

「The Emergency Report on the Global Thermalized Crisis」.

Intergovernmental Panel on Climate Change ≡ IPCC report has been released on 2007/11/17, Valencia, Spain, which warns on dangerous possibility of climate and life fields changes caused by excess Green House Gas (GHG) by human economical activities. Here is the copy. '08/3/24. <motoji-SUZUKI>

❶ **3.4 Risk of abrupt or irreversible changes Anthropogenic warming could lead to some impacts that are abrupt or irreversible, depending upon the rate and magnitude of the climate change. {WGII 12.6, 19.3, 19.4, SPM}.**

<http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr.Pdf>

Abrupt climate change on decadal time scales is normally thought of as involving ocean circulation changes. In addition on longer time scales, ice sheet and ecosystem changes may also play a role. If a large-scale abrupt climate change were to occur, its impact could be quite high (see Topic 5.2). {WGI 8.7, 10.3, 10.7; WGII 4.4, 19.3}. Partial loss of ice sheets on polar land and/or the thermal expansion of sea water over very long time scales could imply metres of sea level rise, major changes in coastlines and inundation of low-lying areas, with greatest effects in river deltas and low-lying islands. Current models project that such changes would occur over very long time scales (millennial) if a global temperature increase of 1.9 to 4.6°C (relative to pre-industrial) were to be sustained. Rapid sea level rise on century time scales cannot be excluded.

{SYR 3.2.3; WGI 6.4, 10.7; WGII 19.3, SPM}. Climate change is *likely* to lead to some irreversible impacts. There is *medium confidence* that approximately 20 to 30% of species assessed so far are *likely* to be at increased risk of extinction if increases in global average warming exceed 1.5 to 2.5°C (relative to 1980-1999). As global average temperature increase exceeds about 3.5°C, model projections suggest significant extinctions (40 to 70% of species assessed) around the globe. {WGII 4.4, Figure SPM.2}. Based on current model simulations, it is *very likely* that the meridional overturning circulation (MOC) of the Atlantic Ocean will slow down during the 21st century; nevertheless temperatures in the region are projected to increase. It is *very unlikely* that the MOC will undergo a large abrupt transition during the 21st century. Longer-term changes in the MOC cannot be assessed with confidence. {WGI 10.3, 10.7; WGII Figure,

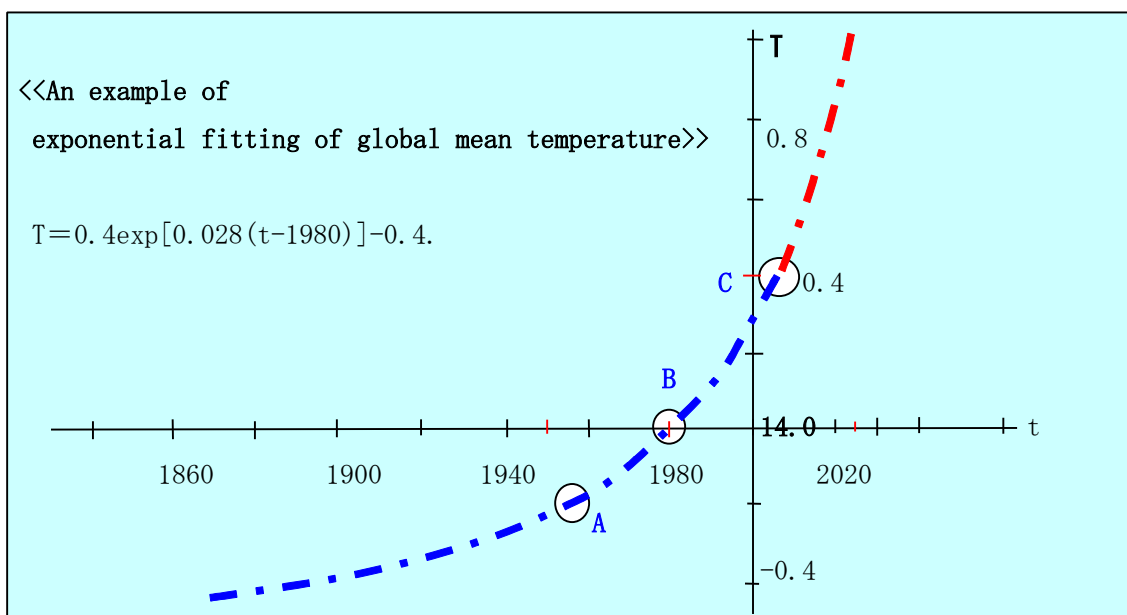
Table TS.5, SPM.2}. Impacts of large-scale and persistent changes in the MOC are likely to include changes in marine ecosystem productivity, fisheries, ocean CO2 uptake, oceanic oxygen concentrations and terrestrial vegetation. Changes in terrestrial and ocean CO2 uptake may feed back on the climate system. {WGII 12.6, 19.3, Figure SPM.2}.

②: The exponential increasing of global mean temperature, which means definite being of **Positive Feed Back** in temperature mechanism.

"The Limit to the Growth by Dennis Meadows et al, or the Rome Report" had been published to the world in 1972. In the report, they suggested potential danger of "unstable exponential increasing causing sudden catastrophe". An exponential increasing seems very slow at first, but in the later, it suddenly becomes radical!. It is caused from results fed back to initial cause.

Then you can see the "global mean temperature increasing of the last 100 years <[Our conclusion is also that the curve of graph is quite fitted to such exponential increasing by filtering \(neglecting\) temporary local noisy fluctuations.](http://www.ipcc.ch/pdf/presentations/briefing-geneva-2007-05/observation-and-drivers.Pdf/(p=8/29)>>)

I hope you try to verify the fact.



③ About above graph:

For simple example, if $\{A(-0.2;1955), B(0.0;1980), C(0.4;2005)\}$ are fixed points at where $\langle T = A \exp[k(t-1980)] + B \rangle$ must be on, then t is year and $\{A, B, k\}$ must be determined uniquely by the simultaneous equation. This simple fitting is remarkable for grasping total past 150 years feature. Desirable method is least mean square fitting.

④ Discussion:

The insisting of IPCC scientists could be summarized as follows.

- (1) The abnormal global temperature increasing has been caused evidently by human activities in the last 100 years.
- (2) Even though, artificial GHG exhausting stopped, the tendency would not be stopped for the time being.

Thus we can not stop to recognize an end of former human history in which we eagerly have been seeking only material prosperities. Certainly such turning established philosophy upside down is very difficult than anything. Especially USA is the worst GHG exhausting nation and also had not joined Kyoto-protocol for international agreement on GHG deduction. We should not neglect **the increasing realities of world wide climate hazards**. Also we should never think it of nothing relief. If we can make world wide power unite to solve the problem, something excellent way will be derived.

I also recommend you to see the site of Professor Jucelino Nobrega the famous Brazilian prophet (<http://www.jucelinodaluz.com.br/>).