

## **PALEOCLIMATIC EVOLUTION RECORDED IN SEDIMENTS OF THE BRANSFIELD STRAIT? ANTARCTICA FOR PAST 112,500 YEARS**

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The piston core PC10 (753.5cm length, 2000m WD, 57.4984 degrees W, 62.2847 degrees S) recovered from the Bransfield Strait?Antarctica has been recorded the deposition of this area during the past 112.5 ka BP.?representing the oxygen isotope stages 1-5 and including one incomplete glacial/interglacial cycle and postglacial period. The characteristics of the grain size, mineral composition, diatom floras, oxygen isotope, magnetic fabric parameters and geochemistry show that the sediment records are sensitive to the paleoclimatic change. The paleoclimatic evolution history may be divided into 12 zones: the peak warm (112.5-106.4 ka BP.)?the first cold (106.4-101 ka BP.)?the first warm (101-92 ka BP.)?the second cold (92-84 ka BP.) and the second warm (84-75 ka BP.) period of the last interglacial stage; the early sub-glacial (75-59 ka BP.)?the sub-interglacial (59-24 ka BP.) , the late sub-glacial (24-14 ka BP.) and the Bolling-Allerod (14-12 ka BP.) period of the last glacial stage; the Younger Dryas (12-10 ka BP.), the warm (10-2.4 ka BP.) period and the cold climate-event occurred at about 2320 a BP. of the post-glacial stage. The 12 zones are in correspondence with the global change of climate since Late Pleistocene.