Visualizing the inter-sectoral connections of climate risks

*Tokuta Yokohata¹, Katsumasa Tanaka¹, Kazuya Nishina¹, Kiyoshi Takahashi¹, Seita Emori¹, Masashi Kiguchi², Yasushi Honda⁴, Masashi Okada⁵, Yoshihiko Iseri³, Yoshimitsu Masaki¹, Akitomo Yamamoto², Masahito Shigemitsu⁶, Masakazu Yoshimori⁷, Tetsuo Sueyoshi⁸, Kenta Iwase⁹, Naota Hanasaki¹, Akihiko Ito¹, Gen Sakurai⁵, Toshichika Iizumi⁵, Motoki Nishimori⁵, Wee Hoo Lim¹⁰, Chihiro Miyazaki¹¹, Akiko Okamoto¹, Shinjiro Kanae³, Taikan Oki²

1.National Institute for Environmental Studies, 2.University of Tokyo, 3. Tokyo Institute of Technology, 4.University of Tsukuba, 5.National Institute for Agro-Environmental Sciences, 6.Japan Agency for Marine-Earth and Technology, 7.Hokkaido University, 8.National Institute for Polar Research, 9.Nomura Research Institute, 10.University of Oxford, 11.Center for Environmental Information Science

It is now widely recognized that climate change is affecting various sectors of the world. Climate change impacts on one sector may spread out to other sectors including seemingly remote ones [1], a process which we call "interconnections of climate risks". While a number of climate risks have been identified in the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (AR5) [2], there has been no attempt to explore the interconnections between them comprehensively [3]. Here we present a first and the most exhaustive visualization of climate risks and their interconnections drawn based on a systematic literature survey. Our risk maps and flowcharts depict that changes in the climate system impact the natural and socio-economic system, influencing ultimately human security, health, and well-being. Our findings point to the need to address the climate risk interconnections in impact and vulnerability studies. Furthermore, our diagrams are useful to educate decision makers, stakeholders, and general public about cascading risks that can be triggered by climate change.

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