



## Poster.7: . Identifying end-user needs and opportunities provided by convection-permitting simulations in the Amazon Basin

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## Abstract

It is now well established that convection-permitting simulations provide a step-change improvement in the representation of precipitation, including diurnal variability, extremes, and its coupling with land-surface conditions. The computation cost of these simulations, however, come at the expense of limited domains, shorter simulation lengths and more limited sampling of future scenarios and uncertainties. Day-to-day variability in precipitation is a key metric to end-users across a range of sectors, and so improvements from convection-permitting simulations could be very valuable to a range of stakeholders. There is a need, however, to communicate these opportunities to end users and better understand their data needs and constraints, to ensure that these modelling advances are accessible to relevant stakeholders. Here we will present the outcomes of a virtual stakeholder workshop taking place in June 2022 as part of the UK-funded Convective-Scale Impacts of Deforestation on Amazonian Rainfall (CIDAR) project. The workshop will bring together different stakeholders in the Brazilian Amazon, including local authorities, government bodies for research and protection of the Amazon, civil defence, fires and health, and indigenous leaders. The aims will be to determine climate-data needs required for decision-making, including at what spatial and temporal scales, with a focus on understanding possible impacts of deforestation using convection-permitting models.