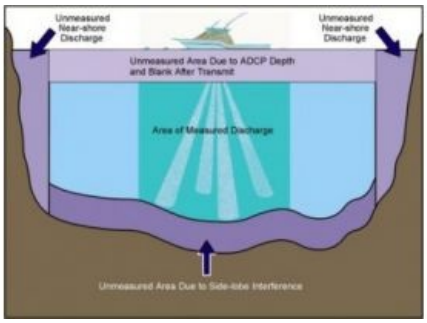
Australian River Flow Compares Acoustic Doppler Current Profilers



The Australian Bureau of Meteorology collates and shares a wealth of river flow data from monitoring organisations across Australia, and the quality of the data starts with the hydrographers that collect it. In March 2017, 50 hydrographers from Australia and New Zealand converged at Thredbo River in New South Wales, armed with an assortment of acoustic doppler instrumentation used to measure river flows.

Participants tested their equipment, skills and procedures. They took measurements at fixed locations along the river to allow comparisons.

The river was running at a steady flow of around $1m^3$ per second, and teams made 47 separate flow measurements using latest technology acoustic Doppler current profilers (ADCPs) and point acoustic Doppler velocity meters.

A comparison of the recorded flow rates showed a high level of consistency, across the range of measuring techniques.

The Bureau was a keen supporter and observer at the event organised by hydrographers from Snowy Hydro and ALS Global. It was a valuable opportunity to ‘pressure test’ the National Industry Guidelines for applying acoustic Doppler current profiler technologies, which the Bureau promotes for adoption. The results will feed into a review of the guidelines in 2018.