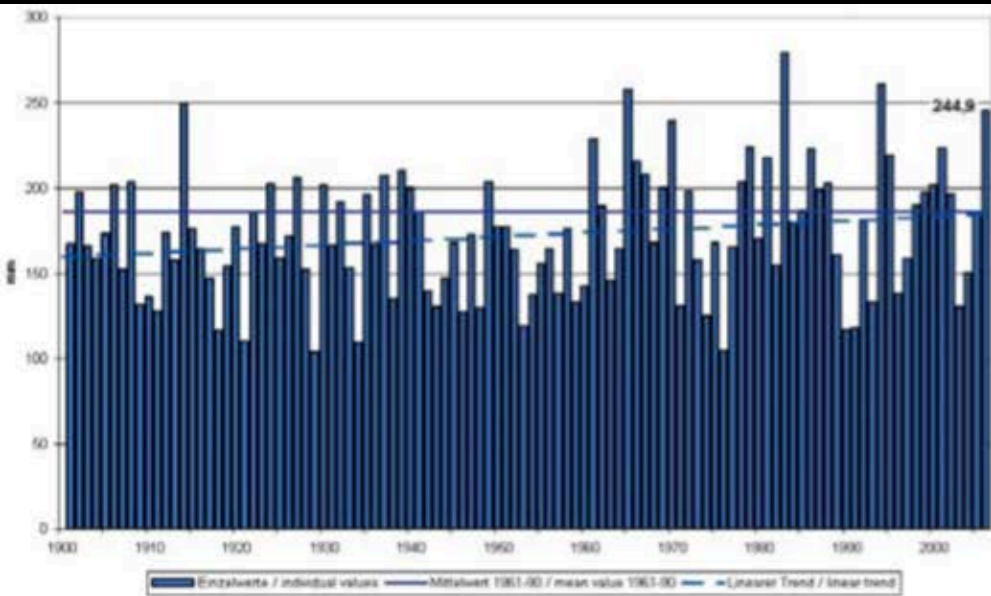
Klicken Sie auf die Grafik, um eine vergrößerte Ansicht zu erhalten

unstoppable CO₂ emissions

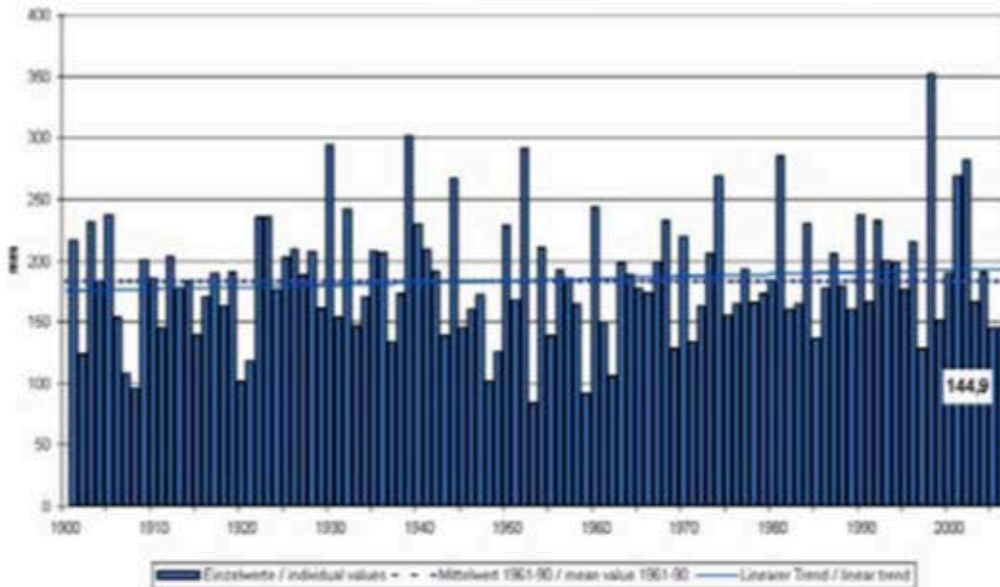
Temperatures: Example Germany Temps 1900-2010, credit H. von Storch



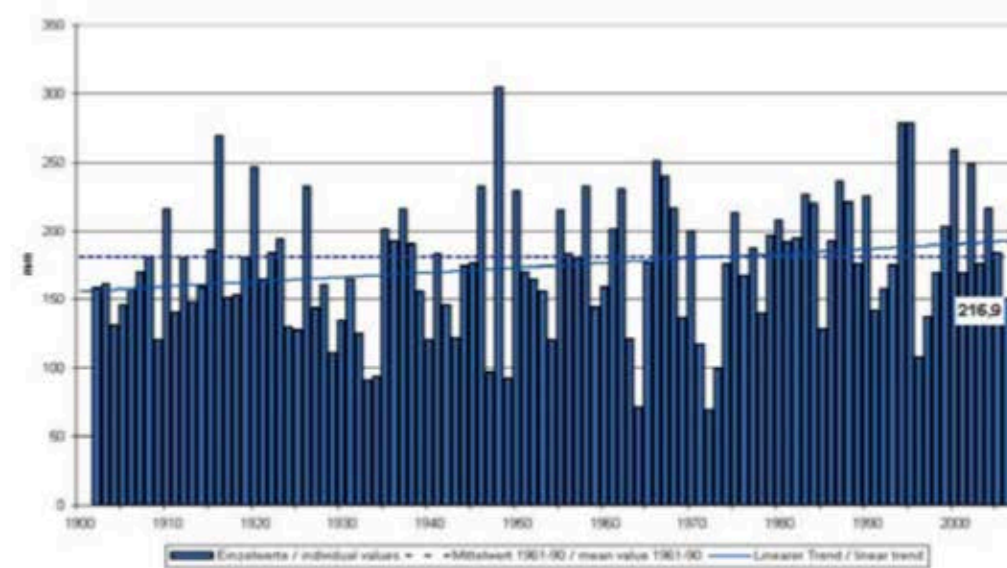
Droughts Example: Germany Rainfall 1900-2010, credit H. von Storch



Herbst



Winter



Political Correctness in science: **Deutsche Klimaphysik**

Tichys Einblick, a journal from a former journalist of the newspaper *Welt*, on 16 Dec. 2016 about an incident at the **Universität Leipzig, Germany** that happened to **geology chair Prof. Dr. Kirstein:**

Die Dissertation (PhD thesis) des Doktoranden Limburg zur Messung globaler Temperaturen wird boykottiert, der Genderkritische Vortrag des Professors wird abgesagt (talk is not permitted), der Paläoklimatologe soll forschen und seine Erkenntnisse für sich behalten, alles weil **politisch nicht erwünscht** —which is a well known formulation.

Das Land der Dichter und Denker da und dort nicht dicht (insane).

I.e., the Germans are back to their early history, at least, most of the politicians and journalists as well as some obedient professors — sounds familiar?

December 2016: Cold Climate starting around 2020

Forecast by Professor Valentina Zharkova, Northumbria University:

After studying full-disc images of the sun's magnetic field, Professor Valentina Zharkova of Northumbria University and her colleagues, discovered that the sun's dynamo is actually made of two components – coming from different depths inside the sun.

The interaction between these two magnetic waves either amplifies solar activity or damps it down. Professor Zharkova's observations suggest we are **due for a prolonged period of low solar activity.**

We will see it from 2020 to 2053, when the three next cycles will produce a very reduced magnetic field of the sun. Basically what happens is that these two waves separate into the opposite hemispheres and they will not be interacting with each other, which means, that the resulting magnetic field will drop dramatically nearly to zero. And this will be a similar condition **like the Maunder Minimum.**

It may get cold !?

Sea Ice Extent: Arctic and Antarctic

According to CFACT:

Status end 2014, other sources are shown in the following slides:

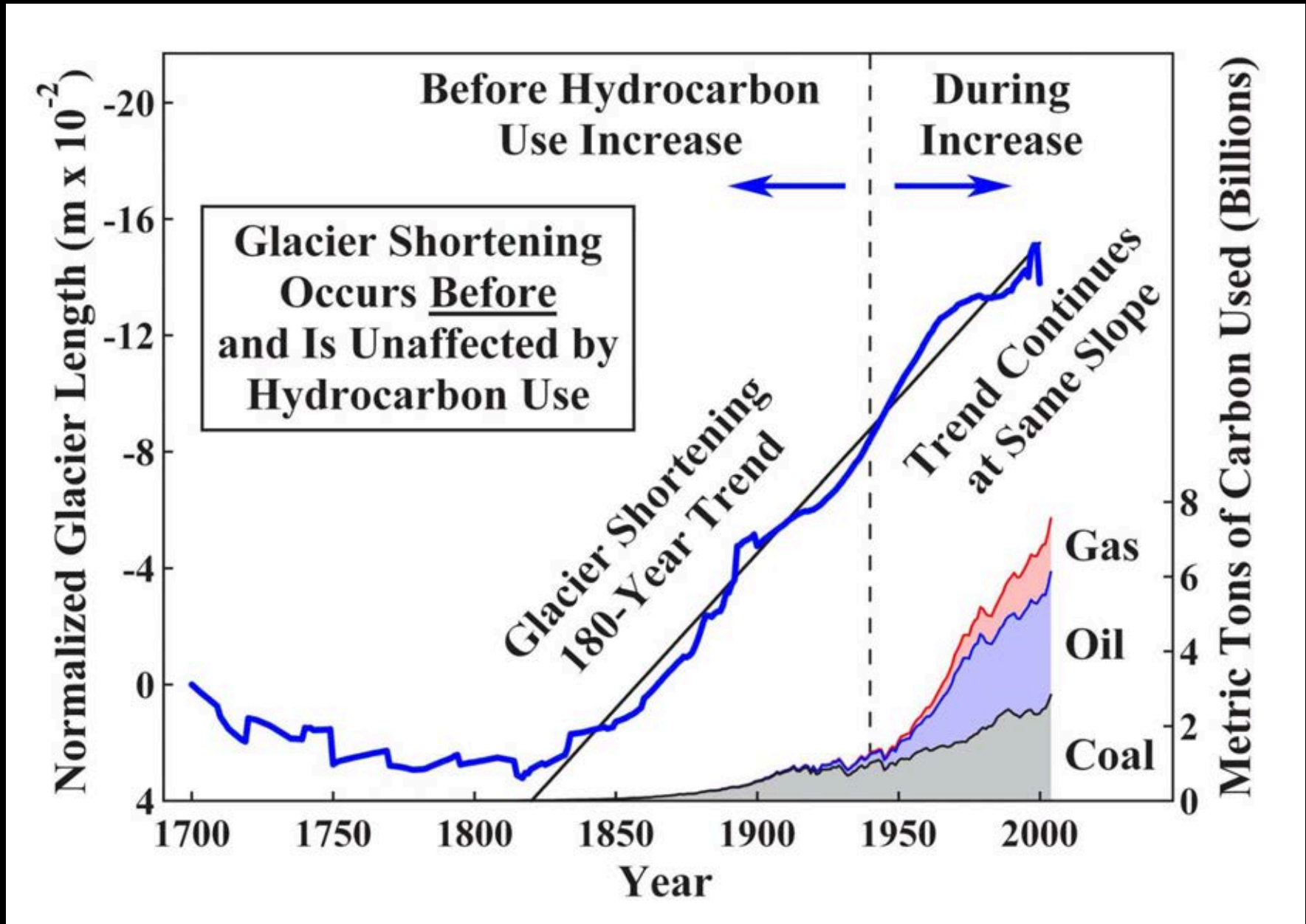
Arctic sea ice: some Alaskan glaciers have been retreating for decades, but **Hubbard is growing** while **Glacier Bay's ice retreat** began around 1750. Arctic sea ice has increased some 26% (400,000 square miles) since 2012, in a cycle that's continued for millennia. The sea ice "was thick in the 1920s, thin in the 1930s and 1940s, thick again in the 1960s and 1970s, and thinner in recent decades," according to oceanographer **Igor Polyakov**, 2004.

Antarctic sea ice: set another record in May, the U.S. National Snow and Ice Data Center reports, climbing 12% above the long-term 1981-2010 average, to reach 12.1 million square kilometers – the gain is almost as much as Alaska and Texas combined!

However, there is a long term **downtrend** in Arctic sea ice since the 1980s, which, however, may be compensated by the gain in the Antarctic ice (Prof. Miller, AWI) as will be quantified in the following slides.

Glacier Lengths since 1850

Taken from ref. 1, same results as Prof. G. Patzelt, Univ. of Innsbruck, Austria, see ref.



Antarctic and Arctic Ice Sheets

The Antarctic and Greenland ice sheets contain more than 99 percent of the freshwater ice on Earth. The Antarctic Ice Sheet extends almost 14 million square kilometers, roughly the area of the contiguous United States and Mexico combined.

The Antarctic Ice Sheet contains 30 million cubic kilometers of ice. The Greenland Ice Sheet extends about 1.7 million square kilometers, covering most of the island of Greenland, three times the size of Texas.

Arctic and Antarctic Sea Ice Level Predictions

In 2007, Prof. Wadhams predicted that **sea ice would be lost by 2013 after levels fell 27 per cent in a single year**. However, **by 2013, ice levels were actually 25 per cent higher than they had been six years before**. In 2012, following another record low, Prof. Wadhams changed his prediction to 2016. Comment: **astrology seems to be a far more serious science**.

The view was supported by Prof. Maslowski, who in 2013 published a paper in the Annual Review of Earth and Planetary Sciences also claiming that the **Arctic would be ice-free by 2016, plus or minus three years**.

These pseudoscience predictions are meant to influence politicians and the public.

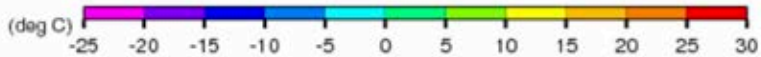
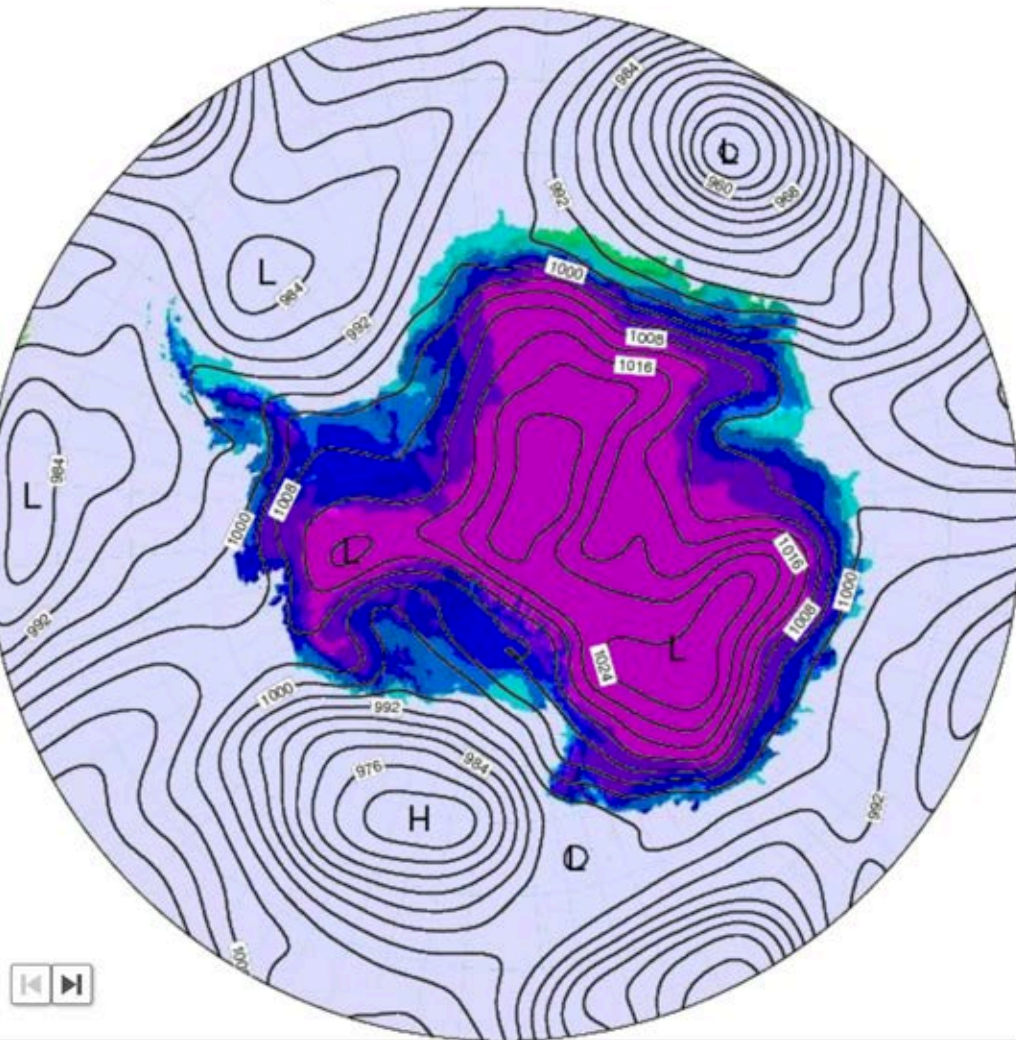
Interesting enough, the rate of Sea Level Rise has remained unchanged for decades, nothing else has been observed.

However, far from record lows, this year the Arctic (Nov. 2014) has seen the quickest refreeze ever recorded with the extent of sea ice growing 405,000 square miles (1.05 million square kilometres) in just three weeks since the September 10 minimum. The Danish Meteorological Institute said that refreezing is happening at the fastest rate since its daily records began in 1987.

Antarctic some real temperatures Arctic

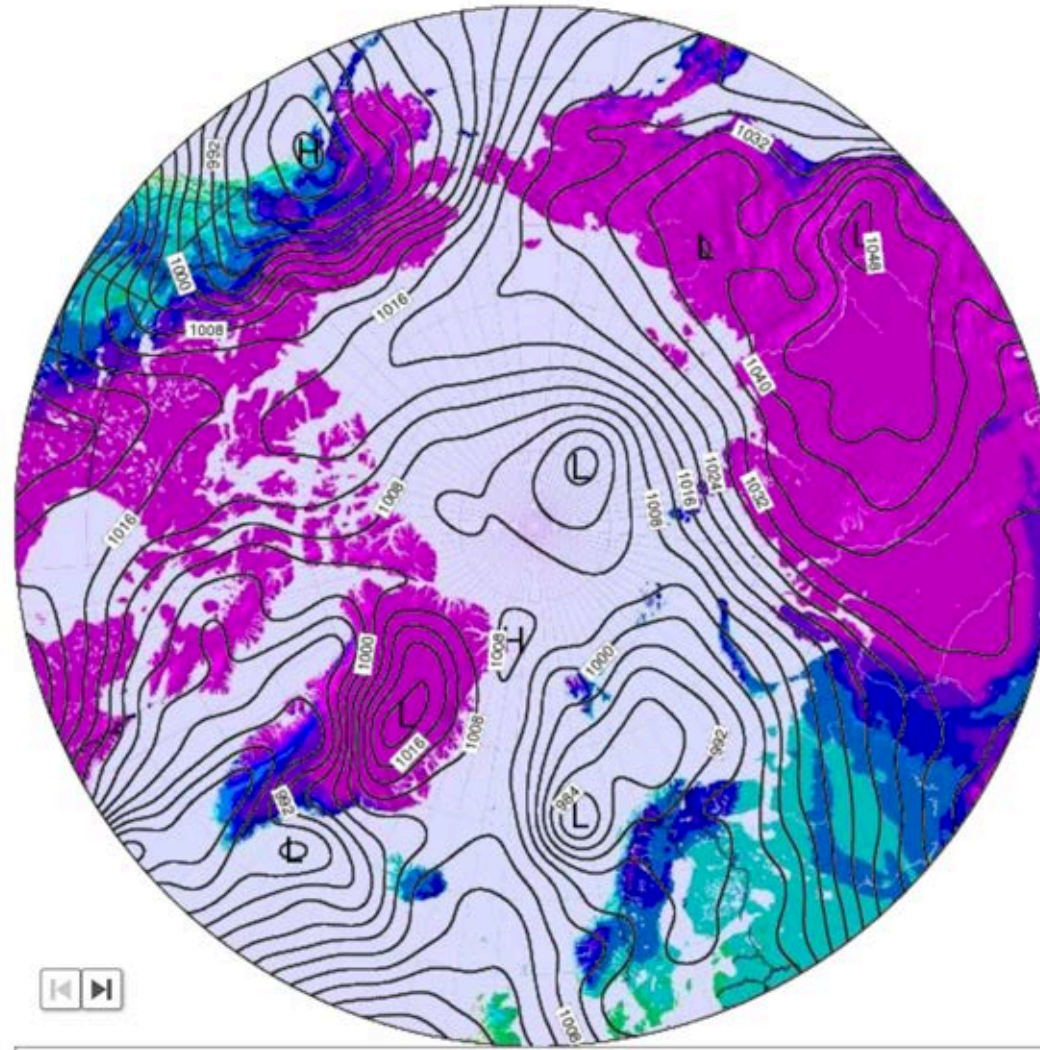
Temperatures on 14 -15 Jan 2017, credit NASA and NOAA

Surface Temperature on Sunday 15 Jan at 1am NZDT



Sea Level Pressure in Millibars Sunday 15 Jan at 1am

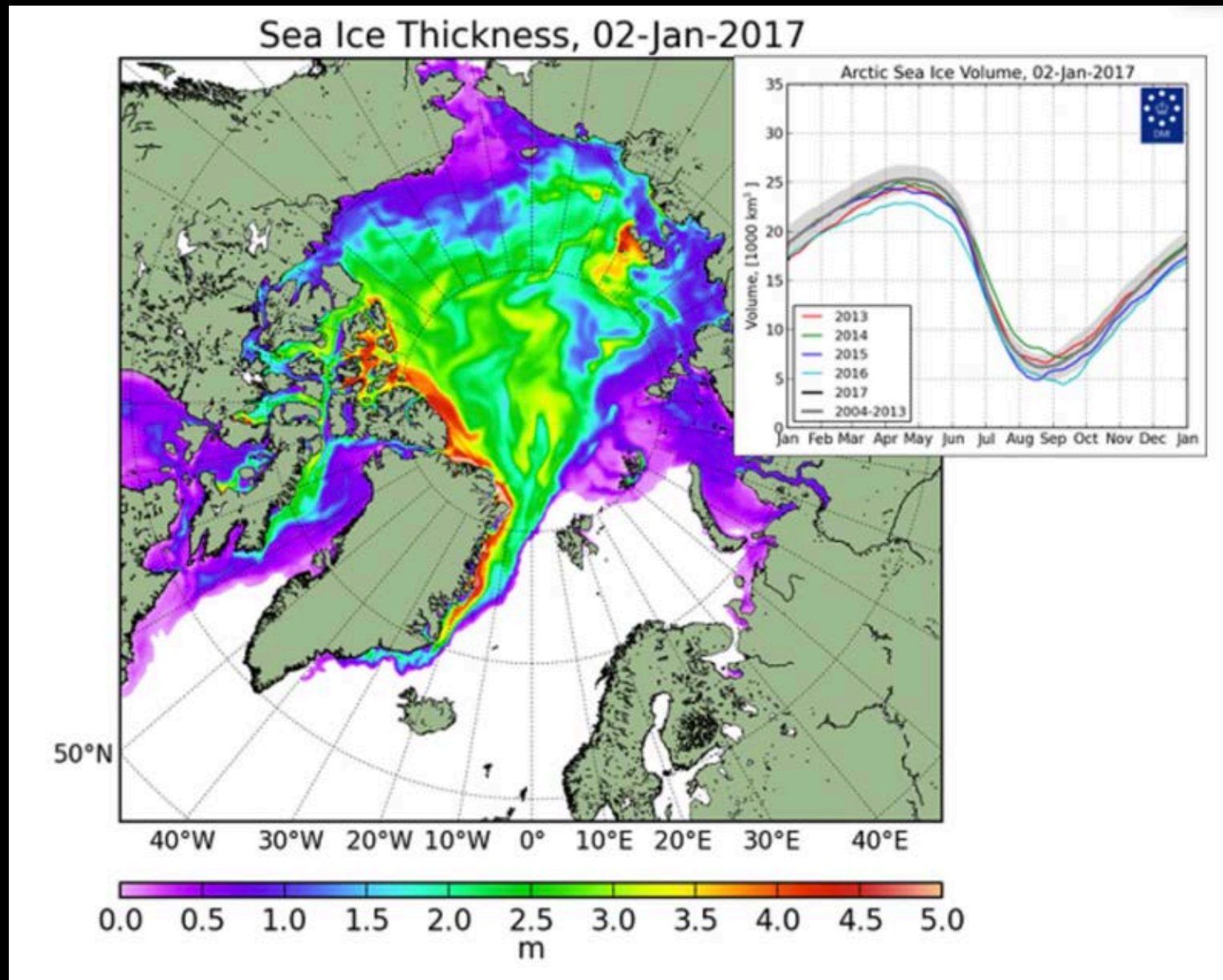
Surface Temperature on Saturday 14 Jan at 12pm UTC



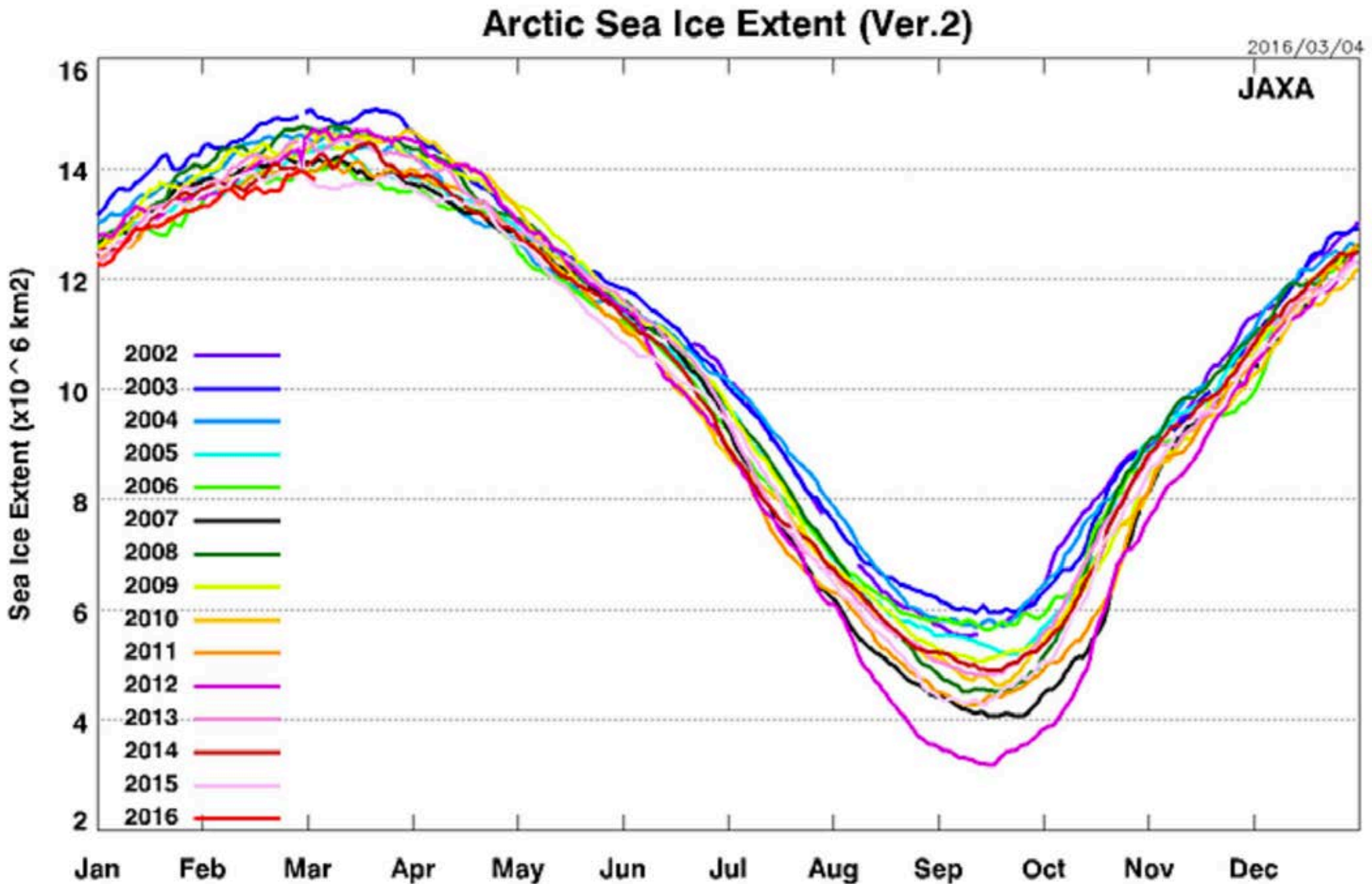
Sea Level Pressure in Millibars Saturday 14 Jan at 12pm

Danish Meteorological Institute: Arctic Sea Ice Level as of 2 and 3 January 2017

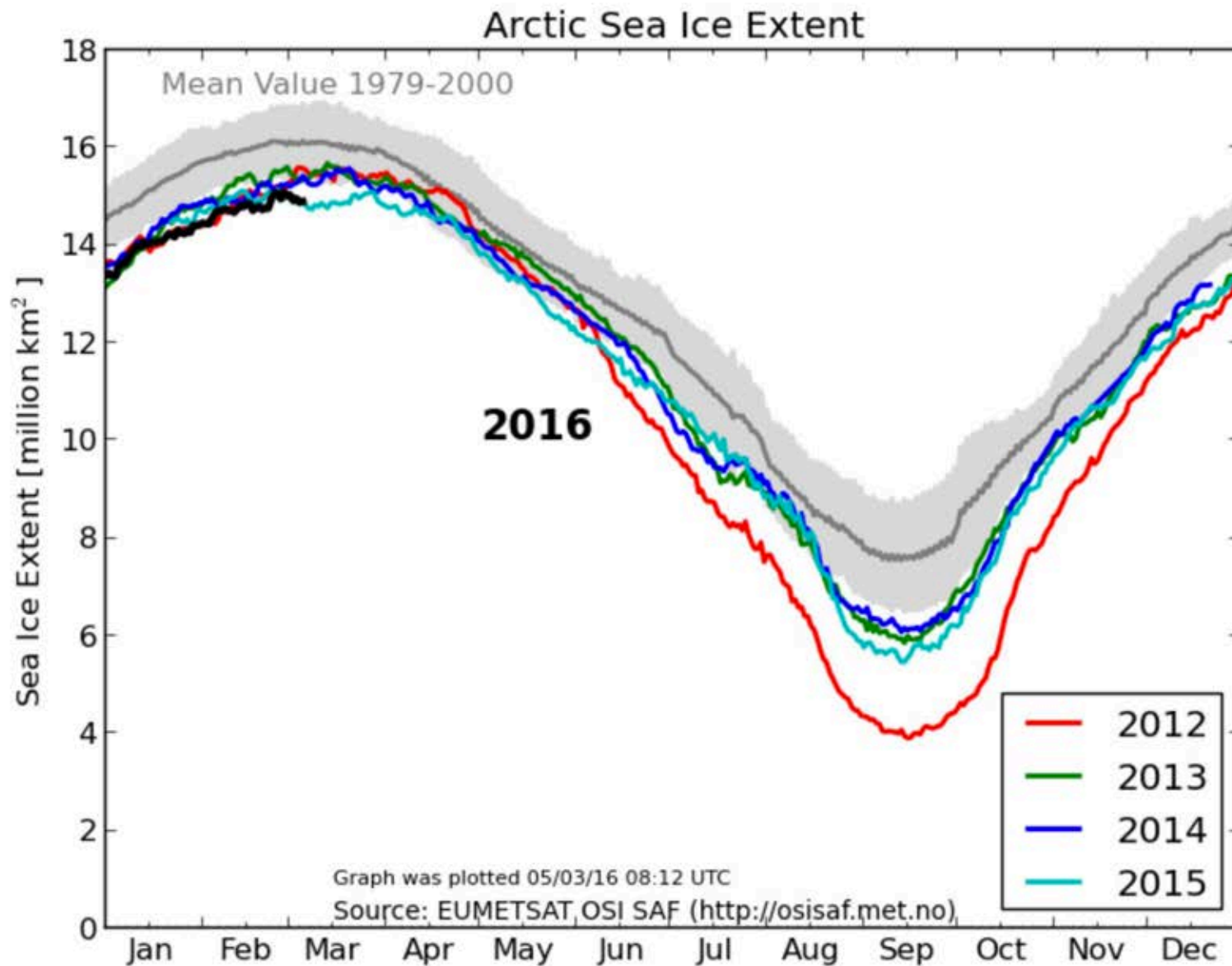
The plots show maps with sea ice thickness, and seasonal cycles of the calculated total arctic sea ice volume. The mean sea ice volume and standard deviation for the period 2004-2013 are shown with gray. The figures are based on calculations using DMI's operational ocean and sea ice model HYCOM-CICE.



Arctic Sea Ice Level 2002-2016 Downtrend



ARTIC Sea Ice compared to average 1979-2000



Sea Ice Cover Data Rigged by NOAA

NOAA satellite records actually extend back much further than 1979, but NOAA hides them because 1979 was the peak and the earlier records wreck their scam. Ice extent in 1974 was nearly two million km² lower in 1974 than it was in 1979.

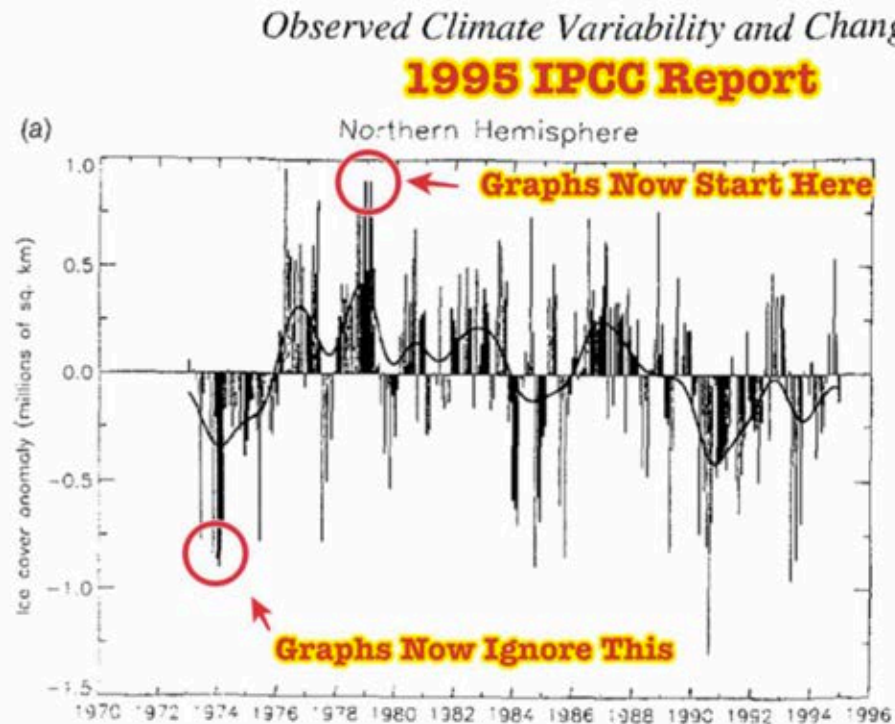


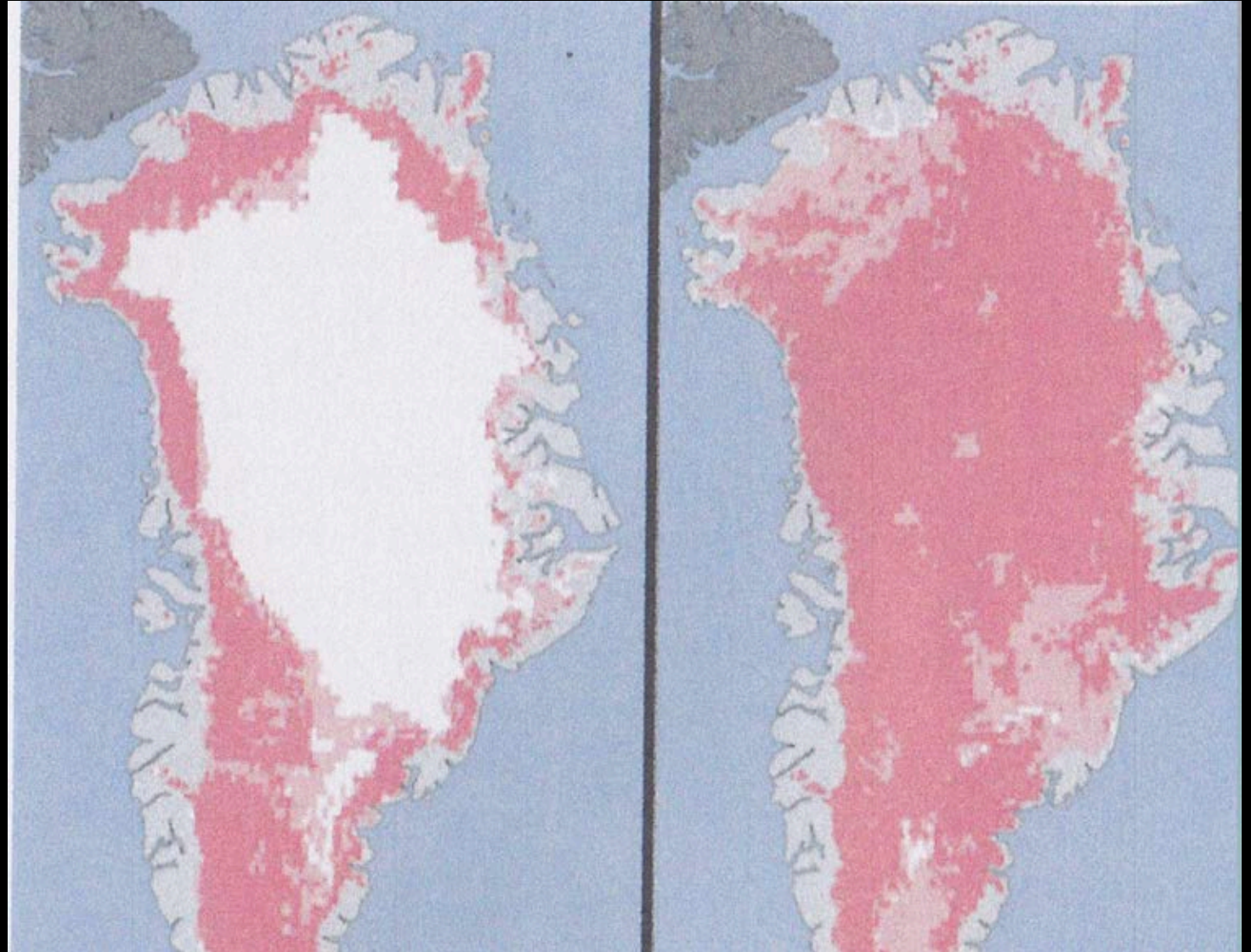
Figure 3.8: Sea ice extent anomalies relative to 1973–1994 for (a) the Northern Hemisphere and (b) the Southern Hemisphere. Data from NOAA (USA). Smooth lines generated from a 128-point binomial filter applied to the monthly anomalies. Heavy bars represent December–February in the Northern Hemisphere or June–August in the Southern Hemisphere.

Arctic Ice Disappears within Four Days

German Newspaper's Data Rigging: Northpole ice **melted** within four years.

However: white: ice cover, red is molten ice (surface water of a few millimeters, the ice beneath is, of course, still there).

In reality all the ice is still there. The thin surface layer of water is seen as red by the satellite, hence the white ice cover disappeared. The German newspaper (RNZ) changed the four days into four years and wanted to make their readers believe that the **North pole virtually has become ice free** (taken from ref. 8).



Mission Eternal Ice

published in the German newspaper the *Welt*, 27 January 2017

an example of a grossly misleading article employing pseudoscience arguments

This report conveys the impression that the ice has been at the North pole forever. **This is wrong**, the North pole has been covered with ice for only about 8 million years, which is a relatively short period in the Earth's climate history. There is nothing eternal here.

As is known from the temperature history of Greenland (see next slide) about 1,000 years ago the mean temperature was **substantially higher** on the island, and the Vikings settled there for almost 400 years.

Moreover, it should be understood that the melting of sea ice **cannot** lead to an increase in the sea level. Fill your whiskey glass with ice cubes and watch their melting.

Glaciers are retreating for more than 150 years (see previous slide), and not just since the industrial revolution. Their ice volume is negligible compared to the Arctic and Antarctic shelf ice.

North Pole is melting again

THE MACKAY DAILY MERCURY:
SATURDAY, APRIL 7, 1923.

NORTH POLE MELTING.

MANY GLACIERS VANISHED.

Is the North Pole going to melt entirely? Are the Arctic regions warming up, with the prospect of a great climatic change in that part of the world?

Science is asking these questions (says "Popular Science Siftings"). Reports from fishermen, seal hunters, and explorers who sail the seas around Spitzbergen, and the eastern Arctic all point to a radical change in climatic conditions, with hitherto unheard-of high temperatures on that part of the earth's surface.

North Pole is melting, but already did so in 1922. Had the author of the **Welt article** cared to check newspaper reports that appeared almost 100 years ago, he could have simply copied the text. However, in 1945 things changed completely, and in 1975 a future **ice age with most dire consequences** for humanity was predicted (see previous slide).

Next, there has been a warming period from about 1976 - 1998, leading to most catastrophic predictions of a too warm climate. For instance, the same institutions **NOAA and NASA** turned around 180 degrees and now are claiming the opposite to be true (compared to 1975).

However, since about **1999 to 2016 no global warming** took place, despite an **ever increasing CO₂** level.

According to a large number of scientists, CO₂ only plays a minor role, but oceanic oscillations, for instance, a 60 year cycle, see recent refs. 17, 18, may have a much more prominent role along with the combination of cosmic rays and the magnetic field of the Sun for low altitude cloud cover (as previously discussed). These topics simply are not addressed at all in the **Welt article**.

Accurate information was not the goal, instead a **fictitious catastrophe** was alluded to, that is, a **soap opera** was constructed (many journalists in Germany **no longer try to report the facts, instead their articles are written to fit their ideology**).

Now the **penguins are disappearing** (see slide below).

Welcome to Absurdistan III

New Arctic Sea Ice Cover Plan

Save the Arctic sea ice with **\$ 5 trillion** of floating, wind-powered ice machines, recommended by the latest research of S. J. Desch et al., ASU, U.S.A.

on 16 February 2017 journalist T. Hopper from *Mail on Sunday* newspaper, reported on a proposal by a team (**the term scientist does NOT apply to these people**) from Arizona State University to save Earth's Arctic Sea Ice

We, the taxpayers, should

Install 100 million (!) wind turbines over the Atlantic Sea Ice region that are driving pumps that then are spraying water on the sea ice to keep it from melting

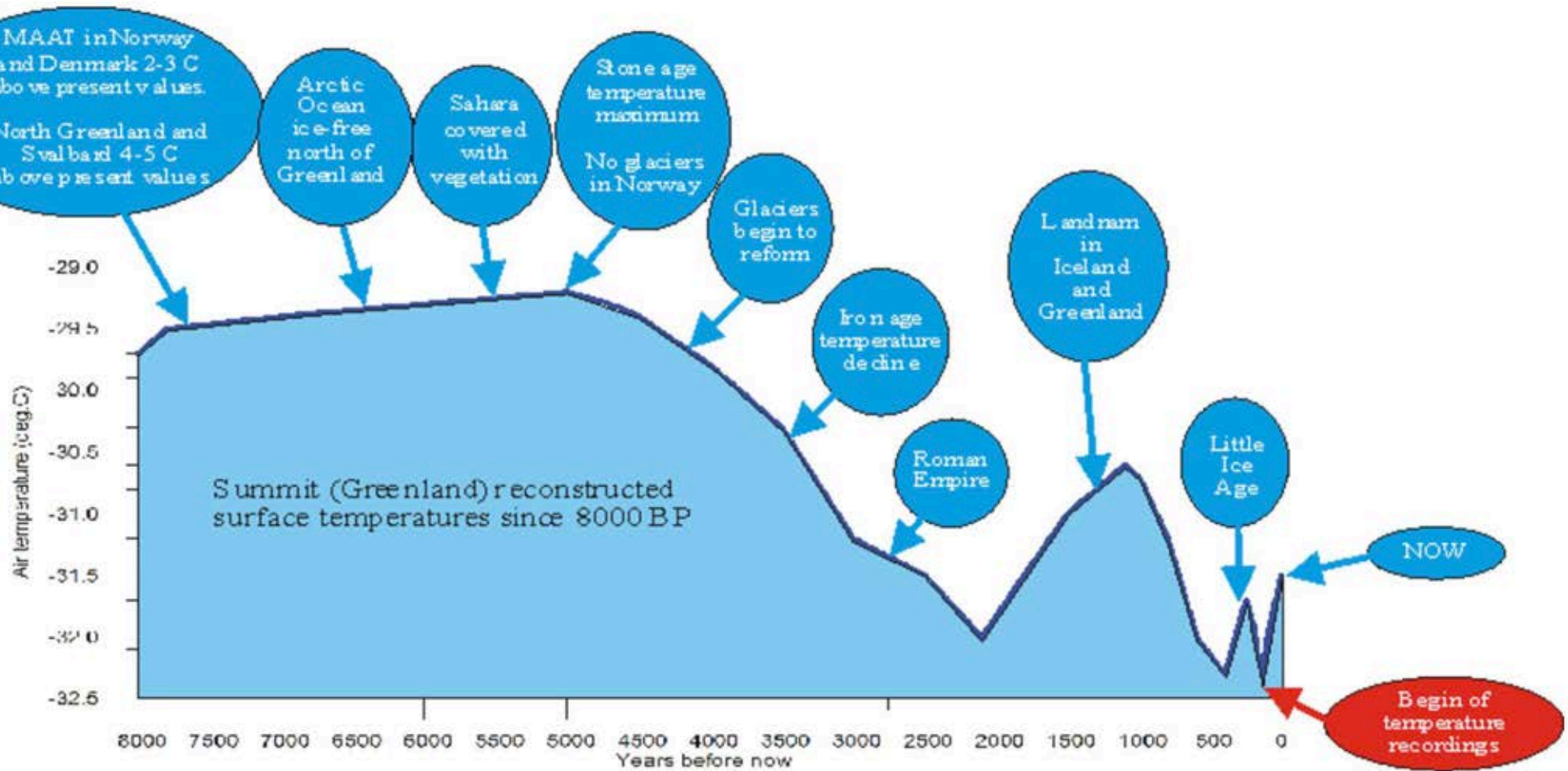
NO IDEA SEEMS TO BE CRAZY ENOUGH
to wast the taxpayer's money

a straightforward search on the internet would have revealed, however, that . . .

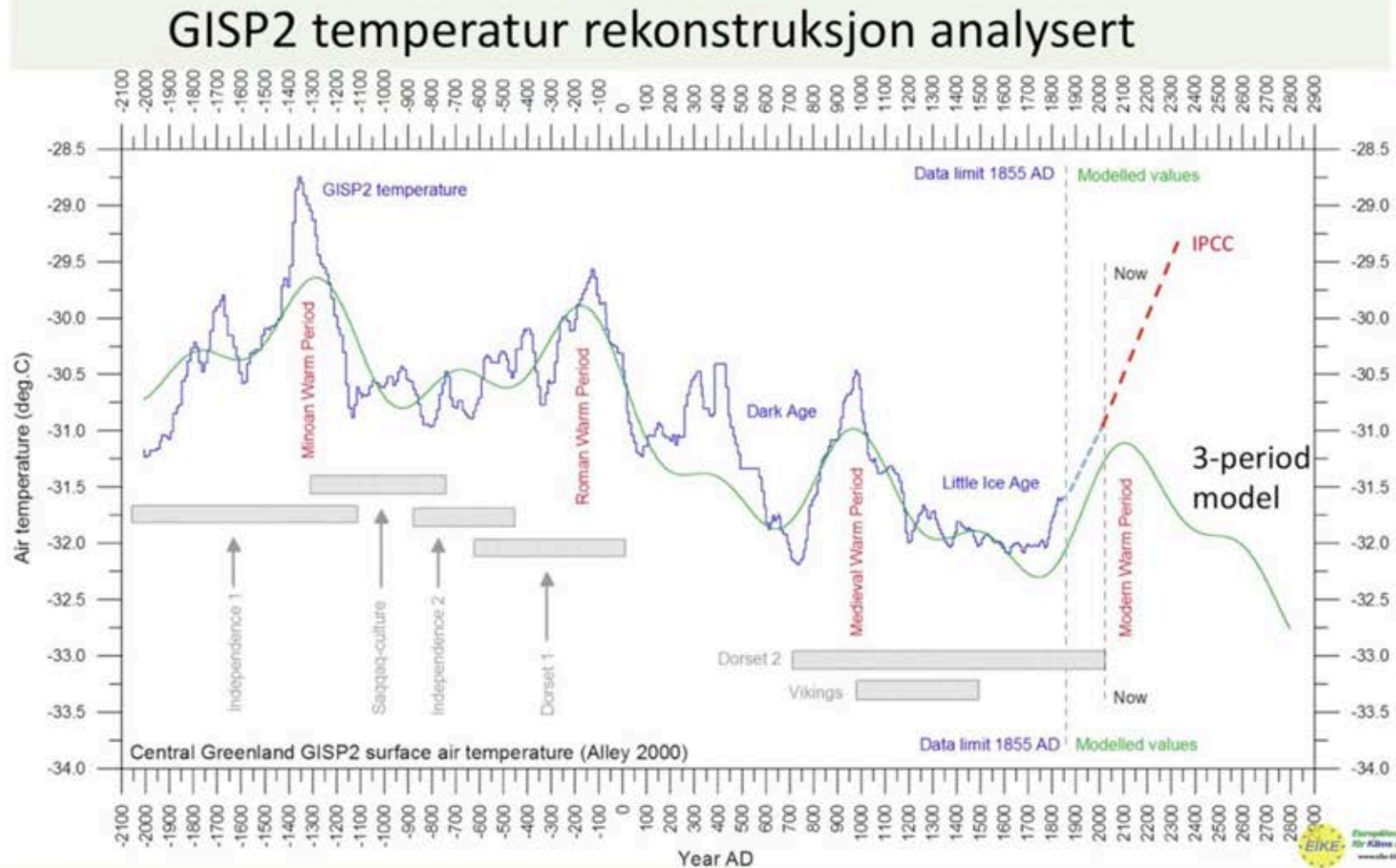
Mission Eternal Ice?

that : Greenland Temperature History shows higher temperatures in the past

(credit Prof. J. E. Solheim, Astrophysical Dept., Univ. of Oslo, climate4you.com)



that : a linear extrapolation **does not make any sense** as done in Fig. 2 of this paper compared to the data of Prof. Solheim, Oslo Univ., and the green curve calculated by him appears to be **substantially more realistic based on real data**



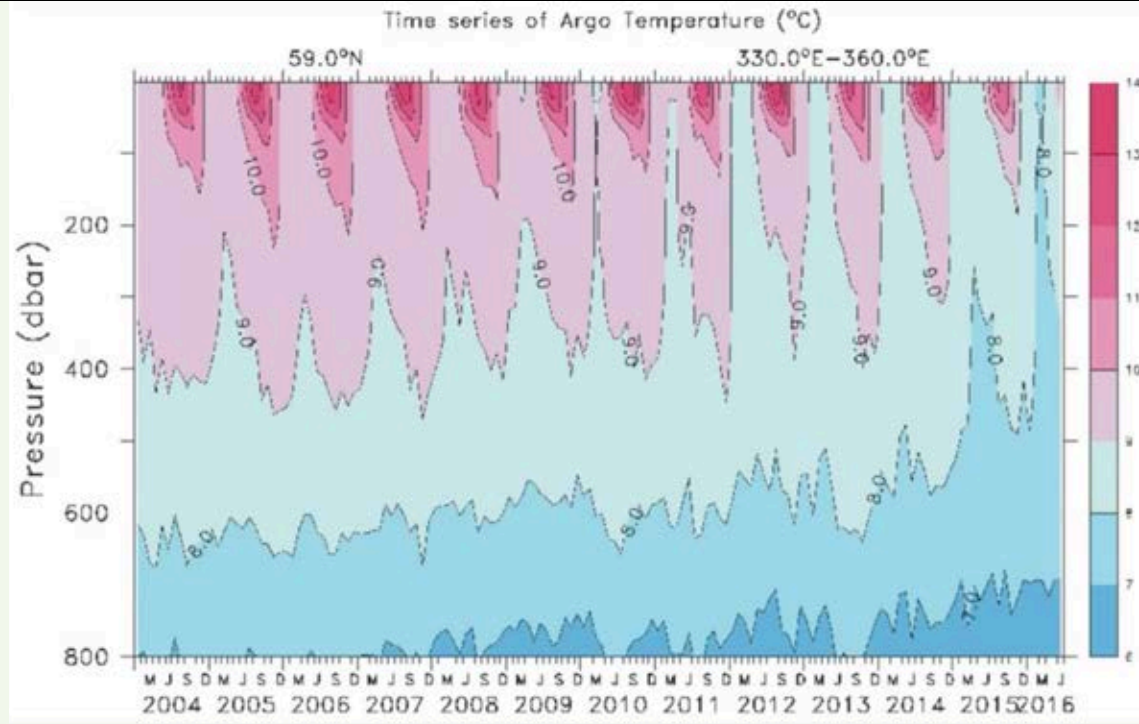
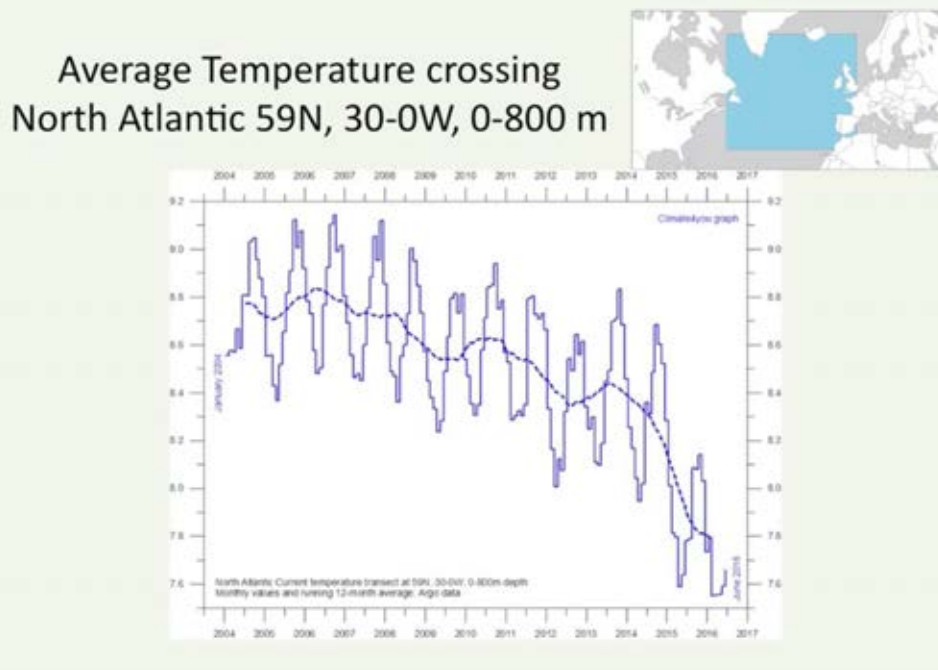
Arctic Sea Ice Cover

that : a severe cooling trend is on the way not considered or discussed in this paper

Since 2006 a strange trend has been observed (Prof. J. E. Solheim):

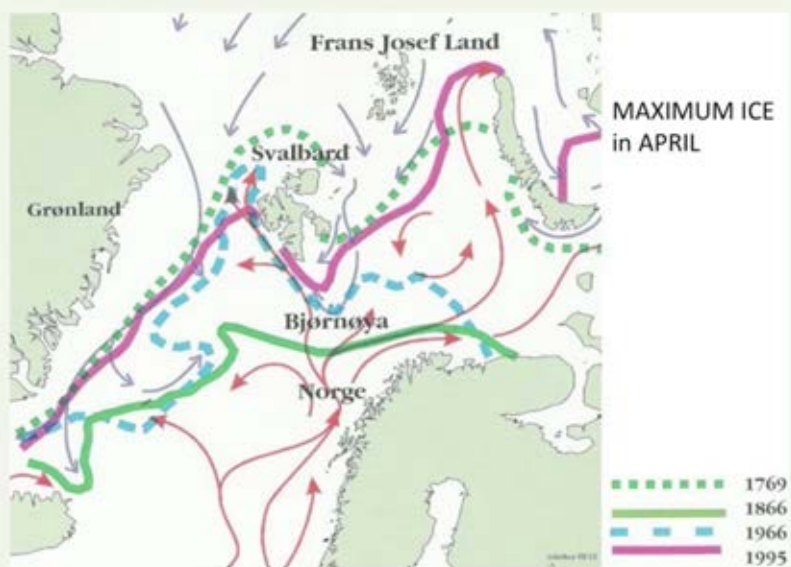
the North Atlantic Ocean is cooling rapidly from the bottom, the exact physical reason is not known

also, according to the history over the last 4,000 years, and, in particular, in accordance with the long term downtrend since the Roman times (GISP2 temperature reconstruction), the Greenland surface air temperature is supposed to fall further significantly in the 22nd century



that : in 1769 the sea ice extent was LESS farther south than in 2015

(credit Prof. J. E. Solheim, Astrophysical Dept., Univ. of Oslo, climate4you.com)

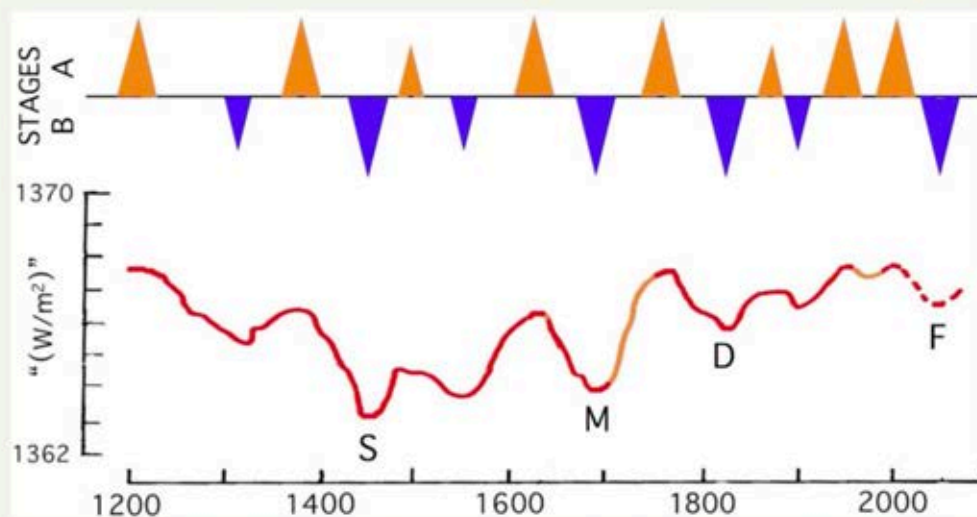


Norwegian Polar Institute Yearbook (1999)

Sea Ice cover has shown to follow the TSI (see figure below) and moves very rapidly. During the D(alton) minimum the sea ice extent moved **500 km south** from 1800-1820

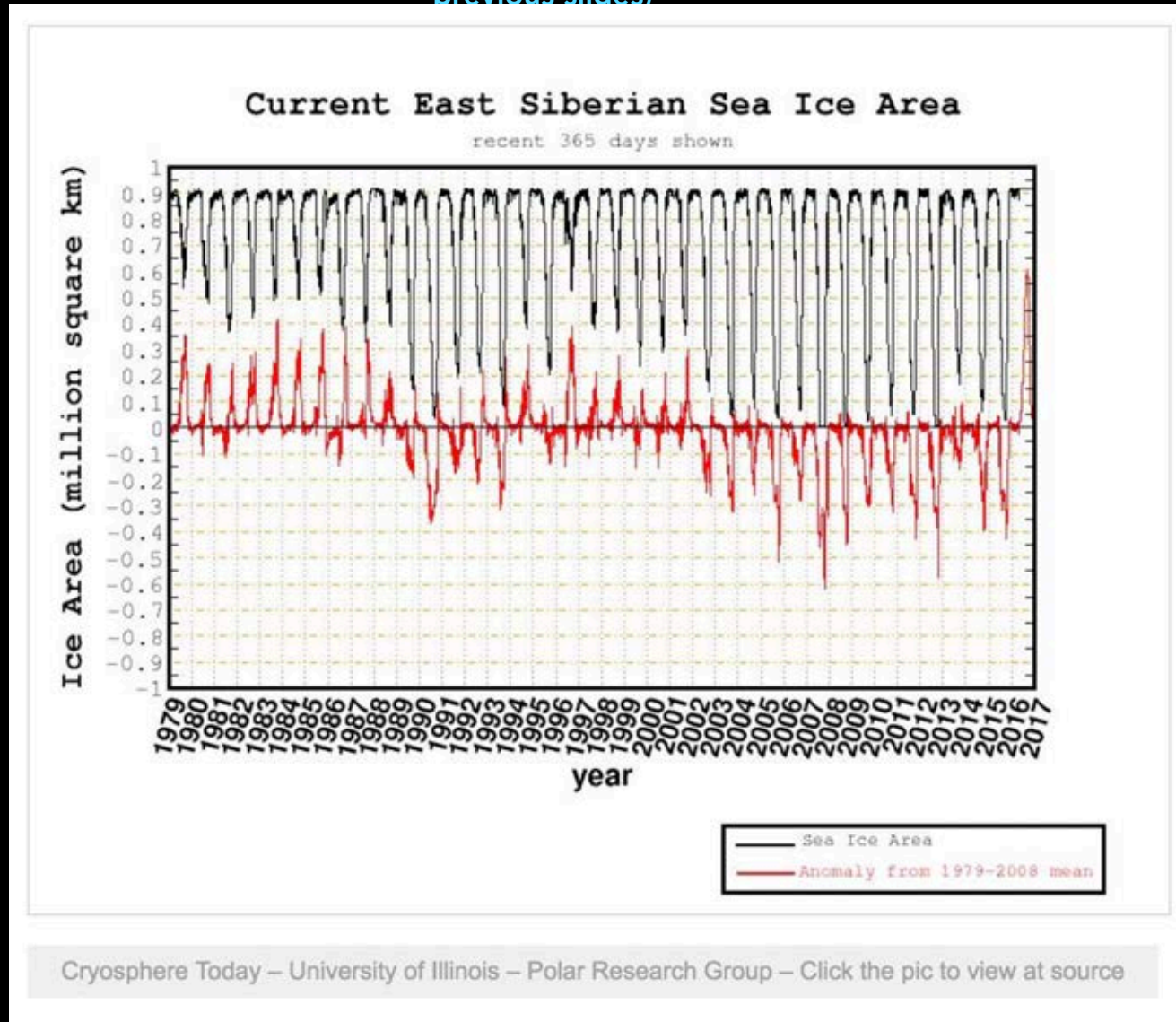
The picture above shows the year 1995, but this is also true for the year 2015

Deep solar minima change ocean currents



Arctic Sea Ice Extent (credit WattsUp website February 2017)

note that there is no polar cap at the North Pole that can melt, only sea ice that is moving rapidly north or south depending on temperature but this IS correlated to TSI (Prof. Solheim) who determined cycles of 22, 84 or 164 years. Note that Prof. Solheim is predicting another solar minimum starting around 2025 and thus during that time sea may move south as it did during the Dalton or Maunder minima (cf. previous slides)



Scientific Misconduct II

A quick look at the paper by Desch S. J. et al: *Arctic ice management*, AGU Publications, Wiley & Sons, online 24 Jan. 2017, reveals:

Abstract: As the Earth's climate has changed, Arctic sea ice extent has decreased drastically. It is likely that the late-summer Arctic will be ice-free as soon as the 2030s. This loss of sea ice represents one of the most severe positive feedbacks in the climate system, as sunlight that would otherwise be reflected by sea ice is absorbed by open ocean . . .

The paper starts with a dramatic appeal as if the small increase in global temperature of about 0.8 K from 1900-1998 and about 0-0.1 K from 1999 - Jan. 2017 could be the cause of the observed change in the Arctic Sea ice over the last 18 years. In particular, the global temperature practically remained constant during the claimed sea ice loss period.

Their dire prediction is simply based on linear extrapolation which has shown to be wrong by Prof. Solheim (previous slide). The paper states that Global average temperatures have been observed to rise linearly with cumulative CO₂ emissions and are predicted to continue to do so, resulting in temperature increases of perhaps 3°C or more by the end of the century.

This is entirely wrong, contradicting all observations. Nothing could be farther from the truth. The proposed technical solution is utter nonsense etc. etc. The reviewer(s) are as bad as the authors.

I propose instead: sending a fleet of container ships with the ice gained in the Antarctic (Prof. Miller, AWI Bremerhaven) to the Arctic, which only would cost \$ 2 trillion, saving the taxpayer \$ 3 trillion!

An even cheaper solution would be to provide about 10 million ice floes with sails to make them drift from the Antarctic to the Arctic. I leave it to the reader to calculate the savings.

This is crackpot science. It also shows that the peer review process, at least for this journal, has been corrupted.

This is not right. It is not even wrong. W. Pauli, nobel prize physics.

Antarctic Ice Cover for 31,000 years

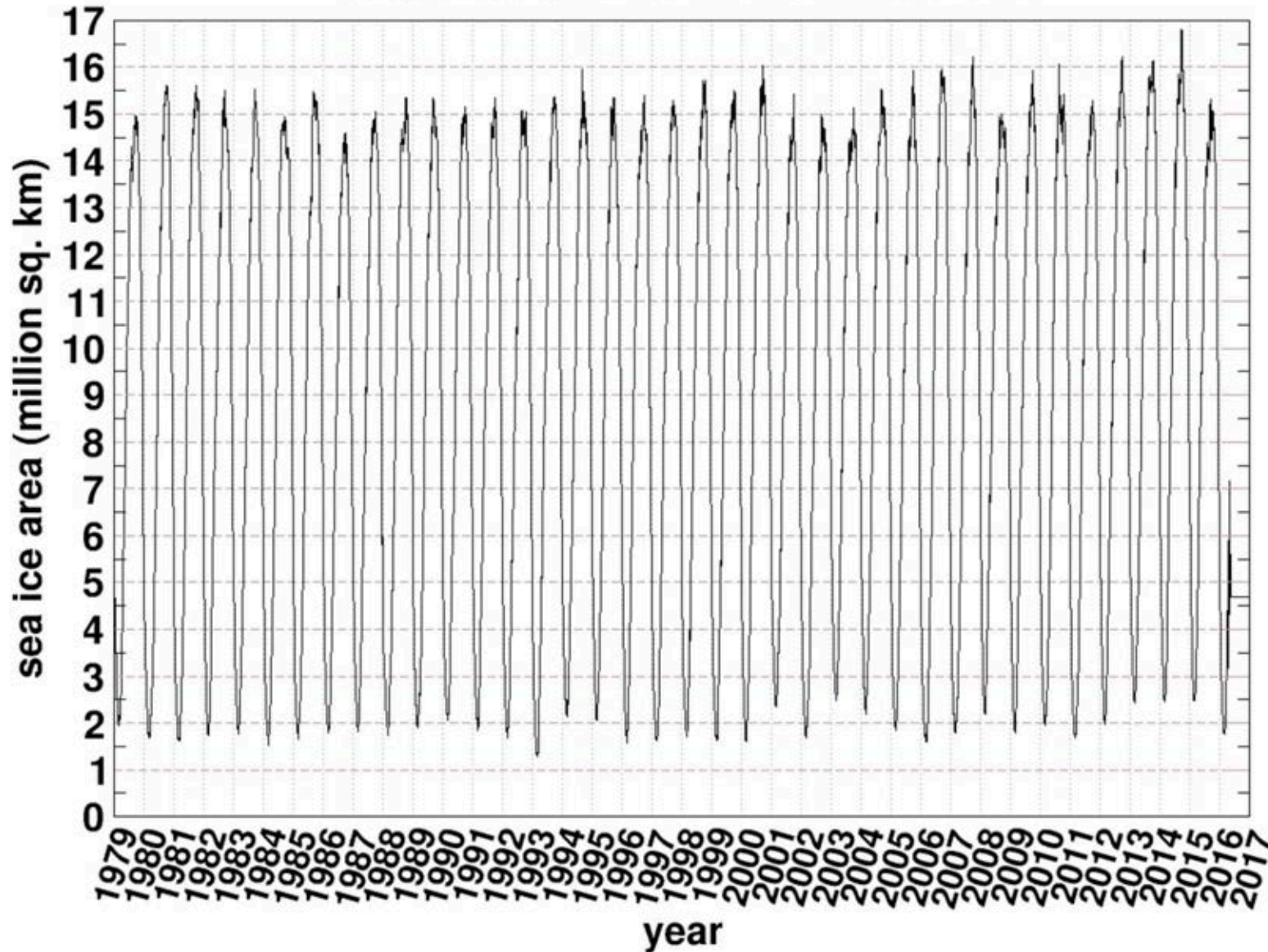
The Antarctic contribution to sea level is a balance between ice loss along the margin and accumulation in the interior. Accumulation records for the past few decades are noisy and show **inconsistent** relationships with temperature. Relationship between **accumulation and temperature** for the past 31 ka using high-resolution records from the West Antarctic Ice Sheet (WAIS) Divide ice core in West Antarctica. The results suggest that variations in atmospheric circulation are an important driver of Antarctic accumulation but they are **not adequately captured** in model simulations. Model-based projections of future Antarctic accumulation, and its impact on sea level, should be treated **with caution**.

Despite much warmer periods during the last 10,000 years the Antarctic ice never melted. It exists since 15 million years.

The Antarctic Ice Shield is not melting, but increasing. In order to melt the Antarctic Ice the average temperature needs to increase by 50 K !

Southern Hemisphere Sea Ice Area

Data provided by NSIDC: NASA SMMR and SSM/I

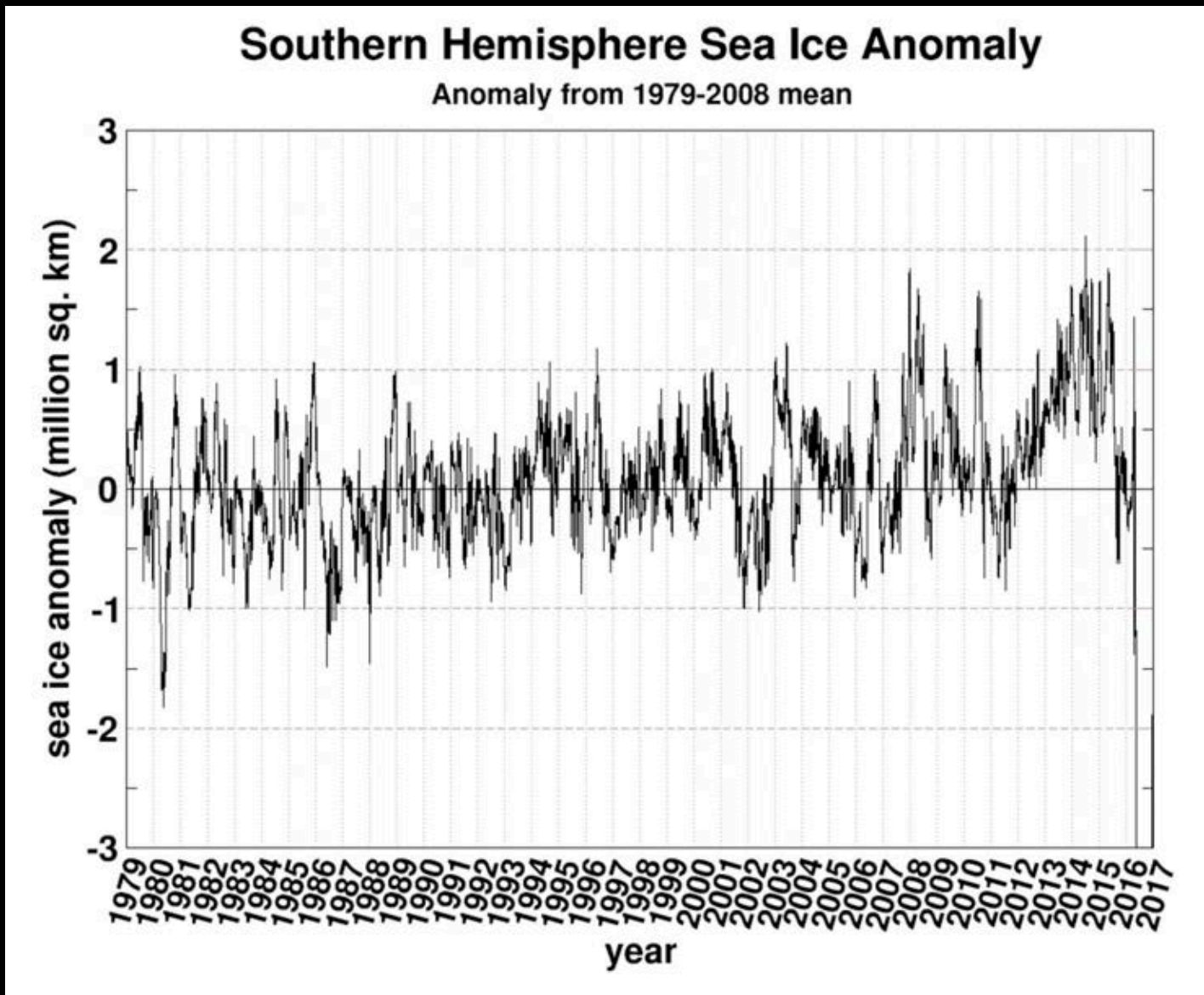


Contrary to the report in the newspaper *Welt*, the sea ice cover does not exhibit a dramatic reduction, the year 2015 showed the highest sea ice cover since the beginning of the global measurements. Of course, one could claim that sea ice cover reduced by 1.5 m sq. km in 2016, and call this a major collapse which, as is obvious, is pseudo-science in order to mislead the public.

History of Antarctic Sea Ice Extent: a highly dynamic quantity

The picture shows the deviation plus or minus from the average sea ice extent constructed from the measured values for the period 1979-2008. The deviation from the mean (or average) value is termed **anomaly**. The denotation is not particularly meaningful, because the fluctuations about the mean are a totally natural phenomenon and not anomalous. Just by looking at the picture it is obvious that there exists a *slight upward trend*, that is, an *increase in sea ice extent over time is to be noticed*, as was pointed out by Prof. Miller, AWI, Bremerhaven, Germany.

The chart allows all kinds of comparisons. If you wish to sound an alarm, then the message can be sent out that just within one from 1986-1987 the Antarctic sea ice extent was reduced by 2 million sqkm and if this trend continued, the Antarctic sea will have disappeared within 8 years, which is nonsense.



If the years 1980 and 2015 are compared, a dramatic increase of the Antarctic sea ice extent by almost 4 million sqkm can be reported, and a new ice age can be predicted based on this correct observation, which clearly is pure propaganda.

Flora and Fauna: Penguins, climate change and Pseudoscience (June 2016)

UD scientists report *projected* response of *Adélie penguins* to Antarctic climate change

It's a big question: how is climate change in Antarctica affecting Adélie penguins? Climate has influenced the distribution patterns of Adélie penguins across Antarctica for millions of years. The geologic record tells us that as glaciers expanded and covered Adélie breeding habitats with ice, penguin colonies were abandoned. When the glaciers melted during warming periods, this warming positively affected the Adélie penguins, allowing them to return to their rocky breeding grounds. But now, University of Delaware scientists and colleagues report that this beneficial warming may have reached its tipping point. In a paper published today in *Scientific Reports*, the researchers project that approximately 30 percent of current Adélie colonies may be in decline by 2060 and approximately 60 percent may be in decline by 2099." Just another nonsense threat: This prediction is not right, it is not even wrong, citing W. Pauli.

More than half of the penguins will be dead by 2099. In earlier times they benefitted from climate warming, but today heat is threatening to wipe them out. How has this come to be? The press release continues:

It is only in recent decades that we know Adélie penguins population declines are associated with warming, which suggests that many regions of Antarctica have warmed too much and that further warming is no longer positive for the species," said the paper's lead author *Megan Cimino*, who earned her doctoral degree at UD in May." *Antarctica has warmed unusually over the past decades?* This is *pseudoscience* and is *completely wrong*. *A climate model that notoriously predicts (false) extreme temperatures was used by the PhD students to make their case!!!* Precisely on this subject a *new paper by Jones et al. 2016* in *Nature Climate Change* tells us: Observed trends are *not unusual* when compared with Antarctic paleoclimate records of the past *two centuries*. Climate model simulations that include anthropogenic forcing *are not compatible* with the observed trends. This suggests that natural variability likely *overwhelms* the forced response in the observations.

NASA Report: Sea Level Rise 1880-1980

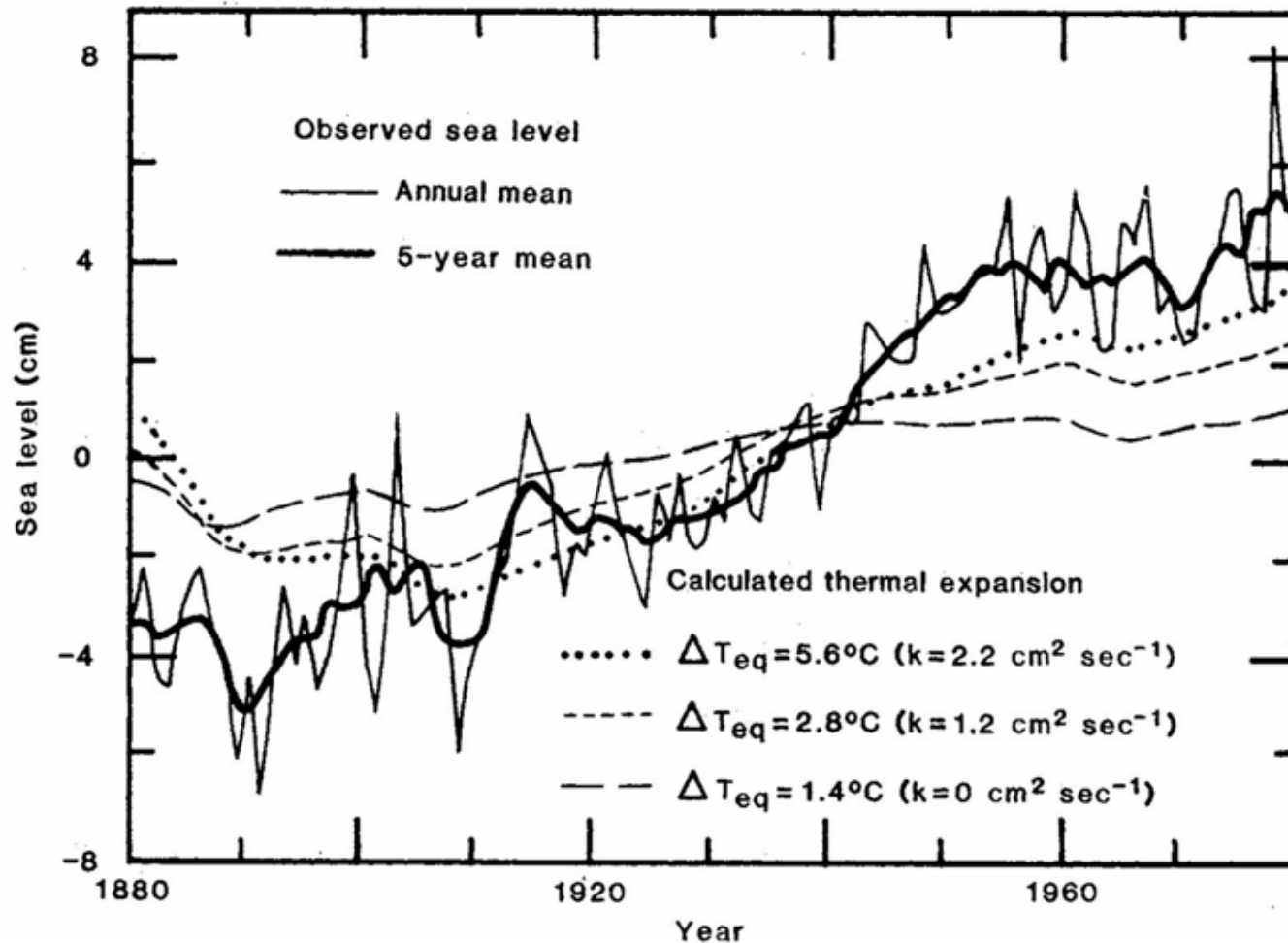


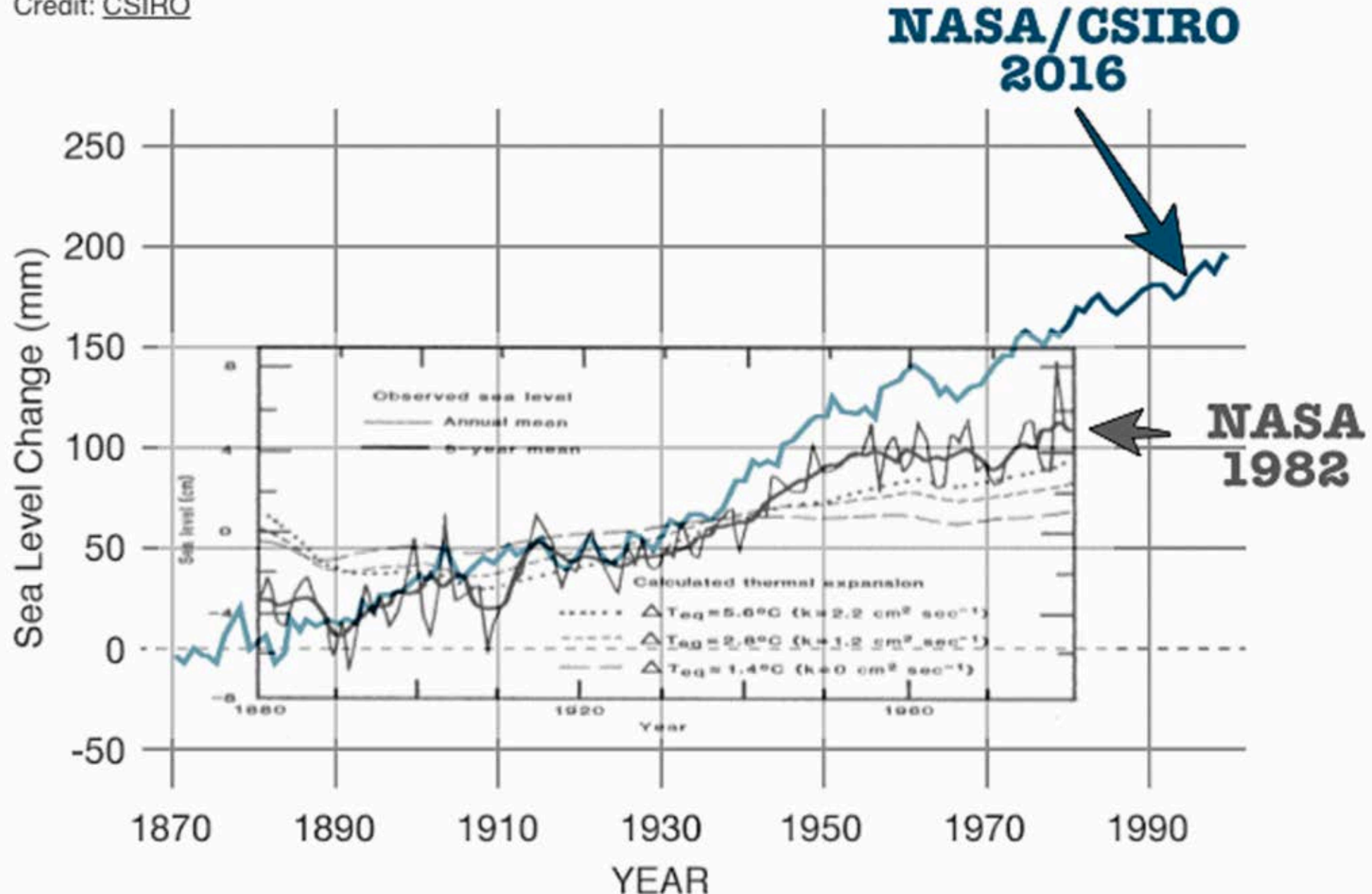
Fig. 2. Global mean sea level trend from tide-gauge data and comparison to the thermal expansion of the upper ocean obtained from the model of Hansen *et al.* (13) (see their equation 9 for the heat flux into the ocean). The radiative forcing used was CO_2 + volcanoes + sun [figure 5 in (13)], but a similar result would be obtained for other forcings that fit the observed global temperature trend; ΔT_{eq} is the equilibrium sensitivity of the model for doubled CO_2 , and k is the diffusion coefficient beneath the mixed layer.

NASA Reconstructed Sea Level Rise 1870-2016

The same data, after 34 years, were re-interpreted by new NASA staff, and are now leading to substantially higher sea level rise - without any scientific basis

Data source: Coastal tide gauge records.

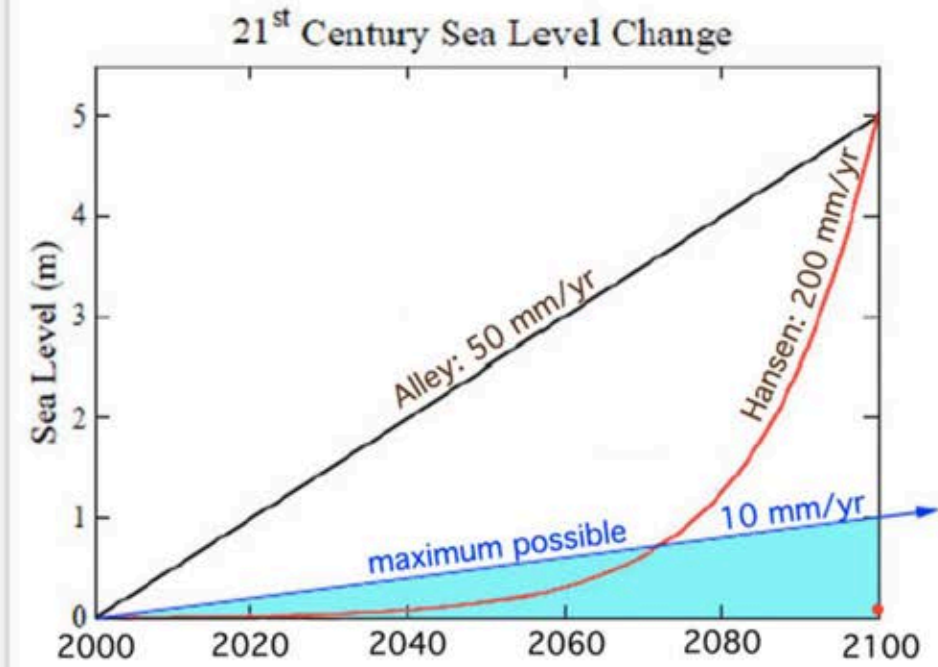
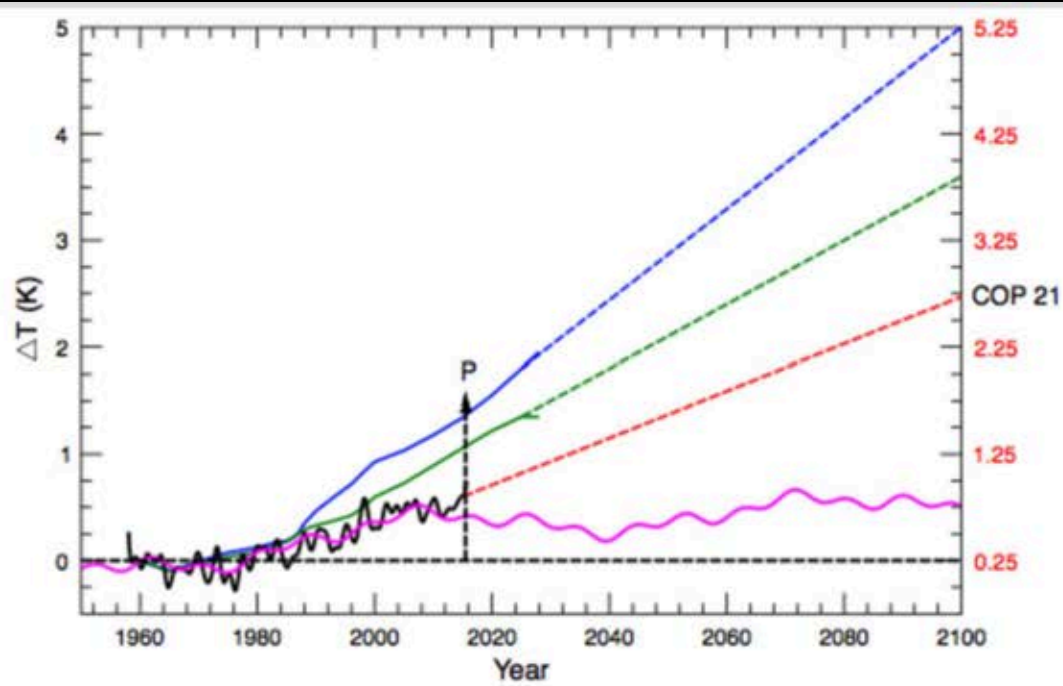
Credit: CSIRO



- A posting at *Real Climate Science* shows the Arctic sea ice today is about the same thickness as it was 75 years ago. However, other sources report a decline of the Arctic sea ice of about 3.4 % per decade, which is compensated by the gain in the Antarctic (Prof. Miller, AWI Bremen).
- In the 1940 Townsville Daily Bulletin "ice measurements are reported having an average of only 6 ½ feet," according to a just-returned expedition of Soviet explorers.
- Then, alongside a posting of a New York Times image stating the ice was "only about seven feet thick" in 1958, it was written that sea ice was "about two meters thick" then.
- Read more at <http://www.wnd.com/2017/01/report-on-arctic-sea-ice-unleashes-shock-waves/#FluZtix40DhUEE5f.99>
- Read more at <http://www.wnd.com/2017/01/report-on-arctic-sea-ice-unleashes-shock-waves/#ChXbilgYbZs1MjKv.99>

Sea Level Rise 1950-2100

Nils Axel Mörner

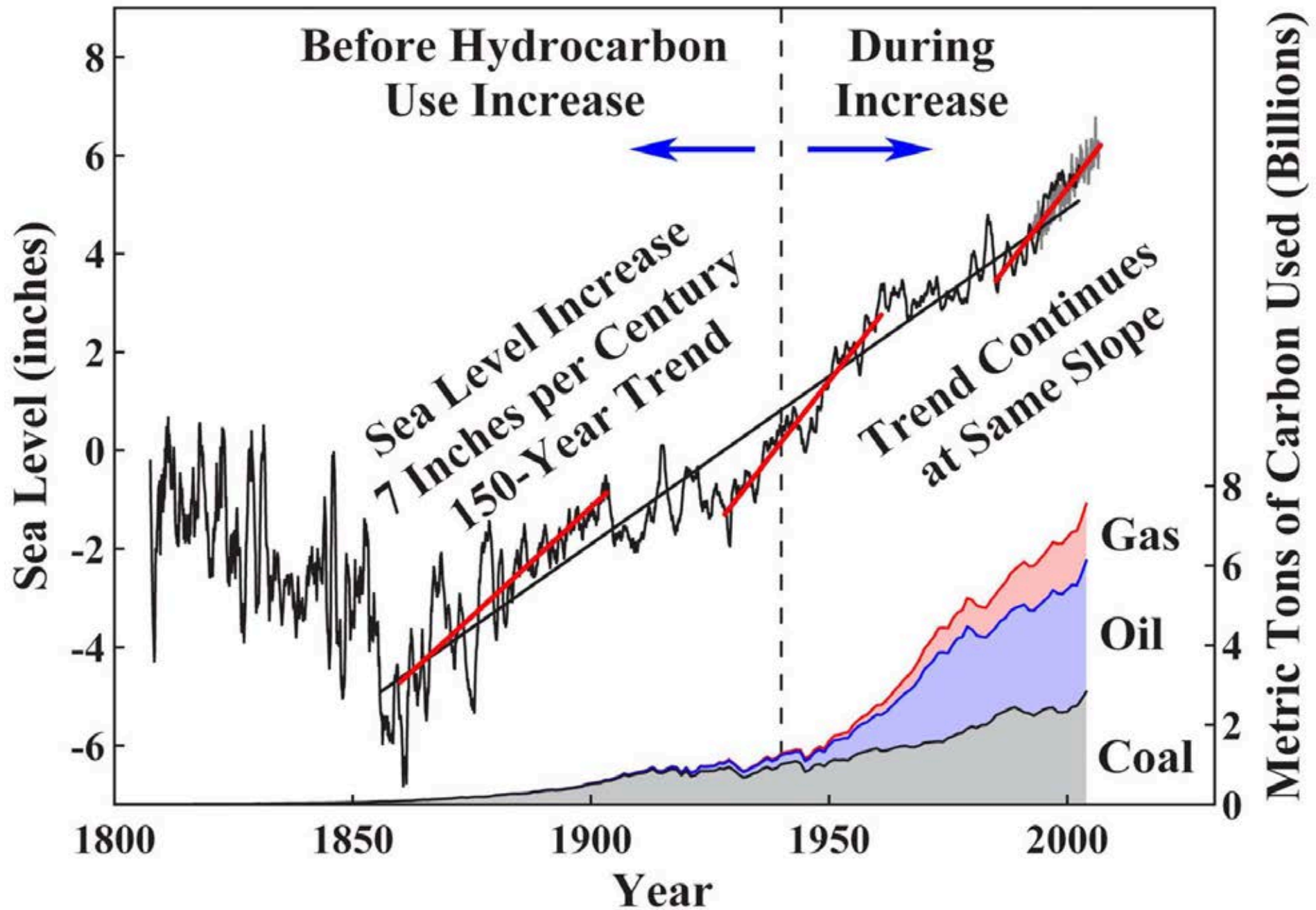


Real data: Observed from satellites: about 3.2-3.3 mm/year,
Measured values (gauges) from Army Corps of Engineers WES,
Vicksburg, MS. agree with satellite data

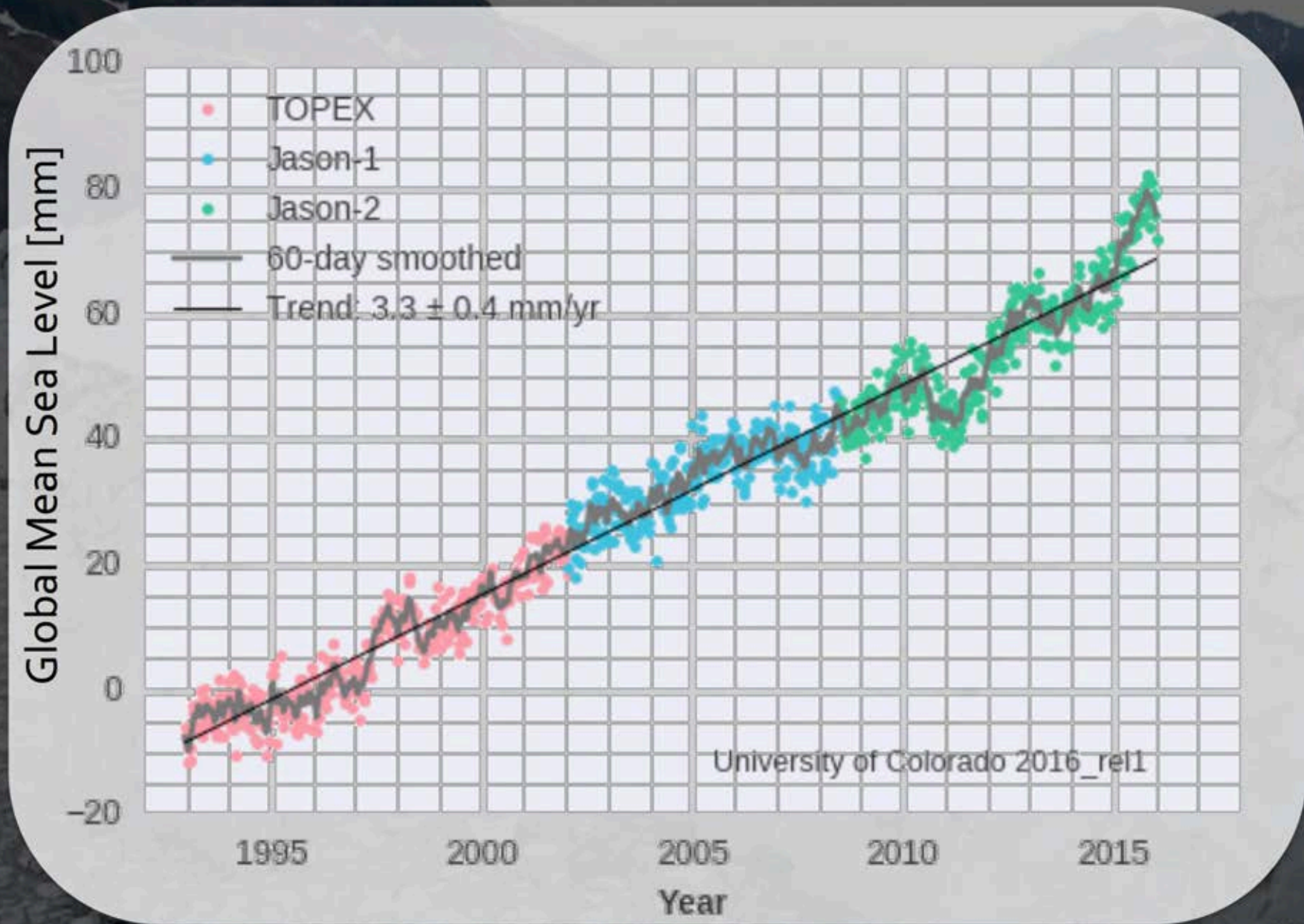
Sea Level Rise satellite measurements Dec 2016

With imagery and data from Landsat 8, a joint mission of NASA and the U.S. Geological Survey is providing a near-real-time view of every large glacier and ice sheet on Earth. The NASA-funded Global Land Ice Velocity Extraction project, called GoLIVE, is a collaboration between scientists from the University of Colorado, the University of Alaska, and NASA's Jet Propulsion Laboratory in Pasadena, California, website should be available in spring 2017.

Sea Level Rise from 1800-2007, ref. 1



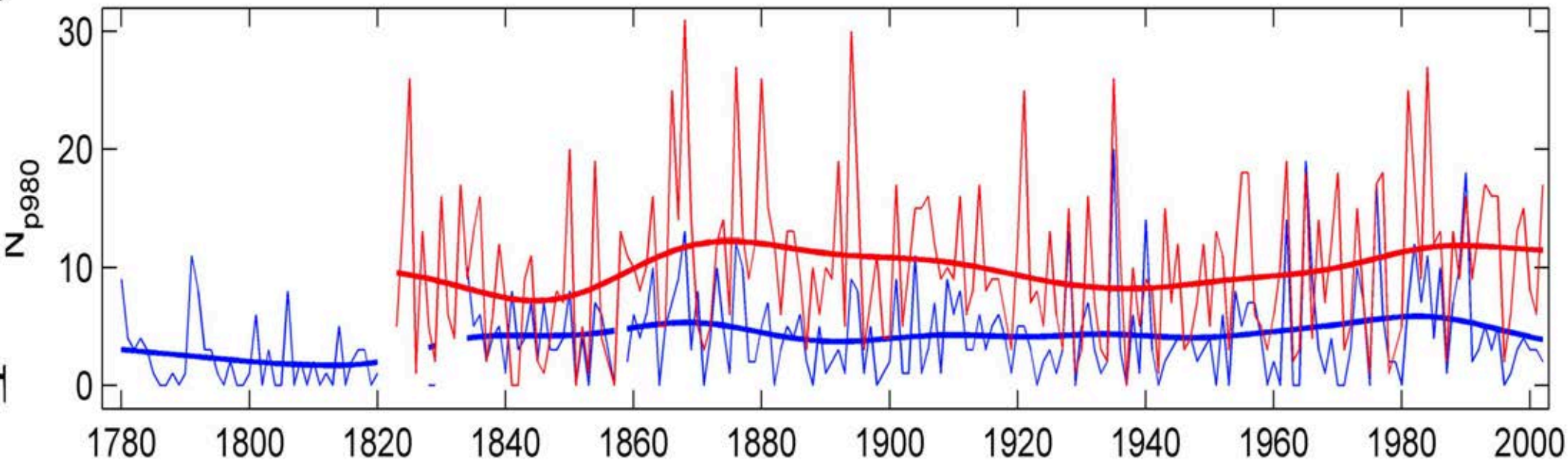
Sea level rise by **satellite** measurements: 1993-2016 about 3.3 mm/year, that is, **roughly 30 cm per 100 years**



W. Tad Pfeffer

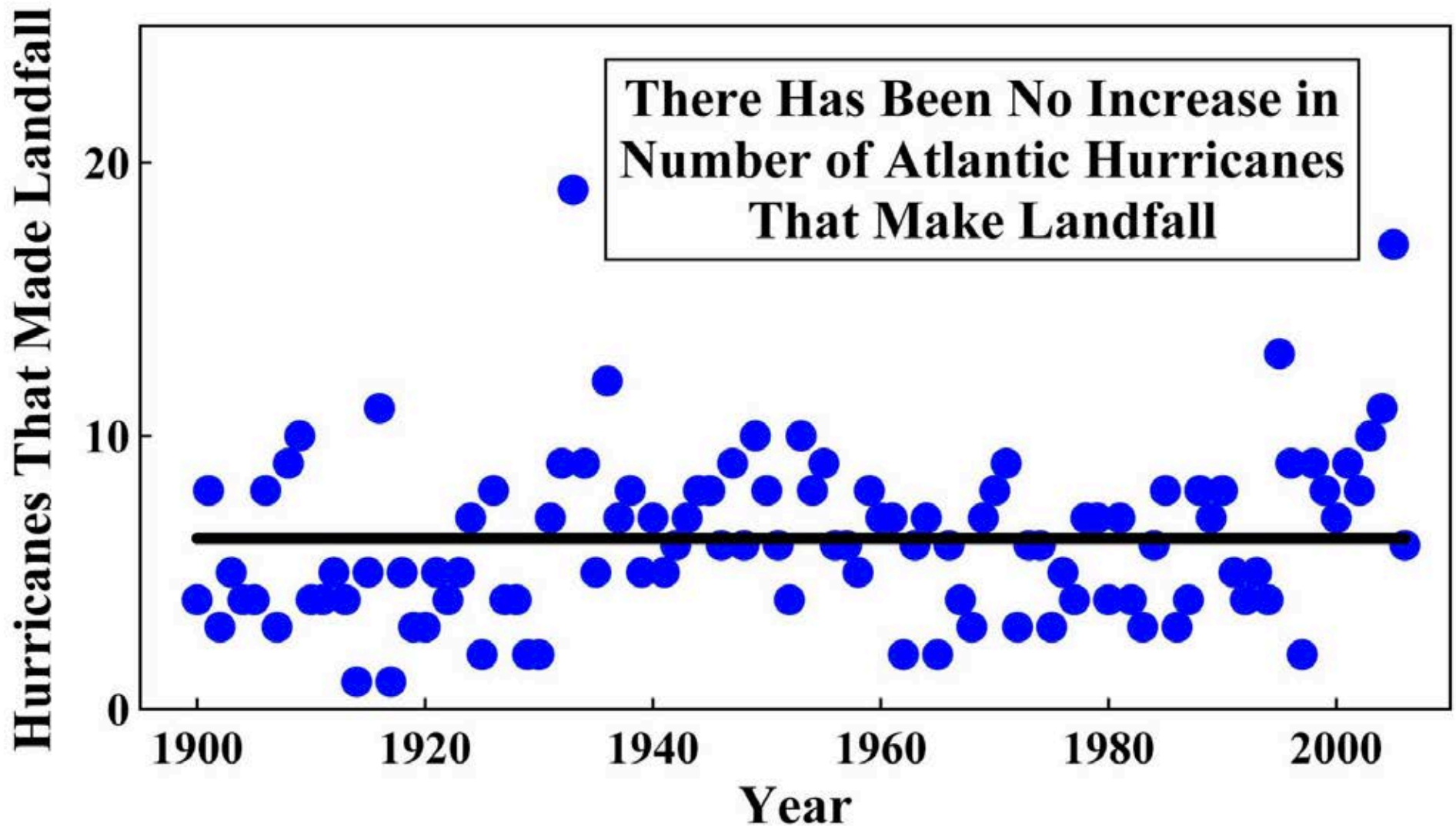
Tornado and Hurricane frequency unchanged

credit H. von Storch

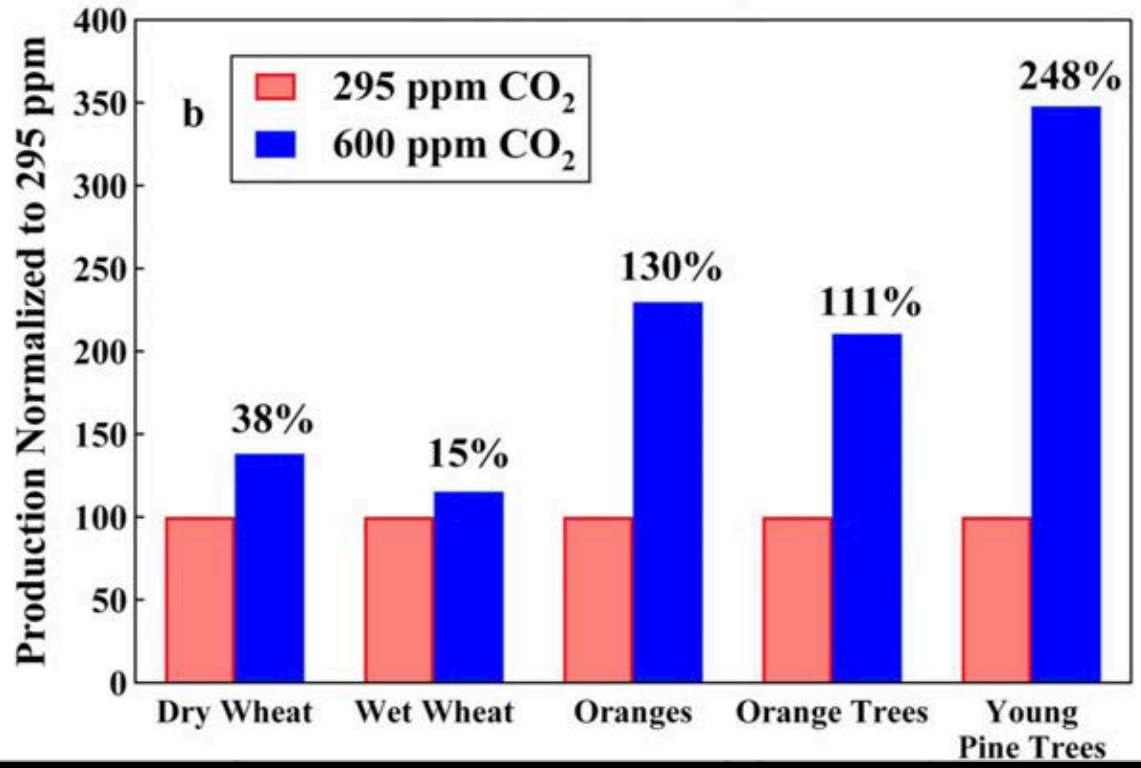
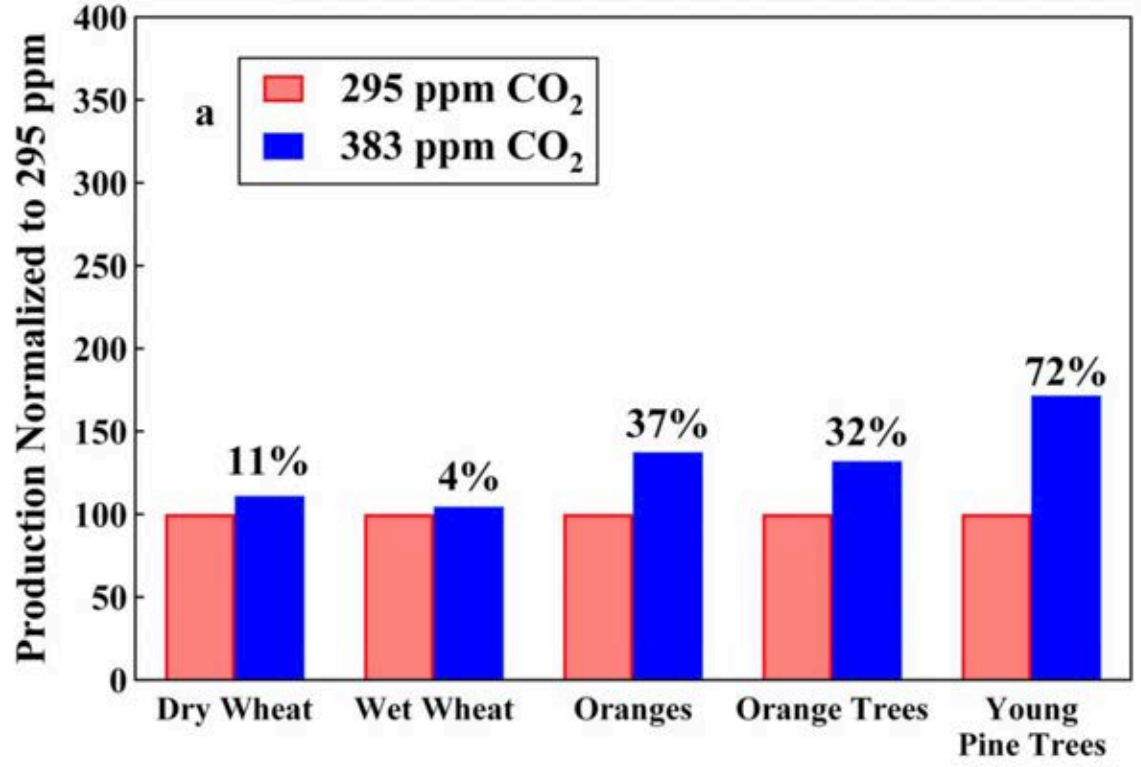


Tornados and Hurricanes, ref. 1

agreement with the data by H. von Storch



Measured Plant Growth
versus
CO₂ level
statement by
Prof. Reichhoff
warmer times
are
good times
for humanity (ref.1)



Scientific Misconduct III

*Dr. Bates, NOAA, reveals that the influential paper by T. Karl, NOAA, termed the **pausebuster paper**, is based on **reconstructed** (that is **FALSE**) data, with the result that sea water warming trend tripled against the actually measured data, 4 Feb 2017*

The **pausebuster** paper by T. Karl et al. (ref. 21), NOAA, published in **Science** in 2015, **just before** the climate summit in Paris, that had a major impact on the (as usually ignorant politicians) **WRONGLY** states, while the rate of global warming from 1950 to 1999 was 0.113C per decade, the rate from 2000 to 2014 was actually higher, at 0.116C per decade. **The IPCC's claim about the pause, it concluded, is no longer valid. A segment that, as it turns out now, is baseless.**

Immediately the news media, e.g. BBC and politicians (acting as climate experts) claimed the measured halt in global warming since 1998 was an illusion caused by inaccurate data. The paper was also described as a **science bomb** dropped on sceptics.

One of the **foremost climate experts in the U.K.**, *Prince Charles* stated: **There isn't a pause... it is hard to reject the facts on the basis of the evidence** — provided, of course, that measured temperature data are **tampered appropriately to render the oceans sufficiently warm enough.**

The Paris climate decisions were strongly influenced on the false claims by T. Karl et al.

The sea dataset used by Thomas Karl and his colleagues – known as Extended Reconstructed Sea Surface Temperatures version 4, or ERSSTv4, tripled the warming trend over the sea during the years 2000 to 2014 from just 0.036C per decade – as stated in version 3 – to 0.099C per decade, simply based on individual measurements in some parts of the Earth which increased by about 0.1C and consequently caused the dramatic increase of the overall global temperature trend published by this paper. But **Dr. Bates, also from NOAA**, said this increase in temperatures was achieved by dubious means. Its **key error** was an **upward adjustment** of readings from fixed and floating buoys, which are generally reliable, to bring them into line with readings from a much more doubtful source – water taken in by ships.

This, Dr. Bates explained, has long been known to be highly questionable: ships are themselves sources of heat, readings will vary from ship to ship, and the depth of water intake will vary according to how heavily a ship is laden – thus affecting temperature readings.

The new U.S. administration (Feb. 2017) should rectify these false claims, taking the necessary measures to restore the lost scientific integrity of NASA and NOAA, and consider modifying/canceling the Paris climate agreement.

Read more: <http://www.dailymail.co.uk/sciencetech/article-4192182/World-leaders-duped-manipulated-global-warming-data.html#ixzz4Y1rebgM9>

Scientific Misconduct III (contd.)

Neither was the paper by T. Karl et al. subject to the usual NOAA review standard according to Dr. Bates. Moreover, in cooperation with editorial board of the journal *Science*, the paper was published just in time before the Paris climate summit in 2015, to serve as THE reference for the (as now evident) FALSE climate decisions by the heads of state present at this meeting. There is no doubt that this was another concerted action by certain politicians and pressure groups to deceive the public. This was not an error, but must be considered scientific fraud.

Despite this fact, the same false curves temperature curves, constructed by T. Karl and coauthors against outspoken warnings from other NOAA scientists, are reproduced in the French magazine *Sciences et Avenir* under the topic *Climatologie*, February 2017 by L. Chauveau, under the provocative title: *Le rechauffement climatique n'a pas fait une pause*. Obviously, the article is meant to deceive French speaking readers, utilizing data known to be incorrect and proposing conclusions that are in opposition to the observed and measured temperature data.

There seems to be an alliance of journals worldwide that are trying to misinform their readers about climate change by favoring a certain climate ideology in order to serve their clientele in politics and business, not hesitating to publish dubious data when necessary by compromising the peer review process. Remember also the infamous hockey stick curve of M. Mann, still a professor at Pennsylvania State Univ., that made headlines in the IPCC final report of 2001. In 2007, the false claims of the Himalaya glaciers meltdown made it into the final IPCC report; also, scientifically proved by Schellenhuber, still a professor at PIK in Germany. In 2009, climategate became known, that showed that a network of scientific institutions existed, responsible for the IPCC scientific coordination, with the outspoken goal to suppress unwanted scientific evidence, and, in particular, to hide the so called global temperature hiatus. Hence, it is no surprise that a team of NOAA scientists, led by T. Karl, in 2015, while this hiatus still existed (as it does today February 2017), published incorrect temperature data before the Paris climate summit took place, in order to scientifically prove the observations of a quasi constant global temperature since 1998 to be false. It is hard for me to believe that this high level fraud could be done without the consent of the Obama administration, which, admittedly, is speculation from my side.

As a result, formerly respected institutions NASA and NOAA as well as numerous scientific journals now have a major credibility problem. But it is also clear that scientists have been dishonest.

COUNTERMEASURES

Guaranteed to *be meaningless*: UN treaties for the climate, but devastating to the western taxpayers whose money is transferred to foreign countries :

On the 22nd of April 2016, representatives from about 170 nations officially signed the Paris Climate Convention (December 2015) for global decarbonization at the United Nations in New York.

It simply is a document of the scientifically ignorant; ideology replaces measured data and scientific facts. Ineffectiveness is guaranteed!

From Paris-based Société de Calcul Mathématique SA - in a paper published September 2015

"There is not a single fact, figure...[or] observation that leads us to conclude the world's climate is in any way 'disturbed,'" the paper states. "It is variable, as it has always been. ... Modern methods are far from being able to accurately measure the planet's overall temperature even today, so measurements made 50 or 100 years ago are even less reliable."

CONCLUSIONS OUTLOOK

Any countermeasures to curb CO₂ emissions are totally useless!

This is guaranteed! CO₂ output will increase further!

BRD promised 1% reduction, i.e., 8 million tons per year from 2005-2020
resulting change in $T < 5 \times 10^{-4} \text{ C}$ (five tenthousandth !) **NONSENSE!**

**1. Global temperature has risen MODERATELY from 1900 - 2016 by about
0.8 C plus/minus 0.1 C.**

Based on measured data the my current best estimate (most probable value) is:

0.25-0.30 C may be anthropogenic

0.50-0.55 C is supposed to come from (natural) sources, that is,

Sun's activity (magnetic field, TSI, planets) + cosmic radiation, and also from ocean oscillations

Higher temperatures also have been observed on both Mars and one of
the moons of Saturn.

2. CO₂ level has risen from about 270 ppm and is now at 407 ppm (2017)-no effect

**The breathing humanity produces about 3 billion tons of CO₂ per year,
twice as much as all cars on Earth!**

HUMANITY PERFORMED A MAJOR LONGTERM EXPERIMENT

**1999-2016 about 550 billion tons of CO₂ were released to the atmosphere: but
global T = constant !!!**

System Earth T did NOT respond to this amount of CO₂ emission.

Hence the envisaged CO₂ reductions cannot have any measurable effect!

Sea Level Rise and Global Climate Change

3. Sea level rise (high sea) is about 2.5 - 3.3 mm per year or about 25-33 cm per 100 years and has been constant for more than 150 years. However, rise at coastlines most likely is smaller (about 10 cm) as moored buoys measurements are revealing, ref. 19. There is *no* observed increase because of anthropogenic CO₂.

4. Acidification of sea water does not occur, ph = 8.1 down from 8.18 — no effect

5. No increase in hurricanes or tornados could be observed.

6. Instead, a decrease of the average wind speed over the Atlantic has been observed.

7. Glaciers lengths are shortening since about 1860, but in the medieval and Roman warm periods they were virtually nonexistent.

The End

As of March 2017 there exist **NO** measured or observed long term data that can justify the scenario of a global climate catastrophe! Quite the contrary, see . . .

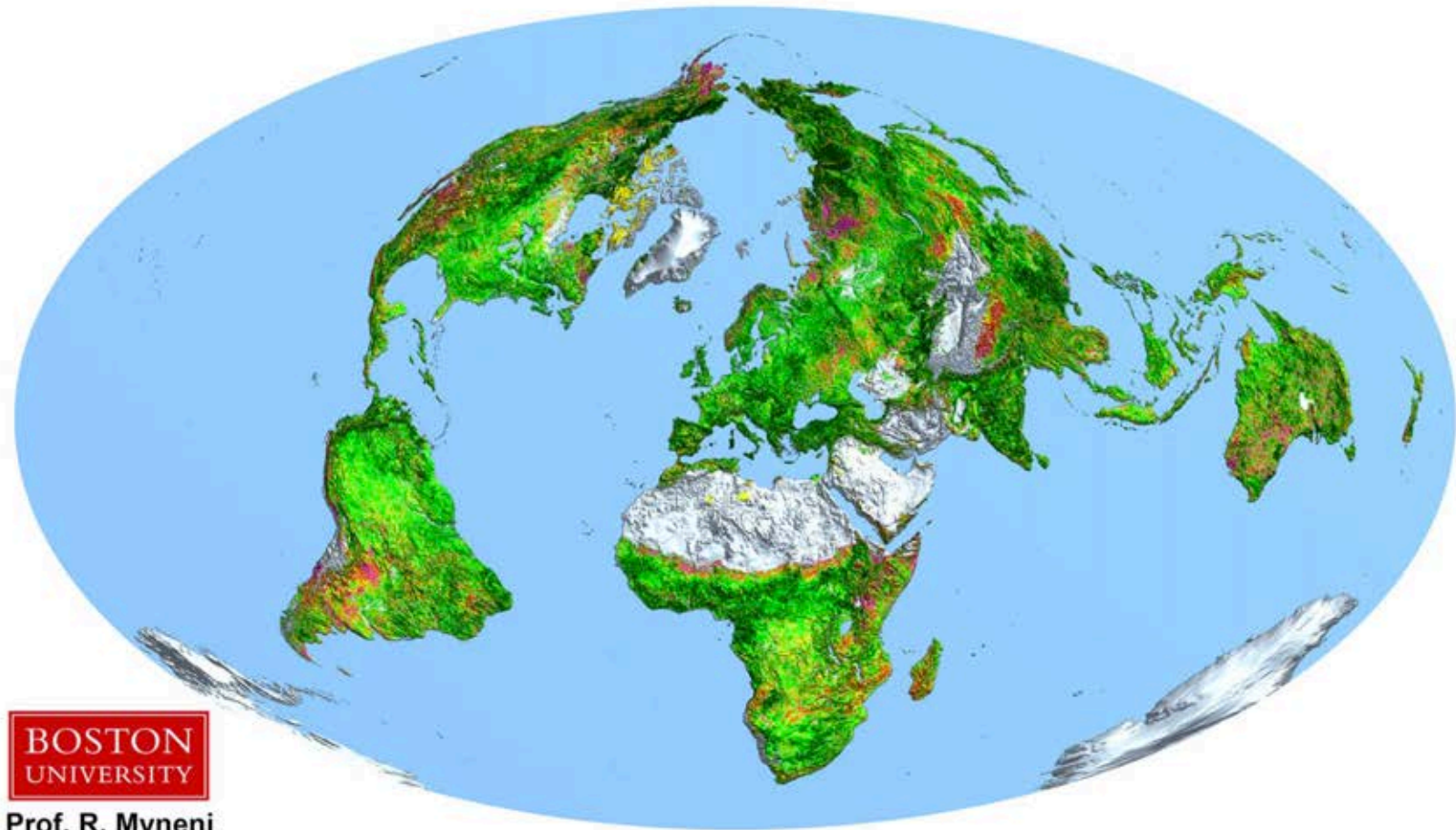
Beneficial Effects of Global Warming

Earth is growing greener while carbon dioxide increased from 0.03 % to 0.04 % since the beginning of the industrial era in the 18 hundreds. Green foliage, plankton, nutritive plants, and crops yields have been increasing ever since.

1. **Environmental greening, ref. 17**: because of rising CO₂ content, global greening occurs, e.g. the Sahara has gained about 300,000 sqkm of greenland.
2. **More species, ref. 20 as well as the books by Prof. Reichholf**: global experiment: heat island effect in megacities 2 C warmer: biodiversity is thriving! Warmer times are better for both flora and fauna.
3. **Record harvests, refs. 1 and 17**: Plant efficiency increases with increasing CO₂ level. etc. etc . see the discussion in the numerous publications by Prof. T. Gervais, e.g. refs 1, 17.

Greening Earth 1982-2015

the greening of the planet also serves as a feedback mechanism for the additional CO₂ more leaves absorb more. The benefit for mankind has been estimated to \$3,000 billion according to Prof. T. Gervais, Univ. Troyes, France, refs. 17, 18.



BOSTON
UNIVERSITY

Prof. R. Myneni

Change in Leaf Area (% 1982 to 2015)



<-30

<-15

-5

5

15

25

35

>50

Change in leaf area in % from 1982-2015. Credit: R. Myneni.

Mission Impossible: Unstoppable CO₂ Level

2016: Breathing humanity alone now generates 3 billion or 3,000 million tons of CO₂ / year. Compare this to the total CO₂ emission of all cars on Earth which is about 1.5 billion tons/year or 1,500 million tons/year. Car emissions (CO₂) are not important, but promise to be good business, ripping off automotive customers.

In order to survive, every human generates about (minimum) 4 tons of CO₂ /year, that is, the population increase since 1950 causes additional 22 billion or 22,000 million tons CO₂/year.

Each year: population explosion is adding 300 - 400 million tons /year more of CO₂

What does this mean for the CO₂ output: **UNSTOPPABLE CO₂**

CO₂ is NOT the climate killer but the life gas for planet Earth!

As of 2017 western countries are only minor contributors to CO₂ emissions.
Developing countries are now emitting about 75% of worldwide anthropogenic CO₂!

A REAL CATASTROPHE

World Population Explosion: The Real Danger

1950: 2.5 Billion or 2,556 million people on Earth (U.S: Census Bureau):

1950: 550 million Chinese, 1947 350 million Indians, 1950 Africa 254 million,
1950 Pakistan 39 million

2016: 7.5 Billion or 7,500 million people on Earth:

Main source of population growth:

2016: 1,415 million Chinese, 1,280 million Indians, Africa 1,234 million, 197 million Pakistan
(muslim countries 1,700 million), western countries NO increase (notation: 1,700 means seventeen hundred)
About 80 - 90 million additional people per year, from Africa about 30 million/year.
It is not poverty, but poverty is the result

In 15 years, Africa alone produces the population of all European countries!

World Population Explosion (some very dire)

Consequences: lack of drinking water

the population growth of 5.0 billion people since the 1950s causes (as of 2017) the **additional** emission of approximately (**at least**) 20 billion tons of CO₂ per year,

the yearly population growth on Earth by far exceeds all possible CO₂ savings,

it puts an enormous pressure on the land and changes the local climate that,

in turn, must have an effect on global climate change, but instead CO₂ increase is used for **unsubstantiated claims** to be recompensed by the industrial countries,

it also destroys the local flora and fauna, exhausts drinking water (deeper wells),

and causes large scale erosion of the farmland etc. etc.

**Because of political correctness these severe problems are not
addressed!**

REFERENCES

Note: Publications from people involved in the Climategate affair and activities such as data tampering, mobbing scientists of different opinions, pressuring PhD students etc. are not cited, because they are not honest scientists any more, that is, they fall in the category of *Deutsche Klimaphysik*.

Al Gore is not worthy to be noted. His film *An Inconvenient Truth* simply is the *convenient lie* of a failed politician. He and his Hollywood pals do not care about scientific truth, nor are they interested in facts. Their entirely fictitious claims are only meant to create fear by misleading the public, and to subsequently cash in on the resulting climate business, i.e., harvesting the taxpayer's money. Al Gore's recent *An Inconvenient Sequel* is just a continuation — the truth content is exactly zero.

Also, beware of the presentations in the public media. For instance, Bill Nye of CNN, claims to be a science guy. He is not, his science facts often are incorrect or distorted by bias. Same: Germany's mainstream press!

See also the earlier slides citing the statements of Dr. E. Zorita, Institute of Coastal Science, HFG, D and Prof. J. Curry, Georgia Tech., U.S.A. Most prominent victims that were mobbed are Prof. N. Shaviv, Israel, Prof. J. Veizer, former Univ. of Bochum (now Univ. of Ottawa), and, in particular, Prof. H. Svensmark, DK. Most recently Prof. Kirstein, Univ. of Leipzig, D became a victim. However, there are many more cases.

This is only very small list of the large number of climate publications (**no climategate publications**).

1. A. B. ROBINSON, *Environmental Effects of Increased Atmospheric Carbon Dioxide*, Oregon Inst, of Science and Medicine, 2007.
2. *Assessment Report: Climate Change 2013: The Physical Science Basis, Snow, Water, Ice and Permafrost in the Arctic (SWIPA) 2011, Arctic Monitoring and Assessment;*
3. *Programme (AMAP) relationship between accumulation and temperature in West Antarctica for the past 31,000 years*, by T. J. Fudge et al., *Geophysical Research Letters*, 28 April 2016
4. *Scientific American: is deteriorating fast toward Unscientific American and cannot be recommended for climate articles.*
5. *Wikipedia does not seem to be a reliable scientific source anymore with regard to Climate Change, because it is dominated by climate activists.*

Recommended literature:

6. Lüdecke, H.-J: *CO₂ und Klimaschutz*, Bouvier, Bonn, 2010 (highly recommended).
7. Muller, R. A.: *Energy for Future Presidents*, W. W. Norton, 2012.
8. Lüdecke, H.-J: *Energie und Klima*, expert verlag, 2016 (highly recommended).
9. Website Dr. R. Spencer, UAH.
10. Scaffetta, N., B. West: *Physics Today*, 2009 and many other papers.
11. Scaffetta, N., A. Mazzarella: *Coherence between climate oscillations and the M ± 7 earthquake historical worldwide record between climate oscillations and the M ± 7 earthquake historical worldwide record* , *J. Natural Hazards*, Springer 2015, 76:1807–1829.
12. Yndestad, H., J.-E. Solheim: *Influence of solar system oscillation on the variability of the total solar irradiance*, *New Astronomy*, Volume 5 February 2017, Elsevier.
13. *EIKE* for German and English speaking people provides a comprehensive list of topics with many links.
14. The blog by N. Shaviv <http://www.sciencebits.com/> contains most valuable information, containing many explanations on the Sun's impact on the climate on Earth.
15. G. Shaviv, N. J. Shaviv and R. Wehrse: *Doubling the CO₂ cools or heats?* *S.A.It.* Vol. 81, 494 c *SAIt* 2010.
16. Website of Prof. Ole Homlum, Norway: climate4you.com, contains an enormous amount of climate information about a large number of topics and provides explanations.
17. Gervais, F.: *Tiny warming of residual anthropogenic CO₂*, *International Journal of Modern Physics B*, Volume 28, Issue 13, 20 May 2014.
18. Gervais, F.: *Tiny CO₂ warming challenged by Earth greening*, Scholar's Press, 2016, (see also his book from 2013 in French at [Amazon.fr](http://amazon.fr)).
19. Carter, M. et al.: *Commentary and Analysis on the Whitehead & Associates 2014 NSW Sea-Level Report*, NIPCC, Sept 2014
20. Idso, C. D. et al: *CO₂, Global Warming and Species Extinctions: Prospects for the Future*, 2009 (see amazon.com).

A very bad example of misusing data to obtain a politically convenient result or, how to produce a convenient lie:

21. Karl, T. et al: Possible artifacts of data biases in the recent global surface warming hiatus, Science, June 2015.

The paper was written to influence the policy makers at the 2015 Paris climate summit. The measured data could not be used to substantiate the claims of the authors.

Consequently, as was recently found (Dr. Bates, see slide in text), the data cited in this paper were starkly manipulated, and so the authors results are baseless!

Another sign of political science and improper journal practice!!

for further details check for Dr. Bates, NOAA.

VIDEOS

Climate Videos

There is an enormous number of videos on youtube and elsewhere on climate change.

Here I have selected five videos that I found to be eyeopeners

1. Houghton, Sir John (former long-term IPCC Chairman): *The Current State of Climate Change*, uploaded by Cambridge Univ. Press. https://www.youtube.com/watch?v=GIWs_mzFRkw. The author is a well known scientist and textbook author (Cambridge Univ. Press). As Sir John is an influential figure in climate change policy, being responsible for the IPCC summary report written for decision makers, I carefully analyzed his talk. My

summary is given below:

Listening to his one hour presentation, I found, surprisingly, numerous incorrect graphs and misleading statements: For instance, the claim that computer models and measured data are in good agreement is totally unfounded. The opposite is true (see the respective slide in this presentation). Next, the claim that CO₂ is the most important greenhouse gas is not correct. Water vapor (see video 6 by Prof. Easterbrook) is much more important. Therefore, all climate models have a built in feedback mechanism, i.e., more CO₂ causes more H₂O. This, however, is contrary to observations. In addition, the picture presenting the CO₂ history is, at best, misleading, because it shows CO₂ to be constant for thousands of years — which is incorrect, see the respective slides in this presentation, and for the last hundred years a hockey stick like CO₂ curve is shown, depicting the increase by industrial activity, as if CO₂ were a major part of the Earth atmosphere. This is completely misleading, because we are talking about a minute increase from 0.0273 % to 0.0407 % . As Prof. Easterbrook (video 6) states: doubling 0 still gives 0, that is, going from 300 to 400 molecules of CO₂ for 1,000,000 molecules of the atmosphere only can have a very small effect on global temperature. Furthermore, the author, while talking about CO₂, is presenting a picture of cooling towers emitting large white clouds — but CO₂ is an invisible gas. The picture is showing (harmless) water vapor, but not CO₂. A further picture shows the temperature increase since 1950 for the northern hemisphere mostly in yellow and red, intended to trigger a false alarm, as if the relatively small global temperature increase of 0.8 K pm 0.1 K since 1900 would indicate a severe danger for our planet. Though the talk was presented on 29 July 2015, the temperature picture only shows the period between 1950 and 2000, not mentioning the hiatus of the global temperature since 1999 up to today, Feb. 2017. Another picture shows the sea ice cover in the arctic, comparing the sea ice extent of the years 2000 and 2012. As is immediately obvious from the slide of the east siberian sea ice extent (credit WattsUp), the author is comparing the recent maximum sea ice extent of the year 2000 with the minimum of the sea ice extent over the last 20 years that is of 2012. He deliberately did not choose the year 2015 (which is a local maximum). If instead, the comparison would have been made between the years 1990 and 2016 (see the respective slide in this presentation), the situation would be entirely reversed. Also, as we have seen the sea ice extent in the arctic was lower in 1769 than in 2015 (cf. slides Prof. Solheim), but this was not mentioned by the author. Sea ice is very dynamic , e.g. moving 500 km north-south in only 20 years and follows TSI (cf. Prof. Solheim) that also was not mentioned by Sir John.

Houghton, Sir John (former IPCC Chairman): *The Current State of Climate Change.*

Moreover, in the talk a map of the temperature distribution of the planet for the year 2050 is shown and almost all of the globe is red, showing severe global warming — based on **computer modeling**. **The catastrophe is coming out of the computer**. At the same time the author is citing the accuracy of the satellites. The measurements of Dr. R. Spencer (see the respective slides in this presentation) tell a **completely different story**. Climate models did not predict that global temperature would remain constant for more than 18 years, since 1999, which is almost as long as the warming period from 1976 to 1998. As the talk was presented in 2015, the **author must have known this fact**. Moreover, since 2001, the IPCC was forced to **continuously lower its temperature predictions in each IPCC summary report**, despite the claimed model prediction capability, at least as believed by Sir John. **Land temperatures, so Sir John, will go up by 4 K. Nothing could be farther from the observed reality**. The consequence would be a strong rising sea level. As we have shown by presenting several slides, **no change in the sea level rise has been observed for decades**. Again his **catastrophic predictions come out of the computer** without any empirical basis. As we have seen sea level rise will be **about 30 cm per century**, which will hardly be noticeable for us. Next, the coming plague of heat waves is mentioned — again, without data. This is **entirely fictitious**, just look again, for instance, at the long term temperature slide for Germany, due to **Prof. H. von Storch**. Sir John also cites that the death of about 20,000 people in Europe in 2003 owing to such a heat wave — this is a **fake number**. Heat waves (whatever the definition may be) are part of the summer weather and are known for hundreds of years. And then the **melting of the ice caps is cited** (that is, the author refers to the Antarctic, because there is no shelf ice at the North pole). As we have seen from the measured data presented in this talk **this is clearly not the case**. See also the **statements by Prof. Easterbrook** in video 6. Interesting enough, there are no data presented by Sir John that could substantiate his claims. Finally he predicts that **part of the UK will vanish**. The next doomsday prediction is that **10 million people in Bangladesh will be threatened by the rising sea level**. Actually the coast of Bangladesh is not disappearing, but growing. Not enough, hundreds of millions of refugees will be created. **It is most astonishing to see these accusations being presented without scientific basis by the long term IPCC chairman**. Obviously, this is the style of the political arm of the IPCC — creating fear. **IPCC credibility is zero**. Different, of course, are the actual scientific reports by the large number of serious scientists in the various IPCC working groups, whose scientific results are only considered if politically correct. **See the open letter (slide) by Dr. Zorita, Institute of Coastal Research, HZG**.

Houghton, Sir John (*final*) : The talk then continues with lengthy polemics against the so called skeptics that are paid by big oil or by fossil companies. The talk continues to cite the existence of increased water vapor levels in the atmosphere that changes cloud cover, which will result in catastrophic modifications of worldwide rainfall patterns. Fact is, that this increase of water vapor has not been measured. As a consequence, millions of species will be killed. This statement has nothing to do with reality.

Again and and again the strong correlation between temperature and CO₂ is cited by Sir John. However, looking at the actual temperature curves and the CO₂ distribution for the last 150 years (see the slides in this presentation) it is clear that there is no correlation between these two quantities at all. It is (un)usual to see such a distorted scientific picture presented by a former IPCC chairman.

For me, it is highly remarkable to see a scientist turned prophet, preaching that we, the humans, are destroying our planet and will be punished for our sins by the great flood, once again — if we do not repent immediately. IPCC as a religious sect or business entity? Remember Prof. Bolz, TU Berlin on climate change as a replacement for religion?

Then, Sir John suggests to take costly measures against global warming, immediately, to curb CO₂ emissions, which, as we discussed, are guaranteed to be totally ineffective, but may ruin the economy of the western countries. His appeal for solar energy is at best naive. His description of the features of electric cars is far removed from the current state of technology. The next unreasonable suggestion is to base the UK economy on tidal energy and wind energy, fantasizing about the upcoming energy revolution. I demonstrated (see the respective slides) that solar and wind energy miserably failed in the winter of 2016 in Germany, and will continue to do so. These are niche technologies. The presentation is finished claiming the (nonexistent) scientific consensus about the cause of climate change and that we will kill our children and grandchildren. Finally, there is a statement of the dangerous gases from cattle. Statements that are both irresponsible and unscientific. The ensuing nonsensical discussion (in particular on vegetarianism — I am one —) of his talk is not what one expects to see at Cambridge University, where this talk was given.

This talk is embarrassing — lacking real science data. In conclusion, it is a sobering lesson to see how far the IPCC political body is removed from reality and how scientific facts are twisted, ignoring measured data, but, instead relying on computer models for their doomsday predictions without presenting any shred of empirical evidence to support their claims. It is to be hoped that the new US administration steers a much more realistic course, no longer supporting the activities of the IPCC, that eventually should be dissolved, because it has done more harm than good. Nevertheless, the excellent scientific work from many of the contributing institutions should continue.

2. Bolz, N., TU Berlin: **Climate Change and Religion**, https://www.youtube.com/watch?v=zG6_eXqgbqo&t=20s (in German, but the pictures speak are clear language), commenting the propaganda movie of the IPCC produced that was shown at the opening of the Copenhagen climate meeting: **A child is crying : please help the world, creating tremendous fear: western countries are destroying our planet and killing our children.**

3. Patzelt, G., Prof. Univ. Innsbruck, Austria: **Gletscher- und Waldentwicklung in Alpinen Hochlagen in den letzten 10,000 Jahren** (in German), <https://www.youtube.com/watch?v=glplSyZM7uE>, some of the diagrams are in English. **The Alps were ice free in the medieval warm periods.**

4. Reichholf, J.H., Munich, biologist: <https://www.youtube.com/watch?v=nEgDntk1svU> (in German), there are many youtube videos and books by Prof. Reichholf. **Discussion of the impact of climate change on species variety, denouncing claims as baseless that species will be extinguished by temperatures changes in the range of a few tenth of a degree as experienced over the last hundred years.**

5. Easterbrook, D., Prof., geologist : **Climate presentation before the US Senate**, <https://www.youtube.com/watch?v=w98S2xs-qs4> (in English). Lucid and easy to follow.