







CNRM, UMR 3589

SEMINAIRE CNRM

Mercredi 24 avril à 10 h en salle Joël Noilhan

URBAN-SCALE MODELLING AT THE MET OFFICE: PROGRESS TOWARDS 100 M SCALE FORECASTING APPLICATIONS

par Humphrey LEAN Manager Urban-scale Modelling Research Met Office, Reading

Abstract:

I will describe the Met Office project to develop an "Urban-scale" (100m scale) modelling capability. Although a number of research projects have shown that finescale models at these resolutions have promise, I will discuss a number of challenges, both scientific and practical, in using these models for real applications. I will describe the 300m ensemble system that we are developing to run over major cities which will give benefits over our current deterministic 300m model for the representation of convection. A key part of our strategy to improve the representation of convection in km scale and 100m scale models has been the WesCon field campaign which took place over Southern England in the summer of 2023. This campaign was focussed on helping to address model issues and the resulting observations will be used by the joint Met Office/academic ParaChute project to develop scale aware grey zone parameterisations for convection and turbulence.