Recovery after the end-Permian biotic crisis in the Boreal Sea

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Global warming, attributed to emissions of CO_2 from the Siberian Traps Large Igneous Province (STLIP), is widely accepted as explaining the environmental changes associated with the Late Permian-Triassic mass extinction event and recovery. As temperatures and CO_2 levels rose, a cascading series of warming-related environmental effects, including expanding shelf and oceanic anoxia, reduced ocean circulation and nutrient influx, have been invoked as triggering marine ecosystem collapse and controlling the pace and pattern of ecosystem recovery. The timing, patterns and magnitude of ecological recovery in the marine and terrestrial realm during the Early Triassic vary with depositional environment, paleolatitude and region. The northern extra-tropical regions were key biodiversity hotspots during the Early Triassic hothouse, yet there are no detailed biogeochemical records spanning the entire hothouse interval at these paleolatitudes. We will present the first expanded record using a highly integrated approach.