

Salinity changes show wetter wet regions, drier arid ones

Evidence that the world's water cycle is changing, making arid regions drier and high rainfall regions wetter as atmospheric temperature increases, is contained in new research published online in the *Journal of Climate*.¹



Credit: ScienceImage/Greg Heath

The study, co-authored by Hobart-based CSIRO scientists Paul Durack and Dr Susan Wijffels, shows the surface ocean beneath rainfall-dominated regions has freshened, whereas ocean regions dominated by evaporation are saltier.

The paper also confirms that surface warming of the world's oceans over the past 50 years has penetrated into the oceans' interior, changing deep-ocean salinity patterns.

The research was based on historical records and data provided by the Argo Program's worldwide network of ocean profilers – robotic submersible buoys that record and report ocean salinity levels and temperatures to depths of two kilometres.

¹ *Journal of Climate*, <http://tiny.cc/mb35z>

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