

Stratigraphy of the Anthropocene

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The Anthropocene Working Group (AWG) of the Subcommittee on Quaternary Stratigraphy, a part of the International Commission on Stratigraphy, is exploring and evaluating stratigraphic successions, as potential stratotypes, in order to facilitate a formal submission of a GSSP (Global Boundary Stratotype Section and Points) proposal, from which a specific year for the onset of the “geological” Anthropocene will be established. The aim is to seek ratification of the Anthropocene as a geological epoch starting in the mid-twentieth century. Stratigraphic records, including a range of novel materials, geochemical and biological signals spanning the mid-twentieth century interval of unprecedented human activity and industrialisation, are being gathered several international teams of scientists, working currently on twelve sections from around the planet. Twelve sites are investigated for a possible GSSP for the Anthropocene epoch, on basis of annually varved sediment cores, coral, peat and speleothem layered records, and other features like artefacts: corals from Flinders Reef, Australia and the West Garden Flower Bank Reef, USA; sediment cores from Searsville Reservoir, USA, Crawford Lake, Canada, Sihailongwan Lake, China, San Francisco Estuary, USA, Beppu Bay, Japan, East Gotland Basin, Baltic Sea, Germany, the Palmer ice core from the Antarctic Peninsula, cores from Śnieżka Peatland, The Sudetes, Poland, Antarctica, a stalagmite from Ernesto Cave, Italy, and finally a section from an archaeological excavation at Karlsplatz, Wien Museum, Vienna, Austria. While the compilation of stratigraphic data to define a new epoch is as old as the science of geology, the demarcation of one within living history that signifies human activity as a global geological agent is unparalleled. Similarly, there is no precedent of a stratigraphic formalisation process being pivotal to the framing of so much contemporary social, ecological, artistic, historical and political thought. In May 2022 along with the online publication of the results and data, an exhibition including a discursive and performative programme was established in the Haus der Kulturen der Welt (HKW) in Berlin as a public forum for the scientific, cultural and socio-political impact of the stratigraphic research carried out by the international research project on the Anthropocene.