



Ozone modelling

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PhD students

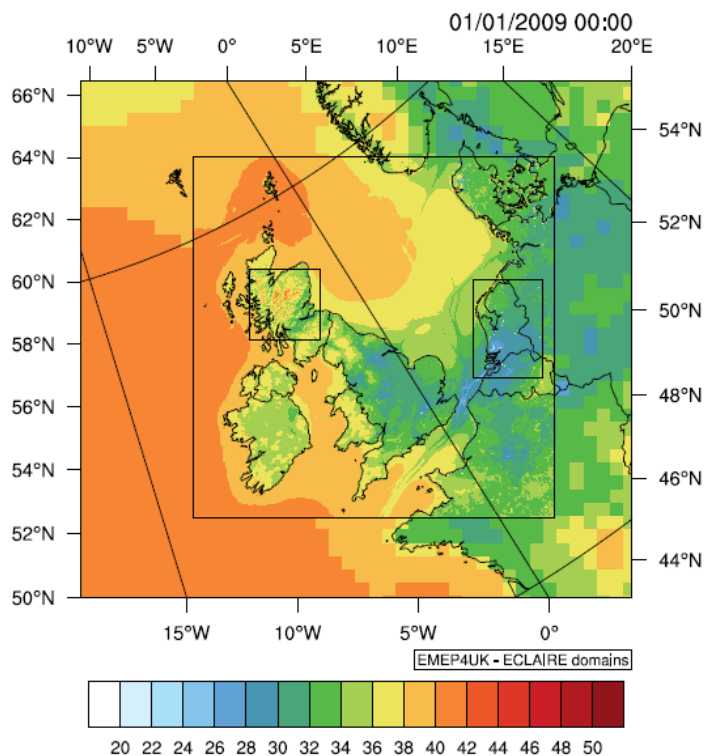
Andi Moring, Riinu Ots, and Pietro Zambelli

**a) Natural Environment Research Council,
Centre for Ecology and Hydrology, Edinburgh UK**

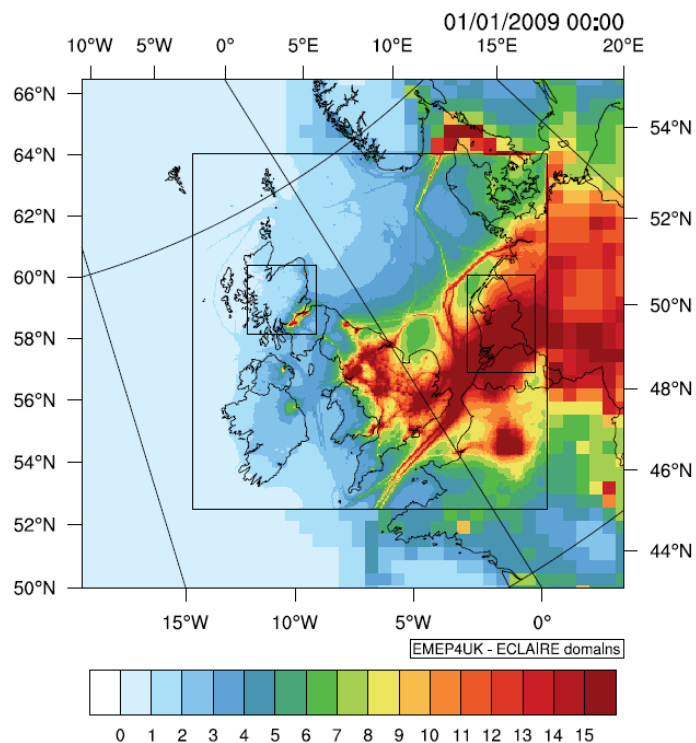
**b) University of Edinburgh,
Crew Building, The King's Buildings, Edinburgh UK**

2008 EMEP4UK results all domains 50, 5 and 1km²

O₃ concentration (ppb)

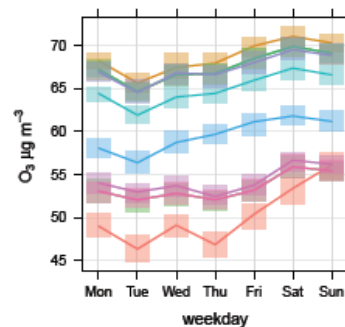
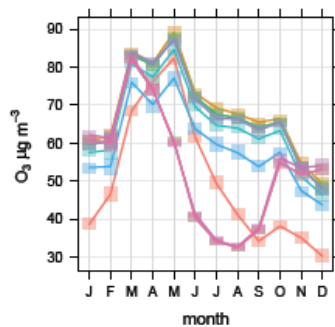
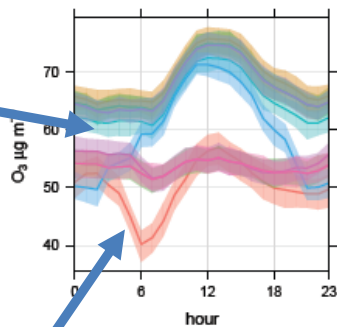


NO₂ concentration (µg m⁻³)



Chemistry and model resolution – Aberdeen Scotland

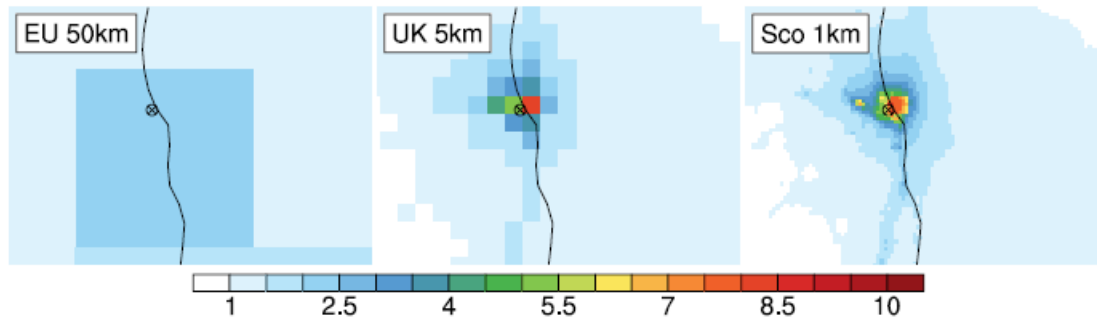
Model
 ± 1 grid



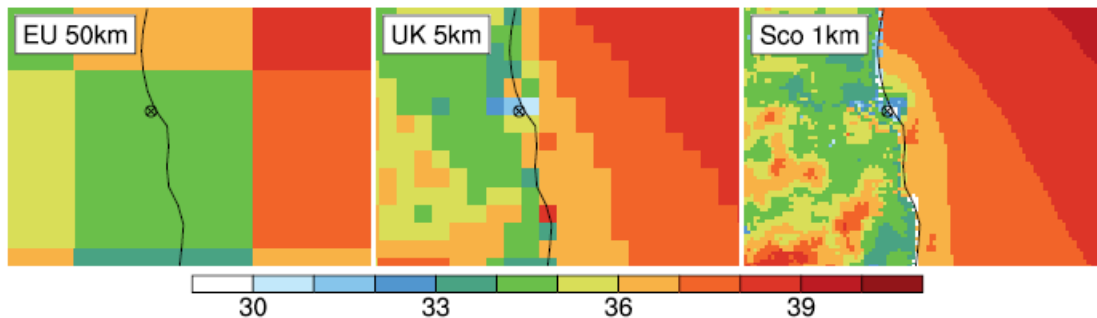
O₃ 1 km² results

Red UK AURN

2008 NO₂ ppb

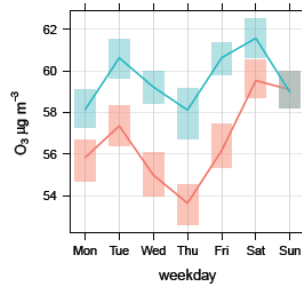
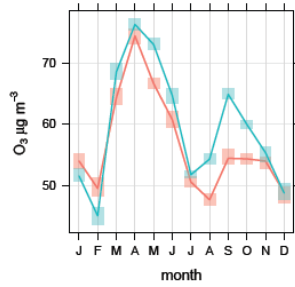
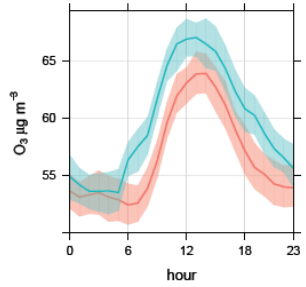
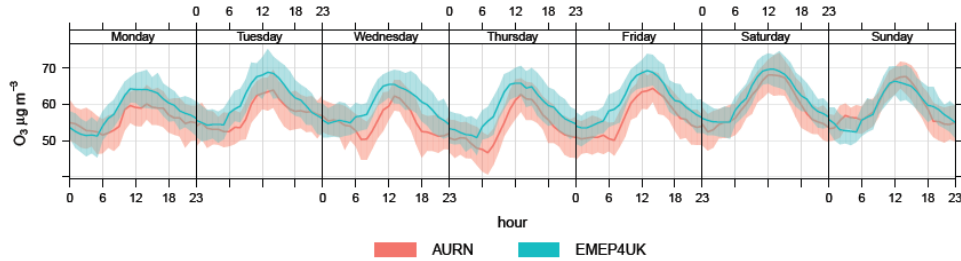


2008 O₃ (ppb)

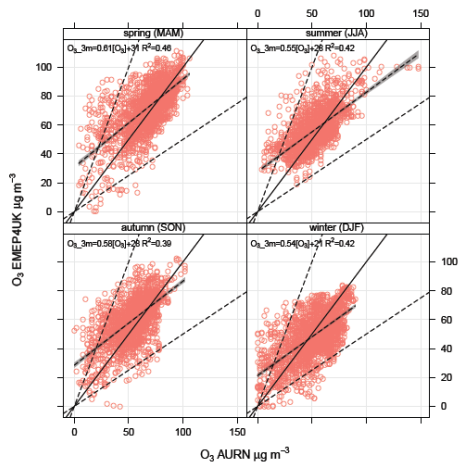




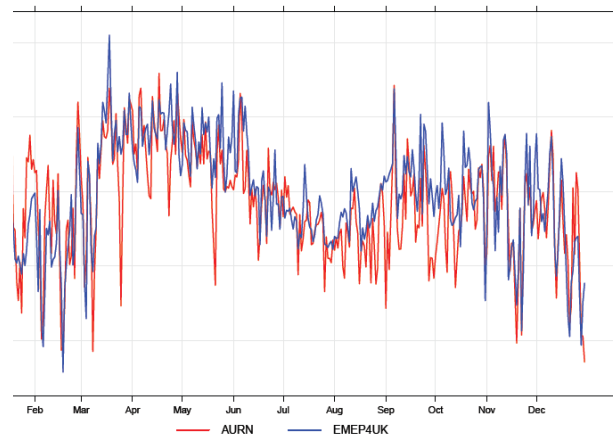
BUSH ESTATE 2010 Background rural



BUSH ESTATE 2010 Background rural hourly

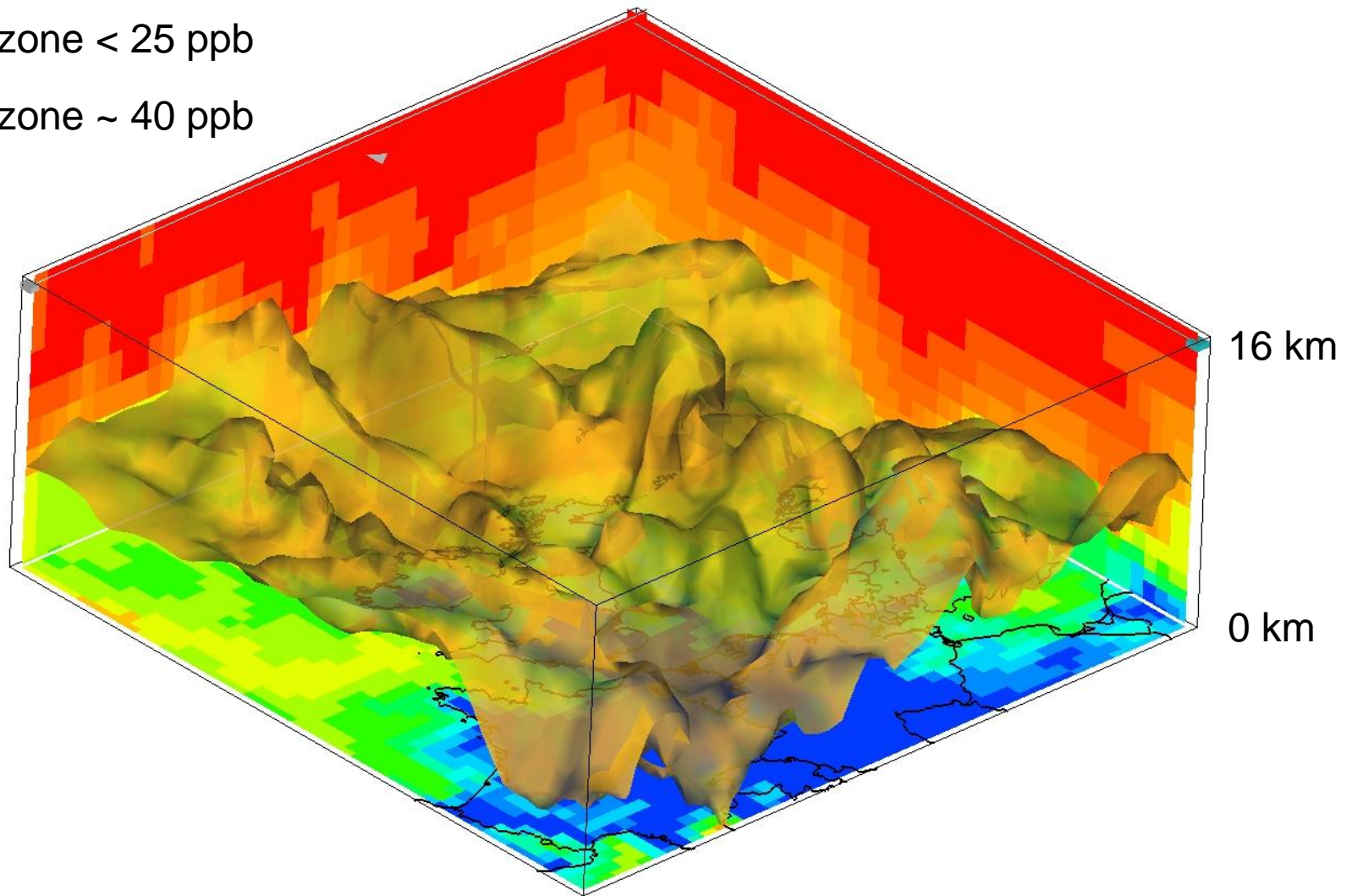


BUSH ESTATE 2010 Background rural daily



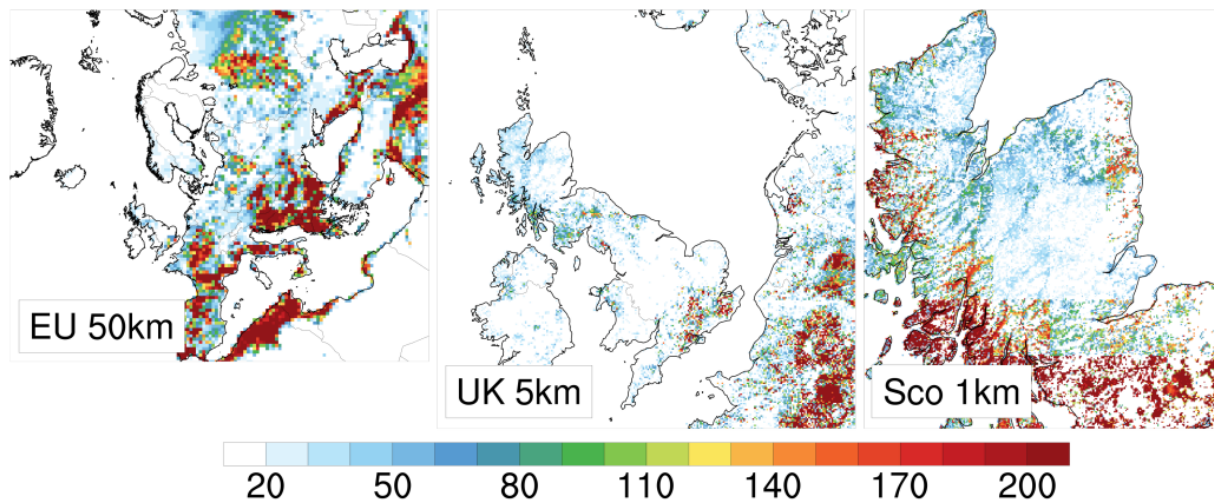
The model is a 3D photochemistry model
Here an example of 3D ozone 06:00 2nd of January 2010

- ozone > 50 ppb
- ozone < 25 ppb
- ozone ~ 40 ppb



BVOCs

2008 monthly NatC_5H_8 mg m^{-2}





EMEP4UK Surface SO₂ ppbv 2010/4/1 1

