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THE STABLE ISOTOPES' RECORD OF THE EPICA-EDML ICE CORE IN COMPARISON WITH THE DOME C ICE CORE

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Two deep ice cores have been drilled in the framework of the European Project for Ice Coring in Antarctica (EPICA) the first one on Dome C and the second one in Dronning Maud Land at Kohnen station. The latter was so far drilled to a depth of 2565 m covering a time period of approximately 200 000 years. Stable isotopes (18O, 2H) were measured continuously with a depth resolution of 50cm along the whole core and with 5cm along selected depth intervals. The 50cm samples represent about 7-11 years during the Holocene, 25 years during the LGM, and approximately 75 years during the MIS 5e. The stable isotope record is presented and compared with the Dome C record. The general trend compares very well, but during the glacial period, where EDML provides the higher time resolution, some new features are more clearly visible in the EDML record. For comparison with Greenland data special emphasis is put on the last transition and the periods for the Dansgaard-Oeschger events or the Antarctic warm events, respectively.