



# Basics of climate change science

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Outreach Event on IPCC Activities and Findings  
Nay Pyi Taw, Myanmar, 30-31 May 2019

[http://bit.ly/ipcc\\_outreach\\_myanmar](http://bit.ly/ipcc_outreach_myanmar)

**ipcc**  
INTERGOVERNMENTAL PANEL ON climate change



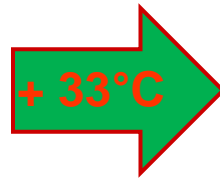
**If the world had no atmosphere, it would be very cold**

**-18°C**

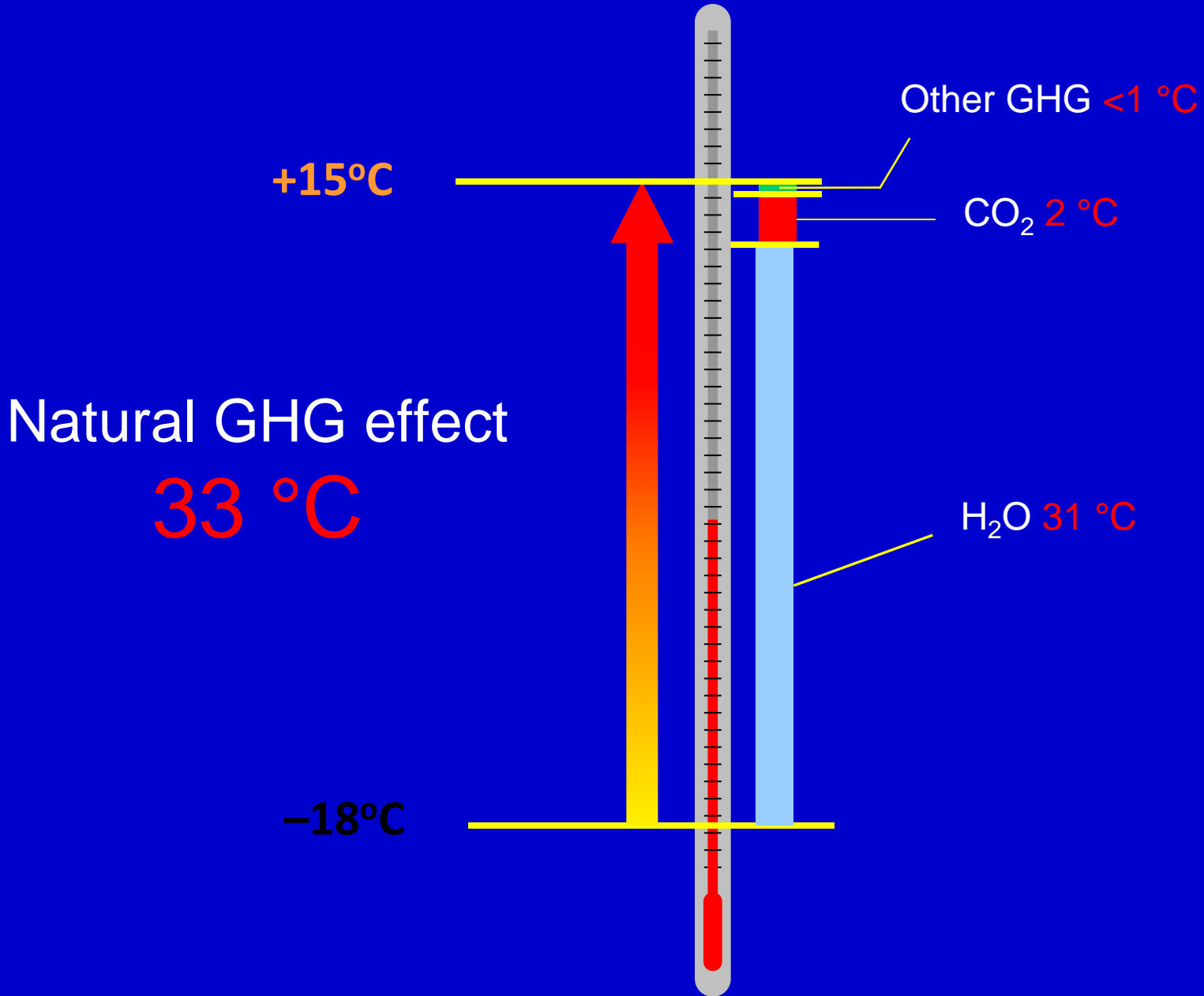
**+15°C**

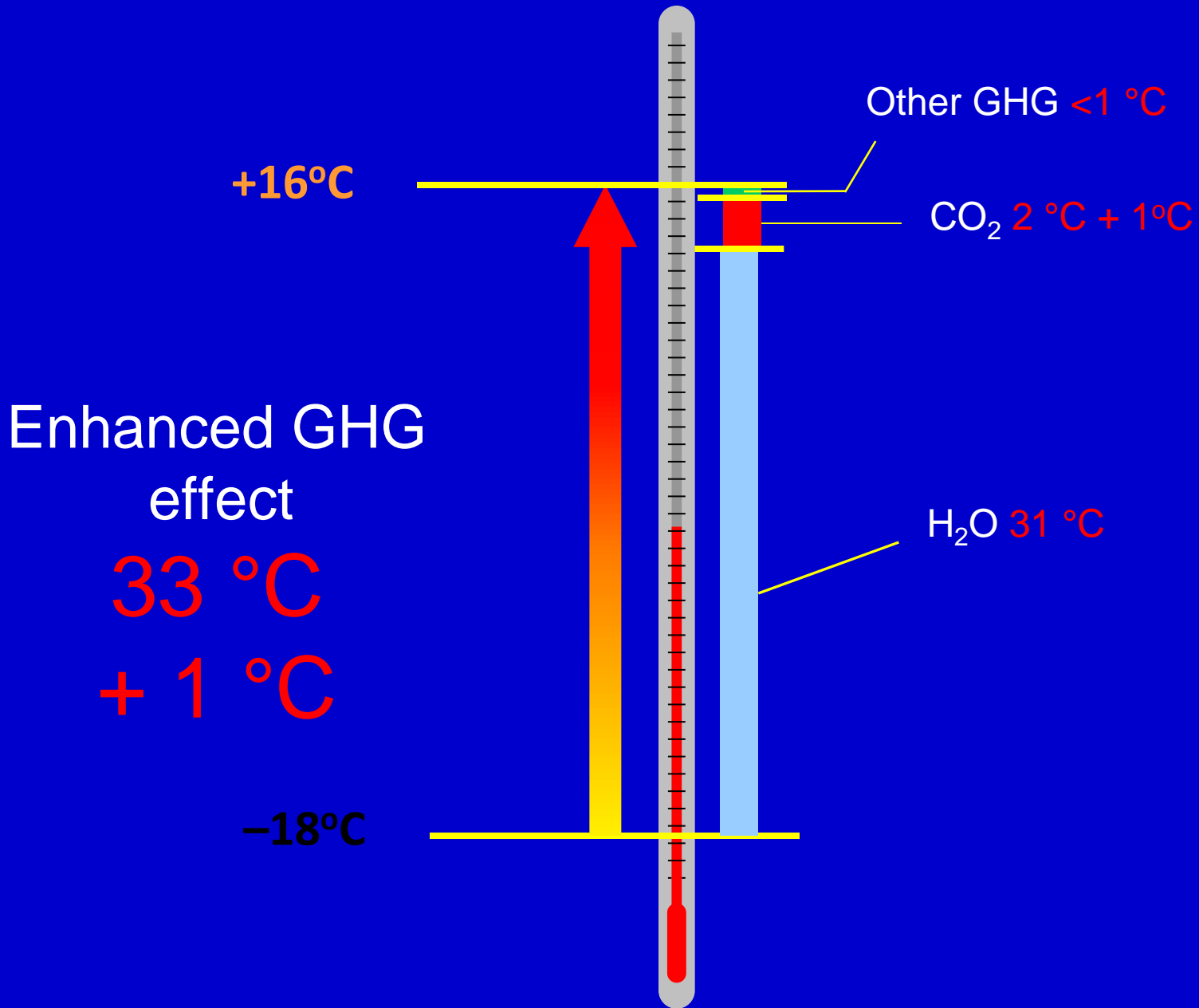


**Earth without air**



**Our planet**





# But the atmosphere is changing fast because of all the things people are doing (putting gases into the air)

Energy production remains the primary driver of GHG emissions

35%

Energy Sector



24%

Agriculture, forests and other land uses



21%

Industry



14%

Transport



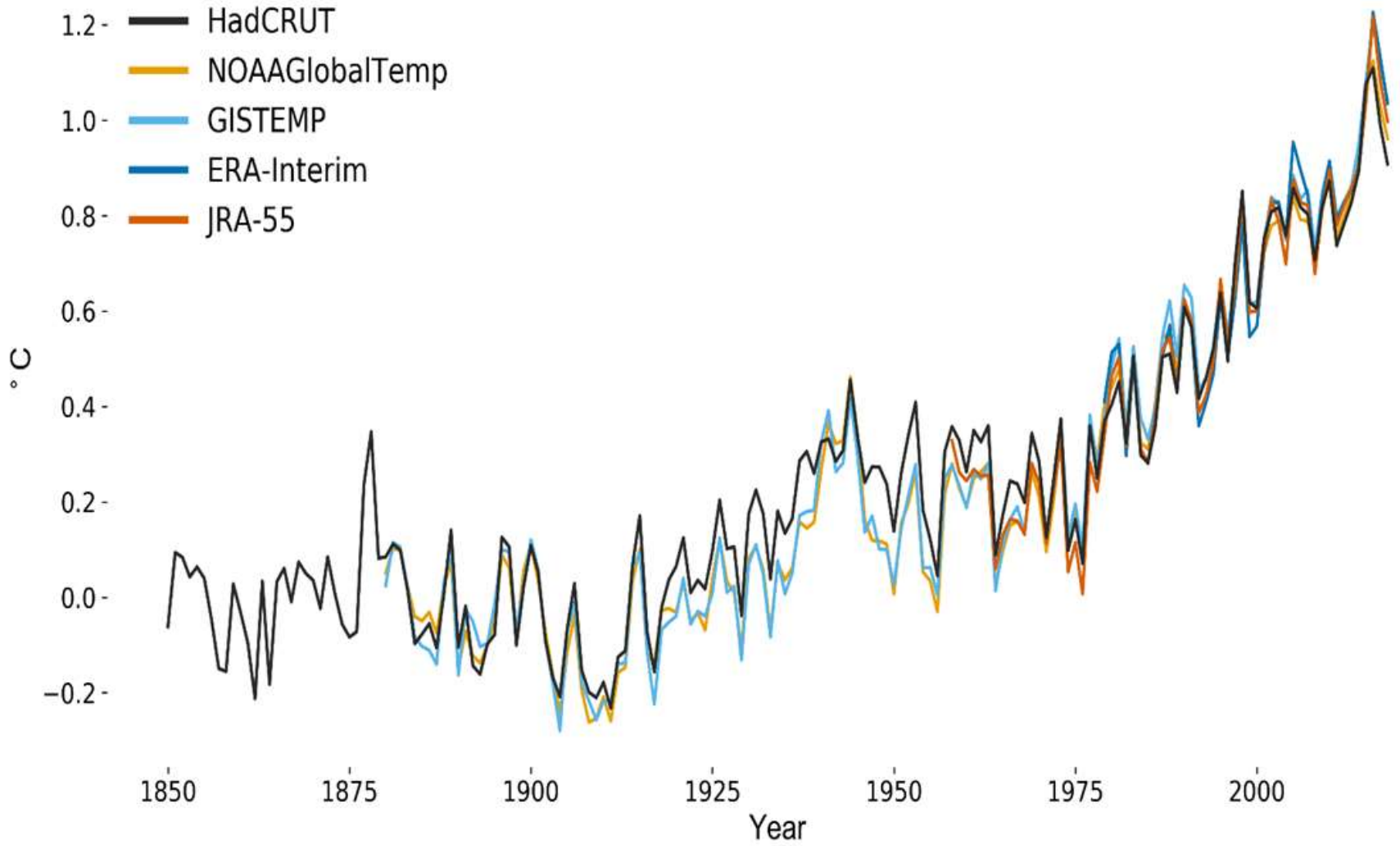
6.4%

Building Sector

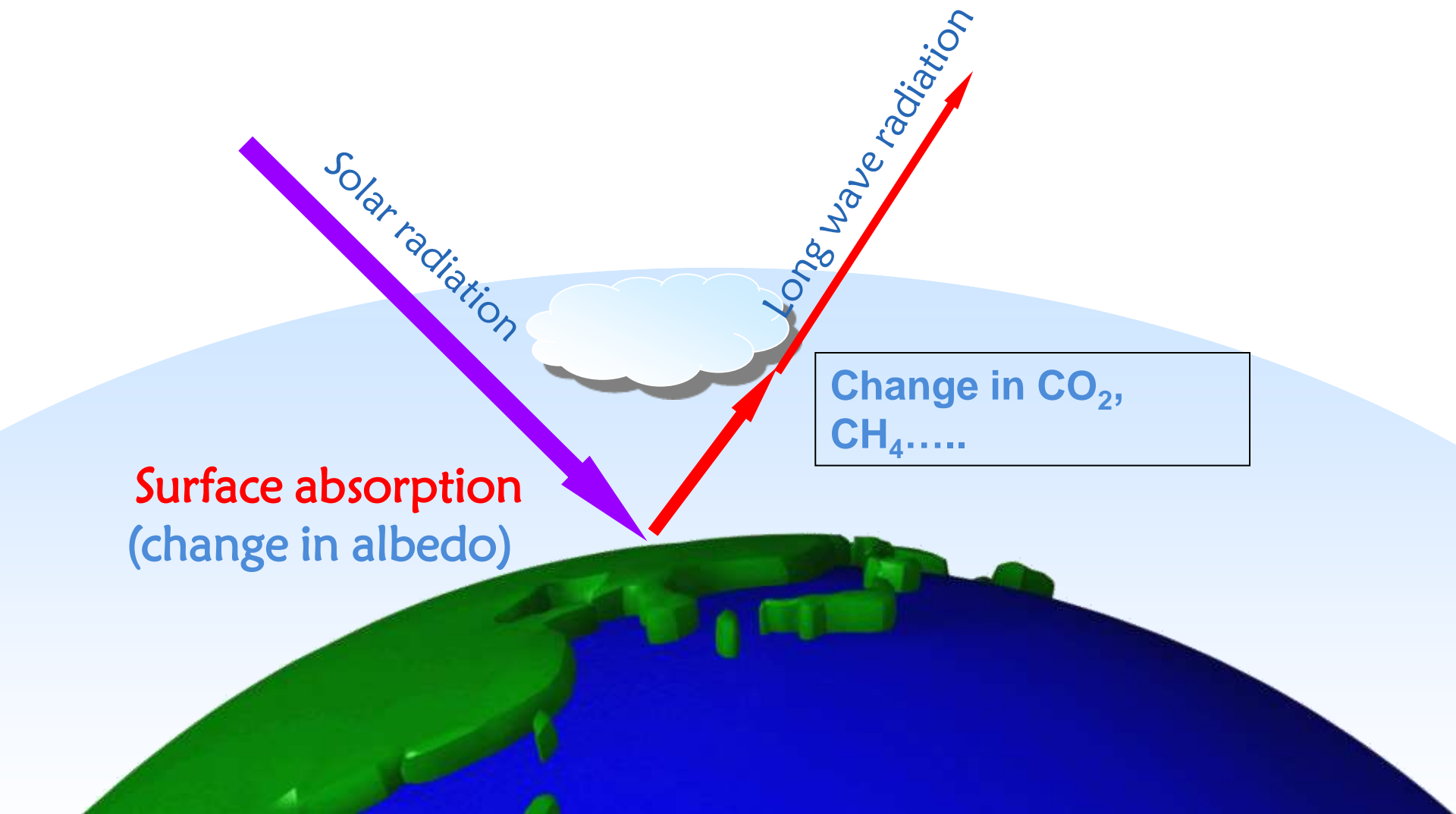


2010 GHG emissions

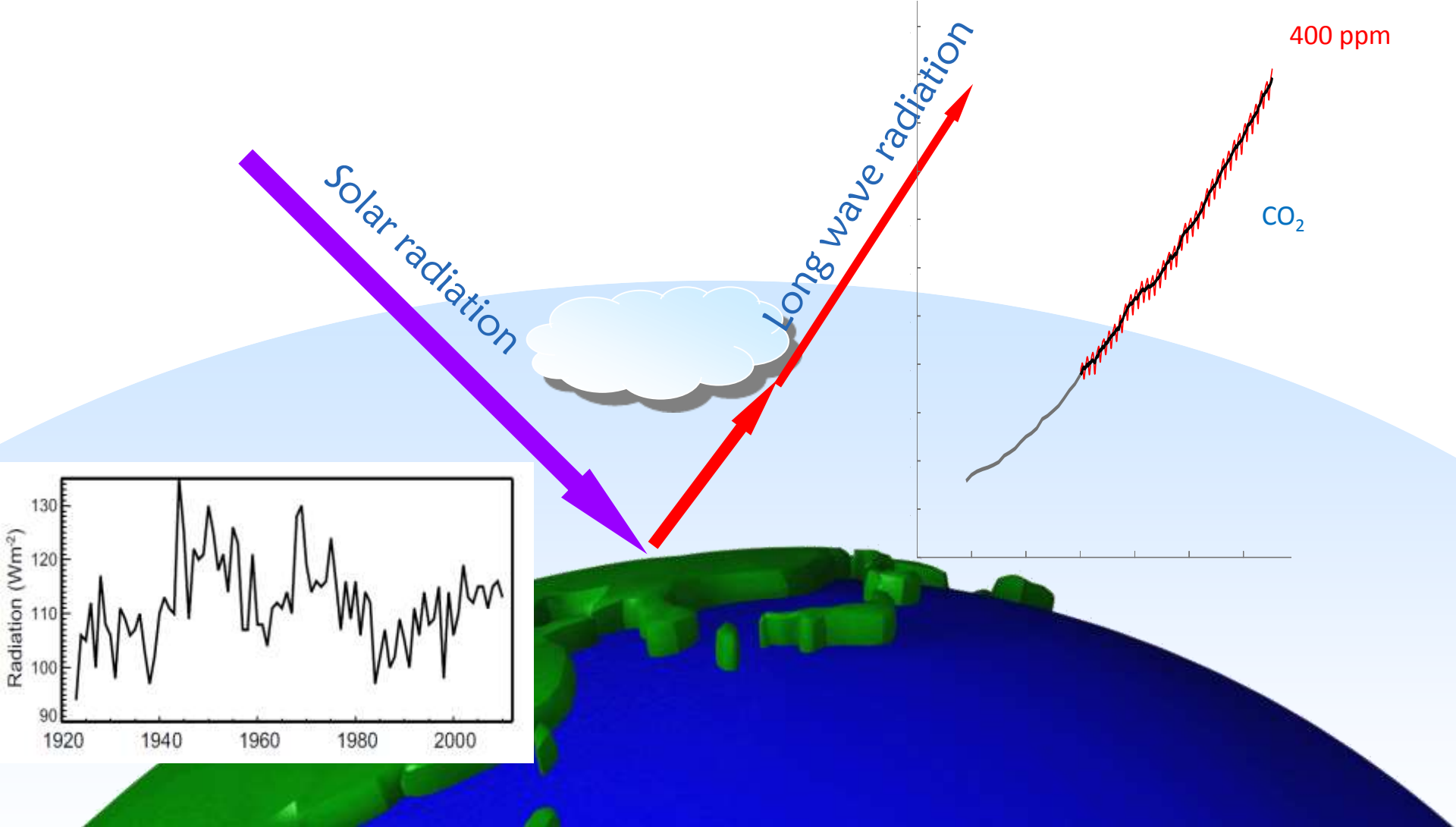
### Global mean temperature difference from 1850-1900 ( ° C)



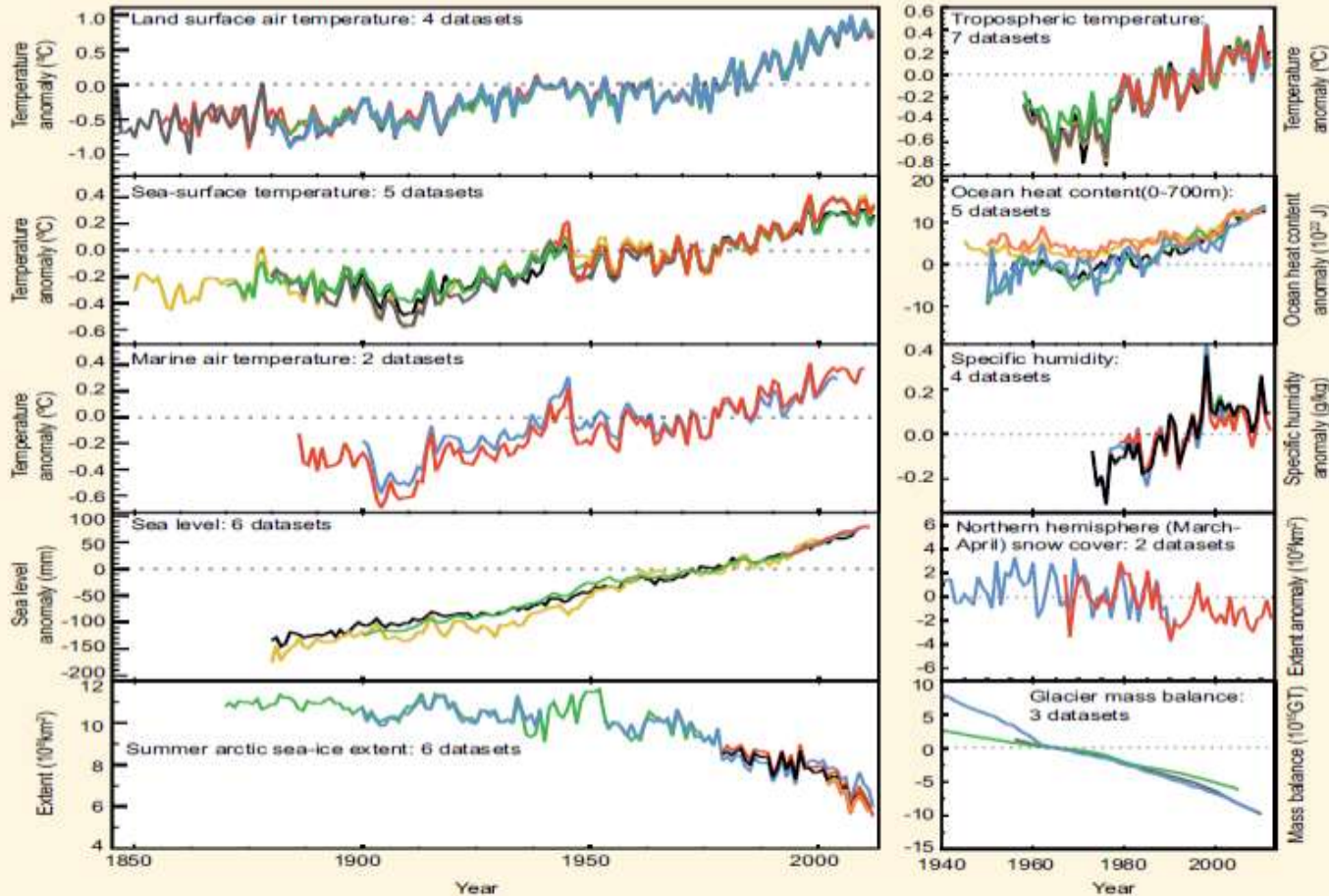
Warming of the earth surface depends on radiation budget of the Climate System.



# Warming of the earth surface depends on radiation budget of the Climate System.







FAQ 2.1, Figure 2 | Multiple independent indicators of a changing global climate. Each line represents an independently derived estimate of change in the climate system. In each panel, all datasets have been normalized to a common period of record. A full detailing of which source datasets go into which panel is given in the

## **Multiple Lines of Evidence for Climate Change :**

- Warming of the climate system is unequivocal ;
- Warming atmosphere & ocean, snow and ice melting, sea level rising , GHG increasing, ....., all reflect consistent warming trend.

# Climate change is already happening

- **Tropics to the poles**
- **On all land areas and oceans**
- **Affecting rich and poor countries**



# THANK YOU FOR YOUR ATTENTION!

## For more information:

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