MAHASRI & Mongolia

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The history of Monsoon study

Monsoon-77, D.Chuluunbat

MONEX-78, Monsoon-79,

D.Chuluunbat, D.Shagdarsuren

Studied the vertical profile of the atmosphere, 2-3 articles. "Transmission of humidity in the atmosphere during monsoon"

Method for prediction of in the Eastern part of Mongolia

The history of Monsoon study

GAME Mongolia – a participating country

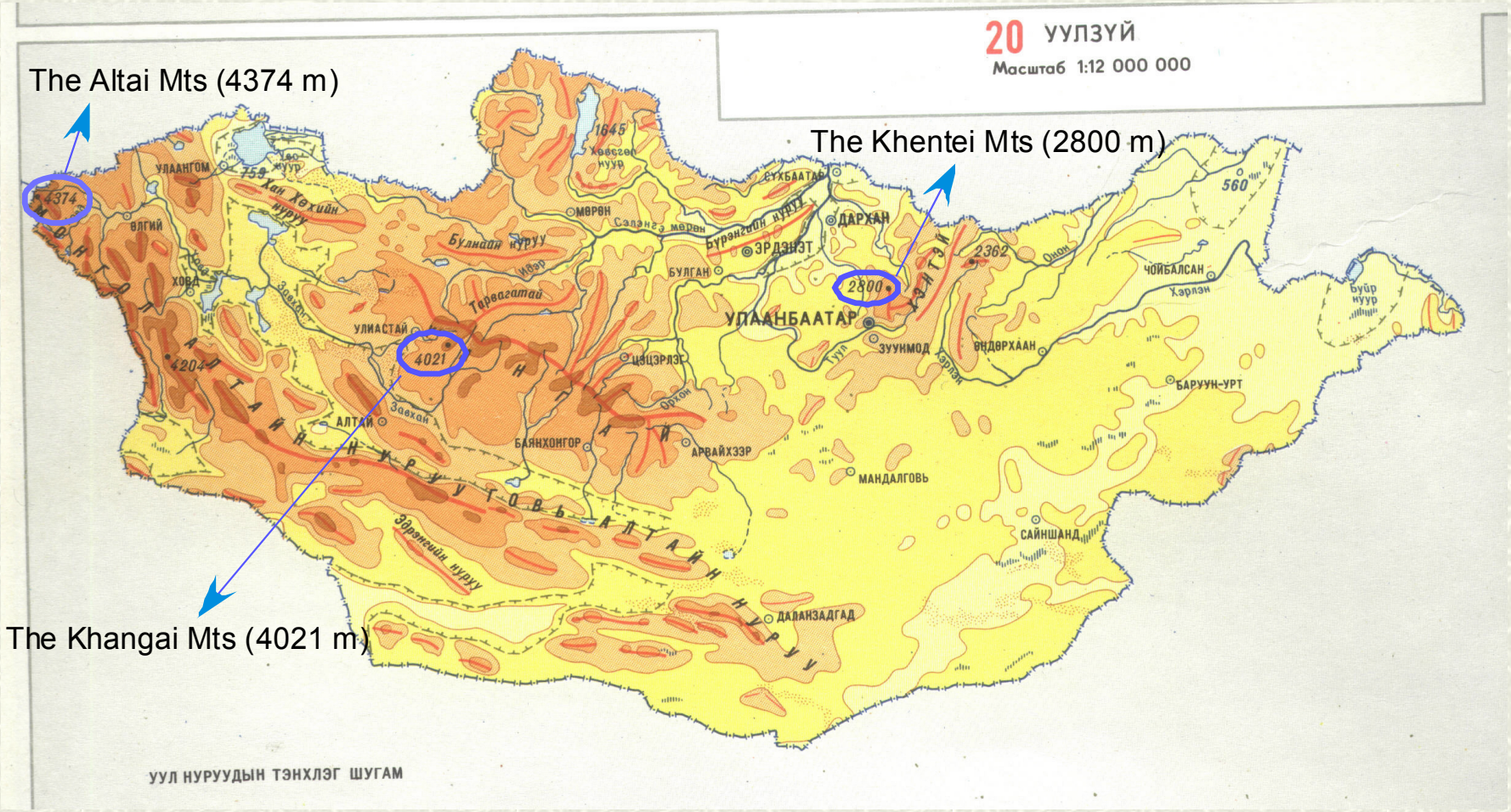
Prof. Yasunari.T and Dr. Miyazaki S, 1994

AMPEX-MAVEX Mongol AMSR/AMSR-E Validation Experiment-a project of ADEOS II 3rd RA of Japan Aerospace Exploration Agency (JAXA).

FRONTIER-FORSGC-IORGC Institute of Observational Research for Global Change/Independent Administrative Institution, Japan Agency for Marine-Earth Science and Technology (JAMSTEC).

RAISE-Rangelands Atmosphere-Hydrosphere-Biosphere Interaction study experiment in Northeastern Asia

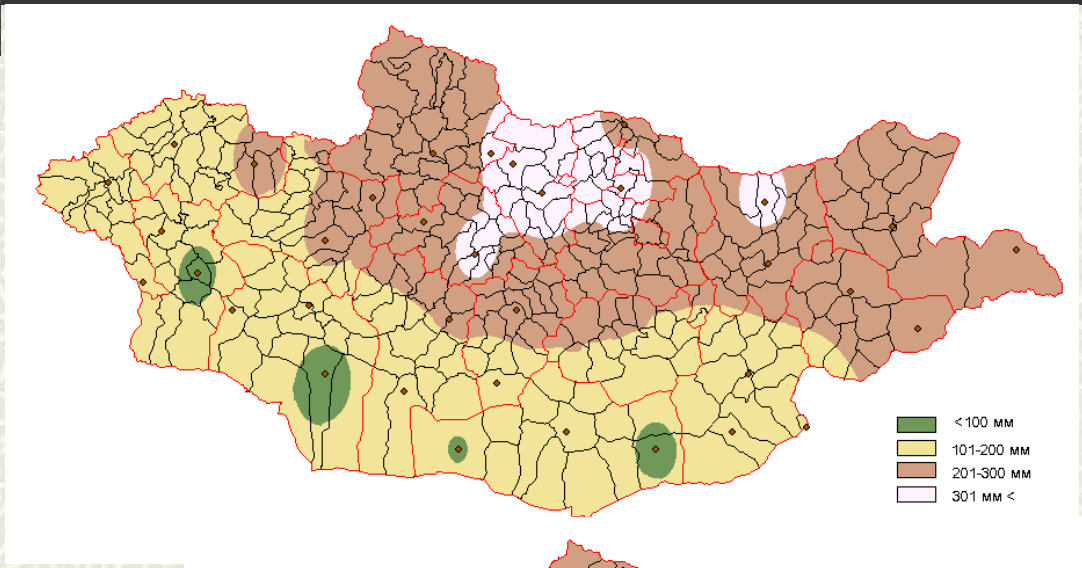
Topography map of Mongolia

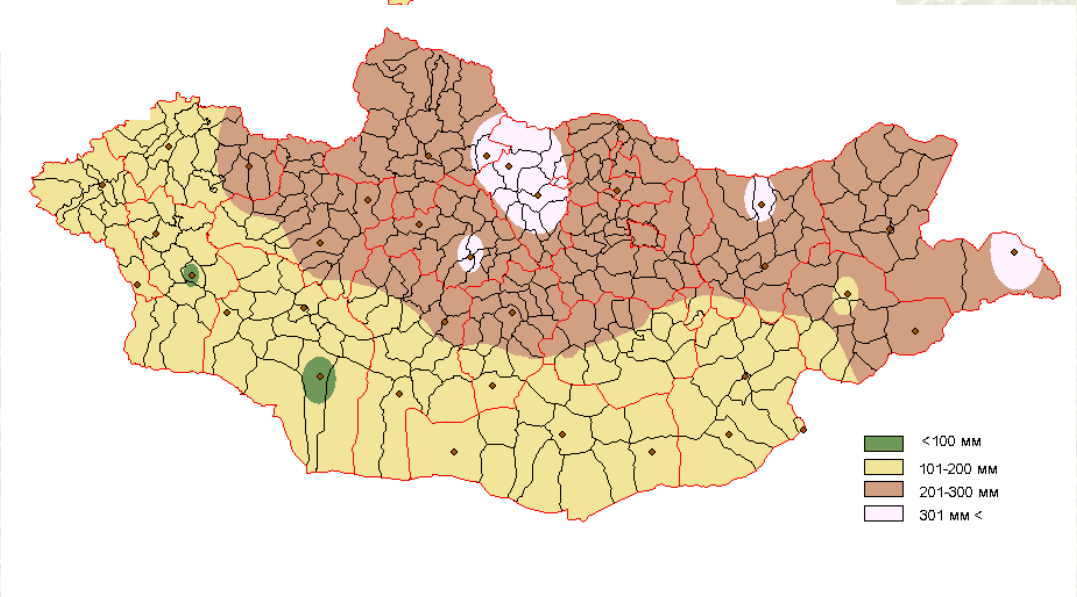


Precipitation in Mongolia

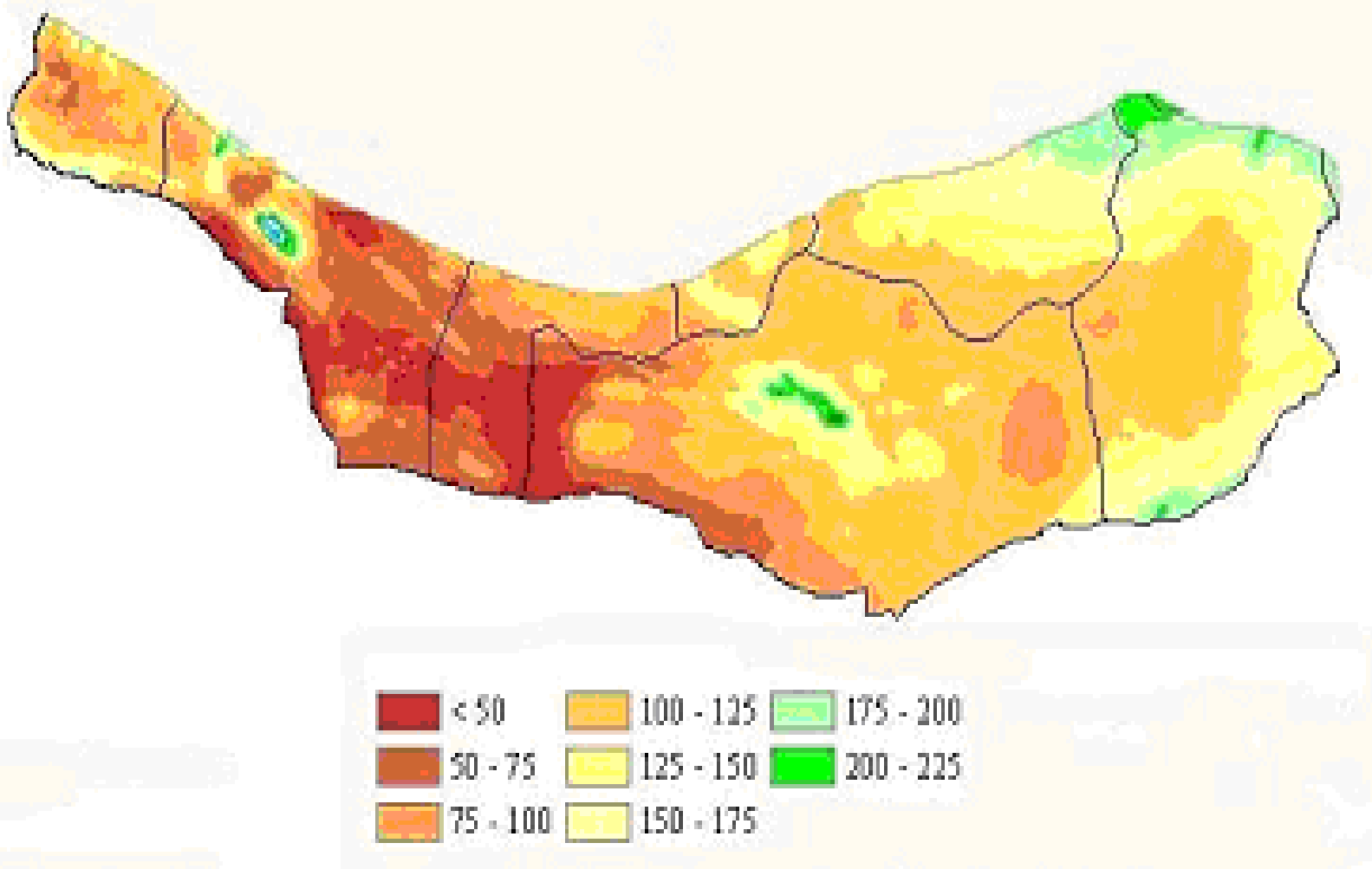
In case of Mongolia 85-90% of the precipitation amount per a year normally have in a warm period of a year.
Due to the global warming during the last 14 years amount of precipitation for the growing period has decreased and precipitation amount of the cold period has increased by 5%. If take the precipitation amount in May, then it has decreased in the northern part of Mongolia and in other regions it has increased a little. In June the precipitation is mostly decreased and it has increased from the second half of July until the second half of August.

The precipitation change, 1960-1990 and 1991-2004

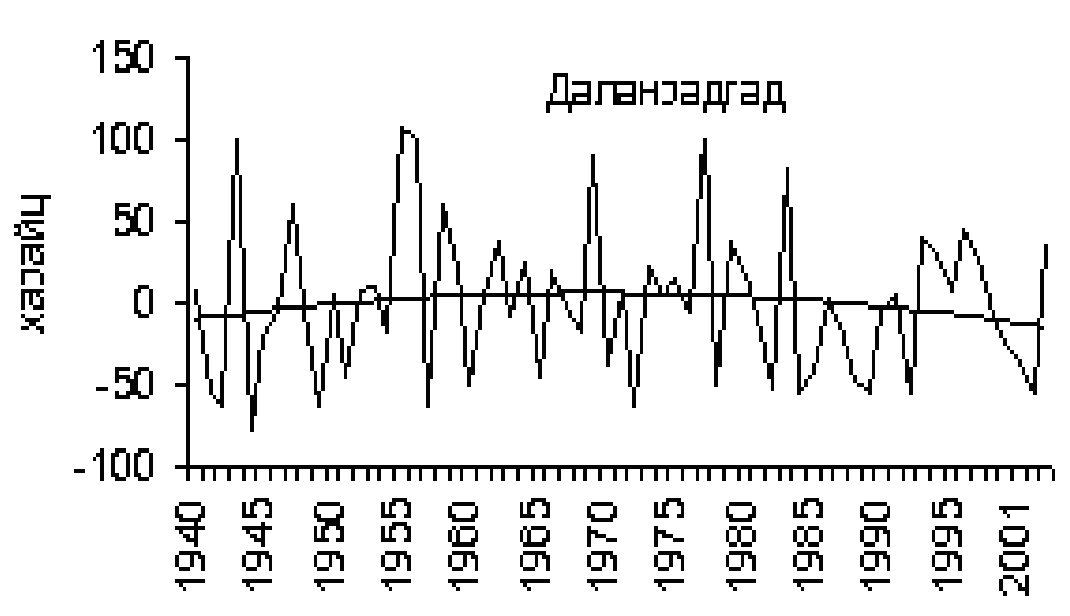


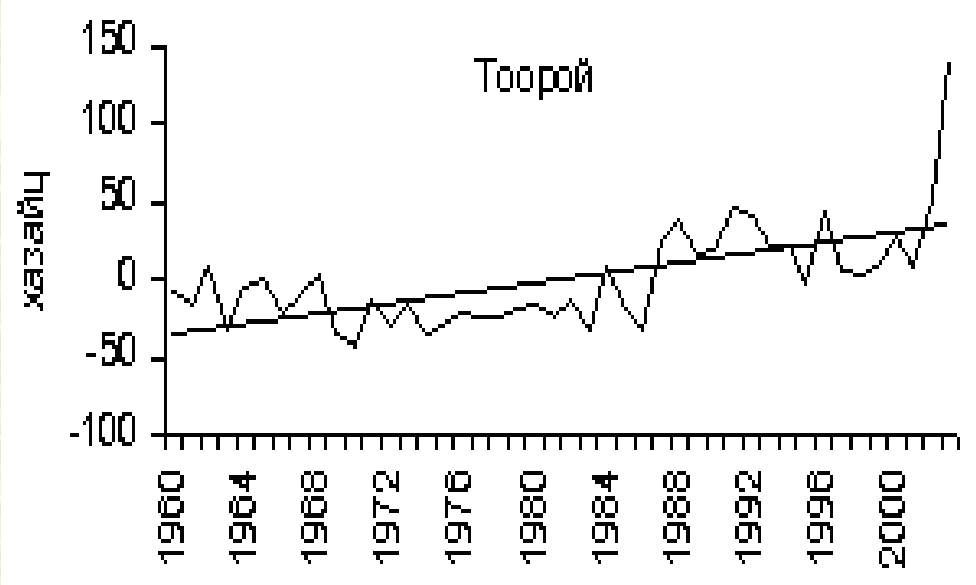


Precipitation amount per year, mm

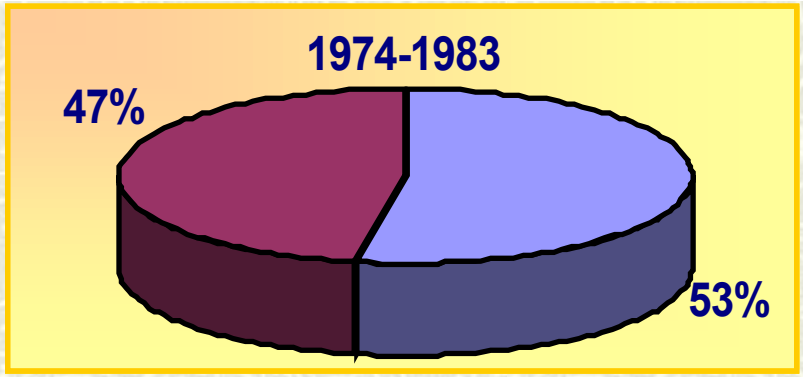


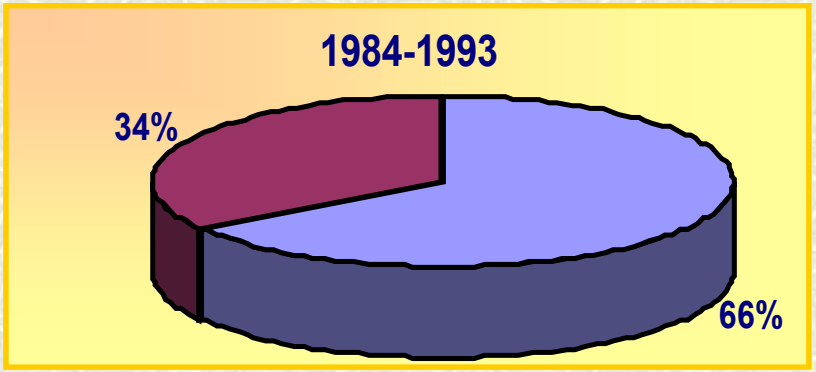
In the last 14 years precipitation has increased by 30-50 mm in Govi & steppe regions of Mongolia.

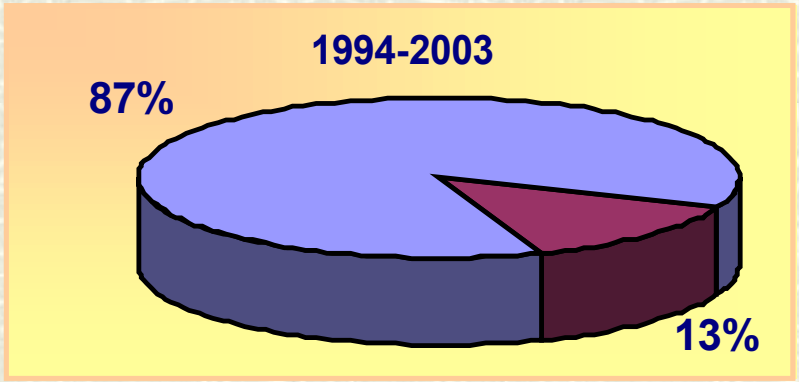




Rain character







Rain, Ns

Rainfall, Cb

Snow cover

In the mountain areas 180-200 days, in the Govi region, 46-90 days, in the other areas 100-180 days.

Snow depth is 15-30 cm in the mountain areas, 5-10 cm in the steppe and Govi regions, 15-20 cm in the other areas.

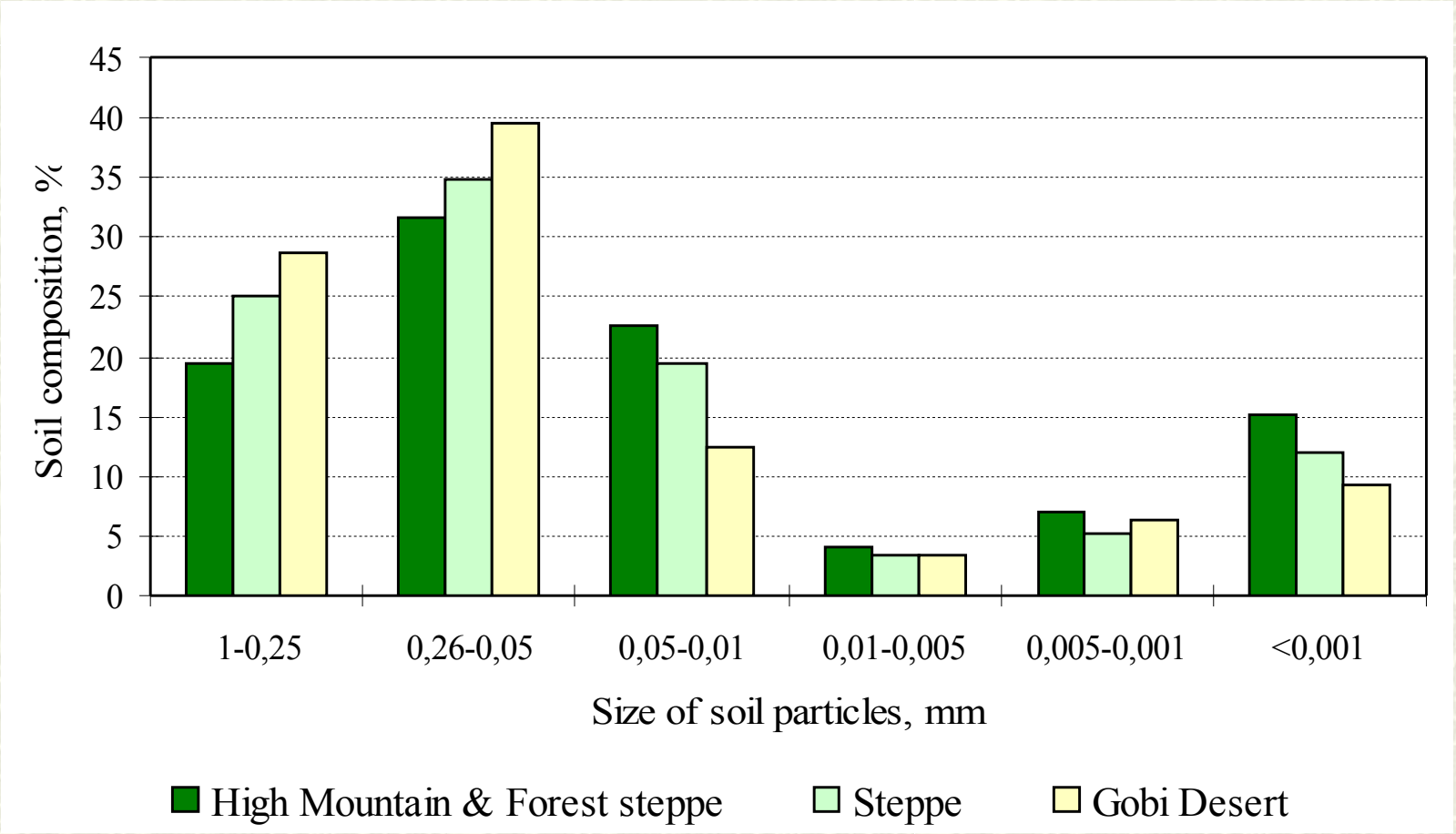
Snow density is 0.13-0.23 g/cm^3.

Date of snow forming & melting has shifted.

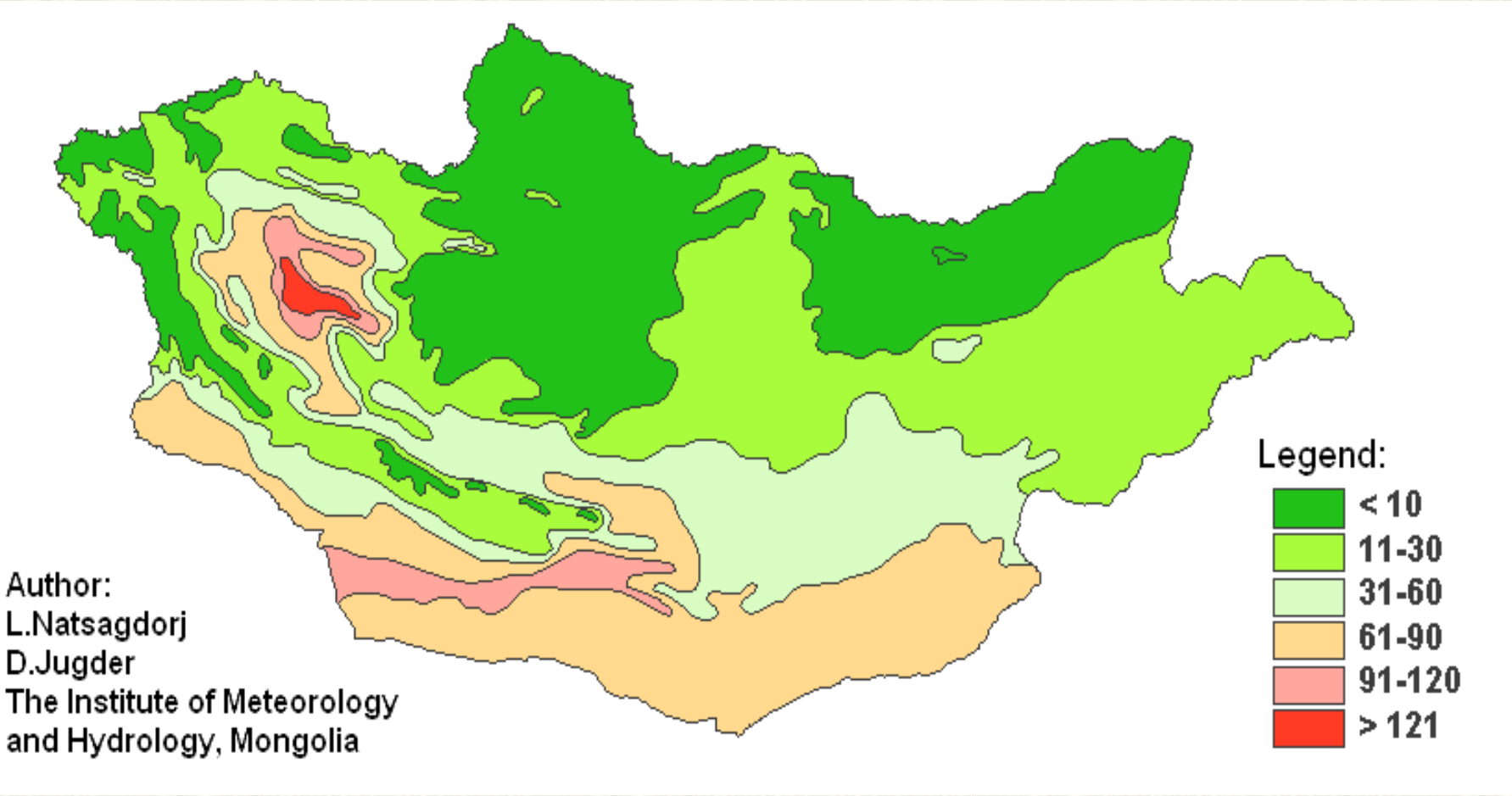
Change of days with numidity less than 30%

	Regions	Number for a year	Change
1	Altai & Khuvsgul mountains' area	**45-95**	**+3...+15**
2	Khangai mountain area & Orkhon Selenge river basin	**45-95**	**-5...-20**
3	Khentii mountain area	**50-100**	**+10...+20**
4	Eastern Mongol steppe	**55-108**	**+5...+20**
5	Govi area	**80-200**	**+30...+40**

Soil particles in Mongolia



Frequency of dust storms



Trend of dusty days

Conclusion

Asian Monsoon-Winter monsoon
Asian high

Heat source: Dust storms & Aerozol

Hydrological study of a small river basin

Capacity building:
(Data sharing & etc)


Thank you for your attention