Adaptation for buildings – from both long term and short term perspectives

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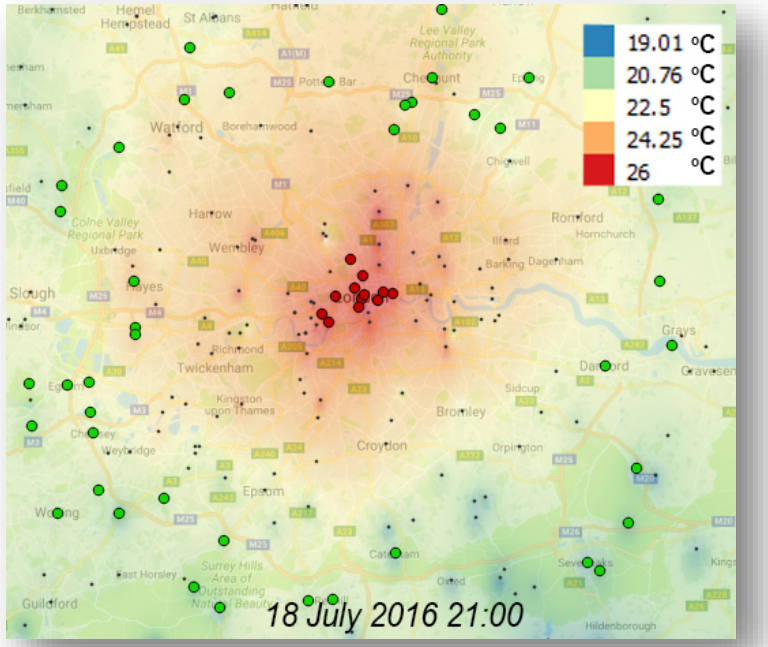
Ongoing projects

Forecast of building energy demand and renewable generation
2014-2019, Fellow



Noddir gan **Lywodraeth Cymru**
Sponsored by **Welsh Government**

Modular external wall retrofit + renewable and storage
2017-2021, PI

European Commission
HORIZON 2020

HuMiD - Health cost of mould and damp in Welsh homes
2017-2018, PI

WelshCrucible CrwsiblCymru

Renewable Energy Systems in Zero Carbon Villages
2018-2019, PI

BRITISH COUNCIL

HABITAT- plug-n-HArvest modular façade for zero bills Buildings In Tibet plATeau
2018, PI

hefcw

GCRF
Global Challenges Research Fund

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China-UK Workshop on Renewable Energy Systems in Zero Carbon Villages

Menu

The China-UK Workshop on Renewable Energy Systems in Zero Carbon Villages will take place in Lhasa, Tibet, China, 6-8 August 2018.

Under the Researcher Links programme offered within the Newton Fund, the British Council and National Natural Science Foundation of China (NSFC), we will be holding a workshop on themes relating to energy, architecture, climate, environment, rural and urban development.

Overview

This workshop will discuss

Apply

We are now inviting Early

Partners and sponsors

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HABITAT- plug-n-HArvest modular façade for zero bills Buildings In Tibet plATeau

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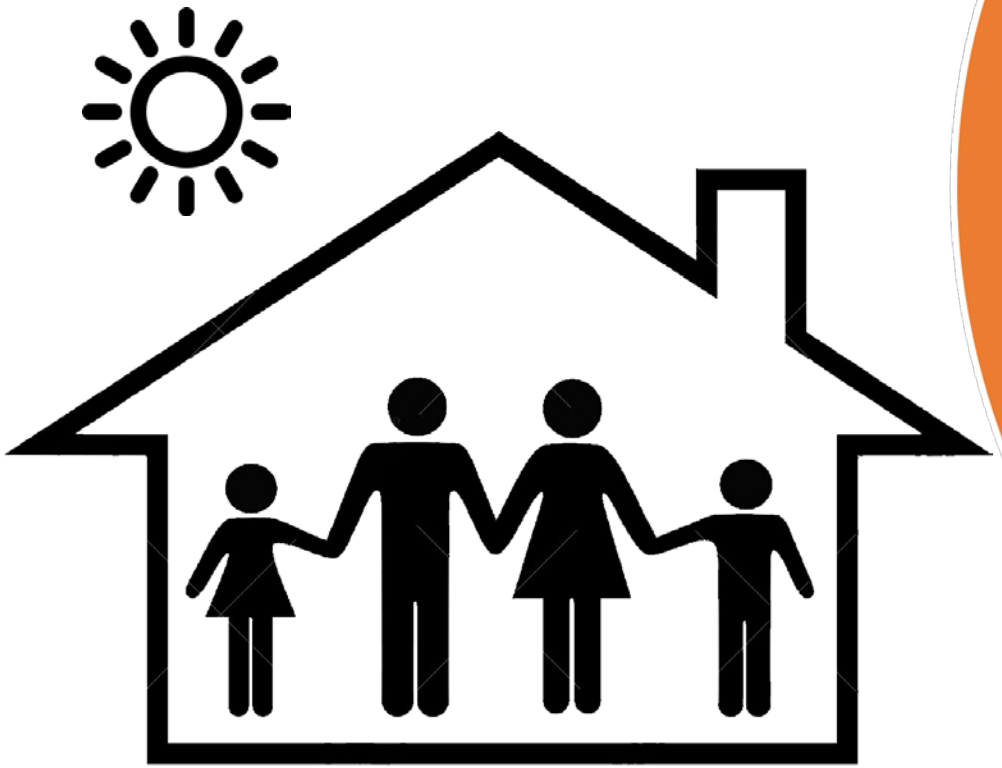
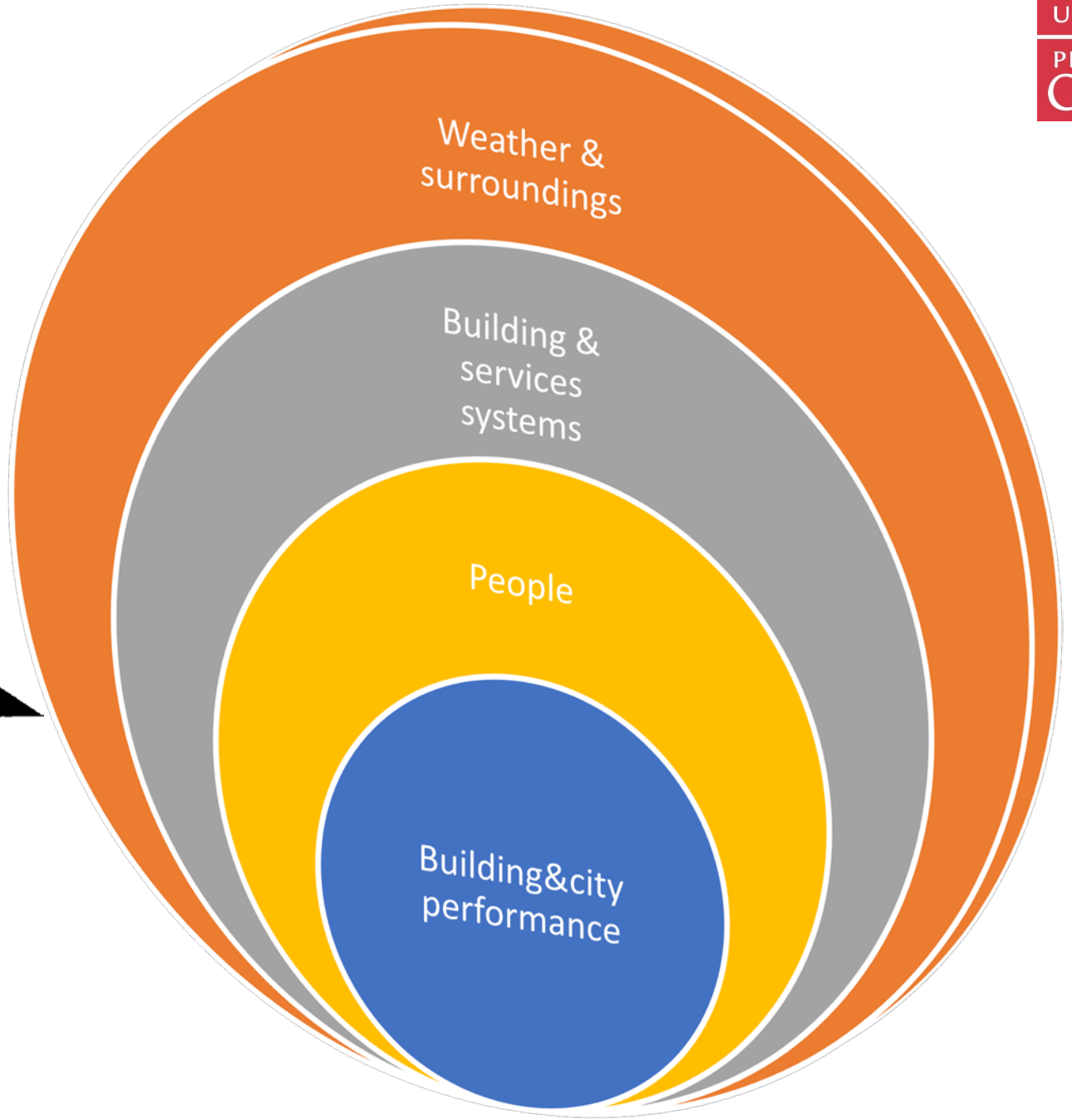
Three layers of adaptation options for buildings:





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UK climate change projections

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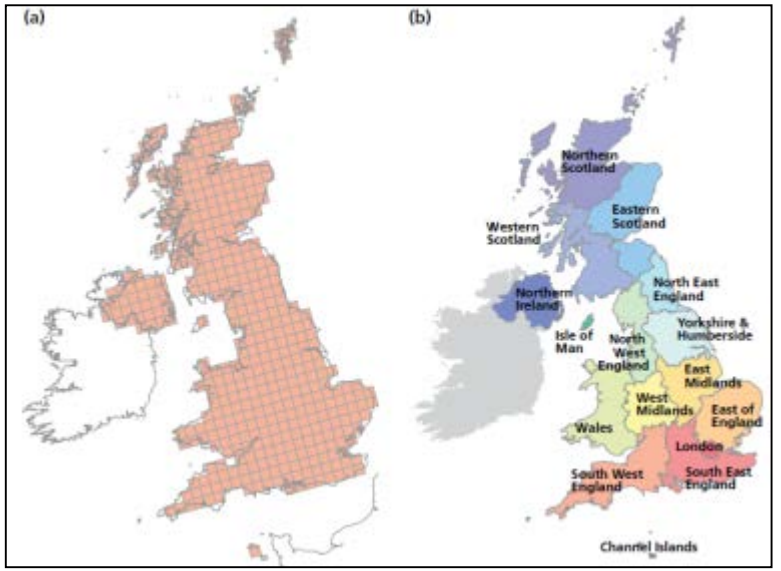
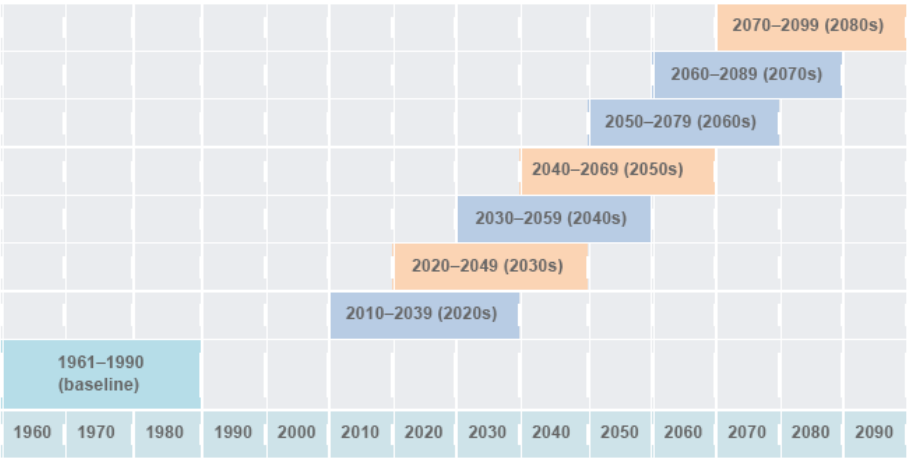
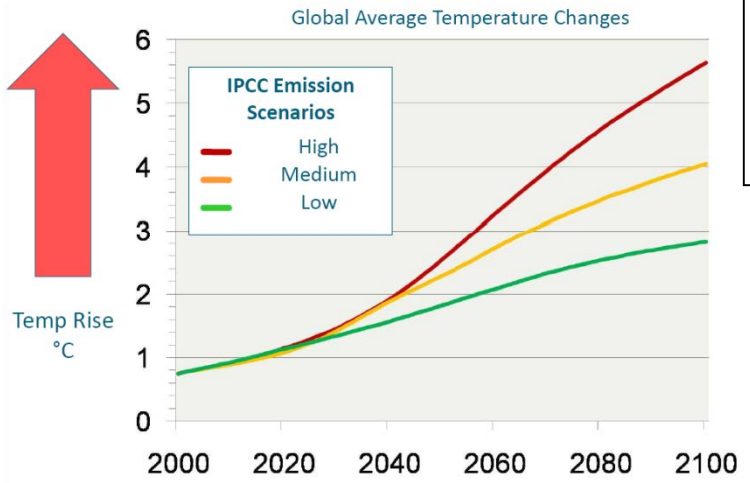
25km grid, 16 admin regions, 23 river-basins and 9 marine regions



Seven different time frames



Three different emission scenarios



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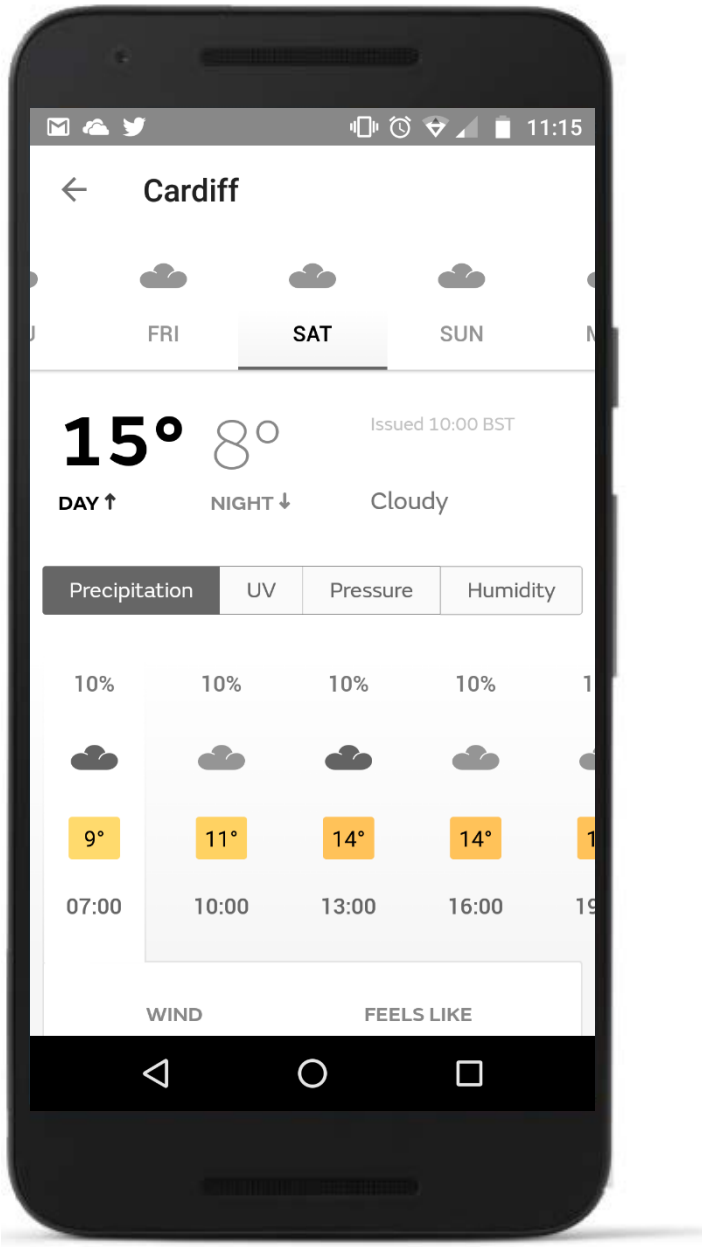

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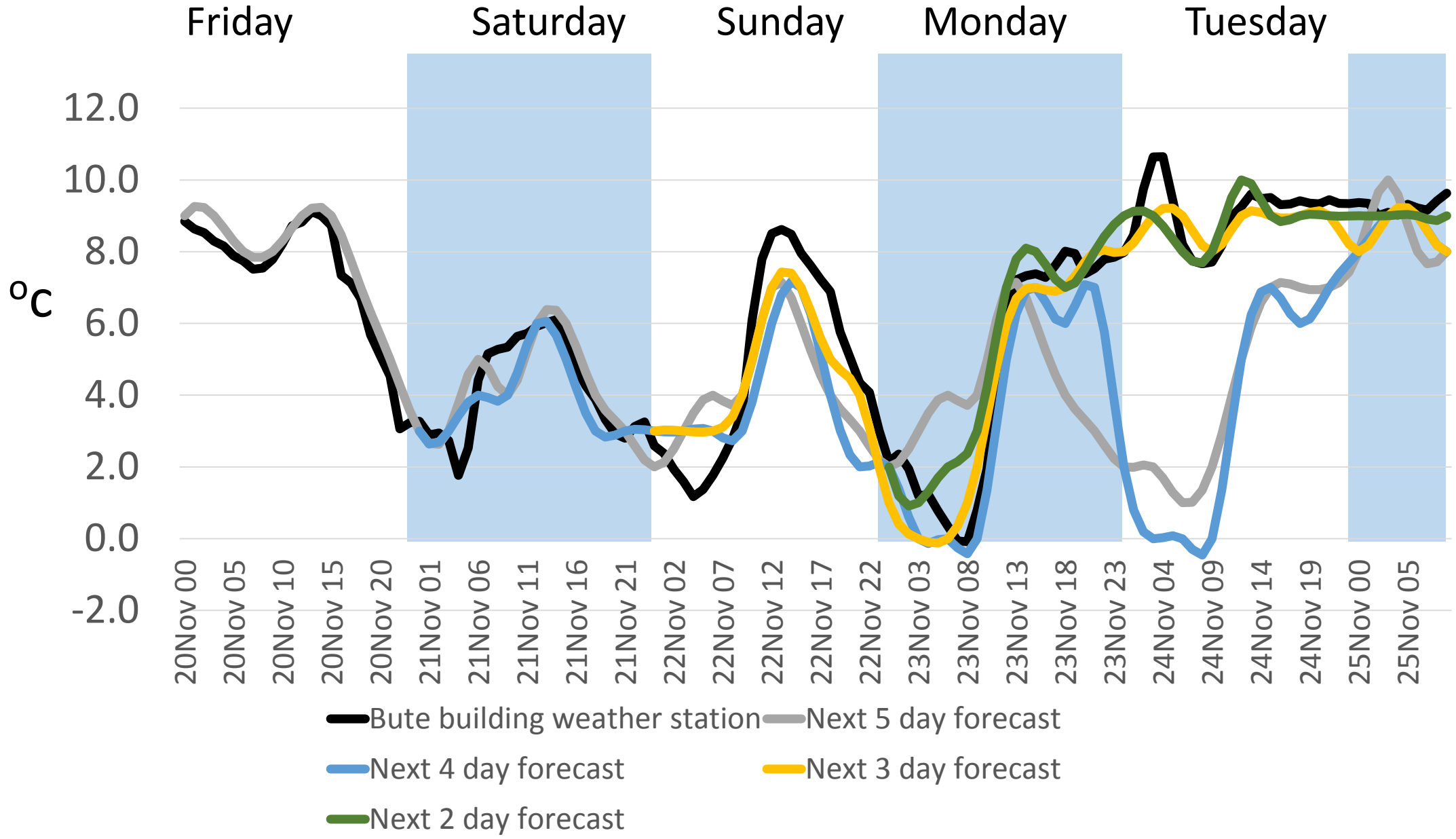
Observation vs. Forecast



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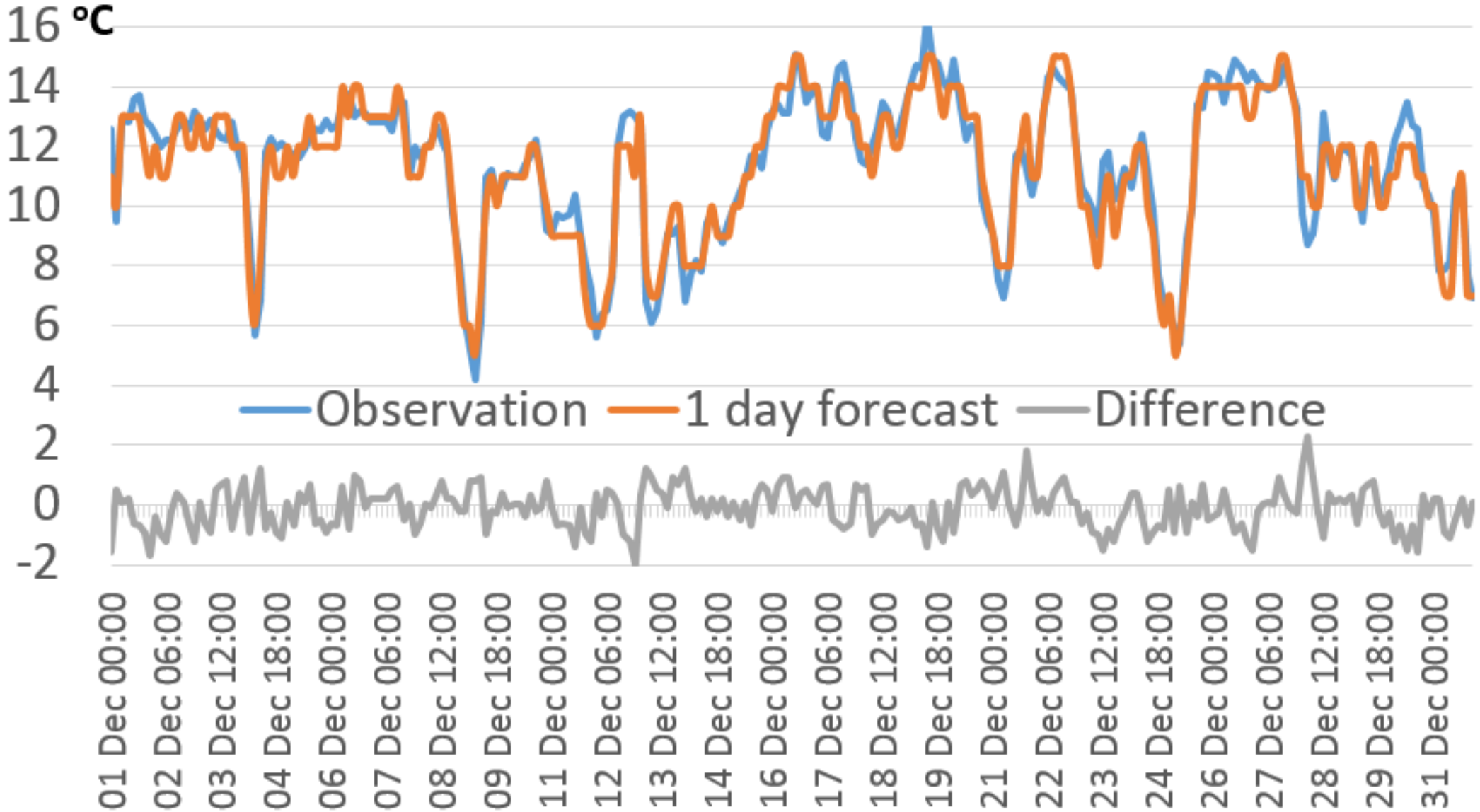
Temperature Forecast vs. Observation
Dec 2015 Heathrow



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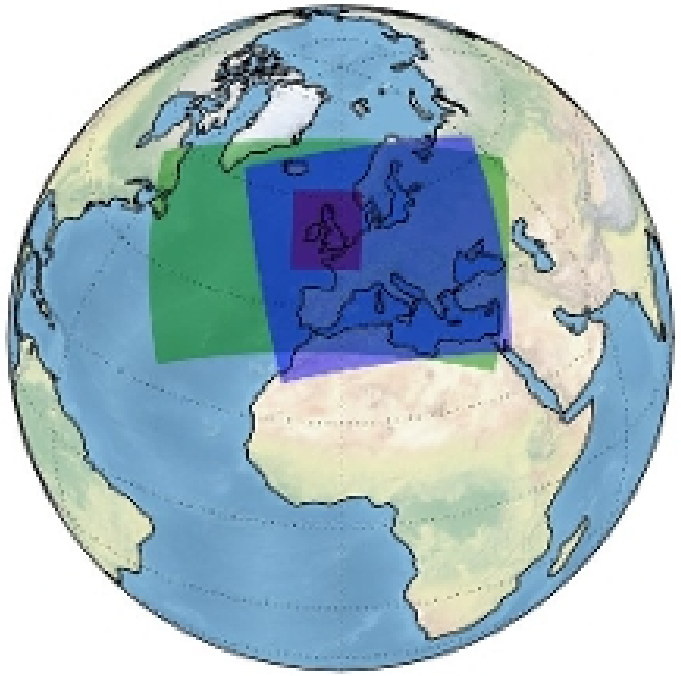

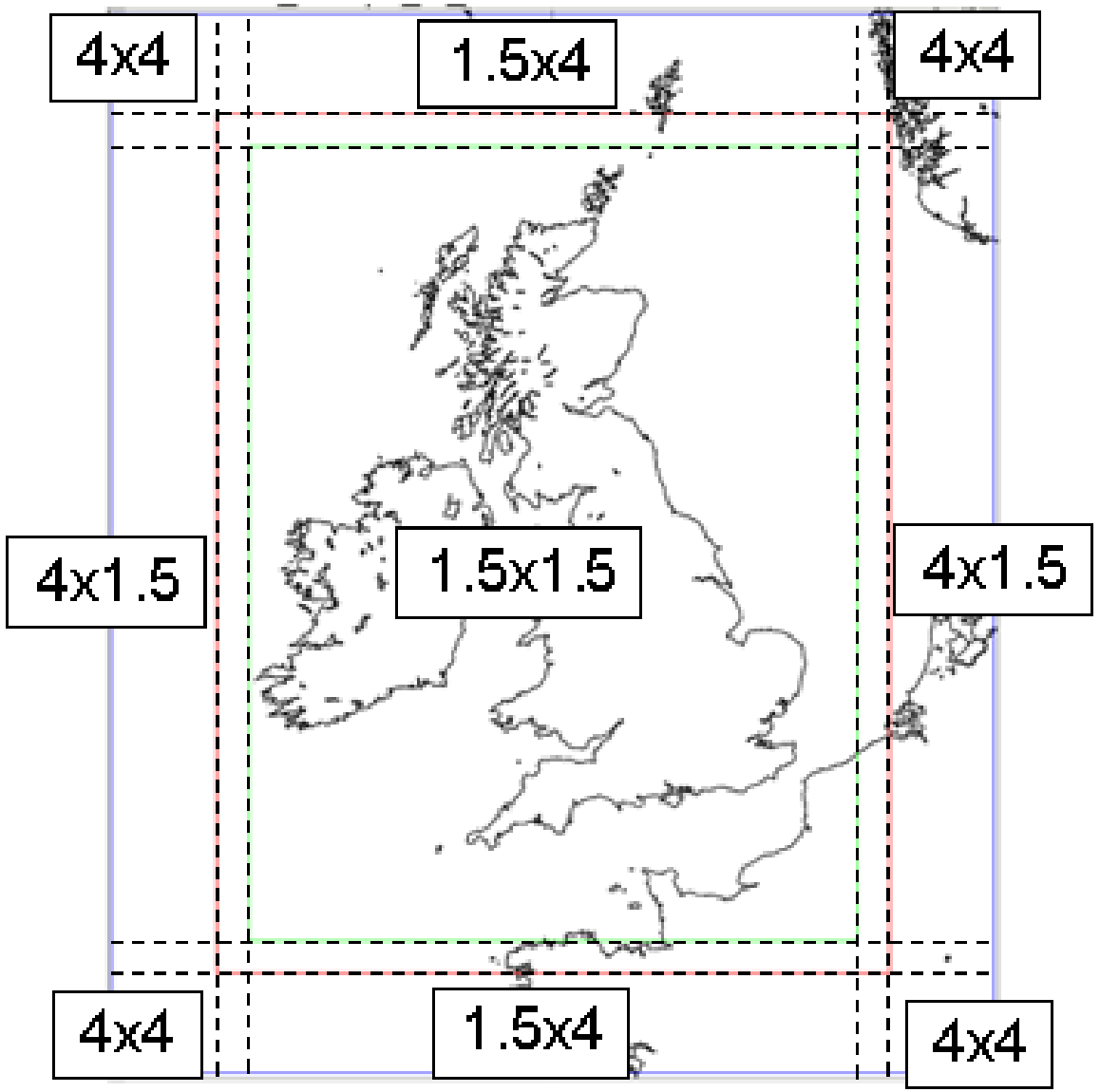

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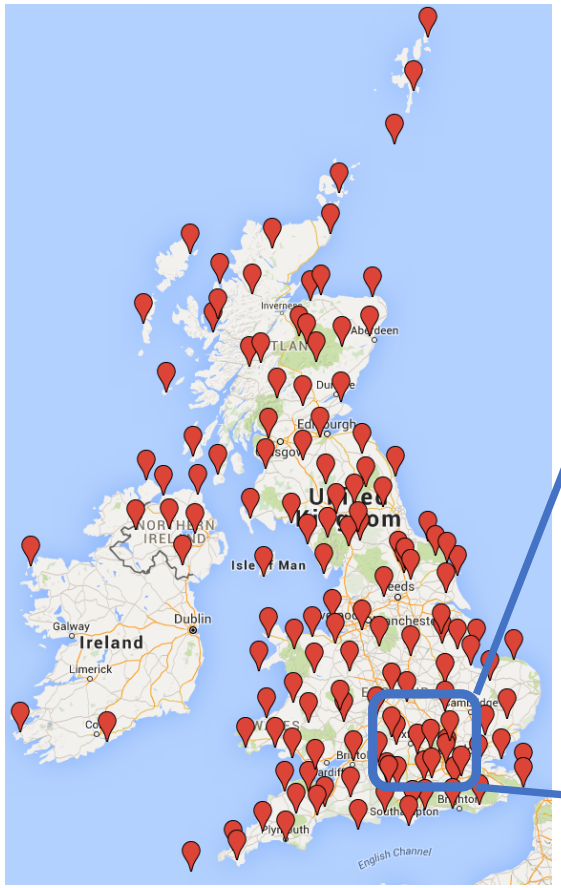
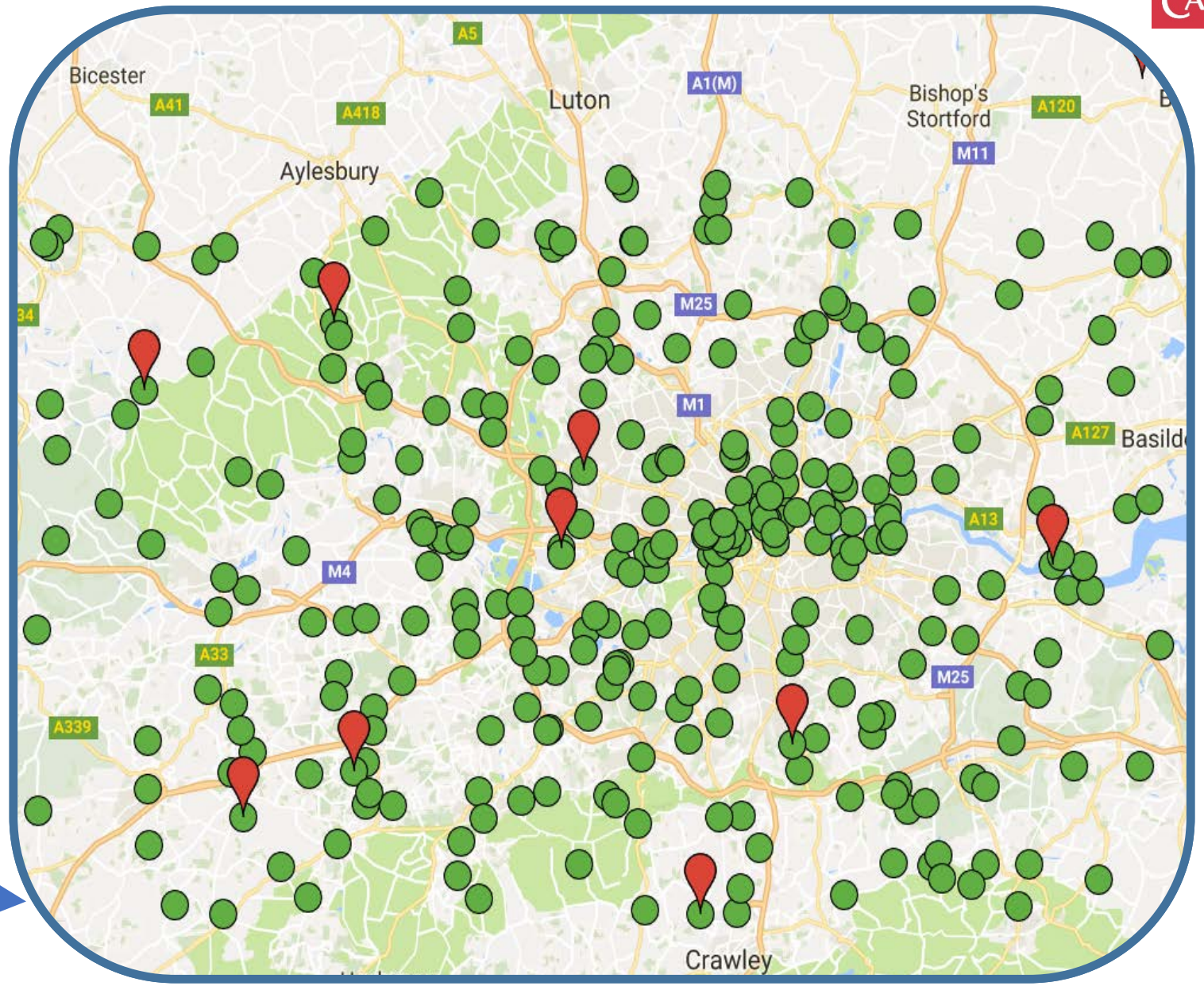
6000 forecast locations

140 observation stations





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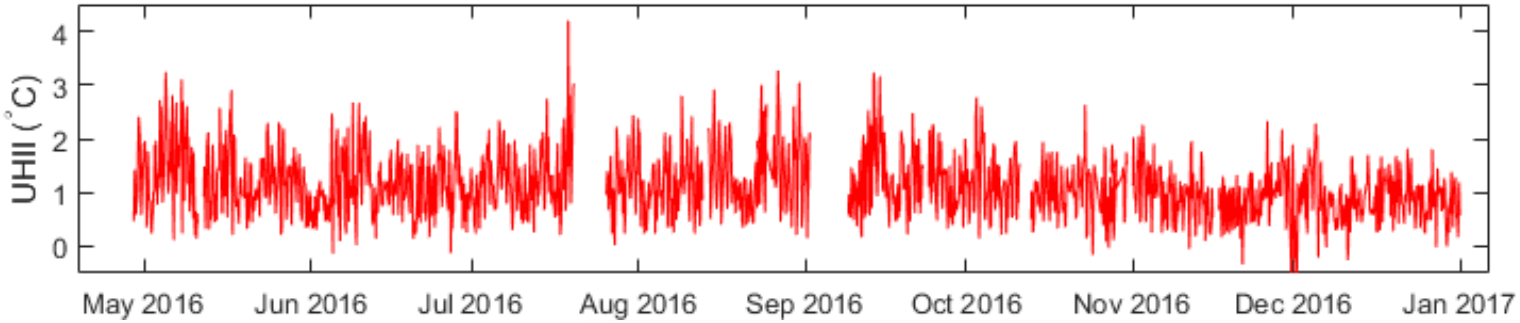

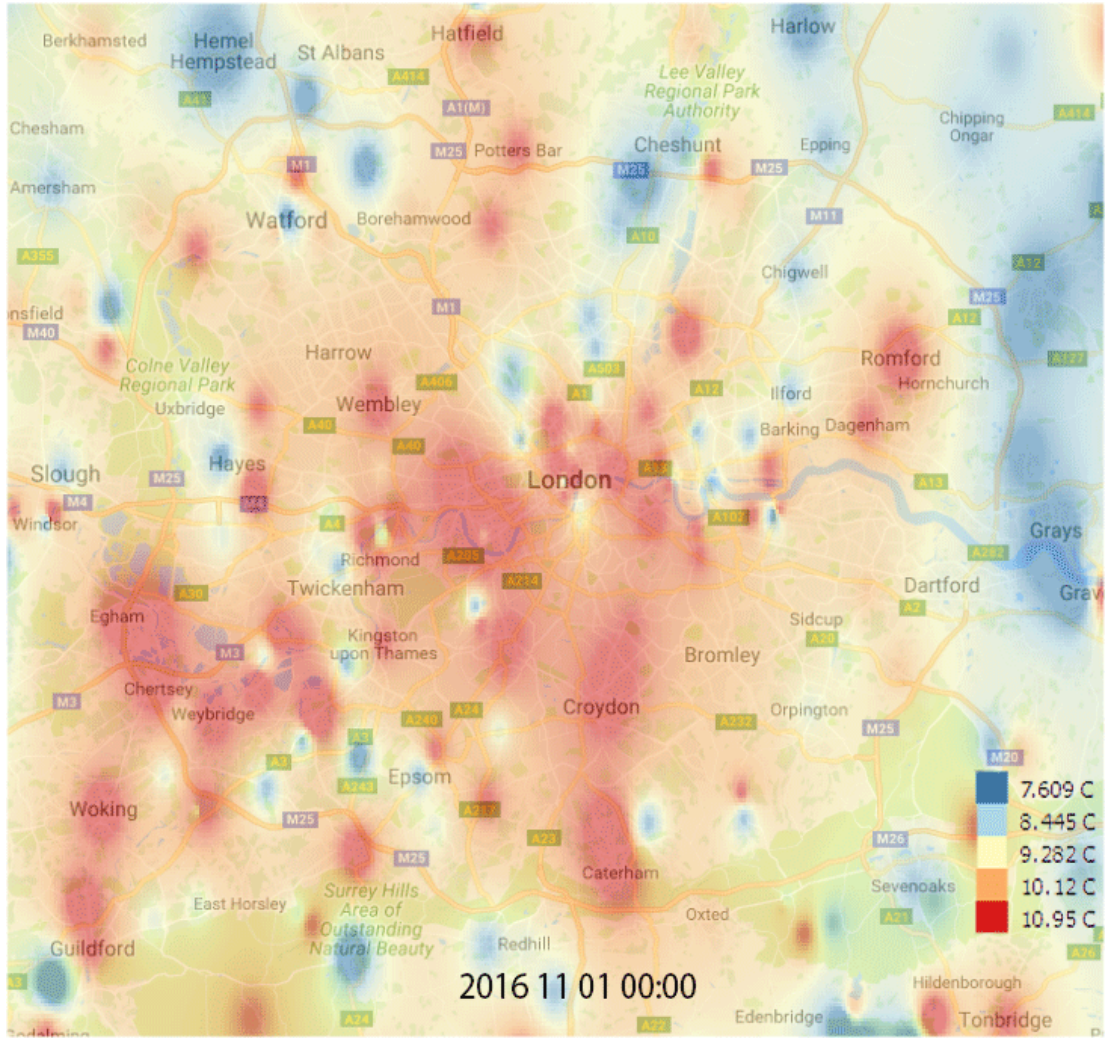

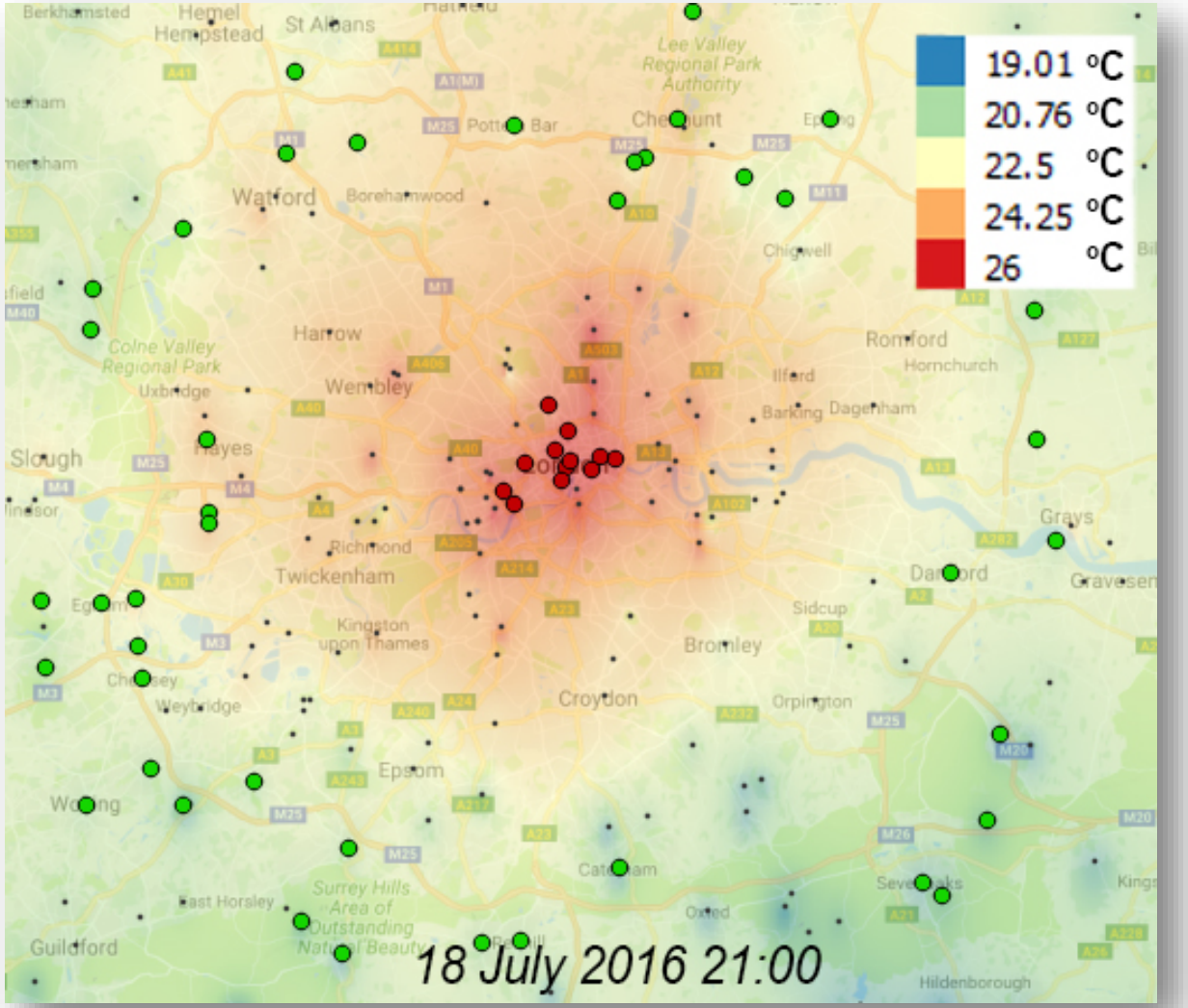

Weekly energy demand	City Boundary		City Centre	
	Epping	Tanners Hatch	Horseguards Parade	Earl's Court
Summer Heating	36.7 kWh	+6%	-33%	-30%
Summer Cooling	27.8 kWh	-9%	+41%	+42%
Winter Heating	201.4 kWh	-1%	-12%	-12%

Heating and cooling energy demand in a summer week (13-19 Jul 2016)
and a winter week (1-7 Nov 2016)

Q&A

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