

Table ronde, Institut français, Athènes  
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**IPCC**  
**Intergovernmental Panel on Climate Change**  
**and**  
**Paris conference 2015 (COP 21)**

Dominique Raynaud (CNRS/UJF & IPCC)  
raynaud@lgge.obs.ujf-grenoble.fr

**IPCC, created in 1988 is a large group of experts mandated under the auspices of the United Nations, to assess periodically the state of the art of the knowledge in the field of climate changes.**

**It includes 3 working groups:**

**WG1 about the physical science basis (how the climate machine works, the present climate changes, projections for the 21th century)**

**WG2 assesses the vulnerability of socio-economic and natural systems to climate changes (Impacts)**

**WG3 assesses the options for mitigating climate changes (mitigation and adaptation)**



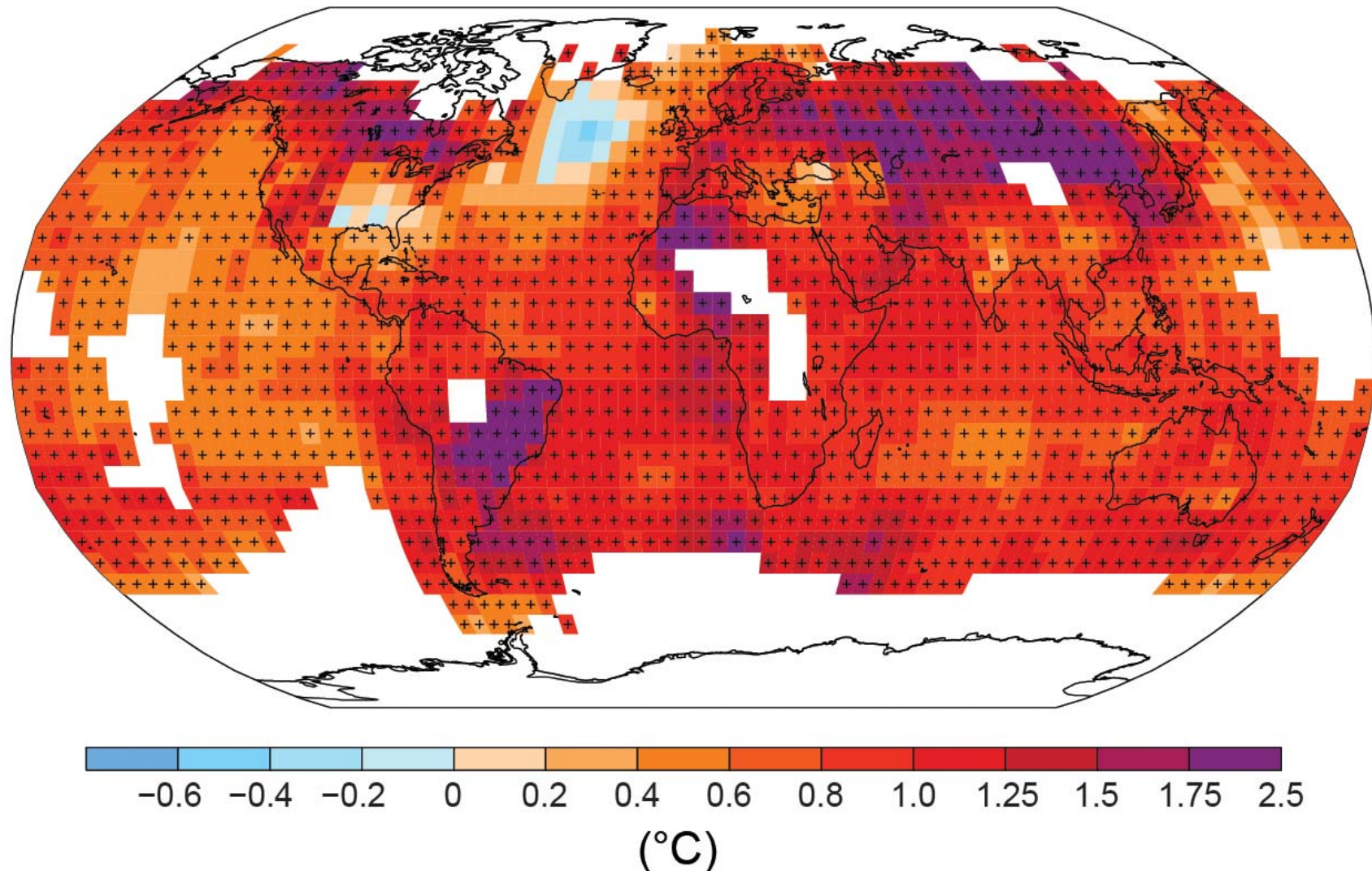
## IPCC (2)

**4 Assessment (**Evaluation**) reports published (1990, 1995, 2001, 2007), including summary for Policy makers, Synthesis, specific reports**

**Important role in leading to the creation of the UN Framework Convention on Climate Change known as COP**

source: IPCC 2013

# Observed change in T°C 1901-2012



# **Warming is unequivocal and unprecedented**

Since the 1950s, many of the observed changes are unprecedented over decades to millennia.

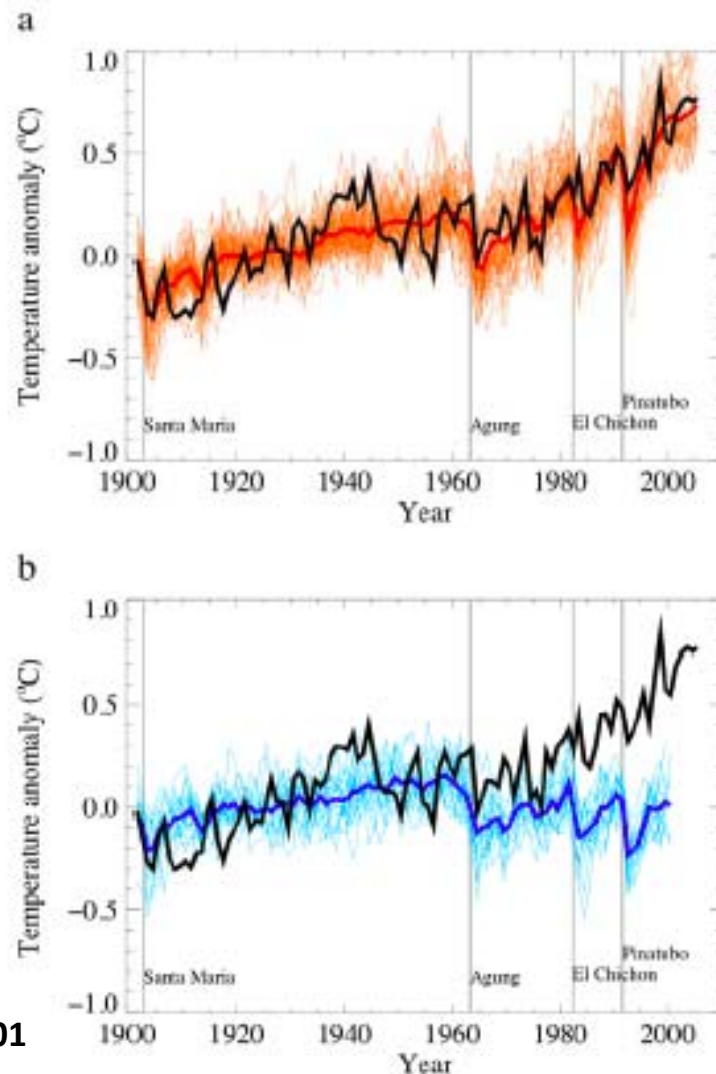
The **atmosphere and ocean** have warmed,

The amounts of **snow and ice** have diminished

**Sea level** has risen

The concentrations of **greenhouse gases** (CO<sub>2</sub>, CH<sub>4</sub>) have increased and are unprecedented during the last 800,000 years

# Human influence on Climate



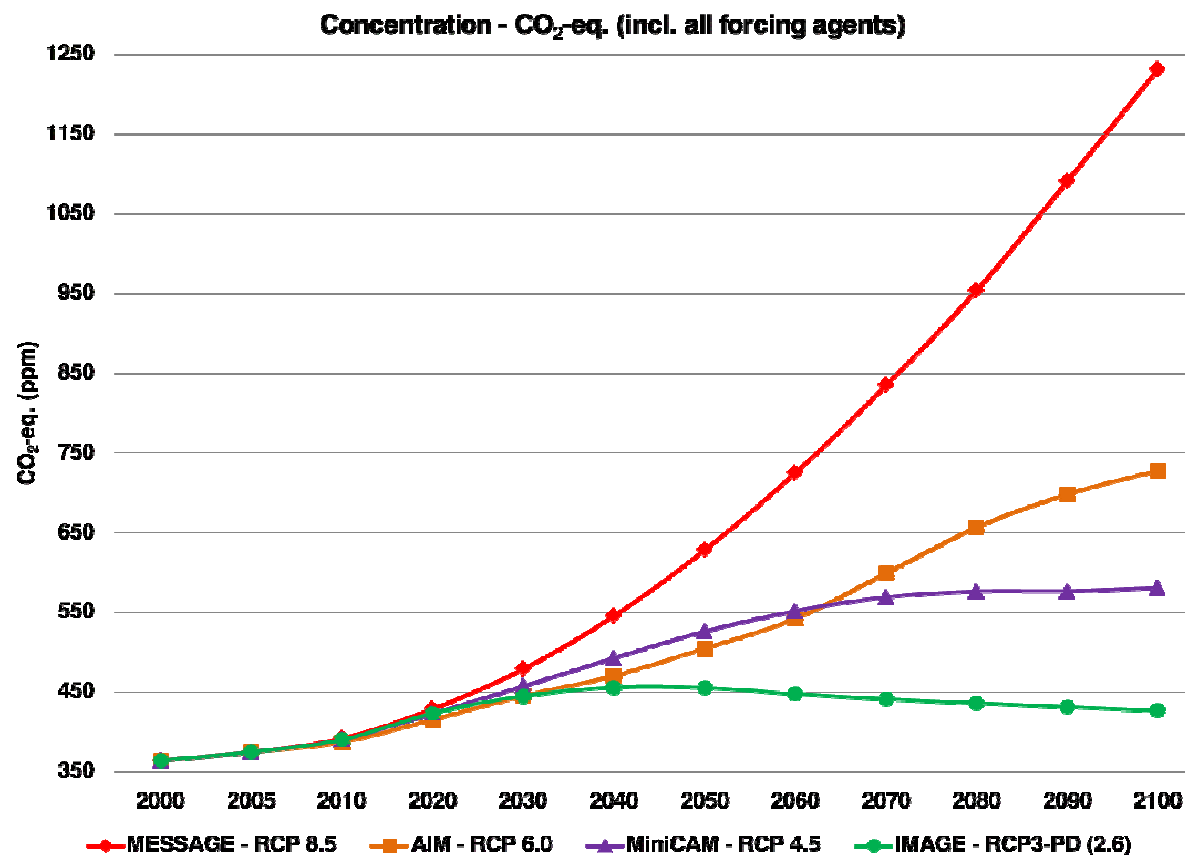
**Human influence on the climate is clear.** This is evident from the increasing greenhouse gas concentrations in the atmosphere, positive radiative forcing, observed warming, and understanding of the climate system.

**It is *extremely likely* that human influence has been the dominant cause of the observed warming since the mid-20th century**

After IPCC 2001

# 21st century: projections

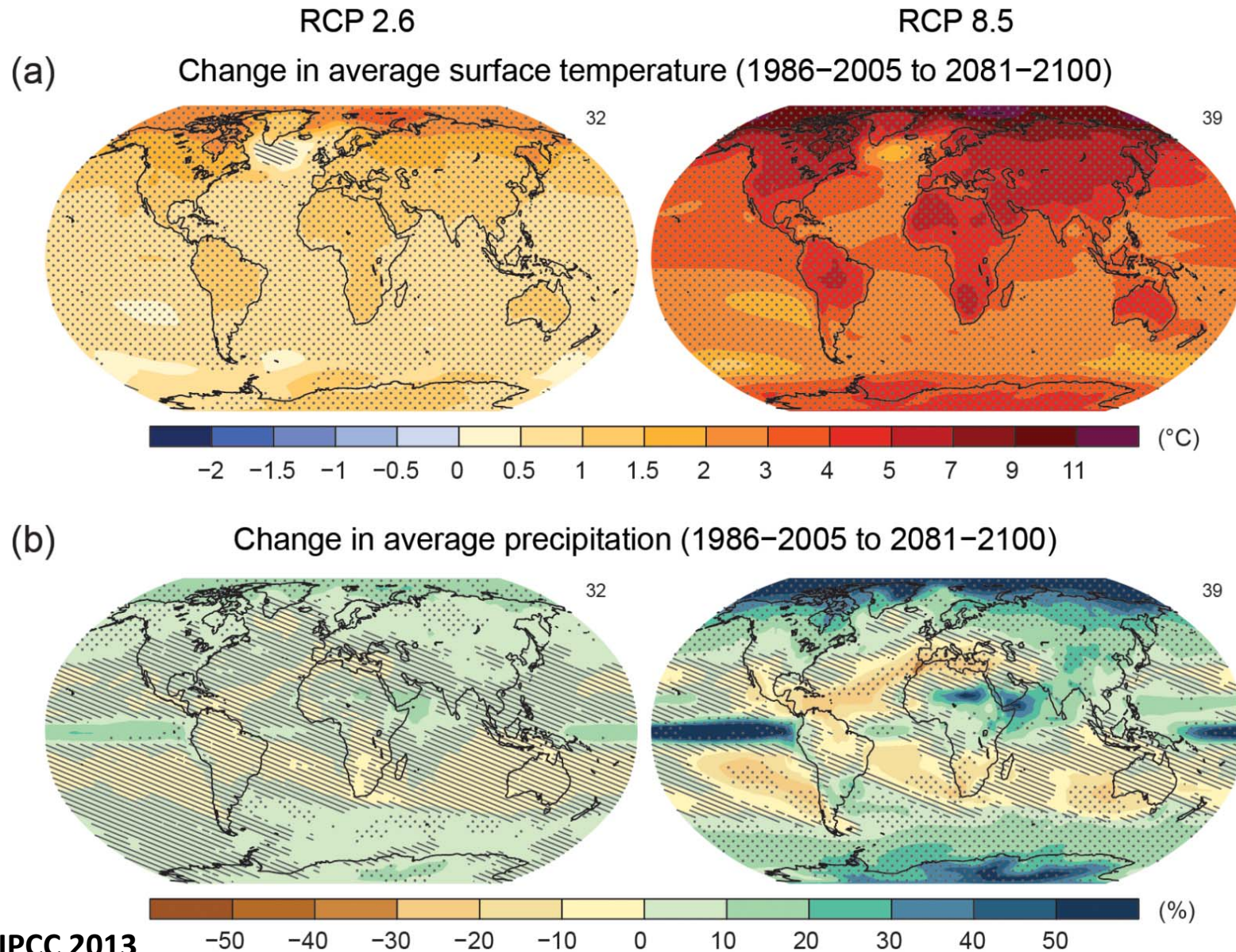
Models of the climate system are run taking into account different scenarios of the societal evolution and its impact on CO<sub>2</sub> eq. concentrations in the atmosphere



Source: Wikipedia,  
Representative  
Concentration  
Pathways (RCP)



# COP 21: 2°C or 4.5°C world at the end of 21<sup>st</sup> century ?



Source: IPCC 2013



## TO CONCLUDE

Why not to think about a regional  
panel on climate change,  
**a RPCC or GPCC**

**Main vulnerabilities:**  
sea level increase,  
aridity,  
heat waves,  
fires

**Figure SPM.9**

Global mean sea level rise

**IPCC 2013**

