



Met Office  
Hadley Centre

# 30 years of IPCC Science- Introductory remarks

John Mitchell,  
MetOffice Hadley  
Centre



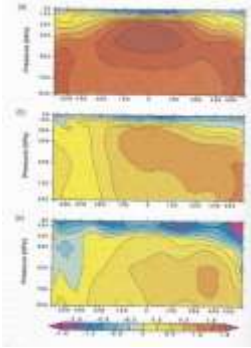
# PROGRESS – DETECTION AND ATTRIBUTION

*1990 AR1: The unequivocal detection of the enhanced greenhouse effect from observations is not likely for a decade or more.*

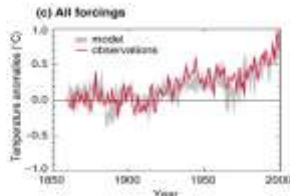
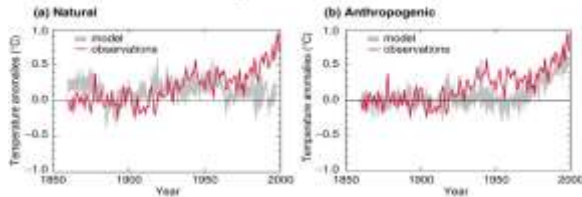
*1996 AR2: The balance of evidence suggests a discernible human influence on global climate*

*2001 AR3: There is new and stronger evidence that most of the warming observed in the last 50 years is attributable to human activities.*

*2013 AR5; It is extremely .....*



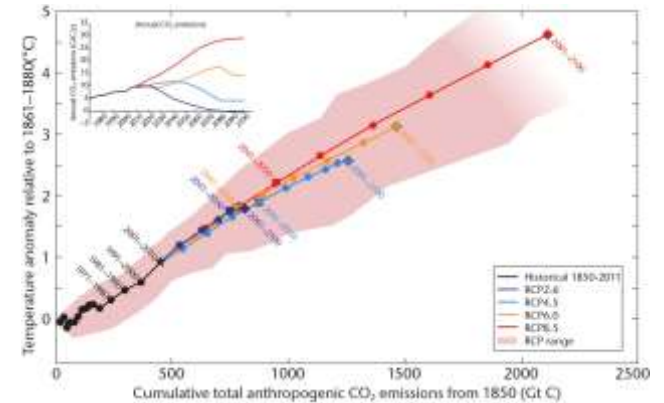
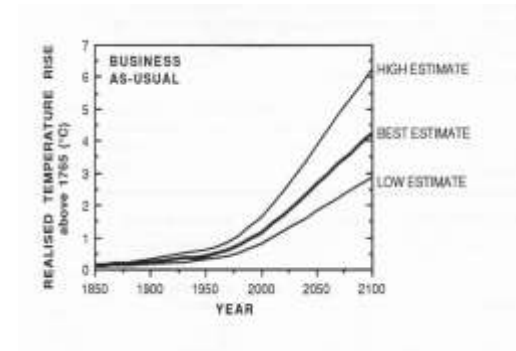
Simulated annual global mean surface temperatures





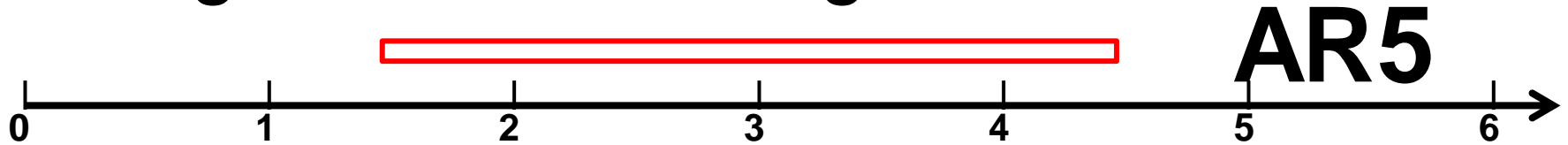
# CONTINUITY – PREDICTIONS OF RATE OF CHANGE OF GLOBAL TEMPERATURE

1990	First predictions	2-5 K
1996	Include aerosols	2-3.5K
2001	Refining aerosols	2-4.5K
2013	Include Carbon Cycle	2.5-4.5K

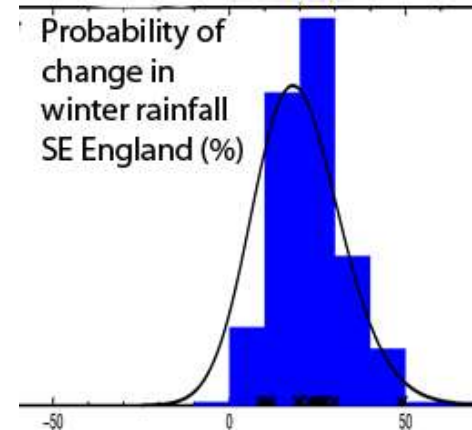


# WORK IN PROGRESS

How big will the warming be?



What will the regional changes be?







# Questions

Has the assessment process become too big?

- As subject matures progress slows—more papers, less content, author fatigue
- Slows response to new issues

Are the working groups sufficiently aligned?

