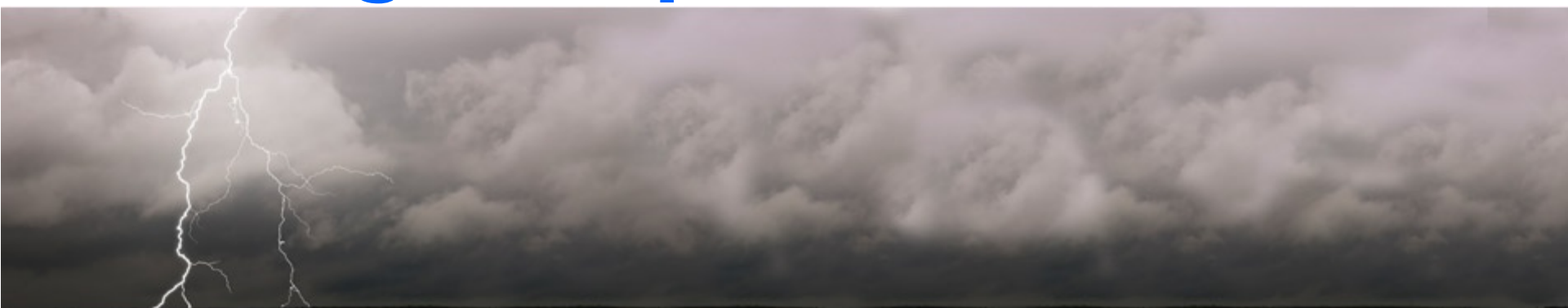
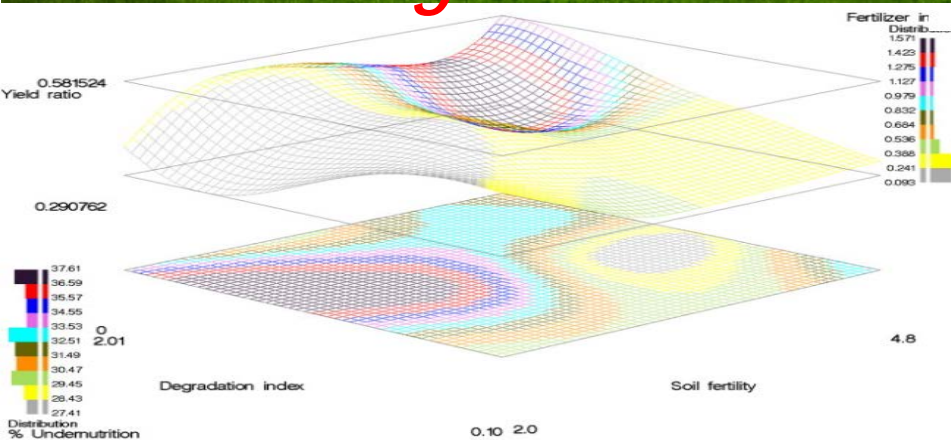




# Strategic Impacts To Fertilizer



*Threatening & Favorable Global Weather Conditions*



Special Thanks To Dr. Harry Vroomen, TFI,  
our sponsors, Glen B., and of course YOU!

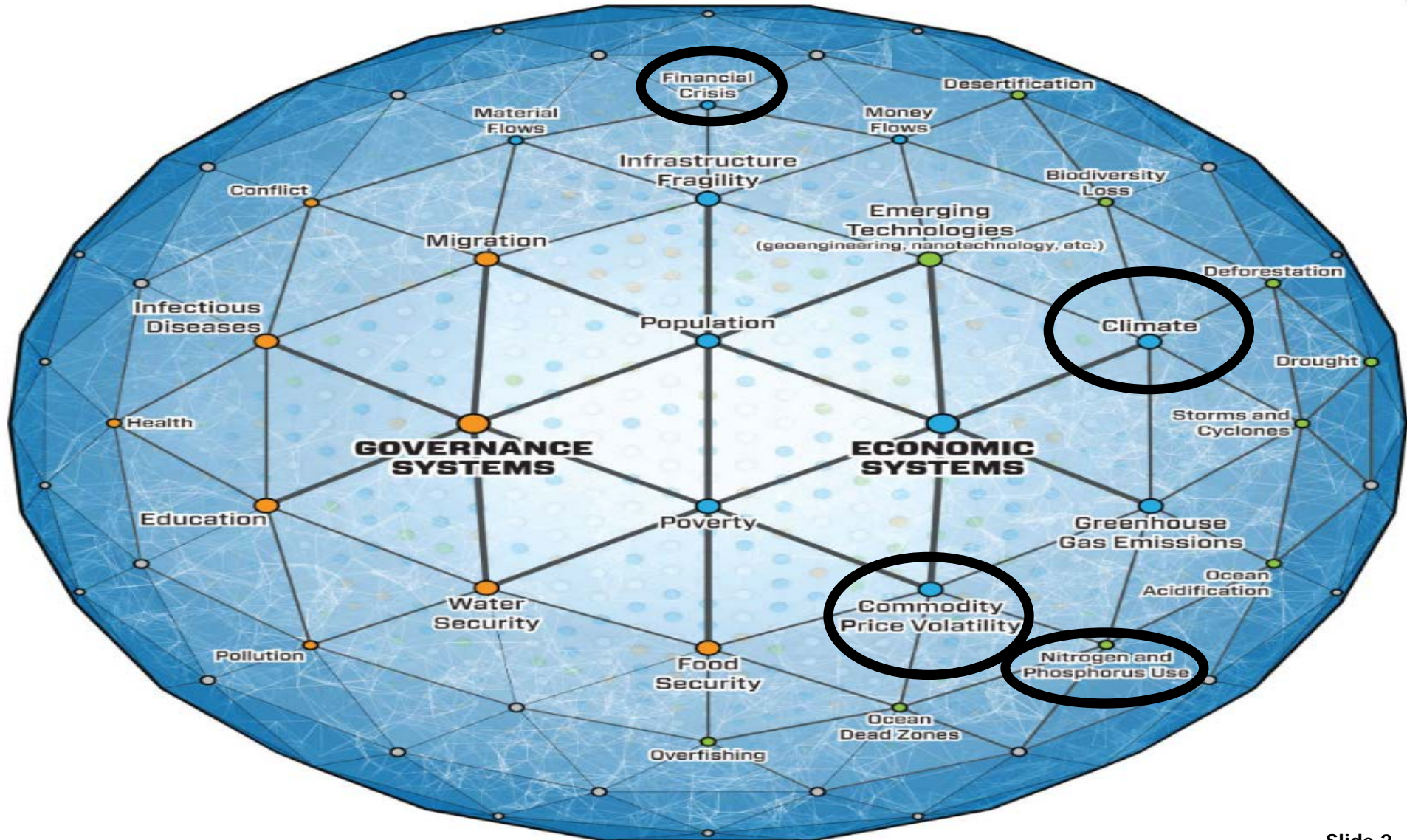
Prepared Especially For The  
**2012 Fertilizer Outlook & Technology Conf**







## Commodity Price Volatility & Changing Climate: A "Connective Risk Web"





A word cloud centered around the theme of disasters. The word "DISASTERS" is the largest and most prominent in the center. Other large words include "TERRORISM", "BOMB SCARES", "EARTHQUAKE", "HAZARD", "WAVES", "LOSS", and "EVENT". Smaller words scattered around include "STORMS", "BLIZZARDS", "LANDSLIDES", "VOLCANOES", "DROUGHT", "Tsunami", "FLOOD", "DISEASE", "ERUPTION", "HYPERNOVAE", "TECTONIC", "VIOLENT", "LOST", "SHAFTS", "LOW-HANGING", "GOD", "AREAS", "INVOLVEMENT", "SEEN", "WATER", "OCCURRENCES", "DIRECTLY WITHOUT", "MOVEMENT", "HEALTH", "LAHARS", "GAMMA RAY", "MEET", "UNNATURAL", "WALL", "PRODUCE", "EDY", "INE", "VAE", "HAZARDS", "UNDERSTANDING", "CONSTRUCTION", "THUNDERSTORMS", "TIONS", "AKES", "EVENT", "ACTUALLY", "BASE", "OFTEN", "FIRE", "EARTH'S", "LOSSES", "VIBRATIONS", "IMPACT", "SES", "AT THE", "CONTINUOUSLY", "LOSS", "EVENT", "VOLCANIC", "ROTATING", "ACCUMULATED SHAPE", "VULNERABILITY".





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**There Is Two Ways:** Leading ... And Following. New Ideas Start To The Right

Follow  
←



Lead  
→



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**This Is Where It All Started For Me: The *Really* 'Big Picture'**

# Start By ...

Thinking Out  
Of  
The  
Box



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**Brilliant Ideas Start With The Craziest Of Thoughts: Think Of Ex's In Your Life**

**I'm not weird.  
I'm a one of a kind special edition.**





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## Out Of The Box, In Space: Galactic Warping, In Oct 2011 *Scientific American*

SCIENTIFIC  
AMERICAN

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Search Scientific American Magazines go Advanced search

Magazine home > Archive > Astrophysics > Full text > Box 1

### Box 1. [SOLVED: MYSTERY#1] Galactic Warp Factor

From the following article  
[The Dark Side of the Milky Way](#)

Leo Blitz  
*Scientific American* 305, 36 - 45 (2011) Published online: 20 September 2011  
doi:10.1038/scientificamerican1011-36

[back to article](#)

SOLVED: MYSTERY#1

## Galactic Warp Factor

The disk of our Milky Way galaxy, which contains most of its stars and gas, has roughly the proportions of a vinyl LP record or compact disk. The warp in the galaxy looks like what happens when you mistreat an LP or CD.

### An Old Hypothesis Revisited

A hypothesis dating to the 1950s attributed the warp to the gravity of two satellite galaxies, the Large and Small Magellanic Clouds. It fell into disfavor because those satellites are too lightweight to have much effect on our galaxy. Astronomers now know that the visible part of the Milky Way is surrounded by a huge ball of dark matter. In recent years they have shown that dark matter could amplify the clouds' gravitational influence, explaining the warp.

Classic view of Milky Way

Some warp explained by Magellanic Clouds

Magellanic Clouds

Dark matter halo  
(purple haze)

Vertical scale exaggerated

Sun

### Vibrating Like a Giant Gong

The warp represents a wave motion captured at one moment in time. The wave has three distinct components corresponding to three natural frequencies of the disk—as though the galaxy were a giant gong. The gravity of the Magellanic Clouds, aided by dark matter, acts as the hammer.

Dark matter disturbance

Large Magellanic Cloud

Small Magellanic Cloud

Like a boat on a lake, the Magellanic Clouds leave a wake in the dark matter as they pass through it. The resulting gravitational disturbance creates the observed warp.

There is an intelligence paradigm shift taking place. People want new thoughts, new processes, new ways to do things, especially with so much information.

Slide 7



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**Hype Sells:** Science Proves There Are Mainly Natural Decadal Climate Shifts

# The Truth Please

People Can

Smell A Lie A Mile Away





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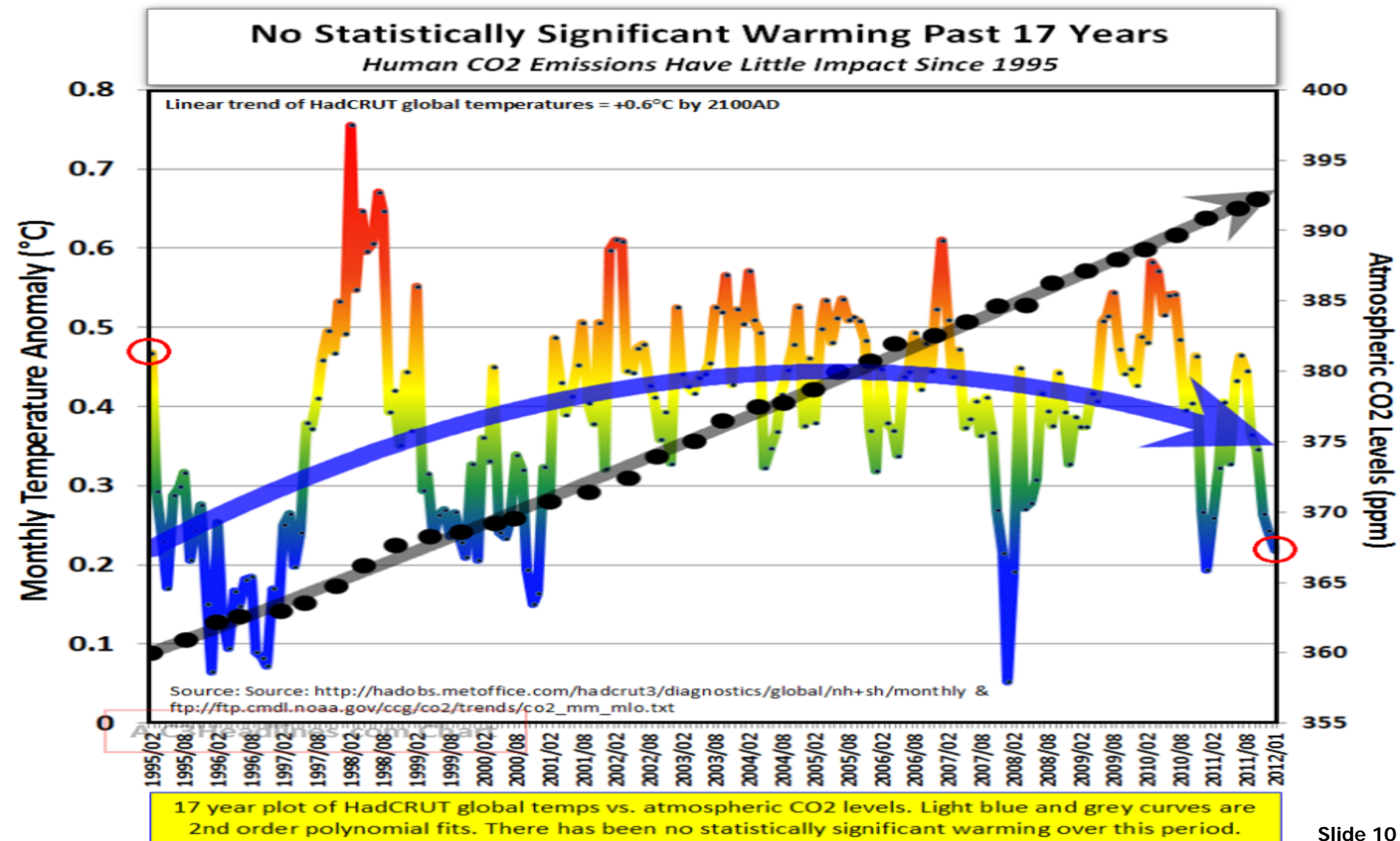
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## Cooling & Warming For Millennia: One Panic After Another, Every 30 Years





## The Real Science Is Only Just Being Uncovered: Cooling Since 2008







## Exposing The Truth Of Politics In Climate: The Multi-Trillion Taxation Scam

### ClimateGate – famous, incriminating quotes

- **Phil Jones quotes** (Head of East Anglia's Climate Research Unit)
  - **Unscrupulous manipulation of highly significant temperature data**
    - "I've just completed Mike's Nature trick of adding in the real temps to each series for the last 20 years, and from 1961 for Keith's to **hide the decline**." ('99)



- **Actively preventing genuine, scientific debate**
  - "I can't see either of these papers being in the next IPCC report. Kevin and I will keep them out somehow - even if we have to redefine what the peer-review literature is!" ('04)





## What Information Can We Rely On? Only That Which We Have Investigated

### Global Warming Stopped 16 Years Ago, Reveals Quietly Released Met Office Report

David Rose

[DailyMail.co.uk](http://DailyMail.co.uk)

October 14, 2012



### Global warming stopped 16 years ago, reveals Met Office report quietly released... and here is the chart to prove it

- The figures reveal that from the beginning of 1997 until August 2012 there was **no discernible rise in aggregate global temperatures**
- This means that the 'pause' in global warming has now lasted for about the same time as the previous period when temperatures rose, 1980 to 1996

By DAVID ROSE

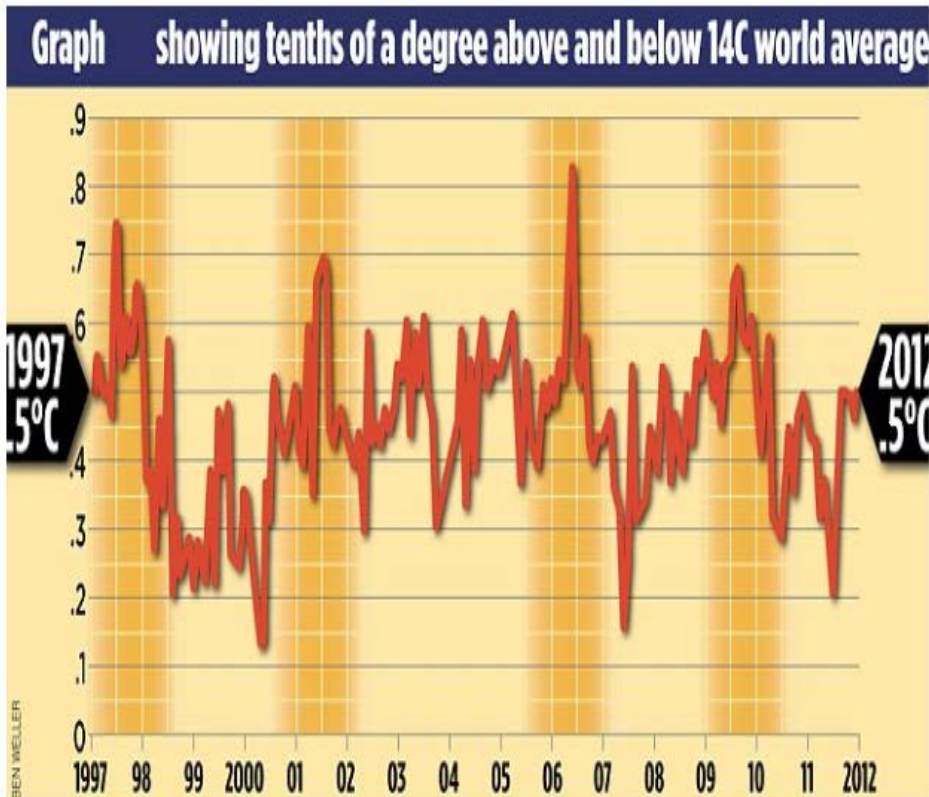
PUBLISHED: 16:42 EST, 13 October 2012 | UPDATED: 08:59 EST, 16 October 2012

[Comments \(957\)](#) [Share](#) [+1](#) 395 [Tweet](#) 4,218 [Like](#) 74k

The world stopped getting warmer almost 16 years ago, according to new data released last week.

The figures, which have triggered debate among climate scientists, reveal that from the beginning of 1997 until August 2012, there was no discernible rise in aggregate global temperatures.

This means that the 'plateau' or 'pause' in global warming has now lasted for about the same time as the previous period when temperatures rose, 1980 to 1996. Before that, temperatures had been stable or declining for about 40 years.







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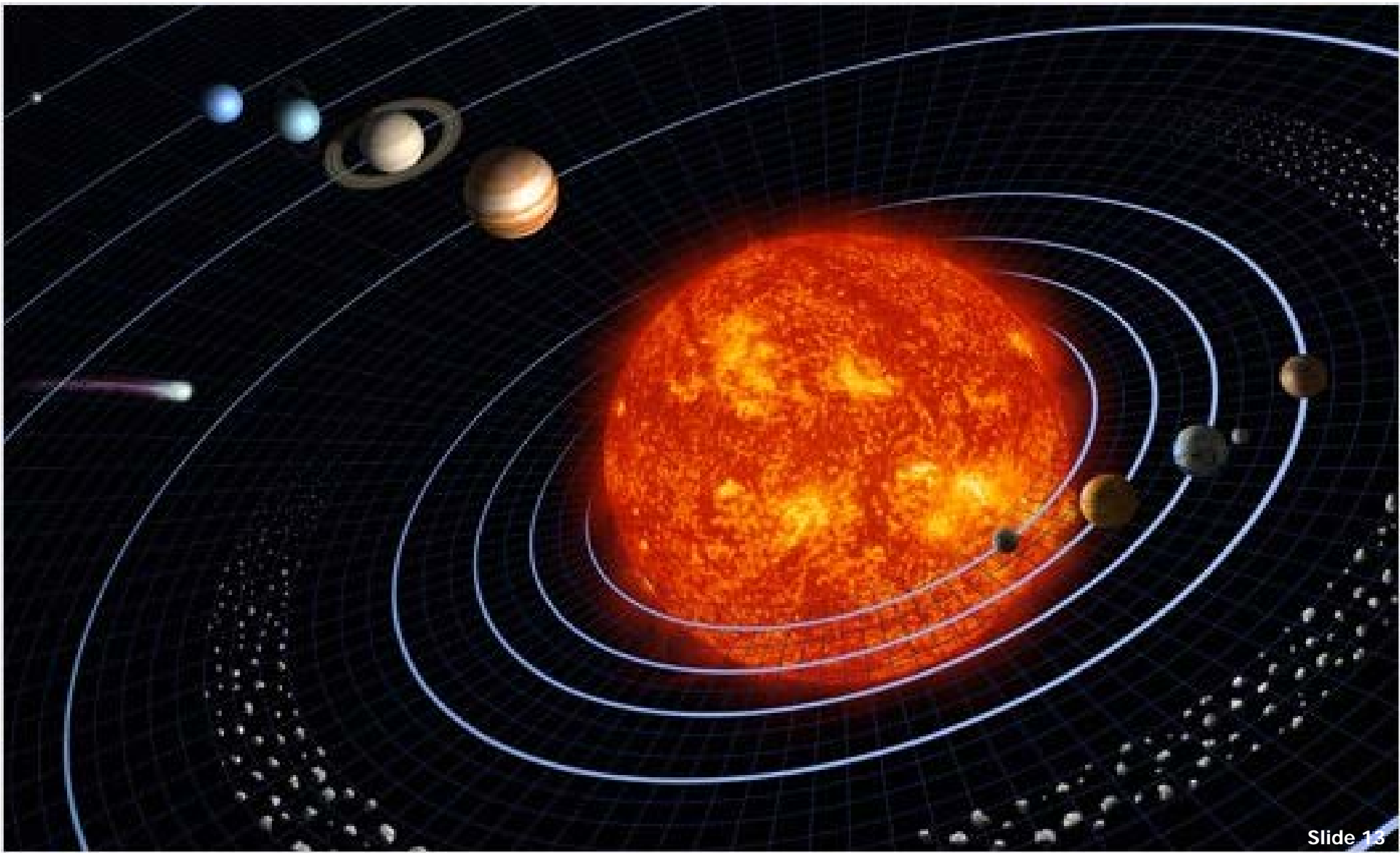
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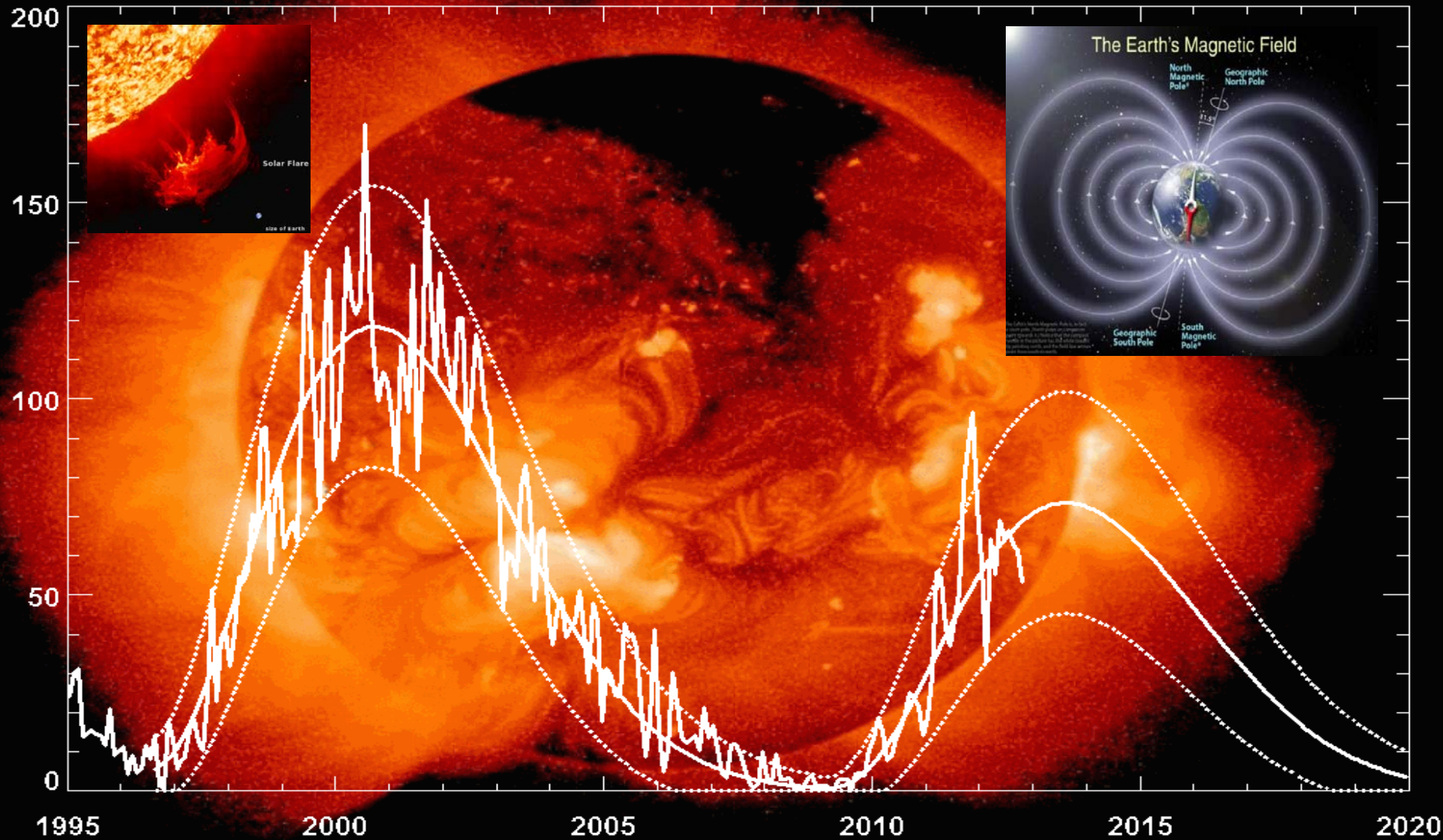
**Gridding-Out The Bigger Picture:** Google "CERN" To See We Are Not 'Alone'





## Sunspots Surging Into Late 2013: Producing Additional Weather Volatility

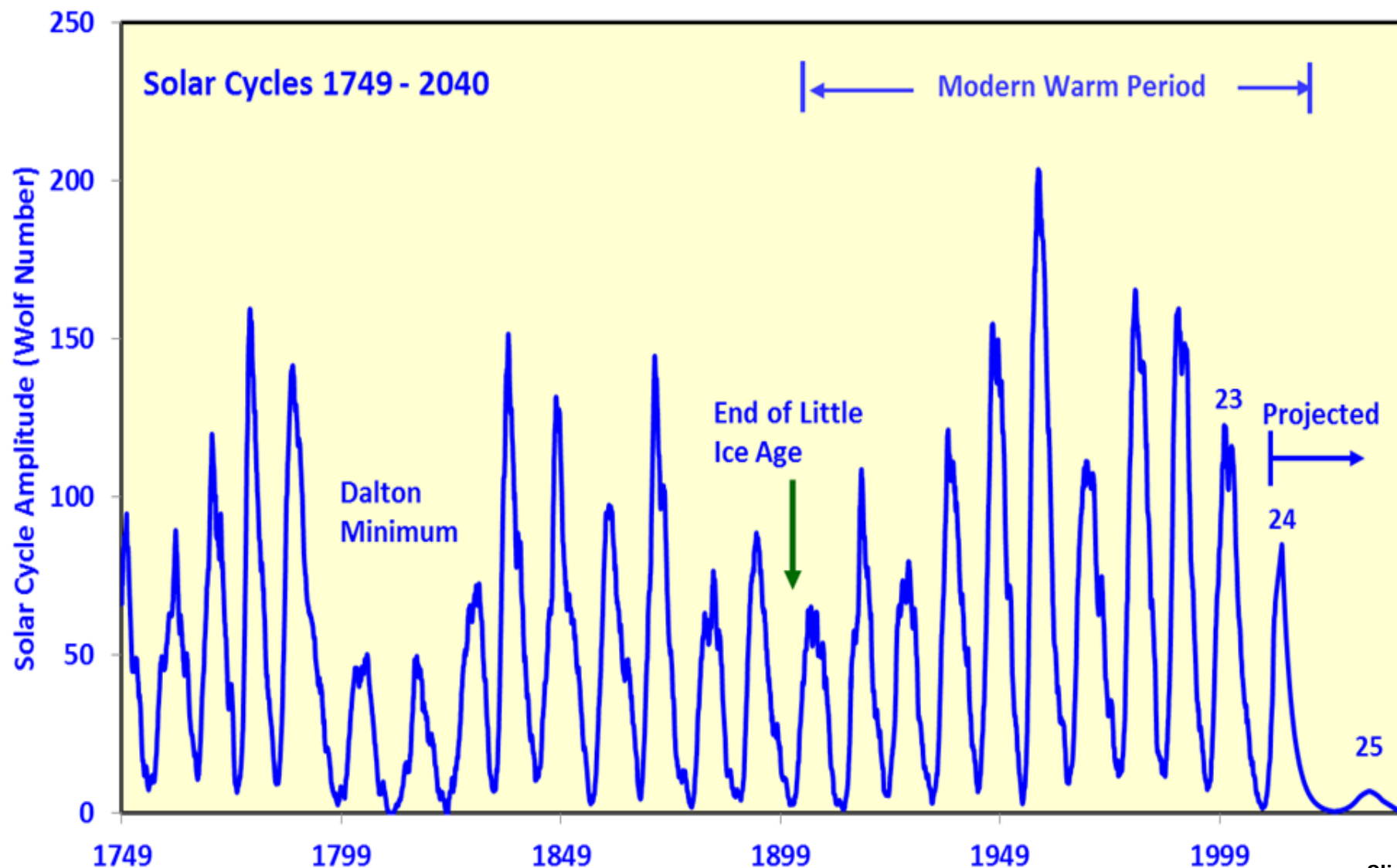
Cycle 24 Sunspot Number Prediction (November 2012)







## The Smaller The Solar Cycle, The More The Cooling: Very Cold World Cycle 25

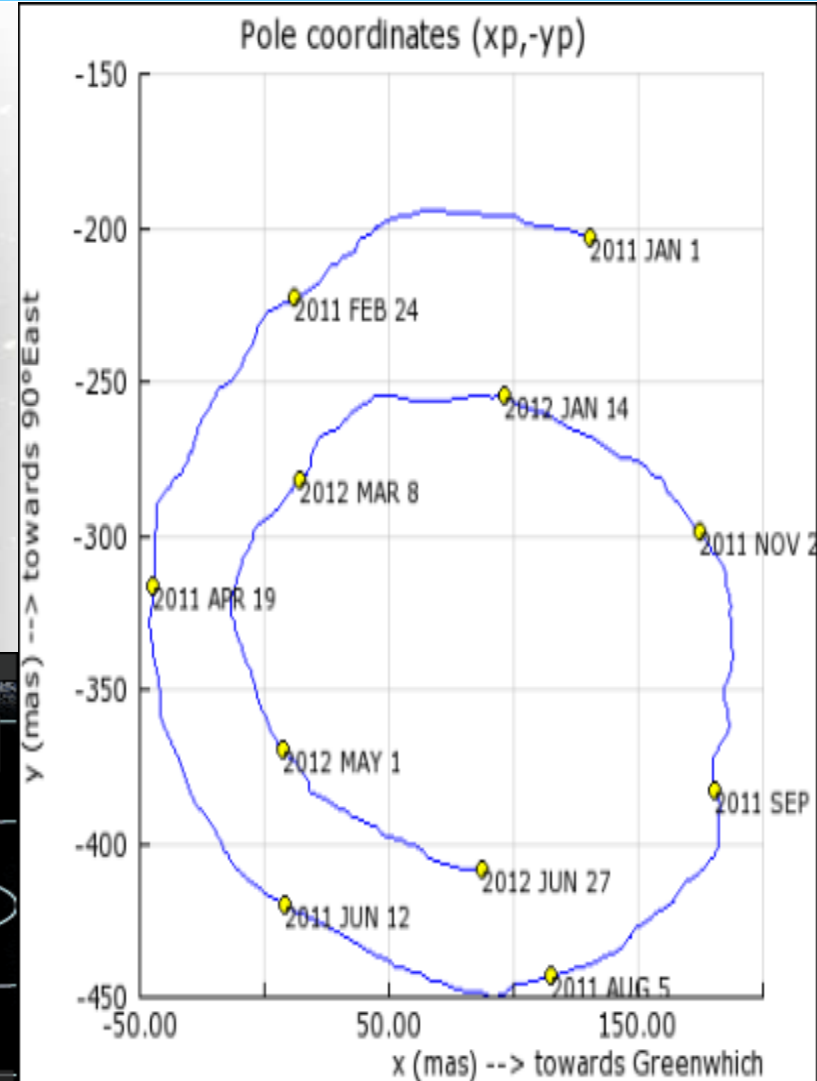
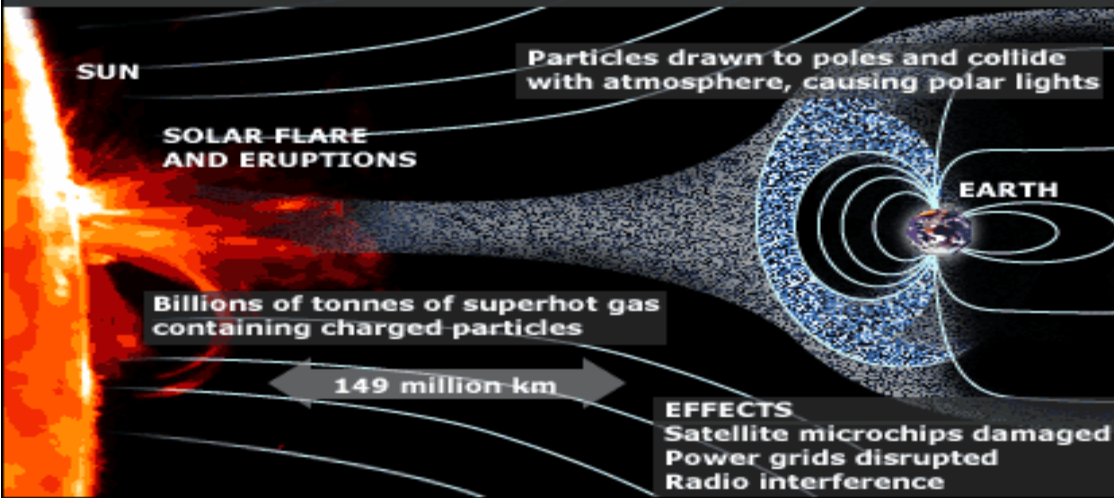




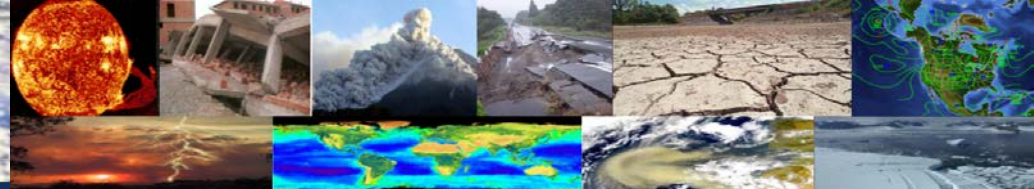
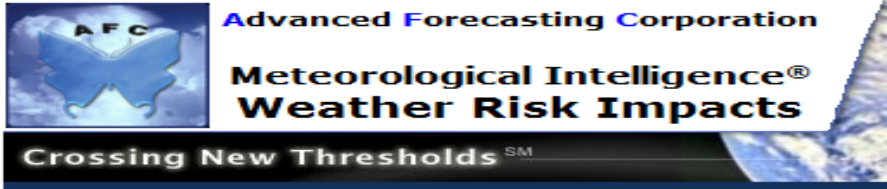
## Chandler Wobble & Magnetic Pole Shifts: Long-Range Study On The Big Stuff



### SOLAR ACTIVITY AND ITS EFFECTS ON EARTH







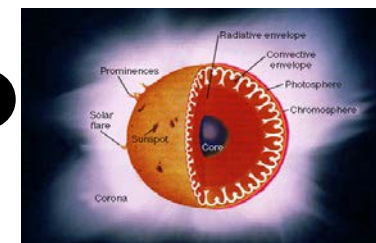
# Out Of The Box, In Weather Risk: Focus On Logic, Long-Range, Big Factors

Climate is constantly going through cycles like the tides. Weather shifts are also cyclical

## Solar / Cosmic Effects & Causes

- 1) Solar wind flux (& plasma communication w/ Earth)
- 2) Helio (sun) magnetic / temperature changes
- 3) Sunspot cycles, flares, and 11 / 19 / 52 / 206 yr cycles
- 4) Cosmic forces (Google 'CERN' & see what they proved)

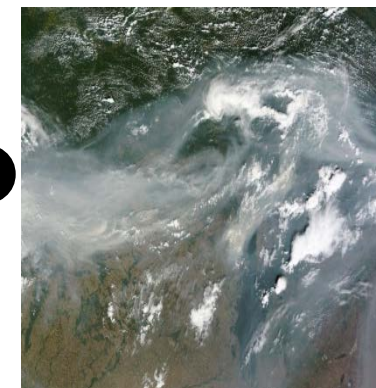
60%



## Terrestrial & Atmospheric Effects & Causes

- 1) Milankovitch cycles (earth rotation / axis, etc.)
- 2) Schumann Resonance (look it up, amazing stuff)
- 3) Volcanoes, wildfires, sandstorms, quakes
- 4) Water vapor / atmospheric ion cycles
- 5) Albedo (reflectivity): polar ice cycles, clouds, etc.
- 6) Marine current aberrations
- 7) Methane 'burps'
- 8) Global salinity shifts (Gulf Stream, etc.)

30%



## Anthropogenic Effects & Causes

- 1) Population increasing / Urban Heat Islands
- 2) Deforestation
- 3) Human pollution ... AND radiation (i.e., Fukushima)
- 4) Technology changing ionospheric stability (HAARP experimentation)

7%



## Other Effects & Causes

- 1) Oceanic trench fissures
- 2) Termites / plankton, misc.
- 3) Crazy farmers

3%







## The Vroomen Family, 1220 AD: Climate Cycles Dictate Famine Or Peace



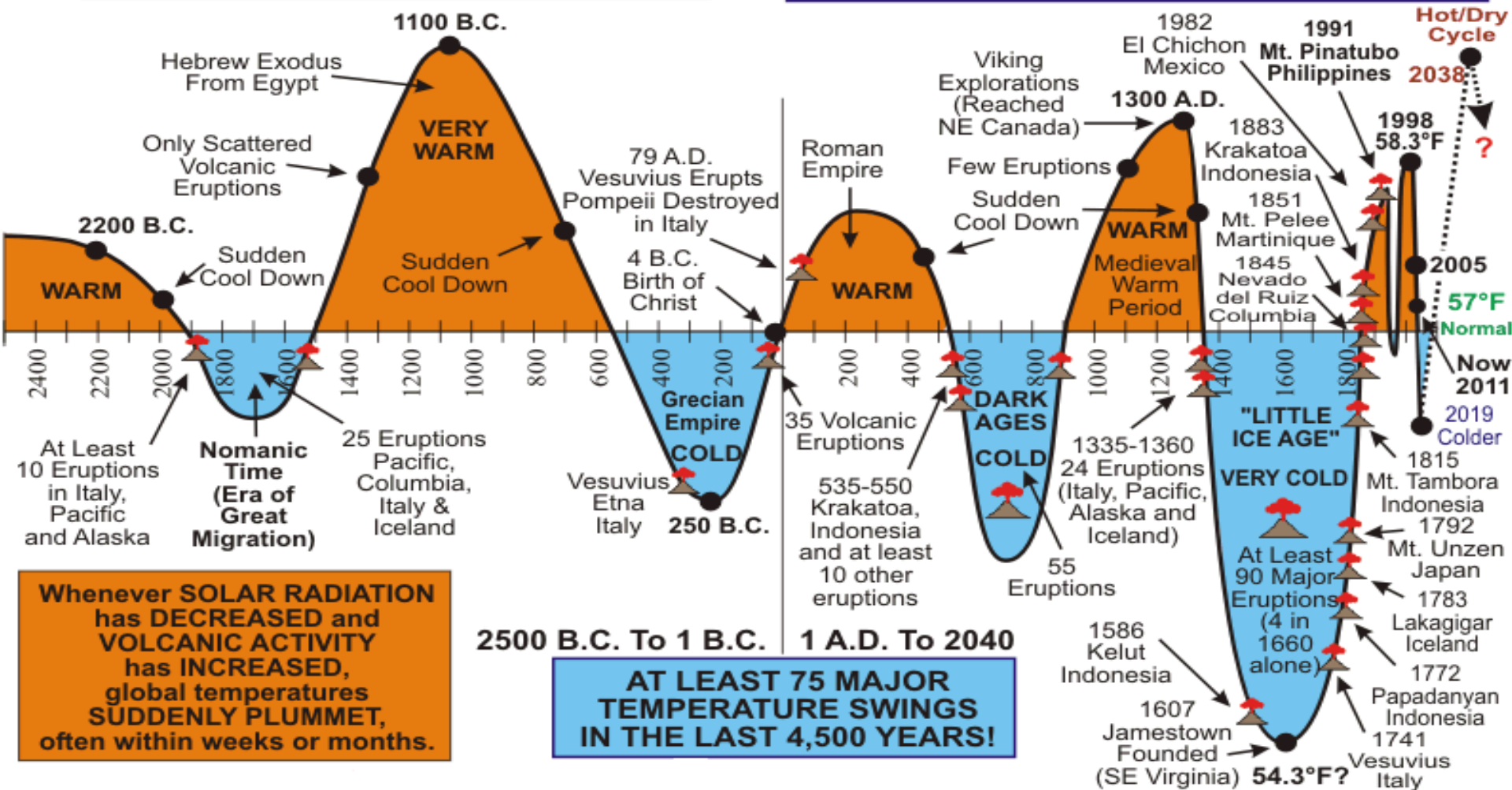




## Cooling Thru 2024: Usually Means Volatile Yields; Abrupt Issues 'Crop-Up'

**MAJOR GLOBAL COOLING SINCE LATE 2007**  
A 0.9 Degree Fahrenheit drop in global temperatures from late 2007 to February 2009.

**MOUNT PINATUBO ERUPTION (Philippines)**  
1.1 Degree F. Rapid Cool Down (June 1991 to March 1992)  
Global Temperature Went From 0.6 Degrees Above Normal To 0.5 Degrees Below Normal.







## Romans Grew Grapes In Northern UK: Fossilized Tree Rings Prove Possible

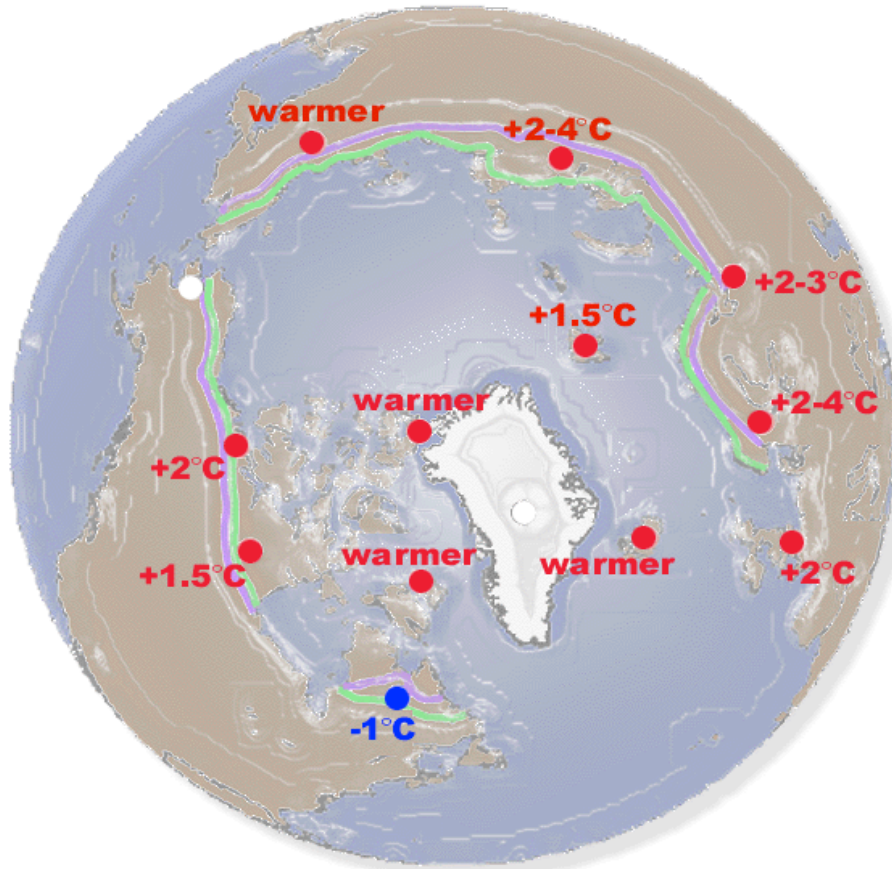
Tree-rings prove climate was **WARMER** in Roman and Medieval times than it is now - and world has been cooling for 2,000 years

- Study of semi-fossilised trees gives accurate climate reading back to 138BC
- World was warmer in Roman and Medieval times than it is now

By SCIENCE REPORTER

PUBLISHED: 07:22 EST, 11 July 2012 | UPDATED: 17:51 EST, 11 July 2012

[Comments \(417\)](#) [Share](#) [+1](#) 142 [Tweet](#) 0



TERRESTRIAL ARCTIC  
ENVIRONMENTS  
6,000 YEARS B.P. - SUMMER

- Modern Treeline
- 8,000 year B.P. Treeline
- Warmer than Present
- Cooler than Present
- Same as Present

How did the Romans grow grapes in northern England? Perhaps because it was warmer than we thought.

A study suggests the Britain of 2,000 years ago experienced a lengthy period of hotter summers than today.

German researchers used data from tree rings – a key indicator of past climate – to claim the world has been on a 'long-term cooling trend' for two millennia until the global warming of the twentieth century.

This cooling was punctuated by a couple of warm spells.

These are the Medieval Warm Period, which is well known, but also a period during the toga-wearing Roman times when temperatures were apparently 1 deg C warmer than now.

They say the very warm period during the years 21 to 50AD has been underestimated by climate scientists.

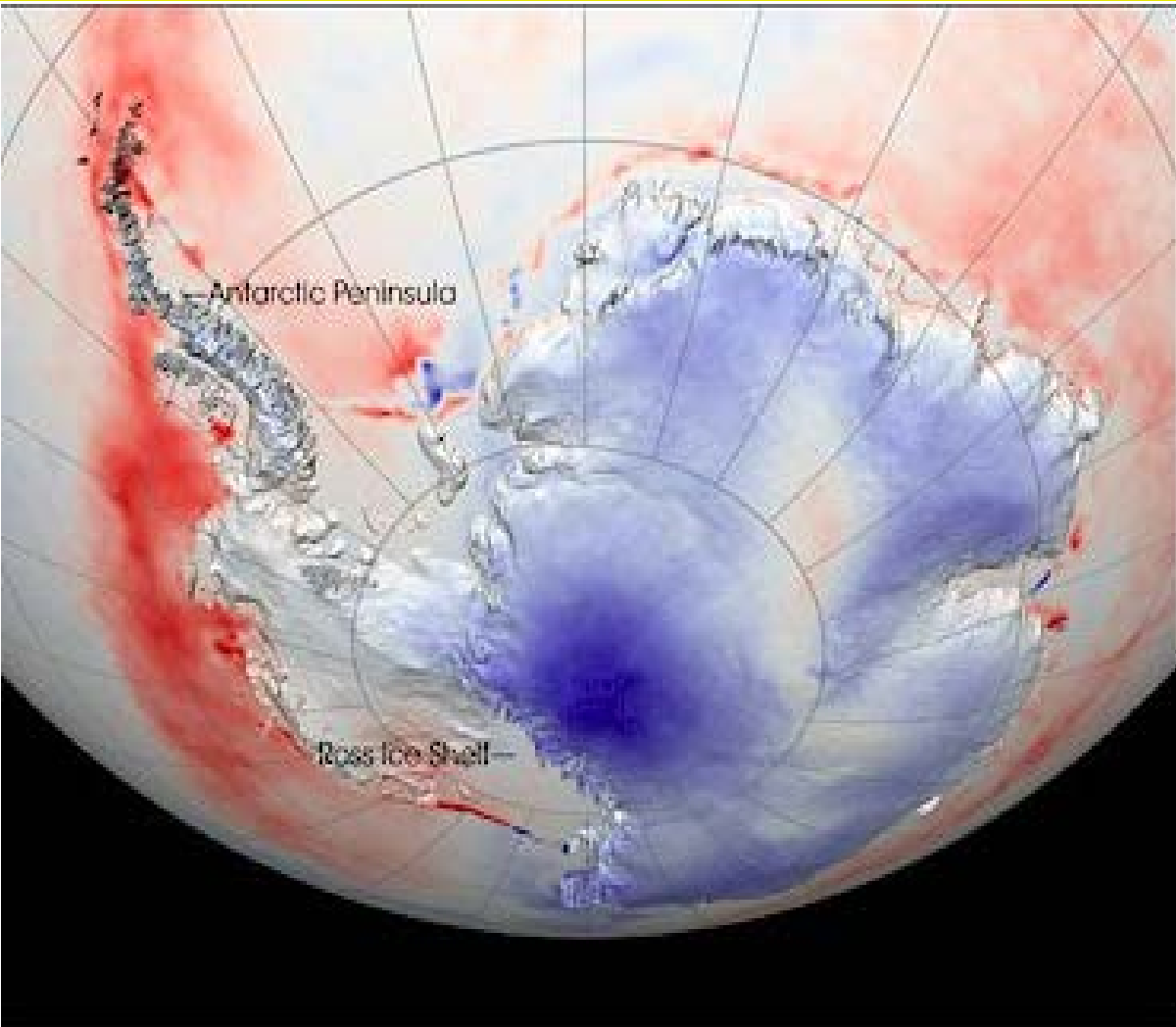
Lead author Professor Dr Jan Esper of Johannes Gutenberg University in Mainz said:







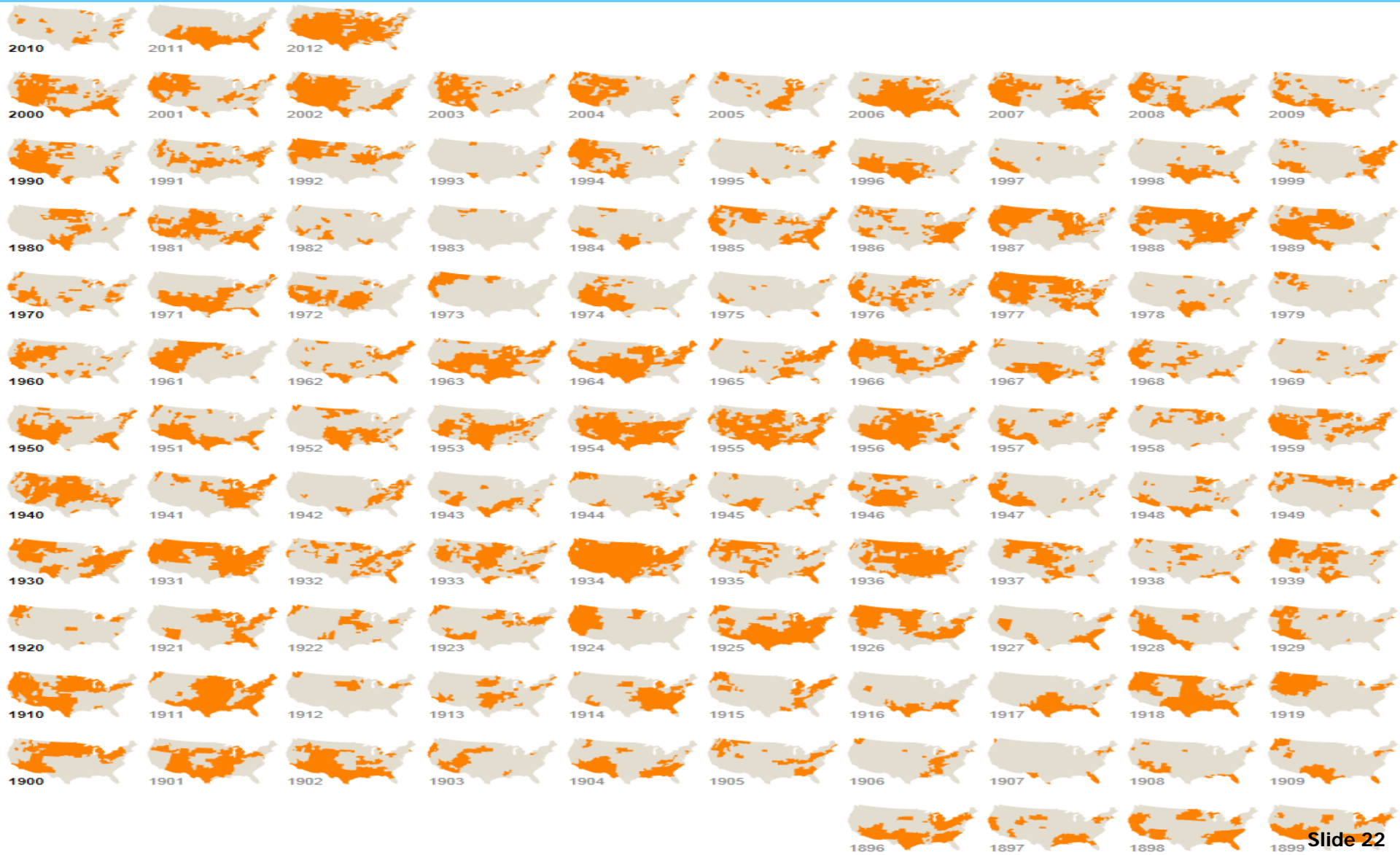
## Ice Breaking Off Due To Volcanic Heating: The Truth Is Spilling Out Slowly



- This original NASA image shows assorted hot spots due to **underground thermal activity** (aka underground volcanoes) around the Antarctic continent
- Note that the highest temperatures are around the Antarctic Peninsula and the Ross Ice shelf, where most of the Antarctic "melting" has occurred



## Drought's Footprint, Summers 1896 – 2012: Natural Cycles Of A Bigger Pic







**We Must Come To Our Senses: Planning For The Wrong Solution Is Disastrous**



**Are we  
“passengers”  
or “drivers”?**

**We must  
focus on the  
science, not  
the politics.**





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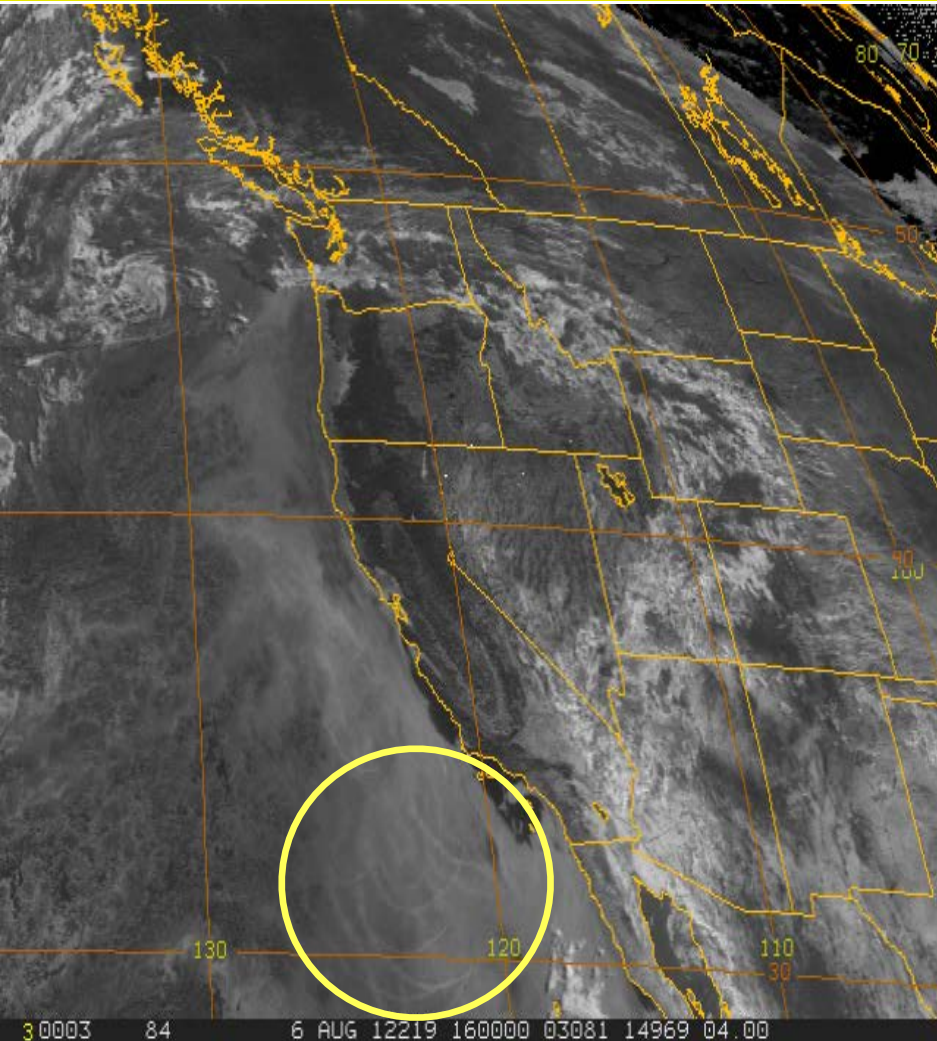


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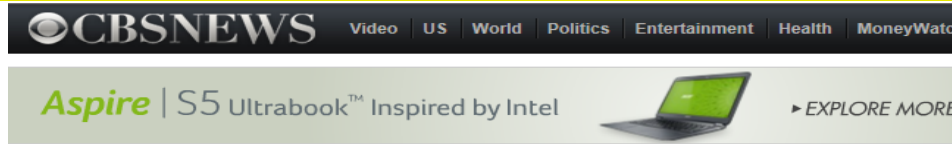


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## Solar Radiation Management: Aerosol Spraying (Chemtrails) & Asteroid Dust

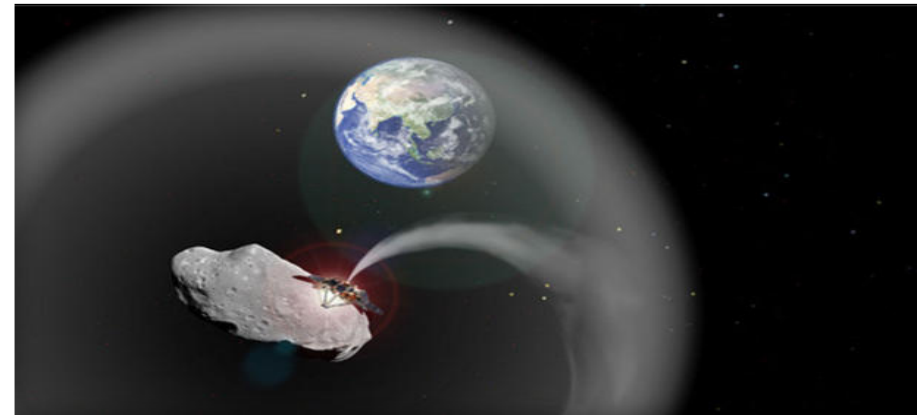


<http://www.geoengineeringwatch.org/massive-north-pacific-spraying-horrific-us-drought-image-attached/>



By CHARLES CHOI / LIVESCIENCE.COM / October 1, 2012, 9:36 AM

### Fighting climate change with asteroid dust



Scientists propose a dust cloud made of asteroid material could help to cool Earth. Here, an artist's depiction of what a spacecraft spewing asteroid dust might look like. / CHARLOTTE LUCKING, NASA

Comment / 11 Shares / 16 Tweets / Stumble / Email

More +

To combat global warming, scientists in Scotland now suggest an out-of-this-world solution -- a giant dust cloud in space, blasted off an asteroid, which would act like a sunshade for Earth.

The world is warming and the climate is changing. Although many want to prevent these shifts by reducing emissions of greenhouse gases that trap heat from the sun, some controversially suggest deliberately manipulating the planet's climate with large-scale engineering projects, commonly called geoengineering.

[http://www.cbsnews.com/8301-205\\_162-57523389/fighting-climate-change-with-asteroid-dust/](http://www.cbsnews.com/8301-205_162-57523389/fighting-climate-change-with-asteroid-dust/)





# Weather Modification In Full Swing: Future Of Technology & Wild Card Events



## POTENTIAL WEATHER MODIFICATION CAPABILITIES

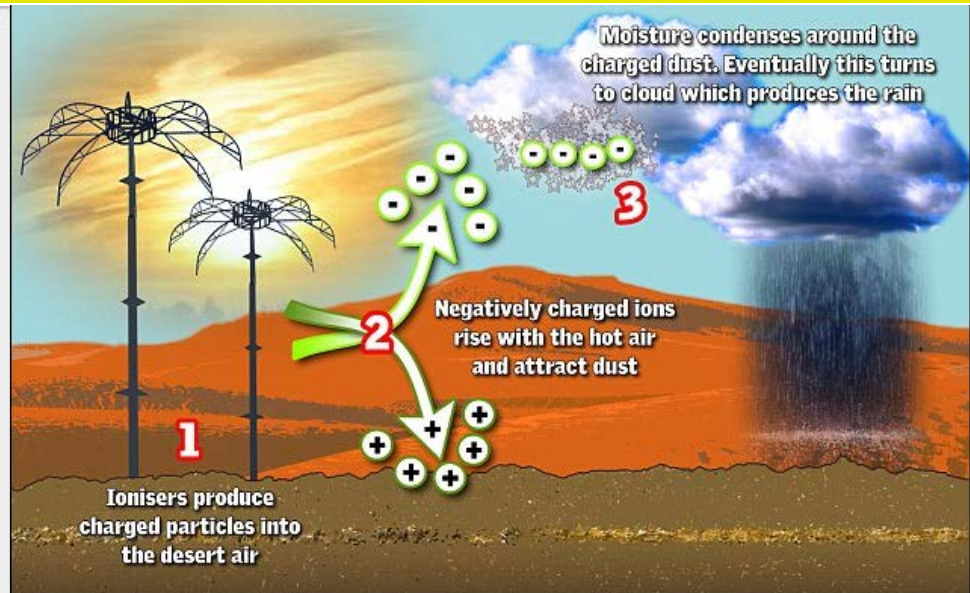
AF 2025



<u>DEGRADE ENEMY FORCES</u>	<u>ENHANCE FRIENDLY FORCES</u>
<b>Precipitation Enhancement</b> <ul style="list-style-type: none"><li>• Flood Lines of Communication</li><li>• Reduce PGM/Recce Effectiveness</li><li>• Decrease Comfort Level/Morale</li></ul>	<b>Precipitation Avoidance</b> <ul style="list-style-type: none"><li>• Maintain/Improve LOC</li><li>• Maintain Visibility</li><li>• Maintain Comfort Level/Morale</li></ul>
<b>Storm Enhancement</b> <ul style="list-style-type: none"><li>• Deny Operations</li></ul>	<b>Storm Modification</b> <ul style="list-style-type: none"><li>• Choose Battlespace Environment</li></ul>
<b>Precipitation Denial</b> <ul style="list-style-type: none"><li>• Deny Fresh Water</li><li>• Induce Drought</li></ul>	<b>Space Weather</b> <ul style="list-style-type: none"><li>• Improve Communication Reliability</li><li>• Intercept Enemy Transmissions</li><li>• Revitalize Space Assets</li></ul>
<b>Space Weather</b> <ul style="list-style-type: none"><li>• Disrupt Communications/Radar</li><li>• Disable/Destroy Space Assets</li></ul>	<b>Fog and Cloud Generation</b> <ul style="list-style-type: none"><li>• Increase Concealment</li></ul>
<b>Fog and Cloud Removal</b> <ul style="list-style-type: none"><li>• Deny Concealment</li><li>• Increase Vulnerability to PGM/Recce</li></ul>	<b>Fog and Cloud Removal</b> <ul style="list-style-type: none"><li>• Maintain Airfield Operations</li><li>• Enhance PGM Effectiveness</li></ul>
<b>Detect Hostile Weather Activities</b>	<b>Defend Against Enemy Capabilities</b>

TTS '97

Weather Modification/PLI/QPA/IAB/970402 2



## GeoEngineering Watch

[AUDIO / VIDEO »](#) [BREAKING NEWS »](#) [CHEMTRAILS »](#) [EFFECTS »](#) [GEOENGINEERING »](#) [HAARP](#)

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Michael Murphy covers new ground concerning Geoengineering / Chemtrails in his upcoming interview.



### Stratospheric Sulfate Aerosols Geoengineering (SAG-SRM)

The ability of stratospheric sulfate aerosols to create a global dimming effect has made them a possible candidate for use in geoengineering projects to limit the effect and impact of climate change due to rising levels of greenhouse gases. Delivery of precursor sulfide gases such as hydrogen sulfide (H<sub>2</sub>S) or sulfur dioxide (SO<sub>2</sub>) by artillery, aircraft and balloons has been proposed. (click image for more...)





## What's China *REALLY* Doing By Invading Tibet? Hint: 'Blue Gold' (The Movie)

China has diverted certain rivers in the past, and is trying again, bit by bit ...



Instability in Asia growing. The need is simple: China and India BOTH want access to the largest locked-up freshwater reserves in the world (here in the Himalayan Plateau in Tibet).



sketchmap only—exact data unknown

Current status:

Eastern route: extensive work has been done

Central route: work commenced in 2010

Western route: in planning and site preparation stages





# Radioactive Bluefin Tuna, Beef, Rice, Water & Milk: Already "On The Market"

SET EDITION: U.S. INTERNATIONAL MÉXICO ARABIC

TV: CNNUS CNNi CNN en Español

**CNN Health**

Home Video CNN Trends U.S. World Politics Justice Entertainment Tech Health

## EPA boosts radiation monitoring after low levels found in milk

By the CNN Wire Staff  
March 31, 2011 6:51 p.m. EDT



Radiation gets into the milk because it falls on grass eaten by cows.

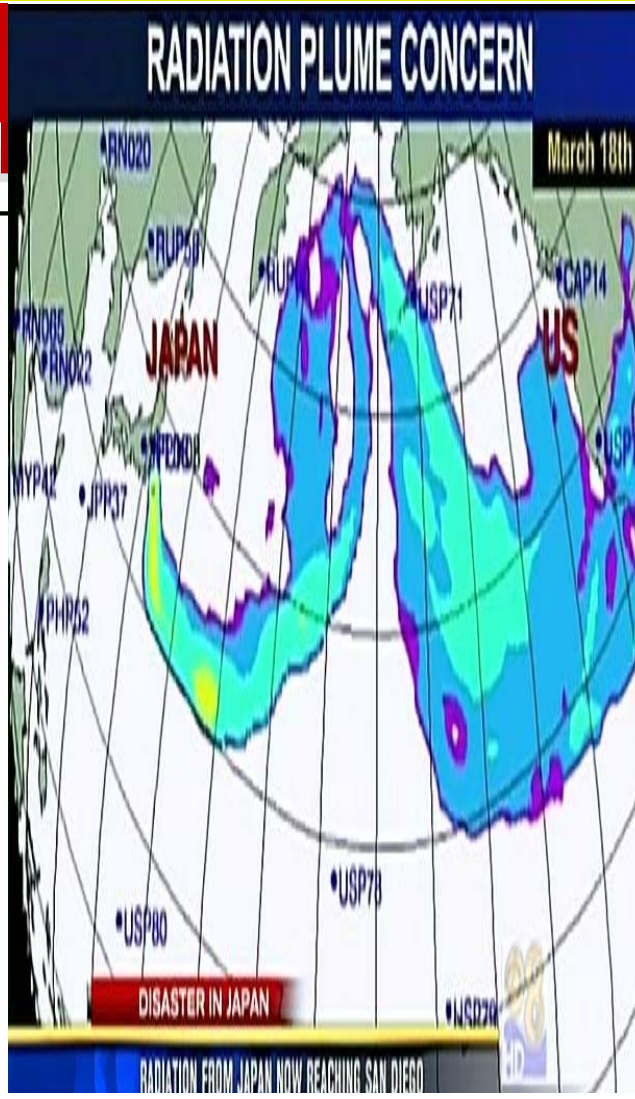
**Washington (CNN)** -- There is no health risk from consuming milk with extremely low levels of radiation, like those found in Washington state and California, experts said Thursday, echoing the U.S. Environmental Protection Agency.

"When we have a disaster like we've had with a nuclear power plant in Japan, we're probably going to find things that are truly not a public health risk, but I think it's very difficult for the public to assimilate this information and understand the risks," said Dr. Wally Curran, a radiation oncologist and head of Emory University's Winship Cancer Center.

The federal agency said Wednesday it was increasing its nationwide monitoring of radiation in milk, precipitation, drinking water, and other outlets. It already tracks radiation in those potential exposure routes through an existing network of stations across the country.

Results from screening samples of milk taken in the past week in Spokane, Washington, and in San Luis Obispo County, California, detected radioactive iodine, or iodine-131, at a level 5,000 times lower than the limit set by the U.S. Food and Drug Administration, officials said.

- STORY HIGHLIGHTS**
- Isotope won't remain in humans' or animals' digestive systems, expert says
  - The Environmental Protection Agency is increasing monitoring nationwide
  - A milk sample from Washington state and California shows "minuscule amounts" of radiation
  - Tests confirm the milk is safe to drink, officials say



Presented: Oct. 16, 2012 in Hiroshima, Japan

Title: Assessment and characterization of radionuclide concentrations from the Fukushima Reactor release in the plankton and nekton communities of the Northern California Current

*Delvan Neville (Oregon St. Univ.), Richard D. Brodeur (NOAA), A. Jason Phillips (OSU) and Kathryn Higley (OSU)*

The incident at the Fukushima Daiichi nuclear plant released a substantial radioactive contamination into the environment. With the predominant wind and current flow in this part of the North Pacific, these **radionuclides will gradually spread to the US West Coast waters** after a suitable period of time, **with the possibility of affecting food quality throughout the food web (including humans)**. In addition to the passive transport by currents and winds, the migratory pathways of large pelagic fish extend from Japan to the Northern California Current. These organisms can serve as transport vectors for these nuclides, especially given their capacity to concentrate radionuclides from surrounding waters and prey. [...] By predicting the radiobiologic stress (if any) for a managed species as more Fukushima-related radionuclides are uptaken, **appropriate action may be taken before significant population effects have occurred**. Determination of natural background concentrations and high quality transport models produced from these data also aid in management in the event of a future accidental release, and in regulating safe activity releases.



Fisheries researcher Jason Phillips bleeds a just-caught albacore tuna into a collection bag (By Cisco Warner, Southwest Fisheries Science Center)



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**Global Flood Intensity Risk Assessment Prediction Map: The Week Ahead**

# Weather Intel

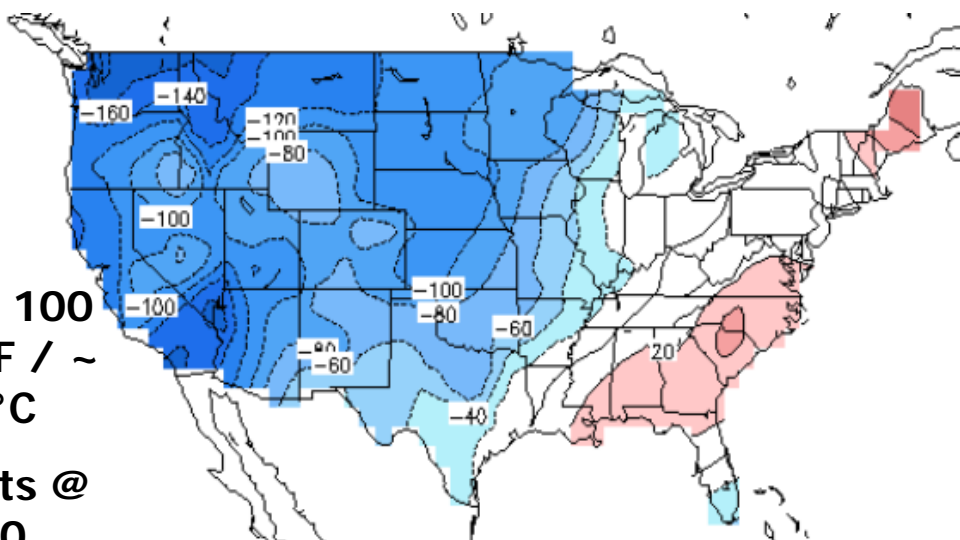
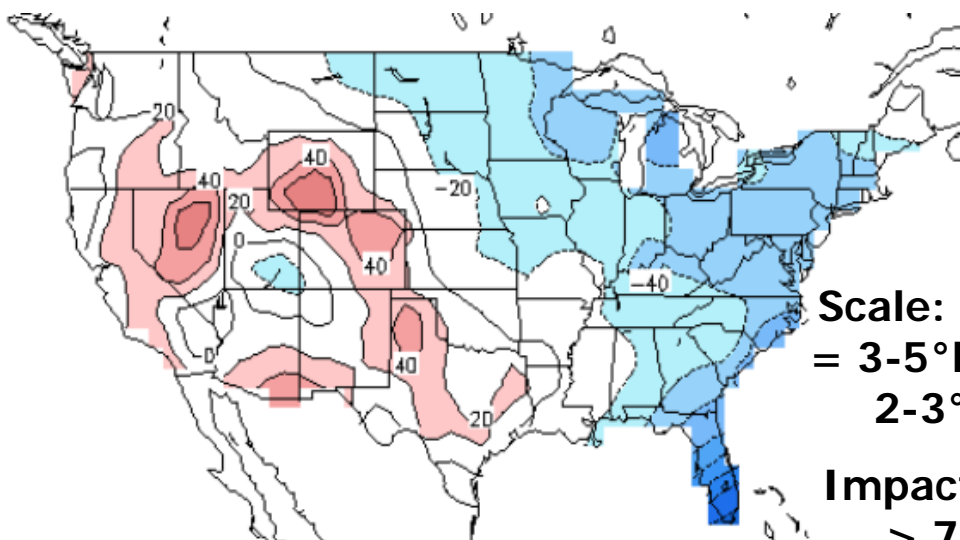




## Grouped Months Extended TEMPS: Standard Deviation / 100

Dec 2012 – Jan-Feb 2013

Jan-Mar 2013

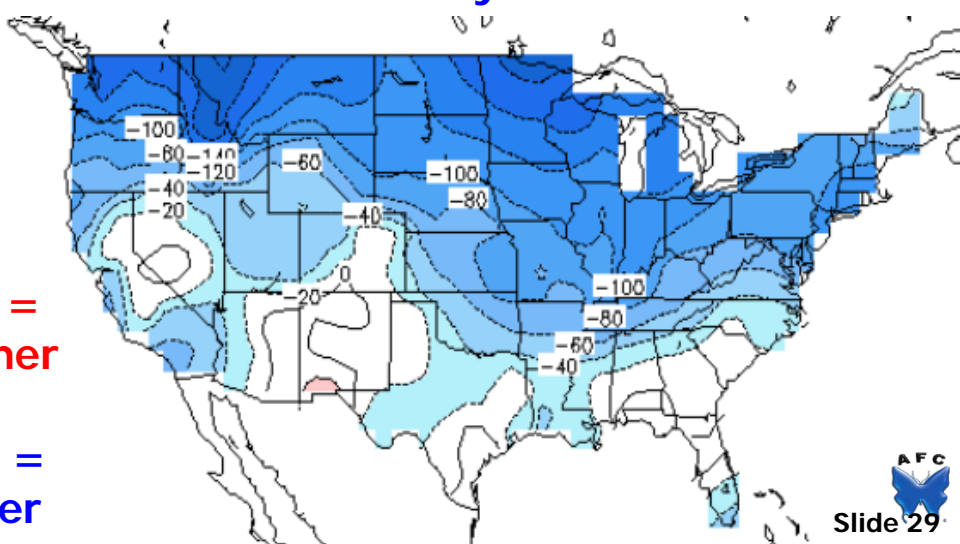
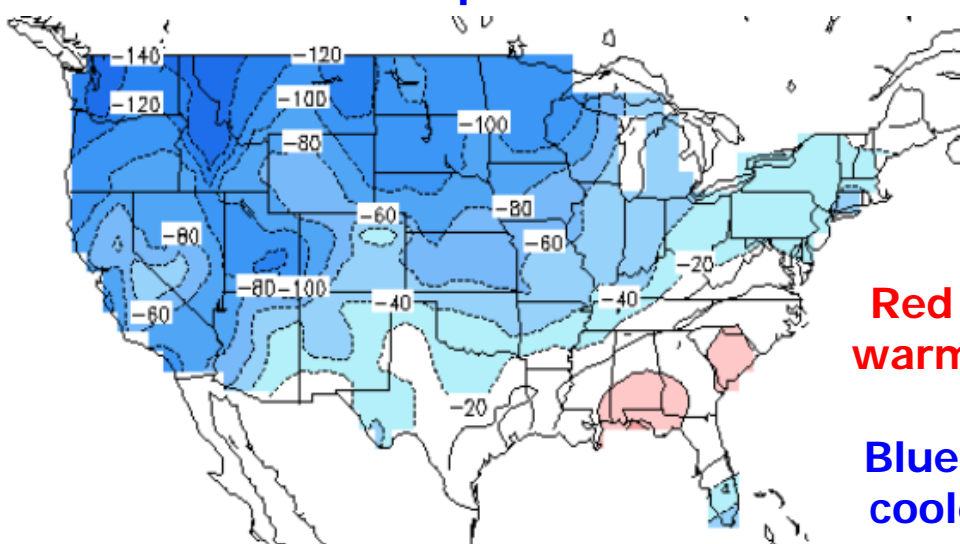


Scale: 100  
= 3-5°F / ~  
2-3°C

Impacts @  
> 70

Feb-Apr 2013

Mar-May 2013



Red =  
warmer

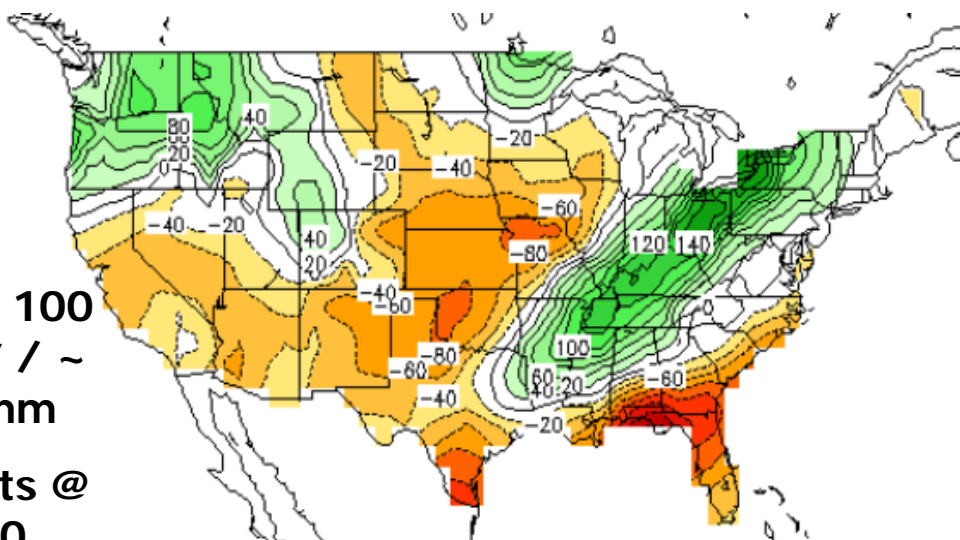
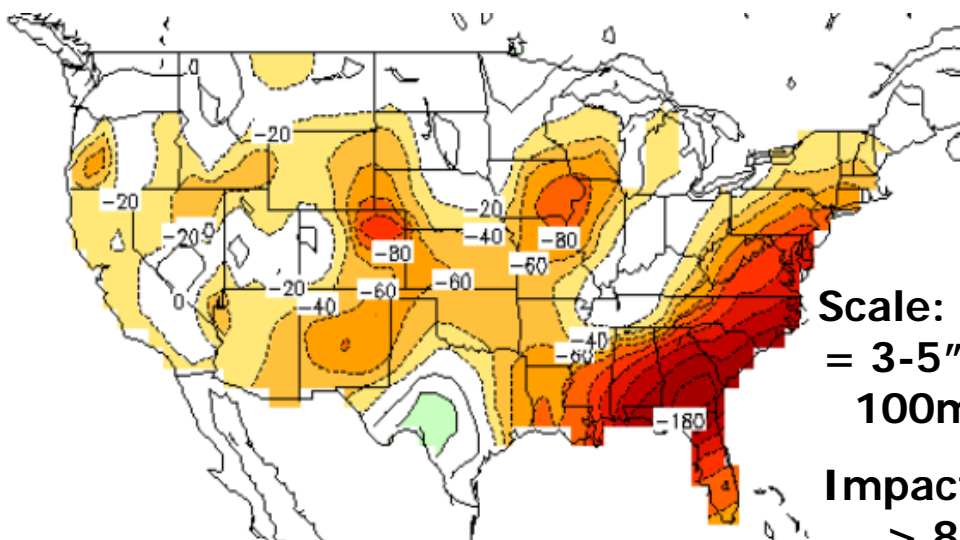
Blue =  
cooler



## Grouped Months Extended PRECIP: Standard Deviation / 100

Dec 2012 – Jan-Feb 2013

Jan-Mar 2013

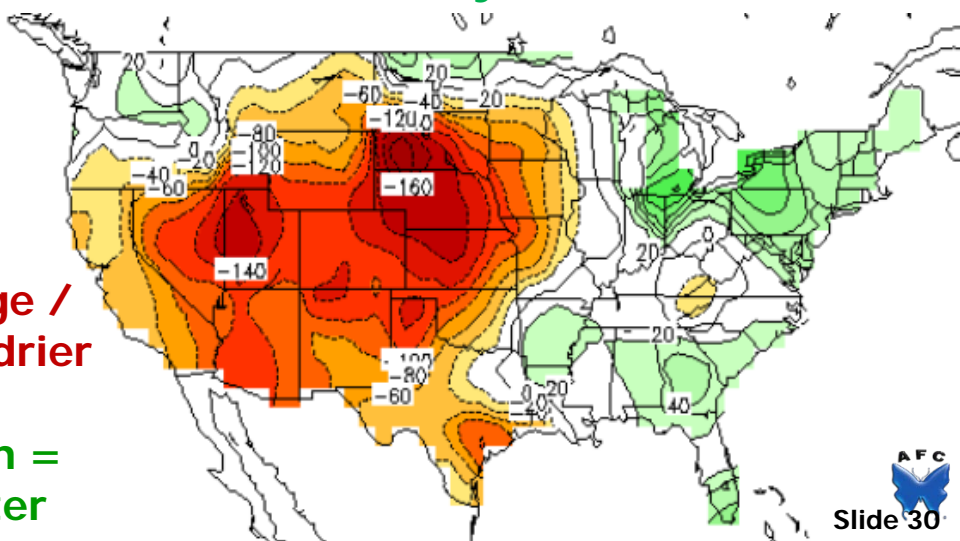
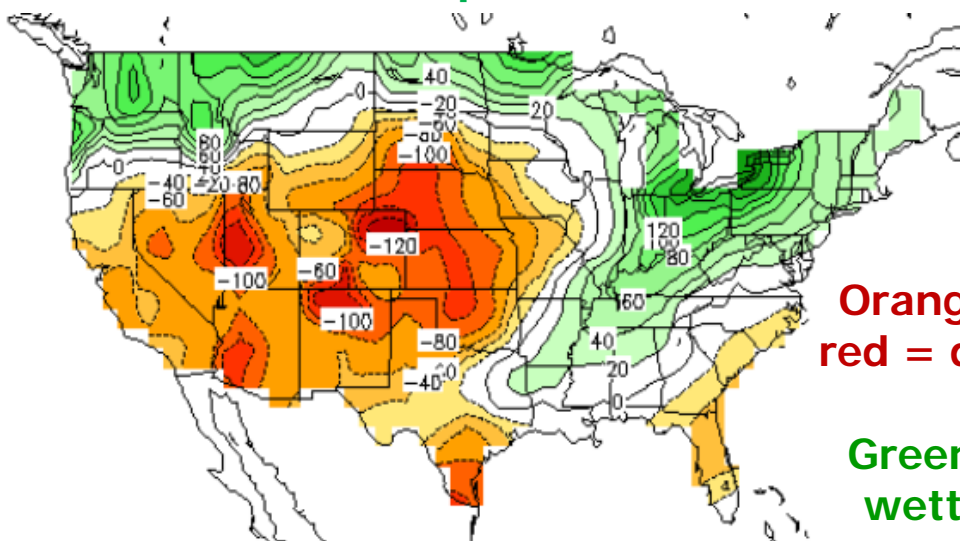


Scale: 100  
= 3-5" / ~  
100mm

Impacts @  
> 80

Feb-Apr 2013

Mar-May 2013



Orange /  
red = drier

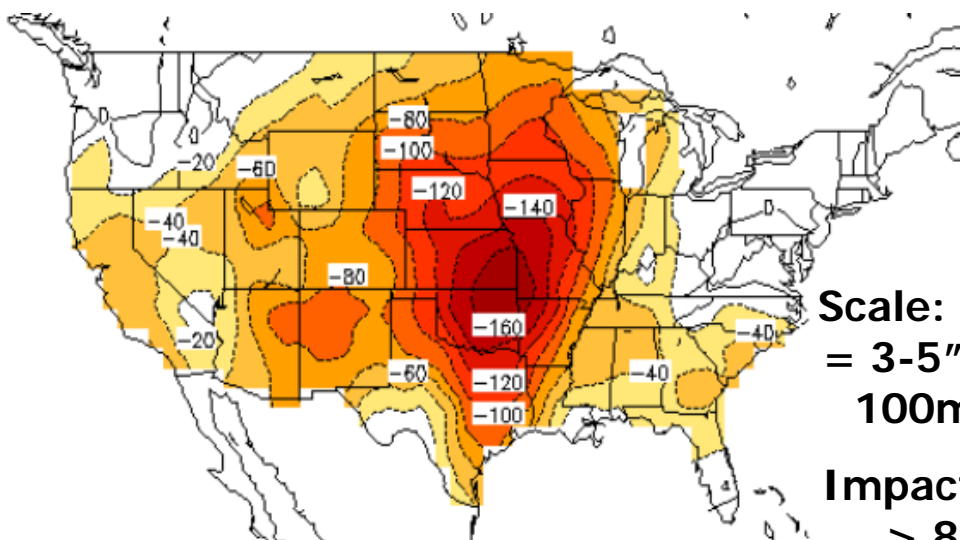
Green =  
wetter



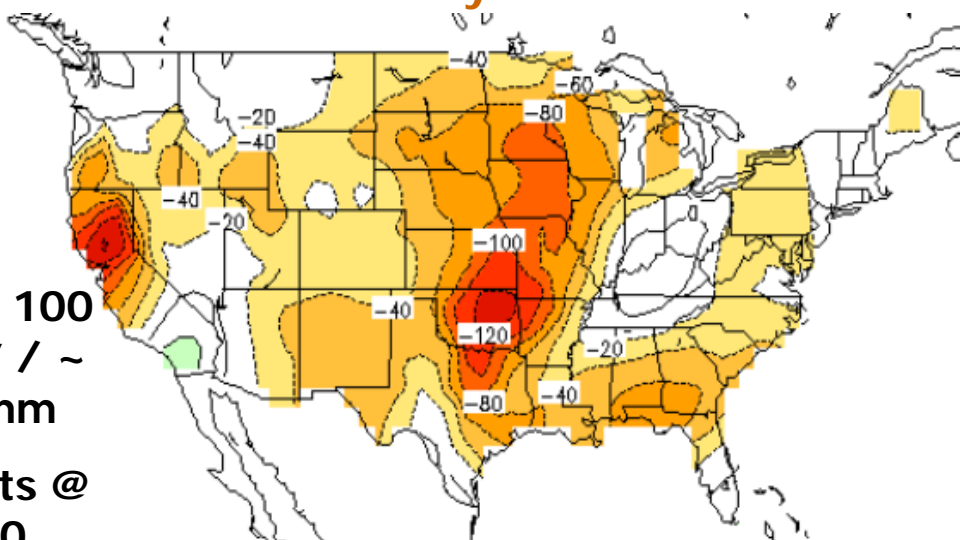


## Month By Month Extended SOIL MOISTURE: Standard Deviation / 100

December 2012



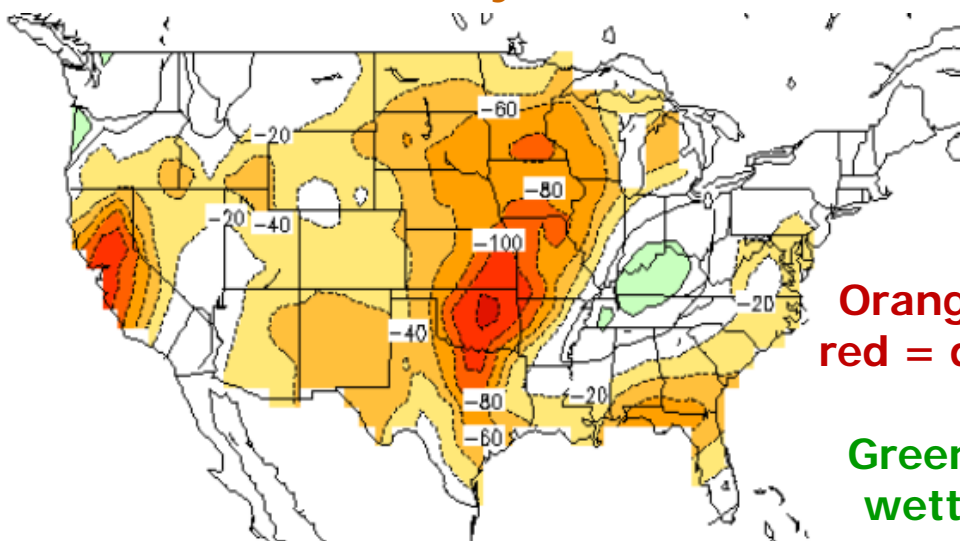
January 2013



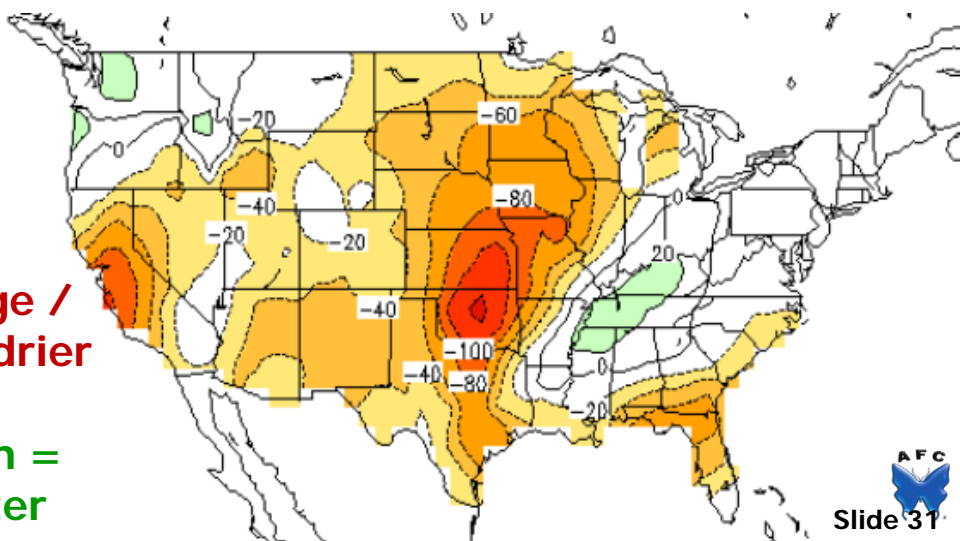
Scale: 100  
= 3-5" / ~  
100mm

Impacts @  
> 80

February 2013



March 2013



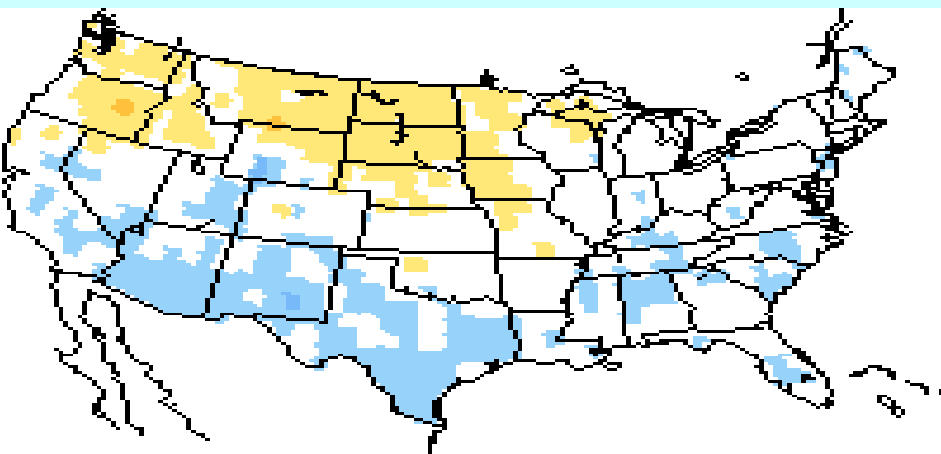
Orange /  
red = drier

Green =  
wetter

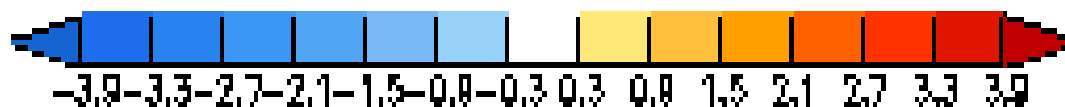
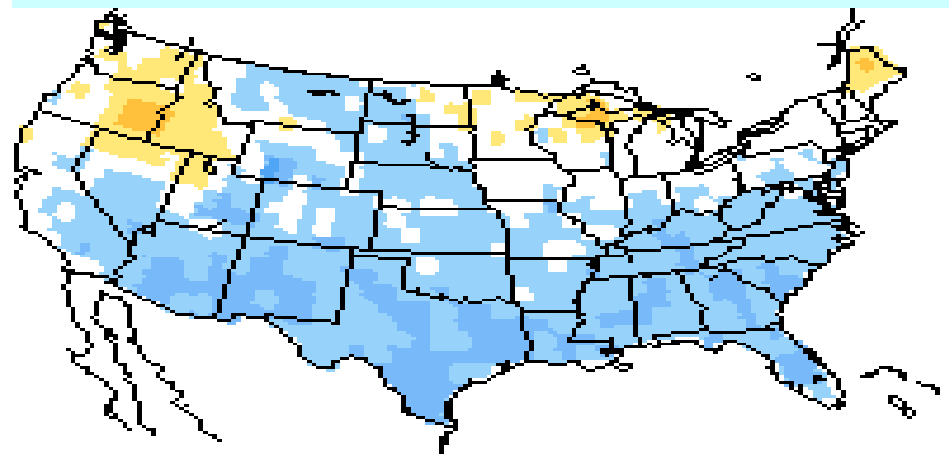


## 2012-2013 TEMPERATURE Quantitative Expectations

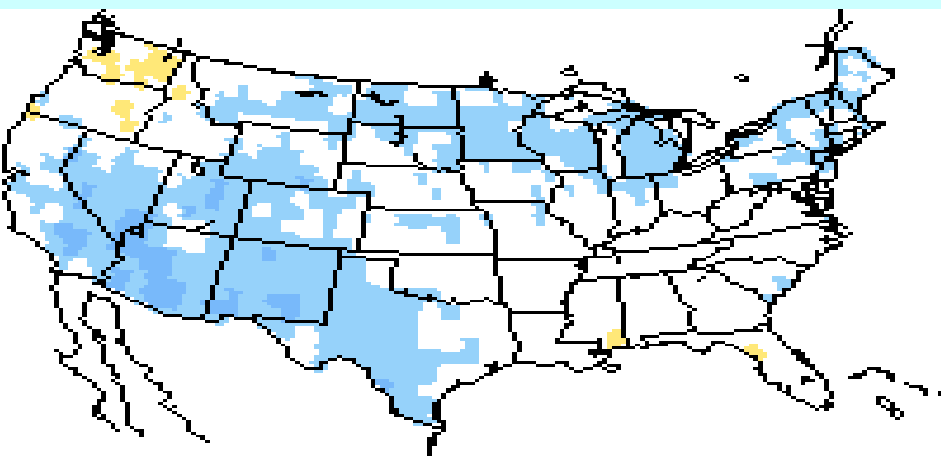
**Nov – Jan:** A Weak / Very Weak El Niño



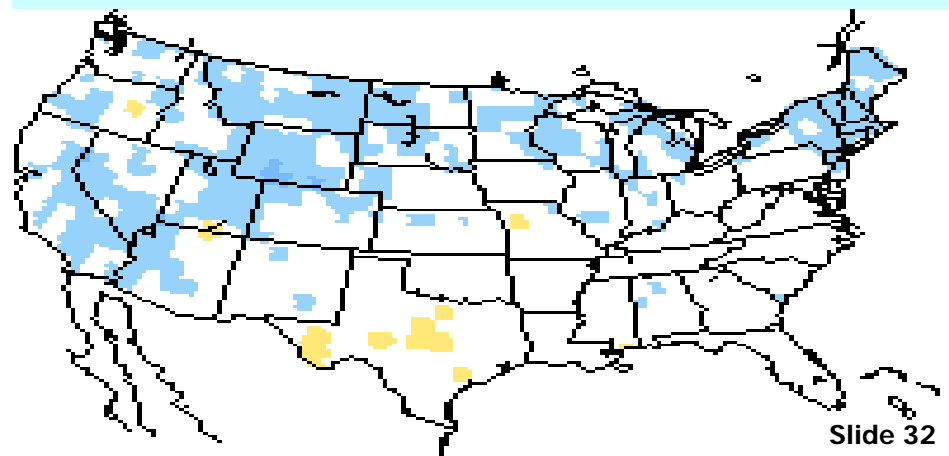
**Feb – Apr:** El Niño Peaks Then Goes To Neutral



**May – Jul:** ENSO Neutral Conditions



**Aug – Oct:** A Weak La Niña Develops Late

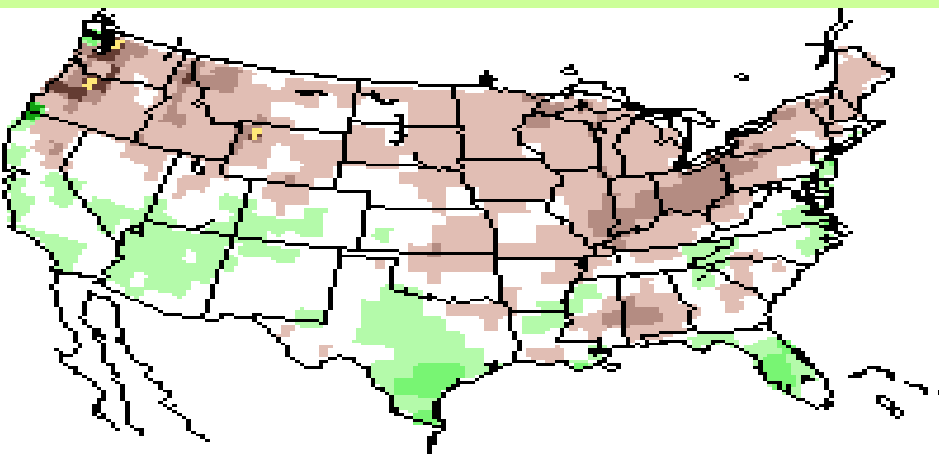




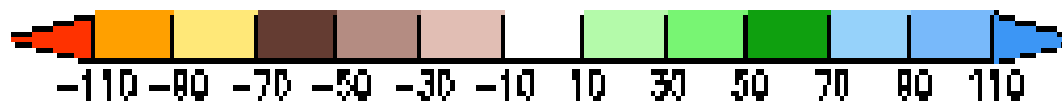
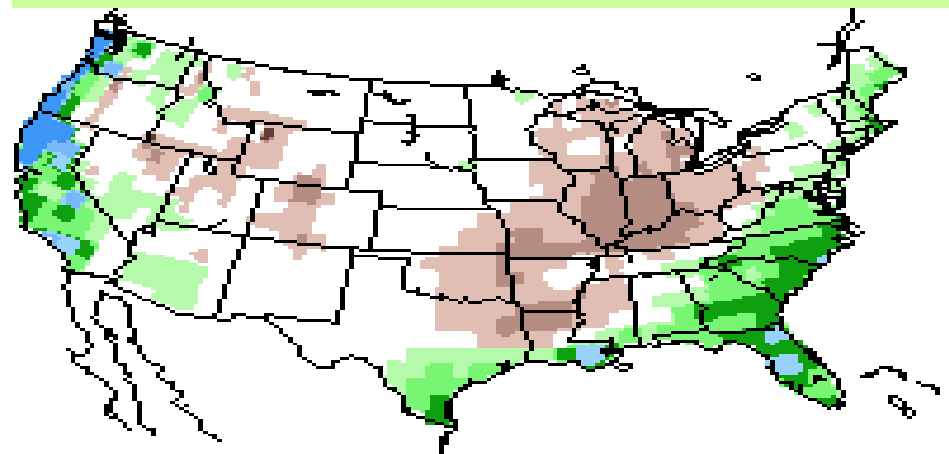


## 2012-2013 PRECIPITATION Quantitative Expectations

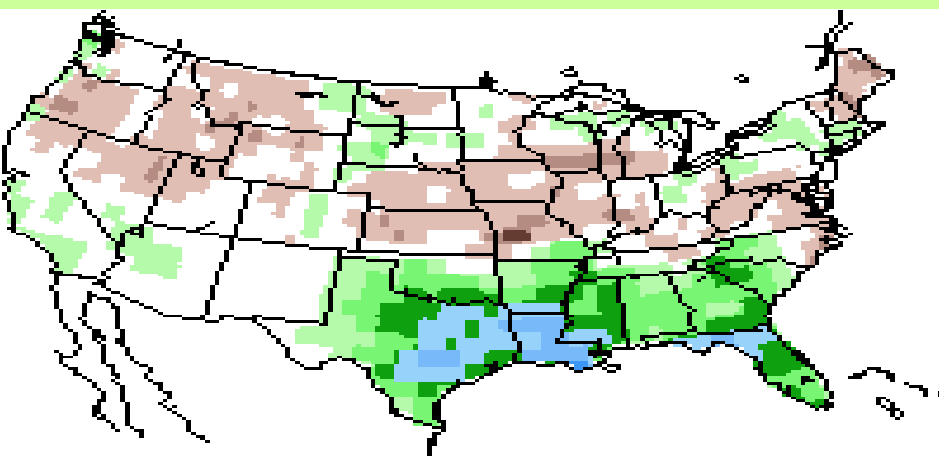
Nov – Jan: A Weak / Very Weak El Niño



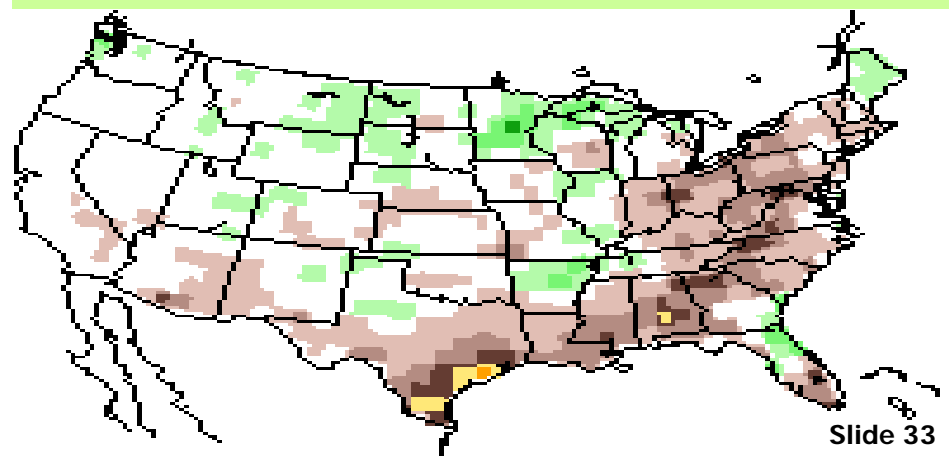
Feb – Apr: El Niño Peaks Then Goes To Neutral



May – Jul: ENSO Neutral Conditions



Aug – Oct: A Weak La Niña Develops Late





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Fertilizer Institute  
Nourish, Replenish, Grow

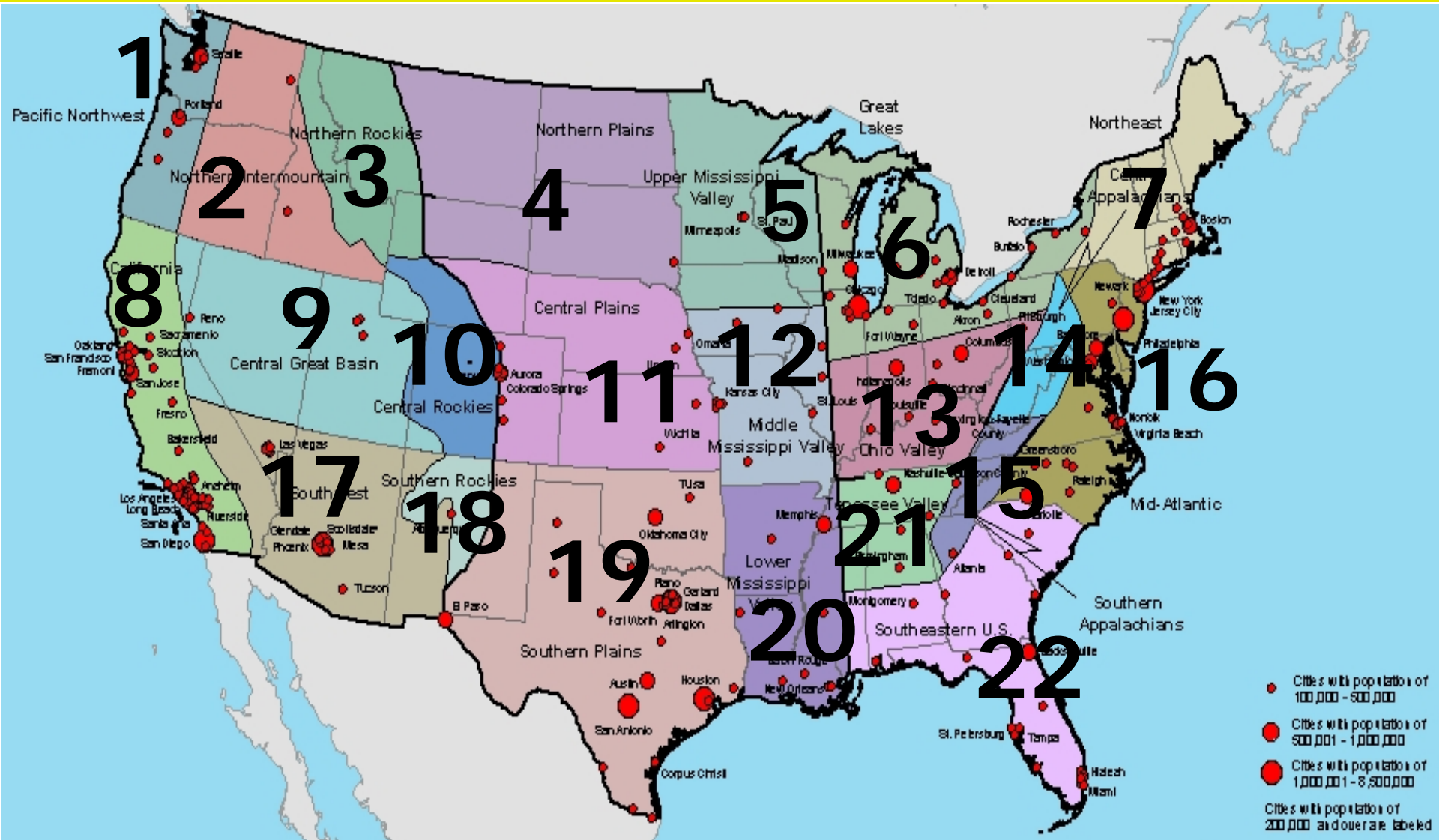
**What Can You Do If You Know The 'Shocks'? Weather Bias Yield Prediction**

# Predicted Weather Shocks & Opportunities





## Official Weather Zones: First The Forecast, Then The Impacts





## Step 1: See How A Region's Weather Is Favorable Or Unfavorable ...

### AFC Nevada Farm Bureau USA Weather Threat Index: Climate-Biased Predictive Impacts To Dairy & Food Demand

#### Projected Weather (Temps & Precip) Bias Score: **Unfavorable** Or **Favorable**?

(-100, RED = worst weather (potential droughts/floods/heatwaves/freezes/etc); +100, GREEN = best weather) ::: arrows indicate weather trend for each month

Shaded GREEN squares = Top 10% best weather areas ::: Shaded RED squares = Top 10% worst weather areas

Region: USA		Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13		Nov-12	Dec-12	Jan-13	GROWING SEASON
SUB-REGIONS		Zone													
Pacific NW	1	↓ -44	↗ 3	↓ -73	↗ 8	↓ -22	↑ 71	↓ -44	↑ 78	↓ -61		↑ 21	↓ -77	↑ 33	↗ -5
Northern Inter-Mountain	2	↓ -46	↓ -36	↓ -13	↓ -64	↓ -45	↓ -60	↓ -40	↓ -18	↑ 63		↑ 28	↑ 23	↗ 5	↓ -27
Northern Rockies	3	↑ 49	↗ 7	↑ 74	↓ -64	↑ 70	↗ 4	↗ -1	↑ 61	↓ -48		↓ -83	↑ 17	↗ 1	↑ 13
Northern Plains	4	↗ 8	↑ 72	↑ 76	↓ -12	↓ -50	↓ -11	↗ -8	↓ -16	↑ 35		↑ 20	↓ -80	↑ 16	↑ 11
Upper MS Valley	5	↑ 12	↗ -5	↓ -27	↑ 22	↓ -15	↓ -76	↓ -66	↓ -68	↓ -30		↑ 52	↓ -35	↓ -75	↓ -33
Great Lakes	6	↓ -79	↓ -18	↓ -41	↑ 10	↑ 83	↑ 10	↑ 52	↑ 82	↑ 85		↗ 4	↑ 49	↑ 73	↑ 33
Northeast	7	↑ 72	↓ -14	↑ 58	↑ 79	↑ 54	↑ 26	↓ -37	↑ 82	↓ -20		↑ 60	↑ 77	↓ -28	↑ 28
California	8	↑ 78	↗ 3	↑ 69	↗ 7	↑ 82	↓ -59	↓ -74	↑ 71	↓ -23		↓ -17	↑ 30	↑ 14	↗ 9
Central Great Basin	9	↓ -69	↑ 68	↑ 72	↓ -35	↑ 42	↓ -71	↓ -38	↑ 45	↑ 51		↑ 29	↑ 74	↑ 46	↑ 17
Central Rockies	10	↑ 39	↑ 29	↓ -38	↓ -29	↓ -83	↓ -26	↓ -84	↗ 4	↑ 68		↗ 1	↓ -81	↓ -70	↓ -20
Central Plains	11	↓ -35	↑ 53	↑ 15	↓ -47	↓ -12	↑ 66	↓ -70	↗ -4	↓ -17		↓ -49	↑ 30	↓ -78	↗ -2
Middle MS Valley	12	↓ -52	↗ 7	↓ -31	↓ -13	↑ 77	↓ -36	↑ 61	↓ -82	↑ 24		↓ -34	↓ -39	↑ 24	↗ 1
Ohio Valley	13	↑ 42	↓ -37	↓ -25	↓ -85	↗ -3	↓ -52	↑ 56	↗ -2	↑ 74		↓ -81	↓ -74	↓ -15	↗ -9
Central Appalachians	14	↓ -73	↑ 35	↑ 57	↑ 25	↑ 39	↗ 7	↓ -79	↑ 61	↓ -51		↓ -45	↗ -5	↑ 65	↑ 12
Southern Appalachians	15	↑ 78	↑ 44	↗ -9	↓ -45	↓ -28	↗ 8	↑ 24	↑ 69	↓ -42		↗ 4	↑ 49	↑ 34	↗ 3
Mid-Atlantic	16	↑ 47	↑ 39	↑ 54	↓ -70	↓ -82	↑ 40	↓ -59	↑ 16	↑ 25		↑ 44	↗ -9	↑ 14	↗ -5
Southwest	17	↓ -30	↓ -65	↑ 26	↓ -37	↓ -27	↓ -61	↑ 61	↓ -16	↑ 23		↓ -65	↓ -78	↑ 82	↓ -12
Southern Rockies	18	↓ -71	↓ -75	↑ 25	↓ -47	↓ -72	↑ 30	↑ 66	↑ 43	↓ -71		↓ -67	↗ -3	↑ 44	↓ -13
Southern Plains	19	↓ -18	↓ -49	↑ 16	↑ 29	↑ 18	↑ 69	↓ -42	↓ -19	↓ -67		↓ -10	↑ 28	↑ 18	↗ -6
Lower MS Valley	20	↓ -51	↓ -45	↑ 22	↓ -18	↑ 68	↑ 18	↑ 39	↑ 16	↑ 25		↗ -8	↑ 20	↓ -81	↑ 16
Tennessee Valley	21	↓ -35	↓ -83	↓ -66	↗ 0	↑ 75	↑ 62	↑ 58	↓ -35	↓ -72		↓ -36	↑ 54	↓ -53	↗ -8
Southeast	22	↑ 34	↓ -43	↑ 22	↑ 34	↓ -85	↓ -24	↓ -79	↑ 80	↓ -57		↓ -11	↓ -21	↑ 37	↓ -19





## Step 2: We Determine Expected Change In General Commodity Yield

### Weather-Bias Predicted Reasonable Impact On General Commodity Yield (%) For Each Month

IMPORTANT NOTE: For Any Particular Commodity, Average Out ONLY THE GROWING SEASON MONTHS To Get "Annual" Change In Demand

(GREEN REGIONS/TIMES :: More Supply

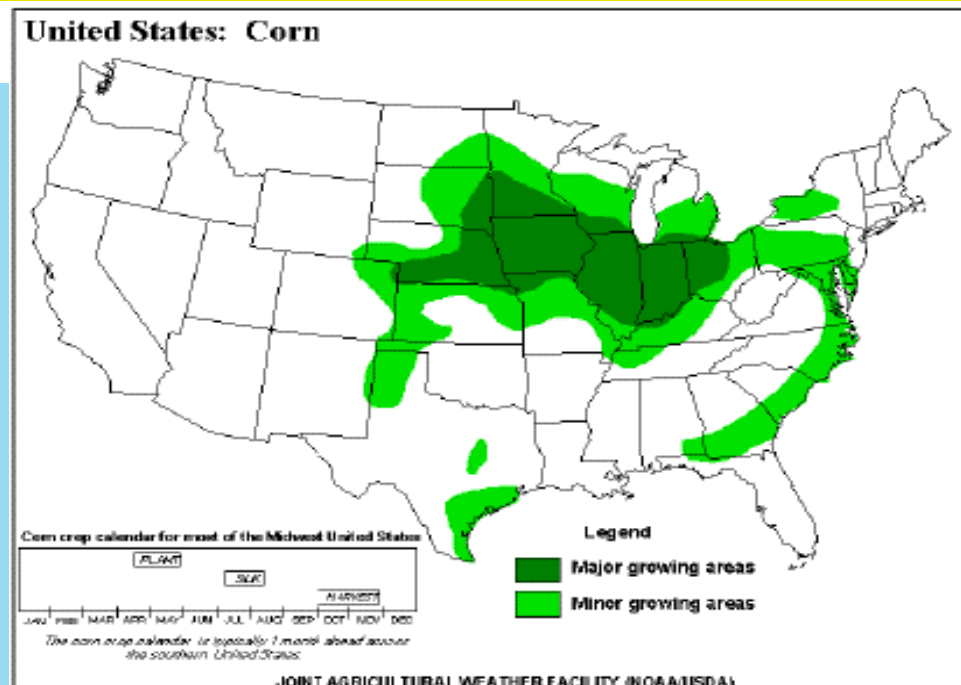
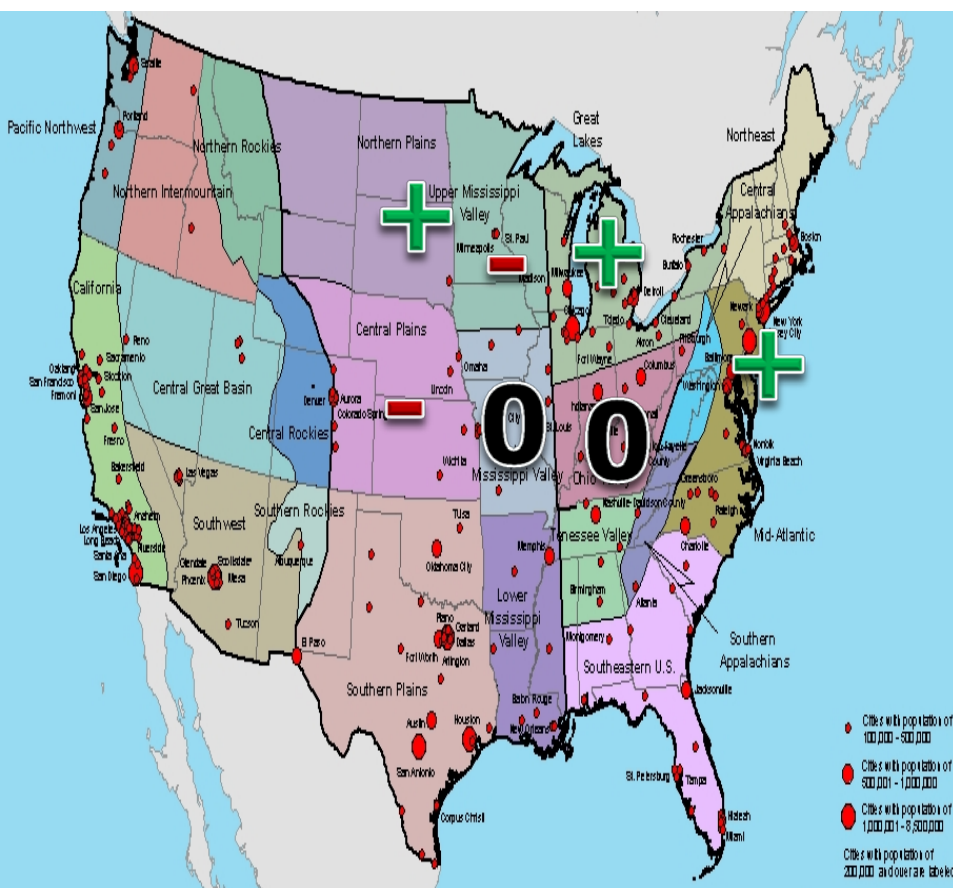
RED REGIONS/TIMES :: Less Supply

Region: USA		Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13		Nov-12	Dec-12	Jan-13	GROWING SEASON
SUB-REGIONS	Zone														
Pacific NW	1	-9	0	-14	1	-5	5	-10	6	-11		0	-12	5	-14
Northern Inter-Mountain	2	-4	-8	-2	0	-5	-2	-9	-1	10		0	3	0	-8
Northern Rockies	3	5	1	14	-13	1	0	0	3	-10		-7	1	0	-2
Northern Plains	4	1	12	7	-2	-7	0	-1	-1	1		2	-14	1	4
Upper MS Valley	5	2	0	-4	0	-1	-1	-7	-7	-5		5	-7	-7	-12
Great Lakes	6	-12	-3	-5	0	4	2	11	14	12		1	2	15	18
Northeast	7	9	-3	13	11	9	4	-2	6	-2		9	9	-2	18
California	8	7	0	15	0	3	-13	-2	2	-4		-1	1	3	1
Central Great Basin	9	-13	10	8	-8	4	-14	0	6	10		2	8	8	7
Central Rockies	10	-13	10	8	-8	4	-14	0	6	10		2	8	8	7
Central Plains	11	6	2	-9	-6	-19	-2	-11	0	11		0	-16	-3	-17
Middle MS Valley	12	-2	5	2	-2	-3	9	-5	0	-1		-7	1	0	2
Ohio Valley	13	-2	1	-3	-2	10	-5	7	-8	2		-1	-1	5	1
Central Appalachians	14	3	0	-1	-6	0	-2	12	0	7		-17	-17	0	5
Southern Appalachians	15	-16	1	4	0	3	1	-2	7	-11		-1	-1	6	1
Mid-Atlantic	16	14	3	-1	-7	0	1	4	9	0		1	2	1	4
Southwest	17	4	8	1	-1	-7	8	-8	2	0		5	-1	1	1
Southern Rockies	18	-3	-4	4	-4	-1	-2	14	0	5		-8	-12	8	6
Southern Plains	19	-10	-10	1	-7	-17	7	15	3	-4		-11	-1	1	-6
Lower MS Valley	20	-2	-2	1	6	0	3	-4	-3	-9		-1	4	1	-4
Tennessee Valley	21	-2	-4	-2	0	0	1	9	-8	-13		-5	1	-6	-8
Southeast	22	5	-7	4	1	-20	-6	-2	9	-13		-1	-3	5	-16



## Agricultural Impacts: **Corn**, March – October, 2013

### USA Weather Shifts On Corn



### **CORE WEATHER BIAS PREDICTION**

Take zones 4,5,6,11,12,13 & 16

3/7 zones – slightly to very positive  
2 zones – very negative; 2 – neutral

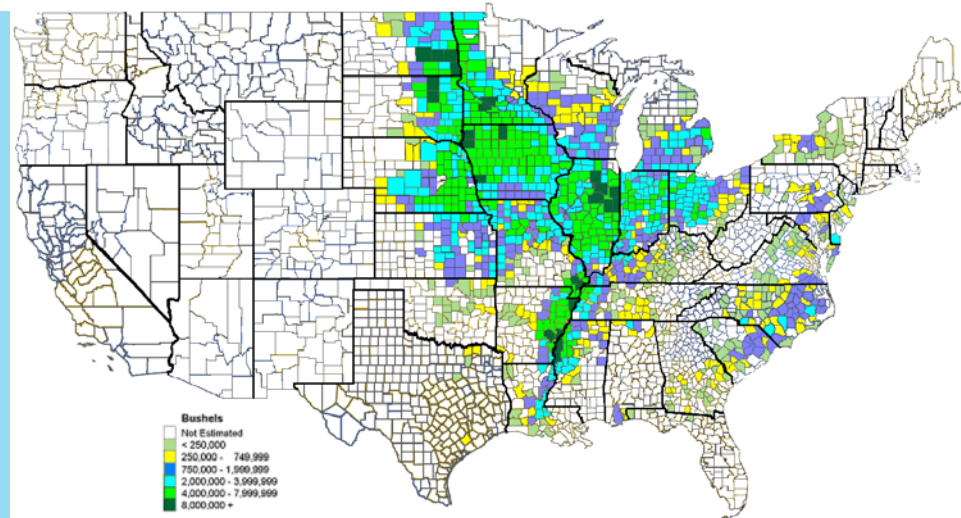
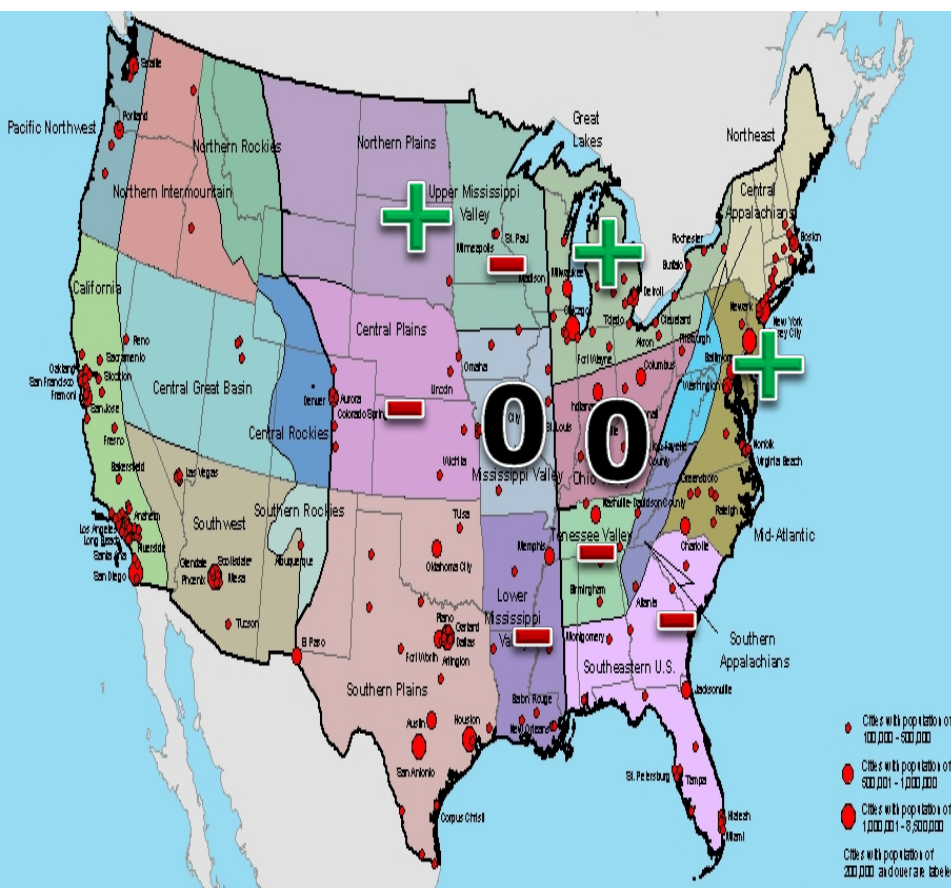
**Price Volatile & Wide Range Due To  
Good & Bad Weather Months**





## Agricultural Impacts: Soybeans, March – October, 2013

### USA Weather Shifts On Soybeans



### CORE WEATHER BIAS PREDICTION

Take zones 4,5,6,11,12,13,16,20,21 & 22

3/10 zones – slightly to very positive  
5 zones – very negative; 2 – neutral

Price **Bullish** Due To Harsh Drought & Heat SE, And Changeable North

- + Mainly beneficial
- Mainly unfavorable
- \* Mainly neutral



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Nourish, Replenish, Grow

**Remember 3 Points: Plus Simon's Golden Rule ...**

# Summary





**Simon Says:** Risks Are Increasing ... But New Thinking Pays Off Handsomely!



## Simon's 3 Golden Rules

- STEP OUT OF THE BOX
- THINK AHEAD & CONNECT DOTS
- ADAPT TO DISRUPTIVE FORCES



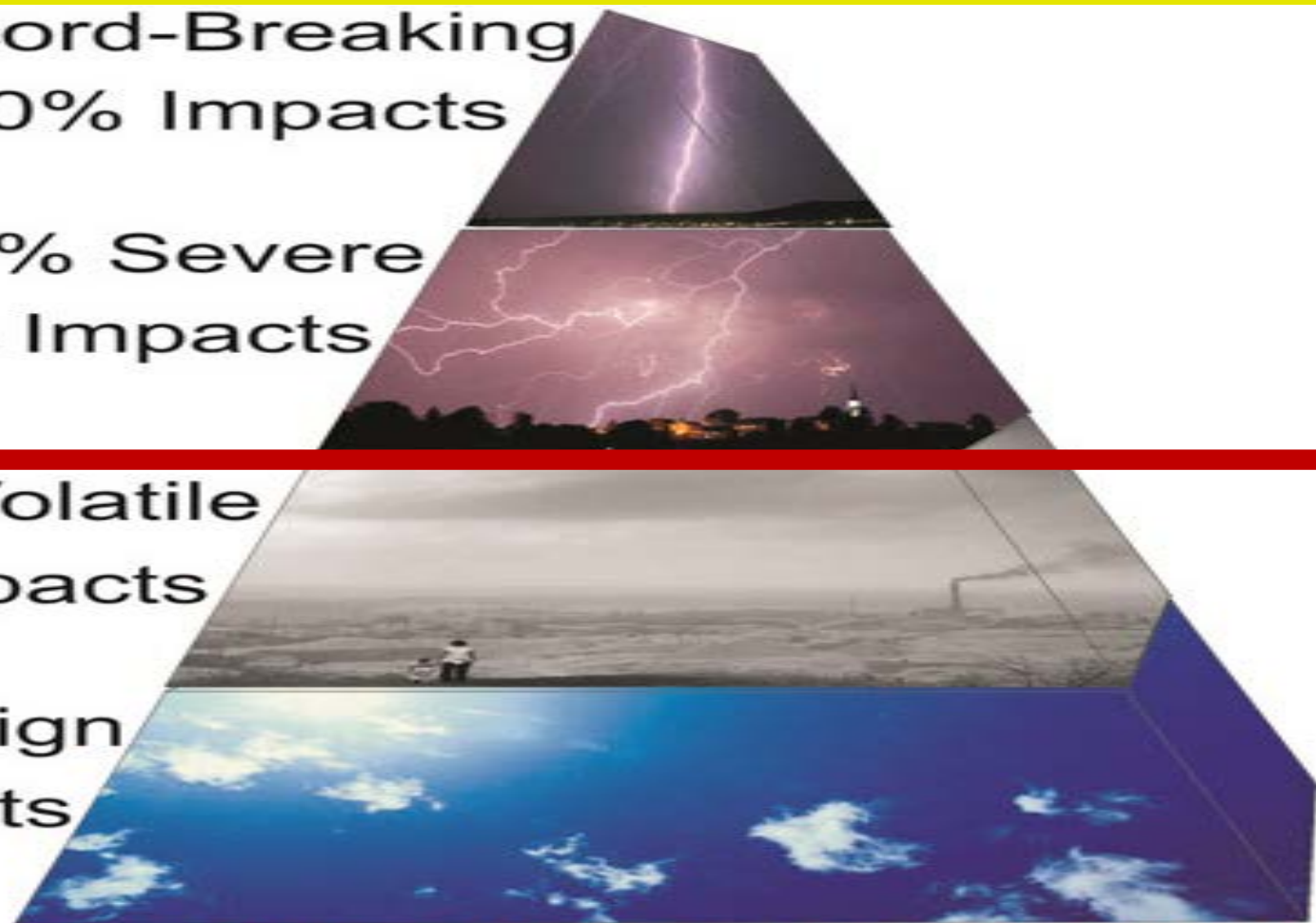
**In Summary, 90:10 Weather Rule: Focus On The Worst Weather Events**

3% Record-Breaking  
60% Impacts

7% Severe  
30% Impacts

20% Volatile  
9% Impacts

70% Benign  
1% Impacts



**WEATHER RISK IMPACT DYNAMICS**

**90% Of Weather Causes Just 10% Of The \$\$\$ Impacts**

**90% Of The \$\$\$ Impacts Come From The Top 10% Worst Weather**





## **When You Are "In The Know": Our 6-Step Rule To Get A Positive 'Edge'**

**Plan Ahead**

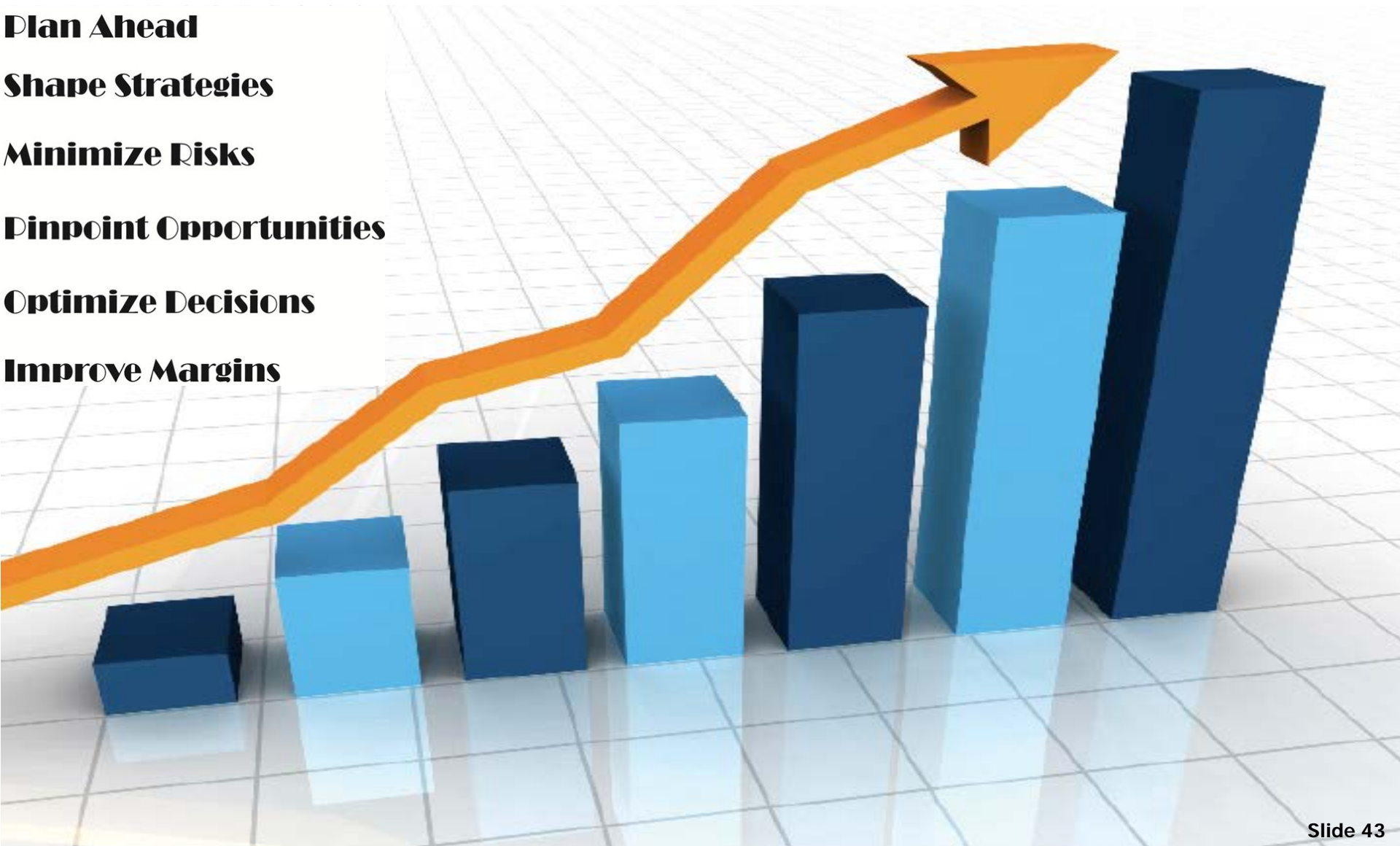
**Shape Strategies**

**Minimize Risks**

**Pinpoint Opportunities**

**Optimize Decisions**

**Improve Margins**





**Q&A:** Let's Share Thoughts, Network New Ideas & Stay In Touch



- **VERY WARM WEATHER**
- **VERY COLD WEATHER**
- **WEATHER**
- **FALLING AUTUMN LEAVES**
- **FALLING PRESIDENTIAL APPROVAL RATINGS**
- **WARMING ON MARS**
- **SQUIRREL ATTACKS**
- **BALDING CLIMATE SCIENTISTS NOT BEING ABLE TO GET DATES**