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Reasons for the Anthropocene – Paul Crutzen’s Contribution to Save Planetary Boundaries

Friday, 2 July 2021 11:30 (30 minutes)

The present geological epoch is now called “Anthropocene” by most scientists and increasingly by the public, largely stimulated by Paul Crutzen’s papers of 2000 and 2006 with this title. This geological epoch is not yet officially accepted, and the exact start time is debated. Whether the Anthropocene started with the steam engine in 1834, Crutzen’s proposal in 2006, or the Trinity nuclear test explosion in 1945 as proposed by the Anthropocene Working Group is rather secondary. It is clear that homo sapiens is dominating planet Earth and has already transgressed save planetary boundaries for several element cycles (e.g. carbon, nitrogen). Hence, we have to reverse the trend by global governance. As done successfully with the Montreal Protocol as part of the Vienna Convention to Protect the Ozone Layer, for which Paul Crutzen’s Nobel Prize honored research laid the foundation, and as since 2016 tried by the Paris Agreement to the United Nations Framework Convention on Climate Change. We have not only to discuss but to avoid very close tipping points of the climate system, like the complete melting of the Greenland ice sheet. To many of these scientific challenges Paul Crutzen has strongly contributed.

Promotional text

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