

# Linking eResearch infrastructures: an integrative approach to biodiversity data and modelling to build capacity, reduce complexity and maximise research outcomes

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Submission for Lightning Talk

## ABSTRACT

Advanced research and modelling into factors influencing abiotic and anthropogenic change of biodiversity, ecology and phenology require the integration of different data and outputs from spatial, environmental, biologic, genetic and urban disciplines. Significant investment has occurred in establishing e-research infrastructures that assist in visualization and analysis of such data however future advances require integration of these infrastructures.

The Biodiversity and Climate Change Virtual Laboratory (BCCVL) is a cloud-based online platform that integrates spatial modelling tools and datasets with high performance computers and major data storage facilities to investigate the impact of climate on the world's biodiversity.

To meet demand of advancing research we have built extensive collaborations with other research infrastructures to easily connect the data to the tools, and provide support and training regarding major aspects of the modelling life cycle. Here we showcase the integrative approach between BCCVL, the Atlas of Living Australia (ALA) the Terrestrial Ecosystem Research Network (TERN) and ZoaTrack to deliver a holistic approach to environmental spatial data discovery, analysis, training and community engagement.