Earth System science in political context

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Since the 1980s, Earth System science (ESS) has become an umbrella for research carried out in a variety of disciplines such as climatology, biogeochemistry, geology, oceanography, and ecology. The concept of a single Earth System developed in ESS is a central contribution of basic research to the current political and scientific debate about the Anthropocene. Even though this concept is closely tied to numerical climate modeling, it is underdetermined by this activity. This can be seen, in particular, in scientific debates and publications that aim at synthesizing ESS insights and addressing the broader scientific community and policy makers. International scientific and hybrid political-scientific organizations provide the main institutional framework for these debates. My contribution will show that in this context ESS scientists'understanding of the Earth System as well as their framing of their social role as scientific experts have undergone silent changes.

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