**Palynology of the glacial sediments associated with the End Ordovician Southern Polar ice sheet**

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As the Late Ordovician ice age came to an end the enormous ice sheet, located over the Southern Pole on Gondwana, began to disintegrate and eventually disappeared. During this process huge quantities of sediments were deposited as diamictites and other glacial sediments. Concomitantly sea level rose and the sea transgressed over previously glaciated areas, reworking glacial deposits and depositing shallow marine sediments. The glacial sediments are extremely complex and can be difficult to decipher because: (i) there was a large amount of reworking as the sea transgressed over the deposits; (ii) they contain few fossils of biostratigraphical value other than palynomorphs; (iii) analysis of the palynomorphs is complicated by reworking that occurred during both glacial downcutting and during the marine transgression that reworked the glacial deposits. In this talk we will attempt to correlate and interpret deglaciation sequences reported from around the Ordovician southern polar ice sheet, from Saudi Arabia, North Africa, South America, West Africa and South Africa, based on their lithostratigraphy and palynological content. Our review suggests that there may be two phases of deglaciation but both were rapid and the ice sheet short lived. Evidence for mass extinction associated with the glaciation among the primary producers (terrestrial plant spores and marine phytoplankton-acritarchs) is ambiguous.