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Oligocene- Miocene dinocyst stratigraphy and paleoceanography off Western Tasmania, ODP Site 1168, preliminary results

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Ocean Drilling Program (ODP) Site 1168 on the Western Tasmanian Margin contains a first-ever continuous Southern Hemisphere late Oligocene through early Miocene) organic walled dinoflagellate cyst (dinocyst) record. Assemblages are well preserved and diversified allowing quantitative analysis. They are largely of cosmopolitan, mid latitude character, and lack Antarctic endemic species. We relate this aspect to a relatively warm 'proto-Leeuwin' current affecting the Western Tasmanian region through the O/M transition. The obtained age model, the drop in SST, relatively low percentages cosmopolitan species and a possible sea-level regression appear to mark the Mi-1 phase.