

Methodology of groundwater drought assessment on international level

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The methodology

- **National level:**
 - In the Federal Republic of Germany, different methodologies are used in federal states
 - The Czech Republic uses uniform methodology for all aquifers (water table data and groundwater yield data)
- In 2018, a common **methodology for the international level** was agreed by the German and the Czech delegation:
 - Water table data are used
 - The top aquifer should be monitored and used
 - Minimal requirement: use monthly values or monthly means; weekly values or weekly means are appreciated
 - Reference period is 30 years long and will be changed each 10 years
 - The current level of the water table is compared to the 1981–2010 reference (normal) period

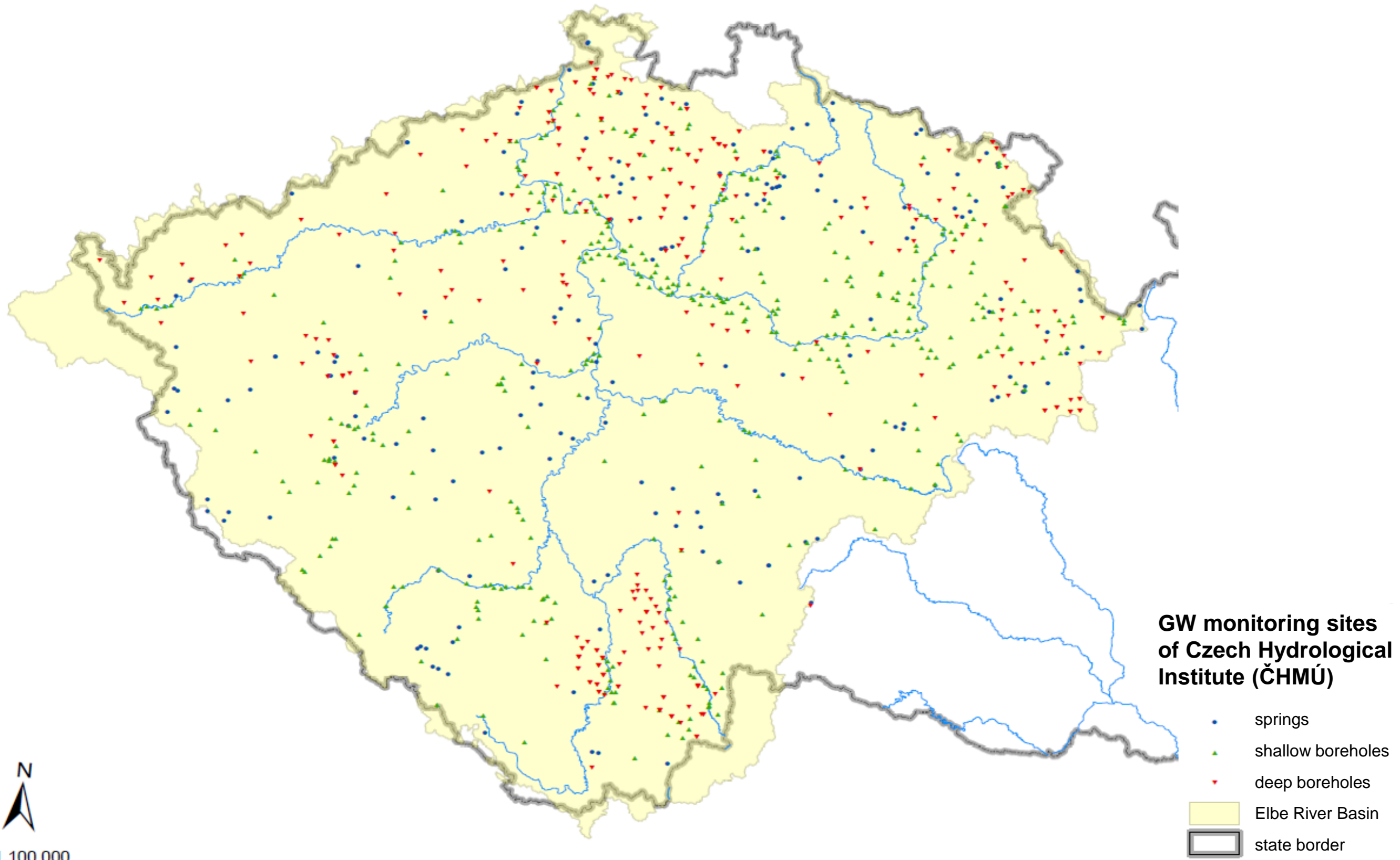


Categories of groundwater level

Exceedance	Category
Extremely high	> 95 %
Significantly high	> 85 %
Moderately high	> 75 – 85 %
Normal	> 75 – 25 %
Moderately low	≤ 25 %
Significantly low	≤ 15 %
Extremely low	≤ 5 %



Monitoring sites in the Elbe River Basin District in the Czech Republic



Monitoring in the Czech Republic

Groundwater quantity monitoring programme:

- manually measurements (springs only) - one-week interval
- automatically measurements (shallow and deep boreholes):
 - automatic measurement system
 - daily interval (hourly interval)



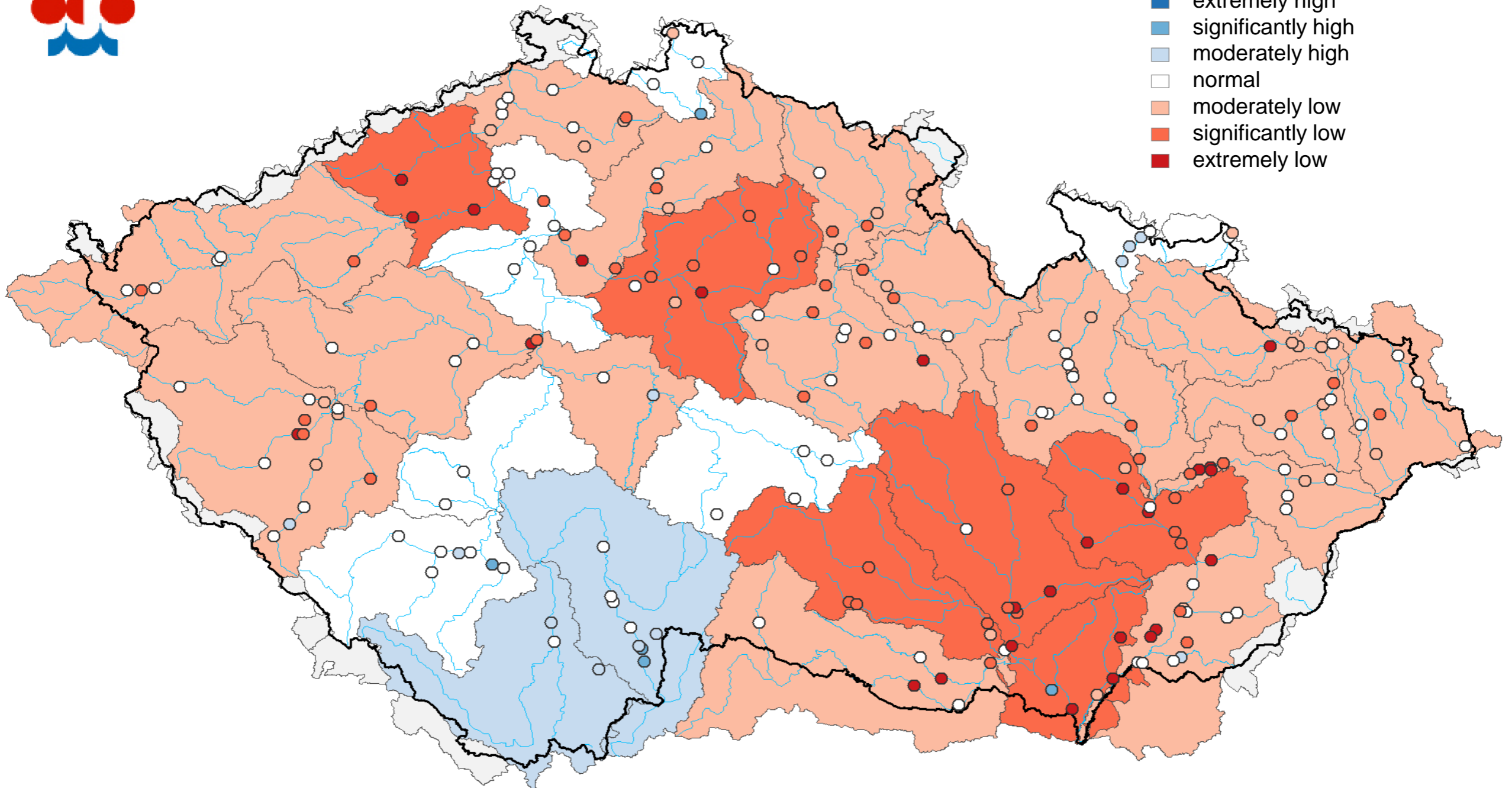
Groundwater level category in shallow boreholes (week 25. 2. – 03. 03. 2019)

Water table level in shallow boreholes

25. 02. – 03. 03. 2019



- extremely high
- significantly high
- moderately high
- normal
- moderately low
- significantly low
- extremely low



Thank you for your
attention

