

About

Essex, in eastern England, spans 3,670 km² with a 905 km coastline along the North Sea. Home to about 185,000 residents, it faces significant flood risks due to its geography and climate change. Historical storms, like the devastating 1953 event, underscore its vulnerability, while recent heatwaves signal rising climate challenges.



WINDS & RAIN



TEMPERATURE



FLOODS

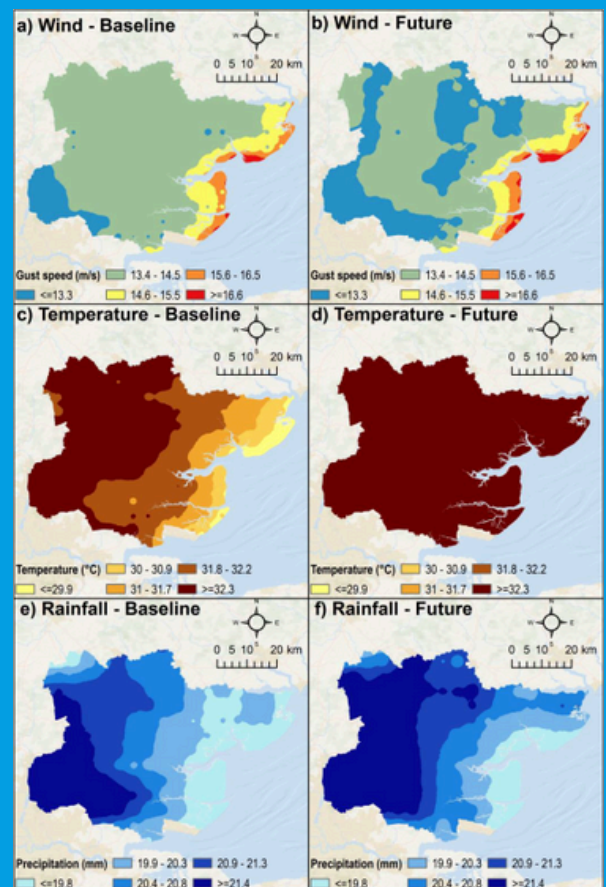
Interacting hazards in Essex

The UK is facing an increase in heatwaves, storms, flooding, and wildfires. Multiple hazard events, such as strong winds and heavy rainfall or high temperatures and drought, can severely impact the built environment and community. Essex is also experiencing multi-hazard events, particularly locally co-occurring compound wind and rainfall extremes. The intensity of such multi-hazard events is projected to increase in the future (2061 to 2080) compared to the baseline scenario (1981 to 2000).

Essex vulnerability

The interacting hazards in Essex demonstrated a few vulnerabilities, from physical ones, such as road flooding and transport disruption, to socio-economic ones, which are less visible but produce an extremely negative impact on society. For example, the MEDiate project developed a Social Vulnerability Score (SoVI) based on Census tract data. It represents the level of a community's social vulnerability.

Spatially compounding multi-hazard indicators



Funded by
the European Union



UK Research
and Innovation



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