



Informing climate change adaptation planning for the Gondwana Rainforests of Australia World Heritage Area

Tuesday 20 October 2020, 2.00-3.00pm (AEDT)

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The Earth Systems and Climate Change Hub has collaborated with researchers at the Queensland Department of Environment and Science to provide climate change information and projections, specifically on future changes to the cloud base, that can be used to inform climate change adaptation planning for the Gondwana Rainforests of Australia World Heritage Area (WHA). The project team also worked with Gondwana Rainforest WHA managers to understand the factors that need to be taken into account for assessing climate change risk and develop appropriate climate change adaptation planning questions

The Gondwana Rainforests WHA is one of 19 listed World Heritage properties in Australia. Extending across 40 reserves on Australia's east coast, the property is recognised by UNESCO for its examples of major stages of the Earth's evolutionary history and ongoing geological and biological processes. The rainforests are biodiversity hot-spots and are home to many threatened and endemic species.

The changing climate poses a threat to the unique habitats in the World Heritage Area and to the species that live there. There are gaps in the scientific understanding of the impact of climate change on the Gondwana Rainforests WHA, particularly changes to cloud cover. This is an important environmental variable for the property because cloud and fog may provide up to half of the annual water requirements in high elevation cloud forests.

In this webinar, Melinda Laidlaw (Qld Department of Environment and Science) will introduce the climate change information knowledge gaps identified for the Gondwana Rainforests WHA and demonstrate how novel climate information resulting from this collaboration can inform adaptation planning. Sugata Narsey (Bureau of Meteorology) will then discuss the climate change information developed under the project and his experience in co-producing climate change information relevant to planning for the future of the Gondwana Rainforests of Australia, including the challenges, opportunities and unexpected highlights.



Melinda Laidlaw is a senior Ecologist at the Qld Department of Environment and Science where she leads the Decision Tools for Predicting Current and Future Species Habitat project. Melinda also investigates the impacts of climate change on the Gondwana Rainforests of Australia World Heritage Area.



Sugata Narsey is a research scientist at the Bureau of Meteorology, working on topics in climate change, variability and extremes. Sugata works collaboratively with ESCC Hub stakeholders and next-users to develop practical climate change science information that can be used to inform future planning and decision-making.

Melinda and Sugata contribute to the Earth Systems and Climate Change Hub [Case Study 5.2: Using climate change information in a Gondwana Rainforests of Australia World Heritage Area climate change adaptation plan](#).

The Earth Systems and Climate Change Hub science webinars are open to anyone interested in finding out more about the Hub's research.