

Frequent Cold Waves from Arctic in Global Warming. 2013/5/10,11

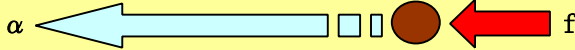
In many nations, people sometime encounter severe cold wave in recent global warming, which may be paradox for people. But it has decisive scientific and reasonable validity.

[0] : Only Heat and Coriolis force determine Climate in the region .

As for people who has been encountering severe cold waves, it is hard to admit global warming, because the visible situation has become upside down. Now author try to make those people full understanding on the controversy.

(1) **What cause velocity acceleration** (Newton Dynamics) . *"This is the first principle".*

$M \alpha = f$. <mass "M" gets acceleration α by force f by Newton dynamic equation>

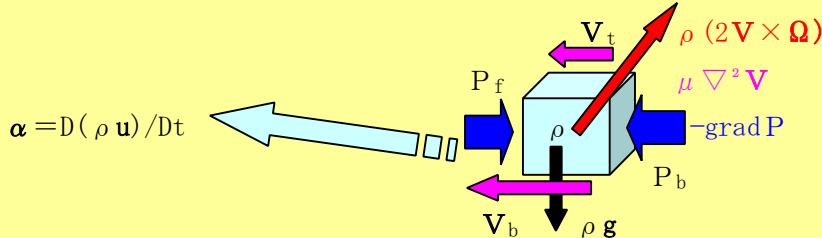


(2) **What cause atmospheric flow (Fluid dynamics viewpoint).**

$$D(\rho \mathbf{V})/Dt = \mu \nabla^2 \mathbf{V} - \text{grad}P + 2\rho \mathbf{V} \times \boldsymbol{\Omega} + \rho \mathbf{g}.$$

The mass (density) ρ acceleration = forces

= surface dragging force + surface pressing one + Coriolis one + gravity one.



Don't care on the details at here, but you should care on only {Coriolis, gravity} forces.

Note "air mass density" $\rho = \rho(T, P)$ is varied by temperature=T (and pressure=P).

(3) **Heat causes upflow (low pressure=LP) and cold do downflow (high pressure=HP).**

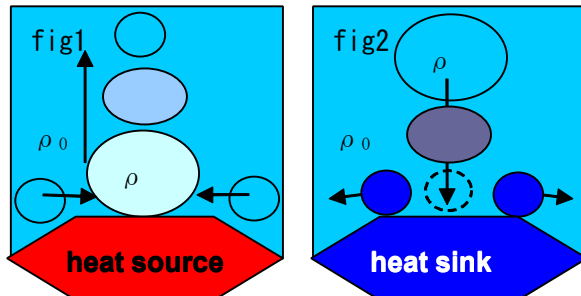
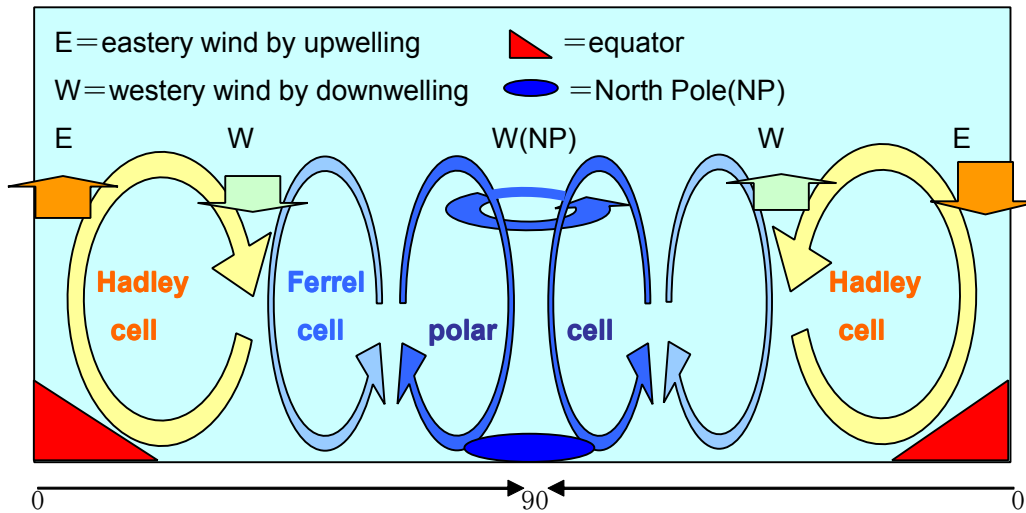


fig1 is upwelling by becoming lighter density by $\rho < \rho_0$ due to heat.
fig2 is down flow (sink) by density becoming heavier by $\rho > \rho_0$ due to cold source. Note the symmetry !!.

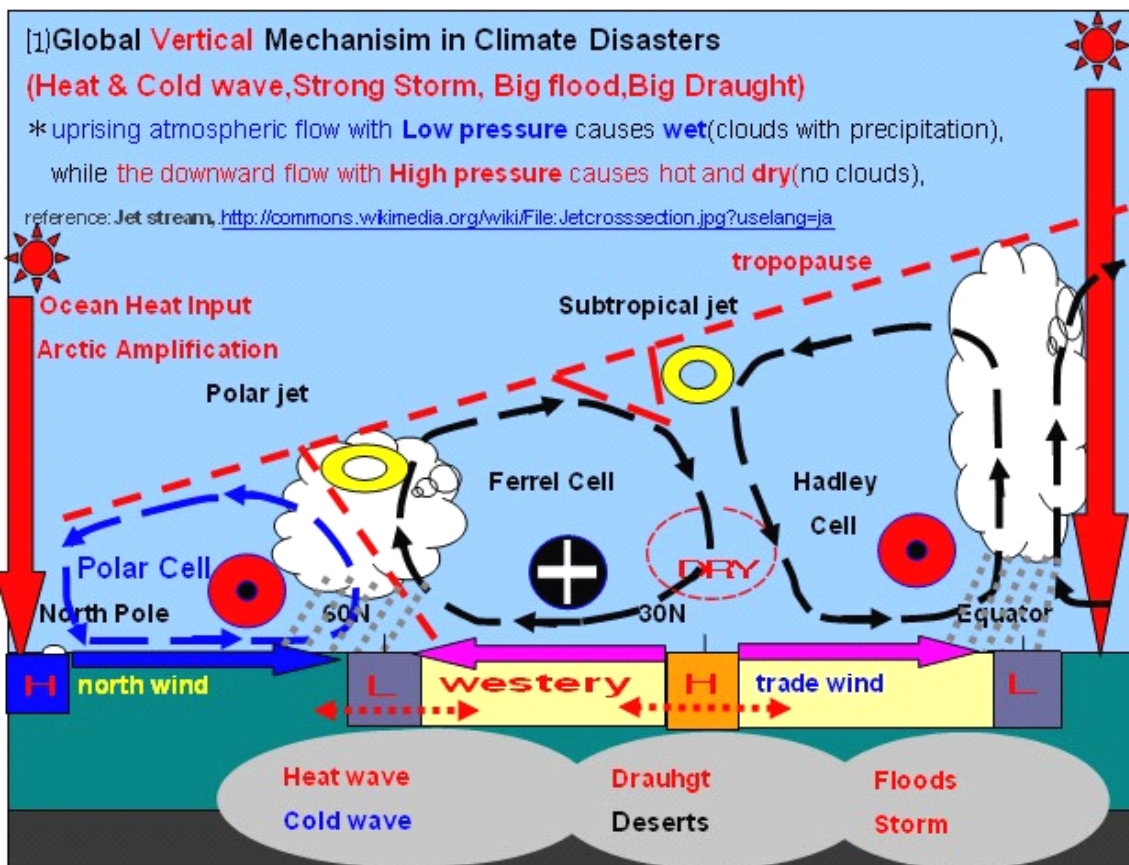
This is well known **convection flow** through density= ρ change by heat sources (sinks) and by **gravity field** (ρg).

(4) **global 3 Looping flows by convections with coliori force.**

http://resources.yesican-science.ca/SS_version1/ss/g05/wx/unit3_weatherg05.html



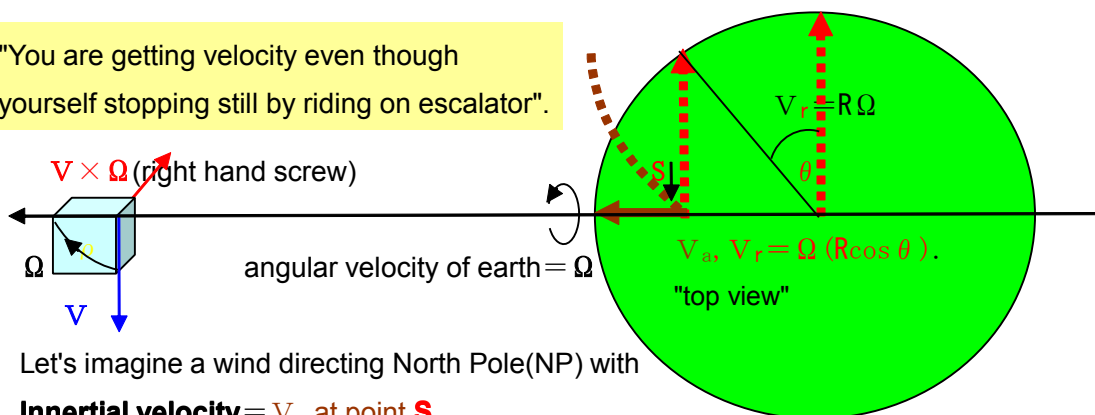
* more detail of global convections



(5) **Coriolis force** due to earth rotation.

The origin of westerly and easterly winds.

"You are getting velocity even though yourself stopping still by riding on escalator".



Let's imagine a wind directing North Pole(NP) with

Inertial velocity = V_a at point **S**.

Then note **the hidden velocity** V_r due to V_a fixed at the **earth surface rotating with velocity** = $\Omega(R \cos \theta)$, escalator velocity of which become less and less as goes to 90° .

As V_a goes to NP, **westerly** V_r reveals to be larger and larger to $\Omega(R \cos \theta) = \max$ at NP.

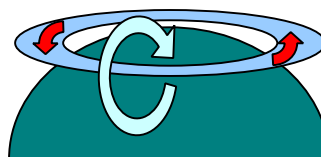
* coriolis force-itself is $= \rho (2 \mathbf{V} \times \boldsymbol{\Omega})$, the vector product of which is proportional to \mathbf{V} .

* vector product : http://en.wikipedia.org/wiki/Cross_product

(a) Flow from Northern hemisphere(NH)

to NP causes **westerly wind**,

which is **main flow** at now.

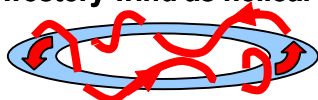


If the driving flow(flow from NH to NP)

became weaker and weaker,also westerly wind becomes weaker

However,westerly wind would not disappear.**Because,so long as Arctic is colder than NH, heat flow direction is NH to NP.**

* **westerly wind as helical ring.**

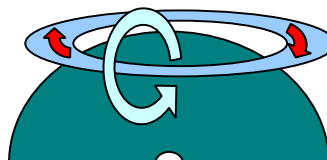


Note driving flow must be loop,where upper flow causes westerly,while lower one does easterly.

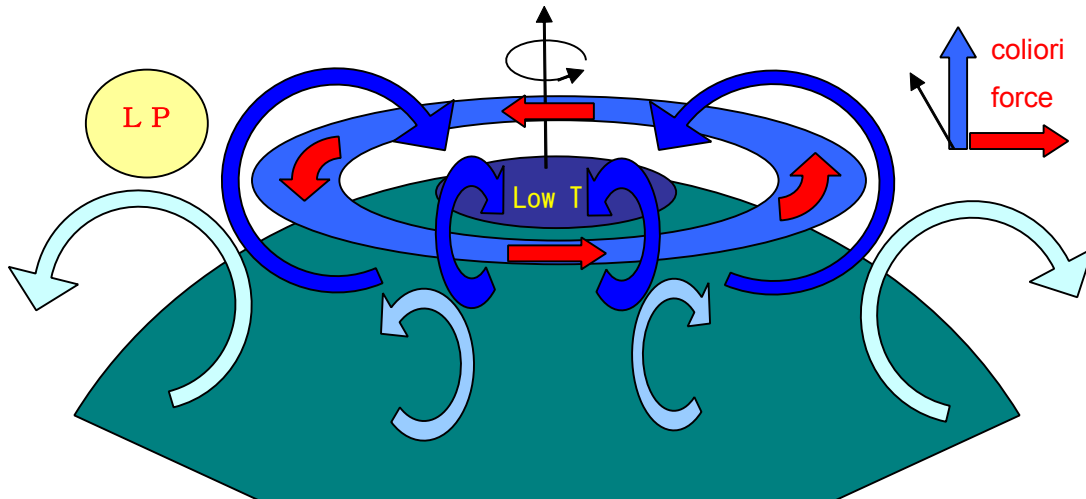
Then why only upper westerly is considered ? The answer may be lower driving flow is weak as the velocity. *In general,wind becomes stronger as the height goes higher.*

(b) Flow from NP to NH causes **easterly wind**,

Then the problem is what causes strength and direction of driving wind ? It is **heat**(cold heat sink).



[1] : **Arctic Oscillation(+)= stability with strong sink by cold NP**
the sink flow accelates wetyry wind by coliori force..



- (1) There is heat exchanging flow between Arctic and northern hemisphere.
- (2) Arctic warmer incoming flow(upper flow) causes **westyry wind** by **coliori force**.
- (3) Low temperature focus of **strong cold** sinks more upper flow to accelate westery wind.
Then the strong sink force acts to **attract** westery ring into focus center(**ring stability**).
 Which act to **confine cold air mass on Arctic ocean**. Strong westery wind ring act as a **shutter** between inner cold and outer warm.

(4) Then outside of the ring is place where cold (from inside) and warm (from out side) flows colliede, are mixed with each other and becomes upwelling as low pressure(**LP**),

(5) Thus the cold system becomes **stable** with confining colder flow.

* Above ring is not **jets tream**. The upper part of outside ring is orbit for jea stream.

* * jet stream=high speed westery wind(east to west) pipe line around nothern sphere.

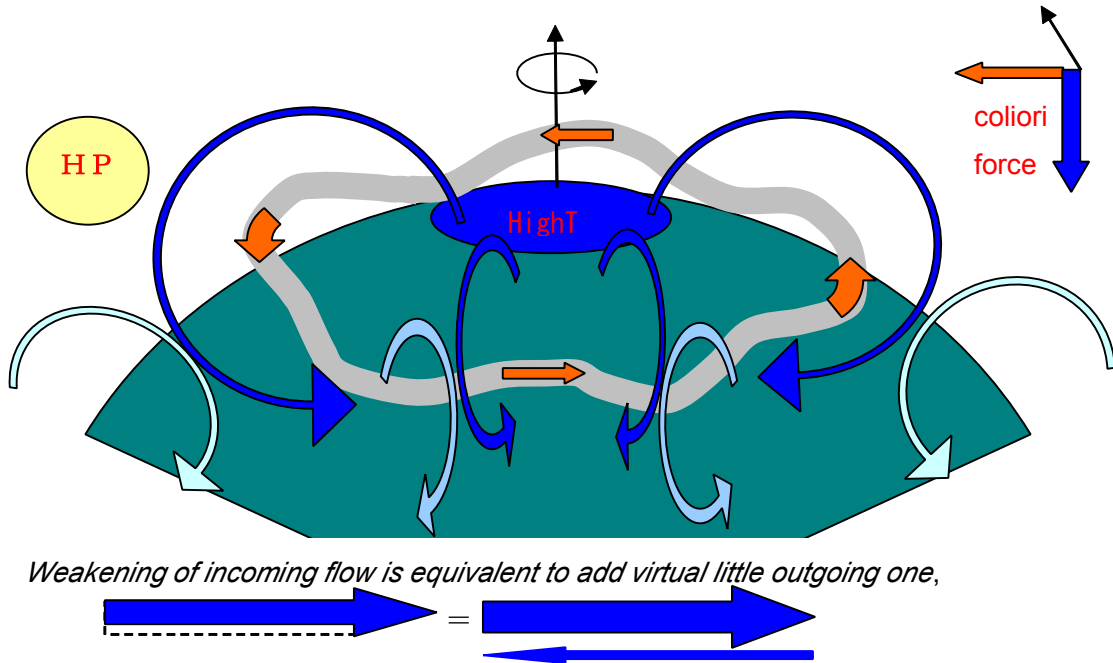
While arctic wind from pole to south is to collied jet stream to meander, which cause.....

<http://www.climatecentral.org/news/arctic-warming-is-altering-weather-patterns-study-shows/>

http://en.wikipedia.org/wiki/Jet_stream

* * * In this report, climate events in Arctic and northern hemisphere was discussed, however also in south-America, they encountered severe cold wave. Maybe Antarctic become warmer as Arctic. In authors's view, Antarctic on the land (**isolated from ocean heat**) would be rather stable than Arctic in direct the ocean. Disasters by climate change had begun in Africa and Australia in warmer southern hemisphere, however, it would be dominat in colder northern hemisphere(NH) due to difference of **pole zone thermal stability**. Carbon reduction is terribly hated in cold NH, because it never can be lost for them. A possible way is mass emigration to south (desert developpment project) and under ground one of wamer places.

**[2] : Arctic Oscillation(−) = instability with weak sink by warmer NP
 .<the situation becomes a bit upside down by NP changing cold to warm>**



Then what happen ? Following are almostly mentioned only the virtual component.

- (1) If focus temperature became **higher**, the situation become **rather upside down**.
- (2) The focus acts to cause some outer upper flow component to **weaken westerly wind** by Coriolis force inversed as for out flow component. Force for pulling to focus is weakened. **As the consequence, the shutter function becomes weaken to allow outgoing cold flow.**
- (3) **Outgoing componet increasing** acts to weak westerly wind and extend the ring radius. This fact is equivalent to cold air mass going down to northern hemisphere.
- (4) The system becomes **unstable** with **leaking colder flow to northern hemisphere**. Note the westerly wind becomes **meander** by local flow fluctuation increasing.

Note that although we denote it high temperature, but it is the coldest Arctic. so out flow of air mass is colder than any one in northern hemisphere. Generally to tell, then warmed Arctic (ocean the heat reservoir) is considered as it were **higher pressure source of cold air mass** which causes frequent cold waves in northern hemisphere in global warming !!.

This is the **warming Arctic paradox** not known in global public in global warming.

[3] : What would happen in Arctic and other regions as global warming goes on ?.

(1) **rapid Arctic warming by ice albedo feedback.**

Arctic ice extent in summer is estimated to be fully disappeared in **2015 ± 2.**

<http://arctic-news.blogspot.co.uk/2012/09/piomas-data-confirm-exponential-trend.html>

<http://www.vmine.net/scienceinparliament/specials/12.pdf>

Black sea surface absorbs more sun heat, which increases more area of black sea surface by ice melting. This is now on **positive feedback** !!, which never be stopped spontaneously, but by artificial technology (**Arctic cooling by geo-engineering**).

<http://arctic-news.blogspot.jp/p/how-to-cool-arctic.html>

(2) **Frequent cold waves outbreaking (the paradox in global warming).**

Cold winter in a world of warming? (Real Climate org)

<http://www.realclimate.org/index.php/archives/2010/12/cold-winter-in-a-world-of-warming/>

Extreme hot, cold waves torturing world - People's Daily Online

<http://english.peopledaily.com.cn/90001/90777/90852/7088455.html>

<http://www.climateark.org/shared/reader/welcome.aspx?linkid=176521>

Less summer Arctic sea ice cover means colder, snowier winters in Central Europe

<http://www.sciencedaily.com/releases/2012/02/120201105126.htm>

Cold Winters Caused by Warmer Summers, Research Suggests

<http://www.sciencedaily.com/releases/2012/01/120112193430.htm>

(3) **Breaking down of Arctic stability confining cold air mass would be disastrous.**

For example, **cold wave damage on firm lands in crop growing season** may be fatal for agriculture. The possibility would monotonously increase as **Arctic instability** grows.

On the other hand, damages by **global draughts** now has been spreading over all the world.

Coming years would face **alternate severe damages** by heat wave and cold one in northern hemisphere.

***What Is a Killing Frost? How Cold Does It Have to Get to Stop Corn and Soybeans?**

<http://farmprogress.com/story-what-is-a-killing-frost-how-cold-does-it-have-to-get-to-stop-corn-and-soybeans-9-31862>

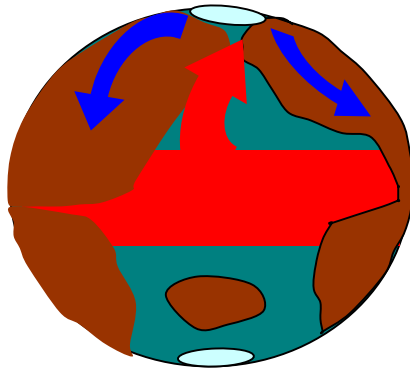
The temperature has to get down to 28 degrees F (**-2.2°C**) for a complete kill on **corn** and **soybean** plants. Temperatures above 28 degrees F don't kill the entire plant, but will damage leaves and upper stem

*気象科学:低温凍結雨霜冷害と防衛策(counter measure on coldwave(Japanese))

<http://www.sourcejuice.com/2013/01/03/%E6%B0%97%E8%B1%A1%E7%A7%91%E5%AD%A6-%E4%BD%8E%E6%B8%A9%E5%87%8D%E7%B5%90%E9%9B%A8%E9%9C%9C%E5%86%B7%E5%AE%B3%E3%81%A8%E9%98%B2%E8%A1%9B%E7%AD%96/ja/>

<http://www.sourcejuice.com/2013/01/03/%E6%B0%97%E8%B1%A1%E7%A7%91%E5%AD%A6-%E4%BD%8E%E6%B8%A9%E5%87%8D%E7%B5%90%E9%9B%A8%E9%9C%9C%E5%86%B7%E5%AE%B3%E3%81%A8%E9%98%B2%E8%A1%9B%E7%AD%96/ja/>

* Heat exchanging flow increasing between hot tropical zone & cold Arctic in global waring.



(4) **Arctic Methane Catastrophe Possibility within 2040~2050?!**

This is nothing, but decisive doomsday prediction also by climate science.

Current trend would cause full diminishing of sea ice in Arctic. Then heat from summer sun would go down to sea floor where **1000GtC** methane clathrate reservoir (massive bomb by heat invasion) lies. Time to fire massive bomb is estimated about within 40 years.

<http://arctic-news.blogspot.jp/p/global-extinction-within-one-human.html>

Also see appendix on the dooms day predictions.

Methane is strong green house effect gas more than 70 times of CO₂. Once massive methane was released in atmosphere, such as **10GtC** would cause radiative forcing (heat amount accumulated in earth to cause global temperature rise) twice time of at now ($1.6W/m^2 \sim 0.03^\circ C/yr$). Which is told fatal to cause **positive feedback** to increase global temperature which turn to increases more methane release from sea bed and zundra. Temperature rise of $0.06^\circ C/yr$ -itself is awful enough to cause wild climate. If positive feedback began, $0.06^\circ C/yr$ becomes more and more to become **fire ball earth at last**.

(5) **Emergent establishing global counter measure!!!:**

Which do you opt to live in hell without hope for decades, or try to survive with hope in hell.

By anyhow, both option never can be nothing, but hell !!.

<http://www.ameg.me/>

<http://www.777true.net/OPERATION-GLOBAL-RAMADAN.pdf>

http://www.777true.net/GLOBAL-DECLARATION-WAR-on-CARBON-with-Geo_Engineering_Part_D.pdf

APPENDIX:

<http://www.777true.net/Scientifical-Mechanism-of-Prophecy-by-Paranormalities.pdf>

(1)Hitler's marvelous future prediction on (2039).

http://inri.client.jp/hexagon/floorB1F_hss/b1fha400.html#04

* Following are what Hitler told<translated citation from book 『after 1999』(Syoudensya co in Japan) by Suzuki>

Separation of the two pole would have been evolving more and more.

After 1988,people would have been more and more being devidened to those who are less,but new type dominator and those who are many,but ruled.One operate and rule on all over and the others are operated and ruled without consiousness.Evolving is not only in humanity,but also in the nature. As humanity would become so,also the nature would reveal big change in earth and universe.After 1989,humanity would encounter and access to unprecedental huge catastrophe by universe.In my youth,I wrote it in the "Mein Kamph". Somedays,mankind would have been terribly revenged from the nature. It is the state after 1989.Mankind would have become boast to break natural low,so the nature would have revenged them to cause them disasters.Which is to lead mankind to a supreme state where none could have imagined.

After 150 years since I was born,the supreme is coming in 21 century,

for which I can clearly visualize by astral power.It's a incredible supremeness.

Whether those may be superficially democratic or socialism nations world, substantially NAZIS would have been ruling in both of those nations by competing and killing with our NAZIS weapons.The society would have become what I had been wishing, as stronger ruler dominate weak major.Then is also era of convulsin of nature.Mankind would have been terribly revenged from the nature.Also the climate would have been devidened to severe cold and severe hot,fire and ice,big flood and big draught,both of which would alternately attack on earth.

Mankind as now being would not have been at that time,because till 2039/January,mankind would have evolved to something different from now mankind,or they would have been degenerated.

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(2)Jucelino Nobrega da Luz's future prediction(2040~2043).

Jucelino Nobrega da Luz.-Website(news in English version).

<http://www.jucelinodaluz.com.br/english/index.htm>

.....
The enviromental problem that await future generations must be resolved now,
or life on this planet will be extincted in 2043.....
and our ,planet can " Fry" untill 2040...

(3)Arctic Scientist told a possibility of (decadal scale).

<http://www.independent.co.uk/news/science/vast-methane-plumes-seen-in-arctic-ocean-as-sea-ice-retreats-6276278.html>

"I am concerned about this process, I am really concerned. But no-one can tell the time scale of catastrophic releases. There is a probability of future massive releases might occur within **the decadal scale** , but to be more accurate about how high that probability is, we just don't know," Dr Shakova said.

Postscript:

Global warming would cause both heat wave and cold one alternatively,which means **Increasing intensity of heat exchange between** tropical zone to both pole zone.

-related topics-

<http://www.777true.net/0.1C-Temperature-Rise-could-cause-Climate-Wild.pdf>

<http://www.777true.net/Strong-Draught-Mechanism.pdf>