

IPCC's AGW theory is a fictitious science

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Figure1 History of model studies supporting IPCC's AGW theory

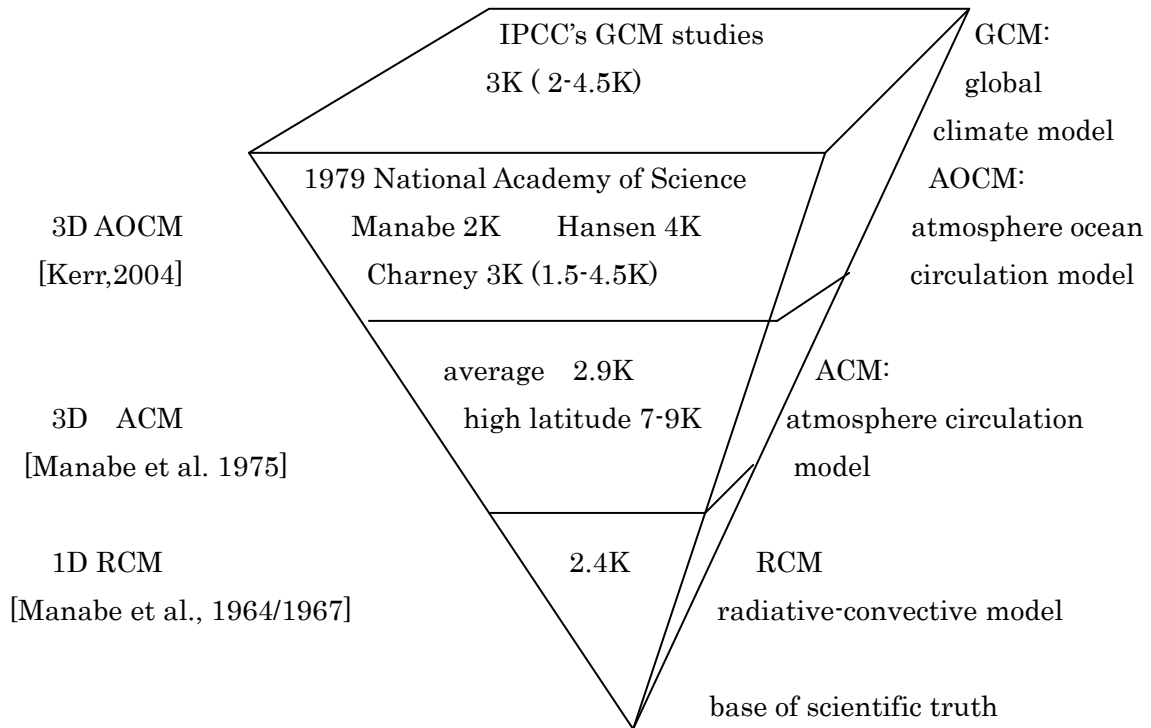
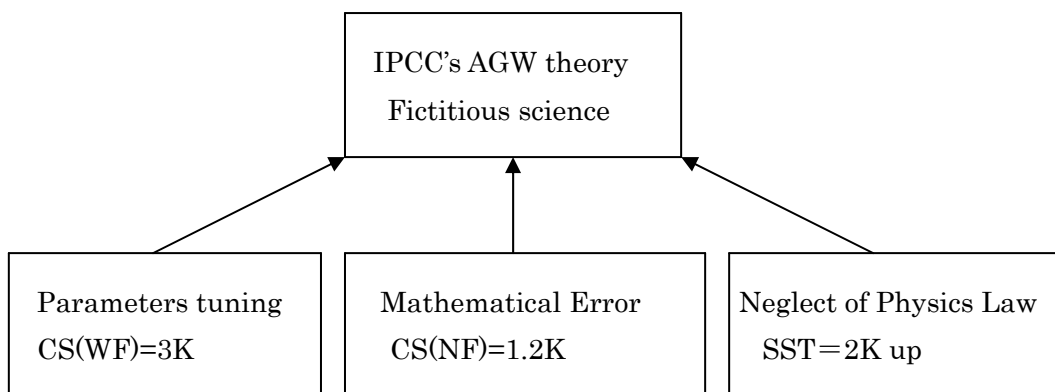


Figure2 Three erroneous components of IPCC's AGW theory



CS(WF): Climate Sensitivity(With Feedback)

CS(NF): Climate Sensitivity(No Feedback) or Planck response

SST: Sea Surface Temperature

1. Two defects in the basic papers of IPCC's AGW theory

Figure1 shows the history of model studies supporting IPCC's claim that CS(WF) is 3K. If an intrinsic difficulty is found out in [Manabe et al, 1964/67], it will collapse instantly. This post will point out the following two defects of these papers.

Defect 1 : Instability of computation results in RCM studies

One dimensional RCM is utilized in [Manabe et al, 1964/67] to obtain CS(NF) of 1.3K with fixed absolute humidity. CS(WF) is 2.4K when water vapor feedback is included with fixed relative humidity. The model is based on fixed lapse rate of 6.5K/km for 1xCO₂ and 2xCO₂. Figure3 shows diagrammatical expression of RCM studies with two parallel lines which means uniform warming in troposphere [Held et al., 2000]. However, computation results are unstable in this method. CS (WF) changes from 0K to 4.8K with a minute change of lapse rate from 6.3K/km to 6.7K/km at 2xCO₂.

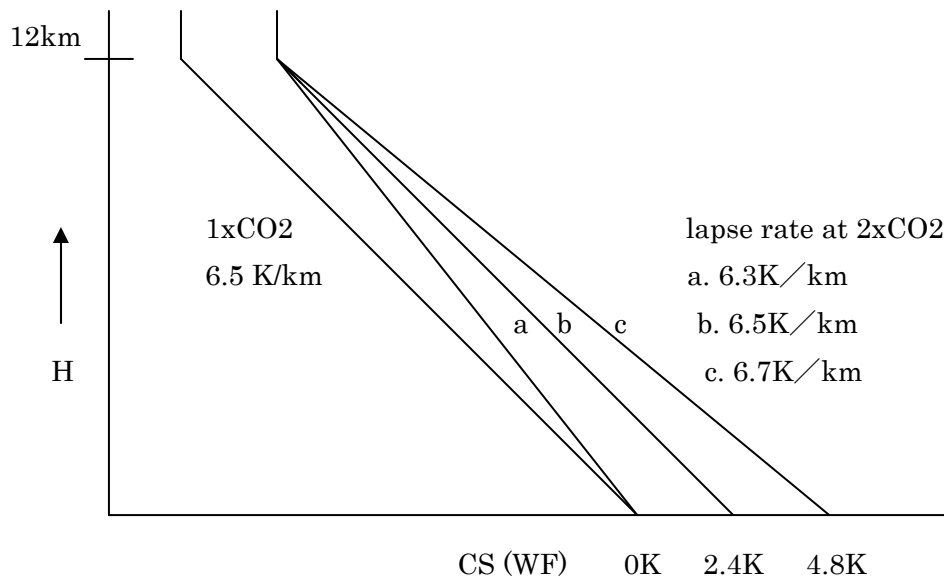


Figure3 Influence of lapse rate change on CS(WF) with CO₂ doubling

Defect2 : Too large CO₂ contribution in natural green house effect

In the papers, Manabe et al obtained more than 10K for CO₂ contribution in natural greenhouse effect of 33K. Since it is 3.3-6.7K from IR studies [Newell et al., 1979; Barrett, 2005], there is something wrong in their RCM calculations.

2. CS(NF) calculation based on pseudo Stefan-Boltzmann law

In 1976, Cess obtained $-3.3(\text{W/m}^2)/\text{K}$ for Planck feedback parameter λ_0 utilizing the following procedure, which gives CS(NF) of 1.2K with radiative forcing of 4W/m^2 for CO_2 doubling [Cess, 1976].

$$\text{OLR (Outgoing Long wave Radiation)} = E_{\text{eff}} \sigma T_s^4$$

$$\text{Planck feedback parameter } \lambda_0 = -d\text{OLR}/dT_s = -4E_{\text{eff}} \sigma T_s^3 = -4\text{OLR}/T_s = -3.3(\text{W/m}^2)/\text{K}$$

$$\text{CS(NF)} = \text{Radiative forcing} / \lambda_0 = 4(\text{W/m}^2) / 3.3(\text{W/m}^2)/\text{K} = 1.2\text{K}$$

Here, E_{eff} : the effective emissivity of the surface-atmosphere system

$$\sigma : \text{Stefan-Boltzmann constant} \quad T_s = 288\text{K} \quad \text{OLR} = 233\text{W/m}^2$$

Cess's procedure has been followed by many researchers including IPCC AR4 [Soden et al., 2006], which constitutes the basis of IPCC's claim that CS(NF) is 1.2K. However, this procedure is apparently mathematical error since E_{eff} is not a constant. Furthermore, the combination of $T_s = 288\text{K}$ and $\text{OLR} = 233\text{W/m}^2$ is not in accordance with Stefan-Boltzmann law [Kimoto, 2009].

3. SST will not increase as much as 2K with CO_2 doubling.

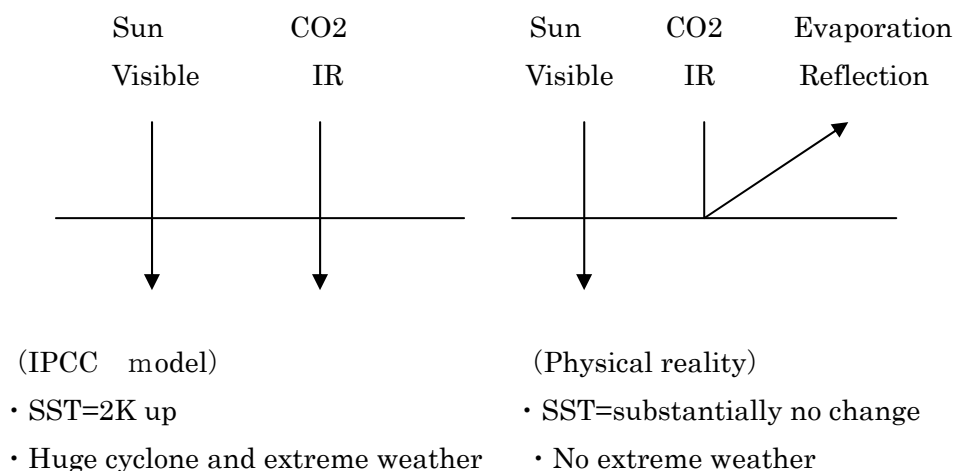
(1) Hoyt, D., 2007: The collapse of arguments for high climate sensitivity

(<http://www.warwickhughes.com/blog/?p=87>)

(2) Stevenson, R.E., 2000: Yes, the Ocean Has Warmed; No, It's Not 'Global Warming'

(<http://www.21stcenturysciencetech.com/articles/ocean.html>)

Figure4 Neglect of physics law in SST problem with CO_2 doubling

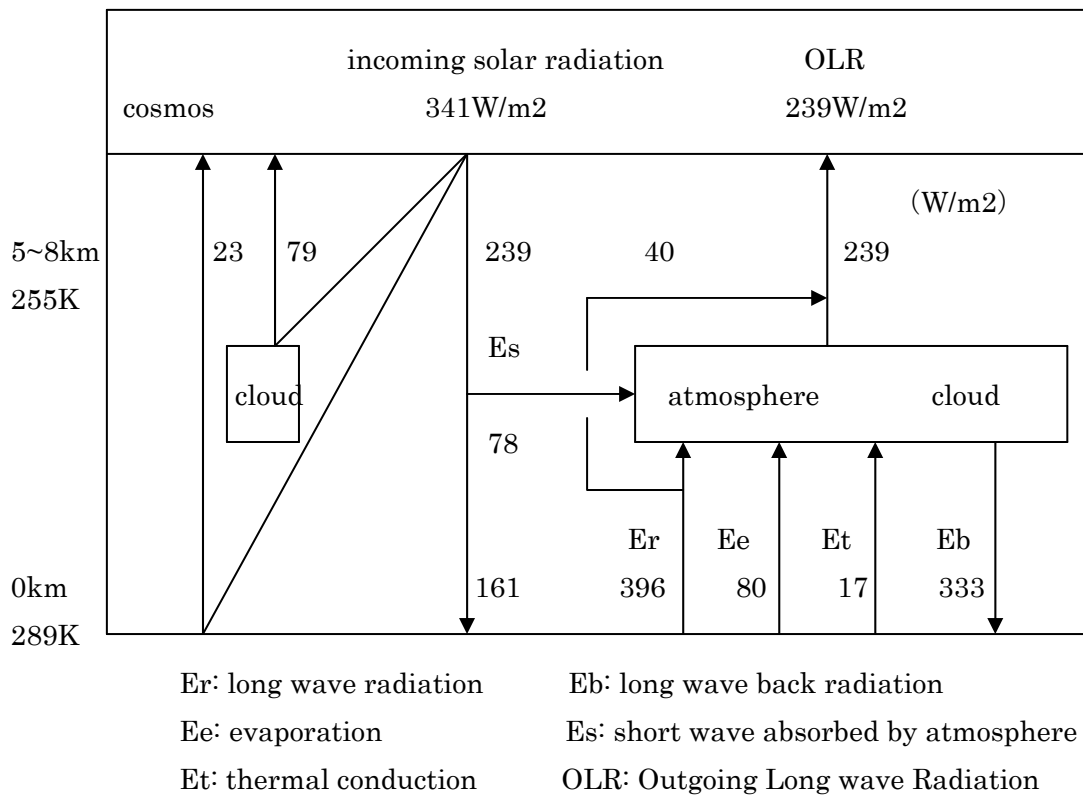


4. CS(WF) based on the observational methods

Observational CS (WF) is 0.2-0.8K as shown below.

energy balance consideration	0.24K	[Newell et al., 1979]
response to volcanos	0.3-0.5K	[Lindzen, 1997]
8 natural experiments	0.4K or less	[Idso, 1998]
data analysis of Pinatubo eruption	0.8K	[Douglass et al., 2006].
ERBE	0.5K	[Lindzen et al., 2009]
CERES	0.6K	[Spencer et al., 2010]

Figure5 Energy budget of the earth [adapted from Trenberth et al. 2009]



Based on Figure 5, CS(WF) is 0.2-0.5K with the following calculation.

Natural greenhouse effect: $289K - 255K = 34K$
Natural greenhouse energy: $E_b - E_s = 333W/m^2 - 78W/m^2 = 255W/m^2$
CS(WF) factor: $34K / 255W/m^2 = 0.13K / (W/m^2)$
CS(WF) : $0.13K / (W/m^2) \times 3.7W/m^2 = 0.5K$
Surface radiative forcing of $1.5W/m^2$ [Newell et al., 1979] : CS(WF)=0.2K

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