

# Upcoming changes to the UK data assimilation system

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In my presentation I will be primarily focussing on the composition and performance of a forthcoming candidate package of data assimilation changes aimed at the UKV operational deterministic LAM flagship with a planned implementation alongside the upgrade to RAL3 model physics in our PS47 parallel suite, due to go live early in 2025. The changes in this package are intended to achieve physical consistency between RAL3 and DA, as well as including important strategic revisions to our system such as the retirement of the adaptive vertical grid and latent heat nudging.

I also hope to show early results from a project investigating the longevity of impact of the LAM-DA during the forecast. This work is done in collaboration with the NG-DA project in Weather Science and will help us inform the design of the future regional DA ensemble.