
[EE] Evening Poster | H (Human Geosciences) | H-CG Complex & General

[H-CG22]Global Land Programme and Regional/Global Sustainability

convener:Yukio Himiyama(Emeritus Professor, Hokkaido University of Education), Shigeko Haruyama(Department of Environmental Science, Graduate School of Bioresources,Mie University), Qinxue Wang(国立研究開発法人 国立環境研究所)

Sun. May 20, 2018 5:15 PM - 6:30 PM Poster Hall (International Exhibition Hall7, Makuhari Messe)

GLP (Global Land Programme) is a partner programme of Future Earth and has an important mission of consolidating land science in order to contribute to Future Earth, the United Nations Sustainable Development Goals, and ultimately to the regional and global sustainability. This session intends to demonstrate some recent achievements and plans of the studies related with GLP, to exchange information and views about them, and to seek possible interdisciplinary joint research projects that can truly serve regional and global sustainability.

[HCG22-P03]Monitoring Mongolian Plateau dust outbreak using Meteorological Satellite data.

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Keywords:Dust storm, MODIS, NDDI

The vast expanse of the Gobi desert across the Mongolian plateau experiences frequent dust storms. Dust storms are seasonal meteorological phenomena; the spring months of April and May are those with the greatest dust storm activity. It is then that average wind speeds reach a maximum and the snow cover is receding.

In this case, to understand desert dust outbreak from MODIS and geostationary meteorological satellite Himawari-8 data, we compared MODIS and geostationary meteorological satellite Himawari-8 dust index for more appropriate dust detection than conventional way of Brightness Temperature Difference (BTD) and Normalized Dust Difference Index (NDDI). Dust indices such as Brightness Temperature Difference (BTD) (Ackerman, 1997) and Normalized Difference Dust Index (NDDI) (Qu, 2006) are used for analyzing dust intensity.