Automated quality assurance and control system

Services provided
• Development of application framework to support generic quality assurance workflow in organisations.
• Web-based access to information.
• Design of algorithms to detect multivariate anomalies in surface water data.
• Trialling of system with South Australia’s key water authority.

Project background
The Bureau of Meteorology’s modernisation and expansion allows for the funding of projects which enhance or simplify water management activities. The idea for the project arose from the Bureau of Meteorology’s need to get a consistent approach to QAQC across Australia as part of their national water database.

Project description
The project initially focused on the development of algorithms for surface water, and then a software application framework was developed to implement the algorithm execution. The application can interface with many of the leading water management information system products, such as TimeStudio, Hydstra and Wiski.

The system was developed to a point where it was suitable to conduct proof of concept trials with the Department of Water, Land and Biodiversity Conservation in South Australia. Trials were conducted in April 2010 with promising results.