Research Associate
Faculty of Science
Climate Change Research Centre

POSITION DESCRIPTION

A. JOB PURPOSE

To provide scientific support to ARC Discovery Project DP140101104, “Testing a new explanation of cloud feedback on global climate.” This position focuses specifically on a project to examine and better understand the maintenance of shallow tropospheric mixing processes. This work will involve the analysis of observations, models and theory.

B. MAIN DUTIES

The Research Associate will

- Assist the Supervisor in carrying out the research project and contribute to the formulation of research direction and strategies
- Assist in the supervision of PhD students in this project area as opportunities arise. Collaborate with other postdoctoral fellows on projects of mutual interest
- Be responsible for writing scientific reports and papers, coordinating research activities, participating in the setting of research directions and any other research activities as required.
- Assisting in the teaching of undergraduate courses is encouraged, but not required.
- Cooperate with all health and safety policies and procedures of the university and take all reasonable care to ensure that their actions or omissions do not impact on the health and safety of others in the university

C. ENVIRONMENT

Position Context

UNSW CCRC is a multi-disciplinary research group comprising one of the largest university research facilities of its kind in Australia. CCRC houses research expertise in the key project areas of atmospheric convection and global climate modelling. The centre also houses expertise in global climate change and extremes of weather and climate. Our oceans program focuses on global ocean thermohaline circulation, water-mass formation, the Antarctic Circumpolar Current, western boundary currents, and the ocean carbon cycle. On the land surface we focus on modelling terrestrial processes in climate models, to develop our understanding of the effects of carbon dynamics, hydrology and vegetation processes on climate.

Reporting Relationships

Supervisor’s title: Professor Steven Sherwood

Other positions reporting to the supervisor: Academic Staff, Research Associates, Professional Staff.
D. PRINCIPAL ACCOUNTABILITIES

- Conduct research on the project under the direction of the Supervisor.
- Investigate shallow atmospheric mixing processes using numerical models and observational data.
- Draft scientific reports and papers for submission to top journals on the project.
- Coordinate research activities with others working on the grant and participate in the definition of research directions.

E. SELECTION CRITERIA

- PhD or equivalent qualification in a relevant discipline;
- Research and publication track record in one or more of the following areas: Atmospheric modelling, atmospheric dynamics, or related disciplines;
- Knowledge of atmospheric physics, dynamics and/or meteorology;
- Expertise in the use of cloud system resolving models, and/or analysis and interpretation of observational data sets;
- Good oral and written communication skills;
- Knowledge and understanding of equity and diversity and OH&S policies and programs and willingness to complete relevant training in these areas.