The main goals of this 3 day workshop were to identify the crucial gaps in understanding of ocean-continen- tnal climate links for southern Africa and the surrounding oceans, as well as to actively promote broader co-operation across disciplinary and international boundaries. The workshop was held to allow scientists from Europe to meet with colleagues and stu- dents from South African institutions, to discuss the scientific issues, to pro- mote research efforts, and to encour- age co-operation with the industries exploring natural resources along the South African margins. Participants were drawn from a broad spectrum of disciplines including oceanogra- phy, archaeology, geology, geogra- phy, palaeoclimatology, and botany.

An emerging focus in global pal- aeoclimatic research is the nature of the links between ocean circulation and continental climate. This is an area of particular interest in southern Africa as it is strongly influenced by oceanic conditions. Connections between the Benguela upwelling system, the winter rainfall/summer drought climate, and the unique Fynbos flora of the West coast, as well as the warm Agulhas current and summer rainfall climate/savanna wood- lands of the eastern and interior regions of southern Africa are appar- ent today. But we know little about how these links varied in the past, or indeed about variation of water masses in the tropical Indian, southern subantarctic and polar oceans. Such information is important be- cause of the key role these oceans play in energy transport within the southern hemisphere and between hemispheres.

Day 1 began with a brief introduc- tion on the chief elements of mod- ern oceanographic conditions around southern Africa, followed by reviews of ongoing marine sediment work off the West coast. Closer to shore, the Orange River mudbelt (HODSA proj- ect) and the DeBeers exploration and palaeoenvironmental research were described. An overview of ongoing monitoring of the modern Benguela ecosystem completed the West coast session. Thereafter, attention turned to the modern and palaeo Agulhas Current system, and its teleconnec- tion to climate change in Antarctica and the North Atlantic.

Discussions during day 2 cen- tered around continental conditions and climatic links between ocean and continent. Topics included longterm fluctuations in summer season rain- fall from the Tsawaing crater sediment record, Kalahari dune mobility, stla- lgmite records, possible links to Ant- arctic circulation, vegetation histories and dust transport recorded in ma- rine sediment cores. A provocative presentation on long-term floral evo- lution emphasized the roles of fire and atmospheric CO₂ levels. Agree- ment emerged among several studies that there was a northward shift of the winter rainfall belt along the west coast under full glacial conditions. Ar- cheological and palaeontological ev- idence was used to examine direct links between marine conditions and those of the adjacent West coast in the Holocene and late Pleistocene. The final sessions revolved around emerging opportunities for new joint research projects over the next 2 to 3 years that are likely to evolve due to scheduled expeditions with Brit- ish, French, German and Spanish re- search vessels. One project will target extraction of a series of high res- olution marine records from near- shore sites along the West coast, with clear links to coastal environments. Two complementary investigations will target transport of Agulhas wa- ters and eddies, one focused on the retroflection area and the other on the SW Indian Ocean.

Day 3 was dedicated to the dis- cussion of combining efforts within the framework of the different proj- ects, and ways to strengthen inter- national collaboration. It was agreed that the nature of ocean-continent connections effecting variability and history of marine systems and contin- ental environments (Fig. 1) should be the major objective in the future, and that these should be considered within the broader context of Antarct- ic and North Atlantic changes. The workshop also concluded that a sci- ence plan following the workshop theme should be developed imme- diately. This should help to create a coherent international research strat- egy and encourage support by poten- tial partners from industries, funding agencies and political institutions. We thank the workshop participants for their contributions and the National Research Foundation of South Africa and PAGES for finan- cial sponsorship of the workshop.

**Workshop Reports**

**Linking the Continental Environmental Quaternary History of Southern Africa with Ocean Currents and Antarctica**

**CAPE TOWN, SOUTH AFRICA, 15-17 MAY 2002**

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Fig. 1: Schematic view of atmospheric and oce- anic processes driving South African precipita- tion patterns (Adapted from Cohen and Tyson 1995, and the ECRAN project UBordeaux). SAA and SIA are atmospheric South Atlantic and South Indian Ocean Anticyclones, STC is Subtropical Convergence Zone. The red squares in the upper panel denote examples for land climate archives: 1: Cold Air Cave, 2: Tsawaing crater, 3: Nelson Bay Cave, 4: Steenbokfontein/ Elands Bay Cave, while yellow boxes in the lower panel outline the areas of marine coring programmes anticipated in the next 2 years: 1: West coast margin, 2: Agulhas passage, 3: Limpopo/Sambesi Fans.)