



# Supporting policy through research

Anne Marte Bergseng

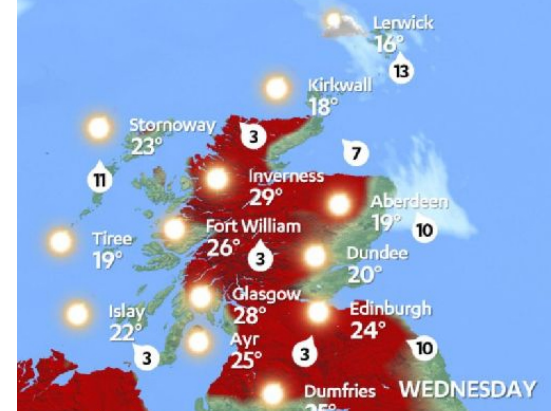
Adaptation Research Manager, ClimateXChange

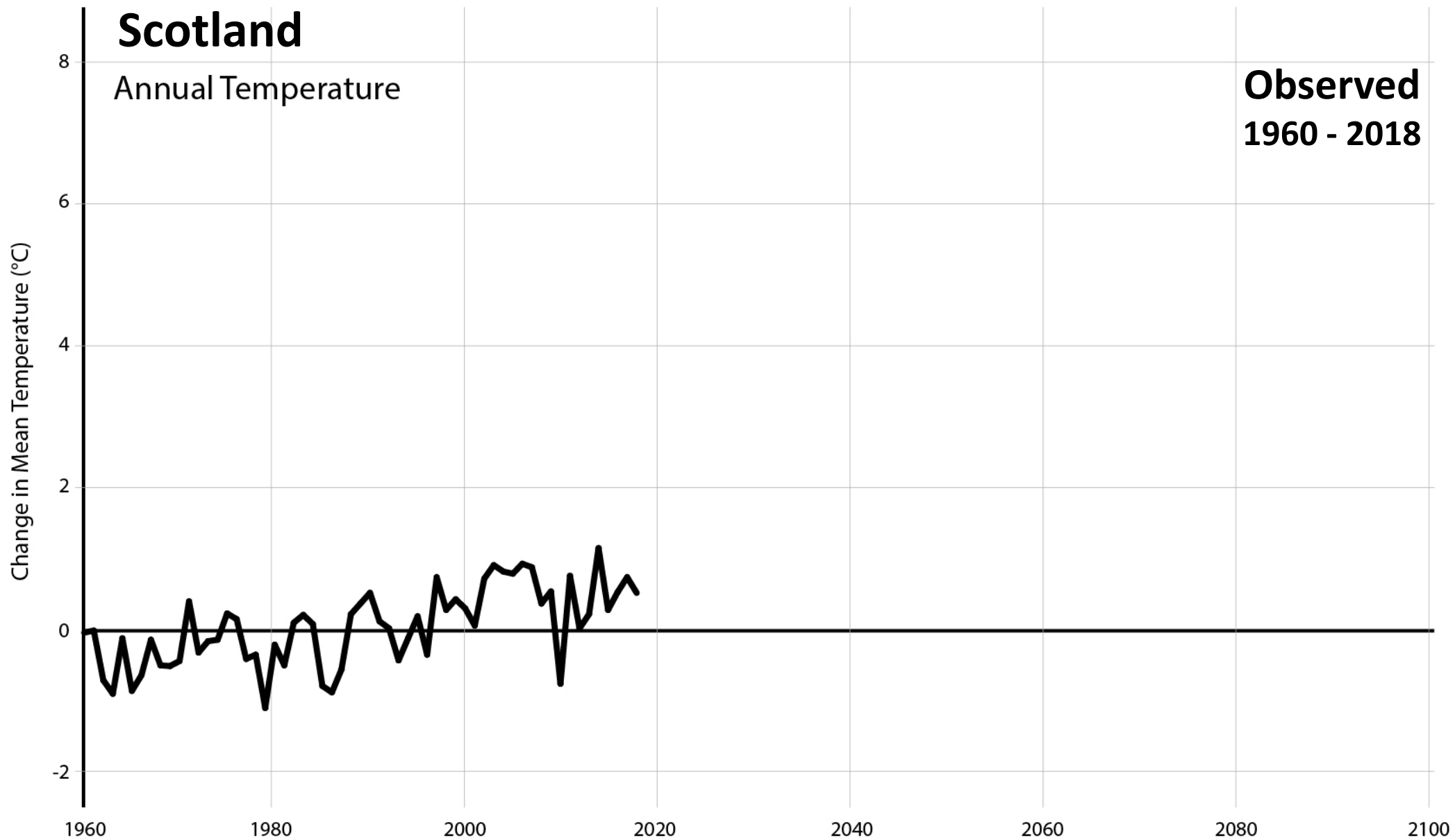


Scotland's centre of expertise connecting  
climate change research and policy

# What can we expect?

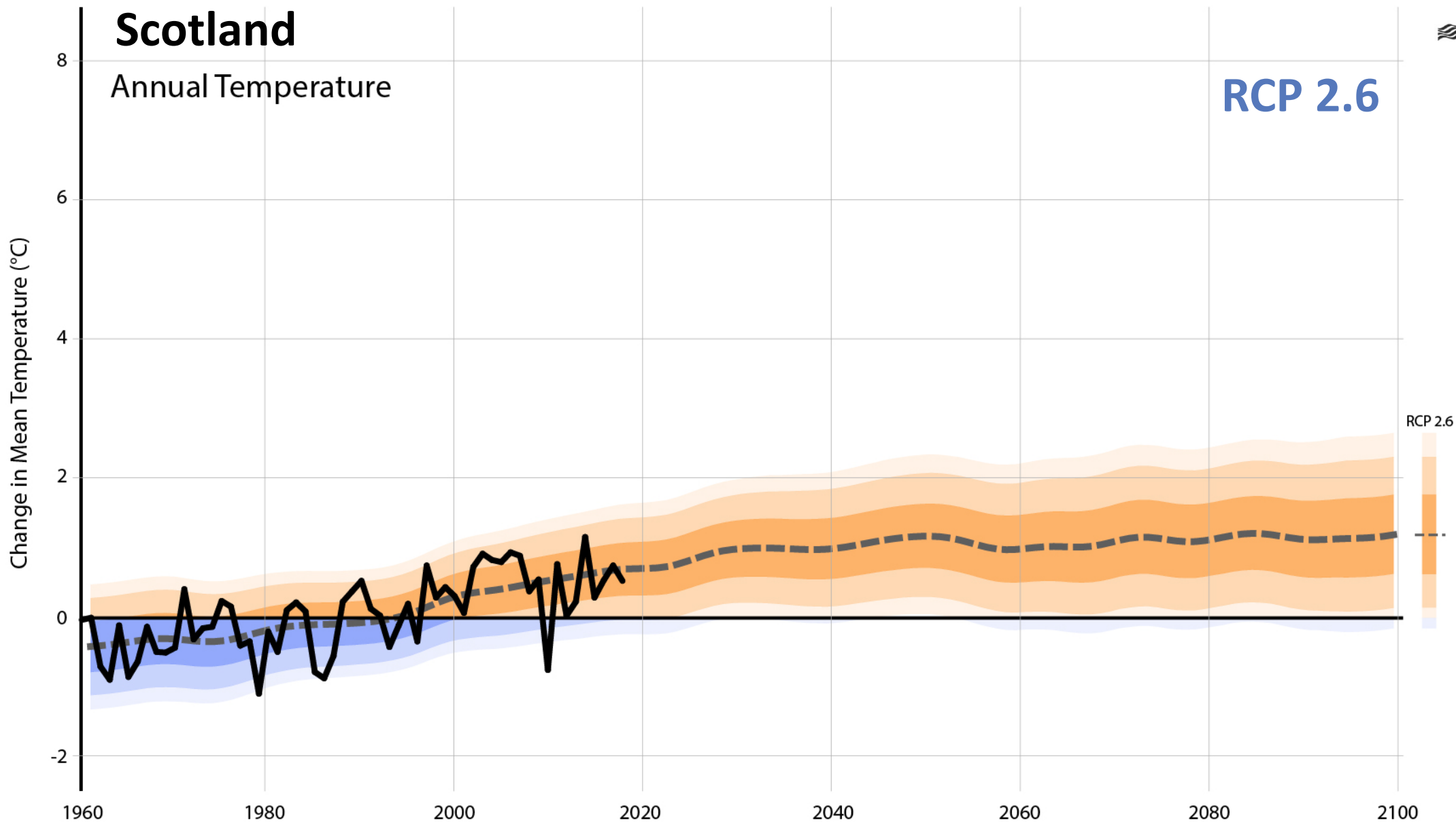
- Warmer – all season, but particularly in summer
- More frequent summer heatwaves
- Increase in average autumn and winter rainfall
- More frequent heavy rain in autumn, winter and spring
- Less snow in coastal areas
- Longer growing seasons
- Sea level rise





 Met Office

National  
Climate  
Information  
Centre



# Scotland

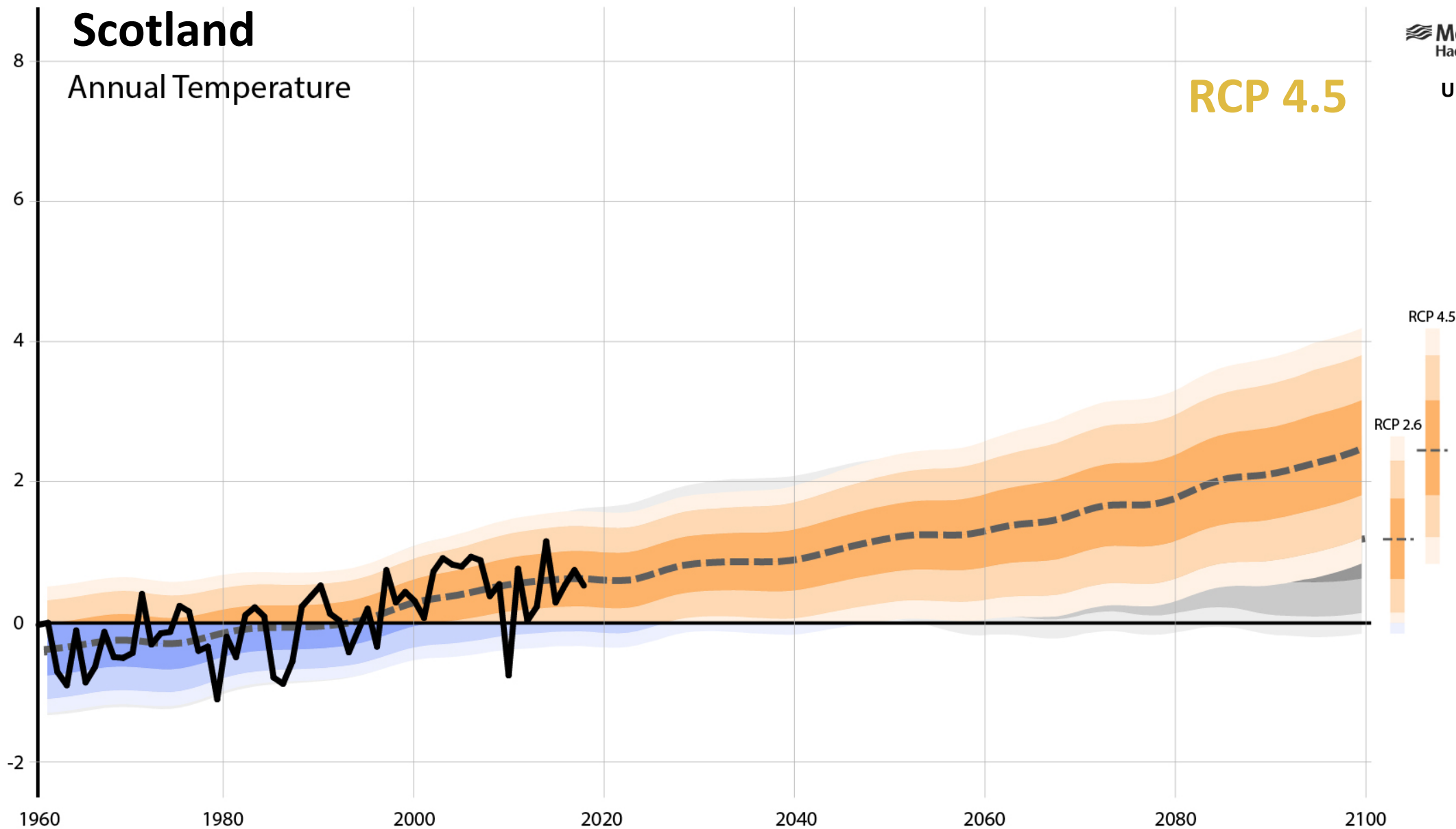
Annual Temperature

Met Office  
Hadley Centre

UKCP18

RCP 4.5

Change in Mean Temperature (°C)



# Scotland

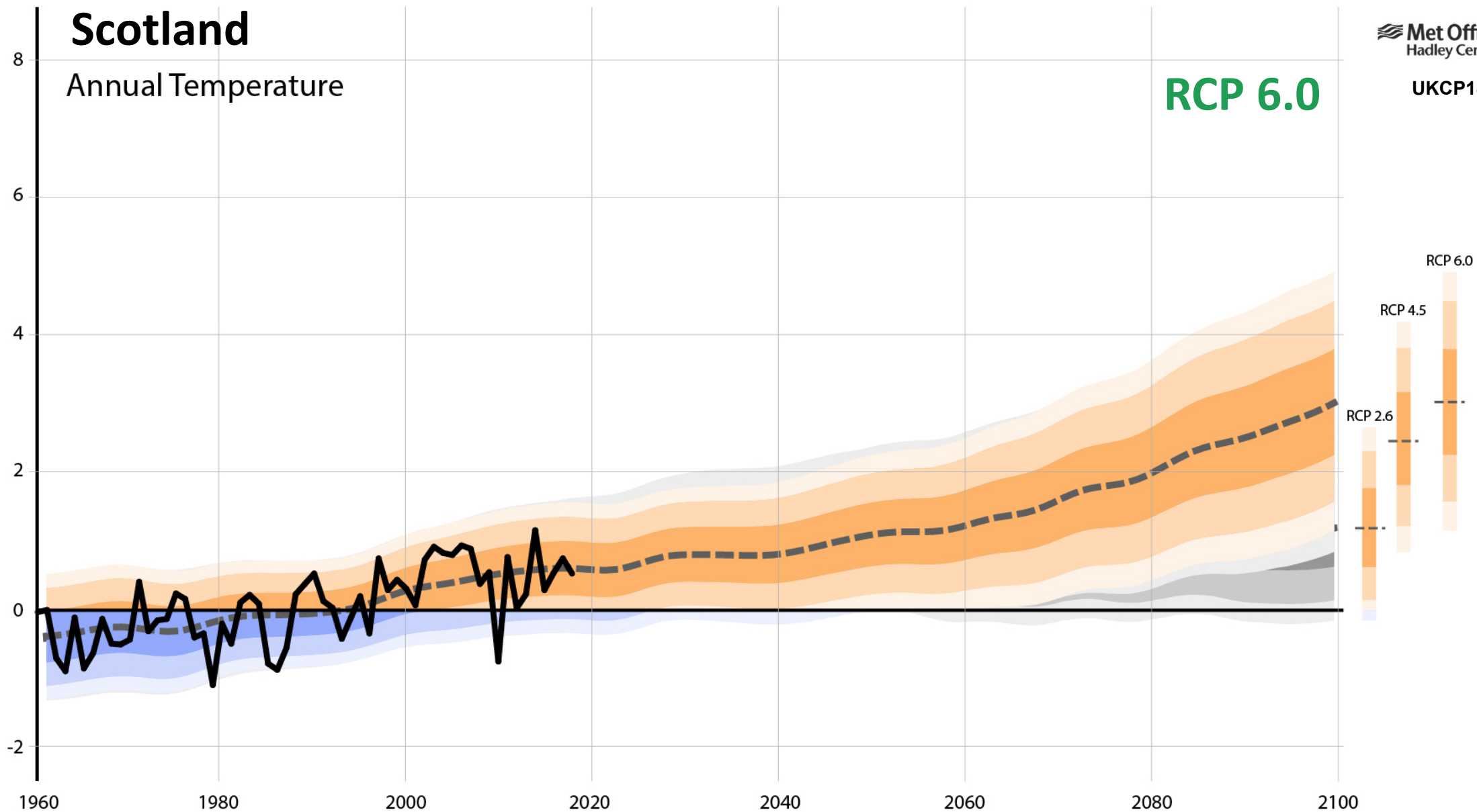
Annual Temperature

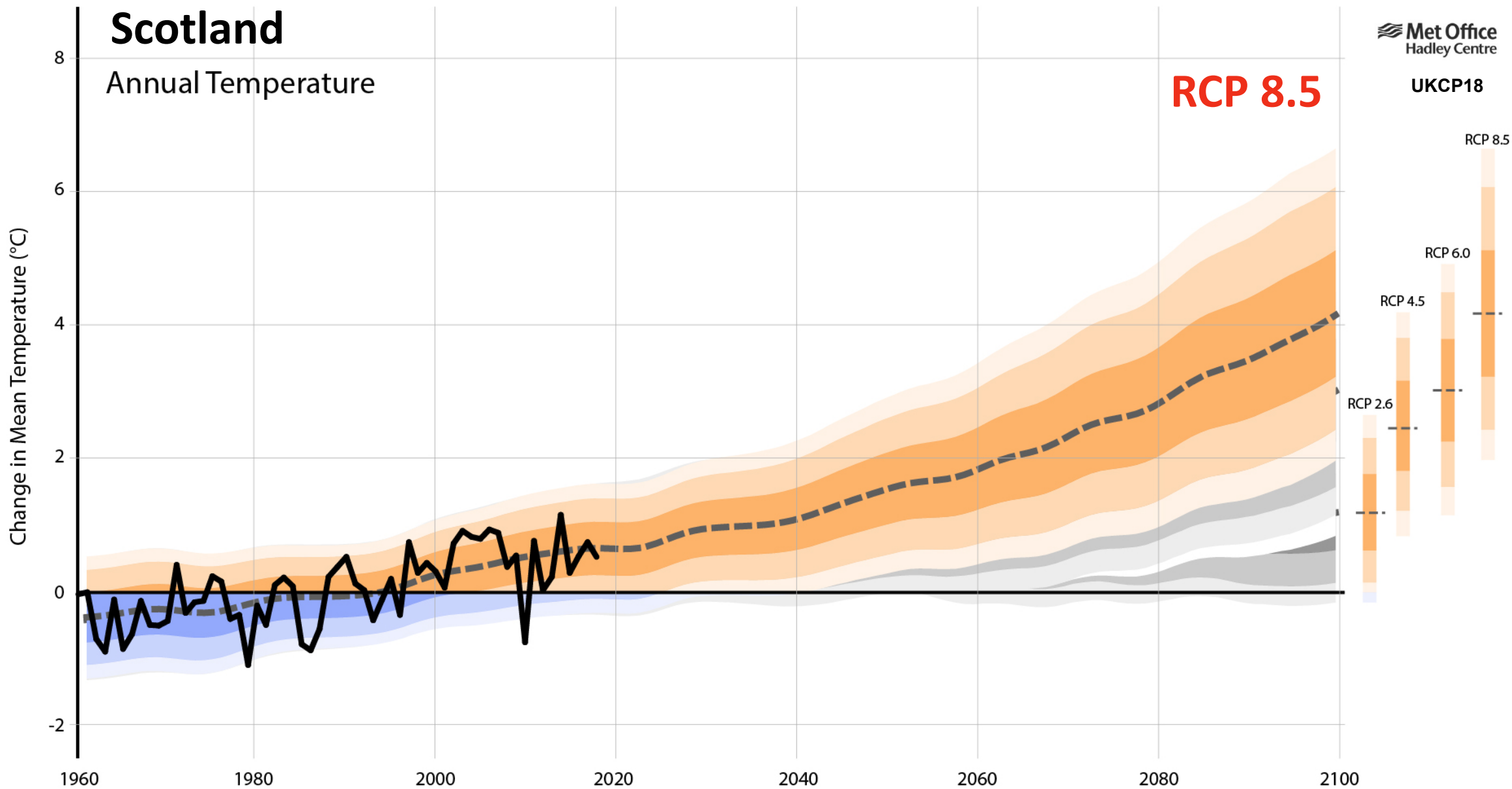
Met Office  
Hadley Centre

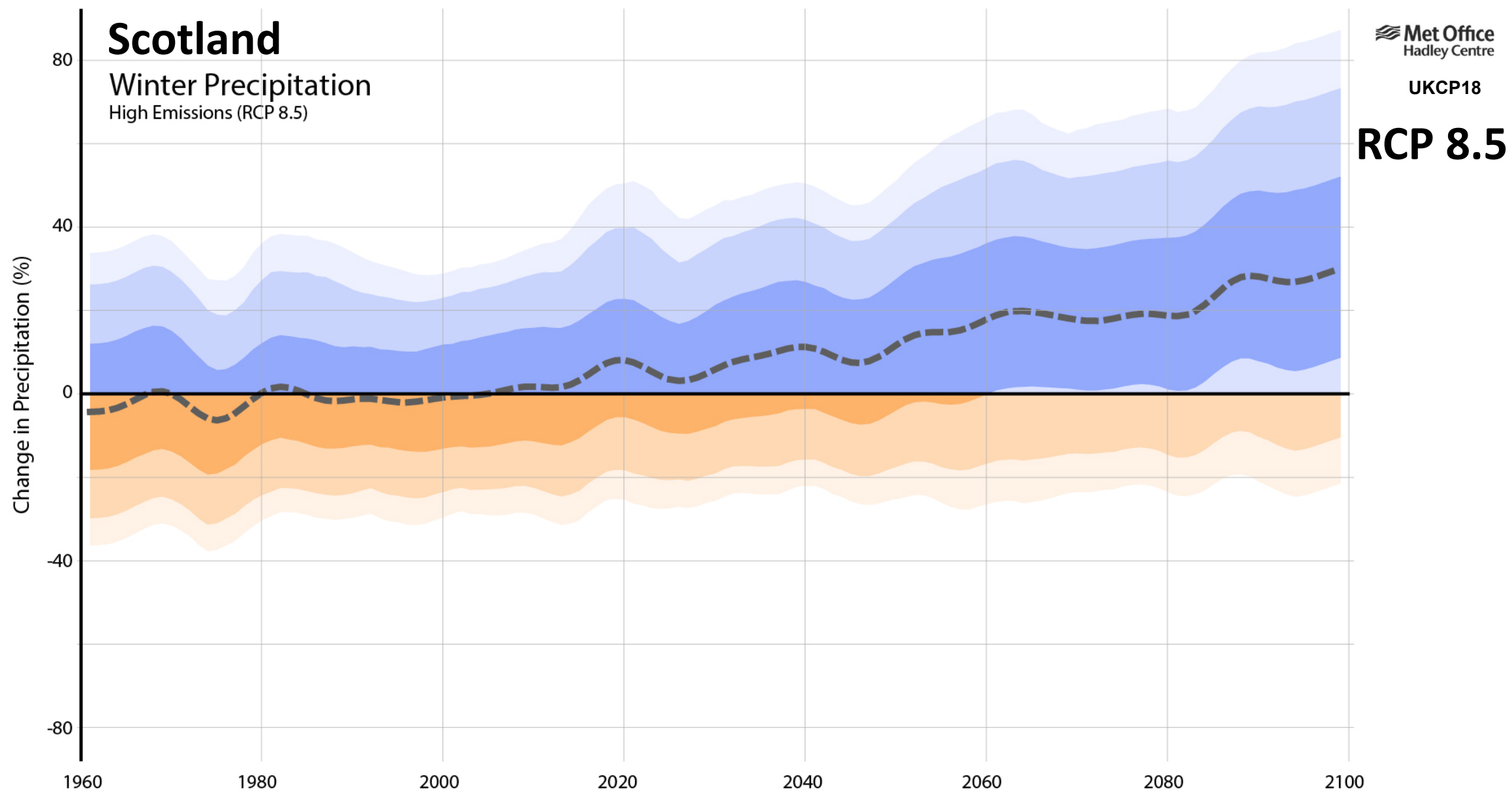
UKCP18

RCP 6.0

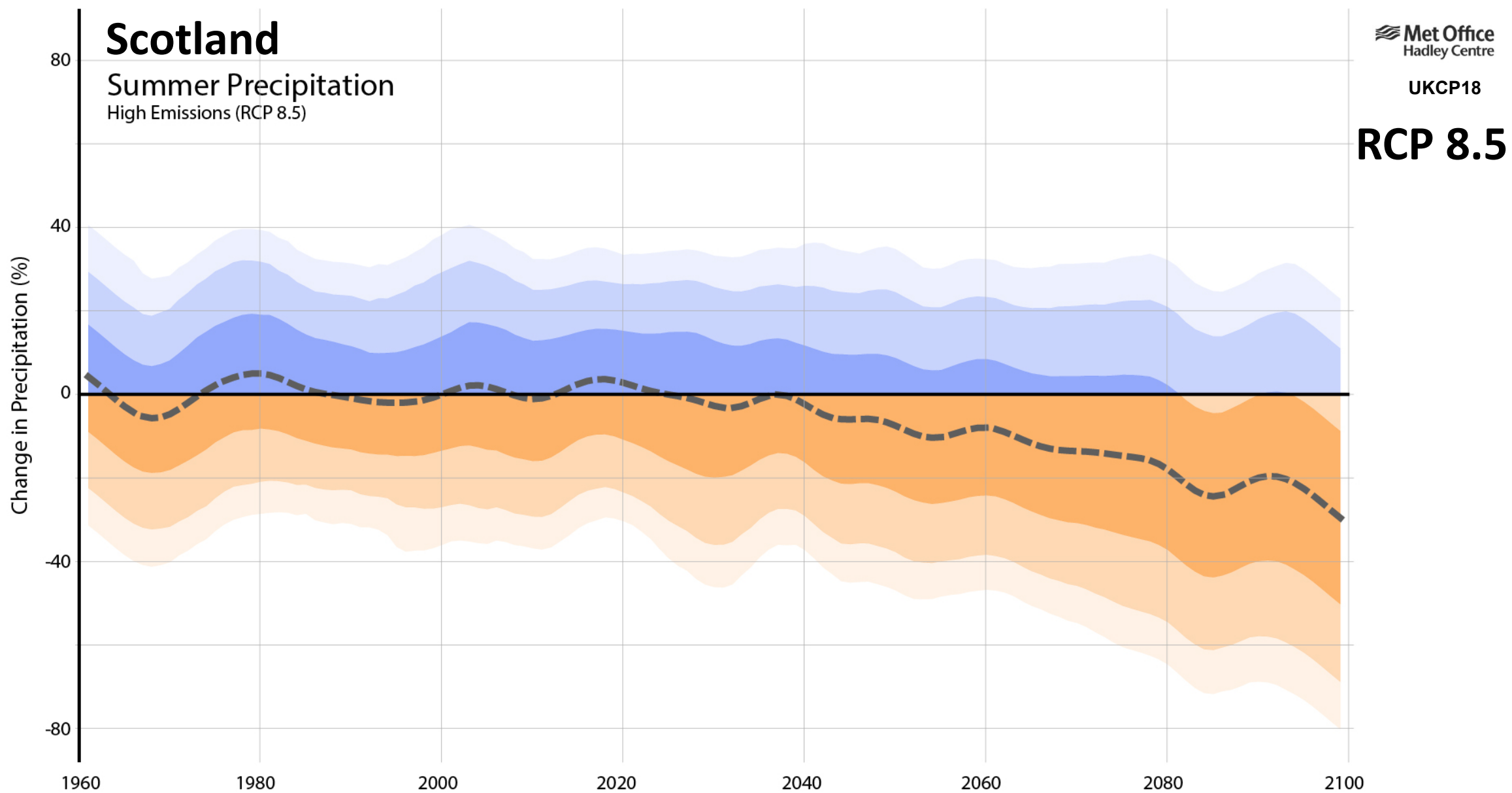
Change in Mean Temperature (°C)





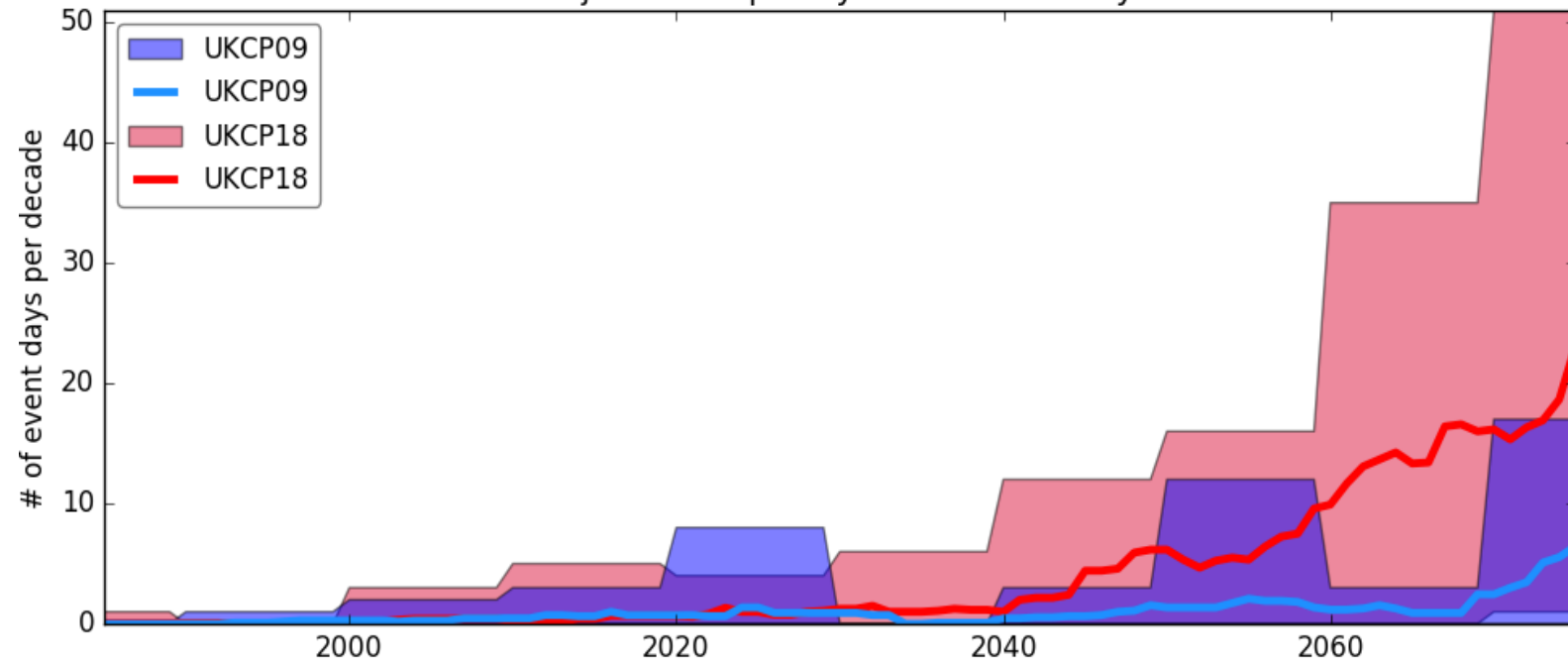




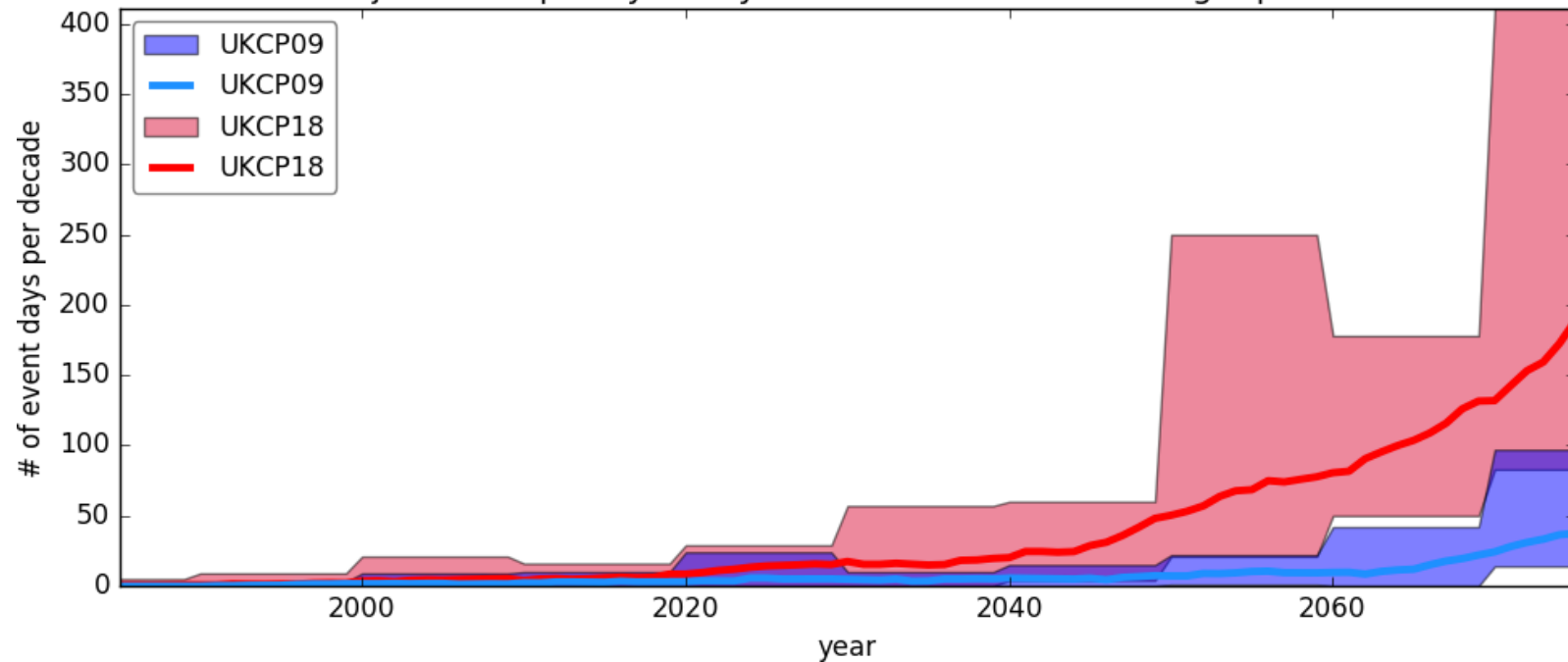




Projected frequency of heatwave days



Projected frequency of days within sustained warm-night periods



Sabine Undorf et al, University of Edinburgh, 2019

<https://www.climatexchange.org.uk/blog/>

# Outcome



## Sub-outcome

Indicator

Indicator

Indicator

## Sub-outcome

## Sub-outcome

- Evaluate progress and the contribution of adaptation measures to that progress

## Action

Indicator

## Action

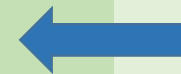
Indicator

## Action

Indicator

- Evaluate the contribution of adaptation measures to that progress

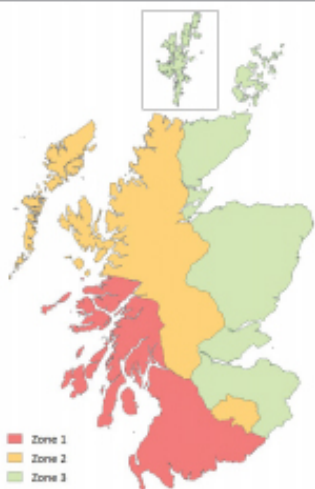
Is it working?



What are we doing?

## RISK

41% of larch in the National Forest Estate lies within *Pr* Risk Zone 1 (NF8)



## IMPACT

*Pr* is concentrated in Dumfries & Galloway where up to 6000ha of larch is infected (NF10)

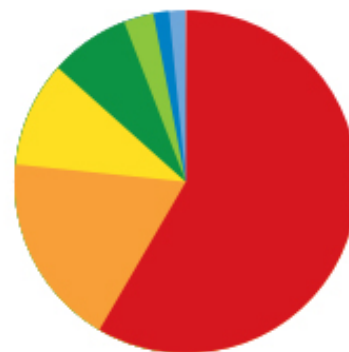
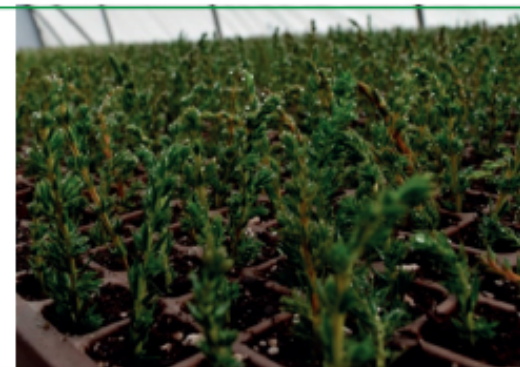


## ACTION

236 Statutory Plant Health Notices for *Pr* were issued during 2010 – 2015 (NF11)



No change in diversity of conifers ordered for planting; small increase in novel species (NF4)



Small increase in diversity of planted forest tree species over last 20 years (NF5)





## Projects

Below are some of our recently updated projects. Visit the [Publications Library](#) for access to all of our research publications.

Or read more about our [areas of expertise](#) or [the challenge we work on](#).



### Soil erosion and compaction in Scottish soils: adapting to a changing climate

This report collates the current state of confident knowledge for Scotland – what we know, what we don't know and what is under active debate.

Land use



### Delivering social care in a changing climate

Investigating how the social care sector is planning for, dealing with and learning from extreme weather events and incremental climate change.

Transforming society Resilient places



### Delivering adaptation in housing policy

Three case studies illustrating how climate change adaptation can help achieve housing policy outcome.

Resilient places



**The role of the scientist is not to  
decide between the possibilities  
but to determine what the  
possibilities are.**

*Lord May, 1990*

Former Chief Scientific Adviser to the UK Government



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[www.climatexchange.org.uk](http://www.climatexchange.org.uk)

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