

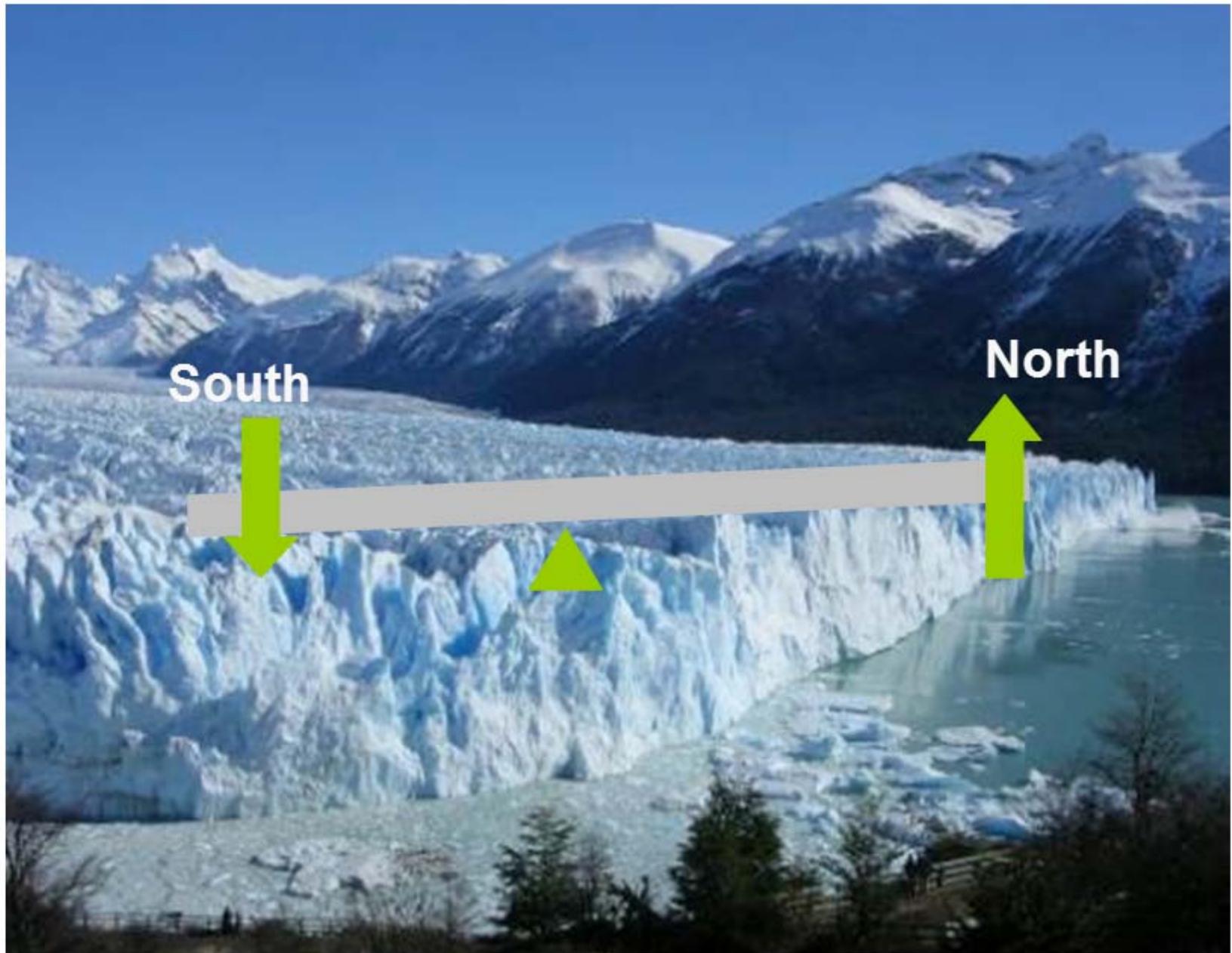


smp2:

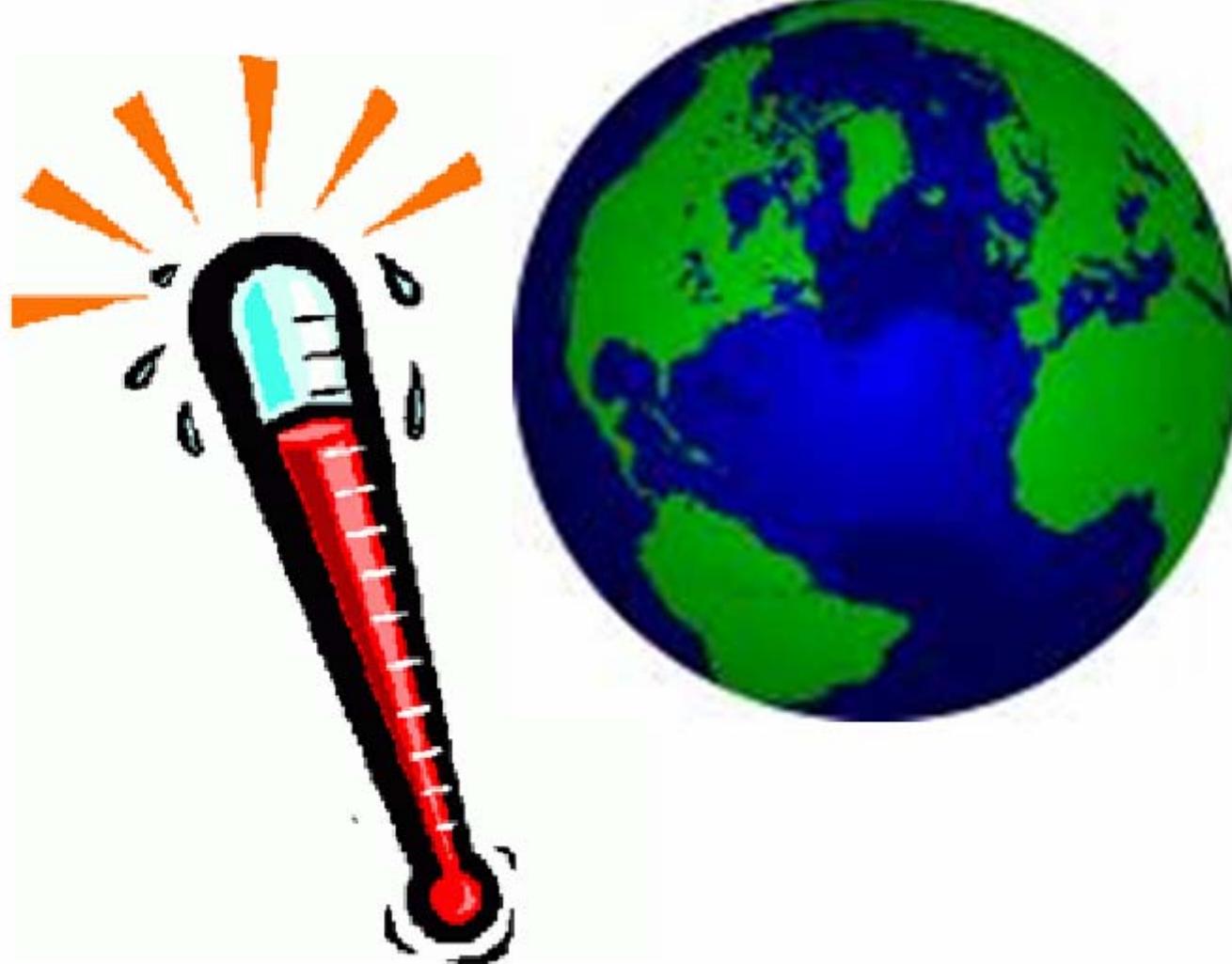
# What is climate change and should we worry?

Dr Nick Cooper, Royal Haskoning

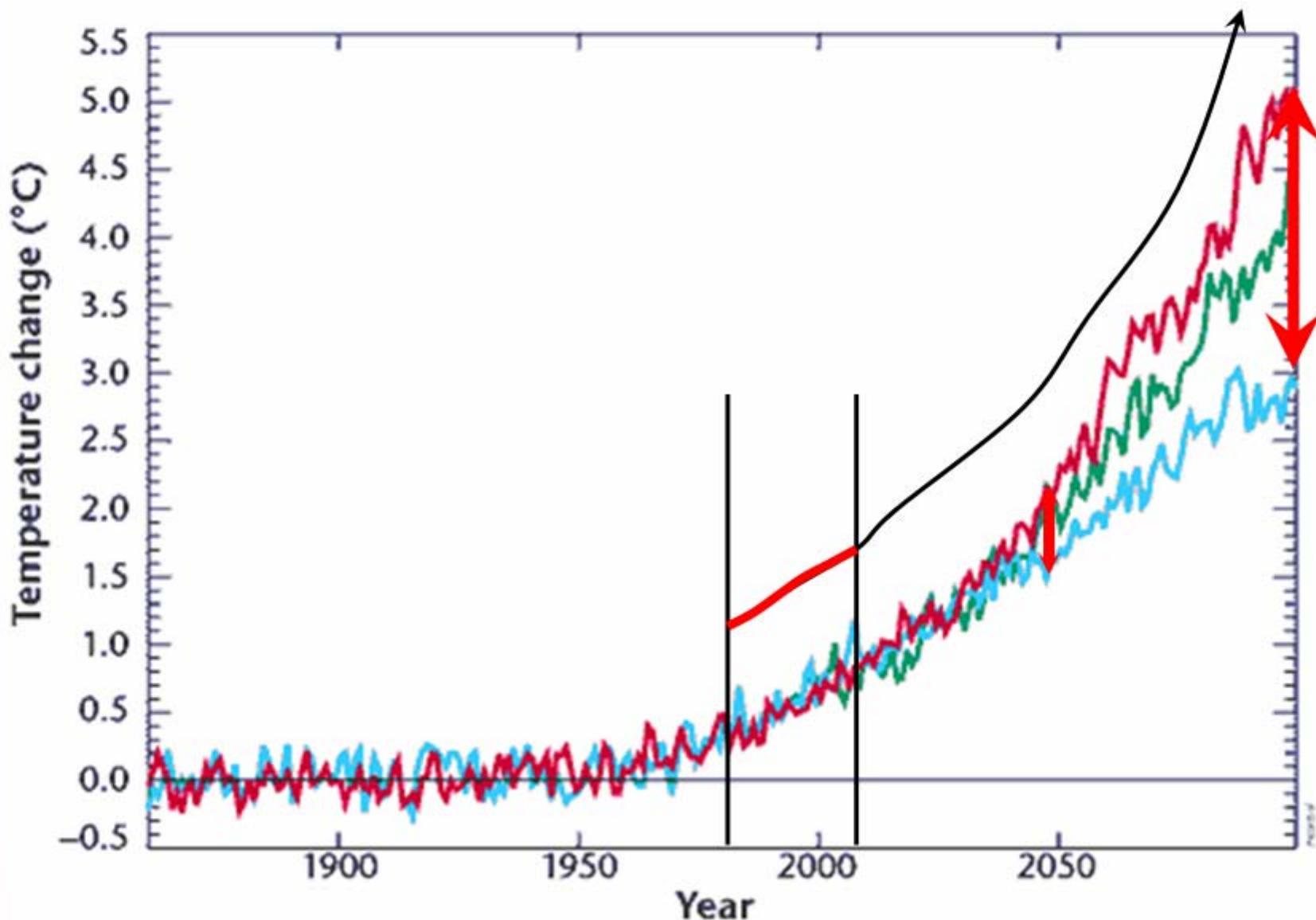
## Post Ice Age



## Global Issue



## Global Issue



## Current Impacts

### Floods, Storms and Lightning



## Current Impacts



### Wind and gales



## Current Impacts



### Heatwaves

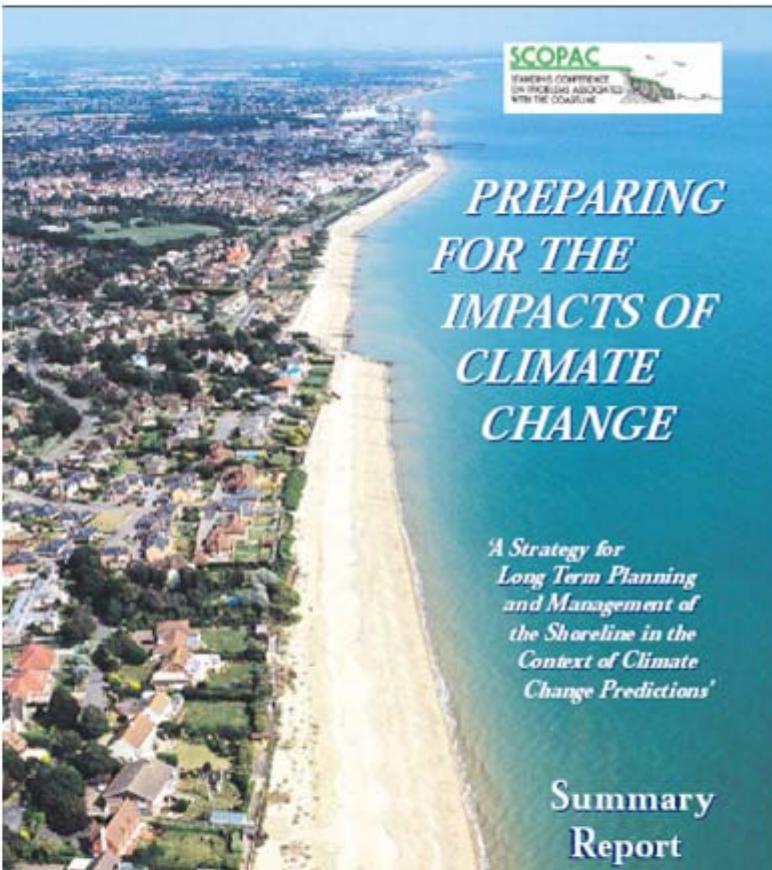


## Current Impacts

### Coastal erosion and landslides



## Climate Changes



# Climate Changes



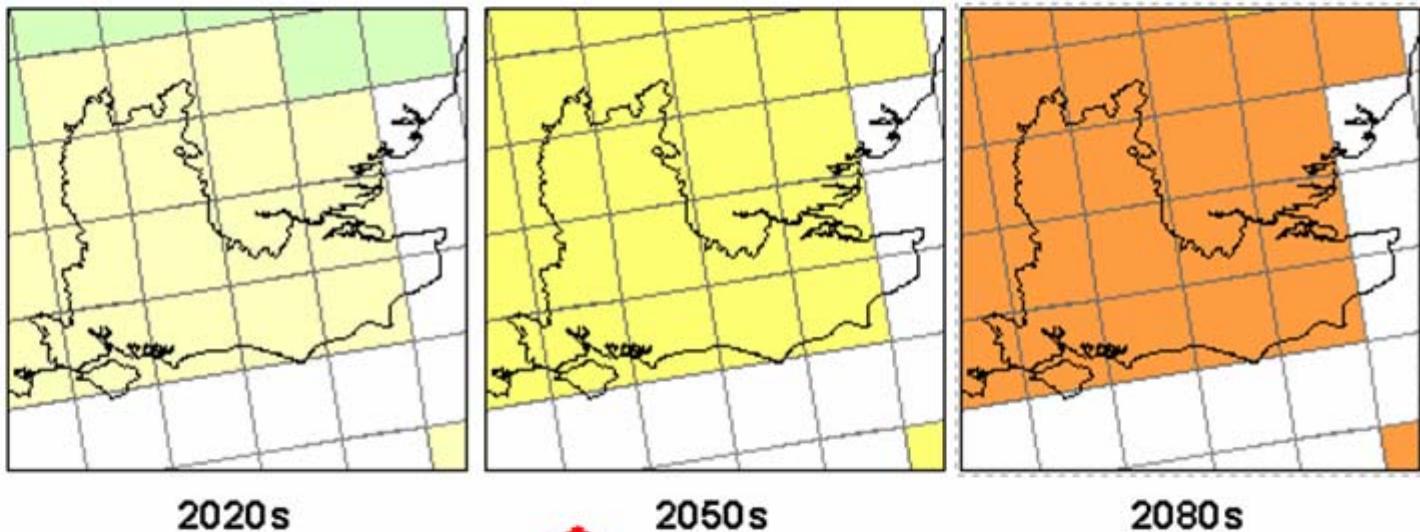
# Climate Changes



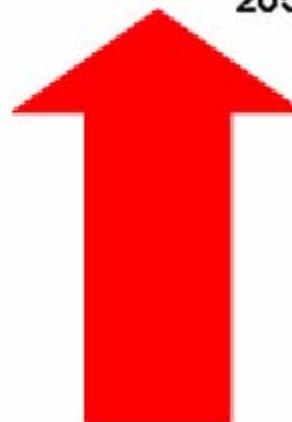
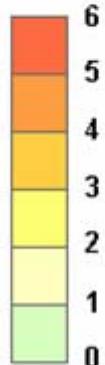
## South East Change in annual average daily temperature

Source: UKCIP02 Climate Change Scenarios (funded by Defra,  
produced by Tyndall and Hadley Centres for UKCIP)

High  
Emissions  
scenario



change in  
deg C



## Climate Changes

3°C doesn't sound like much ...

... it represents a rise in temperature comparable  
with the global heating that occurred between the last  
Ice Age (15,000 years ago) and the 18th Century

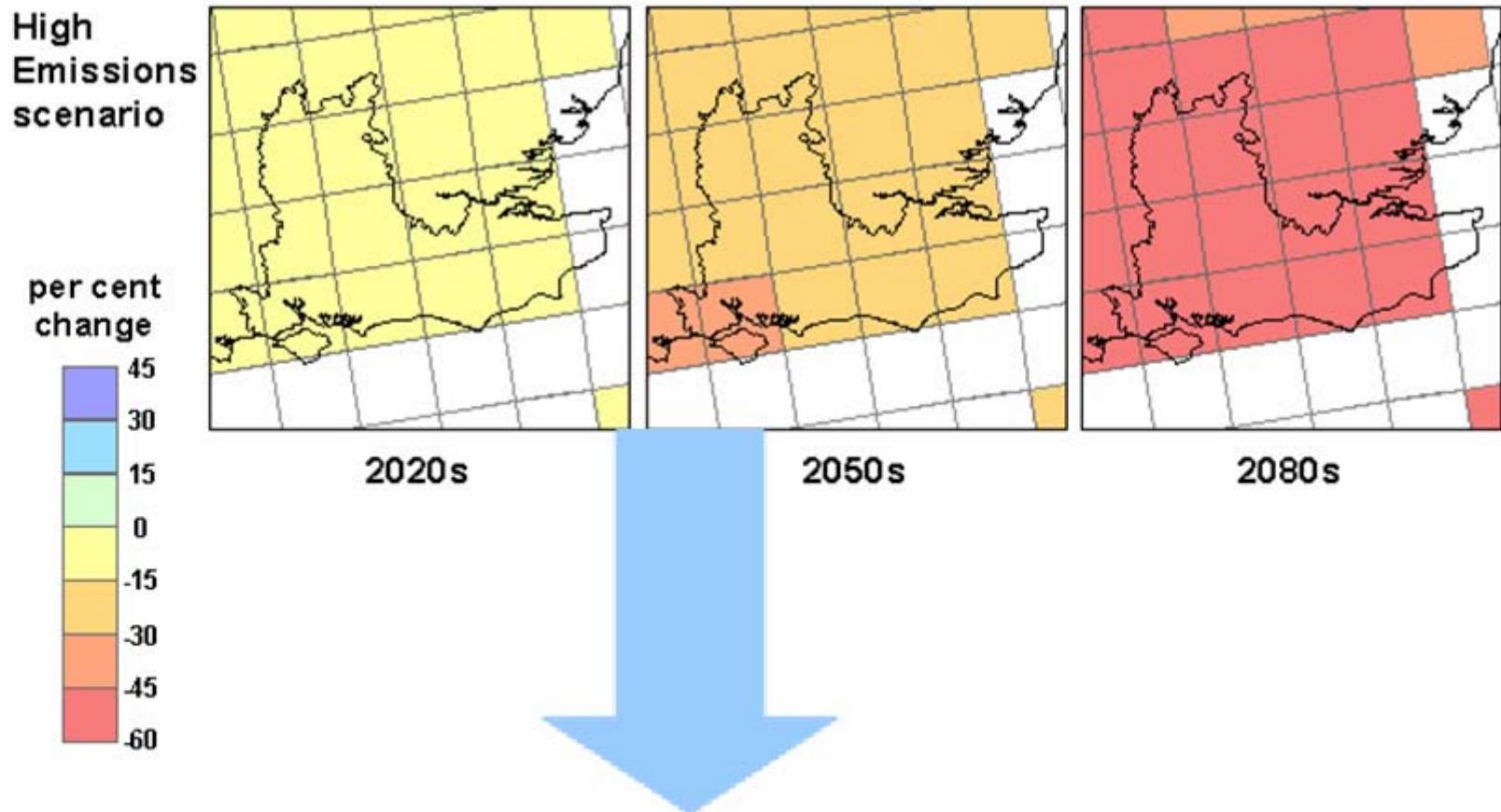
**this is projected for the 2050s**

# Climate Changes



## South East England Percentage change in summer precipitation

Source: UKCIP02 Climate Change Scenarios (funded by Defra, produced by Tyndall and Hadley Centres for UKCIP)

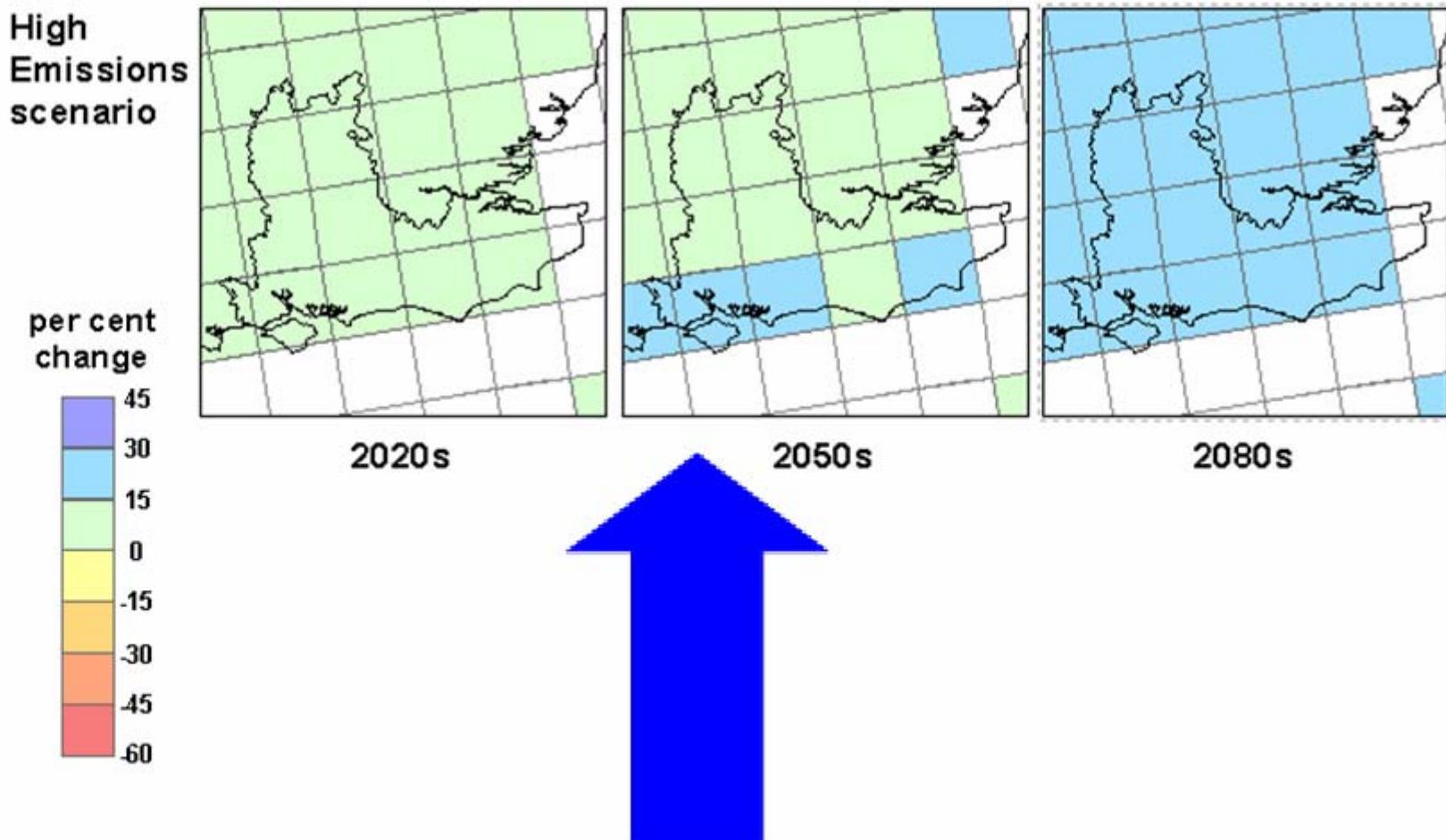


# Climate Changes



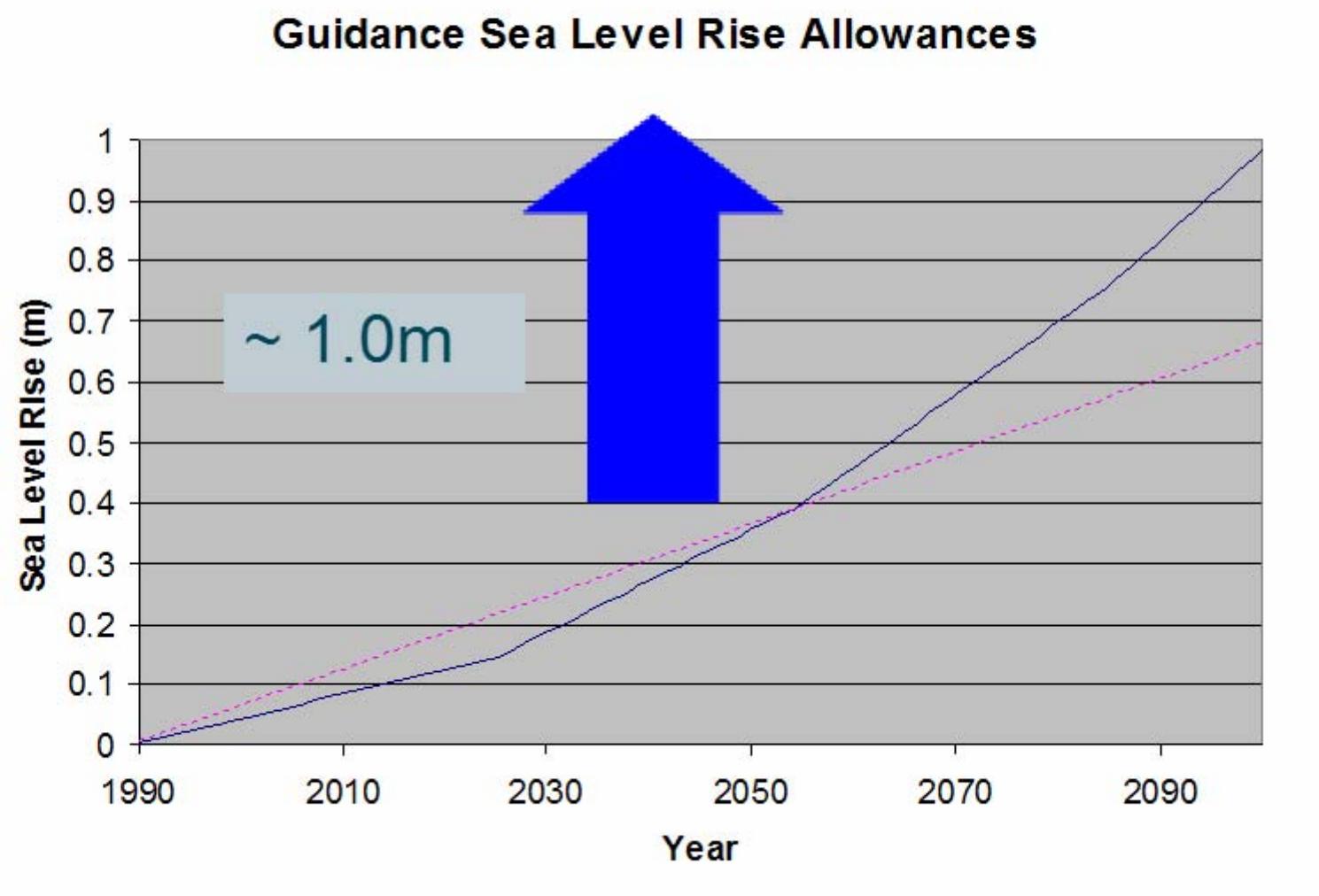
## South East England Percentage change in winter precipitation

Source: UKCIP02 Climate Change Scenarios (funded by Defra,  
produced by Tyndall and Hadley Centres for UKCIP)



## Climate Changes

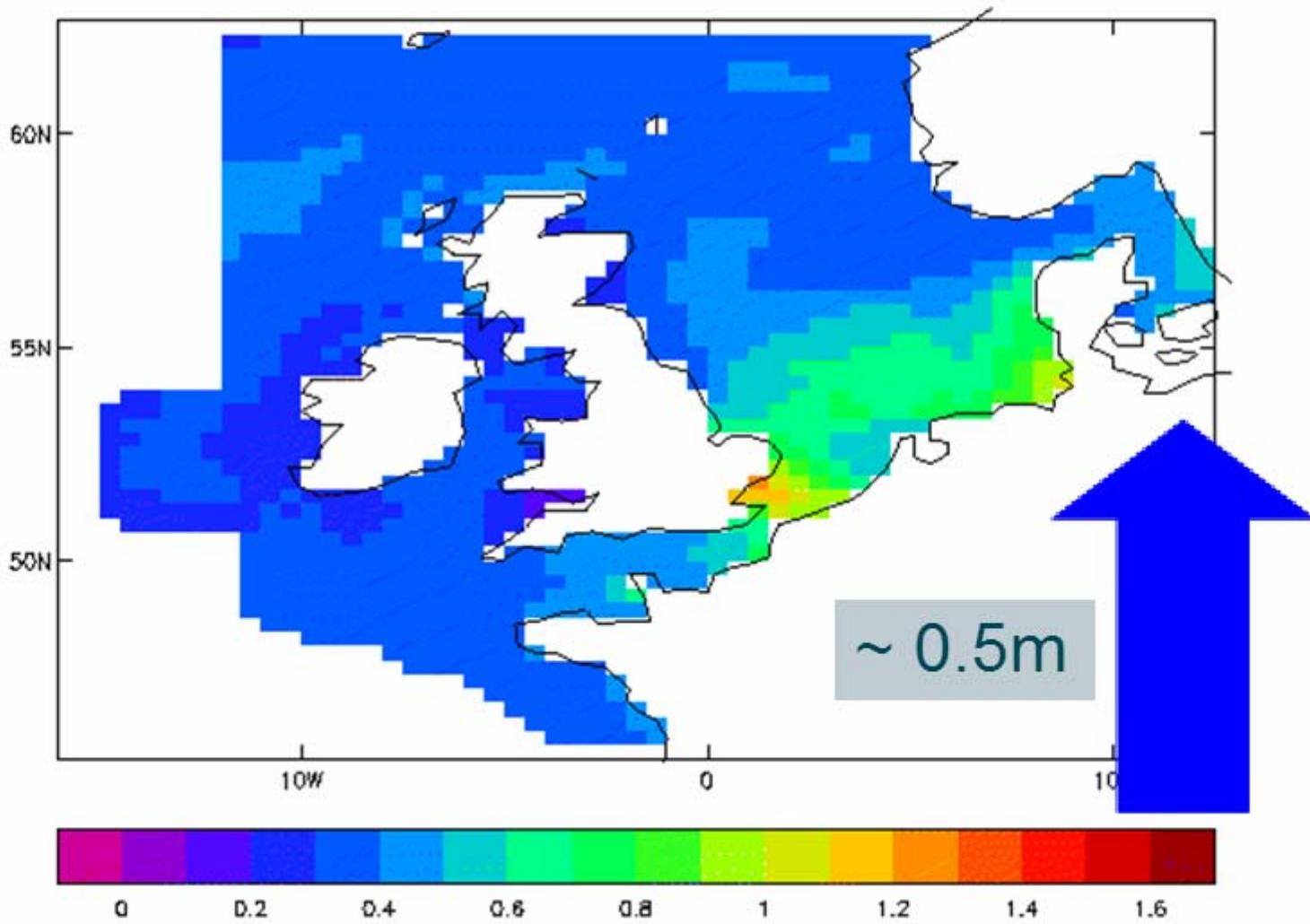
### Mean Sea Level



# Climate Changes

## Surges

2075



## Climate Changes



**What is climate  
change  
and should  
we worry?**

### Key climate change issues for the SMP2:

- Warmer temperatures
- Rising mean sea levels
- Higher extreme sea levels
- Higher wave action(?)
- Changes in wave direction(?)
- Increased winter rainfall