**Table 1.1**
Observed and projected changes in UK hazards due to climate change

| Observed change | Expected change by mid-century | Global warming of 2°C above preindustrial levels by 2100 | Global warming of 4°C above preindustrial levels by 2100 |
|---|---|---|---|
| 0.6°C from 1981 – 2000 | ~1.3°C from 1981 – 2000 | ~1.5°C from 1981 – 2000 | ~3°C from 1981 – 2000 |
| 10 – 25% chance of a '2018 summer', up from <10% a few decades ago | ~50% chance each year | ~50% chance each year | >>50% chance each year |
| 0 no significant long term trend | ~10% drier than over 1981 – 2000 | ~15% drier than over 1981 – 2000 | ~30% drier than over 1981- 2000 |
| 0 no significant long term trend | ~5% wetter than over 1981 – 2000 | ~5% wetter than over 1981 – 2000 | ~20% wetter than over 1981 – 2000 |
| 0 Some increase, but no significant long-term trend | ~10% increase | ~20% increase | ~50% increase |
| ~6.5cm above 1981-2000 | 10 – 30cm above 1981-2000 | 25 – 45cm above 1981-2000 | 55 – 80 cm above 1981-2000 |

Average annual UK temperatures
'Hot summer' occurrence
Average summer rainfall
Average winter rainfall
Heavy rainfall
Sea level rise

Notes:
* Changes to mid-century are taken from across RCP2.6, 4.5 and 6.0 scenarios for UKCP18 probabilistic projections (50th percentiles).
** Changes are taken from the 50th percentile of the RCP2.6 probabilistic projections from UKCP18 averaged over 2081 – 2100 (approximately consistent with a global warming level of 2°C above preindustrial levels.
*** Estimated from the UKCP18 Derived Projections for a global warming level of 4°C above preindustrial levels using the median model realisation. Values given are indicative of the middle of the range of local changes expected across most of the UK.
Heavy rainfall is here defined as the mean of the wettest 5% in the distribution of hourly rainfall over winter. Future projections taken from Sayers et al. (2015) Projections of future flood risk for the UK.
Future sea level changes are given as a range across UK capital cities (50th percentile of projections). Future projections are taken from the UKCP18 Marine Projections for the RCP2.6 and RCP8.5 scenarios which correspond to global warming levels of 2°C and 4°C by 2100 respectively (50th percentiles). Change to 2050 are the range of 50th percentile change across UK capital cities and the RCP2.6 – RCP8.5 scenarios.
Throughout this table values are rounded. Climate response uncertainty means that a broader range of changes are possible around the central estimates presented in this table.