

# IMPACTS OF CLIMATE CHANGE ON FUTURE SEA TEMPERATURE

UKCIP

## Executive Summary

The UK Climate Impacts Programme (UKCIP02, Hulme *et al.*, 2002) shows potential sea surface temperature (SST) rises around the UK coast under different scenarios of greenhouse gas emissions, with more pronounced warming in the southeast than the northwest. The range of future increase in SST in the southern North Sea is 1.5 – 4 °C by the 2080s whilst that at Rockall is only 0.5 – 2 °C (see figure 1)

## Level of Confidence

High confidence that sea-surface temperature will increase around all UK coasts.

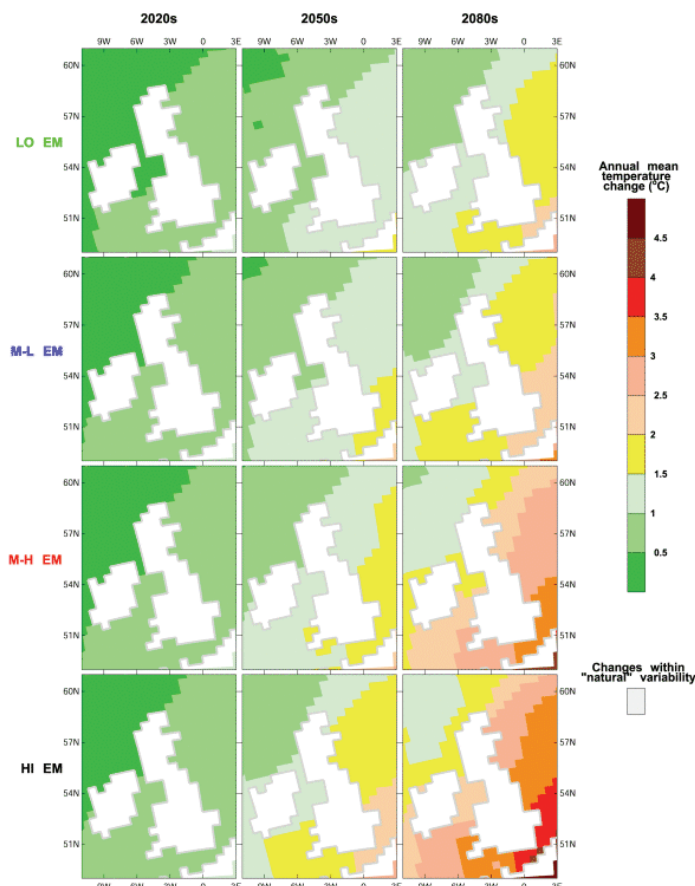


Figure 1: Changes in annual average sea-surface temperature by the 2020s, 2050s, and 2080s (compared to model simulated 1961-1990 average) for four different scenarios of greenhouse gas emissions (UKCIP, 2002)

## **Key sources of Information**

Hulme,M., Jenkins,G.J., Lu,X., Turnpenny,J.R., Mitchell,T.D., Jones,R.G., Lowe,J., Murphy,J.M., Hassell,D., Boorman,P., McDonald,R. and Hill,S. (2002) Climate Change Scenarios for the United Kingdom: The UKCIP02 Scientific Report. Tyndall Centre for Climate Change Research, School of Environmental Sciences, University of East Anglia, Norwich, UK. 120pp

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