

Since 2009, the Working Group on the 'Anthropocene' (or, commonly, AWG for Anthropocene Working Group), has been critically analysing the case for formalization of this proposed but still informal geological time unit. The study to date has mainly involved establishing the overall nature of the Anthropocene as a potential chronostratigraphic/geochronologic unit, and exploring the stratigraphic proxies, including several that are novel in geology, that might be applied to its characterization and definition. A preliminary summary of evidence and interim recommendations was presented by the Working Group at the 35th International Geological Congress in Cape Town, South Africa, in August 2016, together with results of voting by members of the AWG indicating the current balance of opinion on major questions surrounding the Anthropocene. The majority opinion within the AWG holds the Anthropocene to be stratigraphically real, and recommends formalization at epoch/series rank based on a mid-20th century boundary. Work is proceeding towards a formal proposal based upon selection of an appropriate Global boundary Stratotype Section and Point (GSSP), as well as auxiliary stratotypes. Among the array of proxies that might be used as a primary marker, anthropogenic radionuclides associated with nuclear arms testing are the most promising; potential secondary markers include plastic, carbon isotope patterns and industrial fly ash. All these proxies have excellent global or near-global correlation potential in a wide variety of sedimentary bodies, both marine and non-marine.