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Session 5: Advances in modelling and projections

Title: ACCESS-A: Development of the Australian domain convectivescale numerical weather prediction mode

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A national, km-scale weather forecasting system for Australia is being developed. The deterministic numerical weather prediction model, ACCESS-A, will replace the seven operational city models (ACCESS-C). ACCESS-A uses the latest Regional Atmosphere and Land science configuration, RAL3.1, which is the first configuration to unify the tropics and mid-latitudes, and updated surface ancillary files. ACCESS-A is set up to run with 90 vertical levels and a horizontal grid spacing of 1.5 km over the inner domain, with a variable resolution in the outer domain to deal with the spin up effects at the boundaries. Various case studies and short trials have been performed to test the model grid as well as the performance of the physics configuration. The model setup and evaluation of the case studies and trials will be presented in this talk.