Time constraints on magmatic-amagmatic activities during the formation of an oceanic core complex from the Central Indian Ridge

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Oceanic core complex is commonly found from slow-spreading ocean floor. The timing between magmatic and amagmatic activities is not clear. We investigated an oceanic core complex (25S OCC) from the Central Indian Ridge. We determined geomagnetic variations on the OCC and U-Th-Pb isotopic age of zircon in deep-seated rocks collected from the OCC. These results indicate that amagmatic spreading already started from the end of the magmatic activity and/or magmatic activities continued during the amagmatic activity, i.e., during the formation of the OCC.