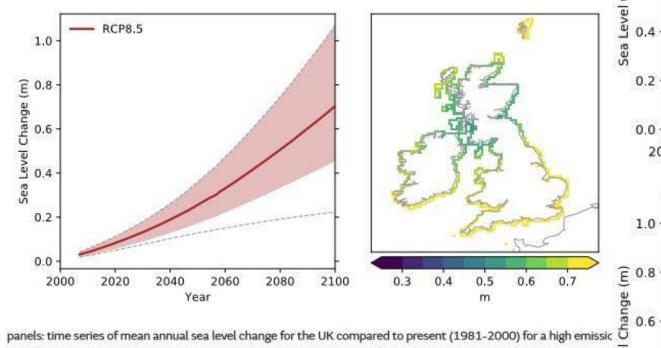
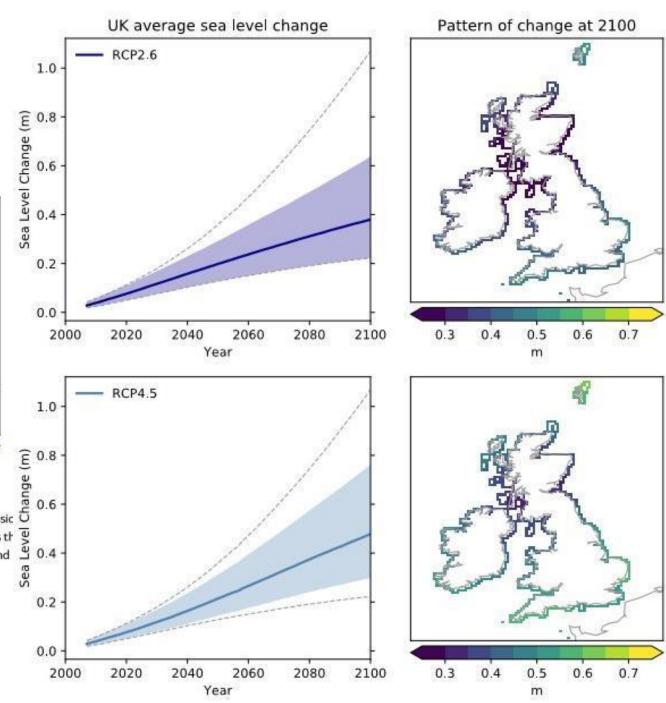
UKCP18 — Dataset Examples (Sea level rise and storm surge)

Dataset	Description	Emission Scenarios	Time Period	Domain
Time mean sea Level (12km)	Projections of future changes in sea water level	RCP2.6 RCP4.5 RCP8.5	2007-2100	UK Coastline
Storm surge trend (12km)	Projections of storm surge trend excluding mean sea level changes	RCP8.5	2007-2100	UK Coastline
Strom surge simulations	Time series of gridded historical and future simulations of sea level excluding mean sea level changes	RCP8.5	1970-2099	UK
Short event case studies	Time series of gridded historical and future simulations of sea level for 3 events	N/A	6 Dec 2013 3 Feb 2014 11 Jan 2015	UK
Time mean sea level (12km)	Exploratory projections of future changes in sea level	RCP2.6 RCP4.5 RCP8.5	2007-2300	UK
Projected future still water return level	Projected future still water levels at tide gauges	RCP2.6 RCP4.5 RCP8.5	2007-2300	UK tide gauges

UKCP18 – Results



panels: time series of mean annual sea level change for the UK compared to present (1981-2000) for a high emissic $\frac{\Box}{\Box}$: bold lines are the median change and the shaded area the likely range (5th-95th percentile). The dotted line shows the nissions scenarios (RCP2.6, RCP4.5 and RCP8.5). Right panels: regional relative sea level change around the UK and $\frac{\Box}{\Box}$ 0.4 CP8.5. From Figure 3.1.3 of Palmer et al. (2018).



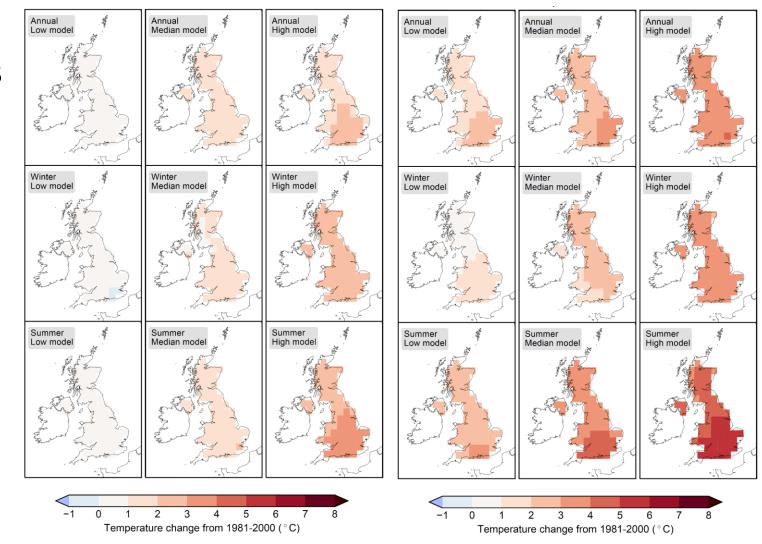
UKCP18 – Results

	RCP2.6		RCP4.5		RCP8.5	
	5 th	95 th	5 th	95 th	5 th	95 th
London	0.29	0.70	0.37	0.83	0.53	1.15
Cardiff	0.27	0.69	0.35	0.81	0.51	1.13
Edinburgh	0.08	0.49	0.15	0.61	0.30	0.90
Belfast	0.11	0.52	0.18	0.64	0.33	0.94



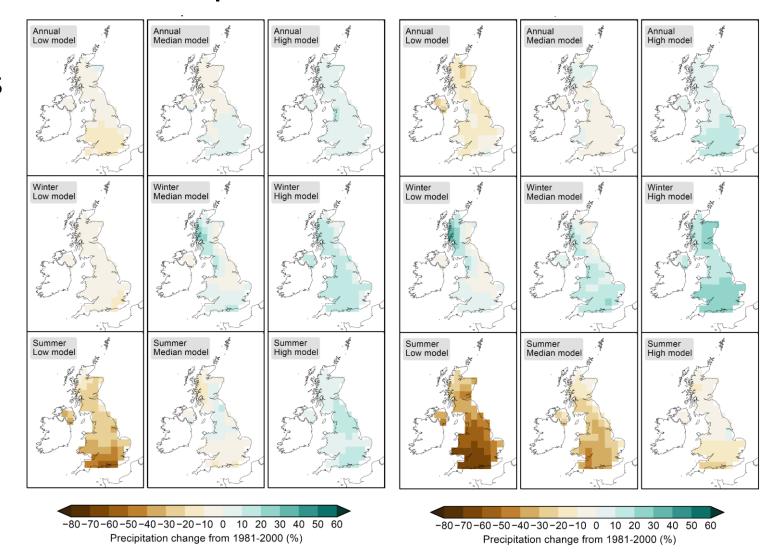
UKCP18 — Dataset Examples (Derived Projections)

• Temperature Changes



UKCP18 - Dataset Examples (Derived Projections)

Precipitation Changes



Summer and winter changes by the 2070s

		- Ö -	<u>Ö</u>
Summer rainfall change	Winter precipitation change	Summer temperature change	Winter temperature change
	For a location in	central England	
41% drier to 9% wetter	3% drier to 22% wetter	No change to 3.3 °C warmer	-0.1 °C cooler to 2.4 °C warmer
57% drier to 3% wetter	2% drier to 33% wetter	1.1 °C warmer to 5.8 °C warmer	0.7 °C warmer to 4.2 °C warmer
	For a location in	central Scotland	
30% drier to 6% wetter	4% drier to 9% wetter	-0.1 °C cooler to 2.8°C warmer	-0.3°C cooler to 2.7°C warmer
40% drier to 8% wetter	3% drier to 12% wetter	0.6 °C warmer to 4.8 °C warmer	0.6 °C warmer to 4.5 °C warmer
	For a location i	n central Wales	
39% drier to 3% wetter	2% drier to 19% wetter	No change to 3.3°C warmer	0.1 °C warmerto 2.4 °C warmer
56% drier to 2% wetter	No change to 29% wetter	0.9 °C warmer to 5.9 °C warmer	0.7 °C warmer to 4.1 °C warmer
	For a location in cen	tral Northern Ireland	
28% drier to 6% wetter	3% drier to 17% wetter	No change to 2.8 °C warmer	0.1 °C warmer to 2.2 °C warmer
38% drier to 3% wetter	2% drier to 25-% wetter	0.8 °C warmer to 4.9 °C warmer	0.6 °C warmer to 3.9 °C warmer
	7/	///	

*All results are for the 10th-90th percentile range for the 2060-2079 period relative to 1981-2000

High emission scenario

Low emission scenario