

A WINDOW INTO THE LAST GLACIAL MAXIMUM AGULHAS THERMOHALINE VALVE USING NEODYMIUM ISOTOPES IN PLANKTONIC FORAMINIFERA

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Abstract: The Agulhas Current has an important role in the global balance of the thermohaline circulation as it exports salt and heat from the Indian Ocean into the Atlantic Basin. Therefore, past changes in the distribution or intensity of this current system through the South African gateway might have altered the global energetic balance and have planetary climatic implications. We propose to use neodymium isotopes in surface dwelling foraminifera to “map” the regional position and extension of the Agulhas current during the Holocene, last deglaciation and last glacial maximum.