

# Increase in frequency of extremely wet autumn days in the UK

## Current Hazard

Parts of South Yorkshire suffered extreme flooding during Nov 2019



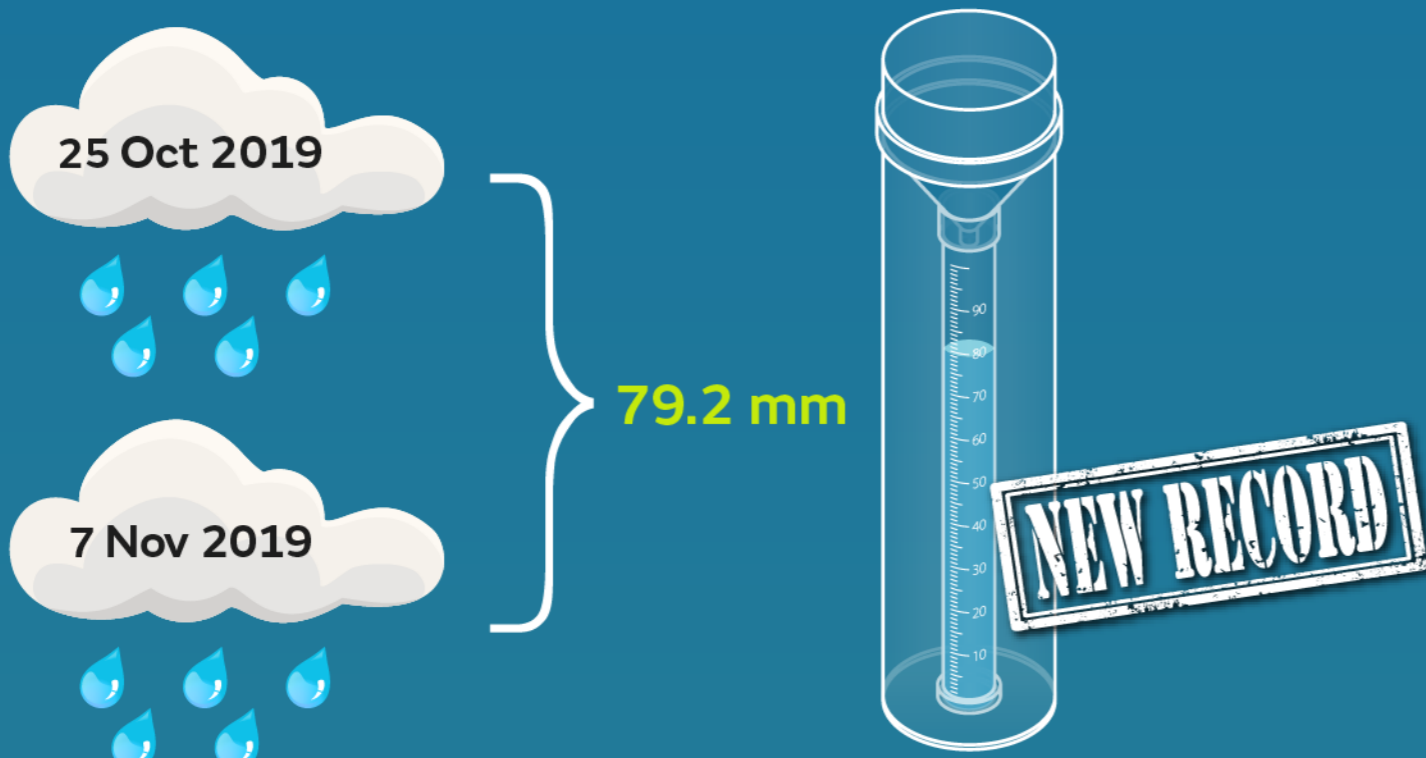
Over 500 properties flooded



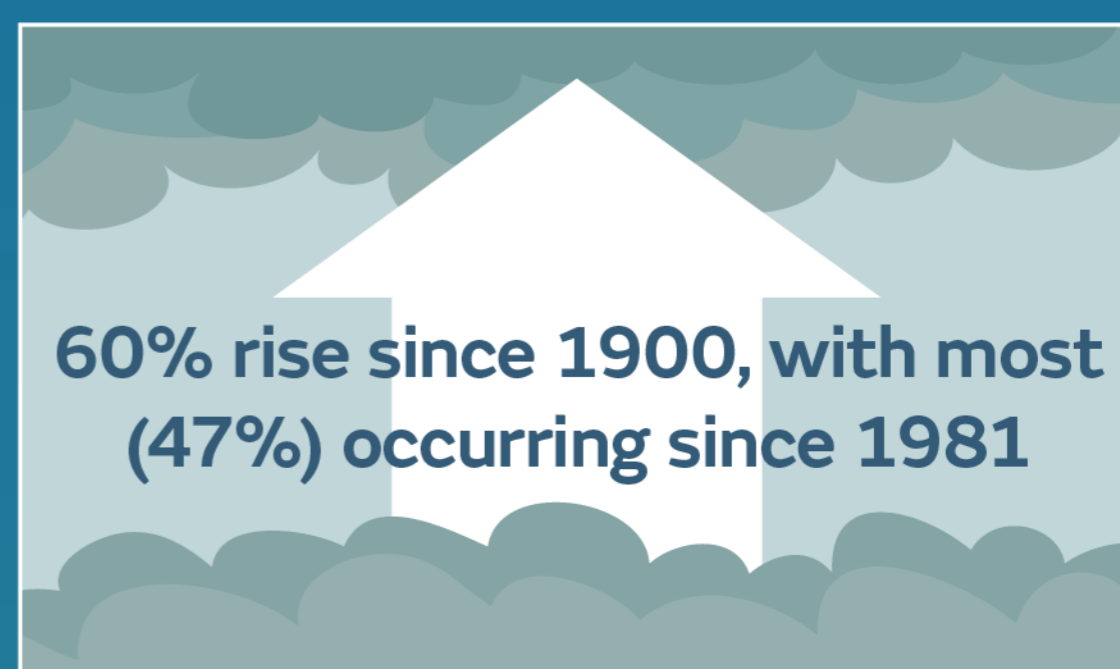
1200 households evacuated



Potential insurance losses of £120 million



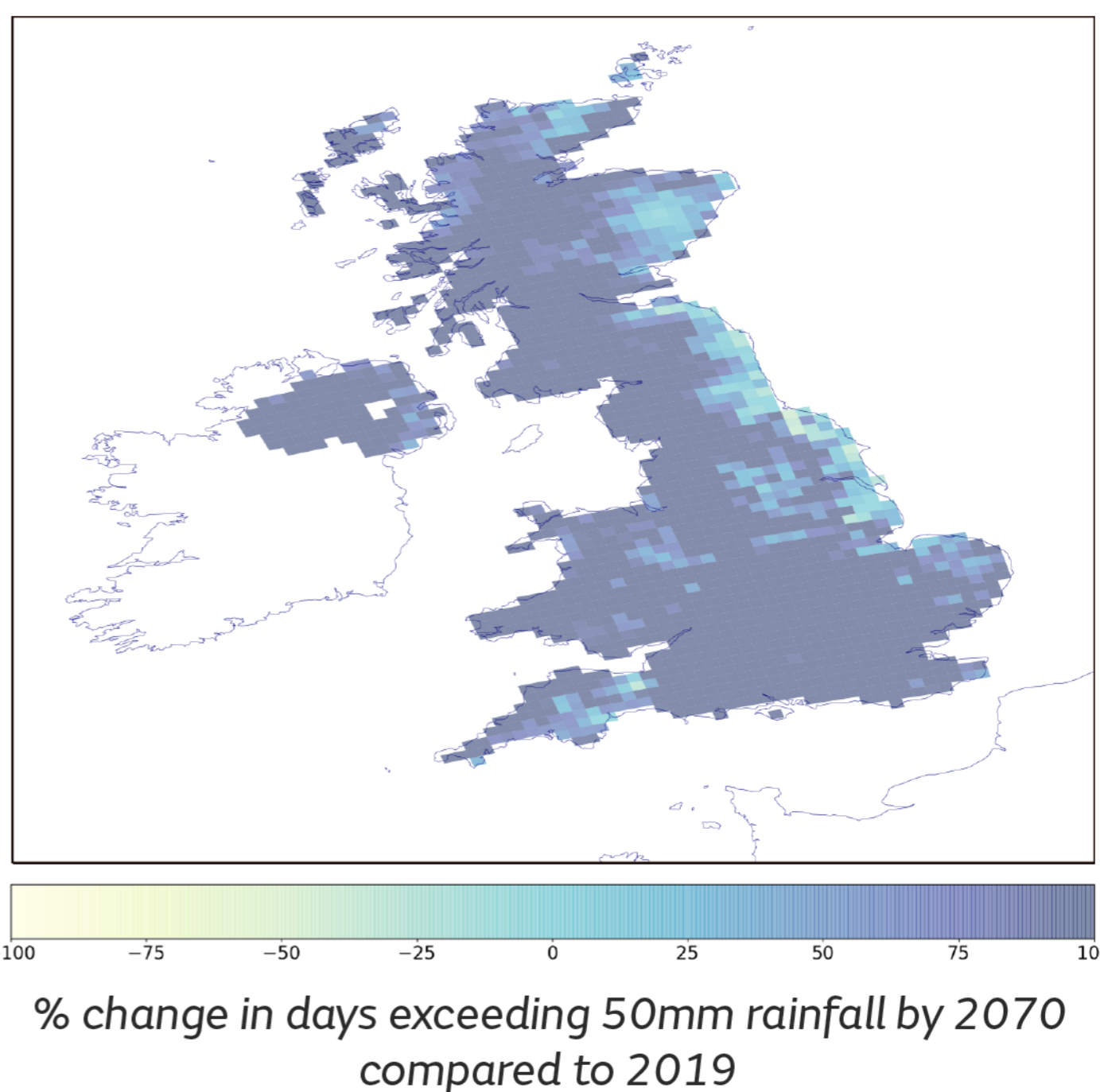
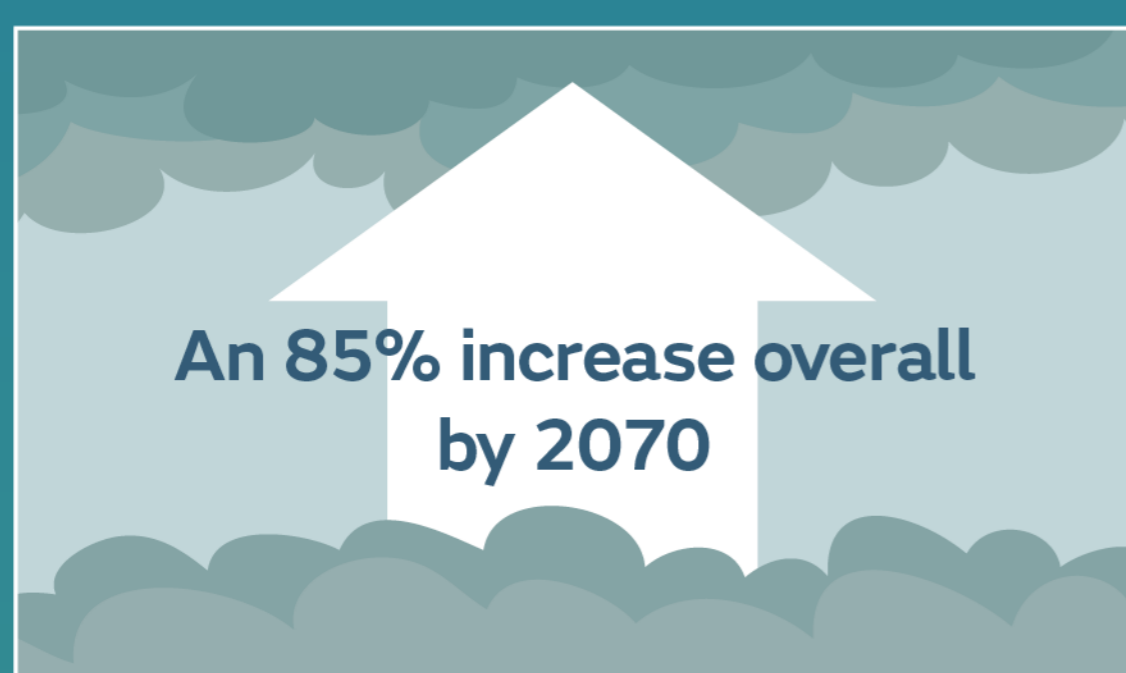
Observations\* show that for South Yorkshire, Autumn 2019 saw the highest recorded rainfall falling over any two individual days during October and November



Both observations\* and model projections\*\* show an increase in the number of UK Autumn days (Oct-Dec) with rainfall totals exceeding 50mm

## Future Hazard

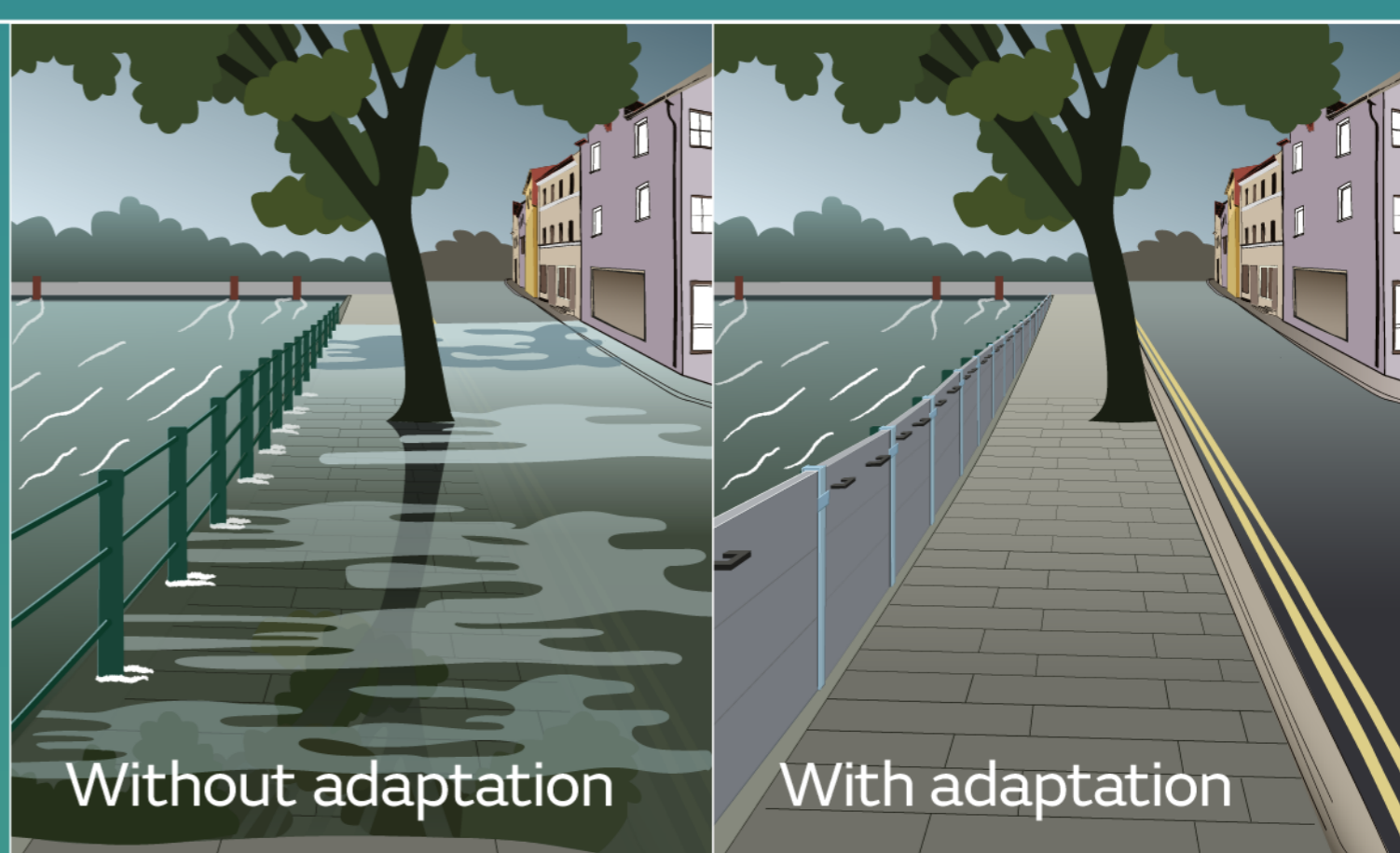
Model projections\*\* show that by 2070 nearly all UK regions will experience further increases in the number of autumn days exceeding 50mm rainfall.



## Future Risk and Resilience

The UK Climate Resilience Programme is helping to combine hazard information with exposure and vulnerability information to allow a better understanding of future risk.

Climate modelling can help optimise adaptation measures.



Cotterill et al. 2021, Increase in the frequency of extreme daily precipitation in the United Kingdom in autumn, *Weather and Climate Extremes*

\*HadUK-Grid \*\*UK Climate Projections 12 km RCM / RCP 8.5