Climate monitoring in the area of the Gabčíkovo Project

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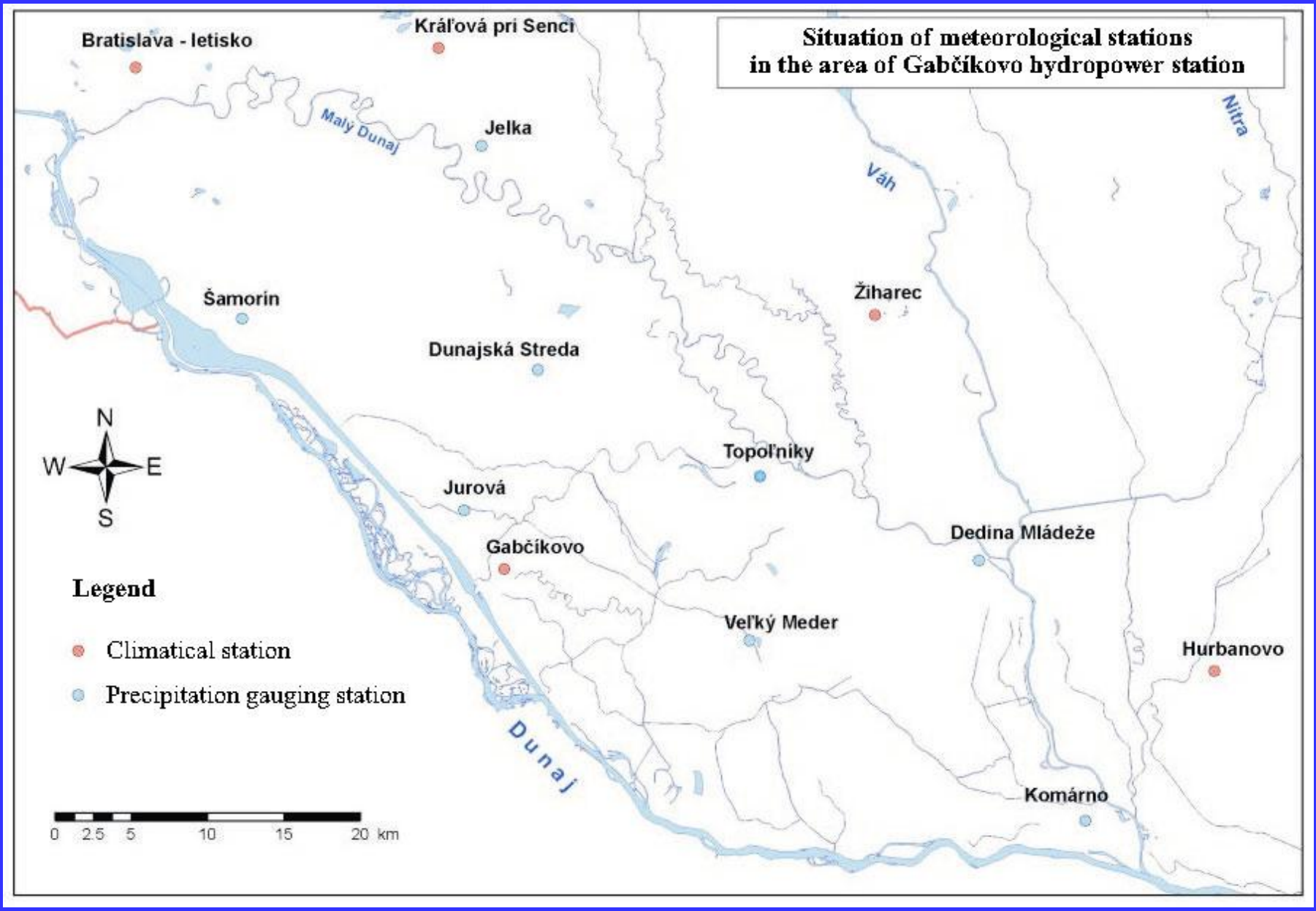
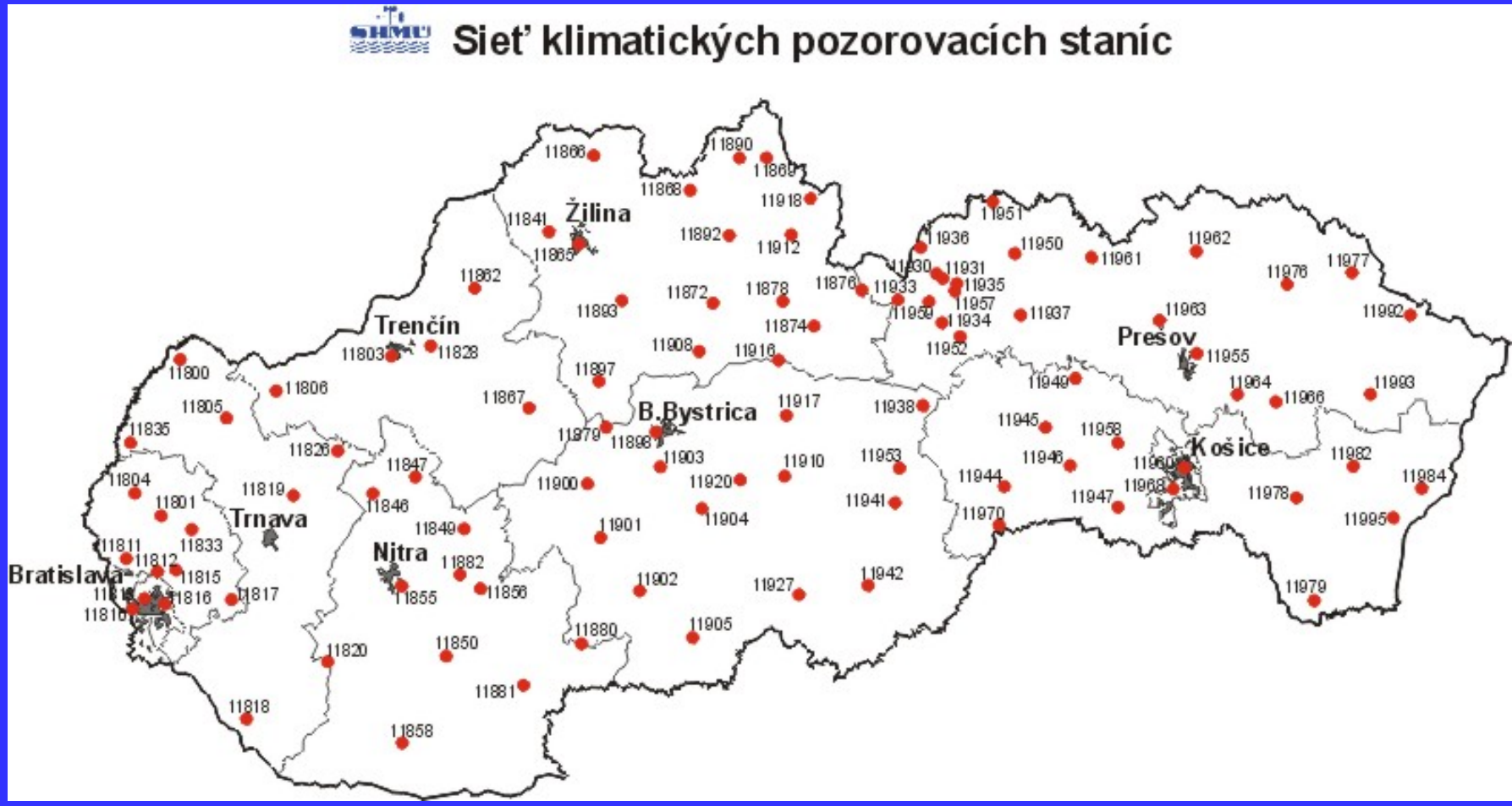
V.1.1. Evaluation of the climate monitoring in the area of the Gabčíkovo hydraulic structures


Situation of meteorological stations
in the area of Gabčíkovo hydropower station
Bratislava - letisko
Kráľová pri Senci
Jelka
Malý Dunaj
Váh
Nitra
Šamorín
Žiharec
Dunajská Streda
Topoľníky
Jurová
Gabčíkovo
Dedina Mládeže
Veľký Meder
Hurbanovo
Komárno
Dunaj
N
W
E
S
Legend
Climatical station
Precipitation gauging station
0 2.5 5 10 15 20 km

Climatological Station Network in Slovakia

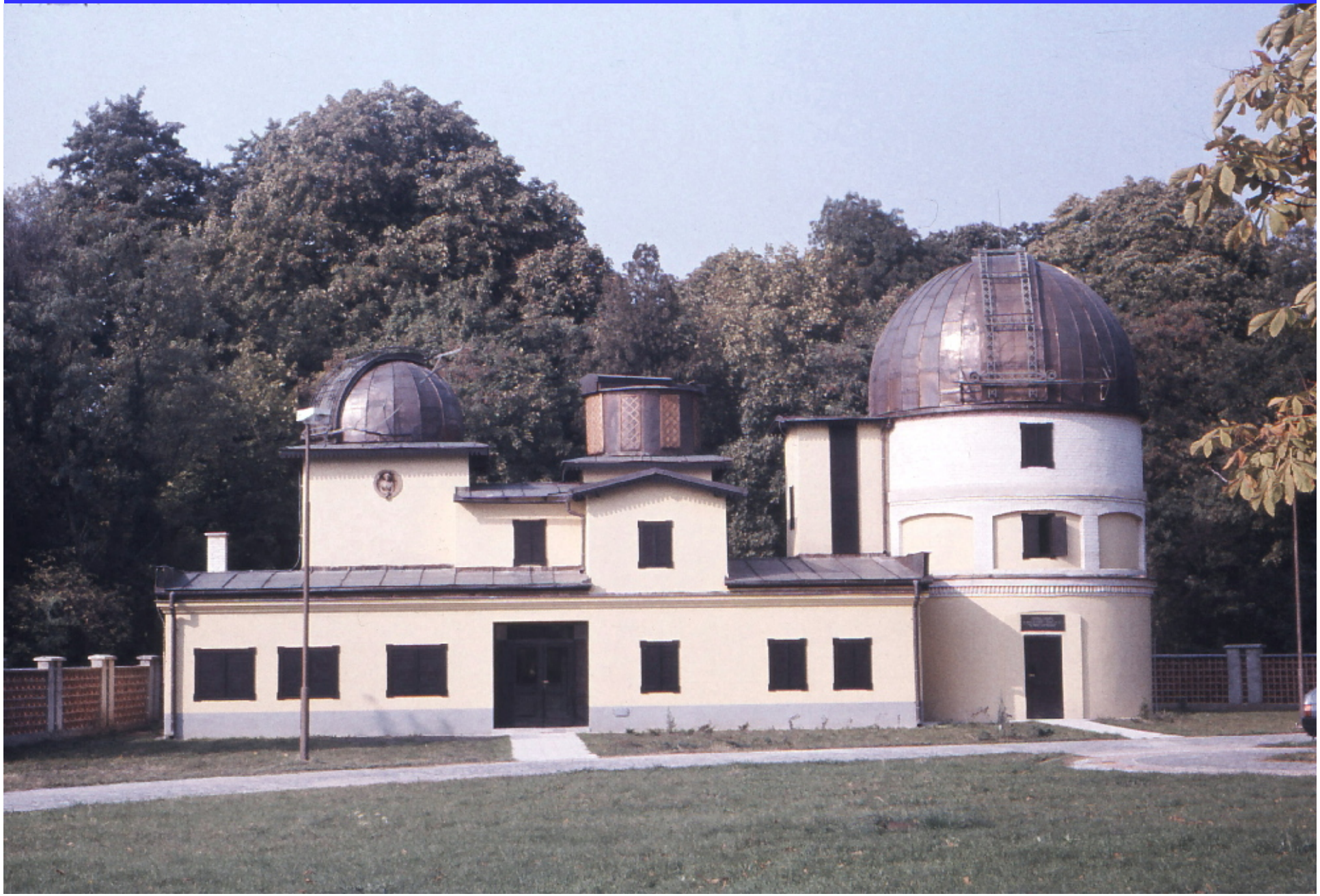
http://www.shmu.sk/cms/mak/index.html



Precipitation Station Network in Slovakia

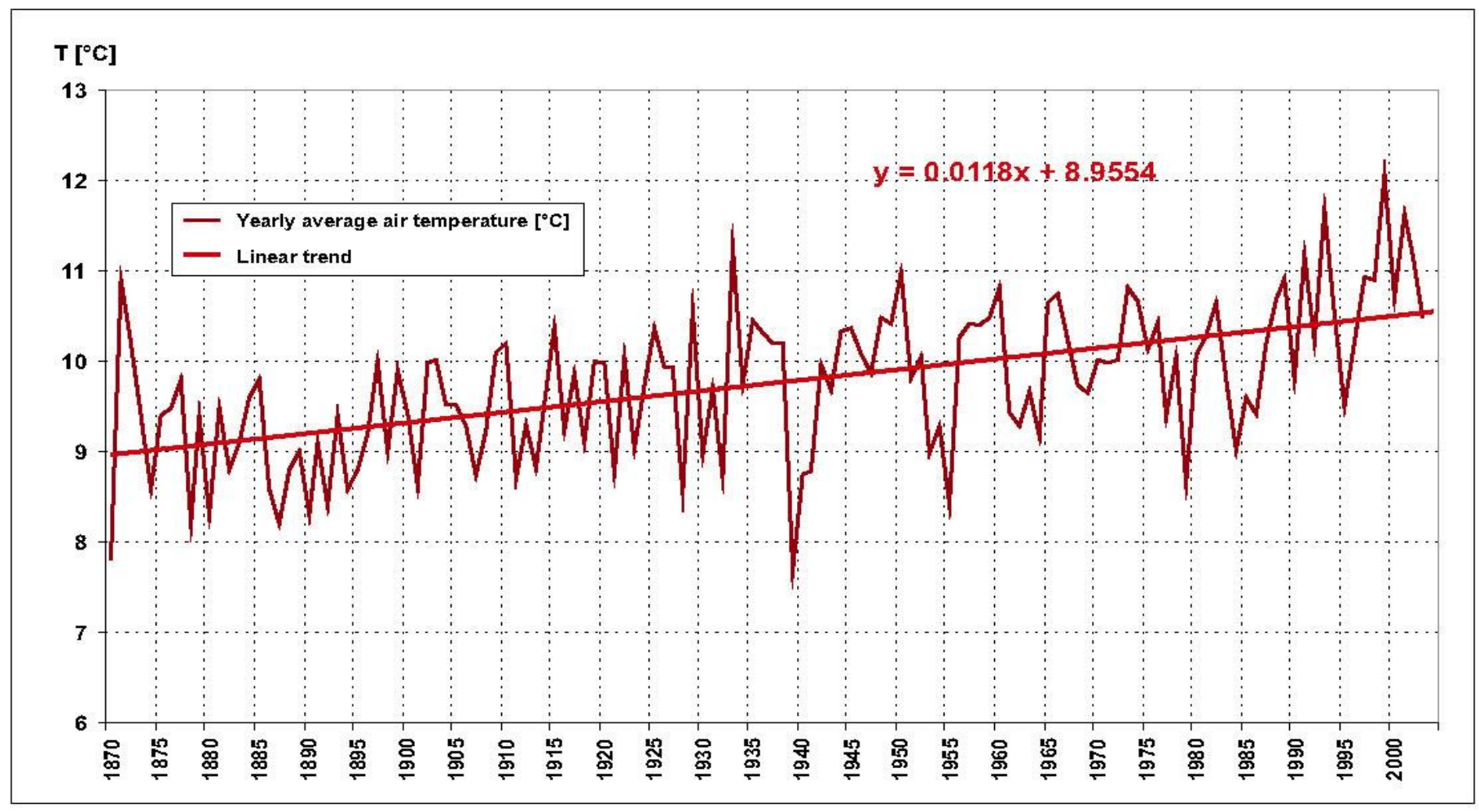
Density of stations – ca 1 station per 70 km^2

Observatory at Hurbanovo, 115 m a.s.l.

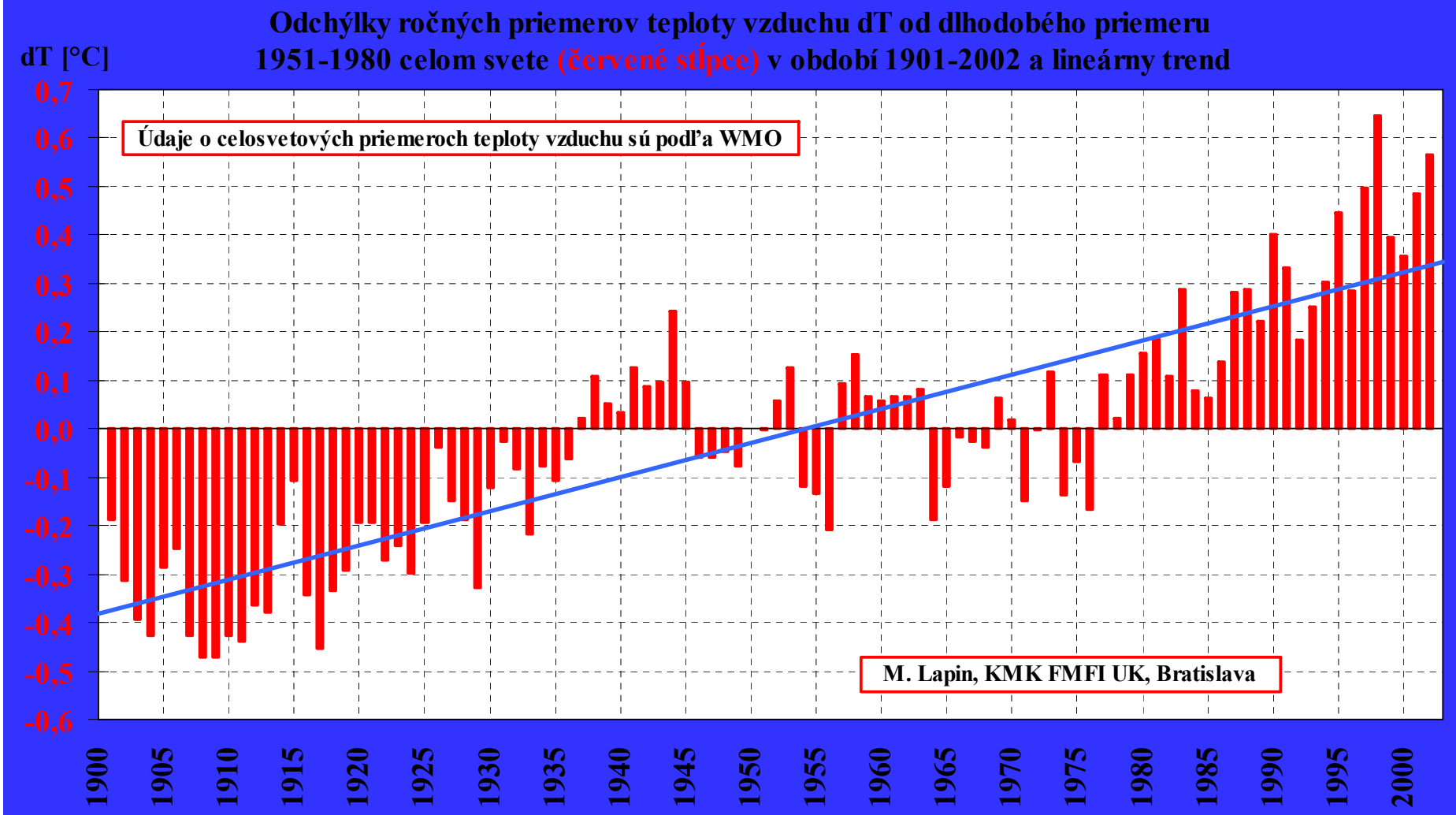


Annual mean temperature course in Hurbanovo (1871 – 2004)

Priemerná ročná teplota vzduchu v Hurbanove (1871 – 2004)

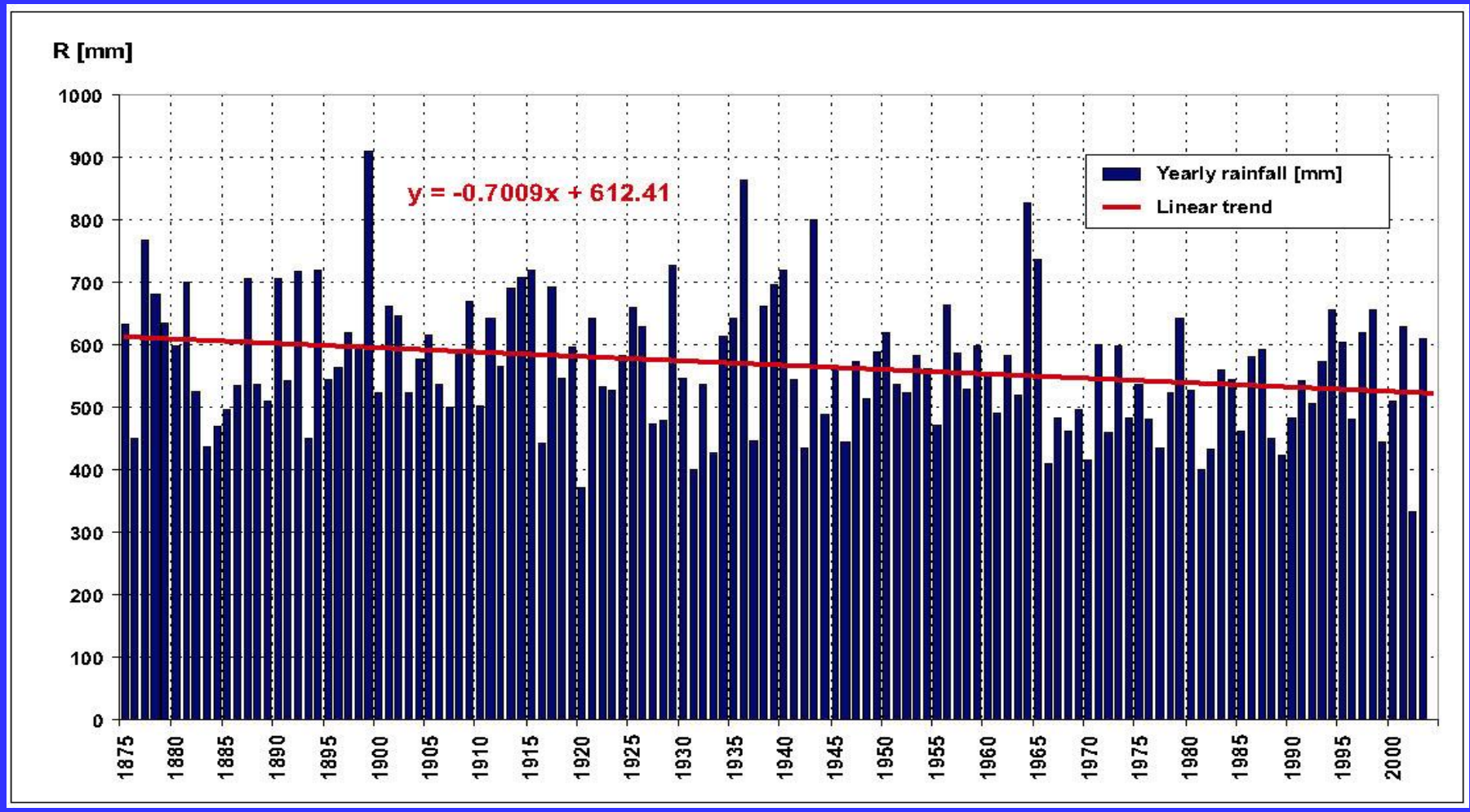


Course of Annual Mean Temperature deviations from normal 1951-1980 in Northern Hemisphere (1901-2002)



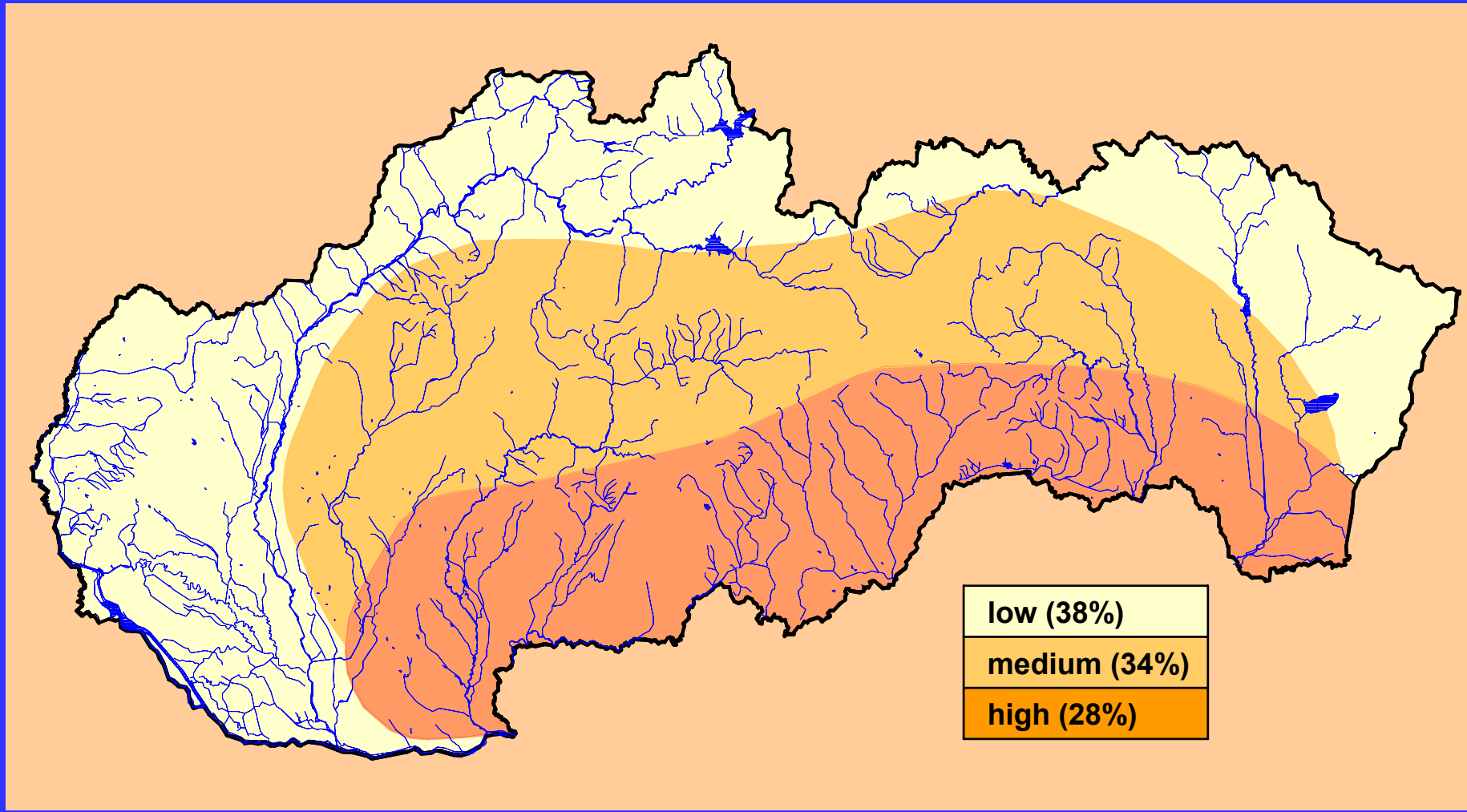
Annual Precipitation Totals in Hurbanovo (1876 – 2004)

Ročné úhrny atmosférických zrážok v Hurbanove (1876 – 2004)



The water resources vulnerability in Slovakia

Mapa zraniteľnosti vodných zdrojov na území Slovenska



Summary

The climatologic monitoring and monitoring of air quality is sufficient and reliable. The collected data are continuously evaluated. The length of observation time makes it possible to evaluate the influence of the Gabčíkovo structures on the surrounding area. After 15 years of monitoring and evaluation, it can be concluded that:

- the influence of the Gabčíkovo hydraulic structures on surrounding climate is not identifiable,
- the climate development has regional character and results from global climate changes,
- the negative climatic changes on water resources affects only those resources *in situ*, which are not bound, either directly or indirectly, to the Danube,
- the Danube provides, to certain degree and under certain conditions, stability to the ground waters in relation to climatic changes,
- the Gabčíkovo hydraulic structures have had an insignificant, although positive, effect.

Thank you for your attention !