### HEADLINE FINDINGS

UKCP Probabilistic (25km) projections provide the broadest ranges of uncertainty in future changes for UK key climate variables and global average temperature. The Global (60km), Regional (12km) and Local (2.2km) projections provide plausible future outcomes for UK weather and climate that can be used for detailed climate impact studies, set in the context of the Probabilistic Projections. All results shown are for a high emission scenario for the 2061-2080 period relative to 1981-2000 unless otherwise stated.

### FUTURE TEMPERATURE CHANGE

**PROBABILISTIC PROJECTIONS**

- **UKCP Probabilistic (25km) projections** show that by 2070, the range of average seasonal temperature changes are projected to increase.*

- **UKCP LOCAL (2.2km)**
  - **RISING SEASONAL TEMPERATURES**
  - **HOT SUMMER DAYS**
    - Temperature of hot summer days**, by 2070, is projected to increase in the Local (2.2km) projections.
  - **THE FREQUENCY OF HOT SPELLS*** IS PROJECTED TO INCREASE
    - The average frequency of hot spells, locally over the southern UK for the period 1981–2000, is once every 4 years.

- **By 2070, the average frequency of hot spells is projected to rise to about four times per year.**

### FUTURE PRECIPITATION CHANGE

**PROBABILISTIC PROJECTIONS**

- **WETTER WINTERS, DRIER SUMMERS**

- **FUTURE INCREASES IN EXTREME HOURLY RAINFALL INTENSITY**
  - By 2070, extreme hourly rainfall intensity associated with an event that typically occurs once every two years increases by 25%.

- **CHANGES IN THE TYPE OF RAINFALL**
  - By 2070, Local (2.2km) projects more of the rain in winter will come from frontal rain events of higher intensity and in summer from short lived high intensity showers.