

Loughton Astronomical Soc 20 May + West Sussex Farmers 10 June 2010

What Does & Doesn't cause Climate Change? & Forecast highlights for coming months

- **Refutation of CO2 driven climate Change hypothesis**
 - **Why CO2 theory fails (slides 16-22)**
- **What Does CAUSE Climate Change • Implications for your operations**
 - **Movie solar effects in action! • Long Range Solar-based forecasts**

Presentation slides 1-33. Slides 34-45 are background info / discussion

Further to *Climate Change, The Solar Weather Technique & The future of Forecasting* – WeatherAction Conference Imperial College London 28 Oct 2009

- **Evidence based science**
- **Beware of confusing Cause, Effect & 'Association'!**



**Vital
information
for Your
business**

Piers Corbyn MD www.weatheraction.com , Climate Realist

Team includes Judith Humprey, Kirill Kuzanyan (IZMIRAN Russ Acad Sci) & Ulric Lyons

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How much CO₂ is there in the atmosphere?

Compare the atmosphere with Big Ben – 316 ft high



The CO₂ in the atmosphere is equivalent to

1 1/4 inches on the top.

Man's contribution is just over **One mm** within that.

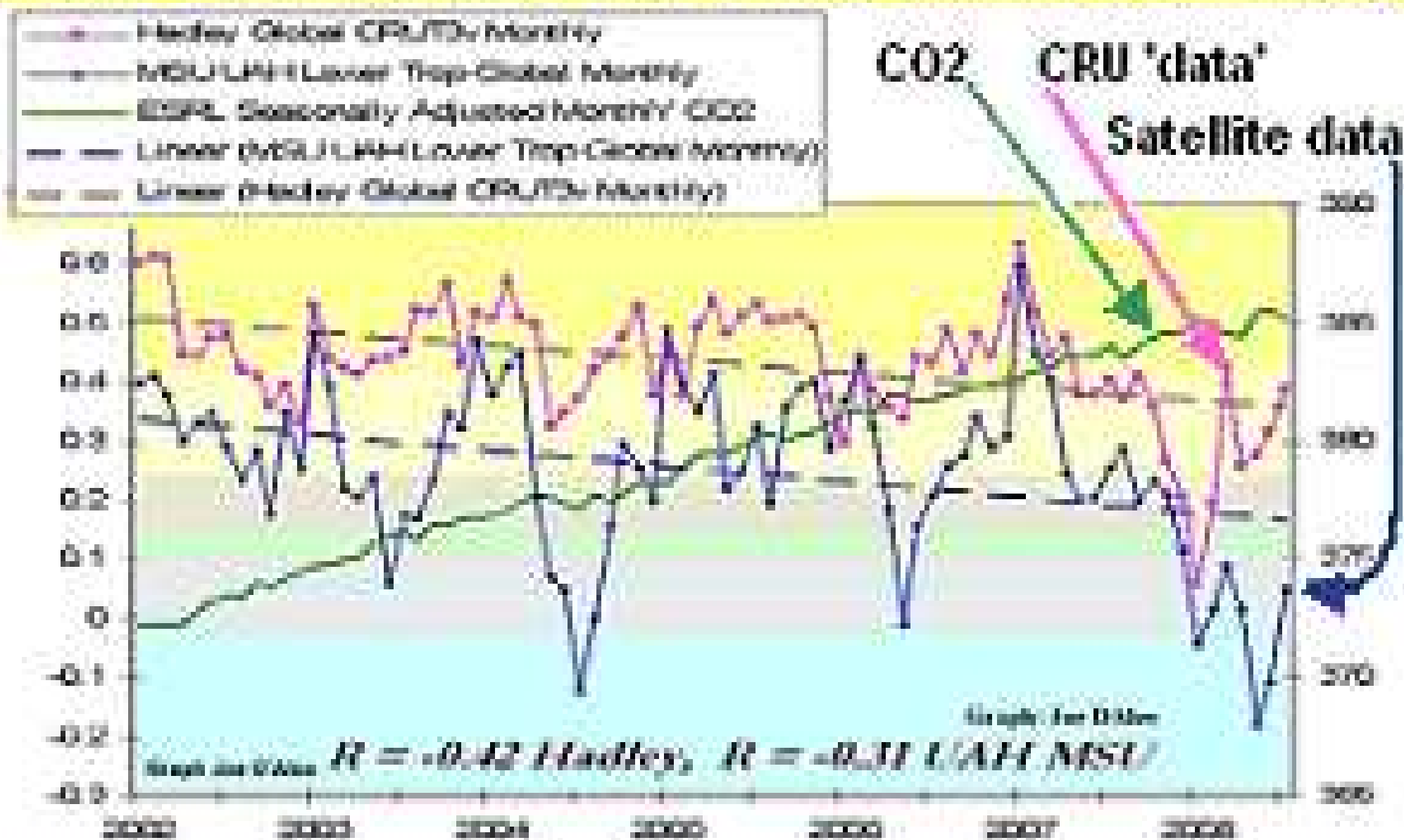
Key Messages

- **The CO2 driver theory of climate change fails**
 - **REFUTED** by Observations and Physics
- **Solar Activity Rules – See Web movie**
 - from Coronal Holes & Solar flares to extreme weather events
- **Proven success of Solar Weather Technique**
 - Brit+Ire - Scandinavia - Europe – USA – World - **FORECASTS** for YOU
- **Policy implications**
 - ***A New dawn for evidence-based science & policy***
 - ***Prepare for game-change!***

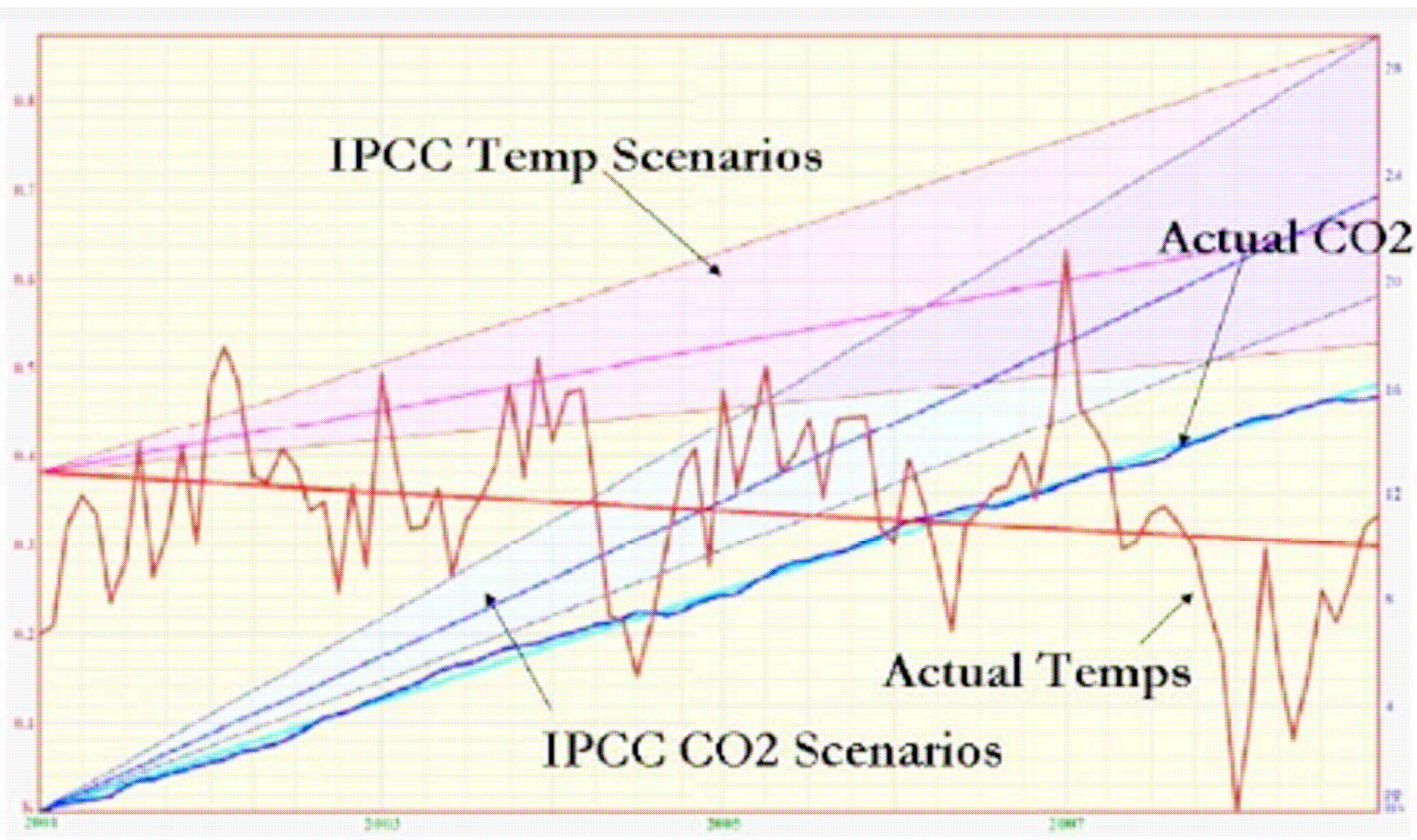
How do we know it's NOT CO2?

- ***It's **NOT** because of the meddling with data, fraud, tricks, fictional claims and suppression of evidence and arguments which oppose the CO2 theory.***
- ***It's because the **CO2 theory FAILS** in ALL it's predictions and expected past correlations.***

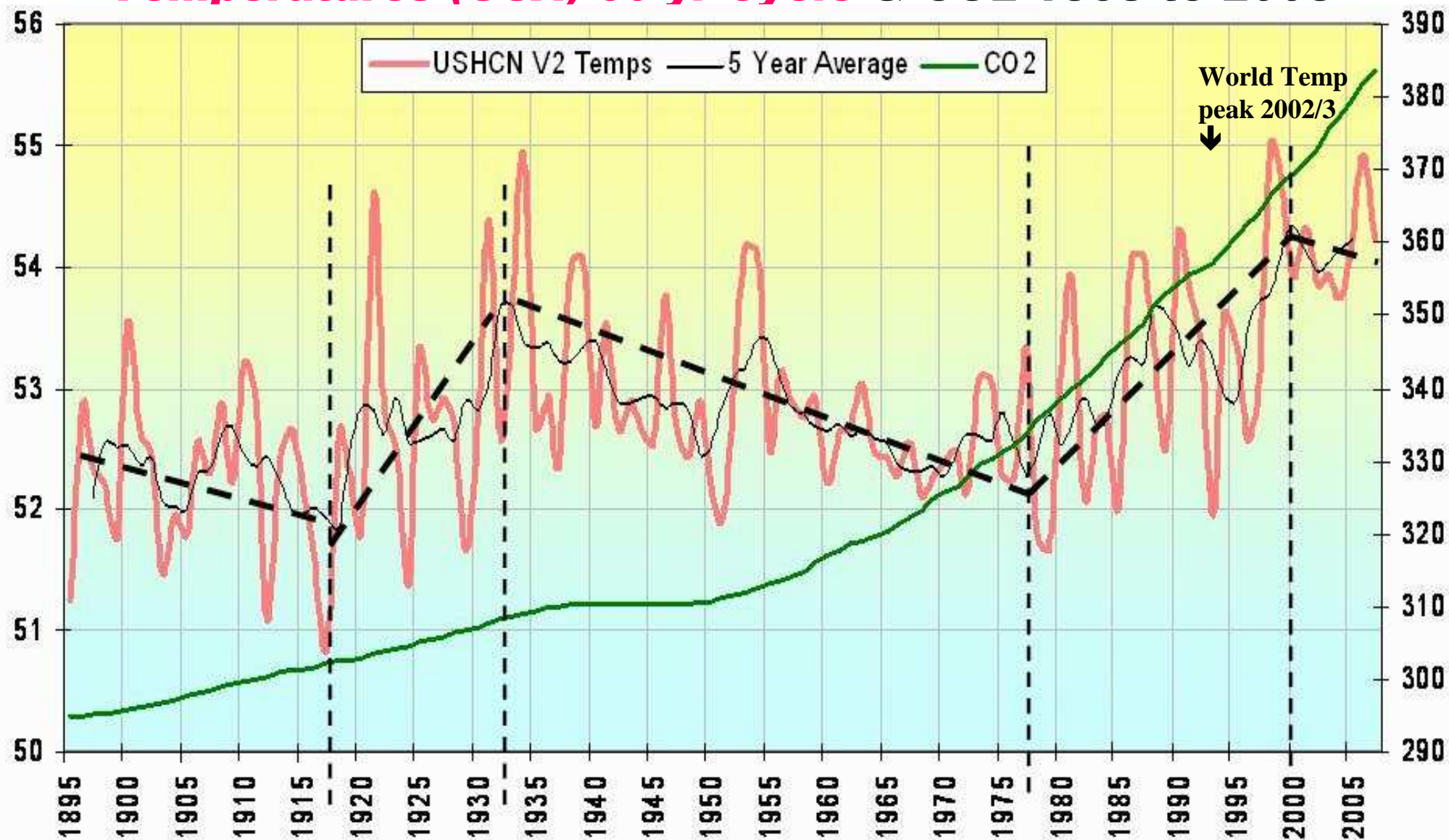
World Temperatures keep falling while CO2 is rising!



The UN (IPCC) Forecasts have comprehensively failed

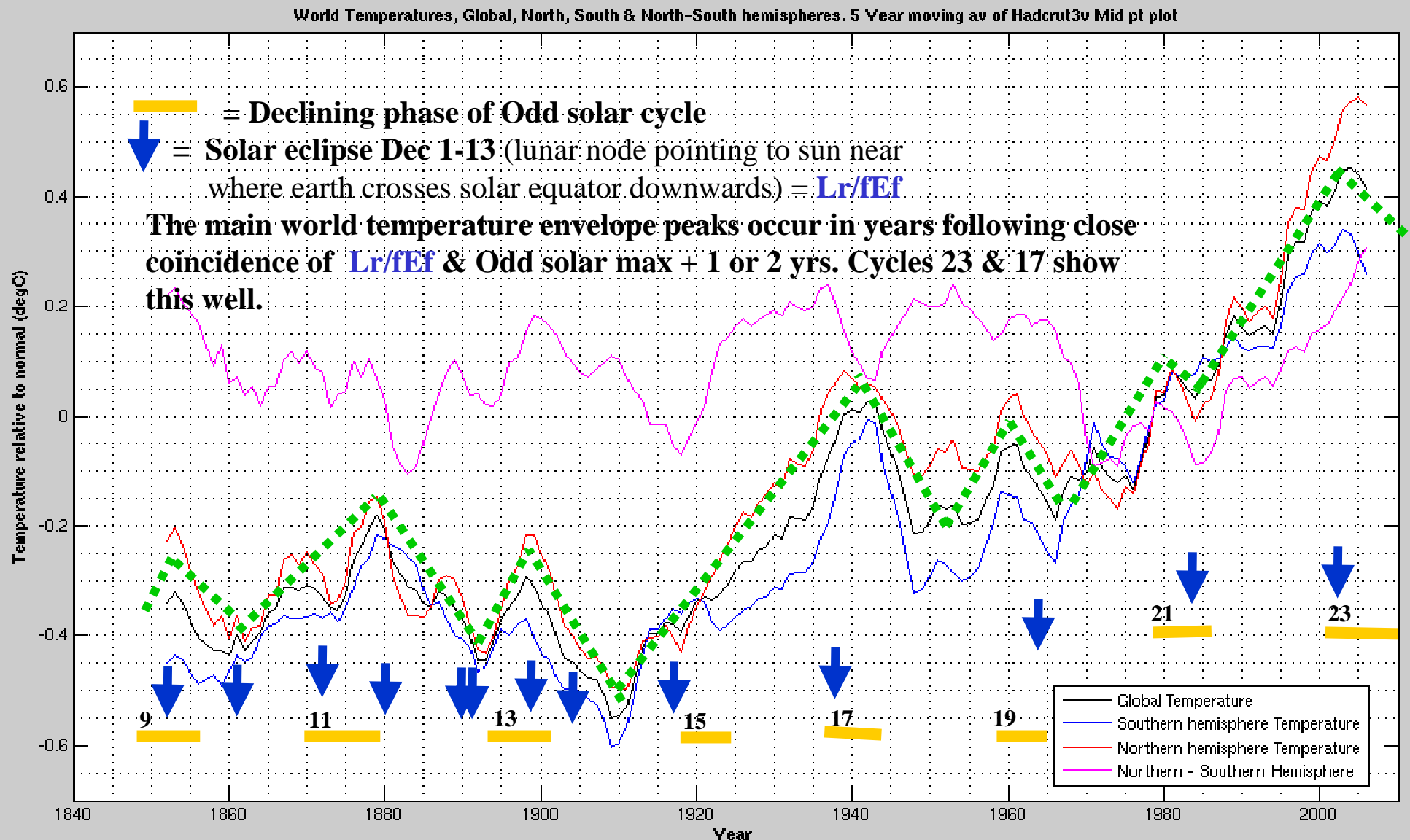


Temperatures (USA) 60 yr Cycle & CO2 1895 to 2008

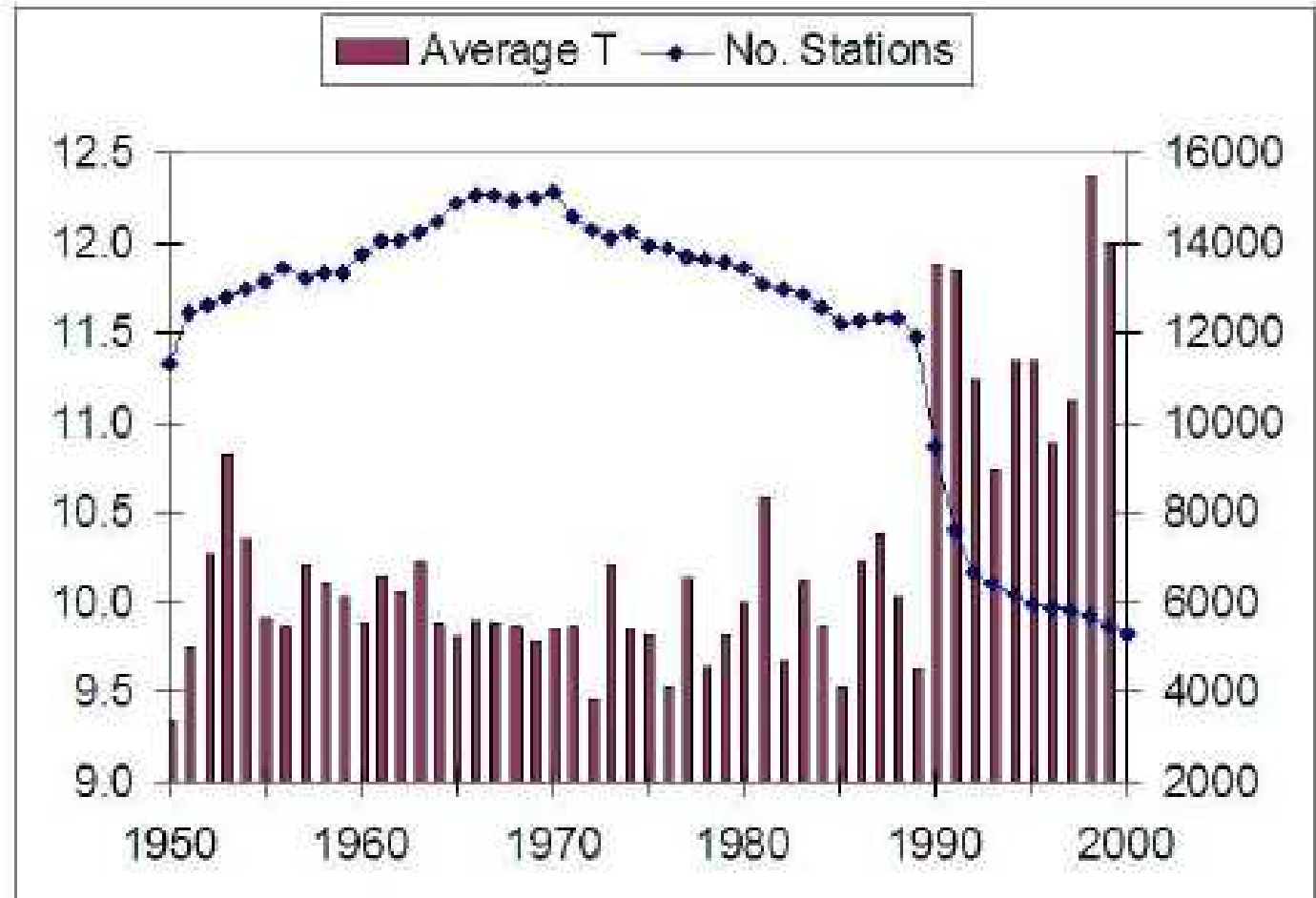


- Official data - Graph by JD'Aleo Sept 2008 Circulated by Piers Corbyn www.weatheraction.com

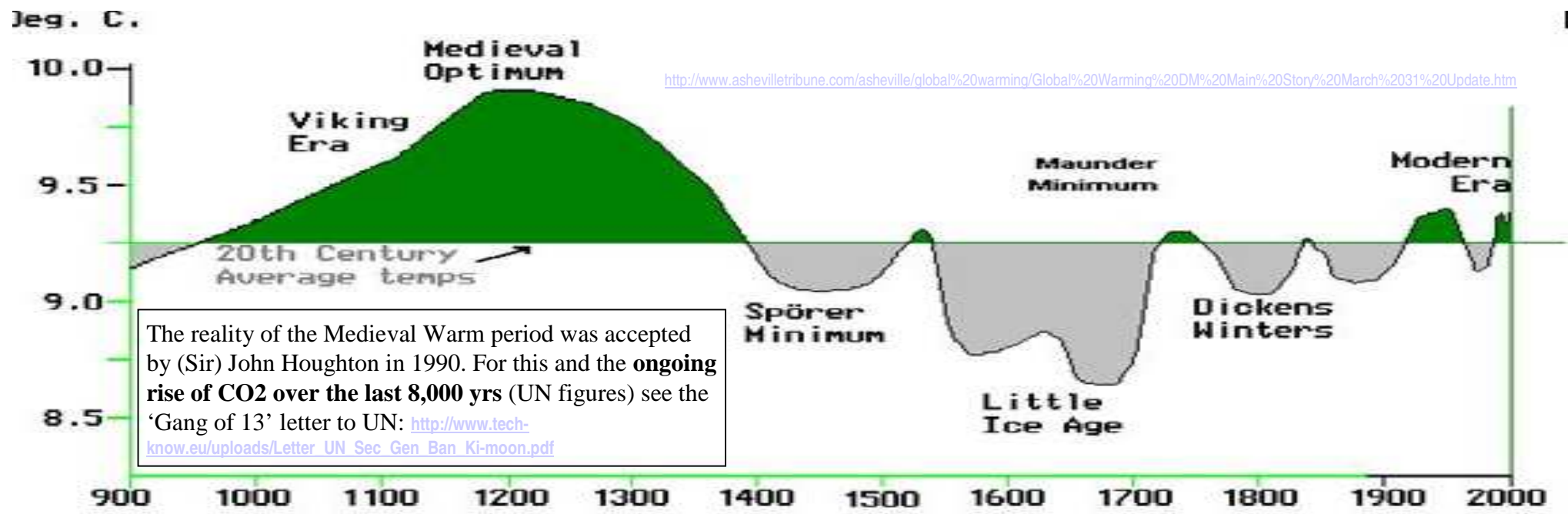
SLAM – Solar Lunar Amplitude Magnetic – Process – 60yr signal



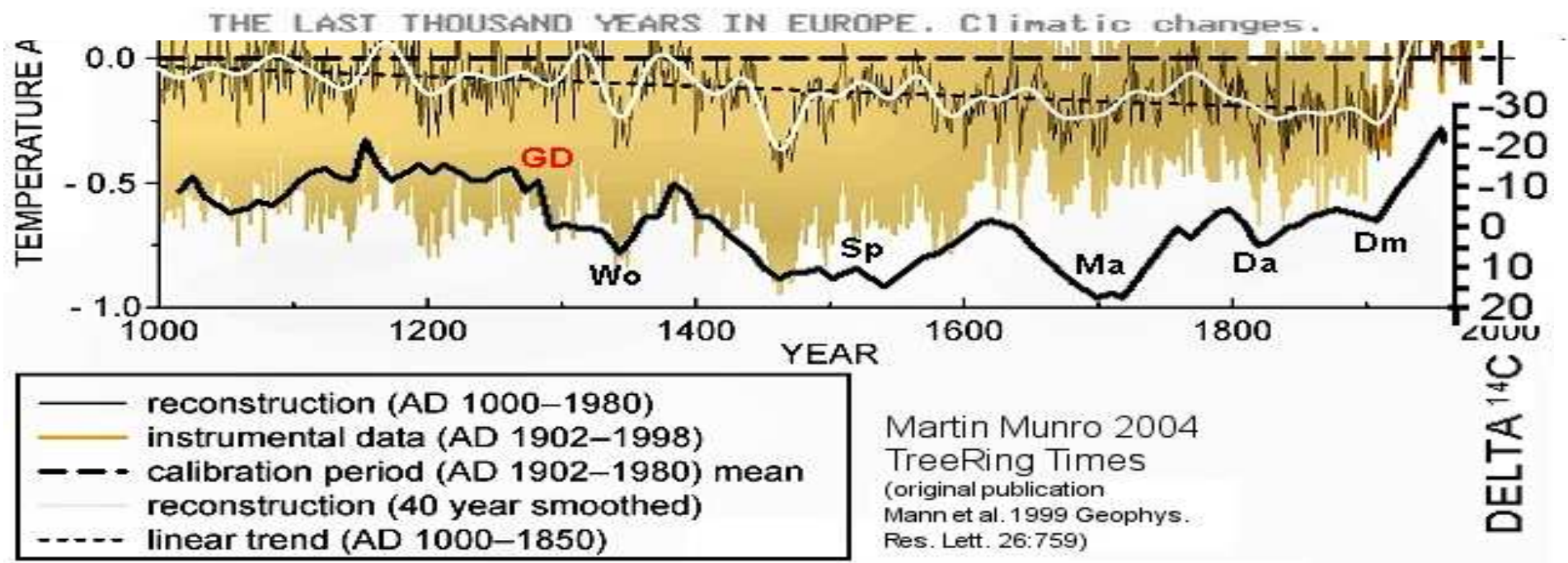
Data Fraud



Data fraud in operation. The selective removal of data stations, which didn't help the Global Warmers' theory, made the remaining average World temperature shoot up from 1990. See <http://www.uoguelph.ca/~rmckitri/research/nvst.html>, which is from Joe D'Aleo and Anthony Watts' superb world analysis of data collection and systematic manipulation: <http://climaterealist.com/?id=4979>
Will the second Cover-up Committee headed by global warming advocate Lord Oxburgh consider this?



The reality of the Medieval Warm period was accepted by (Sir) John Houghton in 1990. For this and the ongoing rise of CO₂ over the last 8,000 yrs (UN figures) see the 'Gang of 13' letter to UN: http://www.tech-know.eu/uploads/Letter_UN_Sec_Gen_Ban_Ki-moon.pdf





GW is renamed Climate Change

The theory of 'Global warming' holds that Man's CO₂ causes Global Warming and this causes other Climate Change and extremes.

CO₂ → Global Warming → Climate Change

We have heard a lot about weather extremes & 'Climate Change'

Since 1998 CO₂ has gone up but World Temperatures have gone down.

ALL subsequent years* have been colder than 1998

Or In terms of two year moving averages the peak was 2002/3

*From Official estimates of world temperatures: <http://www.cru.uea.ac.uk/cru/data/temperature/hadcrut3vgl.txt>

So there are claimed extra effects – 'Climate Change' - without temperature rise to cause them!

AND has post Industrial revolution CO₂ caused ANY change that wasn't going to happen anyway?

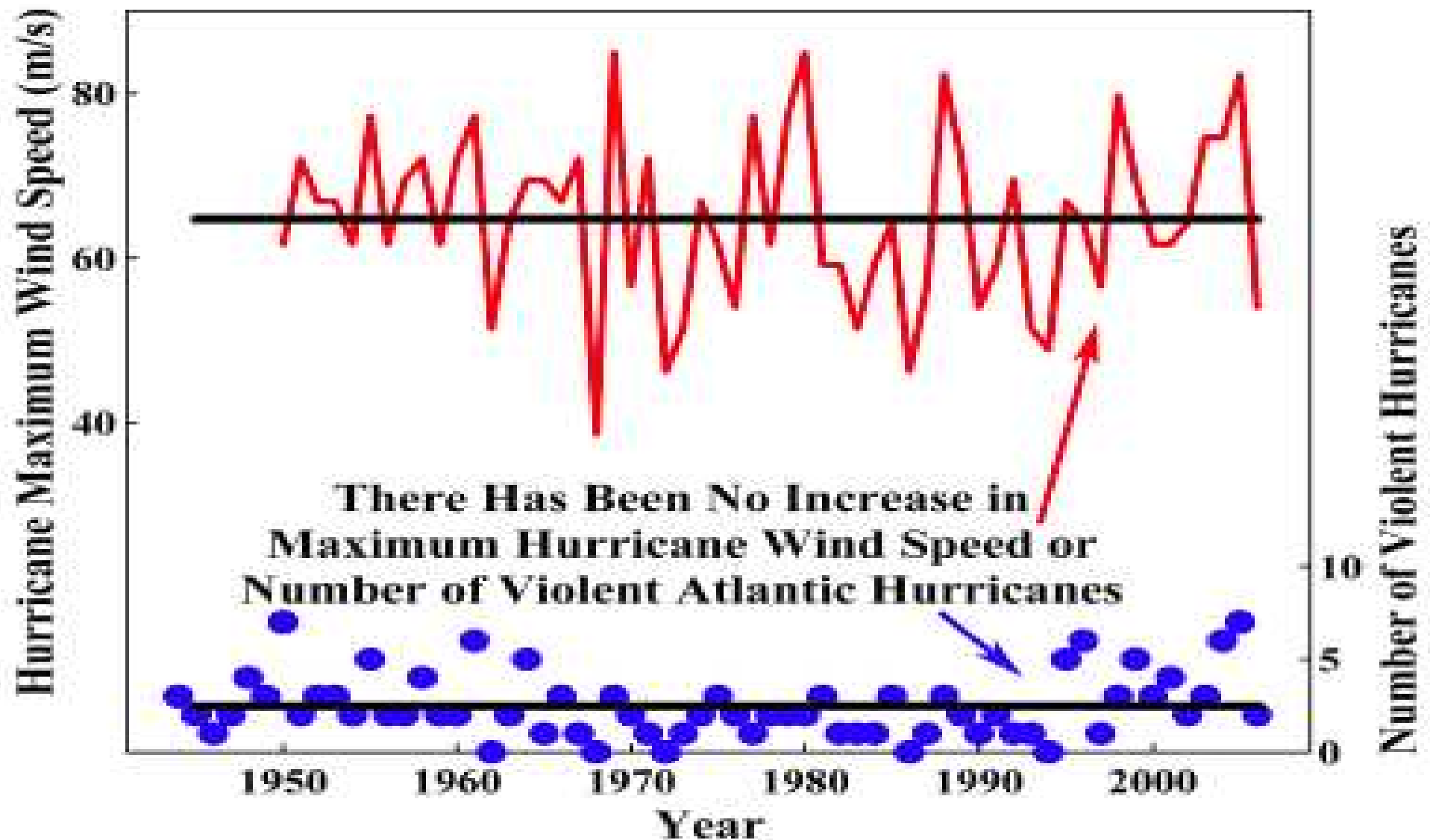


Figure 10: Annual number of violent hurricanes and maximum attained wind speed during those hurricanes in the Atlantic Ocean between 1944 and 2006 (22,23). There is no upward trend in either of these records. During this period, world hydrocarbon use increased 6-fold. Lines are mean values.

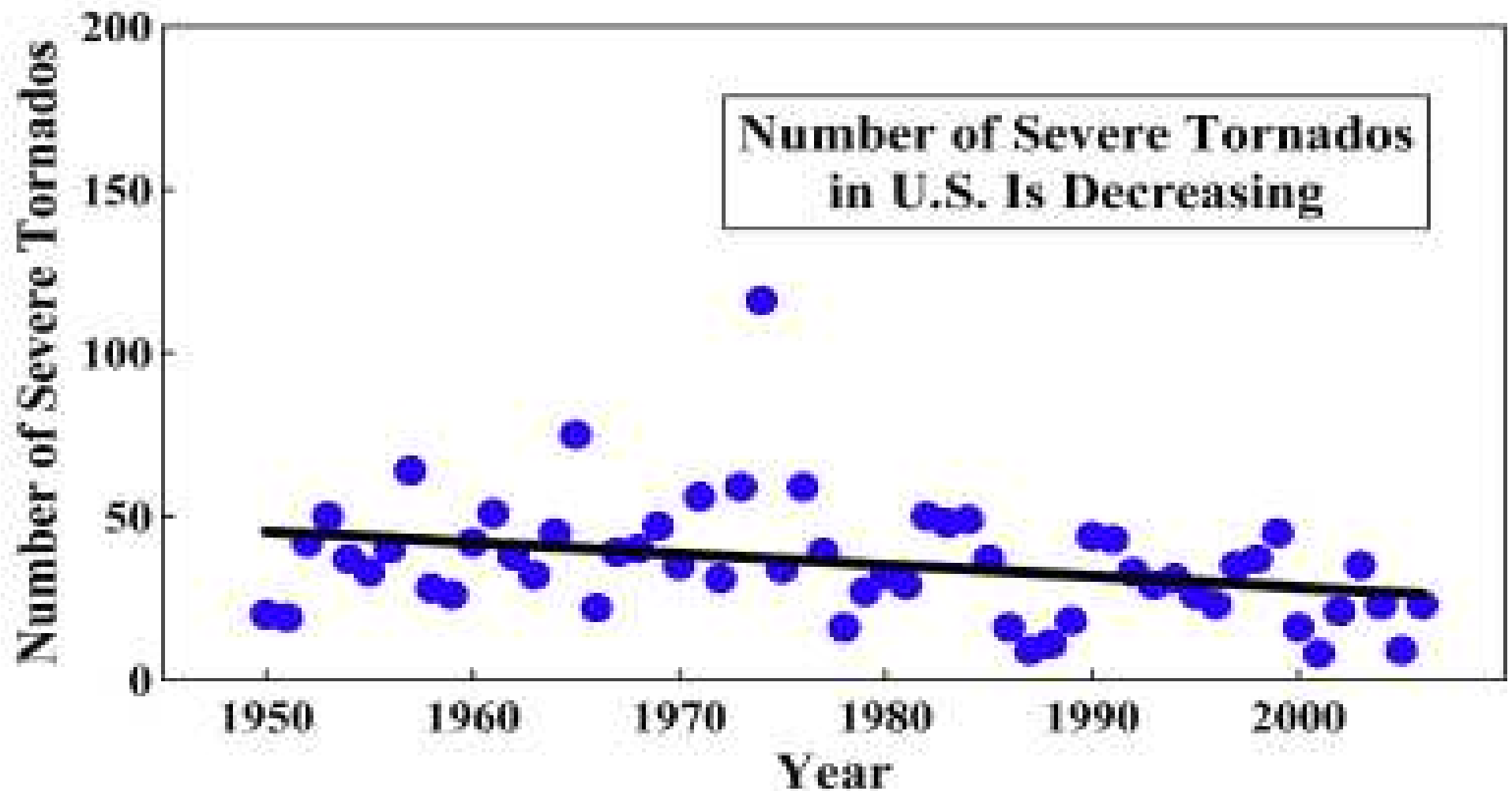


Figure 8: Annual number of strong-to-violent category F3 to F5 tornadoes during the March-to-August tornado season in the U.S. between 1950 and 2006. U.S. National Climatic Data Center, U.S. Department of Commerce 2006 Climate Review (20). During this period, world hydrocarbon use increased 6-fold, while violent tornado frequency decreased by 43%.

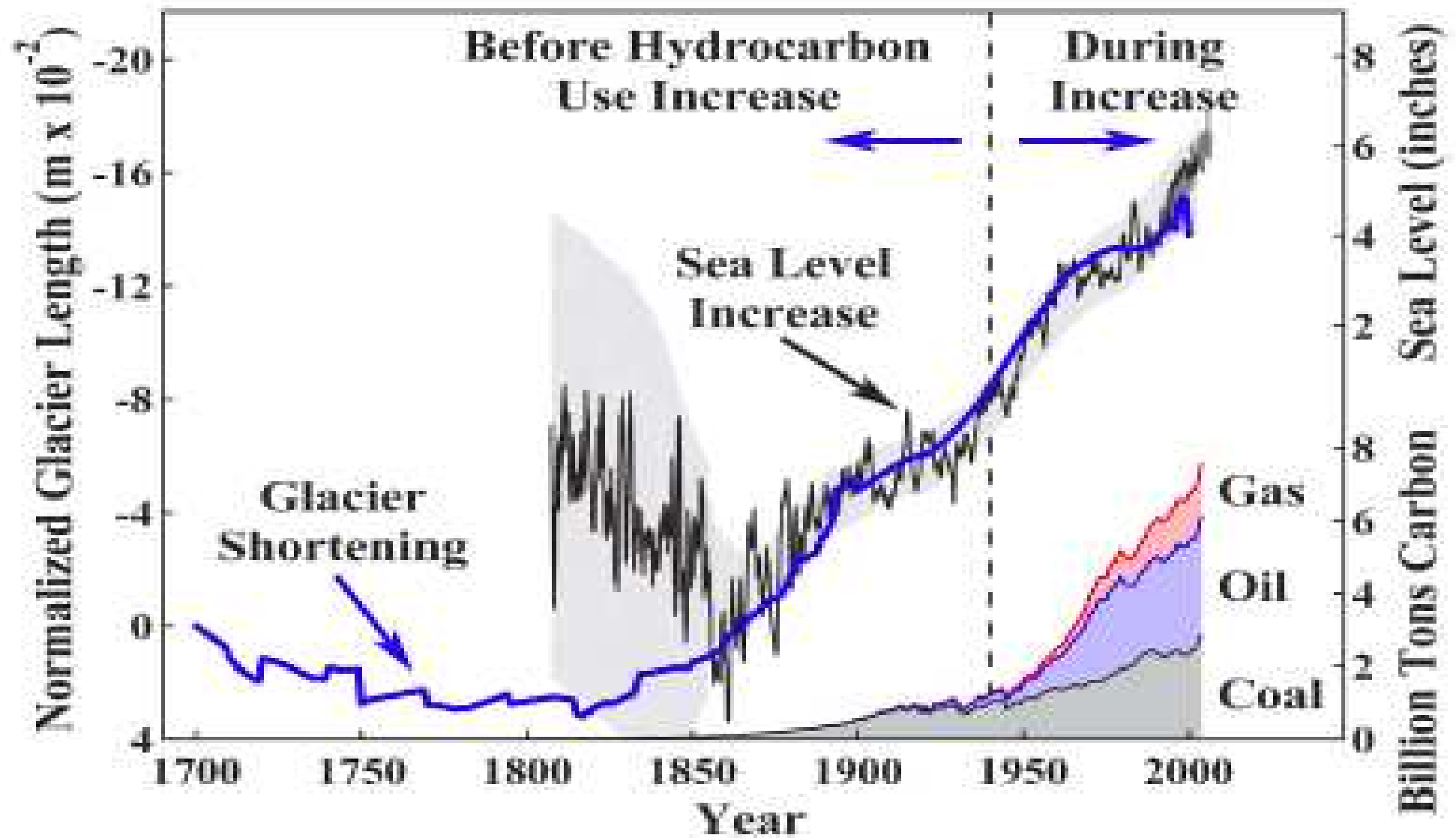


Figure 12: Glacier shortening (4) and sea level rise (24,25). Gray area designates estimated range of error in the sea level record. These measurements lag air temperature increases by about 20 years. So, the trends began more than a century before increases in hydrocarbon use.

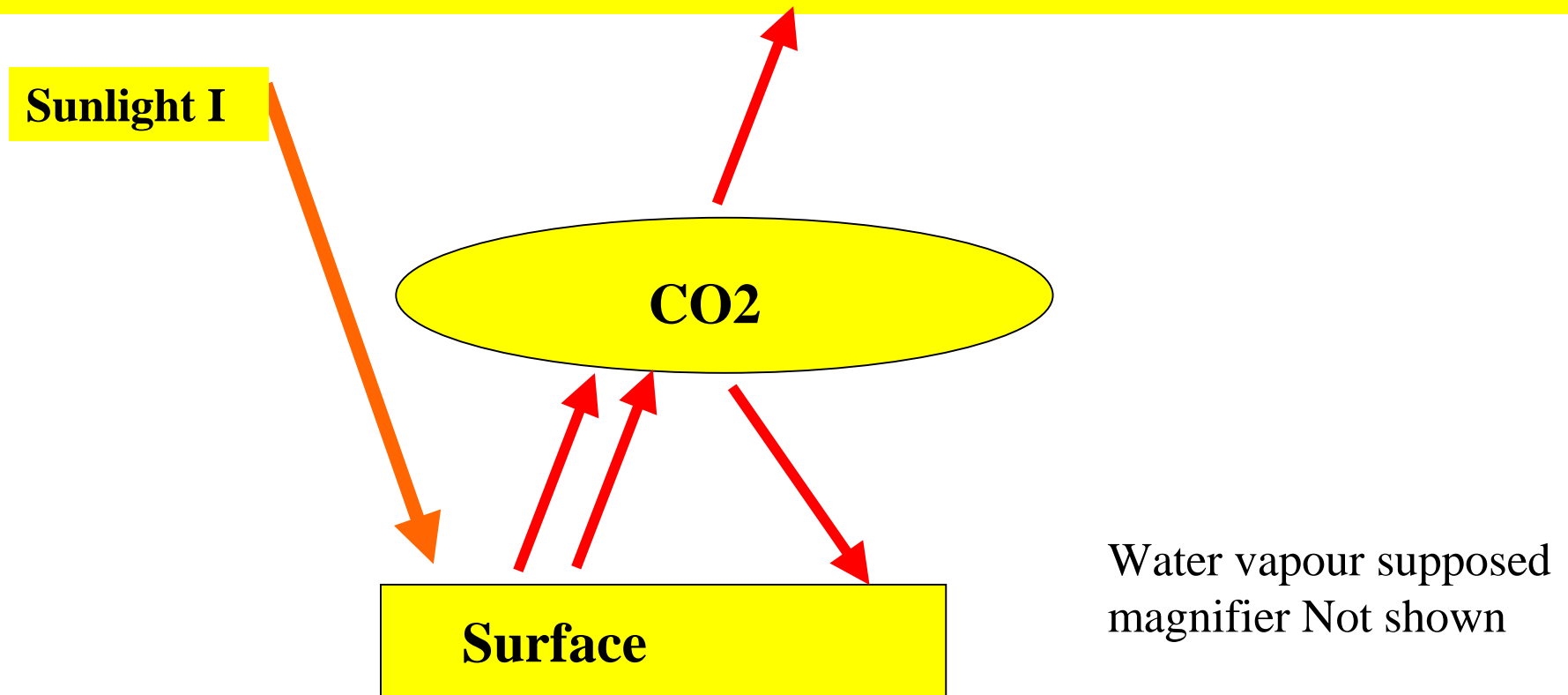


The Global Warmers' last gasps

| Claim | Refutation |
|--|---|
| “CO2 levels have never risen so fast or been so high” | <p>(i) Anything X zero effect = zero</p> <p>(ii) No evidence for this. There are no CO2 spikes in the past ice cores because CO2 is a gas and diffuses through centuries of ice. This current CO2 spike will be invisible in 1k yrs time.</p> |
| “ONLY CO2 can explain the temp rises” | <p><i>Really - like present world cooling!!??</i></p> <p><i>They have dropped this one!</i></p> <p>The graphs making this claim were smudge and fudge.</p> <p>Geomagnetic activity smoothed over 22yrs (solar magnetic period) fits temperature much better.</p> |
| CO2 effect is being ‘stored up’ & delayed. | <p>The <i>EVIDENCE</i> is that CO2 changes are generally driven by temperature. <i>This assertion is equivalent to ‘time will run backwards’.</i></p> |

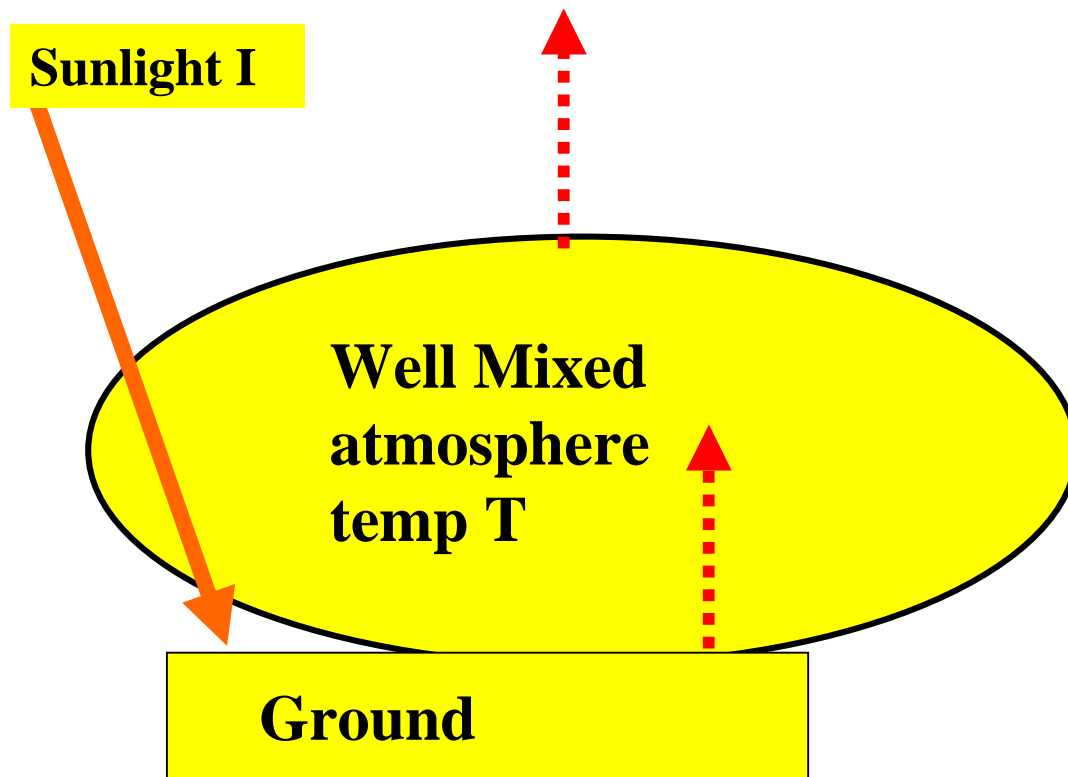
Why CO2 theory does not work 1

Basic idea of the process – as portrayed in media



Why CO2 theory does not work 2

It Cannot work in a uniform temperature atmosphere (not understood in media)



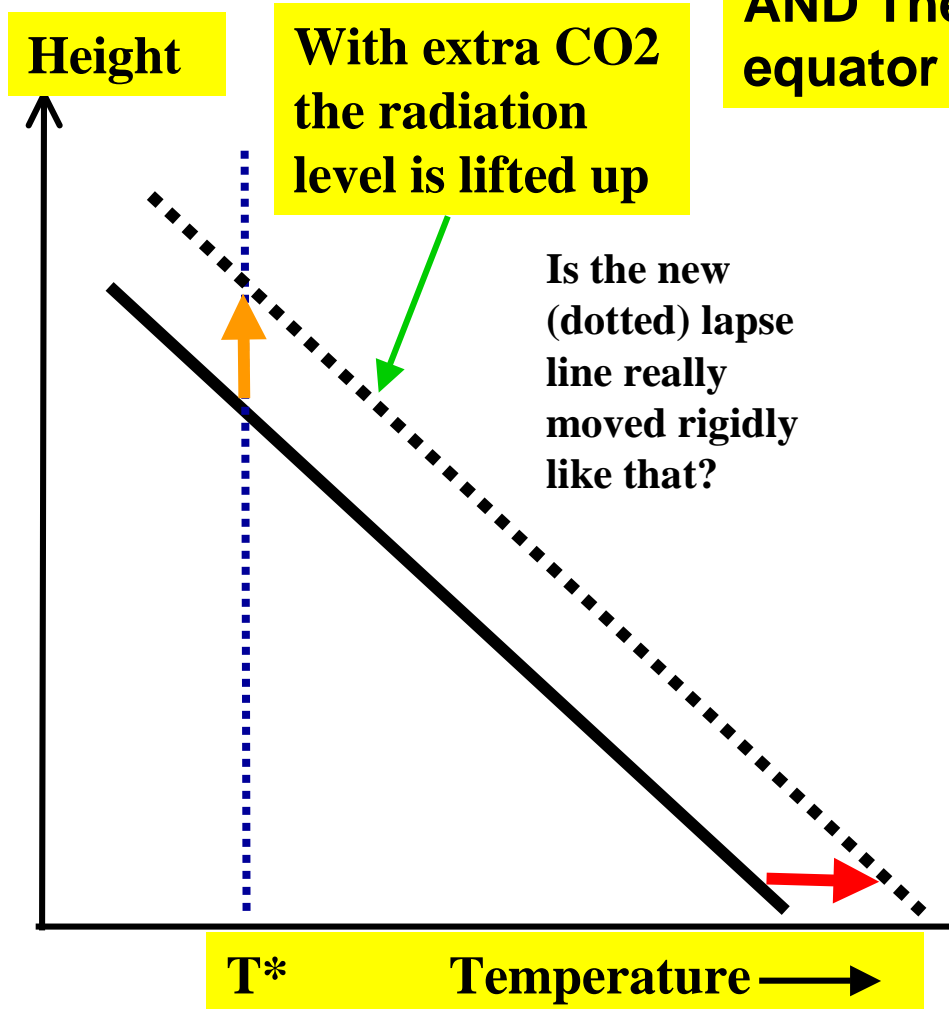
If temperature is uniform the radiation from the top (where more would come from if there is more CO₂) would be the same as from the bottom or the ground, ***So adding CO₂ to a uniform atmosphere has no effect.***

BUT the atmosphere is not uniform.....

Why CO2 theory does not work 3

The atmosphere is colder higher up due to gravity. More CO2 shifts the outgoing radiation level (Temp T^*) & 'lapse' line up . So it should get warmer there  & on surface. **BUT IT DOESN'T**

AND The GWers predicted **HOTSPOT** above the equator is **NOT THERE**. It's a **COLDSPOT** instead.

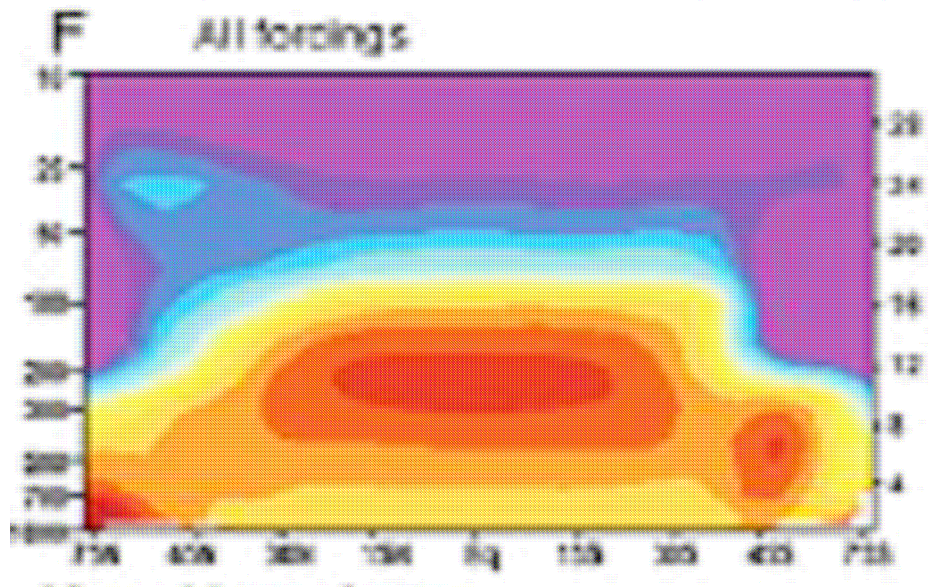


What's Up? PHYSICS Possibilities

Apart from change in IMPORTANT clouds/ reflectivity of atmosphere & evaporation from oceans!

1. A day night effect causes extra upper level cooling for more CO2
2. Changes in lapse rate curve due to changes in IR at different levels
3. **COOLING FEEDBACKS** - eg:
Transpiration **cooling by plants of the surface increases with CO2.**

Why CO2 theory does not work 3a



**THEORY of
HOTSPOT**

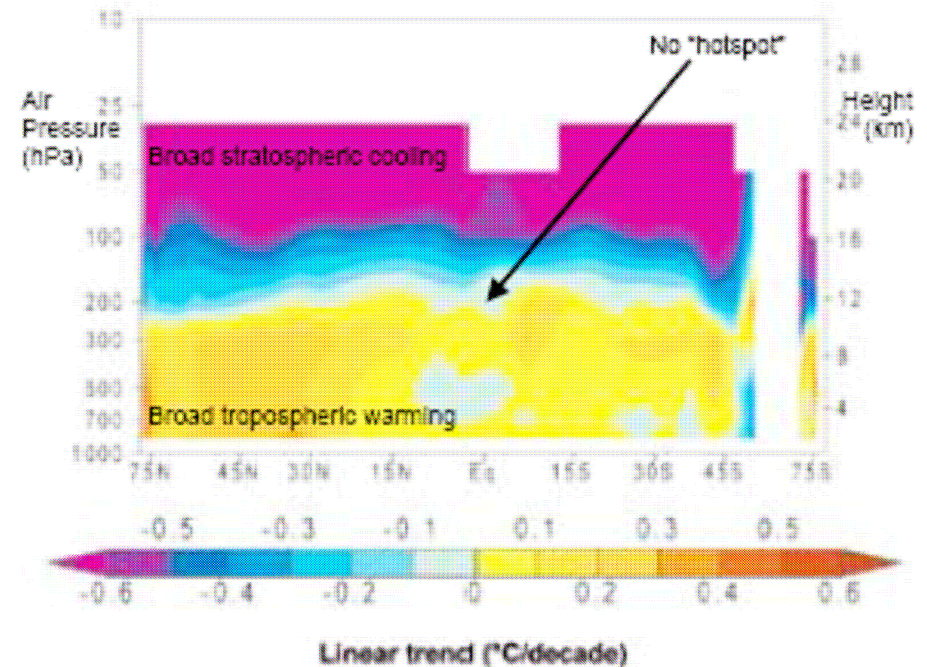


Figure 2: The observed pattern of atmospheric warming, 1979 – 1999, annotated.

What we *don't* see is a hotspot at the top of the tropical troposphere. There is no hotspot at all at 10 – 12 km up, from 23°N to 23°S: indeed, much or most of the troposphere warmed by more than the region where the hotspot would be.

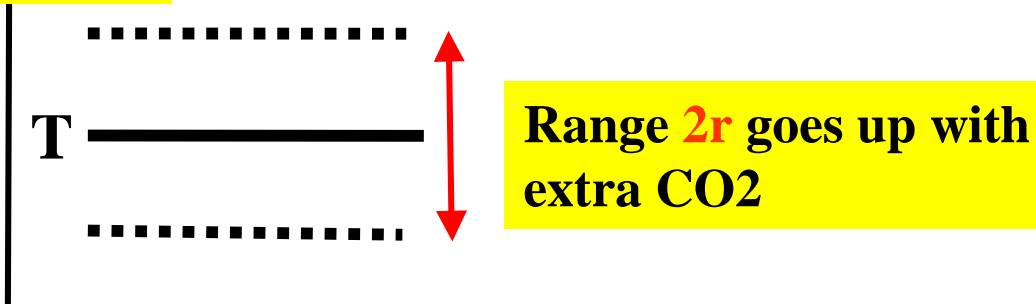
OBSERVED COLDSPOT

Info Thanks to: <http://sciencespeak.com/MissingSignature.pdf> by David Evans

Why CO2 theory does not work 4

In the real atmosphere there are day/night temperature fluctuations (eg in upper atmosphere). They are larger with more CO2 because CO2 (infra red absorber / emitter) gains & loses heat easier than N2 & O2 and so enables all the air to adjust quicker.

Temp



Average radiation out is $= 0.5 b [(T+r)^4 + (T-r)^4]$

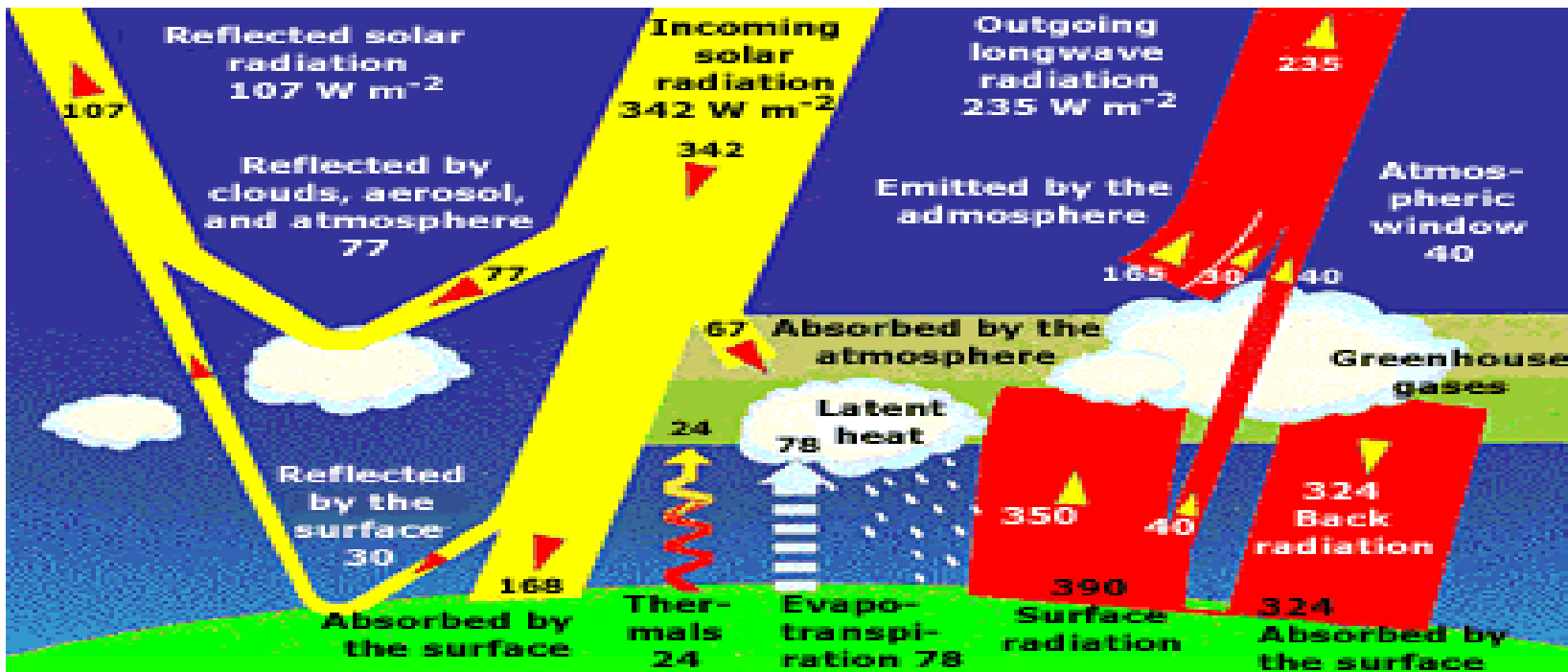
Work it out for the same radiation. For an increase Δr in half range, T will have to go DOWN:
$$\Delta T = - 3 \Delta r \times r/T$$

This could (help) lead to a **COLDSPOT** on the equator - which is observed! AND shift the lapse line (at upper level) back to where it was.

Why CO2 theory does not work 5

- further to Piers Corbyn International Climate Seminar Stockholm Sept 2006 **NB THIS DIAGRAM is not necessarily accurate**

AND if there is heating effect left Extra plant transpiration-Cooling in real world will negate all extra CO2 surface heating (or cooling)



10% or so of total evapo-transpiration heat removal (cooling) is transpiration from land plants.
 11% of 78W/m2
 = 8.6 W/m2

Doubling CO2 increases CO2 Greenhouse heating of Earth's surface by 3.8 W/m2. It also increases plant growth & therefore transpiration heat removal (cooling) by 43% to 45%. Now, 44% of 8.6 = 3.8 W/m2

3.8 – 3.8 = 0 So CO2 increase has no net effect on world temperatures.

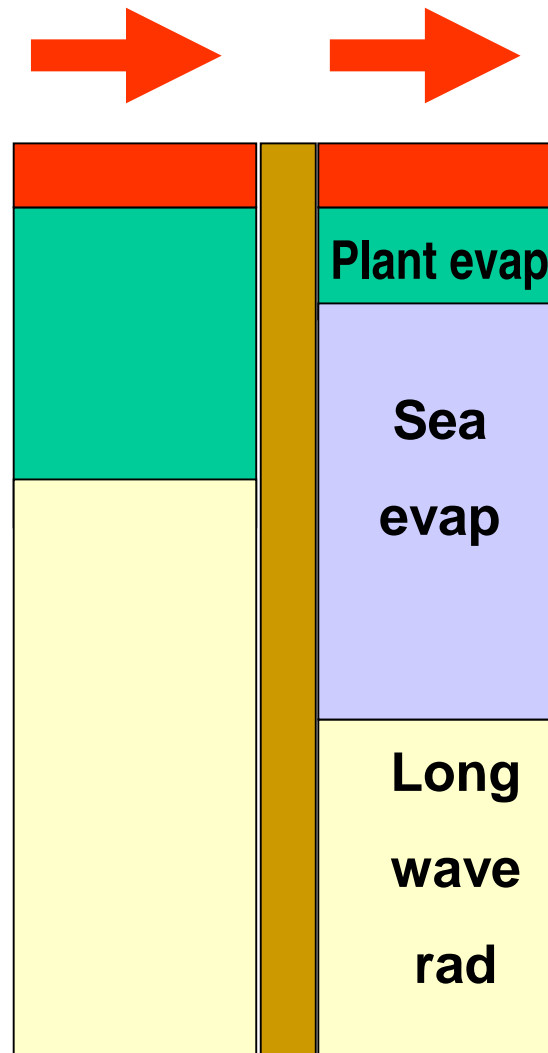
Heat flow in & out of Earth's surface

- Assuming effect of CO2 doubling reliable although that is questioned -



Extra Radiation (or **equivalent** due to atmospheric changes) **to surface** **INFLOW** =
To surface from GHE if CO2 doubled
=
3.8W/m²

GHE = Greenhouse effect
= H₂O (largest GHE) + CO₂ etc



Extra Photosynthesis transpiration
= heat OUTFLOW if CO₂ doubled
approx = 3.8W/m²
- taken up and away from surface

IF there are not enough plants to do the cooling the world gets warmer, Spring gets earlier and plants grow more and have a greater cooling effect. This feedback ensures that the two effects balance over time.

Solar Activity Rules!

For example April 29th
Coronal Holes led to
Increases in geomagnetic
activity & jet stream shifts &
predicted tornadoes,
thunder & massive floods
USA & Azerbaijan

(details WeatherActionNewsNo19)

Movie of jet stream

http://squall.sfsu.edu/scripts/nhemijetstream_model.html

- Archive jet stream – Animated Loop
– 2010 May 1st 0z - 4 days - 6 hr steps

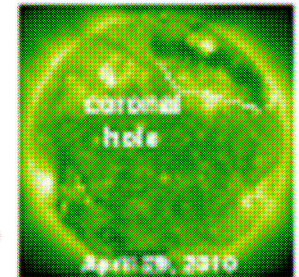
**SEE May 2nd / 3rd as Coronal
Hole effects hit – major Jet
over SE USA & mid East -
extra JS thrashing about
/break-up. Polar core wind
rotation changes direction
May 3rd**

**Coronal Holes drive Solar wind changes which
trigger PREDICTED thunder, tornadoes & floods**

The Chain of events...

1. Coronal Holes observed on April 29th appear to have been the
main trigger for the extreme events later in this series of predicted SWIPs. See
<http://www.nasa.gov/content/20100429main-coronal-hole-20100429>

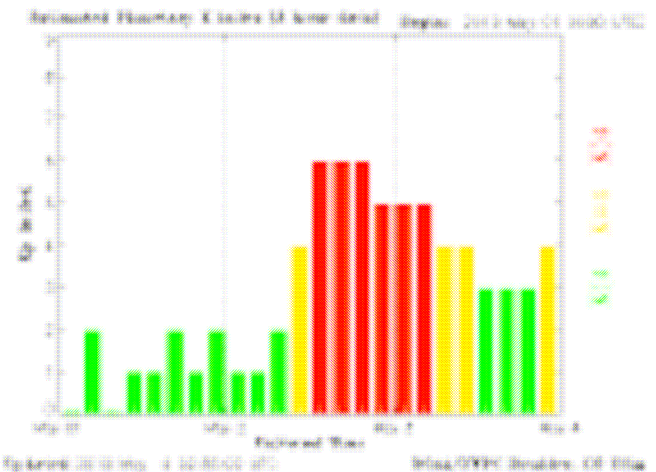
The NOAA warning of April 29th read: A solar wind stream flowing from the isolated
coronal hole could reach Earth on or about May 1st. Credit: STEREO-B/EUVI 17V



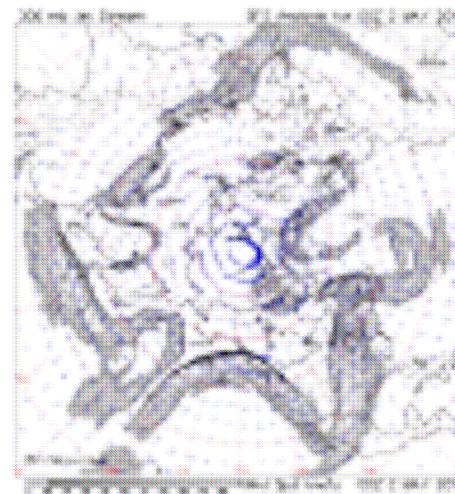
2. Major increases in Geomagnetic activity (right)

as the core excited solar wind strikes Earth's
magnetosphere and ionosphere.
Many other sub-events such as new solar flares
alongside Coronal Holes

<http://www.nasa.gov/content/20100429main-coronal-hole-20100429>
and ionospheric disturbances associated with extra
geomagnetic activity, also occur.



3. Jet Stream Shifts (below) in consequent predicted **SWIP's** - Solar Weather Impact periods (2nd to 4th) - see below



4. PREDICTED Extreme weather events across the World

Notice the greatly increased Jet stream speeds over SE USA
and Mid-East / Azerbaijan around 1st May (left) where
predicted extreme events were confirmed.

Visit http://squall.sfsu.edu/scripts/nhemijetstream_model.html for animated
movie of a latest development.

The jet stream changes corresponding to the predicted cold blizzard
blows over Britain & Ireland around 1-3 May are also apparent.

For full forecasts of World Extreme events, Europe Extreme events,
Europe Forecast pressure Maps and Britain & Ireland detailed
forecasts visit - <http://www.weatheractionnews.com/forecasts>

And the thunder, Tornadoes and FLOODS!!



<http://www.examiner.com/ExaminerSlideshow.html?entryid=1230132&slide=1>

Severe Floods North Mississippi May 2 confirm predicted effects of WeatherAction world-wide SWIP (Solar Weather Impact Period) May 2/3 and deluges from major SWIPs in preceding days.

Simultaneous Major Floods in Azerbaijan (below) and related floods in Riyadh Saudi Arabia also confirmed WeatherAction specific warnings.

<http://www.news.az/articles/14845>

<http://saudijians.org/2010/05/03/riyadh-crisis/>



Proven success of Solar Weather Technique

Met Office forecasted BBQ / Sizzling Summers 2007, 2008 & 2009
Piers Corbyn (WeatherAction) forecasted FLOODS months ahead for each of the three summers. So what happened ??!!.....



Tewkesbury Floods July 2007 (left) + County Down in Northern Ireland & Fife in Scotland struck by flooding on Wed 12 August 2008 + 7-year-old Max Preston, from Merseyside, paddles his kayak around tents on a campsite near Keswick 29 July 2009.

Britain and Ireland were 'under water' July 2007. Summers of 2008 & 2009 were also mainly very wet in Britain & Ireland (espec Nth Britain in 2009) contrary to the forecasts of Standard meteorology and in agreement with WeatherAction long range forecasts. WeatherAction also predicted much **detail** of the worst deluges from months ahead & out-ran TV forecasts from a few days ahead for details, **intensity and timing** of many deluges.

AND Winters 08/09 and 09/10 defied MetOffice mild prognoses & confirmed WeatherAction forecast for ICE & SNOW DELUGES....

It's not a cold
SNAP -
 It will go
ON & ON

It was predicted
 by WeatherAction
 6 months ago

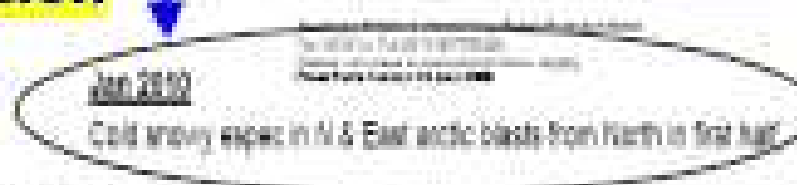
with
DETAILED TIMING of
Snow & blizzards pred later



WeatherAction
 Forecast dates
 from July 09



100% Accurate
 80% & 90% Forecast Dates
 Nov 2009 to Feb 2010



(Full Jan 2010 forecast in 'Timeline with periods' www.weatheraction.co.uk/Jan2010)
 Full details are normally produced at least 20 days ahead

- And **Red Warnings** that snow would be heavier than Met Office/TV forecasts in predicted short periods* (eg Jan 23, 5/6, 8/9.....) (pre-emptive snow map)
- *These periods are called SNIPS - Snow Weather Impact Periods and mean that those periods will be less or heavier than predicted by the Met Office compared to the short term forecast. This means that snow due on 5/6 in England will not be the 10 inches* tops predicted by Met Office but more like 2 Feet.
 - * Plus despite weather action's WeatherAction mean that that forecast prediction period **Frid 8th & weekend 9/10th are likely to suffer even greater blizzards & snow deluges.**

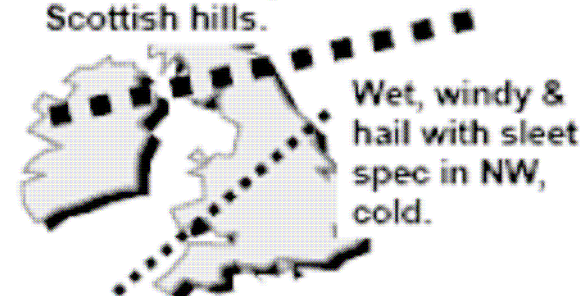


27-31 MAR / 1 APR BC = 70%

Solar Factors: **Significant SWIP 27th-29th & also 31st / 1st Apr**

Likely possible weather map scenario:
 Cyclonic/Northerly with Atlantic ridge receding and fronts from North West (& deep low attack from NorthWest) later.

Heavy showers & windy turning wintry with significant snow on Scottish hills.



Heavy showers & windy. Hail, sleet & snow in North.

Moderate / strong later in North / West.

Cold

Cloudy / dull



The upturned coach which crashed 10ft into a river from black ice covered in fresh snow on a Lancashire bridge 03.50am 21 March. Natasha Jade Eaton, 17, from Clighorn, near Lancs died in the crash.
Why Wasn't that Lancashire Road bridge called 10ft 21 March? BBC challenged to ask the questions which expose the truth.

<http://www.bbc.com/news/uk-17484444>

27-31 MAR / 1 APR BC - 70%

Solar Flares: Significant SWMP 27th-29th & also 31st / 1st Apr

Lowy pressure system may become Cyclonic/Northerly with Atlantic ridge receding and fronts from North West (A deep low attack from NorthWest) later.

Heavy showers & windy turning wintry with significant snow on Scottish hills.



Heavy showers & windy. Hail, sleet & snow in North.

Moderate / strong gale in North / West.

Cold.

Cloudy / dull

9 – 11 JUNE 2010 B = 75%

(similar to 45/60/90d, more detail)

Solar Factors: **EA espec around 8/10th**

Likely possible weather map scenario:
A new active Atlantic Low, fronts
attack from West; blocked to
North/East.



Notable East & Nth vs Scot + 3th + Ire contrasts. Warmer & sunny North/East Britain + NE Northern Ireland. West / South-West thundery and humid with deluges around 9th /10th especially in SW of Northern Ireland, South Eire, SW England & SW Wales.

South-Easterly, strong in South-West parts.

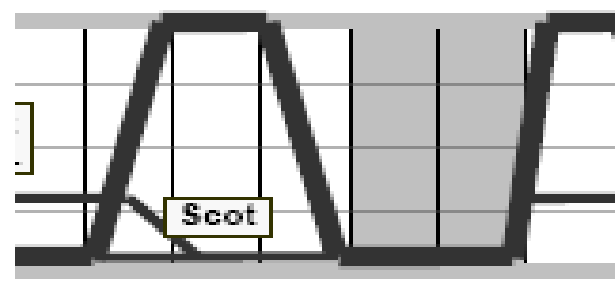
Warmer

Clear in Scot + North-East, cloudy South.

| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|----|----|----|----|----|----|----|
| 80 | 75 | 75 | 75 | 70 | 70 | 75 |

NE Flash Floods

, W dry Thunderstorms Dry Thun delu

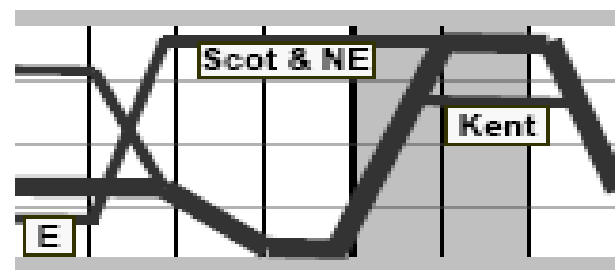


Locally strong

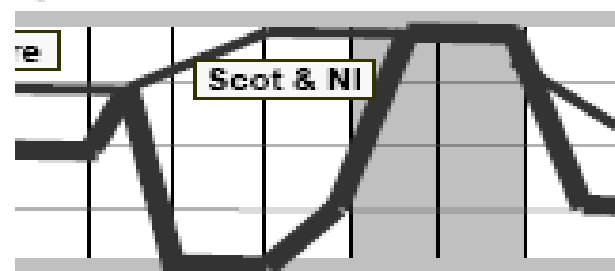
9/10th High

12-14 V High

/ & Ire Cooler except NE



right Sunny





What Next for USA?



USA Long Range Extreme events forecasts & General Scenario prognoses. MAY 18th to JUNE 14th 2010 SWT25E Issued 13 May 2010

(General confidence 85% timing normally accurate to about 1 day)

SWIPs as in Europe Forecast Map options chosen 29 March 2010 & used in B & I 45d & 30d forecasts.

Information

1. WANews No 19 on important predicted extreme events early May (Floods & Tornadoes USA, floods Azerbaijan) following Coronal Holes April 29th - <http://www.weatheraction.com/docs/WANews10No19.pdf>
2. Events in USA – Tornadoes, hail and thunder deluges especially around 7th & 11th (Oklahoma) and (coming) 13th-16th May are as we would expect although no forecasts issued for 4th-17th May.
3. Tropical Storm formation and rapid development forecasts for Atlantic & East Pacific are issued separately.

MAY 18-21 Sharp (α type) SWIPs Red Weather Warning esp 18th & 21st (BC = 70% confidence period)

- Severe deluges, FLOODS, hail thunder and tornadoes MidWest, South-central & SE USA.

LIKELY PRESSURE general scenario: Powerful Low South USA heading to NE USA as ridge builds in central USA from the North and it turns generally colder especially nights in Central parts later.

MAY 22-26 (B = 75% confidence period) LIKELY Pressure general scenario: Quieter. High Pressure central USA with cold nights. Low pressure cloud and showers NE USA.

MAY 27-30/31 Sharp (α Δ type type) SWIPs TOP Red Weather Warning (BC = 70% confidence period)

- A LARGE STORM - Widespread Severe deluges, MASSIVE hail thunder and WIDESPREAD POWERFUL DANGEROUS tornadoes – espec MidWest, Central, South-central & SE USA.

LIKELY PRESSURE general scenario: Extensive ACTIVE Low Central USA and probably Low also off Florida (NB see Tropical Storm formation forecast this is likely to also become the first ATS of season). Prob Higher pressure building over Great Lakes & South of there later.

JUNE 9-14 esp 12-14 Sharp (α type) SWIPs TOP Red Weather Warning esp (BC = 70% confidence period)

- WIDESPREAD SEVERE FLOODING Severe deluges, hail thunder and some tornadoes Mainly NorthEast, MidWest, Central & South USA.

LIKELY PRESSURE general scenario: Changing situation but prob Rockies ridge (cold air) + Powerful Low central USA + separate Low NE USA.



What for BI & Europe?

Interim summary

MAY 18-21 - Major SHARP SWIP TOP (α type) especially 18th & 21st. RED WARNING

- Most of Sweden & Norway (inc Nordpool area), Denmark, Germany, Low Countries & most of France, Switzerland.
Heavy thundery deluges hail and local floods and tornado events in places.
- Italy, Corsica, Sardinia, Gulf of Genoa, NW Balkans, Switzerland.
Major thunderstorms, waterspouts /tornadoes likely, local floods.

MAY 30/31st - Major Top $\alpha\Delta$ type SWIP . RED WARNING

- South Sweden & Norway (inc Nordpool area), Denmark Germany, Low Countries, France, Switzerland, Italy Corsica, Sardinia, Gulf of Genoa, NW Balkans.
Heavy thundery deluges hail, local floods and tornado events in places.
- Ukraine, Belarus and much of East Europe.
Major heatwave likely.

June Brit showery & cool some deluges & **floods**. JSS (Jet Stream South). Scand wet / v wet. France finer

July

Aug

Sept

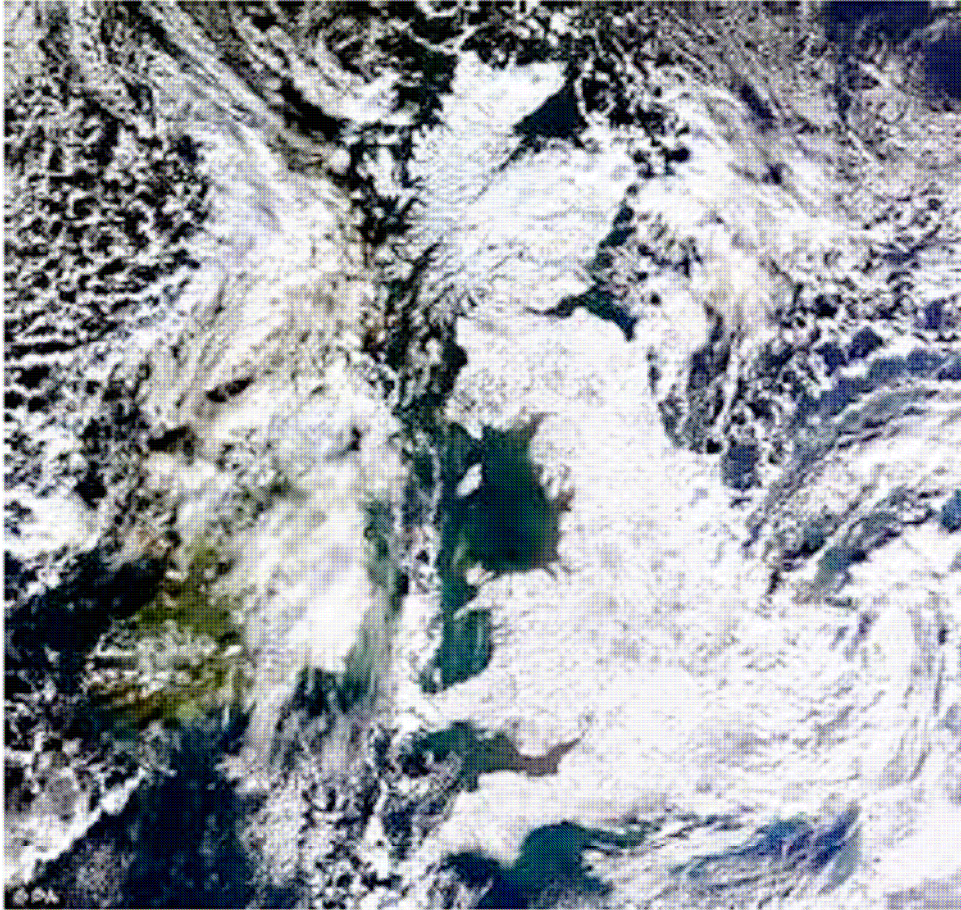
Oct

Nov

Dec

Forecast Notes covered – For purchase please visit
<http://www.weatheraction.com/member.asp>

Gross damage, suffering & loss of life is and will be caused by Climate Change Policy



Snow covered Britain & Ireland from Space (NASA photo 7th Jan 2010) confirming WeatherAction Long range forecast issued July 2009, ahead of all others.

If Britain Ireland & Europe relied on wind farms the lights would go out every winter – and there will be more cold ones!

The Global warmers silly mild winter forecast led to road-salt running out, extra accidents & road deaths

And there is Biofuels (burning food), Carbon trading, job destruction for Carbon handouts (eg Redcar).....

What to do? – 4 point plan



1. ENJOY life! Enjoy the planet!

Don't feel guilty about 'carbon footprints'. CO₂ is the Gas Of Life (GOL)! More GOL increases the bounteousness of plant & animal life. GOL (CO₂) IS NOT A POLLUTANT.

2. ACCEPT Man can't change Climate!

The Problem is Climate Change POLICY.

'Climate Science' lacks integrity. Science is not driving policy. It's the other way round!

Prove and predict. Basic standards of science should be applied in Climate science.

3. PREPARE for the end of Carbon Games

Carbon Trading & all 'Green' games will end. Make new business models to BE AHEAD OF THE GAME. **Be honest Green** - Stop real pollution - Defend biodiversity - Go for cheap energy and Accountable Evidence-based science & policy.

4. USE Proven forecasts – Reduce losses!

Support a new World effort to predict & prepare for all natural disasters

What to do? Local deal



USE Proven forecasts – Reduce losses!

***If you have found any of the information so far useful -
then BUY!***

***If many local farmers order full long range forecasts we
can reduce the price to maybe 1/3 normal (= 67% off)***

Thank you

Solar Activity drives Climate

– Oman stalagmite data 9.5kyr to 6k yr before present

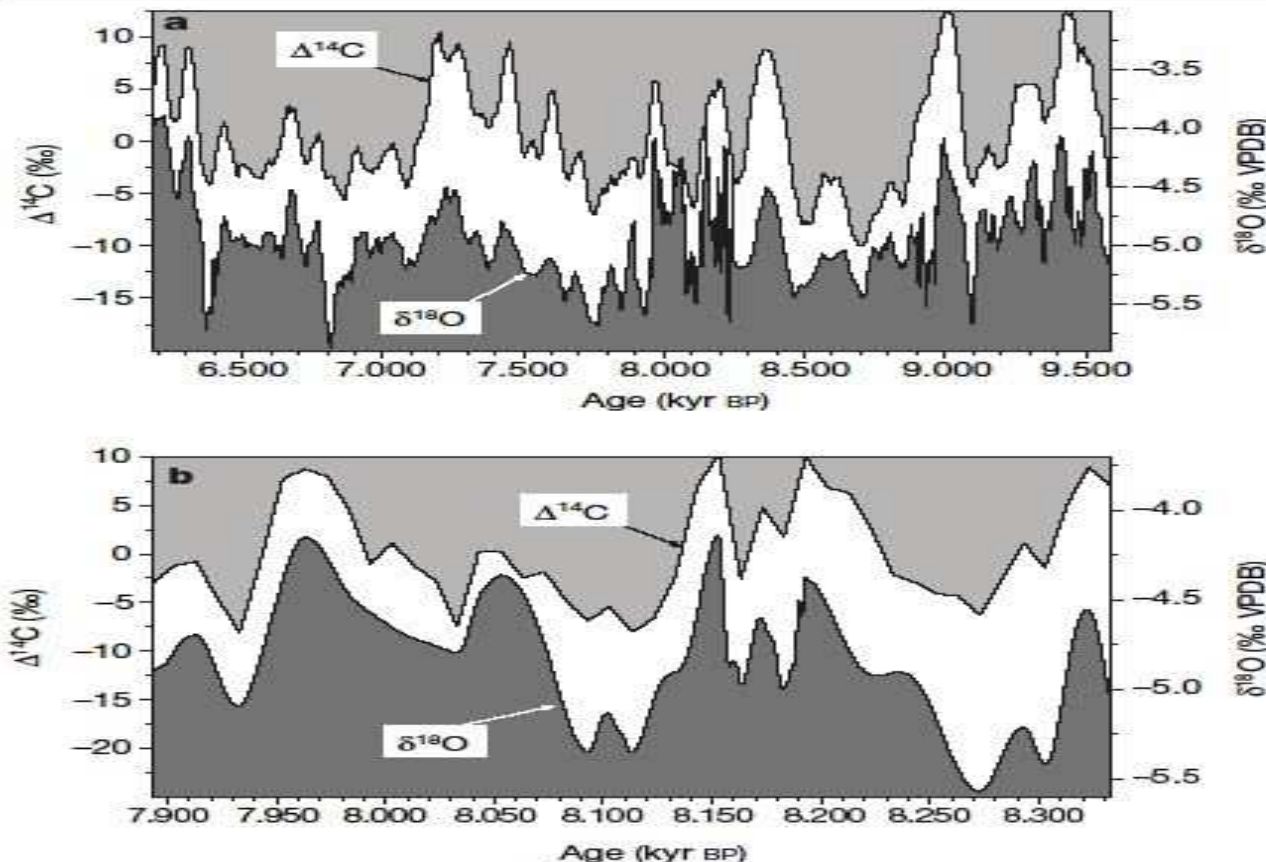


Figure 2 Profiles of H5 $\delta^{18}\text{O}$ values and atmospheric $\Delta^{14}\text{C}$. **a**, The entire H5 record (826 samples); **b**, the high-resolution interval. Both profiles in **a** were smoothed with 5-point adjacent averaging for better visual comparison. The $\delta^{18}\text{O}$ profile in **b** was filtered with 7-point fast Fourier transform smoothing (cut-off frequency, 0.1 yr^{-1}). The correlation coefficient of the unsmoothed data is $r = 0.60$, $P(>|r|) < 10^{-8}$ in **a**, and $r = 0.55$, $P(>|r|) = 1.1 \times 10^{-4}$ in **b**. Because of the apparent good relationship between the two profiles, we fine-tuned the peaks of the $\delta^{18}\text{O}$ age profile to the peaks of the $\Delta^{14}\text{C}$ record. The corrections of the Th–U timescale are shown in Fig. 3.

Growth layers of stalagmite in a Cave in Oman show:

Close correlation between Particles from the Sun* & Temperature**

{*C14 proxy from Cosmic Ray Flux which is reduced by Solar magnetic-particle activity.

**O18 isotope is Climate proxy}

Similar correlations exist over the last 500 Million years

See Neff et al, Nature May 2001; Veizer, Geoscience Canada March 05

Proxies drivers and modulators

Beware confusion of cause, effect & association!

Increased solar (magnetic) activity excludes more cosmic rays (extra-solar high energy) from solar system and Earth. Cosmic rays convert N14 to C14 so C14 is a reverse proxy for solar activity.

$\Delta C14 = - \Delta \text{Solar activity} \Rightarrow 11\text{yr signal}$

Also note solar Cycle length = 1/ solar activity approx.

Geomagnetic activity = Solar activity <11yr>

X Earth magnetic cross section (depends on slow changing Earth's magnetic field) \Rightarrow 11yr signal

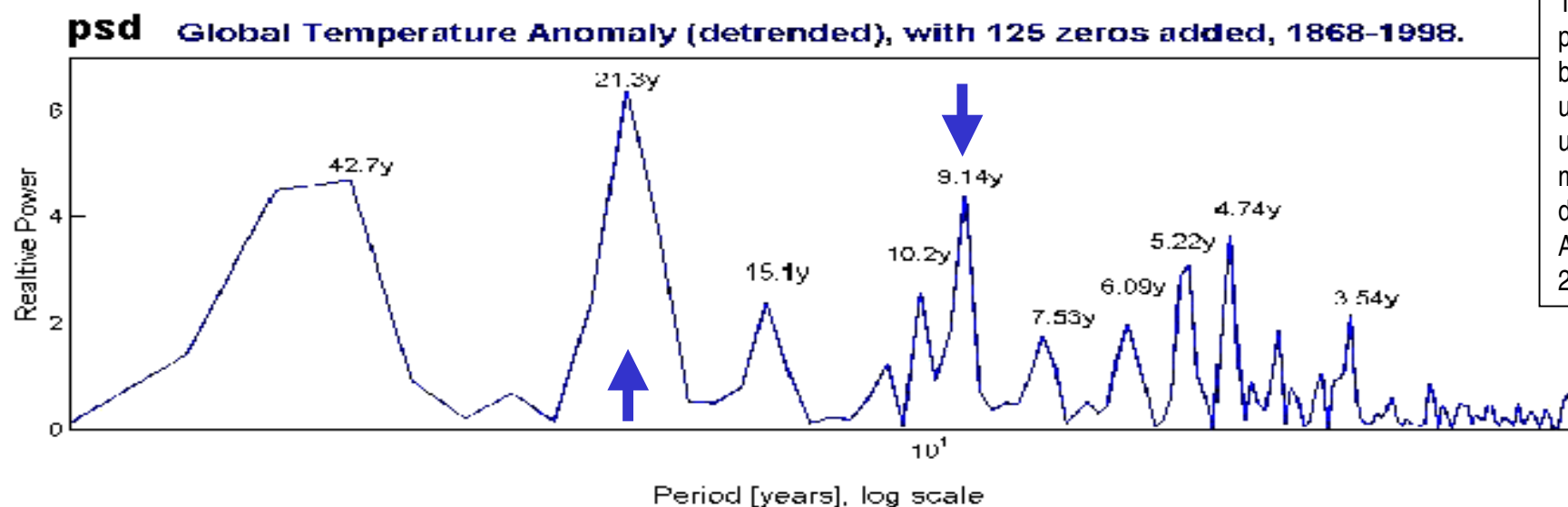
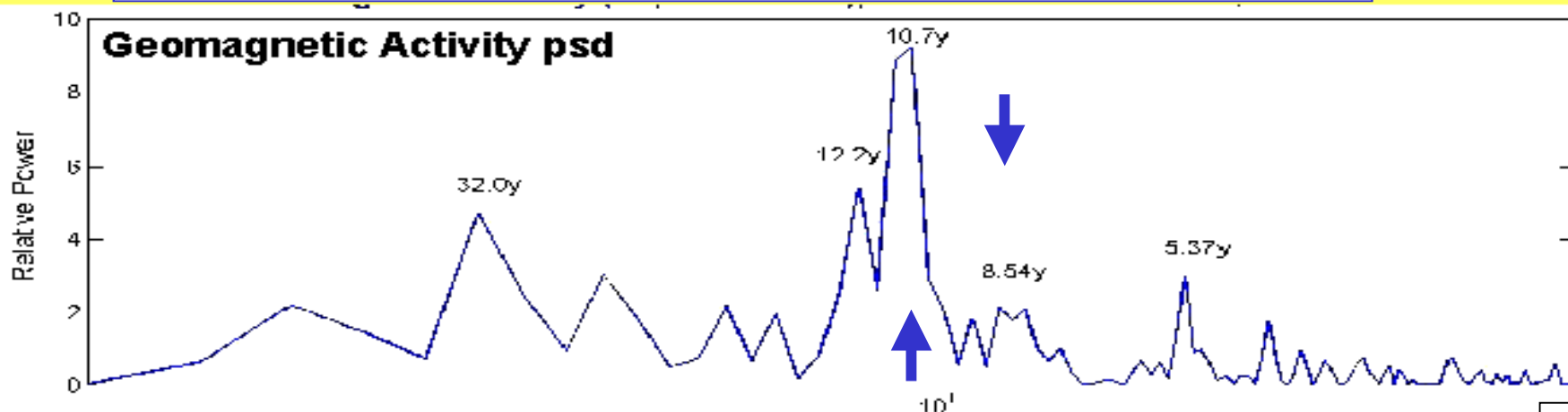
Temperature = Particle EFFECT

= Geomag activity X magnetic linkage to lower atmosphere via poles etc <22yr> \Rightarrow 22yr signal

Solar magnetic cycle (22yr) smoothed temps and geomagnetic activity move together better than anything else.

Cycles of variation - PSDs - of Solar Particles {Geomagnetic Activity, aa,detrended} & World Temperatures (125 zero's added) 1868 - 1998

Peaks on this plot mark the main periodicities present in the data



NB
These
psds are
being
updated
using
monthly
date to
Aug
2009)

Piers
Corbyn,
Weather
Action

The largest and highly significant signal in World Average Temperature records is the Solar-Magnetic, or Hale Double-sunspot cycle; which has averaged 21 to 22 years since 1868

What Does & Doesn't drive Climate

One **X** and you are out!



| Evidence → Candidate ↓ | Temps 1975 to 2000 (smoothed) | Temps last 100 or 1k or 10kyrs | Temp last 25k yrs | 22 yr signal world temps | 60 yr signal PDO & World | ✓ = Might explain That evidence X = Doesn't work |
|--|--|---|-------------------------|-----------------------------------|-----------------------------------|---|
| CO2 | ✓ | X | X* | X | X | Shows on long time scales CO2 is driven BY temps |
| (Extra solar) Cosmic Rays (avoid confusion with solar muons etc) | ✓ | ✓ | ✓ | X | X | NB Total Energy flux of solar particles ~300 times Cosmic rays. |
| | See 13th May 2009 WeatherAction News No 30 = http://www.weatheraction.com/displayarticle.asp?a=34&c=1 | | | | | |
| Light variation in solar cycle | ✓? | ✓? | ✓? | X | X | Light variations in solar cycle less important than solar magnetic (but UV important) |
| Solar Activity & MAGNETIC Link/modulation | ✓ | ✓ | ✓ | ✓ | X | ALSO SWT 25d - involves SLAM - & has predictive powers 12 months ahead |
| Solar AND LUNAR Amplification Magnetic (SLAM) Process | ✓ | ✓ | ✓ | ✓ | ✓ | |

So what drives world temperatures?

| | | | | | | |
|------------------------|---|---|----------|---------------------------|----------|-----------------------------|
| World Temps | = | Solar Activity (level & Timing) | X | Magnetic Links | X | Lunar Modulation |
|------------------------|---|---|----------|---------------------------|----------|-----------------------------|

(11yr)

22yr

(18.6/9.3yr)

SLAM gives the 55-60yr signal

Need

Known

Can estimate

By What Agencies & Mechanisms ?

The **Total Weather State** of the earth at any time is essentially defined by its '**SWT**' State

SWT = (Solar activity *indicators*) x (sun-earth Magnetic links) x (stratospheric winds) x (season) x (lunar modulation)x(etc)

→ **Total Weather State = TWS**

or **SWT** → **TWS**

The **SWT State** (= a set or 'vector' in SWT phase space of **Weather Action Indicators**) is predicable forwards & backwards in time!

A specific SWT state in the future will in general have corresponding similar SWT states at times in the past.

The weather EVENTS in those past states and times are similar to what will happen in the future and such LOOK-BACKS (events or short periods) are therefore PREDICTORS for future weather.

***Temps drive CO₂ as ice ages end.
Fast CO₂ changes (like now) are hidden***

***At the end of the
last ice age
temperature
changes LEAD
CO₂ by 800yrs***

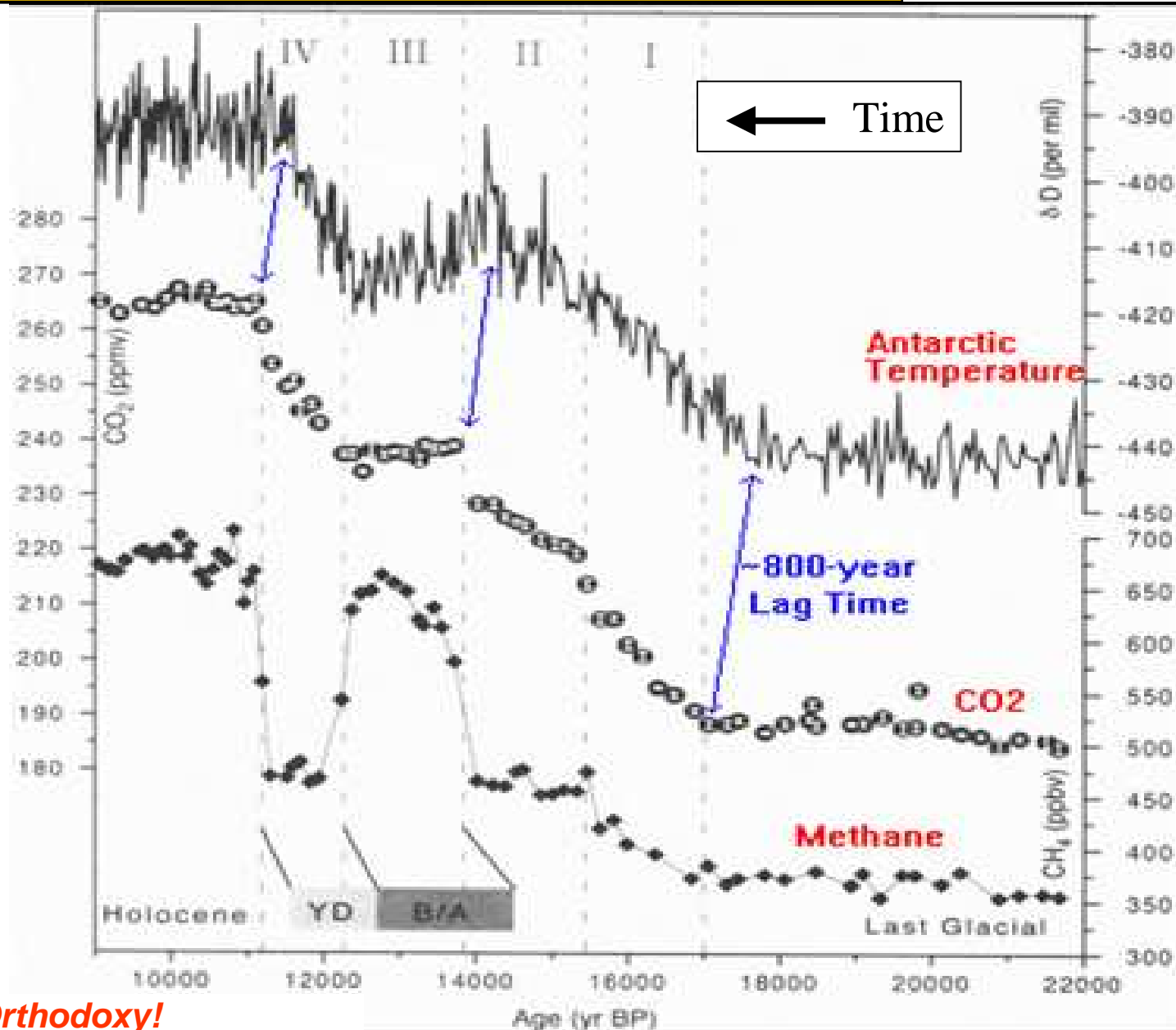
Similar leads are in Antarctic
Termination III 240kyr ago
(Caillon et al Science Mar 03)

***CO₂ diffuses
through ice***

CO₂ data points are at best 200yrs apart and
show only small variations between points.
This is because CO₂ is a gas and diffuses into
centuries of ice layers. The present CO₂ spike
will amount to a mere blip in 1,000yrs time.

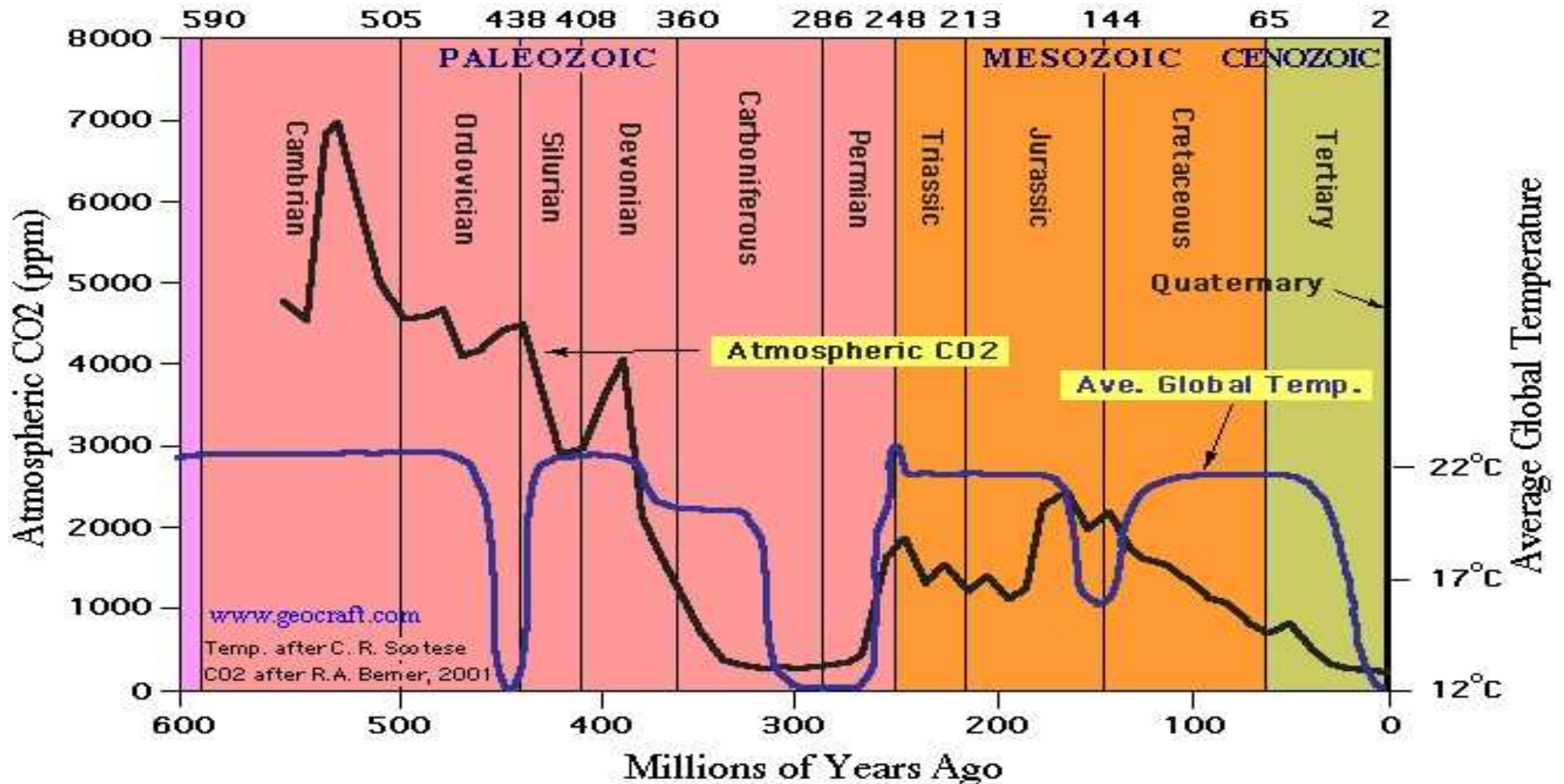
***There is No
Evidence that the
present CO₂ rapid
rise is unique.***

Inconvenient Truths for GW Orthodoxy!



Global Temperature and Atmospheric CO₂ over 600 Million yrs

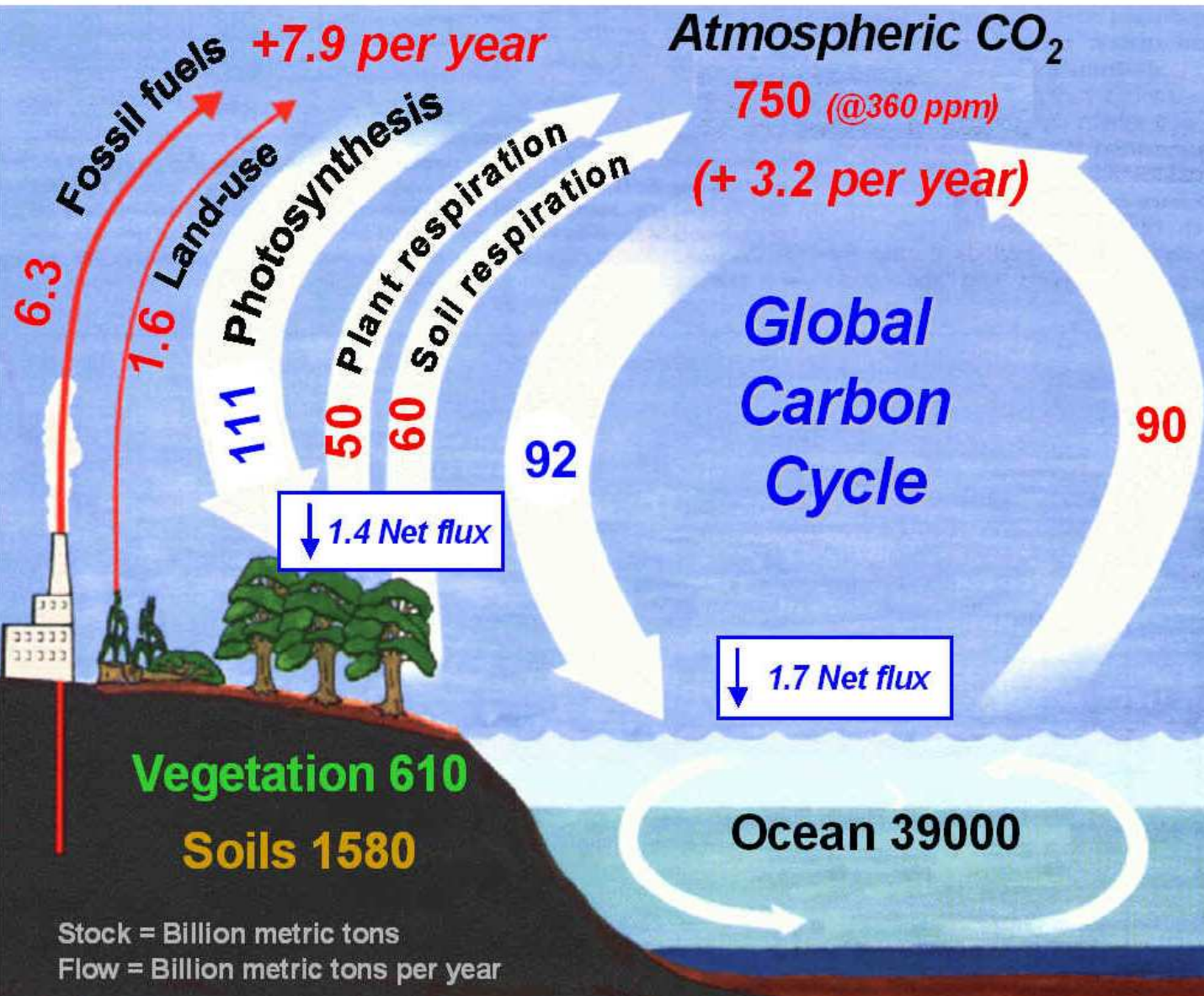
- No Evidence of CO₂ driving temperature



Late Carboniferous to Early Permian time (315 million years ago - 270 million years ago) is the only time period in the last 600 million years when both atmospheric CO₂ and temperatures were as low as they are today (Quaternary Period). At no point do temperature and CO₂ levels relate. Temperature after C.R. Scotese <http://www.scotese.com/climate.htm> CO₂ after R.A. Berner, 2001 (GEOCARB III)

Ocean Acidification – a case of ‘GW3’!

- Hysterical nonsense & a research grant scam
- Man might be polluting the seas in many ways but CO₂ isn't one of them



Facts

Sea life did not die out in Jurassic times when CO₂ was 5x present or in Devonian times & before when it was 10x present. In fact it boomed!

Official figures show at current rates it would take 23,000 years for Ocean CO₂ to double even ignoring all the myriad of buffering effects, and the fact that this would use up all atmospheric CO₂ 50 times OVER!!!

Arctic Ice & Polar Bears – More ‘GW propaganda of the 2nd kind’

-The true story of pack-ice off Iceland according to HMSO Official Reports-

All changes in the Arctic & Antarctic follow natural highly variable patterns. They are not new or special and have been recorded for over a thousand years and have been very well known to the British navy for a long time and available in the Met Office library**.

The Antarctic has been cooling for decades & the Arctic has started to cool in the last year or two. Ice break-up of is a natural process and has been happening for millions of years - before media noticed.

(**HMSO 1963 Weather In the Home Fleet waters Vol 1 Northern Seas part 1 table XV page 246 shows the very high variability of ice off Iceland (eg) since 1900 and the long periods of change of two decades or more. Figures 124 & 125 (page 256) show that historical records indicate there was no pack ice off Iceland for about 180 years from 1020AD to 1200AD yet there was plenty of pack ice through the rapid expansion of industry since 1900 (Fig 126 page 257).

Weeks per year

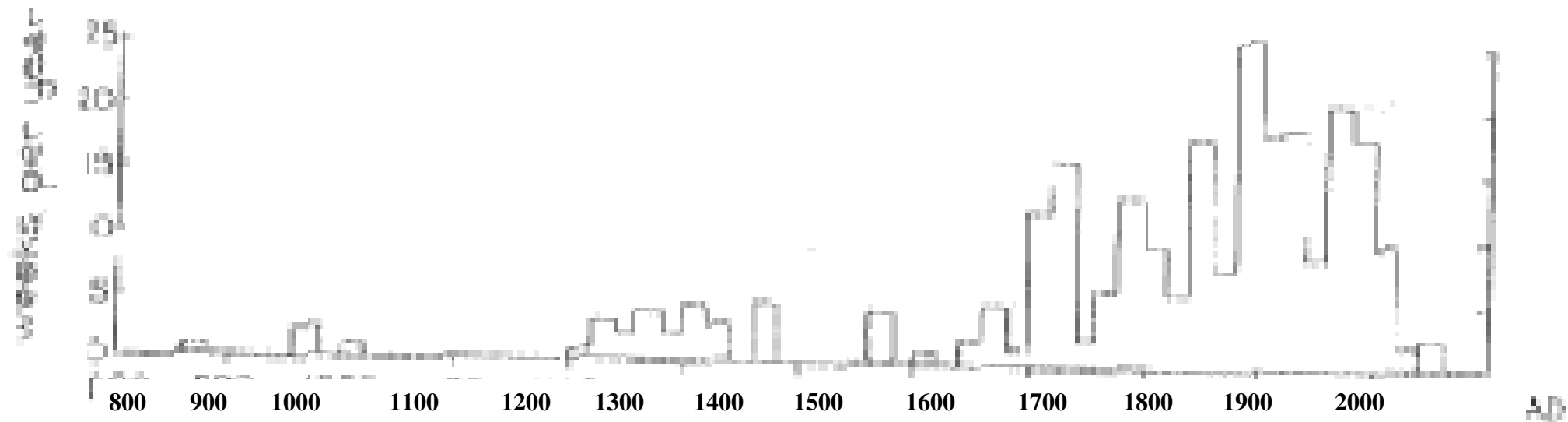


Figure 125. Twenty-year averages of polar ice at the coast of Iceland (after Koch⁷³)

Dashed outlines indicate incomplete data for the 20 yr period, incidence shown being the lowest possible result for the period.

Weather in 21st Century - Answers

The weather extremes of recent years are part of natural essentially predictable processes.....

The slow sea level (volume) rise - 6 inches per century - will continue even as world surface cools. It is just ocean volume expansion due to ongoing warming of the deep ocean (which is still cold) since the end of the last ice age 10,000 years ago.

{notwithstanding changes in ocean floor shape such as the appearance of trenches and sumps in the Pacific as the Indian sub-continent pushes up the Himalayas}

Weather in 21st Century - Answers

The weather extremes of recent years are part of natural essentially predictable processes*

The severe summer floods of 2007 & 2008 & 2009 were like the very wet summers of 1875, 1876, 1877 and 1879 - *associated with the approx 132 yr pattern : $6 \times 22 = 132$, $7 \times 19 = 133$*

The 2007 & 2008 & 2009 summer floods were predicted in detail by the SWT. This flood-likely summers situation *can* continue for a few years but is SUBJECT TO other conditions (SWT) being satisfied.

***As first explained by Piers Corbyn to the Imperial College Union President's centenary dinner 27th July 2007.**
