

## IODP Expedition 361 –Southern African Climates and Agulhas LGM Density Profile

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The Agulhas Current constitutes the largest western boundary current system in the Southern Hemisphere and is a key component of the global oceanic thermohaline circulation. IODP Expedition 361 (January-March 2016) was planned to reveal the sensitivity of the Agulhas Current to climate changes over the past ~5 million years, to determine the dynamics of the Indian-Atlantic gateway, and to examine the connection between the Agulhas leakage and the Atlantic Meridional Overturning Circulation. Other scientific objectives included evaluation of the effect of the Agulhas Current on African terrestrial climates (especially rainfall patterns and river runoff) and potential linkages to hominid evolution. Additionally, Ancillary Project Letter aimed at high-resolution sediment-pore fluid sampling in order to constrain deep ocean temperature and salinities during the last glacial maximum was completed.

During the IODP Exp. 361, six sites (Site U1474 –U1479) were drilled and 5,175 m of sediment core was recovered (average recovery 102 %), spanning the time-interval between ~0.13 and 7 million years. Initial results of chronostratigraphic and paleoenvironmental information of both shipboard and post-cruise measurements by IODP Exp. 361 will be presented.

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