Chris Chambers, University of Melbourne & ARC CECE

Bio:

My research background is in high-resolution weather modelling and ice-sheet modelling. I got my BSc in meteorology from Reading University. My MSc at the University of Hawaii looked at simulations of extreme rainfall gradients on the island of Kauai and the effect of changing vegetation type on island rainfall distribution. My PhD, also in Hawaii, investigated a near-equatorial Typhoon formation and the influence of the Big Island of Hawaii on track, intensity and structure of tropical cyclones passing near the island, or making landfall. I have chased severe thunderstorms in the Midwest USA and tropical cyclones in the USA and Australia and those experiences have heightened my interest in severe weather. In 2011 I moved to Melbourne to work as a severe ocean weather research fellow on an investigation into the effect of East Australian Current eddies on east coast cyclones. In 2016 I did a lot of cycle touring and time-lapse photography while working on a project that compares time-lapses of Darwin's "Hector" thunderstorms with simulations (HECTIME). I worked at the Institute of Low Temperature Science, Hokkaido University from 2017 to mid 2021 as an ice-sheet modeler and have contributed to SICOPOLIS Antarctica and Greenland simulations for ISMIP6 sea-level rise predictions. I also used ice-sheet simulations to investigate a potential 1000 km long subglacial river (Greenland's "Dark River"). I have now returned to Australia and am working with AUS2200 to simulate Australian heavy rain events.