

New seamless science of hydrologic - biogeochemical cycles on the Earth surface

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Land - atmosphere interface on the Earth surface is where humans primarily operate. In the Anthropocene, human activities modify the land surface in many ways that influence the fluxes of water, energy, and trace gases between land and the atmosphere. Such land - atmosphere interactions are primarily important for the current climate change. On the other hands, solar activity seems to have secondary effect for the long-term climate change in the Quaternary period including the Holocene. However, not much is known on the effect of solar activity to the climate change as well as precise mechanisms of solar - climate system in this period. In this presentation, we will discuss on how researches of hydrologic - biogeochemical cycles relate to those of climate changes induced by solar - human activities.

Keywords: hydrologic cycle, biogeochemical cycle, solar activity, human activity, climate change