TASMANIA: ECOLOGICAL RESEARCH

TS-100 Aspirated Radiation Shield

The Warra long-term ecological research (LTER) site, located in Southwestern Tasmania, was founded in 1995 to monitor long-term ecological health and dynamics within a wet eucalyptus forest. The site area consists of 15,900 hectares (61.4 square miles), partly contained within the Tasmanian Wilderness World Heritage Area (managed for conservation) and partly within state forest (managed for multiple uses, including timber production).

The Warra LTER site includes a flux tower that is part of the OzFlux Network and the Australian Supersites Network. The flux tower consists of an 80-meter (262-foot) guyed steel-lattice tower. Turbulent fluxes of heat, water vapor, and carbon dioxide are measured at the top of the tower using a Campbell Scientific CPEC200 Closed-Path Eddy-Covariance System with a vortex sample intake. A combination of a Campbell Scientific AP200 profile system with eight intakes and a series of Apogee TS-100 aspirated shields provides a vertical profile of water vapor, carbon dioxide, and temperature.

Apogee Instruments TS-100 Aspirated Radiation Shield


Looking up at the Warra Flux Towers

Application Summary

Summary
Eight TS-100 shields used to provide air temperature measurements to monitor long-term ecological health dynamics within wet eucalyptus forest at the Warra long-term ecological research site (LTER).

Apogee Sensors Used
TS-100 Aspirated Radiation Shield

Contributing Organizations
Tim Wardlaw, Forestry Tasmania

Location
Warra LTER site, Tasmania, Australia

Since the Warra LTER site was established, more than 200 research projects have been undertaken at the site, and ten of those projects have been designated icon projects, designed with the specific intent of continuing remeasurement in the long term (more than 15 years). The Warra flux tower is one of these ten icon projects.

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