Land plants and terrestrial environmental changes during the onset of the end-Triassic event

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The end-Triassic mass extinction is considered to have been caused by voluminous and repeated emissions of CO2 and/or methane and other gases from magmatic activity in the Central Atlantic Magmatic Province. Despite improved geochronological dating and correlation between the magmatic activity and the extinctions, exactly how the biotic crisis commenced remains poorly understood. Here, we compile palynological and palaeobotanical data, bulk organic δ13C, biomarkers, mercury and other geochemical proxies, charcoal, and sedimentology, from a Rhaetian terrestrial succession in southern Sweden. Our results provide an insight into the climatic, environmental and ecosystem changes that took place at the onset of the mass extinction event.