#### **CLIMATE**



Photo Credit: Getty

Thanks go to Tony Heller, who first collected many of these news clips and posted them on RealClimateScience.

#### **SUMMARY**

Modern doomsayers have been predicting climate and environmental disaster since the 1960s. They continue to do so today.

None of the apocalyptic predictions with due dates as of today have come true.

What follows is a collection of notably wild predictions from notable people in government and science.

More than merely spotlighting the failed predictions, this collection shows that the makers of failed apocalyptic predictions often are individuals holding respected positions in government and science.

While such predictions have been and continue to be enthusiastically reported by a media eager for sensational headlines, the failures are typically not revisited.

The Salt Lake Tribune (Salt Lake City, Utah) • 17 Nov 1967, Fri • Page 9 i

### 'Already Too Late'

# Dire Famine Forecast by '75

By George Getze

Los Angeles Times Writer

LOS ANGELES — It is already too late for the world to avoid a long period of famine, a Stanford University biologist said Thursday.

Paul Ehrlich said the "time of famines" is upon us and will be at its worst and most disastrous by 1975.

He said the population of the United States is already too big, that birth control may have to be accomplished by making it involuntary and by putting sterilizing agents into staple foods and drinking water, and that the Roman Catholic Church should be pressured into going along with routine measures of population control.

Ehrlich said experts keep saying the world food supply will have to be tripled to feed the six or seven billion people they expect to be living in the year 2000.

"That may be possible theoretically but it is clear that it is totally impossible in practice," he said.

Ehrlich spoke at a science symposium at the University of Texas. The text of his speech was made available here.

Since, in Ehrlich's opinion, it is of no longer any use trying to avoid the coming world famines, the best thing to do now is to look past the "time of famines" and hope to have a second chance to control world population

sometime in the future.

"At the moment it is shockingly apparent that the battle to feed humanity will end in a rout," Ehrlich said.

He said we have to hope that the world famines of the next 20 years will not lead to thermonuclear war and the extinction of the human species.

"We must assume man will get another chance, no matter how little he deserves one," he said.

Source: Salt Lake Tribune, November 17, 1967

THE NEW YORK TIMES SUNDAY, AUGUST 10, 1969

## FOE OF POLLUTION SEES LACK OF TIME

Asserts Environmental Ills Outrun Public Concern

> By ROBERT REINHOLD Special to The New York Times

PALO ALTO, Calif., Aug. 5 -"The trouble with almost all environmental problems," says Paul R. Ehrlich, the population biologist, "is that by the time we have enough evidence to convince people, you're dead."

While Dr. Ehrlich is gathering that evidence in his laboratory at Stanford University, he is wasting no time trying to convince people that drastic action is needed to head off what he foresees as a catastrophic explosion fueled by runaway population growth, a limited world food supply, and contamination of the planet by man.

"We must realize that unless we are extremely lucky, everybody will disappear in a cloud of blue steam in 20 years," the 37-year-old scientist said during a coffee break at his laboratory. "The situation is going to get continuously worse unless we change our behavior."

1970: Ice age by 2000

#### Thursday, April 16, 1970 The Boston Globe Scientist predicts a new ice age by 21st century

Air pollution may oblitthird of the next century if population continues grow and the earth's resources are consumed at the present rate, a pollution expert predicted yesterday.

James P. Lodge Jr. also warned that if the current rate of increase in electric power generation concooling water will boil dry the entire flow of the rivers and streams of continental United States.

Looking into "smoggy crystal ball," Lodge also warned that by the next century "the consumption of oxygen in combustion processes, world-wide, will surpass all of the processes which return oxygen to the atmosphere."

Lodge, a scientist at the erate the sun and cause a national center for Atmosnew ice age in the first pheric Research in Boulder, Colo., said the nation's states, with the exception of Alaska and Hawaii. "are already consuming more oxygen than their own green plants replace and that we are importing the balance from the neighboring oceans."

Lodge, speaking at the tinues, the demands for Institute of Environmental Sciences, at the Sheraton Boston, said three factors could prevent these disasters: population control, a less wasteful standard of living, and a major technological breakthrough in the way man consumes the earth's resources.

Source: Boston Globe, April 16, 1970

# Daily Facts

REDLANDS, CALIFORNIA, TUESDAY, OCTOBER 6, 1970

# Dr. Ehrlich, outspoken ecologist, to speak

"Giving aspirins to cancer victims" is what Dr. Paul R. Ehrlich thinks of current proposals for pollution control. No real action has been taken to save the environment, he maintains.

And it does need saving. Ehrlich predicts that:

The oceans will be as dead as Lake Erie in less than a decade.

The DDT in our fatty tissues has reached levels high enough to cause brain damage and cirrhosis of the liver.

America will be subject to water rationing by 1974 and food rationing by 1980.

University of California Extension, Riverside and World Affairs Council of Inland Southern California will present the outspoken author of "The Population Bomb" and the hero of the ecology movement tomorrow at 8 p.m. He will speak in the gynnasium on the UCR campus.



DR. PAUL EHRLICH

Source: Redlands Daily Facts, October 6, 1970

1971: 'New Ice Age Coming'

U.S. Scientist Sees New Ice Age Coming By Victor CohnWashington Post Staff Writer The Washington Post, Times Herald (1959-1973); Jul 9, 1971; pg. A4

# U. S. Scientist Sees New Ice Age Coming

By Victor Cohn Washington Post Staff Writer

The world could be as little as 50 or 60 years away from a disastrous new ice age, a leading atmospheric scientist predicts.

Dr. S. I. Rasool of the National Aeronautics and Space Administration and Columbia University says

 "In the next 50 years," the fine dust man constantly puts into the atmosphere by fossil fuel-burning could screen out so much sunlight that the average temperature could drop by six degrees.

• If sustained over "several years" —"five to 10," he estimated—"such a temperature decrease could be sufficient to trigger an ice age!"

These conclusions—including the ominous exclamation point rare in scientific publication — are printed in this week's issue of the journal Science out today, signed by Rasool and co-worker Dr. S. H. Schneider,

They are also being presented by Schneider at an in-

ternational Study of Man's Impact on Climate now being held in Stockholm as a prelude to a world environmental conference there next June.

Dr. Gordon F. MacDonald, scientist-member of President Nixon's three-man Council on Environmental Quality, said in an interview that these conclusions point up "one of the serious problems" U.S. and other delegates must address next year,

He called Rasool "a firstrate atmospheric physicist" whose estimate that fuel dust could drop temperatures by six degrees "is consistent with estimates I and others have made."

Whether this could cause an ice age "within five or 50 years or even more," he said, "I wouldn't want to guess."

But he "agreed completely" with Rasool that is is now urgent to start an international network to monitor atmospheric dust.

If his calculations provelar gentrathi" fastest computcorrect, Rasool said, it may ers The therman Athiod dates

he simply necessary for men to stop most fossil fuel-burning—use of coal, oil, natural gas and automobile gasoline—and switch in the main to nuclear energy, despite the atom's own disadvantages. Pollution controls alone, he said, cannot, do the job. "I think you have to stop the source."

A new ice age would flood the world's coastal cities and further lower temperatures to build up new glaciers that could eventually cover huge areas.

Scientists have long debated whether man's activity is actually heating or cooling the earth, if either. A "1970 Study of Critical Environmental Problems" concluded that the Rasool-Schneider kind of prediction was impossible to make yet.

"The area of greatest uncertainty," that study concluded, is "our current lack of knowledge" of the optical properties of man-made dust "in scattering or absorbing turnatiation or the woulder

Source: Washington Post, July 9, 1971

1972: New ice age by 2070



#### BROWN UNIVERSITY Providence, Rhode Island . 02912

DEPARTMENT OF GEOLOGICAL SCIENCES

(401) 863-2240

December 3, 1972

The President
The White House
Washington, D. C.

Dear Mr. President:

Aware of your deep concern with the future of the world, we feel obliged to inform you on the results of the scientific conference held here recently. The conference dealt with the past and future changes of climate and was attended by 42 top American and European investigators. We enclose the summary report published in Science and further publications are forthcoming in Quaternary Research.

The main conclusion of the meeting was that a global deterioration of climate, by order of magnitude larger than any hitherto experienced by civilized mankind, is a very real possibility and indeed may be due very soon. The cooling has natural cause and falls within the rank of processes which produced the last ice age. This is a surprising result based largely on recent studies of deep sea sediments.

Existing data still do not allow forecast of the precise timing of the predicted development, nor the assessment of the man's interference with the natural trends. It could not be excluded however that the cooling now under way in the Northern Hemisphere is the start of the expected shift. The present rate of the cooling seems fast enough to bring glacial temperatures in about a century, if continuing at the present page.

The practical consequences which might be brought by such developments to existing social institutions are among others:

- Substantially lowered food production due to the shorter growing seasons and changed rain distribution in the main grain producing belts of the world, with Eastern Europe and Central Asia to be first affected.
- Increased frequency and amplitude of extreme weather anomalies such as those bringing floods, snowstorms, killing frosts etc.

With the efficient help of the world leaders, the research could be effectively organized and could possibly find the answers to the menace. We hope that your Administration will take decisive steps in this direction as it did with other serious international problems in the past. Meantime however it seems reasonable to prepare the agriculture and industry for possible alternatives and to form reserves.

It might also be useful for Administration to take into account that the Soviet Union, with large scientific teams monitoring the climate change in Arctic and Siberia, may already be considering these aspects in its international moves.

With best regards,

George J. Kukla

Lamont-Doherty Geological Observatory

R. K. Matthews, Chairman Department of Geological Sciences

Source: NOAA, October 2015

1974: 'New Ice Age Coming Fast'

# Space satellites show new Ice. Age coming fast

By ANTHONY TUCKER, Science Correspondent

WORLDWIDE and rapid trends towards a mini Ice Age are emerging from the first long term analyses of satellite weather pictures.

Of potentially great importance to energy strategies and to agriculture, but barely observable yet in Britain because our weather is strongly buffered by the Atlantic, a preliminary analysis carried out at Columbia University, New York, by the European climatologists Doctors George and Helena Kukla indicates that snow and ice cover of the earth increased by 12 per cent during 1967-1972.

This appears to be in keeping with other long-term climatic changes, all of which suggest that after reaching a climax of warmth between 1935 and 1955, world average temperatures are now falling. But the rate of increase of snow and ice cover is much faster than would be expected from other trends.

The technique employed, which was first described in this country last year during a conference at the Climatic Research Unit at the University of East Anglia, depends on the averaging of information from standard and infra red satellite weather pictures. In spite of

the newness of the technique the findings are important and it is a matter of some urgency that they should be re-examined by other groups.

It is particularly important to know whether the earth's reflectivity is changing, for this is one of the factors in which a change tends to be self-perpetuating until some new worldwide balance is reached. An increase of snow and ice cover coupled with a decrease in cloud, or even with no change in cloud cover, means that more of the incoming energy from the sun is reflected straight out again, thus further reducing temperatures.

The Columbia University findings suggest that at present the main changes are not in the general area of winter snow and ice coverage but in the continuation of coverage later and later into the spring. This appears to be true of both the northern and southern hemispheres.

In the highly complex dynamics of world weather patterns an interconnection of some kind between major events is inevitable, but often obscure. It could be, for example, that the extraordinary occurrence of a stationary low pressure area over Bristane, with its attendant disas-

trous flooding, is a feature of the overall trend.

The Brisbane low pressure area appears to have started life as a normal Pacific cyclonic feature moving along a normal south-easterly curving track. But instead of recurving towards the southwest, it was blocked by an anticyclone to the south of Australia. It happens that blocking anticyclones play an important role in the characteristics of weather in the northern hemisphere and account for some adverse changes in our own climate. The trends appear to be cyclic, fairly long-term and extremely important. It is therefore surprising that, in Britain at least, support for scientific analysis of the history of climate is almost non-existent.

But Nottingham at least is fighting off the advancing ice age — grass is growing and seeds are sprouting there now.

The artificial spring has been created by the underground hot water pipes which now carry heat to thousands of homes in the city. As an experiment city officials scattered grass seeds on wasteland near the central library and grass is shooting up there and in other areas where the pipes are.

Source: The Guardian, January 29, 1974



Science

#### Another Ice Age?

Monday, Jun 24, 1974

In Africa, drought continues for the sixth consecutive year, adding terribly to the toll of famine victims. During 1972 record rains in parts of the U.S., Pakistan and Japan caused some of the worst flooding in centuries. In Canada's wheat belt, a particularly chilly and rainy spring has delayed planting and may well bring a disappointingly small harvest. Rainy Britain, on the other hand, has suffered from uncharacteristic dry spells the past few springs. A series of unusually cold winters has gripped the American Far West, while New England and northern Europe have recently experienced the mildest winters within anyone's recollection.

As they review the bizarre and unpredictable weather pattern of the past several years, a growing number of scientists are beginning to suspect that many seemingly contradictory meteorological fluctuations are actually part of a global climatic upheaval. However widely the weather varies from place to place and time to time, when meteorologists take an average of temperatures around the globe they find that the atmosphere has been growing gradually cooler for the past three decades. The trend shows no indication of reversing. Climatological Cassandras are becoming increasingly apprehensive, for the weather aberrations they are studying may be the harbinger of another ice age.

Telltale signs are everywhere —from the unexpected persistence and thickness of pack ice in the waters around Iceland to the southward migration of a warmth-loving creature like the armadillo from the Midwest. Since the 1940s the mean global temperature has dropped about 2.7° F. Although that figure is at best an estimate, it is supported by other convincing data. When Climatologist George J. Kukla of Columbia University's Lamont-Doherty Geological Observatory and his wife Helena analyzed satellite weather data for the Northern Hemisphere, they found that the area of the ice and snow cover had suddenly increased by 12% in 1971 and the increase has persisted ever since. Areas of Baffin Island in the Canadian Arctic, for example, were once totally free of any snow in summer; now they are covered year round.

Source: TIME, June 24, 1974

1974: Ozone Depletion a 'Great Peril to Life'

# 'Great Peril To Life'; Gas Pares Away Earth's Ozone

WASHINGTON (UPI) - A scientist told Congress Wednesday the earth appears to be "on the verge of a period of great peril to life on this globe" because of threats to the ozone layer from

modern technology.

Professor T. M. Donahue of the University of Michigan testified at the opening of two days of hearings into the question of whether freon, the gas used in acrosol sprays and as a coolant in refrigerators and air conditioners, has been eating away at the ozone layer near the top of the earth's atmosphere.

The layer filters out most of the sun's ultraviolet rays and some scientists have suggested that a thinning of the layer will trigger huge increases in

skin cancer among the earth's peoples.

Rep. Marvin L. Esch, R. Mich., said Wednesday it may be too late to head off an increase in skin cancer even if Congress acts right away to contril freon gases being released into the atmosphere from serosal sprays and other sources,,

"We must immediately begin a comprchensive study so that steps can be taken to defuse this potential time bomb if a health bazard is proven, Esch said.

Donahue suggested that if a fleet of 500 supersonic transports have been built as was discussed a few years ago enough of the protective ozone layer would have been destroyed to "drive life on the globe back toward a state it had several hundred million years ago."

Donahue, who with other Michigan scientists recently raised the issue before the public, said he and fellow researchers are not even sure they have exhausted the inventory if possible horrors that could result from ozone depletion.

It might even be, be said, that the effort to feed a growing population through grains is using up nifrous oxide and taking that substance away from the ozone layer as well.

"We appear to be on the verge of a period of great peril to life on this globe produced by the development of the very technology designed to make life more pleasant, tolerable and even possi-

ble for all of this humankind," he said.
"It is time to step back and take a very careful look at what we may be doing to ourselves and our

The subcommittee has before it two bills calling for a study first and power later to ban freons. Esch, in testimony prepared for the hearing said a University of Michigan study widely quoted in news reports estimates that ozone destruction would not reach its peak until about 1990, eyen if

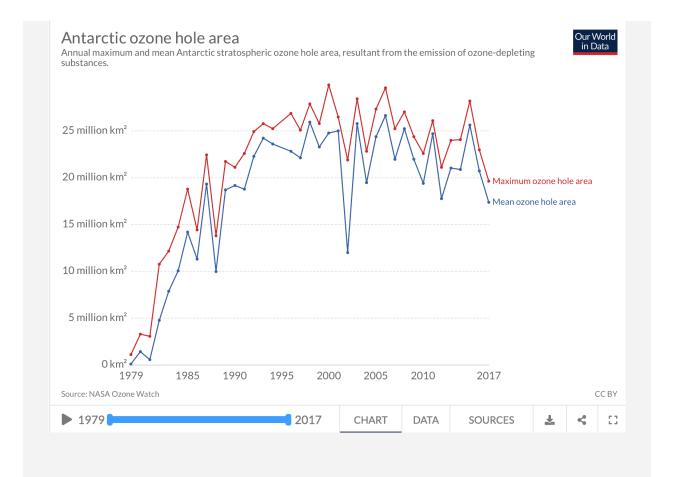
all emissions were halted now.
"There are estimates," he added, "that this ozone destruction will result in an additional 8,000 cases of skin cancer by 1990 and at least one prediction that the incidence of skin cancer could be much higher.

be much higher."

To delay a priority study of the question, Eschisaid, "etuld invite tragedy and suffering which, because of the unusual nature of this problem might not be fully upon us for 10 or 15 years.

"Yet we are told it may already be too late to prevent serious depletion of the ozone shield," he said. "In fact, we are faced with the unnerving prediction that ozone destruction will almost certainly result in an increased incidence of skin tainly result in an increased incidence of skin cancer — no matter what steps we take within the next 12 months."

But no such 'great peril to life' has been observed as the so-called 'ozone hole' remains:



Sources: <u>Headline</u>

NASA Data | Graph

1976: 'The Cooling'

# The Cooling

So writes Stephen Schneider, a young climatologist at the National Center for Atmospheric Research in Boulder, Colo., reflecting the consensus of the climatological community in his new book, "The Genesis Strategy." His warning, that present world food reserves are an insufficient hedge against future famines, has been heard among the scientific community for years-for example, it was a conclusion of a 1975 National Academy of Sciences report, But Schneider has decided to explain the entire problem, as responsibly and accurately as he can, to the general public, and thus has put together a useful and important book.

Schneider quotes University of Wisconsin climatologist Reid Bryson as saying that 1930-1960 "was the most abnormal period in a thousand years-abnormally mild." In fact, conditions of steady, weather in the northern hemisphere during that time favored bumper harvests in the United States, the Soviet Union, and the wheat belt of northern India and Pakistan. In 1974 Schneider and Bryson tried to explain to a White House policy-making group why conditions are likely to worsen. One of the most depressing anecdotes in the book is Schneider's description of the deaf ear their warnings received.

1980: 'Acid Rain Kills Life in Lakes'

### Acid Rain Kills Life In Lakes

SPRINGFIELD, Va. (UPI) — Acid rain, which has already wiped out the fish in 107 of New York's Adirondack Mountain lakes, is rapidly killing other lakes in nearby eastern Canada, says a Canadian official

Raymond Robinson, deputy minister in Canada's environmental agency, told the first interstate summit conference on acid rain Tuesday his country is determined to fight the spreading problem.

"We're simply not prepared to contemplate leaving the generations of the next century with tens of thousands or hundreds of thousands of sterile lakes," he said. "As a practical matter, in Canada, there's no question acid rain is a front page concern."

Robinson was a key speaker at the two-day acid rain meeting, sponsored by the U.S. Environmental Protection Agency. The meeting attracted 200 representatives from a score of Eastern states, government, industry and environmental and civic groups.

Douglas Costle, EPA administrator, said in an opening address the object of the meeting was to reach mutual understanding on the cause and effects of acid rain and to open debate on possible solutions.

"I look at this conference as a first step for

building substantial agreement between the states on the seriousness of the problem and the kinds of near-term and long-term remedial actions that are appropriate," said Costle.

Although the acid rain phenomenon respects no political boundaries, Costle believes the main culprits in the United States are old coal-burning electric power plants that lack newly legislated anti-pollution safeguards.

In Canada, where half the acid rain pollutions wafts in from the United States, the pollution source seems to be heavy industry and non-feric metal smelters, said Robinson.

Noblesville Ledger (Noblesville, IN) April 9, 1980

But 10 years later, the US government program formed to study acid rain concluded:

### Acid rain no environmental crisis, study con

H. JOSEF HEBERT

THE ASSOCIATED PRESS

WASHINGTON — A \$537 million, decade-long study ordered by Congress concluded today that acid rain should be "viewed as a long-term problem" requiring pollution controls but is not the environmental crisis some scientists have suggested.

The report by the National Acid Precipitation Assessment Program was embraced both by those who support steep cuts in sulfur dioxide emissions and by critics of such cuts. The critics have long claimed that severe pollution controls, costing as much as \$5 billion a year, are an overreaction to the acid rain problem.

In its final draft report, the scientific group, known as NAPAP, reiterated that pollution-control measures are needed to return hundreds of lakes and streams — especially in the Northeast and the mid-Atlantic states — to healthy conditions.

The report also acknowledged that acid rain is affecting visibility across much of the East; causes damage to some forests, particularly red spruce at higher elevations; reduces soil nutrients; kills some aquatic life; erodes buildings and statutes, and poses health problems to some humans exposed to acidic aerosols.

James Mahoney, director of NAPA, outlined the draft report to a final meeting of the group and said its findings have "reduced the scientific uncertainties" about acid rain.

"Acid rain is correctly viewed as a longterm problem which should be resolved by permanent measures," he concluded, summarizing the findings.

Mahoney said that while the study supports many of the scientific views expressed over the years on acid rain it also rejected other, "more extreme views" such as those that consider it "a flat-out crisis" or those "who would say there's no problem at all." NAPAP was established by Congress in 1980 to improve the understanding of acid rain. During its decade of work it spent \$537 million.

The report stopped short of endorsing specific control requirements, including the 10-million-ton cut in sulfur dioxide emissions required by legislation nearing approval in Congress.

The study said, however, that if annual sulfur dioxide emissions were cut by 10 million tons the damaging trends would be reversed. Such emission controls would lead to the "chemical recovery" of lakes in the Adirondacks, where the acid rain problem is said to be most severe, and protect lakes in the higher elevations of the mid-Atlantic states. It also would reduce other damages caused by acid rain and improve visibility.

But the pollution controls would not be cheap, with the expense increasing sharply as steeper emission reductions are put in place. An 8-million-ton reduction in sulfur dioxide

emissions would billion a year, would cost as m study estimated.

The most se quirements wou electric utilities high-sulfur coal sults to be effect

The National statement urging rain pollution NAPAP study. evidence that the more cost-effect the limited enviain," said Riction's president.

But Eileen Clevolved with air said the NAPAI the link between ronmental dama

Associated Press, September 6, 1990

1978: 'No End in Sight' to 30-Year Cooling Trend

#### International Team of Specialists Finds No End in Sight to 30-Year Cooling Trend in Northern Hemisphere

Ceisius, roughly 0.2 to 0.4 degrees Fahrenheit.
I from the Southern Hemisphere,
particularly south of latitude 30 south,
are so meage that reliable conclusions
are not possible, the report says. The
30th parallel of south latitude passes
through South Africa, Chile and southern
Australia. The cooling trend seems to extiend at least part way into the Southern
Hemisphere both there have been indica-

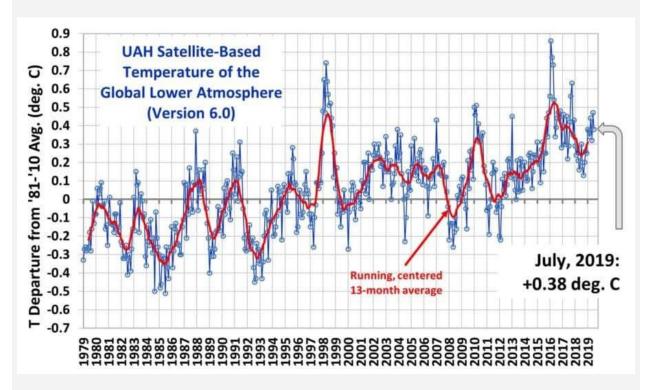
Hannovet, West Germany. For the period from 19-9 to 1976, he has calculated, a manth. The data, plotted for 153 locations of 20 points in the Northern Hemisphere, he average temperature of the atmosphere from the separation between a sharp warming in 1987-68.

4. similar study based on data from the separation between a sharp warming in 1987-68.



#### Source: New York Times, January 5, 1978

But according to NASA satellite data there is a slight warming trend since 1979.



Source: DrRoySpencer.com

1988: James Hansen forecasts increase regional drought in 1990s

# The Miami News

Friday, June 24, 1988

HOME EDITION

#### Jackson to give AZT to indigent AIDS patients

Jackson Memorial Hospital has decided to continue supplying free AZT — the only approved treatment for AIDS — to impoversished patients who were getting the drug for free under a federal program that recently

ended.
Phil Plummer, administrator of the South
Florida AIDS Network at Jackson, said
yesterday no one who was getting the drug
under the \$1.7 million program that ended
June 8 will be cut off, even if they don't
unalify for substitute assistance through

#### Etcetera

Scientist discovers how

# More droughts likely, expert tells senators

'88 on way to be hottest ever as world temperatures up sharply

WASHINGTON — The overall temperature of the Earth rose sharply this year, signaling the beginning of the "greenhouse effect" and significantly increasing the likelihood of droughts and heatwaves in the Southeast and Midwest, a NASA scientist told the

Southesst and Midwest, a NASA scientist told the Senate. James Hansen, director of NASA's Goddard Institute for Space Studies in New York, said that without an abnormal cooling during the second half of the year, 1985 will be the warmest year since measurements began 130 years gas. Hansen specifically refused to say the heat wave and drought currently gripping much of the country were caused by the greenhouse effect. "However, there is evidence that the greenhouse effect increases the likelihood of such events," he said vesterday in testimony before the Senate Energy and Natural Resources Committee.

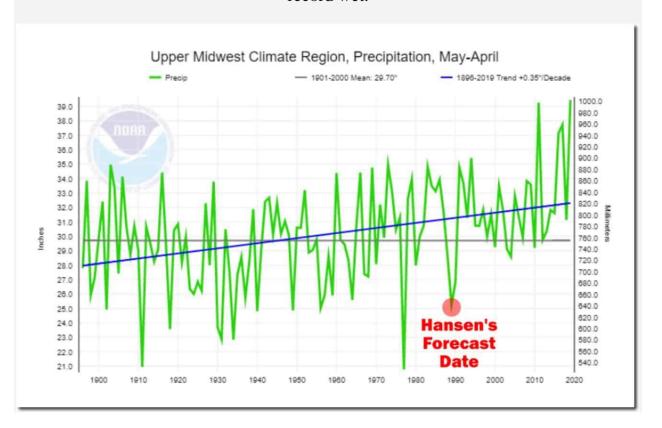
It is time to stop waffling so much and say the evidence is pretty strong that the greenhouse effect is here.

the globe, he and a team of other Goddard scientists had concluded that the planet's average temperature rose by about .7 degree Fahrenheit (.4 degree Celsius) during the first five months of 1988.

The odds against such a sharp rise occurring as a result of a random climate fluctuation were 99-to-one, he said.

"The Earth is warmer in 1988 than at any time in the history of instrumental measurements," Hansen said.

But the last really dry year in the Midwest was 1988, and recent years have been record wet.



#### Source: RealClimateScience.com

1988: Washington DC days over 90F to from 35 to 85

Today

Lansing State Journal

Monday, Dec. 12, 1988

## Prepare for long, hot summers

By EDWARD STILES Gannett News Service

If you liked last summer's record temperatures, you're going to love the 1990s, says James Hansen, the ASA scientist who, during congressional hearings on the Midwestern drought, linked greenhouse warming to the heat wave.

Last summer was a preview of the average summer 10 years from now, and the hottest summers during the '90s will be even hotter and drier than the one we just struggled through, he says.

Although many scientists argue that the dry, hot summer of '88 was not caused by greenhouse warming, it's hard to find a climate expert who will claim that the greenhouse effect is not on its way.

When Hansen, head of the Goddard Institute for Space Studies, spoke recently to researchers at the University of Arizona Lunar and Planetary Laboratory, he ticked off several unpleasant changes in the weather most scientists agree probably will occur

during the next 50 to 60 years:

If we do nothing to cut down on pumping carbon dioxide into the atmosphere, temperatures in 2050 will be 6 to 7 degrees higher than they are today.

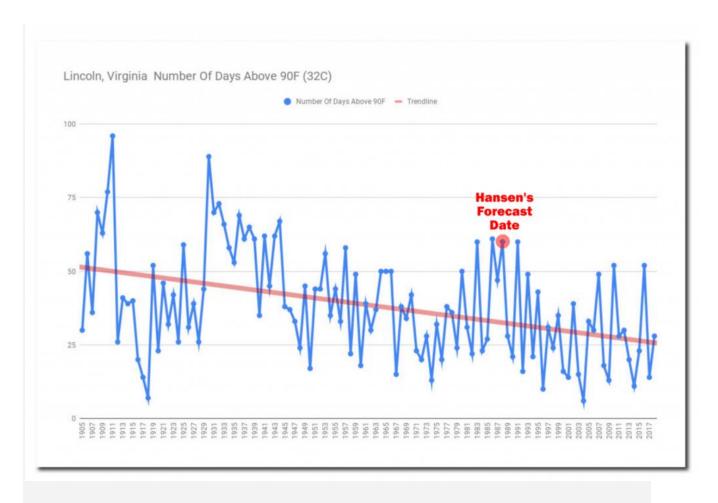
Washington, D.C., for instance, would go from its current 35 days a year over 90 degrees to 85 days a

■ The level of the ocean will rise anywhere from one to six feet.

■ The frequency and severity of storms would increase. If the amount of carbon dioxide in the atmosphere doubles - the worst-case scenario between now and 2050 — the maximum strength of hurricanes may increase by 50 percent, Hansen says.

While a few degrees warmer or cooler may not seem like much, such a change can result in huge differences in climate. Hansen notes that during the last ice age the earth was only about 9 or 10 degrees cooler on average than it is now.

But the number of hot days in the DC area peaked in 1911, and have been declining ever since.



Source: RealClimateScience.com

1988: Maldives completely under water in 30 years

The Canberra Times
MONDAY, SEPTEMBER 26, 1988

# Threat to islands

MALE, Maldives: A gradual rise in average sea level is threatening to completely cover this Indian Ocean nation of 1196 small islands within the next 30 years, according to authorities.

The Environmental Affairs Director, Mr Hussein Shihab, said an estimated rise of 20 to 30 centimetres in the next 20 to 40 years could be "catastrophic" for most of the islands, which were no more than a metre above sea level.

The United Nations Environment Project was planning a study of the problem.

But the end of the Maldives and its 200,000 people could come sooner if drinking water supplies dry up by 1992, as predicted.

- AFP

#### Source: Agence France Press, September 26, 1988

1989: Rising seas to 'obliterate' nations by 2000

#### Rising seas could obliterate nations: U.N. officials

UNITED NATIONS (AP) — A senior U.N. environmental official says entire nations could be wiped off the face of the Earth by rising sea levels if the global warming trend is not reversed by the year 2000.

Coastal flooding and crop failures would create an exodus of "eco-refugees," threatening political chaos, said Noel Brown, director of the New York office of the U.N. Environment Program, or UNEP.

He said governments have a 10-year window of opportunity to solve the greenhouse effect before it goes beyond human control.

As the warming melts polar icecaps, ocean levels will rise by up to three feet, enough to cover the Maldives and other flat island nations, Brown told The Associated Press in an interview on Wednesday.

Coastal regions will be inundated; onesixth of Bangladesh could be flooded, displacing a fourth of its 90 million people. A fifth of Egypt's arable land in the Niled Delta would be flooded, cutting off its food supply, according to a joint UNEP and U.S. Environmental Protection Agency study.

"Ecological refugees will become a major concern, and what's worse is you may find that people can move to drier ground, but the soils and the natural resources may not support life. Africa doesn't have to worry about land, but would you want to live in the Sahara?" he said.

UNEP estimates it would cost the United States at least \$100 billion to protect its east coast alone.

Shifting climate patterns would bring back 1930s Dust Bowl conditions to Canadian and U.S. wheatlands, while the Soviet Union could reap bumper crops if it adapts its agriculture in time, according to a study by UNEP and the International Institute for Applied Systems Analysis.

Excess carbon dioxide is pouring into the atmosphere because of humanity's use of fossil fuels and burning of rain forests, the study says. The atmosphere is retaining more heat than it radiates, much like a greenhouse.

The most conservative scientific estimate is that the Earth's temperature will rise 1 to 7 degrees in the next 30 years, said Brown.

The difference may seem slight, he said, but the planet is only 9 degrees warmer now than during the 8,000-year Ice Age that ended 10,000 years ago.

Brown said if the warming trend continues, "the question is will we be able to reverse the process in time? We say that within the next 10 years, given the present loads that the atmosphere has to bear, we have an opportunity to start the stabilizing process."

He said even the most conservative scientists "already tell us there's nothing we can do now to stop a ... change" of about 3 degrees.

"Anything beyond that, and we have to start thinking about the significant rise of the sea levels ... we can expect more ferocious storms, hurricanes, wind shear, dust erosion."

He said there is time to act, but there is oxygen.

no time to waste.

UNEP is working toward forming a scientific plan of action by the end of 1990, and the adoption of a global climate treaty by 1992. In May, delegates from 103 nations met in Nairobi, Kenya — where UNEP is based — and decided to open negotiations on the treaty next year.

Nations will be asked to reduce the use of fossil fuels, cut the emission of carbon dioxide and other greenhouse gases such as methane and fluorocarbons, and preserve the rain forests.

"We have no clear idea about the ecological minimum of green space that the planet needs to function effectively. What we do know is that we are destroying the tropical rain forest at the rate of 50 acres a minute, about one football field per second," said Brown.

Each acre of rain forest can store 100 tons of carbon dioxide and reprocess it into oxygen.

Source: Associated Press, June 30, 1989

1989: New York City's West Side Highway underwater by 2019



While doing research 12 or 13 years ago, I met Jim Hansen, the scientist who in 1988 predicted the greenhouse effect before Congress. I went over to the window with him and looked out on Broadway in New York City and said, "If what you're saying about the greenhouse effect is true, is anything going to look different down there in 20 years?" He looked for a while and was quiet and didn't say anything for a couple seconds. Then he said, "Well, there will be more traffic." I, of course, didn't think he heard the question right. Then he explained, "The West Side Highway [which runs along the Hudson River] will be under water. And there will be tape across the windows across the street because of high winds. And the same birds won't be there. The trees in the median strip will change." Then he said, "There will be more police cars." Why? "Well, you know what happens to crime when the heat goes up."

And so far, over the last 10 years, we've had 10 of the hottest years on record.

Didn't he also say that restaurants would have signs in their windows that read, "Water by request only."

Under the greenhouse effect, extreme weather increases. Depending on where you are in terms of the hydrological cycle, you get more of whatever you're prone to get. New York can get droughts, the droughts can get more severe and you'll have signs in restaurants saying "Water by request only."

#### When did he say this will happen?

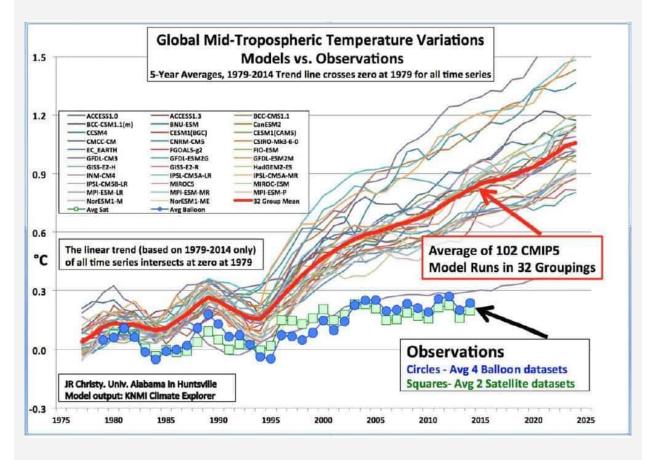
Within 20 or 30 years. And remember we had this conversation in 1988 or 1989.

#### Does he still believe these things?

Yes, he still believes everything. I talked to him a few months ago and he said he wouldn't change anything that he said then.

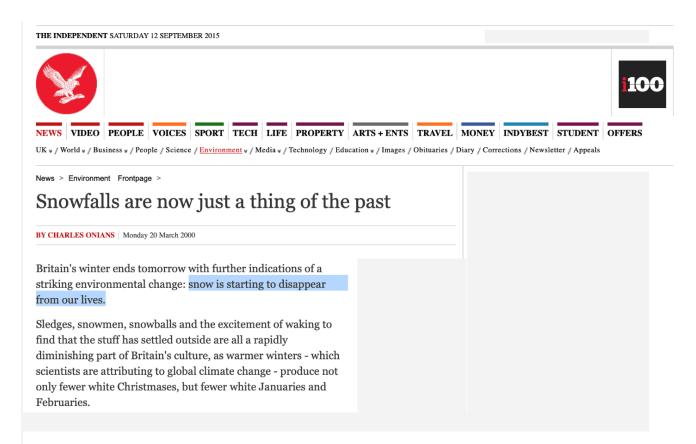
#### Source: Salon.com, October 23, 2001

#### 1995 to Present: Climate Model Failure



Source: CEI.org

2000: 'Children won't know what snow is.'



However, the warming is so far manifesting itself more in winters which are less cold than in much hotter summers. According to Dr David Viner, a senior research scientist at the climatic research unit (CRU) of the University of East Anglia, within a few years winter snowfall will become "a very rare and exciting event".

"Children just aren't going to know what snow is," he said.

Source: The Independent, March 20, 2000

2002: Famine in 10 years



**Famine** 

Why vegans were right all along *George Monbiot* 



Global development is supported by

BILL&MELINDA GATES foundation

**☞** @GeorgeMonbiot Mon 23 Dec 2002 20.01 EST





Famine can only be avoided if the rich give up meat, fish and dairy  $\,$ 

The Christians stole the winter solstice from the pagans, and capitalism stole it from the Christians. But one feature of the celebrations has remained unchanged: the consumption of vast quantities of meat. The practice used to make sense. Livestock slaughtered in the autumn, before the grass ran out,

Source: The Guardian, December 23, 2002

2004: Britain to have Siberian climate by 2020



Sat 21 Feb 2004 20.33 EST

# Now the Pentagon tells Bush: climate change will destroy us

- · Secret report warns of rioting and nuclear war
- · Britain will be 'Siberian' in less than 20 years
- Threat to the world is greater than terrorism

<u>Climate change</u> over the next 20 years could result in a global catastrophe costing millions of lives in wars and natural disasters..

A secret report, suppressed by US defence chiefs and obtained by The Observer, warns that major European cities will be sunk beneath rising seas as Britain is plunged into a 'Siberian' climate by 2020. Nuclear conflict, mega-droughts, famine and widespread rioting will erupt across the world.

2008: Arctic will be ice-free by 2018

The Argus-Press . Owosso, Michigan . Tues., June 24, 2008

#### By SETH BORENSTEIN

AP Science Writer

### NASA scientist: 'We're toast'

"We see a tipping point occurring right before our eyes," Hansen told the AP before the luncheon. "The Arctic is the first tipping point and it's occurring exactly the way we said it would."

Hansen, echoing work by other scientists, said that in five to 10 years, the Arctic will be free of sea ice in the summer.

Longtime global warming skeptic Sen. James Inhofe, R-Okla, citing a recent poll, said in a statement, "Hansen, (former Vice President) Gore and the media have been trumpeting man-made climate doom since the 1980s, But Americans are not buying it."

But Rep. Ed Markey, D-Mass., committee chairman, said, "Dr. Hansen was right. Twenty years later, we recognize him as a climate prophet."

#### Source: Associated Press, June 24, 2008

2008: Al Gore warns of ice-free Arctic by 2013

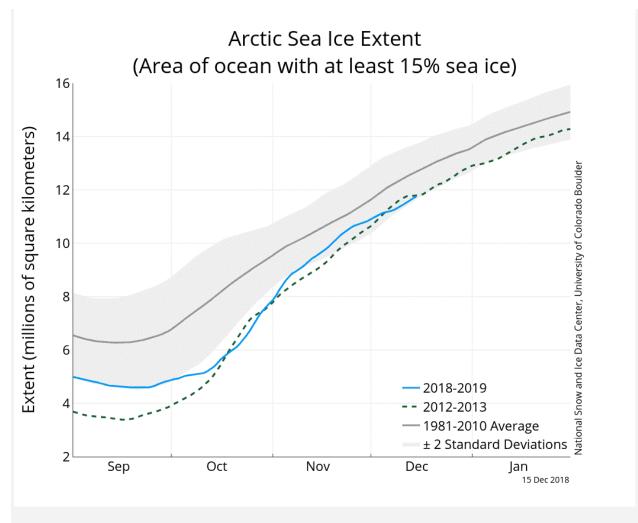
### Ten years ago, @AlGore predicted the North polar ice cap would be gone. Inconveniently, it's still there Anthony Watts / December 16, 2018

On December 14, 2008, former presidential candidate Al Gore predicted the North Polar Ice Cap would be completely ice free in five years. As reported on WUWT, Gore made the prediction to a German TV audience at the COP15 Climate Conference:



Al warned them that "the entire North 'polarized' cap will disappear in 5 years."

But... it's still there:



Source: WattsUpWithThat.com, December 16, 2018

2009: Prince Charles says only 8 years to save the planet

**Environment > Green Living** 

### Just 96 months to save world, says Prince Charles

The price of capitalism and consumerism is just too high, he tells industrialists

Robert Verkaik | Thursday 9 July 2009 00:00 |



**GETTY IMAGES** 

Source: The Independent, July 9, 2009

2009: UK prime minister says 50 days to 'save the planet from catastrophe'



Voices > Commentators

# Gordon Brown: We have fewer than fifty days to save our planet from catastrophe

Tuesday 20 October 2009 00:00 |

Source: The Independent: October 20, 2009

2009: Arctic ice-free by 2014



Source: USA Today, December 14, 2009

2013: Arctic ice-free by 2015

#### **Earth insight Environment**

#### Ice-free Arctic in two years heralds methane catastrophe - scientist

Professor Peter Wadhams, co-author of new Nature paper on costs of Arctic warming, explains the danger of inaction

#### Nafeez Ahmed

Wed 24 Jul 2013 10.54 EDT











▲ Leading Arctic expert Prof Wadhams warns that a summer ice free Arctic in 2 years could trigger dangerous methane release. Photograph: Jenny E Ross/Corbis

A new paper in the journal Nature argues that the release of a 50 Gigatonne (Gt) methane pulse from thawing Arctic permafrost could destabilise the climate system and trigger costs as high as the value of the entire world's GDP. The East Siberian Arctic Shelf's (ESAS) reservoir of methane gas hydrates could be released slowly over 50 years or "catastrophically fast" in a matter of decades - if not even one decade - the researchers said.

Source: The Guardian, July 24, 2013

The paper: https://www.nature.com/articles/s41467-017-02550-9 (open access)

#### Gas hydrate dissociation off Svalbard induced by isostatic rebound rather than global warming

#### Abstract

Methane seepage from the upper continental slopes of Western Svalbard has previously been attributed to gas hydrate dissociation induced by anthropogenic warming of ambient bottom waters. Here we show that sediment cores drilled off Prins Karls Foreland contain freshwater from dissociating hydrates. However, our modeling indicates that the observed pore water freshening began around 8 ka BP when the rate of isostatic uplift outpaced eustatic sea-level rise. The resultant local shallowing and lowering of hydrostatic pressure forced gas hydrate dissociation and dissolved chloride depletions consistent with our geochemical analysis. Hence, we propose that hydrate dissociation was triggered by postglacial isostatic rebound rather than anthropogenic warming. Furthermore, we show that methane fluxes from dissociating hydrates were considerably smaller than present methane seepage rates implying that gas hydrates were not a major source of methane to the oceans, but rather acted as a dynamic seal, regulating methane release from deep geological reservoirs.

2013: Arctic ice-free by 2016

#### Earth insight Environment

# US Navy predicts summer ice free Arctic by 2016

Is conventional modelling out of pace with speed and abruptness of global warming?





▲ Greenpeace icebreaking ship, Arctic Sunrise, among broken floes of Arctic sea ice, photographed from the air.

This image was taken in the Fram Strait, in the month that the sea ice coverage receded to the second lowest extent since records began. Photograph: Nick Cobbing

An ongoing US Department of Energy-backed research project led by a US Navy scientist predicts that the <u>Arctic</u> could lose its summer sea ice cover as early as 2016 - 84 years ahead of conventional model projections.

The project, based out of the <u>US Naval Postgraduate School</u>'s Department of Oceanography, uses complex modelling techniques that make its projections more accurate than others.

#### Source: The Guardian, December 9, 2013

2014: Only 500 days before 'climate chaos'

# French Foreign Minister: '500 Days to Avoid Climate Chaos'

by Jeryl Bier | May 14, 2014 06:29 AM

Secretary of State John Kerry welcomed French foreign minister Laurent Fabius to the State Department in Washington on Tuesday to discuss a range of issues, from Iran to Syria to climate change. Or, in the words of the foreign minister, "climate chaos." Kerry and Fabius made a joint appearance before their meeting, and the foreign minister warned that only 500 days remained to avoid "climate chaos" [emphasis added]:

But...

### Planet Still Standing 500 Days After French Foreign Minister Warned of 'Climate Chaos'

by Jeryl Bier | September 29, 2015 07:08 AM

In May 2014, French foreign minister Laurent Fabius declared during a joint appearance with Secretary of State John Kerry that "we have 500 days to avoid climate chaos." Late last week, time ran out. Fabius's original remarks were as follows:

Sources: Washington Examiner



#### **Returning Policymaking Power to Congress**

• By: <u>Joel Zinberg</u>

07/08/2022

Each year, federal administrative agencies issue between 3,000 and 5,000 final rules. In addition, they issue thousands of guidance documents—termed "Regulatory...

#### **LEGAL**

Blog

#### **DOT's Doublespeak Carbon Reduction Program**

• By: Marlo Lewis, Jr.

• 07/08/2022

The Department of Transportation (DOT) is proposing to require its state and metropolitan counterparts to reduce on-road carbon dioxide (CO2) emissions from portions of...

#### **ENERGY AND ENVIRONMENT**

The Federalist

<u>How the Supreme Court Upended EPA's Power Grab and Curbed the Administrative State</u>