



Voyage SS01-2006

TWP-ICE Characterising the monsoonal atmosphere and ocean near Darwin
– a contribution to the Tropical Warm Pool International Cloud Experiment.

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Contribution to Australia's national benefit:

The aim of the TWP-IC Experiment was to provide a complete data set that described atmospheric convection over the ocean, its structure and evolution, the resulting clouds and their effects. This whole system description has not been attempted before. The data from this experiment will be used to address a range of important scientific questions related to the role of convection and tropical clouds.

Reliably representing tropical cloud systems in atmospheric models used for numerical weather prediction and climate research remains one of the major unresolved problems in atmospheric science. One of the main aims of this research program is to better understand these tropical cloud systems in order to reduce the uncertainty with which they are incorporated into models.

This is of particular relevance to Australian climate, dominated as it is by such conditions to the North. Reducing these uncertainties will lead to more reliable models of Australian and global climate change. This will in turn improve the reliability with which guidance can be provided to policy makers who are concerned, for example, with the impact of global climate change on terrestrial and marine ecosystems.

The TWP-IC Experiment will contribute to, and stimulate, all areas of climate research for

many years to come for science communities ranging from instrument developers to climate modellers.

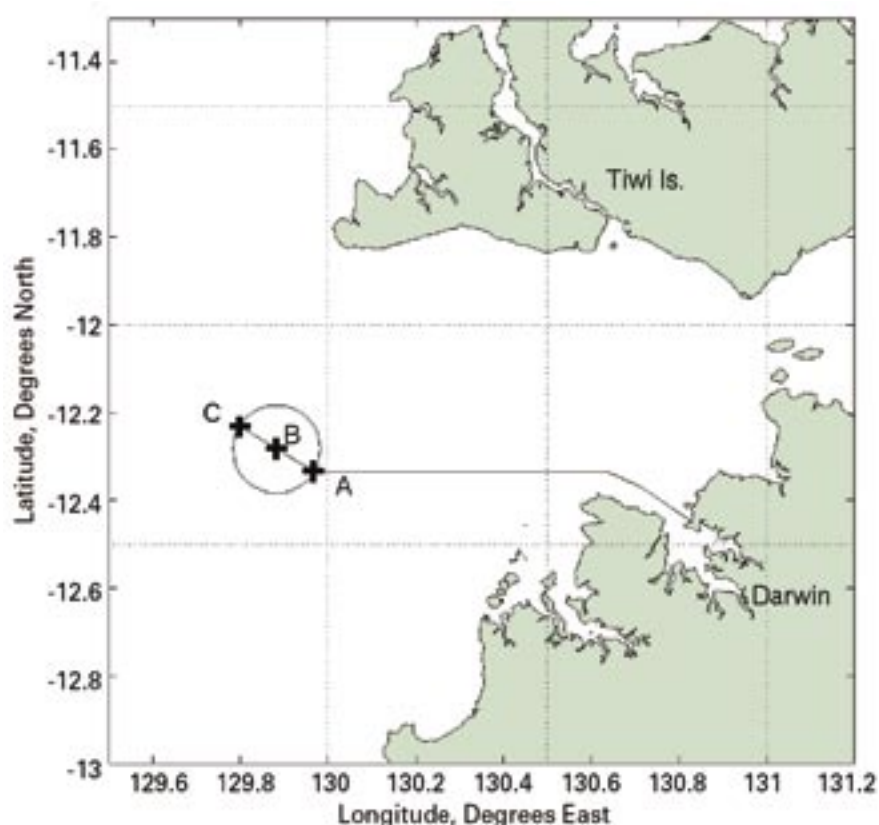
TWP-ICE was an international effort with major contributions from the Australian Bureau of Meteorology, the US Department of Environment's Atmospheric Radiation Measurement program, who provided the core funding, NASA and the European Union. Other

participating organizations were; Monash University, Flinders University, Adelaide University, Osaka University, Kyoto University, York University, University of Wales, Manchester University.

Itinerary

Depart Darwin 1000 hrs,
Friday 20th January 2006.

Arrive Darwin 0800 hrs,
Tuesday 14th February 2006.



> SS01-2006 voyage track