



*The Eighth Session of the East Asia winter
Climate Outlook Forum*



**Review of 2020 Summer climate over
Mongolia**

Sh.Tergel and E.Munkhjargal

Research division of General circulation and Long range prediction

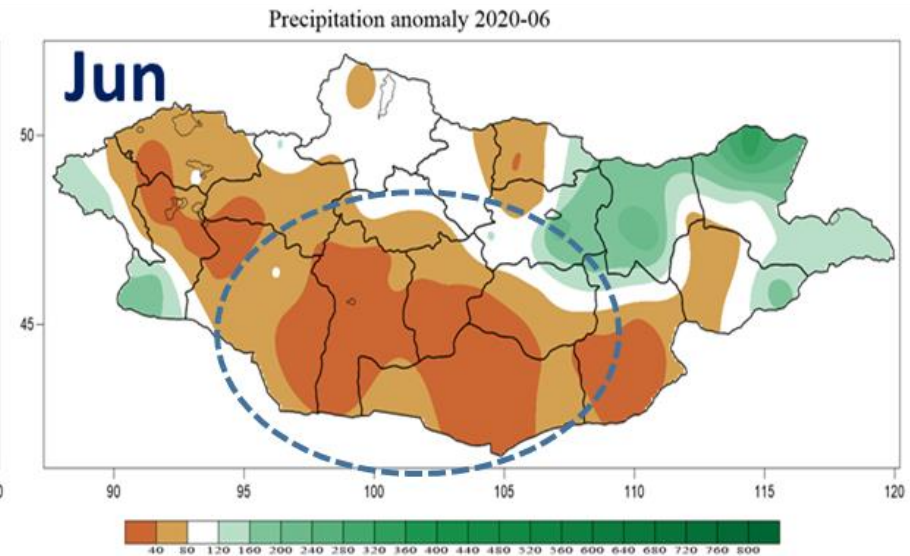
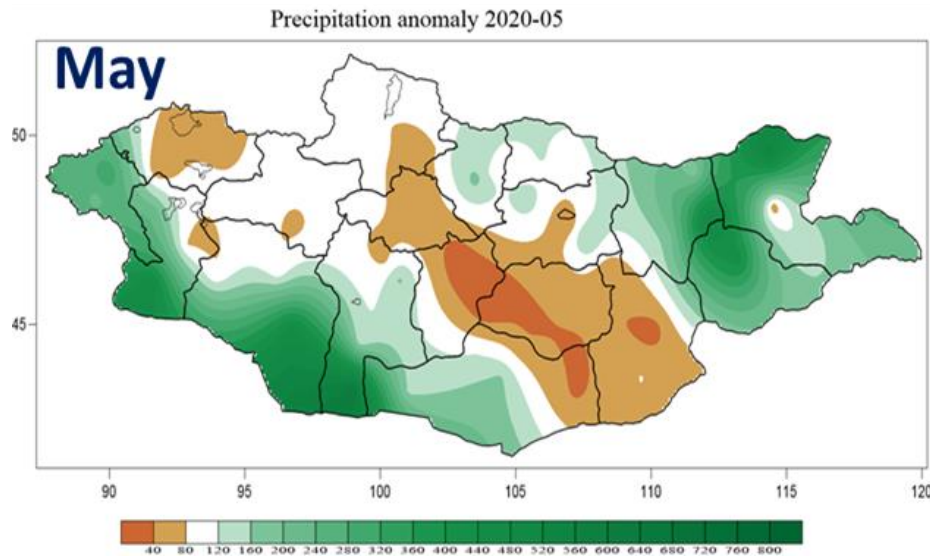
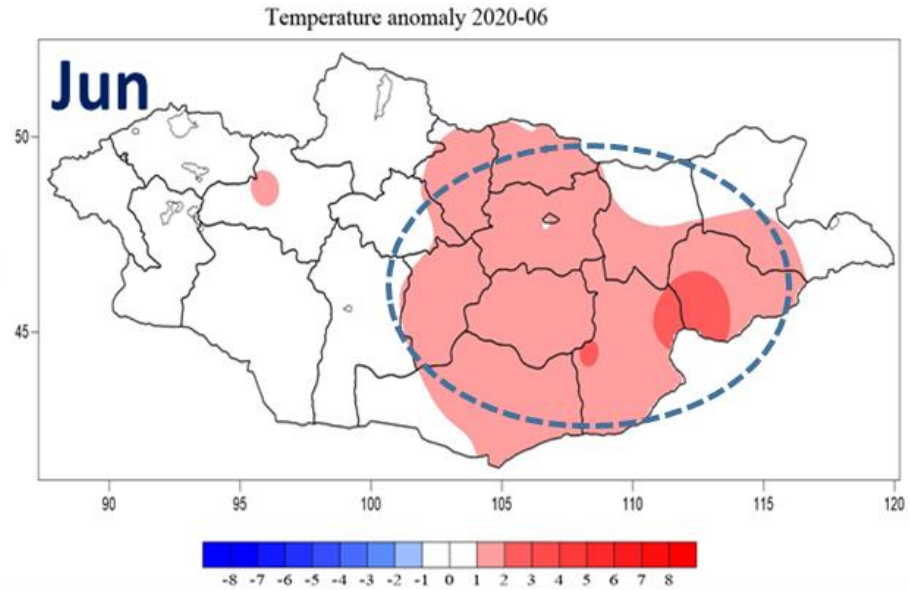
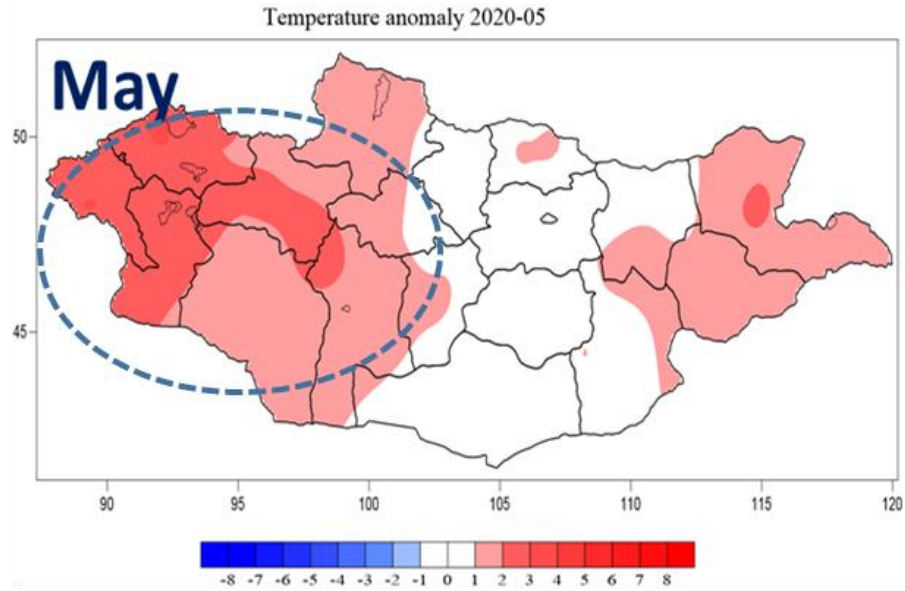
5 November 2020

OUTLINE

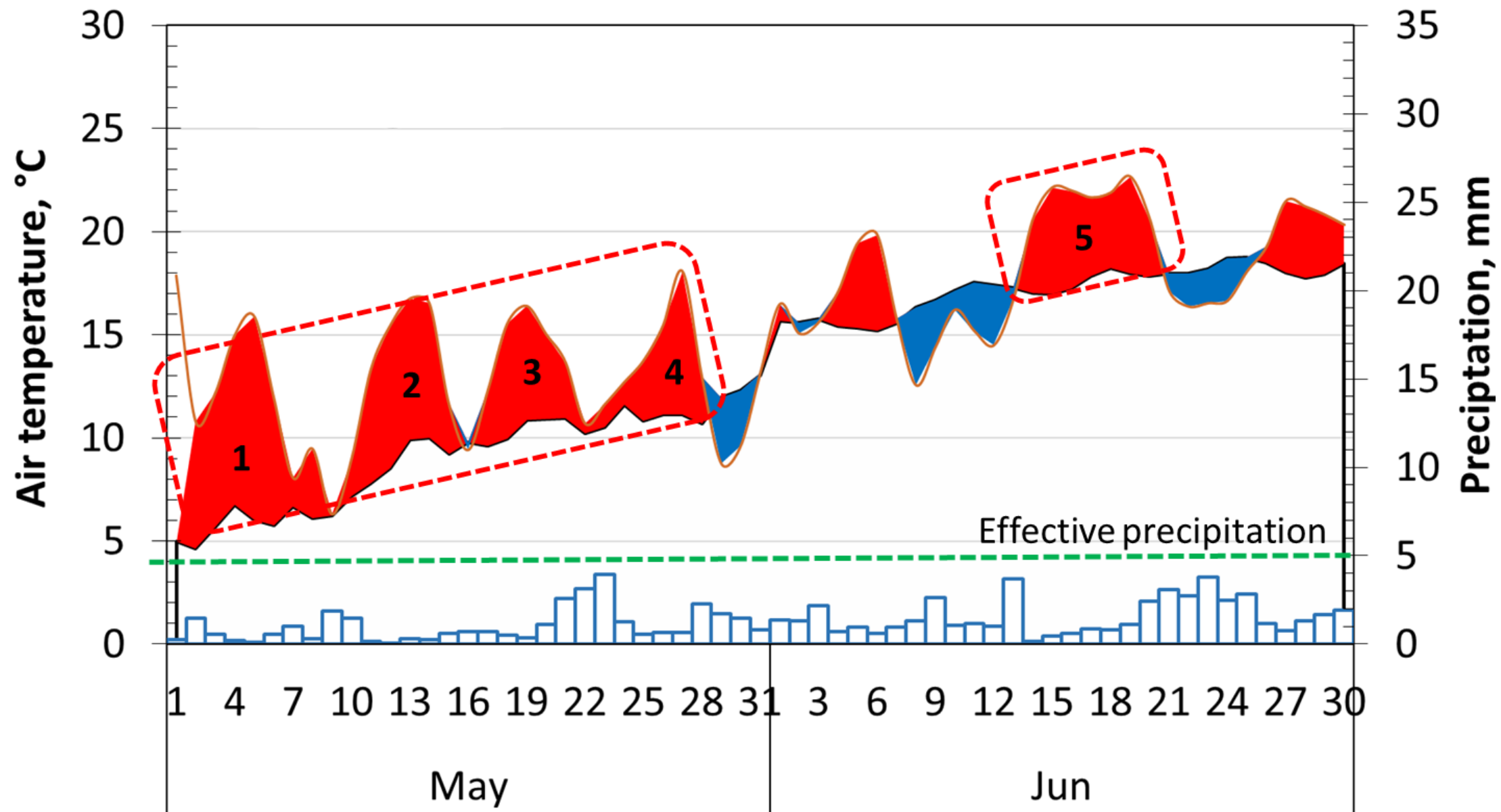
- **Climate features**
- **Extreme events and its impact**
- **Characteristic of atmospheric circulation**
- **Summary**

- **Climate features**

Distribution of air temperature and precipitation anomaly in early summer

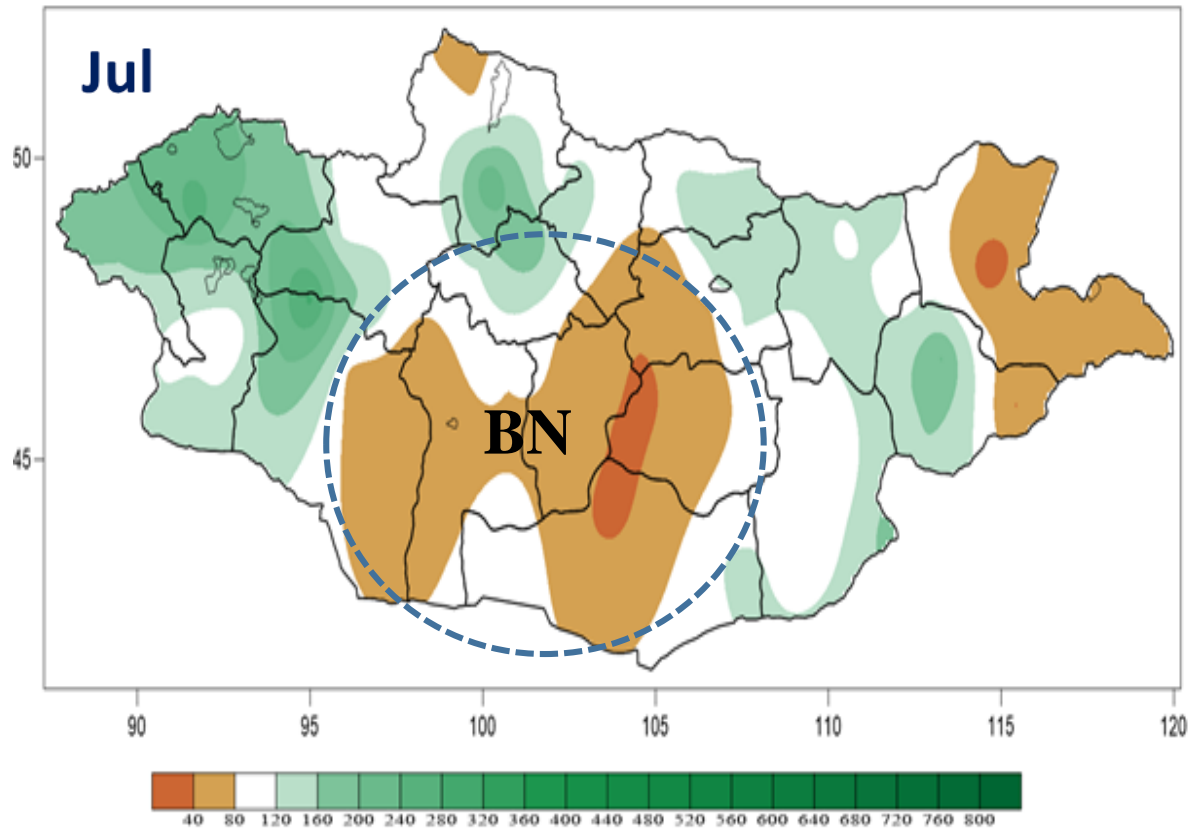


Daily time series of early summer

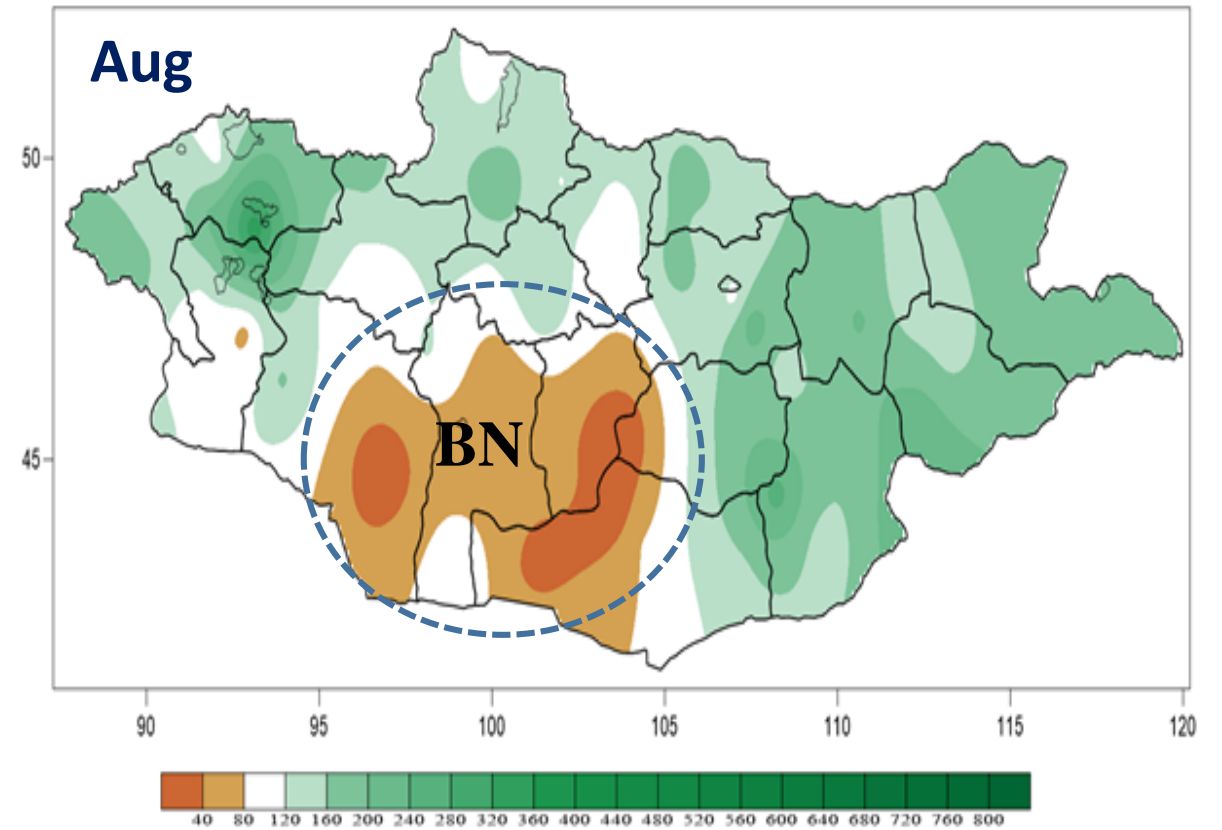


Distribution of precipitation anomaly in late summer

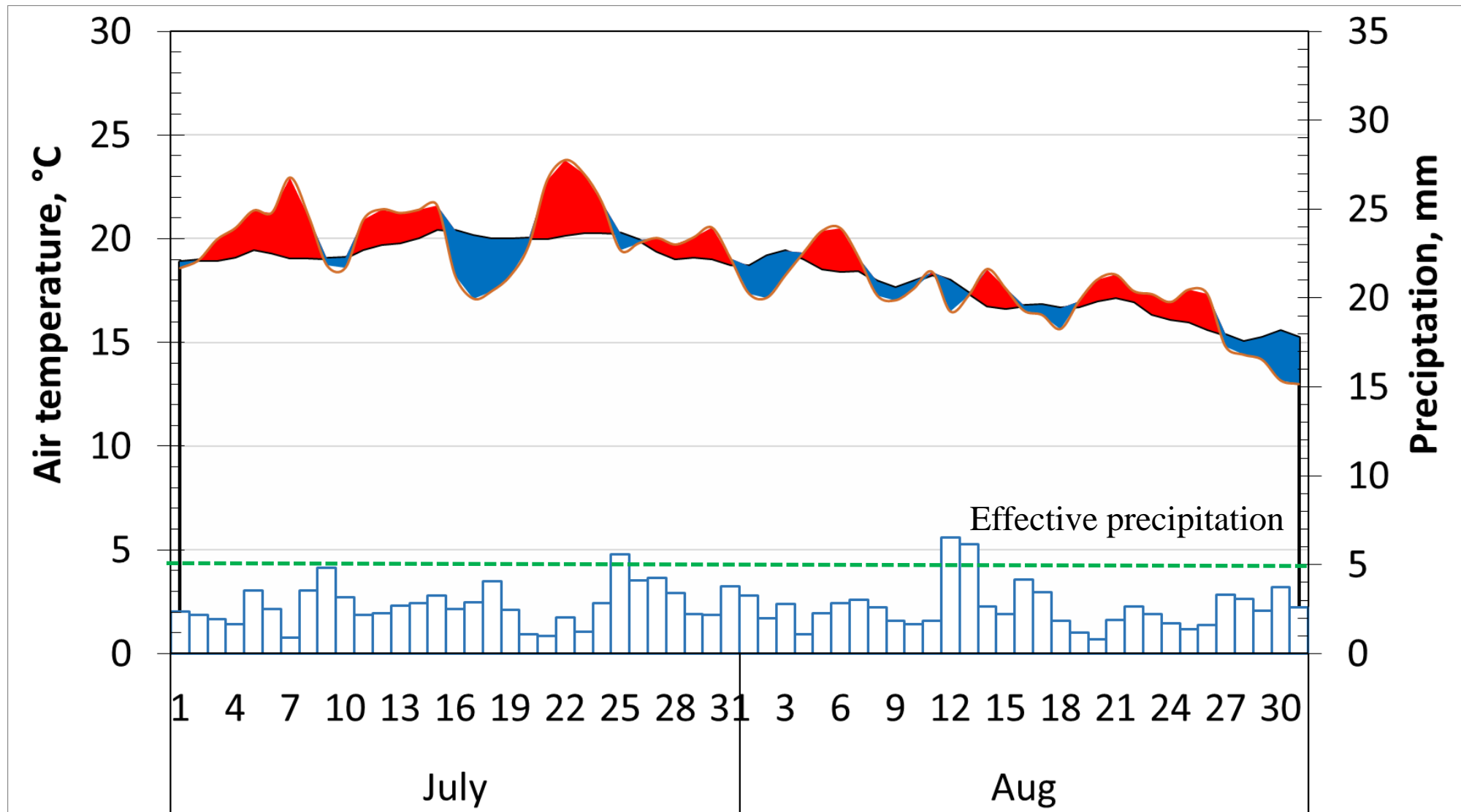
Precipitation anomaly 2020-07



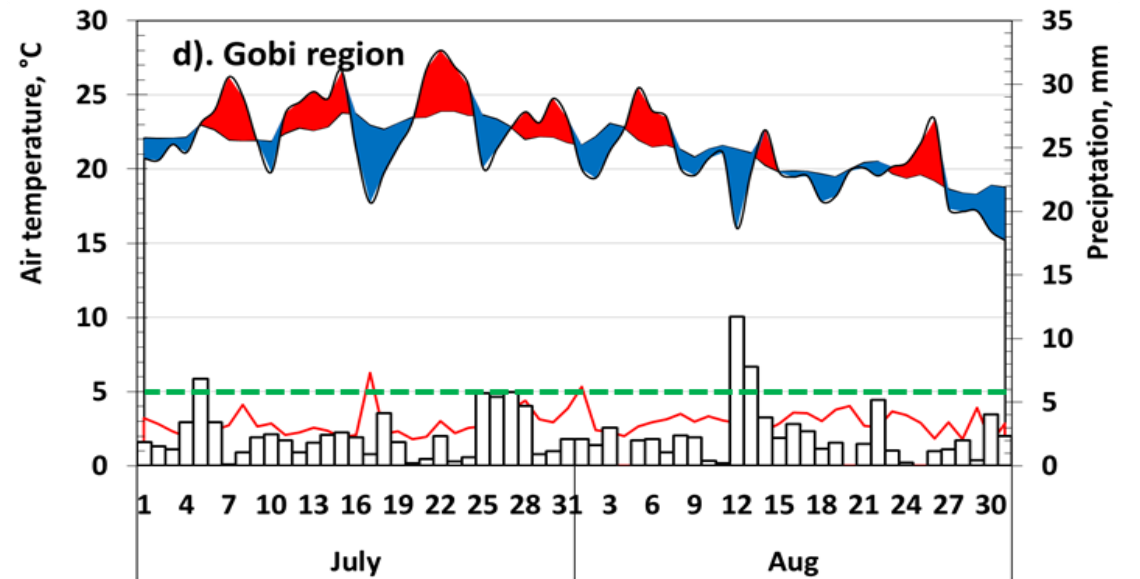
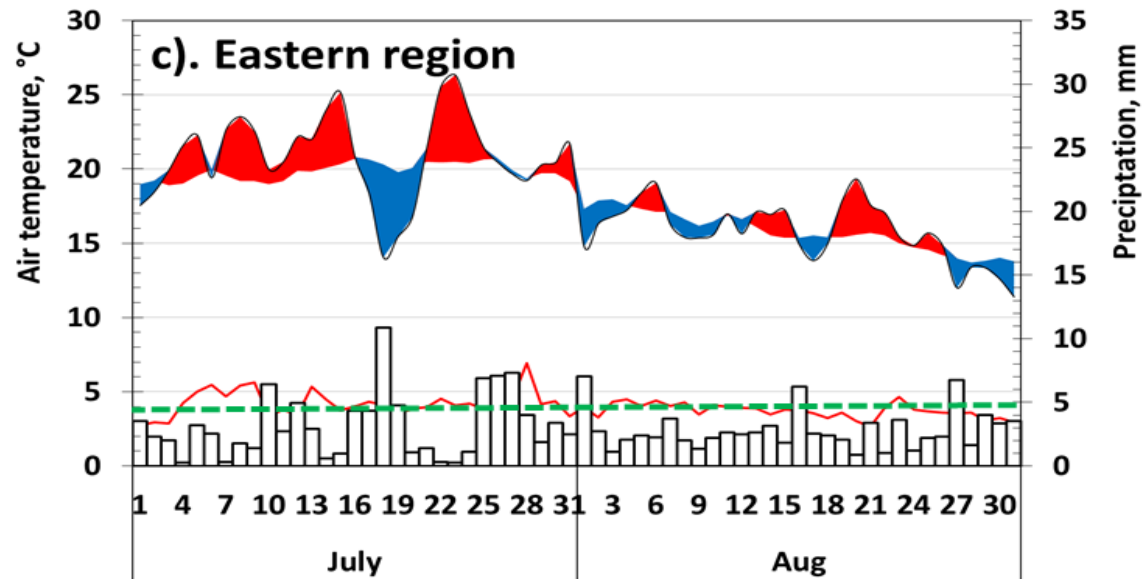
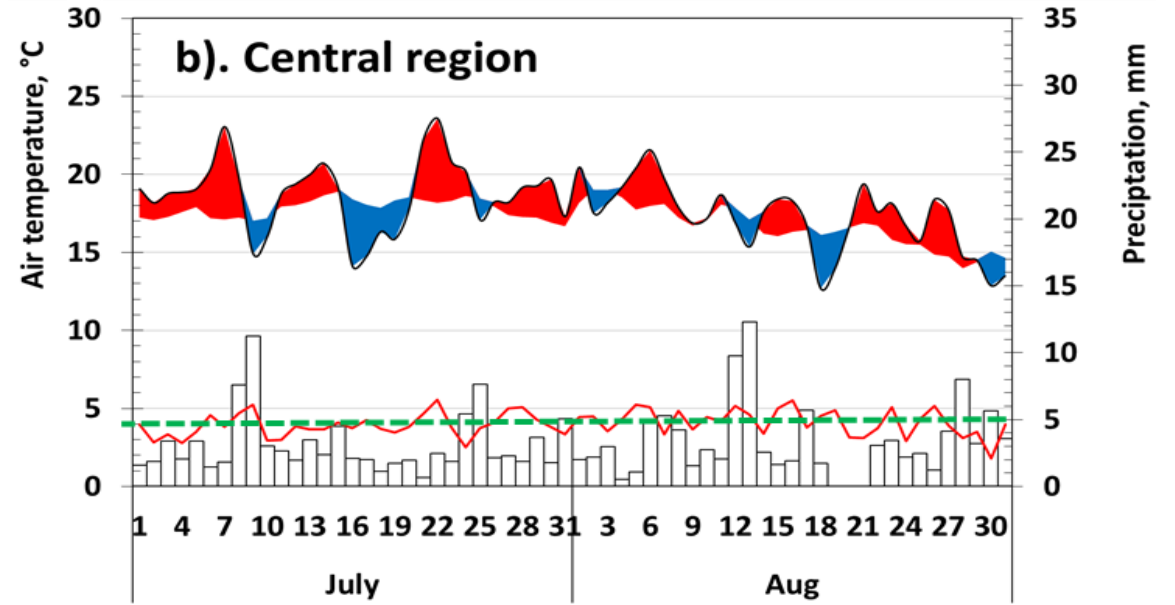
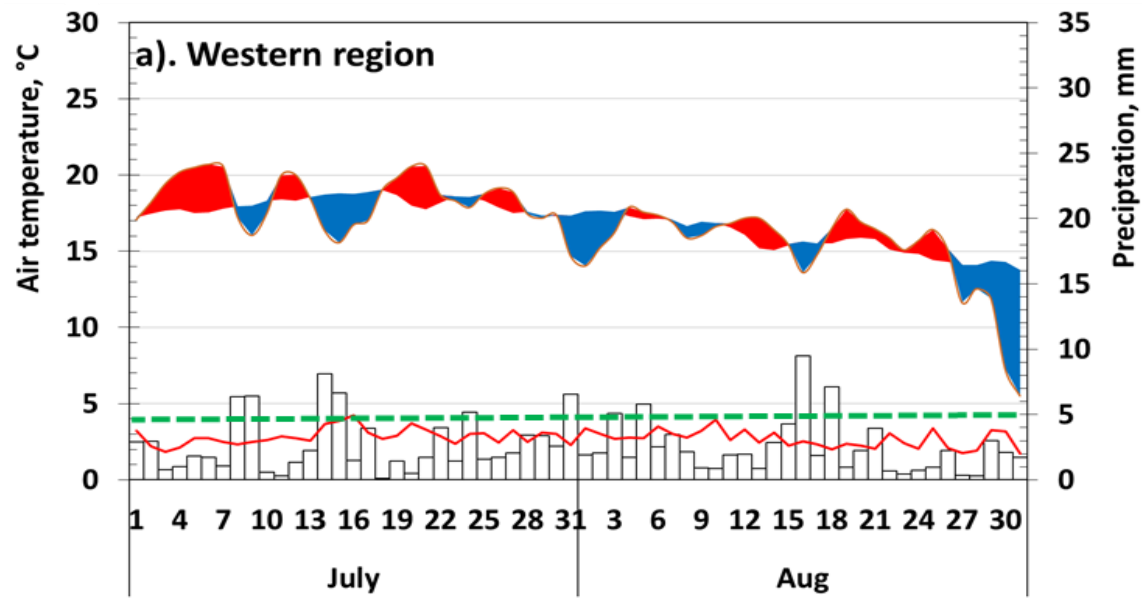
Precipitation anomaly 2020-08



Daily time series of late summer



Time series of late of summer



- **Extreme events and its impact**

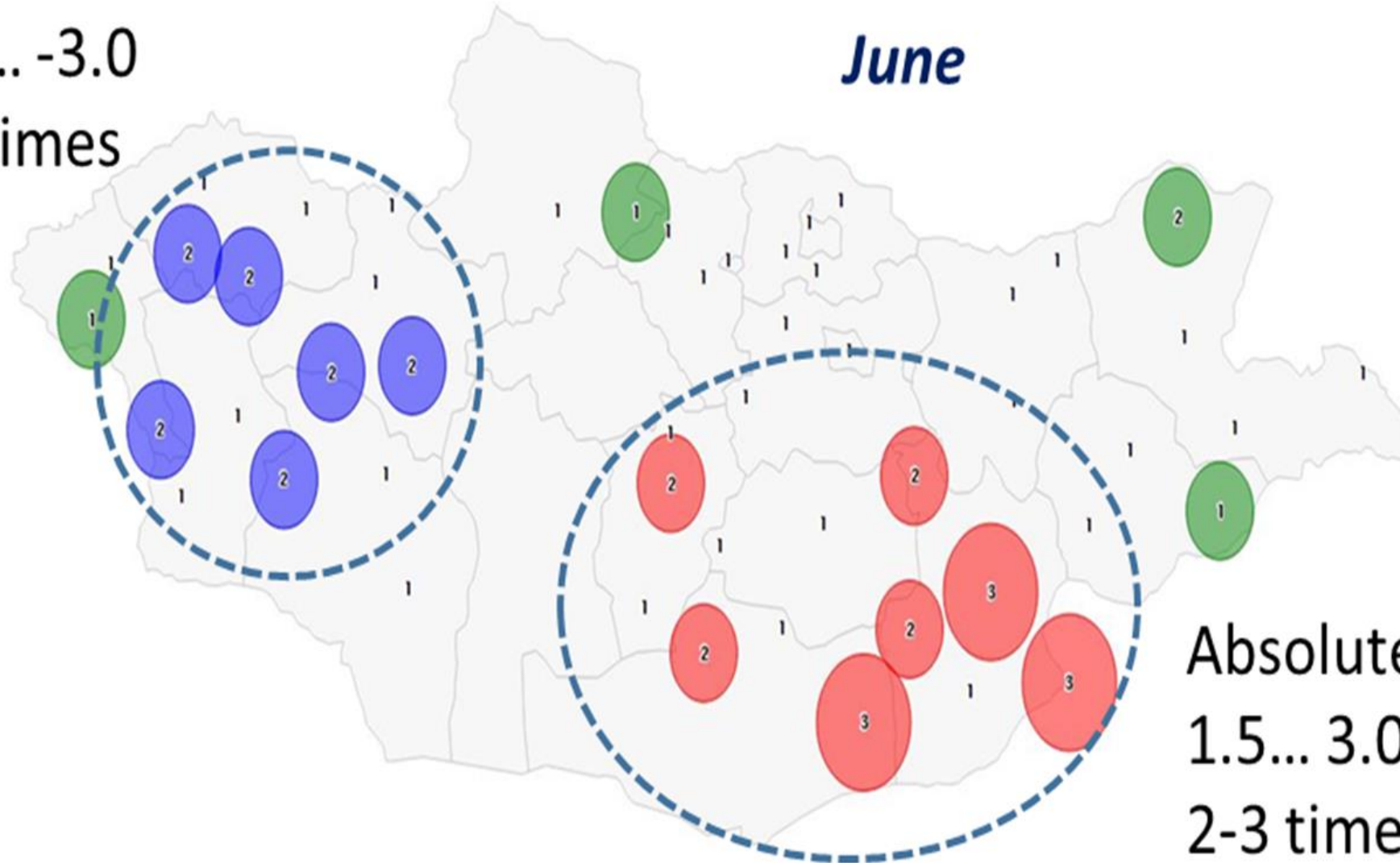
Remarkable climate characteristic

Absolute MIN

-1.5... -3.0

2-3 times

June



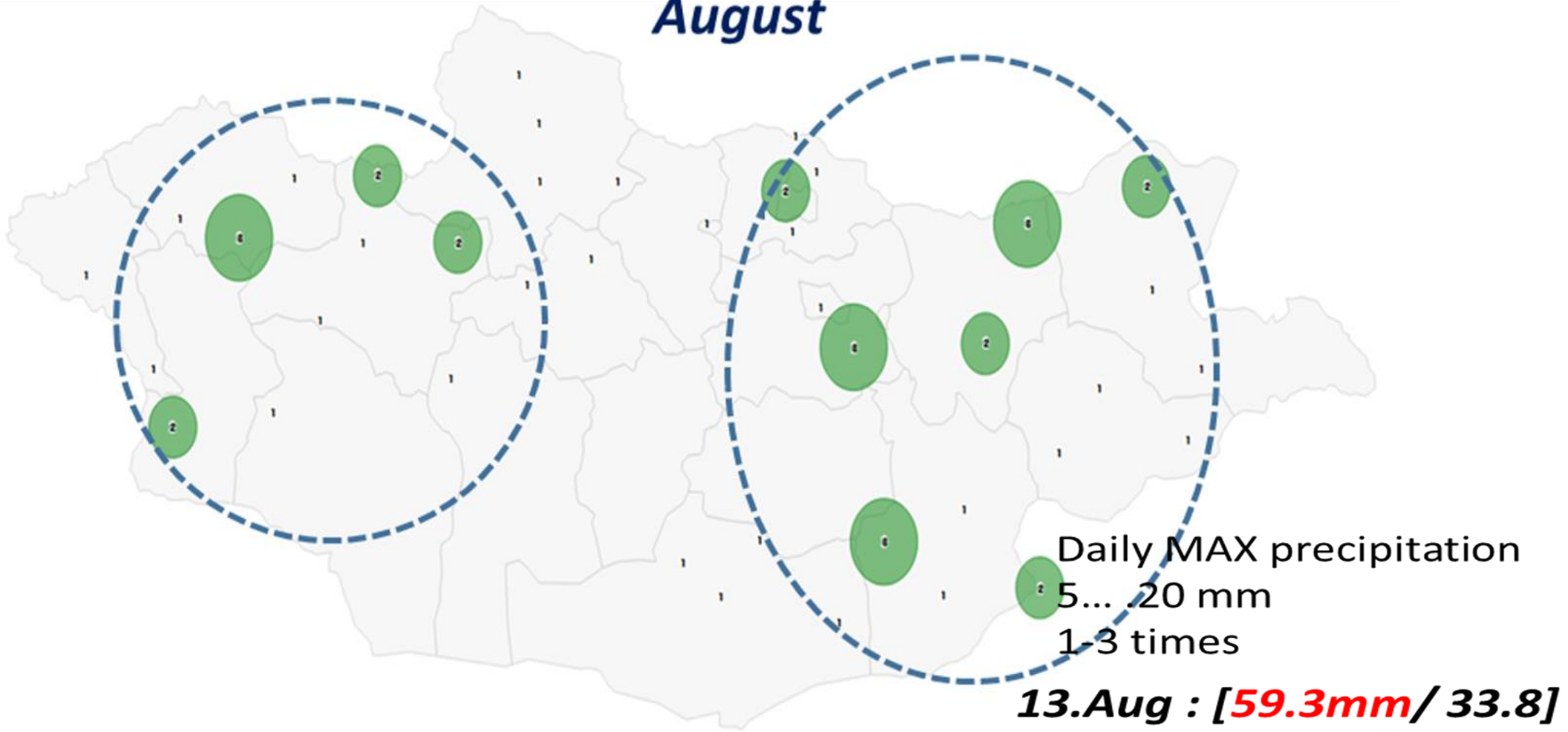
Absolute MAX

1.5... 3.0

2-3 times

Remarkable climate characteristic

August



Extreme events impact



Location: Zuunmod

Date: 21.June

Duration: 40 min

Rain: 69 mm a day

Damage: 2 people died
69 house destroyed
53 gers flooded

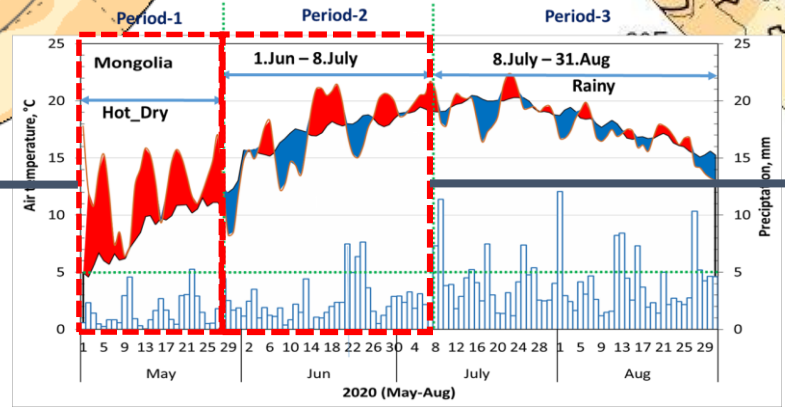
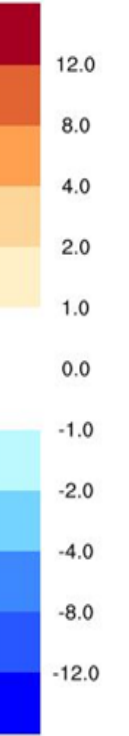
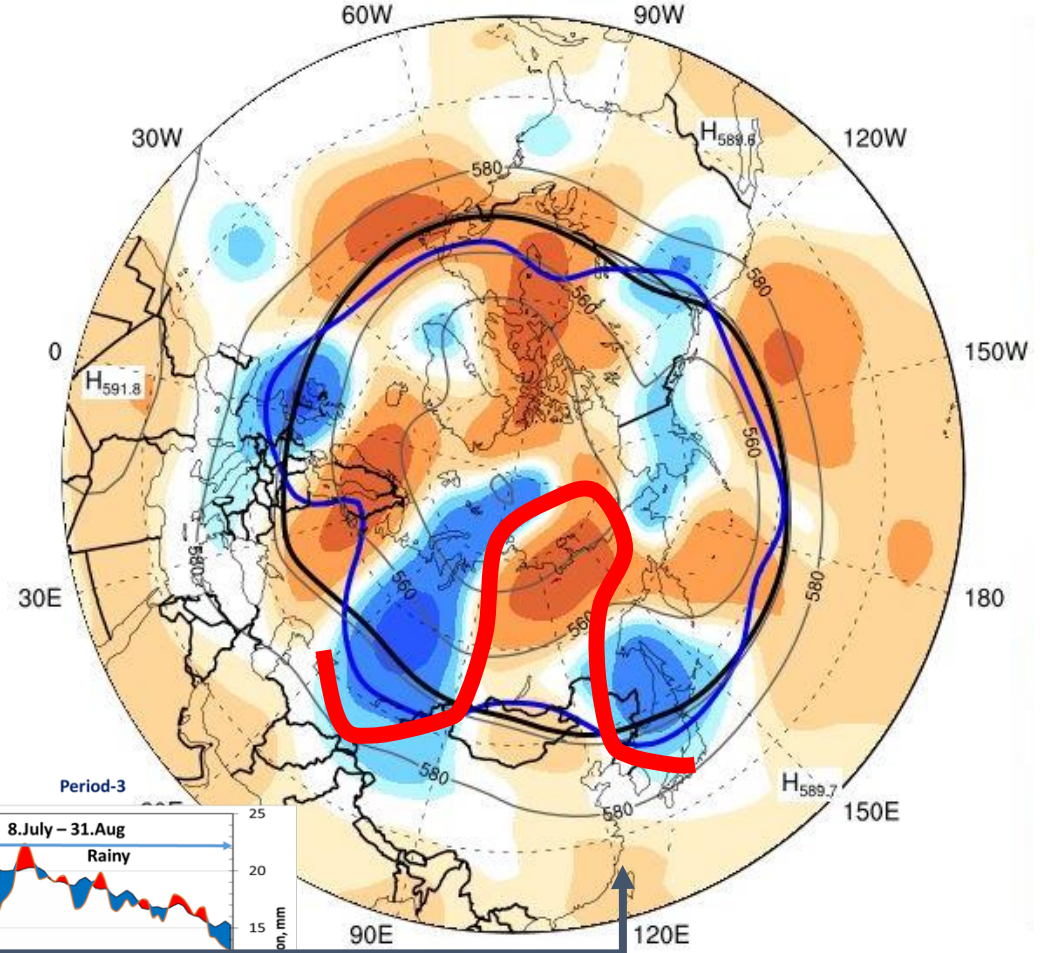
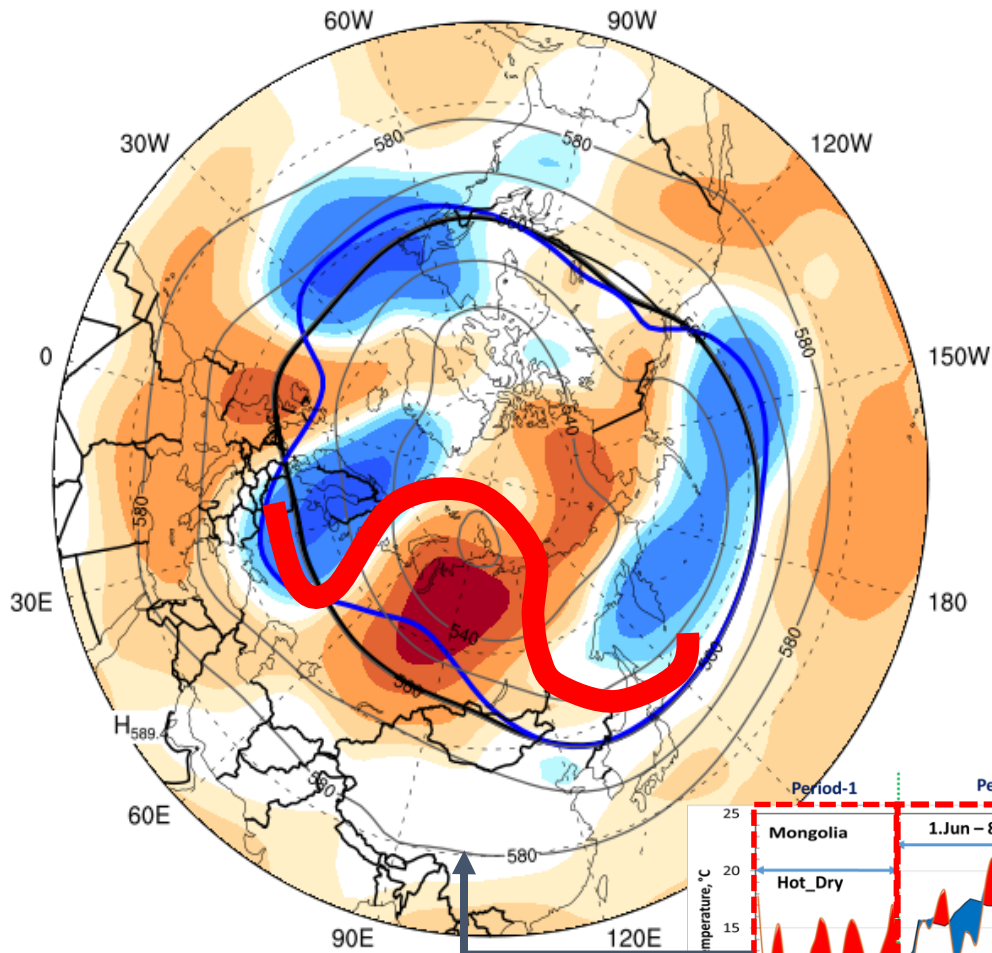


- **Atmospheric circulation**

Hot waves in earlier summer (during May-June, 2020)

Warm: May. 1-28

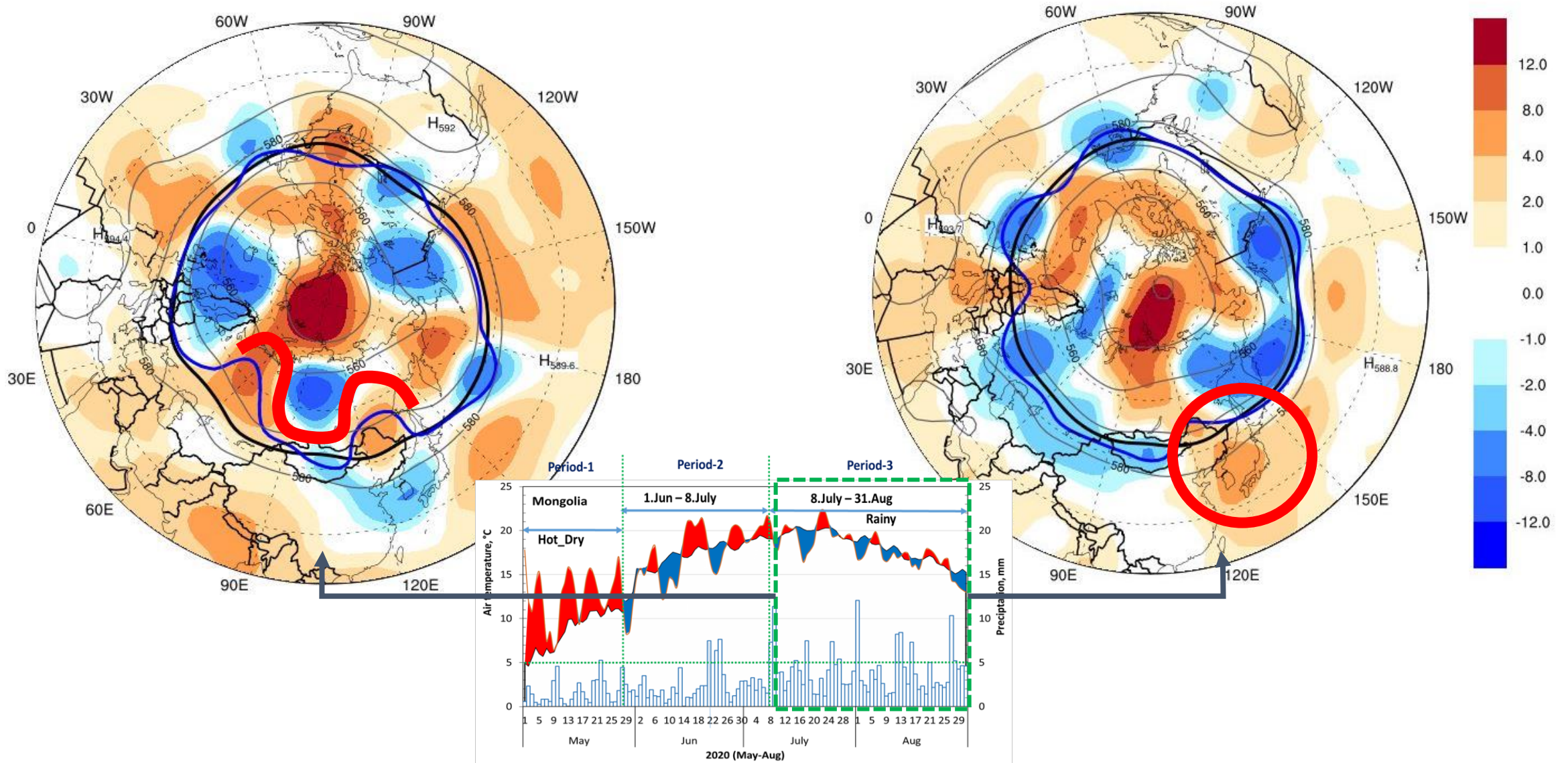
Warm: June. 4-6, 14-21, 26-30



Above normal precipitation period (during July-August, 2020)

Above normal precipitation: July. 8-31

Above normal precipitation: August. 1-31



○ **Summary**

Generally, precipitation (avg: 54.6 mm, anomaly: ~100%) and air temperature (avg: 17.8°C, anomaly: 0.5°C) for this summer were near normal.

Characteristics:

- **Early of summer was generally hot and dry across the western and eastern region.**
- **Above normal precipitation was experienced during late of summer, except over west-south part of Mongolia.**
- **Several heat waves occurred in the early summer were related with “Omega” shaped pattern.**
- **Above normal precipitation was related with reversed “Omega” shaped pattern and positive anomaly of geopotential height at 500 hPa over the Korea and Japan.**

Thank you

