

# Global Water Quality Monitoring Tool Available to Public



The United Nations Education, Scientific and Cultural Organisation (UNESCO) with EOMAP have launched an interactive tool providing access to detailed global water quality indicators from an archive of Earth Observation and satellite data.

The portal was developed to support the UN's International Initiative on Water Quality (IIWQ) of UNESCO's International Hydrological Programme (IHP), and is the first tool to combine high-resolution global coverage with a range of satellite measurements for monitoring streams, lakes, rivers and coastal waters.

The IIWQ Portal includes a functionality to select different time periods dating back over the last three decades. Historic measurements are provided at a 30 metre spatial

resolution for selected regions of each continent throughout 2016, and can be continued with various spatial and temporal resolutions for every country.

"It is an especially effective water quality tool for large, remote or developing regions, as it combines quantitative satellite-based monitoring with user-friendly online visualisation," said Dr. Magnus Wettle, managing director of EOMAP Australia. "For example, the tool could provide ongoing, large scale monitoring of catchment sediment loads impacting the health of the Great Barrier Reef."

The portal provides a comprehensive range of satellite-based water quality parameters such as turbidity, chlorophyll and indicators for toxic Cyanobacteria blooms, which can be mapped with weekly, or even daily, sampling frequencies.

"We can implement such a monitoring system at a range of temporal and spatial resolutions, for any given location, worldwide. Any user can choose to deploy a customised portal for their region, monitoring synoptic water quality on an ongoing basis, with user access customised to their specific constellation of stakeholders," added Dr. Wettle.

EOMAP have indicated that they are developing future updates that include guidance into risk management, and applications of Earth Observation data. The tool is accessible at the IIWQ World Water Quality Portal at <http://worldwaterquality.org/>.