Data-driven monitoring of terrestrial carbon cycle in Mongolia

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Mongolia has been experiencing both climate changes and anthropogenic environmental changes. Therefore, it is important to monitor environmental changes. In particular, more and more observation-based data sets are available, and synthesis analysis using these multiple observation-based data sets are essential.

We analyzed changes in the terrestrial environmental environment in Mongolia from the 1980s to 2010s. We focused on two different temporal periods, the 1980s to 2010s and 2000 to 2015. As for the first period (1980s to 2010s), we used NOAA AVHRR data sets, observed climate data sets for the analysis. As for the second period (1980s to 2010s), we used multiple remote sensing data sets (e.g. Terra MODIS), empirically upscaled CO_2 flux products, and outputs from terrestrial ecosystem models. We will show and discuss the estimated terrestrial environmental changes in Mongolia at the conference.

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